

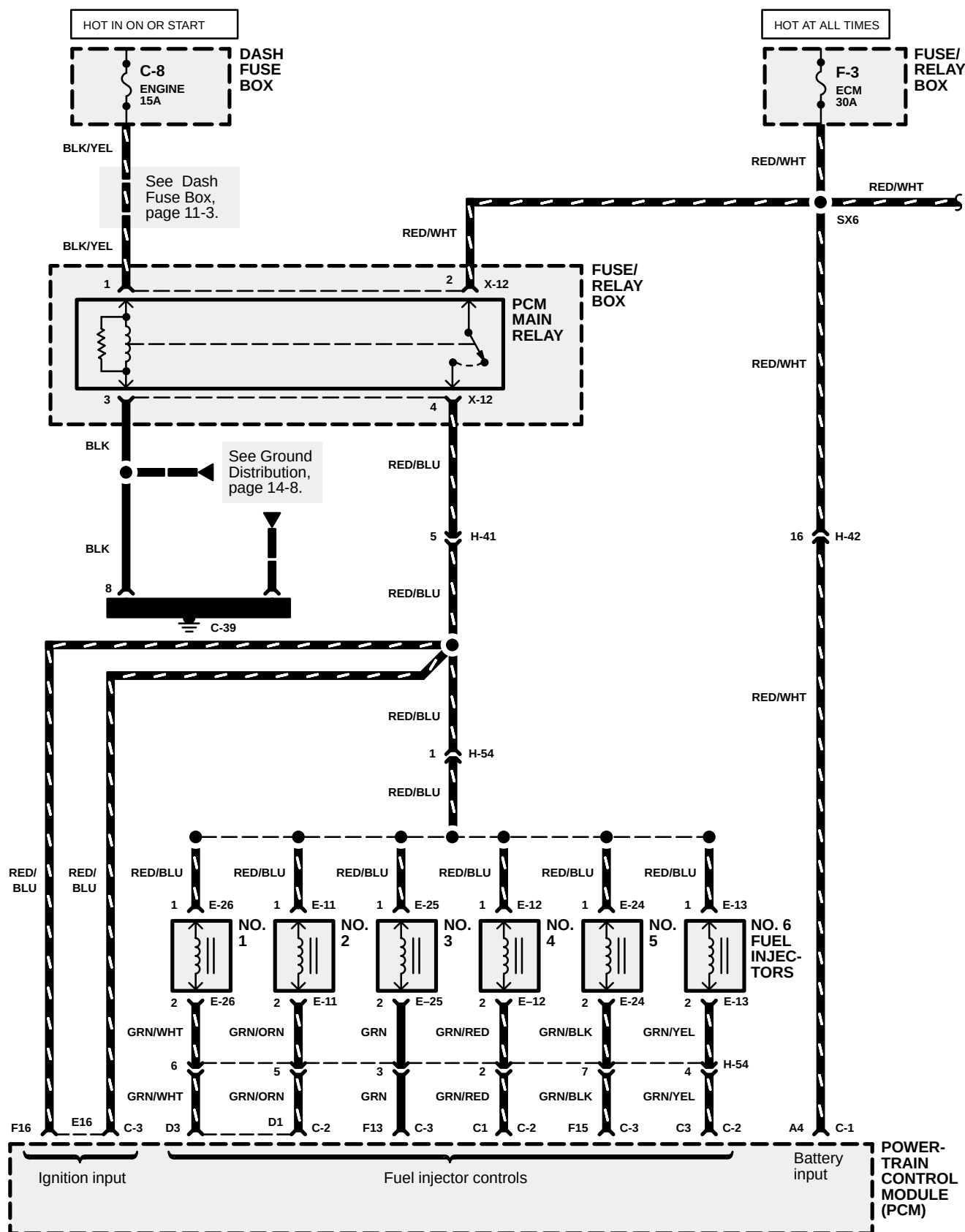
ENGINE CONTROL

Component Index

Camshaft Position (CMP) Sensor	Idle Air Control (IAC) Valve
Clutch Switch	Ignition Control Module (ICM)
Crankshaft Position (CKP) Sensor	Intake Air Temperature (IAT) Sensor
Dash Fuse Box	Knock Sensor (KS)
Data Link Connector (DLC) C63 (16-BLK)	Manifold Absolute Pressure (MAP) Sensor
Engine Coolant Temperature (ECT) Sensor	Mass Air Flow (MAF) Sensor
Evaporative Emission (EVAP) Canister Purge Valve	PCM Main Relay
Exhaust Gas Recirculation (EGR) Valve	Power Steering Pressure (PSP) Switch
Fuel Pump	Powertrain Control Module (PCM)
Fuel Pump Relay	Taillight Relay
Fuse/Relay Box	Throttle Position (TP) Sensor
G Sensor - PCM	Transmission Switch 1-2
Heated Oxygen Sensor (HO2S) B1S1	Transmission Switch 3-4
Heated Oxygen Sensor (HO2S) B2S1	Upshift Relay-1
Heated Oxygen Sensor (HO2S) B1S2 (A/T)	Upshift Relay-2
Heated Oxygen Sensor (HO2S) B1S2 (M/T)	Upshift Resistor
Heated Oxygen Sensor (HO2S) B2S2 (A/T)	Vacuum Switch
Heated Oxygen Sensor (HO2S) B1S3 (M/T)	

