

## CADILLAC

### Cadillac, All Models

**CAUTION** — If equipped with Air Cushion Restraint System, turn ignition key to lock, disconnect battery ground cable and tape end before servicing instrument panel components. This must be done to prevent accidental release of A.C.R.S.

### DESCRIPTION & OPERATION

**Indicator Lights** — Warning lights come on with the ignition in the "ON" and/or "CRANK" position, and go off when the engine has started. The "Coolant Temperature" indicator will come on and remain on when the coolant temperature is excessive. The "Stop Engine Temperature" indicator will be activated when the engine metal temperature is above 240°F and will be continuous above 320°F. The buzzer for the "Stop Engine Temperature" warning will also come on when the key warning buzzer sounds (key in lock, ignition off and drivers door open).

**Fuel Gauge** — On Seville, gauge and bulb are energized through the indicator lights printed circuit. On all other models, gauge and bulb are energized through a separate connector on rear of gauge. On all models, gauge is regulated by variable resistance to ground through the fuel tank sending unit.

### TESTING

#### FUEL GAUGE

**CAUTION** — Do not introduce battery current into system by using a hot jumper lead.

1) Locate fuel tank sending unit lead (18 gauge Tan wire) at right side of trunk lock mechanism. Disconnect Tan lead from license plate side of connector. Jumper a good fuel tank float between body side of connector and ground. Slowly move float arm from full to empty.

2) If gauge fails to follow float, check continuity in Tan wire circuit at connections, fuse block and gauge. If circuit has no defects, replace gauge and retest.

3) If gauge follows float, fault is between trunk connector and sending unit ground. Check trunk connector terminal and Black ground lead. If problem still exists, check sending unit.

#### OIL PRESSURE INDICATOR

**Ignition On, Lamp Off, Engine Not Running** — Check fuse, then if necessary, disconnect sending unit wire and connect it to ground. If lamp comes on, replace sending unit. If lamp remains off, check for bad indicator bulb, bulb-to-printed circuit connector and for continuity between connector Dark Blue wire terminal (No. 8 Seville; No. 5 All Others) and sending unit. If continuity exists, replace printed circuit. If circuit is open, check engine harness connector.

**Engine Running, Lamp On** — Disconnect sending unit wire. If indicator lamp goes off, sending unit is grounded or engine has low oil pressure. Replace sending unit or check oil pressure as required. If lamp remains on, perform continuity checks as described under "Ignition On, Lamp Off, Engine Not Running."

#### COOLANT TEMPERATURE INDICATOR

**Lamp Off During Cranking** — Check fuse. If fuse is good, turn ignition on and disconnect Green wire to sending unit at connector (in front of intake manifold on Seville; near A/C compressor on all others). Ground wire from dash connector. If light comes on, replace sending unit. If light remains off, check for burned out bulb. If bulb is good, check printed circuit connector. If lamp and connector are good, remove steering column-to-bracket retaining screws, allow column to drop and ground Dark Green wire at ignition switch. If lamp lights, replace ignition switch. If lamp remains off, check continuity of Dark Green wire between printed circuit (terminal No. 7 on Seville; No. 4 on all others) and sending unit connector. If continuity exists, replace printed circuit.

**Lamp On With Ignition On** — Disconnect Green wire to sending unit at connector (in front of intake manifold on Seville; near A/C compressor on all others). If lamp goes off, replace sending unit. If lamp remains on, lower steering column and disconnect ignition switch connector. If lamp goes out, replace ignition switch. If lamp remains on, perform continuity checks for ground as described under "Lamp Off During Cranking".

#### STOP ENGINE TEMPERATURE INDICATOR

**Lamp Fails To Come On** — Disconnect Light Green wire from sending unit located on left cylinder head. Ground wire, and if lamp comes on and buzzer sounds, replace sending unit. If lamp remains off, check for open horn circuit breaker. If circuit breaker is good, check for burned out indicator bulb. If bulb is good, check printed circuit connector. If necessary, remove connector and check continuity between connector terminal (No. 14 Seville; No. 6 All Others) and sending unit. If continuity exists, check for voltage at Orange-Black wire terminal (No. 15 Seville; No. 7 All Others) of printed circuit connector. If voltage is present, wire is open between printed circuit connector terminal (No. 14 Seville; No. 6 All Others) and "DX" terminal and sending unit. If voltage is not indicated, Orange-Black wire is open between connector and fuse block.

