

Ignition Switch: Service and Repair

Steering column, assembly

WARNING: Special safety precautions and some different procedures apply to vehicles equipped with airbags

CAUTION: Before working on the electrical system:

Obtain radio anti-theft code.

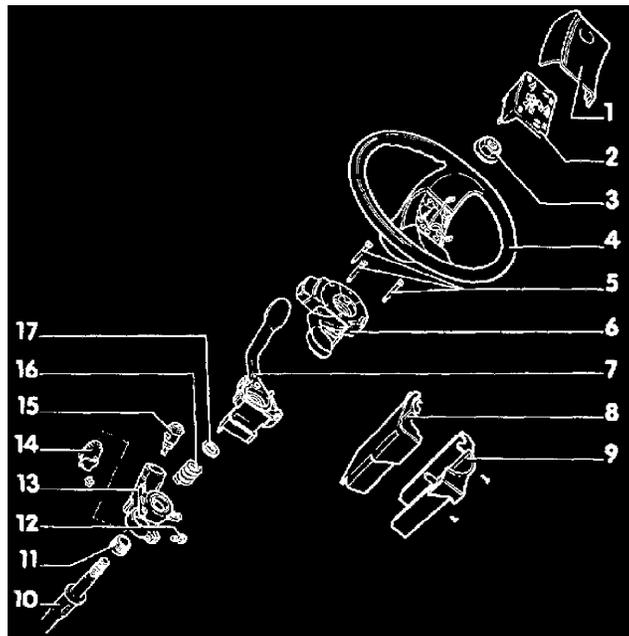
Ignition OFF !

Disconnect battery Ground (GND) strap.

Note: After reconnecting battery: Activate vehicle equipment such as radio, clock and power windows as per service procedures and/or Owner's Manual.

On vehicles equipped with OBD II, activate readiness code. Refer to Powertrain Management, Computers and Control Systems, Testing and Inspection, Procedures See: Powertrain Management/Computers and Control Systems/Testing and Inspection

For further information on the steering column assembly, refer to Steering and Suspension, Steering, Steering Column, Service and Repair



1. - **Horn pad**
 - Removing, **Fig. 1**
2. - **Horn plate**
 - Removing, **Fig. 2**
3. - **50 ±10 Nm (37 ±7 ft lb)**
4. - **Steering wheel**
 - Horn contact ring, **Fig. 3**
 - Lubricate horn ring with universal grease
5. - **Steering column switch securing screws**
6. - **Combination switch**
 - Turn signal switch. -E2-
 - Headlight dimmer/flasher switch -E4-
 - Emergency flasher switch -E3-
 - Removing, **Fig. 4**
7. - **Windshield wiper/washer switch -E22-**
 - Removing, **Fig. 4**
8. - **Upper steering column trim**
9. - **Lower steering column trim**
10. - **Steering column**
11. - **Support ring**
12. - **Steering lock housing securing bolt**

- Shear bolt
- 13. - **Steering lock housing**
 - Removing and installing, refer to Steering and Suspension, Steering, Steering Column, Service and Repair
- 14. - **Ignition/starter switch -D-**
 - To remove, first remove steering lock housing, then remove securing screws
- 15. - **Lock cylinder**
 - Removing/installing, **Fig. 5**
- 16. - **Spring**
- 17. - **Clamping washer**

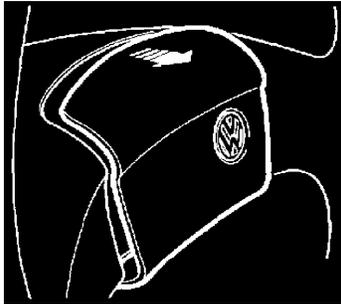


Fig. 1 Horn pad, removing

WARNING! Vehicles with airbags, refer to Service Precautions

Vehicles without airbag

- Lift horn pad at bottom and pull from steering wheel in direction of arrow.
- Remove horn wire.

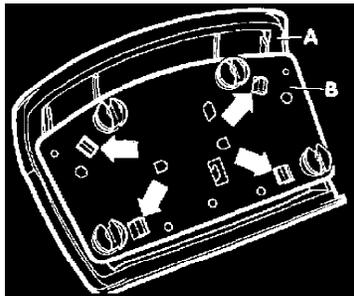


Fig. 2 Horn plate, removing

- Remove wire connector from horn plate.
- Disengage retaining lugs -arrows- and remove contact plate -A- from contact plate -B-.

Note: The horn plate consists of two non insulated contact plates. Horn operates when the horn pad is pressed and plate -A- contacts plate -B- .