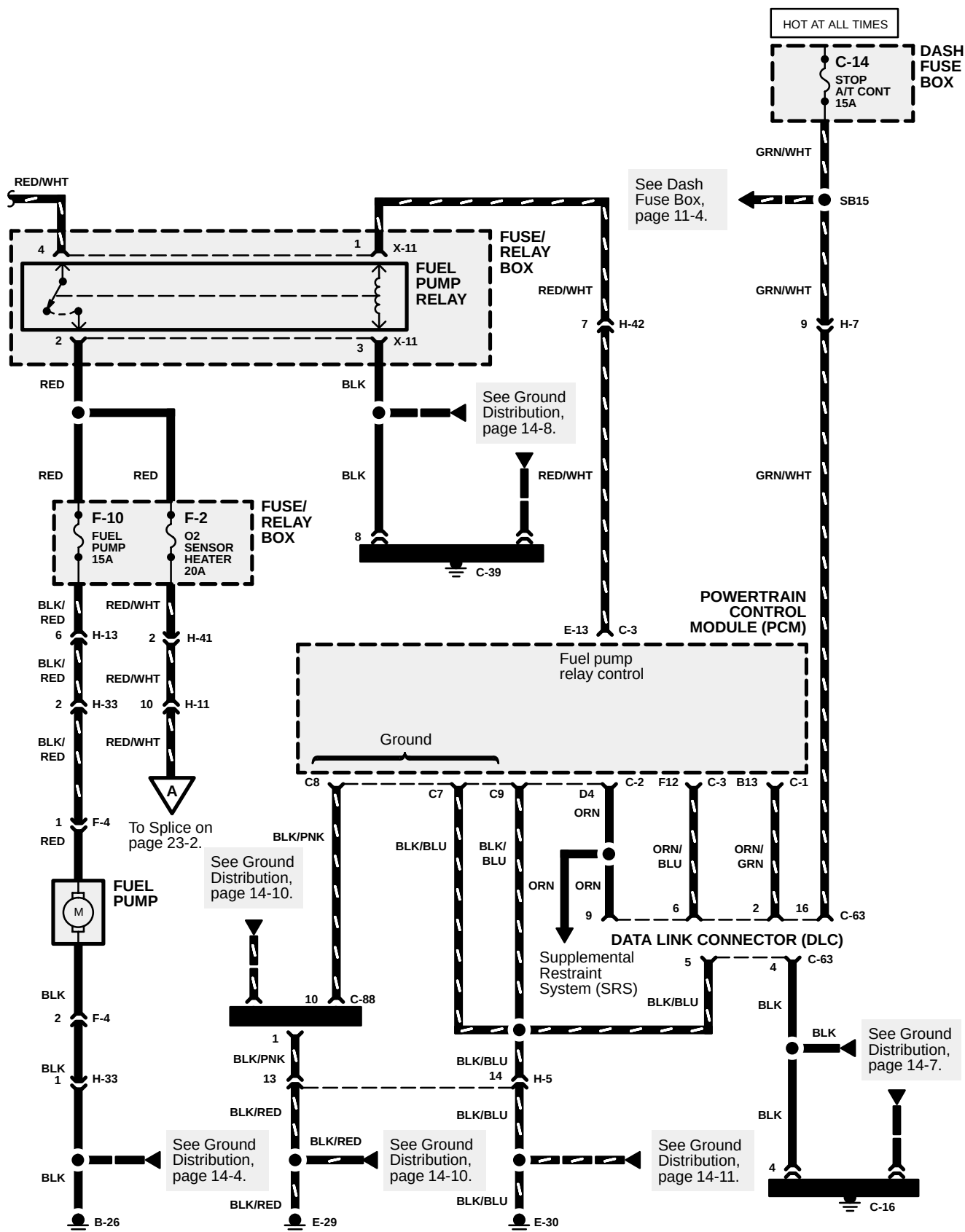
ENGINE CONTROL

Circuit Schematic



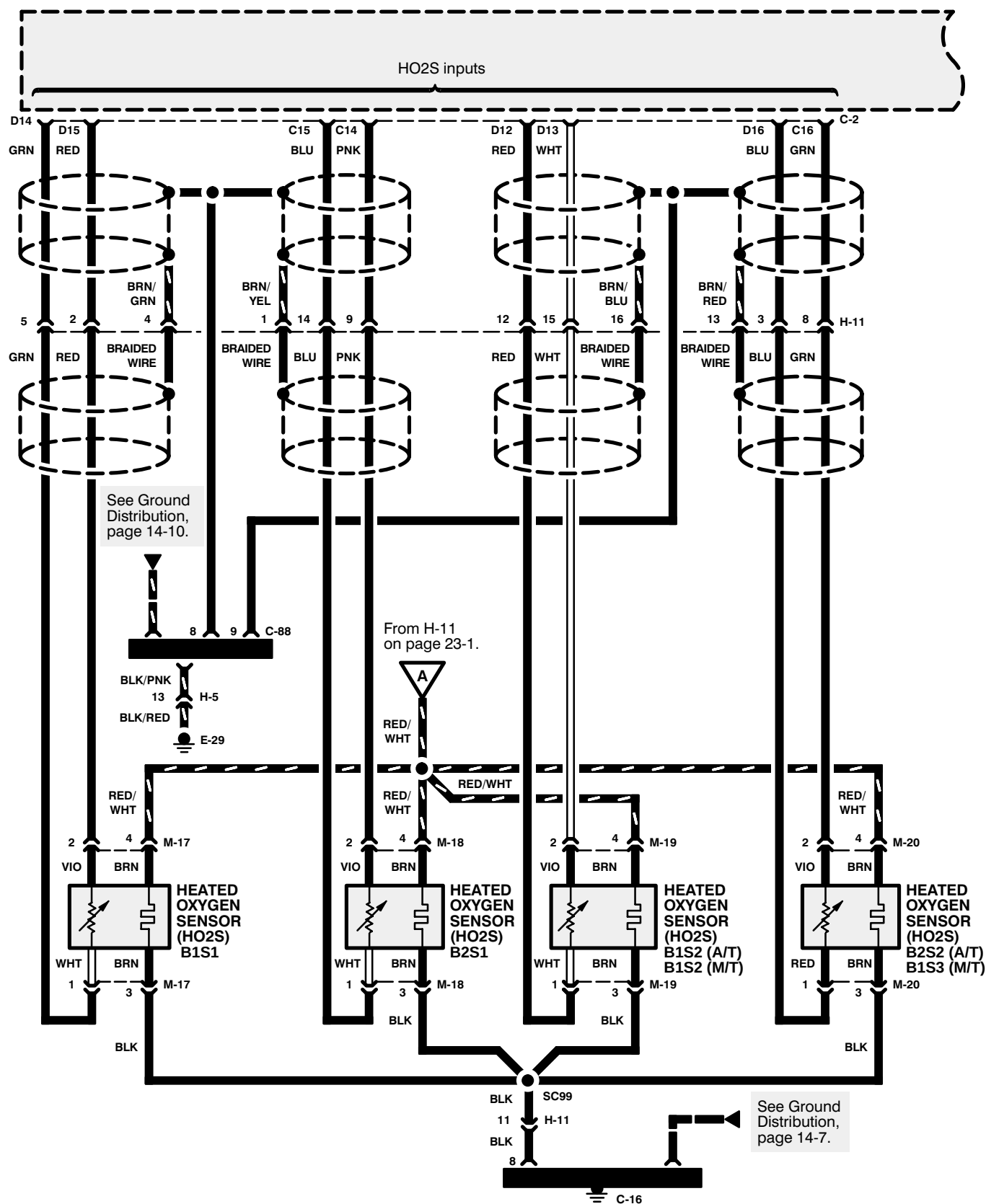
ENGINE CONTROL

Circuit Schematic



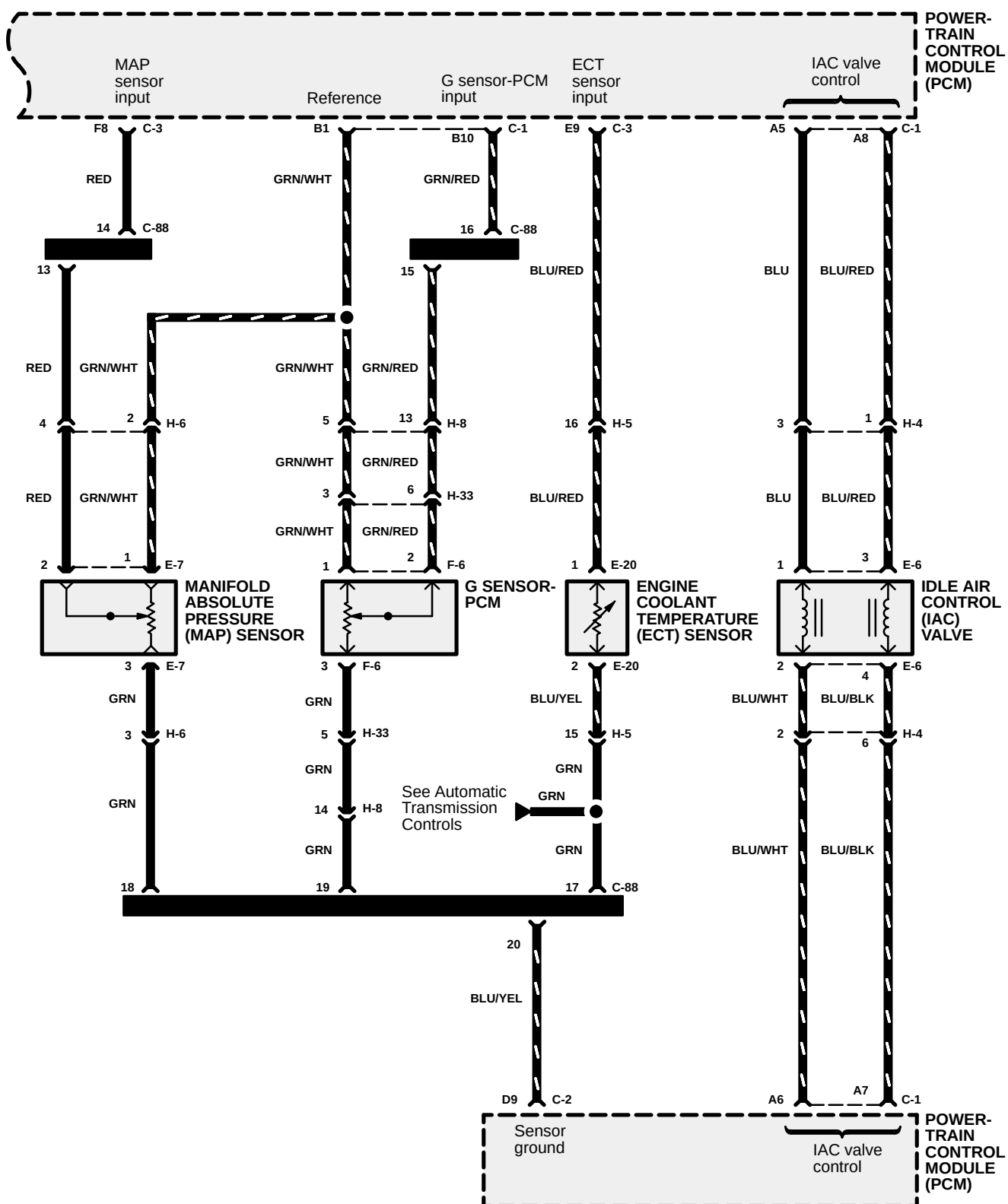
ENGINE CONTROL

Circuit Schematic



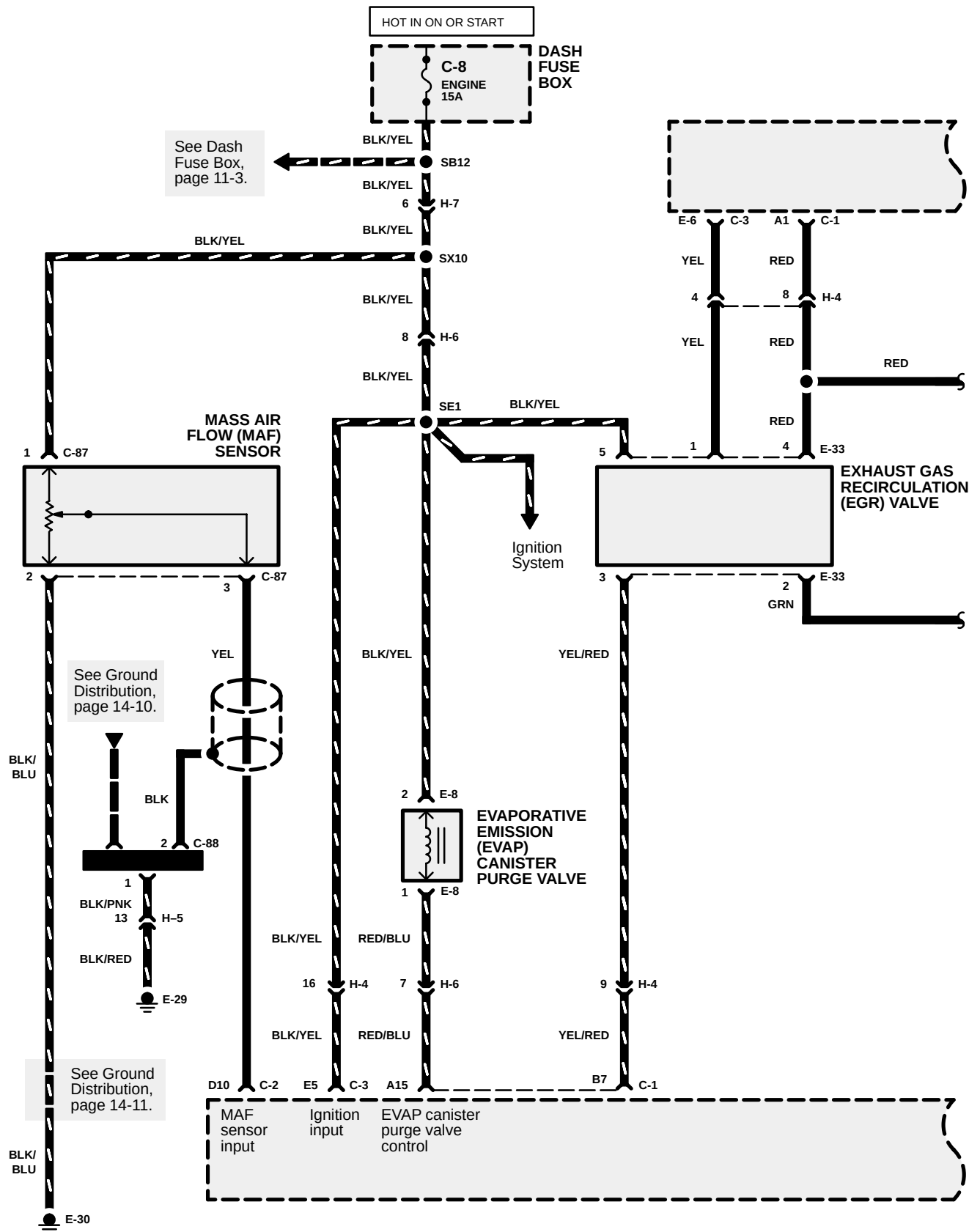
ENGINE CONTROL

Circuit Schematic



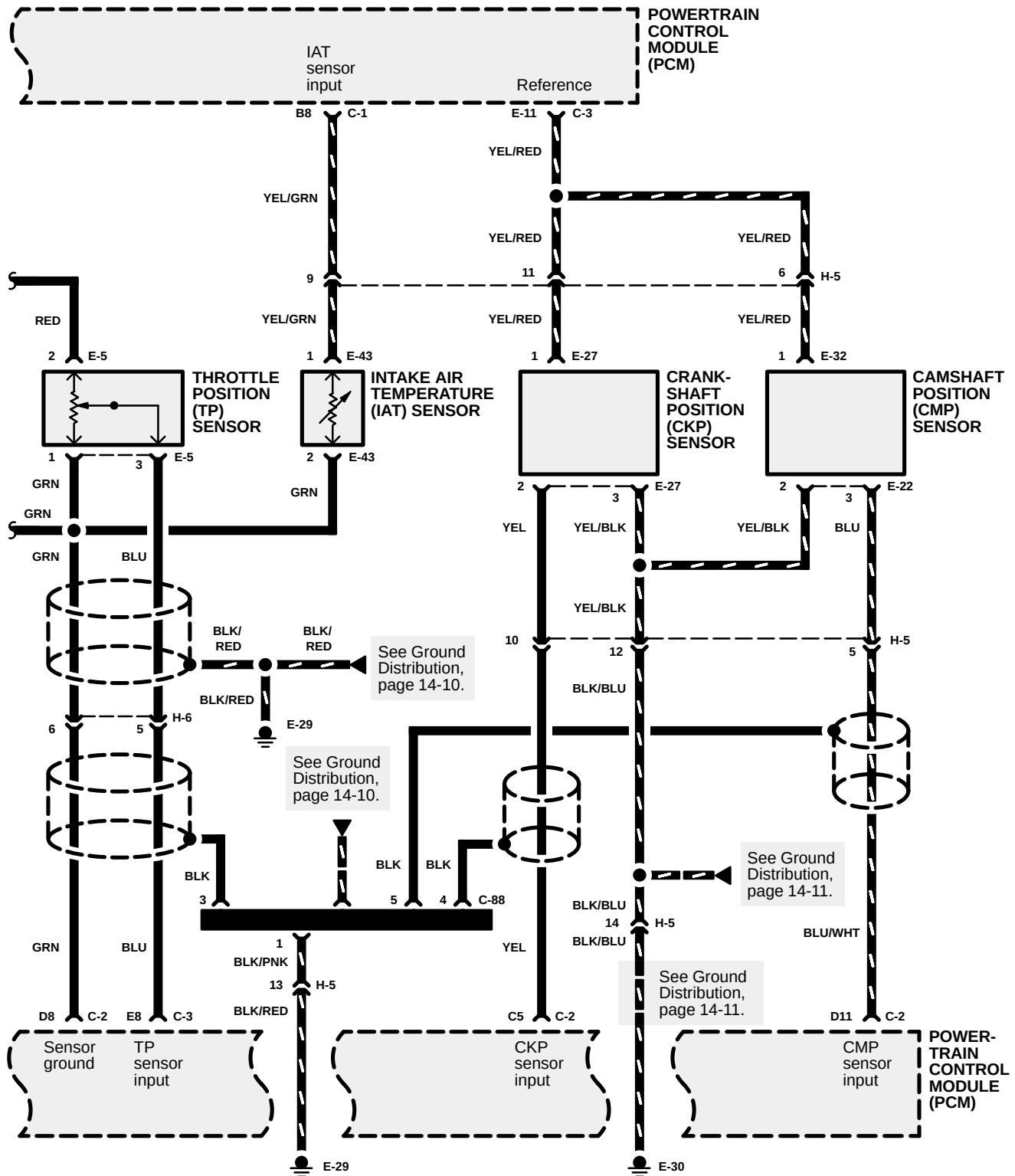
ENGINE CONTROL

Circuit Schematic



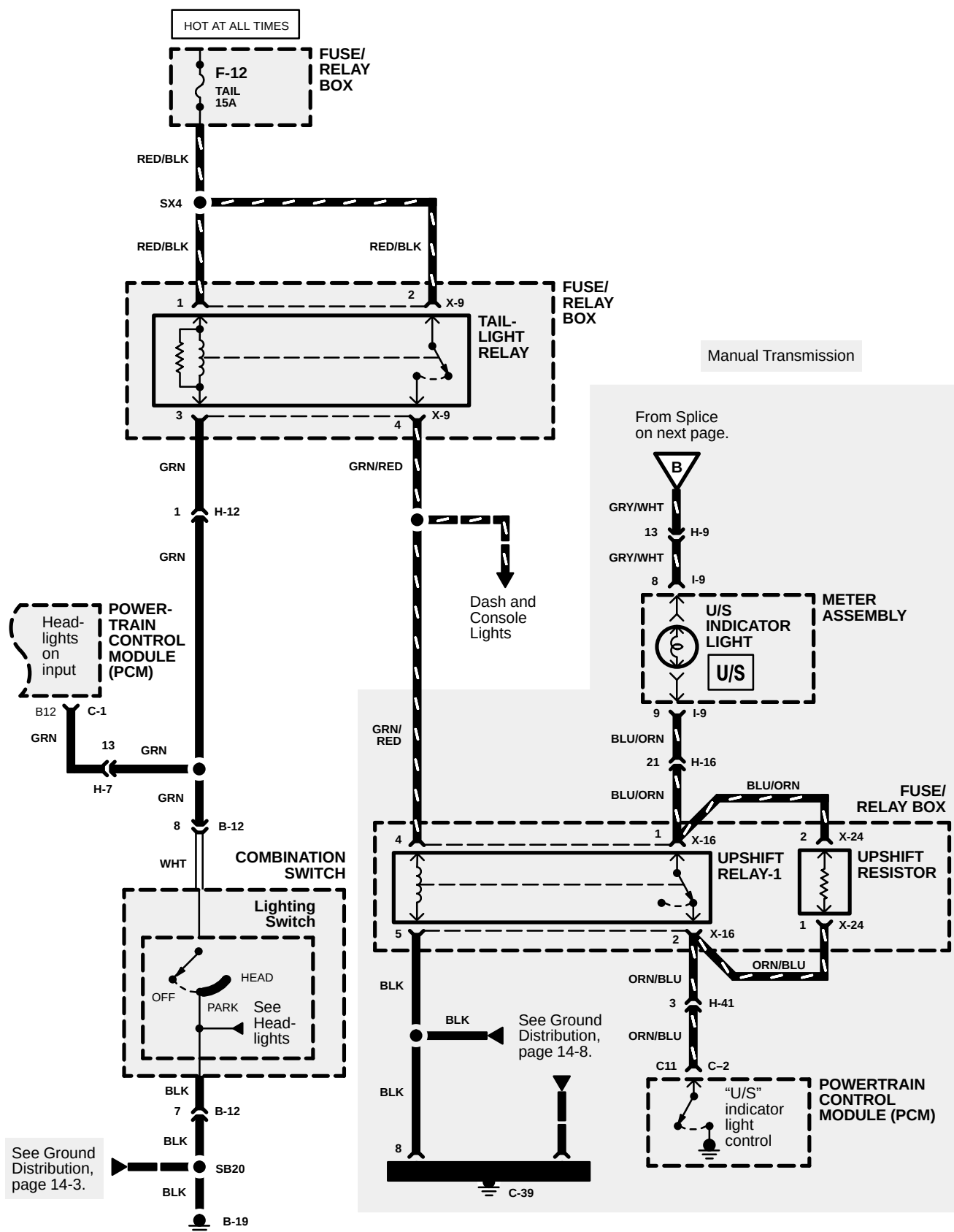
ENGINE CONTROL

Circuit Schematic



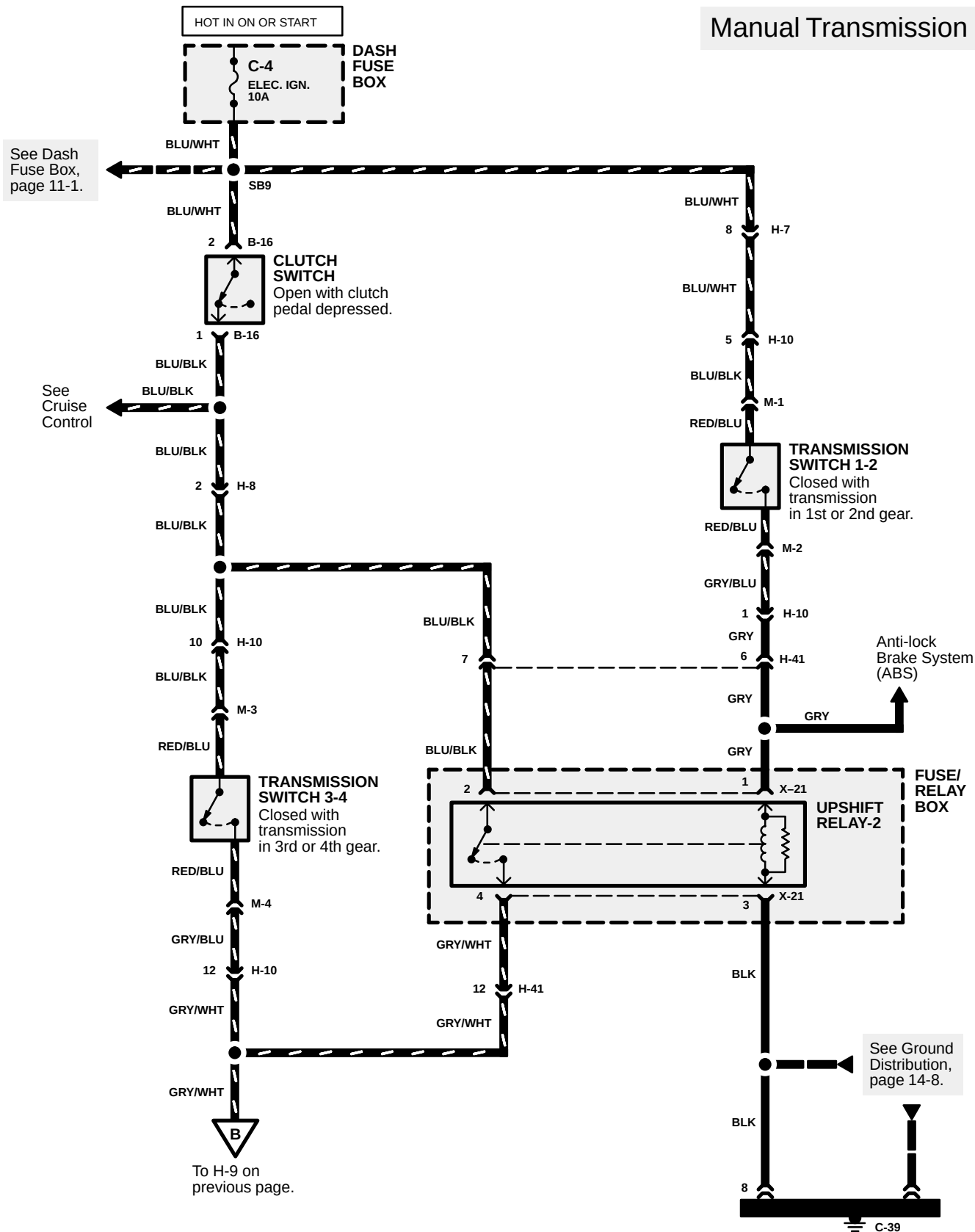
ENGINE CONTROL

Circuit Schematic



ENGINE CONTROL

Circuit Schematic



ENGINE CONTROL

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Camshaft Position (CMP)	
Sensor	Left front of engine 14
Clutch Switch	Below I/P, top of clutch pedal support 57
Crankshaft Position (CKP)	