**Lamp Fails To Go Off** — Disconnect Light Green wire from sending unit. If lamp goes out, replace sending unit. If lamp remains on, Light Green wire between sender and "DX" terminal of dash connector may be grounded, or wire (Black-Pink Seville; Purple-White All Others) between "DX" terminal and printed circuit connector terminal (No. 14 Seville; No. 6 All Others) may be grounded.

#### ALTERNATOR (GENERATOR) INDICATOR

Check for normal operation of indicator as follows: 1 — With ignition and engine off, lamp should be off. 2 — With ignition on and engine off, lamp should be on. 3 — With ignition on and engine running, lamp should be off.

If indicator operates properly, check battery for an under or over charged condition. If indicator does not operate as described, proceed as follows:

**Switch Off, Lamp On** — Disconnect wires at alternator No. 1 and No. 2 terminals. If lamp remains on, check for short between these leads. If lamp goes out and battery is low, check alternator rectifier bridge.

## CADILLAC (Cont.)

**Switch On, Engine Stopped, Lamp Off** — Check 15 ampere "Cruise-A/C" fuse, indicator bulb and socket. Check wire (Pink on Seville; Orange on all others) between ignition switch and fuse and between fuse and bulb. Check Brown wire between bulb and dash connector. An open alternator diode can also cause indicator not to light.

**Switch On, Engine Running, Lamp On** — Check fan belt, alternator No. 1 and No. 2 lead connections and alternator internal circuitry.

## ADJUSTMENT

## STOP LIGHT &amp; CRUISE CONTROL SWITCHES

Push switch well into retaining clip. Pull brake pedal up to full stop position and this will adjust switch. Rotate each switch  $\frac{1}{2}$  turn counterclockwise to ensure vacuum switch will not hold brake pedal on after adjustment.

## REMOVAL &amp; INSTALLATION

## STEERING COLUMN LOWER COVER

Remove four screws securing lower cover to lower steering column cover reinforcement. Remove four screws securing lower cover to instrument panel horizontal support. Remove lower cover. To install cover, reverse removal procedure.

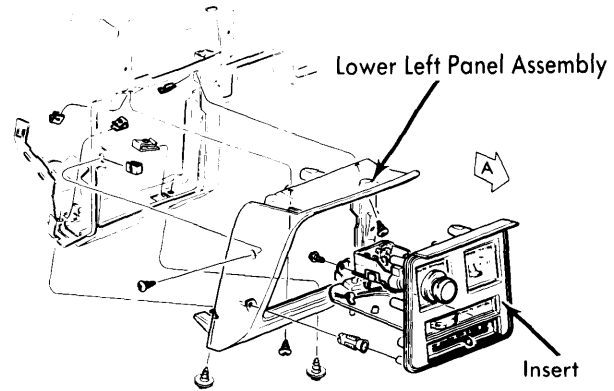
## LOWER LEFT INSTRUMENT PANEL (SEVILLE)

Disconnect negative battery cable. Remove steering column lower cover as previously described, then remove instrument cluster bezel. Remove trim screw from left side of lower panel, two screws retaining lower left panel to top cover, and loosen screw retaining lower panel to brace. Pull panel outward and disconnect electrical and vacuum connections from climate control, cruise control, headlight switch, and illumination bulbs, sockets and ground wire(s). To install, reverse removal procedure.

## HEADLIGHT SWITCH

**Seville** — Remove steering column lower cover and lower left instrument panel cover as previously described. Pull headlight switch knob out of switch while depressing button on bottom of switch. Remove four screws retaining switch to panel insert, and remove switch from panel. Remove sleeve which retains switch to case. To install, reverse removal procedure.

**All Others** — Disconnect battery ground cable. Remove steering column lower cover as previously described. Disconnect electrical connector and lower light from switch. Pull headlight switch knob out of switch while depressing button on top of switch. Remove escutcheon and washer. Remove switch case-to-panel retaining screw, lower switch, disconnect upper switch light, and remove switch. To install, reverse removal procedure.

