

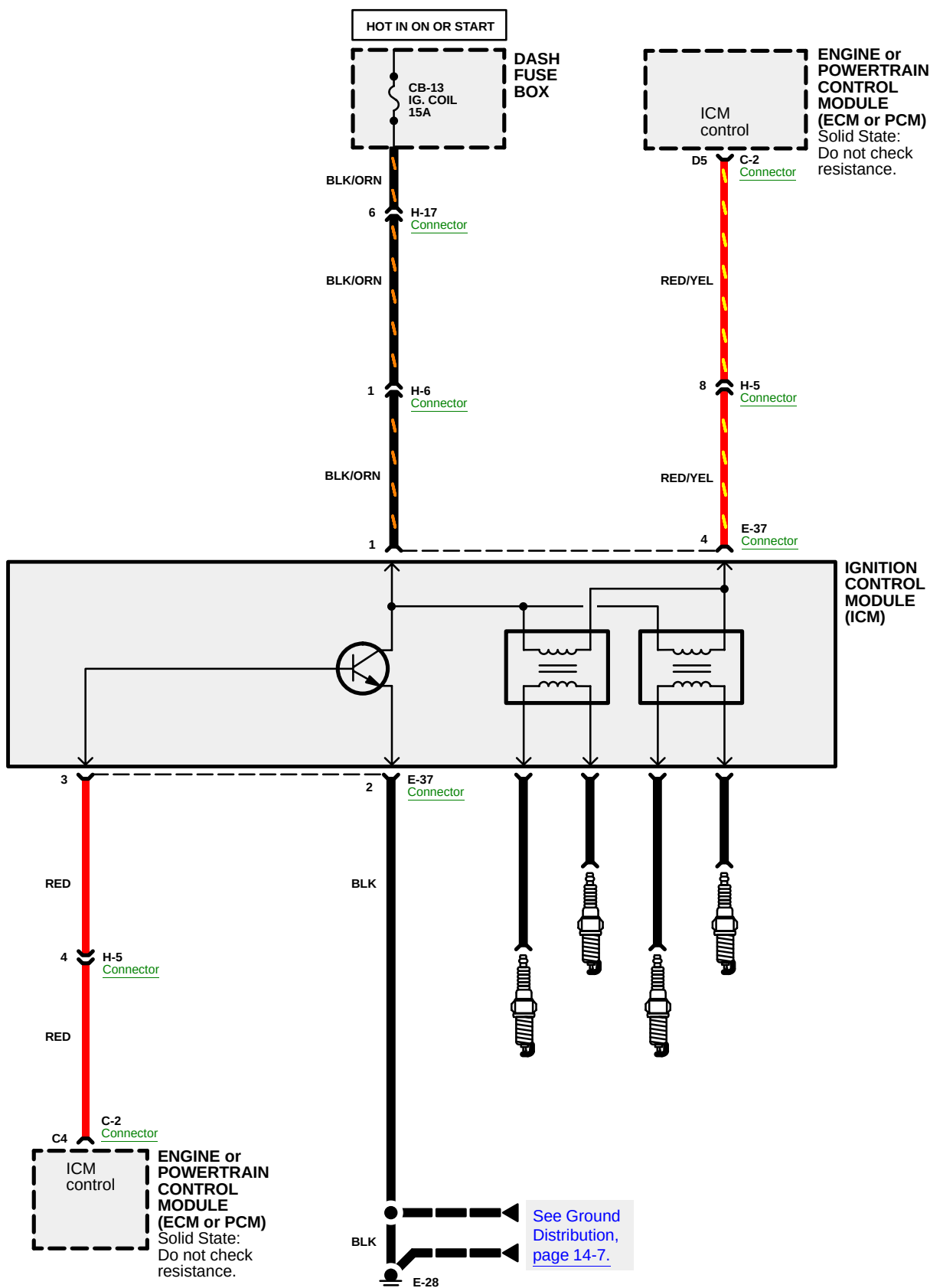
IGNITION SYSTEM

Component Index

- Camshaft Position (CMP) Sensor (2.2L)
- Condenser (3.2L)
- Crankshaft Position (CKP) Sensor (2.2L)
- Dash Fuse Box
- Engine or Powertrain Control Module (ECM or PCM) (2.2L)
- Engine Control Module (ECM) (3.2L)
- Ignition Control Module (ICM) (2.2L)
- Ion Sensing Module
- No. 1 Ignition Coil (3.2L)
- No. 2 Ignition Coil (3.2L)
- No. 3 Ignition Coil (3.2L)
- No. 4 Ignition Coil (3.2L)
- No. 5 Ignition Coil (3.2L)
- No. 6 Ignition Coil (3.2L)

