

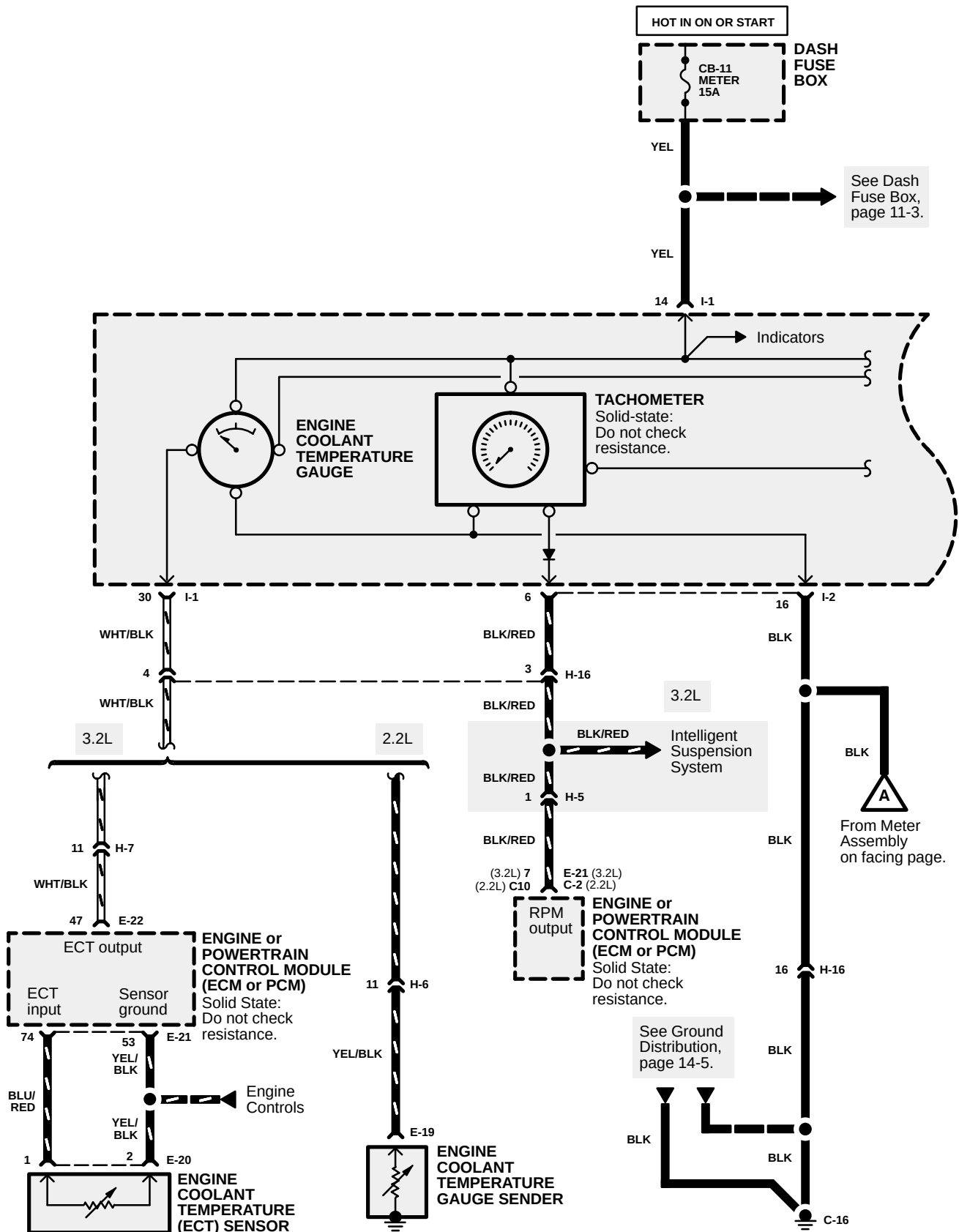
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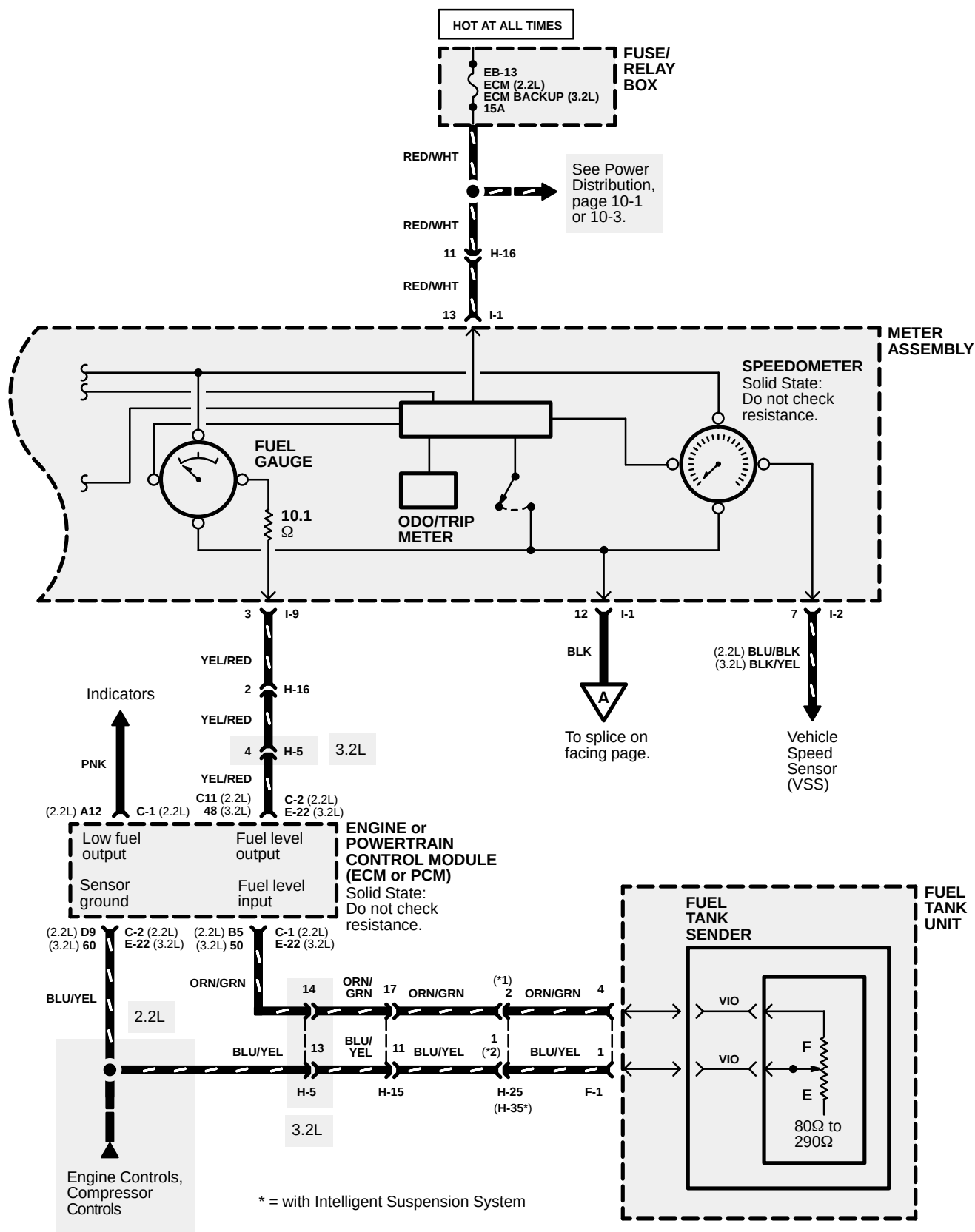
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Circuit Schematic



