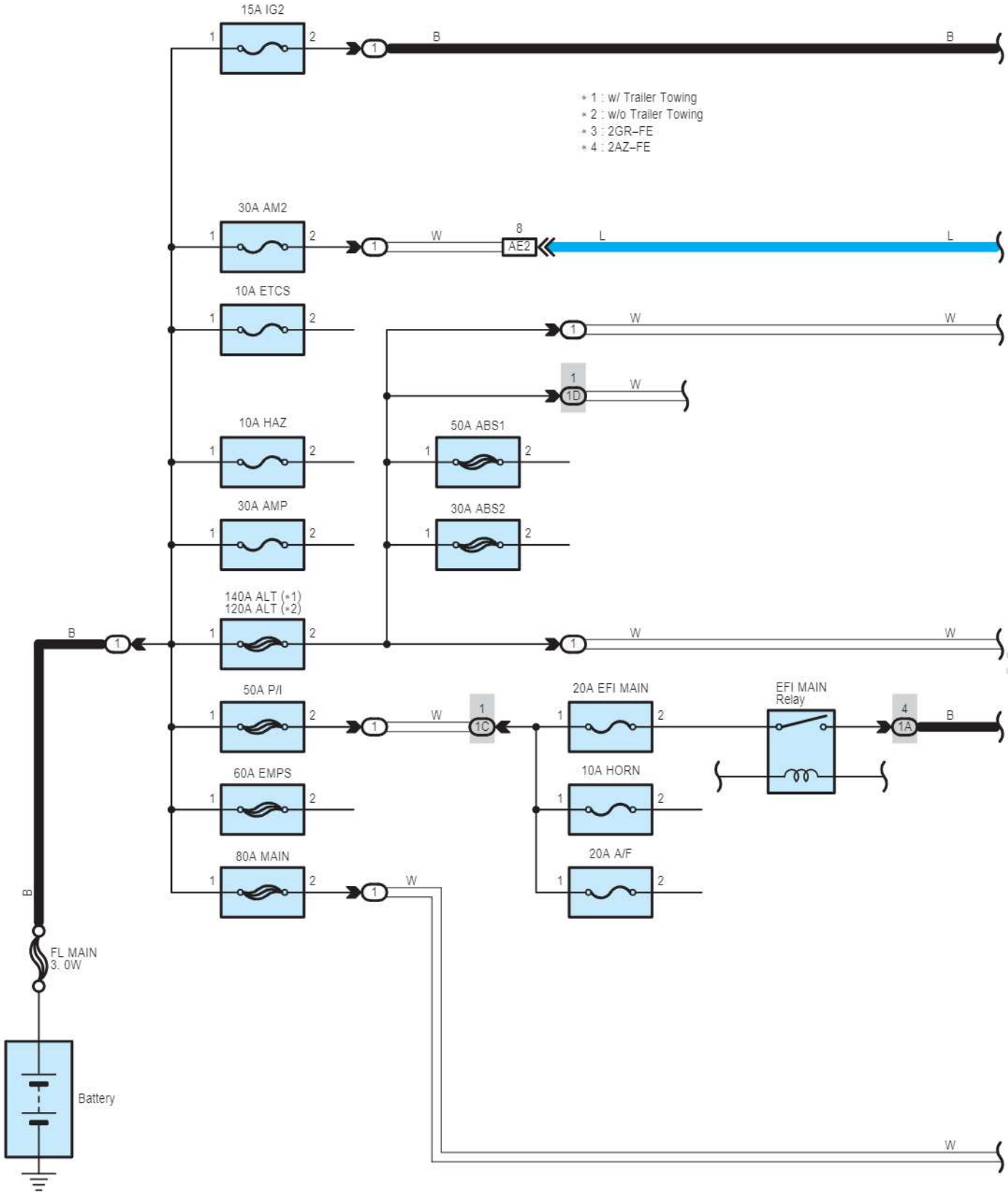
2007 RAV4
ELECTRICAL WIRING DIAGRAM
SYSTEM CIRCUITS

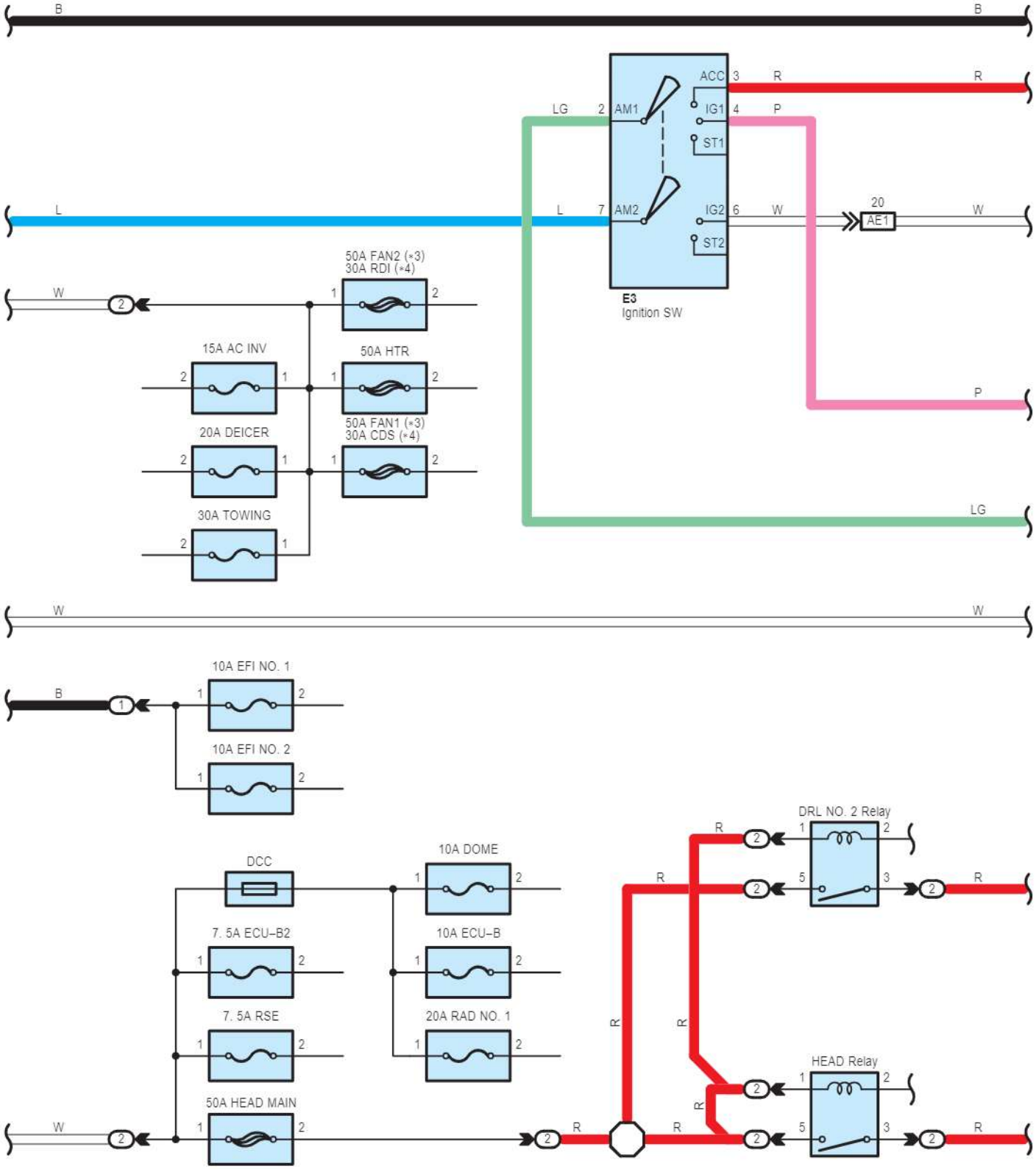
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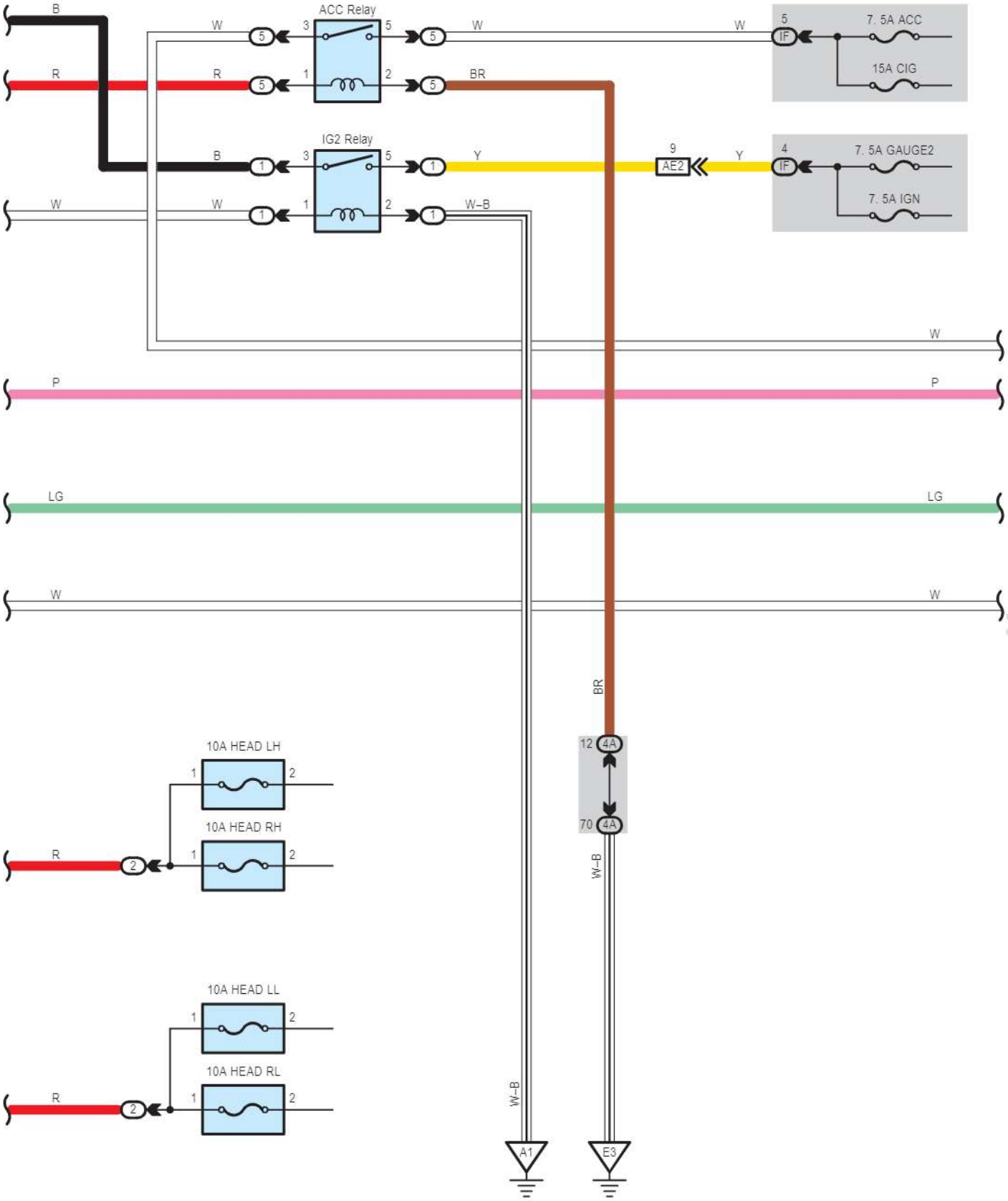
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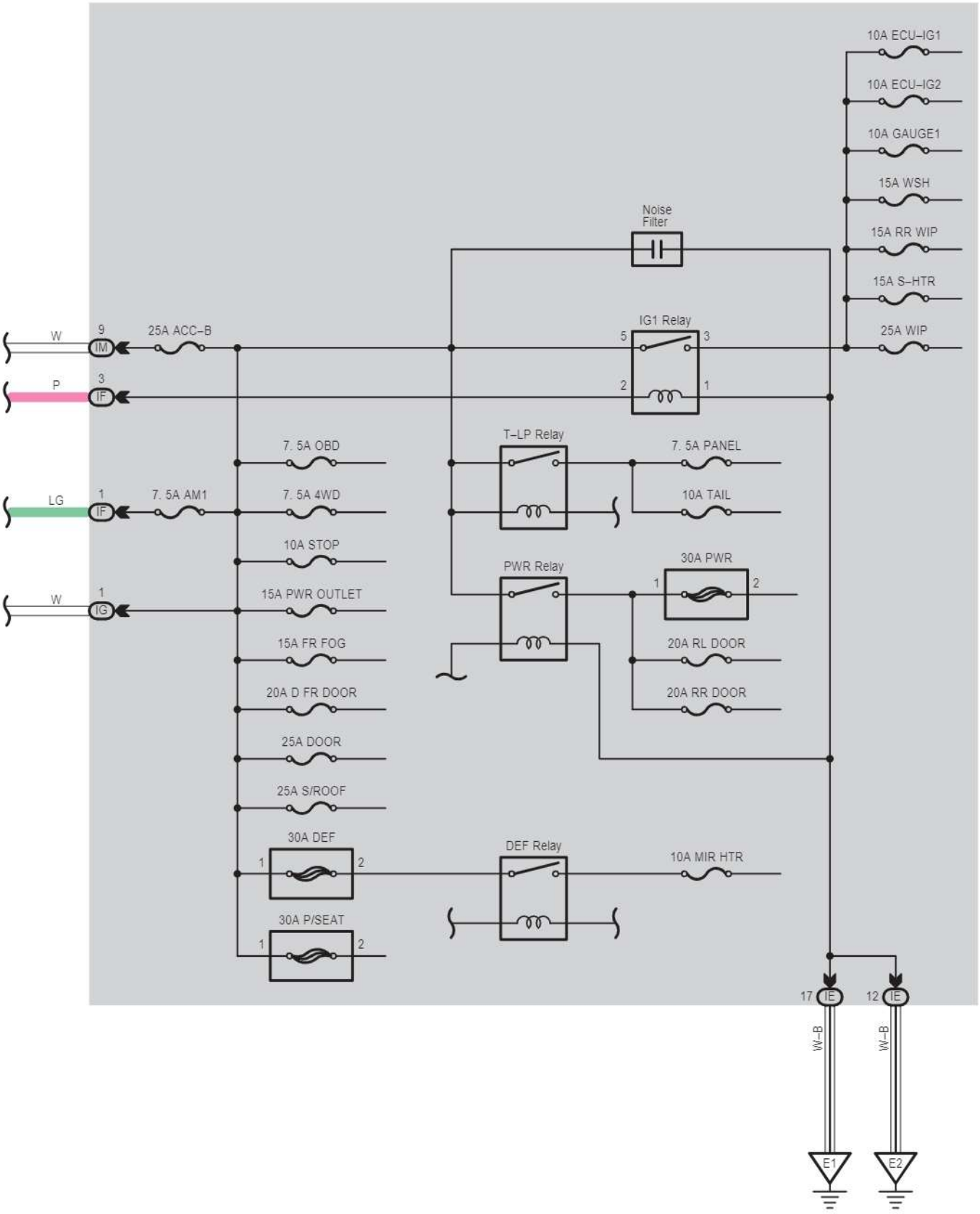
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Power Source

