OLDSMOBILE

Oldsmobile, All Models

DESCRIPTION & OPERATION

Fuel Gauge – Circuit consists of an electrical indicator in instrument panel and a float controlled rheostat in fuel tank. The raising and lowering of fuel in tank varies the circuit resistance through the rheostat, changing the indicator reading.

Temperature Indicator – The temperature indicator is actuated by a sending unit which grounds the indicator circuit as engine coolant reaches approximately 260°F. It is also lit when the ignition is "ON" and the engine not running.

Oil Pressure Indicator – If engine oil pressure is not satisfactory, sending unit on engine will close completing the indicator lamp ground circuit. Oil pressure light should come on when ignition is on and engine is not running.

Alternator Indicator – Indicator light should be on when engine is not running and ignition is turn to "ON". Light should go off and remain off once engine has been started and accelerated above 900 RPM.

Water in Fuel Indicator Light (Diesel) – Late production diesel vehicles are equipped with an indicator to warn of water contamination in the fuel tank. When water in the tank nears the fuel pickup level, the warning lamp will light.

TESTING

FUEL GAUGE

1) If gauge shows empty at all times, disconnect tank unit wire in trunk (Cutlass and Toronado use a pink wire, all others are tan). If gauge moves to full, check sending unit and ground connection. If gauge does not move, disconnect body connector at fuse block. If still at empty, replace gauge.

2) If gauge shows full at all times, check tank ground wire. Disconnect sender and ground sender wire. If gauge moves, check tank sender connections or replace sender. If gauge still shows full, check continuity from gauge to tank. If sender wire has continuity, check printed circuit. If circuit connections are good, replace gauge.

3) If gauge operates, but is inaccurate, disconnect sending unit wire at tank. Connect a known good unit and ground body to frame. Gauge should move as float is moved. If not, replace gauge. If gauge moves, replace sending unit in tank.

INDICATOR WARNING LIGHTS

Temperature Indicator – If indicator light remains on with engine running, check for excessive coolant temperature, a grounded wire between bulb and sending unit, or a defective sending unit or ignition switch. If light fails to come on when cranking engine, check for burned out bulb, open light circuit or defective ignition switch.

Alternator Indicator – If light comes on with engine running above idle RPM, check alternator output, check for a shorted alternator negative diode or loose or broken alternator belt. If light remains on when ignition is off, check for shorted alternator positive diode. If light remains off when ignition is on but the engine is not running, check for burned out indicator bulb, an open light circuit or an open in alternator field.

Oil Pressure Indicator – If light remains on when engine is running above idle speed, check for low oil pressure, a grounded wire between bulb and sending unit or a defective sending unit. If light fails to come on with ignition on and engine stopped, check for burned out bulb, open light circuit or a defective sending unit.

Water in Fuel Indicator – 1) If light is on at all times, disconnect fuel tank connector in trunk. If light is still on, repair short to ground in yellow/black wire. If light goes out, drain water from tank. Connect siphon or pump to smaller (¼") fuel line above rear axle or near fuel pump. Siphon until all water is removed.

2) If light does not come on with water in tank, disconnect connector at tank and ground yellow/black wire. If light comes on, check connections at sensor in fuel tank. If light does not come on, check bulb and continuity from tank to indicator. If still inoperative, replace sensor in tank.

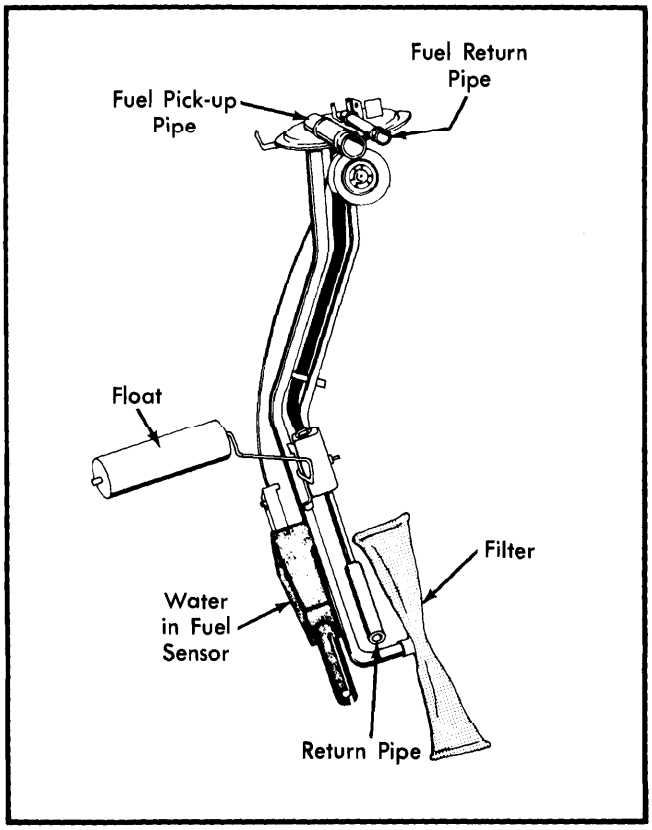

Fig. 1 Fuel Tank Sending Unit With Water in Fuel Sensor

OLDSMOBILE (Cont.)