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Circuit Schematic



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Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Dash Fuse Box	Left side of I/P, behind panel 58
Engine Control Module (ECM) (2.2L)	Below center of I/P 73
Engine Coolant Temperature Gauge Sender (2.2L)	Rear of engine, below intake manifold
Engine Coolant Temperature (ECT) Sensor (3.2L)	Front of engine, in engine coolant manifold 49
Engine or Powertrain Control Module (ECM or PCM) (3.2L)	Left side of engine compartment 44
Fuel Tank Unit	Beneath vehicle, in top of fuel tank
Connector	
F-1 (4-BLK)	Under vehicle, on top of gas tank
H-5 (16-GRN)	Left side of engine compartment 27
H-6 (16-BLU)	Left side of engine compartment, below brake fluid reservoir 11
H-7 (16-WHT)	Left side of engine compartment 27
H-15 (20-BLU)	Behind left kick panel 63
H-16 (22-BLK)	Behind left kick panel 62
H-25 (13-WHT)	Under driver's seat, below carpet 72
H-35 (22-WHT)	Under driver's seat, below carpet 72
I-1 (30-GRN)	Behind left side of I/P, on top of meter assembly 86
I-2 (16-GRN)	Behind left side of I/P, on top of meter assembly 86
I-9 (14-GRN)	Behind left side of I/P, on top of meter assembly 86
Ground	
C-16	Left rear corner of engine compartment, on inner fender panel 43

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 the CB-11 fuse 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 sender (2.2L)/ECT sensor through the ECM or PCM (3.2L). As the resistance in the sender/sensor varies, current through the gauge coils changes. The gauge needle moves according to the changing magnetic field.

Fuel Gauge

The fuel gauge consists of two intersecting coils wound around a permanent magnet rotor (see engine coolant

temperature gauge for operation). The engine (M/T) or powertrain (A/T) control module (ECM or PCM) monitors the fuel level by the resistance level in the fuel tank unit. The fuel tank unit resistance varies from approximately 80 ohms with the fuel tank full to 290 ohms with the tank empty. The ECM or PCM then uses this information to control the fuel gauge.

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.