

Condition	Possible Cause	Correction
Gas gauge does not read full when tank filled	1. Tank unit misadjusted I	1. Install 40 ohm resistor between connector and ground (disconnect from unit). If dash unit reads full within one pointer width. Remove gas tank unit from tank, install connector, ground unit and adjust tab to obtain full reading on dash. Reinstall tank unit.
	2. Defective' voltage stabilizer	1. See corrective action above.
Gas gauge not operating	1. Corroded tank unit terminal	1. Check tank unit terminal, if corroded clean, pack connector with grease and reinstall connector..
	2. Loose dash gauge	1. Install 40 ohm resistor between sending unit connector. and ground (disconnect from tank terminal). If dashgauge does not read full, check dash gauge attaching nuts for secureness and tighten if required. (Requires removal of dash panel) Momentarily touch dash gauge attaching studs to 12 volt source. If indicator moves, reinstall panel; if not, replace gauge. (Caution do not keep studs connected to 12 volt source for more than a few seconds ▪ damage to gauge can result)
	3. Open wiring	1. Remove connector from sending unit and ground (40 ohm resistor may be used if ohmmeter available. Remove multiple connector from rear of dash. Connect test light to ground and touch other end to connector socket with blue and black wire, if it does not light (40 ohm reading of ohm meter used) repair open circuit.
	4. Defective gas tank sending unit	1. Install 40 ohm resistor between temperature sending unit and ground (disconnect from unit) if dash unit reads full scale. Replace tank unit (check for terminal corrosion before replacing).

Condition	Possible Cause	Correction
Car runs out of gas with gauge indicating fuel in tank.	1. Tank unit misadjusted	1. Follow corrective action as stated above (obtain empty reading on dash)
	2. Defective voltage stabilizer.	1. See corrective action above.
Temperature gauge not	1. Loose dash gauge attaching nut.	1. See corrective action above.
	2. Defective temperature sending unit	1. Install 40 ohm resistor between temperature sending unit and ground (disconnect from unit). If dash unit reads full scale, replace temperature sending unit.
	3. Open wiring.	1. Follow corrective action as stated above (connector socket with blue wire).
Temperature gauge indicates hot when engine temperature normal.	1. Incorrect temperature sending unit	1. Check for correct sending unit (white porcelain) replace if incorrect.
	2. Defective temperature sending unit.	1. See corrective action above.
	3. Defective voltage stabilizer.	1. See Corrective action above.

GAS GAUGE TROUBLE DIAGNOSIS · GT

An inoperative gas gauge reading can normally be found to result from a poor grounding condition within the circuit. Using the procedure as outlined below may lead to the correction of the inoperative reading without replacement of either the tank unit or the dash unit.

1. Make certain the gas tank (ground) strap is properly secured.
2. Make certain the ground wire (brown in color) for gasoline/ and temperature gauges is properly connected to the windshield wiper motor and is secured. (This ground wire is also common for the heater blower motor.)

If the above procedure does not produce a satisfactory gauge reading, an attempt to isolate the defective part, i.e. tank or dash unit should be made.

3. Remove a tank unit from parts stock.

4. Disconnect the tank unit lead wire (light blue with black tracer) from the tank unit.

5. Connect the stock tank unit; ground unit, and operate manually.

6. If the dash unit shows a correct reading, then replacement of the tank unit is required as the correction.

A correct reading will be one which resembles the movement of the manually-operated tank unit.

