The Engineering Society For Advancing Mobility Land Sea Air and Space®
INTERNATIONAL
400 Commonwealth Drive, Warrendale, PA 15096-0001

SURFACE VEHICLE RECOMMENDED PRACTICE

SAE J619

REV. DEC93

Issued 1960-06
Revised 1993-12

Superseding J619 JUN80

Submitted for recognition as an American National Standard

FLYWHEELS FOR TWO-PLATE SPRING-LOADED CLUTCHES

1. ***Scope—***This SAE Recommended Practice defines flywheel configuration to promote standardization of flywheels for dry spring-loaded clutches.

Clutches to fit flywheels with configurations per this document may not be commercially available. Availability should be ascertained prior to flywheel design Figure 1 and Table 1A.

2. ***References***

2.1 **Applicable Publications—**The following publications form a part of this specification to the extent specified herein.

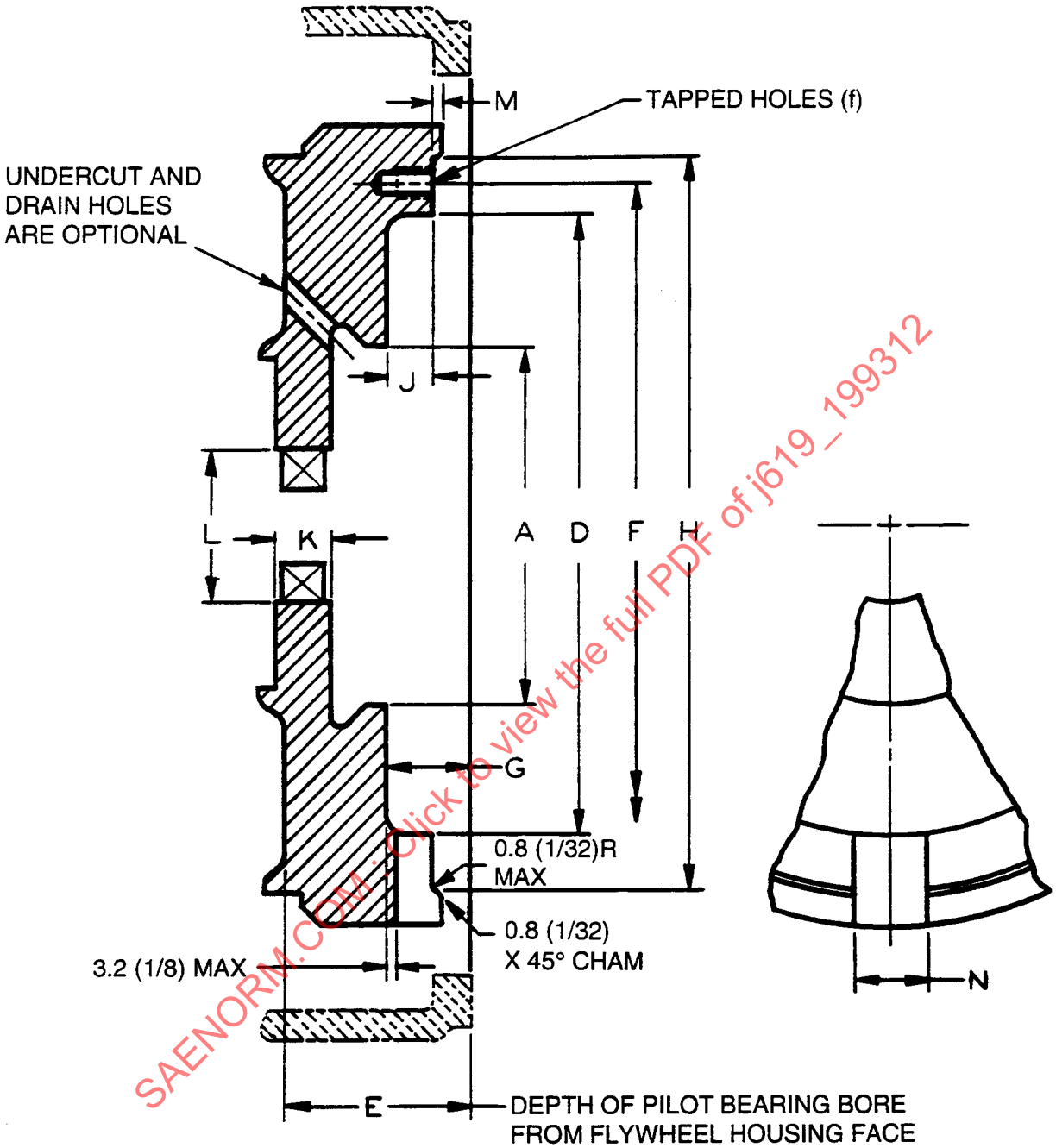
2.1.1 SAE PUBLICATION—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J618—Flywheels for Single-Plate Spring-Loaded Clutches

2.1.2 ANSI PUBLICATION—Available from ANSI, 11 West 42nd Street, New York, NY 10036-8002.

ANSI B1.1—Screw Threads

QUESTIONS REGARDING THIS DOCUMENT: (724) 772-8512 FAX: (724) 776-0243
TO PLACE A DOCUMENT ORDER; (724) 776-4970 FAX: (724) 776-0790
SAE WEB ADDRESS http://www.sae.org



