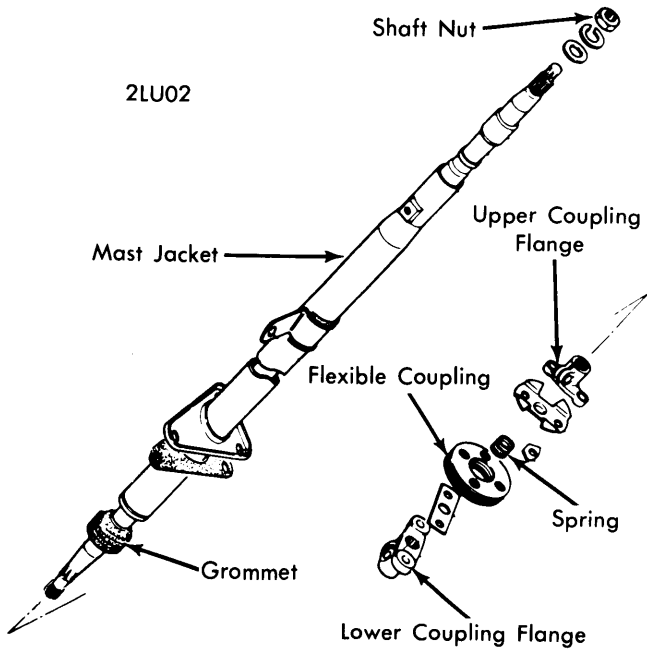


## 1972-73 CHEVROLET LUV

LUV (1972-73)

### DESCRIPTION

Column is fastened to steering gear through a flexible coupling. The energy-absorbing shaft will collapse during frontal impact under predetermined loads, by shearing plastic pins.



STEERING COLUMN WITH FLEXIBLE COUPLING

### REMOVAL & INSTALLATION

**Inspection** — If steering shaft plastic pins have been sheared, shaft will rattle when stuck lightly from the side. Some lash will also be felt when rotating steering wheel while holding the flexible coupling. **NOTE** — If pins are sheared due to minor collision, vehicle can be safely steered; however, steering shaft replacement should be made as soon as possible.

**Removal** — 1) Disconnect battery ground cable, then remove horn button, steering wheel and turn signal switch.

2) Raise front of vehicle. Loosen coupling clamp bolts and spread clamp (in engine compartment). Disconnect heater hose from clip on column and bend clip flat. Remove three mast jacket bracket-to-cowl screws. Remove column-to-instrument panel bolts and detach flexible coupling from shaft. Pull steering column out toward passenger compartment.

**Installation** — To install, reverse removal procedure, noting the following: Leave column-to-panel bolts slightly loose until vehicle is lowered to ground.

### FLEXIBLE COUPLING

**Removal** — Raise front of vehicle. Remove coupling through-bolts (only two can be removed). Remove coupling assembly by loosening clamp pinch bolts. If necessary to remove clamps, steering column must be loosened.

**Installation** — Replace clamps without pinch bolts. Position coupling and torque through-bolts to specifications. Install and torque clamp pinch bolts. If column was loosened, lower vehicle to floor and slightly tighten column-to-panel screws. Install column cowl, then complete tightening of column-to-panel screws.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Steering Wheel Nut .....	25 (3.5)
Coupling Through Bolts .....	18 (2.5)
Shaft Coupling Clamp .....	20 (2.8)
Lower Coupling-to-Wormshaft Clamp .....	20 (2.8)
Column-to-Cowl .....	10 (1.4)

# Steering Columns

## 1963-73 MERCEDES-BENZ

All Models (1963-73)

### DESCRIPTION

Steering column is connected to steering gear by a shaft which is enclosed in a housing and turns on ball bearings. Turn signal switch, shift lever (if on column), and horn button are enclosed in the shaft housing and steering wheel. Assembly is supported on the instrument panel.

### REMOVAL & INSTALLATION

#### STEERING COLUMN HOUSING

**Removal** — 1) Disconnect battery cable. Remove steering wheel. On vehicles with column shift, disconnect shift rods from bearing bracket. Disconnect back up light switch and remove floor plate from steering column. Remove instrument cluster by disconnecting temperature gauge tube, cover under instrument panel, and speedometer cable. Push cluster out from under instrument panel.

2) Remove steering lock by first removing lock sleeve, then turn spindle so bolt pin cannot enter closing ring. Loosen clamping screw and push in lock pin, then turn steering lock and remove from instrument panel.

3) Disconnect electrical plug at housing, remove bolts securing housing to body, and remove steering column housing.

**Installation** — To install, reverse removal procedure, tightening bolts and nuts as required.

#### STEERING COLUMN SHAFT

**Removal** — Remove steering wheel and turn signal switch rubber cover. Disconnect switch from bearing housing and pull out slightly. Disconnect switch wiring. On vehicles with column shift, remove shift lever. Turn guide pin 180° and remove lock (with washer). Remove screws securing bearing housing to column housing; remove column shaft.

**Installation** — To install, reverse removal procedure, tightening bolts and nuts as required.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Steering Column Shaft Nut .....	36 (5.0)
Steering Wheel-to-Collapsible Bowl.....	10 (1.4)
Steering Coupling.....	18 (2.5)
Housing-to-Body.....	18 (2.5)

## 1963-67 MG MIDGET, 1100, & 1300

Midget (1963-67)  
1100 (1963-67)  
1300 (1967)

### REMOVAL & INSTALLATION

#### STEERING COLUMN

**Removal** — 1) Disconnect battery cable. Disconnect horn and turn signal switch connection on bottom of fascia. Remove bolt securing steering column to steering gear pinion shaft. Remove steering column cover on Midget models.

2) Remove bolts securing column clamp on underside of fascia. Pull column assembly upwards and separate from pinion shaft.

**NOTE** — If vehicle is equipped with steering column lock and ignition switch, switch must be disconnected and removed before removing steering column.

**Installation** — To install steering column, reverse removal procedure. Check steering column alignment. See *Steering Column Alignment*.

#### STEERING COLUMN ALIGNMENT

**1100 & 1300 Models** — If steering is stiff, and is still stiff after steering gear ball joints at steering arms have been disconnected, loosen steering gear "U" bolts. Loosen column clamp bolts. Grasp lower end of steering column assembly and move up and down until steering gear obtains its natural position. Tighten all bolts previously loosened, making sure steering gear is not rotated while tightening "U" bolts.

**Midget** — Column is correctly aligned by loosening steering gear mounting bolts and then retightening after column is installed.