

**ASME B18.24-2015**

**[Revision of ASME B18.24-2004 (R2011)]**

# **Part Identifying Number (PIN) Code System Standard for B18 Fastener Products**

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Mechanical Engineers**

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**The American Society of  
Mechanical Engineers**

**Two Park Avenue • New York, NY • 10016 USA**

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# FOREWORD

A joint government and ASME B18 meeting was held November 4, 1977 at Defense Industrial Supply Center in Philadelphia, Pennsylvania. A planning group was established to eliminate road blocks to the government acceptance and use of national voluntary standards. Designated the Ad Hoc Fastener Planning Group, the Group's first meeting was held February 2, 1978 at ASTM Headquarters in Philadelphia. At the meeting, government appendices to ASME B18 metric product standards were endorsed. In addition, an ANSI metric log was established to prevent duplicate efforts and provide the latest status of 18 metric fastener projects. The U.S. Army Armament Research Development and Engineering Center was tasked to provide government appendices for metric fastener standards on an as-needed basis.

At the ASME B18 Standards Committee meeting on December 5, 1991, based on a B18 Subcommittee 24 suggestion, the B18 Standards Committee unanimously approved a motion that Subcommittee 24 Industry/Government Liaison be reactivated and tasked by B18 to address the issue of how to best handle needed changes to the various government appendices.

At the Subcommittee 24 meeting, May 12, 1993 at ASME Headquarters in New York City, the part identifying number (PIN) code system concept for B18 product standards was agreed to. The need was expressed that a PIN code system be made available for all users, not just limited to government users. This was based on the recognition that twenty-eight B18 metric and one B18 inch (ANSI B18.2.1) standards contained government Appendices for Department of Defense (DOD) PIN acquisition usage and were not considered part of the B18 Standard. Again, the premise based on the aforementioned proposal was to provide a B18 code system for all users without exception.

Based on the B18 Standards Committee mandate, a Subcommittee 24 Task Group was formed to develop B18.24.1 (externally threaded fasteners) first, then proceed with B18.24.2 (internally threaded B18 fasteners) and B18.24.3 (nonthreaded fasteners) standards.

During the April 2003 B18 Subcommittee 24 and B18 Standards Committee meetings, it was agreed to draft a new standard, ASME B18.24, Part Identifying Number (PIN) Code System Standard for B18 Fastener Products, to replace the existing ASME B18.24.1, B18.24.2, and B18.24.3 standards. This was based on users' expressed need to reduce the 21-digit PIN code to a code with 18 digits, to accommodate the 18-digit maximum file name length constraint inherent with widely used computer aided design (CAD) software platforms. ASME B18.24-2004 was approved by the American National Standards Institute (ANSI) on April 16, 2004.

Following approval by the ASME B18 Standards Committee and after public review, ASME B18.24a-2006 was approved by the American National Standards Institute on December 7, 2006. The title of Table 1-1 was revised along with the column head under "Feature." Material was added under B18.2.6 and B18.9. "B18.16M" was revised to read "B18.16.3M." "B18.27.6" was revised to read "B27.6." "B18.27.7M" was revised to read "B27.7." "B18.27.8M" was revised to read "B27.8." Various changes were made throughout the document to incorporate required changes.

In 2013, Subcommittee 24 of the B18 Standards Committee created a Task Group to review the B18.24 document against new standards published since 2004 and revisions to existing standards. Quite a few changes were integrated into the new version including the addition of several commonly used ISO callouts for material and plating and several metric standards that had not previously existed. Several ASTM documents for material and plating were added to the B18.24 PIN system to make it more useful.

This revision was approved by ANSI as an American National Standard on June 1, 2015.

# ASME B18 COMMITTEE

## Standardization of Bolts, Nuts, Rivets, Screws, Washers, and Similar Fasteners

(The following is the roster of the Committee at the time of approval of this Standard.)

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<http://go.asme.org/Inquiry>

**Proposing Revisions.** Revisions are made periodically to the Standard to incorporate changes that appear necessary or desirable, as demonstrated by the experience gained from the application of the Standard. Approved revisions will be published periodically.

The Committee welcomes proposals for revisions to this Standard. Such proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent documentation.

**Proposing a Case.** Cases may be issued for the purpose of providing alternative rules when justified, to permit early implementation of an approved revision when the need is urgent, or to provide rules not covered by existing provisions. Cases are effective immediately upon ASME approval and shall be posted on the ASME Committee Web page.

Requests for Cases shall provide a Statement of Need and Background Information. The request should identify the Standard and the paragraph, figure, or table number(s), and be written as a Question and Reply in the same format as existing Cases. Requests for Cases should also indicate the applicable edition(s) of the Standard to which the proposed Case applies.

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The request for an interpretation should be clear and unambiguous. It is further recommended that the inquirer submit his/her request in the following format:

|           |                                                                                                                                                                                                                                                                                                                                                                        |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Subject:  | Cite the applicable paragraph number(s) and the topic of the inquiry.                                                                                                                                                                                                                                                                                                  |
| Edition:  | Cite the applicable edition of the Standard for which the interpretation is being requested.                                                                                                                                                                                                                                                                           |
| Question: | Phrase the question as a request for an interpretation of a specific requirement suitable for general understanding and use, not as a request for an approval of a proprietary design or situation. The inquirer may also include any plans or drawings that are necessary to explain the question; however, they should not contain proprietary names or information. |

Requests that are not in this format may be rewritten in the appropriate format by the Committee prior to being answered, which may inadvertently change the intent of the original request.

ASME procedures provide for reconsideration of any interpretation when or if additional information that might affect an interpretation is available. Further, persons aggrieved by an interpretation may appeal to the cognizant ASME Committee or Subcommittee. ASME does not "approve," "certify," "rate," or "endorse" any item, construction, proprietary device, or activity.

**Attending Committee Meetings.** The B18 Standards Committee regularly holds meetings and/or telephone conferences that are open to the public. Persons wishing to attend any meeting and/or telephone conference should contact the Secretary of the B18 Standards Committee. Future Committee meeting dates and locations can be found on the Committee Page at [go.asme.org/B18committee](http://go.asme.org/B18committee).

# PART IDENTIFYING NUMBER (PIN) CODE SYSTEM STANDARD FOR B18 FASTENER PRODUCTS

## 1 INTRODUCTORY NOTES

### 1.1 Scope

**1.1.1** This Standard is intended to provide all users (manufacturers, distributors, design and configuration, parts control, inventory control, test and maintenance functions) with the capability to identify externally threaded, internally threaded and nonthreaded fastener products by a preselected order of coding as specified herein.

**1.1.2** The B18 PIN is a self-contained code, with distinct identification linkage to individual ASME B18 fastener product standards. The PIN code concept provides for direct traceability back to the applicable B18 product standard. In case of conflict with this document and the B18 product standard, the B18 product standard shall take precedence.

**1.1.3** This Standard is not intended for use as a substitute for the correct usage of the B18 standards for fastener selection and specification. The PIN code is intended as an alternative to the plain text product callout as prescribed in the "Designation" or "Ordering" section of the source B18 product standard. The existence of a PIN code for B18 fastener description is not intended to imply that all products described are available.

**1.1.4** A few B18 fasteners cannot be thoroughly identified using the 18-digit system defined in this Standard. If the user does not find the PIN needed in the body of this Standard, consult the Appendix where special PIN systems have been created to specifically identify those items. If the sought-after PIN for the desired B18 fastener is not in the Appendix, notice should be sent to the secretary of B18 so that the item can be addressed in the next revision of this Standard.

## 2 GENERAL GUIDANCE

### 2.1 Optional Coverage

Each individual ASME B18 fastener product standard provides for optional B18 PIN coverage under "Designation" or "Ordering" data.

### 2.2 Alpha "I" and "O"

Alpha "I", "O", and "-" are not used in PIN field coding configuration.

### 2.3 Characteristics

The B18 PIN code shall identify only those characteristics specified in the B18 product standards.

### 2.4 Succession of B18.24.1, B18.24.2, and B18.24.3 21-Character PIN Codes

Nonmandatory Appendices A and B of this document provide instructions and resources for determining the superseding B18.24.4 18-character PIN code for any cancelled B18.24.1, B18.24.2, and B18.24.3 21-character PIN code.

### 2.5 Identification of Part Numbering System on Drawings

On drawings or parts lists where a column exists for identifying the manufacturer or its Commercial and Government Entity Code, indicate the CAGE Code "05047/B18.24" or "ASME B18.24". If no column exists or there is space only for the five-digit CAGE Code, then a note must indicate that the part numbers are defined in ASME B18.24.

### 2.6 Guidance for Using B18.24

B18.24 (this Standard) defines an 18-digit alphanumeric system for describing most ASME B18 fasteners. Those using this Standard shall refer to the specific ASME B18 standard for product details first, and only then use the appropriate descriptive number defined in this Standard for placing inquiries and orders.

This Standard can be used to describe fasteners that are not readily available from suppliers, or to create numbers in conflict with the B18 product requirements, such as selecting inappropriate or non-recommended finishes. This is why it is critical for users to review the applicable B18 standard before using B18.24 to describe a desired fastener. The product requirements cited in individual ASME B18 Standards take precedence over conflicting numbers that might be created using B18.24.

### 3 PIN CODE STRUCTURE

#### 3.1 PIN Structure Overview

B18 Fastener PIN Example

|                    | Base PIN | Thread Configuration and Size |         |         | Material/Finish |         | Additional Features |
|--------------------|----------|-------------------------------|---------|---------|-----------------|---------|---------------------|
| AEB02C250A50AP1A11 | AEB02    | C                             | 250     | A50     | AP1             | A1      | 1                   |
| 18 characters      | Field 1  | Field 2                       | Field 3 | Field 4 | Field 5         | Field 6 | Field 7             |

General data for 18-digit B18 PINs

| Field | Field Name                        | Field Length     | Table References        | Page Number(s) |
|-------|-----------------------------------|------------------|-------------------------|----------------|
| 1     | Base PIN [Note (1)]               | Characters 1–5   | Table 1-1 [Note (1)]    | 4              |
| 2     | Fastener Thread Configuration     | Character 6      | Tables 2-1 and 2-2      | 25             |
| 3     | Fastener Size                     | Characters 7–9   | Tables 3-1 through 3-29 | 25–38          |
| 4     | Length/Other Dimensions           | Characters 10–12 | Tables 4-1 through 4-6  | 38–42          |
| 5     | Material and Treatment            | Characters 13–15 | Tables 5-1 through 5-9  | 43–96          |
| 6     | Plating, Coating, and Passivation | Characters 16–17 | Tables 6-1 through 6-5  | 97–117         |
| 7     | Additional Features               | Character 18     | Tables 7-1 through 7-14 | 118, 119       |

NOTE:

- (1) Base PINs are provided in the five-character Field 1 of Table 1-1 starting with AE for ASME, followed by one character for the Fastener Family and two characters for the specific type fastener in the Fastener Family (e.g., AEB02).

#### 3.2 PIN Usage Guidance

Both the B18 PIN creation and lookup tasks are 2-step processes.

*Step 1:* Specify or identify the specific B18 Fastener Family and Type/Base PIN from Table 1-1. This shall be the first five (5) digits, beginning with the AE prefix.

*Step 2:* Specify or identify the specific applicable B18 fastener attributes from the lookup table references in Table 1-1 field columns.

For example: AEB02C250A50AP1A11 — Bolt, Hex from ASME B18.2.1

To begin, the user would refer to Table 1-1 which is organized and sorted as follows:

(a) alphabetically by Base PIN to accommodate lookup queries

(b) hierarchically as follows for Fastener Family and Type/Base PIN selection:

Fastener Family PIN (Field 1, 3rd character)

→ B18 Standard Number

→ Specific Fastener Type

(Field 1, 4th & 5th characters)

The following is excerpted from Table 1-1:

**Sample Table 1-1 Fastener Family and Type/Base PIN**

| Bolts                                                                  |       | Applicable<br>Table References: | Thread                          | Size     | Lg/Other | Material | Finish   | Feature  |
|------------------------------------------------------------------------|-------|---------------------------------|---------------------------------|----------|----------|----------|----------|----------|
| <b>B18.2.1 Square and Hex Bolts and Screws (Inch Series)</b>           |       | ②                               | <b>Field 2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| ①<br>Field 1<br>Base<br>PIN                                            | AEB01 | Bolts, Square                   | 2-1                             | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
|                                                                        | AEB02 | Bolts, Hex                      | 2-1                             | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
|                                                                        | AEB03 | Bolts, Hex, Heavy               | ④ 2-1                           | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
|                                                                        | AEB04 | Bolts, Askew Head               | ④ 2-1                           | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>B18.2.3.5M Metric Hex Bolts</b>                                     |       |                                 | <b>Field 2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEB05 Bolts, Hex                                                       |       |                                 | 2-1                             | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.2.3.6M Metric Heavy Hex Bolts</b>                               |       |                                 | <b>Field 2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEB06 Bolts, Hex, Heavy                                                |       |                                 | 2-1                             | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| — —                                                                    |       |                                 | —                               | —        | —        | —        | —        | —        |
| <b>B18.9 Plow Bolts (Inch Series)</b>                                  |       |                                 | <b>Field 2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEB24 Bolts, Plow No. 3 Regular Head (Round, Countersunk, Square Neck) |       |                                 | 2-1                             | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEB25 Bolts, Plow No. 3 Repair Head (Round, Countersunk, Square Neck)  |       |                                 | 2-1                             | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEB26 Bolts, Plow No. 7 Regular Head (Round, Countersunk, Reverse Key) |       |                                 | 2-1                             | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
|                                                                        |       | ③                               | Field Length = 1, 3, 3, 3, 2, 1 |          |          |          |          |          |

① denotes the emboldened Base PIN column of Table 1-1. The Base PIN identifies an individual, top level fastener type from a B18 standard. The Base PIN is comprised of characters 1 through 5.

In our example, the Base PIN is **AEB02** and the unique B18 Fastener PIN is **AEB02C250A50AP1A11**. ② and ③ denote field number and field length, respectively, for subsequent PIN fields. By traversing from left to right from the beginning of Field 2 (character 6), the user can specify or look up the fastener attributes for any unique Base PIN/top level fastener type.

④ denotes the attribute table number references for fields 2–7 as → 2-1 3-1 4-1 5-\* 6-\* 7-1. It is from these attribute fields that a unique fastener is described. Having located the appropriate lookup tables for Base

PIN = AEB02, the user would interpret the remainder of the PIN as follows:

Look up the:

1-character value for Field 2 in Table 2-1

3-character value for Field 3 in Table 3-1

3-character value for Field 4 in Table 4-1

3-character value for Field 5 in Tables 5-1 through 5-9

2-character value for Field 6 in Tables 6-1 through 6-5

1-character value for Field 7 in Table 7-1

The following is an example for this specific B18 fastener PIN:

| Field # | Field Length | Character Range | Field Value | Table Ref(s) | Attributes Fastener Parameter | Attribute Values Parameter Value                   |
|---------|--------------|-----------------|-------------|--------------|-------------------------------|----------------------------------------------------|
| 1       | 5            | 1–5             | AEB02       | 1–1          | → PIN Spec                    | ASME B18.24                                        |
|         |              |                 |             | 1–1          | → PIN Spec Title              | PIN Code System Standard for B18 Fastener Products |
|         |              |                 |             | 1–1          | → Source Document             | ASME B18.2.1                                       |
|         |              |                 |             | 1–1          | → Source Document Title       | Square and Hex Bolts and Screws (Inch Series)      |
|         |              |                 |             | 1–1          | → Unit System                 | Inch                                               |
|         |              |                 |             | 1–1          | → Fastener Type               | Bolt, Hex                                          |
| 2       | 1            | 6               | C           | 2–1          | → Thread Configuration        | UNC–2                                              |
| 3       | 3            | 7–9             | 250         | 3–1          | → Size                        | .250                                               |
| 4       | 3            | 10–12           | A50         | 4–1          | → Length/Other Dim.           | 1.500                                              |
| 5       | 3            | 13–15           | AP1         | 5–1          | → Material                    | Stainless Steel                                    |
|         |              |                 |             | 5–1          | → Material Spec               | ASTM A194/A194M, Grade 8MLCuNA                     |
| 6       | 2            | 16–17           | A1          | 6–1          | → Finish                      | Plain, no finish                                   |
|         |              |                 |             | 6–1          | → Finish Spec                 | N/A                                                |
| 7       | 1            | 18              | 1           | 7–1          | → Features                    | Plain, no additional features                      |

Please note that Tables 4-1 and 4-2 include coverage of Field 4 externally threaded fastener lengths for fasteners with a reduced body diameter (RBD).

### ASME B18 Prefix

| PIN | Description  |
|-----|--------------|
| AE  | ASME B18 PIN |

All 18-digit ASME B18 Fastener PINs shall begin with an "AE" prefix. "AE" combined with the next 3 digits shall comprise the Fastener Family and Type/Base PIN. Refer to Table 1-1 to specify/look up the appropriate top level B18 Fastener Family and Type/Base PIN.

### B18 Fastener Family

| PIN | Description                                |
|-----|--------------------------------------------|
| B   | Bolts                                      |
| E   | Inserts                                    |
| K   | Keys and Keyways                           |
| M   | Screw and Washer Assemblies — SEMs         |
| N   | Nuts                                       |
| P   | Pins                                       |
| R   | Retaining Rings                            |
| S   | Screws                                     |
| T   | Studs (Includes Lifting Eyes and Eyebolts) |
| V   | Rivets                                     |
| W   | Washers                                    |

The B18 Fastener Family table describes digit 3 of Field 1, which is a total of 5 digits in length. As such, the field values of B18 Fastener Family are included within the Table 1-1 PIN values. This table is presented solely to demonstrate how the user can quickly identify what type of fastener a given PIN describes simply by identifying the third digit in a B18 PIN.

**Table 1-1 Fastener Family and Type/Base PIN**

#### GENERAL NOTES:

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- Italic text denotes information that remains the same as in the previous version of the Standard, but has been moved within this document for consolidation or clarity.

### Bolts

|                          |                                                                   | Applicable<br>Table References: | Thread         | Size     | Lg/Other | Material | Finish   | Feature  |
|--------------------------|-------------------------------------------------------------------|---------------------------------|----------------|----------|----------|----------|----------|----------|
| <b>B18.2.1</b>           | <b>Square and Hex Bolts and Screws (Inch Series)</b>              |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEB01                    | Bolts, Square                                                     |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB02                    | Bolts, Hex                                                        |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB03                    | Bolts, Hex, Heavy                                                 |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB04                    | Bolts, Askew Head                                                 |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| <b>B18.2.3.5M</b>        | <b>Metric Hex Bolts</b>                                           |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEB05                    | Bolts, Hex                                                        |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.2.3.6M</b>        | <b>Metric Heavy Hex Bolt</b>                                      |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEB06                    | Bolts, Hex, Heavy                                                 |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b><i>B18.2.3.7M</i></b> | <b><i>Metric Heavy Hex Structural Bolt</i></b>                    |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| <i>AEB07</i>             | <i>Bolts, Hex, Heavy Structural</i>                               |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.2.3.10M</b>       | <b>Metric Square Head Bolts</b>                                   |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEB08                    | Bolts, Square                                                     |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.2.6</b>           | <b>Fasteners for Use in Structural Applications (Inch Series)</b> |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEB09                    | Bolts, Hex, Heavy Structural                                      |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB34                    | Bolts, Hex, Heavy, Tension Control Structural                     |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB35                    | Bolts, Round Head, Tension Control Structural                     |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| <b>B18.2.6M</b>          | <b>Metric Fasteners for Use in Structural Applications</b>        |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| <i>AEB07</i>             | <i>Bolts, Hex, Heavy Structural</i>                               |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Bolts (Cont'd)**

|                   |                                                                              | Applicable<br>Table References: | Thread         | Size     | Lg/Other | Material | Finish   | Feature  |
|-------------------|------------------------------------------------------------------------------|---------------------------------|----------------|----------|----------|----------|----------|----------|
|                   |                                                                              |                                 | Field 2        | 3        | 4        | 5        | 6        | 7        |
| <b>B18.5</b>      | <b>Round Head Bolts (Inch Series)</b>                                        |                                 |                |          |          |          |          |          |
| AEB10             | Bolts, Round Head, (Button Head Bolts)                                       |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB11             | Bolts, Round, Square Neck (Square Neck Carriage Bolts)                       |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB12             | Bolts, Round, Short Square Neck                                              |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB13             | Bolts, Round, Ribbed Neck (Ribbed Neck Carriage Bolts)                       |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB14             | Bolts, Round, Fin Neck (Fin Neck Carriage Bolts)                             |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB15             | Bolts, Round, Step                                                           |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB16             | Bolts, Round, Countersunk, Unslotted                                         |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB17             | Bolts, Round, Countersunk, Slotted                                           |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB18             | Bolts, Round, 114 deg, Countersunk, Square Neck (Countersunk Carriage Bolts) |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB19             | Bolts, Round, Elevator, Flat Head, Countersunk                               |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB20             | Bolts, Round, T Head                                                         |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| <b>B18.5.2.1M</b> | <b>Metric Round Head Short Square Neck Bolts</b>                             |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEB21             | Bolts, Round, Short Square Neck                                              |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.5.2.2M</b> | <b>Metric Round Head Square Neck Bolts</b>                                   |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEB22             | Bolts, Round, Square Neck                                                    |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.5.2.3M</b> | <b>Metric Round Head Square Neck Bolts With Large Head</b>                   |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEB23             | Bolts, Round, Square Neck, Large Head                                        |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.9</b>      | <b>Plow Bolts (Inch Series)</b>                                              |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEB24             | Bolts, Plow No. 3 Regular Head (Round, Countersunk, Square Neck)             |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB25             | Bolts, Plow No. 3 Repair Head (Round, Countersunk, Square Neck)              |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB26             | Bolts, Plow No. 7 Regular Head (Round, Countersunk, Reverse key)             |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB27             | Bolts, Plow No. 7 Repair Head (Round, Countersunk, Reverse key)              |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB28             | Bolts, Plow, Square, No. 4 Repair Head (Square Head, Countersunk)            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB29             | Bolts, Plow No. 6 Repair Head (Round, Countersunk, Heavy key)                |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB30             | Bolts, Plow, Square, No. 4 Regular Head (Square Head, Countersunk)           |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB31             | Bolts, Plow No. 6 Regular Head (Round, Countersunk, Heavy key)               |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB38             | Bolts, Plow Clipped Head                                                     |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AEB39             | Bolts, Plow Elliptical Head                                                  |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| <b>B18.10</b>     | <b>Track Bolts and Nuts (Inch Series)</b>                                    |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEB32             | Bolts, Track, Round, Oval Neck (Mushroom Head)                               |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-13     |
| AEB33             | Bolts, Track, Round, Elliptic Neck (Mushroom Head)                           |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-13     |

**Inserts**

|                  |                                                                                                 |                |          |          |          |          |          |
|------------------|-------------------------------------------------------------------------------------------------|----------------|----------|----------|----------|----------|----------|
| <b>B18.29.1</b>  | <b>Helical Coil Screws Thread Inserts — Free Running and Screw Locking (Inch Series)</b>        | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEE01            | Inserts, Helical Coil Screw Thread (Free Running)                                               | 2-1            | 3-1      | 4-4      | 5-*      | 6-*      | 7-1      |
| AEE02            | Inserts, Helical Coil Screw Thread (Screw Locking)                                              | 2-1            | 3-1      | 4-4      | 5-*      | 6-*      | 7-1      |
| <b>B18.29.2M</b> | <b>Metric Helical Coil Screws Thread Inserts — Free Running and Screw Locking</b>               | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEE03            | Inserts, Helical Coil Screw Thread (Free Running)                                               | 2-1            | 3-3      | 4-4      | 5-*      | 6-*      | 7-1      |
| AEE04            | Inserts, Helical Coil Screw Thread (Screw Locking)                                              | 2-1            | 3-3      | 4-4      | 5-*      | 6-*      | 7-1      |
| <b>B18.29.3</b>  | <b>Tangless Helical Coil Screws Thread Inserts—Free Running and Screw Locking (Inch Series)</b> | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEE05            | Inserts, Tangless Helical Coil Screw Thread (Free Running)                                      | 2-1            | 3-1      | 4-4      | 5-*      | 6-*      | 7-1      |
| AEE06            | Inserts, Tangless Helical Coil Screw Thread (Screw Locking)                                     | 2-1            | 3-1      | 4-4      | 5-*      | 6-*      | 7-1      |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Keys and Keyways**

|                  |                                                       | Applicable<br>Table References: | Thread   | Size     | Lg/Other | Material | Finish   | Feature |
|------------------|-------------------------------------------------------|---------------------------------|----------|----------|----------|----------|----------|---------|
| <b>B18.25.1M</b> | <b>Metric Square and Rectangular Keys and Keyways</b> | <b>Field 2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |         |
| AEK01            | Keys, Square Style A                                  | 2-1                             | 3-28     | 4-2      | 5*       | 6*       | 7-1      |         |
| AEK02            | Keys, Square Style B                                  | 2-1                             | 3-28     | 4-2      | 5*       | 6*       | 7-1      |         |
| AEK03            | Keys, Square Style C                                  | 2-1                             | 3-28     | 4-2      | 5*       | 6*       | 7-1      |         |
| AEK04            | Keys, Square Style A, Hardened                        | 2-1                             | 3-28     | 4-2      | 5*       | 6*       | 7-1      |         |
| AEK05            | Keys, Square Style B, Hardened                        | 2-1                             | 3-28     | 4-2      | 5*       | 6*       | 7-1      |         |
| AEK06            | Keys, Square Style C, Hardened                        | 2-1                             | 3-28     | 4-2      | 5*       | 6*       | 7-1      |         |
| AEK07            | Keys, Rectangular Style A                             | 2-1                             | 3-28     | 4-2      | 5*       | 6*       | 7-1      |         |
| AEK08            | Keys, Rectangular Style B                             | 2-1                             | 3-28     | 4-2      | 5*       | 6*       | 7-1      |         |
| AEK09            | Keys, Rectangular Style C                             | 2-1                             | 3-28     | 4-2      | 5*       | 6*       | 7-1      |         |
| AEK10            | Keys, Rectangular Style A, Hardened                   | 2-1                             | 3-28     | 4-2      | 5*       | 6*       | 7-1      |         |
| AEK11            | Keys, Rectangular Style B, Hardened                   | 2-1                             | 3-28     | 4-2      | 5*       | 6*       | 7-1      |         |
| AEK12            | Keys, Rectangular Style C, Hardened                   | 2-1                             | 3-28     | 4-2      | 5*       | 6*       | 7-1      |         |
| <b>B18.25.2M</b> | <b>Metric Woodruff Keys and Keyways</b>               | <b>Field 2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |         |
| AEK13            | Keys, Woodruff, Normal Form                           | 2-1                             | 3-29     | 4-2      | 5*       | 6*       | 7-1      |         |
| AEK14            | Keys, Woodruff, Whitney Form                          | 2-1                             | 3-29     | 4-2      | 5*       | 6*       | 7-1      |         |

**Screw and Washer Assemblies — Screw Component**

| <b>B18.13</b> | <b>Screw and Washer Assemblies (Inch Series)</b>                  | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |  |
|---------------|-------------------------------------------------------------------|----------------|----------|----------|----------|----------|----------|--|
| AEM01         | SEMs, Hex Cap Screw                                               | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEM14         | SEMs, Hex Socket Head Cap Screw                                   | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMC0         | SEMs, Flat Head Machine Screw, Slotted                            | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMC1         | SEMs, Flat Head Machine Screw, Type I Cross Recess                | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMC2         | SEMs, Flat Head Machine Screw, Type IA Cross Recess               | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMC3         | SEMs, Flat Head Machine Screw, Type II Cross Recess               | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMC4         | SEMs, Flat Head Machine Screw, Type III Square Recess             | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMC5         | SEMs, 100 deg Flat Head Machine Screw, Slotted                    | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMC6         | SEMs, 100 deg Flat Head Machine Screw, Type I Cross Recess        | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMC7         | SEMs, 100 deg Flat Head Machine Screw, Type IA Cross Recess       | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMC8         | SEMs, 100 deg Flat Head Machine Screw, Type II Cross Recess       | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMC9         | SEMs, 100 deg Close Tolerance Machine Screw, Slotted              | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMD0         | SEMs, 100 deg Close Tolerance Machine Screw, Type I Cross Recess  | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMD1         | SEMs, 100 deg Close Tolerance Machine Screw, Type IA Cross Recess | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMD2         | SEMs, 100 deg Close Tolerance Machine Screw, Type II Cross Recess | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMD3         | SEMs, Oval Head Machine Screw, Slotted                            | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMD4         | SEMs, Oval Head Machine Screw, Type I Cross Recess                | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMD5         | SEMs, Oval Head Machine Screw, Type IA Cross Recess               | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMD6         | SEMs, Oval Head Machine Screw, Type II Cross Recess               | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMD7         | SEMs, Oval Head Machine Screw, Type III Square Recess             | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMD8         | SEMs, Undercut Flat Head Machine Screw, Slotted                   | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEMD9         | SEMs, Undercut Flat Head Machine Screw, Type I Cross Recess       | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEME0         | SEMs, Undercut Flat Head Machine Screw, Type IA Cross Recess      | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEME1         | SEMs, Undercut Flat Head Machine Screw, Type II Cross Recess      | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEME2         | SEMs, Undercut Flat Head Machine Screw, Type III Square Recess    | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEME3         | SEMs, Oval Undercut Head Machine Screw, Slotted                   | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEME4         | SEMs, Oval Undercut Head Machine Screw, Type I Cross Recess       | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEME5         | SEMs, Oval Undercut Head Machine Screw, Type IA Cross Recess      | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEME6         | SEMs, Oval Undercut Head Machine Screw, Type II Cross Recess      | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEME7         | SEMs, Oval Undercut Head Machine Screw, Type III Square Recess    | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-9      |  |
| AEME8         | SEMs, Flat Trim Head Machine Screw, Type I Cross Recess           | 2-1            | 3-11     | 4-1      | 5*       | 6*       | 7-9      |  |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Screw and Washer Assemblies — Screw Component (Cont'd)**

|        |                                                                       | Applicable<br>Table References: | Thread | Size | Lg/Other | Material | Finish | Feature |
|--------|-----------------------------------------------------------------------|---------------------------------|--------|------|----------|----------|--------|---------|
| B18.13 | Screw and Washer Assemblies (Inch Series) (Cont'd)                    | Field 2                         | 3      | 4    | 5        | 6        | 7      |         |
| AEME9  | SEMs, Flat Trim Head Machine Screw, Type IA Cross Recess              | 2-1                             | 3-11   | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMF0  | SEMs, Flat Trim Head Machine Screw, Type II Cross Recess              | 2-1                             | 3-11   | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMF1  | SEMs, Oval Trim Head Machine Screw, Type I Cross Recess               | 2-1                             | 3-11   | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMF2  | SEMs, Oval Trim Head Machine Screw, Type IA Cross Recess              | 2-1                             | 3-11   | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMF3  | SEMs, Oval Trim Head Machine Screw, Type II Cross Recess              | 2-1                             | 3-11   | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMF4  | SEMs, Pan Head Machine Screw, Slotted                                 | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMF5  | SEMs, Pan Head Machine Screw, Type I Cross Recess                     | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMF6  | SEMs, Pan Head Machine Screw, Type IA Cross Recess                    | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMF7  | SEMs, Pan Head Machine Screw, Type II Cross Recess                    | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMF8  | SEMs, Pan Head Machine Screw, Type III Square Recess                  | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMF9  | SEMs, Pan Head Machine Screw, Type I Cross Recess with Slot           | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMG0  | SEMs, Pan Head Machine Screw, Type IA Cross Recess with Slot          | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMG1  | SEMs, Pan Head Machine Screw, Type III Square Recess with Slot        | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMG2  | SEMs, Fillister Head Machine Screw, Slotted                           | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMG3  | SEMs, Fillister Head Machine Screw, Type I Cross Recess               | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMG4  | SEMs, Fillister Head Machine Screw, Type IA Cross Recess              | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMG5  | SEMs, Fillister Head Machine Screw, Type II Cross Recess              | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMG6  | SEMs, Fillister Head Machine Screw, Type III Square Recess            | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMG7  | SEMs, Fillister Head Machine Screw, Slotted and Drilled               | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMG8  | SEMs, Truss Head Machine Screw, Slotted                               | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMG9  | SEMs, Truss Head Machine Screw, Type I Cross Recess                   | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMH0  | SEMs, Truss Head Machine Screw, Type IA Cross Recess                  | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMH1  | SEMs, Truss Head Machine Screw, Type II Cross Recess                  | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMH2  | SEMs, Truss Head Machine Screw, Type III Square Recess                | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMH3  | SEMs, Truss Head Machine Screw, Type I Cross Recess with Slot         | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMH4  | SEMs, Truss Head Machine Screw, Type III Square Recess with Slot      | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMH5  | SEMs, Binding Head Machine Screw, Slotted                             | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMH6  | SEMs, Binding Head Machine Screw, Type I Cross Recess                 | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMH7  | SEMs, Binding Head Machine Screw, Type IA Cross Recess                | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMH8  | SEMs, Binding Head Machine Screw, Type II Cross Recess                | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMH9  | SEMs, Binding Head Machine Screw, Type III Square Recess              | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMJ0  | SEMs, Indented Regular Hex Head Machine Screw, Unslotted              | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMJ1  | SEMs, Indented Regular Hex Head Machine Screw, Slotted                | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMJ2  | SEMs, Trimmed Regular Hex Head Machine Screw, Unslotted               | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMJ3  | SEMs, Trimmed Regular Hex Head Machine Screw, Slotted                 | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMJ4  | SEMs, Fully Upset Regular Hex Head Machine Screw, Unslotted           | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMJ5  | SEMs, Fully Upset Regular Hex Head Machine Screw, Slotted             | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMJ6  | SEMs, Indented Large Hex Head Machine Screw, Unslotted                | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMJ7  | SEMs, Indented Large Hex Head Machine Screw, Slotted                  | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMJ8  | SEMs, Trimmed Large Hex Head Machine Screw, Unslotted                 | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMJ9  | SEMs, Trimmed Large Hex Head Machine Screw, Slotted                   | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMK0  | SEMs, Fully Upset Large Hex Head Machine Screw, Unslotted             | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMK1  | SEMs, Fully Upset Large Hex Head Machine Screw, Slotted               | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMK2  | SEMs, Indented Regular Hex Head Machine Screw, Type I Cross Recess    | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMK3  | SEMs, Trimmed Regular Hex Head Machine Screw, Type I Cross Recess     | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMK4  | SEMs, Fully Upset Regular Hex Head Machine Screw, Type I Cross Recess | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMK5  | SEMs, Indented Large Hex Head Machine Screw, Type I Cross Recess      | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMK6  | SEMs, Trimmed Large Hex Head Machine Screw, Type I Cross Recess       | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMK7  | SEMs, Fully Upset Large Hex Head Machine Screw, Type I Cross Recess   | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMK8  | SEMs, Indented Hex Washer Head Machine Screw, Unslotted               | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMK9  | SEMs, Indented Hex Washer Head Machine Screw, Slotted                 | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Screw and Washer Assemblies — Screw Component (Cont'd)**

|        |                                                                             | Applicable<br>Table References: | Thread | Size | Lg/Other | Material | Finish | Feature |
|--------|-----------------------------------------------------------------------------|---------------------------------|--------|------|----------|----------|--------|---------|
| B18.13 | Screw and Washer Assemblies (Inch Series) (Cont'd)                          | Field 2                         | 3      | 4    | 5        | 6        | 7      |         |
| AEMLO  | SEMs, Indented Hex Washer Head Machine Screw, Type I Cross Recess           | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEML1  | SEMs, Indented Hex Washer Head Machine Screw, Type I Cross Recess with Slot | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEML2  | SEMs, Round Washer Head Machine Screw, Slotted                              | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEML3  | SEMs, Round Washer Head Machine Screw, Type I Cross Recess                  | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEML4  | SEMs, Round Head Machine Screw, Slotted                                     | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEML5  | SEMs, Round Head Machine Screw, Type I Cross Recess                         | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEML6  | SEMs, Round Head Machine Screw, Type IA Cross Recess                        | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEML7  | SEMs, Round Head Machine Screw, Type II Cross Recess                        | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEML8  | SEMs, Round Head Machine Screw, Type III Square Recess                      | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEML9  | SEMs, Round Head Machine Screw, Type I Cross Recess with Slot               | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMM0  | SEMs, Round Head Machine Screw, Type IA Cross Recess with Slot              | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMM1  | SEMs, Flat Head Tapping Screw, Slotted                                      | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMM2  | SEMs, Flat Head Tapping Screw, Type I Cross Recess                          | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMM3  | SEMs, Flat Head Tapping Screw, Type IA Cross Recess                         | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMM4  | SEMs, Flat Head Tapping Screw, Type II Cross Recess                         | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMM6  | SEMs, 100 Deg. Flat Head Tapping Screw, Slotted                             | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMM7  | SEMs, 100 Deg. Flat Head Tapping Screw, Type I Cross Recess                 | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMM8  | SEMs, 100 Deg. Flat Head Tapping Screw, Type IA Cross Recess                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMM9  | SEMs, 100 Deg. Flat Head Tapping Screw, Type II Cross Recess                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMN0  | SEMs, Oval Head Tapping Screw, Slotted                                      | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMN1  | SEMs, Oval Head Tapping Screw, Type I Cross Recess                          | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMN2  | SEMs, Oval Head Tapping Screw, Type IA Cross Recess                         | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMN3  | SEMs, Oval Head Tapping Screw, Type II Cross Recess                         | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMN5  | SEMs, Undercut Flat Head Tapping Screw, Slotted                             | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMN6  | SEMs, Undercut Flat Head Tapping Screw, Type I Cross Recess                 | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMN7  | SEMs, Undercut Flat Head Tapping Screw, Type IA Cross Recess                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMN8  | SEMs, Undercut Flat Head Tapping Screw, Type II Cross Recess                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMP0  | SEMs, Undercut Oval Head Tapping Screw, Slotted                             | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMP1  | SEMs, Undercut Oval Head Tapping Screw, Type I Cross Recess                 | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMP2  | SEMs, Undercut Oval Head Tapping Screw, Type IA Cross Recess                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMP3  | SEMs, Undercut Oval Head Tapping Screw, Type II Cross Recess                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMP5  | SEMs, Flat Trim Head Tapping Screw, Type I Cross Recess                     | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMP6  | SEMs, Flat Trim Head Tapping Screw, Type IA Cross Recess                    | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMP7  | SEMs, Flat Trim Head Tapping Screw, Type II Cross Recess                    | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMP8  | SEMs, Oval Trim Head Tapping Screw, Type I Cross Recess                     | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMP9  | SEMs, Oval Trim Head Tapping Screw, Type IA Cross Recess                    | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMQ0  | SEMs, Oval Trim Head Tapping Screw, Type II Cross Recess                    | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMQ1  | SEMs, Pan Head Tapping Screw, Slotted                                       | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMQ2  | SEMs, Pan Head Tapping Screw, Type I Cross Recess                           | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMQ3  | SEMs, Pan Head Tapping Screw, Type IA Cross Recess                          | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMQ4  | SEMs, Pan Head Tapping Screw, Type II Cross Recess                          | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMQ5  | SEMs, Pan Head Tapping Screw, Type III Square Recess                        | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMQ9  | SEMs, Fillister Head Tapping Screw, Slotted                                 | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMR0  | SEMs, Fillister Head Tapping Screw, Type I Cross Recess                     | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMR1  | SEMs, Fillister Head Tapping Screw, Type IA Cross Recess                    | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMR2  | SEMs, Fillister Head Tapping Screw, Type II Cross Recess                    | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMR4  | SEMs, Truss Head Tapping Screw, Slotted                                     | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMR5  | SEMs, Truss Head Tapping Screw, Type I Cross Recess                         | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMR6  | SEMs, Truss Head Tapping Screw, Type IA Cross Recess                        | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMR7  | SEMs, Truss Head Tapping Screw, Type II Cross Recess                        | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMS1  | SEMs, Indented Regular Hex Head Tapping Screw, Unslotted                    | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |

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**Screw and Washer Assemblies — Screw Component (Cont'd)**

|           |                                                                       | Applicable<br>Table References: | Thread | Size | Lg/Other | Material | Finish | Feature |
|-----------|-----------------------------------------------------------------------|---------------------------------|--------|------|----------|----------|--------|---------|
| B18.13    | Screw and Washer Assemblies (Inch Series) (Cont'd)                    | Field 2                         | 3      | 4    | 5        | 6        | 7      |         |
| AEMS2     | SEMs, Indented Regular Hex Head Tapping Screw, Slotted                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMS3     | SEMs, Trimmed Regular Hex Head Tapping Screw, Unslotted               | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMS4     | SEMs, Trimmed Regular Hex Head Tapping Screw, Slotted                 | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMS5     | SEMs, Fully Upset Regular Hex Head Tapping Screw, Unslotted           | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMS6     | SEMs, Fully Upset Regular Hex Head Tapping Screw, Slotted             | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMS7     | SEMs, Indented Large Hex Head Tapping Screw, Unslotted                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMS8     | SEMs, Indented Large Hex Head Tapping Screw, Slotted                  | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMS9     | SEMs, Trimmed Large Hex Head Tapping Screw, Unslotted                 | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMT0     | SEMs, Trimmed Large Hex Head Tapping Screw, Slotted                   | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMT1     | SEMs, Fully Upset Large Hex Head Tapping Screw, Unslotted             | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMT2     | SEMs, Fully Upset Large Hex Head Tapping Screw, Slotted               | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMT3     | SEMs, Indented Regular Hex Head Tapping Screw, Type I Cross Recess    | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMT4     | SEMs, Trimmed Regular Hex Head Tapping Screw, Type I Cross Recess     | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMT5     | SEMs, Fully Upset Regular Hex Head Tapping Screw, Type I Cross Recess | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMT6     | SEMs, Indented Large Hex Head Tapping Screw, Type I Cross Recess      | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMT7     | SEMs, Trimmed Large Hex Head Tapping Screw, Type I Cross Recess       | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMT8     | SEMs, Fully Upset Large Hex Head Tapping Screw, Type I Cross Recess   | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMT9     | SEMs, Indented Hex Washer Head Tapping Screw, Unslotted               | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMU0     | SEMs, Indented Hex Washer Head Tapping Screw, Slotted                 | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMU1     | SEMs, Indented Hex Washer Head Tapping Screw, Type I Cross Recess     | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMU3     | SEMs, Round Washer Head Tapping Screw, Slotted                        | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMU4     | SEMs, Round Washer Head Tapping Screw, Type I Cross Recess            | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMU5     | SEMs, Round Head Tapping Screw, Slotted                               | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMU6     | SEMs, Round Head Tapping Screw, Type I Cross Recess                   | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMU7     | SEMs, Round Head Tapping Screw, Type IA Cross Recess                  | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMU8     | SEMs, Round Head Tapping Screw, Type II Cross Recess                  | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| AEMV2     | SEMs, Round Head Tapping Screw, Unslotted                             | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-9    |         |
| B18.13.1M | Metric Screw and Washer Assemblies                                    | Field 2                         | 3      | 4    | 5        | 6        | 7      |         |
| AEM07     | SEMs, Hex Cap Screw                                                   | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEM43     | SEMs, Hex Socket Head Cap Screw                                       | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMV3     | SEMs, Flat Head Tapping Screw, Slotted                                | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMV4     | SEMs, Style A Flat Head Tapping Screw, Type I Cross Recess            | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMV5     | SEMs, Style A Flat Head Tapping Screw, Type IA Cross Recess           | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMV6     | SEMs, Style A Flat Head Tapping Screw, Type III Cross Recess          | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMV7     | SEMs, Style B Flat Head Tapping Screw, Type I Cross Recess            | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMV8     | SEMs, Style B Flat Head Tapping Screw, Type IA Cross Recess           | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMV9     | SEMs, Style B Flat Head Tapping Screw, Type III Cross Recess          | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMW0     | SEMs, Oval Head Tapping Screw, Slotted                                | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMW1     | SEMs, Oval Head Tapping Screw, Type I Cross Recess                    | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMW2     | SEMs, Oval Head Tapping Screw, Type IA Cross Recess                   | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMW3     | SEMs, Oval Head Tapping Screw, Type III Cross Recess                  | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMW4     | SEMs, Pan Head Tapping Screw, Slotted                                 | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMW5     | SEMs, Pan Head Tapping Screw, Type I Cross Recess                     | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMW6     | SEMs, Pan Head Tapping Screw, Type IA Cross Recess                    | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMW7     | SEMs, Pan Head Tapping Screw, Type III Cross Recess                   | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMX1     | SEMs, Indented Hex Head Tapping Screw, Unslotted                      | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMX3     | SEMs, Trimmed Hex Head Tapping Screw, Unslotted                       | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMX5     | SEMs, Fully Upset Hex Head Tapping Screw, Unslotted                   | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMX7     | SEMs, Hex Flange Head Tapping Screw, Unslotted                        | 2-2                             | 3-7    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMY0     | SEMs, Flat Head Machine Screw, Slotted                                | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Screw and Washer Assemblies — Screw Component (Cont'd)**

|           |                                                              | Applicable<br>Table References: | Thread | Size | Lg/Other | Material | Finish | Feature |
|-----------|--------------------------------------------------------------|---------------------------------|--------|------|----------|----------|--------|---------|
| B18.13.1M | Metric Screw and Washer Assemblies (Cont'd)                  | Field 2                         | 3      | 4    | 5        | 6        | 7      |         |
| AEMY1     | SEMs, Style A Flat Head Machine Screw, Type I Cross Recess   | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMY2     | SEMs, Style A Flat Head Machine Screw, Type IA Cross Recess  | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMY3     | SEMs, Style A Flat Head Machine Screw, Type III Cross Recess | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMY4     | SEMs, Style B Flat Head Machine Screw, Type I Cross Recess   | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMY5     | SEMs, Style B Flat Head Machine Screw, Type IA Cross Recess  | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMY6     | SEMs, Style B Flat Head Machine Screw, Type III Cross Recess | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMY7     | SEMs, Oval Head Machine Screw, Slotted                       | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMY8     | SEMs, Oval Head Machine Screw, Type I Cross Recess           | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMY9     | SEMs, Oval Head Machine Screw, Type IA Cross Recess          | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZ0     | SEMs, Oval Head Machine Screw, Type III Cross Recess         | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZ1     | SEMs, Pan Head Machine Screw, Slotted                        | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZ2     | SEMs, Pan Head Machine Screw, Type I Cross Recess            | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZ3     | SEMs, Pan Head Machine Screw, Type IA Cross Recess           | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZ4     | SEMs, Pan Head Machine Screw, Type III Cross Recess          | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZ8     | SEMs, Indented Hex Head Machine Screw, Unslotted             | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZ9     | SEMs, Indented Hex Head Machine Screw, Slotted               | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZA     | SEMs, Trimmed Hex Head Machine Screw, Unslotted              | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZB     | SEMs, Trimmed Hex Head Machine Screw, Slotted                | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZC     | SEMs, Fully Upset Hex Head Machine Screw, Unslotted          | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZD     | SEMs, Fully Upset Hex Head Machine Screw, Slotted            | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZE     | SEMs, Hex Flange Head Machine Screw, Slotted                 | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |
| AEMZF     | SEMs, Hex Flange Head Machine Screw, Unslotted               | 2-1                             | 3-3    | 4-2  | 5-*      | 6-*      | 7-9    |         |

**Nuts****B18.2.2 Nuts for General Applications: Machine Screw Nuts, Hex, Square, Hex Flange, and Coupling Nuts (Inch Series)**

|       |                                  | Field 2 | 3   | 4   | 5   | 6   | 7   |
|-------|----------------------------------|---------|-----|-----|-----|-----|-----|
| AEN01 | Nuts, Square                     | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN02 | Nuts, Hex Flat                   | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN03 | Nuts, Hex Flat Jam               | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN04 | Nuts, Hex                        | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN05 | Nuts, Hex Jam                    | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN06 | Nuts, Hex Slotted                | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN07 | Nuts, Hex Thick                  | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN08 | Nuts, Hex Thick Slotted          | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN09 | Nuts, Heavy Square               | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN10 | Nuts, Heavy Hex Flat             | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN11 | Nuts, Heavy Hex Flat Jam         | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN12 | Nuts, Heavy Hex                  | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN13 | Nuts, Heavy Hex Jam              | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN14 | Nuts, Heavy Hex Slotted          | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN35 | Nuts, Hex Machine, Small Pattern | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN36 | Nuts, Hex Flange                 | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN37 | Nuts, Hex Flange, Large          | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |
| AEN38 | Nuts, Hex Coupling               | 2-1     | 3-1 | 4-1 | 5-* | 6-* | 7-1 |

**B18.2.4.1M Metric Hex Nuts, Style 1**

|       |                    | Field 2 | 3   | 4   | 5   | 6   | 7   |
|-------|--------------------|---------|-----|-----|-----|-----|-----|
| AEN15 | Nuts, Hex, Style 1 | 2-1     | 3-3 | 4-2 | 5-* | 6-* | 7-1 |

**B18.2.4.2M Metric Hex Nuts, Style 2**

|       |                    | Field 2 | 3   | 4   | 5   | 6   | 7   |
|-------|--------------------|---------|-----|-----|-----|-----|-----|
| AEN16 | Nuts, Hex, Style 2 | 2-1     | 3-3 | 4-2 | 5-* | 6-* | 7-1 |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Nuts (Cont'd)**

|                   |                                                                                                      | Applicable<br>Table References: | Thread         | Size     | Lg/Other | Material | Finish   | Feature  |
|-------------------|------------------------------------------------------------------------------------------------------|---------------------------------|----------------|----------|----------|----------|----------|----------|
| <b>B18.2.4.3M</b> | <b>Metric Slotted Hex Nuts</b>                                                                       |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEN17             | Nuts, Hex, Slotted                                                                                   |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-1      |
| <b>B18.2.4.4M</b> | <b>Metric Hex Flange Nuts</b>                                                                        |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEN18             | Nuts, Hex, Flange                                                                                    |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-1      |
| <b>B18.2.4.5M</b> | <b>Metric Hex Jam Nuts</b>                                                                           |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEN19             | Nuts, Hex, Jam                                                                                       |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-1      |
| <b>B18.2.4.6M</b> | <b>Metric Hex-Hex Nuts</b>                                                                           |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEN20             | Nuts, Heavy-Hex                                                                                      |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-1      |
| <b>B18.2.6</b>    | <b>Fasteners for Use in Structural Applications (Inch Series)</b>                                    |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEN21             | Nuts, Heavy Hex (for use with Structural Bolts)                                                      |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>B18.2.6M</b>   | <b>Metric Fasteners for use in Structural Applications</b>                                           |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEN20             | Nuts, Heavy Hex (for use with Metric Structural Bolts)                                               |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-1      |
| <b>B18.6.3</b>    | <b>Machine Screws and Machine Screw Nuts (Inch Series)</b>                                           |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEN22             | Nuts, Machine, Square                                                                                |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEN23             | Nuts, Machine, Hex                                                                                   |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>B18.6.6</b>    | <b>Nylon Insert Locknuts (Inch Series)</b>                                                           |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEN48             | Nuts, Nylon Insert Locknut                                                                           |                                 | 2-1            | 3-1      | 4-1      | 5-9      | 6-*      | 7-1      |
| <b>B18.6.9</b>    | <b>Wing Nuts (Inch Series)</b>                                                                       |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEN39             | Wing Nut, Type A                                                                                     |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEN40             | Wing Nut, Type B, Style 1                                                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEN41             | Wing Nut, Type B, Style 2                                                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEN42             | Wing Nut, Type C, Style 1                                                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEN43             | Wing Nut, Type C, Style 2                                                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEN44             | Wing Nut, Type C, Style 3                                                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEN45             | Wing Nut, Type D, Style 1                                                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEN46             | Wing Nut, Type D, Style 2 (Low Wing)                                                                 |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEN47             | Wing Nut, Type D, Style 3 (Large Base)                                                               |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>B18.10</b>     | <b>Track Bolts and Nuts (Inch Series)</b>                                                            |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEN24             | Nuts, Track Bolt (Low Carbon)                                                                        |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-13     |
| AEN25             | Nuts, Track Bolt (Medium Carbon)                                                                     |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-13     |
| <b>B18.16M</b>    | <b>Metric Prevailing-Torque Type Steel Hex Nuts and Hex Flange Nuts</b>                              |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| AEN26             | Nuts, Hex, Prevailing-Torque Type (All Metal), Class 5 and 10                                        |                                 | 2-1            | 3-3      | 4-2      | 5-8      | 6-*      | 7-1      |
| AEN27             | Nuts, Hex, Prevailing-Torque Type (Nonmetallic Prevailing Torque Element in Thread), Class 5 and 10  |                                 | 2-1            | 3-3      | 4-2      | 5-8      | 6-*      | 7-1      |
| AEN28             | Nuts, Hex, Prevailing-Torque Type (Top Insert), Class 5 and 10                                       |                                 | 2-1            | 3-3      | 4-2      | 5-8      | 6-*      | 7-1      |
| AEN29             | Nuts, Hex Flange, Prevailing-Torque Type (All Metal)                                                 |                                 | 2-1            | 3-3      | 4-2      | 5-8      | 6-*      | 7-1      |
| AEN30             | Nuts, Hex Flange, Prevailing-Torque Type (Nonmetallic Prevailing Torque Element in Threads)          |                                 | 2-1            | 3-3      | 4-2      | 5-8      | 6-*      | 7-1      |
| AEN31             | Nuts, Hex Flange, Prevailing-Torque Type (Top Insert)                                                |                                 | 2-1            | 3-3      | 4-2      | 5-8      | 6-*      | 7-1      |
| AEN32             | Nuts, Hex, Prevailing-Torque Type (All Metal), Class 9                                               |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-1      |
| AEN33             | Nuts, Hex, Prevailing-Torque Type (Nonmetallic Prevailing Torque Element in Threads), Class 5 and 10 |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-1      |
| AEN34             | Nuts, Hex, Prevailing-Torque Type (Top Insert), Class 9                                              |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-1      |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Nuts (Cont'd)**

|                  |                                                                                                      | Applicable<br>Table References: | Thread         | Size     | Lg/Other | Material | Finish   | Feature  |
|------------------|------------------------------------------------------------------------------------------------------|---------------------------------|----------------|----------|----------|----------|----------|----------|
| <b>B18.16.3M</b> | <b>Metric Prevailing-Torque Type Steel Hex Nuts and Hex Flange Nuts</b>                              |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEN26            | Nuts, Hex, Prevailing-Torque Type (All Metal), Class 5 and 10                                        |                                 | 2-1            | 3-3      | 4-2      | 5-8      | 6*       | 7-1      |
| AEN27            | Nuts, Hex, Prevailing-Torque Type (Nonmetallic Prevailing-Torque Element in Thread), Class 5 and 10  |                                 | 2-1            | 3-3      | 4-2      | 5-8      | 6*       | 7-1      |
| AEN28            | Nuts, Hex, Prevailing-Torque Type (Top Insert), Class 5 and 10                                       |                                 | 2-1            | 3-3      | 4-2      | 5-8      | 6*       | 7-1      |
| AEN29            | Nuts, Hex Flange, Prevailing-Torque Type (All Metal)                                                 |                                 | 2-1            | 3-3      | 4-2      | 5-8      | 6*       | 7-1      |
| AEN30            | Nuts, Hex Flange, Prevailing-Torque Type (Nonmetallic Prevailing-Torque Element in Threads)          |                                 | 2-1            | 3-3      | 4-2      | 5-8      | 6*       | 7-1      |
| AEN31            | Nuts, Hex Flange, Prevailing-Torque Type (Top Insert)                                                |                                 | 2-1            | 3-3      | 4-2      | 5-8      | 6*       | 7-1      |
| AEN32            | Nuts, Hex, Prevailing-Torque Type (All Metal), Class 9                                               |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-1      |
| AEN33            | Nuts, Hex, Prevailing-Torque Type (Nonmetallic Prevailing-Torque Element in Threads), Class 5 and 10 |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-1      |
| AEN34            | Nuts, Hex, Prevailing-Torque Type (Top Insert), Class 9                                              |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-1      |

**Pins**

| <b>B18.8.1</b>    | <b>Clevis Pins and Cotter Pins (Inch Series)</b>                                                                            |  | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------|--|----------------|----------|----------|----------|----------|----------|
| AEP01             | Pins, Clevis                                                                                                                |  | 2-1            | 3-2      | 4-5      | 5*       | 6*       | 7-1      |
| AEP02             | Pins, Cotter                                                                                                                |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-7      |
| <b>B18.8.2</b>    | <b>Taper Pins, Dowel Pins, Straight Pins, Grooved Pins, and Spring Pins (Inch Series)</b>                                   |  | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEP03             | Pins, Taper, Commercial Class                                                                                               |  | 2-1            | 3-19     | 4-1      | 5*       | 6*       | 7-1      |
| AEP04             | Pins, Taper, Precision Class                                                                                                |  | 2-1            | 3-19     | 4-1      | 5*       | 6*       | 7-1      |
| AEP05             | Pins, Dowel, Hardened Ground Machine, Standard Series                                                                       |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP06             | Pins, Dowel, Hardened Ground Machine, Oversize Series                                                                       |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP07             | Pins, Dowel, Hardened Ground Production                                                                                     |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP08             | Pins, Dowel, Unhardened Ground                                                                                              |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP09             | Pins, Straight, Chamfered and Square End                                                                                    |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-8      |
| AEP10             | Pins, Grooved, Low Carbon or Alloy Steel, Type A                                                                            |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP11             | Pins, Grooved, Corrosion Resistant Steel and Monel, Type A                                                                  |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP12             | Pins, Grooved, Low Carbon or Alloy Steel, Type E                                                                            |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP13             | Pins, Grooved, Corrosion Resistant Steel and Monel, Type E                                                                  |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP14             | Pins, Grooved, Low Carbon or Alloy Steel, Type F                                                                            |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP15             | Pins, Grooved, Corrosion Resistant Steel and Monel, Type F                                                                  |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP16             | Pins, Grooved, Low Carbon or Alloy Steel, Type G                                                                            |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP17             | Pins, Grooved, Corrosion Resistant Steel and Monel, Type G                                                                  |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP18             | Pins, Grooved, Low Carbon or Alloy Steel, Type H                                                                            |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP19             | Pins, Grooved, Corrosion-Resistant Steel and Monel, Type H                                                                  |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP20             | Pins, Round Head Grooved Drive Stud                                                                                         |  | 2-1            | 3-18     | 4-1      | 5*       | 6*       | 7-1      |
| AEP21             | Pins, Grooved, T-Head Cotter                                                                                                |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP22             | Pins, Spring, Slotted Type                                                                                                  |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP23             | Pins, Spring, Coiled Type, Standard Duty                                                                                    |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP24             | Pins, Spring, Coiled Type, Heavy Duty                                                                                       |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| AEP25             | Pins, Spring, Coiled Type, Light Duty                                                                                       |  | 2-1            | 3-2      | 4-1      | 5*       | 6*       | 7-1      |
| <b>B18.8.100M</b> | <b>Spring Pins: Coiled Type, Spring Pins: Slotted, Machine Dowel Pins: Hardened Ground and Grooved Pins (Metric Series)</b> |  | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEP26             | Pins, Spring, Coiled Type, Standard Duty                                                                                    |  | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP27             | Pins, Spring, Coiled Type, Heavy Duty                                                                                       |  | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP28             | Pins, Spring, Coiled Type, Light Duty                                                                                       |  | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| <b>B18.8.4M</b>   | <b>Metric Spring Pins — Slotted</b>                                                                                         |  | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEP29             | Pins, Spring, Slotted Type A                                                                                                |  | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP30             | Pins, Spring, Slotted Type B                                                                                                |  | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Pins (Cont'd)**

|                   |                                                                                 | Applicable<br>Table References: | Thread         | Size     | Lg/Other | Material | Finish   | Feature  |
|-------------------|---------------------------------------------------------------------------------|---------------------------------|----------------|----------|----------|----------|----------|----------|
| <b>B18.8.5M</b>   | <b>Metric Dowel Pins—Hardened Ground</b>                                        |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEP31             | Pins, Dowel, Machine, Hardened Ground, Standard Series                          |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP32             | Pins, Dowel, Machine, Hardened Ground, Oversize Series                          |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP42             | <i>Pins, Grooved, Type 39</i>                                                   |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP43             | <i>Pins, Grooved, Type 40</i>                                                   |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP44             | <i>Pins, Grooved, Type 42</i>                                                   |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP45             | <i>Pins, Grooved, Type 43</i>                                                   |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP46             | <i>Pins, Grooved, Type 43-1</i>                                                 |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP47             | <i>Pins, Grooved, Type 43-2</i>                                                 |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP48             | <i>Pins, Grooved, Type 44</i>                                                   |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP49             | <i>Pins, Grooved, Type 45</i>                                                   |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP50             | <i>Pins, Grooved, Type 46-1</i>                                                 |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP51             | <i>Pins, Grooved, Type 46-2</i>                                                 |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP52             | <i>Pins, Grooved, Type 47-1</i>                                                 |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP53             | <i>Pins, Grooved, Type 47-2</i>                                                 |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| <b>B18.8.200M</b> | <b>Cotter Pins, Headless Clevis Pins and Headed Clevis Pins (Metric Series)</b> |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEP33             | Pins, Cotter                                                                    |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-7      |
| <b>B18.8.7M</b>   | <b>Metric Headless Clevis Pins</b>                                              |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEP34             | Pins, Clevis, Headless, Type A Unhardened                                       |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP35             | Pins, Clevis, Headless, Type A Hardened                                         |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP36             | Pins, Clevis, Headless, Type B Unhardened                                       |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP37             | Pins, Clevis, Headless, Type B Hardened                                         |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| <b>B18.8.8M</b>   | <b>Metric Headless Clevis Pins</b>                                              |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEP38             | Pins, Clevis, Headed, Type A Unhardened                                         |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP39             | Pins, Clevis, Headed, Type A Hardened                                           |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP40             | Pins, Clevis, Headed, Type B Unhardened                                         |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP41             | Pins, Clevis, Headed, Type B Hardened                                           |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| <b>B18.8.9M</b>   | <b>Metric Grooved Pins</b>                                                      |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEP42             | <i>Pins, Grooved, Type 39</i>                                                   |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP43             | <i>Pins, Grooved, Type 40</i>                                                   |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP44             | <i>Pins, Grooved, Type 42</i>                                                   |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP45             | <i>Pins, Grooved, Type 43</i>                                                   |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP46             | <i>Pins, Grooved, Type 43-1</i>                                                 |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP47             | <i>Pins, Grooved, Type 43-2</i>                                                 |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP48             | <i>Pins, Grooved, Type 44</i>                                                   |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP49             | <i>Pins, Grooved, Type 45</i>                                                   |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP50             | <i>Pins, Grooved, Type 46-1</i>                                                 |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP51             | <i>Pins, Grooved, Type 46-2</i>                                                 |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP52             | <i>Pins, Grooved, Type 47-1</i>                                                 |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |
| AEP53             | <i>Pins, Grooved, Type 47-2</i>                                                 |                                 | 2-1            | 3-4      | 4-2      | 5*       | 6*       | 7-1      |

