OLDSMOBILE

Oldsmobile
All Models (Exc. Starfire)

NOTE — *For Starfire, see General Motors "H" Body in this section.*

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 — Engine cooling system is pressure type with thermostatic control of coolant circulation. Vehicles with automatic transmissions include a transmission oil cooler located in the radiator. A 15 lb. pressure radiator cap is used which raises the boiling point to approximately 262° F. When this temperature is reached, the sending unit will close the circuit to ground, lighting the indicator light on the instrument panel.

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.

TESTING

FUEL GAUGE

Insure battery is fully charged. Disconnect electrical lead at fuel tank sending unit. Connect gauge tester (BT-6508) to sending unit wire and to ground. Set tester at "FULL" and turn ignition to "ON" position. If gauge responds to tester, check sending unit ground. If sender ground is good, replace sender. If gauge does not respond to tester, leave sender disconnected and connect tester to left terminal of gauge (viewed from back of gauge) and to ground. If gauge responds to tester, check printed circuit. If gauge does not respond, replace gauge.

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.

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.

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.

STOP LIGHT SWITCH

If all stop lights fail to come on, or fail to turn off, check White wire terminal in turn signal connector using a test light, while depressing brake pedal. If test light fails to come on, check stop light switch adjustment. If adjustment is correct, replace stop light switch.

ADJUSTMENT

STOP LIGHT SWITCH

Insert switch into tubular clip until switch body is seated. Pull pedal rearward until it contacts stop. Switch will move in clip for proper adjustment, allowing stop lights to be off with brake pedal in released position.

REMOVAL & INSTALLATION

INSTRUMENT PANEL PAD
88,98 & TORONADO

Removal — Remove L.H., R.H. and lower trim panels. Remove speaker grilles, speakers and glove box. Remove instrument panel pad screws and instrument panel pad.

Installation — To install, reverse removal procedure.

R.H.TRIM PANEL
88,98 & TORONADO

Removal — Disconnect battery cable. Remove radio knobs, cigar lighter and 2 attaching screws. Pull trim cover from clips.

Installation — To install, reverse removal procedure.

L.H. TRIM PANEL
88,98 & TORONADO

Removal — 1) Disconnect battery cable. Rotate headlight knob until notch on back of knob is down. Apply a 1/8" hook in notch pulling retainer clip and knob off shaft.

2) Remove twilight sentinel knob, move steering column up and snap out steering column lower trim cover. Remove 2 attaching screws and pull trim cover from clips.

Installation — To install, reverse removal procedure.

LOWER TRIM PANEL
88,98 & TORONADO

Removal — Remove lower trim panel screws, pull trim panel off clips.

Installation — To install, reverse removal procedure.

HEADLIGHT SWITCH

Removal (88,98 & Toronado) — Remove L.H. trim panel cover and headlight switch mounting screws. Pull switch through opening in panel and disconnect wiring.

OLDSMOBILE (Cont.)

Installation – To install, reverse removal procedure.

Removal (Cutlass) – Disconnect battery cable. Remove cluster pad assembly and 2 headlight mounting screws. Pull switch from panel and remove connector.

Installation – To install, reverse removal procedure.

Removal (Omega) – Disconnect battery cable. Put switch at "ON" position. Reach under instrument panel and depress the switch shaft retainer and remove shaft assembly. Remove nut and switch. Remove connector.

Installation – To install, reverse removal procedure.

WINDSHIELD WIPER/WASHER SWITCH

Removal (88, 98 & Toronado) – Remove headlight switch. Remove wiper switch knob and fasteners. Pull switch through panel to disconnect wiring.

Installation – To install, reverse removal procedure.

Removal (Cutlass) – Disconnect negative battery cable. Remove cluster pad assembly, switch mounting screws and remove switch from rearward.

Installation – To install, reverse removal procedure.

Removal (Omega) – Pull wire connector from rear of switch. Remove screws and switch from rear of panel.

Installation – To install, reverse removal procedure.

HEATER OR AIR CONDITIONER CONTROL 88, 98 & TORONADO

Removal – 1) Remove R.H. trim cover on 88 and 98, L.H. trim cover on Toronado. A/C control; remove mounting screws, pull control out far enough to disconnect vacuum and electrical harness and temperature door cable. Remove control.

2) Heater control; disconnect temperature, defroster and vent door cables at heater. Disconnect electrical connectors, remove control.

Installation – To install, reverse removal procedure and check cable adjustment.

INSTRUMENT CLUSTER

Removal (88, 98 & Toronado) – 1) Disconnect negative battery cable. Remove L.H. trim cover, headlight and windshield wiper switches.

2) Remove radio, heater – A/C control and unlock all switches from the instrument cluster. Disconnect speedometer cable. Remove screws attaching cluster to instrument panel and remove instrument cluster.

Installation – To install, reverse removal procedure.

Removal (Cutlass) – 1) Remove speedometer cluster, fuel gauge and telltale cluster assemblies as follows: With column shift automatic transmission, remove lower trim cover below steering column and disconnect shift indicator clip on shift bowl.

