

## LUV

### INSTRUMENT CLUSTER

Disconnect speedometer cable, remove wing nuts from rear of cluster and pull cluster part way out. Disconnect wiring and remove cluster.

### SPEEDOMETER

**MG Midget** — Disconnect battery and remove screw securing left front end of parcel shelf. Remove console retaining screws and pull console to rear, tilting top forward to clear underside of dash. Disconnect wiring and remove console complete with switches and fittings. Unscrew trip reset retaining nut and disengage reset from bracket. Disconnect drive cable and remove knurled retaining nuts, ground wire and retaining brackets. Pull speedometer from dash and disconnect wiring.

**MGB & MGB GT** — Unscrew trip reset knob retaining nut and remove reset from bracket. Unscrew two knurled retaining nuts, remove bracket and pull speedometer from dash. Disconnect drive cable.

### TACHOMETER

**All Models** — On MGB & MGB GT models, remove lower left hand instrument panel cover. On all models, unscrew two knurled retaining nuts, disconnect ground cable and remove retaining brackets. Pull tachometer from dash and disconnect wiring.

### GAUGES

To remove fuel, oil pressure and temperature gauges, remove components listed below to gain access to unit then unscrew knurled retaining nuts, pull instrument from dash and disconnect wiring.

### SPEEDOMETER & GAUGES

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

### STOP LIGHT SWITCH

Mechanical type mounted on brake pedal bracket.

## MG

### To Remove

### First Remove

Fuel Gauge	
MG Midget.....	Speedometer
MGB & MGB GT.....	None
Oil Pressure Gauge (MGB & MGB GT).....	Tachometer
Temperature Gauge (MGB & MGB GT).....	Heater Control
Combination Gauge (MG Midget).....	Tachometer

### IGNITION SWITCH

**MG Midget** — Disconnect battery. Turn key to position "0". Disconnect wiring from switch and remove two screws securing switch to steering lock. Remove switch.

**MGB & MGB GT** — Pull off center motif from steering wheel, unscrew retaining nut and remove steering wheel using suitable tool. Remove three retaining screws from left switch cowl and remove cowl half. Remove screw retaining right cowl half and remove cowl. Unscrew four switch retaining screws, disconnect switch wiring at snap connectors and remove switch.

### STOP LIGHT SWITCH

**All Models** — Mechanical type mounted on brake pedal bracket.

## OPEL

**All Models - 1)** Disconnect battery ground cable and remove headlight switch button. Remove plugs on cluster panel. Remove sheet metal screws behind plugs on cluster. Pull off heater control knobs.

**2)** Carefully pull instrument cover towards steering wheel and remove cover. Remove screws for lower housing attachment. Disconnect speedometer cable by turning coupling counterclockwise.

**3)** If equipped, pull heated rear window or fog light switch out of instrument housing and disconnect wires from switches.

Pull cluster right and left sides partially out and disconnect wires on back of cluster.

### SPEEDOMETER & GAUGES

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

### STOP LIGHT SWITCH

Mechanical, mounted on brake pedal bracket.

## PORSCHE

### INSTRUMENT CLUSTER

**914 Models** — Disconnect battery ground cable. Remove steering wheel and disconnect speedometer cable. Remove knob and jam nut from trip mileage reset cable. Remove four retaining screws and pull cluster away from panel. Disconnect wire and indicator lights and remove cluster.

### SPEEDOMETER, TACHOMETER & GAUGES

**914 Models** — Speedometer, tachometer and all gauges may be removed after first removing instrument cluster.

**911 Models** — Connecting terminals and wires of all instruments are accessible from luggage compartment side of instrument panel after luggage compartment carpet is removed.

**PORSCHE (Cont.)**

1) Disconnect and detach all cables and wire from instrument that is to be removed. In case of speedometer, also remove drive shaft knurled nut and withdraw shaft from speedometer.

2) Remove small knurled nuts securing instrument, remove retaining clamp and take instrument out from passenger compartment side.

**TURN SIGNAL FLASHER (911 MODELS)**

Flasher is located adjacent to fuse block in luggage compartment, and is a plug in type.

**STOP LIGHT SWITCH**

To adjust switch, loosen jam nut and adjusting screw. Clamp a piece of sheet metal .16" (4 mm) thick between brake pedal lever and pedal stop at brake pedal center. Turn adjusting screw until brake lights operate. Remove switch and lock adjusting screw. Reinstall switch and check switch operation.

**RENAULT****INSTRUMENT CLUSTER**

**R-12 Models** — Disconnect battery and two junction blocks on cluster. Disconnect speedometer cable. Lift the two retaining clips and pull cluster out, freeing mounting lugs from holders.

**R-15 & R-17 Models** — Disconnect battery. Unscrew two knurled nuts on fuse block bracket and tilt it. Unscrew four retaining clip screws (located in each corner of cluster) by first

removing radio speaker grill to gain access to right hand screws. Insert a screwdriver between cluster and instrument panel to free inside clip located at bottom center of cluster. Pull out cluster and disconnect all wiring and speedometer cable.

**SPEEDOMETER & GAUGES**

Speedometer and all gauges may be removed after instrument cluster is removed.

**SAAB****INSTRUMENT CLUSTER**

**99 Models** — Remove safety padding. Remove four self tapping screws. Disconnect speedometer cable and wiring. Remove bulb holders. Lift out instrument cluster.

**SPEEDOMETER & GAUGES**

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

**TURN SIGNAL FLASHER**

Located under instrument panel on left hand side of steering column.

**STOP LIGHT SWITCH**

Mechanical type mounted on brake pedal bracket.

**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.

**Hi-Lux** — 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.

**Corona Mark II** — 1) Remove steering column housing, heater and radio knobs. Loosen heater control illumination light and pull out slightly. Remove the nine screws securing cluster housing.