

Switches & Instrument Panels

MAZDA

DESCRIPTION & OPERATION

All models have a steering column combination switch to control turn signals, headlights and wipers. The instrument cluster contains a speedometer, fuel gauge and water temperature gauge.

Some models also have a tachometer, voltmeter and oil pressure gauge. The fuel and temperature gauge operate on 7 volts, supplied by a cluster-mounted voltage regulator. The sending units are variable-resistance type and have the same resistance values on all models.

TESTING

GAUGES

1) Turn ignition on. If gauge needles do not move at all, check for blown fuse or broken power wire. If both gauges are inoperative, voltage regulator may be the cause. If only one gauge does not work, the gauge, sending unit, or connecting wiring may be at fault.

2) To test temperature gauge, disconnect sending unit wire. Connect a resistor between wire and ground, then check gauge reading. Change resistance and recheck. If gauge readings are as shown in tables, replace sending unit. If not, repair wiring or replace gauge.

3) To test fuel gauge, disconnect wire to sending unit at fuel tank (GLC Hatchback, RX7 and B2000) or unplug connector behind left kick panel (GLC Wagon and 626). Connect resistor between Yellow wire and ground. Check gauge reading.

NOTE: Allow 2 minutes for gauge reading to stabilize. It should be within 1 pointer width of line on gauge face. See Fig. 1.

4) If gauge readings are incorrect, replace gauge. If readings are okay, test in-tank sending unit before replacing it. Resistance should measure 0-5 ohms with float raised, and 103-117 ohms with float lowered. If not, replace sending unit.

RESISTANCES FOR FUEL GAUGE TESTING

Needle Position	Test Resistor
Full Line	17 ohms
Half Tank	33 ohms
Empty Line	95 ohms

- ¹ — On GLC wagon and Pickup, 3 ohms.
- ² — On GLC wagon and Pickup, 110 ohms.

RESISTANCES FOR TEMPERATURE GAUGE TESTING

Model	Cold Line	Hot Line
GLC Wagon & 626	233 ohms	16 ohms
RX7	104 ohms	21 ohms
GLC	153 ohms	12 ohms

REMOVAL & INSTALLATION

INSTRUMENT CLUSTER

Removal (GLC Hatchback)

Disconnect battery ground. Remove steering wheel. Remove meter hood by moving it up and down with

hands. Disconnect speedometer cable and remove 4 cluster screws. Pull cluster back and unplug wiring.

Installation

To install, reverse removal procedure.

Removal (GLC Wagon)

1) Disconnect battery ground. Place a strip of masking tape along edge of instrument panel under cluster to protect finish. Remove 2 screws and meter hood.

2) Remove 1 screw at left end of center panel, then unsnap panel. Remove 3 screws under edge of dashboard cover and remove cover. Remove 3 cluster screws, disconnect speedometer cable and wires and remove cluster.

Installation

To install, reverse removal procedure.

Removal (Pickups & 626)

Disconnect battery ground. Remove steering wheel and column cover. Disconnect speedometer cable. Remove cluster hood and mounting bolts. Pull cluster back, unplug wiring and remove cluster.

Installation

To install, reverse removal procedure.

Removal (RX7)

Disconnect battery ground. Remove steering wheel. Remove 2 screws and cluster cover. Remove cluster attaching screws. Disconnect speedometer cable and pull cluster back. Unplug wiring and remove cluster.

Installation

To install, reverse removal procedure.

COMBINATION SWITCH

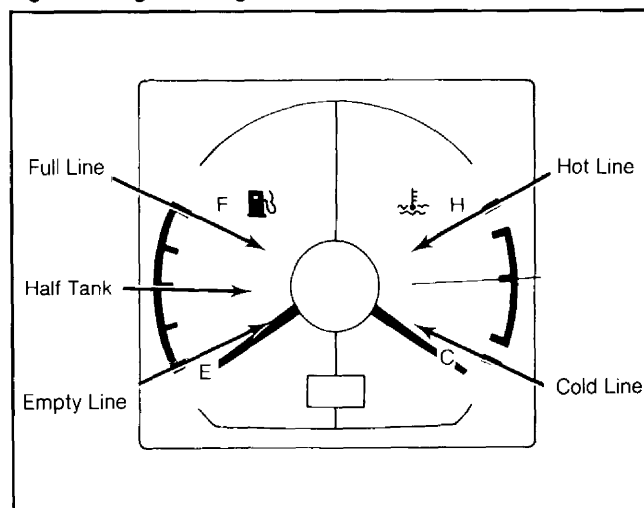
Removal

Disconnect battery ground. Remove steering wheel. Remove column covers and snap ring at top of column (if equipped). Unplug wiring connectors. Loosen combination switch screw. Remove switch.

Installation

To install, reverse removal procedure.

Fig. 1: Gauge Testing Needle Locations.



Needle should indicate proper reading when test resistor is connected.