

10-12 Steering Wheel & Column Switches

MERCEDES-BENZ

230
240D
280, C, S
300D
450SE, SEL, SL, SLC

REMOVAL & INSTALLATION

HORN PAD & STEERING WHEEL

Removal, with Polyurethane Wheel (Soft Rubber) – 1) Grip horn pad near one corner and pull straight up until free. Pull up other corner. Remove pad from steering wheel.

2) Unscrew steering retaining nut, remove spring washer and pull steering wheel from shaft.

Installation – Prior to steering wheel installation, be sure scribe mark on shaft is straight up. Position wheel on shaft with spokes horizontal. Install retaining nut.

Removal, with Rigid Plastic (Bealit) Wheel – 1) Remove vehicle emblem from horn pad. Unscrew steering wheel retaining nut and pull wheel from shaft with pad still attached.

2) Unscrew hex nuts on backside of wheel and separate steering wheel from pad.

NOTE – Horn wire is still attached to steering wheel, so care must be taken to avoid breaking it.

3) Detach horn wire from contact ring and remove steering wheel.

4) Unscrew countersunk screws from steering wheel hub and remove centering pad of contact ring.

5) Remove horn ring from steering wheel. Remove locking ring from hub of pad, then remove slip ring.

Installation – To install, reverse removal procedure, noting that front wheels are always kept in a straight-ahead position and that steering wheel spokes are horizontal.

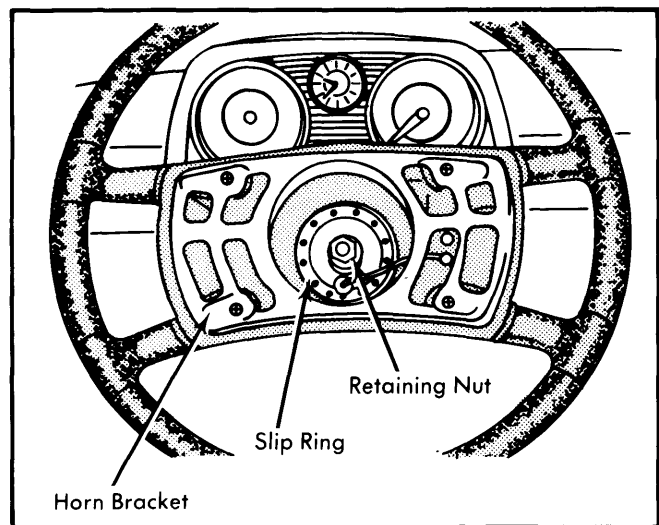


Fig. 1 Mercedes-Benz Steering Wheel with Cover Removed

MG

MGB
Midget

REMOVAL & INSTALLATION

STEERING WHEEL

Removal & Installation; Midget – Disconnect battery ground. Pry off steering pad and remove horn contact plunger from seat. Remove six bolts holding steering wheel and lock ring to hub. Lift wheel from hub and set aside. To install steering wheel, reverse removal procedure.

Removal; MGB – Remove steering wheel pad. Remove mounting nut. Index mark wheel hub and steering column. Rap steering wheel spokes with palm of hand to break loose.

Installation – Reverse removal procedure and note: Line up index marks. Hold wheel spokes horizontal when fitting steering wheel.

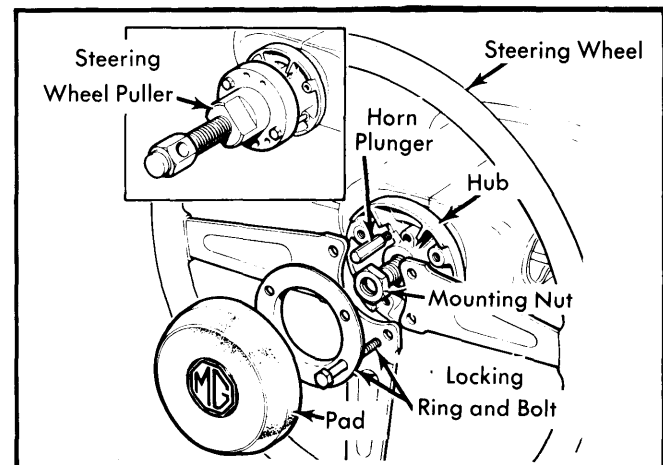


Fig. 1 Midget Steering Wheel and Related Components

STEERING WHEEL HUB

Removal & Installation; Midget – Loosen hub nut slightly and index mark hub and column. Fit suitable steering wheel hub puller and withdraw hub until loose on shaft. Remove puller tool, steering wheel nut and lift off steering hub. When installing, reverse removal procedure and note index marks made during removal.