○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
E3	54				

⬭ : **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE) 23 (2AZ–FE)	Engine Room R/B No.1 (Engine Compartment Left)
2	26 (2GR–FE) 27 (2AZ–FE)	Engine Room R/B No.2 (Engine Compartment Right)
5	28	R/B No.5 (Cowl Side Left)

⬭ : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A 1C	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1D	22 (2GR–FE) 23 (2AZ–FE)	Engine Wire and Engine Room J/B (Engine Compartment Left)
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IE IF	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IG	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)

▭ : **Connector Joining Wire Harness and Wire Harness**

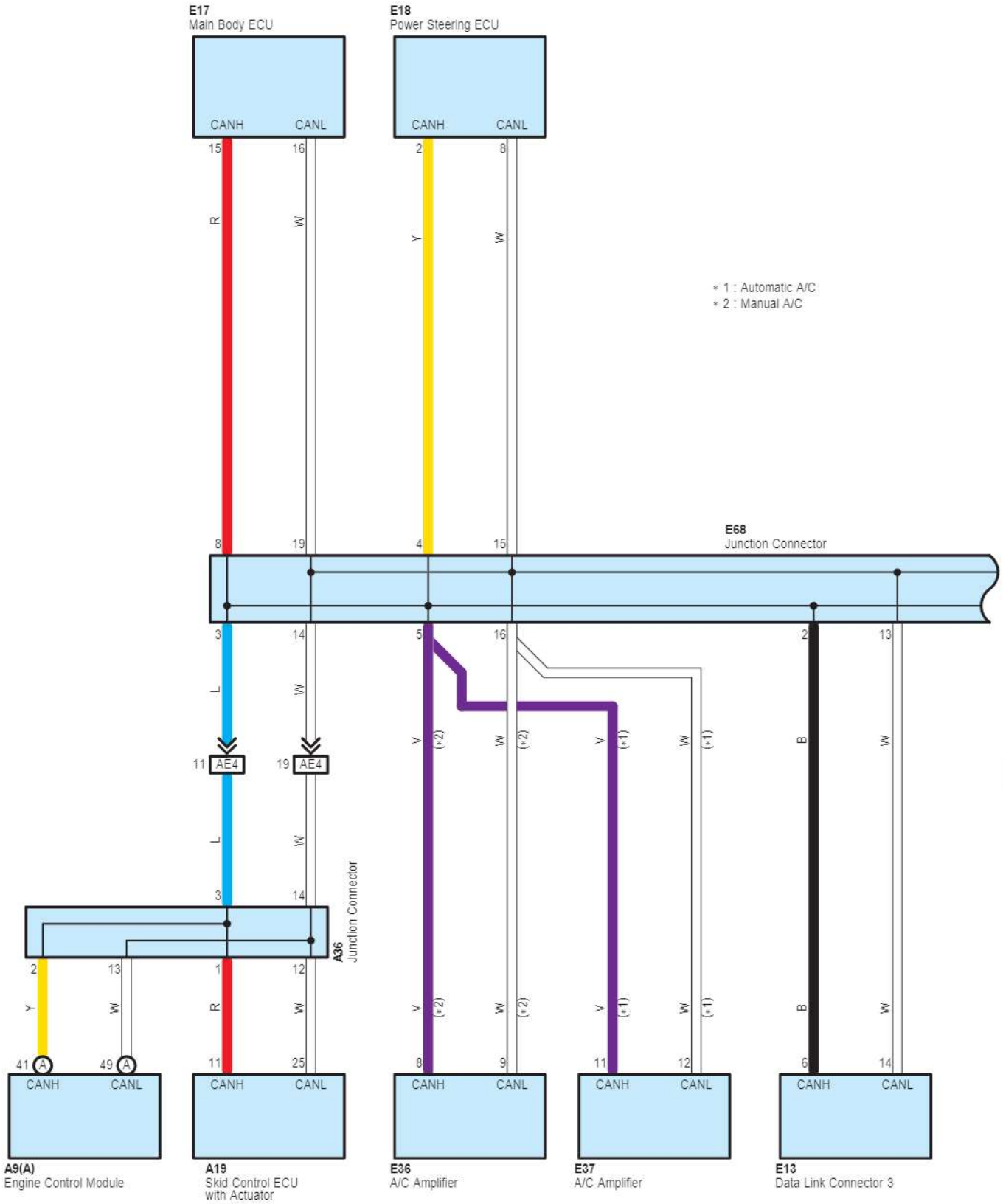
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE1 AE2	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)

▽ : **Ground Points**

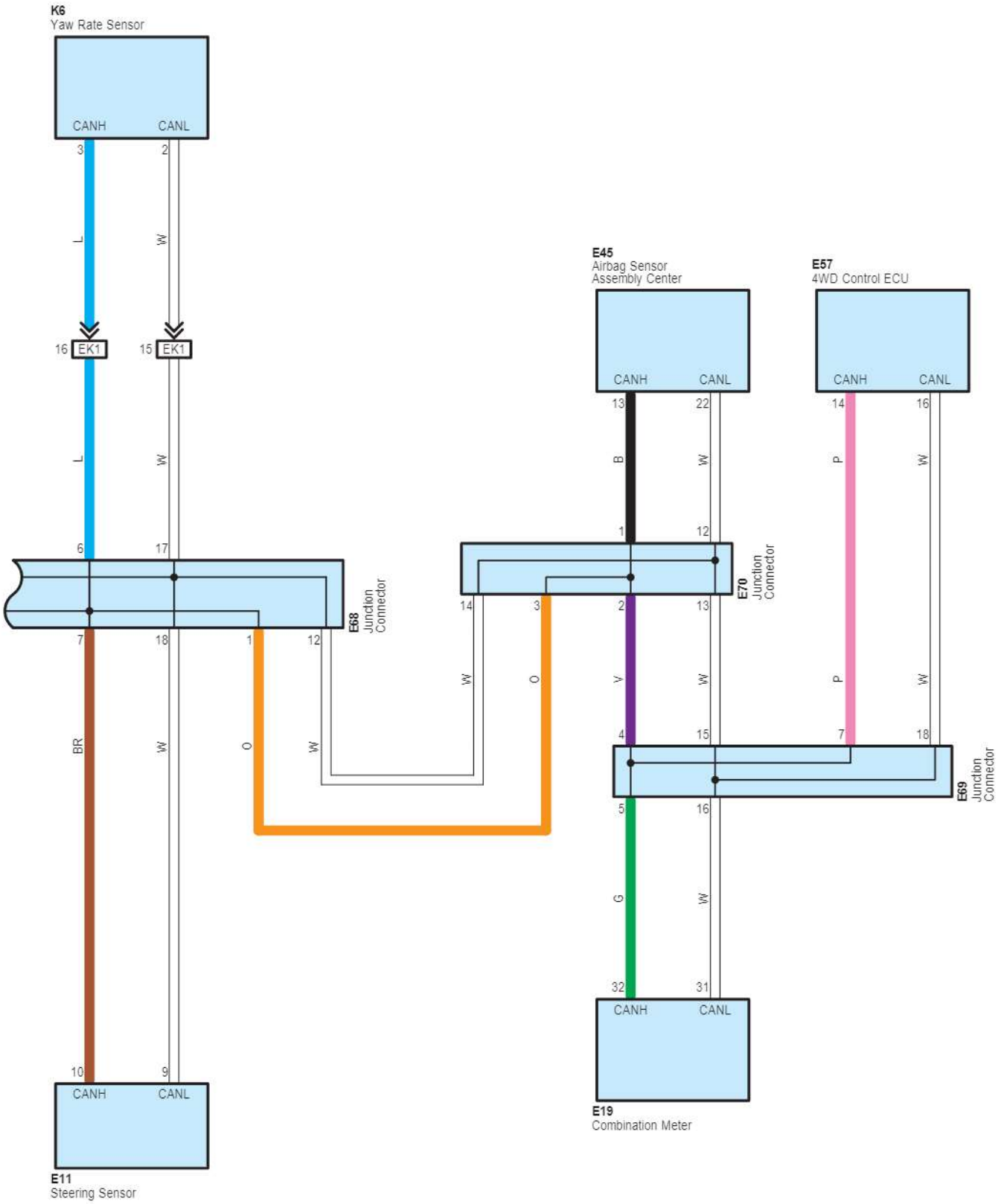
Code	See Page	Ground Points Location
A1	64 (2GR–FE) 65 (2AZ–FE)	Front Left Fender
E1	66	Left Kick Panel
E2	66	Instrument Panel Reinforcement Left
E3	66	Instrument Panel Reinforcement Center

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Multiplex Communication System – CAN

System Outline

CAN has two lines as a pair which make communication with operating voltage. CAN has excellent data speed and error detecting capacity. It consists of vehicle control systems such as 4WD control ECU, A/C amplifier, airbag sensor assembly center, combination meter, data link connector 3, engine control module, main body ECU, power steering ECU, skid control ECU with actuator, steering sensor and yaw rate sensor.

○ : **Parts Location**

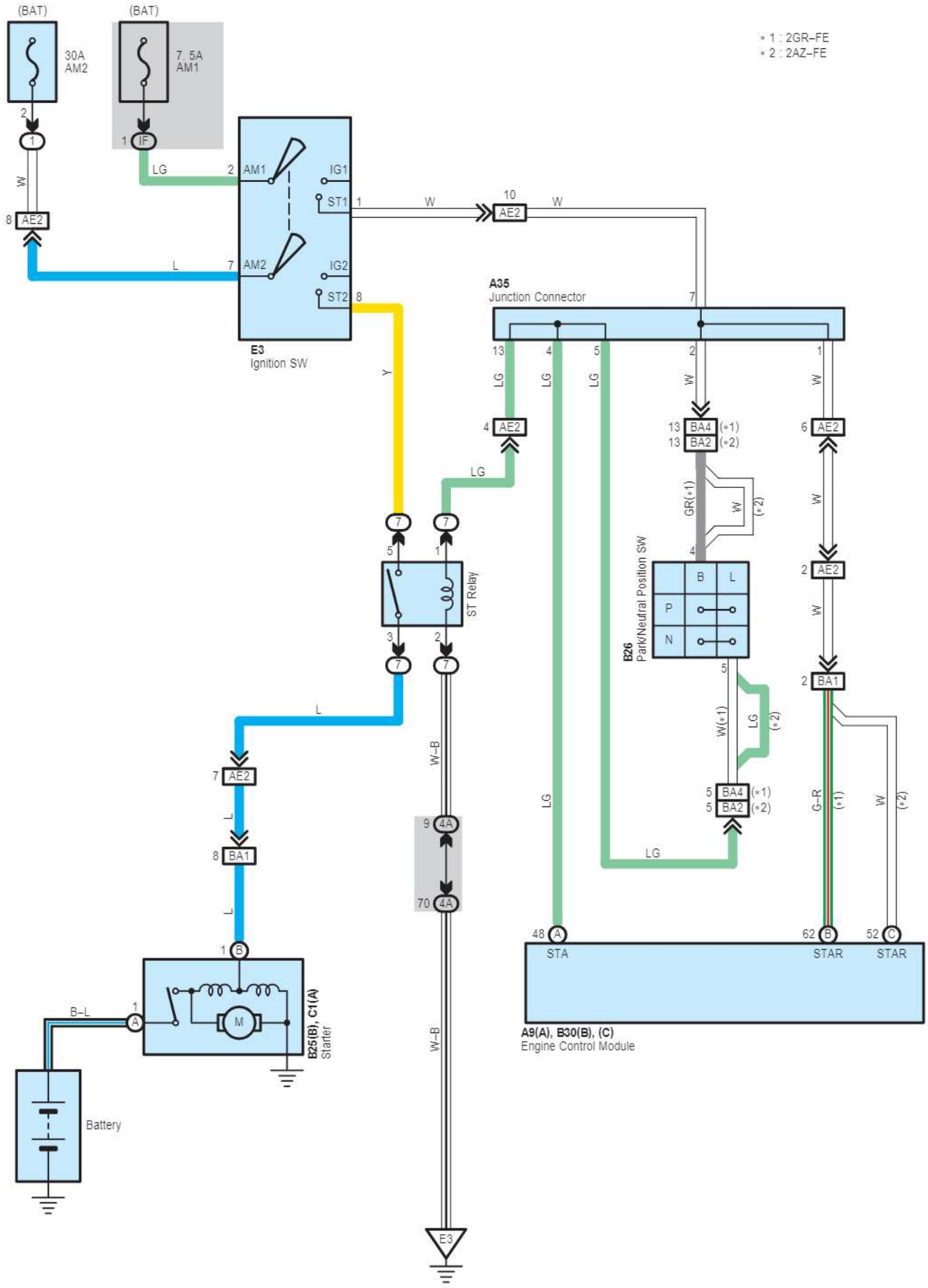
Code		See Page	Code	See Page	Code	See Page
A9	A	50 (2GR–FE)	E13	54	E45	55
		52 (2AZ–FE)	E17	54	E57	55
A19		50 (2GR–FE)	E18	54	E68	55
		52 (2AZ–FE)	E19	54	E69	55
A36		56	E36	55	E70	55
E11		54	E37	55	K6	59

