

SUBARU

INSTRUMENT CLUSTER

1) Remove radio knobs and nuts. Remove ashtray, then remove bolt in ashtray opening. Remove lighting and wiper switch knobs and nuts, heater shutter control knobs, heater control knobs and hanger spring for speedometer cable.

2) Disconnect speedometer cable and wiring harness plug from back of cluster. Disconnect wiring to cigarette lighter (if equipped). Remove cluster from instrument panel.

SPEEDOMETER & GAUGES

Speedometer and all gauges may be removed after first removing instrument cluster.

TACHOMETER

To remove tachometer, remove meter visor by removing two screws. Remove tachometer mounting screws, disconnect wiring harness and remove tachometer.

HAZARD WARNING & TURN SIGNAL FLASHER

Located under instrument panel.

STOP LIGHT SWITCH

Mechanical type mounted on brake pedal bracket. Adjust switch so there is .24-.55" (6-14 mm) free pedal movement before switch turns on brake lights.

TOYOTA

INSTRUMENT CLUSTER

Corolla — Disconnect battery and speedometer cable. Remove instrument panel center and right mouldings. Remove cluster securing screw and two nuts behind cluster. Slowly pull out instrument cluster and disconnect wiring.

Pickup — Loosen steering column clamp bolts. Remove three screws securing cluster. Pull out cluster slightly and disconnect speedometer cable and wiring. Remove cluster.

Corona — Disconnect battery and remove instrument trim panel. Remove side ventilator knob and clock knob (if equipped). Loosen five bolts securing cluster housing. Disconnect speedometer cable and wiring and remove cluster.

Celica — Remove heater knobs and heater control panel. Remove screws securing cluster trim panel and pull out lower part of trim panel. Disconnect all wiring from instrument cluster trim panel and remove panel. Disconnect speedometer cable and remove instrument cluster.

Land Cruiser — Disconnect speedometer cable and remove cluster attaching screws. On 55 series models only, remove steering column clamp attaching bolts. Pull cluster, disconnect wiring and remove cluster.

SPEEDOMETER & GAUGES

All Models — Speedometer and all gauges may be removed after first removing instrument cluster.

INSTRUMENT CLUSTER

Spitfire — Disconnect battery and remove heater control knobs. Remove four screws and cup washers and lower cluster. Remove bulb holders, disconnect wiring and remove cluster.

TR7 — Remove radio speaker grill and top instrument panel trim pad. Remove steering column shrouds, loosen odometer reset knob and remove knob with cable. Loosen clock reset knob and remove with cable. Disconnect speedometer cable, remove retaining screws and pull out instrument cluster slightly. Disconnect all wiring and remove cluster.

TURN SIGNAL FLASHER

Celica & Corona — Mounted under right hand side of dash.

Corolla — Located on fuse block mounting bracket.

Pickup & Land Cruiser — Located behind instrument cluster.

IGNITION SWITCH

Celica, Corona & Corolla — Remove upper and lower steering column covers. Set ignition key to "ACC" position and while pushing lock pin, remove key cylinder. Disconnect wiring and remove switch. Steering column lock may be removed using a screw extractor.

Pickup — Disconnect battery and remove steering column cover. Disconnect wiring, remove switch mounting screw and remove switch.

Land Cruiser — Remove steering column bracket, upper contact ring housing and ignition switch assembly. To install, reverse removal procedure making certain to align the convex part with the concave part.

STOP LIGHT SWITCH

Mechanical type mounted on brake pedal bracket. Free travel should be .120 to .240" (3 to 6 mm).

TRIUMPH

TACHOMETER

Spitfire & TR7 — Tachometer may be removed after removing instrument cluster.

SPEEDOMETER

Spitfire — Disconnect battery. Lower center dash, remove tachometer and depress lever releasing catch from annular groove in the boss. Detach speedometer cable, unscrew trip reset and remove two knurled nuts. Disconnect two connectors, bulb holders and remove speedometer.

