

Steering Wheel & Column Switches 11-15

TOYOTA (Cont.)

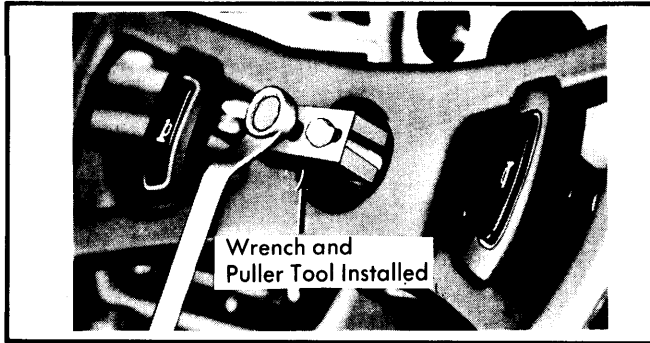


Fig. 1 Using Puller to Remove Steering Wheel

COMBINATION SWITCH

Removal — After removing steering wheel as previously outlined, combination switch may be removed by detaching steering column covers, removing retaining screws from face of switch assembly and unplugging necessary electrical connectors.

Installation — To install, reverse removal procedure and make sure all electrical connections are properly made. Check cancelling operation of turn signal switch.

COLUMN LOCK & IGNITION SWITCH

Removal — 1) Disconnect battery ground. Remove steering wheel as previously outlined.

NOTE — Steering wheel removal is optional if only the ignition switch portion is being removed. Removal of wheel makes access to this operation easier.

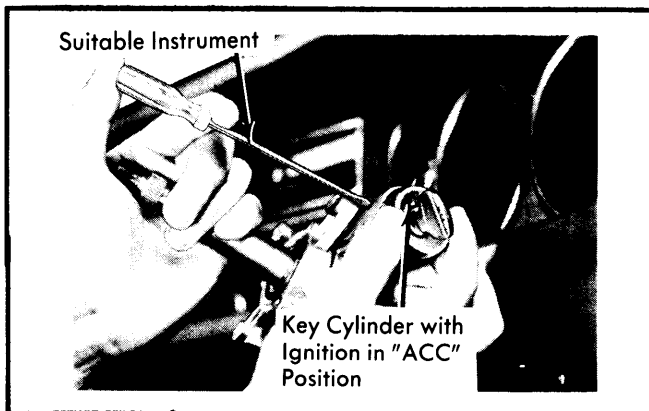


Fig. 2 Disengaging Key Cylinder from Position on Mainshaft

2) Remove screws mounting upper and lower column covers and disconnect any electrical couplings not detached during steering wheel removal.

NOTE — On some models, access to ignition switch for its removal is gained by removing lower cover only. It is easier to perform this operation, however, by removing both cover halves.

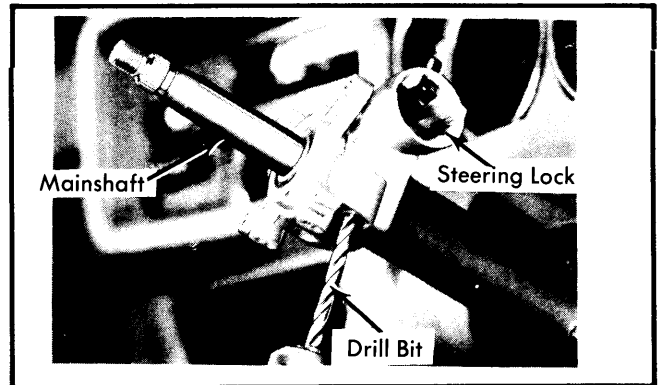


Fig. 3 Drilling Out Shear Head Bolt to Remove Steering Lock from Shaft

3) Remove turn signal switch assembly (only if column lock assembly is being removed). Remove mainshaft bearing retainer and snap ring (if required). Insert key and turn ignition to "ACC" position. Using a small pointed tool to press down stop pin on side of cylinder, free mechanism and pull cylinder from housing. See Fig. 2.

4) On Celica and Supra models, drill out shear bolts holding lock mechanism to steering column. On all other models, lock is part of upper column bearing assembly. Remove bolts mounting upper bearing assembly and slide off column.

Installation — 1) To install column lock and switch assembly, reverse removal procedure. Tighten lock housing shear-head bolts (new) until the heads shear off.

2) Fit key cylinder so ignition switch and cylinder will be aligned in "ACC" position. Insert into housing and check for proper locking operation and key movement.

3) Replace all other components (combination switch assembly, bearing retainer, steering wheel) as removed. Check for proper turn signal switch cancelling operation and smoothness of steering wheel movement.

TRIUMPH

TR7
TR8

REMOVAL & INSTALLATION

STEERING WHEEL

Removal — Disconnect battery ground cable. Place wheels in straight ahead position. Remove steering wheel pad and

retaining nut. Mark position of steering wheel and shaft. Using a puller, remove steering wheel.

Installation — To install, reverse removal procedure.

COMBINATION SWITCH

Removal — 1) Disconnect battery. Unscrew retaining screws for column cover halves and remove covers. Remove steering wheel as previously described.

TRIUMPH (Cont.)