Sensor	Lower right side of engine, above oil pan 18
Dash Fuse Box	Behind left dash side trim panel 51
Data Link Connector (DLC)	
C63 (16-BLK)	Left I/P lower cover, behind access cover 47
Engine Coolant Temperature (ECT) Sensor	Right rear of engine 115
Evaporative Emission (EVAP)	
Canister Purge Valve	Top left rear of engine 15
Exhaust Gas Recirculation (EGR) Valve	Top left rear of engine 16
Fuel Pump	Beneath rear of vehicle, in top of fuel tank
Fuel Pump Relay	In fuse/relay box 38
Fuse/Relay Box	Right side of engine compartment, on inner fender panel 33
G Sensor - PCM	Left front of fuel tank 100
Heated Oxygen Sensor (HO2S)	
B1S1	In right exhaust down pipe 21
Heated Oxygen Sensor (HO2S)	
B2S1	In left exhaust down pipe 25
Heated Oxygen Sensor (HO2S)	
B1S2 (A/T)	In rear of right catalytic converter 29
Heated Oxygen Sensor (HO2S)	
B1S2 (M/T)	Rear of catalytic converter 121
Heated Oxygen Sensor (HO2S)	
B2S2 (A/T)	In rear of left catalytic converter 30
Heated Oxygen Sensor (HO2S)	
B1S3 (M/T)	Forward of catalytic converter 6
Idle Air Control (IAC)	
Valve	Top left side of engine, on air intake assembly 16
Ignition Control Module (ICM)	Top center of engine 15
Intake Air Temperature (IAT) Sensor	Top left side of engine, in air intake hose 10
Knock Sensor (KS)	Top of engine, below intake manifold 114
Manifold Absolute Pressure (MAP) Sensor	Top right side of engine 11
Mass Air Flow (MAF) Sensor	Left front corner of engine compartment 13
PCM Main Relay	In fuse/relay box 38
Power Steering Pressure (PSP) Switch	Lower right front of engine compartment 22
