

TOYOTA LAND CRUISER

Land Cruiser FJ40
Land Cruiser FJ55

DESCRIPTION

The steering shaft assembly on Land Cruiser models consists of a main shaft rotating inside a column tube. FJ40 models use a one-piece main shaft with a flexible coupling at the steering box. FJ55 uses a collapsible shaft and column tube. A second, intermediate shaft connects the steering box to the main shaft. Both models bolt to the instrument panel and floorboard.

REMOVAL & INSTALLATION

MAIN SHAFT

Removal — 1) Place index marks on steering shaft and flexible coupling or universal joint. Loosen screws and remove steering wheel pad. Place marks on wheel and shaft, then pull off steering wheel. Disconnect wiring plugs under column.

2) Remove lock bolt at bottom of main shaft. Remove bolts attaching floor cover to firewall. Loosen upper bracket bolts and pull steering column from vehicle.

Installation — To install, reverse removal procedure.

INTERMEDIATE SHAFT

Removal — Raise front of vehicle and support with stands. Pry off wheel cap and remove left front wheel. Remove bolts securing steering worm yokes to worm and main shaft. Remove intermediate shaft.

Installation — To install, reverse removal procedure.

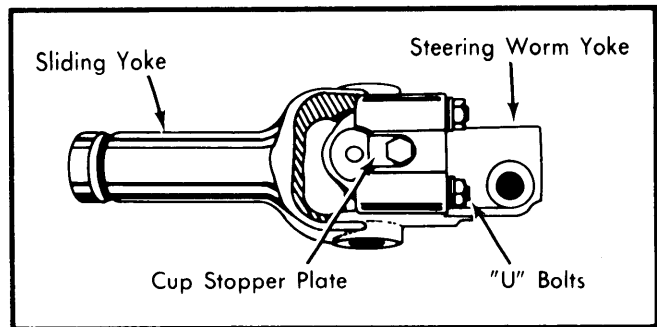


Fig. 2 Assembled View of Intermediate Shaft Coupling

OVERHAUL

Disassembly — 1) Remove turn signal switch from top of column tube. Remove bearing retainer bolts and retainer. Remove snap ring from main shaft.

2) On FJ40 models, remove flexible coupling from bottom of shaft and pull shaft from column housing. On FJ55 models, remove floor plate from bottom of housing, remove snap ring, and pull shaft from column housing.

Inspection — Check shaft, coupling, and bearings for damage, wear, and cracks. Replace bearings if rough.

Reassembly — Grease upper bearing and assemble shaft components in reverse order of disassembly.