3-62 Switches, Gauges & Instrument Panels

TRIUMPH (Cont.)

TR7 — Speedometer may be removed after removing instrument cluster.

GAUGES

Spitfire & TR7 — All gauges may be removed after removing instrument cluster.

IGNITION SWITCH

Spitfire — Remove steering column. Remove switch cover and column anti-torque strap. Use a small chisel to unscrew two

shear head bolts. If this fails, remove using a screw extractor. When installing switch, use new shear bolts.

TR7 — Remove steering column shrouds. Use a small chisel to unscrew two shear bolts. If this fails, remove using a screw extractor. When installing switch, use new shear bolts.

STOP LIGHT SWITCH

Mechanical type mounted on brake pedal bracket.

VOLKSWAGEN

INSTRUMENT CLUSTER

Type 1 (Beetle) — Disconnect battery ground cable. Remove five screws securing cluster. **NOTE** — Cluster screws are covered by small strips on left and right and by a cap in the center. Disconnect speedometer cable and wiring, remove cluster.

Type 2 (Bus) — Disconnect battery ground cable. Remove cluster securing screws and tilt cluster outward. Disconnect speedometer cable and wiring and remove cluster.

Rabbit & Scirocco — Remove trim plate for fresh air control and remove radio or glove box. Disconnect speedometer cable and wiring. Remove retaining screw on right side of cluster (visible after radio or glove box is removed) and remove cluster.

Dasher — Disconnect battery ground cable and speedometer cable. Using long nosed pliers, detach springs securing left and right sides of cluster then swing cluster outward.

SPEEDOMETER

All Models — Speedometer can be removed after removing instrument cluster and speedometer retaining screws.

HAZARD WARNING & TURN SIGNAL FLASHER

Type 1 — Flashers are mounted separately on a bracket, above the fuse box. Relays can be reached by removing the access panel from rear of the front luggage compartment.

All Other Models — Flasher is a plug-in unit on fuse block.

IGNITION SWITCH

All Exc. Type 2 — Disconnect battery ground cable, turn signal switch plug and ignition switch plug. Remove steering wheel and turn signal switch. Remove switch retainer, press ignition switch plug upward out of guide and disconnect wires. Pull lock cylinder with key outward far enough so that lock cylinder may be depressed through hole with piece of stiff wire. While depressing cylinder, pull out cylinder by pulling on key.

Type 2 — Disconnect battery ground cable. Remove ignition switch housing and disconnect wiring behind instrument panel. If necessary, drill out blind hole using a $\frac{1}{8}$ " (3 mm) drill. Press down retaining spring with drill or piece of stiff wire and pull lock cylinder out of housing with key. When installing, if hole was drilled, close hole with piece of wire which can only be removed by drilling.

STOP LIGHT SWITCH

Hydraulic type mounted on brake master cylinder.

VOLVO

INSTRUMENT CLUSTER

All Models — Disconnect battery ground cable and proceed as follows:

- 1) Remove steering column shrouds. Loosen bracket screw and allow bracket to drop down steering column. Remove instrument cluster mounting screws. Disconnect speedometer cable.
- 2) Take hold of back side of speedometer and press upwards until snap lock on upper edge releases. Lift cluster forward and disconnect wiring and tachometer drive cable (if equipped). Cluster can now be removed.

SPEEDOMETER & GAUGES

All Models — Speedometer and all gauges can be removed after removing instrument cluster.

HAZARD WARNING & TURN SIGNAL FLASHER

240 Series — Flasher is mounted behind left side kick panel.

260 Series — Flasher is mounted behind instrument cluster.

IGNITION SWITCH

240 & 260 Series — Disconnect battery cable. Remove noise insulation panel and center side panel. Disconnect terminal block for the ignition switch. Using a stubby screwdriver, remove ignition switch.

STOP LIGHT SWITCH

Mechanical type mounted on brake pedal bracket. Adjust switch to provide .16" (4 mm) clearance between brake pedal and end of switch plunger.