

## AUDI

4000  
5000

### REMOVAL & INSTALLATION

#### STEERING WHEEL & HORN

Disconnect battery ground cable. Using hand pressure, pull off steering wheel center pad. Unscrew steering wheel nut and use wheel puller to remove steering wheel.

**NOTE** — On 5000 models, make sure horn leads slide out of recess in steering wheel during removal of center pad.

#### TURN SIGNAL, WIPER/WASHER, DIMMER

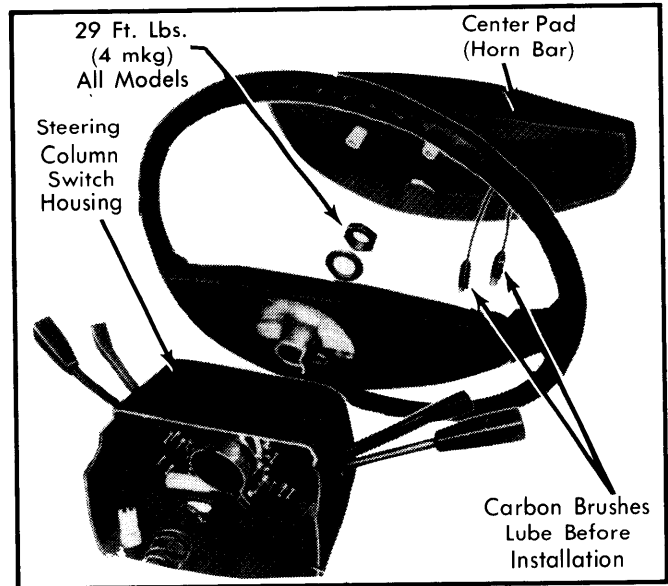
**4000** — Disconnect battery ground cable. Remove steering wheel. Unscrew 3 steering column switch housing mounting screws and pull housing off column tube. Make sure electrical wires are disconnected before completely pulling switch housing off. Remove switch mounting screws and switches.

#### TURN SIGNAL, WIPER/WASHER HAZARD, DIMMER

**5000** — Remove steering wheel. Working through hole in bottom of column shrouding, release mounting and take off shroud. Disconnect electrical wire connectors and undo switch mounting screws. Lift out switches.

#### STEERING COLUMN LOCK

**Power Steering** — Remove lower cover and switches. Remove lock washer and contact ring. With key inserted in ignition,



**Fig. 1 Audi 5000 Steering Wheel Assembly**

remove bolt and lock assembly. To install, reverse removal procedure and tighten bolt to 7 ft. lbs. (1 mkg).

**All Others** — Remove lower cover. Disconnect electrical wires from back of ignition switch. With key inserted in ignition, drill out shear bolts. Separate lock from column. To install, reverse removal procedure and make sure lugs on steering lock engage column tube. Tighten mounting bolts until heads shear off.

## BMW

320i  
528i  
633CSi  
733i

### REMOVAL & INSTALLATION

#### STEERING WHEEL

**Removal** — Place wheels in straight-ahead position. Pry steering wheel cover off to expose wheel mounting nut. Index mark wheel and main shaft. Remove mounting nut and pull steering wheel off main shaft.

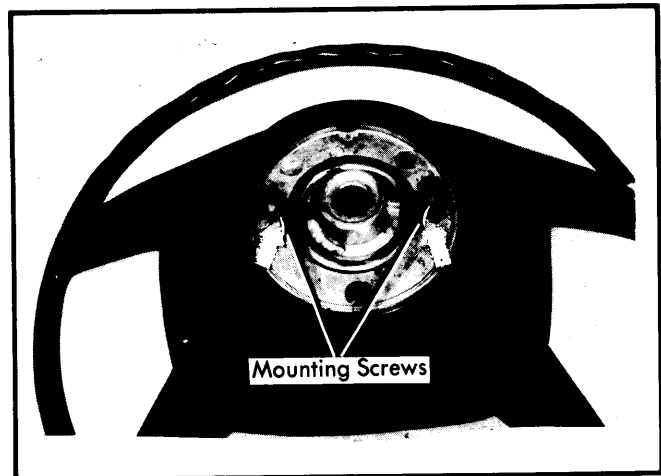
**Installation** — To install, reverse removal procedure and refer to reference marks made during removal.

#### HORN CONTROLS

**Horn Button** — Remove screw on back side of steering wheel spoke to free horn button.

**Contact Spring** — Pry off cover concealing contact spring. Replace spring if broken or if spring is unable to provide adequate contact. Make sure contact pins face inward when reinstalling existing spring or fitting new one.

**Slip Ring** — Disconnect electrical lead at each spoke. Remove 2 slip ring mounting screws and slide slip ring off steering wheel.



