

## 1963-73 FIAT 600D & 850

600D (1963-67)  
850 (1966-73)

### DESCRIPTION

#### STEERING GEAR & LINKAGE

Steering control is effected by a worm and sector type steering gear. Steering box is located on front left side of firewall. Steering linkage consists of two symmetrical side track rods and central link rod connecting pitman arm to relay lever.

### ADJUSTMENT

#### STEERING GEAR

See OVERHAUL procedure in this article.

### REMOVAL & INSTALLATION

#### STEERING GEAR

**Removal** — From inside vehicle, back off column shaft-to-worm screw mounting nut. From under vehicle, remove mounting nuts of track rods at pitman arm. Remove battery to gain access to upper self-locking nut which secures gear box to body. Unscrew lower self-locking nut on opposite side. Remove worm screw from steering column and take out gear box.

**Installation** — Reverse removal procedures, ensuring pitman arm is correctly positioned on sector shaft.

### OVERHAUL

#### STEERING GEAR

**Disassembly** — 1) Secure steering box to suitable support (A. 66032), remove mounting self-locking nut, and detach pitman arm, using suitable puller (A. 46021).

2) Back out worm screw adjuster and bearing retainer lower sleeve. Remove top cover, and after removing lower gasket from sector shaft, back out screw securing eccentric bushing adjusting plate, then take plate off (with gasket).

3) Extract worm sector, thrust washer, and shims (upper bearing outer race will remain in housing). Bearing inner races will remain on worm screw. Remove bearings using suitable puller (A. 46019). Withdraw oil seal and worm screw upper bearing race.

**Inspection & Adjustment** — 1) Check parts to determine whether worm screw threads show signs of seizing, indentations, or scoring. Ensure contact surfaces mesh at center point (this meshing is essential for proper adjustment).

2) Check clearance between eccentric bushing and worm sector. Clearance must not exceed .0039" (.10 mm). If new parts are fitted, clearance must not exceed .00165". **NOTE** — Worm

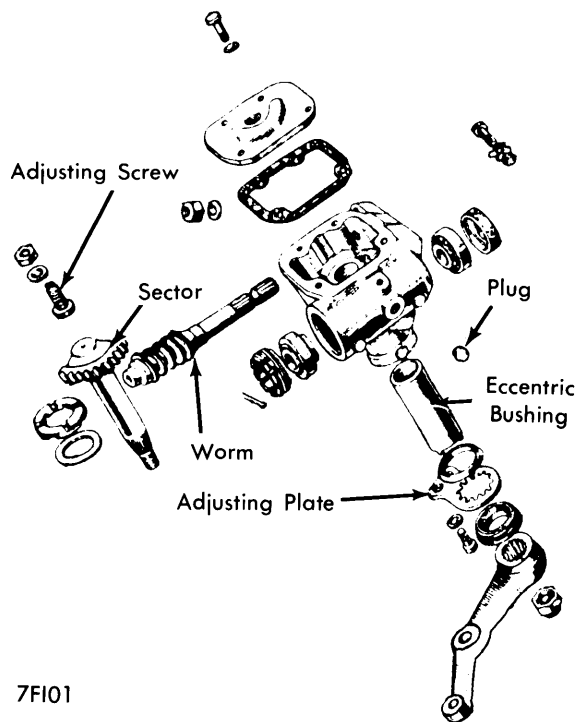
and sector are assembled with a touch fit at tooth flank. Adjustment is made by rotating worm sector mounting eccentric bushing.

3) If backlash between worm screw and sector is excessive, adjust as follows: Rotate eccentric bushing by moving adjustment plate, moving sector in toward worm screw (secure plate using second attaching hole). **NOTE** — If plate is already secured at second hole, remove plate, rotate one serration, and resecure plate.

4) If play in worm screw rollers is excessive, screw lower adjuster ring in to eliminate lash, then secure adjuster ring with cotter pin. If worm screw and sector meshing is off center, move sector axially by adding or removing shims against eccentric bushing shoulder.

5) Eliminate play in gear by turning adjusting screw on cover as necessary (do not tighten such that gear operation becomes stiff). Replace any seal or bearing found defective.

**Reassembly** — Reverse disassembly procedure.



FIAT WORM & SECTOR GEAR — 600D & 850

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Gear Mounting Self-Locking Nut .....	16 (2.2)
Pitman Arm-to-Sector Shaft .....	76 (10.5)
Track Rod Ball Joint Nut .....	20 (2.8)
Steering Wheel Nut .....	33 (4.6)