Steering Gear

Special Tool(s)

ST1603-A	Lifting Bracket, Engine 303-D087 (D93P-6001-A1)
ST2176-B	Support Bar, Engine 303-F070
(SPD) PB	Tie-Rod End Remover 211-105 (T85M-3395-A)
ST1106-A	

Material

Item	Specification
MERCON® V Automatic Transmission Fluid XT-5-QM (or XT-5-QMC) (US); CXT-5- LM12 (Canada)	



N0072233

ltem	Part Number	Description
1	W10909	Steering gear bolts (2 required)
2	3B676	Steering column lower shaft
3	W704980	Steering column coupling-to-steering gear bolt
4	W705606	Tie-rod end nut (2 required)
5	W505255	Pressure line bracket-to-steering gear bolt (4.6L and 5.4L)
6	W505255	Pressure line bracket-to-crossmember bolt
7	3A713	Power steering return line
8	W707622	Power steering line clamp plate bolt
9	3A719	Power steering pressure line
10	3F886-AA	O-ring seal
11	3504	Steering gear
12	3F886-BA	O-ring seal

Removal and Installation

NOTICE: When repairing the power steering system, care should be taken to prevent the entry of foreign material or failure of the power steering components may result.

NOTICE: Do not allow the intermediate shaft to rotate while it is disconnected from the steering gear or damage to the clockspring may result. If there is evidence that the intermediate shaft has rotated, the clockspring must be removed and recentered. For additional information, refer to <u>Section 501-20B</u>.

5.4L engine

1. Remove the 4 nuts and the strut tower cross brace.



- 2. Remove the Air Cleaner (ACL) outlet pipe. For additional information, refer to Section 303-12.
- 3. Install the Engine Lifting Bracket.



4. Remove the LH engine mount nut.To install, tighten to 63 Nm (46 lb-ft).



- 5. Install the Engine Support Bar.
 - Using the Engine Lifting Bracket and Engine Support Bar, raise the LH side of the engine to gain clearance for removal of the power steering pressure line clamp plate bolt and the steering gear mounting bolt.



All vehicles

- 6. Remove the front wheels and tires. For additional information, refer to Section 204-04.
- 7. Remove and discard the 2 tie-rod end nuts. Using the Tie-Rod End Remover, disconnect the tie-rod ends from the wheel knuckles.



• To install, tighten the new nuts to 80 Nm (59 lb-ft).

8. *NOTICE:* Do not allow the intermediate shaft to rotate while it is disconnected from the steering gear or damage to the clockspring may result. If there is evidence that the intermediate shaft has rotated, the clockspring must be removed and recentered. For additional information, refer to <u>Section 501-20B</u>.

Remove the steering column coupling-to-steering gear bolt and disconnect the coupling from the steering gear.

- Discard the bolt.
- To install, tighten the new bolt to 25 Nm (18 lb-ft).
- 9. *NOTICE:* When installing the pressure and return lines to the steering gear, make sure the lines are fully seated into the steering gear prior to installing the clamp plate. Additionally, make sure that the clamp plate surfaces are free of foreign material. DO NOT exceed the specified torque when tightening the clamp plate. Leakage and/or premature failure of the power steering components may occur.

NOTE: New O-ring seals must be installed anytime the power steering lines are disconnected from the steering gear.

Remove the power steering line clamp plate bolt, rotate the clamp plate and disconnect the power

steering pressure and return lines.

- Discard the O-ring seals.
- To install, tighten to 23 Nm (17 lb-ft).
- 10. Remove the pressure line bracket-to-steering gear bolt.
 - To install, tighten to 9 Nm (80 lb-in).
- 11. Remove the pressure line bracket-to-crossmember bolt.
 - Position the pressure line aside.
 - To install, tighten to 9 Nm (80 lb-in).
- 12. Remove the 2 bolts and the steering gear.
 - To install, tighten to 115 Nm (85 lb-ft).
- 13. To install, reverse the removal procedure.
- 14. Fill the power steering system. For additional information, refer to Section 211-00.
- 15. Check and, if necessary, adjust the front toe. For additional information, refer Section 204-00.