

Switches & Instrument Panels

VOLVO

DESCRIPTION & OPERATION

All models are equipped with an instrument cluster containing a speedometer and combined temperature/fuel gauge. A tachometer or clock is installed in the left side of the cluster.

Additional instruments (depending on model) are mounted to the right of the cluster. Warning lights are at the bottom of the instrument cluster.

TESTING

TEMPERATURE AND FUEL GAUGE

NOTE: Gauge needle should be horizontal plus or minus one needle width in the following tests.

Both gauges can be checked with a test resistor. Be sure terminal pins are inserted and mounting nuts are tight before testing gauges. Before replacing gauge, check voltage stabilizer, gauge and sender.

Voltage Stabilizer

If one gauge is not working, disconnect the sending unit wire from the other (working) gauge. Connect a 100 ohm 1 watt test resistor (Volvo Part. No. 9995158-4) between gauge and ground. With ignition on, gauge pointer should be horizontal. If not, voltage stabilizer is faulty.

Gauges

Disconnect sending unit wire from suspected gauge. Connect 100 ohm test resistor between gauge terminal and ground. Gauge needle should be horizontal. If so, sender is bad. If not, gauge is faulty.

Fuel Gauge Sending Unit

Fuel tank sender should have a variable resistance between 230-330 ohms (empty tank) and 35-45 ohms (full tank). Resistance should vary smoothly as float is moved.

Temperature Sending Unit

Heat sensor in water and check resistance. It should measure 260-310 ohms at 122°F (50°C) and 55-65 ohms at 212°F (100°C).

SPEEDOMETER

If speedometer works and odometer does not, or odometer works and speedometer does not, the unit is faulty and must be replaced. If both stop working at the same time, speedometer drive gear or cable is usually the cause.

REMOVAL & INSTALLATION

INSTRUMENT CLUSTER

Removal

1) Disconnect battery ground. Remove steering column covers. Remove bracket screws and slide bracket down column. Remove cluster screws. Disconnect speedometer cable.

2) Hold speedometer from rear and press up and out until cluster comes loose. Disconnect wiring and remove cluster. To remove instruments, remove retaining screws and carefully pull off. Voltage stabilizer is removed by pulling straight out.

Installation

To install, reverse removal procedure.

IGNITION SWITCH

Removal

Remove hush panel and console side panel. Disconnect switch wiring. Use a short screwdriver to remove switch.

Installation

Reverse removal procedure.

TURN SIGNAL/DIMMER SWITCH

Removal

Remove steering column covers. Remove 2 retaining screws and lift switch out. Mark wires for installation and remove wires.

Installation

To install, reverse removal procedure.