

## VOLKSWAGEN

Type 1  
Type 2  
Dasher  
Rabbit  
Scirocco

### REMOVAL & INSTALLATION

#### HORN PAD & STEERING WHEEL

**All Models** — Disconnect battery. Carefully pry off horn pad. Unscrew steering wheel retaining nut. Pull wheel upward and off the shaft.

**CAUTION** — Steering wheel or column has a collapsible section. Care must be taken when working with these components.

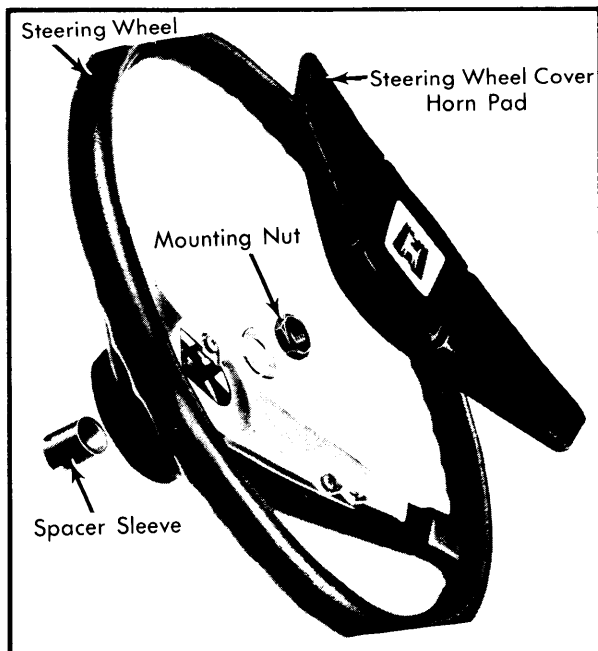


Fig. 1 Typical Volkswagen Steering Wheel Rabbit and Scirocco Shown

#### TURN SIGNAL & WIPER SWITCH

**Removal; Type 1** — Disconnect battery ground. Place ignition key in on position. Remove steering as previously outlined. Remove circlip from groove below steering wheel splines. Disconnect electrical wiring. Remove 4 mounting screws and pull switch assembly up and out.

**NOTE** — Wiper switch must be removed together then, separated. Make sure to bleed air pressure from washer reservoir before disconnecting hose of valve on switch.

**Installation** — To install, reverse removal procedure and note: Make sure turn signal wires are not crushed by windshield wiper switch. Adjust distance between steering wheel hub and steering column switch to  $\frac{1}{16}$ – $\frac{1}{8}$ " (2-3 mm) by loosening both switch mounting screws.

**Removal; Type 2, Rabbit & Scirocco** — 1) Disconnect battery ground. Using hand pressure, lift up steering pad. Remove steering wheel mounting nut. Pull steering wheel off shaft.

2) Remove screw and bolt located in bottom of switch housing and remove shroud. Push up (toward instrument panel) on switch assembly and pry off spacer sleeve. Disconnect electrical wires.

3) After removing switch assembly off steering column, remove screw holding turn signal switch to wiper/washer switch. Separate switches from each other and remove spacer sleeve from between switches.

**Installation** — 1) Refit switches together with screw and spacer sleeve. Slide switch assembly onto column and hook up wires. Refer to Fig. 2 for how far to drive on spacer sleeve.

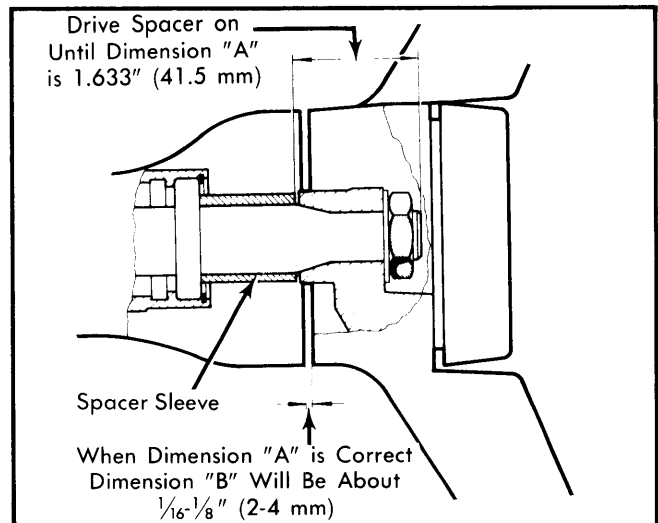


Fig. 2 Dimensions for Installing Spacer Sleeve

**Removal; Dasher** — Disconnect battery ground. Remove steering wheel as previously outlined. Remove 4 Phillips head screws mounting switch housing on column and lay housing forward. Remove 2 screws mounting turn signal switch to switch housing. Disconnect electrical wires. Remove switches from housing by taking out screws in mounting plate. Slide plates out of grooves and withdraw switches.

**Installation** — Reverse removal procedure. Make sure turn signal switch is in neutral position to avoid damage to cancel-finger when screws are tightened.