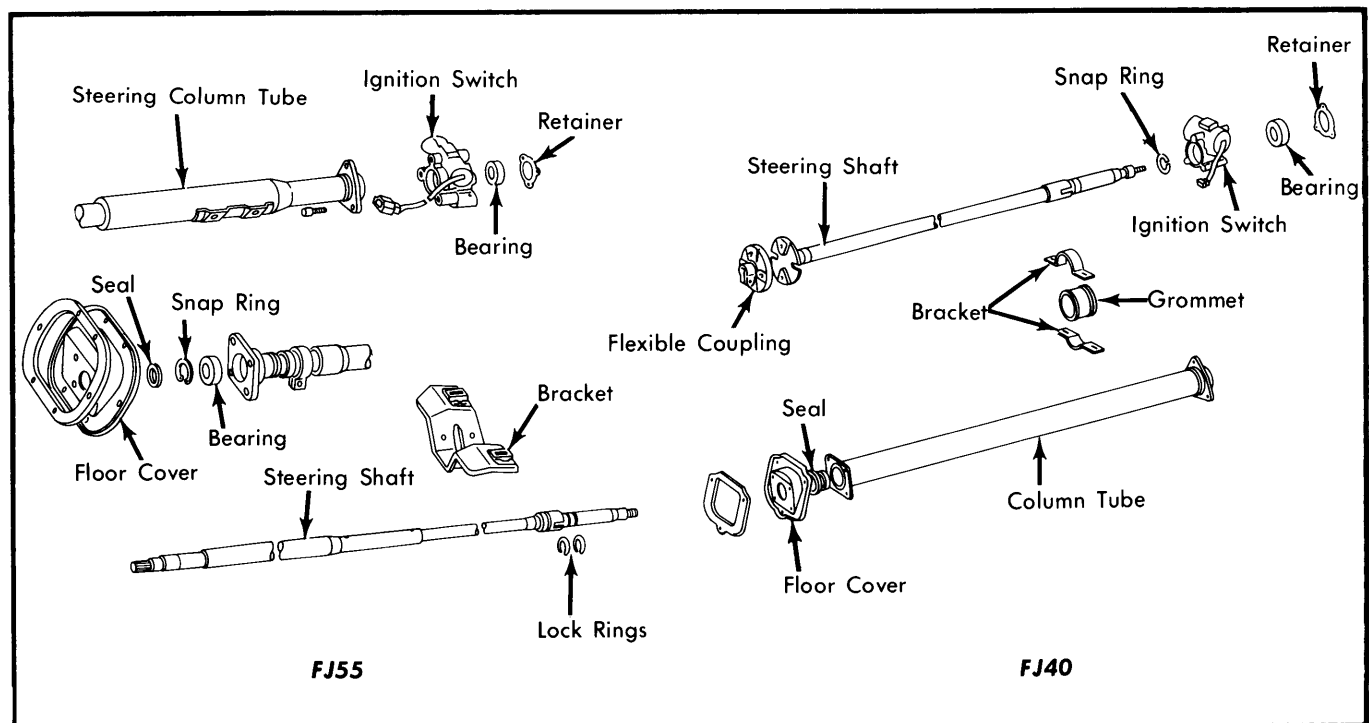


Fig. 1 Land Cruiser Steering Column Assembly

Steering Columns

TOYOTA LAND CRUISER (Cont.)

INTERMEDIATE SHAFT

Disassembly — Remove cup stopper plates (Fig. 2), then remove "U" bolts securing universal joint spider bearing to steering worm yoke. Separate worm yoke from sliding yoke and shaft. Remove hole snap rings from bearing holes, then remove spider bearing.

Reassembly — 1) Pack spider bearing cups with suitable grease and assemble bearing rollers. Press bearing into one side of sliding shaft. Install bearing seal and complete the in-

stallation of spider bearing. Install a snap ring which will provide minimum thrust clearance in the joint spider while still allowing smooth "U" joint operation. Snap rings are available in the following sizes: .047" (1.20 mm), .049" (1.24 mm), and .051" (1.30 mm).

2) Connect sliding shaft to steering worm yoke. Install cup stopper plates and "U" bolts. Assemble joint spider bearing onto sliding yoke in same manner. Pack inside hole of sliding yoke with suitable grease. Align cup stopper plates on sliding yoke side and sliding shaft side. Install dust cover and connect sliding shaft with yoke.

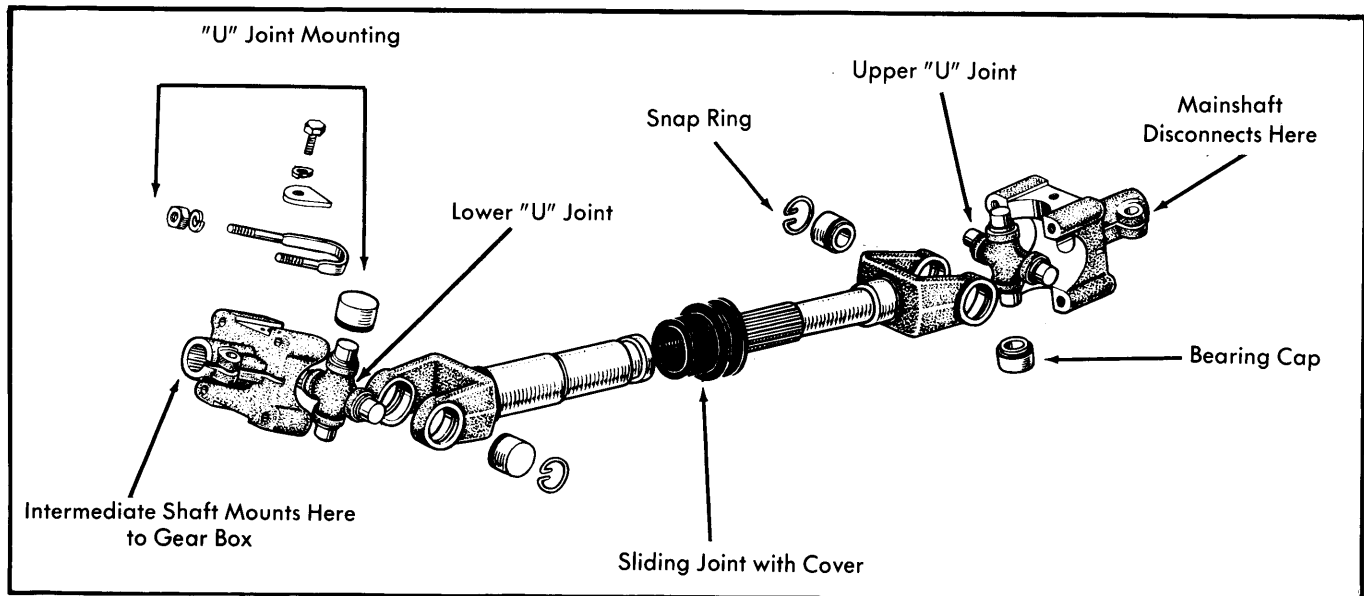


Fig. 3 Exploded View of Land Cruiser FJ55 Intermediate Steering Shaft Components