7. If the dash unit does not show a correct reading, then its replacement is necessary.

MAJOR REPAIR

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Removing Voltage Stabilizer

1. Remove instrument cluster housing assembly.

2. Pull voltage stabilizer of back of printed circuit.
See Figure 1I-1.

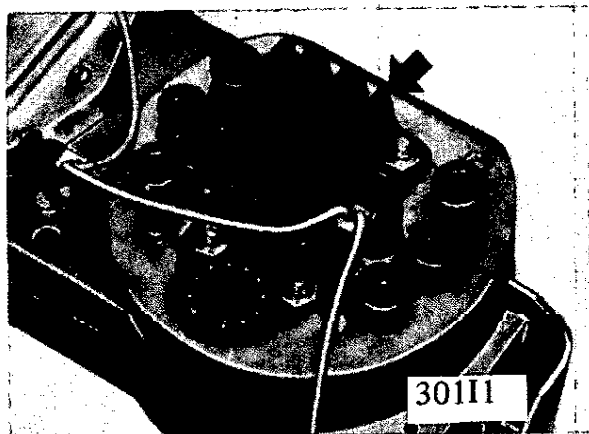


Figure 1I-1 -Voltage Stabilizer

Installation

1. Install voltage stabilizer on back of printed circuit.
2. Install instrument cluster housing assembly.

Removing Speedometer

1. Remove instrument cluster housing.
2. Remove six screws shown in Figure 1I-2 and remove both instrument cluster lens.

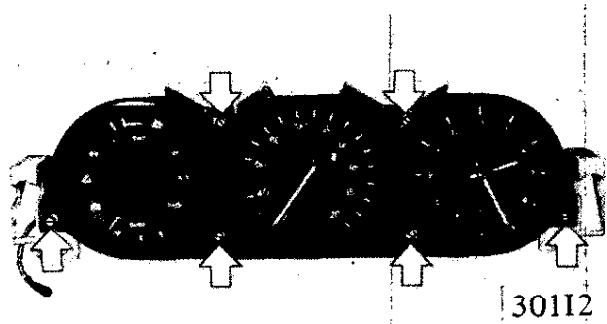


Figure 1 I-2 · Removing Instrument Cluster Lens

3. Remove three speedometer attaching screws. See Figure 1I-3.

Installation

1. Replace speedometer in cluster with three (3) attaching screws.

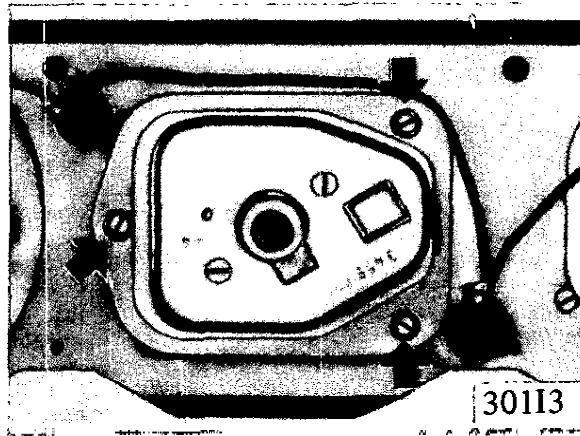


Figure 1 I-3 · Speedometer Attaching Screws

2. Install six (6) screws holding instrument cluster lens in housing.
3. Replace cluster housing.

Removing Electric Clock or Tachometer

1. Remove instrument housing.
2. Remove six screws and remove both instrument cluster lens, as shown in Figure 1I-2.
3. Remove three screws, as shown in Figure 1I-4, and remove clock or tachometer.

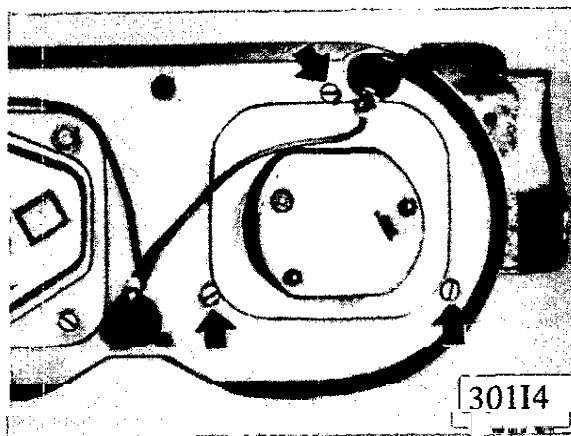


Figure 1 I-4 · Removing Electric Clock or Tachometer

Installation

1. Install clock or tachometer in instrument cluster with three (3) attaching screws.
2. Install six (6) screws holding instrument cluster lens.