**Retaining Rings**

|                 |                                                                        |  |                |          |          |          |          |          |
|-----------------|------------------------------------------------------------------------|--|----------------|----------|----------|----------|----------|----------|
| <b>B18.27</b>   | <b>Tapered and Reduced Cross Section Retaining Rings (Inch Series)</b> |  | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AER01           | Retaining Rings, External Type NA1                                     |  | 2-1            | 3-20     | 4-1      | 5*       | 6*       | 7-1      |
| AER02           | Retaining Rings, Internal Type NA2                                     |  | 2-1            | 3-20     | 4-1      | 5*       | 6*       | 7-1      |
| AER03           | Retaining Rings, E-Ring Type NA3                                       |  | 2-1            | 3-20     | 4-1      | 5*       | 6*       | 7-1      |
| <b>B18.27.2</b> | <b>Tapered and Reduced Cross Section Retaining Rings (Inch Series)</b> |  | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AER04           | Retaining Rings, Heavy Duty External Type NA4                          |  | 2-1            | 3-20     | 4-1      | 5*       | 6*       | 7-1      |
| AER05           | Retaining Rings, Reinforced E-Rings Type NA5                           |  | 2-1            | 3-20     | 4-1      | 5*       | 6*       | 7-1      |
| AER06           | Retaining Rings, C-Type NA6                                            |  | 2-1            | 3-20     | 4-1      | 5*       | 6*       | 7-1      |

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**Retaining Rings (Cont'd)**

|                 |                                                                                                      | Applicable<br>Table References: | Thread   | Size     | Lg/Other | Material | Finish   | Feature |
|-----------------|------------------------------------------------------------------------------------------------------|---------------------------------|----------|----------|----------|----------|----------|---------|
| <b>B18.27.3</b> | <b>Tapered and Reduced Cross Section Retaining Rings (Inch Series)</b>                               | <b>Field 2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |         |
| AER07           | Retaining Rings, Bowed External Rings NA7                                                            | 2-1                             | 3-20     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| AER08           | Retaining Rings, Bowed Internal Rings NA8                                                            | 2-1                             | 3-20     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| AER09           | Retaining Rings, Bowed External E-Rings NA9                                                          | 2-1                             | 3-20     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| <b>B18.27.4</b> | <b>Tapered and Reduced Cross Section Retaining Rings (Inch Series)</b>                               | <b>Field 2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |         |
| AER10           | Retaining Rings, Inverted External NA10                                                              | 2-1                             | 3-20     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| AER11           | Retaining Rings, Inverted Internal NA11                                                              | 2-1                             | 3-20     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| AER12           | Retaining Rings, Beveled External NA12                                                               | 2-1                             | 3-20     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| AER13           | Retaining Rings, Beveled Internal NA13                                                               | 2-1                             | 3-20     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| <b>B18.27.5</b> | <b>Tapered and Reduced Cross Section Retaining Rings (Inch Series)</b>                               | <b>Field 2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |         |
| AER14           | Retaining Rings, External Self-Locking Rings Type NA14                                               | 2-1                             | 3-20     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| AER15           | Retaining Rings, External Interlocking Rings Type NA15                                               | 2-1                             | 3-20     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| AER16           | Retaining Rings, External Bowed Locking Prongs Rings Type NA16                                       | 2-1                             | 3-20     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| <b>B27.6</b>    | <b>General Purpose Uniform Cross Section Spiral Retaining Rings (Inch Series)</b>                    | <b>Field 2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |         |
| AER17           | Retaining Rings, GP Uniform Cross Section Spiral, Light Duty External Type                           | 2-1                             | 3-21     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| AER18           | Retaining Rings, GP Uniform Cross Section Spiral, Heavy Duty External Type                           | 2-1                             | 3-21     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| AER19           | Retaining Rings, GP Uniform Cross Section Spiral, Light Duty Internal Type                           | 2-1                             | 3-21     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| AER20           | Retaining Rings, GP Uniform Cross Section Spiral, Heavy Duty Internal Type                           | 2-1                             | 3-21     | 4-1      | 5-*      | 6-*      | 7-1      |         |
| <b>B27.7</b>    | <b>Metric Tapered and Reduced Cross Section Retaining Rings</b>                                      | <b>Field 2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |         |
| AER21           | Retaining Rings, GP Tapered and Reduced Cross Section, Basic External Series Type 3AM1               | 2-1                             | 3-20     | 4-2      | 5-*      | 6-*      | 7-1      |         |
| AER22           | Retaining Rings, GP Tapered and Reduced Cross Section, Basic Internal Series Type 3BM1               | 2-1                             | 3-20     | 4-2      | 5-*      | 6-*      | 7-1      |         |
| AER23           | Retaining Rings, GP Tapered and Reduced Cross Section, E-Ring External Series Type 3CM1              | 2-1                             | 3-20     | 4-2      | 5-*      | 6-*      | 7-1      |         |
| <b>B27.8</b>    | <b>Metric Tapered and Reduced Cross Section Retaining Rings</b>                                      | <b>Field 2</b>                  | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |         |
| AER24           | Retaining Rings, GP Tapered and Reduced Cross Section, Heavy Duty 1 Ring External Series Type 3DM1   | 2-1                             | 3-20     | 4-2      | 5-*      | 6-*      | 7-1      |         |
| AER25           | Retaining Rings, GP Tapered and Reduced Cross Section, Reinforced 1 E-Ring External Series Type 3EM1 | 2-1                             | 3-20     | 4-2      | 5-*      | 6-*      | 7-1      |         |
| AER26           | Retaining Rings, GP Tapered and Reduced Cross Section, C-Ring External Series Type 3FM1              | 2-1                             | 3-20     | 4-2      | 5-*      | 6-*      | 7-1      |         |

**Screws**

|                   |                                                      |                |          |          |          |          |          |  |
|-------------------|------------------------------------------------------|----------------|----------|----------|----------|----------|----------|--|
| <b>B18.2.1</b>    | <b>Square and Hex Bolts and Screws (Inch Series)</b> | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |  |
| AES01             | Screws, Cap, Hex (Finished Hex Bolt)                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |  |
| AES02             | Screws, Hex, Heavy                                   | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |  |
| AESA0             | Screws, Hex Flange                                   | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |  |
| AESA1             | Screws, Lobed Head                                   | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |  |
| AES03             | Screws, Lag, Square Head, Gimlet Point               | 2-1            | 3-13     | 4-1      | 5-*      | 6-*      | 7-1      |  |
| AES04             | Screws, Lag, Square Head, Cone Point                 | 2-1            | 3-13     | 4-1      | 5-*      | 6-*      | 7-1      |  |
| AES05             | Screws, Lag, Hex Head, Gimlet Point                  | 2-1            | 3-13     | 4-1      | 5-*      | 6-*      | 7-1      |  |
| AES06             | Screws, Lag, Hex Head, Cone Point                    | 2-1            | 3-13     | 4-1      | 5-*      | 6-*      | 7-1      |  |
| <b>B18.2.3.1M</b> | <b>Metric Hex Cap Screws</b>                         | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |  |
| AES07             | Screws, Cap, Hex                                     | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |  |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Screws (Cont'd)**

|                   |                                                                                | Applicable<br>Table References: | Thread         | Size     | Lg/Other | Material | Finish   | Feature  |
|-------------------|--------------------------------------------------------------------------------|---------------------------------|----------------|----------|----------|----------|----------|----------|
| <b>B18.2.3.2M</b> | <b>Metric Formed Hex Screws</b>                                                |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| <b>AES08</b>      | Screws, Hex, Formed                                                            |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.2.3.3M</b> | <b>Metric Heavy Hex Screws</b>                                                 |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| <b>AES09</b>      | Screws, Hex, Heavy                                                             |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.2.3.4M</b> | <b>Metric Hex Flange Screws</b>                                                |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| <b>AES10</b>      | Screws, Hex, Flange 2-1                                                        |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-4      |
| <b>B18.2.3.8M</b> | <b>Metric Hex Lag Screws</b>                                                   |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| <b>AES11</b>      | Screws, Lag, Hex Head, Gimlet Point                                            |                                 | 2-1            | 3-4      | 4-2      | 5-*      | 6-*      | 7-1      |
| <b>B18.2.3.9M</b> | <b>Metric Heavy Hex Flange Screws</b>                                          |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| <b>AES12</b>      | Screws, Heavy Hex, Flange                                                      |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-4      |
| <b>B18.2.5M</b>   | <b>Metric 12-Point Flange Screws</b>                                           |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| <b>AESA2</b>      | Screws, 12-Point, Flange                                                       |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-4      |
| <b>B18.2.7.1M</b> | <b>Metric 12-Spline Flange Screws</b>                                          |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| <b>AES13</b>      | Screws, 12-Spline, Flange                                                      |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-5      |
| <b>B18.3</b>      | <b>Socket Cap, Shoulder, and Set Screws, Hex and Spline Keys (Inch Series)</b> |                                 | <i>Field 2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> |
| <b>AES14</b>      | Screws, Cap, Hex Socket Head                                                   |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-11     |
| <b>AES15</b>      | Screws, Cap, Spline Socket Head                                                |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| <b>AESA4</b>      | Screws, Cap, Hex Socket Low Head                                               |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| <b>AES16</b>      | Screws, Cap, Hex Socket, Flat Countersunk Head                                 |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| <b>AES17</b>      | Screws, Cap, Spline Socket, Flat Countersunk Head                              |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| <b>AES18</b>      | Screws, Cap, Hex Socket, Button Head                                           |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| <b>AES19</b>      | Screws, Cap, Spline Socket, Button Head                                        |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| <b>AES20</b>      | Screws, Shoulder, Hex Socket Head                                              |                                 | 2-1            | 3-8      | 4-1      | 5-*      | 6-*      | 7-2      |
| <b>AES21</b>      | Screws, Set, Spline Socket, Cup Point Type, A                                  |                                 | 2-1            | 3-10     | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES22</b>      | Screws, Set, Spline Socket, Small Cup Point, Type B                            |                                 | 2-1            | 3-10     | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES23</b>      | Screws, Set, Spline Socket, Knurled Cup Point, Type C                          |                                 | 2-1            | 3-10     | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES24</b>      | Screws, Set, Spline Socket, Hexagon Cup Point, Type D                          |                                 | 2-1            | 3-10     | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES25</b>      | Screws, Set, Spline Socket, W Cup Point, Type E                                |                                 | 2-1            | 3-10     | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES26</b>      | Screws, Set, Spline Socket, Nu-Cup Point, Type F                               |                                 | 2-1            | 3-10     | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES27</b>      | Screws, Set, Spline Socket, Nu-Cup Point, Type G                               |                                 | 2-1            | 3-10     | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES28</b>      | Screws, Set, Spline Socket, Cone Point                                         |                                 | 2-1            | 3-10     | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES29</b>      | Screws, Set, Spline Socket, Flat Point                                         |                                 | 2-1            | 3-10     | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES30</b>      | Screws, Set, Spline Socket, Half Dog Point                                     |                                 | 2-1            | 3-10     | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES31</b>      | Screws, Set, Spline Socket, Oval Point                                         |                                 | 2-1            | 3-10     | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES32</b>      | Screws, Set, Hex Socket, Cup Point, Type A                                     |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES33</b>      | Screws, Set, Hex Socket, Small Cup Point, Type B                               |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES34</b>      | Screws, Set, Hex Socket, Knurled Cup Point, Type C                             |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES35</b>      | Screws, Set, Hex Socket, Hexagon Cup Point, Type D                             |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES36</b>      | Screws, Set, Hex Socket, W Cup Point, Type E                                   |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES37</b>      | Screws, Set, Hex Socket, Nu-Cup Point, Type F                                  |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES38</b>      | Screws, Set, Hex Socket, Nu-Cup Point, Type G                                  |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES39</b>      | Screws, Set, Hex Socket, Cone Point                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES40</b>      | Screws, Set, Hex Socket, Flat Point                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES41</b>      | Screws, Set, Hex Socket, Half Dog Point                                        |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>AES42</b>      | Screws, Set, Hex Socket, Oval Point                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Screws (Cont'd)**

|                 |                                                                                                       | Applicable<br>Table References: | Thread         | Size     | Lg/Other | Material | Finish   | Feature  |
|-----------------|-------------------------------------------------------------------------------------------------------|---------------------------------|----------------|----------|----------|----------|----------|----------|
|                 |                                                                                                       |                                 | Field 2        | 3        | 4        | 5        | 6        | 7        |
| <b>B18.3.1M</b> | <b>Metric Socket Head Cap Screws</b>                                                                  |                                 |                |          |          |          |          |          |
| AES43           | Screws, Cap, Hex Socket Head                                                                          |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-11     |
| AES44           | Screws, Cap, Spline Socket Head                                                                       |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.3.3M</b> | <b>Metric Hexagon Socket Head Shoulder Screws</b>                                                     |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AES45           | Screws, Shoulder, Hex Socket                                                                          |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.3.4M</b> | <b>Metric Socket Button Head Cap Screws</b>                                                           |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AES46           | Screws, Cap, Hex Socket, Button Head                                                                  |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.3.5M</b> | <b>Metric Hexagon Socket Flat Countersunk Head Cap Screws</b>                                         |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AES47           | Screws, Cap, Hex Socket Flat Countersunk Head                                                         |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-2      |
| <b>B18.3.6M</b> | <b>Metric Socket Set Screws</b>                                                                       |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AES48           | Screws, Set, Spline Socket, Cup Point, Type I                                                         |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES49           | Screws, Set, Spline Socket, Cup Point, Type II                                                        |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES50           | Screws, Set, Spline Socket, Cup Point, Type III                                                       |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES51           | Screws, Set, Spline Socket, Cup Point, Type IV                                                        |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES52           | Screws, Set, Spline Socket, Cup Point, Type V                                                         |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES53           | Screws, Set, Spline Socket, Cone Point                                                                |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES54           | Screws, Set, Spline Socket, Flat Point                                                                |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES55           | Screws, Set, Spline Socket, Half Dog Point                                                            |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES56           | Screws, Set, Spline Socket, Oval Point                                                                |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES57           | Screws, Set, Hex Socket, Cup Point, Type I                                                            |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES58           | Screws, Set, Hex Socket, Cup Point, Type II                                                           |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES59           | Screws, Set, Hex Socket, Cup Point, Type III                                                          |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES60           | Screws, Set, Hex Socket, Cup Point, Type IV                                                           |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES61           | Screws, Set, Hex Socket, Cup Point, Type V                                                            |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| <b>B18.3.6M</b> | <b>Metric Socket Set Screws (Cont'd)</b>                                                              |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AES62           | Screws, Set, Hex Socket, Cone Point                                                                   |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES63           | Screws, Set, Hex Socket, Flat Point                                                                   |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES64           | Screws, Set, Hex Socket, Half Dog Point                                                               |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| AES65           | Screws, Set, Hex Socket, Oval Point                                                                   |                                 | 2-1            | 3-3      | 4-2      | 5-*      | 6-*      | 7-12     |
| <b>B18.6.1</b>  | <b>Wood Screws (Inch Series)</b>                                                                      |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AES66           | Screws, Wood, Flat Head, Slotted                                                                      |                                 | 2-1            | 3-12     | 4-1      | 5-*      | 6-*      | 7-10     |
| AES67           | Screws, Wood, Flat Head, Type I Cross Recess                                                          |                                 | 2-1            | 3-12     | 4-1      | 5-*      | 6-*      | 7-10     |
| AES68           | Screws, Wood, Flat Head, Type IA Cross Recess                                                         |                                 | 2-1            | 3-12     | 4-1      | 5-*      | 6-*      | 7-10     |
| AES69           | Screws, Wood, Flat Head, Type II Cross Recess                                                         |                                 | 2-1            | 3-12     | 4-1      | 5-*      | 6-*      | 7-10     |
| AES70           | Screws, Wood, Oval Head, Slotted                                                                      |                                 | 2-1            | 3-12     | 4-1      | 5-*      | 6-*      | 7-10     |
| AES71           | Screws, Wood, Oval Head, Type I Cross Recess                                                          |                                 | 2-1            | 3-12     | 4-1      | 5-*      | 6-*      | 7-10     |
| AES72           | Screws, Wood, Oval Head, Type IA Cross Recess                                                         |                                 | 2-1            | 3-12     | 4-1      | 5-*      | 6-*      | 7-10     |
| AES73           | Screws, Wood, Oval Head, Type II Cross Recess                                                         |                                 | 2-1            | 3-12     | 4-1      | 5-*      | 6-*      | 7-10     |
| AES74           | Screws, Wood, Pan Head, Slotted                                                                       |                                 | 2-1            | 3-12     | 4-1      | 5-*      | 6-*      | 7-10     |
| AES75           | Screws, Wood, Pan Head, Type I Cross Recess                                                           |                                 | 2-1            | 3-12     | 4-1      | 5-*      | 6-*      | 7-10     |
| AES76           | Screws, Wood, Pan Head, Type IA Cross Recess                                                          |                                 | 2-1            | 3-12     | 4-1      | 5-*      | 6-*      | 7-10     |
| AES77           | Screws, Wood, Pan Head, Type II Cross Recess                                                          |                                 | 2-1            | 3-12     | 4-1      | 5-*      | 6-*      | 7-10     |
| <b>B18.6.2</b>  | <b>Slotted Head Cap Screws, Square Head Set Screws, and Slotted Headless Set Screws (Inch Series)</b> |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AES78           | Screws, Cap, Flat Countersunk Head, Slotted                                                           |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AES79           | Screws, Cap, Round Head, Slotted                                                                      |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Screws (Cont'd)**

|                |                                                                                                                | Applicable<br>Table References: | Thread         | Size     | Lg/Other | Material | Finish   | Feature  |
|----------------|----------------------------------------------------------------------------------------------------------------|---------------------------------|----------------|----------|----------|----------|----------|----------|
|                |                                                                                                                |                                 | Field 2        | 3        | 4        | 5        | 6        | 7        |
| <b>B18.6.2</b> | <b>Slotted Head Cap Screws, Square Head Set Screws, and Slotted Headless Set Screws (Inch Series) (Cont'd)</b> |                                 |                |          |          |          |          |          |
| AES80          | Screws, Cap, Fillister Head, Slotted                                                                           |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AES81          | Screws, Set, Square Head, Cup Point                                                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES82          | Screws, Set, Square Head, Cone Point                                                                           |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES83          | Screws, Set, Square Head, Flat Point                                                                           |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES84          | Screws, Set, Square Head, Half Dog Point                                                                       |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES85          | Screws, Set, Square Head, Full Dog Point                                                                       |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES86          | Screws, Set, Square Head, Oval Point                                                                           |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES87          | Screws, Set, Square Head, Optional Relieved Neck, Cup Point                                                    |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES88          | Screws, Set, Square Head, Optional Relieved Neck, Cone Point                                                   |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES89          | Screws, Set, Square Head, Optional Relieved Neck, Flat Point                                                   |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES90          | Screws, Set, Square Head, Optional Relieved Neck, Half Dog Point                                               |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES91          | Screws, Set, Square Head, Optional Relieved Neck, Full Dog Point                                               |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES92          | Screws, Set, Square Head, Optional Relieved Neck, Oval Point                                                   |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES93          | Screws, Set, Slotted Headless, Cup Point                                                                       |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES94          | Screws, Set, Slotted Headless, Cone Point                                                                      |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES95          | Screws, Set, Slotted Headless, Flat Point                                                                      |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES96          | Screws, Set, Slotted Headless, Half Dog Point                                                                  |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES97          | Screws, Set, Slotted Headless, Full Dog Point                                                                  |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| AES98          | Screws, Set, Slotted Headless, Oval Point                                                                      |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-12     |
| <b>B18.6.3</b> | <b>Machine Screws, Tapping Screws and Metallic Drive Screws (Inch Series)</b>                                  |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AESC0          | Screws, Machine, Flat Head, Slotted                                                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESC1          | Screws, Machine, Flat Head, Type I Cross Recess                                                                |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESC2          | Screws, Machine, Flat Head, Type IA Cross Recess                                                               |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESC3          | Screws, Machine, Flat Head, Type II Cross Recess                                                               |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESC4          | Screws, Machine, Flat Head, Type III Square Recess                                                             |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESB1          | Screws, Machine, Flat Head, Type VI Six-Lobe Recess                                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESC5          | Screws, Machine, Flat Head, 100 deg, Slotted                                                                   |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESC6          | Screws, Machine, Flat Head, 100 deg, Type I Cross Recess                                                       |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESC7          | Screws, Machine, Flat Head, 100 deg, Type IA Cross Recess                                                      |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESC8          | Screws, Machine, Flat Head, 100 deg, Type II Cross Recess                                                      |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESC9          | Screws, Machine, Flat Head, Close Tolerance, 100 deg, Slotted                                                  |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESD0          | Screws, Machine, Flat Head, Close Tolerance, 100 deg, Type I Cross Recess                                      |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESD1          | Screws, Machine, Flat Head, Close Tolerance, 100 deg, Type IA Cross Recess                                     |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESD2          | Screws, Machine, Flat Head, Close Tolerance, 100 deg, Type II Cross Recess                                     |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESD3          | Screws, Machine, Oval Head, Slotted                                                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESD4          | Screws, Machine, Oval Head, Type I Cross Recess                                                                |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESD5          | Screws, Machine, Oval Head, Type IA Cross Recess                                                               |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESD6          | Screws, Machine, Oval Head, Type II Cross Recess                                                               |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESD7          | Screws, Machine, Oval Head, Type III Square Recess                                                             |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESB2          | Screws, Machine, Oval Head, Type VI Six-Lobe Recess                                                            |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESD8          | Screws, Machine, Flat Head, Undercut, Slotted                                                                  |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESD9          | Screws, Machine, Flat Head, Undercut, Type I Cross Recess                                                      |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESE0          | Screws, Machine, Flat Head, Undercut, Type IA Cross Recess                                                     |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESE1          | Screws, Machine, Flat Head, Undercut, Type II Cross Recess                                                     |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESE2          | Screws, Machine, Flat Head, Undercut, Type III Square Recess                                                   |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESE3          | Screws, Machine, Oval Undercut Head, Slotted                                                                   |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESE4          | Screws, Machine, Oval Undercut Head, Type I Cross Recess                                                       |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESE5          | Screws, Machine, Oval Undercut Head, Type IA Cross Recess                                                      |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |
| AESE6          | Screws, Machine, Oval Undercut Head, Type II Cross Recess                                                      |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-2      |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Screws (Cont'd)**

|         |                                                                                 | Applicable<br>Table References: | Thread          | Size           | Lg/Other       | Material       | Finish         | Feature |
|---------|---------------------------------------------------------------------------------|---------------------------------|-----------------|----------------|----------------|----------------|----------------|---------|
| B18.6.3 | Machine Screws, Tapping Screws and Metallic Drive Screws (Inch Series) (Cont'd) | Field 2                         | 3               | 4              | 5              | 6              | 7              |         |
| AESE7   | Screws, Machine, Oval Undercut Head, Type III Square Recess                     | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESE8   | Screws, Machine, Flat Trim Head, Type I Cross Recess                            | 2-1                             | 3-11            | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESE9   | Screws, Machine, Flat Trim Head, Type IA Cross Recess                           | 2-1                             | 3-11            | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESF0   | <del>Screws, Machine, Flat Trim Head, Type II Cross Recess</del>                | <del>2-1</del>                  | <del>3-11</del> | <del>4-1</del> | <del>5-*</del> | <del>6-*</del> | <del>7-2</del> |         |
| AESF1   | Screws, Machine, Oval Trim Head, Type I Cross Recess                            | 2-1                             | 3-11            | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESF2   | Screws, Machine, Oval Trim Head, Type IA Cross Recess                           | 2-1                             | 3-11            | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESF3   | <del>Screws, Machine, Oval Trim Head, Type II Cross Recess</del>                | <del>2-1</del>                  | <del>3-11</del> | <del>4-1</del> | <del>5-*</del> | <del>6-*</del> | <del>7-2</del> |         |
| AESF4   | Screws, Machine, Pan Head, Slotted                                              | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESF5   | Screws, Machine, Pan Head, Type I Cross Recess                                  | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESF6   | Screws, Machine, Pan Head, Type IA Cross Recess                                 | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESF7   | <del>Screws, Machine, Pan Head, Type II Cross Recess</del>                      | <del>2-1</del>                  | <del>3-1</del>  | <del>4-1</del> | <del>5-*</del> | <del>6-*</del> | <del>7-2</del> |         |
| AESF8   | Screws, Machine, Pan Head, Type III Square Recess                               | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESB3   | Screws, Machine, Pan Head, Type VI Six-Lobe Recess                              | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESF9   | Screws, Machine, Pan Head, Type I Cross Recess with Slot                        | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESG0   | Screws, Machine, Pan Head, Type IA Cross Recess with Slot                       | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESG1   | Screws, Machine, Pan Head, Type III Square Recess with Slot                     | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESG2   | Screws, Machine, Fillister Head, Slotted                                        | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESG3   | Screws, Machine, Fillister Head, Type I Cross Recess                            | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESG4   | Screws, Machine, Fillister Head, Type IA Cross Recess                           | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESG5   | <del>Screws, Machine, Fillister Head, Type II Cross Recess</del>                | <del>2-1</del>                  | <del>3-1</del>  | <del>4-1</del> | <del>5-*</del> | <del>6-*</del> | <del>7-2</del> |         |
| AESG6   | Screws, Machine, Fillister Head, Type III Square Recess                         | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESB4   | Screws, Machine, Fillister Head, Type VI Six-Lobe Recess                        | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESG7   | Screws, Machine, Fillister Head, Slotted and Drilled                            | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESG8   | Screws, Machine, Truss Head, Slotted                                            | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESG9   | Screws, Machine, Truss Head, Type I Cross Recess                                | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESH0   | Screws, Machine, Truss Head, Type IA Cross Recess                               | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESH1   | <del>Screws, Machine, Truss Head, Type II Cross Recess</del>                    | <del>2-1</del>                  | <del>3-1</del>  | <del>4-1</del> | <del>5-*</del> | <del>6-*</del> | <del>7-2</del> |         |
| AESH2   | Screws, Machine, Truss Head, Type III Square Recess                             | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESB5   | Screws, Machine, Truss Head, Type VI Six-Lobe Recess                            | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESH3   | Screws, Machine, Truss Head, Type I Cross Recess with Slot                      | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESH4   | Screws, Machine, Truss Head, Type III Square Recess with Slot                   | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESH5   | Screws, Machine, Binding Head, Slotted                                          | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESH6   | Screws, Machine, Binding Head, Type I Cross Recess                              | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESH7   | Screws, Machine, Binding Head, Type IA Cross Recess                             | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESH8   | <del>Screws, Machine, Binding Head, Type II Cross Recess</del>                  | <del>2-1</del>                  | <del>3-1</del>  | <del>4-1</del> | <del>5-*</del> | <del>6-*</del> | <del>7-2</del> |         |
| AESH9   | Screws, Machine, Binding Head, Type III Square Recess                           | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESJ0   | Screws, Machine, Regular Hex Head, Indented, Unslotted                          | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESJ1   | Screws, Machine, Regular Hex Head, Indented, Slotted                            | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESJ2   | Screws, Machine, Regular Hex Head, Trimmed, Unslotted                           | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESJ3   | Screws, Machine, Regular Hex Head, Trimmed, Slotted                             | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESJ4   | Screws, Machine, Regular Hex Head, Fully Upset, Unslotted                       | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESJ5   | Screws, Machine, Regular Hex Head, Fully Upset, Slotted                         | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESJ6   | Screws, Machine, Large Hex Head, Indented, Unslotted                            | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESJ7   | Screws, Machine, Large Hex Head, Indented, Slotted                              | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESJ8   | Screws, Machine, Large Hex Head, Trimmed, Unslotted                             | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESJ9   | Screws, Machine, Large Hex Head, Trimmed, Slotted                               | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESK0   | Screws, Machine, Large Hex Head, Fully Upset, Unslotted                         | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESK1   | Screws, Machine, Large Hex Head, Fully Upset, Slotted                           | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESK2   | Screws, Machine, Regular Hex Head, Indented, Type I Recess                      | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AES1B   | Screws, Machine, Regular Hex Head, Indented, Type VI Recess                     | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |
| AESK3   | Screws, Machine, Regular Hex Head, Trimmed, Type I Recess                       | 2-1                             | 3-1             | 4-1            | 5-*            | 6-*            | 7-2            |         |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Screws (Cont'd)**

|         |                                                                                          | Applicable<br>Table References: | Thread | Size | Lg/Other | Material | Finish | Feature |
|---------|------------------------------------------------------------------------------------------|---------------------------------|--------|------|----------|----------|--------|---------|
| B18.6.3 | Machine Screws, Tapping Screws and Metallic Drive Screws (Inch Series) (Cont'd)          | Field 2                         | 3      | 4    | 5        | 6        | 7      |         |
| AESK4   | Screws, Machine, Regular Hex Head, Fully Upset, Type I Recess                            | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESK5   | Screws, Machine, Large Hex Head, Indented, Type I Recess                                 | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AES1C   | Screws, Machine, Large Hex Head, Indented, Type VI Recess                                | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESK6   | Screws, Machine, Large Hex Head, Trimmed, Type I Recess                                  | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESK7   | Screws, Machine, Large Hex Head, Fully Upset, Type I Recess                              | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESK8   | Screws, Machine, Hex Washer Head, Indented, Unslotted                                    | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESK9   | Screws, Machine, Hex Washer Head, Indented, Slotted                                      | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESL0   | Screws, Machine, Hex Washer Head, Indented, Type I Cross Recess                          | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESL1   | Screws, Machine, Hex Washer Head, Indented, Type I Cross Recess with Slot                | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AES1D   | Screws, Machine, Hex Washer Head, Indented, Type VI Recess                               | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESL2   | Screws, Machine, Round Washer Head, Slotted                                              | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESL3   | Screws, Machine, Round Washer Head, Type I Cross Recess                                  | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESB6   | Screws, Machine, Round Washer Head, Type VI Cross Recess                                 | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESL4   | Screws, Machine, Round Head, Slotted                                                     | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESL5   | Screws, Machine, Round Head, Type I Cross Recess                                         | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESL6   | Screws, Machine, Round Head, Type IA Cross Recess                                        | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESL7   | Screws, Machine, Round Head, Type II Cross Recess                                        | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESL8   | Screws, Machine, Round Head, Type III Square Recess                                      | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESL9   | Screws, Machine, Round Head, Type I Cross Recess with Slot                               | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| AESM0   | Screws, Machine, Round Head, Type IA Cross Recess with Slot                              | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-2    |         |
| B18.6.4 | Thread Forming and Thread Cutting Tapping Screws and Metallic Drive Screws (Inch Series) | Field 2                         | 3      | 4    | 5        | 6        | 7      |         |
| AESM1   | Screws, Tapping, Flat Head, Slotted                                                      | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESM2   | Screws, Tapping, Flat Head, Type I Cross Recess                                          | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESM3   | Screws, Tapping, Flat Head, Type IA Cross Recess                                         | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESM4   | Screws, Tapping, Flat Head, Type II Cross Recess                                         | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESM6   | Screws, Tapping, 100 deg, Flat Head, Slotted                                             | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESM7   | Screws, Tapping, 100 deg, Flat Head, Type I Cross Recess                                 | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESM8   | Screws, Tapping, 100 deg, Flat Head, Type IA Cross Recess                                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESM9   | Screws, Tapping, 100 deg, Flat Head, Type II Cross Recess                                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESB7   | Screws, Tapping, Flat Head, Type VI Six-Lobe Recess                                      | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESN0   | Screws, Tapping, Oval Head, Slotted                                                      | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESN1   | Screws, Tapping, Oval Head, Type I Cross Recess                                          | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESN2   | Screws, Tapping, Oval Head, Type IA Cross Recess                                         | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESN3   | Screws, Tapping, Oval Head, Type II Cross Recess                                         | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESN5   | Screws, Tapping, Flat Head, Undercut, Slotted                                            | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESN6   | Screws, Tapping, Flat Head, Undercut, Type I Cross Recess                                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESN7   | Screws, Tapping, Flat Head, Undercut, Type IA Cross Recess                               | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESN8   | Screws, Tapping, Flat Head, Undercut, Type II Cross Recess                               | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESP0   | Screws, Tapping, Oval Undercut Head, Slotted                                             | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESP1   | Screws, Tapping, Oval Undercut Head, Type I Cross Recess                                 | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESP2   | Screws, Tapping, Oval Undercut Head, Type IA Cross Recess                                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESB8   | Screws, Tapping, Oval Head, Type VI Six-Lobe Recess                                      | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESP3   | Screws, Tapping, Oval Undercut Head, Type II Cross Recess                                | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESP5   | Screws, Tapping, Flat Trim Head, Type I Cross Recess                                     | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESP6   | Screws, Tapping, Flat Trim Head, Type IA Cross Recess                                    | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESP7   | Screws, Tapping, Flat Trim Head, Type II Cross Recess                                    | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESP8   | Screws, Tapping, Oval Trim Head, Type I Cross Recess                                     | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESP9   | Screws, Tapping, Oval Trim Head, Type IA Cross Recess                                    | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AESQ0   | Screws, Tapping, Oval Trim Head, Type II Cross Recess                                    | 2-2                             | 3-6    | 4-1  | 5-*      | 6-*      | 7-1    |         |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Screws (Cont'd)**

|          |                                                                                                                  | Applicable<br>Table References: | Thread         | Size     | Lg/Other | Material | Finish   | Feature  |
|----------|------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------|----------|----------|----------|----------|----------|
| B18.6.4  | <del>Thread-Forming and Thread-Cutting Tapping Screws and<br/>Metallic Drive Screws (Inch Series) (Cont'd)</del> |                                 | Field 2        | 3        | 4        | 5        | 6        | 7        |
| AESQ1    | Screws, Tapping, Pan Head, Slotted                                                                               |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESQ2    | Screws, Tapping, Pan Head, Type I Cross Recess                                                                   |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESQ3    | Screws, Tapping, Pan Head, Type IA Cross Recess                                                                  |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESQ4    | <del>Screws, Tapping, Pan Head, Type II Cross Recess</del>                                                       |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESB9    | Screws, Tapping, Pan Head, Type VI Six-Lobe Recess                                                               |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESQ9    | Screws, Tapping, Fillister Head, Slotted                                                                         |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESR0    | Screws, Tapping, Fillister Head, Type I Cross Recess                                                             |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESR1    | Screws, Tapping, Fillister Head, Type IA Cross Recess                                                            |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESR2    | <del>Screws, Tapping, Fillister Head, Type II Cross Recess</del>                                                 |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AES1A    | Screws, Tapping, Fillister Head, Type VI Six-Lobe Recess                                                         |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESR4    | Screws, Tapping, Truss Head, Slotted                                                                             |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESR5    | Screws, Tapping, Truss Head, Type I Cross Recess                                                                 |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESR6    | Screws, Tapping, Truss Head, Type IA Cross Recess                                                                |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESR7    | <del>Screws, Tapping, Truss Head, Type II Cross Recess</del>                                                     |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AES2K    | Screws, Tapping, Truss Head, Type VI Six-Lobe Recess                                                             |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESS1    | Screws, Tapping, Regular Hex Head, Indented, Unslotted                                                           |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESS2    | Screws, Tapping, Regular Hex Head, Indented, Slotted                                                             |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESS3    | Screws, Tapping, Regular Hex Head, Trimmed, Unslotted                                                            |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESS4    | Screws, Tapping, Regular Hex Head, Trimmed, Slotted                                                              |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESS5    | Screws, Tapping, Regular Hex Head, Fully Upset, Unslotted                                                        |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESS6    | Screws, Tapping, Regular Hex Head, Fully Upset, Slotted                                                          |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESS7    | Screws, Tapping, Large Hex Head, Indented, Unslotted                                                             |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESS8    | Screws, Tapping, Large Hex Head, Indented, Slotted                                                               |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESS9    | Screws, Tapping, Large Hex Head, Trimmed, Unslotted                                                              |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEST0    | Screws, Tapping, Large Hex Head, Trimmed, Slotted                                                                |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEST1    | Screws, Tapping, Large Hex Head, Fully Upset, Unslotted                                                          |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEST2    | Screws, Tapping, Large Hex Head, Fully Upset, Slotted                                                            |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEST3    | Screws, Tapping, Regular Hex Head, Indented, Type I Recess                                                       |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AES1E    | Screws, Tapping, Regular Hex Head, Indented, Type VI Recess                                                      |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEST4    | Screws, Tapping, Regular Hex Head, Trimmed, Type I Recess                                                        |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEST5    | Screws, Tapping, Regular Hex Head, Fully Upset, Type I Recess                                                    |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEST6    | Screws, Tapping, Large Hex Head, Indented, Type I Recess                                                         |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AES1F    | Screws, Tapping, Large Hex Head, Indented, Type VI Recess                                                        |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEST7    | Screws, Tapping, Large Hex Head, Trimmed, Type I Recess                                                          |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEST8    | Screws, Tapping, Large Hex Head, Fully Upset, Type I Recess                                                      |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AEST9    | Screws, Tapping, Hex Washer Head, Indented, Unslotted                                                            |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESU0    | Screws, Tapping, Hex Washer Head, Indented, Slotted                                                              |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESU1    | Screws, Tapping, Hex Washer Head, Indented, Type I Cross Recess                                                  |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AES1G    | Screws, Tapping, Hex Washer Head, Indented, Type VI Recess                                                       |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESU3    | Screws, Tapping, Round Washer Head, Slotted                                                                      |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESU4    | Screws, Tapping, Round Washer Head, Type I Cross Recess                                                          |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESA3    | Screws, Tapping, Round Washer Head, Type VI Cross Recess                                                         |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESU5    | Screws, Tapping, Round Head, Slotted                                                                             |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESU6    | Screws, Tapping, Round Head, Type I Cross Recess                                                                 |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESU7    | Screws, Tapping, Round Head, Type IA Cross Recess                                                                |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESU8    | <del>Screws, Tapping, Round Head, Type II Cross Recess</del>                                                     |                                 | 2-2            | 3-6      | 4-1      | 5-*      | 6-*      | 7-1      |
| AESV2    | Screws, Tapping, Round Head Type U Metallic Drive                                                                |                                 | 2-2            | 3-2      | 4-1      | 5-*      | 6-*      | 7-1      |
| B18.6.5M | <b>Metric Thread-Forming and Thread-Cutting Tapping Screws</b>                                                   |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AESV3    | Screws, Tapping, Flat Head, Slotted                                                                              |                                 | 2-2            | 3-7      | 4-2      | 5-*      | 6-*      | 7-1      |
| AESV4    | Screws, Tapping, Flat Head, Type A, Type I Cross Recess                                                          |                                 | 2-2            | 3-7      | 4-2      | 5-*      | 6-*      | 7-1      |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

## GENERAL NOTES:

- (a) Strike-through text denotes obsolete fasteners or characteristics, but are left in this document for reference and for use in deciphering older PIN codes.
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**Screws (Cont'd)**

|                 |                                                                         | Applicable<br>Table References: | Thread         | Size     | Lg/Other | Material | Finish   | Feature  |
|-----------------|-------------------------------------------------------------------------|---------------------------------|----------------|----------|----------|----------|----------|----------|
|                 |                                                                         |                                 | Field 2        | 3        | 4        | 5        | 6        | 7        |
| <b>B18.6.5M</b> | <b>Metric Thread-Forming and Thread-Cutting Tapping Screws (Cont'd)</b> |                                 |                |          |          |          |          |          |
| AESV5           | Screws, Tapping, Flat Head, Type A, Type IA Cross Recess                |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESV6           | Screws, Tapping, Flat Head, Type A, Type III Square Recess              |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESV7           | Screws, Tapping, Flat Head, Type B, Type I Cross Recess                 |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESV8           | Screws, Tapping, Flat Head, Type B, Type IA Cross Recess                |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESV9           | Screws, Tapping, Flat Head, Type B, Type III Square Recess              |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESW0           | Screws, Tapping, Oval Head, Slotted                                     |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESW1           | Screws, Tapping, Oval Head, Type I Cross Recess                         |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESW2           | Screws, Tapping, Oval Head, Type IA Cross Recess                        |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESW3           | Screws, Tapping, Oval Head, Type III Square Recess                      |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESW4           | Screws, Tapping, Pan Head, Slotted                                      |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESW5           | Screws, Tapping, Pan Head, Type I Cross Recess                          |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESW6           | Screws, Tapping, Pan Head, Type IA Cross Recess                         |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESW7           | Screws, Tapping, Pan Head, Type III Square Recess                       |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESX1           | Screws, Tapping, Hex Head, Indented, Unslotted                          |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESX2           | Screws, Tapping, Hex Head, Indented, Slotted                            |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESX3           | Screws, Tapping, Hex Head, Trimmed, Unslotted                           |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESX4           | Screws, Tapping, Hex Head, Trimmed, Slotted                             |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESX5           | Screws, Tapping, Hex Head, Fully Upset, Unslotted                       |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESX6           | Screws, Tapping, Hex Head, Fully Upset, Slotted                         |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESX7           | Screws, Tapping, Hex Flange Head, Unslotted                             |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| AESX8           | Screws, Tapping, Hex Flange Head, Slotted                               |                                 | 2-2            | 3-7      | 4-2      | 5*       | 6*       | 7-1      |
| <b>B18.6.7M</b> | <b>Metric Machine Screws</b>                                            |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AESY0           | Screws, Machine, Flat Head, Slotted                                     |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESY1           | Screws, Machine, Flat Head, Type A, Type I Cross Recess                 |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESY2           | Screws, Machine, Flat Head, Type A, Type IA Cross Recess                |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESY3           | Screws, Machine, Flat Head, Type A, Type III Square Recess              |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESY4           | Screws, Machine, Flat Head, Type B, Type I Cross Recess                 |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESY5           | Screws, Machine, Flat Head, Type B, Type IA Cross Recess                |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESY6           | Screws, Machine, Flat Head, Type B, Type III Square Recess              |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESY7           | Screws, Machine, Oval Head, Slotted                                     |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESY8           | Screws, Machine, Oval Head, Type I Cross Recess                         |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESY9           | Screws, Machine, Oval Head, Type IA Cross Recess                        |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZ0           | Screws, Machine, Oval Head, Type III Square Recess                      |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZ1           | Screws, Machine, Pan Head, Slotted                                      |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZ2           | Screws, Machine, Pan Head, Type I Cross Recess                          |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZ3           | Screws, Machine, Pan Head, Type IA Cross Recess                         |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZ4           | Screws, Machine, Pan Head, Type III Square Recess                       |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZ8           | Screws, Machine, Hex Head, Indented, Unslotted                          |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZ9           | Screws, Machine, Hex Head, Indented, Slotted                            |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZA           | Screws, Machine, Hex Head, Trimmed, Unslotted                           |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZB           | Screws, Machine, Hex Head, Trimmed, Slotted                             |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZC           | Screws, Machine, Hex Head, Fully Upset, Unslotted                       |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZD           | Screws, Machine, Hex Head, Fully Upset, Slotted                         |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZE           | Screws, Machine, Hex Flange Head, Slotted                               |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| AESZF           | Screws, Machine, Hex Flange Head, Unslotted                             |                                 | 2-1            | 3-3      | 4-2      | 5*       | 6*       | 7-2      |
| <b>B18.6.8</b>  | <b>Thumb Screws and Wing Screws (Inch Series)</b>                       |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AES2A           | Type A, Regular Thumb Screws                                            |                                 | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-14     |
| AES2B           | Type A, Heavy Thumb Screws                                              |                                 | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-14     |
| AES2C           | Type B, Regular Thumb Screws                                            |                                 | 2-1            | 3-1      | 4-1      | 5*       | 6*       | 7-14     |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

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**Screws (Cont'd)**

|                |                                                            | Applicable<br>Table References: | Thread         | Size     | Lg/Other | Material | Finish   | Feature  |
|----------------|------------------------------------------------------------|---------------------------------|----------------|----------|----------|----------|----------|----------|
|                |                                                            |                                 | Field 2        | 3        | 4        | 5        | 6        | 7        |
| <b>B18.6.8</b> | <b>Thumb Screws and Wing Screws (Inch Series) (Cont'd)</b> |                                 |                |          |          |          |          |          |
| AES2D          | Type B, Heavy Thumb Screws                                 |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-14     |
| AES2E          | Type A, Wing Screws                                        |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-14     |
| AES2F          | Type B, Style 1 Wing Screws                                |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-14     |
| AES2G          | Type B, Style 2 Wing Screws                                |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-14     |
| AES2H          | Type C, Style 1 Wing Screws                                |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-14     |
| AES2I          | Type C, Style 2 Wing Screws                                |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-14     |
| AES2J          | Type D, Wing Screws                                        |                                 | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-14     |
| <b>B18.11</b>  | <b>Miniature Screws (Inch Series)</b>                      |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AESZG          | Screws, Miniature, Fillister Head                          |                                 | 2-1            | 3-5      | 4-3      | 5-*      | 6-*      | 7-1      |
| AESZH          | Screws, Miniature, Pan Head                                |                                 | 2-1            | 3-5      | 4-3      | 5-*      | 6-*      | 7-1      |
| AESZJ          | Screws, Miniature, 100 deg Flat Head                       |                                 | 2-1            | 3-5      | 4-3      | 5-*      | 6-*      | 7-1      |
| AESZK          | Screws, Miniature, Binding Head                            |                                 | 2-1            | 3-5      | 4-3      | 5-*      | 6-*      | 7-1      |

**Studs** For Continuous and Double End Stud part numbers reference SAE J2271  
 Ship Systems and Equipment — Part Standard for Studs — Continuous and  
 Double End (Inch Series)

|                            |                                                           |  |                           |                     |                     |                     |                     |                     |
|----------------------------|-----------------------------------------------------------|--|---------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>B18.15</b>              | <b>Forged Eyebolts (Inch Series)</b>                      |  | <b>Field 2</b>            | <b>3</b>            | <b>4</b>            | <b>5</b>            | <b>6</b>            | <b>7</b>            |
| AET01                      | Bolts, Eye, Straight Shank, Type 1, Plain Pattern Style A |  | 2-1                       | 3-1                 | 4-6                 | 5-*                 | 6-*                 | 7-1                 |
| AET02                      | Bolts, Eye, Straight Shank, Type 1, Plain Pattern Style B |  | 2-1                       | 3-1                 | 4-6                 | 5-*                 | 6-*                 | 7-1                 |
| AET03                      | Bolts, Eye, Shoulder Pattern, Type 2, Style A             |  | 2-1                       | 3-1                 | 4-6                 | 5-*                 | 6-*                 | 7-1                 |
| AET04                      | Bolts, Eye, Shoulder Pattern, Type 2, Style B             |  | 2-1                       | 3-1                 | 4-6                 | 5-*                 | 6-*                 | 7-1                 |
| <b>B18.15M</b>             | <b>Metric Lifting Eyes</b>                                |  | <b>Field 2</b>            | <b>3</b>            | <b>4</b>            | <b>5</b>            | <b>6</b>            | <b>7</b>            |
| AET05                      | Lifting Eye, Forged                                       |  | 2-1                       | 3-3                 | 4-2                 | 5-*                 | 6-*                 | 7-1                 |
| <del><b>18.15.2M</b></del> | <del><b>Metric Straight Shank Lifting Eyes</b></del>      |  | <del><b>Field 2</b></del> | <del><b>3</b></del> | <del><b>4</b></del> | <del><b>5</b></del> | <del><b>6</b></del> | <del><b>7</b></del> |
| AET06                      | Lifting Eye, Straight Shank                               |  | 2-1                       | 3-3                 | 4-2                 | 5-*                 | 6-*                 | 7-1                 |
| <b>B18.31.1M</b>           | <b>Metric Continuous and Double-Ended Studs</b>           |  | <b>Field 2</b>            | <b>3</b>            | <b>4</b>            | <b>5</b>            | <b>6</b>            | <b>7</b>            |
| AET07                      | Studs, Continuous Thread                                  |  | 2-1                       | 3-3                 | 4-2                 | 5-*                 | 6-*                 | 7-2                 |
| AET08                      | Studs, Double End (Clamping Type)                         |  | 2-1                       | 3-3                 | 4-2                 | 5-*                 | 6-*                 | 7-2                 |
| AET09                      | Studs, Double End (Tap End Type)                          |  | 2-1                       | 3-3                 | 4-2                 | 5-*                 | 6-*                 | 7-2                 |

**Rivets**

|                |                                                     |  |                |          |          |          |          |          |
|----------------|-----------------------------------------------------|--|----------------|----------|----------|----------|----------|----------|
| <b>B18.1.1</b> | <b>Small Solid Rivets (Inch Series)</b>             |  | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEV01          | Rivets, Small, Solid, Flat Head                     |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-3      |
| AEV02          | Rivets, Small, Solid, Flat Countersunk Head         |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-3      |
| AEV03          | Rivets, Small, Solid, Button Head                   |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-3      |
| AEV04          | Rivets, Small, Solid, Pan Head                      |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-3      |
| AEV05          | Rivets, Small, Solid, Truss Head                    |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-3      |
| AEV06          | Rivets, Small, Solid, Tinners                       |  | 2-1            | 3-14     | 4-1      | 5-*      | 6-*      | 7-3      |
| AEV07          | Rivets, Small, Solid, Coopers                       |  | 2-1            | 3-14     | 4-1      | 5-*      | 6-*      | 7-3      |
| AEV08          | Rivets, Small, Solid, Belt                          |  | 2-1            | 3-15     | 4-1      | 5-*      | 6-*      | 7-3      |
| AEV09          | Rivets, Small, Solid, 60 deg, Flat Countersunk Head |  | 2-1            | 3-15     | 4-1      | 5-*      | 6-*      | 7-3      |
| <b>B18.1.2</b> | <b>Large Rivets (Inch Series)</b>                   |  | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| AEV10          | Rivets, Large, Button Head                          |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-6      |
| AEV11          | Rivets, Large, High Button (Acorn) Head             |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-6      |
| AEV12          | Rivets, Large, Cone Head                            |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-6      |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

## GENERAL NOTES:

- (a) Strike-through text denotes obsolete fasteners or characteristics, but are left in this document for reference and for use in deciphering older PIN codes.
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**Rivets (Cont'd)**

|                 |                                                                                                             | Applicable<br>Table References: | Thread         | Size     | Lg/Other | Material | Finish   | Feature  |
|-----------------|-------------------------------------------------------------------------------------------------------------|---------------------------------|----------------|----------|----------|----------|----------|----------|
|                 |                                                                                                             |                                 | Field 2        | 3        | 4        | 5        | 6        | 7        |
| <b>B18.1.2</b>  | <b>Large Rivets (Inch Series) (Cont'd)</b>                                                                  |                                 |                |          |          |          |          |          |
| <b>AEV13</b>    | Rivets, Large, Flat Countersunk Head                                                                        |                                 | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-6      |
| <b>AEV14</b>    | Rivets, Large, Oval Countersunk Head                                                                        |                                 | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-6      |
| <b>AEV15</b>    | Rivets, Large, Pan Head                                                                                     |                                 | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-6      |
| <b>B18.1.3M</b> | <b>Metric Small Solid Rivets</b>                                                                            |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| <b>AEV16</b>    | Rivets, Small, Solid, Flat Head                                                                             |                                 | 2-1            | 3-4      | 4-2      | 5-*      | 6-*      | 7-3      |
| <b>AEV17</b>    | Rivets, Small, Solid, Round Head                                                                            |                                 | 2-1            | 3-4      | 4-2      | 5-*      | 6-*      | 7-3      |
| <b>AEV18</b>    | Rivets, Small, Solid, Flat Countersunk Head                                                                 |                                 | 2-1            | 3-4      | 4-2      | 5-*      | 6-*      | 7-3      |
| <b>B18.7</b>    | <b>General Purpose Semi-Tubular Rivets, Full Tubular Rivets, Split Rivets, and Rivet Caps (Inch Series)</b> |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| <b>AEV19</b>    | Rivets, General Purpose, Oval Head Semi-Tubular, Type T                                                     |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV20</b>    | Rivets, General Purpose, Oval Head Semi-Tubular, Type S                                                     |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV21</b>    | Rivets, General Purpose, Truss Head Semi-Tubular, Type T                                                    |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV22</b>    | Rivets, General Purpose, Truss Head Semi-Tubular, Type S                                                    |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV23</b>    | Rivets, General Purpose, 150 deg Flat C sunk Head Semi-Tubular                                              |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV24</b>    | Rivets, General Purpose, 150 deg Large Flat C sunk Head Semi-Tubular                                        |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV25</b>    | Rivets, General Purpose, 120 deg Flat C sunk Head Semi-Tubular Type T                                       |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV26</b>    | Rivets, General Purpose, 120 deg Flat C sunk Head Semi-Tubular Type S                                       |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV27</b>    | Rivets, General Purpose, Full Tubular Oval                                                                  |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV28</b>    | Rivets, General Purpose, Full Tubular Truss                                                                 |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV29</b>    | Rivets, General Purpose, Full Tubular Flat Countersunk                                                      |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV30</b>    | Rivets, General Purpose, Oval Head Split                                                                    |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV31</b>    | Rivets, General Purpose, Flat Countersunk Head Split                                                        |                                 | 2-1            | 3-16     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV32</b>    | Rivets, General Purpose, Cap Style 1                                                                        |                                 | 2-1            | 3-17     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEV33</b>    | Rivets, General Purpose, Cap Style 2                                                                        |                                 | 2-1            | 3-17     | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>B18.7.1M</b> | <b>Metric General Purpose Semi-Tubular Rivets</b>                                                           |                                 | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| <b>AEV34</b>    | Rivets, General Purpose, Oval Head Semi-Tubular                                                             |                                 | 2-1            | 3-4      | 4-2      | 5-*      | 6-*      | 7-1      |

**Washers**

|                 |                                                                                   |  |                |          |          |          |          |          |
|-----------------|-----------------------------------------------------------------------------------|--|----------------|----------|----------|----------|----------|----------|
| <b>B18.2.6</b>  | <b>Fasteners for Use in Structural Applications (Inch Series)</b>                 |  | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| <b>AEW01</b>    | Washers, Structural, Hardened Steel Circular                                      |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEW02</b>    | Washers, Structural, Hardened Steel Circular Clipped                              |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEW03</b>    | Washers, Structural, Hardened Square Beveled                                      |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEW04</b>    | Washers, Structural, Hardened Clipped Square Beveled                              |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEW05</b>    | Washers, Structural, Compressible, Type Direct Tension Indicators (ASTM A490)     |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEW06</b>    | Washers, Structural, Compressible, Type Direct Tension Indicators (ASTM A325)     |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>B18.2.6M</b> | <b>Metric Fasteners for Use in Structural Applications</b>                        |  | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>5</b> | <b>7</b> |
| <b>AEW27</b>    | Metric Hardened Steel Circular                                                    |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEW28</b>    | Metric Hardened Steel Circular Clipped                                            |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEW29</b>    | Metric Compressible Washer-Type Direct Tension Indicator with Curved Protrusion   |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEW30</b>    | Metric Compressible Washer-Type Direct Tension Indicator with Straight Protrusion |  | 2-1            | 3-2      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>B18.21.1</b> | <b>Helical, Spring-Lock, Tooth Lock and Plain Washers (Inch Series)</b>           |  | <b>Field 2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| <b>AEW07</b>    | Washers, Lock, Regular Helical Spring                                             |  | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEW08</b>    | Washers, Lock, Heavy Helical Spring                                               |  | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEW09</b>    | Washers, Lock, Extra Duty Helical Spring                                          |  | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEW10</b>    | Washers, Lock, Hi-Collar Helical Spring                                           |  | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |
| <b>AEW11</b>    | Washers, Lock, Internal Tooth                                                     |  | 2-1            | 3-1      | 4-1      | 5-*      | 6-*      | 7-1      |

**Table 1-1 Fastener Family and Type/Base PIN (Cont'd)**

## GENERAL NOTES:

- (a) Strike-through text denotes obsolete fasteners or characteristics, but are left in this document for reference and for use in deciphering older PIN codes.
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**Washers (Cont'd)**

| Washers (Cont'd) |                                                                           | Applicable<br>Table References: | Thread | Size | Lg/Other | Material | Finish | Feature |
|------------------|---------------------------------------------------------------------------|---------------------------------|--------|------|----------|----------|--------|---------|
| B18.21.1         | Helical, Spring-Lock, Tooth Lock and Plain Washers (Inch Series) (Cont'd) | Field 2                         | 3      | 4    | 5        | 6        | 7      |         |
| AEW12            | Washers, Lock, Heavy Internal Tooth                                       | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AEW13            | Washers, Lock, External Tooth                                             | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AEW14            | Washers, Lock, Countersunk External Tooth                                 | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AEW15            | Washers, Lock, Internal-External Tooth                                    | 2-1                             | 3-25   | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AEW24            | Washers, Type A Plain Washer                                              | 2-1                             | 3-22   | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AEW26            | Washers, Type B Plain Washer                                              | 2-1                             | 3-24   | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AEW31            | Washers, Fender                                                           | 2-1                             | 3-1    | 4-1  | 5-*      | 6-*      | 7-1    |         |
| B18.21.2M        | Metric Lock Washers                                                       | Field 2                         | 3      | 4    | 5        | 6        | 7      |         |
| AEW16            | Washers, Lock, Regular Helical Spring                                     | 2-1                             | 3-4    | 4-2  | 5-*      | 6-*      | 7-1    |         |
| AEW17            | Washers, Lock, Heavy Helical Spring                                       | 2-1                             | 3-4    | 4-2  | 5-*      | 6-*      | 7-1    |         |
| AEW18            | Washers, Lock, Internal Tooth                                             | 2-1                             | 3-4    | 4-2  | 5-*      | 6-*      | 7-1    |         |
| AEW19            | Washers, Lock, Heavy Internal Tooth                                       | 2-1                             | 3-4    | 4-2  | 5-*      | 6-*      | 7-1    |         |
| AEW20            | Washers, Lock, External Tooth                                             | 2-1                             | 3-4    | 4-2  | 5-*      | 6-*      | 7-1    |         |
| AEW21            | Washers, Lock, Countersunk External Tooth                                 | 2-1                             | 3-4    | 4-2  | 5-*      | 6-*      | 7-1    |         |
| AEW22            | Washers, Lock, External-Internal Tooth                                    | 2-1                             | 3-27   | 4-2  | 5-*      | 6-*      | 7-1    |         |
| B18.22M          | Metric Plain Washers                                                      | Field 2                         | 3      | 4    | 5        | 6        | 7      |         |
| AEW23            | Washers, Plain                                                            | 2-1                             | 3-26   | 4-2  | 5-*      | 6-*      | 7-1    |         |
| B18.22.1         | Plain Washers (Inch Series)                                               | Field 2                         | 3      | 4    | 5        | 6        | 7      |         |
| AEW24            | Washers, Type A Plain Washer                                              | 2-1                             | 3-22   | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AEW26            | Washers, Type B Plain Washer                                              | 2-1                             | 3-23   | 4-1  | 5-*      | 6-*      | 7-1    |         |
| AEW25            | Washers, Plain, Type A Selected Sizes                                     | 2-1                             | 3-23   | 4-1  | 5-*      | 6-*      | 7-1    |         |

**Table 2-1 Thread Type**

| PIN          | Thread Series                                 |
|--------------|-----------------------------------------------|
| C [Note (1)] | UNC-2                                         |
| U [Note (1)] | UNC-3                                         |
| F [Note (1)] | UNF-2                                         |
| K [Note (1)] | UNF-3                                         |
| R [Note (1)] | UNRC-2                                        |
| Q [Note (1)] | UNRF-2                                        |
| E [Note (1)] | UNE-F-2                                       |
| N            | UNM                                           |
| S [Note (1)] | 1-14 UNS-2 and small machine screw NS threads |
| D            | 6UN                                           |
| G            | 8UN                                           |
| H            | 8UNR                                          |
| B            | 12UN                                          |
| L            | Lag Screw Thread                              |
| W            | Wood Screw Thread                             |
| M [Note (2)] | Metric                                        |
| X            | Nonthreaded Fastener                          |

## NOTES:

- (1) -2 or -3 refers to -2A and -2B or -3A and -3B, respectively, as applicable.  
 (2) Metric, except where PINs 'L', 'W', or 'X' are applicable.

