

Component Procedures: Steering Gear

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Component Procedures: Steering Gear

Power Steering Gear (Article 2050077)

Non Standards

- Worm Thrust Bearing (2050079)
- Sector Shaft Over Center (2050090)

Parts and Labor (itype_189)

Parts

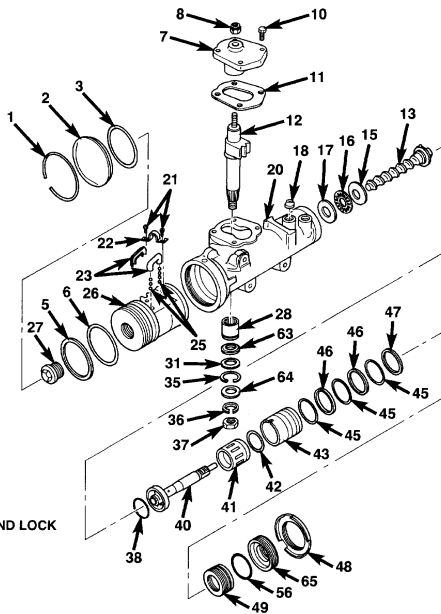
Qualifier	Part #	Name	Price	Note
Power > Steering Gear Assemb?	52089046AC	7 - Steering Gear	672.00	
Rack Gear Only > Power > Rack	4713061	8 - Rack Package	0.00	

Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Replace	Steering Gear, R&R	B	1.3	1.0
Overhaul/Rebuild	Steering Gear, Overhaul	A	3.1	2.4

Components (itype_392)

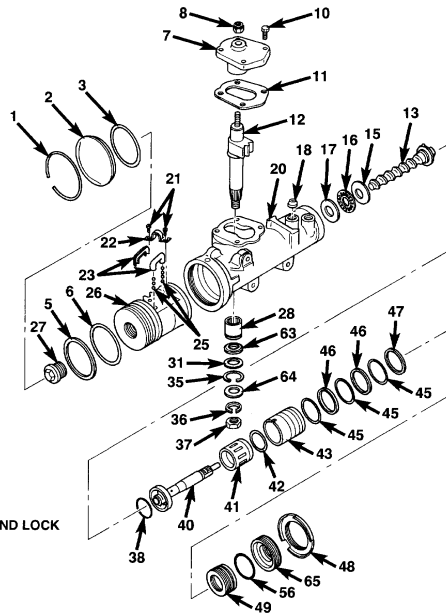
- KEY NO. PART NAME
- 1 - RING, RETAINING
 - 2 - PLUG
 - 3 - SEAL, O-RING
 - 5 - RING, TEFLON
 - 6 - SEAL, O-RING
 - 7 - COVER, SIDE
 - 8 - NUT, ADJUSTER LOCK
 - 10 - BOLT
 - 11 - GASKET
 - 12 - SHAFT, PITMAN
 - 13 - SHAFT, WORM
 - 15 - RACE, FLAT
 - 16 - BEARING, THRUST
 - 17 - RACE, FLAT
 - 18 - VALVE, CHECK
 - 20 - HOUSING
 - 21 - SCREW
 - 22 - CLAMP
 - 23 - GUIDE, BALL
 - 25 - BALLS
 - 26 - PISTON, RACK
 - 27 - PLUG
 - 28 - BEARING, NEEDLE
 - 31 - WASHER, BACKUP
 - 35 - RING, RETAINING
 - 36 - WASHER, LOCK
 - 37 - NUT
 - 38 - SEAL
 - 40 - SHAFT, STUB
 - 41 - SPOOL, VALVE
 - 42 - SEAL
 - 43 - BODY, VALVE
 - 45 - SEAL, O-RING VALVE BODY
 - 46 - RING
 - 48 - NUT, COUPLING SHIELD RETAINER AND LOCK
 - 49 - THRUST SUPPORT ASSEMBLY
 - 56 - SEAL, PITMAN SHAFT
 - 63 - SEAL, DUST
 - 64 - ADJUSTER NUT ASSEMBLY



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Exploded Views (itype_46)