ADJUSTMENT

STOP LIGHT SWITCH

Starfire – Adjust switch so contacts close when pedal is depressed 3/8-5/8" from normal position.

All Other Models – Insert switch into clip until switch body seats. Pull pedal up against stop to adjust switch position.

REMOVAL & INSTALLATION

NOTE – *Windshield wiper switch procedures are described in the appropriate Wipers/Washers article in this Section.*

INSTRUMENT PANEL TOP COVER

Removal (Omega) – Remove 11 screws from edges of top cover pad. On cars with air conditioning, disconnect left duct. Pry pad loose from spring clips and remove.

Installation – To install, reverse removal procedure.

LEFT TRIM COVER

Removal (88, 98) – Disconnect battery and remove headlight switch knob. Move steering column cover up and snap out lower trim cover under column. Remove 2 screws under speedometer. Pull cover out of mounting clips.

Installation – To install, reverse removal procedure.

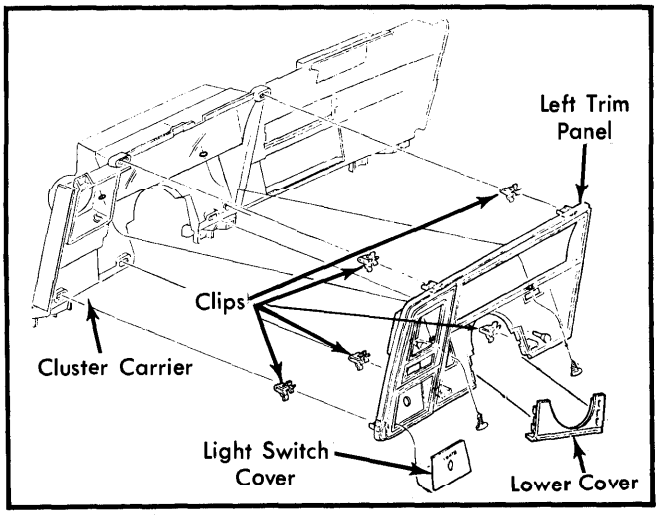

Fig. 2 Left Trim Panel Removal (88 and 98 Models)

Removal (Toronado) – Disconnect battery. Remove headlight switch knob and radio knobs. Remove steering column trim cover, then 4 screws from below left trim cover. Remove sound absorber panel below instrument panel, then pull left trim panel out of spring clips. It may be necessary to lower steering column slightly for clearance.

Installation – To install, reverse removal procedure.

Removal (Omega, Cutlass) – On Omega, remove 2 screws. On all models, remove headlight switch knob and pull panel loose from clips.

Installation – To install, reverse removal procedure.

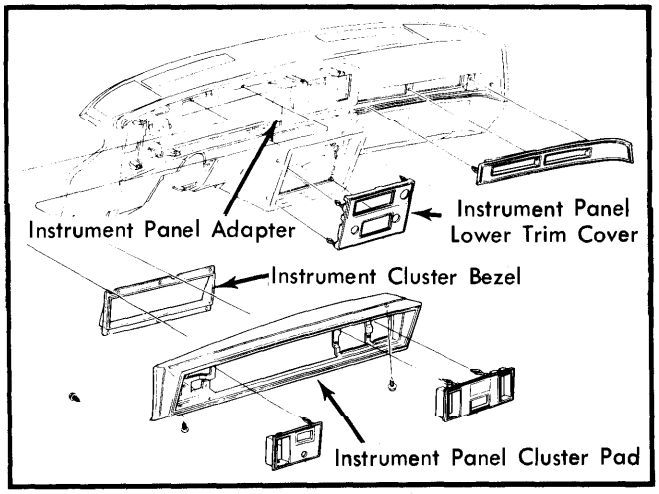

Fig. 3 Instrument Panel Trim Removal (Cutlass)

RIGHT TRIM COVER

Removal (88, 98, Omega) – Remove cigar lighter and knobs. Remove 2 screws and pull trim panel free from dashboard.

Installation – To install, reverse removal procedure.

Removal (Cutlass) – Trim panel is mounted with spring clips. Pull out around edges to remove.

Installation – To install, reverse removal procedure.