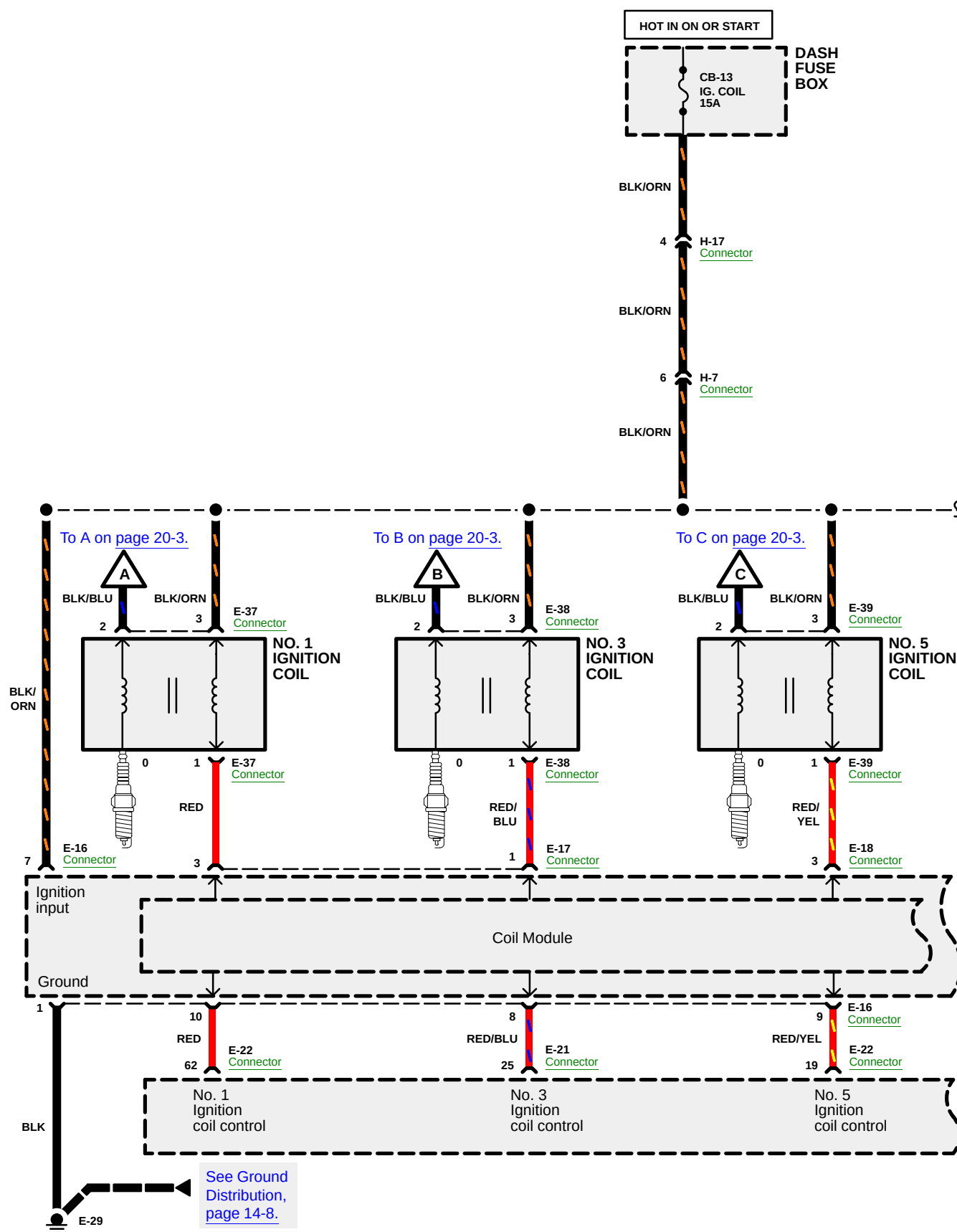
IGNITION SYSTEM: 2.2L

Circuit Schematic

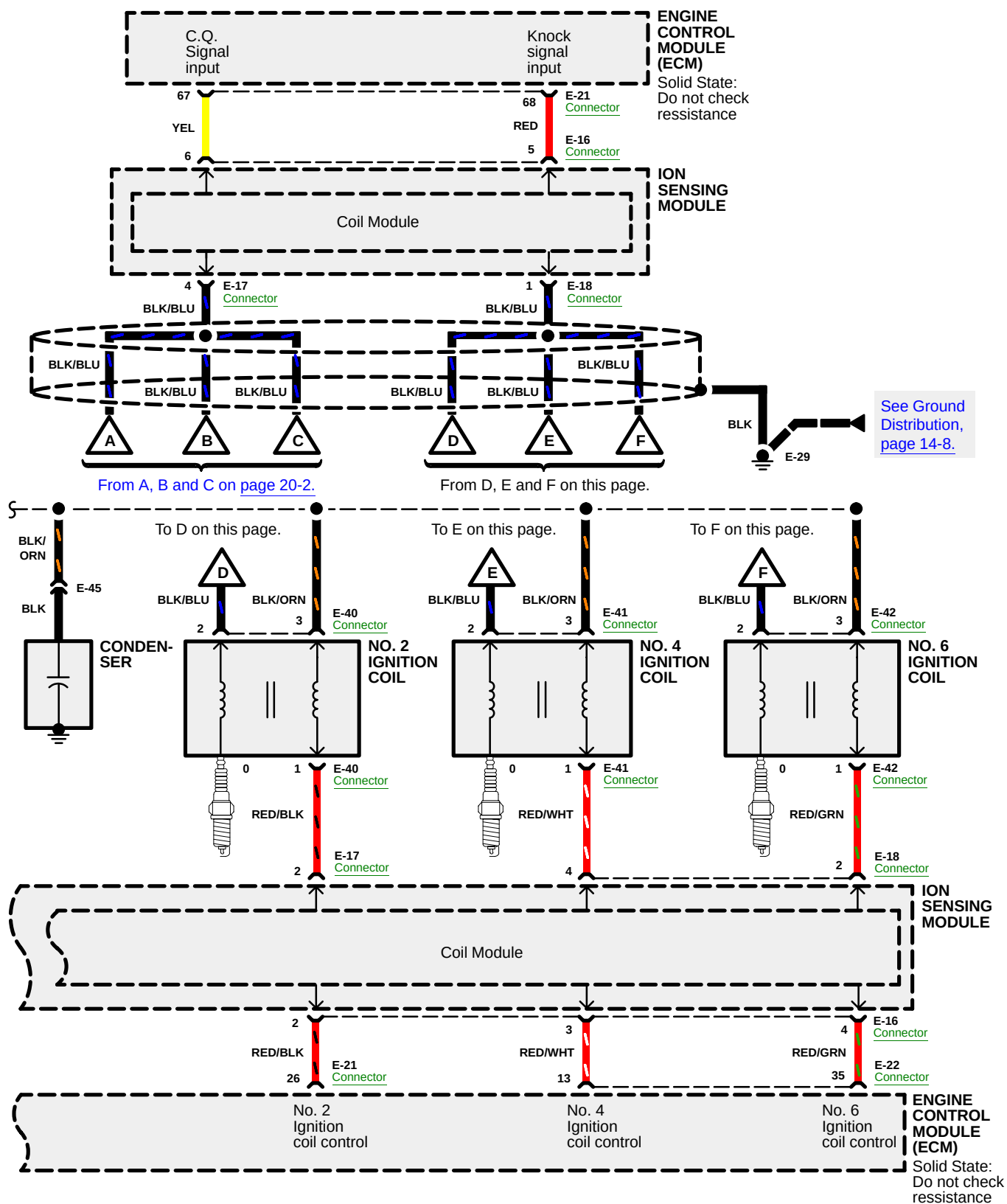


IGNITION SYSTEM: 3.2L

Circuit Schematic



IGNITION SYSTEM: 3.2L



IGNITION SYSTEM

Component Location Index

(Refer to Section 201 for photographs.)

Component	Photo No.
Camshaft Position (CMP)	
Sensor (2.2L)	Top center front of engine 42
Condenser (3.2L)	Top right front of engine 49
Crankshaft Position (CKP)	
Sensor (2.2L)	Lower front of engine
Dash Fuse Box	Left side of I/P, behind panel 58
Engine or Powertrain Control	
Module (ECM or PCM)	
(2.2L)	Below center of I/P 73
Engine Control	
Module (ECM) (3.2L)	Left side of engine compartment 44
Ignition Control Module	
(ICM) (2.2L)	Right rear of engine 34
Ion Sensing Module	Top of intake manifold 50
No. 1 Ignition Coil (3.2L)	On right engine bank 23
No. 2 Ignition Coil (3.2L)	On left engine bank 51
No. 3 Ignition Coil (3.2L)	On right engine bank 23
No. 4 Ignition Coil (3.2L)	On left engine bank 51
No. 5 Ignition Coil (3.2L)	On right engine bank 23
No. 6 Ignition Coil (3.2L)	On left engine bank 51
Connector	
C-37 (22-WHT) (2.2L)	Below center of I/P, below ECM or PCM 123
E-27 (3-BLK) (2.2L)	Right front of eninge 39
E-45 (1-BLK)	Front of engine, near throttle body 49