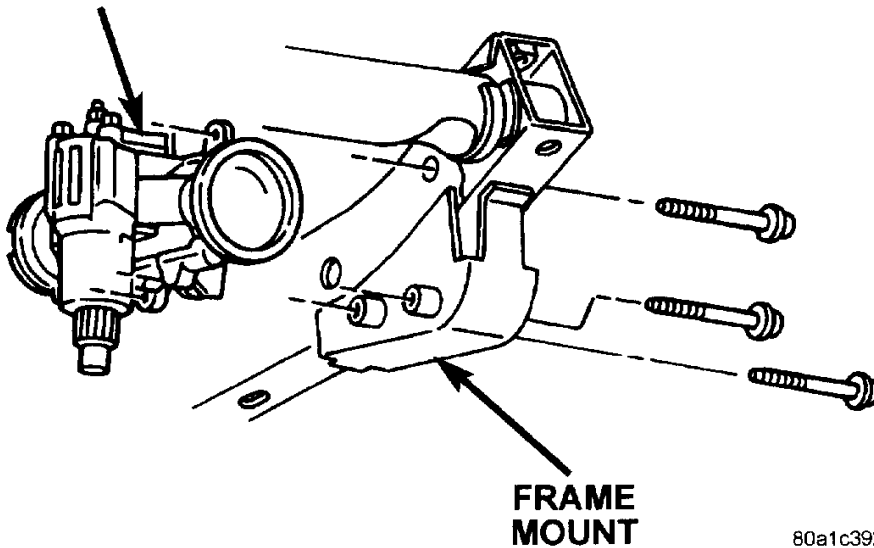
- | KEY NO. | PART NAME |
|---------|--|
| 1 | - RING, RETAINING |
| 2 | - PLUG |
| 3 | - SEAL, O-RING |
| 5 | - RING, TEFLON |
| 6 | - SEAL, O-RING |
| 7 | - COVER, SIDE |
| 8 | - NUT, ADJUSTER LOCK |
| 10 | - BOLT |
| 11 | - GASKET |
| 12 | - SHAFT, PITMAN |
| 13 | - SHAFT, WORM |
| 15 | - RACE, FLAT |
| 16 | - BEARING, THRUST |
| 17 | - RACE, FLAT |
| 18 | - VALVE, CHECK |
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| 48 | - THRUST SUPPORT ASSEMBLY |
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| 56 | - SEAL, PITMAN SHAFT |
| 63 | - SEAL, DUST |
| 64 | - ADJUSTER NUT ASSEMBLY |



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Steering Gear Replacement (Article 2048444)

STEERING GEAR



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Overhaul (Article 2048445)

Non Standards

- Housing End Plug (2048455)
- Pitman Shaft/Seals/Bearing (2048456)
- Spool Valve (2048457)
- Rack Piston and Worm Shaft (2048458)

Vehicle Damage Warnings (itype_16)

CAUTION:

Steering gear

must be adjusted in the proper order. If adjustments are not performed in order, gear damage and improper steering

response may result.

NOTE:

Adjusting the steering gear in the vehicle is not recommended. Remove gear from the vehicle and drain the

fluid. Then mount gear in a vise to perform adjustments.

Power Steering Gear (Article 2050308)

GENERAL SPECIFICATIONS:

Gear Ratio 15 - 13:1

Worm Shaft Bearing Preload 0.45 - 1.13 Nm (4 - 10 inch lbs.)

Pitman Shaft Overcenter Drag (+ Worm Shaft Preload):

New Gear (under 400 miles) 0.45 - 0.90 Nm (4 - 8 inch lbs.)

Used Gear (over 400 miles) 0.5 - 0.6 Nm (4 - 5 inch lbs.)

TIGHTENING SPECIFICATIONS:

Adjustment Cap Locknut 108 Nm (80 ft. lbs.)

Adjustment Screw Locknut 49 Nm (36 ft. lbs.)

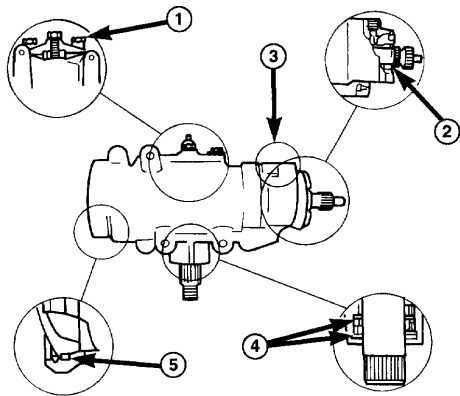
Gear to Frame Bolts 95 Nm (70 ft. lbs.)

Pitman Shaft Nut 251 Nm (185 ft. lbs.)

Rack Piston Plug 102 Nm (75 ft. lbs.)

Side Cover Bolts 60 Nm (44 ft. lbs.)

Component Tests and General Diagnostics (itype_383)



1. SIDE COVER LEAK - TORQUE SIDE COVER BOLTS TO SPECIFICATION. REPLACE THE SIDE COVER SEAL IF THE LEAKAGE PERSISTS.

2. ADJUSTER PLUG SEAL - REPLACE THE ADJUSTER PLUG SEALS.

3. PRESSURE LINE FITTING - TORQUE THE HOSE FITTING NUT TO SPECIFICATIONS. IF LEAKAGE PERSISTS, REPLACE THE SEAL.

4. PITMAN SHAFT SEALS - REPLACE THE SEALS.

5. TOP COVER SEAL - REPLACE THE SEAL.

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Electrical / Mechanical Repair (itype_413)