3. Replace instrument housing.

Removing Temperature Indicator or Fuel Gauge

1. Remove instrument cluster housing.
2. Remove six screws and remove both instrument cluster lens. See Figure 11-2.
3. Pull voltage stabilizer off printed circuit and remove four instrument attaching screws, as shown in Figure 11-5.

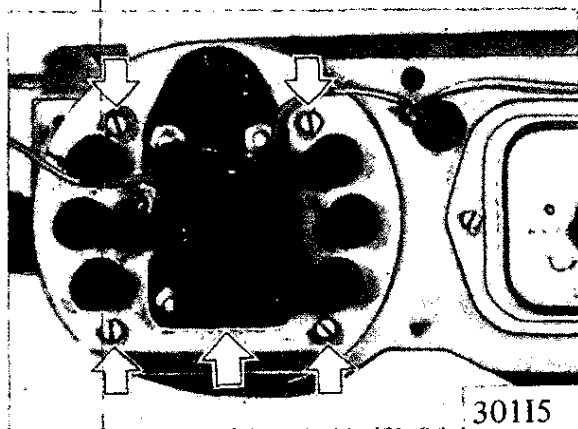


Figure 11-5 Removing Four Instrument Attaching Screws

4. Take temperature or fuel gauge out of cluster

Installation

1. Install temperature or fuel gauge in cluster.
2. Replace voltage stabilizer on back of printed circuit.
3. Replace both instrument cluster lens.
4. Install instrument cluster housing.

Removing Rallye Gauges

1. Remove glove compartment.
2. Remove radio, if equipped.
3. Remove screws holding instrument carrier from instrument panel.
4. Disconnect wires from instrument gauge.
5. Remove attaching nuts from gauge and remove.

Installation

1. Replace gauge with attaching nuts on panel.
2. Hook up wires to gauges.
3. With holding screws, attach gauge cluster to instrument panel.
4. Replace radio.
5. Replace glove compartment.

Removal of Temperature Sending Unit

1. Drain and collect coolant.

To drain radiator, remove end of lower radiator hose that is connected to radiator.

2. Remove wire from temperature sending unit.
3. Unscrew temperature sending unit from thermostat housing. See Figure 11-6.

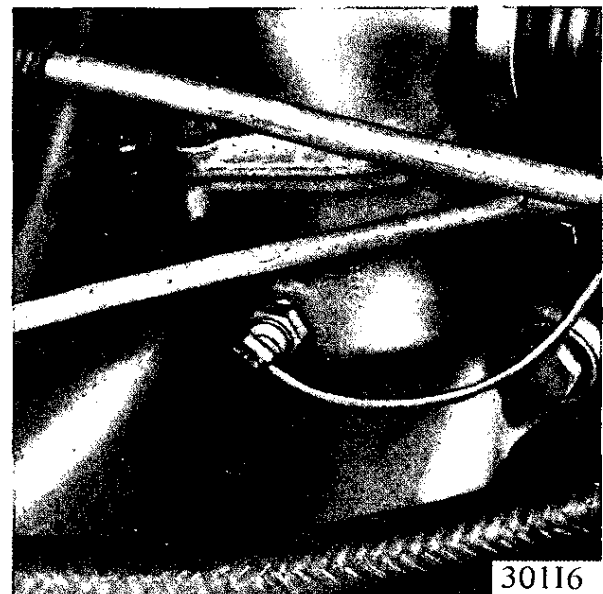


Figure 11-6 -Temperature Sending Unit

Installation

1. Screw temperature sending unit into thermostat housing after sealing unit with non-hardening permatex.
2. Install wire on sending unit.
3. Replace coolant.

