

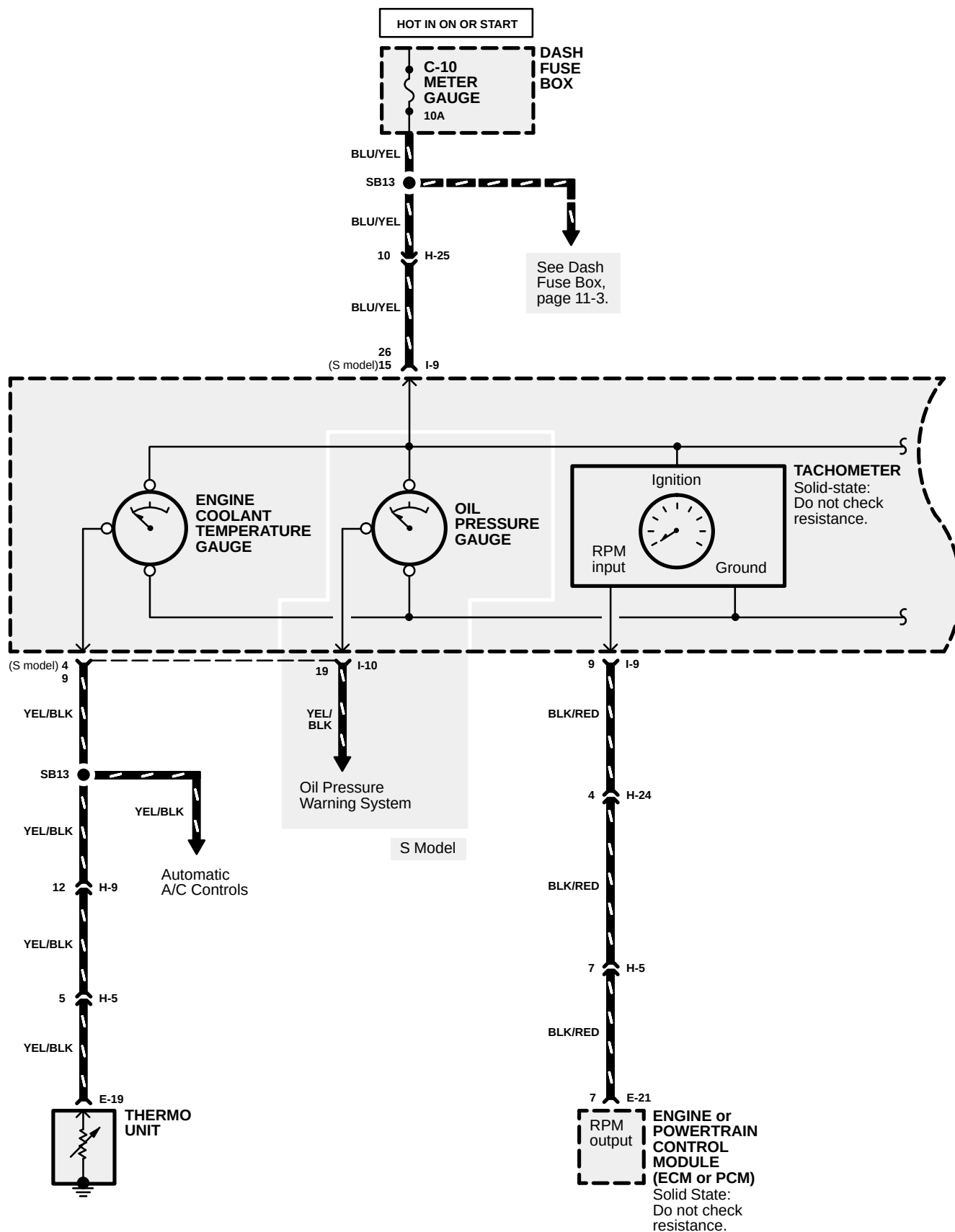
METER ASSEMBLY

Component Index

- Ambient Sensor
- Dash Fuse Box
- Engine or Powertrain Control
 - Module (ECM or PCM)
- Fuse/Relay Box
- Taillight Relay
- Thermo Unit

