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

SURFACE VEHICLE STANDARD

SAE J621

REAF. MAR95

Issued 1956-11
Reaffirmed 1995-03

Superseding J621 APR89

Submitted for recognition as an American National Standard

INDUSTRIAL POWER TAKE-OFFS WITH DRIVING RING-TYPE OVERCENTER CLUTCHES

***Foreword*—**This Document has not changed other than to put it into the new SAE Technical Standards Board Format.

***1. Scope*—**This SAE Standard defines installation dimensions of industrial power take-offs with driving ring-type overcenter clutches.

Table 1 and Figure 1 give dimensions for power take-offs. For dimensions and tolerances of power take-off flanges and flywheels, see SAE J617 and J620, respectively.

2. References

2.1 Applicable Publications—The following publications form a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply.

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

SAE J617—Engine Flywheel Housing and Mating Transmission Housing Flanges
SAE J620—Flywheels for Industrial Engines Used with Industrial Power Take-Offs Equipped with Driving Ring Type Overcenter Clutches and Engine-Mounted Marine Gears and Single Bearing Engine-Mounted Power Generators

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TABLE 1A—DIMENSIONS FOR INDUSTRIAL POWER TAKE-OFFS WITH DRIVING RING-TYPE OVERCENTER CLUTCHES mm (in)

B	B1	C [1]	D	E	F +0.000 +(0.0000) −0.025 −(0.0010)	G	H	J
165 (6-1/2)	1	71.4 (2.81)	141.2 (5.56)	88.9 (3.50)	36.512 (1.4375)	(3/8 x 3/16)	22.4 (0.88)	114.3 (4.50)
190 (7-1/2)	1	71.4 (2.81)	141.2 (5.56)	88.9 (3.50)	36.512 (1.4375)	(3/8 x 3/16)	22.4 (0.88)	114.3 (4.50)
200 (8)	1	100.1 (3.94)	179.3 (7.06)	152.4 (6.00)	44.450 (1.7500)	(1/2 x 1/4)	58.7 (2.31)	127.0 (5.00)
255 (10)	1	100.1 (3.94)	218.9 (8.62)	139.7 (5.50)	57.150 (2.2500)	(5/8 x 5/16)	95.2 (3.75)	146.0 (5.75)
290 (11-1/2)	1	100.1 (3.94)	235.0 (9.25)	165.1 (6.50)	57.150 (2.2500)	(5/8 x 5/16)	95.2 (3.75)	146.0 (5.75)
290 (11-1/2)	2	100.1 (3.94)	244.3 (9.62)	165.1 (6.50)	63.500 (2.5000)	(5/8 x 5/16)	76.2 (3.00)	152.4 (6.00)
355 (14)	1	100.1 (3.94)	307.8 (12.12)	215.9 (8.50)	76.200 (3.0000)	(3/4 x 3/8)	95.2 (3.75)	168.1 (6.62)
355 (14)	2	100.1 (3.94)	349.2 (13.75)	254.0 (10.00)	88.900 (3.5000)	(7/8 x 7/16)	73.2 (2.88)	190.5 (7.50)
355 (14)	3	100.1 (3.94)	368.3 (14.50)	254.0 (10.00)	100.012 (3.9375)	(1 x 1/2)	73.2 (2.88)	190.5 (7.50)
405 (16)	2	100.1 (3.94)	374.6 (14.75)	254.0 (10.00)	100.012 (3.9375)	(1 x 1/2)	73.2 (2.88)	190.5 (7.50)
405 (16)	3	100.1 (3.94)	423.9 (16.69)	254.0 (10.00)	100.012 (3.9375)	(1 x 1/2)	73.2 (2.88)	190.5 (7.50)
460 (18)	1	100.1 (3.94)	374.6 (14.75)	254.0 (10.00)	100.012 (3.9375)	(1 x 1/2)	73.2 (2.88)	190.5 (7.50)
460 (18)	2	100.1 (3.94)	423.9 (16.69)	254.0 (10.00)	100.012 (3.9375)	(1 x 1/2)	73.2 (2.88)	190.5 (7.50)
460 (18)	3	100.1 (3.94)	463.6 (18.25)	254.0 (10.00)	114.300 (4.5000)	(1 x 1/2)	47.8 (1.88)	254.0 (10.00)
530 (21)	1	100.1 (3.94)	419.1 (16.50)	254.0 (10.00)	114.300 (4.5000)	(1 x 1/2)	73.2 (2.88)	241.3 (9.50)
530 (21)	2	100.1 (3.94)	457.2 (18.00)	254.0 (10.00)	120.650 (4.7500)	(1-1/4 x 5/8)	79.2 (3.12)	254.0 (10.00)
530 (21)	3	100.1 (3.94)	505.0 (19.88)	254.0 (10.00)	120.650 (4.7500)	(1-1/4 x 5/8)	69.8 (2.75)	279.4 (11.00)
610 (24)	1	100.1 (3.94)	501.6 (19.75)	254.0 (10.00)	114.300 (4.5000)	(1 x 1/2)	73.2 (2.88)	241.3 (9.50)
610 (24)	2	100.1 (3.94)[2]	515.9 (20.31)	254.0 (10.00)	120.650 (4.7500)	(1-1/4 x 5/8)	79.2 (3.12)	254.0 (10.00)

