1971-73 DODGE COLT

Colt (1971-73)

DESCRIPTION

Steering system uses a recirculating ball gear of variable ratio. This type of gear minimizes gear ratio at the straight-ahead position, resulting in high stability at center; however, as the wheel is turned from center, gear ratio increases, allowing easy maneuvering.

REMOVAL & INSTALLATION

Disconnect steering shaft from gear box main shaft. Using suitable puller, separate relay rod from pitman arm. Remove gear box from frame. Pull pitman arm from cross shaft. To install, reverse removal procedure.

OVERHAUL

Disassembly – 1) Prior to disassembly, record starting torque of main shaft (as guide during assembly). Remove adjusting screw lock nut, turn screw counterclockwise (partial turn), then remove cover. When cover is free of sector shaft, remove adjusting screw. Set gear in straight ahead (center) position and withdraw sector shaft from gear box.

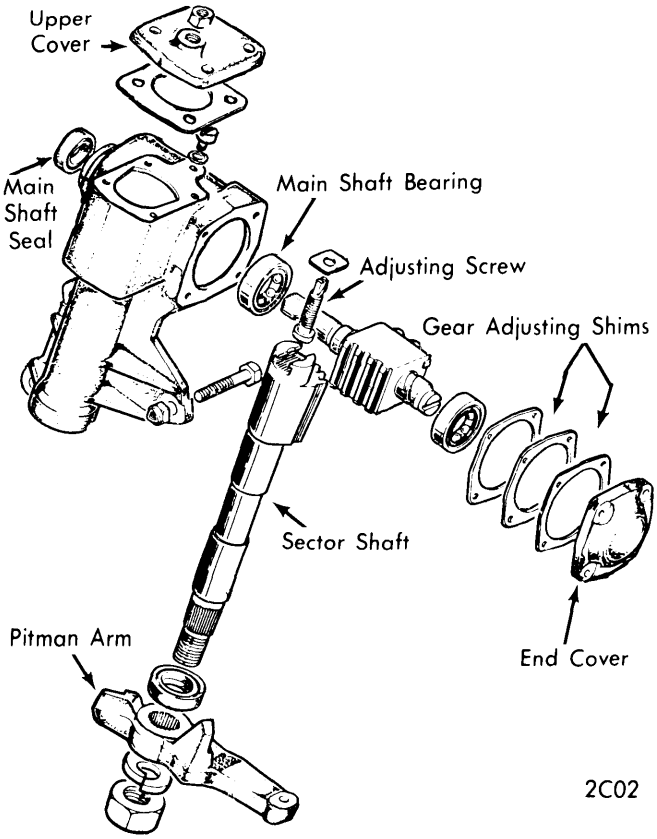
2) Measure and record main shaft starting torque with sector shaft removed. Remove end cover and record quantity and thickness of shims. Carefully draw out main shaft, ball nut assembly and bearing.

Inspection – Check components for excess wear or free play. If rough rotation or excess play is found in main shaft or ball nut, replace both as an assembly. *NOTE – Do not move ball nut fully to either end of main shaft.*

Assembly & Adjustment – 1) Place gear box in vise with main shaft in horizontal position. Replace end cover with shim (same as removed) and torque to specifications. Measure main shaft preload. If less or greater than specified range (3.5-4.4 INCH lbs.), reduce or increase shim size to obtain proper preload.

2) Install adjusting screw and proper shim in groove on sector shaft. Be sure axial play of shaft is no greater than .002". If greater than specified, change shim size. Lubricate and install sector shaft in housing and replace cover, torquing bolts to specifications. Turn sector shaft several times from side to side, then turn adjusting screw in and out several times, to set proper gear mesh.

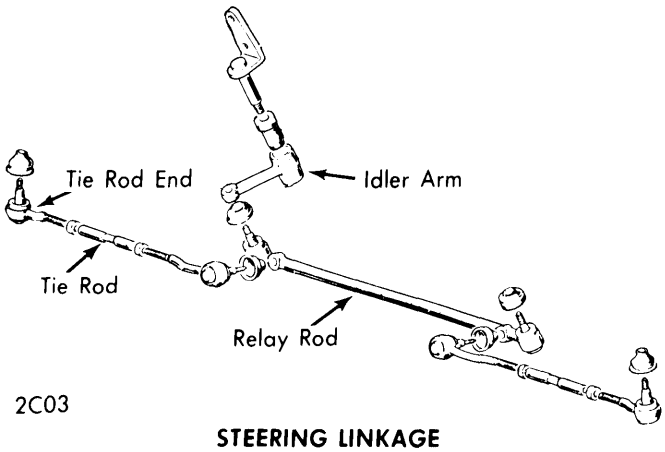
3) Loosen adjusting screw until no play is noticed at main shaft with gear in center position. Tighten lock nut. Recheck main shaft preload (it should now be 5.7-7.0 Inch lbs.). Fill box with SAE 90 gear oil. Check gear oil level through lower right bolt hole. Proper lever is 0.7" from hole.



RECIRCULATING BALL & NUT

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Gear Box-to-Frame	27 (3.7)
Pitman Arm-to-Gear	100 (13.8)
Tie Rod Socket & Relay Rod	33 (4.6)
End Cover Bolts	13 (1.8)
Upper Cover Bolts	13 (1.8)
Tie Rod End Nut	33 (4.6)
Tie Rod End Stud Lock Nut	38 (5.3)
Relay Rod-to-Pitman Arm	36 (5.0)
Idler Arm Retaining Nut	32 (4.4)
Idler Arm Bracket-to-Frame	27 (3.7)
Pitman Arm-to-Cross Shaft	100 (13.8)



STEERING LINKAGE