▭ : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
EK1	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)

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: Parts Location

Code		See Page	Code		See Page	Code		See Page
A9	A	50 (2GR–FE)	B25	B	53 (2AZ–FE)	B30	C	53 (2AZ–FE)
		52 (2AZ–FE)	B26		51 (2GR–FE)	C1	A	51 (2GR–FE)
A35		56			53 (2AZ–FE)			53 (2AZ–FE)
B25	B	51 (2GR–FE)	B30	B	51 (2GR–FE)	E3		54

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	
7	29	R/B No.7 (Cowl Side Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IF	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)

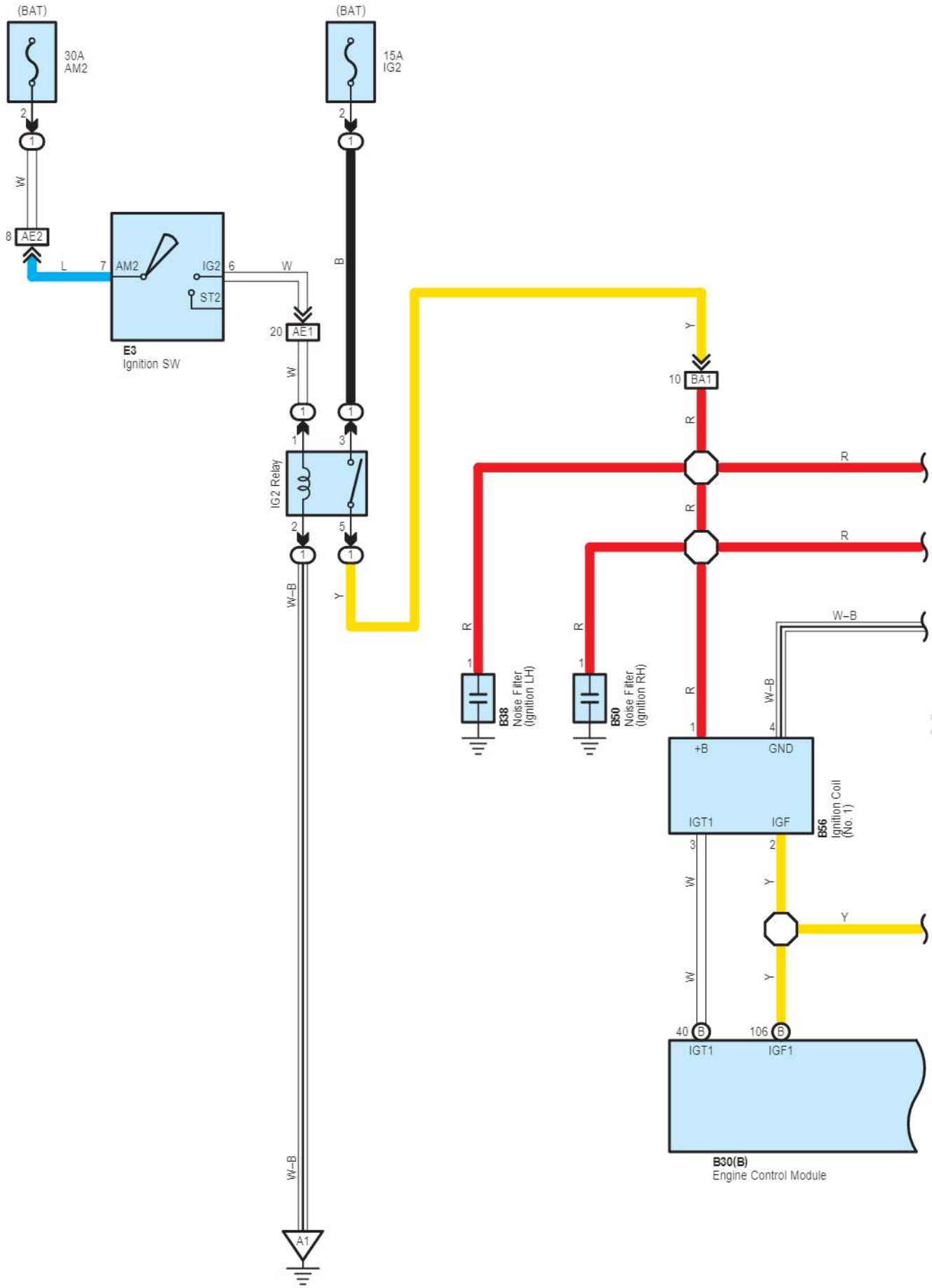
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE2	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
	65 (2AZ–FE)	
BA2	65 (2AZ–FE)	
BA4	64 (2GR–FE)	

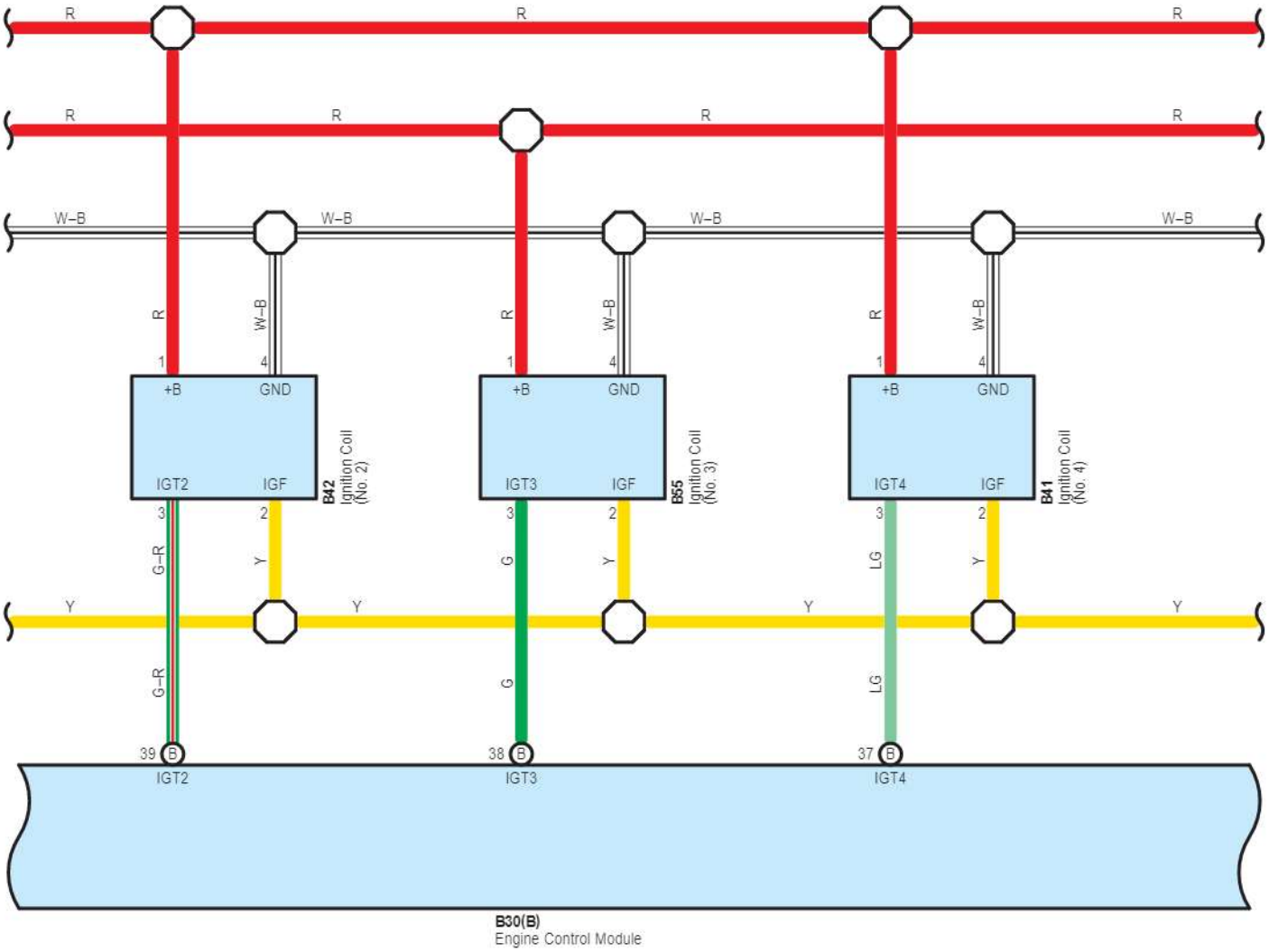
: Ground Points

Code	See Page	Ground Points Location
E3	66	Instrument Panel Reinforcement Center

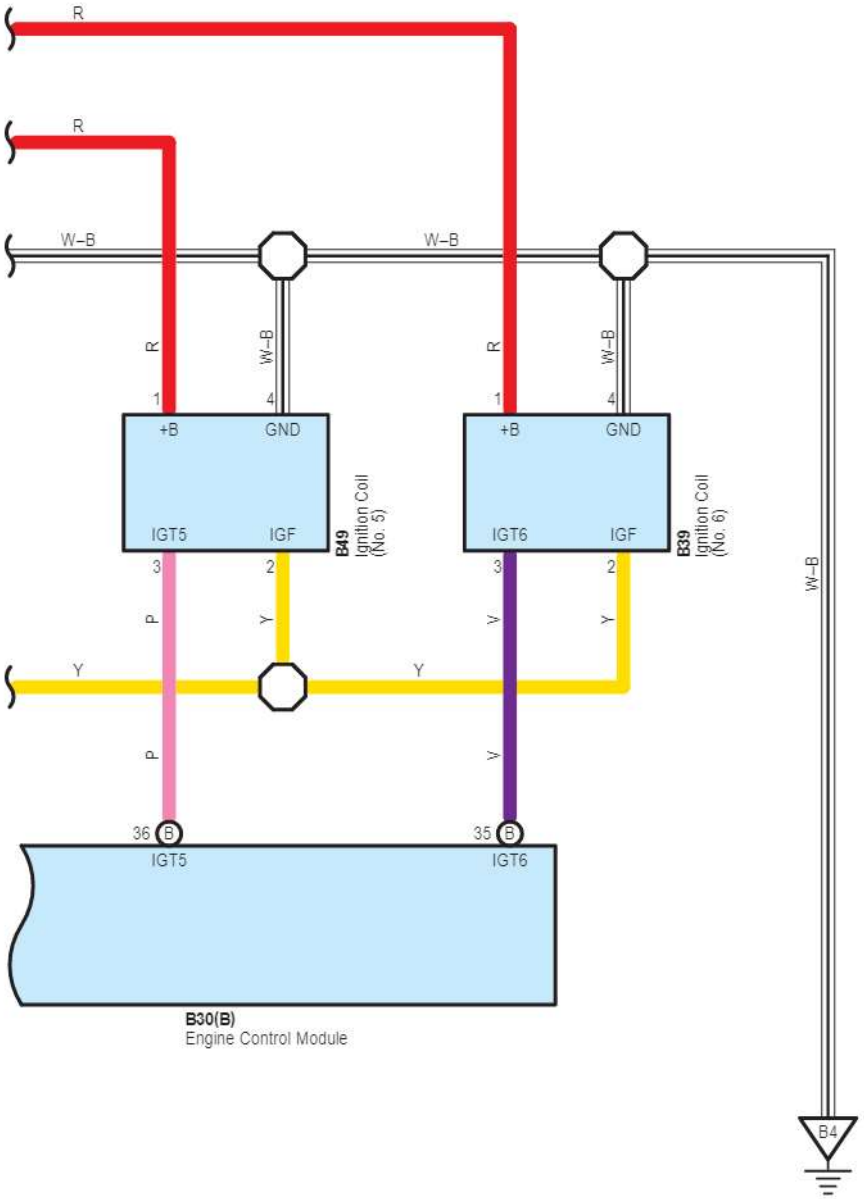
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: Parts Location

Code	See Page	Code	See Page	Code	See Page
B30 B	51 (2GR–FE)	B42	51 (2GR–FE)	B56	51 (2GR–FE)
B38	51 (2GR–FE)	B49	51 (2GR–FE)	E3	54
B39	51 (2GR–FE)	B50	51 (2GR–FE)		
B41	51 (2GR–FE)	B55	51 (2GR–FE)		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)