**Fig. 1 Screws to Take Out for Slip Ring Removal**

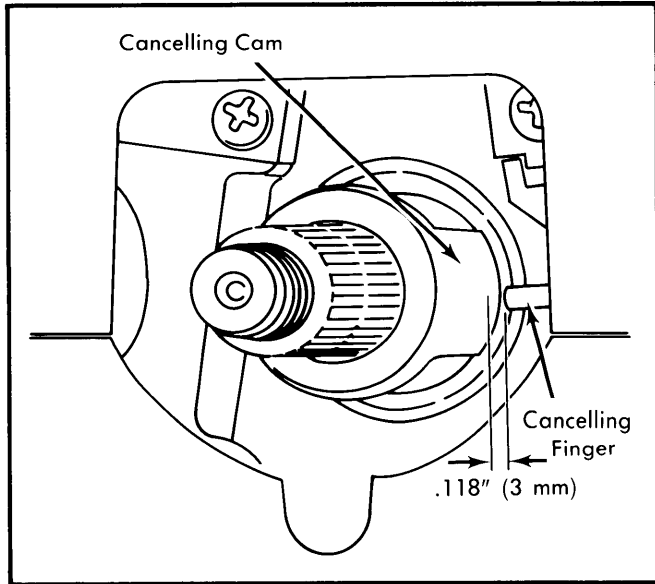
#### TURN SIGNAL & DIMMER SWITCH

**Removal** — Disconnect battery ground cable. Remove 3 mounting screws and pull down lower shroud. Remove steering wheel as previously outlined. Separate wiring from mounting straps on steering column. On 320i models, disconnect electrical plug under instrument panel. On other models, disconnect central fuse/relay plug. Remove 4 switch mounting screws and slide off switch with harness.

# 10-4 Steering Wheel & Column Switches

## BMW (Cont.)

**Installation** — To install, reverse removal procedure and note: Make sure steering wheel is lined up with reference marks. Ensure turn signal assembly is centered. Finger on cancelling cam must face toward center. Distance between switch and finger should be about .118" (3 mm).



**Fig. 2 Cancellling Cam and Finger with Clearance Shown**

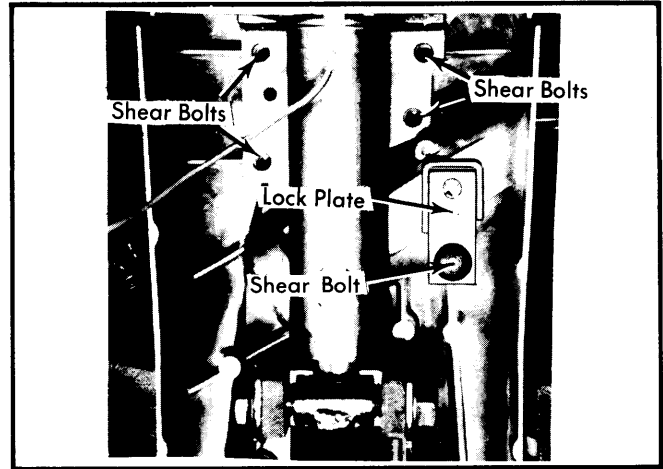
### IGNITION SWITCH

**Removal** — 1) Disconnect battery ground cable. Remove mounting screws and pull off lower plastic shroud. Remove hollow set screw and slide out ignition switch. Disconnect horn wires on 320i models only.

2) Disconnect steering column wire holders. Disconnect central fuse/relay plate plug and plug connector. On 320i models only, disconnect central plug. On all models, remove ignition switch.

**Installation** — To install, reverse removal procedure and note following: Make sure to turn ignition key all the way back

before inserting. Set ignition switch at "O" position before installing. On 320i models only, marks on ignition switch must oppose each other.



**Fig. 3 Location of Shear Bolts. View Looking Up From Under Steering Column. All Models Except 320i**

### STEERING LOCK

**Removal (Exc. 320i)** — 1) Disconnect battery ground. Remove steering wheel. Remove 3 screws holding lower steering column shroud. Disconnect and remove turn signal and wiper/washer switch plate.

2) Remove shear bolts from switch plate with chisel. Remove set screw on outside of steering column tube. Pull out ignition switch. Remove steering lock plate shear bolt and pull out steering lock.

**Installation** — To install, reverse removal procedure.

**Removal (320i)** — Disconnect electrical wires from under instrument panel. Remove shroud. Remove shear bolt from lock plate and pull out steering lock.

**Installation** — To install, reverse removal procedure.

## CHRYSLER CORP. IMPORTS

Arrow  
Arrow Pickup  
Challenger  
Champ

Colt  
D50 Pickup  
Sapporo

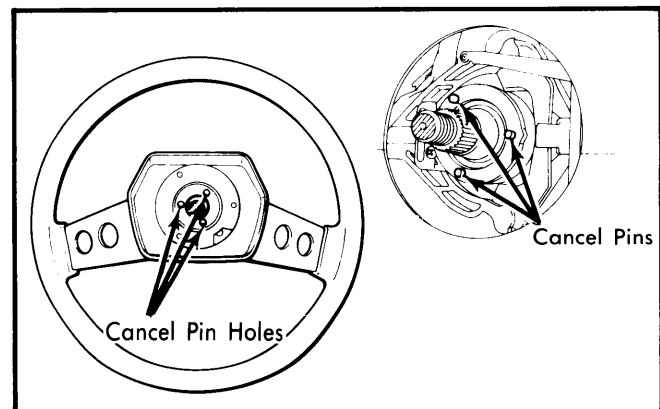
### REMOVAL & INSTALLATION

#### STEERING WHEEL & COMBINATION SWITCH

**Removal** — 1) Disconnect battery ground cable. Remove horn pad. Mark main shaft and steering wheel for reassembly reference. Remove steering wheel nut. Remove steering wheel with suitable puller (DT1001A).

**NOTE** — If equipped with tilt steering, handle must be in lowest position before removing steering wheel.

2) Remove column cover. Disconnect electrical connections at base of steering column. Remove retaining screws and pull combination switch out.



**Fig. 1 Installation of Steering Wheel on Arrow, Challenger, Colt Station Wagon and Sapporo Models**