

SAE J393 JAN84

**Nomenclature —
Wheels, Hubs, and
Rims for Commercial
Vehicles**

**SAE Recommended Practice
Revised January 1984**

SAENORM.COM :: Click to view the full PDF of J393-198401

**S. A. E.
LIBRARY**

SAENORM.COM : Click to view the full PDF of j393_198401

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

Copyright 1989 Society of Automotive Engineers, Inc.

NOMENCLATURE--WHEELS, HUBS, AND RIMS FOR COMMERCIAL VEHICLES

1. SCOPE:

This SAE Recommended Practice establishes uniform engineering nomenclature for wheels, rims, and their components used in truck, bus, and trailer applications. This nomenclature and accompanying drawings are intended to define fundamental truck wheel, hub, and rim terms rather than to provide a comprehensive tabulation of all wheel, hub, and rim designs.

2. REFERENCE:

ISO 3911--Wheels/Rims--Nomenclature, Designation, and Marking
J851--(Recommended tolerance)

3. DEFINITIONS:

- 3.1 Rim: Supporting member for the tire or tire and tube assembly (Fig. 1).
- 3.2 Disc Wheel: A permanent combination of a rim and a disc (Figs. 2, 3, and 4).
- 3.3 Disc (Spider): The center member of a disc wheel.
- 3.4 Hub: A rotating member which provides for disc wheel mounting (Fig. 5).
- 3.5 Wheel for Demountable Rim (Spoke Wheel): A rotating member which provides for mounting and support of one or two demountable rims (Figs. 6 and 7).

The phi (Ø) symbol is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. If the symbol is next to the report title, it indicates a complete revision of the report.

SAE Technical Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

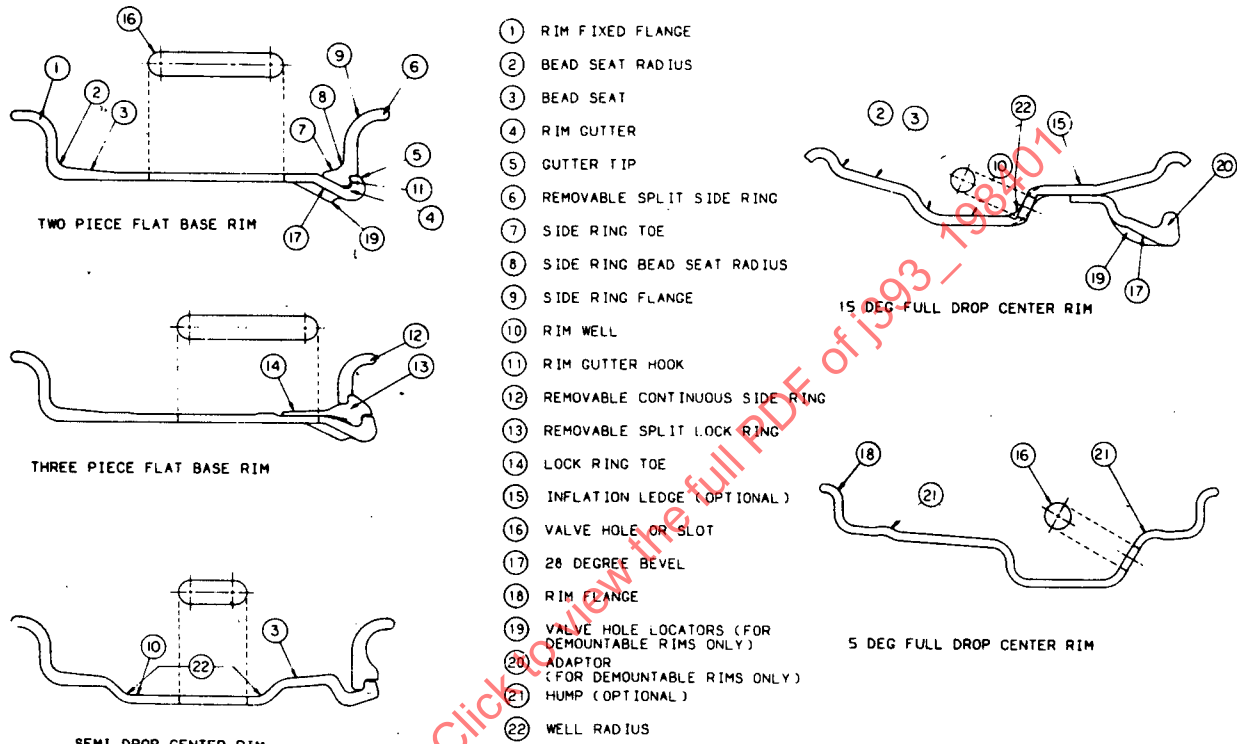
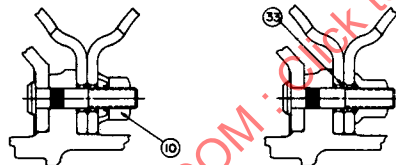
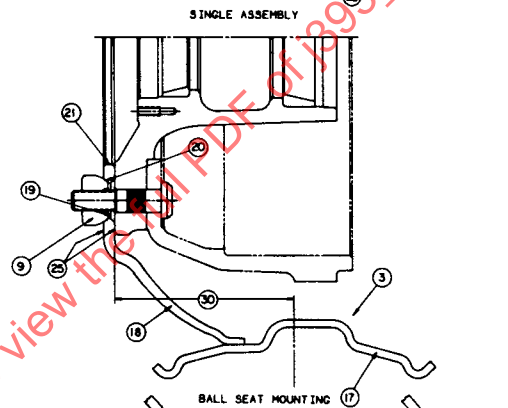
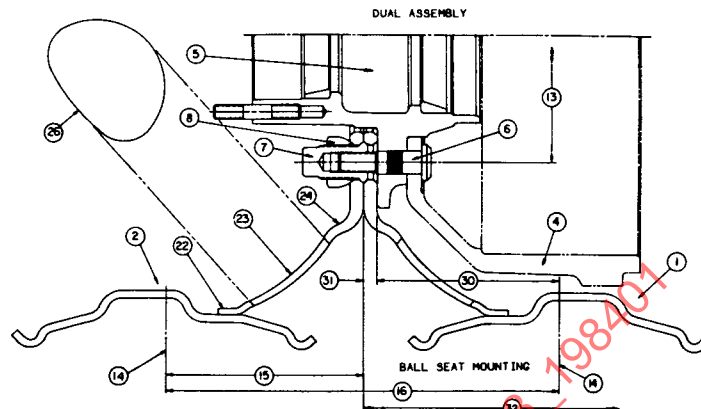
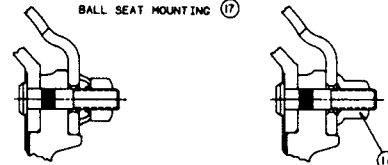


