

Component Procedures: Drive Axles, Bearings and Joints

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Component Procedures: Drive Axles, Bearings and Joints

Front (Article 2079269)

Non Standards

- General Information (2079270)
- Lubricant Specifications (2079271)
- Standard Differential (2079272)

Rear (Article 2079273)

Non Standards

- With 194 RBI Axle (2079274)
- With 216 RBI Axle (2079279)

Disassembly and Assembly (Article 2078773)

For information regarding the Service and Repair of this component and the system that it is a part of, please refer to

Differential

; Service and Repair.

Service Procedures (Article 2078755)

Non Standards

- Front (2078847)
- Rear (2078849)

Removal and Installation (Article 2078757)

Non Standards

- Front Axle Assembly (2078853)
- Rear Axle Assembly (2078854)

Cleaning and Inspection (Article 2078759)

Non Standards

- Front Axle (2078857)
- Rear Axle (2078860)

Final Assembly (Article 2078763)

Non Standards

- Front (2078826)
- Rear (2078764)

Capacities (itype_30)

DIFFERENTIAL FLUID

CAPACITY

181 FBI 1.48 L (3.13 pts.)

194 RBI 1.66 L (3.5 pts.)

with TRAC-LOK include 3.5 oz. friction modifier

216 RBI 1.89 L (4.0 pts.)

with TRAC-LOK include 4 oz. friction modifier

Fluid Types (itype_31)

DIFFERENTIAL FLUID

TYPE

181 FBI, 194 RBI, 216 RBI

Multi-purpose hypoid

gear

lubricant meeting the following specifications:

- MIL-L-2105C
- API GL 5
- Thermally stable SAE 80W-90 gear lubricant

Lubricant for heavy-duty or trailer tow use is SAE 75W-140 SYNTHETIC gear lubricant.

TRAC-LOK

If equipped, include the specified amount of friction modifier.

Fluid Types and Capacities (itype_436)

Fluid Types

Capacities

181 FBI Axle (Article 2080363)

Mechanical Specifications

Axle Ratio

3.07,3.55,3.73,4.10

Differential

Side

Gear

Clearance

0.12-0.20 mm (0.005-0.008 in.)

Ring Gear

Diameter

18.09 cm (7.125 in.)

Ring Gear Backlash

0-0.15 mm (0.005-0.008 in.)

Pinion Std. Depth

92.1 mm (3.625 in.)

Pinion Bearing

Rotating Torque

Original Bearings

1-2 Nm (10-20 in.lbs.)

New Bearings

1.5-4 Nm (15-35 in.lbs.)

Torque Specifications

Fill Hole Plug

34 Nm (25 ft.lbs.)

Differential Cover

Bolt

41 Nm (30 ft.lbs.)

Bearing Cap Bolt

61 Nm (45 ft.lbs.)

Ring Gear Bolt

95-122 Nm (70-90 ft.lbs.)

Axle Nut

.....

237 Nm (175 ft.lbs.)

Hub Bearing

102 Nm (75 ft.lbs.)

Lower Ball Stud

108 Nm (80 ft.lbs.)

Upper Ball Stud

101 Nm (75 ft.lbs.)

194 RBI Axle (Article 2080364)

Mechanical Specifications

Axle Ratio

3.07,3.55,3.73,4.10

Differential Bearing

Preload

0.1 mm (0.004 in.)

Differential

Side

Gear
 Clearance
 0-0.15 mm (0-0.006 in.)
 Ring Gear
 Diameter
 19.2 cm (7.562 in.)
 Ring Gear Backlash
 0-0.15 mm (0.005-0.008 in.)
 Pinion Std. Depth
 92.08 mm (3.625 in.)
 Pinion Bearing
 Rotating Torque
 Original Bearings
 1-2 Nm (10-20 in.lbs.)
 New Bearings
 1.5-4 Nm (15-35 in.lbs.)
 Maximum Carrier Spread
 0.51 mm (0.020 in.)
 Torque Specifications
 Differential Cover
 Bolt
 41 Nm (30 ft.lbs.)
 Differential Bearing Cap Bolt
 77 Nm (57 ft.lbs.)
 Ring Gear Bolt
 95-122 Nm (70-90 ft.lbs.)
 Nut,
 Pinion Gear
 -Minimum
 271-474 Nm (200-350 ft.lbs.)
 Screw, Pinion Mate Shaft Lock
 16.25 Nm (12 ft.lbs.)
 Bolt, ABS Sensor
 8 Nm (70 in.lbs.)

216 RBI Axle (Article 2080365)

Mechanical Specifications
 Axle Ratios
 3.07,3.55,4.10
 Differential Bearing
 Preload
 0.1 mm (0.004 in.)
 Differential
 Side
 Gear
 Clearance
 0-0.15 mm (0-0.006 in.)
 Ring Gear
 Diameter
 216 mm (8.5 in.)
 Ring Gear Backlash
 0.13-0.20 mm (0.005-0.008 in.)
 Pinion Depth
 109.52 mm (4.312 in.)
 Bearing Preload, Pinion (New)
 2.226-4.52 Nm (20-40 in.lbs.)
 Bearing Preload, Pinion (Original)
 1-3 Nm (10-20 in.lbs.)
 Torque Specifications
 Plug, Fill

34 Nm (25 ft.lbs.)
Bolts,
Differential Cover
.....
41 Nm (30 Ft.lbs.)
Bolts, Differential Bearing Cap
108 Nm (80 ft.lbs.)
Bolts, Ring Gear
Nuts, Brake Backing Plate
61 Nm (45 ft.lbs.)
Nut,
Pinion Gear
-Minimum
217 Nm (160 ft.lbs.)

All Technical Service Bulletins (itype_100)

Tsbs
- Steering/Suspension - Wheel Hub/Bearing Inspection COLL. (31-001-12, 2012/01/11)

Repair Tips (itype_110)

Tsbs
- Steering/Suspension - Wheel Hub/Bearing Inspection COLL. (31-001-12, 2012/01/11)

Front (Article 2079053)

Non Standards
- General Information (2079054)
- Gear Noise (2079055)
- Bearing Noise (2079056)
- Low Speed Knock (2079057)
- Vibration (2079058)
- Driveline Snap (2079059)
- Diagnosis Charts (2079107)

Rear (Article 2079108)

Non Standards
- With 194 RBI Axle (2079109)
- With 216 RBI Axle (2079119)