#### STEERING LOCK & CYLINDER

**Removal; Type 1** — 1) Remove steering wheel as previously outlined. Take off circlip and plastic bushing. Remove turn signal lever and steering lock retainer plate.

2) Feed electrical wires through while withdrawing steering lock far enough to expose cylinder release hole. Release hole is located at about 11 o'clock on housing.

3) Push a wire into opening to release spring pressure on cylinder. Take cylinder out by turning key (inserted in cylinder) counterclockwise and pulling.

4) Inspect lock guide to make sure it is still under sufficient tension. Pin should move under light finger pressure.

# 10-20 Steering Wheel & Column Switches

## VOLKSWAGEN (Cont.)

**Installation** — To install, reverse removal procedure and note: Install cylinder by pushing (not forcing) it into place and hand tightening to left without key inserted. Forcing cylinder may bend guide pin.

**Removal; Type 2, Rabbit & Scirocco** — 1) It is necessary to drill into cylinder lock to gain access to cylinder release pin. Refer to Fig. 3 to determine where  $\frac{1}{8}$ " hole must be drilled.

**NOTE** — On Type 2 models, hole for cylinder removal is accessible when cover plate has been removed. Note that not all models have pre-drilled hole.

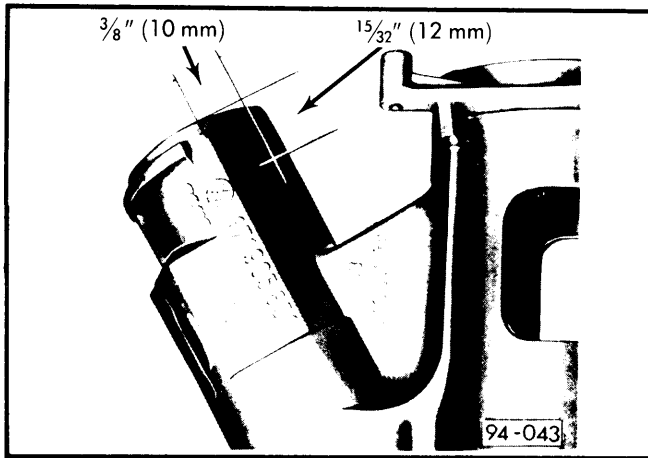


Fig. 3 Measurements for Drilling into Steering Lock Cylinder

2) Insert a pin through hole and press down spring holding lock cylinder in housing. It may be necessary to insert key to pull out cylinder.

**Installation** — To install, press cylinder in until it snaps into position. Reverse removal procedure for remaining components.

**Removal; Dasher** — 1) Disconnect wires from ignition switch back. Fit key and place switch in "ON" position.

2) Centerpunch shear bolts mounting steering lock on column. Use a  $\frac{5}{16}$ " (8.5 mm) drill to remove shear bolts. Steering lock is free for removal.

### IGNITION SWITCH

**Type 2, Rabbit and Scirocco** — Remove shear bolt and remove switch housing. One set screw on back side of switch (near wire connector) holds ignition switch in housing.

**NOTE** — On Dasher models, ignition switch can be removed without lock cylinder or steering column lock being removed.

**Removal; Dasher** — Remove left and center under instrument panel cover also, remove glove box shelf. Remove set screw located on housing of column lock (opposite end of key cylinder). Disconnect electrical wire plugs and pull out switch.

**Installation** — Reverse removal procedure. Make sure set screw goes into recess in switch.

## VOLVO

240  
260

### REMOVAL & INSTALLATION

#### HORN PAD & STEERING WHEEL

**Removal** — 1) Using a screwdriver, pry up both lower corners. Do not lever screwdriver against steering wheel.

2) Grip contact plate and padding then, snap out upper corners. Disconnect electrical wire. Remove steering wheel nut. Attach suitable steering wheel puller and remove steering wheel.

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

#### TURN SIGNAL & WIPER SWITCHES

**Removal** — Remove steering wheel as previously described. Remove column covers from around switches. Disconnect wiring from switch(es) to be replaced.

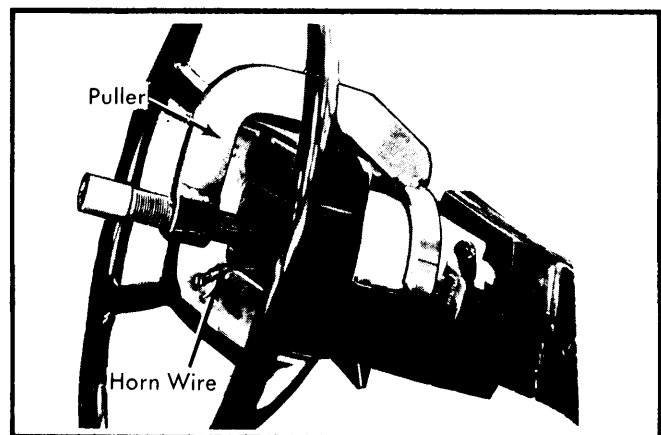


Fig. 1 Using Puller to Remove Steering Wheel