Steering Wheel & Column Switches 10-13

MG (Cont.)

STEERING COLUMN LOCK & IGNITION HUB

NOTE — Steering column must be removed before lock or switch can be removed.

Removal — Remove necessary shrouding to gain access to lock. Make sure steering lock is disengaged. Disconnect ignition switch multi-pin connector. Drill out and remove shear bolts from lock bracket. Remove steering screw holding switch in lock and remove switch.

Installation — Center locking mechanism on column. Hand tighten new shear bolts. Reconnect multi-pin connector. Check switch and lock operation. Tighten shear bolts until heads break.

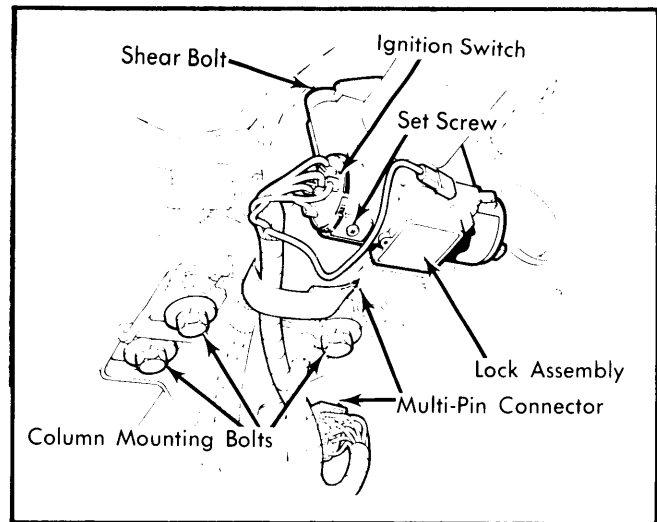


Fig. 2 Bottom View of Steering Column Showing Ignition Switch and Column Lock — MGB Shown

OPEL

All Models

REMOVAL & INSTALLATION

HORN PAD & STEERING WHEEL

Removal — 1) Disconnect battery cable. Remove two screws from backside of steering wheel which hold the horn pad in place.

2) Remove horn pad from its position and disconnect the horn contact wire from the hub connection.

3) Remove steering wheel retaining nut and washer. Position suitable puller and remove the steering wheel.

Installation — To install, reverse removal procedure after making sure that front wheels are in straight-ahead position and that steering wheel spokes are horizontal when steering wheel is installed. Make sure cancelling cam of turn signal switch engages properly.

COMBINATION SWITCH & IGNITION LOCK

Removal — 1) Remove screws holding upper and lower steering column covers in place. Remove the hazard warning button.

2) Detach the combination turn signal/lighting switch by removing the four retaining screws. Remove two retaining screws to take off the washer/wiper switch.

3) Remove the lock cylinder by removing the snap ring and three attaching bolts on the column flange. Lift off the cylinder housing, lower washer and shaft. Use a screwdriver to pry out the lower column rubber bushing.

Installation — To install, reverse removal procedure, noting that lock cylinder engages shaft properly and that cancelling cam of turn signal switch engages steering wheel properly.

PORSCHE

911 Series 924

REMOVAL & INSTALLATION

HORN PAD & STEERING WHEEL

NOTE — On models equipped with a collapsible "can" behind the steering wheel, care must be taken in all service

procedures. Do not apply excessive or striking forces to the steering wheel or steering column.

Removal; 911 Series — 1) Align front wheels in straight-ahead position. Disconnect battery ground cable.

2) Grasp horn pad and rotate counterclockwise while pushing in. When horn pad is free, lift from steering wheel and disconnect horn contact finger.

3) Loosen steering wheel retaining nut. Mark position of steering wheel to steering shaft. Attach a suitable puller and remove the steering wheel.