

TIMKEN WHEEL BEARINGS

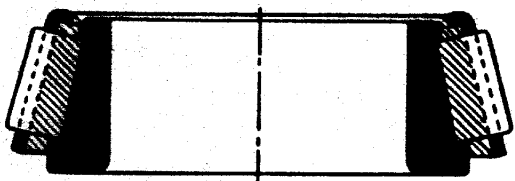
RECOMMENDATIONS

FOR

LUBRICATION AND ADJUSTMENT

WHEEL BEARING LUBRICATION

Shading indicates the recommendation for the correct amount of grease in wheel hub. (Fill wheel hub with grease to inside diameter of outer races and also fill hub grease cap.) Never use grease heavier than 265 A. S. T. M. penetration (No. 2 grade).



Grease bearing cone by machine or by hand method.
Force grease between rollers, cone, and cage.

WHEEL BEARING GREASE SPECIFICATION FOR AUTOMOBILES, BUSES, TRUCKS AND TRAILERS

Grease shall be composed only of soaps and oils and shall be free from abrasives of any kind. It shall be non-corrosive to bearing parts in storage or service. It shall show no oil separation in storage or service. It shall be a smooth textured type grease. It shall have a dropping point (Method D-566-42) in excess of 250° F. The moisture content should not exceed 0.5%. The oil should have a viscosity of 75 to 100 seconds at 100° F. cold test, and it should be a refined product. For applications, the grease should have an ASTM penetration at 77° F. (Method D-217-52T) not heavier than 265 when applied to the bearings. The grease should work softer than a 310 penetration with 60 strokes in the grease worker in service. With 5000 strokes in the grease worker, it shall not show less than 340 penetration. The worked grease (5000 strokes) shall not show an ASTM penetration heavier than 250 when heated to 220° F. for 16 hours. It shall not show excessive oil separation after this test. If higher temperature conditions are not encountered, a lower dropping point grease to the proper consistency with above oil will prove satisfactory.

THE TIMKEN ROLLER BEARING COMPANY
CANTON, OHIO, U.S.A.

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TO: Eng. Memo Distribution
FROM: B. Lewis
SUBJECT: TIMKEN WHEEL BEARINGS (RECOMMENDATIONS FOR LUBRICATION & ADJUSTMENT)

ENGINEERING MEMO #271
(Reissue of 12-19-58 Eng. Memo #8)

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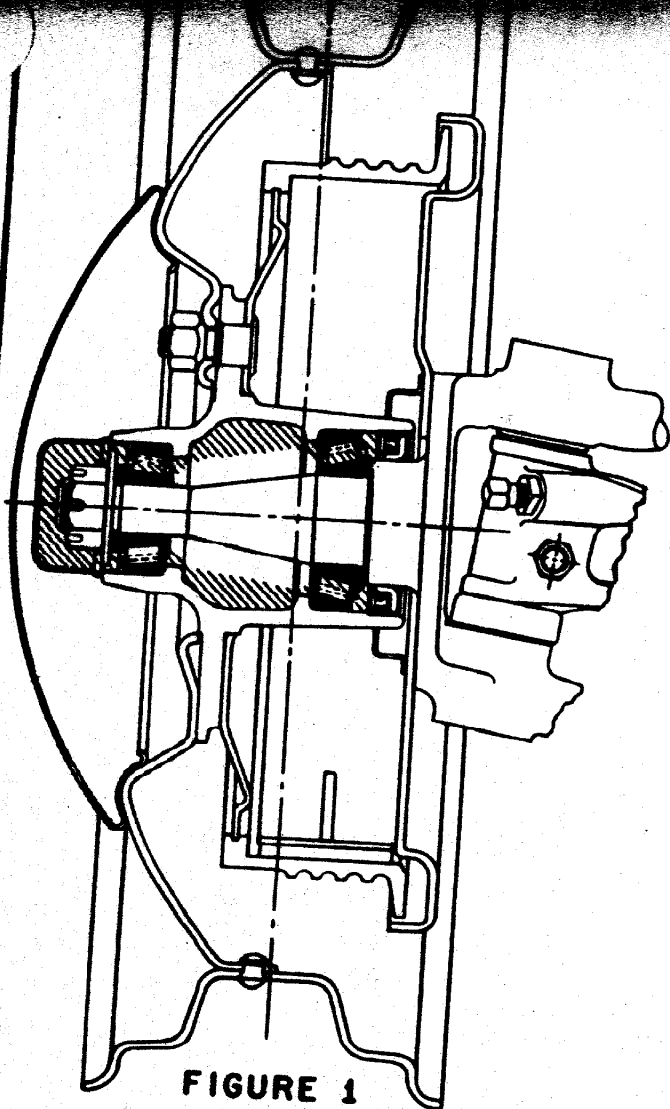