FIGURE 1 - Type and Nomenclature, Rims

- ① INNER DUAL WHEEL POSITION
- ② OUTER DUAL WHEEL POSITION
- ③ SINGLE WHEEL POSITION
- ④ BRAKE DRUM
- ⑤ HUB
- ⑥ STUD OR BOLT
- ⑦ INNER DUAL BALL SEAT NUT
- ⑧ OUTER DUAL BALL SEAT NUT
- ⑨ SINGLE BALL SEAT NUT
- ⑩ 2 PIECE FLANGE NUT
- ⑪ 1 PIECE FLANGE NUT
- ⑫ CONICAL NUT
- ⑬ BOLT CIRCLE DIAMETER
- ⑭ RIM CENTERLINE
- ⑮ OUTSET OR HALF DUAL SPACING
- ⑯ DUAL SPACING
- ⑰ RIM BASE
- ⑱ DISC
- ⑲ STUD (BOLT) HOLE
- ⑳ BALL SEAT
- ㉑ CENTER HOLE
- ㉒ DISC SKIRT
- ㉓ DISC TAPERED SECTION
- ㉔ DISC HAVES
- ㉕ DISC MOUNTING FACE
- ㉖ HAND HOLE
- ㉗ CONE ANGLE
- ㉘ INCOINED STUD HOLE
- ㉙ OUTCOINED STUD HOLE
- ㉚ INSET
- ㉛ DISC THICKNESS
- ㉜ AXLE TRACK
- ㉝ STUD (BOLT) HOLE CHAMFER