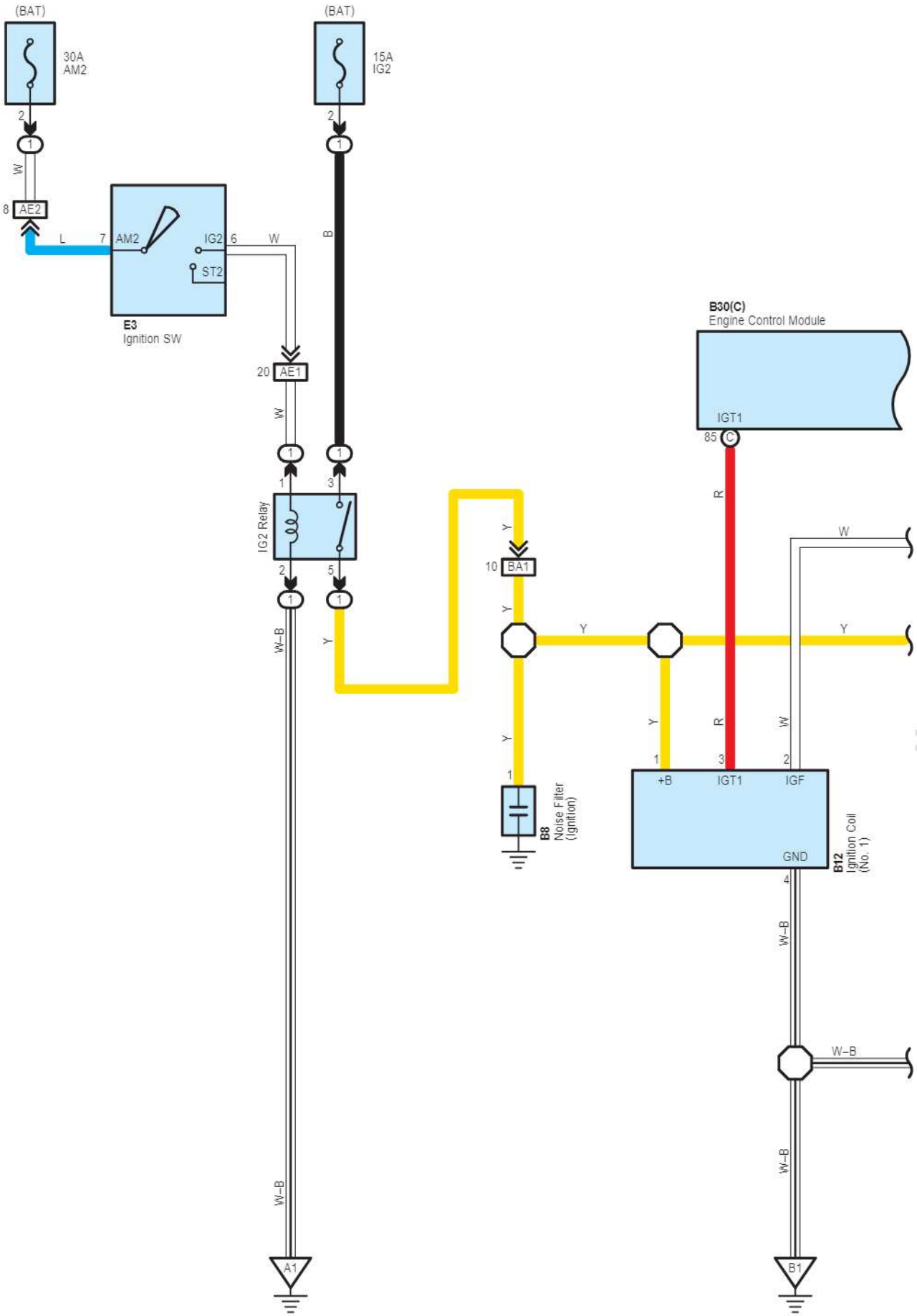
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE1	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE2		
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)

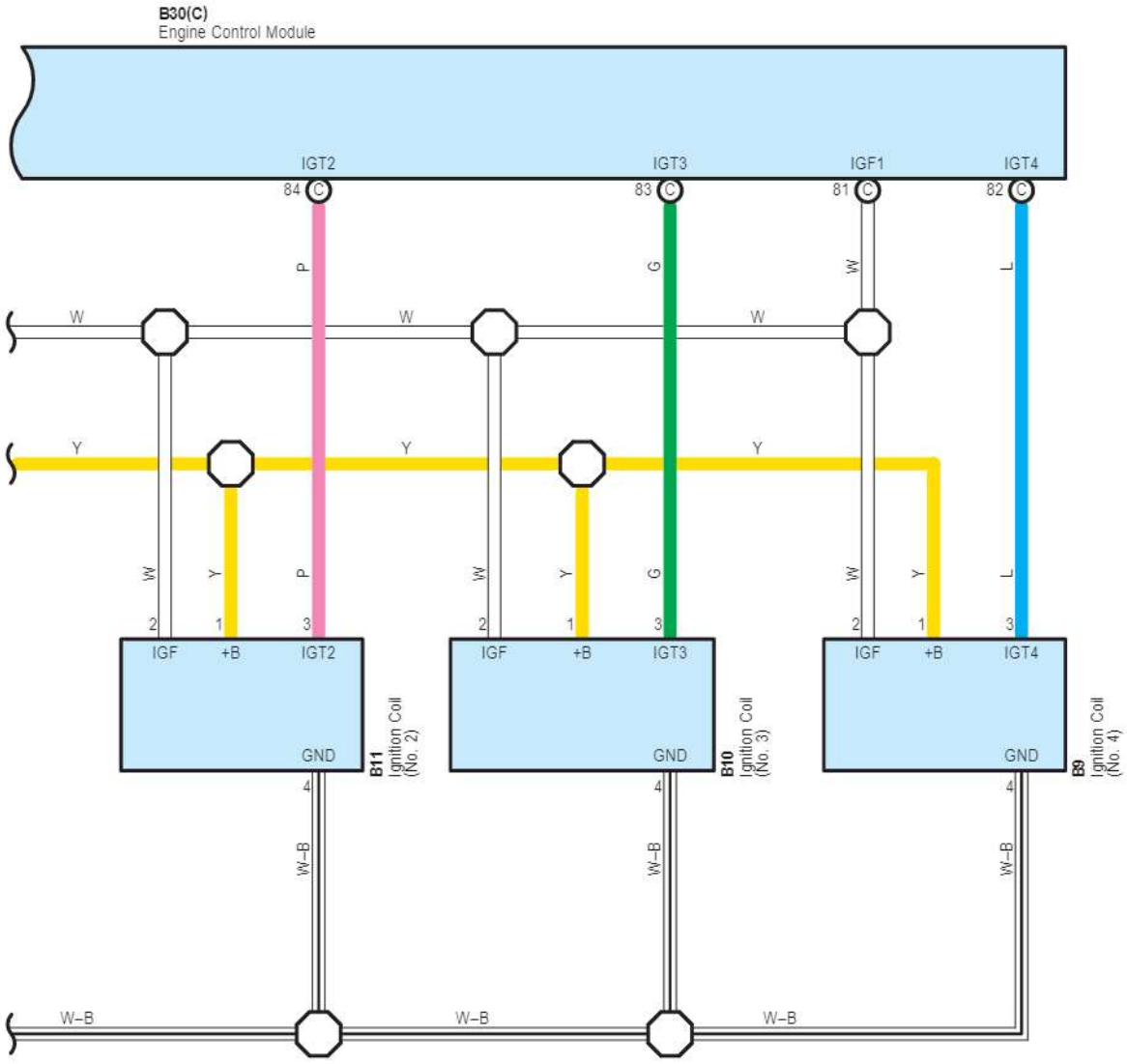
: Ground Points

Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
B4	64 (2GR–FE)	Left Side of the Cylinder Head

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Ignition for 2AZ–FE

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B8	53 (2AZ–FE)	B11	53 (2AZ–FE)	E3	54
B9	53 (2AZ–FE)	B12	53 (2AZ–FE)		
B10	53 (2AZ–FE)	B30 C	53 (2AZ–FE)		

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	23 (2AZ–FE)	Engine Room R/B No.1 (Engine Compartment Left)

▭ : Connector Joining Wire Harness and Wire Harness

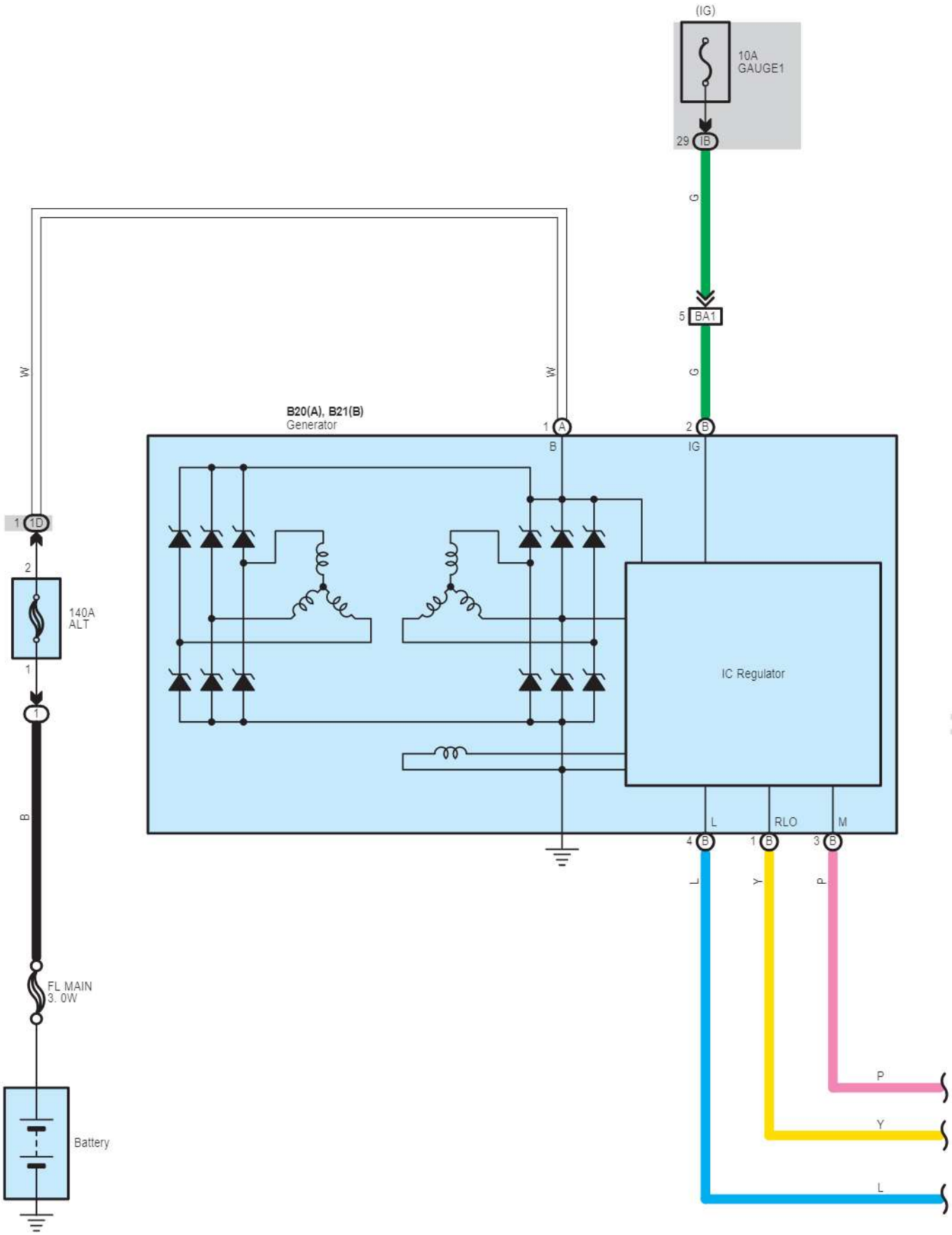
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE1	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE2		
BA1	65 (2AZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)

▽ : Ground Points

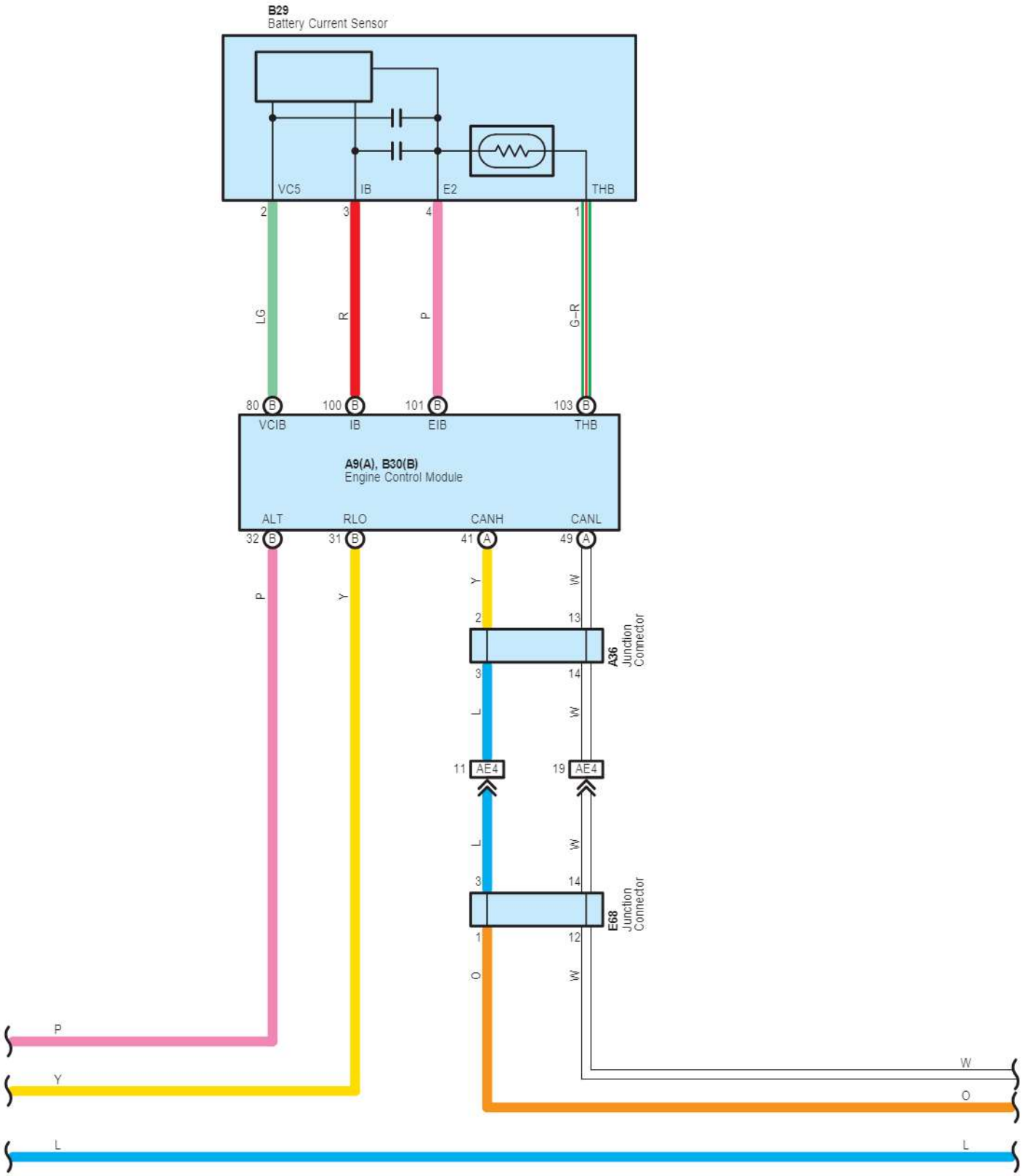
Code	See Page	Ground Points Location
A1	65 (2AZ–FE)	Front Left Fender
B1	65 (2AZ–FE)	Left Side of the Cylinder Head

