

Switches, Gauges & Instrument Panels 3-59

LUV

INSTRUMENT CLUSTER

To remove the instrument cluster, it is necessary to first detach and remove the speedometer cable and position it out of way. Now, remove the wing nuts from the rear of the instrument cluster, to free the cluster assembly, and pull cluster only part way out. Then, disconnect all necessary wiring. Remove instrument cluster assembly from panel.

SPEEDOMETER & GAUGES

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

STOP LIGHT SWITCH

Stop light switch is mechanical type mounted on brake pedal bracket and requires .079 to .110" free travel.

MAZDA

INSTRUMENT CLUSTER

NOTE — Disconnect battery cable prior to removing instrument cluster.

Cosmo & RX-4 — Remove steering wheel, steering column cover and instrument cluster cover. Remove choke and ventilator controls (if equipped). Remove radio and light control switches, knobs and mounting nuts. Remove cluster attaching nuts or screws, then tip cluster back to disconnect speedometer cable and multiple connectors. Remove instrument cluster.

GLC & Pickup — Remove screws holding meter hood to panel and remove hood. Remove center panel and crash pad. Disconnect speedometer cable, remove mounting screws and tip

out instrument cluster. Remove multiple connector plugs from rear of unit and remove cluster.

SPEEDOMETER & GAUGES

Speedometer and all gauges can be removed when cluster is removed.

STOP LIGHT SWITCH

Mechanical type mounted on brake pedal bracket and is used for pedal adjustment. Adjust for free pedal travel of .280 to .350" (7.0 to 9.0 mm)

MERCEDES-BENZ

INSTRUMENT CLUSTER

Instrument cluster is held in a recess by a rubber section. Remove instrument plate glass, prying out and lifting up, using a non-metallic device to prevent damage to the glass.

Remove the speedometer shaft from the cable strap under the left floor mat. Pull instrument cluster out, loosen speedometer shaft, electrical connections and oil pressure line. Remove the instrument cluster sideways and to the right. To install, reverse removal procedure.



Fig. 6 Instrument Cluster Removal

SPEEDOMETER & GAUGES

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

STOPLIGHT SWITCH

Mechanical type mounted on brake pedal bracket and is used for pedal adjustment. Switch contact button should extend for .236 to .315" (6 to 8 mm) from housing and free pedal travel should be .590 to .798" (15 to 20 mm).

MG

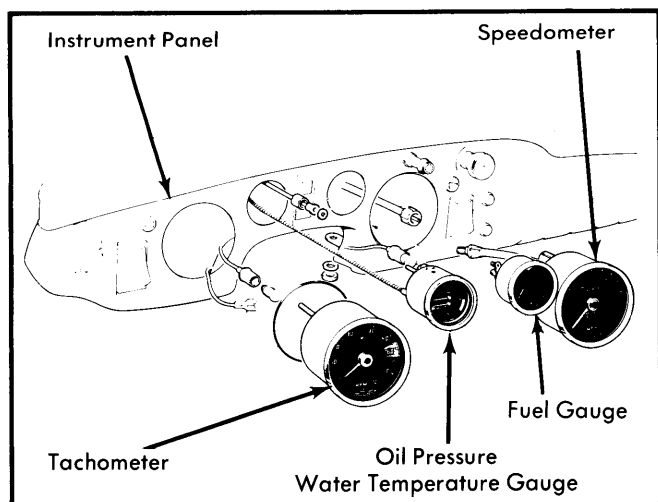
SPEEDOMETER

MG Midget — 1) Disconnect battery and speedometer cable from the speedometer. Remove center console retaining screws and move console back and aside toward the steering column.

2) Remove two knurled retaining nuts from behind speedometer and the knurled nut retaining the trip remote control in its bracket. Pull speedometer forward from dash.

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MG (Cont.)



MG Midget Instrument Cluster

MGB – 1) Disconnect the battery. Remove lower left hand instrument panel cover. Unscrew the knurled nut and disconnect speedometer cable.

2) Push in and turn speedometer clockwise for 30 degrees until the three studs located on the body of the speedometer are aligned with the cut-aways in the dash. Pull speedometer forward from the dash and disconnect wiring.

INSTRUMENT CLUSTER

Disconnect battery ground cable and remove steering wheel. Disconnect speedometer cable, remove wing nut and instrument cluster retaining screws. Rotate cluster outward, disconnect two electrical connectors and remove instrument cluster. To install, reverse removal procedure.

INSTRUMENT CLUSTER

928 Models – Disconnect battery ground lead. Remove steering wheel, steering column switch and instrument cover mounting screws. Disconnect both 12 pin connector plugs at instrument cluster. Lift instrument cover carefully and tilt to rear. Unscrew mounting bolt and remove instrument cluster.

SPEEDOMETER, TACHOMETER & GAUGES

928 Models – Instruments may be removed from assembly individually with cluster out of car. Use caution so that printed circuit board is not damaged when disassembling cluster.

924 Models – Disconnect battery. Put hand underneath instrument panel to back of instrument to be removed. Press instrument forward out of instrument panel. Disconnect wiring or speedometer cable.

NOTE – Remove tachometer and combination gauge before removing speedometer.

TACHOMETER

All Models – Disconnect the battery and remove the lower left hand instrument panel cover. Push in and turn 30 degrees until the three studs on the body of the tachometer are aligned with the cut-aways in the dash. Pull tachometer forward from dash and disconnect the wiring.

GAUGES

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

To Remove

First Remove

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

STOP LIGHT SWITCH

All Models – Mechanical type mounted on brake pedal bracket. Free movement adjustment is .125" (3 mm).

OPEL

SPEEDOMETER & GAUGES

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

STOP LIGHT SWITCH

Mechanical, mounted on brake pedal bracket.

PORSCHE

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

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.