

# STEERING COLUMN

## Article Text

1989 Volkswagen Golf  
For Volkswagen Technical Site  
Copyright © 1998 Mitchell Repair Information Company, LLC  
Tuesday, August 24, 1999 12:03AM

### ARTICLE BEGINNING

#### 1989-90 STEERING

#### Volkswagen - Steering Columns

Cabriolet, Fox, Golf, GTI, Jetta, Jetta GLI

**WARNING:** Cabriolet models are equipped with a driver's side air bag. Air bag must be removed from vehicle before working on steering column. Failure to remove air bag may result in personal injury.

### DESCRIPTION

Swing-away steering column is held by a clamp and leaf spring. On impact, the "U" joint shaft pushes steering column against the leaf spring. The spring allows the column to disengage and swing away.

**CAUTION:** Applying excessive pressure, or causing impact to mainshaft during service, may cause the column to disengage.

### REMOVAL & INSTALLATION

#### AIR BAG

##### Removal & Installation

1) Disconnect negative battery cable. Wait at least 20 minutes for air bag capacitor to discharge. Remove 2 Torx screws (No. 30) from back of steering wheel.

2) Carefully tilt air bag down away from steering wheel. Disconnect electrical wire from back of air bag unit. Remove air bag unit from vehicle. DO NOT store air bag unit on its vinyl side. Store air bag unit on its metal housing.

3) To install, reverse removal procedure. Install new Torx screws to hold air bag unit in steering wheel. Tighten Torx screws to 89 in. lbs. (10 N.m).

#### STEERING COLUMN

##### Removal (Cabriolet)

1) Disconnect battery ground cable. Remove steering wheel. Remove kneebars panel. Remove steering column lower trim panel. Disconnect 2 electrical connectors.

2) Remove 3 screws retaining spiral spring assembly. Remove lock ring, spacer ring, spring and steering lock housing. Position Tube (VW 420) on steering column. Release tension on lock ring with snap ring pliers.

3) Ring will slide upward with spring pressure. Remove steering column. To remove leaf spring from steering column tube, push retaining spring downward with a screwdriver. Disengage leaf spring.

## STEERING COLUMN

### Article Text (p. 2)

1989 Volkswagen Golf

For Volkswagen Technical Site

Copyright © 1998 Mitchell Repair Information Company, LLC

Tuesday, August 24, 1999 12:03AM

#### Installation

To install, reverse removal procedure. When installing spiral spring, install 4 turns from either stop. To install leaf spring on steering column tube, insert leaf spring in bracket slot. Press lower end of leaf spring inward until it engages retaining spring.

#### STEERING COLUMN

##### Removal (Except Cabriolet)

1) Disconnect battery ground cable. Remove steering wheel. Remove bolt and screw from switch housing recess. Tilt switch unit toward instrument panel. Pry spacer sleeve from column.

2) Pull up combination switch to disconnect wires. Remove combination switch. Disconnect steering shaft from "U" joint shaft. Disconnect brake pedal push rod.

3) Separate clutch pedal from clutch cable under instrument panel. Using a screwdriver, push down leaf spring retainer clip to disengage it from mounting slot.

4) Remove bolts retaining column under instrument panel. Center punch and drill out shear bolts. Remove column assembly from vehicle.

#### Installation

To install, reverse removal procedure. Place wheels in a straight-ahead position. Tighten pinch bolt. Install spacer. See Fig. 1. Install combination switch and steering wheel. Adjust brake pedal and clutch pedal height.

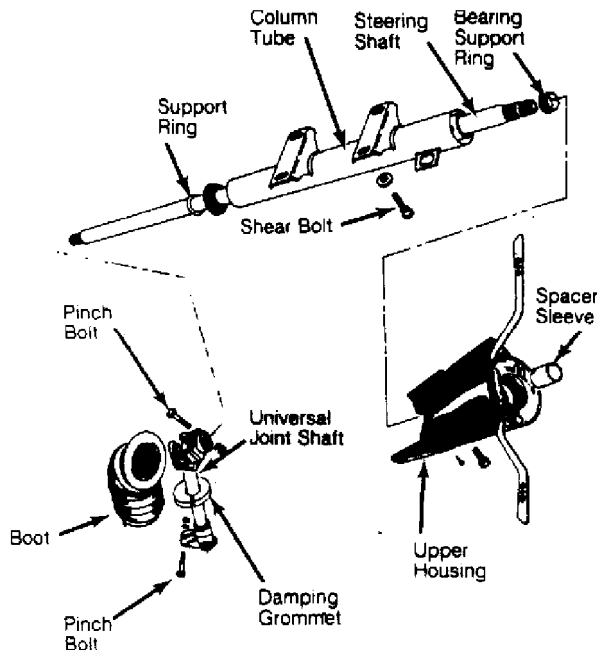


Fig. 1: Exploded View of Steering Column Assembly  
Courtesy of Volkswagen United States, Inc.

## STEERING COLUMN OVERHAUL

### Disassembly

Using a press, drive steering shaft from column. Remove bearings from steering column.

### Inspection

Check upper bracket for damage and upper bearing for rotating smoothness. Check shafts for signs of bending, damaged splines or damaged "U" joints. Check column tube for bending or other damage. Repair or replace components as necessary.

### Reassembly

Using a press, drive in steering shaft and new bearings. DO NOT use more than 200 lbs. (90 kg) of force to press shaft and bearings into column tube.

## "U" JOINT SHAFT OVERHAUL

### Disassembly

1) Remove pinch bolt connecting lower end of "U" joint shaft with steering gear pinion shaft. Separate manual gearshift linkage from steering box. Remove steering gear box-to-frame retaining nuts.

2) Pull box down to separate from lower "U" joint. Remove rubber boot from lower "U" joint. Remove upper "U" joint-to-steering shaft pinch bolt. Pull down joint and remove shaft with "U" joints.

### Inspection

Inspect "U" joints for signs of excessive wear. Check for excessive play. If abnormal wear or play is noticed, replace as necessary.

### Reassembly

1) Fit "U" joint to steering shaft. Align steering shaft notch with lower "U" joint slot. Install boot and dampening grommet. Fit steering box to frame while guiding pinion shaft into lower "U" joint.

2) Hand tighten steering box nuts. Place wheels in a straight-ahead position. Align pinion shaft and "U" joint. Tighten pinch bolt. Tighten gearbox nuts. Connect gearshift linkage to gearbox. Check linkage for smooth operation.

## TORQUE SPECIFICATIONS

### TORQUE SPECIFICATIONS TABLE

AA

Application	Ft. Lbs. (N.m)
Pinch Bolts .....	22 (30)
Steering Column-to-Instrument Panel	
Retaining Bolts .....	15 (20)

# STEERING COLUMN

## Article Text (p. 4)

1989 Volkswagen Golf

For Volkswagen Technical Site

Copyright © 1998 Mitchell Repair Information Company, LLC

Tuesday, August 24, 1999 12:03AM

Shear Bolts ..... (1)  
Steering Wheel Nut ..... 37 (50)

(1) - Tighten until bolt head snaps off.

AA

END OF ARTICLE