



SURFACE VEHICLE RECOMMENDED PRACTICE	J714™	JUN2023
	Issued 1954-11 Reaffirmed 1993-04 Revised 2023-06	
Superseding J714 APR1993		
(R) Wheel Mounting Elements for Off-Highway Disc Wheels		

RATIONALE

This SAE Recommended Practice, SAE J714, includes wheel mounting elements subject to standardization in a series of ferrous industrial and agricultural disc wheels. The disc may be reversible or nonreversible and concave or convex. (See Figure 1 and Tables 1 and 2.) It is being revised to add additional bolt circles and bolting information that reflect practices in place as of this revision.

1. SCOPE

This SAE Recommended Practice includes wheel mounting elements subject to standardization in a series of industrial and agricultural disc wheels. The disc may be reversible or nonreversible and concave or convex. (See Figure 1 and Table 1.)

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

SAE J694 Disc Wheel and Hub or Drum Interface Dimensions - Truck and Bus

2.1.2 ISO Publications

Copies of these documents are available online at <http://webstore.ansi.org/>.

ISO 5711 Tractors and Machinery for Agricultural and Forestry - Wheel-to-Hub

2.1.3 Other Publications

DIN 74361-3 Disc Wheels for Motor Vehicles and Trailers - Part 3: Dimensions and Fastening Devices for Hub-Centering

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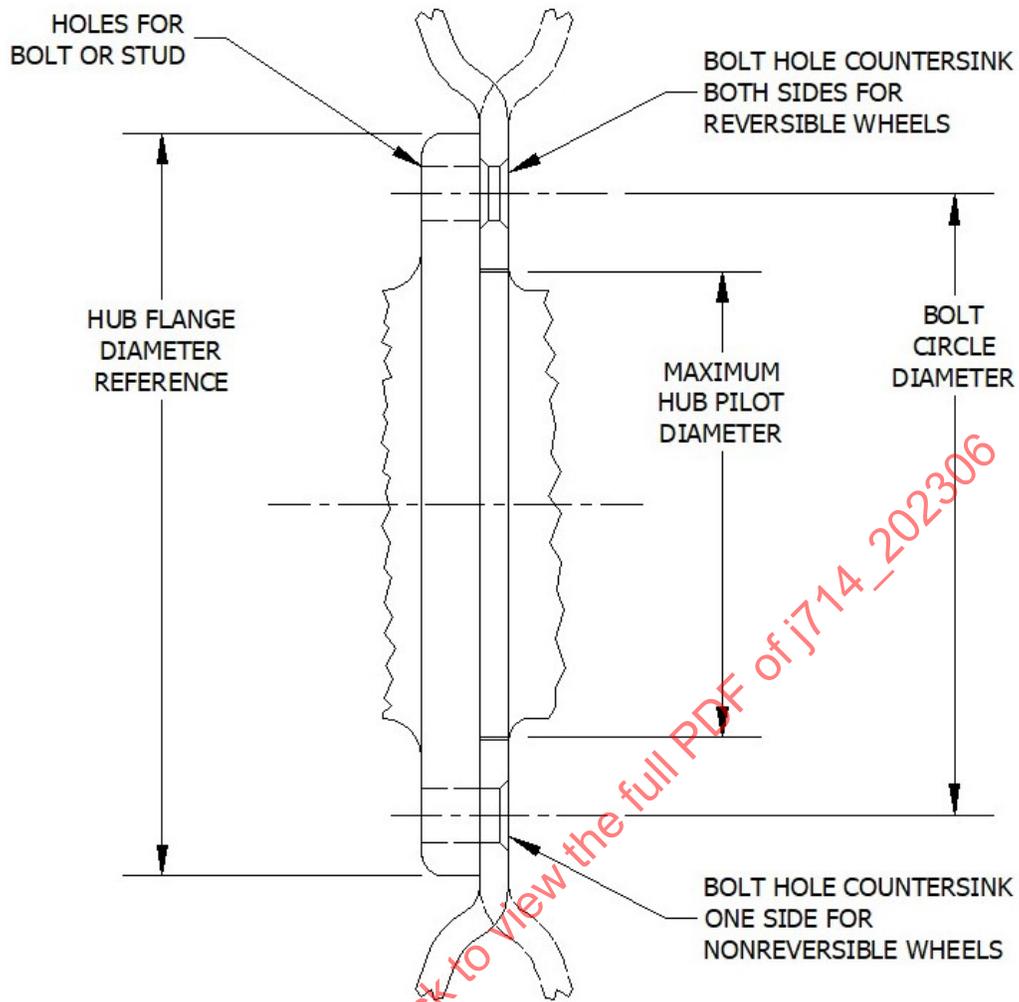


Figure 1 - Hub flange for industrial and agricultural disc wheels

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Table 1 - Wheel mounting elements

Dimensions are in millimeters (inches)

No. of Bolts	Bolt Circle	Hub Pilot Maximum Diameter	Attaching Hub Bolt Diameter	Bolt Hole Countersink	Hub Flange Diameter Reference
4	127.0 (5.000)	92.1 (3.6)	12.00 (0.50)	90 degrees	160.3 (6.31)
5	114.3 (4.500)	79.4 (3.125)	11.00 (0.44)	75 degrees	144.3 (5.68)
5	139.7 (5.500)	101.7 (4.004)	12.00 ⁽¹⁾ (0.50) ⁽¹⁾	90 degrees	117.8 (7.00)
6	152.4 (6.000)	117.45 (4.625)	12.00 ⁽¹⁾ (0.50) ⁽¹⁾	90 degrees or none ⁽²⁾	185.7 (7.31)
8	203.2 (8.000)	152.4 (6.000)	14.00, 16.00, or 18.00 (0.56, 0.62, or 0.75)	90 degrees or none ⁽²⁾	242.9 (9.56)
8	275.0 (10.827)	221.0 (8.701)	18.00 (0.75)	None ⁽²⁾	317.5 (12.50)
10	285.75 (11.250)	220.2 (8.669)	22.00 (0.88)	None ⁽²⁾	340 (13.38)
10, 20	335.0 (13.189)	280.5 (11.045)	18.00 or 22.00 (0.75 or 0.88)	None ⁽²⁾	385.0 (15.16)
12	422.3 (16.625)	368.3 (14.500)	18.00 or 22.00 (0.75 or 0.88)	None ⁽²⁾	476.25 (18.75)
12	425 (16.732)	370.8 (14.372)	22.00 (0.88)	None ⁽²⁾	465 (18.31)
20	470 (18.504)	417.6 (16.441)	22.00 or 24.00 (0.88 or 0.94)	None ⁽²⁾	530 (20.87)
12	500 (19.685)	446.75 (17.589)	22.00 (0.88)	None ⁽²⁾	545 (21.46)

⁽¹⁾ Bolt size may be increased to 14.00 (0.56) only if cone head bolt is used.

⁽²⁾ Where none is noted, no countersink is required if flat nuts, flanged nuts, or nuts with washers are used.