1. °C is from face of flywheel housing to bottom of pilot bore in flywheel.
2. 133.4 (5.25) optional—this will decrease D by 33.3 (1.31).

TABLE 1B—DIMENSIONS FOR INDUSTRIAL POWER TAKE-OFFS WITH DRIVING RING-TYPE OVERCENTER CLUTCHES mm (in) (CONTINUED)

B	B1	N	O	T	U	SAE No., Flywheel Housing 6	SAE No., Flywheel Housing 5	SAE No., Flywheel Housing 4	SAE No., flywheel Housing 3	SAE No., Flywheel Housing 2	SAE No., Flywheel Housing 1	SAE No., Flywheel Housing 1/2	SAE No., Flywheel Housing 0	SAE No., Flywheel Housing 00
165 (6-1/2)	1	15.00 (0.591)	52.000 (2.0472)	1.5 (0.06)	25.4 (1.00)	.	.	. (1)	—	—	—	—	—	—
190 (7-1/2)	1	15.00 (0.591)	52.000 (2.0472)	1.5 (0.06)	25.4 (1.00)	.	.	. (1)	—	—	—	—	—	—
200 (8)	1	17.00 (0.669)	62.000 (2.4409)	1.5 (0.06)	25.4 (1.00)	—	. (2)	.	—	—	—	—	—	—
255 (10)	1	30.18 (1.188)	72.000 (2.8346)	1.5 (0.06)	25.4 (1.00)	—	—	.	.	.	.	—	—	—
290 (11-1/2)	1	30.18 (1.188)	72.000 (2.8346)	1.5 (0.06)	25.4 (1.00)	—	—	—	.	.	.	—	—	—
290 (11-1/2)	2	30.18 (1.188)	72.000 (2.8346)	1.5 (0.06)	25.4 (1.00)	—	—	—	—	.	.	—	.	—
355 (14)	1	34.92 (1.375)	80.000 (3.1496)	3.0 (0.12)	25.4 (1.00)	—	—	—	—	—	—	—	.	.
355 (14)	2	34.92 (1.375)	80.000 (3.1496)	3.0 (0.12)	25.4 (1.00)	—	—	—	—	—	—	—	.	.
355 (14)	3	39.67 (1.562)(3)	100.000 (3.9370)(3)	3.0 (0.12)	25.4 (1.00)	—	—	—	—	—	—	—	.	—
405 (16)	2	39.67 (1.562)	100.000 (3.9370)	3.0 (0.12)	25.4 (1.00)	—	—	—	—	—	—	—	.	—
405 (16)	3	39.67 (1.562)	100.000 (3.9370)	3.0 (0.12)	25.4 (1.00)	—	—	—	—	—	—	—	.	.
460 (18)	1	39.67 (1.562)	100.000 (3.9370)	3.0 (0.12)	25.4 (1.00)	—	—	—	—	—	—	.	.	.
460 (18)	2	39.67 (1.562)	100.000 (3.9370)	3.0 (0.12)	25.4 (1.00)	—	—	—	—	—	—	.	.	.
460 (18)	3	49.23 (1.938)(3)	120.000 (4.7244)(3)	3.0 (0.12)	31.8 (1.25)	—	—	—	—	—	—	—	.	.
530 (21)	1	53.98 (2.125)	130.000 (5.1181)	3.0 (0.12)	31.8 (1.25)	—	—	—	—	—	—	—	—	.
530 (21)	2	53.98 (2.125)	130.000 (5.1181)	3.0 (0.12)	31.8 (1.25)	—	—	—	—	—	—	—	—	.
530 (21)	3	53.98 (2.125)	130.000 (5.1181)	3.0 (0.12)	31.8 (1.25)	—	—	—	—	—	—	—	—	.
610 (24)	1	49.23 (1.938)(3)	120.000 (4.7244)(3)	3.0 (0.12)	31.8 (1.25)	—	—	—	—	—	—	—	—	.
610 (24)	2	53.98 (2.125)	130.000 (5.1181)	3.0 (0.12)	31.8 (1.25)	—	—	—	—	—	—	—	—	.

