

MERCEDES-BENZ

240D
280 Series
300 Series
380 Series

REMOVAL & INSTALLATION

HORN PAD & STEERING WHEEL

Removal (Polyurethane Wheel) — Place alignment marks on wheel and shaft. Grip horn pad near one corner and pull straight up until free. Pull up other corner. Remove pad from steering wheel. Unscrew retaining nut, remove spring washer and pull steering wheel from shaft.

Installation — To install, reverse removal procedure.

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

2) Detach horn wire from contact ring and remove steering wheel. Remove countersunk screws from steering wheel hub and centering pad of contact ring. Remove horn ring from

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

Installation — To install, reverse removal procedure. Ensure wheels are kept in straight ahead position and that steering wheel spokes are horizontal.

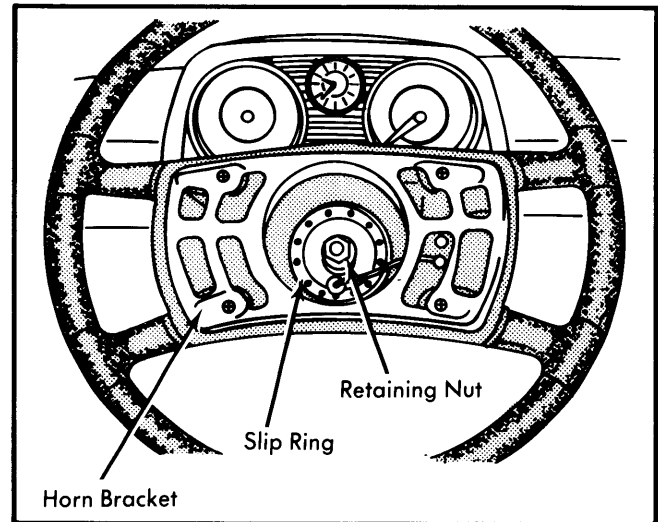


Fig. 1 Mercedes-Benz Steering Wheel with Cover Removed

PORSCHE

911SC
924
928

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 (911SC) — 1) Align front wheels in straight ahead position. Disconnect battery 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.

Installation — To install steering wheel, reverse removal procedure and note the following: Lightly lubricate horn contact finger with electrical contact grease before installation.

Removal (924) — Disconnect battery. Using hand pressure, lift up horn pad. Unscrew wheel retaining nut. Pull wheel upward and off shaft.

Installation — To install, reverse removal procedure.

Removal (928) — Disconnect battery ground. Place wheels in straight-ahead position. Take off horn pad. Disconnect horn wires. Index mark steering wheel and column shaft. Unscrew mounting nut. Remove steering wheel.

Installation — Align index marks and replace steering wheel so spokes are horizontal. Install mounting nut. Fit horn wires into place in pad. Press horn pad onto retaining pins.

COMBINATION SWITCH

Removal (924) — 1) Disconnect battery ground. Using hand pressure, lift up steering pad. Remove steering wheel mounting nut. Pull steering wheel off shaft.

2) Remove shroud from around switch housing. Pull up on switch plate and disconnect electrical wires. Remove entire switch assembly then, separate wiper/washer switch from turn signal switch by taking out screw that mounts them together.

Installation — Refit switches together with screw. Slide switch assemblies back into place, refitting spacer at same time. Make sure spacer is driven in until there is a distance of 1.7" (42.5 mm) from face (top edge) of spacer to top edge of shaft. This distance will ensure there is .08-.15" (2-4 mm) between steering wheel and steering column switches. Reverse removal procedure to install remaining components.

Removal (928) — Disconnect battery ground. Remove steering wheel. Remove cover from under steering column switch. Remove steering column switch mounting screw. Remove instru-

11-12 Steering Wheel & Column Switches

PORSCHE (Cont.)

ment cover mounting screws. Maneuver instrument cover until electrical wires can be disconnected. Remove column switch.

Installation — To install, reverse removal procedure.

STEERING COLUMN LOCK, KEY CYLINDER & IGNITION SWITCH

Removal — 1) Remove combination switch as previously outlined. Drill out shear bolts. Disconnect ignition switch wiring. Disengage snap ring and slide out switch housing with bearing.