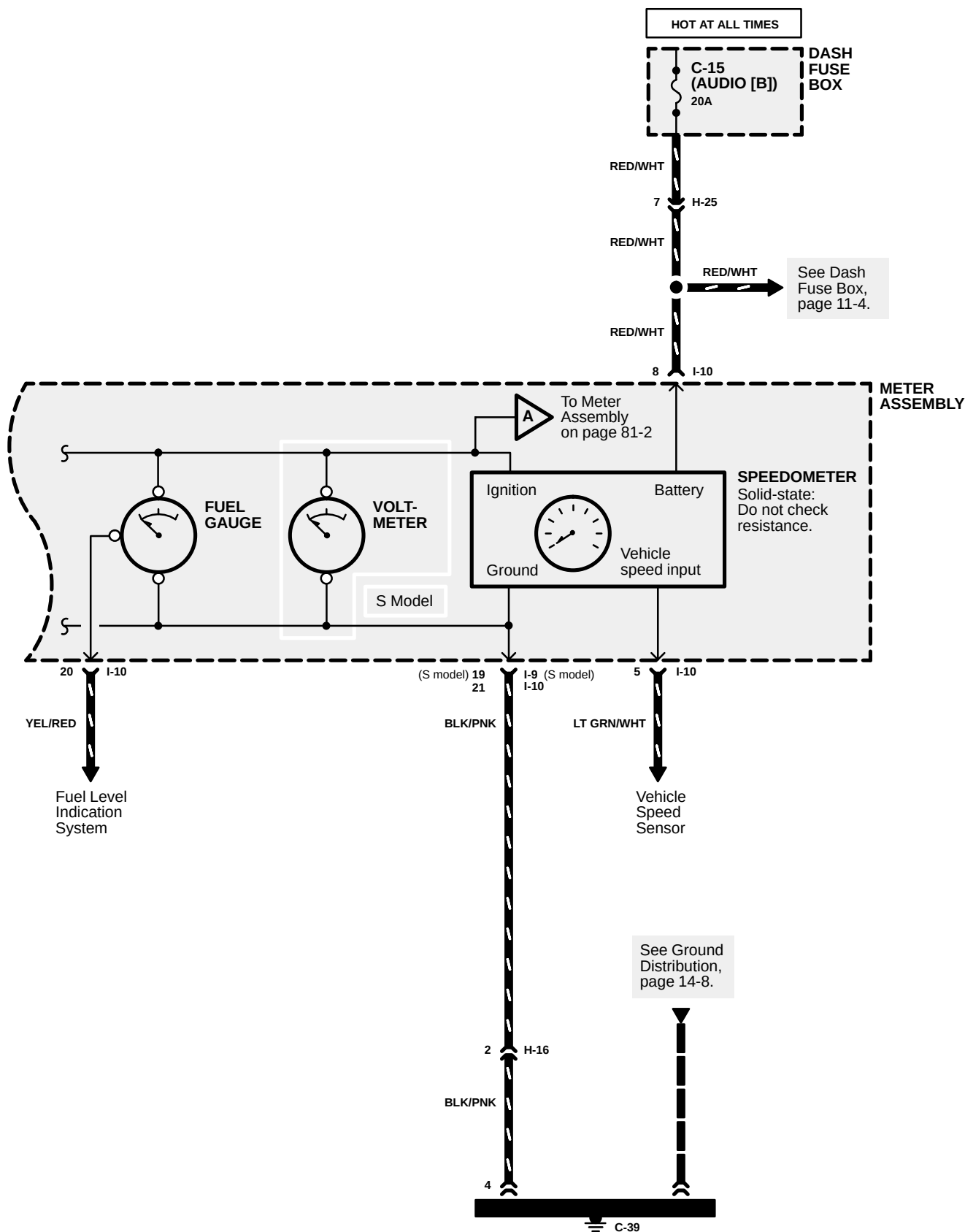
METER ASSEMBLY

Circuit Schematic



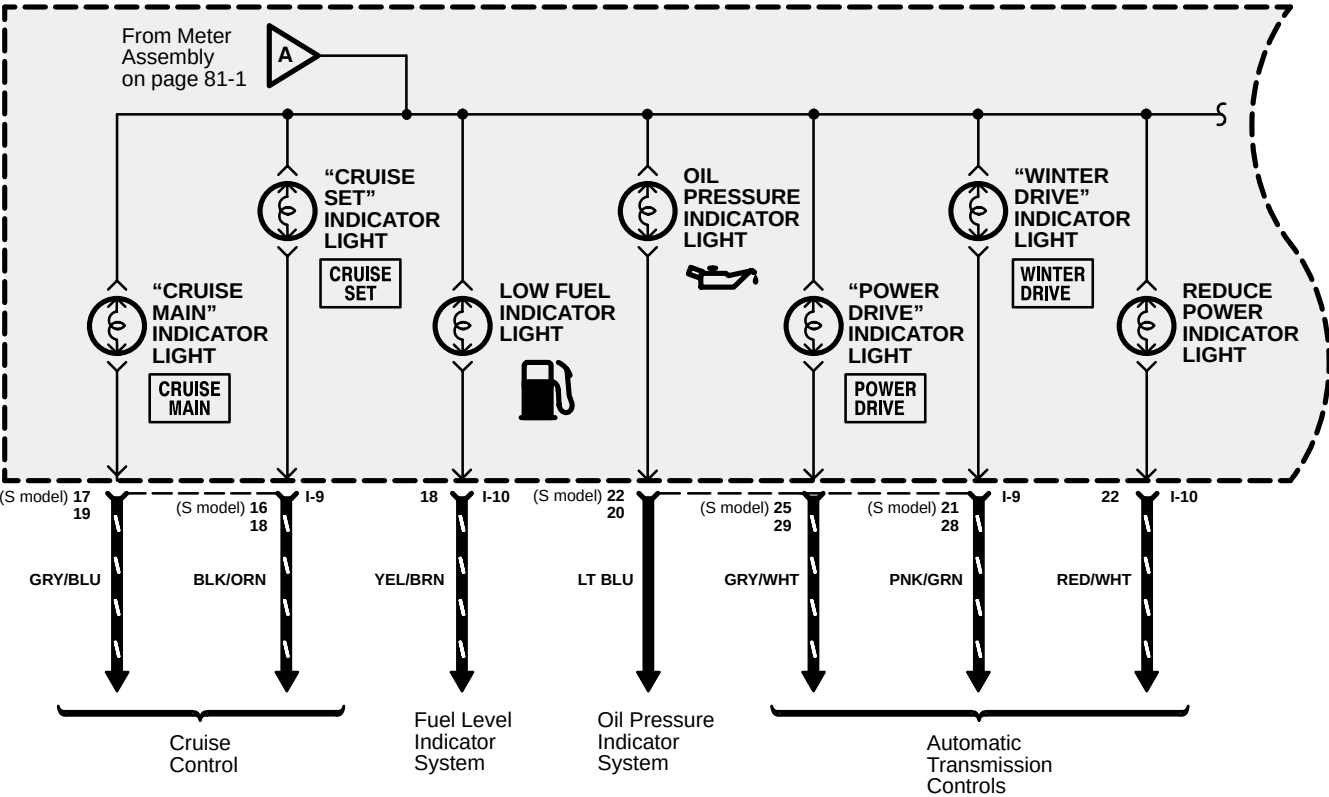
METER ASSEMBLY

Circuit Schematic



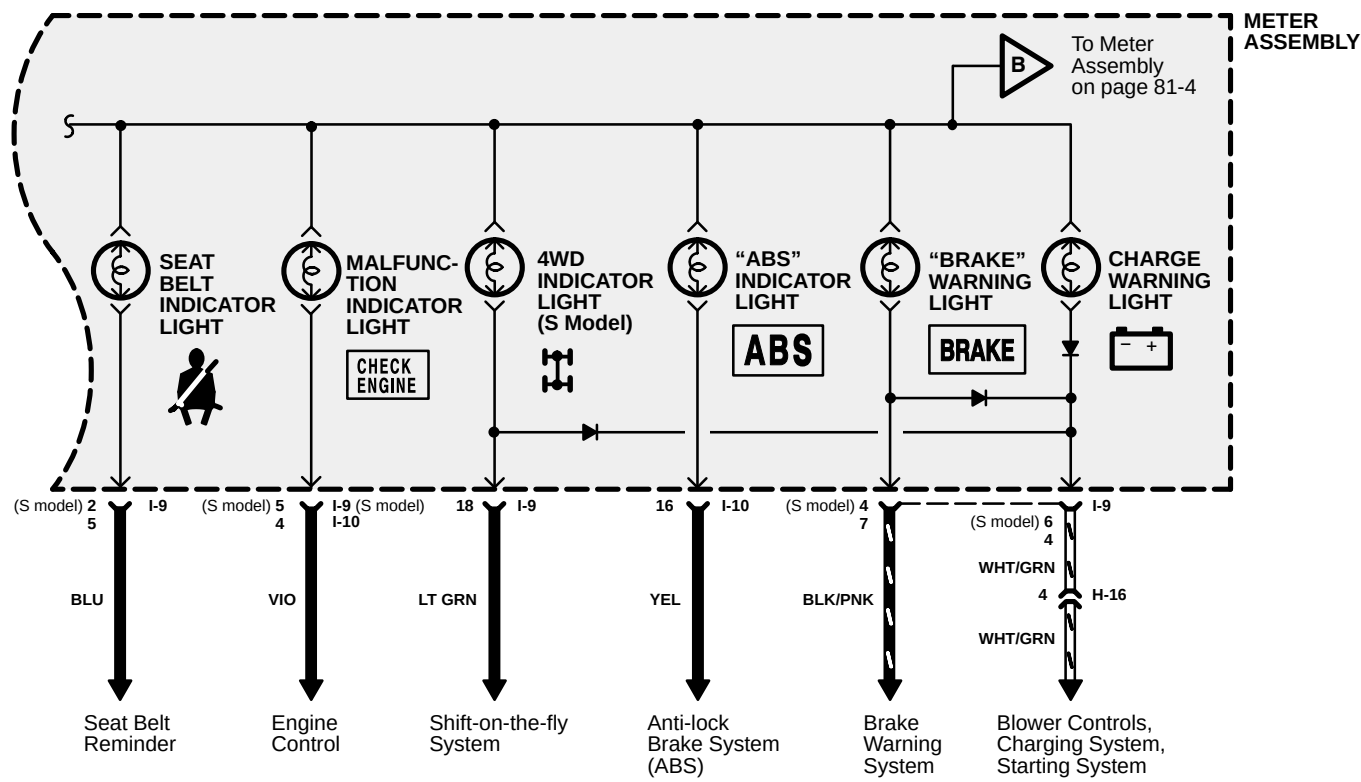
METER ASSEMBLY

Circuit Schematic



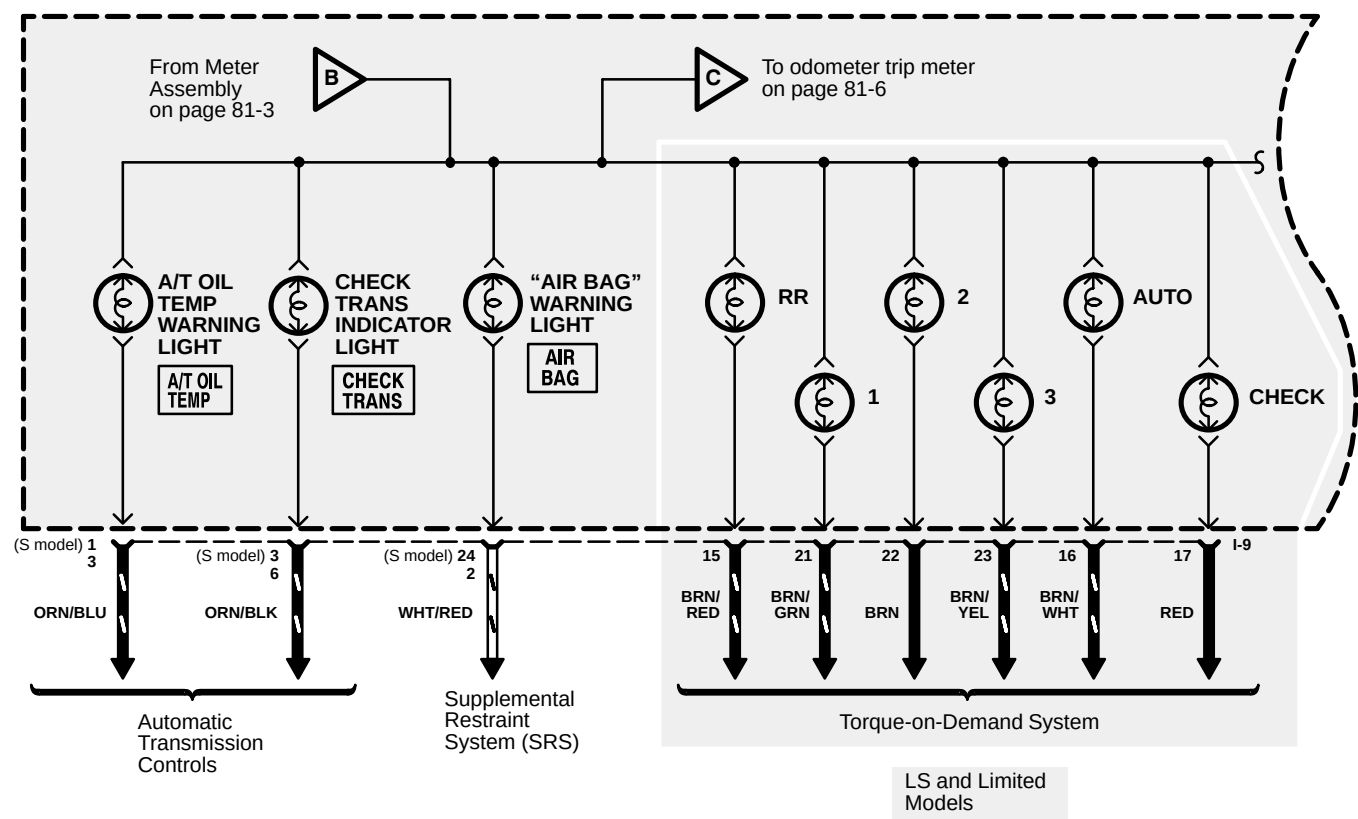
METER ASSEMBLY

Circuit Schematic



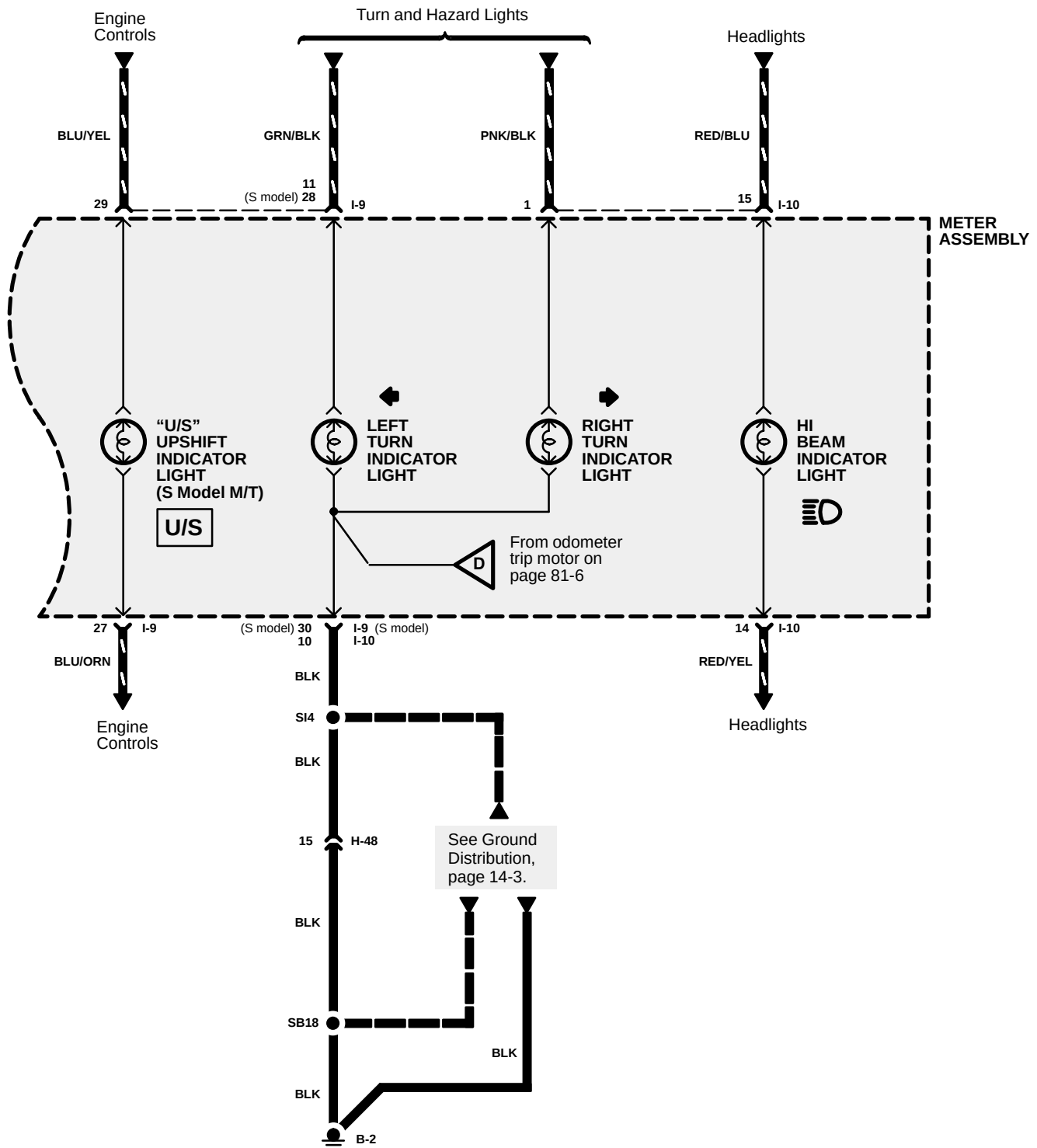
METER ASSEMBLY

Circuit Schematic



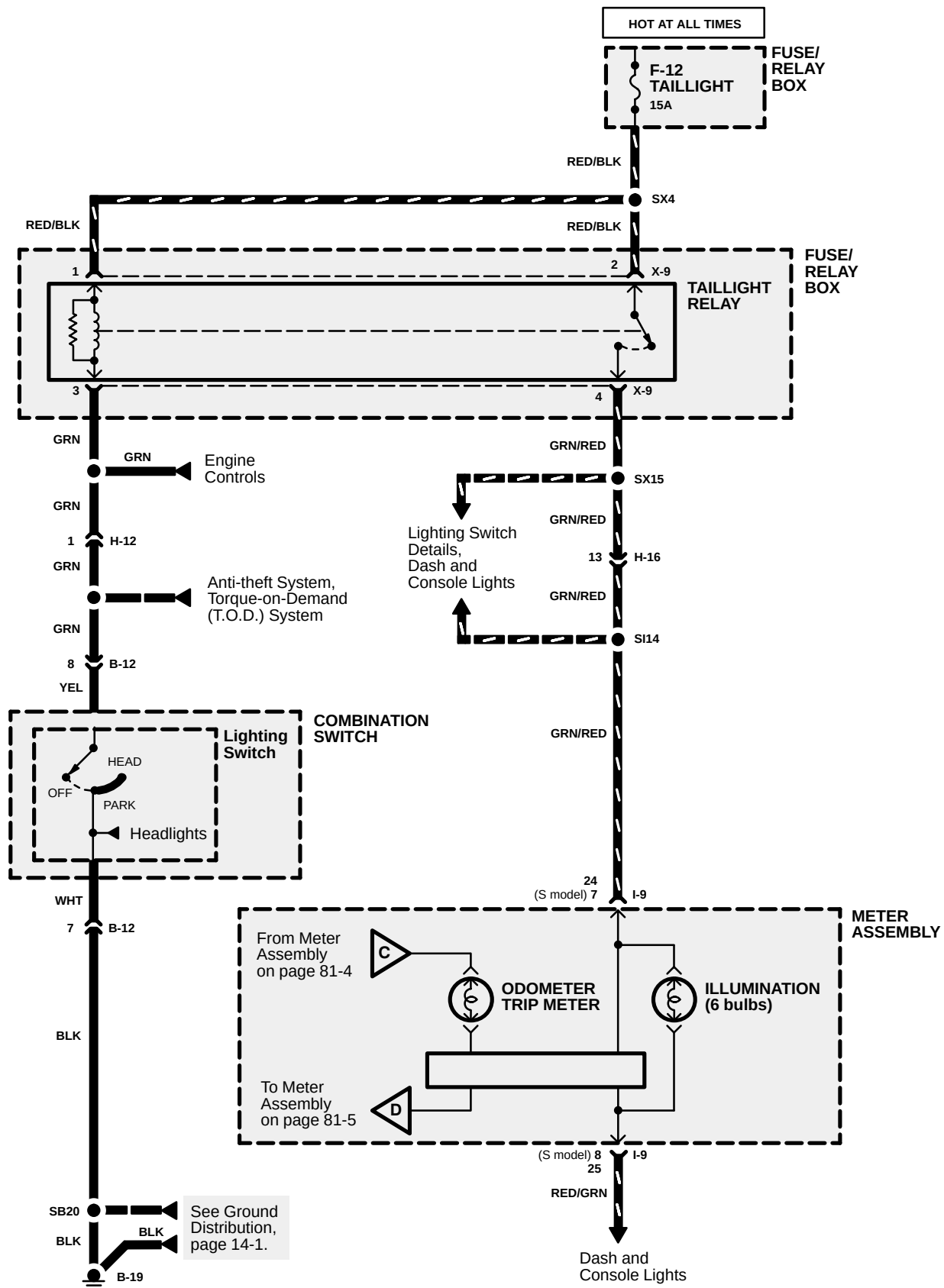
METER ASSEMBLY

Circuit Schematic



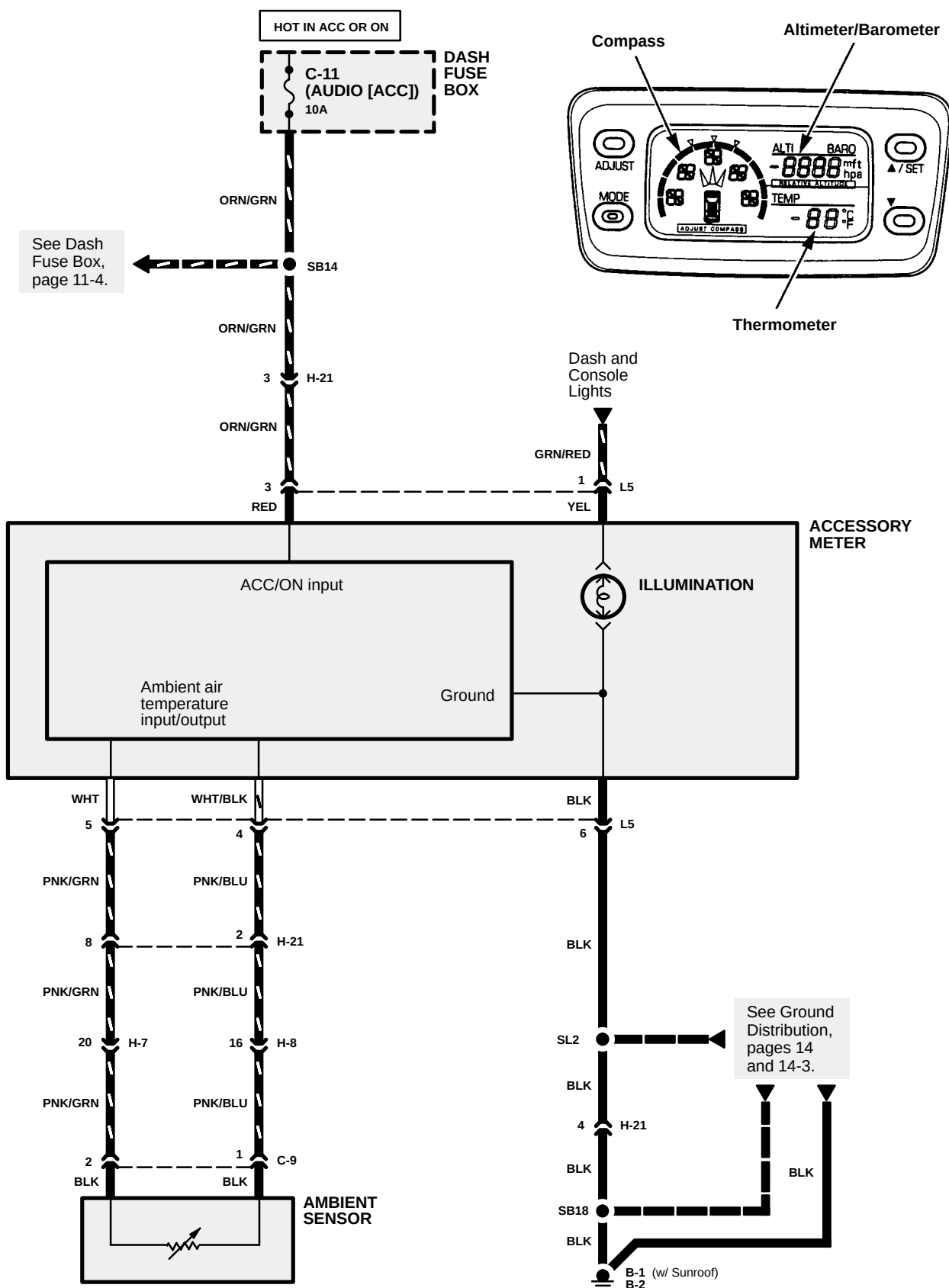
METER ASSEMBLY