**Table 2-2 Thread and Point Options for Tapping Screws**

| PIN | Description                           |
|-----|---------------------------------------|
| A   | Type AB Thread Forming Tapping Screw  |
| H   | Type ABR Thread Forming Tapping Screw |
| B   | Type B Thread Forming Tapping Screw   |
| L   | Type BF Thread Cutting Tapping Screw  |
| P   | Type BP Thread Forming Tapping Screw  |
| R   | Type BT Thread Cutting Tapping Screw  |
| C   | Type C Thread Forming Tapping Screw   |
| D   | Type D Thread Cutting Tapping Screw   |
| F   | Type F Thread Cutting Tapping Screw   |
| G   | Type G Thread Cutting Tapping Screw   |

**Table 2-2 Thread and Point Options for Tapping Screws (Cont'd)**

| PIN | Description                         |
|-----|-------------------------------------|
| T   | Type T Thread Cutting Tapping Screw |
| E   | Type TRS Thread TT Tapping Screw    |
| K   | Type TRS Thread RL Tapping Screw    |
| M   | Type TRS Thread TR-3 Tapping Screw  |
| S   | Type TRS Thread SF Tapping Screw    |
| W   | Type TRS Thread SW Tapping Screw    |
| Z   | Type A Thread Forming Tapping Screw |
| U   | Type U Metallic Drive Screw         |

**Table 3-1 Inch Thread**

| PIN | Size  | Dia. (in.)        |
|-----|-------|-------------------|
| 021 | 0000  | .021-160 NS only  |
| 034 | 000   | .034-120 NS only  |
| 04A | 00    | .047-90 NS-2 only |
| 04B | 00    | .047-96 NS-2 only |
| 060 | 0     | .060              |
| 073 | 1     | .073              |
| 086 | 2     | .086              |
| 099 | 3     | .099              |
| 112 | 4     | .112              |
| 125 | 5     | .125              |
| 138 | 6     | .138              |
| 164 | 8     | .164              |
| 190 | 10    | .190              |
| 216 | 12    | .216              |
| 250 | 1/4   | .250              |
| 268 | 14    | .268              |
| 312 | 5/16  | .3125             |
| 375 | 3/8   | .375              |
| 438 | 7/16  | .4375             |
| 500 | 1/2   | .500              |
| 562 | 9/16  | .5625             |
| 625 | 5/8   | .625              |
| 688 | -     | .6875             |
| 750 | 3/4   | .750              |
| 812 | 13/16 | .8125             |
| 875 | 7/8   | .875              |
| 938 | 15/16 | .9375             |
| A00 | 1     | 1.000             |

**Table 3-1 Inch Thread (Cont'd)**

| PIN | Size   | Dia. (in.) |
|-----|--------|------------|
| A06 | 1 1/16 | 1.0625     |
| A12 | 1 1/8  | 1.125      |
| A18 | 1 3/16 | 1.1875     |
| A25 | 1 1/4  | 1.250      |
| A31 | -      | 1.3125     |
| A37 | 1 3/8  | 1.375      |
| A43 | -      | 1.4375     |
| A50 | 1 1/2  | 1.500      |
| A62 | 1 5/8  | 1.625      |
| A75 | 1 3/4  | 1.750      |
| A87 | 1 7/8  | 1.875      |
| B00 | 2      | 2.000      |
| B25 | 2 1/4  | 2.250      |
| B50 | 2 1/2  | 2.500      |
| B75 | 2 3/4  | 2.750      |
| C00 | 3      | 3.000      |
| C25 | 3 1/4  | 3.250      |
| C50 | 3 1/2  | 3.500      |
| C75 | 3 3/4  | 3.750      |
| D00 | 4      | 4.000      |
| D25 | 4 1/4  | 4.250      |
| D50 | 4 1/2  | 4.500      |
| D75 | 4 3/4  | 4.750      |
| E00 | 5      | 5.000      |
| E25 | 5 1/4  | 5.250      |
| E50 | 5 1/2  | 5.500      |
| E75 | 5 3/4  | 5.750      |
| F00 | 6      | 6.000      |

**Table 3-2 Inch Size**

| PIN | Size | Size/Length (in.) |
|-----|------|-------------------|
| 031 | 1/32 | .031              |
| 039 | -    | .039              |
| 047 | 3/64 | .047              |
| 052 | -    | .052              |
| 060 | -    | .060              |
| 062 | 1/16 | .062              |
| 075 | -    | .075              |
| 078 | 5/64 | .078              |
| 093 | 3/32 | .093              |
| 100 | -    | .100              |
| 109 | 7/64 | .109              |
| 116 | -    | .116              |

**Table 3-2 Inch Size (Cont'd)**

| PIN | Size            | Size/Length (in.) |
|-----|-----------------|-------------------|
| 125 | $\frac{1}{8}$   | .125              |
| 140 | -               | .140              |
| 141 | $\frac{9}{64}$  | .141              |
| 154 | -               | .154              |
| 156 | $\frac{5}{32}$  | .156              |
| 167 | -               | .167              |
| 182 | -               | .182              |
| 187 | -               | .187              |
| 188 | $\frac{3}{16}$  | .188              |
| 212 | -               | .212              |
| 219 | $\frac{7}{32}$  | .219              |
| 242 | -               | .242              |
| 250 | $\frac{1}{4}$   | .250              |
| 281 | $\frac{9}{32}$  | .281              |
| 312 | $\frac{5}{16}$  | .312              |
| 315 | -               | .315              |
| 344 | $\frac{11}{32}$ | .344              |
| 359 | $\frac{23}{64}$ | .359              |
| 375 | $\frac{3}{8}$   | .375              |
| 378 | -               | .378              |
| 406 | $\frac{13}{32}$ | .406              |
| 438 | $\frac{7}{16}$  | .438              |
| 500 | $\frac{1}{2}$   | .500              |
| 562 | $\frac{9}{16}$  | .562              |
| 625 | $\frac{5}{8}$   | .625              |
| 688 | $\frac{11}{16}$ | .688              |
| 750 | $\frac{3}{4}$   | .750              |
| 812 | $\frac{13}{16}$ | .812              |
| 875 | $\frac{7}{8}$   | .875              |
| 938 | $\frac{15}{16}$ | .938              |
| A00 | 1               | 1.000             |
| A12 | $\frac{1}{8}$   | 1.125             |
| A25 | $\frac{1}{4}$   | 1.250             |
| A37 | $\frac{3}{8}$   | 1.375             |
| A50 | $\frac{1}{2}$   | 1.500             |
| A62 | $\frac{5}{8}$   | 1.625             |
| A75 | $\frac{3}{4}$   | 1.750             |
| A87 | $\frac{7}{8}$   | 1.875             |
| B00 | 2               | 2.000             |
| B12 | $\frac{21}{8}$  | 2.125             |
| B25 | $\frac{21}{4}$  | 2.250             |
| B37 | $\frac{23}{8}$  | 2.375             |
| B50 | $\frac{21}{2}$  | 2.500             |
| B62 | $\frac{25}{8}$  | 2.625             |

**Table 3-2 Inch Size (Cont'd)**

| PIN | Size           | Size/Length (in.) |
|-----|----------------|-------------------|
| B75 | $2\frac{3}{4}$ | 2.750             |
| B87 | $2\frac{7}{8}$ | 2.875             |
| C00 | 3              | 3.000             |
| C12 | $3\frac{1}{8}$ | 3.125             |
| C25 | $3\frac{1}{4}$ | 3.250             |
| C37 | $3\frac{3}{8}$ | 3.375             |
| C50 | $3\frac{1}{2}$ | 3.500             |
| C62 | $3\frac{5}{8}$ | 3.625             |
| C75 | $3\frac{3}{4}$ | 3.750             |
| C87 | $3\frac{7}{8}$ | 3.875             |
| D00 | 4              | 4.000             |
| D12 | $4\frac{1}{8}$ | 4.125             |
| D25 | $4\frac{1}{4}$ | 4.250             |
| D37 | $4\frac{3}{8}$ | 4.375             |
| D50 | $4\frac{1}{2}$ | 4.500             |
| D62 | $4\frac{5}{8}$ | 4.625             |
| D75 | $4\frac{3}{4}$ | 4.750             |
| D87 | $4\frac{7}{8}$ | 4.875             |
| E00 | 5              | 5.000             |
| E12 | $5\frac{1}{8}$ | 5.125             |
| E25 | $5\frac{1}{4}$ | 5.250             |
| E37 | $5\frac{3}{8}$ | 5.375             |
| E50 | $5\frac{1}{2}$ | 5.500             |
| E62 | $5\frac{5}{8}$ | 5.625             |
| E75 | $5\frac{3}{4}$ | 5.750             |
| E87 | $5\frac{7}{8}$ | 5.875             |
| F00 | 6              | 6.000             |
| F12 | $6\frac{1}{8}$ | 6.125             |
| F25 | $6\frac{1}{4}$ | 6.250             |
| F37 | $6\frac{3}{8}$ | 6.375             |
| F50 | $6\frac{1}{2}$ | 6.500             |
| F62 | $6\frac{5}{8}$ | 6.625             |
| F75 | $6\frac{3}{4}$ | 6.750             |
| F87 | $6\frac{7}{8}$ | 6.875             |
| G00 | 7              | 7.000             |
| G12 | $7\frac{1}{8}$ | 7.125             |
| G25 | $7\frac{1}{4}$ | 7.250             |
| G37 | $7\frac{3}{8}$ | 7.375             |
| G50 | $7\frac{1}{2}$ | 7.500             |
| G62 | $7\frac{5}{8}$ | 7.625             |
| G75 | $7\frac{3}{4}$ | 7.750             |
| G87 | $7\frac{7}{8}$ | 7.875             |
| H00 | 8              | 8.000             |
| H12 | $8\frac{1}{8}$ | 8.125             |

**Table 3-2 Inch Size (Cont'd)**

| PIN | Size            | Size/Length (in.) |
|-----|-----------------|-------------------|
| H25 | $8\frac{1}{4}$  | 8.250             |
| H37 | $8\frac{3}{8}$  | 8.375             |
| H50 | $8\frac{1}{2}$  | 8.500             |
| H75 | $8\frac{3}{4}$  | 8.750             |
| J00 | 9               | 9.000             |
| J25 | $9\frac{1}{4}$  | 9.250             |
| J50 | $9\frac{1}{2}$  | 9.500             |
| J75 | $9\frac{3}{4}$  | 9.750             |
| K00 | 10              | 10.000            |
| K02 | $10\frac{1}{4}$ | 10.250            |
| K05 | $10\frac{1}{2}$ | 10.500            |
| K07 | $10\frac{3}{4}$ | 10.750            |
| K10 | 11              | 11.000            |
| K12 | $11\frac{1}{4}$ | 11.250            |
| K15 | $11\frac{1}{2}$ | 11.500            |
| K17 | $11\frac{3}{4}$ | 11.750            |
| K20 | 12              | 12.000            |
| K22 | $12\frac{1}{4}$ | 12.250            |
| K25 | $12\frac{1}{2}$ | 12.500            |
| K27 | $12\frac{3}{4}$ | 12.750            |
| K30 | 13              | 13.000            |
| K40 | 14              | 14.000            |
| K50 | 15              | 15.000            |
| K60 | 16              | 16.000            |
| K70 | 17              | 17.000            |
| K80 | 18              | 18.000            |
| K90 | 19              | 19.000            |
| L00 | 20              | 20.000            |

**Table 3-3 Metric Thread**

| PIN | Diameter (mm)/Pitch   |
|-----|-----------------------|
| 163 | M1.6 x 0.35           |
| 204 | M2 x 0.4              |
| 254 | M2.5 x 0.45           |
| 305 | M3 x 0.5              |
| 356 | M3.5 x 0.6            |
| 407 | M4 x 0.7              |
| 508 | M5 x 0.8              |
| 06A | M6 x 1                |
| 07B | M7 x 1                |
| 08B | M8 x 1.25             |
| 08A | M8 x 1                |
| 10Z | M10 x 1.5 (15 mm WAF) |

**Table 3-3 Metric Thread  
(Cont'd)**

| PIN | Diameter (mm)/Pitch |
|-----|---------------------|
| 10C | M10 x 1.5           |
| 10B | M10 x 1.25          |
| 10A | M10 x 1             |
| 107 | M10 x 0.75          |
| 12D | M12 x 1.75          |
| 12C | M12 x 1.5           |
| 12B | M12 x 1.25          |
| 12A | M12 x 1             |
| 14E | M14 x 2             |
| 14C | M14 x 1.5           |
| 15A | M15 x 1             |
| 16E | M16 x 2             |
| 07B | M7 x 1              |
| 16C | M16 x 1.5           |
| 17A | M17 x 1             |
| 18C | M18 x 1.5           |
| 18E | M18 x 2             |
| 18F | M18 x 2.5           |
| 20F | M20 x 2.5           |
| 20C | M20 x 1.5           |
| 20E | M20 x 2             |
| 20A | M20 x 1             |
| 22F | M22 x 2.5           |
| 22C | M22 x 1.5           |
| 24G | M24 x 3             |
| 24E | M24 x 2             |
| 25C | M25 x 1.5           |
| 27G | M27 x 3             |
| 27E | M27 x 2             |
| 30H | M30 x 3.5           |
| 30E | M30 x 2             |
| 30C | M30 x 1.5           |
| 30G | M30 x 3             |
| 33E | M33 x 2             |
| 33G | M33 x 3             |
| 35C | M35 x 1.5           |
| 36J | M36 x 4             |
| 36E | M36 x 2             |
| 36G | M36 x 3             |
| 39E | M39 x 2             |
| 39G | M39 x 3             |
| 40C | M40 x 1.5           |
| 42K | M42 x 4.5           |

**Table 3-3 Metric Thread  
(Cont'd)**

| PIN | Diameter (mm)/Pitch |
|-----|---------------------|
| 42E | M42 x 2             |
| 45C | M45 x 1.5           |
| 48L | M48 x 5             |
| 48E | M48 x 2             |
| 50C | M50 x 1.5           |
| 56M | M56 x 5.5           |
| 64N | M64 x 6             |
| 72N | M72 x 6             |
| 80N | M80 x 6             |
| 90N | M90 x 6             |
| C0N | M100 x 6            |

**Table 3-4 Metric Size**

| PIN | Size/Length (mm) |
|-----|------------------|
| 06M | 0.6              |
| 08M | 0.8              |
| 10M | 1.0              |
| 12M | 1.2              |
| 14M | 1.4              |
| 15M | 1.5              |
| 16M | 1.6              |
| 20M | 2.0              |
| 22M | 2.2              |
| 25M | 2.5              |
| 29M | 2.9              |
| 30M | 3.0              |
| 32M | 3.2              |
| 35M | 3.5              |
| 40M | 4.0              |
| 42M | 4.2              |
| 48M | 4.8              |
| 50M | 5.0              |
| 55M | 5.5              |
| 60M | 6.0              |
| 63M | 6.3              |
| 70M | 7.0              |
| 80M | 8.0              |
| 90M | 9.0              |
| 95M | 9.5              |
| 010 | 10               |
| 011 | 11               |
| 012 | 12               |
| 013 | 13               |

**Table 3-4 Metric Size (Cont'd)**

| PIN | Size/Length (mm) |
|-----|------------------|
| 014 | 14               |
| 015 | 15               |
| 016 | 16               |
| 017 | 17               |
| 018 | 18               |
| 019 | 19               |
| 020 | 20               |
| 021 | 21               |
| 022 | 22               |
| 023 | 23               |
| 024 | 24               |
| 025 | 25               |
| 026 | 26               |
| 027 | 27               |
| 028 | 28               |
| 030 | 30               |
| 032 | 32               |
| 033 | 33               |
| 034 | 34               |
| 035 | 35               |
| 036 | 36               |
| 037 | 37               |
| 038 | 38               |
| 040 | 40               |
| 042 | 42               |
| 045 | 45               |
| 046 | 46               |
| 047 | 47               |
| 048 | 48               |
| 050 | 50               |
| 052 | 52               |
| 055 | 55               |
| 056 | 56               |
| 057 | 57               |
| 058 | 58               |
| 060 | 60               |
| 062 | 62               |
| 063 | 63               |
| 065 | 65               |
| 068 | 68               |
| 070 | 70               |
| 072 | 72               |
| 075 | 75               |
| 078 | 78               |

**Table 3-4 Metric Size (Cont'd)**

| PIN | Size/Length (mm) |
|-----|------------------|
| 080 | 80               |
| 082 | 82               |
| 085 | 85               |
| 088 | 88               |
| 090 | 90               |
| 092 | 92               |
| 095 | 95               |
| 098 | 98               |
| 100 | 100              |
| 102 | 102              |
| 105 | 105              |
| 108 | 108              |
| 110 | 110              |
| 115 | 115              |
| 120 | 120              |
| 125 | 125              |
| 130 | 130              |
| 135 | 135              |
| 140 | 140              |
| 145 | 145              |
| 150 | 150              |
| 155 | 155              |
| 160 | 160              |
| 165 | 165              |
| 175 | 175              |
| 180 | 180              |
| 185 | 185              |
| 190 | 190              |
| 200 | 200              |
| 210 | 210              |
| 220 | 220              |
| 230 | 230              |
| 240 | 240              |
| 250 | 250              |
| 260 | 260              |
| 280 | 280              |
| 300 | 300              |
| 320 | 320              |
| 360 | 360              |
| 400 | 400              |

**Table 3-5 Miniature Screw Thread**

| PIN | Thread   | Size (mm)         |
|-----|----------|-------------------|
| 030 | 0.30 UNM | 0.30 (0.0118 in.) |
| 035 | 0.35 UNM | 0.35 (0.0138 in.) |
| 040 | 0.40 UNM | 0.40 (0.0157 in.) |
| 045 | 0.45 UNM | 0.45 (0.0177 in.) |
| 050 | 0.50 UNM | 0.50 (0.0197 in.) |
| 055 | 0.55 UNM | 0.55 (0.0217 in.) |
| 060 | 0.60 UNM | 0.60 (0.0236 in.) |
| 070 | 0.70 UNM | 0.70 (0.0276 in.) |
| 080 | 0.80 UNM | 0.80 (0.0315 in.) |
| 090 | 0.90 UNM | 0.90 (0.0354 in.) |
| 100 | 1.00 UNM | 1.00 (0.0394 in.) |
| 110 | 1.10 UNM | 1.10 (0.0433 in.) |
| 120 | 1.20 UNM | 1.20 (0.0472 in.) |
| 140 | 1.40 UNM | 1.40 (0.0551 in.) |

**Table 3-6 Inch Tapping Screw Thread**

| PIN | Description                          |
|-----|--------------------------------------|
| 060 | .060-48 Types AB, ABR, B, BP, BF, BT |
| 06A | .060-40 Type A                       |
| 073 | .073-42 Types AB, ABR, B, BP, BF, BT |
| 07A | .073-32 Type A                       |
| 086 | .086-32 Types AB, ABR, B, BP, BF, BT |
| 08A | .086-32 Type A                       |
| 08F | .086-64 Types D, F, G, T, C          |
| 08C | .086-56 Types D, F, G, T, C, TRS     |
| 099 | .099-28 Types AB, ABR, B, BP, BF, BT |
| 09A | .099-28 Type A                       |
| 09F | .099-56 Types D, F, G, T, C          |
| 09C | .099-48 Types D, F, G, T, C, TRS     |
| 112 | .112-24 Types AB, ABR, B, BP, BF, BT |
| 11A | .112-24 Type A                       |
| 11F | .112-48 Types D, F, G, T, C          |
| 11C | .112-40 Types D, F, G, T, C, TRS     |
| 125 | .125-20 Types AB, ABR, B, BP, BF, BT |
| 12A | .125-20 Type A                       |
| 12F | .125-44 Types D, F, G, T, C          |
| 12C | .125-40 Types D, F, G, T, C, TRS     |
| 138 | .138-20 Types AB, ABR, B, BP, BF, BT |
| 13A | .138-18 Type A                       |
| 13F | .138-40 Types D, F, G, T, C          |
| 13C | .138-32 Types D, F, G, T, C, TRS     |

**Table 3-6 Inch Tapping Screw Thread (Cont'd)**

| PIN | Description                                     |
|-----|-------------------------------------------------|
| 13R | .138 Trim Head Size 4 Types AB, A, B, C Coarse  |
| 13S | .138 Trim Head Size 5 Types AB, A, B, C Coarse  |
| 13T | .138 Trim Head Size 4 Type C Fine               |
| 13U | .138 Trim Head Size 5 Type C Fine               |
| 151 | .151-19 Types AB, ABR, B, BP, BF, BT            |
| 15A | .151-16 Type A                                  |
| 164 | .164-18 Types AB, ABR, B, BP, BF, BT            |
| 16A | .164-15 Type A                                  |
| 16F | .164-36 Types D, F, G, T, C                     |
| 16C | .164-32 Types D, F, G, T, C, TRS                |
| 16R | .164 Trim Head Size 5 Types AB, A, B, C Coarse  |
| 16S | .164 Trim Head Size 6 Types AB, A, B, C Coarse  |
| 16T | .164 Trim Head Size 5 Type C Fine               |
| 16U | .164 Trim Head Size 6 Type C Fine               |
| 190 | .190-16 Types AB, ABR, B, BP, BF, BT            |
| 19A | .190-12 Type A                                  |
| 19F | .190-32 Types D, F, G, T, C, TRS                |
| 19C | .190-24 Types D, F, G, T, C, TRS                |
| 216 | .216-14 Types AB, ABR, B, BP, BF, BT            |
| 21A | .216-11 Type A                                  |
| 21C | .216-24 Type D, F, G, T, C, TRS                 |
| 21F | .216-28 Type D, F, G, T, C                      |
| 21R | .216 Trim Head Size 8 Types AB, A, B, C Coarse  |
| 21S | .216 Trim Head Size 10 Types AB, A, B, C Coarse |
| 21T | .216 Trim Head Size 8 Type C Fine               |
| 21U | .216 Trim Head Size 10 Type C Fine              |
| 24A | .242-10 Type A                                  |
| 24R | .242 Trim Head Size 10                          |
| 24S | .242 Trim Head Size 12                          |
| 250 | .250-14 Types AB, ABR, B, BP, BF, BT            |
| 25F | .250-28 Types D, F, G, T, C                     |
| 25C | .250-20 Types D, F, G, T, C, TRS                |
| 25R | .250 Trim Head Size 10 Types AB, A, B, C Coarse |
| 25S | .250 Trim Head Size 12 Types AB, A, B, C Coarse |
| 25T | .250 Trim Head Size 10 Type C Fine              |
| 25U | .250 Trim Head Size 12 Type C Fine              |
| 26A | .268-10 Type A                                  |

**Table 3-6 Inch Tapping Screw Thread (Cont'd)**

| PIN | Description                                      |
|-----|--------------------------------------------------|
| 29A | .294-9 Type A                                    |
| 312 | .3125-12 Types AB, ABR, B, BP, BF, BT            |
| 31F | .3125-24 Types D, F, G, T, C                     |
| 31C | .3125-18 Types D, F, G, T, C, TRS                |
| 31R | .3125 Trim Head Size 12 Types AB, A, B, C Coarse |
| 31S | .3125 Trim Head Size 1¼ Types AB, A, B, C Coarse |
| 31T | .3125 Trim Head Size 12 Type C Fine              |
| 31U | .3125 Trim Head Size 1¼ Type C Fine              |
| 32A | .320-9 Type A                                    |
| 375 | .375-12 Types AB, ABR, B, BP, BF, BT             |
| 37A | .372-9 Type A                                    |
| 37F | .375-24 Types D, F, G, T, C                      |
| 37C | .375-16 Types D, F, G, T, C, TRS                 |
| 438 | .4375-10 Types AB, ABR, B, BP, BF, BT            |
| 43F | .4375-20 Types D, F, G, T, C                     |
| 43C | .4375-14 Types D, F, G, T, C, TRS                |
| 500 | .500-5 Types AB, ABR, B, BP, BF, BT              |
| 50F | .500-20 Types D, F, G, T, C, TRS                 |
| 50C | .500-13 Types D, F, G, T, C                      |

**Table 3-7 Metric Tapping Screw Thread**

| PIN | Description |
|-----|-------------|
| 204 | 2 x 0.4     |
| 228 | 2.2 x 0.8   |
| 254 | 2.5 x 0.45  |
| 291 | 2.9 x 1.1   |
| 305 | 3 x 0.5     |
| 356 | 3.5 x 0.6   |
| 351 | 3.5 x 1.3   |
| 407 | 4 x 0.7     |
| 421 | 4.2 x 1.4   |
| 481 | 4.8 x 1.6   |
| 508 | 5 x 0.8     |
| 551 | 5.5 x 1.8   |
| 06A | 6 x 1       |
| 631 | 6.3 x 1.8   |
| 08B | 8 x 1.25    |
| 802 | 8 x 2.1     |

**Table 3-7 Metric Tapping Screw Thread (Cont'd)**

| PIN | Description                          |
|-----|--------------------------------------|
| 952 | 9.5 x 2.1                            |
| 95Y | 9.5 x 2.1 (15 mm width across flats) |
| 10C | 10 x 1.5                             |
| 10Z | 10 x 1.5 (15 mm width across flats)  |

**Table 3-8 Inch Hex Socket Head Shoulder Screw Size**

| PIN | Shoulder Diameter (in.) |
|-----|-------------------------|
| 250 | .250                    |
| 312 | .312                    |
| 375 | .375                    |
| 500 | .500                    |
| 625 | .625                    |
| 750 | .750                    |
| A00 | 1.000                   |
| A25 | 1.250                   |
| A50 | 1.500                   |
| A75 | 1.750                   |
| B00 | 2.000                   |

**Table 3-9 Metric Hex Socket Head Shoulder Screw Size**

| PIN | Shoulder Diameter (mm) |
|-----|------------------------|
| 65M | 6.5                    |
| 80M | 8                      |
| 010 | 10                     |
| 013 | 13                     |
| 016 | 16                     |
| 020 | 20                     |
| 025 | 25                     |

**Table 3-10 Inch Spline Socket Set Screw Thread**

| PIN | Size | Description/No. of Splines (in.) |
|-----|------|----------------------------------|
| 060 | 0    | .060 4 Splines                   |
| 073 | 1    | .073 4 Splines                   |
| 08A | 2    | .086 4 Splines                   |
| 08B | 2    | .086 6 Splines                   |

**Table 3-10 Inch Spline Socket Set Screw Thread (Cont'd)**

| PIN | Size | Description/No. of Splines (in.) |
|-----|------|----------------------------------|
| 09A | 3    | .099 4 Splines                   |
| 09B | 3    | .099 6 Splines                   |
| 112 | 4    | .112 6 Splines                   |
| 12A | 5    | .125 4 Splines                   |
| 12B | 5    | .125 6 Splines                   |
| 13A | 4    | .138 4 Splines                   |
| 13B | 6    | .138 6 Splines                   |
| 164 | 8    | .164 6 Splines                   |
| 190 | 10   | .190 6 Splines                   |
| 250 | 1¼   | .250 6 Splines                   |
| 312 | 5/16 | .3125 6 Splines                  |
| 375 | 3/8  | .375 6 Splines                   |
| 438 | 7/16 | .4375 6 Splines                  |
| 500 | 1/2  | .500 6 Splines                   |
| 625 | 5/8  | .625 6 Splines                   |
| 750 | 3/4  | .750 6 Splines                   |
| 875 | 7/8  | .875 6 Splines                   |

**Table 3-11 Inch Trim Head Machine Screw Size**

| PIN | Description         |
|-----|---------------------|
| 112 | .112-3 Head Size    |
| 125 | .125-4 Head Size    |
| 13A | .138-4 Head Size    |
| 13B | .138-5 Head Size    |
| 16A | .164-5 Head Size    |
| 16B | .164-6 Head Size    |
| 190 | .190-8 Head Size    |
| 21A | .216-8 Head Size    |
| 21B | .216-10 Head Size   |
| 25A | .250-10 Head Size   |
| 25B | .250-12 Head Size   |
| 31A | .3125-12 Head Size  |
| 31B | .3125-4/1 Head Size |
| 375 | .375-5/16 Head Size |

**Table 3-12 Inch Wood Screw Thread**

| PIN | Size | Diameter (in.)/Pitch |
|-----|------|----------------------|
| 060 | 0    | .060-32              |
| 073 | 1    | .073-28              |
| 086 | 2    | .086-26              |
| 099 | 3    | .099-24              |
| 112 | 4    | .112-22              |
| 125 | 5    | .125-20              |
| 138 | 6    | .138-18              |
| 151 | 7    | .151-16              |
| 164 | 8    | .164-15              |
| 177 | 9    | .177-14              |
| 190 | 10   | .190-13              |
| 216 | 12   | .216-11              |
| 242 | 14   | .242-10              |
| 268 | 16   | .268-9               |
| 294 | 18   | .294-8               |
| 320 | 20   | .320-8               |
| 372 | 24   | .372-7               |

**Table 3-13 Inch Lag Screw Thread**

| PIN | Diameter (in.)/Pitch |
|-----|----------------------|
| 190 | .190-11              |
| 250 | .250-10              |
| 312 | .3125-9              |
| 375 | .375-7               |
| 438 | .4375-7              |
| 500 | .500-6               |
| 625 | .625-5               |
| 750 | .750-4.5             |
| 875 | .875-4               |
| A00 | 1.000-3.5            |
| A12 | 1.125-3.25           |
| A25 | 1.250-3.25           |

**Table 3-14 Inch Rivet Size Weight**

| PIN | Size Designation |
|-----|------------------|
| 06Z | 6 oz             |
| 08Z | 8 oz             |
| 10Z | 10 oz            |
| 12Z | 12 oz            |
| 14Z | 14 oz            |

**Table 3-14 Inch Rivet Size Weight (Cont'd)**

| PIN | Size Designation    |
|-----|---------------------|
| 010 | 1 lb                |
| 012 | 1 $\frac{1}{4}$ lb  |
| 015 | 1 $\frac{1}{2}$ lb  |
| 017 | 1 $\frac{3}{4}$ lb  |
| 020 | 2 lb                |
| 025 | 2 $\frac{1}{2}$ lb  |
| 030 | 3 lb                |
| 035 | 3 $\frac{1}{2}$ lb  |
| 040 | 4 lb                |
| 050 | 5 lb                |
| 060 | 6 lb                |
| 070 | 7 lb                |
| 080 | 8 lb                |
| 090 | 9 lb                |
| 100 | 10 lb               |
| 120 | 11 lb               |
| 140 | 12 lb               |
| 160 | 13 lb               |
| 180 | 14 lb               |
| 200 | 15 lb               |
| 375 | 3 $\frac{3}{8}$ in. |

**Table 3-15 Inch Rivet Size Number**

| PIN | Size Number     |
|-----|-----------------|
| 140 | 14              |
| 130 | 13              |
| 120 | 12              |
| 110 | 10              |
| 090 | 9               |
| 080 | 8               |
| 070 | 7               |
| 060 | 6               |
| 055 | 5 $\frac{1}{2}$ |
| 050 | 5               |
| 040 | 4               |

**Table 3-16 Inch Rivet Size 1**

| PIN | Diameter |
|-----|----------|
| 061 | 0.061    |
| 062 | 0.062    |

**Table 3-16 Inch Rivet Size 1 (Cont'd)**

| PIN | Diameter |
|-----|----------|
| 089 | 0.089    |
| 099 | 0.099    |
| 123 | 0.123    |
| 125 | 0.125    |
| 146 | 0.146    |
| 152 | 0.152    |
| 15L | 0.152*   |
| 188 | 0.188    |
| 190 | 0.190    |
| 217 | 0.217    |
| 252 | 0.252    |
| 310 | 0.310    |

\*Large Flat Countersunk Head

**Table 3-17 Inch Rivet Size/Length**

| PIN | Length or O.D. (in.) |
|-----|----------------------|
| 092 | 0.092                |
| 078 | 0.078                |
| 093 | 0.093                |
| 109 | 0.109                |
| 125 | 0.125                |
| 140 | 0.140                |
| 156 | 0.156                |
| 171 | 0.171                |
| 187 | 0.187                |
| 203 | 0.203                |
| 218 | 0.218                |
| 234 | 0.234                |
| 250 | 0.250                |
| 265 | 0.265                |
| 281 | 0.281                |
| 296 | 0.296                |
| 312 | 0.312                |
| 328 | 0.328                |
| 343 | 0.343                |
| 359 | 0.359                |
| 375 | 0.375                |
| 390 | 0.390                |
| 406 | 0.406                |
| 421 | 0.421                |
| 437 | 0.437                |

**Table 3-17 Inch Rivet Size/Length (Cont'd)**

| PIN | Length or O.D.<br>(in.) |
|-----|-------------------------|
| 453 | 0.453                   |
| 468 | 0.468                   |
| 484 | 0.484                   |
| 500 | 0.500                   |
| 515 | 0.515                   |
| 531 | 0.531                   |
| 546 | 0.546                   |
| 562 | 0.562                   |
| 578 | 0.578                   |
| 593 | 0.593                   |
| 609 | 0.609                   |
| 625 | 0.625                   |
| 640 | 0.640                   |
| 656 | 0.656                   |
| 671 | 0.671                   |
| 687 | 0.687                   |
| 703 | 0.703                   |
| 718 | 0.718                   |
| 734 | 0.734                   |
| 750 | 0.750                   |
| 765 | 0.765                   |
| 781 | 0.781                   |
| 796 | 0.796                   |
| 812 | 0.812                   |
| 828 | 0.828                   |
| 843 | 0.843                   |
| 859 | 0.859                   |
| 875 | 0.875                   |
| 890 | 0.890                   |
| 906 | 0.906                   |
| 921 | 0.921                   |
| 937 | 0.937                   |
| 953 | 0.953                   |
| 968 | 0.968                   |
| 984 | 0.984                   |
| A00 | 1.000                   |

**Table 3-18 Inch Pin Size 1**

| PIN | Size | Diameter (in.) |
|-----|------|----------------|
| 067 | 0    | .067           |
| 086 | 2    | .086           |
| 104 | 4    | .104           |

**Table 3-18 Inch Pin Size 1 (Cont'd)**

| PIN | Size | Diameter (in.) |
|-----|------|----------------|
| 120 | 6    | .120           |
| 136 | 7    | .136           |
| 144 | 8    | .144           |
| 161 | 10   | .161           |
| 196 | 12   | .196           |
| 221 | 14   | .221           |
| 250 | 16   | .250           |

**Table 3-19 Inch Pin Size 2**

| PIN | Size | Diameter (in.) |
|-----|------|----------------|
| 062 | 7/0  | .062           |
| 078 | 6/0  | .078           |
| 094 | 5/0  | .094           |
| 109 | 4/0  | .109           |
| 125 | 3/0  | .125           |
| 141 | 2/0  | .141           |
| 156 | 0    | .156           |
| 172 | 1    | .172           |
| 193 | 2    | .193           |
| 219 | 3    | .219           |
| 250 | 4    | .250           |
| 289 | 5    | .289           |
| 341 | 6    | .341           |
| 409 | 7    | .409           |
| 492 | 8    | .492           |
| 591 | 9    | .591           |
| 709 | 10   | .706           |
| 860 | 11   | .860           |
| A03 | 12   | 1.032          |
| A24 | 13   | 1.241          |
| A52 | 14   | 1.523          |

**Table 3-20 Retaining Ring Size Number**

| PIN | Size Designation |
|-----|------------------|
| 001 | 1                |
| 002 | 2                |
| 003 | 3                |
| 004 | 4                |
| 005 | 5                |
| 006 | 6                |
| 0S6 | S6               |

**Table 3-20 Retaining Ring Size Number (Cont'd)**

| PIN | Size Designation |
|-----|------------------|
| 0Y6 | Y6               |
| 007 | 7                |
| 008 | 8                |
| 009 | 9                |
| 0S9 | S9               |
| 010 | 10               |
| 011 | 11               |
| S11 | S11              |
| 012 | 12               |
| S12 | S12              |
| 013 | 13               |
| 014 | 14               |
| S14 | S14              |
| Y14 | Y14              |
| 015 | 15               |
| S15 | S15              |
| 016 | 16               |
| 017 | 17               |
| S17 | S17              |
| 018 | 18               |
| S18 | S18              |
| Y18 | Y18              |
| 019 | 19               |
| 020 | 20               |
| 021 | 21               |
| S21 | S21              |
| 022 | 22               |
| 023 | 23               |
| 024 | 24               |
| 025 | 25               |
| 026 | 26               |
| 027 | 27               |
| 028 | 28               |
| 030 | 30               |
| 031 | 31               |
| Y31 | Y31              |
| 032 | 32               |
| 034 | 34               |
| 035 | 35               |
| 036 | 36               |
| 037 | 37               |
| S37 | S37              |
| 038 | 38               |

**Table 3-20 Retaining Ring Size Number (Cont'd)**

| PIN | Size Designation |
|-----|------------------|
| 039 | 39               |
| 040 | 40               |
| 042 | 42               |
| 043 | 43               |
| S43 | S43              |
| 045 | 45               |
| 046 | 46               |
| 047 | 47               |
| 048 | 48               |
| 050 | 50               |
| 051 | 51               |
| 052 | 52               |
| 054 | 54               |
| 055 | 55               |
| 056 | 56               |
| 057 | 57               |
| 058 | 58               |
| 059 | 59               |
| 060 | 60               |
| 062 | 62               |
| 063 | 63               |
| 065 | 65               |
| 066 | 66               |
| 068 | 68               |
| 070 | 70               |
| 072 | 72               |
| S74 | S74              |
| 075 | 75               |
| 077 | 77               |
| 078 | 78               |
| 080 | 80               |
| 081 | 81               |
| 082 | 82               |
| 084 | 84               |
| 085 | 85               |
| 086 | 86               |
| 087 | 87               |
| 088 | 88               |
| 090 | 90               |
| 092 | 92               |
| 093 | 93               |
| 095 | 95               |
| 098 | 98               |

**Table 3-20 Retaining Ring Size Number (Cont'd)**

| PIN | Size Designation |
|-----|------------------|
| S98 | S98              |
| 100 | 100              |
| 102 | 102              |
| 105 | 105              |
| 106 | 106              |
| 108 | 108              |
| 110 | 110              |
| 112 | 112              |
| 115 | 115              |
| 118 | 118              |
| SA1 | S118             |
| 120 | 120              |
| 125 | 125              |
| 130 | 130              |
| 131 | 131              |
| 135 | 135              |
| 137 | 137              |
| SA3 | S137             |
| 140 | 140              |
| 143 | 143              |
| 145 | 145              |
| 150 | 150              |
| 155 | 155              |
| 156 | 156              |
| 160 | 160              |
| 162 | 162              |
| 165 | 165              |
| 168 | 168              |
| 170 | 170              |
| 175 | 175              |
| 177 | 177              |
| 180 | 180              |
| 181 | 181              |
| 185 | 185              |
| 187 | 187              |
| 190 | 190              |
| 193 | 193              |
| 196 | 196              |
| 200 | 200              |
| 206 | 206              |
| 210 | 210              |
| 212 | 212              |
| 215 | 215              |

**Table 3-20 Retaining Ring Size Number (Cont'd)**

| PIN | Size Designation |
|-----|------------------|
| 218 | 218              |
| 220 | 220              |
| 225 | 225              |
| 230 | 230              |
| 231 | 231              |
| 237 | 237              |
| 240 | 240              |
| 243 | 243              |
| 244 | 244              |
| 250 | 250              |
| 255 | 255              |
| 256 | 256              |
| 262 | 262              |
| 268 | 268              |
| 275 | 275              |
| 281 | 281              |
| 287 | 287              |
| 293 | 293              |
| 295 | 295              |
| 300 | 300              |
| 306 | 306              |
| 312 | 312              |
| 315 | 315              |
| 325 | 325              |
| 334 | 334              |
| 343 | 343              |
| 347 | 347              |
| 350 | 350              |
| 354 | 354              |
| 362 | 362              |
| 368 | 368              |
| 375 | 375              |
| 387 | 387              |
| 393 | 393              |
| 400 | 400              |
| 412 | 412              |
| 425 | 425              |
| 433 | 433              |
| 437 | 437              |
| 450 | 450              |
| 462 | 462              |
| 475 | 475              |
| 500 | 500              |

**Table 3-20 Retaining Ring Size Number (Cont'd)**

| PIN | Size Designation |
|-----|------------------|
| 525 | 525              |
| 537 | 537              |
| 550 | 550              |
| 575 | 575              |
| 600 | 600              |
| 625 | 625              |
| 650 | 650              |
| 662 | 662              |
| 675 | 675              |
| 700 | 700              |
| 725 | 725              |
| 750 | 750              |
| 775 | 775              |
| 800 | 800              |
| 825 | 825              |
| 850 | 850              |
| 875 | 875              |
| 900 | 900              |
| 925 | 925              |
| 950 | 950              |
| 975 | 975              |
| M00 | 1000             |

**Table 3-21 Inch Retaining Ring Size**

| PIN | Diameter (in.) |
|-----|----------------|
| 469 | 0.469          |
| 500 | 0.500          |
| 512 | 0.512          |
| 531 | 0.531          |
| 551 | 0.551          |
| 562 | 0.562          |
| 594 | 0.594          |
| 625 | 0.625          |
| 656 | 0.656          |
| 669 | 0.669          |
| 687 | 0.687          |
| 688 | 0.688          |
| 718 | 0.718          |
| 750 | 0.750          |
| 777 | 0.777          |
| 781 | 0.781          |
| 812 | 0.812          |

**Table 3-21 Inch Retaining Ring Size (Cont'd)**

| PIN | Diameter (in.) |
|-----|----------------|
| 843 | 0.843          |
| 866 | 0.866          |
| 875 | 0.875          |
| 901 | 0.901          |
| 906 | 0.906          |
| 937 | 0.937          |
| 938 | 0.938          |
| 968 | 0.968          |
| 984 | 0.984          |
| 987 | 0.987          |
| A00 | 1.000          |
| A02 | 1.023          |
| A03 | 1.031          |
| A06 | 1.062          |
| A09 | 1.093          |
| A12 | 1.125          |
| A15 | 1.156          |
| A18 | 1.188          |
| A21 | 1.218          |
| A25 | 1.250          |
| A28 | 1.281          |
| A31 | 1.312          |
| A34 | 1.343          |
| A37 | 1.375          |
| A40 | 1.406          |
| A43 | 1.437          |
| A43 | 1.438          |
| A43 | 1.439          |
| A45 | 1.456          |
| A46 | 1.468          |
| A50 | 1.500          |
| A56 | 1.562          |
| A57 | 1.574          |
| A57 | 1.575          |
| A62 | 1.625          |
| A65 | 1.653          |
| A67 | 1.687          |
| A68 | 1.688          |
| A75 | 1.750          |
| A77 | 1.771          |
| A81 | 1.812          |
| A81 | 1.813          |
| A85 | 1.850          |

**Table 3-21 Inch Retaining Ring Size (Cont'd)**

| PIN | Diameter (in.) |
|-----|----------------|
| A87 | 1.875          |
| A93 | 1.938          |
| A96 | 1.969          |
| B00 | 2.000          |
| B04 | 2.047          |
| B06 | 2.062          |
| B12 | 2.125          |
| B15 | 2.156          |
| B16 | 2.165          |
| B18 | 2.188          |
| B25 | 2.250          |
| B31 | 2.312          |
| B36 | 2.362          |
| B37 | 2.375          |
| B43 | 2.437          |
| B44 | 2.440          |
| B50 | 2.500          |
| B53 | 2.531          |
| B55 | 2.559          |
| B56 | 2.562          |
| B62 | 2.625          |
| B67 | 2.677          |
| B68 | 2.687          |
| B68 | 2.688          |
| B75 | 2.750          |
| B81 | 2.813          |
| B83 | 2.834          |
| B87 | 2.875          |
| B93 | 2.937          |
| B95 | 2.952          |
| C00 | 3.000          |
| C06 | 3.062          |
| C12 | 3.125          |
| C14 | 3.149          |
| C15 | 3.156          |
| C15 | 3.157          |
| C18 | 3.187          |
| C25 | 3.250          |
| C31 | 3.312          |
| C34 | 3.343          |
| C34 | 3.344          |
| C34 | 3.346          |
| C37 | 3.375          |

**Table 3-21 Inch Retaining Ring Size (Cont'd)**

| PIN | Diameter (in.) |
|-----|----------------|
| C43 | 3.437          |
| C46 | 3.469          |
| C50 | 3.500          |
| C54 | 3.543          |
| C56 | 3.562          |
| C62 | 3.625          |
| C68 | 3.687          |
| C74 | 3.740          |
| C75 | 3.750          |
| C81 | 3.812          |
| C87 | 3.875          |
| C93 | 3.938          |
| D00 | 4.000          |
| D06 | 4.063          |
| D12 | 4.125          |
| D13 | 4.134          |
| D18 | 4.188          |
| D25 | 4.250          |
| D31 | 4.312          |
| D33 | 4.330          |
| D33 | 4.331          |
| D37 | 4.375          |
| D43 | 4.437          |
| D50 | 4.500          |
| D52 | 4.527          |
| D56 | 4.562          |
| D62 | 4.625          |
| D68 | 4.687          |
| D72 | 4.724          |
| D75 | 4.750          |
| D81 | 4.812          |
| D87 | 4.875          |
| D92 | 4.921          |
| D93 | 4.937          |
| E00 | 5.000          |
| E11 | 5.118          |
| E12 | 5.125          |
| E25 | 5.250          |
| E37 | 5.375          |
| E50 | 5.500          |
| E51 | 5.511          |
| E62 | 5.625          |
| E70 | 5.708          |

**Table 3-21 Inch Retaining Ring Size (Cont'd)**

| PIN | Diameter (in.) |
|-----|----------------|
| E75 | 5.750          |
| E87 | 5.875          |
| E90 | 5.905          |
| F00 | 6.000          |
| F12 | 6.125          |
| F25 | 6.250          |
| F29 | 6.299          |
| F37 | 6.375          |
| F50 | 6.500          |
| F62 | 6.625          |
| F69 | 6.692          |
| F75 | 6.750          |
| F87 | 6.875          |
| GF0 | 7.000          |
| G08 | 7.086          |
| G12 | 7.125          |
| G25 | 7.250          |
| G37 | 7.375          |
| G48 | 7.480          |
| G50 | 7.500          |
| G62 | 7.625          |
| G75 | 7.750          |
| G87 | 7.875          |
| H00 | 8.000          |
| H25 | 8.250          |
| H26 | 8.267          |
| H46 | 8.464          |
| H50 | 8.500          |
| H75 | 8.750          |
| H85 | 8.858          |
| J00 | 9.000          |
| J05 | 9.055          |
| J25 | 9.250          |
| J44 | 9.448          |
| J50 | 9.500          |
| J75 | 9.750          |
| K00 | 10.000         |
| K02 | 10.250         |
| K05 | 10.500         |
| K07 | 10.750         |
| K10 | 11.000         |
| K12 | 11.250         |
| K15 | 11.500         |

**Table 3-21 Inch Retaining Ring Size (Cont'd)**

| PIN | Diameter (in.) |
|-----|----------------|
| K17 | 11.750         |
| K20 | 12.000         |
| K22 | 12.250         |
| K25 | 12.500         |
| K27 | 12.750         |
| K30 | 13.000         |
| K32 | 13.250         |
| K35 | 13.500         |
| K37 | 13.750         |
| K40 | 14.000         |
| K42 | 14.250         |
| K45 | 14.500         |
| K47 | 14.750         |
| K50 | 15.000         |

**Table 3-22 Inch Washer Size 1**

| PIN | Size           | Diameter (in.) |
|-----|----------------|----------------|
| 078 |                | 0.078          |
| 094 |                | 0.094          |
| 125 |                | 0.125          |
| 138 | No. 6          | 0.138          |
| 164 | No. 8          | 0.164          |
| 188 | $\frac{3}{16}$ | 0.188          |
| 190 | No. 10         | 0.190          |
| 216 | No. 12         | 0.216          |
| 25N | $\frac{1}{4}$  | 0.250 Narrow   |
| 25W | $\frac{1}{4}$  | 0.250 Wide     |
| 31N | $\frac{5}{16}$ | 0.312 Narrow   |
| 31W | $\frac{5}{16}$ | 0.312 Wide     |
| 37N | $\frac{3}{8}$  | 0.375 Narrow   |
| 37W | $\frac{3}{8}$  | 0.375 Wide     |
| 43N | $\frac{7}{16}$ | 0.438 Narrow   |
| 43W | $\frac{7}{16}$ | 0.438 Wide     |
| 50N | $\frac{1}{2}$  | 0.500 Narrow   |
| 50W | $\frac{1}{2}$  | 0.500 Wide     |
| 56N | $\frac{9}{16}$ | 0.562 Narrow   |
| 56W | $\frac{9}{16}$ | 0.562 Wide     |
| 62N | $\frac{5}{8}$  | 0.625 Narrow   |
| 62W | $\frac{5}{8}$  | 0.625 Wide     |
| 75N | $\frac{3}{4}$  | 0.750 Narrow   |
| 75W | $\frac{3}{4}$  | 0.750 Wide     |
| 87N | $\frac{7}{8}$  | 0.875 Narrow   |

**Table 3-22 Inch Washer Size 1 (Cont'd)**

| PIN | Size           | Diameter (in.) |
|-----|----------------|----------------|
| 87W | $\frac{7}{8}$  | 0.875 Wide     |
| A0N | 1              | 1.000 Narrow   |
| A0W | 1              | 1.000 Wide     |
| A1N | $1\frac{1}{8}$ | 1.125 Narrow   |
| A1W | $1\frac{1}{8}$ | 1.125 Wide     |
| A2N | $1\frac{1}{4}$ | 1.250 Narrow   |
| A2W | $1\frac{1}{4}$ | 1.250 Wide     |
| A3N | $1\frac{1}{2}$ | 1.375 Narrow   |
| A3W | $1\frac{1}{2}$ | 1.375 Wide     |
| A5N | $1\frac{1}{2}$ | 1.500 Narrow   |
| A5W | $1\frac{1}{2}$ | 1.500 Wide     |
| A62 | -              | 1.625          |
| A75 | $1\frac{3}{4}$ | 1.750          |
| A87 | $1\frac{3}{4}$ | 1.875          |
| B00 | 2              | 2.000          |
| B25 | $2\frac{1}{4}$ | 2.250          |
| B50 | $2\frac{1}{2}$ | 2.500          |
| B75 | $2\frac{3}{4}$ | 2.750          |
| C00 | 3              | 3.000          |

**Table 3-23 Inch Washer Size 2**

| PIN | Diameter/Outside Diameter (in.) |
|-----|---------------------------------|
| 094 | 0.094                           |
| 125 | 0.125                           |
| 156 | 0.156                           |
| 172 | 0.172                           |
| 188 | 0.188                           |
| 203 | 0.203                           |
| 219 | 0.219                           |
| 234 | 0.234                           |
| 250 | 0.250                           |
| 266 | 0.266                           |
| 312 | 0.312                           |
| 37A | 0.375/0.734                     |
| 37B | 0.375/1.125                     |
| 43A | 0.438/0.875                     |
| 43B | 0.438/1.375                     |
| 50A | 0.500/1.125                     |
| 50B | 0.500/1.625                     |
| 56A | 0.562/1.25                      |
| 56B | 0.562/1.875                     |
| 62A | 0.625/1.375                     |

**Table 3-23 Inch Washer Size 2 (Cont'd)**

| PIN | Diameter/Outside Diameter (in.) |
|-----|---------------------------------|
| 62B | 0.625/2.125                     |
| 68A | 0.688/1.469                     |
| 68B | 0.688/2.375                     |
| 81A | 0.812/1.750                     |
| 81B | 0.812/2.875                     |
| 93A | 0.938/2.000                     |
| 93B | 0.938/3.375                     |
| A0A | 1.062/2.250                     |
| A0B | 1.062/3.875                     |
| A25 | 1.250                           |
| A37 | 1.375                           |
| A50 | 1.500                           |
| A62 | 1.625                           |
| A68 | 1.688                           |
| A81 | 1.812                           |
| A93 | 1.938                           |
| B06 | 2.062                           |

**Table 3-24 Inch Washer Size 3**

| PIN | Size  | Diameter and Type (in.) |
|-----|-------|-------------------------|
| 06N | No. 0 | 0.060 Narrow            |
| 06R | No. 0 | 0.060 Regular           |
| 06W | No. 0 | 0.060 Wide              |
| 07N | No. 1 | 0.073 Narrow            |
| 07R | No. 1 | 0.073 Regular           |
| 07W | No. 1 | 0.073 Wide              |
| 08N | No. 2 | 0.086 Narrow            |
| 08R | No. 2 | 0.086 Regular           |
| 08W | No. 2 | 0.086 Wide              |
| 09N | No. 3 | 0.099 Narrow            |
| 09R | No. 3 | 0.099 Regular           |
| 09W | No. 3 | 0.099 Wide              |
| 11N | No. 4 | 0.112 Narrow            |
| 11R | No. 4 | 0.112 Regular           |
| 11W | No. 4 | 0.112 Wide              |
| 12N | No. 5 | 0.125 Narrow            |
| 12R | No. 5 | 0.125 Regular           |
| 12W | No. 5 | 0.125 Wide              |
| 13R | No. 6 | 0.138 Regular           |
| 13W | No. 6 | 0.138 Wide              |
| 16N | No. 8 | 0.164 Narrow            |
| 16R | No. 8 | 0.164 Regular           |

**Table 3-24 Inch Washer Size 3 (Cont'd)**

| PIN | Size           | Diameter and Type (in.) |
|-----|----------------|-------------------------|
| 16W | No. 8          | 0.164 Wide              |
| 19N | No. 10         | 0.190 Narrow            |
| 19R | No. 10         | 0.190 Regular           |
| 19W | No. 10         | 0.190 Wide              |
| 21N | No. 12         | 0.216 Narrow            |
| 21R | No. 12         | 0.216 Regular           |
| 21W | No. 12         | 0.216 Wide              |
| 25N | $\frac{1}{4}$  | 0.250 Narrow            |
| 25R | $\frac{1}{4}$  | 0.250 Regular           |
| 25W | $\frac{1}{4}$  | 0.250 Wide              |
| 31N | $\frac{5}{16}$ | 0.312 Narrow            |
| 31R | $\frac{5}{16}$ | 0.312 Regular           |
| 31W | $\frac{5}{16}$ | 0.312 Wide              |
| 37N | $\frac{3}{8}$  | 0.375 Narrow            |
| 37R | $\frac{3}{8}$  | 0.375 Regular           |
| 37W | $\frac{3}{8}$  | 0.375 Wide              |
| 43N | $\frac{7}{16}$ | 0.438 Narrow            |
| 43R | $\frac{7}{16}$ | 0.438 Regular           |
| 43W | $\frac{7}{16}$ | 0.438 Wide              |
| 50N | $\frac{1}{2}$  | 0.500 Narrow            |
| 50R | $\frac{1}{2}$  | 0.500 Regular           |
| 50W | $\frac{1}{2}$  | 0.500 Wide              |
| 56N | $\frac{9}{16}$ | 0.562 Narrow            |
| 56R | $\frac{9}{16}$ | 0.562 Regular           |
| 56W | $\frac{9}{16}$ | 0.562 Wide              |
| 62N | $\frac{5}{8}$  | 0.625 Narrow            |
| 62R | $\frac{5}{8}$  | 0.625 Regular           |
| 62W | $\frac{5}{8}$  | 0.625 Wide              |
| 75N | $\frac{3}{4}$  | 0.750 Narrow            |
| 75R | $\frac{3}{4}$  | 0.750 Regular           |
| 75W | $\frac{3}{4}$  | 0.750 Wide              |
| 87N | $\frac{7}{8}$  | 0.875 Narrow            |
| 87R | $\frac{7}{8}$  | 0.875 Regular           |
| 87W | $\frac{7}{8}$  | 0.875 Wide              |
| A0N | 1              | 1.000 Narrow            |
| A0R | 1              | 1.000 Regular           |
| A0W | 1              | 1.000 Wide              |
| A1N | $1\frac{1}{8}$ | 1.125 Narrow            |
| A1R | $1\frac{1}{8}$ | 1.125 Regular           |
| A1W | $1\frac{1}{8}$ | 1.125 Wide              |
| A2N | $1\frac{1}{4}$ | 1.250 Narrow            |
| A2R | $1\frac{1}{4}$ | 1.250 Regular           |
| A2W | $1\frac{1}{4}$ | 1.250 Wide              |

**Table 3-24 Inch Washer Size 3 (Cont'd)**

| PIN | Size            | Diameter and Type (in.) |
|-----|-----------------|-------------------------|
| A3N | 1 $\frac{3}{8}$ | 1.375 Narrow            |
| A3R | 1 $\frac{3}{8}$ | 1.375 Regular           |
| A3W | 1 $\frac{3}{8}$ | 1.375 Wide              |
| A5N | 1 $\frac{1}{2}$ | 1.500 Narrow            |
| A5R | 1 $\frac{1}{2}$ | 1.500 Regular           |
| A5W | 1 $\frac{1}{2}$ | 1.500 Wide              |
| A6N | 1 $\frac{5}{8}$ | 1.625 Narrow            |
| A6R | 1 $\frac{5}{8}$ | 1.625 Regular           |
| A6W | 1 $\frac{5}{8}$ | 1.625 Wide              |
| A7N | 1 $\frac{3}{4}$ | 1.750 Narrow            |
| A7R | 1 $\frac{3}{4}$ | 1.750 Regular           |
| A7W | 1 $\frac{3}{4}$ | 1.750 Wide              |
| A8N | 1 $\frac{7}{8}$ | 1.875 Narrow            |
| A8R | 1 $\frac{7}{8}$ | 1.875 Regular           |
| A8W | 1 $\frac{7}{8}$ | 1.875 Wide              |
| B0N | 2               | 2.000 Narrow            |
| B0R | 2               | 2.000 Regular           |
| B0W | 2               | 2.000 Wide              |
| B2N | 2 $\frac{1}{4}$ | 2.250 Narrow            |
| B2R | 2 $\frac{1}{4}$ | 2.250 Regular           |
| B2W | 2 $\frac{1}{4}$ | 2.250 Wide              |
| B5N | 2 $\frac{1}{2}$ | 2.500 Narrow            |
| B5R | 2 $\frac{1}{2}$ | 2.500 Regular           |
| B5W | 2 $\frac{1}{2}$ | 2.500 Wide              |
| B7N | 2 $\frac{3}{4}$ | 2.750 Narrow            |
| B7R | 2 $\frac{3}{4}$ | 2.750 Regular           |
| B7W | 2 $\frac{3}{4}$ | 2.750 Wide              |
| C0N | 3               | 3.000 Narrow            |
| C0R | 3               | 3.000 Regular           |
| C0W | 3               | 3.000 Wide              |

**Table 3-25 Inch Washer Size 4**

| PIN | Size | Outside Diameter (in.) |
|-----|------|------------------------|
| 11A | .112 | .475                   |
| 11B | .112 | .510                   |
| 11C | .112 | .610                   |
| 13A | .138 | .510                   |
| 13B | .138 | .610                   |
| 13C | .138 | .690                   |
| 16A | .164 | .610                   |
| 16B | .164 | .690                   |
| 16C | .164 | .760                   |

**Table 3-25 Inch Washer Size 4 (Cont'd)**

| PIN | Size | Outside Diameter (in.) |
|-----|------|------------------------|
| 19A | .190 | .610                   |
| 19B | .190 | .690                   |
| 19C | .190 | .760                   |
| 19D | .190 | .900                   |
| 21A | .216 | .690                   |
| 21B | .216 | .760                   |
| 21C | .216 | .900                   |
| 21D | .216 | .985                   |
| 25A | .250 | .760                   |
| 25B | .250 | .900                   |
| 25C | .250 | .985                   |
| 25D | .250 | 1.070                  |
| 31A | .312 | .900                   |
| 31B | .312 | .985                   |
| 31C | .312 | 1.070                  |
| 31D | .312 | 1.155                  |
| 37A | .375 | .985                   |
| 37B | .375 | 1.070                  |
| 37C | .375 | 1.155                  |
| 37D | .375 | 1.260                  |
| 43A | .438 | 1.070                  |
| 43B | .438 | 1.155                  |
| 43C | .438 | 1.260                  |
| 43D | .438 | 1.315                  |
| 50A | .500 | 1.260                  |
| 50B | .500 | 1.315                  |
| 50C | .500 | 1.410                  |
| 50D | .500 | 1.620                  |
| 56A | .562 | 1.315                  |
| 56B | .562 | 1.430                  |
| 56C | .562 | 1.620                  |
| 56D | .562 | 1.830                  |
| 62A | .625 | 1.410                  |
| 62B | .625 | 1.620                  |
| 62C | .625 | 1.830                  |
| 62D | .625 | 1.975                  |

**Table 3-26 Metric Washer Size 1**

| PIN | Diameter and Type (mm) |
|-----|------------------------|
| 01N | 1.6 Narrow             |
| 01R | 1.6 Regular            |

**Table 3-26 Metric Washer Size 1 (Cont'd)**

| PIN | Diameter and Type (mm) |
|-----|------------------------|
| 01W | 1.6 Wide               |
| 02N | 2 Narrow               |
| 02R | 2 Regular              |
| 02W | 2 Wide                 |
| 2BN | 2.5 Narrow             |
| 2BR | 2.5 Regular            |
| 2BW | 2.5 Wide               |
| 03N | 3 Narrow               |
| 03R | 3 Regular              |
| 03W | 3 Wide                 |
| 3CN | 3.5 Narrow             |
| 3CR | 3.5 Regular            |
| 3CW | 3.5 Wide               |
| 04N | 4 Narrow               |
| 04R | 4 Regular              |
| 04W | 4 Wide                 |
| 05N | 5 Narrow               |
| 05R | 5 Regular              |
| 05W | 5 Wide                 |
| 06N | 6 Narrow               |
| 06R | 6 Regular              |
| 06W | 6 Wide                 |
| 08N | 8 Narrow               |
| 08R | 8 Regular              |
| 08W | 8 Wide                 |
| 10N | 10 Narrow              |
| 10R | 10 Regular             |
| 10W | 10 Wide                |
| 12N | 12 Narrow              |
| 12R | 12 Regular             |
| 12W | 12 Wide                |
| 14N | 14 Narrow              |
| 14R | 14 Regular             |
| 14W | 14 Wide                |
| 16N | 16 Narrow              |
| 16R | 16 Regular             |
| 16W | 16 Wide                |
| 20N | 20 Narrow              |
| 20R | 20 Regular             |
| 20W | 20 Wide                |
| 24N | 24 Narrow              |
| 24R | 24 Regular             |
| 24W | 24 Wide                |

**Table 3-26 Metric Washer  
Size 1 (Cont'd)**

| PIN | Diameter and Type (mm) |
|-----|------------------------|
| 30N | 30 Narrow              |
| 30R | 30 Regular             |
| 30W | 30 Wide                |
| 36N | 36 Narrow              |
| 36R | 36 Regular             |
| 36W | 36 Wide                |

**Table 3-27 Metric Washer  
Size 2**

| PIN | Description          |                       |
|-----|----------------------|-----------------------|
|     | Inside Diameter (mm) | Outside Diameter (mm) |
| 29A | 2.9                  | 12.10                 |
| 29B | 2.9                  | 13.00                 |
| 29C | 2.9                  | 15.50                 |
| 30A | 3                    | 12.10                 |
| 30B | 3                    | 13.00                 |
| 30C | 3                    | 15.50                 |
| 35A | 3.5                  | 12.90                 |
| 35B | 3.5                  | 15.50                 |
| 35C | 3.5                  | 17.55                 |
| 40A | 4                    | 15.25                 |
| 40B | 4                    | 17.70                 |
| 40C | 4                    | 19.30                 |
| 42A | 4.2                  | 15.25                 |
| 42B | 4.2                  | 17.70                 |
| 42C | 4.2                  | 19.30                 |
| 48A | 4.8                  | 15.25                 |
| 48B | 4.8                  | 17.75                 |
| 48C | 4.8                  | 19.30                 |
| 48D | 4.8                  | 22.90                 |
| 50A | 5                    | 15.25                 |
| 50B | 5                    | 17.75                 |
| 50C | 5                    | 19.30                 |
| 50D | 5                    | 22.90                 |
| 55A | 5.5                  | 17.75                 |
| 55B | 5.5                  | 19.30                 |
| 55C | 5.5                  | 22.90                 |
| 55D | 5.5                  | 25.00                 |
| 60A | 6                    | 19.30                 |
| 60B | 6                    | 22.90                 |
| 60C | 6                    | 25.00                 |