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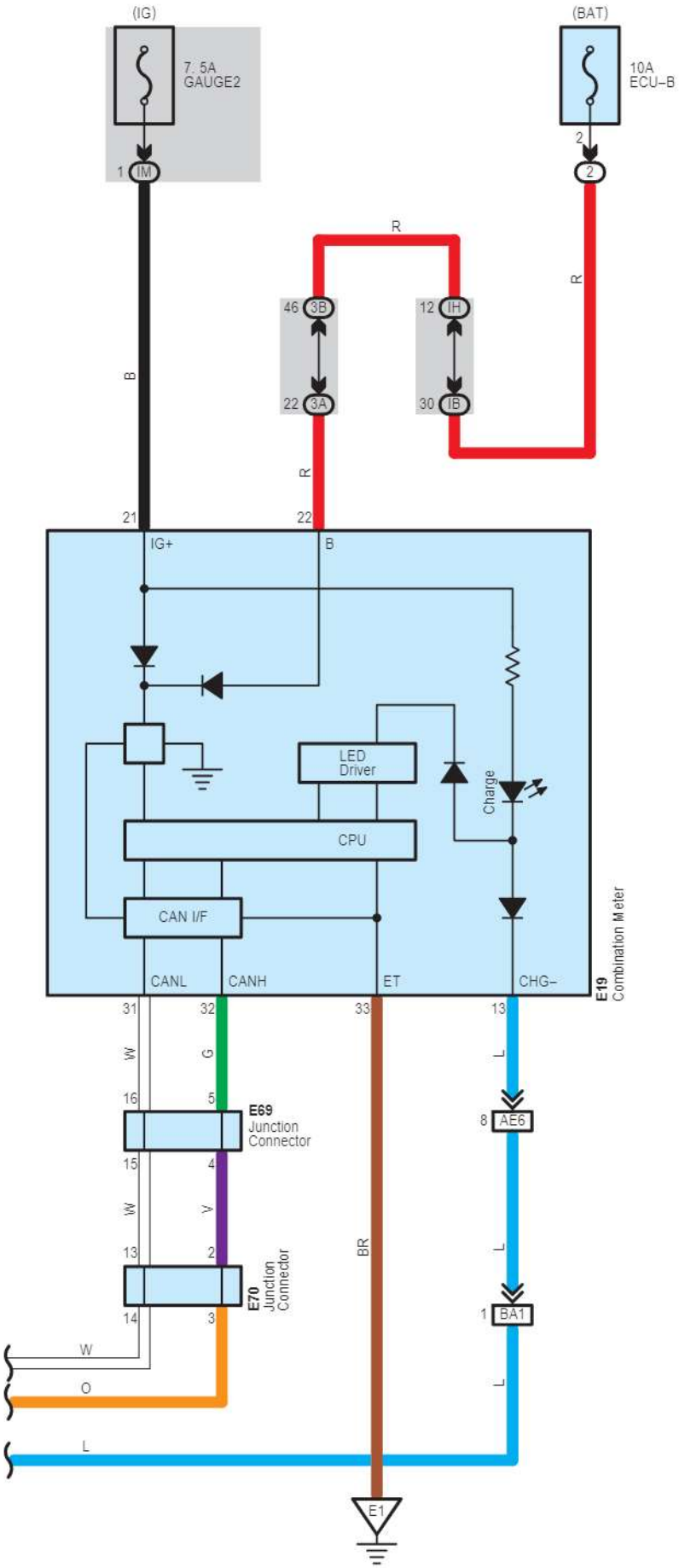
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: Parts Location

Code	See Page	Code	See Page	Code	See Page
A9 A	50 (2GR–FE)	B29	51 (2GR–FE)	E69	55
A36	56	B30 B	51 (2GR–FE)	E70	55
B20 A	51 (2GR–FE)	E19	54		
B21 B	51 (2GR–FE)	E68	55		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22 (2GR–FE)	Engine Wire and Engine Room J/B (Engine Compartment Left)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IH	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	

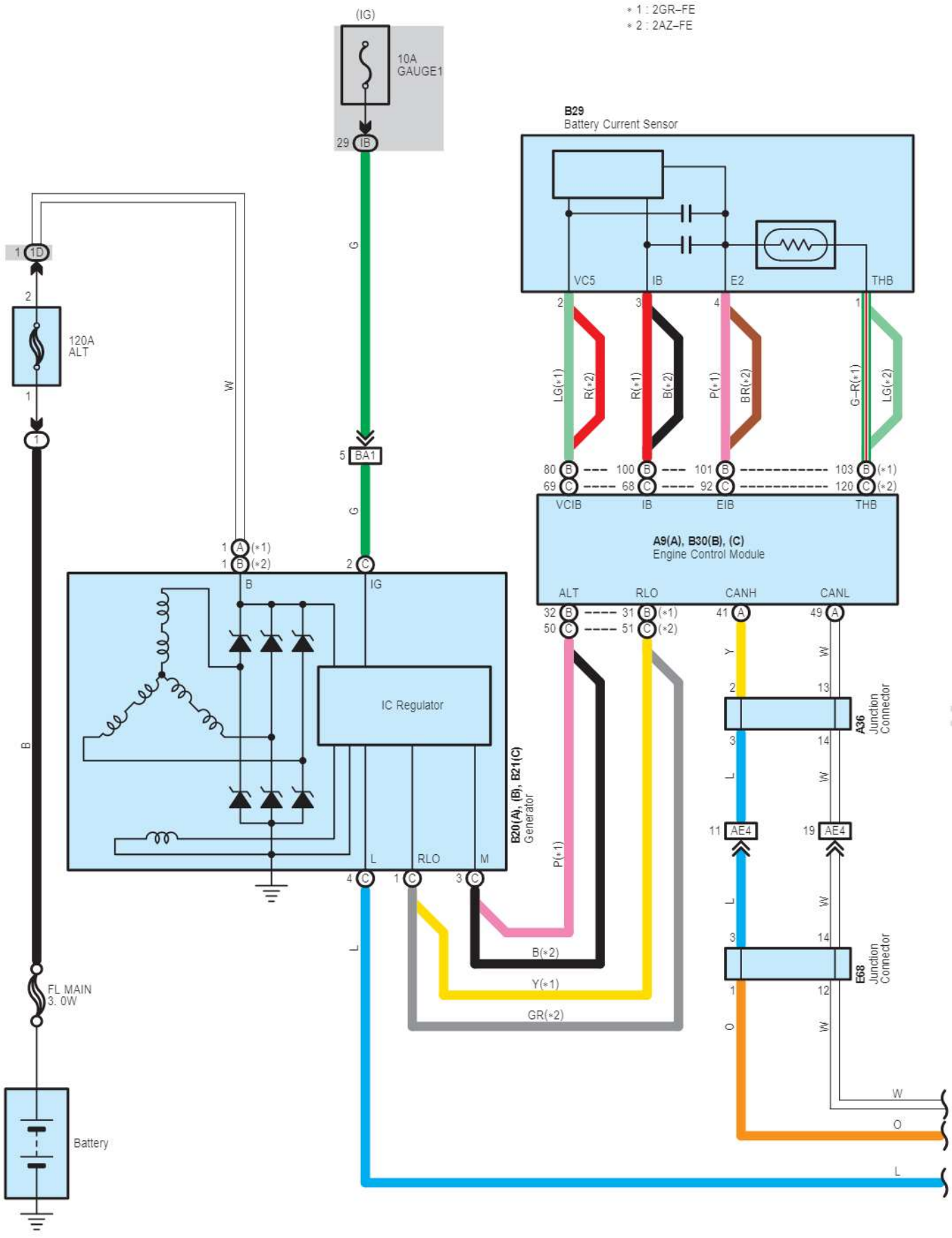
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE6		
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)

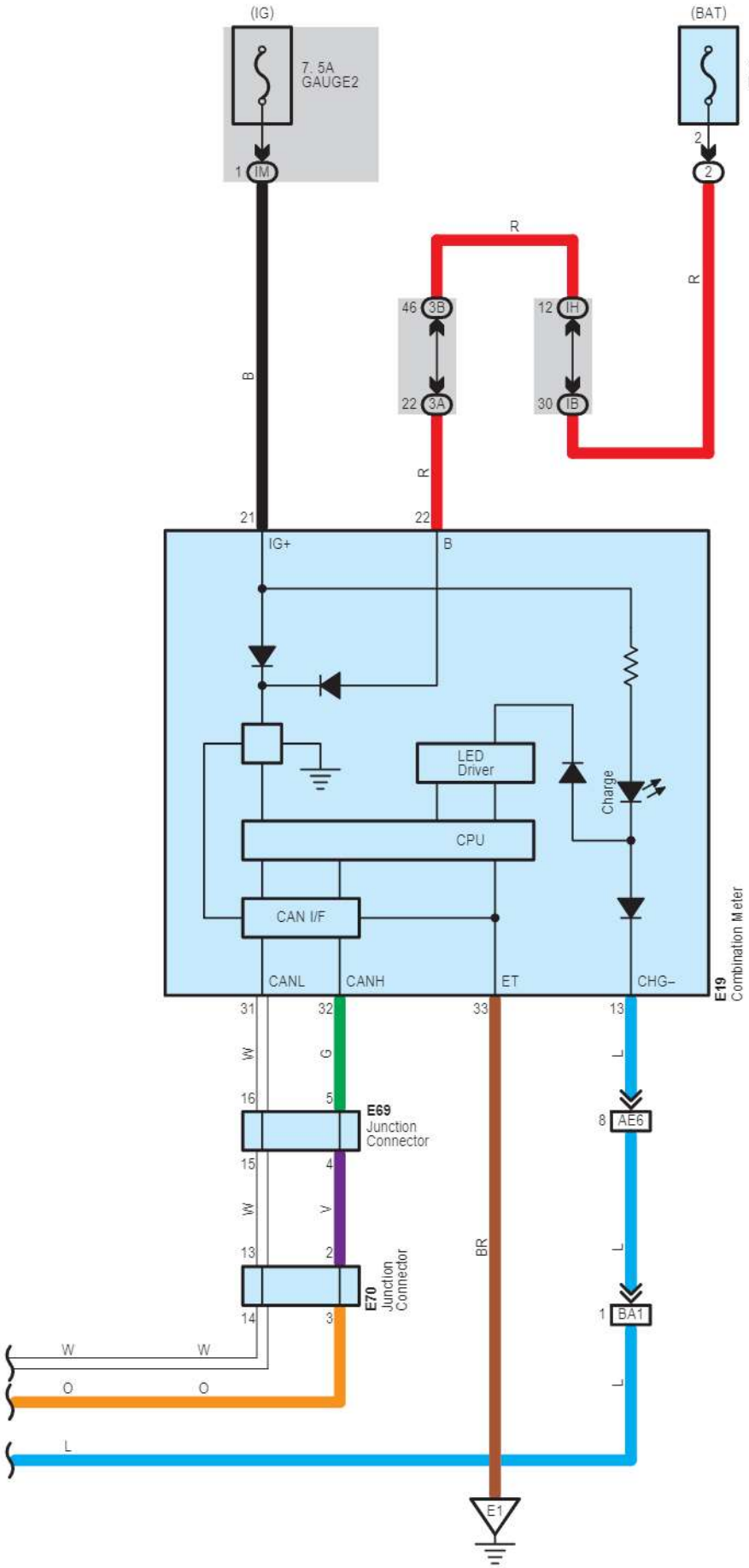
: Ground Points

Code	See Page	Ground Points Location
E1	66	Left Kick Panel

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Charging without Trailer Towing

○ : **Parts Location**

Code		See Page	Code		See Page	Code		See Page
A9	A	50 (2GR–FE)	B21	C	51 (2GR–FE)	B30	C	53 (2AZ–FE)
		52 (2AZ–FE)			53 (2AZ–FE)	E19		54
A36		56	B29		51 (2GR–FE)	E68		55
B20	A	51 (2GR–FE)			53 (2AZ–FE)	E69		55
	B	53 (2AZ–FE)	B30	B	51 (2GR–FE)	E70		55

▭ : **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

▭ : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22 (2GR–FE)	Engine Wire and Engine Room J/B (Engine Compartment Left)
	23 (2AZ–FE)	
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IH	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	

