



SURFACE VEHICLE RECOMMENDED PRACTICE	J876™	AUG2021
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Superseding J876 OCT2015		
Wide Base Disc Wheels and Demountable Rims - Truck, Bus, and Trailer		

RATIONALE

This SAE Recommended Practice establishes uniform engineering nomenclature for wide base disc wheels and demountable rims. During the Five-Year Review process, all changes were for general formatting.

1. SCOPE

This SAE Recommended Practice establishes uniform engineering nomenclature for wide base disc wheels and demountable rims. This nomenclature and accompanying figures are intended to define fundamental wide base disc wheel and demountable rim terms. The dimensions given are those necessary to maintain serviceability and interchangeability of the wide base disc wheels and demountable rims with standard hardware. Valve clearances have not been included in this document.

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 J393	Nomenclature - Wheels, Hubs, and Rims for Commercial Vehicles
SAE J694	Disc Wheel and Hub or Drum Interface Dimensions - Truck and Bus
SAE J851	Dimensions - Wheels for Demountable Rims, Demountable Rims, and Spacer Bands - Truck and Bus

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For more information on this standard, visit
https://www.sae.org/standards/content/J876_202108/

2.2 Related Publications

The following publications are provided for information purposes only and are not a required part of this SAE Technical Report.

2.2.1 ISO Publications

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

ISO 4107 Commercial Vehicles - Wheel-Hub Attachment Dimensions

2.2.2 Tire and Rim Association Publications

Available from The Tire and Rim Association, Inc., 4000 Embassy Parkway, Suite 390, Akron, OH 44333, www.us-tra.org.

Yearbook, the Tire and Rim Association, Inc.

3. DEFINITIONS

3.1 WIDE BASE DISC WHEEL

A permanent combination of a disc and a rim with a 19.5 or 22.5 rim diameter code and a rim width of 266.7 mm (10.50 inches) or wider.

3.2 WIDE BASE DEMOUNTABLE RIM

A rim with permanent 28 degrees bevel mountings (using an adaptor) with a 19.5 or 22.5 rim diameter code and a rim width of 266.7 mm (10.50 inches) or wider.

3.3 INSET

The distance from the attachment face of the disc to the centerline of the rim. The centerline of the rim is located inboard of the attachment face of the disc.

3.4 OUTSET

The distance from the attachment face of the disc to the centerline of the rim. The centerline of the rim is located outboard of the attachment face of the disc.

3.5 ZEROSET

The centerline of the rim is coincident with the attachment face of the disc.

4. WIDE BASE DISC WHEELS AND DEMOUNTABLE RIMS

4.1 Basic Nomenclature

1. Rim centerline
2. Inset
3. Outset
4. Adaptor
5. Mounting band
6. Rim offset

7. Dual centerline with a 101.6 mm (4 inches) wide spacer
8. Axle track
9. Zeroset

Figures 1, 2, 3, and 4 introduce, illustrate, and specify nomenclature and definitions related specifically to wide base disc wheels and demountable rims. A detailed listing of basic nomenclature is contained in SAE J393.

4.2 Wide Base Disc Wheels

See Figures 1 and 2.

4.3 Wide Base Demountable Rims

See Figures 3 and 4.

4.4 Dimensions

- a. A = Minimum clearance diameter under the rim ledge
- b. B = Minimum clearance diameter under the rim drop center
- c. C = One-half the change in axle track when comparing dual wheel assembly and wide base single

All dimensions are in millimeters followed by inches in parentheses.

4.5 Wide Base Disc Wheel and Demountable Rim Dimensions

See Table 1.

Table 1 - Wide base disc wheel and demountable rim dimensions

Rim Diameter Code	Dimension A Minimum	Dimension B Minimum
19.5	457.7 (18.02)	416.6 (16.40)
22.5	534.9 (21.06)	485.6 (19.12)

4.5.1 Additional Rear Demountable Rim Dimensions

See Table 2.

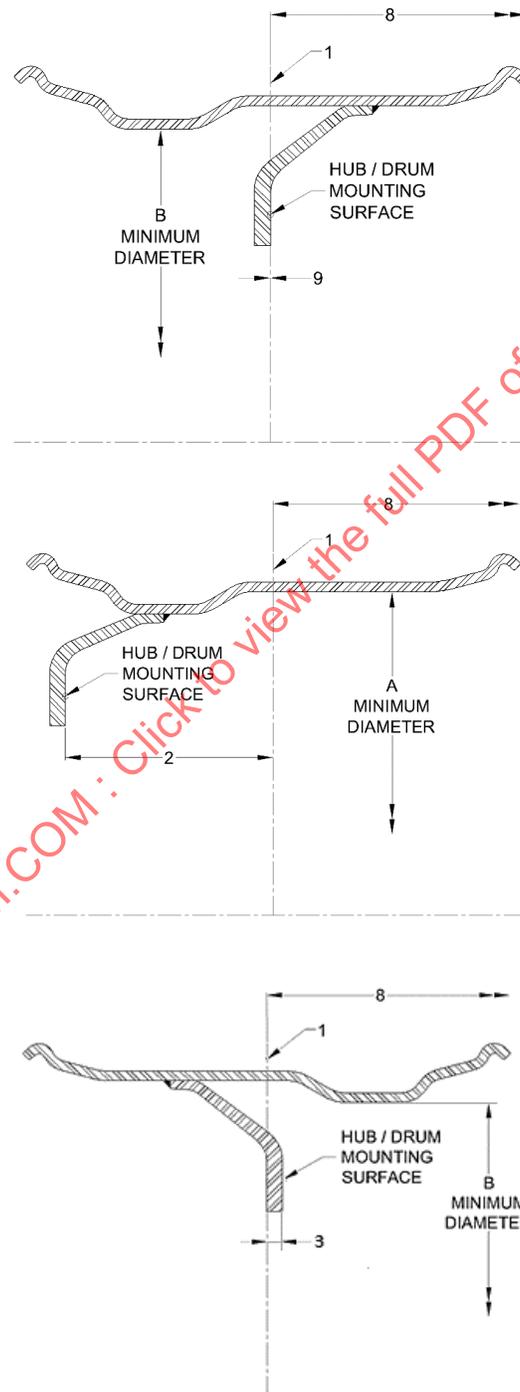
Table 2 - Additional rear wide base demountable rim dimensions

Rim Size	Dimension C
22.5 x 12.25	9.65 or 47.75 (0.38 or 1.88)
22.5 x 13.00	0 or 69.85 (0 or 2.75)

5. NOTES

5.1 Revision Indicator

A change bar (I) located in the left margin is for the convenience of the user in locating areas where technical revisions, not editorial changes, have been made to the previous issue of this document. An (R) symbol to the left of the document title indicates a complete revision of the document, including technical revisions. Change bars and (R) are not used in original publications, nor in documents that contain editorial changes only.



Example of
ZEROSET

Example of
INSET

Example of
OUTSET

Figure 1 - Wide base disc wheels (ferrous)

See 4.1 for basic nomenclature.