1. Requires a flywheel housing and flywheel to provide a 71.4 (2.81) E dimension per SAE J617.
2. Requires a flywheel housing and flywheel to provide a 100.1 (3.94) E dimension per SAE J617.
3. Sizes to match flywheels per SAE J620 are also available.

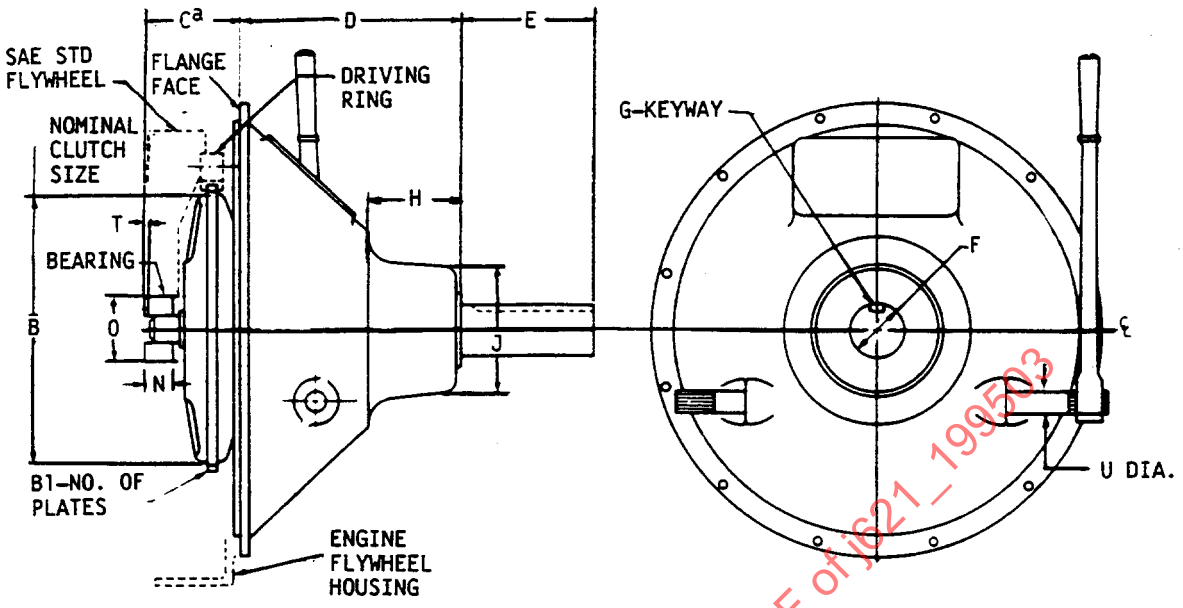

FIGURE 1—DIMENSIONS OF INDUSTRIAL POWER TAKE-OFFS WITH DRIVING RING-TYPE OVERCENTER CLUTCHES

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