Powertrain Control Module (PCM)	Behind the lower cluster assembly 62
Taillight Relay	In fuse/relay box 35
Throttle Position (TP)	
Sensor	Top left side of engine, on air intake assembly 10
Transmission Switch 1-2	Beneath vehicle, on right side of transmission

ENGINE CONTROL

Component Location Index

(Refer to Section 201 for photographs.)

Component

Photo No.

Transmission Switch 3-4	Beneath vehicle, on left side of transmission	
Upshift Relay-1	In fuse/relay box	34
Upshift Relay-2	In fuse/relay box	34
Upshift Resistor	In fuse/relay box	34
Vacuum Switch	Left rear of engine compartment	28

Connector

B-12 (16-WHT)	Below I/P, right of steering column	58
C-26 (2-BLK)	Lower right front of engine compartment, below battery tray	22
C-88 (20-GRN) Junction		
Connector	Behind lower cluster assembly, taped to PCM breakout	63
E-14 (2-BLK)	Top rear of engine	114
F-4 (2-BLK)	Beneath rear of vehicle, right of fuel tank	100
H-4 (9-BLK)	Left side of engine compartment	13
H-5 (16-GRN)	Left side of engine compartment	13
H-6 (16-BLU)	Left side of engine compartment	13
H-7 (20-BRN/WHT)	Below I/P, above left dash side trim panel, on bracket	52
H-8 (16-BLK)	Below I/P, above left dash side trim panel, on bracket	53
H-9 (20-BLK)	Below I/P, above left dash side trim panel, on bracket	53
H-10 (12-BLU) (M/T)	Left front of engine compartment	27
H-11 (16-BLK)	Left front of engine compartment	27
H-12 (20-WHT)	Below I/P, above right dash side trim panel, on bracket	69
H-13 (6-GRY)	Below I/P, above right dash side trim panel, on bracket	69
H-16 (22-WHT)	Behind right dash side trim panel	73