**Table 3-27 Metric Washer  
Size 2 (Cont'd)**

| PIN | Description          |                       |
|-----|----------------------|-----------------------|
|     | Inside Diameter (mm) | Outside Diameter (mm) |
| 60D | 6                    | 27.20                 |
| 63A | 6.3                  | 19.30                 |
| 63B | 6.3                  | 22.90                 |
| 63C | 6.3                  | 25.00                 |
| 63D | 6.3                  | 27.20                 |
| 80A | 8                    | 22.90                 |
| 80B | 8                    | 25.00                 |
| 80C | 8                    | 27.20                 |
| 80D | 8                    | 29.35                 |
| 95A | 9.5                  | 25.00                 |
| 95B | 9.5                  | 27.20                 |
| 95C | 9.5                  | 29.35                 |
| 95D | 9.5                  | 32.00                 |
| A0A | 10                   | 25.00                 |
| A0B | 10                   | 27.20                 |
| A0C | 10                   | 29.35                 |
| A0D | 10                   | 32.00                 |
| A2A | 12                   | 32.00                 |
| A2B | 12                   | 33.50                 |
| A2C | 12                   | 36.00                 |
| A2D | 12                   | 41.35                 |
| A4A | 14                   | 33.50                 |
| A4B | 14                   | 36.00                 |
| A4C | 14                   | 41.35                 |
| A4D | 14                   | 46.50                 |
| A6A | 16                   | 36.00                 |
| A6B | 16                   | 41.35                 |
| A6C | 16                   | 46.50                 |
| A6D | 16                   | 50.20                 |

**Table 3-28 Metric Key Size 1**

| PIN | Key Size         |
|-----|------------------|
| 022 | $\frac{3}{2}$    |
| 033 | $\frac{3}{3}$    |
| 044 | $\frac{4}{4}$    |
| 055 | $\frac{5}{5}$    |
| 066 | $\frac{6}{6}$    |
| 053 | $\frac{5}{3}$    |
| 064 | $\frac{6}{4}$    |
| 085 | $\frac{8}{5}$    |
| 087 | $\frac{8}{7}$    |
| 10A | $\frac{10}{6}$   |
| 10B | $\frac{10}{8}$   |
| 12A | $\frac{12}{6}$   |
| 12B | $\frac{12}{8}$   |
| 14A | $\frac{14}{6}$   |
| 14B | $\frac{14}{9}$   |
| 16A | $\frac{16}{7}$   |
| 16B | $\frac{16}{10}$  |
| 18A | $\frac{18}{7}$   |
| 18B | $\frac{18}{11}$  |
| 20A | $\frac{20}{8}$   |
| 20B | $\frac{20}{12}$  |
| 22A | $\frac{22}{6}$   |
| 22B | $\frac{22}{14}$  |
| 25A | $\frac{25}{9}$   |
| 25B | $\frac{25}{14}$  |
| 28A | $\frac{28}{10}$  |
| 28B | $\frac{28}{16}$  |
| 32A | $\frac{32}{11}$  |
| 32B | $\frac{32}{18}$  |
| 36A | $\frac{36}{12}$  |
| 36B | $\frac{36}{20}$  |
| 40A | $\frac{40}{20}$  |
| 45A | $\frac{45}{25}$  |
| 50A | $\frac{50}{28}$  |
| 56A | $\frac{56}{32}$  |
| 63A | $\frac{63}{32}$  |
| 70A | $\frac{70}{36}$  |
| 80A | $\frac{80}{40}$  |
| 90A | $\frac{90}{45}$  |
| 100 | $\frac{100}{50}$ |

**Table 3-29 Metric Key Size 2**

| PIN | Key Size       |
|-----|----------------|
| 101 | 1 x 1.4 x 4    |
| 152 | 1.5 x 2.6 x 7  |
| 202 | 2 x 2.6 x 7    |
| 203 | 2 x 3.7 x 10   |
| 253 | 2.5 x 3.7 x 10 |
| 305 | 3 x 5 x 13     |
| 306 | 3 x 6.5 x 16   |
| 406 | 4 x 6.5 x 16   |
| 407 | 4 x 7.5 x 19   |
| 506 | 5 x 6.5 x 16   |
| 507 | 5 x 7.5 x 19   |
| 509 | 5 x 9 x 22     |
| 609 | 6 x 9 x 22     |
| 60K | 6 x 10 x 25    |
| 80L | 8 x 11 x 28    |
| K0P | 10 x 13 x 32   |

**Table 4-1 Inch Length/Other**

| PIN | Size           | Dia./Length (in.) |
|-----|----------------|-------------------|
| 000 | n/a            | No Entry          |
| 031 | $\frac{1}{32}$ | .031              |
| 039 | .039           | .039              |
| 047 | $\frac{3}{64}$ | .047              |
| 052 | .052           | .052              |
| 062 | $\frac{1}{16}$ | .062              |
| 075 | .075           | .075              |
| 078 | $\frac{5}{64}$ | .078              |
| 093 | $\frac{3}{32}$ | .093              |
| 094 | .094           | .094              |
| 010 | .100           | .100              |
| 109 | $\frac{7}{64}$ | .109              |
| 116 | .116           | .116              |
| 125 | $\frac{1}{8}$  | .125              |
| 140 | .140           | .140              |
| 141 | $\frac{9}{64}$ | .141              |
| 154 | .154           | .154              |
| 156 | $\frac{5}{32}$ | .156              |
| 167 | .167           | .167              |
| 172 | .172           | .172              |
| 182 | .182           | .182              |
| 188 | $\frac{3}{16}$ | .188              |
| 203 | .203           | .203              |
| 212 | .212           | .212              |

**Table 4-1 Inch Length/Other (Cont'd)**

| PIN | Size            | Dia./Length (in.) |
|-----|-----------------|-------------------|
| 219 | $\frac{7}{32}$  | .219              |
| 234 | .234            | .234              |
| 242 | .242            | .242              |
| 250 | $\frac{1}{4}$   | .250              |
| 266 | .266            | .266              |
| 281 | $\frac{9}{32}$  | .281              |
| 297 | .297            | .297              |
| 312 | $\frac{5}{16}$  | .312              |
| 315 | .315            | .315              |
| 328 | .328            | .328              |
| 344 | $\frac{11}{32}$ | .344              |
| 359 | $\frac{23}{64}$ | .359              |
| 375 | $\frac{3}{8}$   | .375              |
| 378 | .378            | .378              |
| 390 | .390            | .390              |
| 406 | $\frac{13}{32}$ | .406              |
| 422 | .422            | .422              |
| 438 | $\frac{7}{16}$  | .438              |
| 453 | .453            | .453              |
| 469 | .469            | .469              |
| 484 | .484            | .484              |
| 500 | $\frac{1}{2}$   | .500              |
| 562 | $\frac{9}{16}$  | .562              |
| 625 | $\frac{5}{8}$   | .625              |
| 688 | $\frac{11}{16}$ | .688              |
| 750 | $\frac{3}{4}$   | .750              |
| 812 | $\frac{13}{16}$ | .812              |
| 875 | $\frac{7}{8}$   | .875              |
| 938 | $\frac{15}{16}$ | .938              |
| A00 | 1               | 1.000             |
| A12 | $1\frac{1}{8}$  | 1.125             |
| A25 | $1\frac{1}{4}$  | 1.250             |
| A37 | $1\frac{3}{8}$  | 1.375             |
| A50 | $1\frac{1}{2}$  | 1.500             |
| A62 | $1\frac{5}{8}$  | 1.625             |
| A75 | $1\frac{3}{4}$  | 1.750             |
| A87 | $1\frac{7}{8}$  | 1.875             |
| B00 | 2               | 2.000             |
| B12 | $2\frac{1}{8}$  | 2.125             |
| B25 | $2\frac{1}{4}$  | 2.250             |
| B37 | $2\frac{3}{8}$  | 2.375             |
| B50 | $2\frac{1}{2}$  | 2.500             |
| B62 | $2\frac{5}{8}$  | 2.625             |

**Table 4-1 Inch Length/Other (Cont'd)**

| PIN | Size           | Dia./Length (in.) |
|-----|----------------|-------------------|
| B75 | $2\frac{3}{4}$ | 2.750             |
| B87 | $2\frac{7}{8}$ | 2.875             |
| C00 | 3              | 3.000             |
| C12 | $3\frac{1}{8}$ | 3.125             |
| C25 | $3\frac{1}{4}$ | 3.250             |
| C37 | $3\frac{3}{8}$ | 3.375             |
| C50 | $3\frac{1}{2}$ | 3.500             |
| C62 | $3\frac{5}{8}$ | 3.625             |
| C75 | $3\frac{3}{4}$ | 3.750             |
| C87 | $3\frac{7}{8}$ | 3.875             |
| D00 | 4              | 4.000             |
| D12 | $4\frac{1}{8}$ | 4.125             |
| D25 | $4\frac{1}{4}$ | 4.250             |
| D37 | $4\frac{3}{8}$ | 4.375             |
| D50 | $4\frac{1}{2}$ | 4.500             |
| D62 | $4\frac{5}{8}$ | 4.625             |
| D75 | $4\frac{3}{4}$ | 4.750             |
| D87 | $4\frac{7}{8}$ | 4.875             |
| E00 | 5              | 5.000             |
| E12 | $5\frac{1}{8}$ | 5.125             |
| E25 | $5\frac{1}{4}$ | 5.250             |
| E37 | $5\frac{3}{8}$ | 5.375             |
| E50 | $5\frac{1}{2}$ | 5.500             |
| E62 | $5\frac{5}{8}$ | 5.625             |
| E75 | $5\frac{3}{4}$ | 5.750             |
| E87 | $5\frac{7}{8}$ | 5.875             |
| F00 | 6              | 6.000             |
| F12 | $6\frac{1}{8}$ | 6.125             |
| F25 | $6\frac{1}{4}$ | 6.250             |
| F37 | $6\frac{3}{8}$ | 6.375             |
| F50 | $6\frac{1}{2}$ | 6.500             |
| F62 | $6\frac{5}{8}$ | 6.625             |
| F75 | $6\frac{3}{4}$ | 6.750             |
| F87 | $6\frac{7}{8}$ | 6.875             |
| G00 | 7              | 7.000             |
| G12 | $7\frac{1}{8}$ | 7.125             |
| G25 | $7\frac{1}{4}$ | 7.250             |
| G37 | $7\frac{3}{8}$ | 7.375             |
| G50 | $7\frac{1}{2}$ | 7.500             |
| G62 | $7\frac{5}{8}$ | 7.625             |
| G75 | $7\frac{3}{4}$ | 7.750             |
| G87 | $7\frac{7}{8}$ | 7.875             |
| H00 | 8              | 8.000             |

**Table 4-1 Inch Length/Other  
(Cont'd)**

| PIN | Size             | Dia./Length (in.) |
|-----|------------------|-------------------|
| H25 | 8 $\frac{1}{4}$  | 8.250             |
| H50 | 8 $\frac{1}{2}$  | 8.500             |
| H75 | 8 $\frac{3}{4}$  | 8.750             |
| J00 | 9                | 9.000             |
| J25 | 9 $\frac{1}{4}$  | 9.250             |
| J50 | 9 $\frac{1}{2}$  | 9.500             |
| J75 | 9 $\frac{3}{4}$  | 9.750             |
| K00 | 10               | 10.000            |
| K02 | 10 $\frac{1}{4}$ | 10.250            |
| K05 | 10 $\frac{1}{2}$ | 10.500            |
| K07 | 10 $\frac{3}{4}$ | 10.750            |
| K10 | 11               | 11.000            |
| K12 | 11 $\frac{1}{4}$ | 11.250            |
| K15 | 11 $\frac{1}{2}$ | 11.500            |
| K17 | 11 $\frac{3}{4}$ | 11.750            |
| K20 | 12               | 12.000            |
| K22 | 12.250           | 12.250            |
| K25 | 12 $\frac{1}{2}$ | 12.500            |
| K27 | 12.750           | 12.750            |
| K30 | 13               | 13.000            |
| K35 | 13 $\frac{1}{2}$ | 13.500            |
| K40 | 14               | 14.000            |
| K45 | 14 $\frac{1}{2}$ | 14.500            |
| K50 | 15               | 15.000            |
| K55 | 15 $\frac{1}{2}$ | 15.500            |
| K60 | 16               | 16.000            |
| K65 | 16 $\frac{1}{2}$ | 16.500            |
| K70 | 17               | 17.000            |
| K75 | 17 $\frac{1}{2}$ | 17.500            |
| K80 | 18               | 18.000            |
| K85 | 18 $\frac{1}{2}$ | 18.500            |
| K90 | 19               | 19.000            |
| K95 | 19 $\frac{1}{2}$ | 19.500            |
| L00 | 20               | 20.000            |
| 01R | $\frac{1}{16}$   | .062 RBD          |
| 02R | $\frac{1}{8}$    | .125 RBD          |
| 03R | $\frac{3}{16}$   | .188 RBD          |
| 04R | $\frac{1}{4}$    | .250 RBD          |
| 05R | $\frac{5}{16}$   | .312 RBD          |
| 06R | $\frac{3}{8}$    | .375 RBD          |
| 07R | $\frac{7}{16}$   | .438 RBD          |
| 08R | $\frac{1}{2}$    | .500 RBD          |
| 09R | $\frac{9}{16}$   | .562 RBD          |

**Table 4-1 Inch Length/Other  
(Cont'd)**

| PIN | Size            | Dia./Length (in.) |
|-----|-----------------|-------------------|
| 10R | $\frac{5}{8}$   | .625 RBD          |
| 11R | $\frac{11}{16}$ | .688 RBD          |
| 12R | $\frac{3}{4}$   | .750 RBD          |
| 13R | $\frac{13}{16}$ | .812 RBD          |
| 14R | $\frac{7}{8}$   | .875 RBD          |
| 15R | $\frac{15}{16}$ | .938 RBD          |
| 16R | 1               | 1.000 RBD         |
| 18R | 1 $\frac{1}{8}$ | 1.125 RBD         |
| 20R | 1 $\frac{1}{4}$ | 1.250 RBD         |
| 22R | 1 $\frac{3}{8}$ | 1.375 RBD         |
| 24R | 1 $\frac{1}{2}$ | 1.500 RBD         |
| 26R | 1 $\frac{5}{8}$ | 1.625 RBD         |
| 28R | 1 $\frac{3}{4}$ | 1.750 RBD         |
| 30R | 1 $\frac{7}{8}$ | 1.875 RBD         |
| 32R | 2               | 2.000 RBD         |
| 34R | 2 $\frac{1}{8}$ | 2.125 RBD         |
| 36R | 2 $\frac{1}{4}$ | 2.250 RBD         |
| 38R | 2 $\frac{3}{8}$ | 2.375 RBD         |
| 40R | 2 $\frac{1}{2}$ | 2.500 RBD         |
| 42R | 2 $\frac{5}{8}$ | 2.625 RBD         |
| 44R | 2 $\frac{3}{4}$ | 2.750 RBD         |
| 46R | 2 $\frac{7}{8}$ | 2.875 RBD         |
| 48R | 3               | 3.000 RBD         |
| 52R | 3 $\frac{1}{4}$ | 3.250 RBD         |
| 56R | 3 $\frac{1}{2}$ | 3.500 RBD         |
| 60R | 3 $\frac{3}{4}$ | 3.750 RBD         |
| 64R | 4               | 4.000 RBD         |
| 68R | 4 $\frac{1}{4}$ | 4.250 RBD         |
| 72R | 4 $\frac{1}{2}$ | 4.500 RBD         |
| 76R | 4 $\frac{3}{4}$ | 4.750 RBD         |
| 80R | 5               | 5.000 RBD         |
| 84R | 5 $\frac{1}{4}$ | 5.250 RBD         |
| 88R | 5 $\frac{1}{2}$ | 5.500 RBD         |
| 92R | 5 $\frac{3}{4}$ | 5.750 RBD         |
| 96R | 6               | 6.000 RBD         |
| F2R | 6 $\frac{1}{4}$ | 6.250 RBD         |
| F5R | 6 $\frac{1}{2}$ | 6.500 RBD         |
| F7R | 6 $\frac{3}{4}$ | 6.750 RBD         |
| G0R | 7               | 7.000 RBD         |
| G2R | 7 $\frac{1}{4}$ | 7.250 RBD         |
| G5R | 7 $\frac{1}{2}$ | 7.500 RBD         |
| G7R | 7 $\frac{3}{4}$ | 7.750 RBD         |
| H0R | 8               | 8.000 RBD         |

**Table 4-1 Inch Length/Other  
(Cont'd)**

| PIN | Size             | Dia./Length (in.) |
|-----|------------------|-------------------|
| H2R | 8 $\frac{1}{4}$  | 8.250 RBD         |
| H5R | 8 $\frac{1}{2}$  | 8.500 RBD         |
| H7R | 8 $\frac{3}{4}$  | 8.750 RBD         |
| J0R | 9                | 9.000 RBD         |
| J2R | 9 $\frac{1}{4}$  | 9.250 RBD         |
| J5R | 9 $\frac{1}{2}$  | 9.500 RBD         |
| J7R | 9 $\frac{3}{4}$  | 9.750 RBD         |
| K0R | 10               | 10.00 RBD         |
| K2R | 10 $\frac{1}{4}$ | 10.25 RBD         |
| K5R | 10 $\frac{1}{2}$ | 10.50 RBD         |
| K7R | 10 $\frac{3}{4}$ | 10.75 RBD         |
| L0R | 11               | 11.00 RBD         |
| L2R | 11 $\frac{1}{4}$ | 11.25 RBD         |
| L5R | 11 $\frac{1}{2}$ | 11.50 RBD         |
| L7R | 11 $\frac{3}{4}$ | 11.75 RBD         |
| M0R | 12               | 12.00 RBD         |
| M5R | 12 $\frac{1}{2}$ | 12.50 RBD         |
| N0R | 13               | 13.00 RBD         |
| N5R | 13 $\frac{1}{2}$ | 13.50 RBD         |
| P0R | 14               | 14.00 RBD         |
| P5R | 14 $\frac{1}{2}$ | 14.50 RBD         |
| Q0R | 15               | 15.00 RBD         |
| Q5R | 15 $\frac{1}{2}$ | 15.50 RBD         |
| S0R | 16               | 16.00 RBD         |
| S5R | 16 $\frac{1}{2}$ | 16.50 RBD         |
| T0R | 17               | 17.00 RBD         |
| T5R | 17 $\frac{1}{2}$ | 17.50 RBD         |
| U0R | 18               | 18.00 RBD         |
| U5R | 18 $\frac{1}{2}$ | 18.50 RBD         |
| V0R | 19               | 19.00 RBD         |
| V5R | 19 $\frac{1}{2}$ | 19.50 RBD         |
| W0R | 20               | 20.00 RBD         |

GENERAL NOTE: RBD = Reduced Body Diameter.

**Table 4-2 Metric Length/Other**

| PIN | Size/Length (mm) |
|-----|------------------|
| 000 | No Entry         |
| 06M | 0.6              |
| 08M | 0.8              |
| 10M | 1.0              |
| 12M | 1.2              |
| 14M | 1.4              |
| 15M | 1.5              |
| 16M | 1.6              |
| 20M | 2.0              |
| 22M | 2.2              |
| 25M | 2.5              |
| 29M | 2.9              |
| 30M | 3.0              |
| 32M | 3.2              |
| 35M | 3.5              |
| 40M | 4.0              |
| 42M | 4.2              |
| 48M | 4.8              |
| 50M | 5.0              |
| 55M | 5.5              |
| 60M | 6.0              |
| 63M | 6.3              |
| 70M | 7.0              |
| 80M | 8.0              |
| 90M | 9.0              |
| 95M | 9.5              |
| 010 | 10               |
| 011 | 11               |
| 012 | 12               |
| 013 | 13               |
| 014 | 14               |
| 015 | 15               |
| 016 | 16               |
| 017 | 17               |
| 018 | 18               |
| 019 | 19               |
| 020 | 20               |
| 021 | 21               |
| 022 | 22               |
| 023 | 23               |
| 024 | 24               |
| 025 | 25               |
| 026 | 26               |
| 027 | 27               |

**Table 4-2 Metric Length/Other (Cont'd)**

| PIN | Size/Length (mm) |
|-----|------------------|
| 028 | 28               |
| 030 | 30               |
| 032 | 32               |
| 033 | 33               |
| 034 | 34               |
| 035 | 35               |
| 036 | 36               |
| 037 | 37               |
| 038 | 38               |
| 040 | 40               |
| 042 | 42               |
| 045 | 45               |
| 046 | 46               |
| 047 | 47               |
| 048 | 48               |
| 050 | 50               |
| 052 | 52               |
| 055 | 55               |
| 056 | 56               |
| 057 | 57               |
| 058 | 58               |
| 060 | 60               |
| 062 | 62               |
| 063 | 63               |
| 065 | 65               |
| 068 | 68               |
| 070 | 70               |
| 072 | 72               |
| 075 | 75               |
| 078 | 78               |
| 080 | 80               |
| 082 | 82               |
| 085 | 85               |
| 088 | 88               |
| 090 | 90               |
| 092 | 92               |
| 095 | 95               |
| 098 | 98               |
| 100 | 100              |
| 102 | 102              |
| 105 | 105              |
| 108 | 108              |
| 110 | 110              |

**Table 4-2 Metric Length/Other (Cont'd)**

| PIN | Size/Length (mm) |
|-----|------------------|
| 115 | 115              |
| 120 | 120              |
| 125 | 125              |
| 130 | 130              |
| 135 | 135              |
| 140 | 140              |
| 145 | 145              |
| 150 | 150              |
| 155 | 155              |
| 160 | 160              |
| 165 | 165              |
| 170 | 170              |
| 175 | 175              |
| 180 | 180              |
| 185 | 185              |
| 190 | 190              |
| 200 | 200              |
| 210 | 210              |
| 220 | 220              |
| 230 | 230              |
| 240 | 240              |
| 250 | 250              |
| 260 | 260              |
| 270 | 270              |
| 280 | 280              |
| 290 | 290              |
| 300 | 300              |
| 320 | 320              |
| 340 | 340              |
| 360 | 360              |
| 380 | 380              |
| 400 | 400              |
| 420 | 420              |
| 440 | 440              |
| 460 | 460              |
| 480 | 480              |
| 500 | 500              |
| 520 | 520              |
| 540 | 540              |
| 560 | 560              |
| 580 | 580              |
| 600 | 600              |
| 620 | 620              |

**Table 4-2 Metric Length/Other (Cont'd)**

| PIN | Size/Length (mm) |
|-----|------------------|
| 640 | 640              |
| 660 | 660              |
| 680 | 680              |
| 700 | 700              |
| 720 | 720              |
| 740 | 740              |
| 760 | 760              |
| 780 | 780              |
| 800 | 800              |
| 820 | 820              |
| 840 | 840              |
| 860 | 860              |
| 880 | 880              |
| 900 | 900              |
| 920 | 920              |
| 940 | 940              |
| 960 | 960              |
| 980 | 980              |
| K00 | 1000             |
| 0CR | 2.5 RBD          |
| 03R | 3.0 RBD          |
| 0DR | 3.5 RBD          |
| 04R | 4.0 RBD          |
| 05R | 5.0 RBD          |
| 06R | 6.0 RBD          |
| 07R | 7.0 RBD          |
| 08R | 8.0 RBD          |
| 09R | 9.0 RBD          |
| 10R | 10 RBD           |
| 12R | 12 RBD           |
| 13R | 13 RBD           |
| 14R | 14 RBD           |
| 16R | 16 RBD           |
| 17R | 17 RBD           |
| 18R | 18 RBD           |
| 19R | 19 RBD           |
| 20R | 20 RBD           |
| 22R | 22 RBD           |
| 25R | 25 RBD           |
| 30R | 30 RBD           |
| 35R | 35 RBD           |
| 40R | 40 RBD           |
| 45R | 45 RBD           |

**Table 4-2 Metric Length/Other (Cont'd)**

| PIN | Size/Length (mm) |
|-----|------------------|
| 50R | 50 RBD           |
| 55R | 55 RBD           |
| 60R | 60 RBD           |
| 65R | 65 RBD           |
| 70R | 70 RBD           |
| 75R | 75 RBD           |
| 80R | 80 RBD           |
| 85R | 85 RBD           |
| 90R | 90 RBD           |
| A0R | 100 RBD          |
| A1R | 110 RBD          |
| A2R | 120 RBD          |
| A3R | 130 RBD          |
| A4R | 140 RBD          |
| A5R | 150 RBD          |
| A6R | 160 RBD          |
| A7R | 170 RBD          |
| A8R | 180 RBD          |
| A9R | 190 RBD          |
| B0R | 200 RBD          |
| B2R | 220 RBD          |
| B4R | 240 RBD          |
| B6R | 260 RBD          |
| B8R | 280 RBD          |
| C0R | 300 RBD          |
| C2R | 320 RBD          |
| C4R | 340 RBD          |
| C6R | 360 RBD          |
| C8R | 380 RBD          |
| D0R | 400 RBD          |
| D2R | 420 RBD          |
| D4R | 440 RBD          |
| D6R | 460 RBD          |
| D8R | 480 RBD          |
| E0R | 500 RBD          |
| E2R | 520 RBD          |
| E4R | 540 RBD          |
| E6R | 560 RBD          |
| E8R | 580 RBD          |
| F0R | 600 RBD          |
| F2R | 620 RBD          |
| F4R | 640 RBD          |
| F6R | 660 RBD          |

**Table 4-2 Metric Length/Other (Cont'd)**

| PIN | Size/Length (mm) |
|-----|------------------|
| F8R | 680 RBD          |
| G0R | 700 RBD          |
| G2R | 720 RBD          |
| G4R | 740 RBD          |
| G6R | 760 RBD          |
| G8R | 780 RBD          |
| H0R | 800 RBD          |
| H2R | 820 RBD          |
| H4R | 840 RBD          |
| H6R | 860 RBD          |
| H8R | 880 RBD          |
| J0R | 900 RBD          |
| J2R | 920 RBD          |
| J4R | 940 RBD          |
| J6R | 960 RBD          |
| J8R | 980 RBD          |
| K0R | 1000 RBD         |

GENERAL NOTE: RBD = Reduced Body Diameter.

**Table 4-3 Inch Miniature Screw Length**

| PIN | Length (in.) |
|-----|--------------|
| 020 | .020         |
| 025 | .025         |
| 032 | .032         |
| 040 | .040         |
| 050 | .050         |
| 060 | .060         |
| 080 | .080         |
| 100 | .100         |
| 120 | .120         |
| 160 | .160         |
| 200 | .200         |
| 250 | .250         |
| 320 | .320         |
| 400 | .400         |
| 500 | .500         |
| 600 | .600         |

**Table 4-4 Insert Length**

| PIN | Length          |
|-----|-----------------|
| 10X | 1.0 x Nom. Dia. |
| 15X | 1.5 x Nom. Dia. |
| 20X | 2.0 x Nom. Dia. |
| 25X | 2.5 x Nom. Dia. |
| 30X | 3.0 x Nom. Dia. |

**Table 4-5 Inch Pin Length**

| PIN | Length (in.) |
|-----|--------------|
| 250 | 0.250        |
| 312 | 0.312        |
| 375 | 0.375        |
| 580 | 0.58         |
| 770 | 0.77         |
| 940 | 0.94         |
| A00 | 1.000        |
| A06 | 1.06         |
| A12 | 1.125        |
| A19 | 1.19         |
| A36 | 1.36         |
| A61 | 1.61         |
| A91 | 1.91         |
| B16 | 2.16         |
| B24 | 2.41         |
| J50 | 9.50         |
| J75 | 9.75         |
| K00 | 10.00        |

**Table 4-6 Inch Eyebolt Full Thread Length**

| PIN | Length (in.) |
|-----|--------------|
| 750 | 0.75         |
| 810 | 0.81         |
| 840 | 0.84         |
| 880 | 0.88         |
| 940 | 0.94         |
| A00 | 1.00         |
| A12 | 1.12         |
| A13 | 1.13         |
| A25 | 1.25         |
| A31 | 1.31         |
| A38 | 1.38         |
| A50 | 1.50         |
| A62 | 1.62         |
| A69 | 1.69         |
| A81 | 1.81         |
| A88 | 1.88         |
| B22 | 2.22         |
| B25 | 2.25         |
| B31 | 2.31         |
| B38 | 2.38         |
| B44 | 2.44         |
| B50 | 2.50         |
| B53 | 2.53         |
| B62 | 2.62         |
| B66 | 2.66         |
| B75 | 2.75         |
| B81 | 2.81         |
| B97 | 2.97         |
| C00 | 3.00         |
| C06 | 3.06         |
| C09 | 3.09         |
| C19 | 3.19         |
| C38 | 3.38         |
| C41 | 3.41         |
| C44 | 3.44         |
| C47 | 3.47         |
| C50 | 3.50         |
| C75 | 3.75         |
| C78 | 3.78         |
| C81 | 3.81         |
| C88 | 3.88         |
| D12 | 4.12         |
| D19 | 4.19         |

**Table 4-6 Inch Eyebolt Full Thread Length (Cont'd)**

| PIN | Length (in.) |
|-----|--------------|
| D25 | 4.25         |
| D56 | 4.56         |
| D69 | 4.69         |
| D94 | 4.94         |
| E06 | 5.06         |
| E31 | 5.31         |
| E50 | 5.50         |
| E69 | 5.69         |
| E75 | 5.75         |
| E94 | 5.94         |
| F19 | 6.19         |
| F31 | 6.31         |
| F44 | 6.44         |
| F69 | 6.69         |
| F88 | 6.88         |
| G06 | 7.06         |
| G31 | 7.31         |
| G69 | 7.69         |
| G75 | 7.75         |
| H44 | 8.44         |
| H56 | 8.56         |
| H94 | 8.94         |
| J22 | 9.22         |
| J50 | 9.50         |
| J72 | 9.72         |
| K01 | 10.12        |
| K05 | 10.50        |
| K12 | 11.20        |
| K14 | 11.44        |
| K15 | 11.53        |
| K22 | 12.22        |
| K31 | 13.19        |
| K40 | 14.06        |

**Table 5-1 Material and Treatment: ASTM Material Specifications**

GENERAL NOTE: *Italic text denotes information that remains the same as in the previous version of the Standard, but has been moved within this document for consolidation or clarity.*

NOTE:

(1) This designation is cancelled and is not to be used for new design.

**ASTM A31 – Boiler Rivet Steel**

| PIN | Material Spec     | Material     | UNS # |
|-----|-------------------|--------------|-------|
| EP6 | ASTM A31, Grade A | Carbon Steel | —     |
| EP7 | ASTM A31, Grade B | Carbon Steel | —     |

**ASTM A183 – Carbon Steel Track Bolts and Nuts**

| PIN | Material Spec      | Material    | UNS # |
|-----|--------------------|-------------|-------|
| AA1 | ASTM A183, Grade 1 | Alloy Steel | —     |
| AA2 | ASTM A183, Grade 2 | Alloy Steel | —     |

**ASTM A193/A193M – Alloy Steel and Stainless Steel Bolting Materials for High-Temperature Service**

| PIN | Material Spec                             | Material        | UNS #  |
|-----|-------------------------------------------|-----------------|--------|
| AA3 | ASTM A193/A193M, Grade B5                 | Stainless Steel | S50100 |
| AA4 | ASTM A193/A193M, Grade B6                 | Stainless Steel | S41000 |
| AA5 | ASTM A193/A193M, Grade B6X                | Stainless Steel | S41000 |
| AA6 | ASTM A193/A193M, Grade B7                 | Alloy Steel     | G41400 |
| AA7 | ASTM A193/A193M, Grade B7M                | Alloy Steel     | G41400 |
| AA8 | ASTM A193/A193M, Grade B16                | Alloy Steel     | K14072 |
| AA9 | ASTM A193/A193M, Grade B8, Class 1        | Stainless Steel | S30400 |
| AB0 | ASTM A193/A193M, Grade B8C, Class 1       | Stainless Steel | S34700 |
| AB1 | ASTM A193/A193M, Grade B8M, Class 1       | Stainless Steel | S31600 |
| AB2 | ASTM A193/A193M, Grade B8P, Class 1       | Stainless Steel | S30500 |
| AB3 | ASTM A193/A193M, Grade B8T, Class 1       | Stainless Steel | S32100 |
| AB4 | ASTM A193/A193M, Grade B8LN, Class 1      | Stainless Steel | S30453 |
| AB5 | ASTM A193/A193M, Grade B8MLN, Class 1     | Stainless Steel | S31653 |
| AB6 | ASTM A193/A193M, Grade B8A, Class 1A      | Stainless Steel | S30400 |
| AB7 | ASTM A193/A193M, Grade B8CA, Class 1A     | Stainless Steel | S34700 |
| AB8 | ASTM A193/A193M, Grade B8MA, Class 1A     | Stainless Steel | S31600 |
| AB9 | ASTM A193/A193M, Grade B8PA, Class 1A     | Stainless Steel | S30500 |
| AC0 | ASTM A193/A193M, Grade B8TA, Class 1A     | Stainless Steel | S32100 |
| AC1 | ASTM A193/A193M, Grade B8LNA, Class 1A    | Stainless Steel | S30453 |
| AC2 | ASTM A193/A193M, Grade B8MLNA, Class 1A   | Stainless Steel | S31653 |
| AC3 | ASTM A193/A193M, Grade B8NA, Class 1A     | Stainless Steel | S30451 |
| AC4 | ASTM A193/A193M, Grade B8MNA, Class 1A    | Stainless Steel | S31651 |
| AC5 | ASTM A193/A193M, Grade B8MLCuNA, Class 1A | Stainless Steel | S31254 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

GENERAL NOTE: Italic text denotes information that remains the same as in the previous version of the Standard, but has been moved within this document for consolidation or clarity.

NOTE:

(1) This designation is cancelled and is not to be used for new design.

**ASTM A193/A193M – Alloy Steel and Stainless Steel Bolting Materials for High-Temperature Service (Cont'd)**

| PIN | Material Spec                            | Material        | UNS #  |
|-----|------------------------------------------|-----------------|--------|
| AC6 | ASTM A193/A193M, Grade B8N, Class 1B     | Stainless Steel | S30451 |
| AC7 | ASTM A193/A193M, Grade B8MN, Class 1B    | Stainless Steel | S31651 |
| AC8 | ASTM A193/A193M, Grade B8MLCuN, Class 1B | Stainless Steel | S31254 |
| AC9 | ASTM A193/A193M, Grade B8R, Class 1C     | Stainless Steel | S20910 |
| AD0 | ASTM A193/A193M, Grade B8RA, Class 1C    | Stainless Steel | S20910 |
| AD1 | ASTM A193/A193M, Grade B8S, Class 1C     | Stainless Steel | S21800 |
| AD2 | ASTM A193/A193M, Grade B8SA, Class 1C    | Stainless Steel | S21800 |
| AD3 | ASTM A193/A193M, Grade B8, Class 1D      | Stainless Steel | S30400 |
| AD4 | ASTM A193/A193M, Grade B8M, Class 1D     | Stainless Steel | S31600 |
| AD5 | ASTM A193/A193M, Grade B8P, Class 1D     | Stainless Steel | S30500 |
| AD6 | ASTM A193/A193M, Grade B8LN, Class 1D    | Stainless Steel | S30453 |
| AD7 | ASTM A193/A193M, Grade B8MLN, Class 1D   | Stainless Steel | S31653 |
| AD8 | ASTM A193/A193M, Grade B8N, Class 1D     | Stainless Steel | S30451 |
| AD9 | ASTM A193/A193M, Grade B8MN, Class 1D    | Stainless Steel | S31651 |
| AE0 | ASTM A193/A193M, Grade B8R, Class 1D     | Stainless Steel | S20910 |
| AE1 | ASTM A193/A193M, Grade B8S, Class 1D     | Stainless Steel | S21800 |
| AE2 | ASTM A193/A193M, Grade B8, Class 2       | Stainless Steel | S30400 |
| AE3 | ASTM A193/A193M, Grade B8C, Class 2      | Stainless Steel | S34700 |
| AE4 | ASTM A193/A193M, Grade B8P, Class 2      | Stainless Steel | S30500 |
| AE5 | ASTM A193/A193M, Grade B8T, Class 2      | Stainless Steel | S32100 |
| AE6 | ASTM A193/A193M, Grade B8N, Class 2      | Stainless Steel | S30451 |
| AE7 | ASTM A193/A193M, Grade B8M, Class 2      | Stainless Steel | S31600 |
| AE8 | ASTM A193/A193M, Grade B8MN, Class 2     | Stainless Steel | S31651 |
| AE9 | ASTM A193/A193M, Grade B8MLCuN, Class 2  | Stainless Steel | S31254 |
| AF0 | ASTM A193/A193M, Grade B8M2, Class 2B    | Stainless Steel | S31600 |
| AF1 | ASTM A193/A193M, Grade B8, Class 2B      | Stainless Steel | S30400 |
| AF2 | ASTM A193/A193M, Grade B8M3, Class 2C    | Stainless Steel | S31600 |

**ASTM A194/A194M – Carbon and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service**

| PIN | Material Spec                                               | Material     | UNS #  |
|-----|-------------------------------------------------------------|--------------|--------|
| AF3 | ASTM A194/A194M, Grade 1                                    | Carbon Steel | K01503 |
| AF4 | ASTM A194/A194M, Grade 1, Scale Free Bright Finish Required | Carbon Steel | K01503 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

GENERAL NOTE: Italic text denotes information that remains the same as in the previous version of the Standard, but has been moved within this document for consolidation or clarity.

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(1) This designation is cancelled and is not to be used for new design.

**ASTM A194/A194M – Carbon and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service (Cont'd)**

| PIN | Material Spec                                                 | Material        | UNS #  |
|-----|---------------------------------------------------------------|-----------------|--------|
| AF5 | ASTM A194/A194M, Grade 2                                      | Carbon Steel    | K04002 |
| AF6 | ASTM A194/A194M, Grade 2, Scale Free Bright Finish Required   | Carbon Steel    | K04002 |
| AF7 | ASTM A194/A194M, Grade 2H                                     | Carbon Steel    | K04002 |
| AF8 | ASTM A194/A194M Grade 2H, Scale Free Bright Finish Required   | Carbon Steel    | K04002 |
| AF9 | ASTM A194/A194M, Grade 2HM                                    | Carbon Steel    | K04002 |
| AG0 | ASTM A194/A194M, Grade 2HM, Scale Free Bright Finish Required | Carbon Steel    | K04002 |
| AG1 | ASTM A194/A194M, Grade 3                                      | Stainless Steel | S50100 |
| AG2 | ASTM A194/A194M, Grade 3, Scale Free Bright Finish Required   | Stainless Steel | S50100 |
| AG3 | ASTM A194/A194M, Grade 4                                      | Alloy Steel     | K14510 |
| AG4 | ASTM A194/A194M, Grade 4, Scale Free Bright Finish Required   | Alloy Steel     | K14510 |
| AG5 | ASTM A194/A194M, Grade 4L                                     | Alloy Steel     | K14510 |
| AG6 | ASTM A194/A194M, Grade 4L, Scale Free Bright Finish Required  | Alloy Steel     | K14510 |
| AG7 | ASTM A194/A194M, Grade 6                                      | Stainless Steel | S41000 |
| AG8 | ASTM A194/A194M, Grade 6, Scale Free Bright Finish Required   | Stainless Steel | S41000 |
| AG9 | ASTM A194/A194M, Grade 6F                                     | Stainless Steel | S41600 |
| AH0 | ASTM A194/A194M, Grade 6F, Scale Free Bright Finish Required  | Stainless Steel | S41600 |
| AH1 | ASTM A194/A194M, Grade 7                                      | Alloy Steel     | G41400 |
| AH2 | ASTM A194/A194M, Grade 7, Scale Free Bright Finish Required   | Alloy Steel     | G41400 |
| AH3 | ASTM A194/A194M, Grade 7L                                     | Alloy Steel     | G41400 |
| AH4 | ASTM A194/A194M, Grade 7L, Scale Free Bright Finish Required  | Alloy Steel     | G41400 |
| AH5 | ASTM A194/A194M, Grade 7M                                     | Alloy Steel     | G41400 |
| AH6 | ASTM A194/A194M, Grade 7M, Scale Free Bright Finish Required  | Alloy Steel     | G41400 |
| AH7 | ASTM A194/A194M, Grade 16                                     | Stainless Steel | K14072 |
| AH8 | ASTM A194/A194M, Grade 16, Scale Free Bright Finish Required  | Stainless Steel | K14072 |
| AH9 | ASTM A194/A194M, Grade 8                                      | Stainless Steel | S30400 |
| AJ0 | ASTM A194/A194M, Grade 8, Scale Free Bright Finish Required   | Stainless Steel | S30400 |
| AJ1 | ASTM A194/A194M, Grade 8C                                     | Stainless Steel | S34700 |
| AJ2 | ASTM A194/A194M, Grade 8C, Scale Free Bright Finish Required  | Stainless Steel | S34700 |
| AJ3 | ASTM A194/A194M, Grade 8M                                     | Stainless Steel | S31600 |
| AJ4 | ASTM A194/A194M, Grade 8M, Scale Free Bright Finish Required  | Stainless Steel | S31600 |
| AJ5 | ASTM A194/A194M, Grade 8T                                     | Stainless Steel | S32100 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

GENERAL NOTE: Italic text denotes information that remains the same as in the previous version of the Standard, but has been moved within this document for consolidation or clarity.

NOTE:

(1) This designation is cancelled and is not to be used for new design.

**ASTM A194/A194M – Carbon and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service (Cont'd)**

| PIN | Material Spec                                                    | Material        | UNS #  |
|-----|------------------------------------------------------------------|-----------------|--------|
| AJ6 | ASTM A194/A194M, Grade 8T, Scale Free Bright Finish Required     | Stainless Steel | S32100 |
| AJ7 | ASTM A194/A194M, Grade 8F                                        | Stainless Steel | S30323 |
| AJ8 | ASTM A194/A194M, Grade 8F, Scale Free Bright Finish Required     | Stainless Steel | S30323 |
| AJ9 | ASTM A194/A194M, Grade 8P                                        | Stainless Steel | S30500 |
| AK0 | ASTM A194/A194M, Grade 8P, Scale Free Bright Finish Required     | Stainless Steel | S30500 |
| AK1 | ASTM A194/A194M, Grade 8N                                        | Stainless Steel | S30451 |
| AK2 | ASTM A194/A194M, Grade 8N, Scale Free Bright Finish Required     | Stainless Steel | S30451 |
| AK3 | ASTM A194/A194M, Grade 8MN                                       | Stainless Steel | S31651 |
| AK4 | ASTM A194/A194M, Grade 8MN, Scale Free Bright Finish Required    | Stainless Steel | S31651 |
| AK5 | ASTM A194/A194M, Grade 8R                                        | Stainless Steel | S20910 |
| AK6 | ASTM A194/A194M, Grade 8R, Scale Free Bright Finish Required     | Stainless Steel | S20910 |
| AK7 | ASTM A194/A194M Grade 8S                                         | Stainless Steel | S21800 |
| AK8 | ASTM A194/A194M, Grade 8S, Scale Free Bright Finish Required     | Stainless Steel | S21800 |
| AK9 | ASTM A194/A194M, Grade 8LN                                       | Stainless Steel | S30453 |
| AL0 | ASTM A194/A194M, Grade 8LN, Scale Free Bright Finish Required    | Stainless Steel | S30453 |
| AL1 | ASTM A194/A194M, Grade 8MLN                                      | Stainless Steel | S31653 |
| AL2 | ASTM A194/A194M, Grade 8MLN, Scale Free Bright Finish Required   | Stainless Steel | S31653 |
| AL3 | ASTM A194/A194M, Grade 8MLCuN                                    | Stainless Steel | S31653 |
| AL4 | ASTM A194/A194M, Grade 8MLCuN, Scale Free Bright Finish Required | Stainless Steel | S31653 |
| AL5 | ASTM A194/A194M, Grade 9C                                        | Stainless Steel | N08367 |
| AL6 | ASTM A194/A194M, Grade 9C, Scale Free Bright Finish Required     | Stainless Steel | N08367 |
| AL7 | ASTM A194/A194M, Grade 8A                                        | Stainless Steel | S30400 |
| AL8 | ASTM A194/A194M, Grade 8A, Scale Free Bright Finish Required     | Stainless Steel | S30400 |
| AL9 | ASTM A194/A194M, Grade 8CA                                       | Stainless Steel | S34700 |
| AM0 | ASTM A194/A194M, Grade 8CA, Scale Free Bright Finish Required    | Stainless Steel | S34700 |
| AM1 | ASTM A194/A194M, Grade 8MA                                       | Stainless Steel | S31600 |
| AM2 | ASTM A194/A194M, Grade 8MA, Scale Free Bright Finish Required    | Stainless Steel | S31600 |
| AM3 | ASTM A194/A194M, Grade 8TA                                       | Stainless Steel | S32100 |
| AM4 | ASTM A194/A194M, Grade 8TA, Scale Free Bright Finish Required    | Stainless Steel | S32100 |
| AM5 | ASTM A194/A194M, Grade 8FA                                       | Stainless Steel | S30323 |
| AM6 | ASTM A194/A194M, Grade 8FA, Scale Free Bright Finish Required    | Stainless Steel | S30323 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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(1) This designation is cancelled and is not to be used for new design.

**ASTM A194/A194M – Carbon and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service (Cont'd)**

| PIN | Material Spec                                                     | Material        | UNS #  |
|-----|-------------------------------------------------------------------|-----------------|--------|
| AM7 | ASTM A194/A194M, Grade 8PA                                        | Stainless Steel | S30500 |
| AM8 | ASTM A194/A194M, Grade 8PA, Scale Free Bright Finish Required     | Stainless Steel | S30500 |
| AM9 | ASTM A194/A194M, Grade 8NA                                        | Stainless Steel | S30451 |
| AN0 | ASTM A194/A194M, Grade 8NA, Scale Free Bright Finish Required     | Stainless Steel | S30451 |
| AN1 | ASTM A194/A194M, Grade 8MNA                                       | Stainless Steel | S31651 |
| AN2 | ASTM A194/A194M, Grade 8MNA, Scale Free Bright Finish Required    | Stainless Steel | S31651 |
| AN3 | ASTM A194/A194M Grade 8RA                                         | Stainless Steel | S20910 |
| AN4 | ASTM A194/A194M, Grade 8RA, Scale Free Bright Finish Required     | Stainless Steel | S20910 |
| AN5 | ASTM A194/A194M, Grade 8SA                                        | Stainless Steel | S21800 |
| AN6 | ASTM A194/A194M, Grade 8SA, Scale Free Bright Finish Required     | Stainless Steel | S21800 |
| AN7 | ASTM A194/A194M, Grade 8LNA                                       | Stainless Steel | S30453 |
| AN8 | ASTM A194/A194M, Grade 8LNA, Scale Free Bright Finish Required    | Stainless Steel | S30453 |
| AN9 | ASTM A194/A194M, Grade 8MLNA                                      | Stainless Steel | S31653 |
| AP0 | ASTM A194/A194M, Grade 8MLNA, Scale Free Bright Finish Required   | Stainless Steel | S31653 |
| AP1 | ASTM A194/A194M, Grade 8MLCuNA                                    | Stainless Steel | S31653 |
| AP2 | ASTM A194/A194M, Grade 8MLCuNA, Scale Free Bright Finish Required | Stainless Steel | S31653 |
| AP3 | ASTM A194/A194M, Grade 9CA                                        | Stainless Steel | N08367 |
| AP4 | ASTM A194/A194M, Grade 9CA, Scale Free Bright Finish Required     | Stainless Steel | N08368 |

**ASTM A307 – Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength**

| PIN | Material Spec      | Material     | UNS # |
|-----|--------------------|--------------|-------|
| AP5 | ASTM A307, Grade A | Carbon Steel | —     |
| AP6 | ASTM A307, Grade B | Carbon Steel | —     |
| AP7 | ASTM A307, Grade C | Carbon Steel | —     |

**ASTM A320/A320M – Alloy-Steel Bolting Materials for Low-Temperature Service**

| PIN | Material Spec                                                 | Material    | UNS #  |
|-----|---------------------------------------------------------------|-------------|--------|
| AP8 | ASTM A320/A320M, Grade L7                                     | Alloy Steel | G41400 |
| AP9 | ASTM A320/A320M, Grade L7, Scale Free Bright Finish Required  | Alloy Steel | G41400 |
| AQ0 | ASTM A320/A320M, Grade L7A                                    | Alloy Steel | G40370 |
| AQ1 | ASTM A320/A320M, Grade L7A, Scale Free Bright Finish Required | Alloy Steel | G40370 |
| AQ2 | ASTM A320/A320M, Grade L7B                                    | Alloy Steel | G41370 |
| AQ3 | ASTM A320/A320M, Grade L7B, Scale Free Bright Finish Required | Alloy Steel | G41370 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM A320/A320M – Alloy-Steel Bolting Materials for Low-Temperature Service (Cont'd)**

| PIN | Material Spec                                                           | Material        | UNS #  |
|-----|-------------------------------------------------------------------------|-----------------|--------|
| AQ4 | ASTM A320/A320M, Grade L7C                                              | Alloy Steel     | G87400 |
| AQ5 | ASTM A320/A320M, Grade L7C, Scale Free Bright Finish Required           | Alloy Steel     | G87400 |
| AQ6 | ASTM A320/A320M, Grade L70                                              | Alloy Steel     | —      |
| AQ7 | ASTM A320/A320M, Grade L70, Scale Free Bright Finish Required           | Alloy Steel     | —      |
| AQ8 | ASTM A320/A320M, Grade L71                                              | Alloy Steel     | G40370 |
| AQ9 | ASTM A320/A320M, Grade L71, Scale Free Bright Finish Required           | Alloy Steel     | G40370 |
| AR0 | ASTM A320/A320M, Grade L72                                              | Alloy Steel     | —      |
| AR1 | ASTM A320/A320M, Grade L72, Scale Free Bright Finish Required           | Alloy Steel     | —      |
| AR2 | ASTM A320/A320M, Grade L73                                              | Alloy Steel     | —      |
| AR3 | ASTM A320/A320M, Grade L73, Scale Free Bright Finish Required           | Alloy Steel     | —      |
| AR4 | ASTM A320/A320M, Grade L43                                              | Alloy Steel     | G43400 |
| AR5 | ASTM A320/A320M, Grade L43, Scale Free Bright Finish Required           | Alloy Steel     | G43400 |
| AR6 | ASTM A320/A320M, Grade L7M                                              | Alloy Steel     | G41400 |
| AR7 | ASTM A320/A320M, Grade L7M, Scale Free Bright Finish Required           | Alloy Steel     | G41400 |
| AR8 | ASTM A320/A320M, Grade L1                                               | Alloy Steel     | —      |
| AR9 | ASTM A320/A320M, Grade L1, Scale Free Bright Finish Required            | Alloy Steel     | —      |
| AS0 | ASTM A320/A320M, Grade B8, Class 1                                      | Stainless Steel | S30400 |
| AS1 | ASTM A320/A320M, Grade B8, Class 1, Scale Free Bright Finish Required   | Stainless Steel | S30400 |
| AS2 | ASTM A320/A320M, Grade B8C, Class 1                                     | Stainless Steel | S34700 |
| AS3 | ASTM A320/A320M, Grade B8C, Class 1, Scale Free Bright Finish Required  | Stainless Steel | S34700 |
| AS4 | ASTM A320/A320M, Grade B8M, Class 1                                     | Stainless Steel | S31600 |
| AS5 | ASTM A320/A320M, Grade B8M, Class 1, Scale Free Bright Finish Required  | Stainless Steel | S31600 |
| AS6 | ASTM A320/A320M, Grade B8P, Class 1                                     | Stainless Steel | S30500 |
| AS7 | ASTM A320/A320M, Grade B8P, Class 1, Scale Free Bright Finish Required  | Stainless Steel | S30500 |
| AS8 | ASTM A320/A320M, Grade B8F, Class 1                                     | Stainless Steel | S30323 |
| AS9 | ASTM A320/A320M, Grade B8F, Class 1, Scale Free Bright Finish Required  | Stainless Steel | S30323 |
| AT0 | ASTM A320/A320M, Grade B8T, Class 1                                     | Stainless Steel | S32100 |
| AT1 | ASTM A320/A320M, Grade B8T, Class 1, Scale Free Bright Finish Required  | Stainless Steel | S32100 |
| AT2 | ASTM A320/A320M, Grade B8LN, Class 1                                    | Stainless Steel | S30453 |
| AT3 | ASTM A320/A320M, Grade B8LN, Class 1, Scale Free Bright Finish Required | Stainless Steel | S30453 |
| AT4 | ASTM A320/A320M, Grade B8MLN, Class 1                                   | Stainless Steel | S31653 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM A320/A320M – Alloy-Steel Bolting Materials for Low-Temperature Service (Cont'd)**

| PIN | Material Spec                                                              | Material        | UNS #  |
|-----|----------------------------------------------------------------------------|-----------------|--------|
| AT5 | ASTM A320/A320M, Grade B8MLN, Class 1, Scale Free Bright Finish Required   | Stainless Steel | S31653 |
| AT6 | ASTM A320/A320M, Grade B8A, Class 1A                                       | Stainless Steel | —      |
| AT7 | ASTM A320/A320M, Grade B8A, Class 1A, Scale Free Bright Finish Required    | Stainless Steel | —      |
| AT8 | ASTM A320/A320M, Grade B8CA, Class 1A                                      | Stainless Steel | —      |
| AT9 | ASTM A320/A320M, Grade B8CA, Class 1A, Scale Free Bright Finish Required   | Stainless Steel | —      |
| AU0 | ASTM A320/A320M, Grade B8MA, Class 1A                                      | Stainless Steel | —      |
| AU1 | ASTM A320/A320M, Grade B8MA, Class 1A, Scale Free Bright Finish Required   | Stainless Steel | —      |
| AU2 | ASTM A320/A320M, Grade B8PA, Class 1A                                      | Stainless Steel | —      |
| AU3 | ASTM A320/A320M, Grade B8PA, Class 1A, Scale Free Bright Finish Required   | Stainless Steel | —      |
| AU4 | ASTM A320/A320M, Grade B8FA, Class 1A                                      | Stainless Steel | —      |
| AU5 | ASTM A320/A320M, Grade B8FA, Class 1A, Scale Free Bright Finish Required   | Stainless Steel | —      |
| AU6 | ASTM A320/A320M, Grade B8TA, Class 1A                                      | Stainless Steel | —      |
| AU7 | ASTM A320/A320M, Grade B8TA, Class 1A, Scale Free Bright Finish Required   | Stainless Steel | —      |
| AU8 | ASTM A320/A320M, Grade B8LNA, Class 1A                                     | Stainless Steel | —      |
| AU9 | ASTM A320/A320M, Grade B8LNA, Class 1A, Scale Free Bright Finish Required  | Stainless Steel | —      |
| AV0 | ASTM A320/A320M, Grade B8MLNA, Class 1A                                    | Stainless Steel | —      |
| AV1 | ASTM A320/A320M, Grade B8MLNA, Class 1A, Scale Free Bright Finish Required | Stainless Steel | —      |
| AV2 | ASTM A320/A320M, Grade B8, Class 2                                         | Stainless Steel | S30400 |
| AV3 | ASTM A320/A320M, Grade B8, Class 2, Scale Free Bright Finish Required      | Stainless Steel | S30400 |
| AV4 | ASTM A320/A320M, Grade B8C, Class 2                                        | Stainless Steel | S34700 |
| AV5 | ASTM A320/A320M, Grade B8C, Class 2, Scale Free Bright Finish Required     | Stainless Steel | S34700 |
| AV6 | ASTM A320/A320M, Grade B8P, Class 2                                        | Stainless Steel | S30500 |
| AV7 | ASTM A320/A320M, Grade B8P, Class 2, Scale Free Bright Finish Required     | Stainless Steel | S30500 |
| AV8 | ASTM A320/A320M, Grade B8F, Class 2                                        | Stainless Steel | S30323 |
| AV9 | ASTM A320/A320M, Grade B8F, Class 2, Scale Free Bright Finish Required     | Stainless Steel | S30323 |
| AW0 | ASTM A320/A320M, Grade B8M, Class 2                                        | Stainless Steel | S31600 |
| AW1 | ASTM A320/A320M, Grade B8M, Class 2, Scale Free Bright Finish Required     | Stainless Steel | S31600 |
| AW2 | ASTM A320/A320M, Grade B8T, Class 2                                        | Stainless Steel | S32100 |
| AW3 | ASTM A320/A320M, Grade B8T, Class 2, Scale Free Bright Finish Required     | Stainless Steel | S32100 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM A325 – Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength**

| PIN | Material Spec           | Material     | UNS #  |
|-----|-------------------------|--------------|--------|
| AW4 | ASTM A325, Grade Type 1 | Carbon Steel | K02706 |
| AW5 | ASTM A325, Grade Type 3 | Carbon Steel | K11510 |

**ASTM A325M – Structural Bolts, Steel Heat Treated 830 MPa Minimum Tensile Strength (Metric)**

| PIN | Material Spec            | Material     | UNS # |
|-----|--------------------------|--------------|-------|
| AW6 | ASTM A325M, Grade Type 1 | Carbon Steel | —     |
| AW7 | ASTM A325M, Grade Type 3 | Carbon Steel | —     |

**ASTM A354 – Quenched and Tempered Alloy Steel Bolts, Studs, and Other Externally Threaded Fasteners**

| PIN | Material Spec       | Material    | UNS #  |
|-----|---------------------|-------------|--------|
| AW8 | ASTM A354, Grade BC | Alloy Steel | K04100 |
| AW9 | ASTM A354, Grade BD | Alloy Steel | K04100 |

**ASTM A394 – Steel Transmission Tower Bolts, Zinc-Coated and Bare**

| PIN | Material Spec           | Material        | UNS # |
|-----|-------------------------|-----------------|-------|
| AX0 | ASTM A394, Grade Type 0 | Carbon Steel    | —     |
| AX1 | ASTM A394, Grade Type 1 | Carbon Steel    | —     |
| AX2 | ASTM A394, Grade Type 2 | Carbon Steel    | —     |
| AX3 | ASTM A394, Grade Type 3 | Stainless Steel | —     |

**ASTM A449 – Quenched and Tempered Steel Bolts and Studs**

| PIN | Material Spec                | Material     | UNS #  |
|-----|------------------------------|--------------|--------|
| AX4 | ASTM A449, Grade Type 1      | Carbon Steel | K04200 |
| AX5 | ASTM A449, Grade Type 2      | Carbon Steel | K04200 |
| AX6 | ASTM A449, Grade Type 1 or 2 | Carbon Steel | K04200 |

**ASTM A453/A453M – Quenched and Tempered Steel Bolts and Studs**

| PIN | Material Spec                                 | Material        | UNS #  |
|-----|-----------------------------------------------|-----------------|--------|
| AX7 | ASTM A453/A453M, Grade 660, Class A (130 ksi) | Stainless Steel | S66286 |
| AX8 | ASTM A453/A453M, Grade 660, Class B (130 ksi) | Stainless Steel | S66286 |
| AX9 | ASTM A453/A453M, Grade 660, Class C (130 ksi) | Stainless Steel | S66286 |
| AY0 | ASTM A453/A453M, Grade 651, Class A (100 ksi) | Stainless Steel | S63198 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM A453/A453M – Quenched and Tempered Steel Bolts and Studs (Cont'd)**

| <b>PIN</b> | <b>Material Spec</b>                          | <b>Material</b> | <b>UNS #</b> |
|------------|-----------------------------------------------|-----------------|--------------|
| AY1        | ASTM A453/A453M, Grade 651, Class B (95 ksi)  | Stainless Steel | S63198       |
| AY2        | ASTM A453/A453M, Grade 662, Class A (130 ksi) | Stainless Steel | S66220       |
| AY3        | ASTM A453/A453M, Grade 662, Class B (125 ksi) | Stainless Steel | S66220       |
| AY4        | ASTM A453/A453M, Grade 665, Class A (170 ksi) | Stainless Steel | S66545       |
| AY5        | ASTM A453/A453M, Grade 665, Class B (155 ksi) | Stainless Steel | S66545       |

**ASTM A489 – Carbon Steel Lifting Eyes**

| <b>PIN</b> | <b>Material Spec</b>       | <b>Material</b> | <b>UNS #</b> |
|------------|----------------------------|-----------------|--------------|
| AY6        | ASTM A489, Type 1, Style A | Carbon Steel    | K04800       |
| AY7        | ASTM A489, Type 1, Style B | Carbon Steel    | K04800       |
| AY8        | ASTM A489, Type 2, Style A | Carbon Steel    | K04800       |
| AY9        | ASTM A489, Type 2, Style B | Carbon Steel    | K04800       |

**ASTM A490 – Structural Bolts, Alloy Steel, Heat Treated, 150 ksi Minimum Tensile Strength**

| <b>PIN</b> | <b>Material Spec</b> | <b>Material</b> | <b>UNS #</b> |
|------------|----------------------|-----------------|--------------|
| AZ0        | ASTM A490, Type 1    | Alloy Steel     | K03900       |
| AZ1        | ASTM A490, Type 3    | Alloy Steel     | K03900       |

**ASTM A490M – High-Strength Steel Bolts, Classes 10.9 and 10.9.3, for Structural Steel Joints (Metric)**

| <b>PIN</b> | <b>Material Spec</b> | <b>Material</b> | <b>UNS #</b> |
|------------|----------------------|-----------------|--------------|
| AZ2        | ASTM A490M, Type 1   | Alloy Steel     | K03900       |
| AZ3        | ASTM A490M, Type 3   | Alloy Steel     | K03900       |

**ASTM A563 – Carbon and Alloy Steel Nuts**

| <b>PIN</b> | <b>Material Spec</b> | <b>Material</b> | <b>UNS #</b> |
|------------|----------------------|-----------------|--------------|
| AZ4        | ASTM A563, Grade A   | Carbon Steel    | K05802       |
| AZ5        | ASTM A563, Grade B   | Carbon Steel    | K05802       |
| AZ6        | ASTM A563, Grade D   | Carbon Steel    | K05801       |
| AZ7        | ASTM A563, Grade DH  | Carbon Steel    | K03800       |
| AZ8        | ASTM A563, Grade DH3 | Alloy Steel     | K13650       |
| AZ9        | ASTM A563, Grade C   | Carbon Steel    | K05802       |
| BA0        | ASTM A563, Grade C3  | Alloy Steel     | —            |
| BA1        | ASTM A563, Grade O   | Carbon Steel    | K05802       |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM A563M – Carbon and Alloy Steel Nuts (Metric)**

| PIN | Material Spec                             | Material           | UNS # |
|-----|-------------------------------------------|--------------------|-------|
| BA2 | ASTM A563M, Property Class 5              | Carbon/Alloy Steel | —     |
| BA3 | ASTM A563M, Property Class 5 Overlapped   | Carbon/Alloy Steel | —     |
| BA4 | ASTM A563M, Property Class 8S             | Carbon/Alloy Steel | —     |
| BA5 | ASTM A563M, Property Class 8S3            | Carbon/Alloy Steel | —     |
| BA6 | ASTM A563M, Property Class 9              | Carbon/Alloy Steel | —     |
| BA7 | ASTM A563M, Property Class 10             | Carbon/Alloy Steel | —     |
| BA8 | ASTM A563M, Property Class 10S3           | Carbon/Alloy Steel | —     |
| BA9 | ASTM A563M, Property Class 10S Overlapped | Carbon/Alloy Steel | —     |
| BB0 | ASTM A563M, Property Class 10S            | Carbon/Alloy Steel | —     |
| BB1 | ASTM A563M, Property Class 12             | Carbon/Alloy Steel | —     |
| BB2 | ASTM A563M, Property Class 12 Overlapped  | Carbon/Alloy Steel | —     |

**ASTM A574 – Alloy Steel Socket-Head Cap Screws**

| PIN | Material Spec           | Material    | UNS #  |
|-----|-------------------------|-------------|--------|
| BB3 | ASTM A574, Alloy Steel  | Alloy Steel | —      |
| BB4 | ASTM A574, Grade 4037   | Alloy Steel | G40370 |
| BB5 | ASTM A574, Grade 4042   | Alloy Steel | G40420 |
| BB6 | ASTM A574, Grade 4137   | Alloy Steel | G41370 |
| BB7 | ASTM A574, Grade 4140   | Alloy Steel | G41400 |
| BB8 | ASTM A574, Grade 4142   | Alloy Steel | G41420 |
| BB9 | ASTM A574, Grade 4145   | Alloy Steel | G41450 |
| BC0 | ASTM A574, Grade 4340   | Alloy Steel | G43400 |
| BC1 | ASTM A574, Grade 8740   | Alloy Steel | G87400 |
| BC2 | ASTM A574, Grade 5137M  | Alloy Steel | K13745 |
| BC3 | ASTM A574, Grade 513B7M | Alloy Steel | K13647 |

**ASTM A574M – Alloy Steel Socket-Head Cap Screws (Metric)**

| PIN | Material Spec           | Material    | UNS #  |
|-----|-------------------------|-------------|--------|
| BC4 | ASTM A574M, Alloy Steel | Alloy Steel | —      |
| BC5 | ASTM A574M, Grade 4037  | Alloy Steel | G40370 |
| BC6 | ASTM A574M, Grade 4042  | Alloy Steel | G40420 |
| BC7 | ASTM A574M, Grade 4137  | Alloy Steel | G41370 |
| BC8 | ASTM A574M, Grade 4140  | Alloy Steel | G41400 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM A574M – Alloy Steel Socket-Head Cap Screws (Metric) (Cont'd)**

| PIN | Material Spec            | Material    | UNS #  |
|-----|--------------------------|-------------|--------|
| BC9 | ASTM A574M, Grade 4142   | Alloy Steel | G41420 |
| BD0 | ASTM A574M, Grade 4145   | Alloy Steel | G41450 |
| BD1 | ASTM A574M, Grade 4340   | Alloy Steel | G43400 |
| BD2 | ASTM A574M, Grade 8740   | Alloy Steel | G87400 |
| BD3 | ASTM A574M, Grade 5137M  | Alloy Steel | K13745 |
| BD4 | ASTM A574M, Grade 513B7M | Alloy Steel | K13647 |

**ASTM A687 – High-Strength Nonheaded Steel Bolts and Studs (Withdrawn 1999)**

| PIN | Material Spec | Material     | UNS # |
|-----|---------------|--------------|-------|
| BD5 | ASTM A687     | Carbon Steel | —     |

**ASTM B99 – Copper-Silicon Alloy Wire**

| PIN | Material Spec                  | Material       | UNS #  |
|-----|--------------------------------|----------------|--------|
| FA1 | ASTM B99, Copper Alloy No. 651 | Silicon Bronze | C65100 |
| FA2 | ASTM B99, Copper Alloy No. 655 | Silicon Bronze | C65500 |

**ASTM B159 – Phosphor Bronze Wire**

| PIN | Material Spec                   | Material        | UNS #  |
|-----|---------------------------------|-----------------|--------|
| FB1 | ASTM B159, Copper Alloy No. 510 | Phosphor Bronze | C51000 |

**ASTM B211 – Aluminum and Aluminum Alloy**

| PIN | Material Spec         | Material | UNS #  |
|-----|-----------------------|----------|--------|
| FC1 | ASTM B211, Alloy 7075 | Aluminum | A97075 |

**ASTM F436 – Hardened Steel Washers**

| PIN | Material Spec                        | Material        | UNS # |
|-----|--------------------------------------|-----------------|-------|
| BD6 | ASTM F436, Type 1 - Carbon Steel     | Carbon Steel    | —     |
| BD7 | ASTM F436, Type 3 - Weathering Steel | Stainless Steel | —     |

**ASTM F436M – Hardened Steel Washers (Metric)**

| PIN | Material Spec                         | Material        | UNS # |
|-----|---------------------------------------|-----------------|-------|
| BD8 | ASTM F436M, Type 1 - Carbon Steel     | Carbon Steel    | —     |
| BD9 | ASTM F436M, Type 3 - Weathering Steel | Stainless Steel | —     |

**ASTM F467 – Nonferrous Nuts for General Use**

| PIN | Material Spec                         | Material   | UNS #  |
|-----|---------------------------------------|------------|--------|
| BE0 | ASTM F467, Alloy 110                  | ETP Copper | C11000 |
| BE1 | ASTM F467, Alloy 110, Stress Relieved | ETP Copper | C11000 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F467 – Nonferrous Nuts for General Use (Cont'd)**

| <b>PIN</b> | <b>Material Spec</b>                  | <b>Material</b>         | <b>UNS #</b> |
|------------|---------------------------------------|-------------------------|--------------|
| BE2        | ASTM F467, Alloy 270                  | Brass                   | C27000       |
| BE3        | ASTM F467, Alloy 270, Stress Relieved | Brass                   | C27000       |
| BE4        | ASTM F467, Alloy 462                  | Naval Brass             | C46200       |
| BE5        | ASTM F467, Alloy 462, Stress Relieved | Naval Brass             | C46200       |
| BE6        | ASTM F467, Alloy 464                  | Naval Brass             | C46400       |
| BE7        | ASTM F467, Alloy 464, Stress Relieved | Naval Brass             | C46400       |
| BE8        | ASTM F467, Alloy 510                  | Phosphor Bronze         | C51000       |
| BE9        | ASTM F467, Alloy 510, Stress Relieved | Phosphor Bronze         | C51000       |
| BF0        | ASTM F467, Alloy 613                  | Aluminum Bronze         | C61300       |
| BF1        | ASTM F467, Alloy 613, Stress Relieved | Aluminum Bronze         | C61300       |
| BF2        | ASTM F467, Alloy 614                  | Aluminum Bronze         | C61400       |
| BF3        | ASTM F467, Alloy 614, Stress Relieved | Aluminum Bronze         | C61400       |
| BF4        | ASTM F467, Alloy 630                  | Aluminum Bronze         | C63000       |
| BF5        | ASTM F467, Alloy 630, Stress Relieved | Aluminum Bronze         | C63000       |
| BF6        | ASTM F467, Alloy 642                  | Aluminum Silicon Bronze | C64200       |
| BF7        | ASTM F467, Alloy 642, Stress Relieved | Aluminum Silicon Bronze | C64201       |
| BF8        | ASTM F467, Alloy 651                  | Silicon Bronze          | C65100       |
| BF9        | ASTM F467, Alloy 651, Stress Relieved | Silicon Bronze          | C65100       |
| BG0        | ASTM F467, Alloy 655                  | Silicon Bronze          | C65500       |
| BG1        | ASTM F467, Alloy 655, Stress Relieved | Silicon Bronze          | C65500       |
| BG2        | ASTM F467, Alloy 661                  | Silicon Bronze          | C66100       |
| BG3        | ASTM F467, Alloy 661, Stress Relieved | Silicon Bronze          | C66100       |
| BG4        | ASTM F467, Alloy 675                  | Manganese Bronze        | C67500       |
| BG5        | ASTM F467, Alloy 675, Stress Relieved | Manganese Bronze        | C67500       |
| BG6        | ASTM F467, Alloy 710                  | Cupro-Nickel            | C71000       |
| BG7        | ASTM F467, Alloy 710, Stress Relieved | Cupro-Nickel            | C71000       |
| BG8        | ASTM F467, Alloy 715                  | Cupro-Nickel            | C71500       |
| BG9        | ASTM F467, Alloy 715, Stress Relieved | Cupro-Nickel            | C71500       |
| BH0        | ASTM F467, Alloy 335                  | Ni-Mo                   | N10001       |
| BH1        | ASTM F467, Alloy 335, Stress Relieved | Ni-Mo                   | N10001       |
| BH2        | ASTM F467, Alloy 276                  | Ni-Mo-Cr                | N10276       |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

GENERAL NOTE: Italic text denotes information that remains the same as in the previous version of the Standard, but has been moved within this document for consolidation or clarity.