NOTE—SEE "FLYWHEELS FOR SINGLE-PLATE SPRING-LOADED CLUTCHES" (FLAT TYPE) IF DRIVE FOR INTERMEDIATE PLATE IS SUPPLIED WITH TWO-PLATE CLUTCH

POT TYPE

FIGURE 1—FLYWHEELS FOR TWO-PLATE SPRING-LOADED CLUTCHES

TABLE 1A—DIMENSIONS OF FLYWHEELS FOR TWO-PLATE SPRING-LOADED CLUTCHES

Nominal Clutch Size	A mm	A in	D mm	D in	E mm	E in	F mm	F in	G mm	G in	H(1),(2) mm	H(1),(2) in	J mm	J in
6	91.9	3.62	158.8	6.25	71.4	2.81	187.32	7.375	41.1	1.62	206.38	8.125	19.05	0.750
7	111.3	4.38	184.2	7.25	71.4	2.81	212.72	8.375	41.1	1.62	231.78	9.125	19.05	0.750
8	127.0	5.00	209.6	8.25	71.4	2.81	238.12	9.375	41.1	1.62	257.18	10.125	19.05	0.750
9	142.7	5.62	235.0	9.25	71.4	2.81	263.52	10.375	41.1	1.62	282.58	11.125	23.83	0.938
10	149.4	5.88	260.4	10.25	100.1	3.94	288.92	11.375	66.5	2.62	307.98	12.125	26.97	1.062
11	155.4	6.12	285.8	11.25	100.1	3.94	317.50	12.500	66.5	2.62	339.72	13.375	26.97	1.062
12	174.8	6.88	311.2	12.25	100.1	3.94	342.90	13.500	66.5	2.62	365.12	14.375	26.97	1.062
13	190.5	7.50	336.6	13.25	100.1	3.94	371.48	14.625	66.5	2.62	393.70	15.500	26.97	1.062
14	203.2	8.00	362.0	14.25	100.1	3.94	396.88	15.625	66.5	2.62	419.10	16.500	34.92	1.375
15	215.9	8.50	387.4	15.25	100.1	3.94	422.28	16.625	66.5	2.62	444.50	17.500	34.92	1.375
16	235.0	9.25	412.8	16.25	100.1	3.94	450.85	17.750	66.5	2.62	473.08	18.625	39.67	1.562
17	251.0	9.88	438.2	17.25	100.1	3.94	479.42	18.875	66.5	2.62	501.65	19.750	39.67	1.562

Suggested tolerances and eccentricities to be measured on assembled engines. All holes and slots are equally spaced.

1. Diameter tolerance of clutch pilot bore H and B is 0.08 mm (+0.003 in) –0.000; maximum eccentricity is 0.13 mm (0.005 in) TIR. For B, see SAE J618.
2. Face runout is 0.013 mm (0.0005 in) maximum TIR per 25.4 mm (1 in) of diameter.

Nominal Clutch Size	K(1) mm	K(1) in	L(1) mm	L(1) in	M mm	M in	N, Slot Width mm	N, Slot Width in	N, Slot No.	Tapped Holes(2) Size, in	Tapped Holes(2) No.
6	14.2	0.56	40.000	1.5748	3.0	0.12	25.40	1.000	3	5/16-18	9
7	14.2	0.56	40.000	1.5748	3.0	0.12	25.40	1.000	3	5/16-18	9
8	14.2	0.56	40.000	1.5748	3.0	0.12	25.40	1.000	3	5/16-18	9
9	17.3	0.68	47.000	1.8504	3.0	0.12	38.10	1.500	3	5/16-18	9
10	17.3	0.68	47.000	1.8504	3.0	0.12	38.10	1.500	3	5/16-18	9
11	17.3	0.68	52.000	2.0472	3.0	0.12	38.10	1.500	3	3/8-16	12
12	17.3	0.68	52.000	2.0472	3.0	0.12	44.45	1.750	3	3/8-16	12
13	17.3	0.68	52.000	2.0472	4.6	0.18	44.45	1.750	3	3/8-16	12
14	17.3	0.68	52.000	2.0472	4.6	0.18	50.80	2.000	3	3/8-16	12
15	19.0	0.75	72.000	2.8346	4.6	0.18	50.80	2.000	3	3/8-16	12
16	19.0	0.75	72.000	2.8346	4.6	0.18	50.80	2.000	4	3/8-16	12
17	22.4	0.88	80.000	3.1496	4.6	0.18	50.80	2.000	4	3/8-16	12

Suggested tolerances and eccentricities to be measured on assembled engines. All holes and slots are equally spaced.

1. K is length of bore for pilot bearing; L is nominal diameter of bearing. Diameter and fit are to suit installation. Maximum eccentricity is 0.13 mm (0.005 in) TIR.
2. Tapped holes should be threaded in accordance with UNC class 2B tolerances of ANSI B1.1.

3. Notes

3.1 Marginal Indicia—The change bar (l) located in the left margin is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. An (R) symbol to the left of the document title indicates a complete revision of the report.

PREPARED BY THE SAE CLUTCH, FLYWHEEL, AND HOUSING STANDARDS COMMITTEE