H-33 (14-WHT)	In floor, below right front seat	110
H-41 (16-BLU)	Right front of engine compartment	31
H-42 (16-BLK)	Right front of engine compartment	31
H-54 (7-GRY)	Left side of engine compartment	13
I-9 (16-BLK)	On left rear of meter assembly	45
M-1 (1-CLR)	Beneath center of vehicle, top left side of transmission	
M-2 (1-CLR)	Beneath center of vehicle, top left side of transmission	
M-3 (1-CLR)	Beneath center of vehicle, top left side of transmission	
M-4 (1-CLR)	Beneath center of vehicle, top left side of transmission	
M-17 (4-BLK)	Near heated oxygen sensor (HO2S) A	
M-18 (4-BLK)	Near heated oxygen sensor (HO2S) B	25
M-19 (4-BLK) (A/T)	Near heated oxygen sensor (HO2S) C	29
M-19 (4-BLK) (M/T)	Near heated oxygen sensor (HO2S) C	121
M-20 (4-BLK)	Near heated oxygen sensor (HO2S) D	30

Ground

B-19	Behind top of left dash side trim panel	54
B-26	Below rear of center console	67
C-16	Left rear corner of engine compartment, on inner fender panel	28
C-39	Right rear corner of engine compartment, on inner fender panel	40
E-29	Top center front of engine	14
E-30	Top center front of engine	14

ENGINE CONTROL

Circuit Operation

The powertrain control module (PCM) receives inputs from the engine sensors and switches, controlling the functions of the engine. The powertrain control module (PCM) also turns on the “CHECK ENGINE” malfunction indicator lamp whenever a malfunction or abnormal engine performance is detected, and allows for diagnostic testing through the data link connector (DLC).

Refer to Section 6 of Workshop Manual for further engine diagnosis.