

1966-73 PORSCHE 911 & 912

911 (1966-73)
912 (1966-69)

DESCRIPTION

Steering shaft is a collapsible type. It is built in three sections (joined by universal joints) and is collapsible on impact. On 1972 and later 911 models, a wiper/washer switch is incorporated on steering column, opposite turn signal switch.

REMOVAL & INSTALLATION

STEERING HOUSING

Removal — 1) Remove front compartment carpeting and detach heating duct of auxiliary heater from steering post. Open access door and remove intermediate shaft cover. Remove three heater fuel pump retaining bolts and move pump aside.

2) Unbolt universal joint from steering shaft. Remove steering shaft bushing cap, pull out bushing and dust boot. Remove retaining bolts from steering coupling. Detach undershield.

3) Separate ball joint from tie rod, using suitable tool. Unscrew steering housing retaining bolts. Remove right reinforcing crossmember brace. Withdraw housing assembly to the right. Unbolt tie rod yoke and remove tie rod. Remove housing.

Installation — To install, reverse removal procedure, torque all bolts to specifications.

STEERING SHAFT

NOTE — Some steering shafts are splined and mated with internally splined universal joints. Do not interchange either part with non-splined components.

Removal — 1) Disconnect battery. Remove front trunk mat and open access door. Remove trunk paneling in front of fresh air plenum box. Remove grille work from blower and unscrew plenum chamber retaining screws. Detach hoses from control box, then disconnect electrical wiring from fresh air box. Remove fresh air box with blower.

2) Take off cover plate for intermediate shaft. Remove top hex head bolt from upper universal joint. Detach steering shaft bearing cap. Pull lower universal joint out of steering shaft and remove intermediate shaft, with both universal joints.

3) Pull steering wheel from shaft. Extract column bearing, using suitable tool. Take circlip from steering shaft and drive shaft out upward.

4) Remove circlip from grooved ball bearing from outer steering housing and drive out ball bearing downward.

NOTE — When installing steering coupling, match large orifices to flanges in pinion or lower shaft. In no case should safety plates and bolt heads rest against large orifices, or damage to coupling may result.

Installation — To install, reverse removal procedure, noting the following: Pack grooved ball bearing with lithium base grease and drive bearing into shaft housing (with bearing cover disc facing outward). Tighten steering shaft bearing cap bolts to specification before installing universal joints.

UPPER SHAFT & SWITCH ASSEMBLY

Removal — 1) Disconnect battery. Remove front compartment carpeting and open access door. Detach auxiliary heater duct from steering post. Remove intermediate shaft cover. Remove heater fuel pump retaining bolts and lay pump aside.

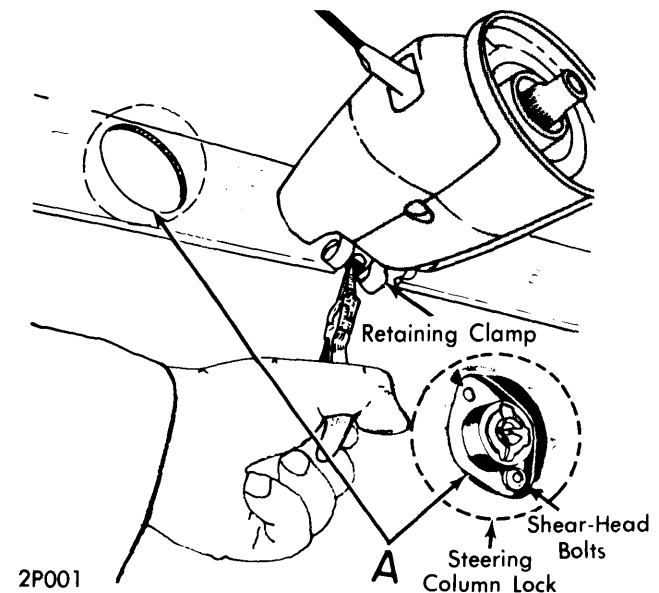
2) Loosen lower retaining nuts on both universal joints. Remove lower steering shaft bushing cap. Pull universal joint off lower shaft. Drive intermediate shaft out of upper universal joint, then remove intermediate shaft and lower universal joint.

