

VOLKSWAGEN QUANTUM

DESCRIPTION

The Quantum uses a 2-piece safety steering column with a slip joint flange connection. Steering column is supported by the column tube and steering lock assembly.

REMOVAL & INSTALLATION

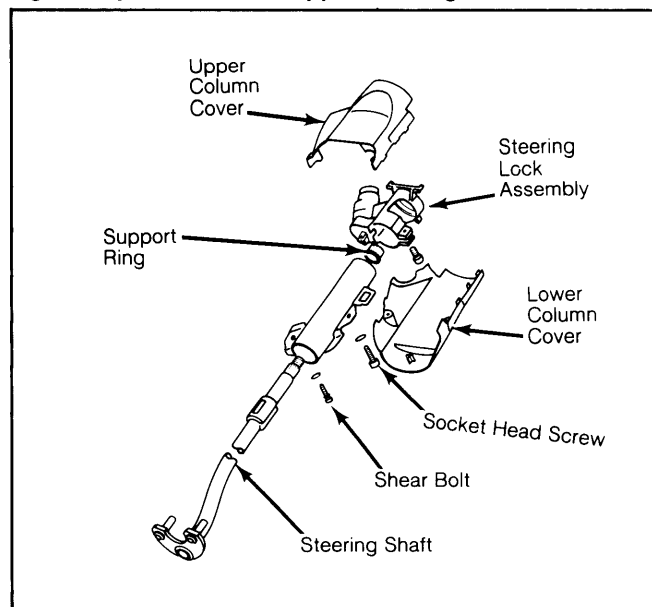
STEERING COLUMN

Removal

1) Disconnect battery ground cable. Remove steering wheel and column switches. See *Volkswagen in Steering Wheels & Column Switches* article in this Section.

2) From under hood, remove clamp bolt retaining steering shaft clamp to steering gear pinion shaft. Remove column cover bolts and steering column covers. See Fig. 1.

Fig. 1: Exploded View of Upper Steering Column



3) Pry lock washer off steering shaft. Remove spring. Remove contact ring and steering lock assembly. Remove support ring from column tube. See Fig. 1. Center punch shear bolt retaining column tube to dash. Drill out shear bolt. Remove socket head screw.

4) From inside vehicle, force dust boot out of floor board. Remove steering column tube and shaft as an assembly.

Installation

1) Install assembled steering column into vehicle. Install shear bolt and socket head bolt finger tight. Push dust boot into floor board until seated.

2) Place clamp onto steering gear pinion shaft. Place support ring into column tube. Install steering lock assembly on steering column.

3) Install contact ring, spring and new lock washer. Tighten socket head screw. Tighten shear bolt until head snaps off.

4) Install upper and lower column covers. Install column switches and steering wheel. See *Volkswagen in Steering Wheels & Column Switches* article in this Section.

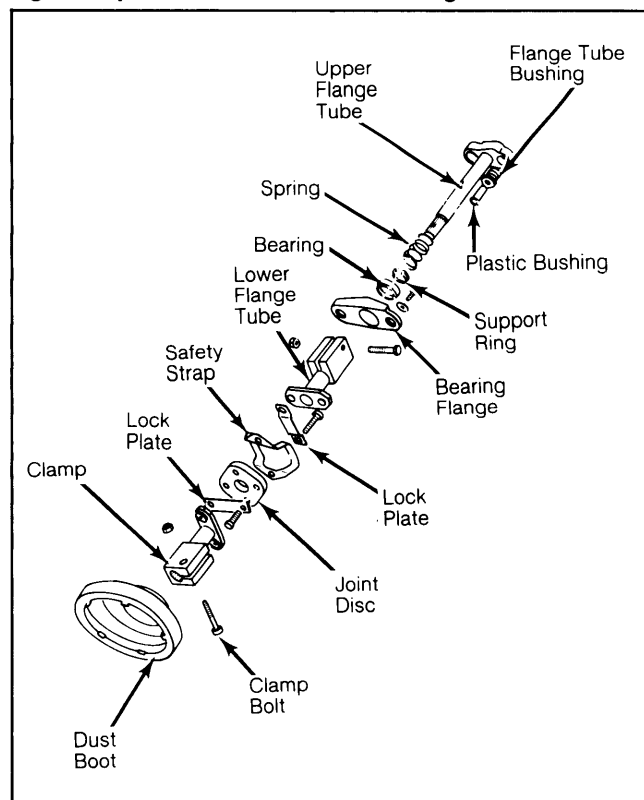
OVERHAUL

STEERING COLUMN

Disassembly

1) On lower steering shaft, remove clamp bolt retaining lower flange tube to upper flange tube. Separate flange tubes and remove bearing flange, bearing, support ring, spring and washer. See Fig. 2.

Fig. 2: Exploded View of Lower Steering Column



2) Push upper flange tube toward steering shaft until components can be separated. Remove flange tube bushings with plastic bushings. See Fig. 2.

3) Remove lower flange tube-to-clamp bolts. Separate lower flange tube from clamp. Inspect joint disc, safety strap and lock plates for damage or wear.

4) On steering shaft, slide column tube off steering shaft. Inspect steering shaft, support ring and steering lock assembly for wear or damage. Replace components as necessary. See Fig. 1.

Reassembly

To reassemble steering column, reverse disassembly procedures. Press flange tube bushing and plastic bushing in by hand.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N.m)
Clamp Bolt	22 (30)
Lock Plate Bolts	18 (24)
Lower Flange Tube Bolt	22 (30)
Socket Head Screw	14 (19)
Steering Wheel Nut	29 (39)