

**OUTBOARD MOUNTED BRAKE DRUM/DISC WHEEL HUB
INTERFACE DIMENSIONS—COMMERCIAL VEHICLES**

1. **Scope**—This SAE Recommended Practice contains dimensions and tolerances for outboard mounted brake drums and disc wheel hubs in the interface areas. The geometric features described in this document are shown at true position. This document is intended for outboard mounted brake drums and disc wheel hubs used on Class 7 and 8 commercial vehicles. Special and less common applications are not covered.
- 1.1 **Purpose**—This document defines and documents the dimensions and tolerances necessary to maintain interchangeability in the interface areas.
2. **References**
- 2.1 **Applicable Publication**—The following publication forms 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 PUBLICATION—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J694—Disc Wheel/Hub or Drum Interface Dimensions—Commercial Vehicles
- 2.2 **Related Publication**—The following publication is provided for information purposes only and is not a required part of this document.
 - 2.2.1 SAE PUBLICATION—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J393—Nomenclature—Wheels, Hubs, and Rims for Commercial Vehicles
3. **Definitions**—A listing of basic nomenclature and definitions are shown in 3.1. Metric mounting systems shown in Figures 1 and 2 are given in millimeters (mm). Inch mounting systems shown in Figures 3 and 4 are given in inches.

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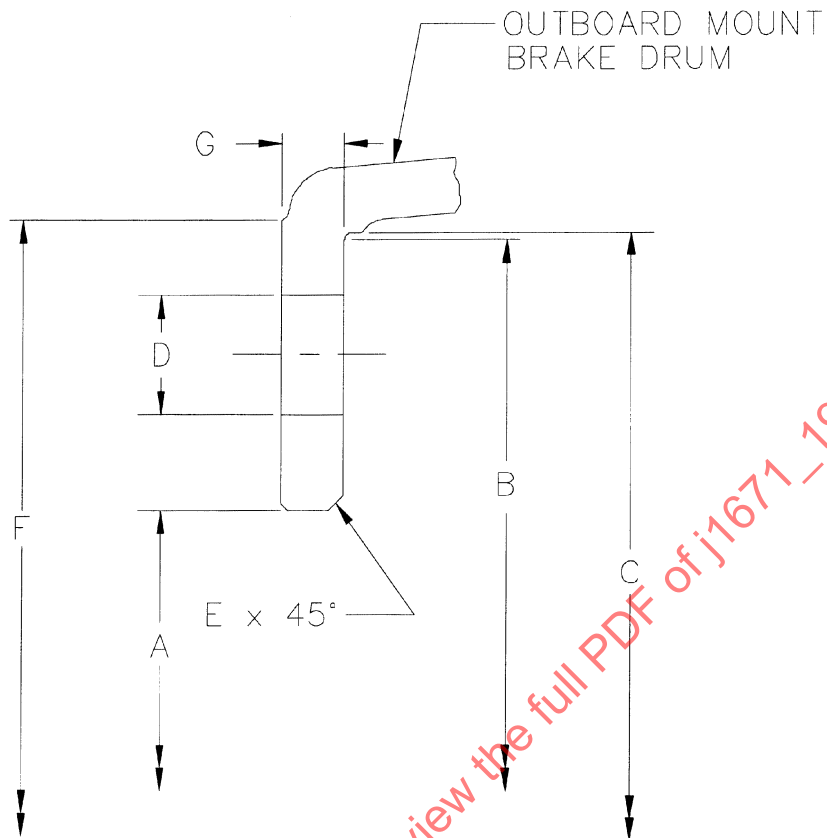
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3.1 Feature Definition