3) Remove steering wheel. Remove steering lock cover (if equipped) by drilling shear-head bolts. Do not disconnect electrical wiring. Using suitable tool (P 281), remove headlight switch (allow to hang by wires).

4) Loosen Allen bolt in column switch assembly retaining clamp. Turn clamp joint down and pull out locking pin with pliers. Disconnect wiring leading to switch assembly (mark for reassembly). Withdraw switch assembly with upper shaft and universal joint. Remove steering post attaching bolts. Twist and remove post from grommet.

Installation — 1) To install, reverse removal procedure, noting the following: Prior to replacing switch assembly in column, place retaining clamp onto steering post with threaded part on right side (to permit installation of Allen bolt from bottom).

2) After switch assembly and locking pin are in place, torque clamp (Allen bolt) to specification. Clearance between post and instrument panel should be .08" (2 mm). If necessary, move steering post, then torque post retaining bolts to specification. Tighten and shear heads from new steering lock bolts.



UPPER SHAFT ASSEMBLY

Steering Columns

1966-73 PORSCHE 911 & 912 (Cont.)

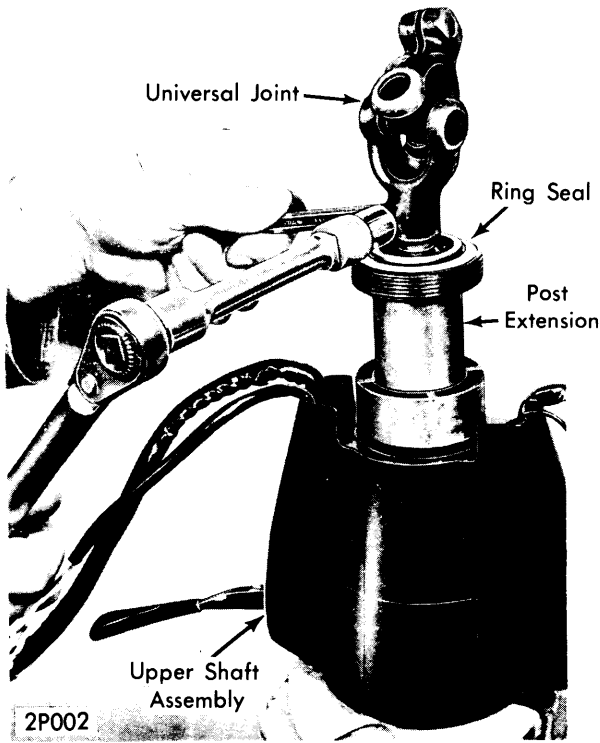
3) Install new universal joint bolts and lock washers. Place lock washers under Allen bolts which retain bushing cap on lower steering shaft. Torque to specification.

Reassembly — To assemble, reverse disassembly procedure, noting the following: When post extension is installed, align rectangular steering lock opening on line with directional switch handle.

OVERHAUL

UPPER SHAFT & POST EXTENSION

Disassembly — Remove universal joint. Detach ring seal retainer, ring seal washer and second seal retainer. Remove Allen bolts securing steering post extension. Drive post extension out of switch assembly. Remove bearing lock ring from upper shaft and drive shaft out of bearing. Pry bearing retainer out of post extension. Drive ball bearing out of extension. Mount extension in padded vise and drive spindle bearing out.



UPPER SHAFT & POST EXTENSION

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Universal Joint Hex Bolt	25 (3.5)
Splined Universal Joint Hex Bolts	18 (2.5)
Steering Tube Hex Bolts	18 (2.5)
Steering Shaft Bearing Cap	18 (2.5)
Steering Wheel Nut	58 (8.0)
Steering Housing Base Plate	11 (1.5)
Steering Support Tube Bolts.....	18 (2.5)
Switch Assembly Clamp Strap	18 (2.5)