NOTE:

(1) This designation is cancelled and is not to be used for new design.

**ASTM F467 – Nonferrous Nuts for General Use (Cont'd)**

| PIN | Material Spec                          | Material            | UNS #  |
|-----|----------------------------------------|---------------------|--------|
| BH3 | ASTM F467, Alloy 276, Stress Relieved  | Ni-Mo-Cr            | N10276 |
| BH4 | ASTM F467, Alloy 400                   | Ni-Cu Class A       | N04400 |
| BH5 | ASTM F467, Alloy 400, Stress Relieved  | Ni-Cu Class A       | N04400 |
| BH6 | ASTM F467, Alloy 405                   | Ni-Cu Class B       | N04405 |
| BH7 | ASTM F467, Alloy 405, Stress Relieved  | Ni-Cu Class B       | N04405 |
| BH8 | ASTM F467, Alloy 500                   | Ni-Cu-Al            | N05500 |
| BH9 | ASTM F467, Alloy 500, Stress Relieved  | Ni-Cu-Al            | N05500 |
| BJ0 | ASTM F467, Alloy 686                   | Ni-Cr-Mo-W          | N06686 |
| BJ1 | ASTM F467, Alloy 686, Stress Relieved  | Ni-Cr-Mo-W          | N06686 |
| BJ2 | ASTM F467, Alloy 2024                  | Aluminum 2024       | A92024 |
| BJ3 | ASTM F467, Alloy 2024, Stress Relieved | Aluminum 2024       | A92024 |
| BJ4 | ASTM F467, Alloy 6061                  | Aluminum 6061       | A96061 |
| BJ5 | ASTM F467, Alloy 6061, Stress Relieved | Aluminum 6061       | A96061 |
| BJ6 | ASTM F467, Alloy 6262                  | Aluminum 6262       | A96262 |
| BJ7 | ASTM F467, Alloy 6262, Stress Relieved | Aluminum 6262       | A96262 |
| BJ8 | ASTM F467, Alloy 1                     | Titanium Gr 1       | R50250 |
| BJ9 | ASTM F467, Alloy 1, Stress Relieved    | Titanium Gr 1       | R50250 |
| BK0 | ASTM F467, Alloy 2                     | Titanium Gr 2       | R50400 |
| BK1 | ASTM F467, Alloy 2, Stress Relieved    | Titanium Gr 2       | R50400 |
| BK2 | ASTM F467, Alloy 4                     | Titanium Gr 4       | R50700 |
| BK3 | ASTM F467, Alloy 4, Stress Relieved    | Titanium Gr 4       | R50700 |
| BK4 | ASTM F467, Alloy 5                     | Titanium Gr 5       | R56400 |
| BK5 | ASTM F467, Alloy 5, Stress Relieved    | Titanium Gr 5       | R56400 |
| BK6 | ASTM F467, Alloy 23                    | Titanium Ti-6Al-4V  | R56401 |
| BK7 | ASTM F467, Alloy 23, Stress Relieved   | Titanium Ti-6Al-4V  | R56401 |
| BK8 | ASTM F467, Alloy 7                     | Titanium Gr 7       | R52400 |
| BK9 | ASTM F467, Alloy 7, Stress Relieved    | Titanium Gr 7       | R52400 |
| BL0 | ASTM F467, Alloy 19                    | Titanium Ti-38-6-44 | R58640 |
| BL1 | ASTM F467, Alloy 19, Stress Relieved   | Titanium Ti-38-6-44 | R58640 |
| BL2 | ASTM F467, Alloy 32                    | Titanium Ti-5-1-1-1 | R55111 |
| BL3 | ASTM F467, Alloy 32, Stress Relieved   | Titanium Ti-5-1-1-1 | R55111 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

GENERAL NOTE: Italic text denotes information that remains the same as in the previous version of the Standard, but has been moved within this document for consolidation or clarity.

NOTE:

(1) This designation is cancelled and is not to be used for new design.

**ASTM F467M – Nonferrous Nuts for General Use (Metric)**

| <b>PIN</b> | <b>Material Spec</b>                   | <b>Material</b>         | <b>UNS #</b> |
|------------|----------------------------------------|-------------------------|--------------|
| BL4        | ASTM F467M, Alloy 110                  | ETP Copper              | C11000       |
| BL5        | ASTM F467M, Alloy 110, Stress Relieved | ETP Copper              | C11000       |
| BL6        | ASTM F467M, Alloy 270                  | Brass                   | C27000       |
| BL7        | ASTM F467M, Alloy 270, Stress Relieved | Brass                   | C27000       |
| BL8        | ASTM F467M, Alloy 462                  | Naval Brass             | C46200       |
| BL9        | ASTM F467M, Alloy 462, Stress Relieved | Naval Brass             | C46200       |
| BM0        | ASTM F467M, Alloy 464                  | Naval Brass             | C46400       |
| BM1        | ASTM F467M, Alloy 464, Stress Relieved | Naval Brass             | C46400       |
| BM2        | ASTM F467M, Alloy 510                  | Phosphor Bronze         | C51000       |
| BM3        | ASTM F467M, Alloy 510, Stress Relieved | Phosphor Bronze         | C51000       |
| BM4        | ASTM F467M, Alloy 614                  | Aluminum Bronze         | C61400       |
| BM5        | ASTM F467M, Alloy 614, Stress Relieved | Aluminum Bronze         | C61400       |
| BM6        | ASTM F467M, Alloy 630                  | Aluminum Bronze         | C63000       |
| BM7        | ASTM F467M, Alloy 630, Stress Relieved | Aluminum Bronze         | C63000       |
| BM8        | ASTM F467M, Alloy 642                  | Aluminum Silicon Bronze | C64200       |
| BM9        | ASTM F467M, Alloy 642, Stress Relieved | Aluminum Silicon Bronze | C64201       |
| BN0        | ASTM F467M, Alloy 651                  | Silicon Bronze          | C65100       |
| BN1        | ASTM F467M, Alloy 651, Stress Relieved | Silicon Bronze          | C65100       |
| BN2        | ASTM F467M, Alloy 655                  | Silicon Bronze          | C65500       |
| BN3        | ASTM F467M, Alloy 655, Stress Relieved | Silicon Bronze          | C65500       |
| BN4        | ASTM F467M, Alloy 661                  | Silicon Bronze          | C66100       |
| BN5        | ASTM F467M, Alloy 661, Stress Relieved | Silicon Bronze          | C66100       |
| BN6        | ASTM F467M, Alloy 675                  | Manganese Bronze        | C67500       |
| BN7        | ASTM F467M, Alloy 675, Stress Relieved | Manganese Bronze        | C67500       |
| BN8        | ASTM F467M, Alloy 710                  | Cupro-Nickel            | C71000       |
| BN9        | ASTM F467M, Alloy 710, Stress Relieved | Cupro-Nickel            | C71000       |
| BP0        | ASTM F467M, Alloy 715                  | Cupro-Nickel            | C71500       |
| BP1        | ASTM F467M, Alloy 715, Stress Relieved | Cupro-Nickel            | C71500       |
| BP2        | ASTM F467M, Alloy 335                  | Ni-Mo                   | N10001       |
| BP3        | ASTM F467M, Alloy 335, Stress Relieved | Ni-Mo                   | N10001       |
| BP4        | ASTM F467M, Alloy 276                  | Ni-Mo-Cr                | N10276       |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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NOTE:

(1) This designation is cancelled and is not to be used for new design.

**ASTM F467M – Nonferrous Nuts for General Use (Metric) (Cont'd)**

| <b>PIN</b> | <b>Material Spec</b>                    | <b>Material</b>     | <b>UNS #</b> |
|------------|-----------------------------------------|---------------------|--------------|
| BP5        | ASTM F467M, Alloy 276, Stress Relieved  | Ni-Mo-Cr            | N10276       |
| BP6        | ASTM F467M, Alloy 400                   | Ni-Cu Class A       | N04400       |
| BP7        | ASTM F467M, Alloy 400, Stress Relieved  | Ni-Cu Class A       | N04400       |
| BP8        | ASTM F467M, Alloy 405                   | Ni-Cu Class B       | N04405       |
| BP9        | ASTM F467M, Alloy 405, Stress Relieved  | Ni-Cu Class B       | N04405       |
| BQ0        | ASTM F467M, Alloy 500                   | Ni-Cu-Al            | N05500       |
| BQ1        | ASTM F467M, Alloy 500, Stress Relieved  | Ni-Cu-Al            | N05500       |
| BQ2        | ASTM F467M, Alloy 686                   | Ni-Cr-Mo-W          | N06686       |
| BQ3        | ASTM F467M, Alloy 686, Stress Relieved  | Ni-Cr-Mo-W          | N06686       |
| BQ4        | ASTM F467M, Alloy 2024                  | Aluminum 2024       | A92024       |
| BQ5        | ASTM F467M, Alloy 2024, Stress Relieved | Aluminum 2024       | A92024       |
| BQ6        | ASTM F467M, Alloy 6061                  | Aluminum 6061       | A96061       |
| BQ7        | ASTM F467M, Alloy 6061, Stress Relieved | Aluminum 6061       | A96061       |
| BQ8        | ASTM F467M, Alloy 6262                  | Aluminum 6262       | A96262       |
| BQ9        | ASTM F467M, Alloy 6262, Stress Relieved | Aluminum 6262       | A96262       |
| BR0        | ASTM F467M, Alloy 1                     | Titanium Gr 1       | R50250       |
| BR1        | ASTM F467M, Alloy 1, Stress Relieved    | Titanium Gr 1       | R50250       |
| BR2        | ASTM F467M, Alloy 2                     | Titanium Gr 2       | R50400       |
| BR3        | ASTM F467M, Alloy 2, Stress Relieved    | Titanium Gr 2       | R50400       |
| BR4        | ASTM F467M, Alloy 4                     | Titanium Gr 4       | R50700       |
| BR5        | ASTM F467M, Alloy 4, Stress Relieved    | Titanium Gr 4       | R50700       |
| BR6        | ASTM F467M, Alloy 5                     | Titanium Gr 5       | R56400       |
| BR7        | ASTM F467M, Alloy 5, Stress Relieved    | Titanium Gr 5       | R56400       |
| BR8        | ASTM F467M, Alloy 23                    | Titanium Ti-6Al-4V  | R56401       |
| BR9        | ASTM F467M, Alloy 23, Stress Relieved   | Titanium Ti-6Al-4V  | R56401       |
| BS0        | ASTM F467M, Alloy 7                     | Titanium Gr 7       | R52400       |
| BS1        | ASTM F467M, Alloy 7, Stress Relieved    | Titanium Gr 7       | R52400       |
| BS2        | ASTM F467M, Alloy 19                    | Titanium Ti-38-6-44 | R58640       |
| BS3        | ASTM F467M, Alloy 19, Stress Relieved   | Titanium Ti-38-6-44 | R58640       |
| BS4        | ASTM F467M, Alloy 32                    | Titanium Ti-5-1-1-1 | R55111       |
| BS5        | ASTM F467M, Alloy 32, Stress Relieved   | Titanium Ti-5-1-1-1 | R55111       |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

GENERAL NOTE: Italic text denotes information that remains the same as in the previous version of the Standard, but has been moved within this document for consolidation or clarity.

NOTE:

(1) This designation is cancelled and is not to be used for new design.

**ASTM F468 – Nonferrous Bolts, Hex Cap Screws, and Studs for General Use**

| <b>PIN</b> | <b>Material Spec</b>                  | <b>Material</b>         | <b>UNS #</b> |
|------------|---------------------------------------|-------------------------|--------------|
| BS6        | ASTM F468, Alloy 110                  | ETP Copper              | C11000       |
| BS7        | ASTM F468, Alloy 110, Stress Relieved | ETP Copper              | C11000       |
| BS8        | ASTM F468, Alloy 270                  | Brass                   | C27000       |
| BS9        | ASTM F468, Alloy 270, Stress Relieved | Brass                   | C27000       |
| BT0        | ASTM F468, Alloy 462                  | Naval Brass             | C46200       |
| BT1        | ASTM F468, Alloy 462, Stress Relieved | Naval Brass             | C46200       |
| BT2        | ASTM F468, Alloy 464                  | Naval Brass             | C46400       |
| BT3        | ASTM F468, Alloy 464, Stress Relieved | Naval Brass             | C46400       |
| BT4        | ASTM F468, Alloy 510                  | Phosphor Bronze         | C51000       |
| BT5        | ASTM F468, Alloy 510, Stress Relieved | Phosphor Bronze         | C51000       |
| BT6        | ASTM F468, Alloy 613                  | Aluminum Bronze         | C61300       |
| BT7        | ASTM F468, Alloy 613, Stress Relieved | Aluminum Bronze         | C61300       |
| BT8        | ASTM F468, Alloy 614                  | Aluminum Bronze         | C61400       |
| BT9        | ASTM F468, Alloy 614, Stress Relieved | Aluminum Bronze         | C61400       |
| BU0        | ASTM F468, Alloy 630                  | Aluminum Bronze         | C63000       |
| BU1        | ASTM F468, Alloy 630, Stress Relieved | Aluminum Bronze         | C63000       |
| BU2        | ASTM F468, Alloy 642                  | Aluminum Silicon Bronze | C64200       |
| BU3        | ASTM F468, Alloy 642, Stress Relieved | Aluminum Silicon Bronze | C64201       |
| BU4        | ASTM F468, Alloy 651                  | Silicon Bronze          | C65100       |
| BU5        | ASTM F468, Alloy 651, Stress Relieved | Silicon Bronze          | C65100       |
| BU6        | ASTM F468, Alloy 655                  | Silicon Bronze          | C65500       |
| BU7        | ASTM F468, Alloy 655, Stress Relieved | Silicon Bronze          | C65500       |
| BU8        | ASTM F468, Alloy 661                  | Silicon Bronze          | C66100       |
| BU9        | ASTM F468, Alloy 661, Stress Relieved | Silicon Bronze          | C66100       |
| BV0        | ASTM F468, Alloy 675                  | Manganese Bronze        | C67500       |
| BV1        | ASTM F468, Alloy 675, Stress Relieved | Manganese Bronze        | C67500       |
| BV2        | ASTM F468, Alloy 710                  | Cupro-Nickel            | C71000       |
| BV3        | ASTM F468, Alloy 710, Stress Relieved | Cupro-Nickel            | C71000       |
| BV4        | ASTM F468, Alloy 715                  | Cupro-Nickel            | C71500       |
| BV5        | ASTM F468, Alloy 715, Stress Relieved | Cupro-Nickel            | C71500       |
| BV6        | ASTM F468, Alloy 335                  | Ni-Mo                   | N10001       |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

GENERAL NOTE: *Italic text denotes information that remains the same as in the previous version of the Standard, but has been moved within this document for consolidation or clarity.*

NOTE:

(1) This designation is cancelled and is not to be used for new design.

**ASTM F468 – Nonferrous Bolts, Hex Cap Screws, and Studs for General Use (Cont'd)**

| PIN | Material Spec                          | Material           | UNS #  |
|-----|----------------------------------------|--------------------|--------|
| BV7 | ASTM F468, Alloy 335, Stress Relieved  | Ni-Mo              | N10001 |
| BV8 | ASTM F468, Alloy 276                   | Ni-Mo-Cr           | N10276 |
| BV9 | ASTM F468, Alloy 276, Stress Relieved  | Ni-Mo-Cr           | N10276 |
| BW0 | ASTM F468, Alloy 400                   | Ni-Cu Class A      | N04400 |
| BW1 | ASTM F468, Alloy 400, Stress Relieved  | Ni-Cu Class A      | N04400 |
| BW2 | ASTM F468, Alloy 405                   | Ni-Cu Class B      | N04405 |
| BW3 | ASTM F468, Alloy 405, Stress Relieved  | Ni-Cu Class B      | N04405 |
| BW4 | ASTM F468, Alloy 500                   | Ni-Cu-Al           | N05500 |
| BW5 | ASTM F468, Alloy 500, Stress Relieved  | Ni-Cu-Al           | N05500 |
| BW6 | ASTM F468, Alloy 686                   | Ni-Cr-Mo-W         | N06686 |
| BW7 | ASTM F468, Alloy 686, Stress Relieved  | Ni-Cr-Mo-W         | N06686 |
| BW8 | ASTM F468, Alloy 2024                  | Aluminum 2024      | A92024 |
| BW9 | ASTM F468, Alloy 2024, Stress Relieved | Aluminum 2024      | A92024 |
| BX0 | ASTM F468, Alloy 6061                  | Aluminum 6061      | A96061 |
| BX1 | ASTM F468, Alloy 6061, Stress Relieved | Aluminum 6061      | A96061 |
| BX2 | ASTM F468, Alloy 7075                  | Aluminum 7075      | A97075 |
| BX3 | ASTM F468, Alloy 7075, Stress Relieved | Aluminum 7075      | A97075 |
| BX4 | ASTM F468, Alloy 1                     | Titanium Gr 1      | R50250 |
| BX5 | ASTM F468, Alloy 1, Stress Relieved    | Titanium Gr 1      | R50250 |
| BX6 | ASTM F468, Alloy 2                     | Titanium Gr 2      | R50400 |
| BX7 | ASTM F468, Alloy 2, Stress Relieved    | Titanium Gr 2      | R50400 |
| BX8 | ASTM F468, Alloy 4                     | Titanium Gr 4      | R50700 |
| BX9 | ASTM F468, Alloy 4, Stress Relieved    | Titanium Gr 4      | R50700 |
| BY0 | ASTM F468, Alloy 5A                    | Titanium Gr 5      | R56400 |
| BY1 | ASTM F468, Alloy 5A, Stress Relieved   | Titanium Gr 5      | R56400 |
| BY2 | ASTM F468, Alloy 5B                    | Titanium Gr 5      | R56400 |
| BY3 | ASTM F468, Alloy 5B, Stress Relieved   | Titanium Gr 5      | R56400 |
| BY4 | ASTM F468, Alloy 23                    | Titanium Ti-6Al-4V | R56401 |
| BY5 | ASTM F468, Alloy 23, Stress Relieved   | Titanium Ti-6Al-4V | R56401 |
| BY6 | ASTM F468, Alloy 7                     | Titanium Gr 7      | R52400 |
| BY7 | ASTM F468, Alloy 7, Stress Relieved    | Titanium Gr 7      | R52400 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

GENERAL NOTE: Italic text denotes information that remains the same as in the previous version of the Standard, but has been moved within this document for consolidation or clarity.

NOTE:

(1) This designation is cancelled and is not to be used for new design.

**ASTM F468 – Nonferrous Bolts, Hex Cap Screws, and Studs for General Use (Cont'd)**

| <b>PIN</b> | <b>Material Spec</b>                 | <b>Material</b>     | <b>UNS #</b> |
|------------|--------------------------------------|---------------------|--------------|
| <b>BY8</b> | ASTM F468, Alloy 19                  | Titanium Ti-38-6-44 | R58640       |
| <b>BY9</b> | ASTM F468, Alloy 19, Stress Relieved | Titanium Ti-38-6-44 | R58640       |
| <b>BZ0</b> | ASTM F468, Alloy 32                  | Titanium Ti-5-1-1-1 | R55111       |
| <b>BZ1</b> | ASTM F468, Alloy 32, Stress Relieved | Titanium Ti-5-1-1-1 | R55111       |

**ASTM F468M – Nonferrous Bolts, Hex Cap Screws, and Studs for General Use (Metric)**

| <b>PIN</b> | <b>Material Spec</b>                   | <b>Material</b>         | <b>UNS #</b> |
|------------|----------------------------------------|-------------------------|--------------|
| <b>BZ2</b> | ASTM F468M, Alloy 110                  | ETP Copper              | C11000       |
| <b>BZ3</b> | ASTM F468M, Alloy 110, Stress Relieved | ETP Copper              | C11000       |
| <b>BZ4</b> | ASTM F468M, Alloy 270                  | Brass                   | C27000       |
| <b>BZ5</b> | ASTM F468M, Alloy 270, Stress Relieved | Brass                   | C27000       |
| <b>BZ6</b> | ASTM F468M, Alloy 462                  | Naval Brass             | C46200       |
| <b>BZ7</b> | ASTM F468M, Alloy 462, Stress Relieved | Naval Brass             | C46200       |
| <b>BZ8</b> | ASTM F468M, Alloy 464                  | Naval Brass             | C46400       |
| <b>BZ9</b> | ASTM F468M, Alloy 464, Stress Relieved | Naval Brass             | C46400       |
| <b>CA0</b> | ASTM F468M, Alloy 510                  | Phosphor Bronze         | C51000       |
| <b>CA1</b> | ASTM F468M, Alloy 510, Stress Relieved | Phosphor Bronze         | C51000       |
| <b>CA2</b> | ASTM F468M, Alloy 613                  | Aluminum Bronze         | C61300       |
| <b>CA3</b> | ASTM F468M, Alloy 613, Stress Relieved | Aluminum Bronze         | C61300       |
| <b>CA4</b> | ASTM F468M, Alloy 614                  | Aluminum Bronze         | C61400       |
| <b>CA5</b> | ASTM F468M, Alloy 614, Stress Relieved | Aluminum Bronze         | C61400       |
| <b>CA6</b> | ASTM F468M, Alloy 630                  | Aluminum Bronze         | C63000       |
| <b>CA7</b> | ASTM F468M, Alloy 630, Stress Relieved | Aluminum Bronze         | C63000       |
| <b>CA8</b> | ASTM F468M, Alloy 642                  | Aluminum Silicon Bronze | C64200       |
| <b>CA9</b> | ASTM F468M, Alloy 642, Stress Relieved | Aluminum Silicon Bronze | C64201       |
| <b>CB0</b> | ASTM F468M, Alloy 651                  | Silicon Bronze          | C65100       |
| <b>CB1</b> | ASTM F468M, Alloy 651, Stress Relieved | Silicon Bronze          | C65100       |
| <b>CB2</b> | ASTM F468M, Alloy 655                  | Silicon Bronze          | C65500       |
| <b>CB3</b> | ASTM F468M, Alloy 655, Stress Relieved | Silicon Bronze          | C65500       |
| <b>CB4</b> | ASTM F468M, Alloy 661                  | Silicon Bronze          | C66100       |
| <b>CB5</b> | ASTM F468M, Alloy 661, Stress Relieved | Silicon Bronze          | C66100       |
| <b>CB6</b> | ASTM F468M, Alloy 675                  | Manganese Bronze        | C67500       |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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NOTE:

(1) This designation is cancelled and is not to be used for new design.

**ASTM F468M – Nonferrous Bolts, Hex Cap Screws, and Studs for General Use (Metric) (Cont'd)**

| PIN | Material Spec                           | Material           | UNS #  |
|-----|-----------------------------------------|--------------------|--------|
| CB7 | ASTM F468M, Alloy 675, Stress Relieved  | Manganese Bronze   | C67500 |
| CB8 | ASTM F468M, Alloy 710                   | Cupro-Nickel       | C71000 |
| CB9 | ASTM F468M, Alloy 710, Stress Relieved  | Cupro-Nickel       | C71000 |
| CC0 | ASTM F468M, Alloy 715                   | Cupro-Nickel       | C71500 |
| CC1 | ASTM F468M, Alloy 715, Stress Relieved  | Cupro-Nickel       | C71500 |
| CC2 | ASTM F468M, Alloy 335                   | Ni-Mo              | N10001 |
| CC3 | ASTM F468M, Alloy 335, Stress Relieved  | Ni-Mo              | N10001 |
| CC4 | ASTM F468M, Alloy 276                   | Ni-Mo-Cr           | N10276 |
| CC5 | ASTM F468M, Alloy 276, Stress Relieved  | Ni-Mo-Cr           | N10276 |
| CC6 | ASTM F468M, Alloy 400                   | Ni-Cu Class A      | N04400 |
| CC7 | ASTM F468M, Alloy 400, Stress Relieved  | Ni-Cu Class A      | N04400 |
| CC8 | ASTM F468M, Alloy 405                   | Ni-Cu Class B      | N04405 |
| CC9 | ASTM F468M, Alloy 405, Stress Relieved  | Ni-Cu Class B      | N04405 |
| CD0 | ASTM F468M, Alloy 500                   | Ni-Cu-Al           | N05500 |
| CD1 | ASTM F468M, Alloy 500, Stress Relieved  | Ni-Cu-Al           | N05500 |
| CD2 | ASTM F468M, Alloy 686                   | Ni-Cr-Mo-W         | N06686 |
| CD3 | ASTM F468M, Alloy 686, Stress Relieved  | Ni-Cr-Mo-W         | N06686 |
| CD4 | ASTM F468M, Alloy 2024                  | Aluminum 2024      | A92024 |
| CD5 | ASTM F468M, Alloy 2024, Stress Relieved | Aluminum 2024      | A92024 |
| CD6 | ASTM F468M, Alloy 6061                  | Aluminum 6061      | A96061 |
| CD7 | ASTM F468M, Alloy 6061, Stress Relieved | Aluminum 6061      | A96061 |
| CD8 | ASTM F468M, Alloy 7075                  | Aluminum 7075      | A97075 |
| CD9 | ASTM F468M, Alloy 7075, Stress Relieved | Aluminum 7075      | A97075 |
| CE0 | ASTM F468M, Alloy 1                     | Titanium Gr 1      | R50250 |
| CE1 | ASTM F468M, Alloy 1, Stress Relieved    | Titanium Gr 1      | R50250 |
| CE2 | ASTM F468M, Alloy 2                     | Titanium Gr 2      | R50400 |
| CE3 | ASTM F468M, Alloy 2, Stress Relieved    | Titanium Gr 2      | R50400 |
| CE4 | ASTM F468M, Alloy 4                     | Titanium Gr 4      | R50700 |
| CE5 | ASTM F468M, Alloy 4, Stress Relieved    | Titanium Gr 4      | R50700 |
| CE6 | ASTM F468M, Alloy 5A                    | Titanium Gr 5      | R56400 |
| CE7 | ASTM F468M, Alloy 5A, Stress Relieved   | Titanium Gr 5      | R56400 |
| CE8 | ASTM F468M, Alloy 23                    | Titanium Ti-6Al-4V | R56401 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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(1) This designation is cancelled and is not to be used for new design.

**ASTM F468M – Nonferrous Bolts, Hex Cap Screws, and Studs for General Use (Metric) (Cont'd)**

| PIN | Material Spec                         | Material            | UNS #  |
|-----|---------------------------------------|---------------------|--------|
| CE9 | ASTM F468M, Alloy 23, Stress Relieved | Titanium Ti-6Al-4V  | R56401 |
| CF0 | ASTM F468M, Alloy 7                   | Titanium Gr 7       | R52400 |
| CF1 | ASTM F468M, Alloy 7, Stress Relieved  | Titanium Gr 7       | R52400 |
| CF2 | ASTM F468M, Alloy 19                  | Titanium Ti-38-6-44 | R58640 |
| CF3 | ASTM F468M, Alloy 19, Stress Relieved | Titanium Ti-38-6-44 | R58640 |
| CF4 | ASTM F468M, Alloy 5B                  | Titanium Gr 5       | R56400 |
| CF5 | ASTM F468M, Alloy 5B, Stress Relieved | Titanium Gr 5       | R56400 |
| CF6 | ASTM F468M, Alloy 32                  | Titanium Ti-5-1-1-1 | R55111 |
| CF7 | ASTM F468M, Alloy 32, Stress Relieved | Titanium Ti-5-1-1-1 | R55111 |

**ASTM A502 – Specifications for Steel Structural Rivets**

| PIN | Material Spec      | Material     | UNS # |
|-----|--------------------|--------------|-------|
| EP8 | ASTM A502, Grade 1 | Carbon Steel | —     |
| EP9 | ASTM A502, Grade 2 | Carbon Steel | —     |
| EQ0 | ASTM A502, Grade 3 | Carbon Steel | —     |

**ASTM F541 – Alloy Steel Eyebolts**

| PIN | Material Spec          | Material    | UNS # |
|-----|------------------------|-------------|-------|
| CF8 | ASTM F541, Alloy Steel | Alloy Steel | —     |

**ASTM F568M – Carbon and Alloy Steel Externally Threaded Metric Fasteners (Metric) [Note (1)]**

| PIN | Material Spec                                                             | Material     | UNS # |
|-----|---------------------------------------------------------------------------|--------------|-------|
| EE9 | ASTM F568M, Grade 4.6 Low or Medium Carbon Steel                          | Carbon Steel | —     |
| EE0 | ASTM F568M, Grade 4.8 Low or Medium Carbon Steel, Annealed                | Carbon Steel | —     |
| EE1 | ASTM F568M, Grade 5.8 Low or Medium Carbon Steel, Cold Worked             | Carbon Steel | —     |
| EE2 | ASTM F568M, Grade 8.8 Medium Carbon Steel, Quenched and Tempered          | Carbon Steel | —     |
| EE3 | ASTM F568M, Grade 8.8 Low Carbon Martensitic Steel, Quenched and Tempered | Carbon Steel | —     |
| EE4 | ASTM F568M, Grade 8.8.3 Corrosion Resistant Steel, Quenched and Tempered  | Carbon Steel | —     |
| EE5 | ASTM F568M, Grade 9.8 Medium Carbon Steel, Quenched and Tempered          | Carbon Steel | —     |
| EE6 | ASTM F568M, Grade 9.8 Low Carbon Martensitic Steel, Quenched and Tempered | Carbon Steel | —     |
| EE7 | ASTM F568M, Grade 10.9 Medium Carbon Steel, Quenched and Tempered         | Carbon Steel | —     |
| EE8 | ASTM F568M, Grade 10.9 Medium Carbon Alloy Steel, Quenched and Tempered   | Alloy Steel  | —     |
| EE9 | ASTM F568M, Grade 10.9 Low Carbon Steel                                   | Carbon Steel | —     |
| EH0 | ASTM F568M, Grade 10.9.3 Corrosion Resistant Steel, Quenched and Tempered | Carbon Steel | —     |
| EH1 | ASTM F568M, Grade 12.9 Alloy Steel, Quenched and Tempered                 | Alloy Steel  | —     |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F593 – Stainless Steel Bolts, Hex Cap Screws, and Studs**

| PIN | Material Spec                                      | Material        | UNS #  |
|-----|----------------------------------------------------|-----------------|--------|
| CH2 | ASTM F593, Alloy Group 1, Default Condition CW     | Stainless Steel | —      |
| CH3 | ASTM F593, Alloy Group 1, Condition AF             | Stainless Steel | —      |
| CH4 | ASTM F593, Alloy Group 1, Condition A              | Stainless Steel | —      |
| CH5 | ASTM F593, Alloy Group 1, Condition SH             | Stainless Steel | —      |
| CH6 | ASTM F593, Alloy Group 2, Default Condition CW     | Stainless Steel | —      |
| CH7 | ASTM F593, Alloy Group 2, Condition AF             | Stainless Steel | —      |
| CH8 | ASTM F593, Alloy Group 2, Condition A              | Stainless Steel | —      |
| CH9 | ASTM F593, Alloy Group 2, Condition SH             | Stainless Steel | —      |
| CJ0 | ASTM F593, Alloy Group 3, Default Condition CW     | Stainless Steel | —      |
| CJ1 | ASTM F593, Alloy Group 3, Condition AF             | Stainless Steel | —      |
| CJ2 | ASTM F593, Alloy Group 3, Condition A              | Stainless Steel | —      |
| CJ3 | ASTM F593, Alloy Group 3, Condition SH             | Stainless Steel | —      |
| CJ4 | ASTM F593, Alloy Group 4, Default Condition CW     | Stainless Steel | S43000 |
| CJ5 | ASTM F593, Alloy Group 4, Condition A              | Stainless Steel | S43000 |
| CJ6 | ASTM F593, Alloy Group 5, Default Condition H      | Stainless Steel | S41000 |
| CJ7 | ASTM F593, Alloy Group 5, Condition HT             | Stainless Steel | S41000 |
| CJ8 | ASTM F593, Alloy Group 6, Default Condition H      | Stainless Steel | S43100 |
| CJ9 | ASTM F593, Alloy Group 6, Condition HT             | Stainless Steel | S43100 |
| CK0 | ASTM F593, Alloy Group 7, Default Condition AH     | Stainless Steel | S17400 |
| CK1 | ASTM F593, Alloy Group 7, Condition NONE           | Stainless Steel | S17400 |
| CK2 | ASTM F593, Alloy 303 only, Default Condition CW    | Stainless Steel | S30300 |
| CK3 | ASTM F593, Alloy 303 only, Condition AF            | Stainless Steel | S30300 |
| CK4 | ASTM F593, Alloy 303 only, Condition A             | Stainless Steel | S30300 |
| CK5 | ASTM F593, Alloy 303 only, Condition SH            | Stainless Steel | S30300 |
| CK6 | ASTM F593, Alloy 303 Se only, Default Condition CW | Stainless Steel | S30323 |
| CK7 | ASTM F593, Alloy 303 Se only, Condition AF         | Stainless Steel | S30323 |
| CK8 | ASTM F593, Alloy 303 Se only, Condition A          | Stainless Steel | S30323 |
| CK9 | ASTM F593, Alloy 303 Se only, Condition SH         | Stainless Steel | S30323 |
| CL0 | ASTM F593, Alloy 304 only, Default Condition CW    | Stainless Steel | S30400 |
| CL1 | ASTM F593, Alloy 304 only, Condition AF            | Stainless Steel | S30400 |
| CL2 | ASTM F593, Alloy 304 only, Condition A             | Stainless Steel | S30400 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F593 – Stainless Steel Bolts, Hex Cap Screws, and Studs (Cont'd)**

| <b>PIN</b> | <b>Material Spec</b>                                    | <b>Material</b> | <b>UNS #</b> |
|------------|---------------------------------------------------------|-----------------|--------------|
| CL3        | ASTM F593, Alloy 304 only, Condition SH                 | Stainless Steel | S30400       |
| CL4        | ASTM F593, Alloy 304L only, Default Condition CW        | Stainless Steel | S30403       |
| CL5        | ASTM F593, Alloy 384 L only, Condition AF               | Stainless Steel | S30403       |
| CL6        | ASTM F593, Alloy 384 L only, Condition A                | Stainless Steel | S30403       |
| CL7        | ASTM F593, Alloy 384 L only, Condition SH               | Stainless Steel | S30403       |
| CL8        | ASTM F593, Alloy 305 only, Default Condition CW         | Stainless Steel | S30500       |
| CL9        | ASTM F593 Alloy 305 only, Condition AF                  | Stainless Steel | S30500       |
| CM0        | ASTM F593, Alloy 305 only, Condition A                  | Stainless Steel | S30500       |
| CM1        | ASTM F593, Alloy 305 only, Condition SH                 | Stainless Steel | S30500       |
| CM2        | ASTM F593, Alloy 384 only, Default Condition CW         | Stainless Steel | S38400       |
| CM3        | ASTM F593, Alloy 384 only, Condition AF                 | Stainless Steel | S38400       |
| CM4        | ASTM F593, Alloy 384 only, Condition A                  | Stainless Steel | S38400       |
| CM5        | ASTM F593, Alloy 384 only, Condition SH                 | Stainless Steel | S38400       |
| CM6        | ASTM F593, Alloy XM1 only, Default Condition CW         | Stainless Steel | S20300       |
| CM7        | ASTM F593, Alloy XM1 only, Condition AF                 | Stainless Steel | S20300       |
| CM8        | ASTM F593, Alloy XM1 only, Condition A                  | Stainless Steel | S20300       |
| CM9        | ASTM F593, Alloy XM1 only, Condition SH                 | Stainless Steel | S20300       |
| CN0        | ASTM F593, Alloy 18-9LW only, Default Condition CW      | Stainless Steel | S30430       |
| CN1        | ASTM F593, Alloy 18-9LW only, Condition AF              | Stainless Steel | S30430       |
| CN2        | ASTM F593, Alloy 18-9LW only, Condition A               | Stainless Steel | S30430       |
| CN3        | ASTM F593, Alloy 18-9LW only, Condition SH              | Stainless Steel | S30430       |
| CN4        | ASTM F593, Alloy 302HQ (XM7) only, Default Condition CW | Stainless Steel | S30433       |
| CN5        | ASTM F593, Alloy 302HQ (XM7) only, Condition AF         | Stainless Steel | S30433       |
| CN6        | ASTM F593, Alloy 302HQ (XM7) only, Condition A          | Stainless Steel | S30433       |
| CN7        | ASTM F593, Alloy 302HQ (XM7) only, Condition SH         | Stainless Steel | S30433       |
| CN8        | ASTM F593, Alloy 316 only, Default Condition CW         | Stainless Steel | S31600       |
| CN9        | ASTM F593, Alloy 316 only, Condition AF                 | Stainless Steel | S31600       |
| CP0        | ASTM F593, Alloy 316 only, Condition A                  | Stainless Steel | S31600       |
| CP1        | ASTM F593, Alloy 316 only, Condition SH                 | Stainless Steel | S31600       |
| CP2        | ASTM F593, Alloy 316L only, Default Condition CW        | Stainless Steel | S31603       |
| CP3        | ASTM F593, Alloy 316L only, Condition AF                | Stainless Steel | S31603       |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F593 – Stainless Steel Bolts, Hex Cap Screws, and Studs (Cont'd)**

| PIN | Material Spec                                     | Material        | UNS #  |
|-----|---------------------------------------------------|-----------------|--------|
| CP4 | ASTM F593, Alloy 316L only, Condition A           | Stainless Steel | S31603 |
| CP5 | ASTM F593, Alloy 316L only, Condition SH          | Stainless Steel | S31603 |
| CP6 | ASTM F593, Alloy 321 only, Default Condition CW   | Stainless Steel | S32100 |
| CP7 | ASTM F593, Alloy 321 only, Condition AF           | Stainless Steel | S32100 |
| CP8 | ASTM F593, Alloy 321 only, Condition A            | Stainless Steel | S32100 |
| CP9 | ASTM F593, Alloy 321 only, Condition SH           | Stainless Steel | S32100 |
| CQ0 | ASTM F593, Alloy 347 only, Default Condition CW   | Stainless Steel | S34700 |
| CQ1 | ASTM F593, Alloy 347 only, Condition AF           | Stainless Steel | S34700 |
| CQ2 | ASTM F593, Alloy 347 only, Condition A            | Stainless Steel | S34700 |
| CQ3 | ASTM F593, Alloy 347 only, Condition SH           | Stainless Steel | S34700 |
| CQ4 | ASTM F593, Alloy 430 only, Default Condition CW   | Stainless Steel | S43000 |
| CQ5 | ASTM F593, Alloy 430 only, Condition A            | Stainless Steel | S43000 |
| CQ6 | ASTM F593, Alloy 430F only, Default Condition CW  | Stainless Steel | S43020 |
| CQ7 | ASTM F593, Alloy 430F only, Condition A           | Stainless Steel | S43020 |
| CQ8 | ASTM F593, Alloy 410 only, Default Condition H    | Stainless Steel | S41000 |
| CQ9 | ASTM F593, Alloy 410 only, Condition HT           | Stainless Steel | S41000 |
| CR0 | ASTM F593, Alloy 416 only, Default Condition H    | Stainless Steel | S41600 |
| CR1 | ASTM F593, Alloy 416 only, Condition HT           | Stainless Steel | S41600 |
| CR2 | ASTM F593, Alloy 416 Se only, Default Condition H | Stainless Steel | S41623 |
| CR3 | ASTM F593, Alloy 416 Se only, Condition HT        | Stainless Steel | S41623 |

**ASTM F594 – Stainless Steel Nuts**

| PIN | Material Spec                                  | Material        | UNS # |
|-----|------------------------------------------------|-----------------|-------|
| CR4 | ASTM F594, Alloy Group 1, Default Condition CW | Stainless Steel | —     |
| CR5 | ASTM F594, Alloy Group 1, Condition AF         | Stainless Steel | —     |
| CR6 | ASTM F594, Alloy Group 1, Condition A          | Stainless Steel | —     |
| CR7 | ASTM F594, Alloy Group 1, Condition SH         | Stainless Steel | —     |
| CR8 | ASTM F594, Alloy Group 2, Default Condition CW | Stainless Steel | —     |
| CR9 | ASTM F594, Alloy Group 2, Condition AF         | Stainless Steel | —     |
| CS0 | ASTM F594, Alloy Group 2, Condition A          | Stainless Steel | —     |
| CS1 | ASTM F594, Alloy Group 2, Condition SH         | Stainless Steel | —     |
| CS2 | ASTM F594, Alloy Group 3, Default Condition CW | Stainless Steel | —     |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F594 – Stainless Steel Nuts (Cont'd)**

| <b>PIN</b> | <b>Material Spec</b>                               | <b>Material</b> | <b>UNS #</b> |
|------------|----------------------------------------------------|-----------------|--------------|
| CS3        | ASTM F594, Alloy Group 3, Condition AF             | Stainless Steel | —            |
| CS4        | ASTM F594, Alloy Group 3, Condition A              | Stainless Steel | —            |
| CS5        | ASTM F594, Alloy Group 3, Condition SH             | Stainless Steel | —            |
| CS6        | ASTM F594, Alloy Group 4, Default Condition CW     | Stainless Steel | S43000       |
| CS7        | ASTM F594, Alloy Group 4, Condition A              | Stainless Steel | S43000       |
| CS8        | ASTM F594, Alloy Group 5, Default Condition H      | Stainless Steel | S41000       |
| CS9        | ASTM F594, Alloy Group 5, Condition HT             | Stainless Steel | S41000       |
| CT0        | ASTM F594, Alloy Group 6, Default Condition H      | Stainless Steel | S43100       |
| CT1        | ASTM F594, Alloy Group 6, Condition HT             | Stainless Steel | S43100       |
| CT2        | ASTM F594, Alloy Group 7, Default Condition AH     | Stainless Steel | S17400       |
| CT3        | ASTM F594, Alloy Group 7, Condition NONE           | Stainless Steel | S17400       |
| CT4        | ASTM F594, Alloy 303 only, Default Condition CW    | Stainless Steel | S30300       |
| CT5        | ASTM F594, Alloy 303 only, Condition AF            | Stainless Steel | S30300       |
| CT6        | ASTM F594, Alloy 303 only, Condition A             | Stainless Steel | S30300       |
| CT7        | ASTM F594, Alloy 303 only, Condition SH            | Stainless Steel | S30300       |
| CT8        | ASTM F594, Alloy 303 Se only, Default Condition CW | Stainless Steel | S30323       |
| CT9        | ASTM F594, Alloy 303 Se only, Condition AF         | Stainless Steel | S30323       |
| CU0        | ASTM F594, Alloy 303 Se only, Condition A          | Stainless Steel | S30323       |
| CU1        | ASTM F594, Alloy 303 Se only, Condition SH         | Stainless Steel | S30323       |
| CU2        | ASTM F594, Alloy 304 only, Default Condition CW    | Stainless Steel | S30400       |
| CU3        | ASTM F594, Alloy 304 only, Condition AF            | Stainless Steel | S30400       |
| CU4        | ASTM F594, Alloy 304 only, Condition A             | Stainless Steel | S30400       |
| CU5        | ASTM F594, Alloy 304 only, Condition SH            | Stainless Steel | S30400       |
| CU6        | ASTM F594, Alloy 304L only, Default Condition CW   | Stainless Steel | S30403       |
| CU7        | ASTM F594, Alloy 384 L only, Condition AF          | Stainless Steel | S30403       |
| CU8        | ASTM F594, Alloy 384 L only, Condition A           | Stainless Steel | S30403       |
| CU9        | ASTM F594, Alloy 384 L only, Condition SH          | Stainless Steel | S30403       |
| CV0        | ASTM F594, Alloy 305 only, Default Condition CW    | Stainless Steel | S30500       |
| CV1        | ASTM F594, Alloy 305 only, Condition AF            | Stainless Steel | S30500       |
| CV2        | ASTM F594, Alloy 305 only, Condition A             | Stainless Steel | S30500       |
| CV3        | ASTM F594, Alloy 305 only, Condition SH            | Stainless Steel | S30500       |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F594 – Stainless Steel Nuts (Cont'd)**

| <b>PIN</b> | <b>Material Spec</b>                                    | <b>Material</b> | <b>UNS #</b> |
|------------|---------------------------------------------------------|-----------------|--------------|
| CV4        | ASTM F594, Alloy 384 only, Default Condition CW         | Stainless Steel | S38400       |
| CV5        | ASTM F594, Alloy 384 only, Condition AF                 | Stainless Steel | S38400       |
| CV6        | ASTM F594, Alloy 384 only, Condition A                  | Stainless Steel | S38400       |
| CV7        | ASTM F594, Alloy 384 only, Condition SH                 | Stainless Steel | S38400       |
| CV8        | ASTM F594, Alloy XM1 only, Default Condition CW         | Stainless Steel | S20300       |
| CV9        | ASTM F594, Alloy XM1 only, Condition AF                 | Stainless Steel | S20300       |
| CW0        | ASTM F594, Alloy XM1 only, Condition A                  | Stainless Steel | S20300       |
| CW1        | ASTM F594, Alloy XM1 only, Condition SH                 | Stainless Steel | S20300       |
| CW2        | ASTM F594, Alloy 18-9LW only, Default Condition CW      | Stainless Steel | S30430       |
| CW3        | ASTM F594, Alloy 18-9LW only, Condition AF              | Stainless Steel | S30430       |
| CW4        | ASTM F594, Alloy 18-9LW only, Condition A               | Stainless Steel | S30430       |
| CW5        | ASTM F594, Alloy 18-9LW only, Condition SH              | Stainless Steel | S30430       |
| CW6        | ASTM F594, Alloy 302HQ (XM7) only, Default Condition CW | Stainless Steel | S30433       |
| CW7        | ASTM F594, Alloy 302HQ (XM7) only, Condition AF         | Stainless Steel | S30433       |
| CW8        | ASTM F594, Alloy 302HQ (XM7) only, Condition A          | Stainless Steel | S30433       |
| CW9        | ASTM F594, Alloy 302HQ (XM7) only, Condition SH         | Stainless Steel | S30433       |
| CX0        | ASTM F594, Alloy 316 only, Default Condition CW         | Stainless Steel | S31600       |
| CX1        | ASTM F594, Alloy 316 only, Condition AF                 | Stainless Steel | S31600       |
| CX2        | ASTM F594, Alloy 316 only, Condition A                  | Stainless Steel | S31600       |
| CX3        | ASTM F594, Alloy 316 only, Condition SH                 | Stainless Steel | S31600       |
| CX4        | ASTM F594, Alloy 316L only, Default Condition CW        | Stainless Steel | S31603       |
| CX5        | ASTM F594, Alloy 316L only, Condition AF                | Stainless Steel | S31603       |
| CX6        | ASTM F594, Alloy 316L only, Condition A                 | Stainless Steel | S31603       |
| CX7        | ASTM F594, Alloy 316L only, Condition SH                | Stainless Steel | S31603       |
| CX8        | ASTM F594, Alloy 321 only, Default Condition CW         | Stainless Steel | S32100       |
| CX9        | ASTM F594, Alloy 321 only, Condition AF                 | Stainless Steel | S32100       |
| CY0        | ASTM F594, Alloy 321 only, Condition A                  | Stainless Steel | S32100       |
| CY1        | ASTM F594, Alloy 321 only, Condition SH                 | Stainless Steel | S32100       |
| CY2        | ASTM F594, Alloy 347 only, Default Condition CW         | Stainless Steel | S34700       |
| CY3        | ASTM F594, Alloy 347 only, Condition AF                 | Stainless Steel | S34700       |
| CY4        | ASTM F594, Alloy 347 only, Condition A                  | Stainless Steel | S34700       |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F594 – Stainless Steel Nuts (Cont'd)**

| PIN | Material Spec                                     | Material        | UNS #  |
|-----|---------------------------------------------------|-----------------|--------|
| CY5 | ASTM F594, Alloy 347 only, Condition SH           | Stainless Steel | S34700 |
| CY6 | ASTM F594, Alloy 430 only, Default Condition CW   | Stainless Steel | S43000 |
| CY7 | ASTM F594, Alloy 430 only, Condition A            | Stainless Steel | S43000 |
| CY8 | ASTM F594, Alloy 430F only, Default Condition CW  | Stainless Steel | S43020 |
| CY9 | ASTM F594, Alloy 430F only, Condition A           | Stainless Steel | S43020 |
| CZ0 | ASTM F594, Alloy 410 only, Default Condition H    | Stainless Steel | S41000 |
| CZ1 | ASTM F594, Alloy 410 only, Condition HT           | Stainless Steel | S41000 |
| CZ2 | ASTM F594, Alloy 416 only, Default Condition H    | Stainless Steel | S41600 |
| CZ3 | ASTM F594, Alloy 416 only, Condition HT           | Stainless Steel | S41600 |
| CZ4 | ASTM F594, Alloy 416 Se only, Default Condition H | Stainless Steel | S41623 |
| CZ5 | ASTM F594, Alloy 416 Se only, Condition HT        | Stainless Steel | S41623 |

**ASTM F738M – Stainless Steel Metric Bolts, Screws, and Studs (Metric)**

| PIN | Material Spec                          | Material        | UNS #  |
|-----|----------------------------------------|-----------------|--------|
| CZ6 | ASTM F738M, Class A1-50, Condition AF  | Stainless Steel | —      |
| CZ7 | ASTM F738M, Class A1-70, Condition CW  | Stainless Steel | —      |
| CZ8 | ASTM F738M, Class A1-80, Condition SH  | Stainless Steel | —      |
| CZ9 | ASTM F738M, Class A2-50, Condition AF  | Stainless Steel | —      |
| DA0 | ASTM F738M, Class A2-70, Condition CW  | Stainless Steel | —      |
| DA1 | ASTM F738M, Class A2-80, Condition SH  | Stainless Steel | —      |
| DA2 | ASTM F738M, Class A4-50, Condition AF  | Stainless Steel | —      |
| DA3 | ASTM F738M, Class A4-70, Condition CW  | Stainless Steel | —      |
| DA4 | ASTM F738M, Class A4-80, Condition SH  | Stainless Steel | —      |
| DA5 | ASTM F738M, Class F1-45, Condition AF  | Stainless Steel | S43000 |
| DA6 | ASTM F738M, Class F1-60, Condition CW  | Stainless Steel | S43000 |
| DA7 | ASTM F738M, Class C1-50, Condition A   | Stainless Steel | S41000 |
| DA8 | ASTM F738M, Class C1-70, Condition H   | Stainless Steel | S41000 |
| DA9 | ASTM F738M, Class C1-110, Condition HT | Stainless Steel | S41000 |
| DB0 | ASTM F738M, Class C3-80, Condition H   | Stainless Steel | S43100 |
| DB1 | ASTM F738M, Class C3-120, Condition HT | Stainless Steel | S43100 |
| DB2 | ASTM F738M, Class C4-50, Condition A   | Stainless Steel | —      |
| DB3 | ASTM F738M, Class C4-70, Condition H   | Stainless Steel | —      |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

GENERAL NOTE: Italic text denotes information that remains the same as in the previous version of the Standard, but has been moved within this document for consolidation or clarity.

NOTE:

(1) This designation is cancelled and is not to be used for new design.