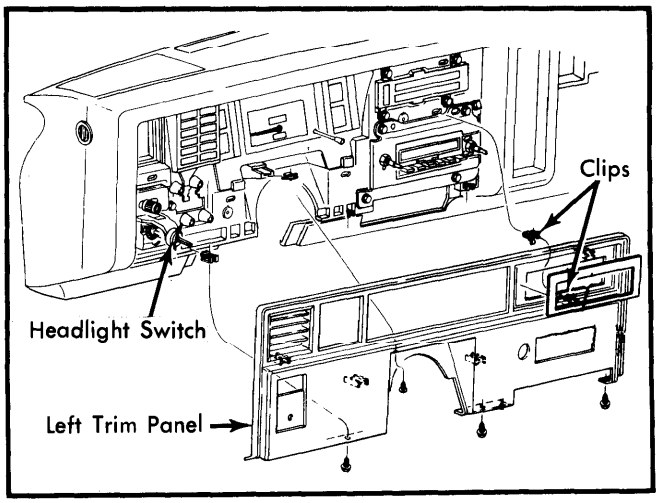

Fig. 4 Left Trim Panel Removal (Toronado)

SPEEDOMETER, GAUGES & PRINTED CIRCUITS

Removal (88, 98) – 1) Remove left trim cover. Remove 2 screws and speedometer lens, then 2 screws and speedometer retainer. Remove 2 screws on light shield, 2 speedometer screws, and disconnect speedometer cable. Remove speedometer, then 2 screws and fuel gauge.

OLDSMOBILE (Cont.)

2) To remove gauges, remove 4 screws holding cluster to left trim cover. Disconnect bulb sockets and wiring, remove gauge mounting screws, and remove gauges.

Installation – To install, reverse removal procedure.

Removal (Toronado) – **1)** Remove left trim panel and 2 cluster lens screws. Remove lens and 2 screws each on temperature and fuel gauge. Remove 3 speedometer screws on front, and 2 screws from rear of housing. Pull cluster enough to disconnect speedometer cable, then remove speedometer.

2) Remove screw retaining warning light lens and housing. Remove housing, then remove 4 screws from cluster housing. Pull cluster housing out, remove all bulbs, and pry gauge clips free with small screwdriver. Remove printed circuit.

Installation – To install, reverse removal procedure.

Removal (Cutlass) – **1)** Remove left and right trim covers. Remove 7 screws attaching cluster pad to instrument panel and remove cluster pad. Remove steering column trim cover and shift indicator clip from column.

2) Pull speedometer and gauge cluster back and disconnect speedometer cable. Remove 6 cluster bezel screws and cluster bezel. Remove gauge mounting screws and gauges.

Installation – To install, reverse removal procedure.

Removal (Omega) – **1)** Remove steering column trim cover and lower steering column. Remove 4 trim cover screws, disconnect wiring (if equipped) and remove trim cover. Remove 4 screws attaching cluster to instrument panel.

2) Disconnect shift indicator cable, then pull cluster out and remove wiring and speedometer cable. Remove 2 screws and cluster lens. Remove screws and nuts from rear of cluster to remove instruments. Remove bulbs and sockets to access printed circuit.

Installation – To install, reverse removal procedure.

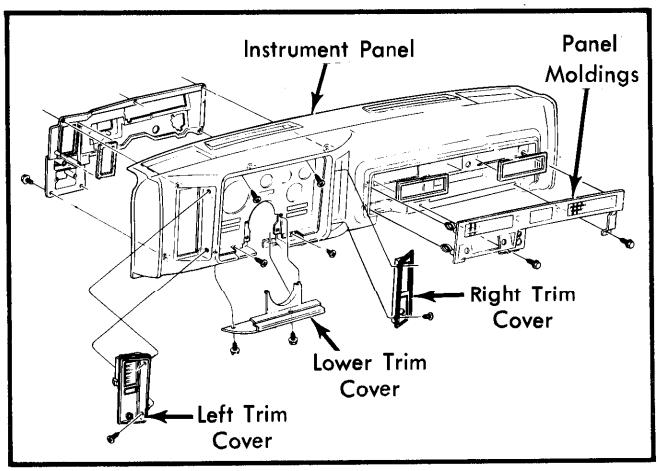

Fig. 5 Instrument Panel Trim Removal (Omega)

Removal (Starfire) – Remove clock knob and 4 cluster lens screws. Remove bezel and lens. Remove gauges after disconnecting wiring.

Installation – To install, reverse removal procedure.

HEADLIGHT SWITCH

Removal (Starfire) – Remove instrument panel insulator below dash. Press release button and pull out shaft and knob. Remove ferrule nut, disconnect wiring, and remove switch.

Installation – To install, reverse removal procedure.

Removal (All Other Models) – Remove left trim panel. On Cutlass, remove instrument panel pad. On all models, unscrew mounting screw, remove wiring connector, and pull switch away from panel.

Installation – To install, reverse removal procedure.