H-5 (16-GRN) (2.2L)	Left side of engine compartment, below brake fluid reservoir 11
H-6 (16-BLU) (2.2L)	Left side of engine compartment, below brake fluid reservoir 11
H-7 (16-BLK) (3.2L)	Left side of engine compartment 27
H-17 (19-BLK) (A/T)	Behind left kick panel 62
Ground	
E-28 (2.2L)	Right rear of engine 34
E-29 (3.2L)	Top left side of engine 54

Circuit Operation

With the starter switch in ON or START, battery voltage is applied to the Engine (M/T) or Powertrain (A/T) Control Module (ECM) or (PCM), various engine sensors, and the ignition control module (ICM)/(2.2L) or ignition coils and ION Sensing Module (3.2L). When the engine is cranked to start, the crank shaft position (CKP) sensor sends timing information directly to the ECM/PCM, which breaks the ground path in the primary of the ignition coils, thus creating a high voltage secondary impulse which fires the spark plugs, and the engine starts. The ECM/PCM receives information such as firing order and starting timing at each ignition coil from the CKP sensor. The ECM/PCM relies on information from various engine sensors to determine correct ignition timing.

(The 2.2L utilizes the “waste spark” system, that fires two spark plugs simultaneously, with the highest voltage intensity in the cylinder under compression.)