**ASTM F738M – Stainless Steel Metric Bolts, Screws, and Studs (Metric) (Cont'd)**

| PIN | Material Spec                                                 | Material        | UNS #  |
|-----|---------------------------------------------------------------|-----------------|--------|
| DB4 | ASTM F738M, Class C4-110, Condition HT                        | Stainless Steel | —      |
| DB5 | ASTM F738M, Class P1-90, Condition AH                         | Stainless Steel | S17400 |
| DB6 | ASTM F738M, Class A1-50, Alloy 303 only, Condition AF         | Stainless Steel | S30300 |
| DB7 | ASTM F738M, Class A1-50, Alloy 303Se only, Condition AF       | Stainless Steel | S30323 |
| DB8 | ASTM F738M, Class A1-50, Alloy 304 only, Condition AF         | Stainless Steel | S30400 |
| DB9 | ASTM F738M, Class A1-50, Alloy 304L only, Condition AF        | Stainless Steel | S30403 |
| DC0 | ASTM F738M, Class A1-50, Alloy 305 only, Condition AF         | Stainless Steel | S30500 |
| DC1 | ASTM F738M, Class A1-50, Alloy 384 only, Condition AF         | Stainless Steel | S38400 |
| DC2 | ASTM F738M, Class A1-50, Alloy XM1 only, Condition AF         | Stainless Steel | S20300 |
| DC3 | ASTM F738M, Class A1-50, Alloy 18-9LW only, Condition AF      | Stainless Steel | S30430 |
| DC4 | ASTM F738M, Class A1-50, Alloy 302HQ (XM7) only, Condition AF | Stainless Steel | S30433 |
| DC5 | ASTM F738M, Class A1-70, Alloy 303 only, Condition CW         | Stainless Steel | S30300 |
| DC6 | ASTM F738M, Class A1-70, Alloy 303Se only, Condition CW       | Stainless Steel | S30323 |
| DC7 | ASTM F738M, Class A1-70, Alloy 304 only, Condition CW         | Stainless Steel | S30400 |
| DC8 | ASTM F738M, Class A1-70, Alloy 304L only, Condition CW        | Stainless Steel | S30403 |
| DC9 | ASTM F738M, Class A1-70, Alloy 305 only, Condition CW         | Stainless Steel | S30500 |
| DD0 | ASTM F738M, Class A1-70, Alloy 384 only, Condition CW         | Stainless Steel | S38400 |
| DD1 | ASTM F738M, Class A1-70, Alloy XM1 only, Condition CW         | Stainless Steel | S20300 |
| DD2 | ASTM F738M, Class A1-70, Alloy 18-9LW only, Condition CW      | Stainless Steel | S30430 |
| DD3 | ASTM F738M, Class A1-70, Alloy 302HQ (XM7) only, Condition CW | Stainless Steel | S30433 |
| DD4 | ASTM F738M, Class A1-80, Alloy 303 only, Condition SH         | Stainless Steel | S30300 |
| DD5 | ASTM F738M, Class A1-80, Alloy 303Se only, Condition SH       | Stainless Steel | S30323 |
| DD6 | ASTM F738M, Class A1-80, Alloy 304 only, Condition SH         | Stainless Steel | S30400 |
| DD7 | ASTM F738M, Class A1-80, Alloy 304L only, Condition SH        | Stainless Steel | S30403 |
| DD8 | ASTM F738M, Class A1-80, Alloy 305 only, Condition SH         | Stainless Steel | S30500 |
| DD9 | ASTM F738M, Class A1-80, Alloy 384 only, Condition SH         | Stainless Steel | S38400 |
| DE0 | ASTM F738M, Class A1-80, Alloy XM1 only, Condition SH         | Stainless Steel | S20300 |
| DE1 | ASTM F738M, Class A1-80, Alloy 18-9LW only, Condition SH      | Stainless Steel | S30430 |
| DE2 | ASTM F738M, Class A1-80, Alloy 302HQ (XM7) only, Condition SH | Stainless Steel | S30433 |
| DE3 | ASTM F738M, Class A2-50, Alloy 321 only, Condition AF         | Stainless Steel | S30400 |
| DE4 | ASTM F738M, Class A2-50, Alloy 347 only, Condition AF         | Stainless Steel | S30403 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F738M – Stainless Steel Metric Bolts, Screws, and Studs (Metric) (Cont'd)**

| PIN | Material Spec                                           | Material        | UNS #  |
|-----|---------------------------------------------------------|-----------------|--------|
| DE5 | ASTM F738M, Class A2-70, Alloy 321 only, Condition AF   | Stainless Steel | S30500 |
| DE6 | ASTM F738M, Class A2-70, Alloy 347 only, Condition AF   | Stainless Steel | S38400 |
| DE7 | ASTM F738M, Class A2-80, Alloy 321 only, Condition SH   | Stainless Steel | S20300 |
| DE8 | ASTM F738M, Class A2-80, Alloy 347 only, Condition SH   | Stainless Steel | S30430 |
| DE9 | ASTM F738M, Class A4-50, Alloy 316 only, Condition AF   | Stainless Steel | S31600 |
| DF0 | ASTM F738M, Class A4-50, Alloy 316L only, Condition AF  | Stainless Steel | S31603 |
| DF1 | ASTM F738M, Class A4-70, Alloy 316 only, Condition CW   | Stainless Steel | S31600 |
| DF2 | ASTM F738M, Class A4-70, Alloy 316L only, Condition CW  | Stainless Steel | S31603 |
| DF3 | ASTM F738M, Class A4-80, Alloy 316 only, Condition SH   | Stainless Steel | S31600 |
| DF4 | ASTM F738M, Class A4-80, Alloy 316L only, Condition SH  | Stainless Steel | S31603 |
| DF5 | ASTM F738M, Class F1-45, Alloy 430 only, Condition AF   | Stainless Steel | S43000 |
| DF6 | ASTM F738M, Class F1-45, Alloy 430F only, Condition AF  | Stainless Steel | S43020 |
| DF7 | ASTM F738M, Class F1-60, Alloy 430 only, Condition CW   | Stainless Steel | S43000 |
| DF8 | ASTM F738M, Class F1-60, Alloy 430F only, Condition CW  | Stainless Steel | S43020 |
| DF9 | ASTM F738M, Class C4-50, Alloy 416 only, Condition A    | Stainless Steel | S41600 |
| DG0 | ASTM F738M, Class C4-50, Alloy 416L only, Condition A   | Stainless Steel | S41623 |
| DG1 | ASTM F738M, Class C4-70, Alloy 416 only, Condition H    | Stainless Steel | S41600 |
| DG2 | ASTM F738M, Class C4-70, Alloy 416L only, Condition H   | Stainless Steel | S41623 |
| DG3 | ASTM F738M, Class C4-110, Alloy 416 only, Condition HT  | Stainless Steel | S41600 |
| DG4 | ASTM F738M, Class C4-110, Alloy 416L only, Condition HT | Stainless Steel | S41623 |

**ASTM F835 – Alloy Steel Socket Button and Flat Countersunk Head Cap Screws**

| PIN | Material Spec                                | Material    | UNS # |
|-----|----------------------------------------------|-------------|-------|
| DG5 | ASTM F835, Quenched and Tempered Alloy Steel | Alloy Steel | —     |

**ASTM F835M – Alloy Steel Socket Button and Flat Countersunk Head Cap Screws (Metric)**

| PIN | Material Spec                                 | Material    | UNS # |
|-----|-----------------------------------------------|-------------|-------|
| DG6 | ASTM F835M, Quenched and Tempered Alloy Steel | Alloy Steel | —     |

**ASTM F836M – Stainless Steel Metric Bolts, Screws, and Studs (Metric)**

| PIN | Material Spec                         | Material        | UNS # |
|-----|---------------------------------------|-----------------|-------|
| DG7 | ASTM F836M, Class A1-50, Condition A  | Stainless Steel | —     |
| DG8 | ASTM F836M, Class A1-50, Condition AF | Stainless Steel | —     |
| DG9 | ASTM F836M, Class A1-70, Condition CW | Stainless Steel | —     |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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(1) This designation is cancelled and is not to be used for new design.

**ASTM F836M – Stainless Steel Metric Bolts, Screws, and Studs (Metric) (Cont'd)**

| PIN | Material Spec                                           | Material        | UNS #  |
|-----|---------------------------------------------------------|-----------------|--------|
| DH0 | ASTM F836M, Class A1-80, Condition SH                   | Stainless Steel | —      |
| DH1 | ASTM F836M, Class A2-50, Condition A                    | Stainless Steel | —      |
| DH2 | ASTM F836M, Class A2-50, Condition AF                   | Stainless Steel | —      |
| DH3 | ASTM F836M, Class A2-70, Condition CW                   | Stainless Steel | —      |
| DH4 | ASTM F836M, Class A2-80, Condition SH                   | Stainless Steel | —      |
| DH5 | ASTM F836M, Class A4-50, Condition A                    | Stainless Steel | —      |
| DH6 | ASTM F836M, Class A4-50, Condition AF                   | Stainless Steel | —      |
| DH7 | ASTM F836M, Class A4-70, Condition CW                   | Stainless Steel | —      |
| DH8 | ASTM F836M, Class A4-80, Condition SH                   | Stainless Steel | —      |
| DH9 | ASTM F836M, Class F1-45, Condition A                    | Stainless Steel | —      |
| DJ0 | ASTM F836M, Class F1-45, Condition AF                   | Stainless Steel | —      |
| DJ1 | ASTM F836M, Class C1-70, Condition H                    | Stainless Steel | S41000 |
| DJ2 | ASTM F836M, Class C1-110, Condition HT                  | Stainless Steel | S41000 |
| DJ3 | ASTM F836M, Class C3-80, Condition H                    | Stainless Steel | S43100 |
| DJ4 | ASTM F836M, Class C3-120, Condition HT                  | Stainless Steel | S43100 |
| DJ5 | ASTM F836M, Class C4-70, Condition H                    | Stainless Steel | —      |
| DJ6 | ASTM F836M, Class C4-110, Condition HT                  | Stainless Steel | —      |
| DJ7 | ASTM F836M, Class P1-90, Condition AH                   | Stainless Steel | S17400 |
| DJ8 | ASTM F836M, Class A1-50, Alloy 303 only, Condition A    | Stainless Steel | S30300 |
| DJ9 | ASTM F836M, Class A1-50, Alloy 303 only, Condition AF   | Stainless Steel | S30300 |
| DK0 | ASTM F836M, Class A1-50, Alloy 303Se only, Condition A  | Stainless Steel | S30323 |
| DK1 | ASTM F836M, Class A1-50, Alloy 303Se only, Condition AF | Stainless Steel | S30323 |
| DK2 | ASTM F836M, Class A1-50, Alloy 304 only, Condition A    | Stainless Steel | S30400 |
| DK3 | ASTM F836M, Class A1-50, Alloy 304 only, Condition AF   | Stainless Steel | S30400 |
| DK4 | ASTM F836M, Class A1-50, Alloy 304L only, Condition A   | Stainless Steel | S30403 |
| DK5 | ASTM F836M, Class A1-50, Alloy 304L only, Condition AF  | Stainless Steel | S30403 |
| DK6 | ASTM F836M, Class A1-50, Alloy 305 only, Condition A    | Stainless Steel | S30500 |
| DK7 | ASTM F836M, Class A1-50, Alloy 305 only, Condition AF   | Stainless Steel | S30500 |
| DK8 | ASTM F836M, Class A1-50, Alloy 384 only, Condition A    | Stainless Steel | S38400 |
| DK9 | ASTM F836M, Class A1-50, Alloy 384 only, Condition AF   | Stainless Steel | S38400 |
| DL0 | ASTM F836M, Class A1-50, Alloy XM1 only, Condition A    | Stainless Steel | S20300 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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(1) This designation is cancelled and is not to be used for new design.

**ASTM F836M – Stainless Steel Metric Bolts, Screws, and Studs (Metric) (Cont'd)**

| <b>PIN</b> | <b>Material Spec</b>                                          | <b>Material</b> | <b>UNS #</b> |
|------------|---------------------------------------------------------------|-----------------|--------------|
| DL1        | ASTM F836M, Class A1-50, Alloy XM1 only, Condition AF         | Stainless Steel | S20300       |
| DL2        | ASTM F836M, Class A1-50, Alloy 302HQ (XM7) only, Condition A  | Stainless Steel | S30433       |
| DL3        | ASTM F836M, Class A1-50, Alloy 302HQ (XM7) only, Condition AF | Stainless Steel | S30433       |
| DL4        | ASTM F836M, Class A1-50, Alloy 18-9LW only, Condition A       | Stainless Steel | S30430       |
| DL5        | ASTM F836M, Class A1-50, Alloy 18-9LW only, Condition AF      | Stainless Steel | S30430       |
| DL6        | ASTM F836M, Class A1-70, Alloy 303 only, Condition CW         | Stainless Steel | S30300       |
| DL7        | ASTM F836M, Class A1-70, Alloy 303Se only, Condition CW       | Stainless Steel | S30323       |
| DL8        | ASTM F836M, Class A1-70, Alloy 304 only, Condition CW         | Stainless Steel | S30400       |
| DL9        | ASTM F836M, Class A1-70, Alloy 304L only, Condition CW        | Stainless Steel | S30403       |
| DM0        | ASTM F836M, Class A1-70, Alloy 305 only, Condition CW         | Stainless Steel | S30500       |
| DM1        | ASTM F836M, Class A1-70, Alloy 384 only, Condition CW         | Stainless Steel | S38400       |
| DM2        | ASTM F836M, Class A1-70, Alloy XM1 only, Condition CW         | Stainless Steel | S20300       |
| DM3        | ASTM F836M, Class A1-70, Alloy 18-9LW only, Condition CW      | Stainless Steel | S30430       |
| DM4        | ASTM F836M, Class A1-70, Alloy 302HQ (XM7) only, Condition CW | Stainless Steel | S30433       |
| DM5        | ASTM F836M, Class A1-80, Alloy 303 only, Condition SH         | Stainless Steel | S30300       |
| DM6        | ASTM F836M, Class A1-80, Alloy 303Se only, Condition SH       | Stainless Steel | S30323       |
| DM7        | ASTM F836M, Class A1-80, Alloy 304 only, Condition SH         | Stainless Steel | S30400       |
| DM8        | ASTM F836M, Class A1-80, Alloy 304L only, Condition SH        | Stainless Steel | S30403       |
| DM9        | ASTM F836M, Class A1-80, Alloy 305 only, Condition SH         | Stainless Steel | S30500       |
| DN0        | ASTM F836M, Class A1-80, Alloy 384 only, Condition SH         | Stainless Steel | S38400       |
| DN1        | ASTM F836M, Class A1-80, Alloy XM1 only, Condition SH         | Stainless Steel | S20300       |
| DN2        | ASTM F836M, Class A1-80, Alloy 302HQ (XM7) only, Condition SH | Stainless Steel | S30433       |
| DN3        | ASTM F836M, Class A1-80, Alloy 18-9LW only, Condition SH      | Stainless Steel | S30430       |
| DN4        | ASTM F836M, Class A4-50, Alloy 316 only, Condition A          | Stainless Steel | S31600       |
| DN5        | ASTM F836M, Class A4-50, Alloy 316 only, Condition AF         | Stainless Steel | S31600       |
| DN6        | ASTM F836M, Class A4-50, Alloy 316L only, Condition A         | Stainless Steel | S31603       |
| DN7        | ASTM F836M, Class A4-50, Alloy 316L only, Condition AF        | Stainless Steel | S31603       |
| DN8        | ASTM F836M, Class A4-70, Alloy 316 only, Condition CW         | Stainless Steel | S31600       |
| DN9        | ASTM F836M, Class A4-70, Alloy 316L only, Condition CW        | Stainless Steel | S31603       |
| DP0        | ASTM F836M, Class A4-80, Alloy 316 only, Condition SH         | Stainless Steel | S31600       |
| DP1        | ASTM F836M, Class A4-80, Alloy 316L only, Condition SH        | Stainless Steel | S31603       |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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(1) This designation is cancelled and is not to be used for new design.

**ASTM F836M – Stainless Steel Metric Bolts, Screws, and Studs (Metric) (Cont'd)**

| PIN | Material Spec                                           | Material        | UNS #  |
|-----|---------------------------------------------------------|-----------------|--------|
| DP2 | ASTM F836M, Class A2-50, Alloy 321 only, Condition A    | Stainless Steel | S30400 |
| DP3 | ASTM F836M, Class A2-50, Alloy 321 only, Condition AF   | Stainless Steel | S30400 |
| DP4 | ASTM F836M, Class A2-50, Alloy 347 only, Condition A    | Stainless Steel | S30403 |
| DP5 | ASTM F836M, Class A2-50, Alloy 347 only, Condition AF   | Stainless Steel | S30403 |
| DP6 | ASTM F836M, Class A2-70, Alloy 321 only, Condition CW   | Stainless Steel | S30500 |
| DP7 | ASTM F836M, Class A2-70, Alloy 347 only, Condition CW   | Stainless Steel | S38400 |
| DP8 | ASTM F836M, Class A2-80, Alloy 321 only, Condition SH   | Stainless Steel | S20300 |
| DP9 | ASTM F836M, Class A2-80, Alloy 347 only, Condition SH   | Stainless Steel | S30430 |
| DQ0 | ASTM F836M, Class F1-45, Alloy 430 only, Condition A    | Stainless Steel | S43000 |
| DQ1 | ASTM F836M, Class F1-45, Alloy 430 only, Condition AF   | Stainless Steel | S43000 |
| DQ2 | ASTM F836M, Class F1-45, Alloy 430F only, Condition A   | Stainless Steel | S43020 |
| DQ3 | ASTM F836M, Class F1-45, Alloy 430F only, Condition AF  | Stainless Steel | S43020 |
| DQ4 | ASTM F836M, Class C4-70, Alloy 416 only, Condition A    | Stainless Steel | S41600 |
| DQ5 | ASTM F836M, Class C4-70, Alloy 416 only, Condition H    | Stainless Steel | S41600 |
| DQ6 | ASTM F836M, Class C4-70, Alloy 416L only, Condition A   | Stainless Steel | S41623 |
| DQ7 | ASTM F836M, Class C4-70, Alloy 416L only, Condition H   | Stainless Steel | S41623 |
| DQ8 | ASTM F836M, Class C4-110, Alloy 416 only, Condition HT  | Stainless Steel | S41600 |
| DQ9 | ASTM F836M, Class C4-110, Alloy 416L only, Condition HT | Stainless Steel | S41623 |

**ASTM F837 – Stainless Steel Socket Head Cap Screws**

| PIN | Material Spec                                                         | Material        | UNS #  |
|-----|-----------------------------------------------------------------------|-----------------|--------|
| DR0 | ASTM F837, Alloy Group 1 AF                                           | Stainless Steel | —      |
| DR1 | ASTM F837, Alloy Group 1 AF, apply Supplementary Reqt. S7             | Stainless Steel | —      |
| DR2 | ASTM F837, Alloy Group 1 CW                                           | Stainless Steel | —      |
| DR3 | ASTM F837, Alloy Group 1 CW, apply Supplementary Reqt. S7             | Stainless Steel | —      |
| DR4 | ASTM F837, Alloy Group 1 CW1                                          | Stainless Steel | —      |
| DR5 | ASTM F837, Alloy Group 1 CW1, apply Supplementary Reqt. S7            | Stainless Steel | —      |
| DR6 | ASTM F837, Alloy Group 5 HT                                           | Stainless Steel | S41000 |
| DR7 | ASTM F837, Alloy Group 5 HT, apply Supplementary Reqt. S7             | Stainless Steel | S41000 |
| DR8 | ASTM F837, Alloy 303 only, Condition AF                               | Stainless Steel | S30300 |
| DR9 | ASTM F837, Alloy 303 only, Condition AF, apply Supplementary Reqt. S7 | Stainless Steel | S30300 |
| DS0 | ASTM F837, Alloy 303 only, Condition CW                               | Stainless Steel | S30300 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F837 – Stainless Steel Socket Head Cap Screws (Cont'd)**

| <b>PIN</b> | <b>Material Spec</b>                                                    | <b>Material</b> | <b>UNS #</b> |
|------------|-------------------------------------------------------------------------|-----------------|--------------|
| DS1        | ASTM F837, Alloy 303 only, Condition CW, apply Supplementary Reqt. S7   | Stainless Steel | S30300       |
| DS2        | ASTM F837, Alloy 303 only, Condition CW1                                | Stainless Steel | S30300       |
| DS3        | ASTM F837, Alloy 303 only, Condition CW1, apply Supplementary Reqt. S7  | Stainless Steel | S30300       |
| DS4        | ASTM F837, Alloy 304 only, Condition AF                                 | Stainless Steel | S30400       |
| DS5        | ASTM F837, Alloy 304 only, Condition AF, apply Supplementary Reqt. S7   | Stainless Steel | S30400       |
| DS6        | ASTM F837, Alloy 304 only, Condition CW                                 | Stainless Steel | S30400       |
| DS7        | ASTM F837, Alloy 304 only, Condition CW, apply Supplementary Reqt. S7   | Stainless Steel | S30400       |
| DS8        | ASTM F837, Alloy 304 only, Condition CW1                                | Stainless Steel | S30400       |
| DS9        | ASTM F837, Alloy 304 only, Condition CW1, apply Supplementary Reqt. S7  | Stainless Steel | S30400       |
| DT0        | ASTM F837, Alloy 304L only, Condition AF                                | Stainless Steel | S30403       |
| DT1        | ASTM F837, Alloy 304L only, Condition AF, apply Supplementary Reqt. S7  | Stainless Steel | S30403       |
| DT2        | ASTM F837, Alloy 304L only, Condition CW                                | Stainless Steel | S30403       |
| DT3        | ASTM F837, Alloy 304L only, Condition CW, apply Supplementary Reqt. S7  | Stainless Steel | S30403       |
| DT4        | ASTM F837, Alloy 304L only, Condition CW1                               | Stainless Steel | S30403       |
| DT5        | ASTM F837, Alloy 304L only, Condition CW1, apply Supplementary Reqt. S7 | Stainless Steel | S30403       |
| DT6        | ASTM F837, Alloy 305 only, Condition AF                                 | Stainless Steel | S30500       |
| DT7        | ASTM F837, Alloy 305 only, Condition AF, apply Supplementary Reqt. S7   | Stainless Steel | S30500       |
| DT8        | ASTM F837, Alloy 305 only, Condition CW                                 | Stainless Steel | S30500       |
| DT9        | ASTM F837, Alloy 305 only, Condition CW, apply Supplementary Reqt. S7   | Stainless Steel | S30500       |
| DU0        | ASTM F837, Alloy 305 only, Condition CW1                                | Stainless Steel | S30500       |
| DU1        | ASTM F837, Alloy 305 only, Condition CW1, apply Supplementary Reqt. S7  | Stainless Steel | S30500       |
| DU2        | ASTM F837, Alloy 384 only, Condition AF                                 | Stainless Steel | S38400       |
| DU3        | ASTM F837, Alloy 384 only, Condition AF, apply Supplementary Reqt. S7   | Stainless Steel | S38400       |
| DU4        | ASTM F837, Alloy 384 only, Condition CW                                 | Stainless Steel | S38400       |
| DU5        | ASTM F837, Alloy 384 only, Condition CW, apply Supplementary Reqt. S7   | Stainless Steel | S38400       |
| DU6        | ASTM F837, Alloy 384 only, Condition CW1                                | Stainless Steel | S38400       |
| DU7        | ASTM F837, Alloy 384 only, Condition CW1, apply Supplementary Reqt. S7  | Stainless Steel | S38400       |
| DU8        | ASTM F837, Alloy XM1 only, Condition AF                                 | Stainless Steel | S20300       |
| DU9        | ASTM F837, Alloy XM1 only, Condition AF, apply Supplementary Reqt. S7   | Stainless Steel | S20300       |
| DV0        | ASTM F837, Alloy XM1 only, Condition CW                                 | Stainless Steel | S20300       |
| DV1        | ASTM F837, Alloy XM1 only, Condition CW, apply Supplementary Reqt. S7   | Stainless Steel | S20300       |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F837 – Stainless Steel Socket Head Cap Screws (Cont'd)**

| PIN | Material Spec                                                                   | Material        | UNS #  |
|-----|---------------------------------------------------------------------------------|-----------------|--------|
| DV2 | ASTM F837, Alloy XM1 only, Condition CW1                                        | Stainless Steel | S20300 |
| DV3 | ASTM F837, Alloy XM1 only, Condition CW1, apply Supplementary Reqt. S7          | Stainless Steel | S20300 |
| DV4 | ASTM F837, Alloy 18-9LW only, Condition AF                                      | Stainless Steel | S30430 |
| DV5 | ASTM F837, Alloy 18-9LW only, Condition AF, apply Supplementary Reqt S7         | Stainless Steel | S30430 |
| DV6 | ASTM F837, Alloy 18-9LW only, Condition CW                                      | Stainless Steel | S30430 |
| DV7 | ASTM F837, Alloy 18-9LW only, Condition CW, apply Supplementary Reqt. S7        | Stainless Steel | S30430 |
| DV8 | ASTM F837, Alloy 18-9LW only, Condition CW1                                     | Stainless Steel | S30430 |
| DV9 | ASTM F837, Alloy 18-9LW only, Condition CW1, apply Supplementary Reqt. S7       | Stainless Steel | S30430 |
| DW0 | ASTM F837, Alloy 302HQ (XM7) only, Condition AF                                 | Stainless Steel | S30433 |
| DW1 | ASTM F837, Alloy 302HQ (XM7) only, Condition AF, apply Supplementary Reqt. S7   | Stainless Steel | S30433 |
| DW2 | ASTM F837, Alloy 302HQ (XM7) only, Condition ACW                                | Stainless Steel | S30433 |
| DW3 | ASTM F837, Alloy 302HQ (XM7) only, Condition ACW, apply Supplementary Reqt. S7  | Stainless Steel | S30434 |
| DW4 | ASTM F837, Alloy 302HQ (XM7) only, Condition ACW1                               | Stainless Steel | S30435 |
| DW5 | ASTM F837, Alloy 302HQ (XM7) only, Condition ACW1, apply Supplementary Reqt. S7 | Stainless Steel | S30436 |
| DW6 | ASTM F837, Alloy 316 only, Condition AF                                         | Stainless Steel | S31600 |
| DW7 | ASTM F837, Alloy 316 only, Condition AF, apply Supplementary Reqt. S7           | Stainless Steel | S31600 |
| DW8 | ASTM F837, Alloy 316 only, Condition CW                                         | Stainless Steel | S31600 |
| DW9 | ASTM F837, Alloy 316 only, Condition CW, apply Supplementary Reqt. S7           | Stainless Steel | S31600 |
| DX0 | ASTM F837, Alloy 316 only, Condition CW1                                        | Stainless Steel | S31600 |
| DX1 | ASTM F837, Alloy 316 only, Condition CW1, apply Supplementary Reqt. S7          | Stainless Steel | S31600 |
| DX2 | ASTM F837, Alloy 316L only, Condition AF                                        | Stainless Steel | S31603 |
| DX3 | ASTM F837, Alloy 316L only, Condition AF, apply Supplementary Reqt. S7          | Stainless Steel | S31603 |
| DX4 | ASTM F837, Alloy 316L only, Condition CW                                        | Stainless Steel | S31603 |
| DX5 | ASTM F837, Alloy 316L only, Condition CW, apply Supplementary Reqt. S7          | Stainless Steel | S31603 |
| DX6 | ASTM F837, Alloy 316L only, Condition CW1                                       | Stainless Steel | S31603 |
| DX7 | ASTM F837, Alloy 316L only, Condition CW1, apply Supplementary Reqt. S7         | Stainless Steel | S31603 |

**ASTM F837M – Stainless Steel Socket Head Cap Screws (Metric)**

| PIN | Material Spec                                     | Material        | UNS #  |
|-----|---------------------------------------------------|-----------------|--------|
| DX8 | ASTM F837M, Class A1-50, Annealed                 | Stainless Steel | —      |
| DX9 | ASTM F837M, Class A1-70, Cold Worked              | Stainless Steel | —      |
| DY0 | ASTM F837M, Class C1-110                          | Stainless Steel | S41000 |
| DY1 | ASTM F837M, Class A1-50, Alloy 303 only, Annealed | Stainless Steel | S30300 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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(1) This designation is cancelled and is not to be used for new design.

**ASTM F837M – Stainless Steel Socket Head Cap Screws (Metric) (Cont'd)**

| PIN | Material Spec                                                | Material        | UNS #  |
|-----|--------------------------------------------------------------|-----------------|--------|
| DY2 | ASTM F837M, Class A1-50, Alloy 304 only, Annealed            | Stainless Steel | S30400 |
| DY3 | ASTM F837M, Class A1-50, Alloy 304L only, Annealed           | Stainless Steel | S30403 |
| DY4 | ASTM F837M, Class A1-50, Alloy 305 only, Annealed            | Stainless Steel | S30500 |
| DY5 | ASTM F837M, Class A1-50, Alloy 384 only, Annealed            | Stainless Steel | S38400 |
| DY6 | ASTM F837M, Class A1-50, Alloy XM1 only, Annealed            | Stainless Steel | S20300 |
| DY7 | ASTM F837M, Class A1-50, Alloy 18-9LW only, Annealed         | Stainless Steel | S30430 |
| DY8 | ASTM F837M, Class A1-50, Alloy 302HQ (XM7) only, Annealed    | Stainless Steel | S30433 |
| DY9 | ASTM F837M, Class A1-50, Alloy 316 only, Annealed            | Stainless Steel | S31600 |
| DZ0 | ASTM F837M, Class A1-50, Alloy 316L only, Annealed           | Stainless Steel | S31603 |
| DZ1 | ASTM F837M, Class A1-70, Alloy 303 only, Cold Worked         | Stainless Steel | S30300 |
| DZ2 | ASTM F837M, Class A1-70, Alloy 304 only, Cold Worked         | Stainless Steel | S30400 |
| DZ3 | ASTM F837M, Class A1-70, Alloy 304L only, Cold Worked        | Stainless Steel | S30403 |
| DZ4 | ASTM F837M, Class A1-70, Alloy 305 only, Cold Worked         | Stainless Steel | S30500 |
| DZ5 | ASTM F837M, Class A1-70, Alloy 384 only, Cold Worked         | Stainless Steel | S38400 |
| DZ6 | ASTM F837M, Class A1-70, Alloy XM1 only, Cold Worked         | Stainless Steel | S20300 |
| DZ7 | ASTM F837M, Class A1-70, Alloy 18-9LW only, Cold Worked      | Stainless Steel | S30430 |
| DZ8 | ASTM F837M, Class A1-70, Alloy 302HQ (XM7) only, Cold Worked | Stainless Steel | S30433 |
| DZ9 | ASTM F837M, Class A1-70, Alloy 316 only, Cold Worked         | Stainless Steel | S31600 |
| DA0 | ASTM F837M, Class A1-70, Alloy 316L only, Cold Worked        | Stainless Steel | S31603 |

**ASTM F844 – Washers, Steel, Plain (Flat), Unhardened for General Use**

| PIN | Material Spec                                                                        | Material     | UNS # |
|-----|--------------------------------------------------------------------------------------|--------------|-------|
| EA1 | ASTM F844, Carbon Steel, UNS G10050, -060, -080, -090, 10100, -110, -120, -130, -150 | Carbon Steel | —     |

**ASTM F879 – Stainless Steel Socket Button and Flat Countersunk Head Cap Screws**

| PIN | Material Spec                            | Material        | UNS #  |
|-----|------------------------------------------|-----------------|--------|
| EA2 | ASTM F879, Alloy Group 1, Condition AF   | Stainless Steel | —      |
| EA3 | ASTM F879, Alloy Group 1, Condition CW   | Stainless Steel | —      |
| EA4 | ASTM F879, Alloy 304 only, Condition AF  | Stainless Steel | S30400 |
| EA5 | ASTM F879, Alloy 304 only, Condition CW  | Stainless Steel | S30400 |
| EA6 | ASTM F879, Alloy 304L only, Condition AF | Stainless Steel | S30403 |
| EA7 | ASTM F879, Alloy 304L only, Condition CW | Stainless Steel | S30403 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F879 – Stainless Steel Socket Button and Flat Countersunk Head Cap Screws (Cont'd)**

| PIN | Material Spec                                   | Material        | UNS #  |
|-----|-------------------------------------------------|-----------------|--------|
| EA8 | ASTM F879, Alloy 305 only, Condition AF         | Stainless Steel | S30500 |
| EA9 | ASTM F879, Alloy 305 only, Condition CW         | Stainless Steel | S30500 |
| EB0 | ASTM F879, Alloy 384 only, Condition AF         | Stainless Steel | S38400 |
| EB1 | ASTM F879, Alloy 384 only, Condition CW         | Stainless Steel | S38400 |
| EB2 | ASTM F879, Alloy 18-9LW only, Condition AF      | Stainless Steel | S30430 |
| EB3 | ASTM F879, Alloy 18-9LW only, Condition CW      | Stainless Steel | S30430 |
| EB4 | ASTM F879, Alloy 302HQ (XM7) only, Condition AF | Stainless Steel | S30433 |
| EB5 | ASTM F879, Alloy 302HQ (XM7) only, Condition CW | Stainless Steel | S30433 |
| EB6 | ASTM F879, Alloy 316 only, Condition AF         | Stainless Steel | S31600 |
| EB7 | ASTM F879, Alloy 316 only, Condition CW         | Stainless Steel | S31600 |
| EB8 | ASTM F879, Alloy 316L only, Condition AF        | Stainless Steel | S31603 |
| EB9 | ASTM F879, Alloy 316L only, Condition CW        | Stainless Steel | S31603 |

**ASTM F879M – Stainless Steel Socket Button and Flat Countersunk Head Cap Screws (Metric)**

| PIN | Material Spec                                                | Material        | UNS #  |
|-----|--------------------------------------------------------------|-----------------|--------|
| EC0 | ASTM F879M, Class A1-50, Annealed                            | Stainless Steel | —      |
| EC1 | ASTM F879M, Class A1-70, Cold Worked                         | Stainless Steel | —      |
| EC2 | ASTM F879M, Class A1-50, Alloy 304 only, Annealed            | Stainless Steel | S30400 |
| EC3 | ASTM F879M, Class A1-50, Alloy 304L only, Annealed           | Stainless Steel | S30403 |
| EC4 | ASTM F879M, Class A1-50, Alloy 305 only, Annealed            | Stainless Steel | S30500 |
| EC5 | ASTM F879M, Class A1-50, Alloy 384 only, Annealed            | Stainless Steel | S38400 |
| EC6 | ASTM F879M, Class A1-50, Alloy 18-9LW only, Annealed         | Stainless Steel | S30430 |
| EC7 | ASTM F879M, Class A1-50, Alloy 302HQ (XM7) only, Annealed    | Stainless Steel | S30433 |
| EC8 | ASTM F879M, Class A1-50, Alloy 316 only, Annealed            | Stainless Steel | S31600 |
| EC9 | ASTM F879M, Class A1-50, Alloy 316L only, Annealed           | Stainless Steel | S31603 |
| ED0 | ASTM F879M, Class A1-70, Alloy 304 only, Cold Worked         | Stainless Steel | S30400 |
| ED1 | ASTM F879M, Class A1-70, Alloy 304L only, Cold Worked        | Stainless Steel | S30403 |
| ED2 | ASTM F879M, Class A1-70, Alloy 305 only, Cold Worked         | Stainless Steel | S30500 |
| ED3 | ASTM F879M, Class A1-70, Alloy 384 only, Cold Worked         | Stainless Steel | S38400 |
| ED4 | ASTM F879M, Class A1-70, Alloy 18-9LW only, Cold Worked      | Stainless Steel | S30430 |
| ED5 | ASTM F879M, Class A1-70, Alloy 302HQ (XM7) only, Cold Worked | Stainless Steel | S30433 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F879M – Stainless Steel Socket Button and Flat Countersunk Head Cap Screws (Metric) (Cont'd)**

| PIN | Material Spec                                         | Material        | UNS #  |
|-----|-------------------------------------------------------|-----------------|--------|
| ED6 | ASTM F879M, Class A1-70, Alloy 316 only, Cold Worked  | Stainless Steel | S31600 |
| ED7 | ASTM F879M, Class A1-70, Alloy 316L only, Cold Worked | Stainless Steel | S31603 |

**ASTM F880 – Stainless Steel Socket-Set Screws**

| PIN | Material Spec                                   | Material        | UNS #  |
|-----|-------------------------------------------------|-----------------|--------|
| ED8 | ASTM F880, Alloy Group 1, Condition AF          | Stainless Steel | —      |
| ED9 | ASTM F880, Alloy Group 1, Condition CW          | Stainless Steel | —      |
| EE0 | ASTM F880, Alloy 303 only, Condition AF         | Stainless Steel | S30300 |
| EE1 | ASTM F880, Alloy 303 only, Condition CW         | Stainless Steel | S30300 |
| EE2 | ASTM F880, Alloy 303Se only, Condition AF       | Stainless Steel | S30323 |
| EE3 | ASTM F880, Alloy 303Se only, Condition CW       | Stainless Steel | S30323 |
| EE4 | ASTM F880, Alloy 304 only, Condition AF         | Stainless Steel | S30400 |
| EE5 | ASTM F880, Alloy 304 only, Condition CW         | Stainless Steel | S30400 |
| EE6 | ASTM F880, Alloy 304L only, Condition AF        | Stainless Steel | S30403 |
| EE7 | ASTM F880, Alloy 304L only, Condition CW        | Stainless Steel | S30403 |
| EE8 | ASTM F880, Alloy 305 only, Condition AF         | Stainless Steel | S30500 |
| EE9 | ASTM F880, Alloy 305 only, Condition CW         | Stainless Steel | S30500 |
| EF0 | ASTM F880, Alloy 384 only, Condition AF         | Stainless Steel | S38400 |
| EF1 | ASTM F880, Alloy 384 only, Condition CW         | Stainless Steel | S38400 |
| EF2 | ASTM F880, Alloy XM1 only, Condition AF         | Stainless Steel | S20300 |
| EF3 | ASTM F880, Alloy XM1 only, Condition CW         | Stainless Steel | S20300 |
| EF4 | ASTM F880, Alloy 18-9LW only, Condition AF      | Stainless Steel | S30430 |
| EF5 | ASTM F880, Alloy 18-9LW only, Condition CW      | Stainless Steel | S30430 |
| EF6 | ASTM F880, Alloy 302HQ (XM7) only, Condition AF | Stainless Steel | S30433 |
| EF7 | ASTM F880, Alloy 302HQ (XM7) only, Condition CW | Stainless Steel | S30433 |

**ASTM F880M – Stainless Steel Socket-Set Screws (Metric)**

| PIN | Material Spec                                       | Material        | UNS #  |
|-----|-----------------------------------------------------|-----------------|--------|
| EF8 | ASTM F880M, Class A1-50                             | Stainless Steel | —      |
| EF9 | ASTM F880M, Class A1-70                             | Stainless Steel | —      |
| EG0 | ASTM F880M, Class A1-50, Alloy 303 only, Annealed   | Stainless Steel | S30300 |
| EG1 | ASTM F880M, Class A1-50, Alloy 303Se only, Annealed | Stainless Steel | S30323 |
| EG2 | ASTM F880M, Class A1-50, Alloy 304 only, Annealed   | Stainless Steel | S30400 |
| EG3 | ASTM F880M, Class A1-50, Alloy 304L only, Annealed  | Stainless Steel | S30403 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F880M – Stainless Steel Socket-Set Screws (Metric) (Cont'd)**

| PIN | Material Spec                                                | Material        | UNS #  |
|-----|--------------------------------------------------------------|-----------------|--------|
| EG4 | ASTM F880M, Class A1-50, Alloy 305 only, Annealed            | Stainless Steel | S30500 |
| EG5 | ASTM F880M, Class A1-50, Alloy 384 only, Annealed            | Stainless Steel | S38400 |
| EG6 | ASTM F880M, Class A1-50, Alloy XM1 only, Annealed            | Stainless Steel | S20300 |
| EG7 | ASTM F880M, Class A1-50, Alloy 18-9LW only, Annealed         | Stainless Steel | S30430 |
| EG8 | ASTM F880M, Class A1-50, Alloy 302HQ (XM7) only, Annealed    | Stainless Steel | S30430 |
| EG9 | ASTM F880M, Class A1-70, Alloy 303 only, Cold Worked         | Stainless Steel | S30300 |
| EH0 | ASTM F880M, Class A1-70, Alloy 303Se only, Cold Worked       | Stainless Steel | S30323 |
| EH1 | ASTM F880M, Class A1-70, Alloy 304 only, Cold Worked         | Stainless Steel | S30400 |
| EH2 | ASTM F880M, Class A1-70, Alloy 304L only, Cold Worked        | Stainless Steel | S30403 |
| EH3 | ASTM F880M, Class A1-70, Alloy 305 only, Cold Worked         | Stainless Steel | S30500 |
| EH4 | ASTM F880M, Class A1-70, Alloy 384 only, Cold Worked         | Stainless Steel | S38400 |
| EH5 | ASTM F880M, Class A1-70, Alloy XM1 only, Cold Worked         | Stainless Steel | S20300 |
| EH6 | ASTM F880M, Class A1-70, Alloy 18-9LW only, Cold Worked      | Stainless Steel | S30430 |
| EH7 | ASTM F880M, Class A1-70, Alloy 302HQ (XM7) only, Cold Worked | Stainless Steel | S30430 |

**ASTM F901 – Aluminum Transmission Tower Bolts and Nuts**

| PIN | Material Spec         | Material       | UNS # |
|-----|-----------------------|----------------|-------|
| EH8 | ASTM F901, Alloy 2024 | Aluminum Alloy | —     |
| EH9 | ASTM F901, Alloy 6061 | Aluminum Alloy | —     |
| EJ0 | ASTM F901, Alloy 6262 | Aluminum Alloy | —     |

**ASTM F912 – Alloy Steel Socket Set Screws**

| PIN | Material Spec | Material    | UNS # |
|-----|---------------|-------------|-------|
| EJ1 | ASTM F912     | Alloy Steel | —     |

**ASTM F912M – Alloy Steel Socket Set Screws (Metric)**

| PIN | Material Spec | Material    | UNS # |
|-----|---------------|-------------|-------|
| EJ2 | ASTM F912M    | Alloy Steel | —     |

**ASTM F959 – Compressible-Washer-Type Direct Tension Indicators for Use with Structural Fasteners**

| PIN | Material Spec       | Material     | UNS # |
|-----|---------------------|--------------|-------|
| EJ3 | ASTM F959, Type 325 | Carbon Steel | —     |
| EJ4 | ASTM F959, Type 490 | Carbon Steel | —     |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F959M – Compressible-Washer-Type Direct Tension Indicators for Use with Structural Fasteners (Metric)**

| PIN | Material Spec         | Material     | UNS # |
|-----|-----------------------|--------------|-------|
| EJ5 | ASTM F959M, Type 8.8  | Carbon Steel | —     |
| EJ6 | ASTM F959M, Type 10.9 | Carbon Steel | —     |

**ASTM F1852 – Standard Specification for “Twist Off” Type Tension Control Structural Bolt/Nut/Washer Assemblies, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength**

| PIN | Material Spec                                                 | Material | UNS # |
|-----|---------------------------------------------------------------|----------|-------|
| EQ1 | ASTM F1852, Type I, Plain Carbon, Carbon Boron or Alloy Steel | Steel    | —     |
| EQ2 | ASTM F1852, Type 3, Weathering Steel                          | Steel    | —     |

**ASTM F2280 – Standard Specification for “Twist Off” Type Tension Control Structural Bolt/Nut/Washer Assemblies, Steel, Heat Treated, 150 ksi Minimum Tensile Strength**

| PIN | Material Spec                        | Material    | UNS # |
|-----|--------------------------------------|-------------|-------|
| EQ3 | ASTM F2280, Type I, Alloy Steel      | Alloy Steel | —     |
| EQ4 | ASTM F2280, Type 3, Weathering Steel | Steel       | —     |

**ASTM F2281 – Stainless Steel and Nickel Alloy Bolts, Hex Cap Screws, and Studs, for Heat Resistance and High Temperature Applications**

| PIN | Material Spec                                                       | Material        | UNS #  |
|-----|---------------------------------------------------------------------|-----------------|--------|
| EJ7 | ASTM F2281, Type I, Class A - Austenitic, Grade 304, Condition A    | Stainless Steel | S30400 |
| EJ8 | ASTM F2281, Type I, Class A - Austenitic, Grade 304, Condition CWA  | Stainless Steel | S30400 |
| EJ9 | ASTM F2281, Type I, Class A - Austenitic, Grade 304, Condition HWA  | Stainless Steel | S30400 |
| EK0 | ASTM F2281, Type I, Class A - Austenitic, Grade 304L, Condition A   | Stainless Steel | S30403 |
| EK1 | ASTM F2281, Type I, Class A - Austenitic, Grade 304L, Condition CWA | Stainless Steel | S30403 |
| EK2 | ASTM F2281, Type I, Class A - Austenitic, Grade 304L, Condition HWA | Stainless Steel | S30403 |
| EK3 | ASTM F2281, Type I, Class A - Austenitic, Grade 316, Condition A    | Stainless Steel | S31600 |
| EK4 | ASTM F2281, Type I, Class A - Austenitic, Grade 316, Condition CWA  | Stainless Steel | S31600 |
| EK5 | ASTM F2281, Type I, Class A - Austenitic, Grade 316, Condition HWA  | Stainless Steel | S31600 |
| EK6 | ASTM F2281, Type I, Class A - Austenitic, Grade 316L, Condition A   | Stainless Steel | S31603 |
| EK7 | ASTM F2281, Type I, Class A - Austenitic, Grade 316L, Condition CWA | Stainless Steel | S31603 |
| EK8 | ASTM F2281, Type I, Class A - Austenitic, Grade 316L, Condition HWA | Stainless Steel | S31603 |
| EK9 | ASTM F2281, Type I, Class B - Martensitic, Grade 410, Condition H   | Stainless Steel | S41000 |
| EL0 | ASTM F2281, Type I, Class B - Martensitic, Grade 410, Condition HT  | Stainless Steel | S41000 |
| EL1 | ASTM F2281, Type I, Class B - Martensitic, Grade 416, Condition H   | Stainless Steel | S41600 |
| EL2 | ASTM F2281, Type I, Class B - Martensitic, Grade 416, Condition HT  | Stainless Steel | S41600 |
| EL3 | ASTM F2281, Type I, Class B - Martensitic, Grade 431, Condition H   | Stainless Steel | S43100 |
| EL4 | ASTM F2281, Type I, Class B - Martensitic, Grade 431, Condition HT  | Stainless Steel | S43100 |
| EL5 | ASTM F2281, Type I, Class C - Ferritic, Grade 430, Condition A      | Stainless Steel | S43000 |

**Table 5-1 Material and Treatment: ASTM Material Specifications (Cont'd)**

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**ASTM F2281 – Stainless Steel and Nickel Alloy Bolts, Hex Cap Screws, and Studs, for Heat Resistance and High Temperature Applications (Cont'd)**

| <b>PIN</b> | <b>Material Spec</b>                                                             | <b>Material</b>             | <b>UNS #</b> |
|------------|----------------------------------------------------------------------------------|-----------------------------|--------------|
| <b>EL6</b> | ASTM F2281, Type I, Class C - Ferritic, Grade 430, Condition CWA                 | Stainless Steel             | S43000       |
| <b>EL7</b> | ASTM F2281, Type I, Class C - Ferritic, Grade 430, Condition HWA                 | Stainless Steel             | S43000       |
| <b>EL8</b> | ASTM F2281, Type I, Class C - Ferritic, Grade 430F, Condition A                  | Stainless Steel             | S43020       |
| <b>EL9</b> | ASTM F2281, Type I, Class C - Ferritic, Grade 430F, Condition CWA                | Stainless Steel             | S43020       |
| <b>EM0</b> | ASTM F2281, Type I, Class C - Ferritic, Grade 430F, Condition HWA                | Stainless Steel             | S43020       |
| <b>EM1</b> | ASTM F2281, Type II - Heat Resisting, Grade 309, Condition A                     | Heat Resisting Steel        | S30900       |
| <b>EM2</b> | ASTM F2281, Type II - Heat Resisting, Grade 309, Condition CWA                   | Heat Resisting Steel        | S30900       |
| <b>EM3</b> | ASTM F2281, Type II - Heat Resisting, Grade 309, Condition HWA                   | Heat Resisting Steel        | S30900       |
| <b>EM4</b> | ASTM F2281, Type II - Heat Resisting, Grade 310, Condition A                     | Heat Resisting Steel        | S31000       |
| <b>EM5</b> | ASTM F2281, Type II - Heat Resisting, Grade 310, Condition CWA                   | Heat Resisting Steel        | S31000       |
| <b>EM6</b> | ASTM F2281, Type II - Heat Resisting, Grade 310, Condition HWA                   | Heat Resisting Steel        | S31000       |
| <b>EM7</b> | ASTM F2281, Type II - Heat Resisting, Grade 321, Condition A                     | Stainless Steel             | S32100       |
| <b>EM8</b> | ASTM F2281, Type II - Heat Resisting, Grade 321, Condition CWA                   | Stainless Steel             | S32100       |
| <b>EM9</b> | ASTM F2281, Type II - Heat Resisting, Grade 321, Condition HWA                   | Stainless Steel             | S32100       |
| <b>EN0</b> | ASTM F2281, Type II - Heat Resisting, Grade 330, Condition A                     | Nickel Alloy                | N08300       |
| <b>EN1</b> | ASTM F2281, Type II - Heat Resisting, Grade 330, Condition CWA                   | Nickel Alloy                | N08330       |
| <b>EN2</b> | ASTM F2281, Type II - Heat Resisting, Grade 330, Condition HWA                   | Nickel Alloy                | N08330       |
| <b>EN3</b> | ASTM F2281, Type II - Heat Resisting, Grade 347, Condition A                     | Stainless Steel             | S34700       |
| <b>EN4</b> | ASTM F2281, Type II - Heat Resisting, Grade 347, Condition CWA                   | Stainless Steel             | S34700       |
| <b>EN5</b> | ASTM F2281, Type II - Heat Resisting, Grade 347, Condition HWA                   | Stainless Steel             | S34700       |
| <b>EN6</b> | ASTM F2281, Type III, Class A - Nickel Based Alloy, Grade 600, Condition A       | Nickel Alloy                | N06600       |
| <b>EN7</b> | ASTM F2281, Type III, Class A - Nickel Based Alloy, Grade 600, Condition CWA     | Nickel Alloy                | N06600       |
| <b>EN8</b> | ASTM F2281, Type III, Class A - Nickel Based Alloy, Grade 600, Condition HWA     | Nickel Alloy                | N06600       |
| <b>EN9</b> | ASTM F2281, Type III, Class A - Nickel Based Alloy, Grade 601, Condition A       | Nickel Alloy                | N06601       |
| <b>EP0</b> | ASTM F2281, Type III, Class A - Nickel Based Alloy, Grade 601, Condition CWA     | Nickel Alloy                | N06601       |
| <b>EP1</b> | ASTM F2281, Type III, Class A - Nickel Based Alloy, Grade 601, Condition HWA     | Nickel Alloy                | N06601       |
| <b>EP2</b> | ASTM F2281, Type III, Class B - Precipitation Hardened, Grade 660, Condition AH1 | Iron Base Superalloy (A286) | S66286       |
| <b>EP3</b> | ASTM F2281, Type III, Class B - Precipitation Hardened, Grade 660, Condition AH2 | Iron Base Superalloy (A286) | S66286       |
| <b>EP4</b> | ASTM F2281, Type III, Class B - Precipitation Hardened, Grade 660, Condition AH3 | Iron Base Superalloy (A286) | S66286       |
| <b>EP5</b> | ASTM F2281, Type III, Class C - Precipitation Hardened, Grade 718, Condition AH4 | Nickel Alloy                | N07718       |

**Table 5-2 Material and Treatment: UNS Carbon and Alloy Steels**

| PIN | Material Spec | Material     |
|-----|---------------|--------------|
| GA1 | 1005, G10050  | Carbon Steel |
| GA2 | 1006, G10060  | Carbon Steel |
| GA3 | 1008, G10080  | Carbon Steel |
| GA4 | 1009, G10090  | Carbon Steel |
| GA5 | 1010, G10100  | Carbon Steel |
| GA6 | 1011, G10110  | Carbon Steel |
| GA7 | 1012, G10120  | Carbon Steel |
| GA8 | 1013, G10130  | Carbon Steel |
| GA9 | 1015, G10140  | Carbon Steel |
| GB0 | 1016, G10160  | Carbon Steel |
| GB1 | 1017, G10170  | Carbon Steel |
| GB2 | 1018, G10180  | Carbon Steel |
| GB3 | 1019, G10190  | Carbon Steel |
| GB4 | 1020, G10200  | Carbon Steel |
| GB5 | 1021, G10210  | Carbon Steel |
| GB6 | 1022, G10220  | Carbon Steel |
| GB7 | 1023, G10230  | Carbon Steel |
| GB8 | 1025, G10250  | Carbon Steel |
| GB9 | 1026, G10260  | Carbon Steel |
| GC0 | 1029, G10290  | Carbon Steel |
| GC1 | 1030, G10300  | Carbon Steel |
| GC2 | 1033, G10330  | Carbon Steel |
| GC3 | 1034, G10340  | Carbon Steel |
| GC4 | 1035, G10350  | Carbon Steel |
| GC5 | 1037, G10370  | Carbon Steel |
| GC6 | 1038, G10380  | Carbon Steel |
| GC7 | 1039, G10390  | Carbon Steel |
| GC8 | 1040, G10400  | Carbon Steel |
| GC9 | 1042, G10420  | Carbon Steel |
| GD0 | 1043, G10430  | Carbon Steel |
| GD1 | 1044, G10440  | Carbon Steel |
| GD2 | 1045, G10450  | Carbon Steel |

**Table 5-2 Material and Treatment: UNS Carbon and Alloy Steels (Cont'd)**

| PIN | Material Spec                                                                            | Material                  |
|-----|------------------------------------------------------------------------------------------|---------------------------|
| GD3 | 1046, G10460                                                                             | Carbon Steel              |
| GD4 | 1049, G10490                                                                             | Carbon Steel              |
| GD5 | 1050, G10500                                                                             | Carbon Steel              |
| GD6 | 1053, G10530                                                                             | Carbon Steel              |
| GD7 | 1055, G10555                                                                             | Carbon Steel              |
| GD8 | 1059, G10590                                                                             | Carbon Steel              |
| GD9 | 1060, G10600                                                                             | Carbon Steel              |
| GE0 | 1064, G10640                                                                             | Carbon Steel              |
| GE1 | 1065, G10650                                                                             | Carbon Steel              |
| GE2 | 1069, G10690                                                                             | Carbon Steel              |
| GE3 | 1070, G10700                                                                             | Carbon Steel              |
| GE4 | 1074, G10740                                                                             | Carbon Steel              |
| GE5 | 1075, G10750                                                                             | Carbon Steel              |
| GE6 | 1078, G10780                                                                             | Carbon Steel              |
| GE7 | 1080, G10800                                                                             | Carbon Steel              |
| GE7 | 1084, G10840                                                                             | Carbon Steel              |
| GE9 | 1085, G10850                                                                             | Carbon Steel              |
| GF0 | 1086, G10860                                                                             | Carbon Steel              |
| GF1 | 1090, G10900                                                                             | Carbon Steel              |
| GF2 | 1095, G10950                                                                             | Carbon Steel              |
| GF3 | UNS G10080, -090, 10100, -110, -120, -130, -140, -160, -170, -180, or -190               | Carbon Steel              |
| GF4 | UNS G10300, G10350, G10380, or G15410                                                    | Carbon Steel              |
| GF5 | UNS G10700, -740, -750, -780, 10800, -840, -850, -860, 10900, or 10950                   | Carbon Steel              |
| GF6 | UNS G10600, 640, -650, -690, 10700, -740, -750, -780, 10800, -840, -850, -860, or G10900 | Carbon Steel              |
| GF7 | 1108, G11080                                                                             | Resulfurized Carbon Steel |
| GF8 | 1109, G11090                                                                             | Resulfurized Carbon Steel |
| GF9 | 1110, G11100                                                                             | Resulfurized Carbon Steel |
| GG0 | 1113, G11160                                                                             | Resulfurized Carbon Steel |
| GG1 | 1117, G11170                                                                             | Resulfurized Carbon Steel |
| GG2 | 1118, G11180                                                                             | Resulfurized Carbon Steel |
| GG3 | 1119, G11190                                                                             | Resulfurized Carbon Steel |
| GG4 | 1123, G11230                                                                             | Resulfurized Carbon Steel |

**Table 5-2 Material and Treatment: UNS Carbon and Alloy Steels (Cont'd)**

| PIN | Material Spec                                         | Material                                               |
|-----|-------------------------------------------------------|--------------------------------------------------------|
| GG5 | 1132, G11320                                          | Resulfurized Carbon Steel                              |
| GG6 | 1137, G11370                                          | Resulfurized Carbon Steel                              |
| GG7 | 11374, G11374                                         | Steel, Free Machining                                  |
| GG8 | 1139, G11390                                          | Resulfurized Carbon Steel                              |
| GG9 | 1140, G11400                                          | Resulfurized Carbon Steel                              |
| GH0 | 1141, G11410                                          | Resulfurized Carbon Steel                              |
| GH1 | 1144, G11440                                          | Resulfurized Carbon Steel                              |
| GH2 | 1145, G11450                                          | Resulfurized Carbon Steel                              |
| GH3 | 1146, G11460                                          | Resulfurized Carbon Steel                              |
| GH4 | 1151, G11510                                          | Resulfurized Carbon Steel                              |
| GH5 | 1211, G12110                                          | Rephosphorized and Resulfurized Carbon Steel           |
| GH6 | 1212, G12120                                          | Rephosphorized and Resulfurized Carbon Steel           |
| GH7 | 1213, G12130                                          | Rephosphorized and Resulfurized Carbon Steel           |
| GH8 | 12L13, G12134                                         | Rephosphorized, Resulfurized, and Lead<br>Carbon Steel |
| GH9 | 12L14, G12144                                         | Rephosphorized and Resulfurized Carbon Steel           |
| GJ0 | 1215, G12150                                          | Rephosphorized and Resulfurized Carbon Steel           |
| GJ1 | UNS G10140, G10200, G10220, G11170, or G11180         | Carbon Steel                                           |
| GJ2 | UNS G10300, G10400, G10500, G10600, G10800, or G11440 | Carbon Steel                                           |
| GJ3 | 1513, G15130                                          | Carbon Steel                                           |
| GJ4 | 1518, G15180                                          | Carbon Steel                                           |
| GJ5 | 1522, G15220                                          | Carbon Steel                                           |
| GJ6 | 1524, G15240                                          | Carbon Steel                                           |
| GJ7 | 1525, G15250                                          | Carbon Steel                                           |
| GJ8 | 1526, G15260                                          | Carbon Steel                                           |
| GJ9 | 1527, G15270                                          | Carbon Steel                                           |
| GK0 | 1533, G15330                                          | Carbon Steel                                           |
| GK1 | 1534, G15340                                          | Carbon Steel                                           |
| GK2 | 1536, G15360                                          | Carbon Steel                                           |
| GK3 | 1541, G15410                                          | Carbon Steel                                           |
| GK4 | 1547, G15470                                          | Carbon Steel                                           |
| GK5 | 1548, G15480                                          | Carbon Steel                                           |
| GK6 | 1551, G15510                                          | Carbon Steel                                           |
| GK7 | 1552, G15520                                          | Carbon Steel                                           |

**Table 5-2 Material and Treatment: UNS Carbon and Alloy Steels (Cont'd)**

| PIN | Material Spec                                         | Material          |
|-----|-------------------------------------------------------|-------------------|
| GK8 | 1553, G15530                                          | Carbon Steel      |
| GK9 | 1561, G15610                                          | Carbon Steel      |
| GL0 | 1566, G15660                                          | Carbon Steel      |
| GL1 | 1570, G15700                                          | Carbon Steel      |
| GL2 | 1572, G15720                                          | Carbon Steel      |
| GL3 | 1580, G15800                                          | Carbon Steel      |
| GL4 | 1590, G15900                                          | Carbon Steel      |
| GL5 | UNS G10060, G10080, or G10100                         | Carbon Steel      |
| GL6 | UNS G10120, G10140, G10170, or G10200                 | Carbon Steel      |
| GL7 | UNS G10160, G10180, G10210, G10220, or G10260         | Carbon Steel      |
| GL8 | UNS G10230 or G10250                                  | Carbon Steel      |
| GL9 | UNS G10290, G10300, G10350, G10370, G10380, or G10390 | Carbon Steel      |
| GM0 | UNS G10555, G10600, G10700, G10800, G10840, or G10850 | Carbon Steel      |
| GM1 | UNS G10780 or G10950                                  | Carbon Steel      |
| GM2 | UNS G12110, G12120, or G12130                         | Carbon Steel      |
| GM3 | UNS G11080 or G11090                                  | Carbon Steel      |
| GM4 | UNS G11160, G11170, G11180, or G11190                 | Carbon Steel      |
| GM5 | UNS G11400, G11450, or G11460                         | Carbon Steel      |
| GM6 | UNS G11374, G11410, or G11440                         | Carbon Steel      |
| GM7 | Any UNS Carbon Steel                                  | Carbon Steel      |
| GN1 | 1330, G13300                                          | Mn Alloy Steel    |
| GN2 | 1335, G13350                                          | Mn Alloy Steel    |
| GN3 | 1340, G13400                                          | Mn Alloy Steel    |
| GN4 | 1345, G13450                                          | Mn Alloy Steel    |
| GN5 | 4012, G40120                                          | Mo Alloy Steel    |
| GN6 | 4023, G40230                                          | Mo Alloy Steel    |
| GN7 | 4024, G40240                                          | Mo Alloy Steel    |
| GN8 | 4027, G40270                                          | Mo Alloy Steel    |
| GN9 | 4028, G40280                                          | Mo Alloy Steel    |
| GP0 | 4032, G40320                                          | Mo Alloy Steel    |
| GP1 | 4037, G40370                                          | Mo Alloy Steel    |
| GP2 | 4042, G40420                                          | Mo Alloy Steel    |
| GP3 | 4047, G40470                                          | Mo Alloy Steel    |
| GP4 | 4113, G41180                                          | Cr-Mo Alloy Steel |

**Table 5-2 Material and Treatment: UNS Carbon and Alloy Steels (Cont'd)**

| PIN | Material Spec | Material             |
|-----|---------------|----------------------|
| GP5 | 4130, G41300  | Cr-Mo Alloy Steel    |
| GP6 | 4135, G41350  | Cr-Mo Alloy Steel    |
| GP7 | 4137, G41370  | Cr-Mo Alloy Steel    |
| GP8 | 4140, G41400  | Cr-Mo Alloy Steel    |
| GP9 | 4142, G41420  | Cr-Mo Alloy Steel    |
| GQ0 | 4145, G41450  | Cr-Mo Alloy Steel    |
| GQ1 | 4147, G41470  | Cr-Mo Alloy Steel    |
| GQ2 | 4150, G41500  | Cr-Mo Alloy Steel    |
| GQ3 | 4161, G41610  | Cr-Mo Alloy Steel    |
| GQ4 | 4320, G43200  | Ni-Cr-Mo Alloy Steel |
| GQ5 | 4340, G43400  | Ni-Cr-Mo Alloy Steel |
| GQ6 | E4340, G43406 | Ni-Cr-Mo Alloy Steel |
| GQ7 | 4419, G44190  | Mo Alloy Steel       |
| GQ8 | 4422, G44220  | Mo Alloy Steel       |
| GQ9 | 4427, G44270  | Mo Alloy Steel       |
| GR0 | 4615, G46150  | Ni-Mo Alloy Steel    |
| GR1 | 4617, G46170  | Ni-Mo Alloy Steel    |
| GR2 | 4620, G46200  | Ni-Mo Alloy Steel    |
| GR3 | 4621, G46210  | Ni-Mo Alloy Steel    |
| GR4 | 4626, G46260  | Ni-Mo Alloy Steel    |
| GR5 | 4718, G47180  | Ni-Cr-Mo Alloy Steel |
| GR6 | 4720, G47200  | Ni-Cr-Mo Alloy Steel |
| GR7 | 4815, G48150  | Ni-Mo Alloy Steel    |
| GR8 | 4817, G48170  | Ni-Mo Alloy Steel    |
| GR9 | 4820, G48200  | Ni-Mo Alloy Steel    |
| GS0 | 5015, G50150  | Cr Alloy Steel       |
| GS1 | 50B40, G50401 | Cr-B Alloy Steel     |
| GS2 | 50B44, G50441 | Cr-B Alloy Steel     |
| GS3 | 5046, G50460  | Cr Alloy Steel       |
| GS4 | 50B46, G50461 | Cr-B Alloy Steel     |
| GS5 | 50B50, G50501 | Cr-B Alloy Steel     |
| GS6 | 5060, G50600  | Cr Alloy Steel       |
| GS7 | 50B60, G50601 | Cr-B Alloy Steel     |
| GS8 | 5115, G51150  | Cr Alloy Steel       |

**Table 5-2 Material and Treatment: UNS Carbon and Alloy Steels (Cont'd)**

| PIN | Material Spec | Material               |
|-----|---------------|------------------------|
| GS9 | 5117, G51170  | Cr Alloy Steel         |
| GT0 | 5120, G51200  | Cr Alloy Steel         |
| GT1 | 5130, G51300  | Cr Alloy Steel         |
| GT2 | 5132, G51320  | Cr Alloy Steel         |
| GT3 | 5135, G51350  | Cr Alloy Steel         |
| GT4 | 5140, G51400  | Cr Alloy Steel         |
| GT5 | 5145, G51450  | Cr Alloy Steel         |
| GT6 | 5147, G51470  | Cr Alloy Steel         |
| GT7 | 5150, G51500  | Cr Alloy Steel         |
| GT8 | 5155, G51550  | Cr Alloy Steel         |
| GT9 | 5160, G51600  | Cr Alloy Steel         |
| GU0 | 51B60, G51601 | Cr-B Alloy Steel       |
| GU1 | 50100, G50986 | Cr Alloy Steel         |
| GU2 | 51100, G51986 | Cr Alloy Steel         |
| GU3 | 52100, G52986 | Cr Alloy Steel         |
| GU4 | 6118, G61180  | Cr-V Alloy Steel       |
| GU5 | 6150, G61500  | Cr-V Alloy Steel       |
| GU6 | 8115, G81150  | Ni-Cr-Mo Alloy Steel   |
| GU7 | 81B45, G81451 | Ni-Cr-Mo-B Alloy Steel |
| GU8 | 8615, G86150  | Ni-Cr-Mo Alloy Steel   |
| GU9 | 8617, G86170  | Ni-Cr-Mo Alloy Steel   |
| GV0 | 8620, G86200  | Ni-Cr-Mo Alloy Steel   |
| GV1 | 8622, G86220  | Ni-Cr-Mo Alloy Steel   |
| GV2 | 8625, G86250  | Ni-Cr-Mo Alloy Steel   |
| GV3 | 8627, G86270  | Ni-Cr-Mo Alloy Steel   |
| GV4 | 8630, G86300  | Ni-Cr-Mo Alloy Steel   |
| GV5 | 8637, G86370  | Ni-Cr-Mo Alloy Steel   |
| GV6 | 8640, G86400  | Ni-Cr-Mo Alloy Steel   |
| GV7 | 8642, G86420  | Ni-Cr-Mo Alloy Steel   |
| GV8 | 8645, G86450  | Ni-Cr-Mo Alloy Steel   |
| GV9 | 86B45, G86451 | Ni-Cr-Mo-B Alloy Steel |
| GW0 | 8650, G86500  | Ni-Cr-Mo Alloy Steel   |
| GW1 | 8655, G86550  | Ni-Cr-Mo Alloy Steel   |
| GW2 | 8660, G86600  | Ni-Cr-Mo Alloy Steel   |