CENTER HOLE PILOT MOUNTING



CENTER HOLE PILOT MOUNTING

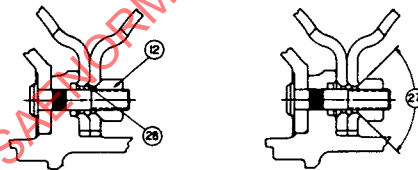
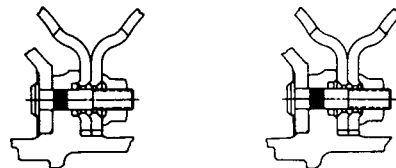
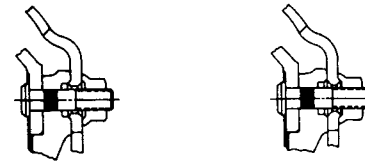
*IN-OUT* COINED MOUNTING
INTERMITTENT STUD HOLES
CONICAL NUT*IN-OUT* COINED MOUNTING
INTERMITTENT STUD HOLES
CONICAL NUT*IN-OUT* COINED MOUNTING
FLANGE NUT*IN-OUT* COINED MOUNTING
FLANGE NUT

FIGURE 2 - Nomenclature, Tapered Disc Wheel

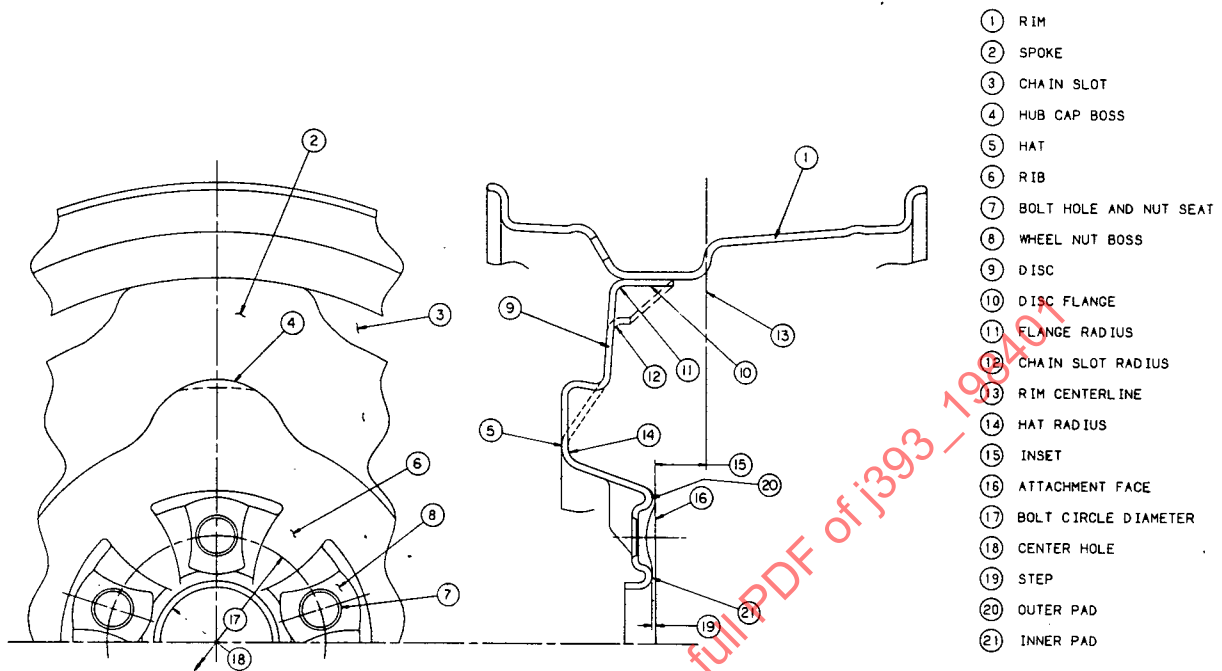


FIGURE 3 - Nomenclature, Stamped Disc Wheel