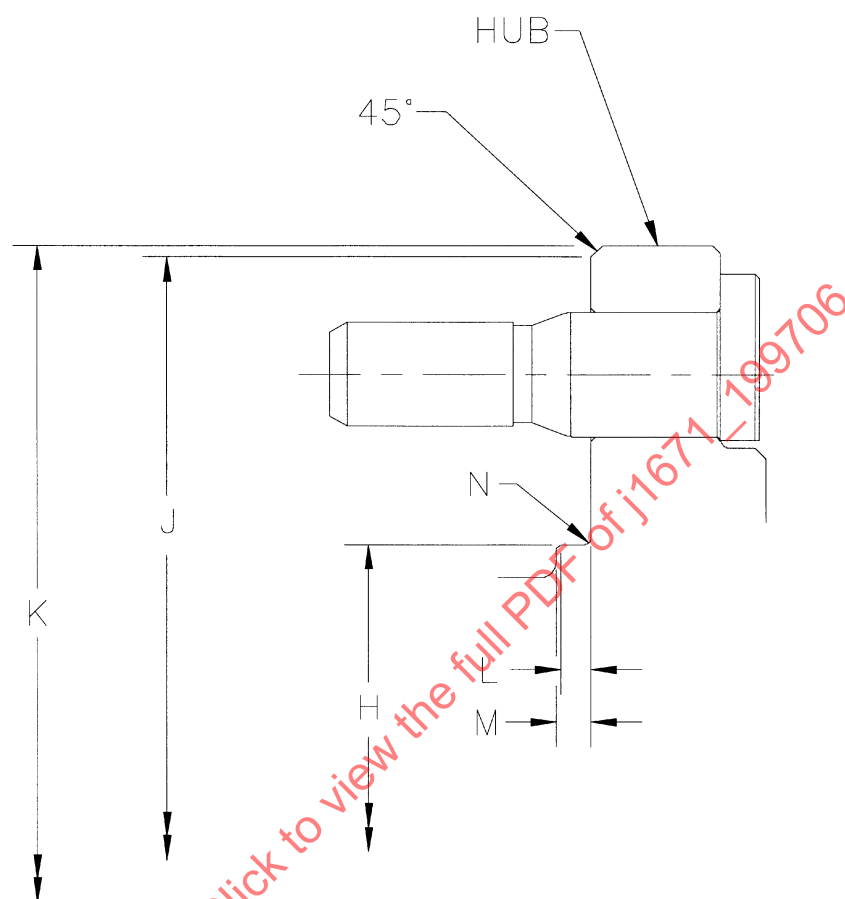
- A Drum Center Hole Diameter
- B Inside Drum Face Diameter (Flat)
- C Inside Clearance Diameter
- D Wheel Bolt or Stud Hole Diameter
- E Drum Center Hole Chamfer
- F Wheel Backup Diameter (For Reference Only)
- G Drum Thickness
- H Drum Pilot Diameter
- J Hub Flange Face Diameter (Flat)
- K Hub Flange Outside Diameter
- L Hub/Drum Pilot Length
- M Drum Seat Length
- N Hub/Drum Pilot Fillet Radius

