

# Steering Columns

## VOLKSWAGEN TYPE 2

### Type 2

#### DESCRIPTION

Type 2 Volkswagen models use an energy-absorbing steering column assembly. Mounting support and energy-absorbing bracket are welded to steering column. When frontal impact is encountered, column support detaches from under instrument panel. Bracket then collapses to a predetermined location and support is deflected to side. Steering shaft can be removed separately or entire steering column (with shaft) can be removed as a unit.

#### STEERING COLUMN ASSEMBLY

**Removal** - 1) Disconnect battery ground. Disconnect all electrical wires from steering column.

2) Work under vehicle and disconnect horn ground wire. Unbolt steering shaft from coupling at steering gear box pinch bolt.

3) Work between pedals and remove column cover plate. From under instrument panel, unbolt column tube support. Pull steering column assembly out of vehicle as an assembly.

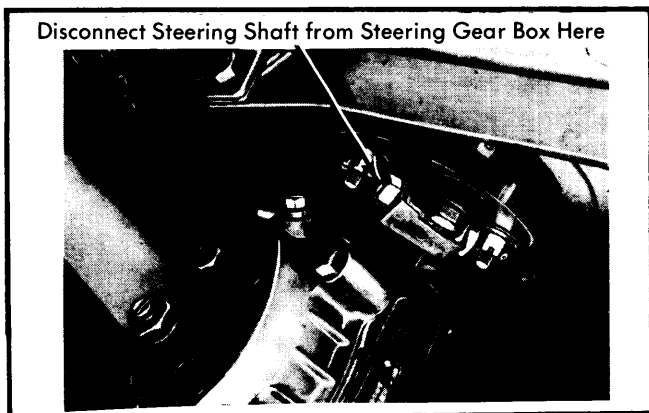
**NOTE** - If vehicle has been damaged, entire steering column must be replaced. Do not attempt any repairs.

**Installation** - To install, reverse removal procedure and note: Make sure plastic-coated washers are replaced.

#### STEERING SHAFT

**Removal** - 1) Disconnect battery. Remove steering wheel. See Volkswagen under STEERING WHEEL & COLUMN SWITCHES in this Section. Put ignition/steering lock switch in "ON" position.

2) Work between pedals and remove steering column cover plate. Bend up lock plate then remove bolt keeping steering shaft coupler to steering gear.

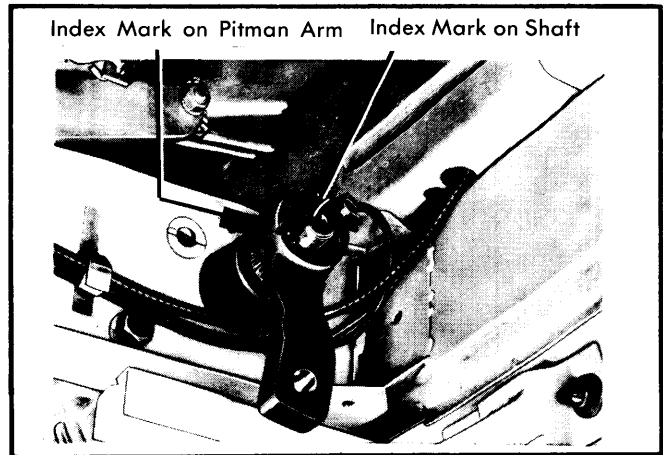


**Fig. 1 Steering Shaft to Gear Box Coupling Viewed from Under Vehicle**

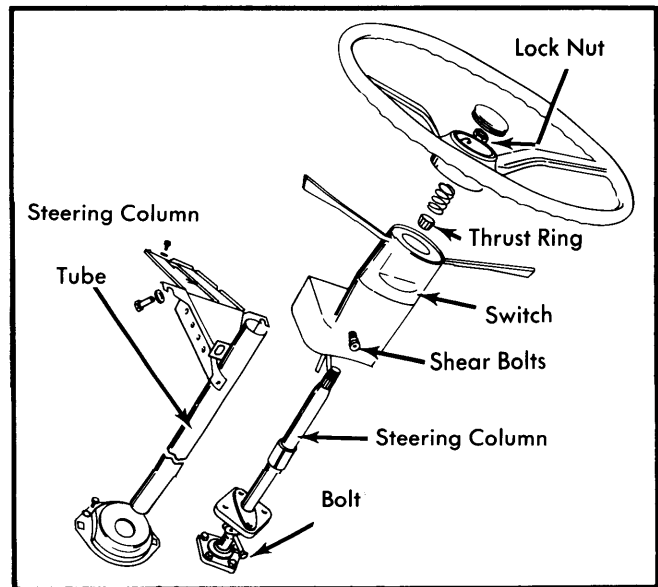
3) Remove drag link and pitman arm. Remove 4 bolts mounting steering gear box to frame. Force steering shaft up enough so gear box can be removed.

4) Slide shaft downward and out of vehicle complete with steering coupling.

**Installation** - To install, reverse removal procedure and note: From chassis number 212-2038-133 there are 2 pitman arm alignment marks. Make sure the "L" (left-hand drive) mark in pitman arm aligns with index mark cast in steering gear shaft.



**Fig. 2 Pitman Arm and Steering Gear Shaft Alignment Marks**



**Fig. 3 Type 2 Steering Column and Bracket Assembly**

#### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Steering Wheel Nut .....	36 (5.0)
Flexible Coupling-to-Flange .....	10 (1.5)
Column Cover Plate .....	3.5 (0.5)
Bracket Attaching Bolts .....	10 (1.5)
Couplange, Flange-to-Worm Shaft .....	14 (2.0)