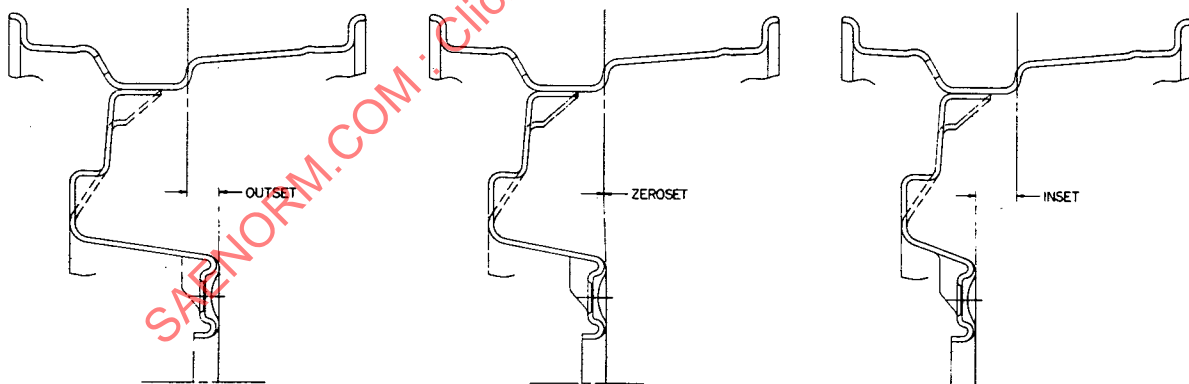


FIGURE 4 - Illustration Defining Outset, Zero set, Inset

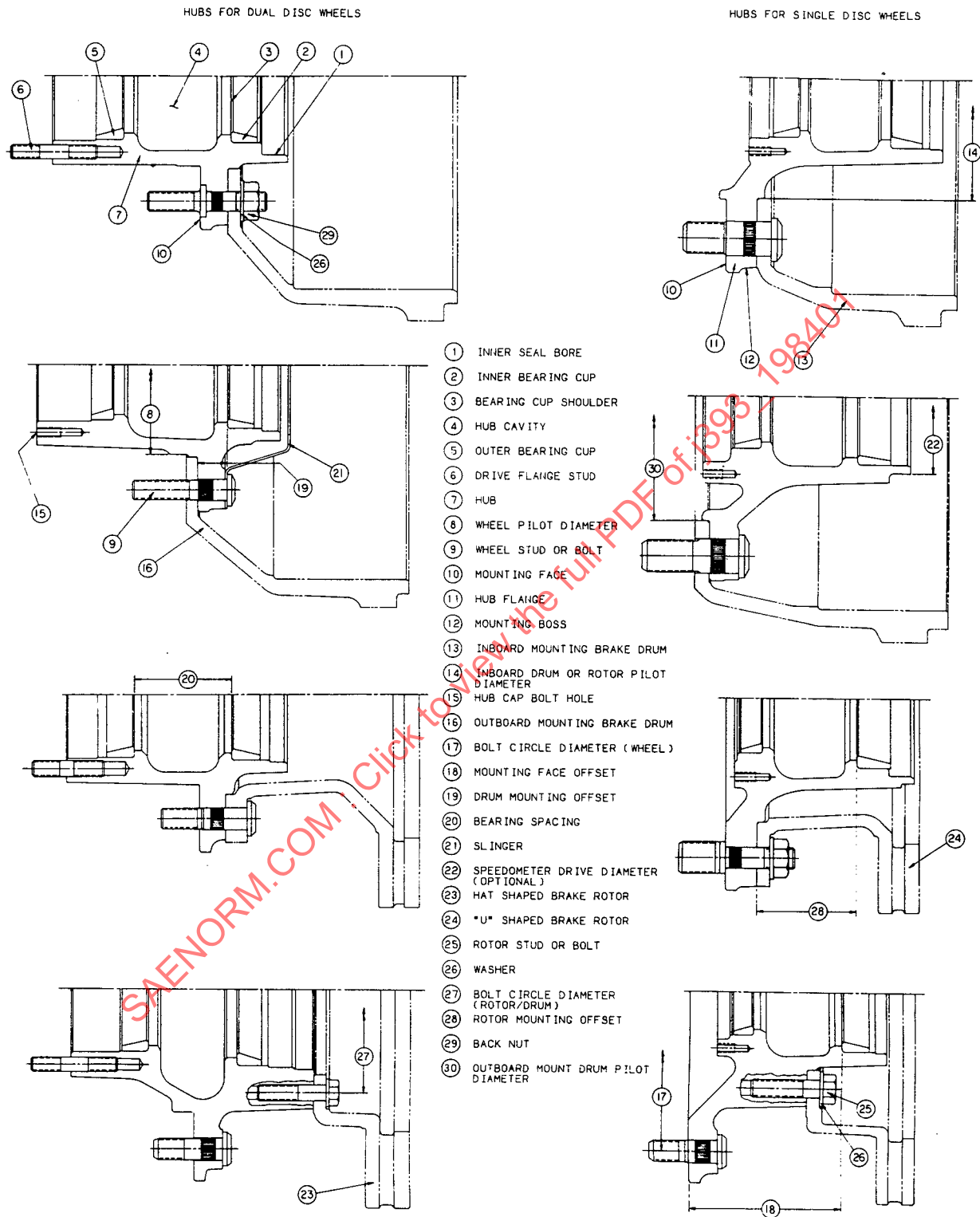


FIGURE 5 - Nomenclature, Hub

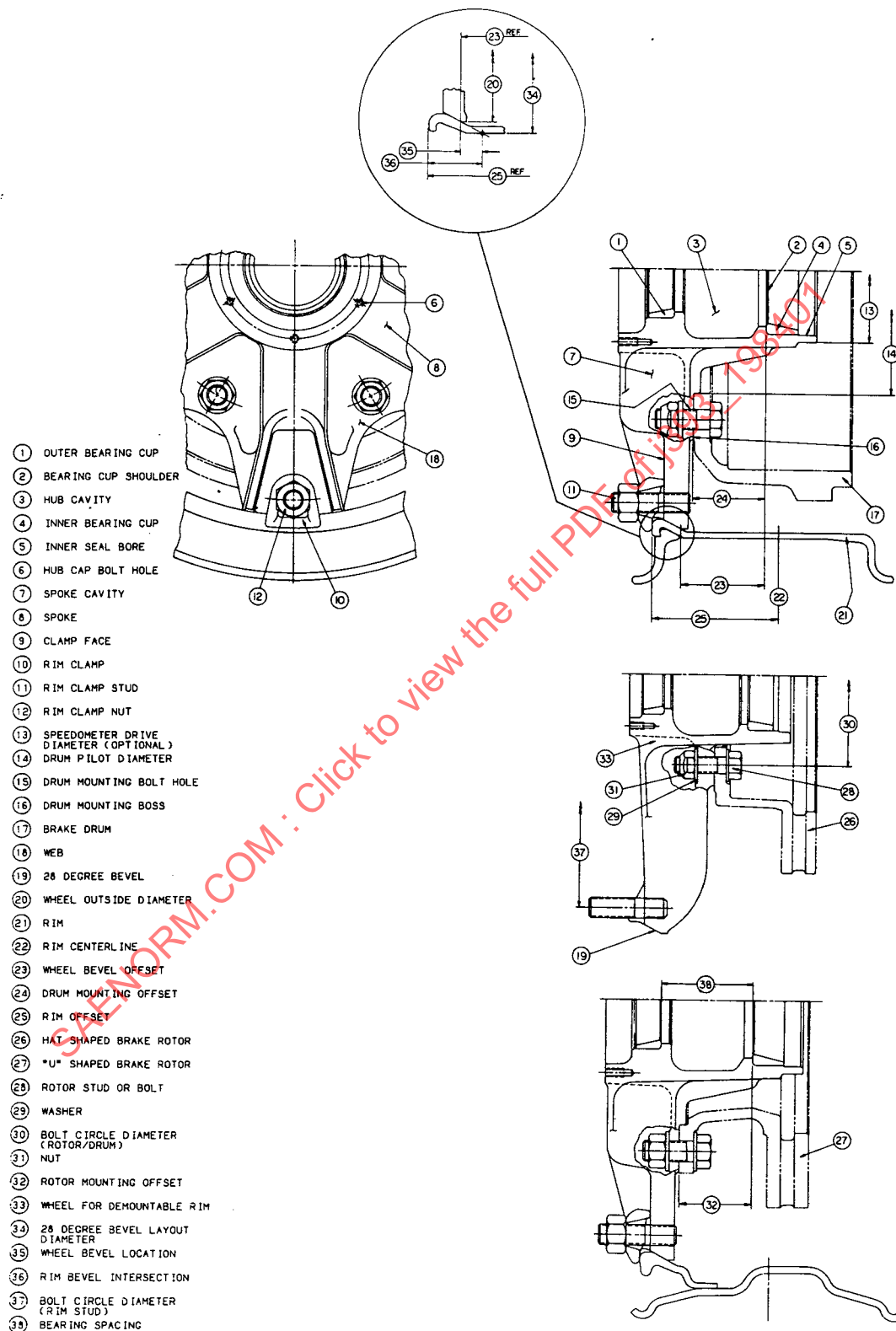


FIGURE 6 - Nomenclature, Front Wheel for Demountable Rim