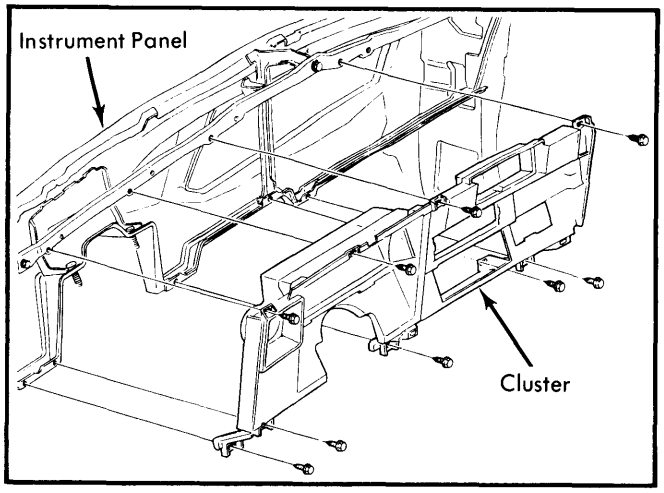

Fig. 1 Instrument Cluster Panel (88, 98-Toronado Similar)

2) Disconnect speedometer cable. Lower steering column. Remove speedometer screws and pull speedometer out so shift indicator needle is not damaged; then disconnect wire connectors.

Installation – To install, reverse removal procedure.

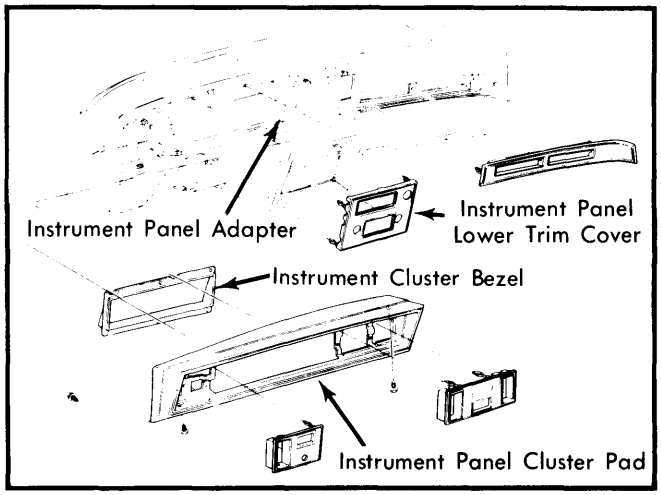

Fig. 2 Instrument Panel Trim Covers (Cutlass)

Removal (Omega) – 1) With column shift automatic transmission, remove shift indicator needle from shift bowl. Lower steering column. Remove heater control panel screws. Remove radio knobs, bezel nuts and front support at lower edge of instrument cluster.

2) Remove screws at top, bottom and side of cluster. Tilt cluster and reach behind to disconnect speedometer cable, speedminder, electrical connectors and remove cluster.

Installation – To install, reverse removal procedure.

OLDSMOBILE (Cont.)

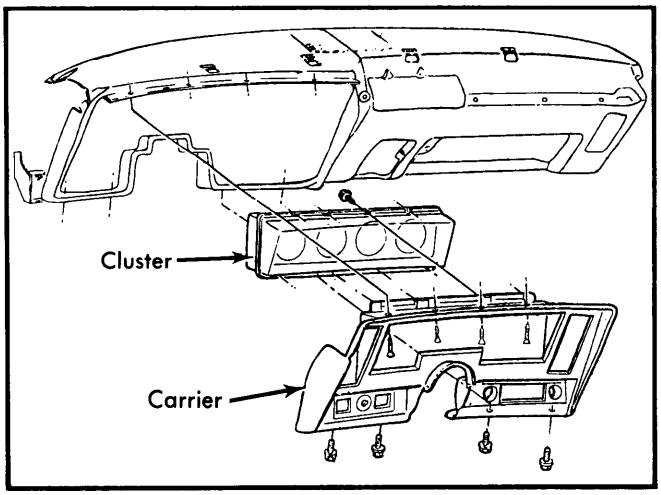

Fig. 3 Instrument Cluster Panel (Omega)

SPEEDOMETER & GAUGES

Removal (88, 98 & Toronado) – Remove cluster lens screws, pull lens out at top and lift from bottom edge tabs. Remove screws and bezel from cluster. Lift face plate over shift indicator needle. Remove speedometer or gauge face screws, remove cable or electrical connections and remove speedometer or gauge.

Installation – To install, reverse removal procedure.

Cutlass – *See Instrument Cluster Removal & Installation.*

Removal (Omega Speedometer) – Remove instrument cluster and screws retaining rear cover to cluster. Bend ground strap away and remove cover. Remove speedometer-to-housing retaining screws and speedometer from rear cover.

Installation – To install, reverse removal procedure.

Removal (Omega Fuel Gauge) – Remove instrument cluster and printed circuit. Remove gauge assembly from cluster housing, 2 terminal nuts attaching gauge to cover plate, then remove gauge

Installation – To install, reverse removal procedure.

PRINTED CIRCUITS

Removal (88, 98 & Toronado) – **1)** Remove L.H. trim cover, telltale lens and housing assembly. Remove 4 screws attaching cluster housing to cluster carrier, remove cluster housing.

2) Remove lamp sockets noting color and position before removal. Remove gauge terminal clips from cluster housing, remove printed circuit.

Installation – To install, reverse removal procedure.

Removal (Cutlass) – **1)** Remove speedometer printed circuit after removing speedometer cluster, light sockets from printed circuit and 3 retaining screws.

2) Remove fuel gauge printed circuit or fuel economy meter (if equipped), after removing gauge assembly, light sockets from printed circuits, plastic cover and resistor, and printed circuit attaching screws or meter retaining nuts. Remove printed circuit.

Installation – To install, reverse removal procedure.

Removal (Omega) – Remove instrument cluster, illumination and indicator lights, and terminal nuts from fuel gauge and clock which retain printed circuit board to housing and remove circuit board.

Installation – To install, reverse removal procedure.