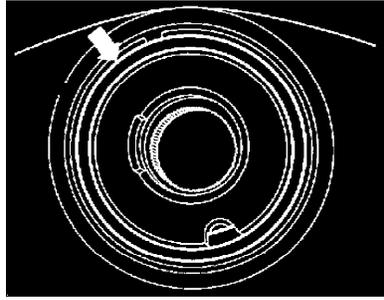


Fig. 3 Horn contact ring

The battery positive voltage (B+) for horn operation is supplied via a spring contact on the turn signal switch and a contact (slip) ring -arrow- under the steering wheel.

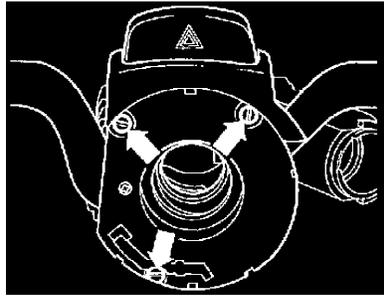


Fig. 4 Turn signal switch -E2- and windshield wiper/washer switch -E22-, removing

- Remove steering wheel. See: Steering and Suspension/Steering/Steering Wheel/Service and Repair
- Remove switch securing screws -arrows-.
- Disconnect switch connector.
- Remove turn signal switch -E2- and windshield wiper/washer switch -E22- from steering column.

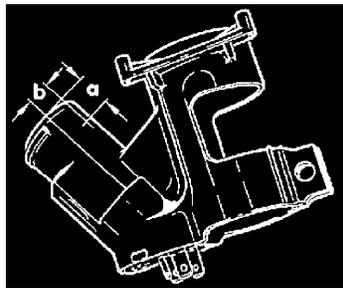


Fig. 5 Lock cylinder, removing and installing

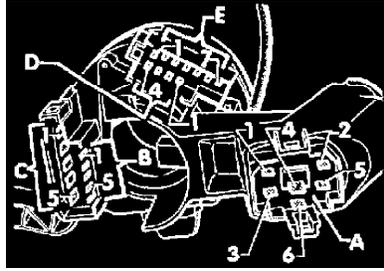
Removing

- Remove steering lock housing.
- Mark steering lock housing for hole at intersection of points -a- and -b-.
Dimension -a- = **12 mm (15/32 in.)**
Dimension -b- = **10 mm (25/64 in.)**
- Drill **3 mm (1/8 in.)** diameter hole into steering lock housing at mark until lock cylinder stop spring is visible.
Hole depth: **approx. 3 mm (1/8 in.)**
- Compress stop spring using opposite end of drill and pull out lock cylinder.

Installing

- Insert lock cylinder into steering lock housing.
- Insert key into lock cylinder.
- Push lock cylinder fully into housing while gently turning key.

Steering column switches, connector wiring



Steering Column Switches, Connector Wiring

A. Ignition/starter switch -D-

1. Ignition/starter switch -D-, terminal 15 (B+ with key on)
2. Ignition/starter switch -D-, terminal X (B+ with key on)
3. Ignition/starter switch -D-, terminal 50
4. Ignition/starter switch -D-, terminal 30 (B+)
5. Ignition/starter switch -D-, terminal SU
6. Ignition/starter switch -D-, terminal P

B. Connector, 5-point

1. Windshield wiper/washer switch -E22-, terminal 53b
2. Windshield wiper/washer switch -E22-, terminal 53a
3. Windshield wiper/washer switch -E22-, terminal 53
4. Windshield wiper/washer switch -E22-, terminal 53e
5. Windshield wiper/washer switch -E22-, terminal J

C. Connector, 5-point

1. Emergency flasher switch -E3-, terminal 49
2. Headlight dimmer/flasher switch -E4-, terminal 56b
3. Headlight dimmer/flasher switch -E4-, terminal 56
4. Headlight dimmer/flasher switch -E4-, terminal 56a
5. Headlight dimmer/flasher switch -E4-, terminal 30 (B+)

D. Connector, 4-point

1. Windshield wiper/washer switch -E22-, terminal L
2. Windshield wiper/washer switch -E22-, terminal T
3. Windshield wiper/washer switch -E22-, terminal 31 (GND)
4. Emergency flasher switch -E3-, terminal 15 (B+ with key on)

E. Connector, 7-point

1. Horn button, terminal 71
2. Emergency flasher switch -E3-, terminal 49a
3. Turn signal switch -E2-, terminal L
4. Parking light switch -E19-, terminal PL
5. Parking light switch -E19-, terminal P
6. Parking light switch -E19-, terminal PR
7. Turn signal switch -E2-, terminal R