Removing Oil Pressure Sending Unit

1. Disconnect wire from sending unit.
2. Unscrew oil pressure sending unit from block. See Figure 11-7.

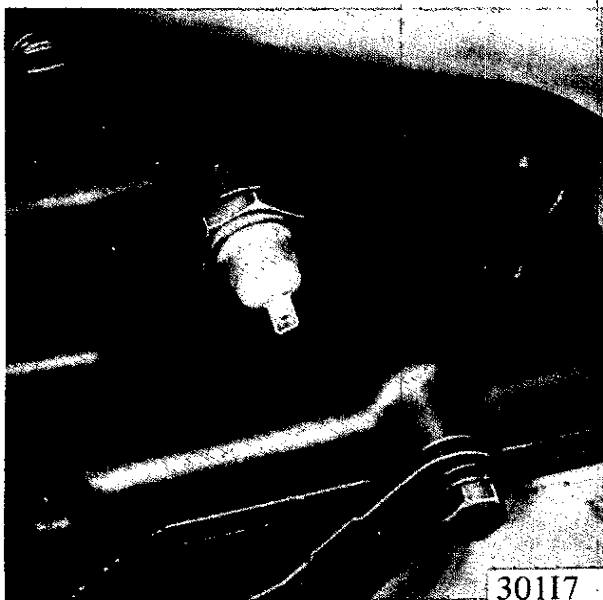


Figure 11-7 • Oil Pressure Sending Unit

Installation

1. Replace oil pressure sending unit into block.
2. Connect wire to unit.

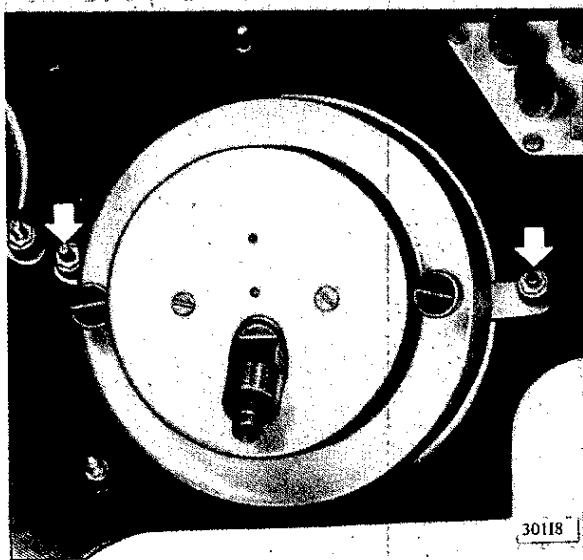


Figure 11-8 Rear View of Speedometer

Removal of Speedometer

1. Remove instrument housing.
2. Remove speedometer. See Figure 11-9 1.

Installation

1. Install speedometer.
2. Install instrument housing per paragraph 11-71.

Removal of Tachometer

1. Remove instrument housing.
2. Remove tachometer.
3. Disconnect electrical wires. See Figure 11-9.

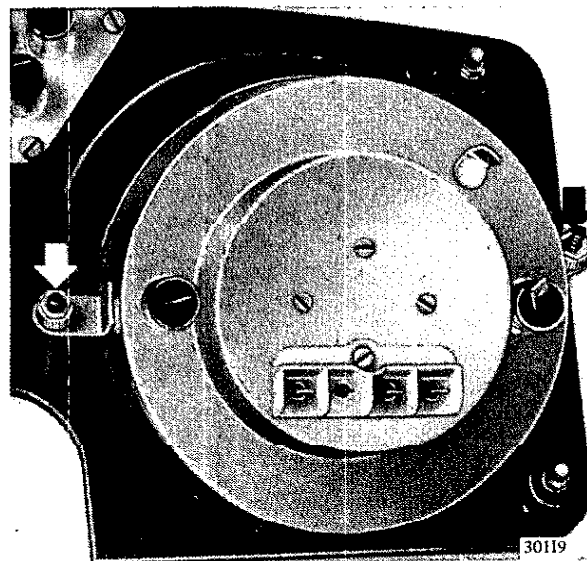


Figure 11-9 Rear View of Tachometer

Installation

1. Connect wires.
2. Install tachometer.
3. Install instrument cluster.

Removal of Temperature Indicator and Fuel Gauge Dash Unit

1. Remove instrument housing.
2. Remove temperature indicator and fuel gauge dash unit.
3. Disconnect electrical wires. See figure 11-10.