▭ : **Connector Joining Wire Harness and Wire Harness**

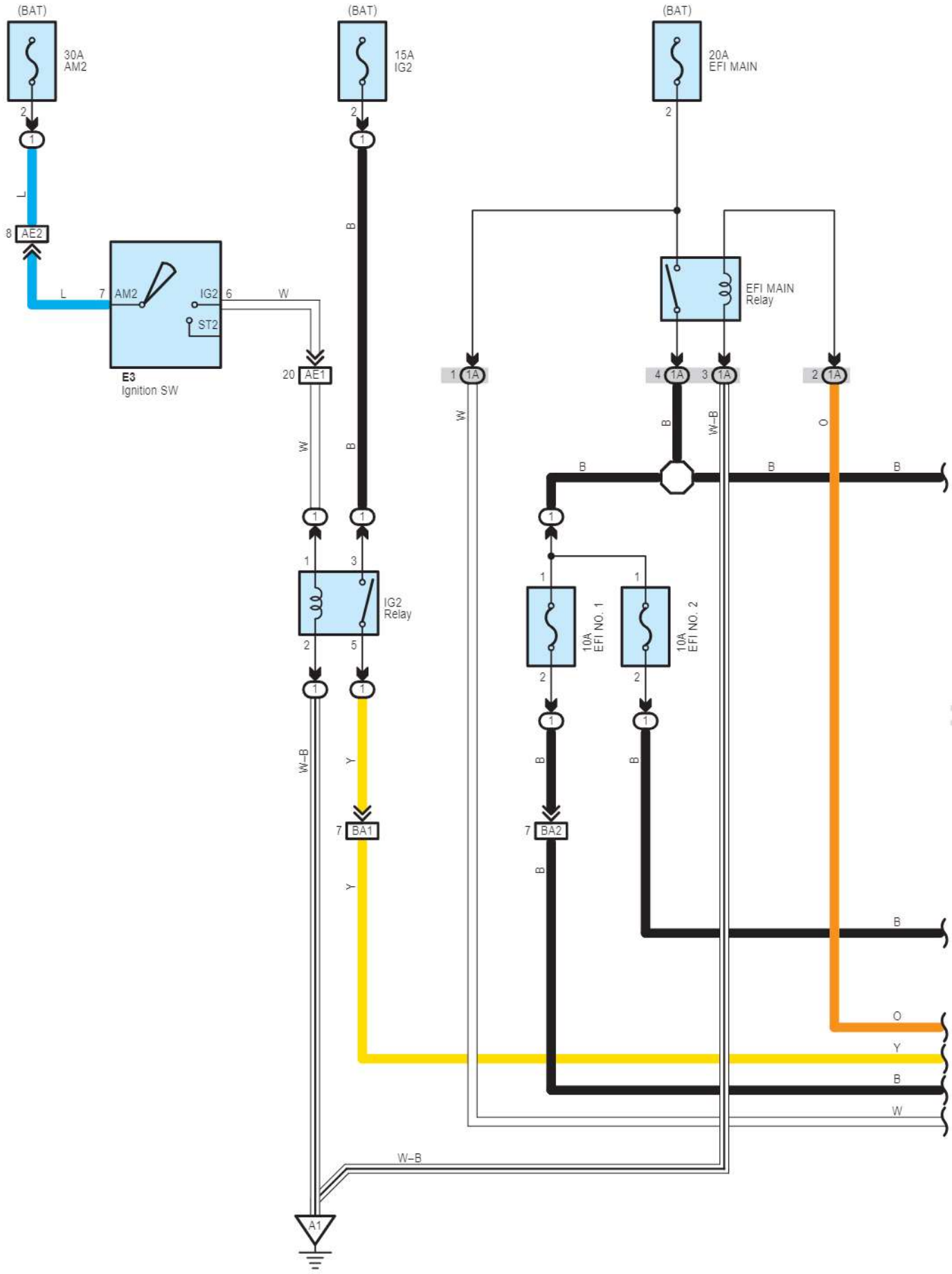
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE6		
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
	65 (2AZ–FE)	

▽ : **Ground Points**

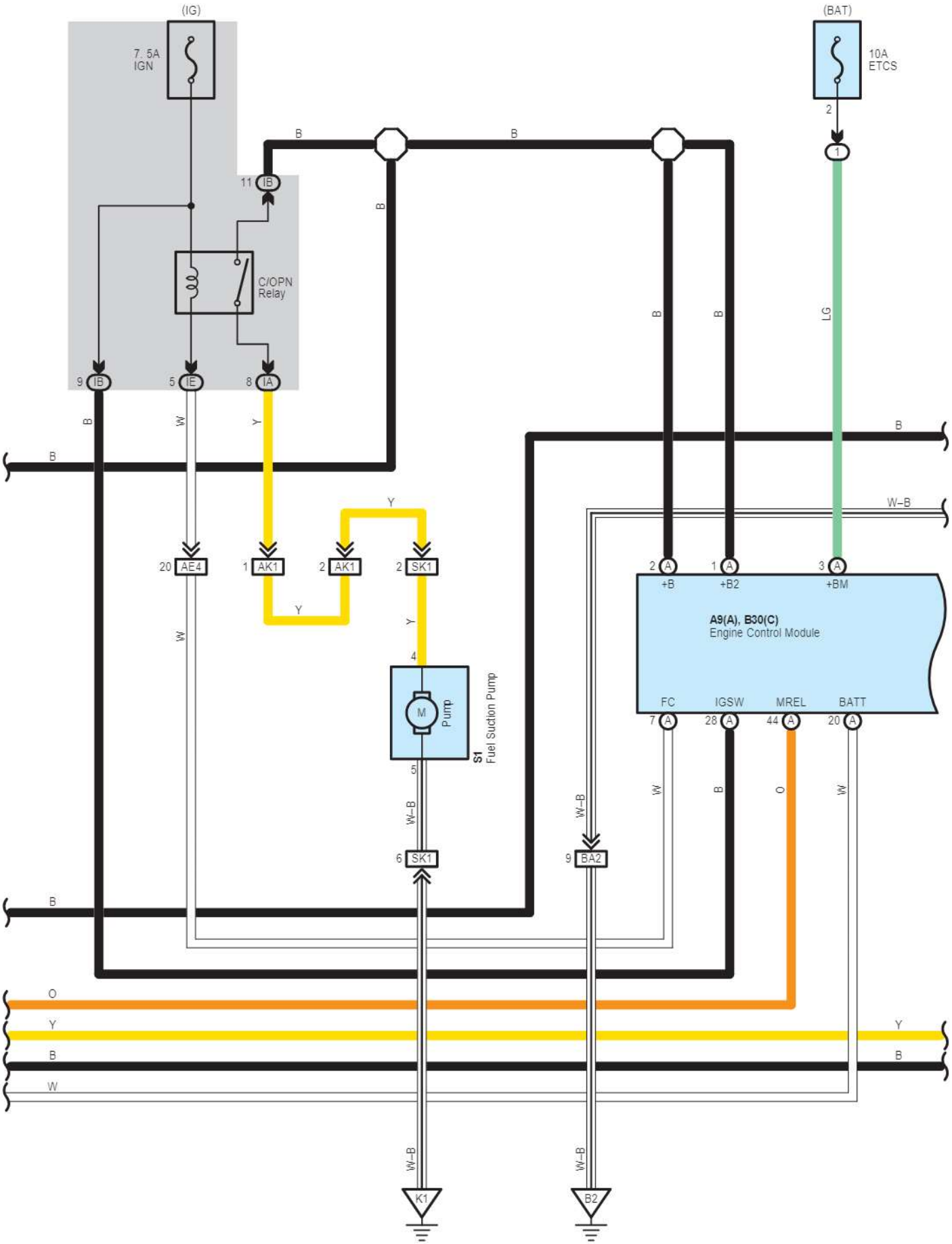
Code	See Page	Ground Points Location
E1	66	Left Kick Panel

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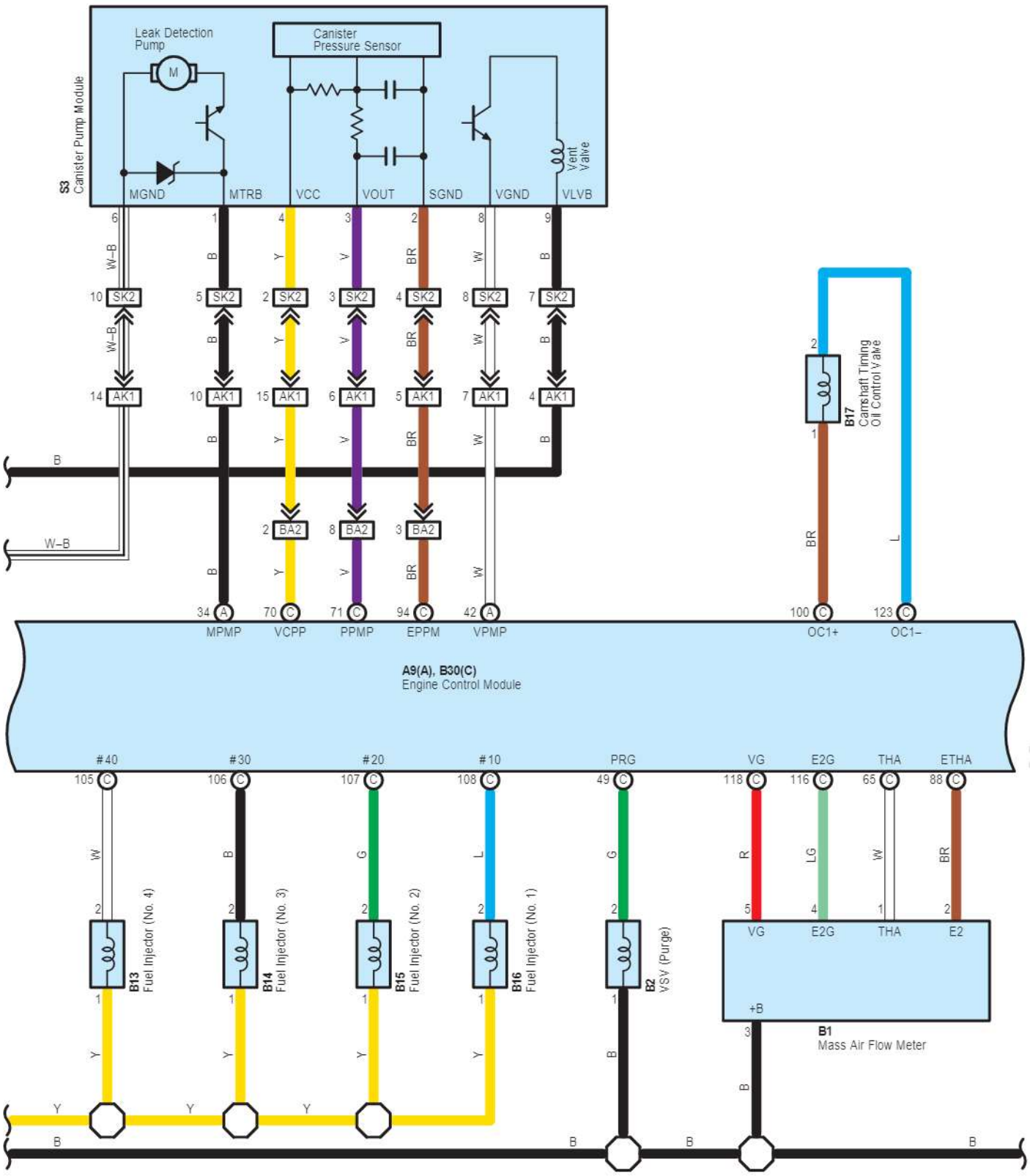
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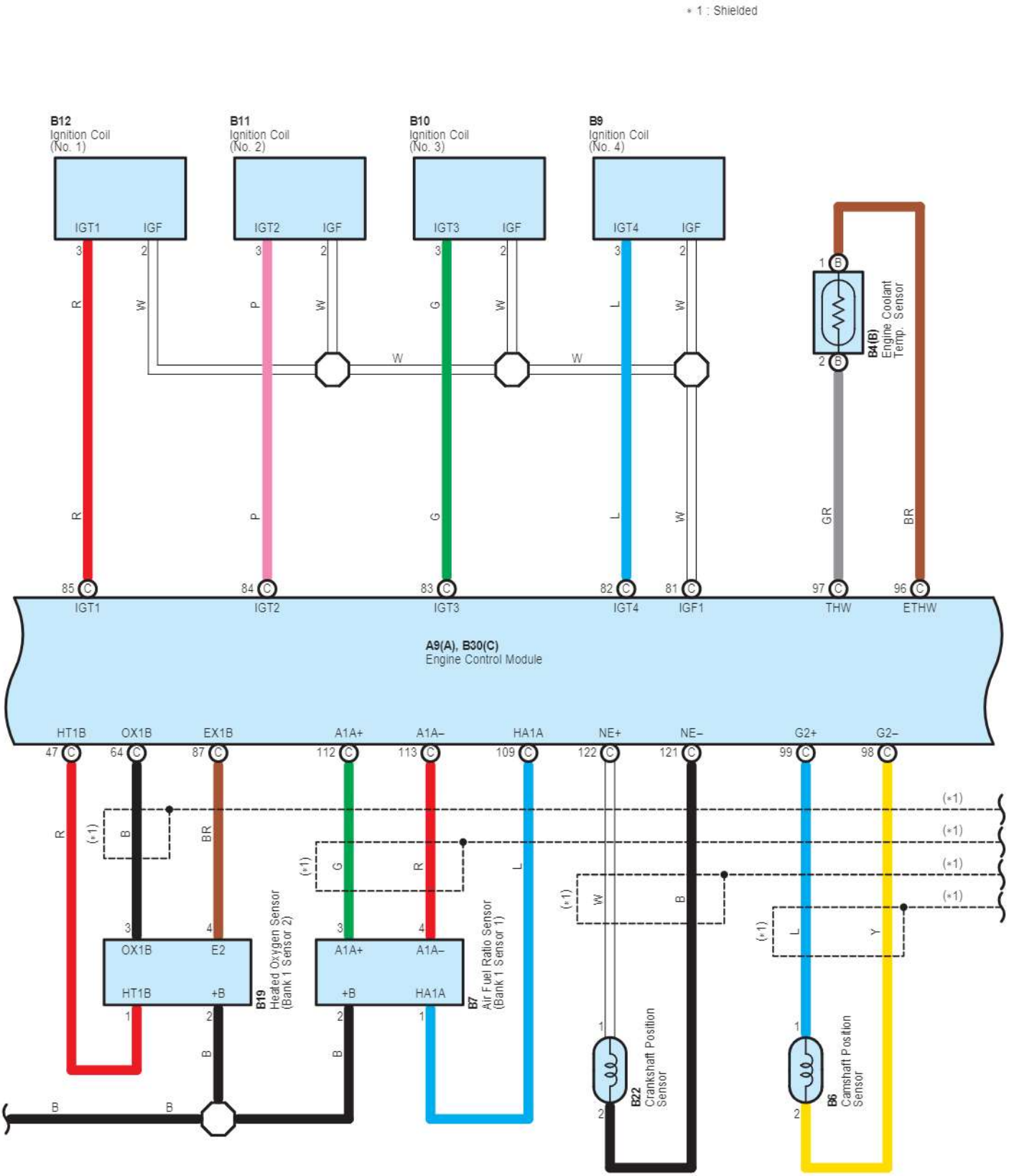
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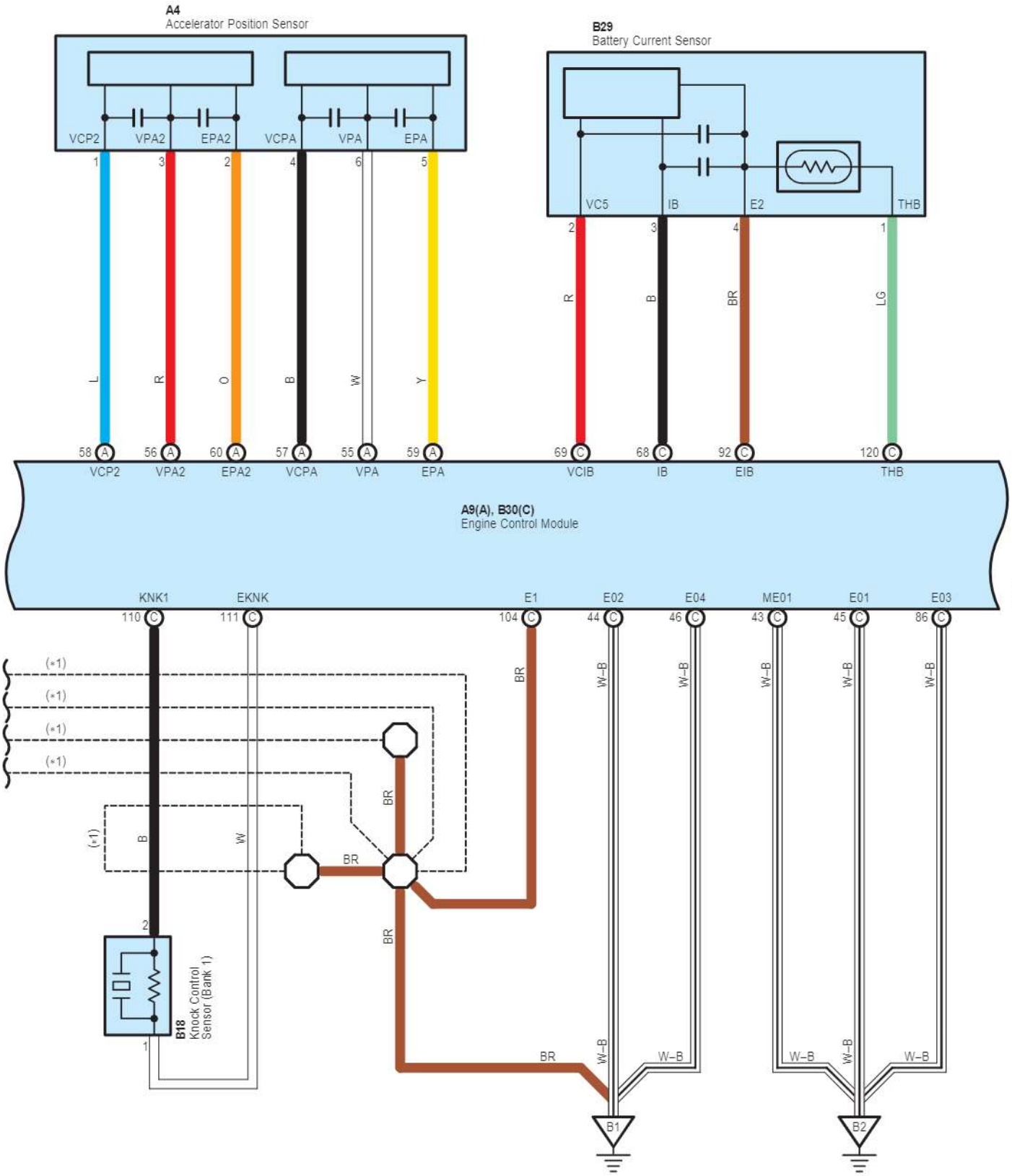