**Table 5-2 Material and Treatment: UNS Carbon and Alloy Steels (Cont'd)**

| PIN | Material Spec                              | Material               |
|-----|--------------------------------------------|------------------------|
| GW3 | 8720, G87200                               | Ni-Cr-Mo Alloy Steel   |
| GW4 | 8740, G87400                               | Ni-Cr-Mo Alloy Steel   |
| GW5 | 8822, G88220                               | Ni-Cr-Mo Alloy Steel   |
| GW6 | 9254, G92540                               | Cr-Si Alloy Steel      |
| GW7 | 9255, G92550                               | Si-Mn Alloy Steel      |
| GW8 | 9260, G92600                               | Si-Mn Alloy Steel      |
| GW9 | 9310, G93106                               | Ni-Cr-Mo Alloy Steel   |
| GX0 | 94B15, G94151                              | Ni-Cr-Mo-B Alloy Steel |
| GX1 | 94B17, G94171                              | Ni-Cr-Mo-B Alloy Steel |
| GX2 | 94830, G94301                              | Ni-Cr-Mo-B Alloy Steel |
| GX3 | 6150H, H61500                              | Cr-V H-Alloy Steel     |
| GX4 | UNS G41300, G41400, G43400                 | Alloy Steel            |
| GX5 | UNS G41300, G43400, G86370, G86400         | Alloy Steel            |
| GX6 | UNS G41300, G43400, G86370, G86400, G87400 | Alloy Steel            |
| GX7 | B21, K14073                                | Alloy Steel            |
| GX8 | B24, K24064                                | Alloy Steel            |
| GX9 | B24V, K24070                               | Alloy Steel            |
| GY0 | Any Alloy Steel                            | Alloy Steel            |

**Table 5-3 Material and Treatment: UNS Heat and Corrosion Resisting Steels**

| PIN | Material Spec             | Material                                                       |
|-----|---------------------------|----------------------------------------------------------------|
| SA1 | 201, S20100, Annealed     | Austenitic Cr-Mn-Ni Stainless Steel                            |
| SA2 | 201, S20100, Cold Worked  | Austenitic Cr-Mn-Ni Stainless Steel                            |
| SA3 | 202, S20200, Annealed     | Austenitic Cr-Mn-Ni Stainless Steel                            |
| SA4 | 202, S20200, Cold Worked  | Austenitic Cr-Mn-Ni Stainless Steel                            |
| SA5 | 203, S20300, Annealed     | Austenitic Cr-Mn-Ni-Cu Free Machining Stainless Steel (203 EZ) |
| SA6 | 203, S20300, Cold Worked  | Austenitic Cr-Mn-Ni-Cu Free Machining Stainless Steel (203 EZ) |
| SA7 | 301, S30100, Annealed     | Austenitic Cr-Ni Stainless Steel                               |
| SA8 | 301, S30100, Cold Worked  | Austenitic Cr-Ni Stainless Steel                               |
| SA9 | 302, S30200, Annealed     | Austenitic Cr-Ni Stainless Steel                               |
| SB0 | 302, S30200, Cold Worked  | Austenitic Cr-Ni Stainless Steel                               |
| SB1 | 302B, S30215, Annealed    | Austenitic Cr-Ni Stainless Steel                               |
| SB2 | 302B, S30215, Cold Worked | Austenitic Cr-Ni Stainless Steel                               |

**Table 5-3 Material and Treatment: UNS Heat and Corrosion Resisting Steels (Cont'd)**

| PIN | Material Spec              | Material                                                               |
|-----|----------------------------|------------------------------------------------------------------------|
| SB3 | 303, S30300, Annealed      | Free Machining Austenitic Cr-Ni Stainless Steel                        |
| SB4 | 303, S30300, Cold Worked   | Free Machining Austenitic Cr-Ni Stainless Steel                        |
| SB5 | 303Se, S30323, Annealed    | Free Machining Austenitic Cr-Ni Stainless Steel (Se Bearing)           |
| SB6 | 303Se, S30323, Cold Worked | Free Machining Austenitic Cr-Ni Stainless Steel (Se Bearing)           |
| SB7 | 304, S30400, Annealed      | Austenitic Cr-Ni Stainless Steel                                       |
| SB8 | 304, S30400, Cold Worked   | Austenitic Cr-Ni Stainless Steel                                       |
| SB9 | 304H, S30409, Annealed     | Austenitic Cr-Ni Stainless Steel, High Carbon (304 H)                  |
| SC0 | 304H, S30409, Cold Worked  | Austenitic Cr-Ni Stainless Steel, High Carbon (304 H)                  |
| SC1 | 304L, S30403, Annealed     | Austenitic Cr-Ni Stainless Steel (Low Carbon)                          |
| SC2 | 304L, S30403, Cold Worked  | Austenitic Cr-Ni Stainless Steel (Low Carbon)                          |
| SC3 | 304LN, S30453, Annealed    | Austenitic Nitrogen Bearing Cr-Ni Stainless Steel (304 LN)             |
| SC4 | 304LN, S30453, Cold Worked | Austenitic Nitrogen Bearing Cr-Ni Stainless Steel (304 LN)             |
| SC5 | 30430, S30430, Annealed    | Austenitic Cr-Ni-Cu Low Work Hardening Stainless Steel (18-9-LW)       |
| SC6 | 30430, S30430, Cold Worked | Austenitic Cr-Ni-Cu Low Work Hardening Stainless Steel (18-9-LW)       |
| SC7 | 304N, S30451, Annealed     | Austenitic Nitrogen Bearing Cr-Ni Stainless Steel (304 N)              |
| SC8 | 304N, S30451, Cold Worked  | Austenitic Nitrogen Bearing Cr-Ni Stainless Steel (304 N)              |
| SC9 | 305, S30500, Annealed      | Austenitic Nitrogen Bearing Cr-Ni Stainless Steel (Low Work Hardening) |
| SD0 | 305, S30500, Cold Worked   | Austenitic Nitrogen Bearing Cr-Ni Stainless Steel (Low Work Hardening) |
| SD1 | 308, S30800, Annealed      | Austenitic Cr-Ni Heat Resisting Steel                                  |
| SD2 | 308, S30800, Cold Worked   | Austenitic Cr-Ni Heat Resisting Steel                                  |
| SD3 | 309, S30900, Annealed      | Austenitic Cr-Ni Heat Resisting Steel                                  |
| SD4 | 309, S30900, Cold Worked   | Austenitic Cr-Ni Heat Resisting Steel                                  |
| SD5 | 309S, S30908, Annealed     | Austenitic Cr-Ni Heat Resisting Stainless Steel (309 S)                |
| SD6 | 309S, S30908, Cold Worked  | Austenitic Cr-Ni Heat Resisting Stainless Steel (309 S)                |
| SD7 | 310, S31000, Annealed      | Austenitic Cr-Ni Heat Resisting Steel                                  |
| SD8 | 310, S31000, Cold Worked   | Austenitic Cr-Ni Heat Resisting Steel                                  |
| SD9 | 310S, S31008, Annealed     | Austenitic Cr-Ni Heat Resisting Steel (310 S)                          |
| SE0 | 310S, S31008, Cold Worked  | Austenitic Cr-Ni Heat Resisting Steel (310 S)                          |
| SE1 | 314, S31400, Annealed      | Austenitic Cr-Ni Heat Resisting Steel                                  |
| SE2 | 314, S31400, Cold Worked   | Austenitic Cr-Ni Heat Resisting Steel                                  |
| SE3 | 316, S31600, Annealed      | Austenitic Cr-Ni-Mo Stainless Steel                                    |
| SE4 | 316, S31600, Cold Worked   | Austenitic Cr-Ni-Mo Stainless Steel                                    |
| SE5 | 316F, S31620, Annealed     | Austenitic Cr-Ni-Mo Free Machining Stainless Steel                     |

**Table 5-3 Material and Treatment: UNS Heat and Corrosion Resisting Steels (Cont'd)**

| PIN | Material Spec              | Material                                                                                            |
|-----|----------------------------|-----------------------------------------------------------------------------------------------------|
| SE6 | 316F, S31620, Cold Worked  | Austenitic Cr-Ni-Mo Free Machining Stainless Steel                                                  |
| SE7 | 316H, S31609, Annealed     | Austenitic Cr-Ni-Mo Stainless Steel (High Carbon)                                                   |
| SE8 | 316H, S31609, Cold Worked  | Austenitic Cr-Ni-Mo Stainless Steel (High Carbon)                                                   |
| SE9 | 316L, S31603, Annealed     | Austenitic Cr-Ni-Mo Stainless Steel (Low Carbon)                                                    |
| SF0 | 316L, S31603, Cold Worked  | Austenitic Cr-Ni-Mo Stainless Steel (Low Carbon)                                                    |
| SF1 | 316N, S31651, Annealed     | Austenitic Nitrogen Bearing Cr-Ni-Mo Stainless Steel (316 N)                                        |
| SF2 | 316N, S31651, Cold Worked  | Austenitic Nitrogen Bearing Cr-Ni-Mo Stainless Steel (316 N)                                        |
| SF3 | 316LN, S31653, Annealed    | Austenitic Nitrogen Bearing Cr-Ni-Mo Stainless Steel (316LN)                                        |
| SF4 | 316LN, S31653, Cold Worked | Austenitic Nitrogen Bearing Cr-Ni-Mo Stainless Steel (316LN)                                        |
| SF5 | 317, S31700, Annealed      | Austenitic Cr-Ni-Mo Stainless Steel                                                                 |
| SF6 | 317, S31700, Cold Worked   | Austenitic Cr-Ni-Mo Stainless Steel                                                                 |
| SF7 | 317L, S31703, Annealed     | Austenitic Cr-Ni-Mo Stainless Steel (Low Carbon)                                                    |
| SF8 | 317L, S31703, Cold Worked  | Austenitic Cr-Ni-Mo Stainless Steel (Low Carbon)                                                    |
| SF9 | 321, S32100, Annealed      | Austenitic Cr-Ni Stainless Steel (Titanium Stabilized)                                              |
| SG0 | 321, S32100, Cold Worked   | Austenitic Cr-Ni Stainless Steel (Titanium Stabilized)                                              |
| SG1 | 321H, S32109, Annealed     | Austenitic Cr-Ni Stainless Steel (Titanium Stabilized), High Carbon (321H)                          |
| SG2 | 321H, S32109, Cold Worked  | Austenitic Cr-Ni Stainless Steel (Titanium Stabilized), High Carbon (321H)                          |
| SG3 | 329, S32900, Annealed      | Ferritic-Austenitic Cr-Ni Stainless Steel                                                           |
| SG4 | 329, S32900, Cold Worked   | Ferritic-Austenitic Cr-Ni Stainless Steel                                                           |
| SG5 | 347, S34700, Annealed      | Austenitic Cr-Ni Stainless Steel (Columbium Stabilized)                                             |
| SG6 | 347, S34700, Cold Worked   | Austenitic Cr-Ni Stainless Steel (Columbium Stabilized)                                             |
| SG7 | 347H, S34709, Annealed     | Austenitic Cr-Ni Stainless Steel (Columbium Stabilized), High Carbon (347-H)                        |
| SG8 | 347H, S34709, Cold Worked  | Austenitic Cr-Ni Stainless Steel (Columbium Stabilized), High Carbon (347-H)                        |
| SG9 | 348, S34800, Annealed      | Austenitic Cr-Ni Stainless Steel (Columbium Stabilized) (Ta and Co Restricted)                      |
| SH0 | 348, S34800, Cold Worked   | Austenitic Cr-Ni Stainless Steel (Columbium Stabilized) (Ta and Co Restricted)                      |
| SH1 | 348H, S34809, Annealed     | Austenitic Cr-Ni Stainless Steel (Columbium Stabilized), High Carbon (Ta and Co Restricted) (348-H) |
| SH2 | 348H, S34809, Cold Worked  | Austenitic Cr-Ni Stainless Steel (Columbium Stabilized), High Carbon (Ta and Co Restricted) (348-H) |
| SH3 | 384, S38400, Annealed      | Austenitic Cr-Ni Stainless Steel (Low Work Hardening)                                               |
| SH4 | 384, S38400, Cold Worked   | Austenitic Cr-Ni Stainless Steel (Low Work Hardening)                                               |

**Table 5-3 Material and Treatment: UNS Heat and Corrosion Resisting Steels (Cont'd)**

| PIN | Material Spec                                                                                     | Material                                                     |
|-----|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| SH5 | UNS S20100, S20200, or S20500, Annealed                                                           | Stainless Steel                                              |
| SH6 | UNS S20100, S20200, or S20500, Cold Worked                                                        | Stainless Steel                                              |
| SH7 | Any Austenitic Stainless Steel, Annealed                                                          | Stainless Steel                                              |
| SH8 | Any Austenitic Stainless Steel, Cold Worked                                                       | Stainless Steel                                              |
| SH9 | 405, S40500, Annealed                                                                             | Cr Stainless Steel (Not Hardenable by Heat Treatment)        |
| SJ0 | 405, S40500, Cold Worked                                                                          | Cr Stainless Steel (Not Hardenable by Heat Treatment)        |
| SJ1 | 409, S40900, Annealed                                                                             | Ferritic Cr Stainless Steel                                  |
| SJ2 | 409, S40900, Cold Worked                                                                          | Ferritic Cr Stainless Steel                                  |
| SJ3 | 429, S42900, Annealed                                                                             | Cr Stainless Steel                                           |
| SJ4 | 429, S42900, Cold Worked                                                                          | Cr Stainless Steel                                           |
| SJ5 | 430, S43000, Annealed                                                                             | Cr Stainless Steel                                           |
| SJ6 | 430, S43000, Cold Worked                                                                          | Cr Stainless Steel                                           |
| SJ7 | 430F, S43020, Annealed                                                                            | Free Machining Cr Stainless Steel (S Bearing)                |
| SJ8 | 430F, S43020, Cold Worked                                                                         | Free Machining Cr Stainless Steel (S Bearing)                |
| SJ9 | 430Fse, S43023, Annealed                                                                          | Free Machining Cr Stainless Steel (Se Bearing)               |
| SK0 | 430Fse, S43023, Cold Worked                                                                       | Free Machining Cr Stainless Steel (Se Bearing)               |
| SK1 | 434, S43400, Annealed                                                                             | Cr-Mo Stainless Steel                                        |
| SK2 | 434, S43400, Cold Worked                                                                          | Cr-Mo Stainless Steel                                        |
| SK3 | 436, S43600, Annealed                                                                             | Cr-Mo Stainless Steel                                        |
| SK4 | 436, S43600, Cold Worked                                                                          | Cr-Mo Stainless Steel                                        |
| SK5 | 442, S44200, Annealed                                                                             | Cr Heat Resisting Steel                                      |
| SK6 | 442, S44200, Cold Worked                                                                          | Cr Heat Resisting Steel                                      |
| SK7 | 444, S44400, Annealed                                                                             | Cr-Mo Stainless Steel (Stabilized Low-Interstitial Ferritic) |
| SK8 | 444, S44400, Cold Worked                                                                          | Cr-Mo Stainless Steel (Stabilized Low-Interstitial Ferritic) |
| SK9 | 446, S44600, Annealed                                                                             | Cr Heat Resisting Steel                                      |
| SL0 | 446, S44600, Cold Worked                                                                          | Cr Heat Resisting Steel                                      |
| SL1 | UNS S40500, -900, 42900, 43000, -020, -023, 43400, -600, 44200, -400 (Ferritic S.S.), Annealed    | Stainless Steel                                              |
| SL2 | UNS S40500, -900, 42900, 43000, -020, -023, 43400, -600, 44200, -400 (Ferritic S.S.), Cold Worked | Stainless Steel                                              |
| SL3 | 403, S40300, Annealed                                                                             | Cr Stainless Steel (Hardenable by Heat Treatment)            |
| SL4 | 403, S40300, Quenched and Tempered                                                                | Cr Stainless Steel (Hardenable by Heat Treatment)            |
| SL5 | 410, S41000, Annealed                                                                             | Cr Stainless Steel (Hardenable by Heat Treatment)            |
| SL6 | 410, S41000, Quenched and Tempered                                                                | Cr Stainless Steel (Hardenable by Heat Treatment)            |
| SL7 | 414, S41400, Annealed                                                                             | Cr Stainless Steel With Low Nickel Content                   |

**Table 5-3 Material and Treatment: UNS Heat and Corrosion Resisting Steels (Cont'd)**

| PIN | Material Spec                                                                                                              | Material                                                          |
|-----|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| SL8 | 414, S41400, Quenched and Tempered                                                                                         | Cr Stainless Steel With Low Nickel Content                        |
| SL9 | 416, S41600, Annealed                                                                                                      | Cr Stainless Steel (Free Machining)                               |
| SM0 | 416, S41600, Quenched and Tempered                                                                                         | Cr Stainless Steel (Free Machining)                               |
| SM1 | 416Se, S41623, Annealed                                                                                                    | Martensitic Cr Free Machining Stainless Steel (Se Bearing)        |
| SM2 | 416Se, S41623, Quenched and Tempered                                                                                       | Martensitic Cr Free Machining Stainless Steel (Se Bearing)        |
| SM3 | 420, S42000, Annealed                                                                                                      | Hardenable Cr Stainless Steel                                     |
| SM4 | 420, S42000, Quenched and Tempered                                                                                         | Hardenable Cr Stainless Steel                                     |
| SM5 | 420F, S42020, Annealed                                                                                                     | Hardenable Cr Free Machining Stainless Steel                      |
| SM6 | 420F, S42020, Quenched and Tempered                                                                                        | Hardenable Cr Free Machining Stainless Steel                      |
| SM7 | 422, S42200, Annealed                                                                                                      | Martensitic Cr Stainless Steel                                    |
| SM8 | 422, S42200, Quenched and Tempered                                                                                         | Martensitic Cr Stainless Steel                                    |
| SM9 | 431, S43100, Annealed                                                                                                      | Ni Bearing Hardenable Cr Stainless Steel                          |
| SN0 | 431, S43100, Quenched and Tempered                                                                                         | Ni Bearing Hardenable Cr Stainless Steel                          |
| SN1 | 440A, S44002, Annealed                                                                                                     | Hardenable Cr Stainless Steel (440 A)                             |
| SN2 | 440A, S44002, Quenched and Tempered                                                                                        | Hardenable Cr Stainless Steel (440 A)                             |
| SN3 | 440B, S44003, Annealed                                                                                                     | Hardenable Cr Stainless Steel (440 B)                             |
| SN4 | 440B, S44003, Quenched and Tempered                                                                                        | Hardenable Cr Stainless Steel (440 B)                             |
| SN5 | 440C, S44004, Annealed                                                                                                     | Hardenable Cr Stainless Steel (440 C)                             |
| SN6 | 440C, S44004, Quenched and Tempered                                                                                        | Hardenable Cr Stainless Steel (440 C)                             |
| SN7 | 501, S50100, Annealed                                                                                                      | Cr Heat Resisting Steel                                           |
| SN8 | 501, S50100, Quenched and Tempered                                                                                         | Cr Heat Resisting Steel                                           |
| SP3 | 502, S50200, Annealed                                                                                                      | Cr Heat Resisting Steel                                           |
| SP4 | 502, S50200, Quenched and Tempered                                                                                         | Cr Heat Resisting Steel                                           |
| SP5 | 503, S50300, Annealed                                                                                                      | Cr Heat Resisting Steel                                           |
| SP6 | 503, S50300, Quenched and Tempered                                                                                         | Cr Heat Resisting Steel                                           |
| SP7 | 504, S50400, Annealed                                                                                                      | Cr Heat Resisting Steel                                           |
| SP8 | 504, S50400, Quenched and Tempered                                                                                         | Cr Heat Resisting Steel                                           |
| SP9 | UNS S40300, 41000, -400, -600, -623, 42000, -020, -200, 43100, 44002, -003, -004 (Martensitic S.S.), Annealed              | Stainless Steel                                                   |
| SQ0 | UNS S40300, 41000, -400, -600, -623, 42000, -020, -200, 43100, 44002, -003, -004 (Martensitic S.S.), Quenched and Tempered | Stainless Steel                                                   |
| SQ1 | A286, S66286, Solution Treated and Aged, S15700                                                                            | Iron Base Superalloy (A286)                                       |
| SQ2 | 15-7PH, Annealed, UNS S15700                                                                                               | Precipitation Hardenable Cr-Ni-Mo-Al Stainless Steel (PH 15-7 Mo) |
| SQ3 | 15-7PH, Solution Treated and Aged, S15700                                                                                  | Precipitation Hardenable Cr-Ni-Mo-Al Stainless Steel (PH 15-7 Mo) |

**Table 5-3 Material and Treatment: UNS Heat and Corrosion Resisting Steels (Cont'd)**

| PIN | Material Spec                                                                                         | Material                                                          |
|-----|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| SQ4 | 14-8PH, Annealed, S14800                                                                              | Precipitation Hardenable Cr-Ni-Mo-Al Stainless Steel (PH 14-8 Mo) |
| SQ5 | 14-8PH, Solution Treated and Aged, S14800                                                             | Precipitation Hardenable Cr-Ni-Mo-Al Stainless Steel (PH 14-8 Mo) |
| SQ6 | PH-13-8MO, Annealed, S13800                                                                           | Precipitation Hardenable Cr-Ni-AL-Mo Stainless Steel (PH 13-8 Mo) |
| SQ7 | PH-13-8MO, Solution Treated and Aged, S13800                                                          | Precipitation Hardenable Cr-Ni-AL-Mo Stainless Steel (PH 13-8 Mo) |
| SQ8 | 15-5PH, Annealed, S15500                                                                              | Precipitation Hardenable Cr-Ni-Cu Stainless Steel (15-5 PH)       |
| SQ9 | 15-5PH, Solution Treated and Aged, S15500                                                             | Precipitation Hardenable Cr-Ni-Cu Stainless Steel (15-5 PH)       |
| SR0 | 17-4PH, Annealed, S17400                                                                              | Precipitation Hardenable Cr-Ni-Cu Stainless Steel (17-4 PH)       |
| SR1 | 17-4PH, Solution Treated and Aged, S17400                                                             | Precipitation Hardenable Cr-Ni-Cu Stainless Steel (17-4 PH)       |
| SR2 | 17-7PH, Annealed, S17700                                                                              | Precipitation Hardenable Cr-Ni-Al Stainless Steel (17-7 PH)       |
| SR3 | 17-7PH, Solution Treated and Aged, S17700                                                             | Precipitation Hardenable Cr-Ni-Al Stainless Steel (17-7 PH)       |
| SR4 | UNS S15700, 14800, 13800, 15500, 17400, 17700<br>(Precipitation Hardening), Annealed                  | Stainless Steel                                                   |
| SR5 | UNS S15700, 14800, 13800, 15500, 17400, 17700<br>(Precipitation Hardening), Solution Treated and Aged | Stainless Steel                                                   |

**Table 5-4 Material and Treatment: UNS Nonferrous Materials**

| PIN | Material Spec                 | Material                                      |
|-----|-------------------------------|-----------------------------------------------|
| UA1 | 462, C46200                   | Naval Brass, 63-1/2%                          |
| UA3 | 2024, A92024                  | Wrought Aluminum Alloy, Heat Treatable        |
| UA4 | 6061-T73, A96061              | Wrought Aluminum Alloy, Heat Treatable        |
| UA5 | 7075-T73, A97075              | Wrought Aluminum Alloy, Heat Treatable        |
| UA6 | UNS A92024, A96061, or A97075 | Wrought Aluminum Alloy, Heat Treatable        |
| UA7 | 110, C11000                   | Copper, Electrolytic Tough Pitch Copper (ETP) |
| UA8 | 145, C14500                   | Phosphorous Deoxidized Copper                 |
| UA9 | 147, C14700                   | Sulfur Bearing Copper                         |
| UB0 | UNS C11000, C14500, or C14700 | Copper                                        |
| UK5 | 172, C17200                   | Beryllium Copper                              |
| UB1 | 210, C21000                   | Gilding, 95% (Copper/Zinc)                    |
| UB2 | 220, C22000                   | Commercial Bronze, 90%                        |
| UB3 | 230, C23000                   | Red Brass, 85%                                |
| UB4 | 240, C24000                   | Low Brass, 80%                                |
| UB5 | 260, C26000                   | Cartridge Brass, 70%                          |
| UB6 | 268, C26800                   | Yellow Brass, 66%                             |
| UB7 | 270, C27000                   | Yellow Brass, 65%                             |

**Table 5-4 Material and Treatment: UNS Nonferrous Materials (Cont'd)**

| PIN | Material Spec                                                         | Material                                   |
|-----|-----------------------------------------------------------------------|--------------------------------------------|
| UB8 | 272, C27200                                                           | Brass                                      |
| UB9 | 274, C27400                                                           | Yellow Brass, 63%                          |
| UC0 | UNS C21000, 22000, 23000, 24000, 26000, 26800, 27000, 27200, or 27400 | Brass                                      |
| UC1 | 335, C33500                                                           | Low Leaded Brass                           |
| UC2 | 340, C34000                                                           | Medium Leaded Brass, 64.5%                 |
| UC3 | 342, C34200                                                           | High Leaded Brass, 64.5%                   |
| UC4 | 350, C35000                                                           | Medium Leaded Brass, 62%                   |
| UC5 | 3534, C35340                                                          | Leaded Brass                               |
| UC6 | 356, C35600                                                           | Leaded Brass Alloy                         |
| UC7 | UNS C33500, 34000, 34200, 35000, 35340, or 35600                      | Brass                                      |
| UC8 | 360, C36000                                                           | Free Cutting Brass                         |
| UC9 | 365, C36500                                                           | Leaded Muntz Metal, Uninhibited (Cu-Zn-Pb) |
| UD0 | 377, C37700                                                           | Forging Brass                              |
| UD2 | 464, C46400                                                           | Naval Brass, Uninhibited                   |
| UD4 | 482, C48200                                                           | Naval Brass, Medium Leaded                 |
| UD5 | 485, C48500                                                           | Naval Brass, High Leaded                   |
| UD6 | 510, C51000                                                           | Phosphor Bronze, 5% A                      |
| UD7 | 521, C52100                                                           | Phosphor Bronze, 8%                        |
| UD8 | 524, C52400                                                           | Phosphor Bronze, 10%                       |
| UD9 | UNS C5100, C52100, or C52400                                          | Phosphor Bronze                            |
| UE0 | 613, C61300                                                           | Aluminum Bronze                            |
| UE1 | 614, C61400                                                           | Aluminum Bronze D                          |
| UE2 | 619, C61900                                                           | Aluminum Bronze                            |
| UE3 | 623, C62300                                                           | Aluminum Bronze                            |
| UE4 | 630, C63000                                                           | Aluminum Bronze                            |
| UE5 | 630, C63000                                                           | Aluminum Bronze                            |
| UE6 | 632, C63200                                                           | Aluminum Bronze                            |
| UE7 | 642, C64200                                                           | Aluminum Bronze                            |
| UE9 | 6421, C64210                                                          | Aluminum Silicon Bronze                    |
| UF0 | 651, C65100                                                           | Low Silicon Bronze B                       |
| UF1 | 655, C65500                                                           | High Silicon Bronze A                      |
| UF2 | 661, C66100                                                           | Silicon Bronze                             |
| UF3 | 675, C67500                                                           | Manganese Bronze A                         |

**Table 5-4 Material and Treatment: UNS Nonferrous Materials (Cont'd)**

| PIN | Material Spec                                                                                                           | Material                                                 |
|-----|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| UF4 | 710, C71000                                                                                                             | Copper-Nickel, 20%                                       |
| UF5 | UNS C11000, 27000, 36000, 46200, -400, 48200, 51000, 61300, -400, 63000, -200, 64200, 65100, 65500, 66100, 67500, 71000 | Brass/Bronze/Copper-Nickel Alloy                         |
| UF6 | 715, C71500                                                                                                             | Copper-Nickel, 30%                                       |
| UK6 | 729, C72900                                                                                                             | Copper-Nickel Tin Spinodal Alloy                         |
| UF7 | 745, C74500                                                                                                             | Nickel Silver, 65-10                                     |
| UF8 | 752, C75200                                                                                                             | Nickel Silver, 65-18                                     |
| UF9 | 757, C75700                                                                                                             | Nickel Silver, 65-12                                     |
| UG0 | 764, C76400                                                                                                             | Nickel Silver                                            |
| UG1 | 770, C77000                                                                                                             | Nickel Silver, 55-18                                     |
| UG2 | 774, C77400                                                                                                             | Nickel Silver                                            |
| UG3 | UNS C36500, 37700, 46400, 48200, 48500, 61900, 62300, 63000, 63200, 64200, 64210, 65500, or 77400                       | Brass/Bronze                                             |
| UG4 | 792, C79200                                                                                                             | Leaded Nickel Silver                                     |
| UG5 | UNS C71200, 71000, 74500, 75200, 75700, 76400, 77000, or 79200                                                          | Leaded Nickel Silver                                     |
| UG6 | Ni400HF, N04400                                                                                                         | Ni-Cu Alloy Solid Solution Strengthened (Monel 400)      |
| UG7 | R405, N04405                                                                                                            | Ni-Cu Alloy Solid Solution Strengthened (Monel R405)     |
| UG8 | K5000, N05500                                                                                                           | Ni-Cu Alloy Precipitation Hardenable (Monel K500)        |
| UG9 | N10001                                                                                                                  | Ni-Mo Alloy Solid Solution Strengthened (Hastelloy C)    |
| UH0 | C276, N10276                                                                                                            | Ni-Mo Alloy Solid Solution Strengthened (Hastelloy C276) |
| UH1 | R50250                                                                                                                  | Titanium, Unalloyed                                      |
| UH2 | R50400                                                                                                                  | Titanium, Unalloyed                                      |
| UH3 | R50550                                                                                                                  | Titanium, Unalloyed                                      |
| UH4 | R50700                                                                                                                  | Titanium, Unalloyed                                      |
| UH5 | R52400                                                                                                                  | Titanium, Unalloyed                                      |
| UH6 | R54520                                                                                                                  | Titanium Alloy                                           |
| UH7 | R54521                                                                                                                  | Titanium Alloy                                           |
| UH8 | R54560                                                                                                                  | Titanium Alloy                                           |
| UH9 | R54620                                                                                                                  | Titanium Alloy                                           |
| UJ0 | R54810                                                                                                                  | Titanium Alloy                                           |
| UJ1 | R56080                                                                                                                  | Titanium Alloy                                           |
| UJ2 | R56210                                                                                                                  | Titanium Alloy                                           |
| UJ3 | R56260                                                                                                                  | Titanium Alloy                                           |
| UJ4 | R56320                                                                                                                  | Titanium Alloy                                           |

**Table 5-4 Material and Treatment: UNS Nonferrous Materials (Cont'd)**

| PIN | Material Spec                                                                                                                                       | Material                            |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| UJ5 | R56400                                                                                                                                              | Titanium Alloy                      |
| UJ6 | R56401                                                                                                                                              | Titanium Alloy 6Al-4V ELI           |
| UJ7 | R56402                                                                                                                                              | Titanium Alloy Welding Filler Metal |
| UJ8 | R56430                                                                                                                                              | Titanium Alloy                      |
| UJ9 | R56620                                                                                                                                              | Titanium Alloy                      |
| UK0 | R58010                                                                                                                                              | Titanium Alloy                      |
| UK1 | R58030                                                                                                                                              | Titanium Alloy                      |
| UK2 | R58640                                                                                                                                              | Titanium Alloy Beta C (Grade 19)    |
| UK3 | R58820                                                                                                                                              | Titanium Alloy                      |
| UK4 | UNS R50250, -400, -550, -700, 52400, 54520, 54521, -560, -620, -810, 56080, -210, -260, -320, -400, -401, -402, -430, -620, 58010, -030, -640, -820 | Titanium Alloy                      |

**Table 5-5 Material and Treatment: SAE Material Specifications**

| PIN | Material Spec        | Material        |
|-----|----------------------|-----------------|
| WJ1 | SAE J403 1055-1065   | Carbon Steel    |
| WJ2 | SAE J404 4037        | Alloy Steel     |
| WJ3 | SAE J405 302-305     | Stainless Steel |
| WJ4 | SAE J405 316         | Stainless Steel |
| WJ5 | SAE J411 10B55-10B65 | Boron Steel     |
| WA1 | SAE J429 — Grade 2   | Carbon Steel    |
| WA2 | SAE J429 — Grade 5   | Carbon Steel    |
| WA3 | SAE J429 — Grade 5.1 | Carbon Steel    |
| WA4 | SAE J429 — Grade 5.2 | Carbon Steel    |
| WA5 | SAE J429 — Grade 7   | Carbon Steel    |
| WA6 | SAE J429 — Grade 8   | Carbon Steel    |
| WA7 | SAE J429 — Grade 8.2 | Carbon Steel    |
| WF1 | SAE J429 — Grade 1   | Carbon Steel    |
| WF2 | SAE J429 — Grade 4   | Carbon Steel    |
| WF3 | SAE J429 — Grade 8.1 | Carbon Steel    |
| WF4 | SAE J430 — Grade 0   | Carbon Steel    |
| WF5 | SAE J430 — Grade 1   | Carbon Steel    |
| WF6 | SAE J430 — Grade 2   | Carbon Steel    |

**Table 5-5 Material and Treatment: SAE Material Specifications (Cont'd)**

| PIN | Material Spec                 | Material     |
|-----|-------------------------------|--------------|
| WF7 | SAE J430 — Grade 3            | Carbon Steel |
| WA8 | SAE J995 — Grade 2            | Carbon Steel |
| WA9 | SAE J995 — Grade 5            | Carbon Steel |
| WB0 | SAE J995 — Grade 8            | Carbon Steel |
| WB1 | SAE J1199 Property Class 4.6  | Carbon Steel |
| WB2 | SAE J1199 Property Class 4.8  | Carbon Steel |
| WB3 | SAE J1199 Property Class 5.8  | Carbon Steel |
| WB4 | SAE J1199 Property Class 8.8  | Carbon Steel |
| WB5 | SAE J1199 Property Class 9    | Carbon Steel |
| WB6 | SAE J1199 Property Class 9.8  | Carbon Steel |
| WB7 | SAE J1199 Property Class 9.8  | Carbon Steel |
| WB8 | SAE J1199 Property Class 10   | Carbon Steel |
| WB9 | SAE J1199 Property Class 10.9 | Carbon Steel |
| WC0 | SAE J1199 Property Class 10.9 | Carbon Steel |

**Table 5-6 Material and Treatment: ISO Material Specifications**

| PIN | Material Spec                   | Material                       |
|-----|---------------------------------|--------------------------------|
| WC1 | ISO 898-1 Property Class 8.8    | Carbon Steel                   |
| WC2 | ISO 898-1 Property Class 10.9   | Carbon Steel                   |
| WC3 | ISO 898-1 Property Class 12.9   | Alloy Steel                    |
| WC4 | ISO 898-1 Property Class 4.8    | Carbon Steel                   |
| WF8 | ISO 898-1 Property Class 4.6    | Carbon Steel                   |
| WF9 | ISO 898-1 Property Class 5.8    | Carbon Steel                   |
| WC5 | ISO 898-2 Property Class 4      | Carbon Steel                   |
| WC6 | ISO 898-2 Property Class 5      | Carbon Steel                   |
| WC7 | ISO 898-2 Property Class 8      | Carbon Steel                   |
| WC8 | ISO 898-2 Property Class 10     | Carbon Steel                   |
| WC9 | ISO 898-2 Property Class 12     | Carbon Steel                   |
| WJ6 | ISO 3506-1 Property Class A2-70 | 304 or Similar Stainless Steel |
| WJ7 | ISO 3506-1 Property Class A4-70 | 316 Stainless Steel            |
| WJ8 | ISO 3506-2 Property Class A2-80 | 304 or Similar Stainless Steel |
| WJ9 | ISO 3506-2 Property Class A4-80 | 316 Stainless Steel            |

**Table 5-7 Material and Treatment: IFI Material Specifications**

| PIN | Material Spec         | Material     |
|-----|-----------------------|--------------|
| WD1 | IFI 140, Grade 1006   | Carbon Steel |
| WD2 | IFI 140, Grade 1008   | Carbon Steel |
| WD3 | IFI 140, Grade 1010   | Carbon Steel |
| WD4 | IFI 140, Grade 1018   | Carbon Steel |
| WD5 | IFI 140, Grade 1022/A | Carbon Steel |
| WD6 | IFI 140, Grade 1022/B | Carbon Steel |
| WD7 | IFI 140, Grade 1033   | Carbon Steel |
| WD8 | IFI 140, Grade 1035   | Carbon Steel |
| WD9 | IFI 140, Grade 1038   | Carbon Steel |
| WE0 | IFI 140, Grade 10B21  | Carbon Steel |
| WE1 | IFI 140, Grade 10B38  | Carbon Steel |
| WE2 | IFI 140, Grade 1335   | Alloy Steel  |
| WE3 | IFI 140, Grade 1541/A | Carbon Steel |
| WE4 | IFI 140, Grade 1541/B | Carbon Steel |
| WE5 | IFI 140, Grade 4037   | Alloy Steel  |
| WE6 | IFI 140, Grade 4042   | Alloy Steel  |
| WE7 | IFI 140, Grade 4118   | Alloy Steel  |
| WE8 | IFI 140, Grade 4140   | Alloy Steel  |
| WF0 | IFI 140, Grade 8637   | Alloy Steel  |
| WF9 | IFI 140, Grade 5140   | Alloy Steel  |

**Table 5-8 Material and Treatment: B18.16.1M**

| PIN | Material Spec                    | Material     |
|-----|----------------------------------|--------------|
| WG1 | ANSI B18.16.1M Property Class 5  | Carbon Steel |
| WG2 | ANSI B18.16.1M Property Class 9  | Carbon Steel |
| WG3 | ANSI B18.16.1M Property Class 10 | Carbon Steel |

**Table 5-9 Material and Treatment: B18.6.6**

| PIN | Material Spec                   | Material     |
|-----|---------------------------------|--------------|
| WK0 | ANSI B18.6.6 Property Grade NE2 | Carbon Steel |
| WK1 | ANSI B18.6.6 Property Grade NE5 | Carbon Steel |
| WK2 | ANSI B18.6.6 Property Grade NE8 | Carbon Steel |

**Table 6-1 Plating, Coating, and Passivation: Plain, Unfinished**

| Plain, No Finish |                  |        |
|------------------|------------------|--------|
| PIN              | Finish Spec      | Finish |
| A1               | Plain, No Finish | None   |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications****ASTM A153—Zinc Coating (Hot-Dip) on Iron and Steel Hardware**

| PIN | Finish Spec | Finish     |
|-----|-------------|------------|
| A2  | ASTM A153   | Zinc Plate |

**ASTM A380—Cleaning Descaling, and Passivation of Stainless Steel Parts**

| PIN | Finish Spec | Finish    |
|-----|-------------|-----------|
| A3  | ASTM A380   | Passivate |

**ASTM B633—Electrodeposited Coatings of Zinc on Iron and Steel**

| PIN | Finish Spec               | Finish     |
|-----|---------------------------|------------|
| A4  | ASTM B633, Type I, SC 1   | Zinc Plate |
| A5  | ASTM B633, Type I, SC 2   | Zinc Plate |
| A6  | ASTM B633, Type I, SC 3   | Zinc Plate |
| A7  | ASTM B633, Type I, SC 4   | Zinc Plate |
| A8  | ASTM B633, Type II, SC 1  | Zinc Plate |
| A9  | ASTM B633, Type II, SC 2  | Zinc Plate |
| AA  | ASTM B633, Type II, SC 3  | Zinc Plate |
| AB  | ASTM B633, Type II, SC 4  | Zinc Plate |
| AC  | ASTM B633, Type III, SC 1 | Zinc Plate |
| AD  | ASTM B633, Type III, SC 2 | Zinc Plate |
| AE  | ASTM B633, Type III, SC 3 | Zinc Plate |
| AF  | ASTM B633, Type III, SC 4 | Zinc Plate |
| AG  | ASTM B633, Type IV, SC 1  | Zinc Plate |
| AH  | ASTM B633, Type IV, SC 2  | Zinc Plate |
| AJ  | ASTM B633, Type IV, SC 3  | Zinc Plate |
| AK  | ASTM B633, Type IV, SC 4  | Zinc Plate |
| MA  | ASTM B633, Type V, SC 1   | Zinc Plate |
| MB  | ASTM B633, Type V, SC 2   | Zinc Plate |
| MC  | ASTM B633, Type V, SC 3   | Zinc Plate |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| <b>ASTM B633—Electrodeposited Coatings of Zinc on Iron and Steel (Cont'd)</b> |                              |               |
|-------------------------------------------------------------------------------|------------------------------|---------------|
| <b>PIN</b>                                                                    | <b>Finish Spec</b>           | <b>Finish</b> |
| MD                                                                            | ASTM B633, Type V, SC 4      | Zinc Plate    |
| ME                                                                            | ASTM B633, Type VI, SC 1     | Zinc Plate    |
| MF                                                                            | ASTM B633, Type VI, SC 2     | Zinc Plate    |
| MG                                                                            | ASTM B633, Type VI, SC 3     | Zinc Plate    |
| MH                                                                            | ASTM B633, Type VI, SC 4     | Zinc Plate    |
| <b>ASTM B695—Coatings of Zinc Mechanically Deposited on Iron and Steel</b>    |                              |               |
| <b>PIN</b>                                                                    | <b>Finish Spec</b>           | <b>Finish</b> |
| AL                                                                            | ASTM B695, Type I, Class 5   | Zinc Plate    |
| AM                                                                            | ASTM B695, Type I, Class 8   | Zinc Plate    |
| AN                                                                            | ASTM B695, Type I, Class 12  | Zinc Plate    |
| AP                                                                            | ASTM B695, Type I, Class 25  | Zinc Plate    |
| AQ                                                                            | ASTM B695, Type I, Class 40  | Zinc Plate    |
| AR                                                                            | ASTM B695, Type I, Class 50  | Zinc Plate    |
| MI                                                                            | ASTM B695, Type I, Class 55  | Zinc Plate    |
| AS                                                                            | ASTM B695, Type II, Class 5  | Zinc Plate    |
| AT                                                                            | ASTM B695, Type II, Class 8  | Zinc Plate    |
| AU                                                                            | ASTM B695, Type II, Class 12 | Zinc Plate    |
| AV                                                                            | ASTM B695, Type II, Class 25 | Zinc Plate    |
| AW                                                                            | ASTM B695, Type II, Class 40 | Zinc Plate    |
| AX                                                                            | ASTM B695, Type II, Class 50 | Zinc Plate    |
| MJ                                                                            | ASTM B695, Type II, Class 55 | Zinc Plate    |
| <b>ASTM B696—Coatings of Cadmium Mechanically Deposited</b>                   |                              |               |
| <b>PIN</b>                                                                    | <b>Finish Spec</b>           | <b>Finish</b> |
| AY                                                                            | ASTM B696, Type I, Class 5   | Cadmium Plate |
| AZ                                                                            | ASTM B696, Type I, Class 8   | Cadmium Plate |
| B0                                                                            | ASTM B696, Type I, Class 12  | Cadmium Plate |
| B1                                                                            | ASTM B696, Type II, Class 5  | Cadmium Plate |
| B2                                                                            | ASTM B696, Type II, Class 8  | Cadmium Plate |
| B3                                                                            | ASTM B696, Type II, Class 12 | Cadmium Plate |
| <b>ASTM B766—Electrodeposited Coatings of Cadmium</b>                         |                              |               |
| <b>PIN</b>                                                                    | <b>Finish Spec</b>           | <b>Finish</b> |
| B4                                                                            | ASTM B766, Type I, Class 5   | Cadmium Plate |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| <b>ASTM B766—Electrodeposited Coatings of Cadmium (Cont'd)</b>                |                               |               |
|-------------------------------------------------------------------------------|-------------------------------|---------------|
| <b>PIN</b>                                                                    | <b>Finish Spec</b>            | <b>Finish</b> |
| B5                                                                            | ASTM B766, Type I, Class 8    | Cadmium Plate |
| B6                                                                            | ASTM B766, Type I, Class 12   | Cadmium Plate |
| B7                                                                            | ASTM B766, Type I, Class 25   | Cadmium Plate |
| B8                                                                            | ASTM B766, Type II, Class 5   | Cadmium Plate |
| B9                                                                            | ASTM B766, Type II, Class 8   | Cadmium Plate |
| BA                                                                            | ASTM B766, Type II, Class 12  | Cadmium Plate |
| BB                                                                            | ASTM B766, Type II, Class 25  | Cadmium Plate |
| BC                                                                            | ASTM B766, Type III, Class 5  | Cadmium Plate |
| BD                                                                            | ASTM B766, Type III, Class 8  | Cadmium Plate |
| BE                                                                            | ASTM B766, Type III, Class 12 | Cadmium Plate |
| BF                                                                            | ASTM B766, Type III, Class 25 | Cadmium Plate |
| <b>ASTM F871 MN—Electrodeposited Coatings on Threaded Components (Metric)</b> |                               |               |
| <b>PIN</b>                                                                    | <b>Finish Spec</b>            | <b>Finish</b> |
| BG                                                                            | ASTM F871M, A165 SC 1         | Cadmium Plate |
| BH                                                                            | ASTM F871 M, A165 SC 2        | Zinc Plate    |
| BJ                                                                            | ASTM F871 M, A165 SC 3        | Zinc Plate    |
| BK                                                                            | ASTM F871 M, N633 SC 0        | Zinc Plate    |
| BL                                                                            | ASTM F871 M, N633 SC 1        | Zinc Plate    |
| BM                                                                            | ASTM F871 M, N633 SC 2        | Zinc Plate    |
| BN                                                                            | ASTM F871 M, N633 SC 3        | Zinc Plate    |
| BP                                                                            | ASTM F871 M, N633 SC 4        | Zinc Plate    |
| BQ                                                                            | ASTM F871 M, B456 SC 1        | Zinc Plate    |
| BR                                                                            | ASTM F871 M, B456 SC 2        | Zinc Plate    |
| BS                                                                            | ASTM F871 M, B456 SC 3        | Zinc Plate    |
| BT                                                                            | ASTM F871 M, B456 SC 4        | Zinc Plate    |
| <b>ASTM A967—Chemical Passivation Treatments for Stainless Steel Parts</b>    |                               |               |
| <b>PIN</b>                                                                    | <b>Finish Spec</b>            | <b>Finish</b> |
| BU                                                                            | ASTM A967, Citric 1           | Passivate     |
| BV                                                                            | ASTM A967, Citric 2           | Passivate     |
| BW                                                                            | ASTM A967, Citric 3           | Passivate     |
| BX                                                                            | ASTM A967, Citric 4           | Passivate     |
| BY                                                                            | ASTM A967, Nitric 1           | Passivate     |
| BZ                                                                            | ASTM A967, Nitric 2           | Passivate     |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM A967—Chemical Passivation Treatments for Stainless Steel Parts (Cont'd)                   |                                 |                        |
|------------------------------------------------------------------------------------------------|---------------------------------|------------------------|
| PIN                                                                                            | Finish Spec                     | Finish                 |
| C0                                                                                             | ASTM A967, Nitric 3             | Passivate              |
| C1                                                                                             | ASTM A967, Nitric 4             | Passivate              |
| C2                                                                                             | ASTM A967, Nitric 5             | Passivate              |
| ASTM F1135—Cadmium or Zinc Chromate Organic Corrosion Protective Coating for Fasteners         |                                 |                        |
| PIN                                                                                            | Finish Spec                     | Finish                 |
| C3                                                                                             | ASTM F1135, Grade 1, Code A     | Zinc Plate             |
| C4                                                                                             | ASTM F1135, Grade 1, Code B     | Zinc Plate             |
| C5                                                                                             | ASTM F1135, Grade 2, Code A     | Zinc Plate             |
| C6                                                                                             | ASTM F1135, Grade 2, Code B     | Zinc Plate             |
| C7                                                                                             | ASTM F1135, Grade 3, Code A     | Zinc Plate             |
| C8                                                                                             | ASTM F1135, Grade 3, Code B     | Zinc Plate             |
| C9                                                                                             | ASTM F1135, Grade 4, Code A     | Zinc Plate             |
| CA                                                                                             | ASTM F1135, Grade 4, Code B     | Zinc Plate             |
| CB                                                                                             | ASTM F1135, Grade 5, Code A     | Cadmium Plate          |
| CC                                                                                             | ASTM F1135, Grade 5, Code B     | Cadmium Plate          |
| CD                                                                                             | ASTM F1135, Grade 6, Code A     | Cadmium Plate          |
| CE                                                                                             | ASTM F1135, Grade 6, Code B     | Cadmium Plate          |
| CF                                                                                             | ASTM F1135, Grade 7, Code A     | Cadmium Plate          |
| CG                                                                                             | ASTM F1135, Grade 7, Code B     | Cadmium Plate          |
| CH                                                                                             | ASTM F1135, Grade 8, Code A     | Cadmium Plate          |
| CJ                                                                                             | ASTM F1135, Grade 8, Code B     | Cadmium Plate          |
| ASTM F1136—Chromium/Zinc Corrosion Protective Coatings for Fasteners                           |                                 |                        |
| PIN                                                                                            | Finish Spec                     | Finish                 |
| CK                                                                                             | ASTM F1136, Grade 1             | Chromium/Zinc Coating  |
| CL                                                                                             | ASTM F1136, Grade 2             | Chromium/Zinc Coating  |
| CM                                                                                             | ASTM F1136, Grade 3             | Chromium/Zinc Coating  |
| 1X                                                                                             | ASTM F1136, Grade 4             | Zinc/Aluminum Coating  |
| 2X                                                                                             | ASTM F1136, Grade 5             | Zinc/Aluminum Coating  |
| 3X                                                                                             | ASTM F 1136, Grade 6 [Note (1)] | Zinc/Aluminum Coating  |
| ASTM F1137—Phosphate Oil/Oil and Phosphate/Organic Corrosive Protective Coatings for Fasteners |                                 |                        |
| PIN                                                                                            | Finish Spec                     | Finish                 |
| CN                                                                                             | ASTM F1137, Grade I [Note (1)]  | Zinc Phosphate Coating |
| CP                                                                                             | ASTM F1137, Grade II [Note (1)] | Zinc Phosphate Coating |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1137—Phosphate Oil/Oil and Phosphate/Organic Corrosive Protective Coatings for Fasteners (Cont'd)                |                                                    |                        |
|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------|
| PIN                                                                                                                    | Finish Spec                                        | Finish                 |
| CQ                                                                                                                     | ASTM F1137, Grade III [Note (1)]                   | Zinc Phosphate Coating |
| CR                                                                                                                     | ASTM F1137, Grade A                                | Zinc Phosphate Coating |
| CS                                                                                                                     | ASTM F1137, Grade B                                | Zinc Phosphate Coating |
| CT                                                                                                                     | ASTM F1137, Grade C                                | Zinc Phosphate Coating |
| CU                                                                                                                     | ASTM F1137, Grade D                                | Zinc Phosphate Coating |
| ASTM F1428—Aluminum Particle-Filled Basecoat/Organic or Inorganic Topcoat, Corrosion Protective Coatings for Fasteners |                                                    |                        |
| PIN                                                                                                                    | Finish Spec                                        | Finish                 |
| CV                                                                                                                     | ASTM F1428, Grade 1A                               | Aluminum Coating       |
| CW                                                                                                                     | ASTM F1428, Grade 1B                               | Aluminum Coating       |
| ASTM F1428—Aluminum Particle-Filled Basecoat/Organic or Inorganic Topcoat, Corrosion Protective Coatings for Fasteners |                                                    |                        |
| PIN                                                                                                                    | Finish Spec                                        | Finish                 |
| CX                                                                                                                     | ASTM F1428, Grade 1C                               | Aluminum Coating       |
| CY                                                                                                                     | ASTM F1428, Grade 2A                               | Aluminum Coating       |
| CZ                                                                                                                     | ASTM F1428, Grade 2B                               | Aluminum Coating       |
| D0                                                                                                                     | ASTM F1428, Grade 2C                               | Aluminum Coating       |
| D1                                                                                                                     | ASTM F1428, Grade 3A                               | Aluminum Coating       |
| D2                                                                                                                     | ASTM F1428, Grade 3B                               | Aluminum Coating       |
| D3                                                                                                                     | ASTM F1428, Grade 4A                               | Aluminum Coating       |
| D4                                                                                                                     | ASTM F1428, Grade 4B                               | Aluminum Coating       |
| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Zinc Coating Fe/Zn                                          |                                                    |                        |
| PIN                                                                                                                    | Finish Spec                                        | Finish                 |
| D5                                                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 1A [Note (1)] | Zinc Plate             |
| D6                                                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 2A [Note (1)] | Zinc Plate             |
| D7                                                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 3A            | Zinc Plate             |
| D8                                                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 5A            | Zinc Plate             |
| 1A                                                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 8A            | Zinc Plate             |
| 2A                                                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 12A           | Zinc Plate             |
| D9                                                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 1B [Note (1)] | Zinc Plate             |
| DA                                                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 2B [Note (1)] | Zinc Plate             |
| DB                                                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 3B            | Zinc Plate             |
| DC                                                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 5B            | Zinc Plate             |
| 3A                                                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 8B            | Zinc Plate             |
| 4A                                                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 12B           | Zinc Plate             |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Zinc Coating Fe/Zn (Cont'd) |                                                               |            |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------|------------|
| PIN                                                                                    | Finish Spec                                                   | Finish     |
| DD                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 1C [Note (1)]            | Zinc Plate |
| DE                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 2C [Note (1)]            | Zinc Plate |
| DF                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 3C                       | Zinc Plate |
| DG                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 5C                       | Zinc Plate |
| 5A                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 8C                       | Zinc Plate |
| 6A                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 12C                      | Zinc Plate |
| DH                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 1D [Note (1)]            | Zinc Plate |
| DJ                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 2D [Note (1)]            | Zinc Plate |
| DK                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 3D                       | Zinc Plate |
| DL                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 5D                       | Zinc Plate |
| 7A                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 8D                       | Zinc Plate |
| 8A                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 12D                      | Zinc Plate |
| DM                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 1E [Note (1)]            | Zinc Plate |
| DN                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 2E [Note (1)]            | Zinc Plate |
| DP                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 3E                       | Zinc Plate |
| DQ                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 5E                       | Zinc Plate |
| 9A                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 8E                       | Zinc Plate |
| 1B                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 12E                      | Zinc Plate |
| DR                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 1F [Note (1)]            | Zinc Plate |
| DS                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 2F [Note (1)]            | Zinc Plate |
| DT                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 3F                       | Zinc Plate |
| DU                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 5F                       | Zinc Plate |
| 2B                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 8F                       | Zinc Plate |
| 3B                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Type 12F                      | Zinc Plate |
| 4B                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 3AT  | Zinc Plate |
| 5B                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 5AT  | Zinc Plate |
| 6B                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 8AT  | Zinc Plate |
| 7B                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 12AT | Zinc Plate |
| 8B                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 3BT  | Zinc Plate |
| 9B                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 5BT  | Zinc Plate |
| 1C                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 8BT  | Zinc Plate |
| 2C                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 12BT | Zinc Plate |
| 3C                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 3CT  | Zinc Plate |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Zinc Coating Fe/Zn (Cont'd) |                                                               |               |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------|
| PIN                                                                                    | Finish Spec                                                   | Finish        |
| 4C                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 5CT  | Zinc Plate    |
| 5C                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 8CT  | Zinc Plate    |
| 6C                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 12CT | Zinc Plate    |
| 7C                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 3DT  | Zinc Plate    |
| 8C                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 5DT  | Zinc Plate    |
| 9C                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 8DT  | Zinc Plate    |
| 1D                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 12DT | Zinc Plate    |
| 2D                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 3ET  | Zinc Plate    |
| 3D                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 5ET  | Zinc Plate    |
| 4D                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 8ET  | Zinc Plate    |
| 5D                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 12ET | Zinc Plate    |
| 6D                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 3FT  | Zinc Plate    |
| 7D                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 5FT  | Zinc Plate    |
| 8D                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 8FT  | Zinc Plate    |
| 9D                                                                                     | ASTM F1941, Zinc Coating Fe/Zn, Trivalent Chromate, Type 12FT | Zinc Plate    |
| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Cadmium Coating Fe/Cd       |                                                               |               |
| PIN                                                                                    | Finish Spec                                                   | Finish        |
| DV                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 1A [Note (1)]         | Cadmium Plate |
| DW                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 2A [Note (1)]         | Cadmium Plate |
| DX                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 3A                    | Cadmium Plate |
| DY                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 5A                    | Cadmium Plate |
| 1E                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 8A                    | Cadmium Plate |
| 2E                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 12A                   | Cadmium Plate |
| DZ                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 1B [Note (1)]         | Cadmium Plate |
| E0                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 2B [Note (1)]         | Cadmium Plate |
| E1                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 3B                    | Cadmium Plate |
| E2                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 5B                    | Cadmium Plate |
| 3E                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 8B                    | Cadmium Plate |
| 4E                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 12B                   | Cadmium Plate |
| E3                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 1C [Note (1)]         | Cadmium Plate |
| E4                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 2C [Note (1)]         | Cadmium Plate |
| E5                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 3C                    | Cadmium Plate |
| E6                                                                                     | ASTM F1941, Cadmium Coating Fe/Cd, Type 5C                    | Cadmium Plate |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Cadmium Coating Fe/Cd (Cont'd) |                                                                  |                          |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------|--------------------------|
| PIN                                                                                       | Finish Spec                                                      | Finish                   |
| 5E                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 8C                       | Cadmium Plate            |
| 6E                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 12C                      | Cadmium Plate            |
| <del>E7</del>                                                                             | <del>ASTM F1941, Cadmium Coating Fe/Cd, Type 1D [Note (1)]</del> | <del>Cadmium Plate</del> |
| <del>E8</del>                                                                             | <del>ASTM F1941, Cadmium Coating Fe/Cd, Type 2D [Note (1)]</del> | <del>Cadmium Plate</del> |
| E9                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 3D                       | Cadmium Plate            |
| EA                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 5D                       | Cadmium Plate            |
| 7E                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 8D                       | Cadmium Plate            |
| 8E                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 12D                      | Cadmium Plate            |
| <del>EB</del>                                                                             | <del>ASTM F1941, Cadmium Coating Fe/Cd, Type 1E [Note (1)]</del> | <del>Cadmium Plate</del> |
| <del>EC</del>                                                                             | <del>ASTM F1941, Cadmium Coating Fe/Cd, Type 2E [Note (1)]</del> | <del>Cadmium Plate</del> |
| ED                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 3E                       | Cadmium Plate            |
| EE                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 5E                       | Cadmium Plate            |
| 9E                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 8E                       | Cadmium Plate            |
| 1F                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 12E                      | Cadmium Plate            |
| <del>EF</del>                                                                             | <del>ASTM F1941, Cadmium Coating Fe/Cd, Type 1F [Note (1)]</del> | <del>Cadmium Plate</del> |
| <del>EG</del>                                                                             | <del>ASTM F1941, Cadmium Coating Fe/Cd, Type 2F [Note (1)]</del> | <del>Cadmium Plate</del> |
| EH                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 3F                       | Cadmium Plate            |
| EJ                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 5F                       | Cadmium Plate            |
| 2F                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 8F                       | Cadmium Plate            |
| 3F                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Type 12F                      | Cadmium Plate            |
| 4F                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 3AT  | Cadmium Plate            |
| 5F                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 5AT  | Cadmium Plate            |
| 6F                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 8AT  | Cadmium Plate            |
| 7F                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 12AT | Cadmium Plate            |
| 8F                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 3BT  | Cadmium Plate            |
| 9F                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 5BT  | Cadmium Plate            |
| 1G                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 8BT  | Cadmium Plate            |
| 2G                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 12BT | Cadmium Plate            |
| 3G                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 3CT  | Cadmium Plate            |
| 4G                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 5CT  | Cadmium Plate            |
| 5G                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 8CT  | Cadmium Plate            |
| 6G                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 12CT | Cadmium Plate            |
| 7G                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 3DT  | Cadmium Plate            |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Cadmium Coating Fe/Cd (Cont'd) |                                                                  |               |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------|
| PIN                                                                                       | Finish Spec                                                      | Finish        |
| 8G                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 5DT  | Cadmium Plate |
| 9G                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 8DT  | Cadmium Plate |
| 1H                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 12DT | Cadmium Plate |
| 2H                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 3ET  | Cadmium Plate |
| 3H                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 5ET  | Cadmium Plate |
| 4H                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 8ET  | Cadmium Plate |
| 5H                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 12ET | Cadmium Plate |
| 6H                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 3FT  | Cadmium Plate |
| 7H                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 5FT  | Cadmium Plate |
| 8H                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 8FT  | Cadmium Plate |
| 9H                                                                                        | ASTM F1941, Cadmium Coating Fe/Cd, Trivalent Chromate, Type 12FT | Cadmium Plate |
| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Zinc Cobalt Alloy Fe/Zn-Co     |                                                                  |               |
| PIN                                                                                       | Finish Spec                                                      | Finish        |
| EK                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 1A [Note (1)]       | Zinc Plate    |
| EL                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 2A [Note (1)]       | Zinc Plate    |
| EM                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 3A                  | Zinc Plate    |
| EN                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 5A                  | Zinc Plate    |
| 1J                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 8A                  | Zinc Plate    |
| 2J                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 12A                 | Zinc Plate    |
| EP                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 1B [Note (1)]       | Zinc Plate    |
| EQ                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 2B [Note (1)]       | Zinc Plate    |
| ER                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 3B                  | Zinc Plate    |
| ES                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 5B                  | Zinc Plate    |
| 3J                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 8B                  | Zinc Plate    |
| 4J                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 12B                 | Zinc Plate    |
| ET                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 1C [Note (1)]       | Zinc Plate    |
| EU                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 2C [Note (1)]       | Zinc Plate    |
| EV                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 3C                  | Zinc Plate    |
| EW                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 5C                  | Zinc Plate    |
| 5J                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 8C                  | Zinc Plate    |
| 6J                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 12C                 | Zinc Plate    |
| EX                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 1D [Note (1)]       | Zinc Plate    |
| EY                                                                                        | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 2D [Note (1)]       | Zinc Plate    |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Zinc Cobalt Alloy Fe/Zn-Co (Cont'd) |                                                                       |            |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------|
| PIN                                                                                            | Finish Spec                                                           | Finish     |
| EZ                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 3D                       | Zinc Plate |
| F0                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 5D                       | Zinc Plate |
| 7J                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 8D                       | Zinc Plate |
| 8J                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 12D                      | Zinc Plate |
| F1                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 1E [Note (1)]            | Zinc Plate |
| F2                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 2E [Note (1)]            | Zinc Plate |
| F3                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 3E                       | Zinc Plate |
| F4                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 5E                       | Zinc Plate |
| 9J                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 8E                       | Zinc Plate |
| 1K                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 12E                      | Zinc Plate |
| F5                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 1F [Note (1)]            | Zinc Plate |
| F6                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 2F [Note (1)]            | Zinc Plate |
| F7                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 3F                       | Zinc Plate |
| F8                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 5F                       | Zinc Plate |
| 2K                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 8F                       | Zinc Plate |
| 3K                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Type 12F                      | Zinc Plate |
| 4K                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 3AT  | Zinc Plate |
| 5K                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 5AT  | Zinc Plate |
| 6K                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 8AT  | Zinc Plate |
| 7K                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 12AT | Zinc Plate |
| 8K                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 3BT  | Zinc Plate |
| 9K                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 5BT  | Zinc Plate |
| 1L                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 8BT  | Zinc Plate |
| 2L                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 12BT | Zinc Plate |
| 3L                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 3CT  | Zinc Plate |
| 4L                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 5CT  | Zinc Plate |
| 5L                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 8CT  | Zinc Plate |
| 6L                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 12CT | Zinc Plate |
| 7L                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 3DT  | Zinc Plate |
| 8L                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 5DT  | Zinc Plate |
| 9L                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 8DT  | Zinc Plate |
| 1M                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 12DT | Zinc Plate |
| 2M                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 3ET  | Zinc Plate |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Zinc Cobalt Alloy Fe/Zn-Co (Cont'd) |                                                                       |            |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------|
| PIN                                                                                            | Finish Spec                                                           | Finish     |
| 3M                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 5ET  | Zinc Plate |
| 4M                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 8ET  | Zinc Plate |
| 5M                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 12ET | Zinc Plate |
| 6M                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 3FT  | Zinc Plate |
| 7M                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 5FT  | Zinc Plate |
| 8M                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 8FT  | Zinc Plate |
| 9M                                                                                             | ASTM F1941, Zinc Cobalt Alloy Fe/Zn-Co, Trivalent Chromate, Type 12FT | Zinc Plate |
| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Zinc Nickel Alloy Fe/Zn-Ni          |                                                                       |            |
| PIN                                                                                            | Finish Spec                                                           | Finish     |
| F9                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 1A [Note (1)]            | Zinc Plate |
| FA                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 2A [Note (1)]            | Zinc Plate |
| FB                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 3A                       | Zinc Plate |
| FC                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 5A                       | Zinc Plate |
| 1N                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 8A                       | Zinc Plate |
| 2N                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 12A                      | Zinc Plate |
| FD                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 1B [Note (1)]            | Zinc Plate |
| FE                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 2B [Note (1)]            | Zinc Plate |
| FF                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 3B                       | Zinc Plate |
| FG                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 5B                       | Zinc Plate |
| 3N                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 8B                       | Zinc Plate |
| 4N                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 12B                      | Zinc Plate |
| FH                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 1C [Note (1)]            | Zinc Plate |
| FJ                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 2C [Note (1)]            | Zinc Plate |
| FK                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 3C                       | Zinc Plate |
| FL                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 5C                       | Zinc Plate |
| 5N                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 8C                       | Zinc Plate |
| 6N                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 12C                      | Zinc Plate |
| FM                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 1D [Note (1)]            | Zinc Plate |
| FN                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 2D [Note (1)]            | Zinc Plate |
| FP                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 3D                       | Zinc Plate |
| FQ                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 5D                       | Zinc Plate |
| 7N                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 8D                       | Zinc Plate |
| 8N                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 12D                      | Zinc Plate |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Zinc Nickel Alloy Fe/Zn-Ni (Cont'd) |                                                                       |            |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------|
| PIN                                                                                            | Finish Spec                                                           | Finish     |
| FR                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 1E [Note (1)]            | Zinc Plate |
| FS                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 2E [Note (1)]            | Zinc Plate |
| FT                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 3E                       | Zinc Plate |
| FU                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 5E                       | Zinc Plate |
| 9N                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 8E                       | Zinc Plate |
| 1P                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 12E                      | Zinc Plate |
| FV                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 1F [Note (1)]            | Zinc Plate |
| FW                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 2F [Note (1)]            | Zinc Plate |
| FX                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 3F                       | Zinc Plate |
| FY                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 5F                       | Zinc Plate |
| 2P                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 8F                       | Zinc Plate |
| 3P                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Type 12F                      | Zinc Plate |
| 4P                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 3AT  | Zinc Plate |
| 5P                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 5AT  | Zinc Plate |
| 6P                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 8AT  | Zinc Plate |
| 7P                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 12AT | Zinc Plate |
| 8P                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 3BT  | Zinc Plate |
| 9P                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 5BT  | Zinc Plate |
| 1Q                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 8BT  | Zinc Plate |
| 2Q                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 12BT | Zinc Plate |
| 3Q                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 3CT  | Zinc Plate |
| 4Q                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 5CT  | Zinc Plate |
| 5Q                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 8CT  | Zinc Plate |
| 6Q                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 12CT | Zinc Plate |
| 7Q                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 3DT  | Zinc Plate |
| 8Q                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 5DT  | Zinc Plate |
| 9Q                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 8DT  | Zinc Plate |
| 1R                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 12DT | Zinc Plate |
| 2R                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 3ET  | Zinc Plate |
| 3R                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 5ET  | Zinc Plate |
| 4R                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 8ET  | Zinc Plate |
| 5R                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 12ET | Zinc Plate |
| 6R                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 3FT  | Zinc Plate |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Zinc Nickel Alloy Fe/Zn-Ni (Cont'd) |                                                                       |            |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------|
| PIN                                                                                            | Finish Spec                                                           | Finish     |
| 7R                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 5FT  | Zinc Plate |
| 8R                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 8FT  | Zinc Plate |
| 9R                                                                                             | ASTM F1941, Zinc Nickel Alloy Fe/Zn-Ni, Trivalent Chromate, Type 12FT | Zinc Plate |
| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Zinc Iron Alloy Fe/Zn-Fe            |                                                                       |            |
| PIN                                                                                            | Finish Spec                                                           | Finish     |
| FZ                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 1A [Note (1)]              | Zinc Plate |
| G0                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 2A [Note (1)]              | Zinc Plate |
| G1                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 3A                         | Zinc Plate |
| G2                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 5A                         | Zinc Plate |
| 1S                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 8A                         | Zinc Plate |
| 2S                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 12A                        | Zinc Plate |
| G3                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 1B [Note (1)]              | Zinc Plate |
| G4                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 2B [Note (1)]              | Zinc Plate |
| G5                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 3B                         | Zinc Plate |
| G6                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 5B                         | Zinc Plate |
| 3S                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 8B                         | Zinc Plate |
| 4S                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 12B                        | Zinc Plate |
| G7                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 1C [Note (1)]              | Zinc Plate |
| G8                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 2C [Note (1)]              | Zinc Plate |
| G9                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 3C                         | Zinc Plate |
| GA                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 5C                         | Zinc Plate |
| 5S                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 8C                         | Zinc Plate |
| 6S                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 12C                        | Zinc Plate |
| GB                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 1D [Note (1)]              | Zinc Plate |
| GC                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 2D [Note (1)]              | Zinc Plate |
| GD                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 3D                         | Zinc Plate |
| GE                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 5D                         | Zinc Plate |
| 7S                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 8D                         | Zinc Plate |
| 8S                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 12D                        | Zinc Plate |
| GF                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 1E [Note (1)]              | Zinc Plate |
| GG                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 2E [Note (1)]              | Zinc Plate |
| GH                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 3E                         | Zinc Plate |
| GJ                                                                                             | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 5E                         | Zinc Plate |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941—Electrodeposited Coatings on Threaded Fasteners/Zinc Iron Alloy Fe/Zn-Fe (Cont'd) |                                                                     |            |
|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------|------------|
| PIN                                                                                          | Finish Spec                                                         | Finish     |
| 9S                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 8E                       | Zinc Plate |
| 1T                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 12E                      | Zinc Plate |
| GK                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 1F [Note (1)]            | Zinc Plate |
| GL                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 2F [Note (1)]            | Zinc Plate |
| GM                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 3F                       | Zinc Plate |
| GN                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 5F                       | Zinc Plate |
| 2T                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 8F                       | Zinc Plate |
| 3T                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Type 12F                      | Zinc Plate |
| 4T                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 3AT  | Zinc Plate |
| 5T                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 5AT  | Zinc Plate |
| 6T                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 8AT  | Zinc Plate |
| 7T                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 12AT | Zinc Plate |
| 8T                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 3BT  | Zinc Plate |
| 9T                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 5BT  | Zinc Plate |
| 1U                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 8BT  | Zinc Plate |
| 2U                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 12BT | Zinc Plate |
| 3U                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 3CT  | Zinc Plate |
| 4U                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 5CT  | Zinc Plate |
| 5U                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 8CT  | Zinc Plate |
| 6U                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 12CT | Zinc Plate |
| 7U                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 3DT  | Zinc Plate |
| 8U                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 5DT  | Zinc Plate |
| 9U                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 8DT  | Zinc Plate |
| 1W                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 12DT | Zinc Plate |
| 2W                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 3ET  | Zinc Plate |
| 3W                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 5ET  | Zinc Plate |
| 4W                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 8ET  | Zinc Plate |
| 5W                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 12ET | Zinc Plate |
| 6W                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 3FT  | Zinc Plate |
| 7W                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 5FT  | Zinc Plate |
| 8W                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 8FT  | Zinc Plate |
| 9W                                                                                           | ASTM F1941, Zinc Iron Alloy Fe/Zn-Fe, Trivalent Chromate, Type 12FT | Zinc Plate |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941M—Electrodeposited Coatings on Threaded Fasteners/Zinc Coating, Fe/Zn (Metric)    |                                             |               |
|---------------------------------------------------------------------------------------------|---------------------------------------------|---------------|
| PIN                                                                                         | Finish Spec                                 | Finish        |
| GP                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 3A    | Zinc Plate    |
| GQ                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 3B    | Zinc Plate    |
| GR                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 3C    | Zinc Plate    |
| GS                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 3D    | Zinc Plate    |
| GT                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 3E    | Zinc Plate    |
| GU                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 3F    | Zinc Plate    |
| GV                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 5A    | Zinc Plate    |
| GW                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 5B    | Zinc Plate    |
| GX                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 5C    | Zinc Plate    |
| GY                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 5D    | Zinc Plate    |
| GZ                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 5E    | Zinc Plate    |
| H0                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 5F    | Zinc Plate    |
| H1                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 8A    | Zinc Plate    |
| H2                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 8B    | Zinc Plate    |
| H3                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 8C    | Zinc Plate    |
| H4                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 8D    | Zinc Plate    |
| H5                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 8E    | Zinc Plate    |
| H6                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 8F    | Zinc Plate    |
| H7                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 12A   | Zinc Plate    |
| H8                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 12B   | Zinc Plate    |
| H9                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 12C   | Zinc Plate    |
| HA                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 12D   | Zinc Plate    |
| HB                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 12E   | Zinc Plate    |
| HC                                                                                          | ASTM F1941M, Zinc Coating Fe/Zn, Type 12F   | Zinc Plate    |
| ASTM F1941M—Electrodeposited Coatings on Threaded Fasteners/Cadmium Coating, Fe/Cd (Metric) |                                             |               |
| PIN                                                                                         | Finish Spec                                 | Finish        |
| HD                                                                                          | ASTM F1941M, Cadmium Coating Fe/Cd, Type 3A | Cadmium Plate |
| HE                                                                                          | ASTM F1941M, Cadmium Coating Fe/Cd, Type 3B | Cadmium Plate |
| HF                                                                                          | ASTM F1941M, Cadmium Coating Fe/Cd, Type 3C | Cadmium Plate |
| HG                                                                                          | ASTM F1941M, Cadmium Coating Fe/Cd, Type 3D | Cadmium Plate |
| HH                                                                                          | ASTM F1941M, Cadmium Coating Fe/Cd, Type 3E | Cadmium Plate |
| HJ                                                                                          | ASTM F1941M, Cadmium Coating Fe/Cd, Type 3F | Cadmium Plate |
| HK                                                                                          | ASTM F1941M, Cadmium Coating Fe/Cd, Type 5A | Cadmium Plate |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941M—Electrodeposited Coatings on Threaded Fasteners/Cadmium Coating, Fe/Cd (Metric) (Cont'd) |                                                  |               |
|------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------|
| PIN                                                                                                  | Finish Spec                                      | Finish        |
| HL                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 5B      | Cadmium Plate |
| HM                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 5C      | Cadmium Plate |
| HN                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 5D      | Cadmium Plate |
| HP                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 5E      | Cadmium Plate |
| HQ                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 5F      | Cadmium Plate |
| HR                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 8A      | Cadmium Plate |
| HS                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 8B      | Cadmium Plate |
| HT                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 8C      | Cadmium Plate |
| HU                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 8D      | Cadmium Plate |
| HV                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 8E      | Cadmium Plate |
| HW                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 8F      | Cadmium Plate |
| HX                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 12A     | Cadmium Plate |
| HY                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 12B     | Cadmium Plate |
| HZ                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 12C     | Cadmium Plate |
| J0                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 12D     | Cadmium Plate |
| J1                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 12E     | Cadmium Plate |
| J2                                                                                                   | ASTM F1941M, Cadmium Coating Fe/Cd, Type 12F     | Cadmium Plate |
| ASTM F1941M—Electrodeposited Coatings on Threaded Fasteners/Zinc Cobalt Alloy, Fe/Zn-Co (Metric)     |                                                  |               |
| PIN                                                                                                  | Finish Spec                                      | Finish        |
| J3                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 3A | Zinc Plate    |
| J4                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 3B | Zinc Plate    |
| J5                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 3C | Zinc Plate    |
| J6                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 3D | Zinc Plate    |
| J7                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 3E | Zinc Plate    |
| J8                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 3F | Zinc Plate    |
| J9                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 5A | Zinc Plate    |
| JA                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 5B | Zinc Plate    |
| JB                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 5C | Zinc Plate    |
| JC                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 5D | Zinc Plate    |
| JD                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 5E | Zinc Plate    |
| JE                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 5F | Zinc Plate    |
| JF                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 8A | Zinc Plate    |
| JG                                                                                                   | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 8B | Zinc Plate    |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941M—Electrodeposited Coatings on Threaded Fasteners/Zinc Cobalt Alloy, Fe/Zn-Co (Metric) (Cont'd) |                                                   |            |
|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------|------------|
| PIN                                                                                                       | Finish Spec                                       | Finish     |
| JH                                                                                                        | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 8C  | Zinc Plate |
| JJ                                                                                                        | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 8D  | Zinc Plate |
| JK                                                                                                        | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 8E  | Zinc Plate |
| JL                                                                                                        | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 8F  | Zinc Plate |
| JM                                                                                                        | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 12A | Zinc Plate |
| JN                                                                                                        | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 12B | Zinc Plate |
| JP                                                                                                        | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 12C | Zinc Plate |
| JQ                                                                                                        | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 12D | Zinc Plate |
| JR                                                                                                        | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 12E | Zinc Plate |
| JS                                                                                                        | ASTM F1941M, Zinc Cobalt Alloy Fe/Zn-Co, Type 12F | Zinc Plate |
| ASTM F1941M—Electrodeposited Coatings on Threaded Fasteners/Zinc Nickel Alloy, Fe/Zn-Ni (Metric)          |                                                   |            |
| PIN                                                                                                       | Finish Spec                                       | Finish     |
| JT                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 3A  | Zinc Plate |
| JU                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 3B  | Zinc Plate |
| JV                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 3C  | Zinc Plate |
| JW                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 3D  | Zinc Plate |
| JX                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 3E  | Zinc Plate |
| JY                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 3F  | Zinc Plate |
| JZ                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 5A  | Zinc Plate |
| K0                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 5B  | Zinc Plate |
| K1                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 5C  | Zinc Plate |
| K2                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 5D  | Zinc Plate |
| K3                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 5E  | Zinc Plate |
| K4                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 5F  | Zinc Plate |
| K5                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 8A  | Zinc Plate |
| K6                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 8B  | Zinc Plate |
| K7                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 8C  | Zinc Plate |
| K8                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 8D  | Zinc Plate |
| K9                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 8E  | Zinc Plate |
| KA                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 8F  | Zinc Plate |
| KB                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 12A | Zinc Plate |
| KC                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 12B | Zinc Plate |
| KD                                                                                                        | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 12C | Zinc Plate |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F1941M—Electrodeposited Coatings on Threaded Fasteners/Zinc Nickel Alloy, Fe/Zn-Ni (Metric) (Cont'd)                                             |                                                   |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------------|
| PIN                                                                                                                                                   | Finish Spec                                       | Finish               |
| KE                                                                                                                                                    | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 12D | Zinc Plate           |
| KF                                                                                                                                                    | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 12E | Zinc Plate           |
| KG                                                                                                                                                    | ASTM F1941M, Zinc Nickel Alloy Fe/Zn-Ni, Type 12F | Zinc Plate           |
| ASTM F1941M—Electrodeposited Coatings on Threaded Fasteners/Zinc Iron Alloy, Fe/Zn-Fe (Metric)                                                        |                                                   |                      |
| PIN                                                                                                                                                   | Finish Spec                                       | Finish               |
| KH                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 3A    | Zinc Plate           |
| KJ                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 3B    | Zinc Plate           |
| KK                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 3C    | Zinc Plate           |
| KL                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 3D    | Zinc Plate           |
| KM                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 3E    | Zinc Plate           |
| KN                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 3F    | Zinc Plate           |
| KP                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 5A    | Zinc Plate           |
| KQ                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 5B    | Zinc Plate           |
| KR                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 5C    | Zinc Plate           |
| KS                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 5D    | Zinc Plate           |
| KT                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 5E    | Zinc Plate           |
| KU                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 5F    | Zinc Plate           |
| KV                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 8A    | Zinc Plate           |
| KW                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 8B    | Zinc Plate           |
| KX                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 8C    | Zinc Plate           |
| KY                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 8D    | Zinc Plate           |
| KZ                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 8E    | Zinc Plate           |
| L0                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 8F    | Zinc Plate           |
| L1                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 12A   | Zinc Plate           |
| L2                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 12B   | Zinc Plate           |
| L3                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 12C   | Zinc Plate           |
| L4                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 12D   | Zinc Plate           |
| L5                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 12E   | Zinc Plate           |
| L6                                                                                                                                                    | ASTM F1941M, Zinc Iron Alloy Fe/Zn-Fe, Type 12F   | Zinc Plate           |
| ASTM F2329—Zinc Coating, Hot-Dip, Requirements for Application to Carbon and Alloy Steel Bolts, Screws, Washers, Nuts, and Special Threaded Fasteners |                                                   |                      |
| PIN                                                                                                                                                   | Finish Spec                                       | Finish               |
| M2                                                                                                                                                    | ASTM F2329                                        | Hot-Dip Zinc Coating |