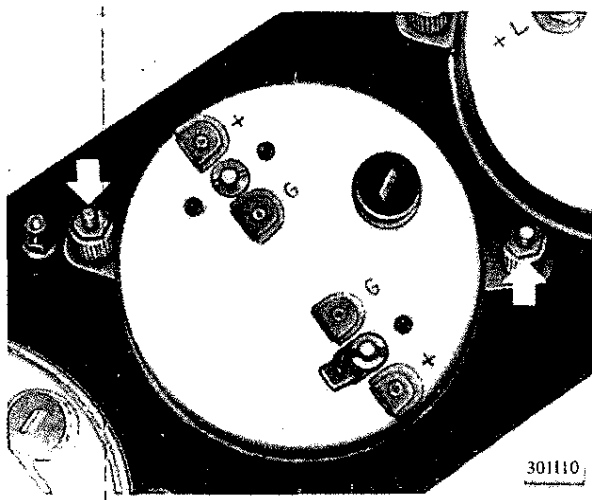


Figure 11-10 Rear View of Temperature Indicator and Fuel Gauge Dash Unit

Installation

1. Connect wires and install unit.
2. Install instrument cluster housing.

Removal of Electric Clock

1. Remove instrument housing.

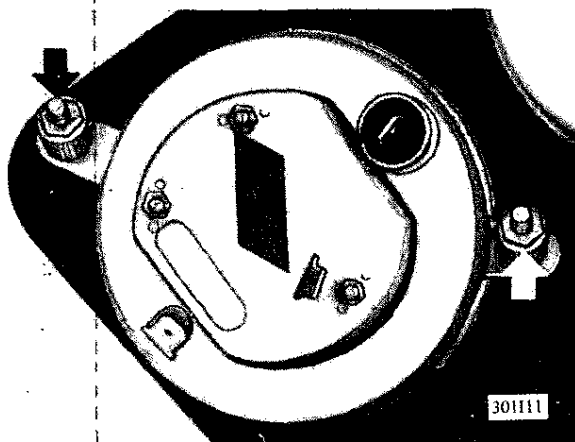


Figure 11-11 Rear View of Electrical Clock

2. Remove electrical clock.
3. Disconnect electrical wires. See Figure 11-11.

Installation

1. Install clock and connect wires.
2. Install instrument cluster housing.

Removal of Ammeter and Oil Pressure Gauge

1. Remove instrument housing.
2. Remove ammeter and oil pressure gauge.
3. Disconnect electrical wires. See Figure 11-12.

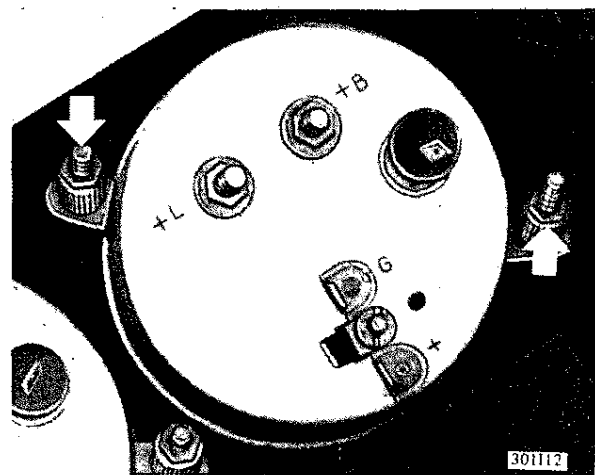


Figure 11-12 Rear View of Ammeter and Oil Pressure Gauge

Installation

1. Connect wires to ammeter and oil pressure gauge and install.
2. Install instrument cluster housing.