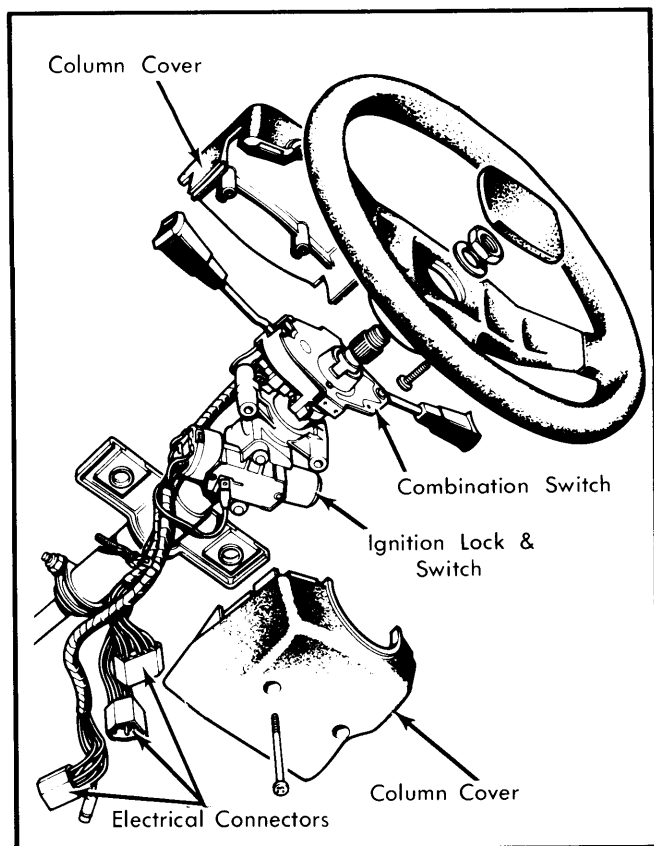


Fig. 1 Triumph Steering Wheel and Column Switches

2) Note location of all wiring harnesses. Remove wire harness clip securing switch harnesses. Disconnect 2 harness plugs. Loosen switch clamp screw and remove switch assembly.

3) Individual switches may be replaced at this time, but note that the 2 center cross-head screws are not to be removed. Switches are separated by drilling out 2 retaining rivets and removing 1 cross-head screw (right side of switch face).

Installation — To install, reverse removal procedure and note: Switch assembly must engage outer column assembly. Turn signal cancel collar must align in steering wheel.

IGNITION SWITCH AND STEERING COLUMN LOCK

Removal — Disconnect battery ground cable. Center punch both shear bolts mounting steering lock to column. Using a small chisel (or equivalent), remove bolts. Disconnect electrical plug and remove steering lock.

NOTE — It is possible to remove ignition switch without taking out column lock. There are 2 set screws mounting switch assembly in column lock housing.

Installation — To install ignition switch and steering column lock, reverse removal procedure and note the following: Ensure dowel pin aligns in column drilling. Fit new shear head bolts and tighten evenly.

VOLKSWAGEN

Dasher
Jetta
Rabbit

Rabbit Pickup
Scirocco
Vanagon

REMOVAL & INSTALLATION

HORN PAD & STEERING WHEEL

Removal — Disconnect battery ground cable. Carefully pry off horn pad and disconnect electrical connectors. Remove steering wheel retaining nut and washer (if equipped). Pull wheel off shaft.

Installation — To install, reverse removal procedure.

CAUTION — Steering column has a collapsible section. Care must be used when working with steering assembly.

COMBINATION SWITCH

Removal (Dasher) — Disconnect battery ground. Remove steering wheel. Remove 2 screws mounting lower switch housing. Disconnect electrical wires. Remove 3 screws attaching turn signal and wiper switches to ignition switch mounting. Remove switches.

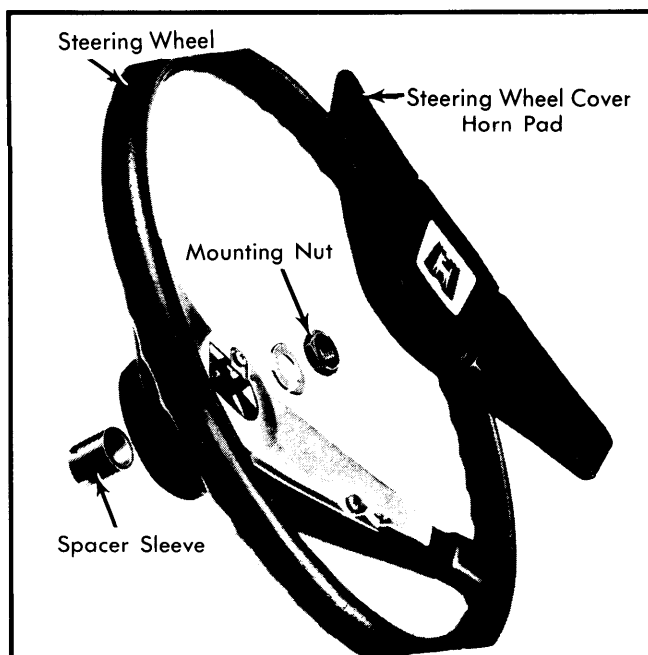


Fig. 1 Typical Volkswagen Steering Wheel Rabbit and Scirocco Shown