2) Using a pointed tool (scribe), push cylinder lock retainer in to release cylinder. With key inserted and retainer depressed, pull cylinder from housing. Remove ignition switch set screw and remove ignition switch back from housing.

Installation — To install, reverse removal procedure.

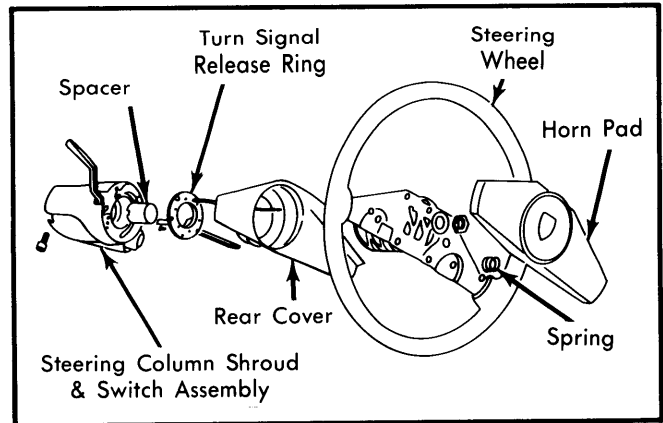


Fig. 1 Exploded View of Porsche 924 Steering Wheel and Related Components

RENAULT

**Le Car
18i**

REMOVAL & INSTALLATION

HORN PAD & STEERING WHEEL

Removal (Le Car) — Disconnect battery. Remove horn pad. Remove steering wheel nut. Using puller (Dir. 21A) remove steering wheel.

Installation — To install, reverse removal procedure.

Removal (18i) — 1) Disconnect battery. Remove horn pad. Remove 2 steering column protective housings.

2) Remove steering wheel nut. Install puller plate tool (Dir. 372) behind steering wheel.

3) Using a center punch, make a center point mark in center of steering column shaft.

4) Connect puller tool (Mot. 49) to puller plate. Using a wrench, turn puller shaft until steering wheel is pulled from steering shaft.

Installation — 1) Position steering wheel on steering shaft.

2) Install steering wheel nut and tighten. Using a center punch, notch the edge of steering column shaft to lock the nut in place.

3) To complete installation, reverse removal procedure.

TURN SIGNAL & LIGHTING SWITCH

Removal (Le Car) — 1) Disconnect battery. Remove instrument panel housing retaining screws and remove housing. See Fig. 2.

2) Remove switch retaining screws. Disconnect electrical connectors. Remove switch.

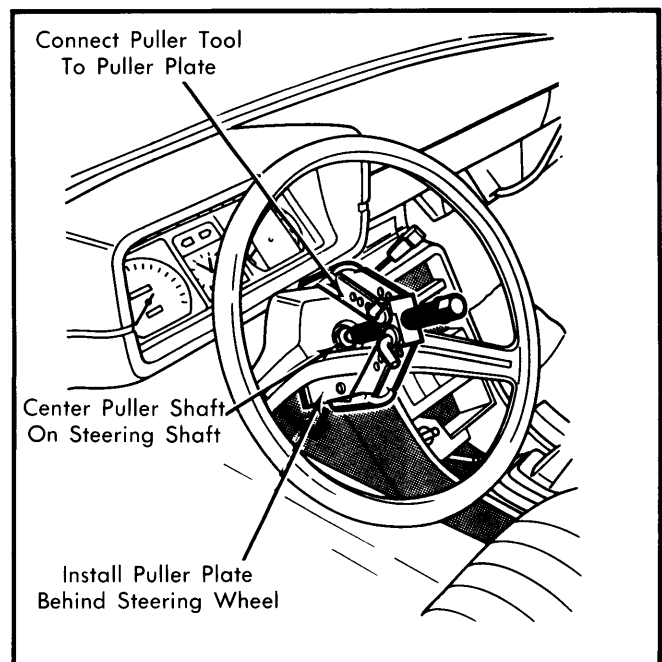


Fig. 1 Removing Steering Wheel on 18i

Installation — Reverse removal procedure to install.

COMBINATION SWITCH

Removal (18i) — 1) Disconnect battery. Remove steering wheel. Remove 2 steering column protective housings.

2) Remove switch retaining bolts and screw. Disconnect electrical connectors. Remove switch.

Installation — Reverse removal procedure to install.