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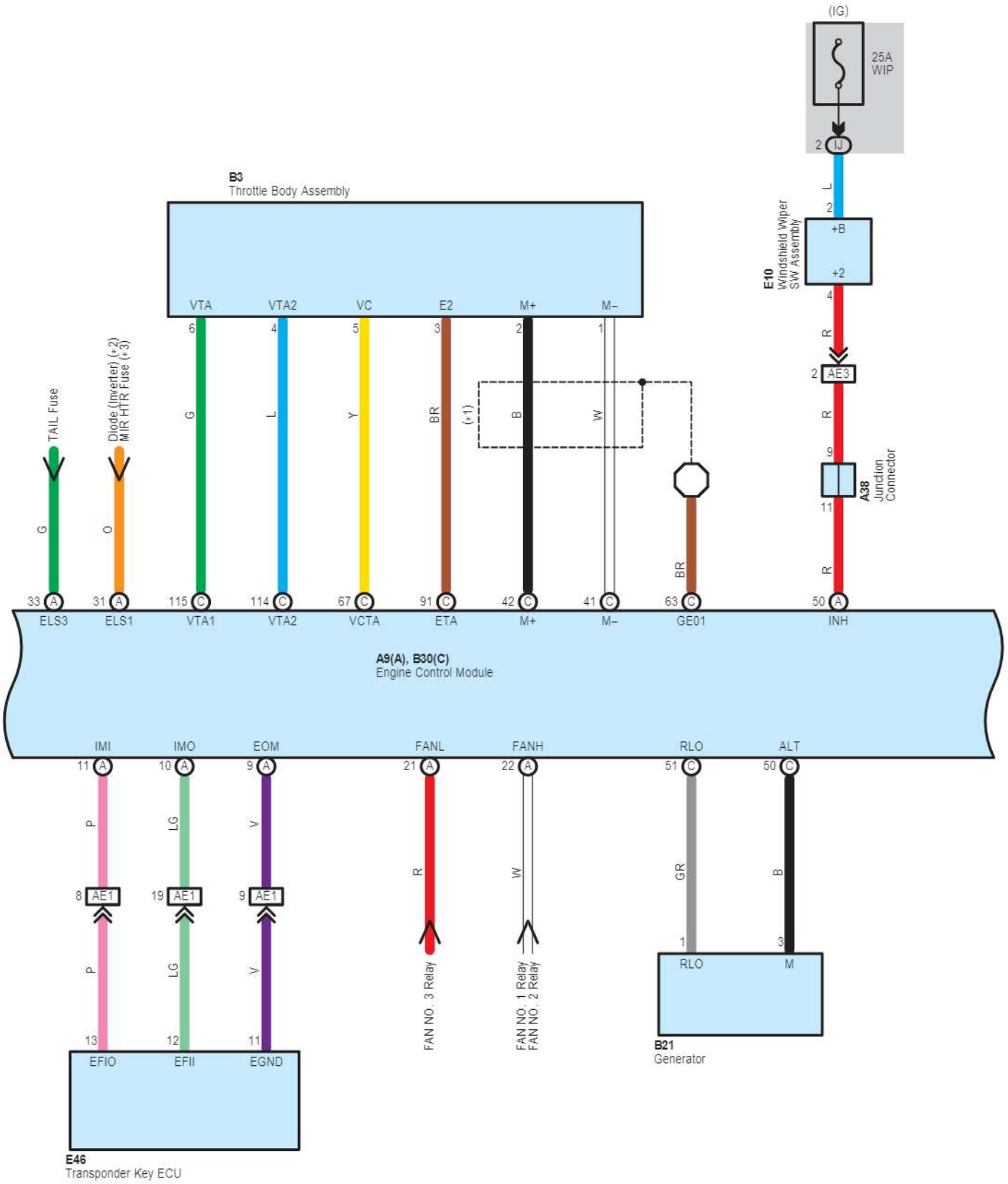


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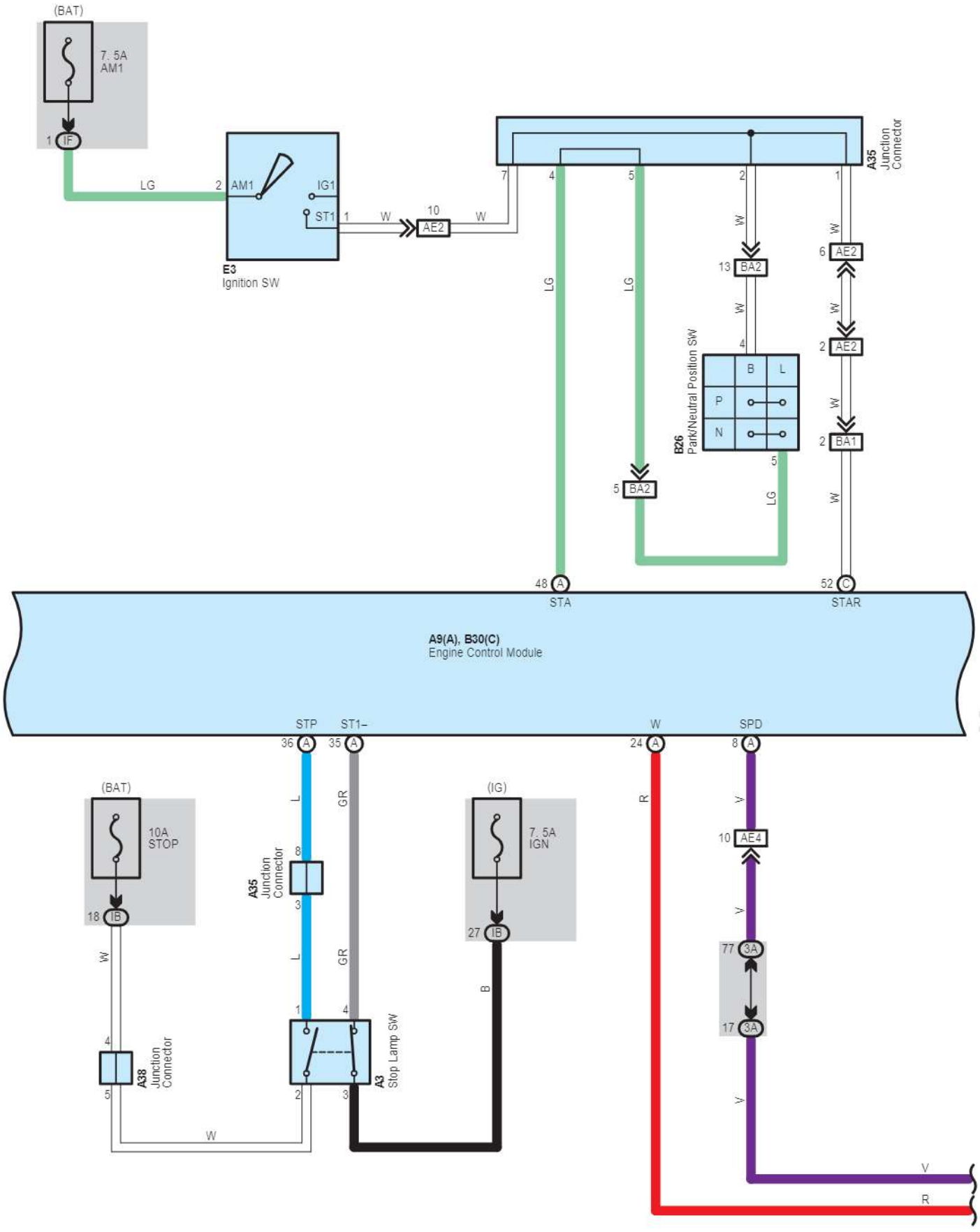
* 1 : Shielded
* 2 : w/ Power Outlet (115V)
* 3 : w/o Power Outlet (115V)