Circuit Schematic



METER ASSEMBLY

Circuit Schematic



METER ASSEMBLY

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Ambient Sensor	Top left front of radiator bracket 2
Dash Fuse Box	Behind left dash side trim panel 55
Engine or Powertrain Control Module (ECM or PCM)	Right side of engine compartment 60
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 41
Taillight Relay	In fuse/relay box 35
Thermo Unit	Left front of engine 22
Connector	
B-12 (16-WHT)	Below I/P, right of steering column 58
C-9 (2-BRN)	Top left front of radiator bracket 2
H-5 (16-GRN)	Left side of engine compartment 33
H-7 (20-BRN/WHT)	Below I/P, above left dash side trim panel, on bracket 69
H-9 (20-BLK)	Below I/P, above left dash side trim panel, on bracket 70
H-12 (20-WHT)	Below I/P, above right dash side trim panel, on bracket 100
H-16 (22-WHT)	Behind right dash side trim panel 120
H-21 (8-WHT)	Below I/P, above right dash side trim panel, on bracket 100
H-24 (18-YEL)	Below I/P, above left dash side trim panel, on bracket 70
H-25 (22-BLU)	Below I/P, above left dash side trim panel, on bracket 71
H-48 (16-BLK)	Behind right dash side trim panel 120
I-9 (30-GRN)	On left top of meter assembly 53
I-10 (22-GRN)	On right top of meter assembly 53
L-5 (6-WHT)	Above multi-meter 26
Ground	
B-1	Above right dash side trim panel 116
B-2	Above right dash side trim panel 116
B-19	Behind top of left dash side trim panel 71
C-39	Right rear corner of engine compartment, on inner fender panel 45

METER ASSEMBLY

Circuit Operation

Engine Coolant Temperature Gauge

The engine coolant temperature gauge consists of two intersecting coils wound around a permanent magnet rotor. When voltage from fuse C-10 is applied to the coils, a magnetic field is generated. This causes the rotor to rotate and the gauge needle to move. The magnetic field is controlled by the thermo unit. As the resistance in the thermo unit varies, current through the gauge coils changes. The gauge needle moves according to the changing magnetic field.

Tachometer

The tachometer displays engine speed in RPM. Voltage pulses are taken from the ignition system and sent to the tachometer. The tachometer responds to the frequency of the voltage pulses, which increases with engine speed. Solid-state circuits process these pulses into a signal that causes the gauge needle to move.

Oil Pressure Gauge (S Model)

The oil pressure gauge consists of two intersecting coils wound around a permanent magnet rotor (see engine coolant temperature gauge for operation).

Voltmeter (S Model)

The voltmeter measures the voltage through fuse C-10 when the starter switch is in ON or START.

Indicators

The indicator lights are controlled by different conditions in their associated systems. See the associated system for the indicator light circuit description.

Bulb Check

With the starter switch in ON or START, battery voltage is applied to the "BRAKE" warning and charge warning lights. The generator will provide ground to the circuit until the engine is running. The lights go on to test the light bulbs and then go off after the engine is started.