

Steering Columns

VOLKSWAGEN VANAGON

DESCRIPTION

Volkswagen Vanagon models use an energy absorbing steering column. Column is attached to dash by brackets and to floor pan by a dust boot. Steering shaft is made up of an upper steering shaft and lower steering shaft. Shafts are connected together by a short upper flange. Lower steering shaft is connected to the transfer gear by a flange containing a rubber coupling.

REMOVAL & INSTALLATION

STEERING COLUMN ASSEMBLY

Removal - 1) Remove horn button and steering wheel. Remove column covers, then disconnect column switch wires. Remove column switch. Remove steering lock and spacer sleeve with a puller.

2) Remove clamp bolt attaching upper steering shaft to upper flange. Remove lower column clamp bolts, then upper column bolts. Remove upper steering shaft with column tube as an assembly.

3) Remove lower flange clamp bolt, the one attaching lower flange to lower steering shaft. Remove dust boot-to-floor pan bolts and remove lower steering shaft.

Installation - 1) To install steering column, reverse removal procedures and note the following: Install new gasket on dust boot. Install steering shaft and column tube as an assembly.

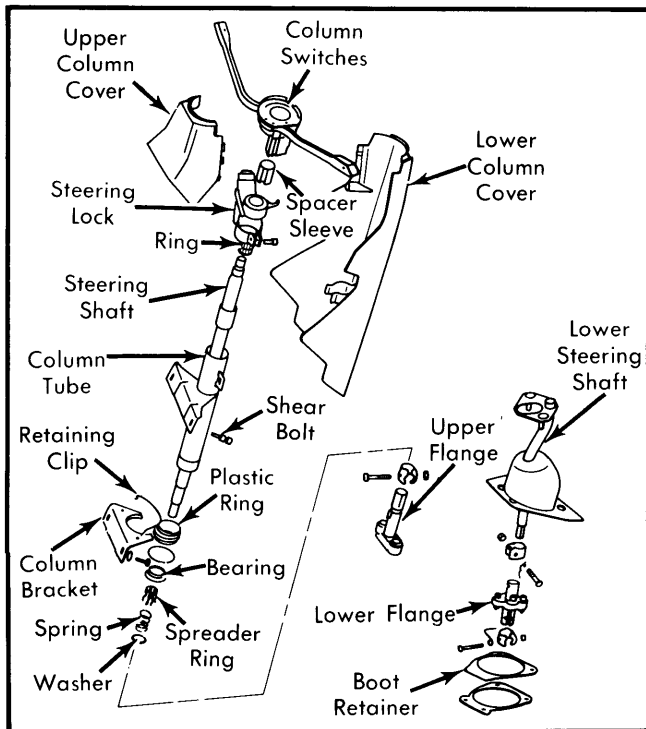


Fig. 1 Exploded View of Volkswagen Vanagon Steering Column Assembly

2) When installing steering lock and spacer sleeve, clamp lower steering shaft to upper flange with tool VW 267a. Make sure distance from top of column tube to top of upper steering shaft (with steering wheel and nut installed) is 1.634" (41.5 mm) and space between column switch and steering wheel is .079-.157" (2-4 mm). See Fig. 2.

OVERHAUL

Disassembly - 1) On lower steering shaft, remove flange from steering shaft. Remove clamp from flange. Remove gasket and boot retainer from dust boot.

2) On upper steering shaft, remove washer, spring, spreader ring, bearing, column bracket and plastic ring from bottom end of shaft. Remove steering lock ring from upper end of steering shaft.

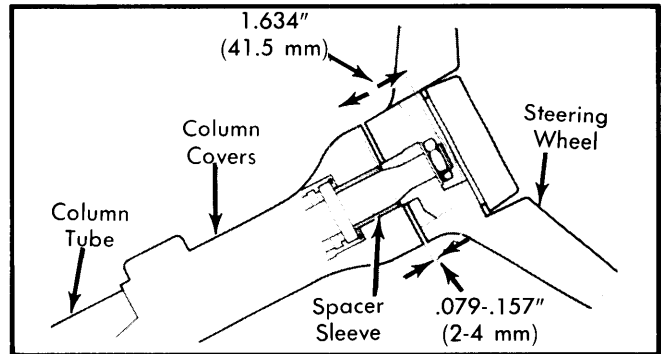


Fig. 2 Measurements for Installing Spacer Sleeve

3) On column tube, drill out and remove shear bolt. Remove column tube from steering shaft.

Inspection - Check all components for excessive wear, scoring or other damage. Check steering shafts for bending, cracks or other collision damage. Replace components as necessary.

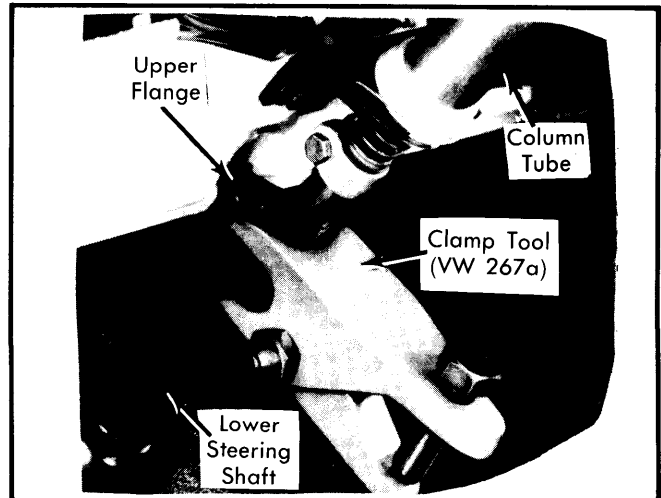


Fig. 3 Clamp Tool for Installing Spacer Sleeve

Reassembly - To reassemble steering column and shafts, reverse disassembly procedures and note the following: Always assemble steering lock, spacer sleeve and ring before installing to steering shaft. When installing shear bolt to column, tighten bolt until head snaps off.

TIGHTENING SPECIFICATIONS

Application	Ft.Lbs.(mkg)
Clamp Bolts	14 (1.9)
Lower Bracket Bolts	18 (2.5)
Steering Wheel Nut	36 (5.0)