

## 1964-70 DATSUN 310, 311, 312, 410

Datsun 310 (1964-65)  
 Datsun 311 (1966-70)  
 Datsun 312 (1964)  
 Datsun 410 (1964-65)

### DESCRIPTION

#### STEERING GEAR

Steering gear of these applications is the cam and lever type. Turning action of steering shaft revolves the worm which engages the cam and turns the steering lever through a predetermined arc. The lever is attached to a pitman arm which moves front wheels through the steering linkage.

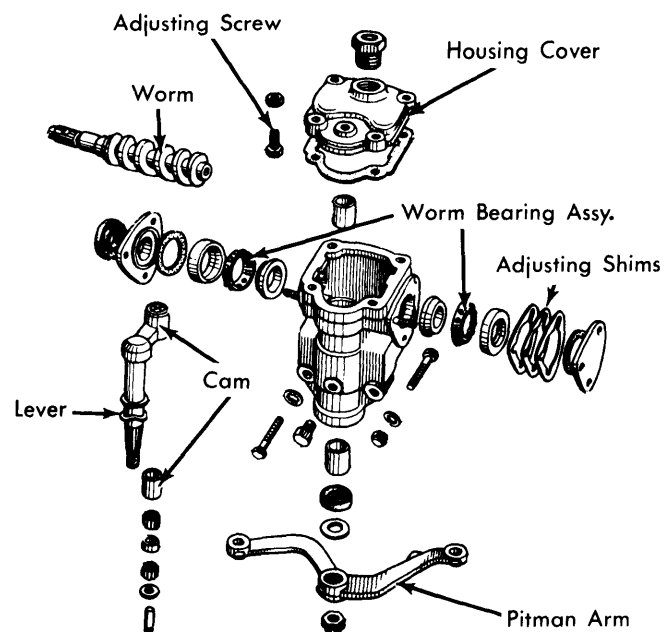
#### STEERING LINKAGE

**Models 310, 311, 312** – Linkage consists of pitman arm, connected at one end to non-adjustable tie rod and at the other end to adjustable center link which is connected to the idler arm. The idler arm is linked to the other non-adjustable tie rod. Both tie rods are attached to steering knuckles which change the road wheel direction.

**Model 410** – Components are same as other models except tie rods are individually adjustable while the center rod is non-adjustable. Configuration of pitman arm and idler arm are also slightly different.

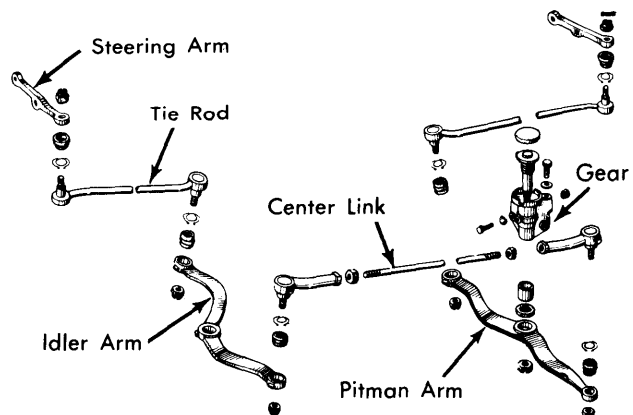
#### ADJUSTMENT

See *Overhaul procedure in this article.*



ODA003

#### CAM & LEVER GEAR



ODA004

#### STEERING LINKAGE – 310,311,312,410

### REMOVAL & INSTALLATION

#### STEERING GEAR

**Removal** – Disconnect horn button and remove steering wheel, then unbolt universal joint (310, 311) or column lock and housing (312, 410) from column. Pull center link from pitman arm, at ball joint. Remove gear assembly from vehicle by unscrewing retaining bolts at front member.

**Installation** – Reverse removal procedure.

#### STEERING LINKAGE

**Pitman Arm Removal** – Remove pitman arm by detaching center link from pitman arm, then unscrew pitman retaining nut. Use suitable puller to separate pitman arm from lever shaft. **NOTE** – Do not hammer pitman arm from shaft. To install, reverse removal procedure.

**Idler Arm Removal** – Disconnect tie rod and center link from idler arm. Unscrew three idler arm assembly-to-body retaining bolts. Move assembly to bench and remove rubber cover and extract idler shaft.

### OVERHAUL

#### STEERING GEAR

**Disassembly** – Remove pitman arm, then unbolt and detach lever shaft cover. Using suitable drift, tap out lever. Disconnect coupling from worm shaft. Cam, located in lever, may be removed, however care should be taken during removal so that needle bearings are not lost. It is advisable to remove cam only if appreciable wear is noticed. Remove worm shaft cover. Tap out worm shaft and rear bearing.

**Reassembly** – Reverse disassembly procedure, noting the following: Adjusting shims should be placed behind front cover such that there is no end play on worm. With adjusting screw slackened, set gear in straight-ahead position, then turn screw in until there is no free play at center position of pitman arm.