FIGURE 1

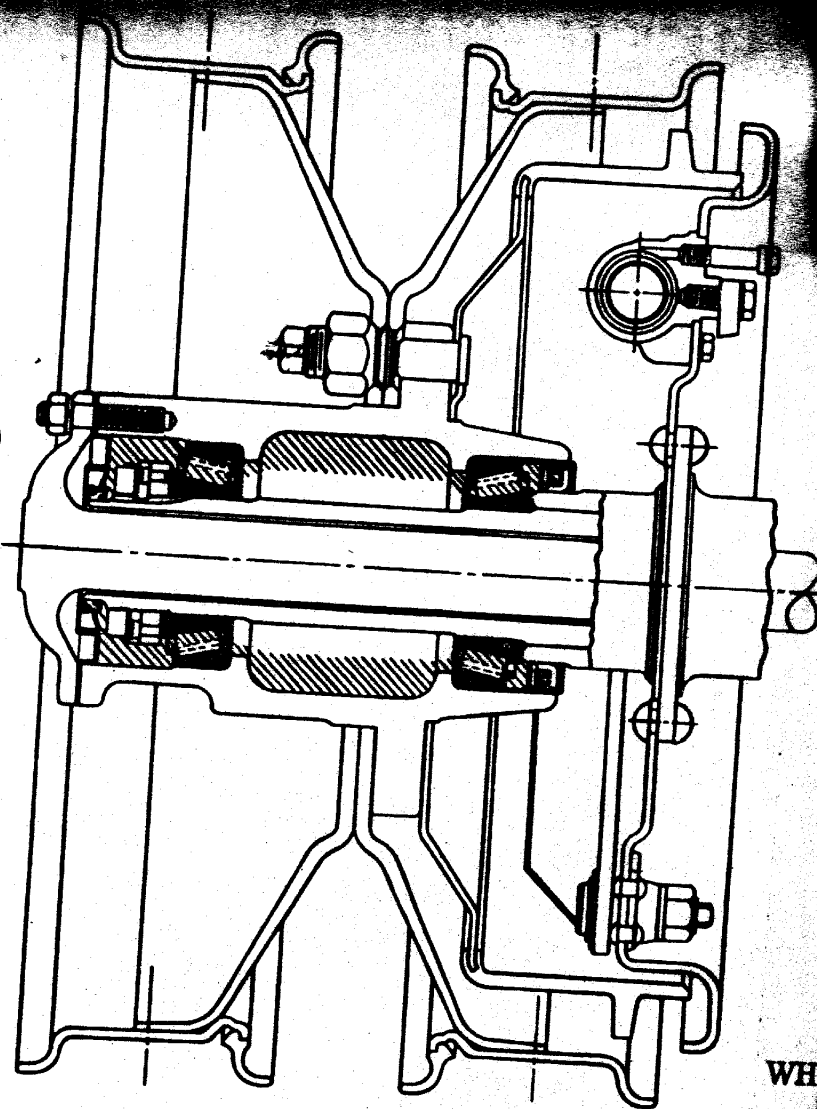


FIGURE 2

WHEEL BEARING ADJUSTMENT

FIGURE 1 SINGLE ADJUSTING NUT

Tighten the adjusting nut with a 12" wrench, at the same time turn wheel in both directions, until there is a slight bind to be sure all bearing surfaces are in contact. Then back off adjusting nut 1/6 to 1/4 turn or to the nearest locking hole or sufficiently to allow the wheel to rotate freely within limits of .001" to .010" end play. Lock nut at this position.

FIGURE 2 DOUBLE ADJUSTING NUTS

Tighten inner nut with 12" wrench, while turning the wheel in both directions, until there is a slight bind so all bearing surfaces are in contact. Then back off inner nut 1/3 turn to allow the wheel to rotate freely. Install lock washer. Tighten jam or outer nut. Final bearing adjustment should be with .001" to .010" end play. Lock nuts at this position.

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