**Table 6-2 Plating, Coating, and Passivation: ASTM Finish Specifications (Cont'd)**

| ASTM F2833—Corrosion Protective Fastener Coatings with Zinc Rich Base Coat and Aluminum Organic/Inorganic Type |                     |                       |
|----------------------------------------------------------------------------------------------------------------|---------------------|-----------------------|
| PIN                                                                                                            | Finish Spec         | Finish                |
| M3                                                                                                             | ASTM F2833, Grade 1 | Zinc/Aluminum Coating |
| M4                                                                                                             | ASTM F2833, Grade 2 | Zinc/Aluminum Coating |
| M5                                                                                                             | ASTM F2833, Grade 3 | Zinc/Aluminum Coating |
| M6                                                                                                             | ASTM F2833, Grade 4 | Zinc/Aluminum Coating |

NOTE:

- (1) Strike-through text denotes obsolete fasteners or characteristics, but are left in this document for reference and for use in deciphering older PIN codes.

**Table 6-3 Plating, Coating, and Passivation: Government Finish Specifications**

| MIL-DTL-13924D—Coating, Oxide, Black for Ferrous Metals                              |                                |                     |
|--------------------------------------------------------------------------------------|--------------------------------|---------------------|
| PIN                                                                                  | Finish Spec                    | Finish              |
| L7                                                                                   | MIL-DTL-13924D, Class 1        | Black Oxide Coating |
| L8                                                                                   | MIL-DTL-13924D, Class 3        | Black Oxide Coating |
| L9                                                                                   | MIL-DTL-13924D, Class 4        | Black Oxide Coating |
| MIL-DTL-16232G—Phosphate Coatings, Heavy Manganese or Zinc Base (for Ferrous Metals) |                                |                     |
| PIN                                                                                  | Finish Spec                    | Finish              |
| LA                                                                                   | MIL-DTL-16232, Type M, Class 1 | Phosphate Coating   |
| LB                                                                                   | MIL-DTL-16232, Type M, Class 2 | Phosphate Coating   |
| LC                                                                                   | MIL-DTL-16232, Type M, Class 3 | Phosphate Coating   |
| LD                                                                                   | MIL-DTL-16232, Type M, Class 4 | Phosphate Coating   |
| LE                                                                                   | MIL-DTL-16232, Type Z, Class 1 | Phosphate Coating   |
| LF                                                                                   | MIL-DTL-16232, Type Z, Class 2 | Phosphate Coating   |
| LG                                                                                   | MIL-DTL-16232, Type Z, Class 3 | Phosphate Coating   |
| LH                                                                                   | MIL-DTL-16232, Type Z, Class 4 | Phosphate Coating   |
| MIL-F-495E—Finish, Chemical, Black, for Copper Alloys                                |                                |                     |
| PIN                                                                                  | Finish Spec                    | Finish              |
| LJ                                                                                   | MIL-F-495E                     | Black Oxide Coating |

**Table 6-4 Plating, Coating, and Passivation: SAE Finish Specifications**

| SAE AMS-QQ-N-290—Nickel Plating (Electrodeposited) |                                    |                |
|----------------------------------------------------|------------------------------------|----------------|
| PIN                                                | Finish Spec                        | Finish         |
| LK                                                 | SAE-AMS-QQ-N-290, Class 1, Grade E | Nickel Coating |
| LL                                                 | SAE-AMS-QQ-N-290, Class 1, Grade F | Nickel Coating |
| LM                                                 | SAE-AMS-QQ-N-290, Class 1, Grade G | Nickel Coating |

**Table 6-4 Plating, Coating, and Passivation: SAE Finish Specifications (Cont'd)**

| SAE AMS–QQ–P–35–Passivation Treatments for Corrosion Resistant Steel |                                     |                      |
|----------------------------------------------------------------------|-------------------------------------|----------------------|
| PIN                                                                  | Finish Spec                         | Finish               |
| LN                                                                   | SAE-AMS-QQ-P-35, Type II            | Passivate            |
| LP                                                                   | SAE-AMS-QQ-P-35, Type VI            | Passivate            |
| LQ                                                                   | SAE-AMS-QQ-P-35, Type VII           | Passivate            |
| LR                                                                   | SAE-AMS-QQ-P-35, Type VIII          | Passivate            |
| SAE AMS–QQ–P–416–Plating, Cadmium (Electrodeposited)                 |                                     |                      |
| PIN                                                                  | Finish Spec                         | Finish               |
| LS                                                                   | SAE-AMS-QQ-P-416, Type I, Class 1   | Cadmium Plate        |
| LT                                                                   | SAE-AMS-QQ-P-416, Type I, Class 2   | Cadmium Plate        |
| LU                                                                   | SAE-AMS-QQ-P-416, Type I, Class 3   | Cadmium Plate        |
| LV                                                                   | SAE-AMS-QQ-P-416, Type II, Class 1  | Cadmium Plate        |
| LW                                                                   | SAE-AMS-QQ-P-416, Type II, Class 2  | Cadmium Plate        |
| LX                                                                   | SAE-AMS-QQ-P-416, Type II, Class 3  | Cadmium Plate        |
| LY                                                                   | SAE-AMS-QQ-P-416, Type III, Class 1 | Cadmium Plate        |
| LZ                                                                   | SAE-AMS-QQ-P-416, Type III, Class 2 | Cadmium Plate        |
| SAE AS5272–Lubricant, Solid Film, Heat Cured Corrosion Inhibiting    |                                     |                      |
| PIN                                                                  | Finish Spec                         | Finish               |
| M0                                                                   | SAE AS5272, Type I                  | Solid Film Lubricant |
| M1                                                                   | SAE AS5272, Type II                 | Solid Film Lubricant |

**Table 6-5 Plating, Coating, and Passivation: ISO Finish Specifications**

| ISO 10683–Non Electrolytically Applied Zinc Flake Coatings |                        |              |
|------------------------------------------------------------|------------------------|--------------|
| PIN                                                        | Finish Spec            | Finish       |
| QA                                                         | ISO 10683, flZn–240h   | Zinc Coating |
| QB                                                         | ISO 10683, flZnL–240h  | Zinc Coating |
| QC                                                         | ISO 10683, flZn–240h–L | Zinc Coating |
| QD                                                         | ISO 10683, flZnnc–240h | Zinc Coating |
| QE                                                         | ISO 10683, flZnyc–240h | Zinc Coating |
| QF                                                         | ISO 10683, flZn–480h   | Zinc Coating |
| QG                                                         | ISO 10683, flZnL–480h  | Zinc Coating |
| QH                                                         | ISO 10683, flZn–480h–L | Zinc Coating |
| QJ                                                         | ISO 10683, flZnnc–480h | Zinc Coating |
| QK                                                         | ISO 10683, flZnyc–480h | Zinc Coating |

**Table 6-5 Plating, Coating, and Passivation: ISO Finish Specifications (Cont'd)**

| ISO 10683–Non Electrolytically Applied Zinc Flake Coatings (Cont'd) |                        |              |
|---------------------------------------------------------------------|------------------------|--------------|
| PIN                                                                 | Finish Spec            | Finish       |
| QL                                                                  | ISO 10683, flZn–720h   | Zinc Coating |
| QM                                                                  | ISO 10683, flZnL–720h  | Zinc Coating |
| QN                                                                  | ISO 10683, flZn–720h–L | Zinc Coating |
| QP                                                                  | ISO 10683, flZnnc–720h | Zinc Coating |
| QQ                                                                  | ISO 10683, flZnyc–720h | Zinc Coating |
| QR                                                                  | ISO 10683, flZn–960h   | Zinc Coating |
| QS                                                                  | ISO 10683, flZnL–960h  | Zinc Coating |
| QT                                                                  | ISO 10683, flZn–960h–L | Zinc Coating |
| QU                                                                  | ISO 10683, flZnnc–960h | Zinc Coating |
| QV                                                                  | ISO 10683, flZnyc–960h | Zinc Coating |

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**Table 7-1 Plain: No Additional Features**

| PIN | Description            |
|-----|------------------------|
| 1   | No Additional Features |

**Table 7-2 Miscellaneous Features for Externally Threaded Fasteners**

| PIN | Description                                                |
|-----|------------------------------------------------------------|
| 1   | Plain End—No Additional Features                           |
| 2   | Pointed—No Additional Features                             |
| 6   | Plain End—Optional-Type Self-Locking                       |
| 7   | Plain End—Drilled Head                                     |
| B   | Plain End—Optional-Type Self-Locking Element, Drilled Head |
| C   | Plain End—Drilled Shank                                    |
| G   | Pointed—Optional-Type Self-Locking Element                 |
| H   | Pointed—Drilled Head                                       |
| M   | Pointed—Optional-Type Self-Locking Element, Drilled Head   |
| N   | Pointed—Drilled Shank                                      |
| P   | As specified by the purchaser                              |

**Table 7-3 General Point Options**

| PIN | Description  |
|-----|--------------|
| 1   | Plain End    |
| 2   | Header Point |

**Table 7-4 Features for Metric Flange Screws**

| PIN | Description                 |
|-----|-----------------------------|
| 2   | Header Point, Type F Fillet |
| 4   | Header Point, Type U Fillet |

**Table 7-5 Features for Metric 12-Spline Screws**

| PIN | Description                 |
|-----|-----------------------------|
| 2   | Header Point, Type A Fillet |
| 4   | Header Point, Type B Fillet |

**Table 7-6 Neck Options for Large Rivets**

| PIN | Description            |
|-----|------------------------|
| 1   | Straight Shank to Head |
| 2   | Swell Neck             |

**Table 7-7 Cotter Pin Type**

| PIN | Description         |
|-----|---------------------|
| 1   | Extended Prong Type |
| 2   | Hammer Lock Type    |

**Table 7-8 Pin Type**

| PIN | Description         |
|-----|---------------------|
| 1   | Chamfered Straight  |
| 2   | Square End Straight |

**Table 7-9 SEMs Washer Components**

| PIN | Description                                    |
|-----|------------------------------------------------|
| 1   | Helical Spring Lock Washer Component           |
| 2   | External Tooth Lock Washer Component           |
| 3   | Internal Tooth Lock Washer Component           |
| 4   | Type L Narrow Conical Spring Washer Component  |
| 5   | Type L Regular Conical Spring Washer Component |
| 6   | Type L Wide Conical Spring Washer Component    |
| 7   | Type H Narrow Conical Spring Washer Component  |
| 8   | Type H Regular Conical Spring Washer Component |
| 9   | Type H Wide Conical Spring Washer Component    |
| A   | Plain Narrow Washer Component                  |
| B   | Plain Regular Washer Component                 |
| C   | Plain Wide Washer Component                    |

**Table 7-10 Wood Screw Thread Types**

| PIN | Description                      |
|-----|----------------------------------|
| C   | Cut Thread Wood Screws           |
| R   | Rolled Thread Wood Screws        |
| P   | Cut or Rolled Thread Wood Screws |

**Table 7-11 Miscellaneous Features for Socket Head Cap Screws**

| PIN | Description                                              |
|-----|----------------------------------------------------------|
| 1   | Undrilled Head, No Additional Features                   |
| 6   | Undrilled Head, Optional-Type Self-Locking Element       |
| 7   | 2 Drilled Head Holes, No Additional Features             |
| B   | 2 Drilled Head Holes, Optional-Type Self-Locking Element |
| C   | 4 Drilled Head Holes, No Additional Features             |
| G   | 4 Drilled Head Holes, Optional-Type Self-Locking Element |
| H   | 6 Drilled Head Holes, No Additional Features             |
| M   | 6 Drilled Head Holes, Optional-Type Self-Locking Element |
| P   | As specified by the purchaser                            |

**Table 7-12 Self-Locking Elements for Set Screws**

| PIN | Description                        |
|-----|------------------------------------|
| 1   | No Additional Features             |
| 6   | Optional-Type Self-Locking Element |
| P   | As specified by the purchaser      |

**Table 7-13 Thread Class for Track Bolts and Nuts**

| PIN | Description            |
|-----|------------------------|
| A   | Free Fit               |
| B   | Wrench Turn Fit        |
| I   | No Additional Features |

**Table 7-14 Alternate Points for Thumb and Wing Screws (ASME B18.6.8)**

| PIN | Description    |
|-----|----------------|
| A   | Cup Point      |
| B   | Cone Point     |
| C   | Oval Point     |
| D   | Flat Point     |
| E   | Dog Point      |
| P   | Plain, Sheared |

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## NONMANDATORY APPENDIX A

### B18.24.1, B18.24.2, AND B18.24.3

### PIN SUCCESSION INSTRUCTIONS

These instructions are meant for use with the worksheet in Fig. A-1. Following that is a 21-digit PIN succession example.

- (1) Enter cancelled 21 digit PIN.
- (2) Demarcate digit 1 (field 1) PIN.
- (3) Based on resolved logic for digit 1, enter the applicable "next table" value in cell A2 and the "table pg#" value in cell C2.
- (4) Demarcate the next 6 or 7 digits (field 2 value) as applicable from "next length" value in cell A2.
- (5) Enter field 2 PIN21 value into cell B2.
- (6) Look up cell B2 PIN21 value in Table B-2 or B-3, as applicable. Enter resolved PIN18 value into cell D2.
- (7) Enter table references by listing them vertically into worksheet beginning from cell A3. Use the simpler

"Bxxx-x" format (table-field length) e.g., B136-1 rather than the "[B-xxx]x," format in Tables B-2 and B-3. For example, [B-136] 1.

- (8) Demarcate remaining fields according to "next length" values starting from cell A3 downward.
- (9) Enter remaining demarcated field values by listing them vertically from cell B3 downward.
- (10) Enter the page numbers vertically beginning from cell C3 downward.
- (11) Look up PIN18 values for tables listed in column A starting from A3 downward. Enter PIN18 values into column D.
- (12) Transpose vertical PIN18 values from column D horizontally to "AE" entry field at bottom of worksheet. This resolves the cancelled B18.24.1-3 PIN to a superseding 18 digit B18.24 PIN.

**Fig. A-1(a) Instructions**  
**Blank 21 to 18 Digit Conversion Worksheet.**

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**

then cell A2 below has a value of **B2-7**

if digit 1 above = **E, N, P, R, V, or W**

then cell A2 below has a value of **B3-6**

|   | A                         | B     | C               | D         |
|---|---------------------------|-------|-----------------|-----------|
|   | next—next<br>table—length | PIN21 | table<br>pg.no. | PIN18     |
| 1 |                           |       |                 | <b>AE</b> |
| 2 |                           |       |                 |           |
| 3 |                           |       |                 |           |
| 4 |                           |       |                 |           |
| 5 |                           |       |                 |           |
| 6 |                           |       |                 |           |
| 7 |                           |       |                 |           |

**AE**

18 digit B18.24 superseding PIN

**Fig. A-1(c) Instructions**  
**Step (2) Demarcate digit 1 (field 1) PIN.**

**B | 210NA01CAD16468GAAB 1**

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**

then cell A2 below has a value of **102-7**

if digit 1 above = **E, N, P, R, V, or W**

then cell A2 below has a value of **103-6**

|   | A                         | B     | C               | D         |
|---|---------------------------|-------|-----------------|-----------|
|   | next—next<br>table—length | PIN21 | table<br>pg.no. | PIN18     |
| 1 |                           |       |                 | <b>AE</b> |
| 2 |                           |       |                 |           |
| 3 |                           |       |                 |           |
| 4 |                           |       |                 |           |
| 5 |                           |       |                 |           |
| 6 |                           |       |                 |           |
| 7 |                           |       |                 |           |

**AE**

18 digit B18.24 superseding PIN

**Fig. A-1(b) Instructions**  
**Step (1) Enter cancelled 21 digit PIN.**

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**

then cell A2 below has a value of **B2-7**

if digit 1 above = **E, N, P, R, V, or W**

then cell A2 below has a value of **B3-6**

|   | A                         | B     | C               | D         |
|---|---------------------------|-------|-----------------|-----------|
|   | next—next<br>table—length | PIN21 | table<br>pg.no. | PIN18     |
| 1 |                           |       |                 | <b>AE</b> |
| 2 |                           |       |                 |           |
| 3 |                           |       |                 |           |
| 4 |                           |       |                 |           |
| 5 |                           |       |                 |           |
| 6 |                           |       |                 |           |
| 7 |                           |       |                 |           |

**AE**

18 digit B18.24 superseding PIN

**Fig. A-1(d) Instructions**  
**Step (3) Based on resolved logic for digit 1, enter the applicable “next table” value in cell A2 and the correct pg. no. in cell C2 from the Table of Contents.**

**B | 210NA01CAD16468GAAB 1**

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**

then cell A2 below has a value of **102-7**

if digit 1 above = **E, N, P, R, V, or W**

then cell A2 below has a value of **103-6**

|   | A                         | B     | C                 | D         |
|---|---------------------------|-------|-------------------|-----------|
|   | next—next<br>table—length | PIN21 | table<br>pg.no.   | PIN18     |
| 1 | <b><u>B2-7</u></b>        |       | <b><u>122</u></b> | <b>AE</b> |
| 2 |                           |       |                   |           |
| 3 |                           |       |                   |           |
| 4 |                           |       |                   |           |
| 5 |                           |       |                   |           |
| 6 |                           |       |                   |           |
| 7 |                           |       |                   |           |

**AE**

18 digit B18.24 superseding PIN

Fig. A-1(e) Instructions

Step (4) Demarcate the next 6 or 7 digits (field 2 value) as applicable from "next length" value in cell A2.

B|210NA01|CAD16468GAAB1

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**  
then cell A2 below has a value of **B2-7**  
if digit 1 above = **E, N, P, R, V, or W**  
then cell A2 below has a value of **B3-6**

|   | A                         | B     | C               | D         |
|---|---------------------------|-------|-----------------|-----------|
|   | next—next<br>table—length | PIN21 | table<br>pg.no. | PIN18     |
| 1 | <b>B 2-7</b>              |       | <b>122</b>      | <b>AE</b> |
| 2 |                           |       |                 |           |
| 3 |                           |       |                 |           |
| 4 |                           |       |                 |           |
| 5 |                           |       |                 |           |
| 6 |                           |       |                 |           |
| 7 |                           |       |                 |           |

**AE**

18 digit B18.24 superseding PIN

Fig. A-1(g) Instructions

Step (6) Look up cell B2 PIN21 value in Table B-2 or B-3, as applicable. Enter resolved PIN18 value into cell D2.

B|210NA01|CAD16468GAAB1

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**  
then cell A2 below has a value of **B2-7**  
if digit 1 above = **E, N, P, R, V, or W**  
then cell A2 below has a value of **B3-6**

|   | A                         | B              | C               | D             |
|---|---------------------------|----------------|-----------------|---------------|
|   | next—next<br>table—length | PIN21          | table<br>pg.no. | PIN18         |
| 1 | <b>B 2-7</b>              | <b>210NA01</b> | <b>122</b>      | <b>AE B03</b> |
| 2 |                           |                |                 |               |
| 3 |                           |                |                 |               |
| 4 |                           |                |                 |               |
| 5 |                           |                |                 |               |
| 6 |                           |                |                 |               |
| 7 |                           |                |                 |               |

**AE**

18 digit B18.24 superseding PIN

Fig. A-1(f) Instructions

Step (5) Enter field 2 PIN21 value into cell B2.

B|210NA01|CAD16468GAAB1

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**  
then cell A2 below has a value of **B2-7**  
if digit 1 above = **E, N, P, R, V, or W**  
then cell A2 below has a value of **B3-6**

|   | A                         | B              | C               | D         |
|---|---------------------------|----------------|-----------------|-----------|
|   | next—next<br>table—length | PIN21          | table<br>pg.no. | PIN18     |
| 1 | <b>B 2-7</b>              | <b>210NA01</b> | <b>122</b>      | <b>AE</b> |
| 2 |                           |                |                 |           |
| 3 |                           |                |                 |           |
| 4 |                           |                |                 |           |
| 5 |                           |                |                 |           |
| 6 |                           |                |                 |           |
| 7 |                           |                |                 |           |

**AE**

18 digit B18.24 superseding PIN

Fig. A-1(h) Instructions

Step (7) Enter table references from table by listing them vertically into worksheet beginning from cell A3. Use the simpler xxx-x format rather than the [B-xxx]x format used in Tables B-2 and B-3.

B|210NA01|CAD16468GAAB1

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**  
then cell A2 below has a value of **B2-7**  
if digit 1 above = **E, N, P, R, V, or W**  
then cell A2 below has a value of **B3-6**

|   | A                         | B              | C               | D             |
|---|---------------------------|----------------|-----------------|---------------|
|   | next—next<br>table—length | PIN21          | table<br>pg.no. | PIN18         |
| 1 | <b>B 2-7</b>              | <b>210NA01</b> | <b>122</b>      | <b>AE B03</b> |
| 2 | <b>B 4-1</b>              |                |                 |               |
| 3 | <b>B 6-2</b>              |                |                 |               |
| 4 | <b>B 11-2</b>             |                |                 |               |
| 5 | <b>B 134-5</b>            |                |                 |               |
| 6 | <b>B 136-2</b>            |                |                 |               |
| 7 | <b>B 137-1</b>            |                |                 |               |

**AE**

18 digit B18.24 superseding PIN

Fig. A-1(i) Instructions

Step (8) Demarcate remaining fields according to “next length” values starting from cell A3 downward.

B|210NA01|C|AD|16|468GA|AB|1

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**

then cell A2 below has a value of **B2-7**

if digit 1 above = **E, N, P, R, V, or W**

then cell A2 below has a value of **B3-6**

|   | A                         | B              | C               | D             |
|---|---------------------------|----------------|-----------------|---------------|
|   | next—next<br>table—length | PIN21          | table<br>pg.no. | PIN18         |
| 1 | <b>B 2-7</b>              | <b>210NA01</b> | <b>122</b>      | <b>AE B03</b> |
| 2 | <b>B 4-1</b>              |                |                 |               |
| 3 | <b>B 6-2</b>              |                |                 |               |
| 4 | <b>B 11-2</b>             |                |                 |               |
| 5 | <b>B 134-5</b>            |                |                 |               |
| 6 | <b>B 136-2</b>            |                |                 |               |
| 7 | <b>B 137-1</b>            |                |                 |               |

AE

18 digit B18.24 superseding PIN

Fig. A-1(k) Instructions

Step (10) Look up page numbers from Table of Contents. Enter them vertically beginning from cell C3 downward.

B|210NA01|C|AD|16|468GA|AB|1

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**

then cell A2 below has a value of **B2-7**

if digit 1 above = **E, N, P, R, V, or W**

then cell A2 below has a value of **B3-6**

|   | A                         | B              | C               | D             |
|---|---------------------------|----------------|-----------------|---------------|
|   | next—next<br>table—length | PIN21          | table<br>pg.no. | PIN18         |
| 1 | <b>B 2-7</b>              | <b>210NA01</b> | <b>x</b>        | <b>AE B03</b> |
| 2 | <b>B 4-1</b>              | <b>C</b>       | <b>x</b>        |               |
| 3 | <b>B 6-2</b>              | <b>AD</b>      | <b>x</b>        |               |
| 4 | <b>B 11-2</b>             | <b>16</b>      | <b>x</b>        |               |
| 5 | <b>B 134-5</b>            | <b>468GA</b>   | <b>x</b>        |               |
| 6 | <b>B 136-2</b>            | <b>AB</b>      | <b>x</b>        |               |
| 7 | <b>B 137-1</b>            | <b>1</b>       | <b>x</b>        |               |

AE

18 digit B18.24 superseding PIN

Fig. A-1(j) Instructions

Step (9) Enter remaining demarcated field values by listing them vertically from cell B3 downward.

B|210NA01|C|AD|16|468GA|AB|1

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**

then cell A2 below has a value of **B2-7**

if digit 1 above = **E, N, P, R, V, or W**

then cell A2 below has a value of **B3-6**

|   | A                         | B              | C               | D             |
|---|---------------------------|----------------|-----------------|---------------|
|   | next—next<br>table—length | PIN21          | table<br>pg.no. | PIN18         |
| 1 | <b>B 2-7</b>              | <b>210NA01</b> |                 | <b>AE B03</b> |
| 2 | <b>B 4-1</b>              | <b>C</b>       |                 |               |
| 3 | <b>B 6-2</b>              | <b>AD</b>      |                 |               |
| 4 | <b>B 11-2</b>             | <b>16</b>      |                 |               |
| 5 | <b>B 134-5</b>            | <b>468GA</b>   |                 |               |
| 6 | <b>B 136-2</b>            | <b>AB</b>      |                 |               |
| 7 | <b>B 137-1</b>            | <b>1</b>       |                 |               |

AE

18 digit B18.24 superseding PIN

Fig. A-1(l) Instructions

Step (11) Look up PIN18 values for tables listed in column A starting from A3 downward. Enter PIN18 values into column D.

B|210NA01|C|AD|16|468GA|AB|1

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**

then cell A2 below has a value of **B2-7**

if digit 1 above = **E, N, P, R, V, or W**

then cell A2 below has a value of **B3-6**

|   | A                         | B              | C               | D             |
|---|---------------------------|----------------|-----------------|---------------|
|   | next—next<br>table—length | PIN21          | table<br>pg.no. | PIN18         |
| 1 | <b>B 2-7</b>              | <b>210NA01</b> |                 | <b>AE B03</b> |
| 2 | <b>B 4-1</b>              | <b>C</b>       | <b>x</b>        | <b>C</b>      |
| 3 | <b>B 6-2</b>              | <b>AD</b>      | <b>x</b>        | <b>250</b>    |
| 4 | <b>B 11-2</b>             | <b>16</b>      | <b>x</b>        | <b>875</b>    |
| 5 | <b>B 134-5</b>            | <b>468GA</b>   | <b>x</b>        | <b>BV5</b>    |
| 6 | <b>B 136-2</b>            | <b>AB</b>      | <b>x</b>        | <b>A2</b>     |
| 7 | <b>B 137-1</b>            | <b>1</b>       | <b>x</b>        | <b>1</b>      |

AE

18 digit B18.24 superseding PIN

**Fig. A-1(m) Instructions**

**Step (12) Transpose vertical PIN18 values from column D horizontally to “AE” entry field at bottom of worksheet. This resolves the cancelled B18.24.1-3 PIN to a superseding 18 digit B18.24.4 PIN.**

**B|210NA01|C|AD|16|468GA|AB|1**

Enter cancelled 21 digit PIN

if digit 1 above = **B, M, S, or T**

then cell A2 below has a value of **B2-7**

if digit 1 above = **E, N, P, R, V, or W**

then cell A2 below has a value of **B3-6**

|   | A                         | B              | C                | D             |
|---|---------------------------|----------------|------------------|---------------|
|   | next—next<br>table—length | PIN21          | table<br>pg. no. | PIN18         |
| 1 | <b>B 2-7</b>              | <b>210NA01</b> | <b>x</b>         | <b>AE B03</b> |
| 2 | <b>B 4-1</b>              | <b>C</b>       | <b>x</b>         | <b>C</b>      |
| 3 | <b>B 6-2</b>              | <b>AD</b>      | <b>x</b>         | <b>250</b>    |
| 4 | <b>B 11-2</b>             | <b>16</b>      | <b>x</b>         | <b>875</b>    |
| 5 | <b>B 134-5</b>            | <b>468GA</b>   | <b>x</b>         | <b>BV5</b>    |
| 6 | <b>B 136-2</b>            | <b>AB</b>      | <b>x</b>         | <b>A2</b>     |
| 7 | <b>B 137-1</b>            | <b>1</b>       | <b>x</b>         | <b>1</b>      |

**AE B02C250875BV5A2 1**

18 digit B18.24 superseding PIN

## NONMANDATORY APPENDIX B

### B18.24.1, B18.24.2, AND B18.24.3 PIN SUCCESSION TABLES

**Table B-1 Fastener Family**

| Digit 1 | Source   | Description                       | Next PIN          |
|---------|----------|-----------------------------------|-------------------|
| A       | B18.24   | 18 Digit PIN                      | Use B18.24 Tables |
| B       | B18.24.1 | Bolts                             | [B2] 7,           |
| E       | B18.24.2 | Inserts                           | [B3] 6,           |
| K       | B18.24.3 | Keys and Keysets                  | [B3] 6,           |
| M       | B18.24.1 | Screw and Washer Assemblies: SEMs | [B2] 7,           |
| N       | B18.24.2 | Nuts                              | [B3] 6,           |
| P       | B18.24.3 | Pins                              | [B3] 6,           |
| R       | B18.24.3 | Retaining Rings                   | [B3] 6,           |
| S       | B18.24.1 | Screws                            | [B2] 7,           |
| T       | B18.24.1 | Studs                             | [B2] 7,           |
| V       | B18.24.3 | Rivets                            | [B3] 6,           |
| W       | B18.24.3 | Washers                           | [B3] 6,           |

**Table B-2 Fastener Type: Externally Threaded**

| PIN21   | PIN18 | Table References                                      |
|---------|-------|-------------------------------------------------------|
| 100NA28 | AEB32 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 100NA29 | AEB33 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 110NG83 | AESZG | [B-4]1,[B-10]2,[B-13]2,[B-134]5,[B-136]2,[B-137]1,    |
| 110NG84 | AESZH | [B-4]1,[B-10]2,[B-13]2,[B-134]5,[B-136]2,[B-137]1,    |
| 110NG85 | AESZI | [B-4]1,[B-10]2,[B-13]2,[B-134]5,[B-136]2,[B-137]1,    |
| 110NG86 | AESZK | [B-4]1,[B-10]2,[B-13]2,[B-134]5,[B-136]2,[B-137]1,    |
| 130NG11 | AEMF4 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1,     |
| 130NG12 | AEMF5 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1,     |
| 130NG13 | AEMF6 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1,     |
| 130NG14 | AEMF7 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1,     |
| 130NG15 | AEMQ9 | [B-146]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1, |
| 130NG16 | AEMR0 | [B-146]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1, |
| 130NG17 | AEMR1 | [B-146]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1, |
| 130NG18 | AEMR2 | [B-146]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1, |
| 130NG19 | AEMS1 | [B-147]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1, |
| 130NG20 | AEMT9 | [B-149]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1, |
| 130NG21 | AEM01 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1,     |
| 130NG22 | AEMQ1 | [B-140]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1, |
| 130NG23 | AEMQ2 | [B-140]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1, |
| 130NG24 | AEMQ3 | [B-140]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1, |
| 130NG25 | AEMQ4 | [B-140]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1, |
| 130NG30 | AEMS1 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1, |
| 130NG31 | AEMT9 | [B-144]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1, |
| 130NG32 | AEM14 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-158]1,     |
| 130NG33 | AEMF4 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-160]1,     |
| 130NG34 | AEMF5 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-160]1,     |
| 130NG35 | AEMF6 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-160]1,     |
| 130NG36 | AEMF7 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-160]1,     |

**Table B-2 Fastener Type: Externally Threaded (Cont'd)**

| PIN21   | PIN18 | Table References                                      |
|---------|-------|-------------------------------------------------------|
| 130NG37 | AEMQ9 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-160]1, |
| 130NG38 | AEMR0 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-160]1, |
| 130NG39 | AEMR1 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-160]1, |
| 130NG40 | AEMR2 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-160]1, |
| 130NG41 | AEMS1 | [B-140]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-160]1, |
| 130NG42 | AEMT9 | [B-149]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-160]1, |
| 130NG43 | AEM01 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-160]1,     |
| 130NG44 | AEMC0 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1,     |
| 130NG45 | AEMC1 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1,     |
| 130NG46 | AEMC2 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1,     |
| 130NG47 | AEMC3 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1,     |
| 130NG48 | AEMN0 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG49 | AEMN1 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG50 | AEMN2 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG51 | AEMN3 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG52 | AEMQ1 | [B-140]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG53 | AEMQ2 | [B-140]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG54 | AEMQ3 | [B-140]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG55 | AEMQ4 | [B-140]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG56 | AEMQ1 | [B-146]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG57 | AEMQ2 | [B-146]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG58 | AEMQ3 | [B-146]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG59 | AEMQ4 | [B-146]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG60 | AEMT9 | [B-149]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1, |
| 130NG61 | AEM01 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-159]1,     |
| 130NG62 | AEMQ1 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-162]1, |
| 130NG63 | AEMQ2 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-162]1, |
| 130NG64 | AEMQ3 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-162]1, |
| 130NG65 | AEMQ4 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-162]1, |
| 130NG66 | AEMQ9 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-162]1, |
| 130NG67 | AEMR0 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-162]1, |
| 130NG68 | AEMR1 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-162]1, |
| 130NG69 | AEMR2 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-162]1, |
| 130NG72 | AEM01 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-165]1,     |
| 130NG73 | AEMF4 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-168]1,     |
| 130NG74 | AEMF5 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-168]1,     |
| 130NG75 | AEMF6 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-168]1,     |
| 130NG76 | AEMF7 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-168]1,     |
| 130NG77 | AEMQ1 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-167]1, |
| 130NG78 | AEMQ2 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-167]1, |
| 130NG79 | AEMQ3 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-167]1, |
| 130NG80 | AEMQ4 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-167]1, |
| 130NG81 | AEMS1 | [B-140]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-167]1, |
| 130NG82 | AEMT9 | [B-149]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-169]1, |
| 130NG83 | AEM01 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-168]1,     |
| 131NG11 | AEMZ1 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-158]1,     |
| 131NG12 | AEMZ2 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-158]1,     |
| 131NG13 | AEMZ3 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-158]1,     |
| 131NG19 | AEMX1 | [B-147]1,[B-152]2,[B-12]2,[B-134]5,[B-136]2,[B-158]1, |
| 131NG20 | AEMX7 | [B-149]1,[B-152]2,[B-12]2,[B-134]5,[B-136]2,[B-158]1, |
| 131NG21 | AEM07 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-158]1,     |
| 131NG22 | AEMW4 | [B-140]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-158]1, |
| 131NG23 | AEMW5 | [B-140]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-158]1, |
| 131NG24 | AEMW6 | [B-140]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-158]1, |
| 131NG30 | AEMX1 | [B-141]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-158]1, |
| 131NG31 | AEMX7 | [B-144]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-158]1, |
| 131NG32 | AEM43 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-158]1,     |
| 131NG33 | AEMZ1 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-160]1,     |
| 131NG34 | AEMZ2 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-160]1,     |
| 131NG35 | AEMZ3 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-160]1,     |
| 131NG41 | AEMX1 | [B-140]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-160]1, |
| 131NG42 | AEMX7 | [B-149]1,[B-152]2,[B-12]2,[B-134]5,[B-136]2,[B-160]1, |

**Table B-2 Fastener Type: Externally Threaded (Cont'd)**

| PIN21   | PIN18 | Table References                                      |
|---------|-------|-------------------------------------------------------|
| 131NG43 | AEM07 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-160]1,     |
| 131NG44 | AEMV3 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-159]1,     |
| 131NG45 | AEMV4 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-159]1,     |
| 131NG46 | AEMV5 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-159]1,     |
| 131NG48 | AEMW0 | [B-141]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-159]1, |
| 131NG49 | AEMW1 | [B-141]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-159]1, |
| 131NG50 | AEMW2 | [B-141]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-159]1, |
| 131NG52 | AEMW4 | [B-140]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-159]1, |
| 131NG53 | AEMW5 | [B-140]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-159]1, |
| 131NG54 | AEMW6 | [B-140]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-159]1, |
| 131NG60 | AEMX7 | [B-149]1,[B-152]2,[B-12]2,[B-134]5,[B-136]2,[B-159]1, |
| 131NG61 | AEM07 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-159]1,     |
| 131NG62 | AEMW4 | [B-140]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-162]1, |
| 131NG63 | AEMW5 | [B-140]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-162]1, |
| 131NG64 | AEMW6 | [B-140]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-162]1, |
| 131NG71 | AEMX7 | [B-141]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-162]1, |
| 131NG72 | AEM07 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-165]1,     |
| 131NG73 | AEMZ1 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-168]1,     |
| 131NG74 | AEMZ2 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-168]1,     |
| 131NG75 | AEMZ3 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-168]1,     |
| 131NG81 | AEMX1 | [B-140]1,[B-151]2,[B-12]2,[B-134]5,[B-136]2,[B-167]1, |
| 131NG82 | AEMX7 | [B-149]1,[B-152]2,[B-12]2,[B-134]5,[B-136]2,[B-169]1, |
| 131NG83 | AEM07 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-169]1,     |
| 151NG09 | AET05 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,     |
| 152NG10 | AET06 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,     |
| 210NA00 | AEB02 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 210NA01 | AEB03 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 210NA09 | AEB01 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 210NA38 | AES01 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 210NA48 | AES02 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 210NA50 | AES03 | [B-4]1,[B-157]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 210NA51 | AES04 | [B-4]1,[B-157]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 210NA52 | AES05 | [B-4]1,[B-157]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 210NA53 | AES06 | [B-4]1,[B-157]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 2310A09 | AEB08 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,     |
| 231NA38 | AES07 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,     |
| 234NG07 | AES10 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,     |
| 235NA00 | AEB05 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,     |
| 236NA01 | AEB06 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,     |
| 237NA06 | AEB07 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,     |
| 238NA52 | AES11 | [B-171]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 239NG08 | AES12 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,     |
| 260NA06 | AEB09 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 271NB45 | AES13 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,     |
| 300NA42 | AES14 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 300NA43 | AES15 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 300NA44 | AES16 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 300NA45 | AES17 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 300NA46 | AES18 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 300NA47 | AES19 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 300NB08 | AES22 | [B-4]1,[B-155]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB09 | AES23 | [B-4]1,[B-155]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB10 | AES24 | [B-4]1,[B-155]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB11 | AES25 | [B-4]1,[B-155]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB12 | AES26 | [B-4]1,[B-155]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB13 | AES28 | [B-4]1,[B-155]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB14 | AES29 | [B-4]1,[B-155]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB15 | AES30 | [B-4]1,[B-155]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB16 | AES31 | [B-4]1,[B-155]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB17 | AES32 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 300NB18 | AES33 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 300NB19 | AES34 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |

**Table B-2 Fastener Type: Externally Threaded (Cont'd)**

| PIN21   | PIN18 | Table References                                    |
|---------|-------|-----------------------------------------------------|
| 300NB20 | AES35 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB21 | AES36 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB22 | AES37 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB23 | AES39 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB24 | AES40 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB25 | AES41 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NB26 | AES42 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 300NS30 | AES21 | [B-4]1,[B-155]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 310NA42 | AES43 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 310NA43 | AES44 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 340NA46 | AES46 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 360NB13 | AES53 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 360NB14 | AES54 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 360NB15 | AES55 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 360NB16 | AES56 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 360NB23 | AES62 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 360NB24 | AES63 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 360NB25 | AES64 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 360NB26 | AES65 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 500NA17 | AEB10 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 500NA18 | AEB16 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 500NA19 | AEB18 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 500NA20 | AEB14 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 500NA21 | AEB13 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 500NA22 | AEB11 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 500NA23 | AEB12 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 500NA24 | AEB19 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 500NA27 | AEB15 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 500NA37 | AEB20 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 500NAA1 | AEB17 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 521NA23 | AEB21 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 522NA22 | AEB22 | [B-4]1,[B-8]2,[B-12]2,[B-134]5,[B-136]2,[B-137]1,   |
| 610NB46 | AES66 | [B-4]1,[B-156]2,[B-11]2,[B-134]5,[B-136]2,[B-172]1, |
| 610NB47 | AES67 | [B-4]1,[B-156]2,[B-11]2,[B-134]5,[B-136]2,[B-172]1, |
| 610NB48 | AES68 | [B-4]1,[B-156]2,[B-11]2,[B-134]5,[B-136]2,[B-172]1, |
| 610NB49 | AES69 | [B-4]1,[B-156]2,[B-11]2,[B-134]5,[B-136]2,[B-172]1, |
| 610NB50 | AES70 | [B-4]1,[B-156]2,[B-11]2,[B-134]5,[B-136]2,[B-172]1, |
| 610NB51 | AES71 | [B-4]1,[B-156]2,[B-11]2,[B-134]5,[B-136]2,[B-172]1, |
| 610NB52 | AES72 | [B-4]1,[B-156]2,[B-11]2,[B-134]5,[B-136]2,[B-172]1, |
| 610NB53 | AES73 | [B-4]1,[B-156]2,[B-11]2,[B-134]5,[B-136]2,[B-172]1, |
| 620NA39 | AES78 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NA40 | AES80 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NA41 | AES79 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB27 | AES93 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB28 | AES94 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB29 | AES95 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB30 | AES96 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB31 | AES97 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB32 | AES98 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB33 | AES81 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB34 | AES82 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB35 | AES83 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB36 | AES84 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB37 | AES85 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB38 | AES86 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB39 | AES87 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB40 | AES88 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB41 | AES89 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB42 | AES90 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB43 | AES91 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 620NB44 | AES92 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |
| 630NA54 | AESH5 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,   |

**Table B-2 Fastener Type: Externally Threaded (Cont'd)**

| PIN21   | PIN18 | Table References                                      |
|---------|-------|-------------------------------------------------------|
| 630NA55 | AESH6 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA56 | AESH8 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA57 | AESG7 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA58 | AESG2 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA59 | AESG3 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA60 | AESG4 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA61 | AESG5 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA62 | AESCO | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA63 | AESC1 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA64 | AESC2 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA65 | AESC3 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA69 | AESD8 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA70 | AESD9 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA71 | AESE0 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA72 | AESE1 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA73 | AESC5 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA74 | AESC6 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA75 | AESC8 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA76 | AESC9 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA77 | AESD0 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA78 | AESD2 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA83 | AESK9 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA84 | AESK8 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA85 | AESD3 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA86 | AESD4 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA87 | AESD5 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA88 | AESD6 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA89 | AESE3 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA90 | AESE4 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA91 | AESE5 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA92 | AESE6 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA96 | AESL4 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA97 | AESL5 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA98 | AESL7 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NA99 | AESF4 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NB00 | AESF5 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NB01 | AESF6 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NB02 | AESF7 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NB03 | AESG8 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NB04 | AESG9 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NB05 | AESH1 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 630NB06 | AESH0 | [B-4]1,[B-6]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1,     |
| 640NB57 | AESQ9 | [B-140]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB58 | AESQ9 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB59 | AESQ9 | [B-142]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB60 | AESQ9 | [B-143]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB61 | AESQ9 | [B-144]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB62 | AESQ9 | [B-145]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB63 | AESQ9 | [B-146]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB64 | AESQ9 | [B-147]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB65 | AESQ9 | [B-148]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB66 | AESQ9 | [B-149]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB67 | AESR0 | [B-140]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB68 | AESR0 | [B-141]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB69 | AESR0 | [B-142]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB70 | AESR0 | [B-143]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB71 | AESR0 | [B-144]1,[B-151]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB72 | AESR0 | [B-145]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB73 | AESR0 | [B-146]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB74 | AESR0 | [B-147]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB75 | AESR0 | [B-148]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |
| 640NB76 | AESR0 | [B-149]1,[B-152]2,[B-11]2,[B-134]5,[B-136]2,[B-137]1, |

### Table B-2 Fastener Type: Externally Threaded (Cont'd)

[illegible]

### Table B-2 Fastener Type: Externally Threaded (Cont'd)

[illegible]

### Table B-2 Fastener Type: Externally Threaded (Cont'd)

[illegible]

### Table B-2 Fastener Type: Externally Threaded (Cont'd)

[illegible]

### Table B-2 Fastener Type: Externally Threaded (Cont'd)

[illegible]

### Table B-2 Fastener Type: Externally Threaded (Cont'd)

[illegible]

### Table B-2 Fastener Type: Externally Threaded (Cont'd)

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