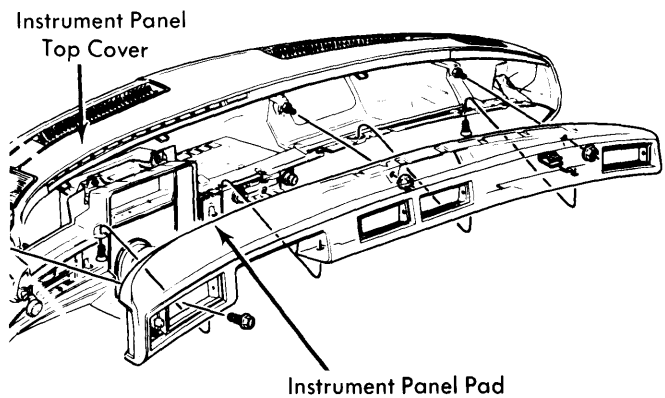


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## HEADLIGHT SWITCH (SEVILLE SHOWN)

## INSTRUMENT PANEL PAD &amp; AIR OUTLET GRILLES

Disconnect battery ground cable. Remove air outlet grilles using suitable remover-installer tool (J-21612) to compress release tabs; rotate grille upward to remove. Working through outlet openings, remove three fasteners securing pad to instrument panel support. Remove screws securing pad to instrument panel horizontal support.



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## INSTRUMENT PANEL PAD (EXC. SEVILLE)

## INSTRUMENT PANEL TOP COVER

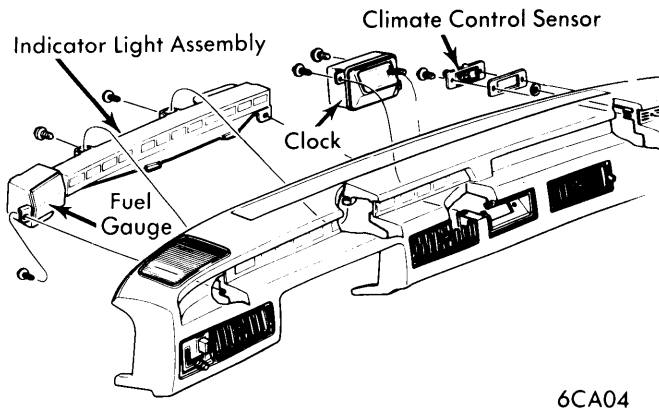
**Seville** — **NOTE** — Place shift lever in "LO" and tilt steering wheel to lowest position. Remove negative battery cable. Remove four screws on sides of defroster outlets, and five screws from lower edge of top cover. Pull top cover out and disconnect as required, the following connections: wiper switch, indicator light printed circuit, twilight sentinel photocell, clock, radio speaker, climate control sensor and aspirator, and security system indicator bulb and socket. Remove top cover. To install, reverse removal procedure.

## CADILLAC (Cont.)

**All Others** — Remove instrument panel pad as previously described. Remove screw retaining top cover to left and right side of panel, and two top cover to horizontal support studs. Loosen nut retaining top cover to panel brace on cowl, located just forward and to the left of clock. Disconnect speaker lead at radio, pull top cover out, and disconnect as required, the following connections: printed circuit, fuel gauge and bulb, clock and bulb, climate control sensor hose, and twilight sentinel photocell. Remove top cover. To install, reverse removal procedure.

### INDICATOR LIGHTS, PRINTED CIRCUIT & FUEL GAUGE

Remove instrument panel top cover as previously described. Remove indicator bulbs and sockets from printed circuit. Remove printed circuit retaining screws, then remove printed circuit. Remove fuel gauge, then remove housing to top cover retaining screws. Remove housing, housing cover, and lenses. To install, reverse removal procedure.