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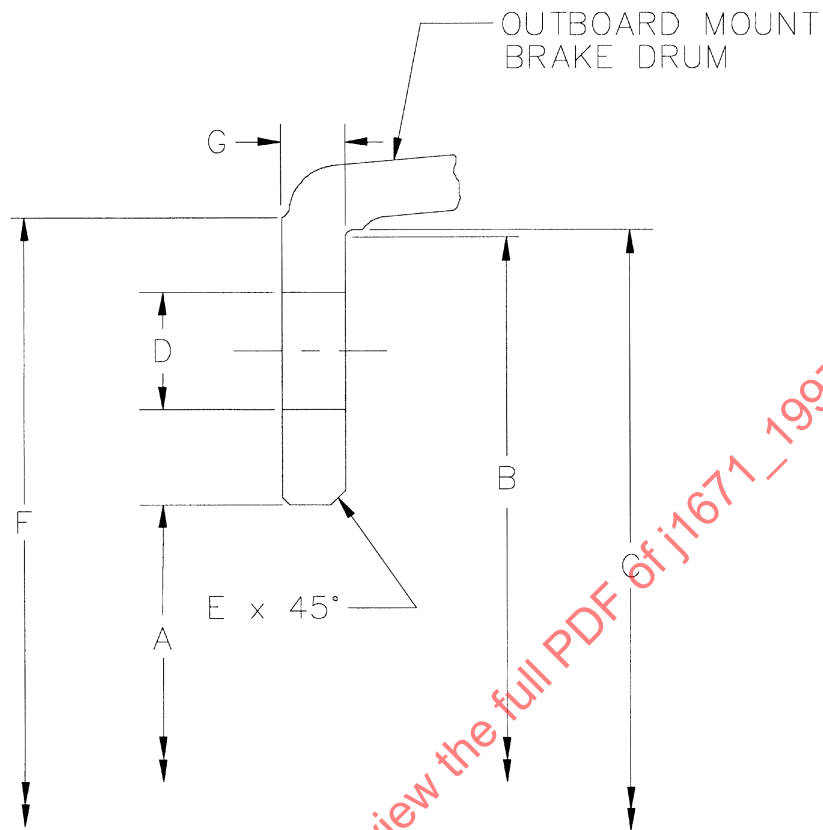
MOUNTING SYSTEMS			BRAKE DRUM DIMENSIONS						
Mounting System (SAE J694)	No. of Studs or Bolts	Bolt Circle Diameter	A Drum Center Hole Diameter	B Minimum Inside Drum Face Diameter	C Minimum Inside Clearance Diameter	D Minimum Drum Bolt or Stud Hole Diameter	E Minimum Drum Center Hole Chamfer	F SAE J694 Wheel Backup (Ref)	G Minimum Drum Thickness
II	8	275	228.62 228.52	319.8	324.4	21.5	2.3	320.0 315.0	6.1
III	10	285.75	223.08 222.98	330.5	336.0	23.5	2.3	340.0 335.0	6.1
IV	10	335	285.85 285.75	369.3	375.9	23.5	2.3	385.0 380.0	6.1
XIV	8	275	228.62 228.52	330.5	336.0	23.5	2.3	343.0 334.0	6.1

FIGURE 1—DRUM INTERFACE DIMENSIONS
(ALL DIMENSIONS IN MILLIMETERS)



MOUNTING SYSTEMS			BRAKE DRUM DIMENSIONS					
Mounting System (SAE J694)	No. of Studs or Bolts	Bolt Circle Diameter	H Drum Pilot Diameter	J Maximum Flange Face Diameter	K Maximum Hub Flange Diameter	L Minimum Drum Pilot Length	M Maximum Drum Seat Length	N Maximum Drum Pilot Fillet Rad
II	8	275	228.49 228.39	319.0	324.0	4.1	6.1	2.3
III	10	285.75	222.96 222.86	330.0	334.0	4.1	6.1	2.3
IV	10	335	285.73 285.63	368.0	370.0	4.1	6.1	2.3
XIV	8	275	228.49 228.39	330.0	334.0	4.1	6.1	2.3

FIGURE 2—HUB INTERFACE DIMENSIONS
(ALL DIMENSIONS IN MILLIMETERS)



MOUNTING SYSTEMS				BRAKE DRUM DIMENSIONS						
Mounting System (SAE J694)	No. of Studs or Bolts	Stud or Bolt Diameter	Bolt Circle Diameter	A Drum Center Hole Diameter	B Minimum Inside Drum Face Diameter	C Minimum Inside Clearance Diameter	D Minimum Drum Bolt or Stud Hole Diameter	E Minimum Drum Center Hole Chamfer	F SAE J694 Wheel Backup (Ref)	G Minimum Drum Thickness
X	10	0.75	11.25	8.783 8.779	13.01	13.23	0.92	0.09	13.50 13.18	0.24
X	10	1.125	11.25	8.783 8.779	13.01	13.23	1.24	0.09	13.50 13.18	0.24

FIGURE 3—DRUM INTERFACE DIMENSIONS
(ALL DIMENSIONS IN INCHES)