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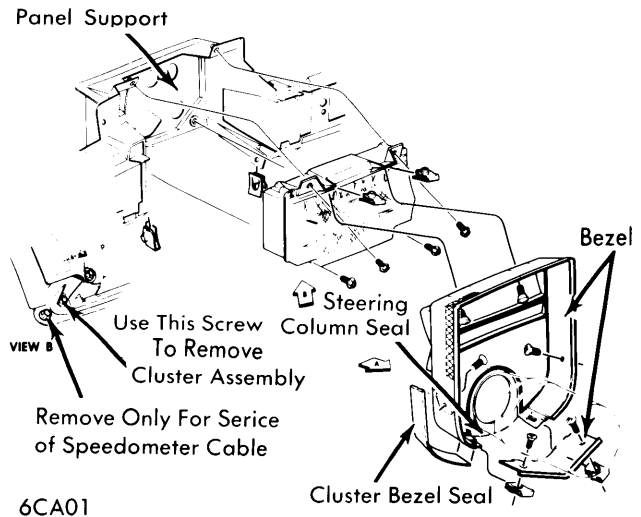
**INDICATOR LIGHT & FUEL GAUGE ASSEMBLY  
(SEVILLE SHOWN)**

### SPEEDOMETER CLUSTER & BEZEL

**All Models** — *NOTE* — On Seville, bezel is one piece; on all other models bezel is in two pieces. To remove bezel, remove screws retaining bezel to cluster. On Seville, press bezel downward, and rotate top outward to remove. On all other models, remove bezel and steering column seal from steering column. To remove cluster, place shift lever in "P" and remove screw and washer retaining shift indicator cable to steering column. Remove two upper screws retaining cluster to panel support. Remove two lower inboard screws retaining cluster to speedometer cable retaining adaptor. *NOTE* — Do not remove cable retaining adaptor. Pull cluster outward to disengage speedometer cable, rotate top downward, disconnect printed circuit connector, then remove cluster. To install, reverse removal procedure.

### SPEEDOMETER CLUSTER PRINTED CIRCUIT

Remove cluster and all sockets and lights from cluster case, then remove printed circuit. *NOTE* — Do not repair printed circuit board, if defective, it should be replaced. To install circuit board, reverse removal procedures.



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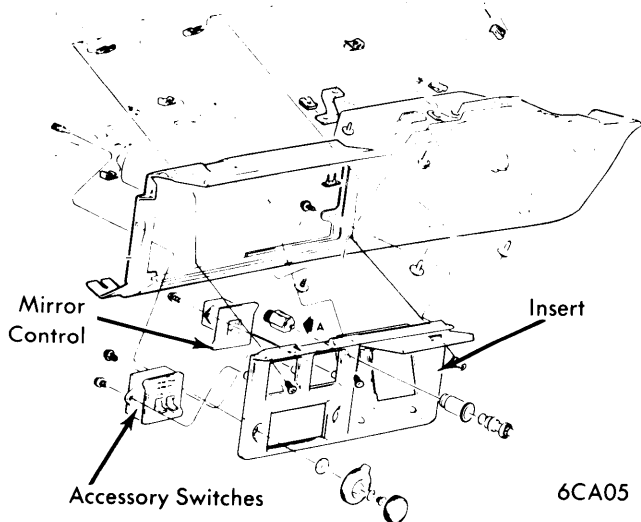
### SPEEDOMETER CLUSTER & BEZEL (CADILLAC SHOWN)

#### SPEEDOMETER HEAD

To remove speedometer head, remove instrument cluster as previously outlined. Then remove four screws securing instrument cluster lens to cluster housing. Remove trip reset knob by turning counterclockwise. Hold shaft on flats under knob. Remove lens and face plate. Remove selector quadrant assembly from cluster housing by pulling straight out. Remove rubber mounted screws securing speedometer head assembly and remove from cluster housing. Remove screws securing dial to speedometer head and remove dial using care not to damage pointer. To install speedometer head, reverse removal procedures.

#### LOWER RIGHT INSTRUMENT PANEL & ACCESSORY SWITCHES

Remove radio knobs, springs, rings, and retaining nuts. Remove insert retaining screws through opening in top of glove box. Push accessory switch(es) until it pops out of insert. Disconnect bulbs and map light connector. To install, reverse removal procedure.



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**LOWER RIGHT INSTRUMENT PANEL (SEVILLE SHOWN)**