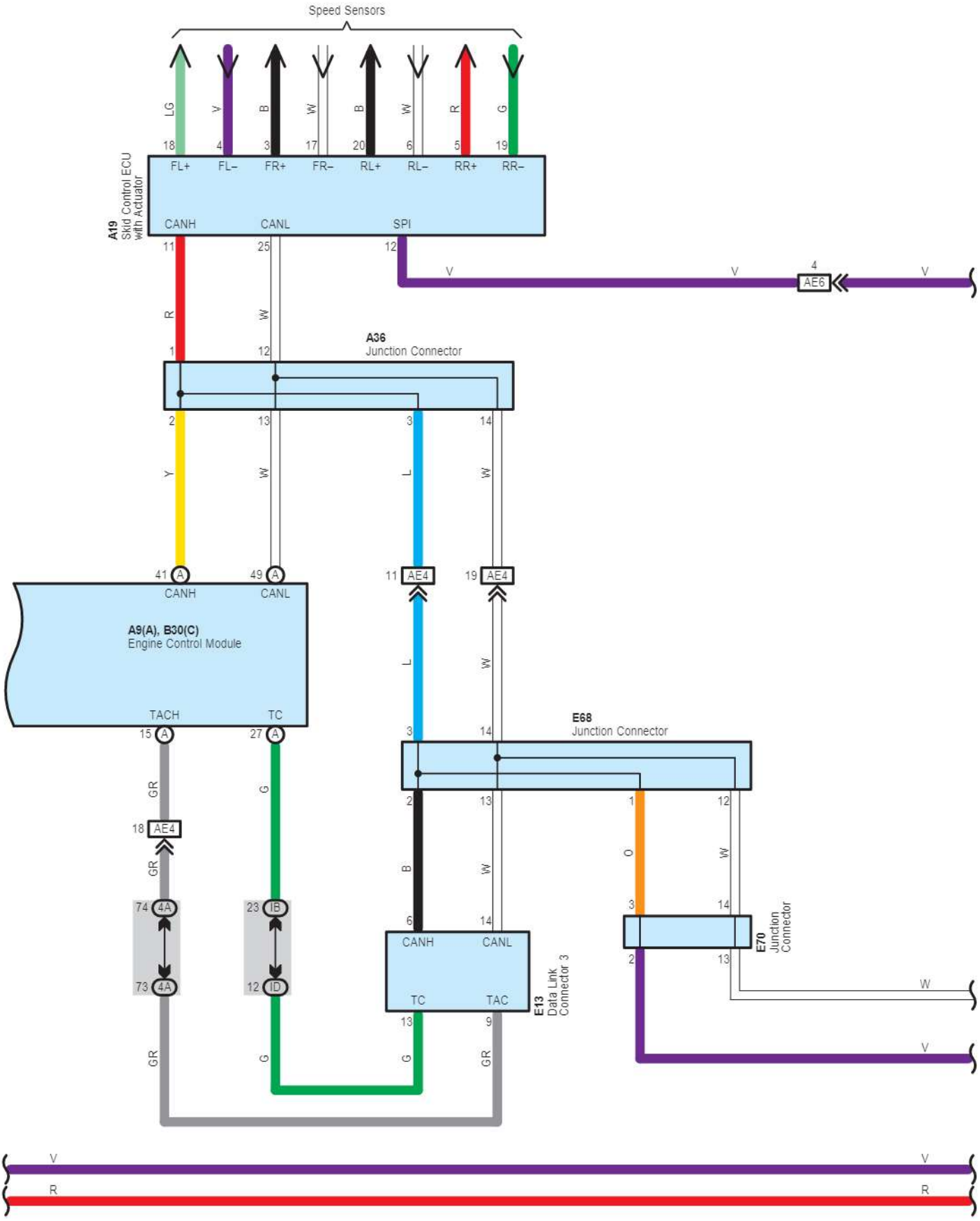
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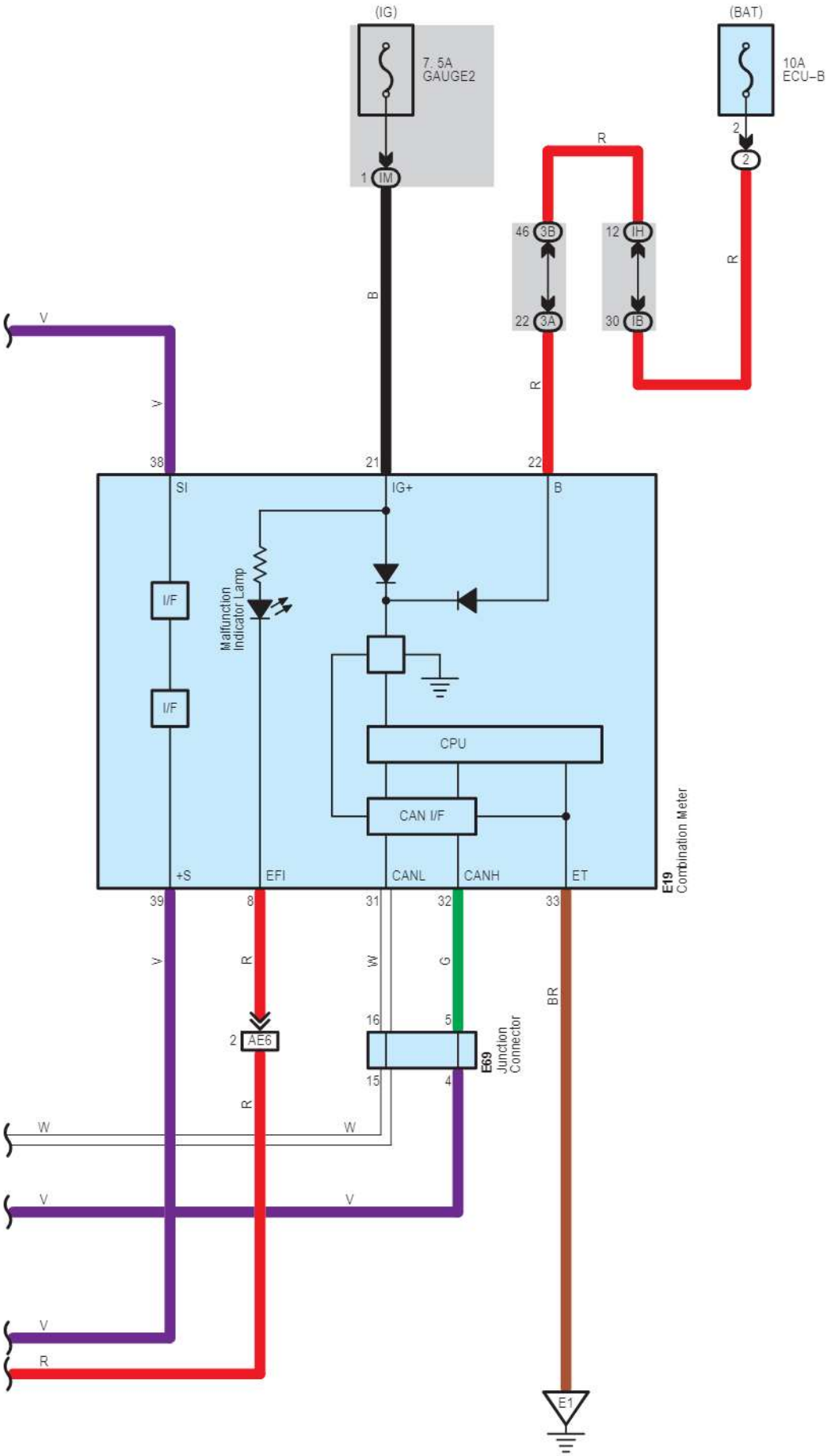
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System Outline

The engine control system utilizes a microcomputer and maintains overall control of the engine, transmission etc. An outline of the engine control is given here.

1. Input Signals

(1) Engine coolant temp. signal circuit

The engine coolant temp. sensor detects the engine coolant temp. and has a built–in thermistor with a resistance, which varies according to the engine coolant temp.. The engine coolant temp. which is input into TERMINAL THW of the engine control module as a control signal.

(2) Intake air temp. signal circuit

The intake air temp. sensor is installed in the mass air flow meter and detects the intake air temp. which is input as a control signal to TERMINAL THA of the engine control module.

(3) Vehicle speed signal circuit

The vehicle speed signal is input from the speed sensor to skid control ECU with actuator, and are sent to the engine control module through communication control.

(4) RPM signal circuit

Camshaft position and crankshaft position are detected by the camshaft position sensor and crankshaft position sensor. Camshaft position is input as a control signal to TERMINAL G2+ of the engine control module, and engine RPM is input into TERMINAL NE+.

(5) Throttle position signal circuit

The throttle position sensor detects the throttle valve opening angle as a control signal, which is input into TERMINALS VTA1 and VTA2 of the engine control module.

(6) Battery signal circuit

Voltage is constantly applied to TERMINAL BATT of the engine control module. With the ignition SW turned on, the voltage for engine control module start–up power supply is applied to TERMINALS +B and +B2 of the engine control module via the EFI MAIN relay.

The current flowing through the IGN fuse flows to TERMINAL IGSW of the engine control module.

(7) Intake air volume signal circuit

Intake air volume is detected by the mass air flow meter and the signal is input to TERMINAL VG of the engine control module as a control signal.

(8) Stop lamp SW signal circuit

The stop lamp SW is used to detect whether the vehicle is braking or not and the signal is input into TERMINAL STP of the engine control module as a control signal.

(9) Starter signal circuit

To confirm whether the engine is cranking, the voltage is applied to the starter motor during cranking is detected and the signal is input into TERMINAL STA of the engine control module as a control signal.

(10) Engine knock signal circuit

Engine knocking is detected by knock sensor and the signal is input into TERMINAL KNK1 as a control signal.

(11) Air fuel ratio signal system

The air fuel ratio is detected and input as a control signal into TERMINAL A1A+ of the engine control module.

(12) Oxygen sensor signal circuit

The oxygen density in the exhaust gases is detected and input as a control signal into TERMINAL OX1B of the engine control module. To maintain stable detection performance by the heated oxygen sensor, a heater is used for warning the sensor. The heater is also controlled by engine control module (O1B–).

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2. Control System

* SFI system
  The SFI system monitors the engine condition through the signals input from each sensor to the engine control module. And the control signal is output to TERMINALS #10, #20, #30 and #40 of the engine control module to operate the injector (Inject the fuel). The SFI system controls the fuel injection operation by the engine control module in response to the driving conditions.
* ESA system
  The ESA system monitors the engine condition through the signals input to the engine control module from each sensor. The best ignition timing is decided according to this data and the memorized data in the engine control module and the control signal is output to TERMINALS IGT1, IGT2, IGT3 and IGT4. This signal controls the igniter to provide the best ignition timing for the driving conditions.

3. Diagnosis System

With the diagnosis system, when there is a malfunction in the engine control module signal system, the malfunctioning system is recorded in the memory. The malfunctioning system can be found by reading the code displayed by the malfunction indicator lamp.

4. Fail–safe System

When a malfunction has occurred in any system, if there is a possibility of engine trouble being caused by continued control based on the signals from that system, the fail–safe system either controls the system by using data (Standard values) recorded in the engine control module memory or else stops the engine.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	56	B9	53 (2AZ–FE)	B26	53 (2AZ–FE)
A4	56	B10	53 (2AZ–FE)	B29	53 (2AZ–FE)
A9 A	52 (2AZ–FE)	B11	53 (2AZ–FE)	B30 C	53 (2AZ–FE)
A19	52 (2AZ–FE)	B12	53 (2AZ–FE)	E3	54
A35	56	B13	53 (2AZ–FE)	E10	54
A36	56	B14	53 (2AZ–FE)	E13	54
A38	56	B15	53 (2AZ–FE)	E19	54
B1	53 (2AZ–FE)	B16	53 (2AZ–FE)	E46	55
B2	53 (2AZ–FE)	B17	53 (2AZ–FE)	E68	55
B3	53 (2AZ–FE)	B18	53 (2AZ–FE)	E69	55
B4 B	53 (2AZ–FE)	B19	53 (2AZ–FE)	E70	55
B6	53 (2AZ–FE)	B21	53 (2AZ–FE)	S1	61
B7	53 (2AZ–FE)	B22	53 (2AZ–FE)	S3	61

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	23 (2AZ–FE)	Engine Room R/B No.1 (Engine Compartment Left)
2	27 (2AZ–FE)	Engine Room R/B No.2 (Engine Compartment Right)

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: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IE		
IF		
IH		
IJ		
IM	31	

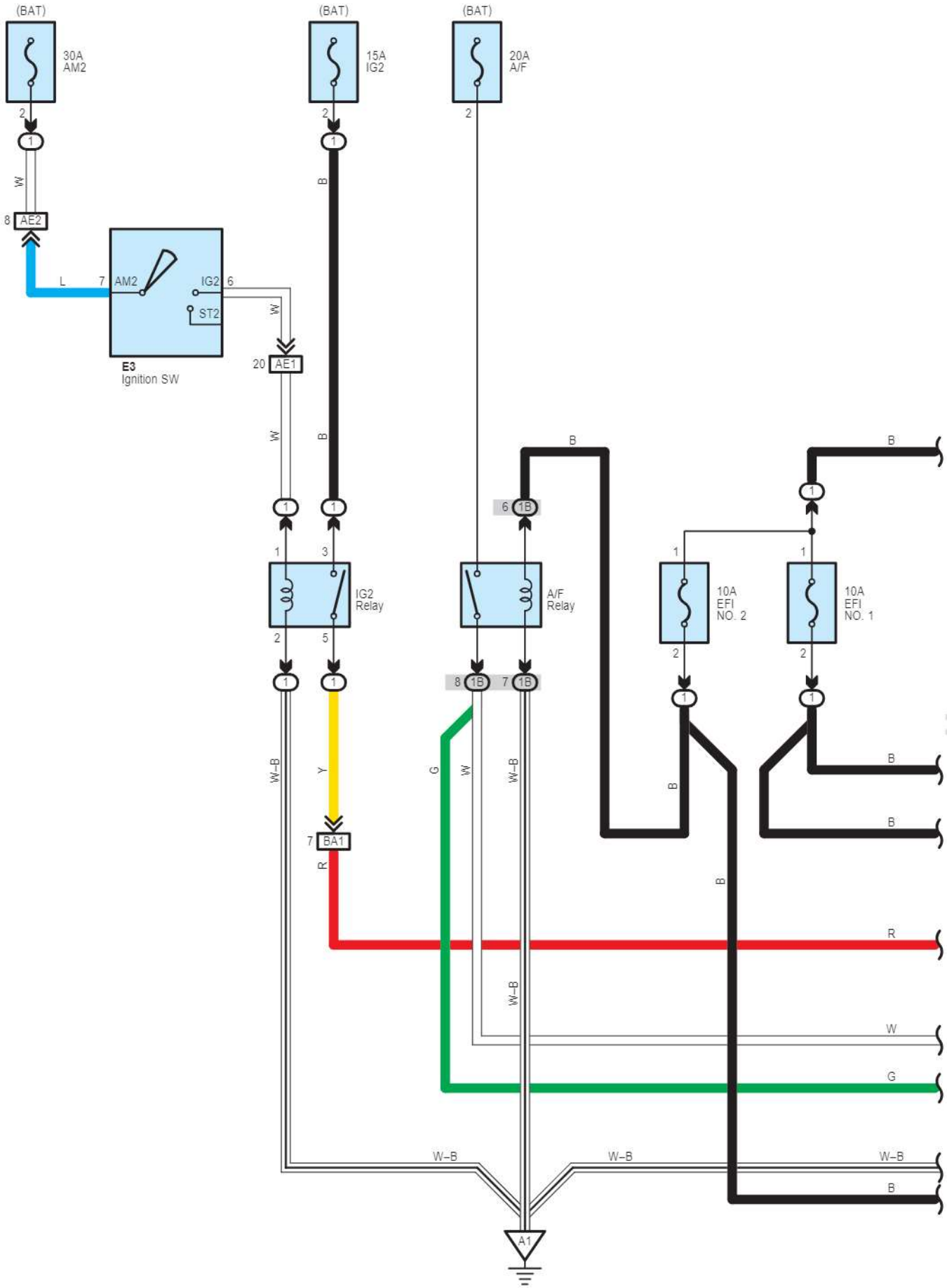
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE1	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE2		
AE3		
AE4		
AE6		
AK1	66	Engine Room Main Wire and Floor Wire (Left Kick Panel)
BA1	65 (2AZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
BA2		
SK1	66	Fuel Gauge Wire and Floor Wire (Under the Console Box)
SK2		

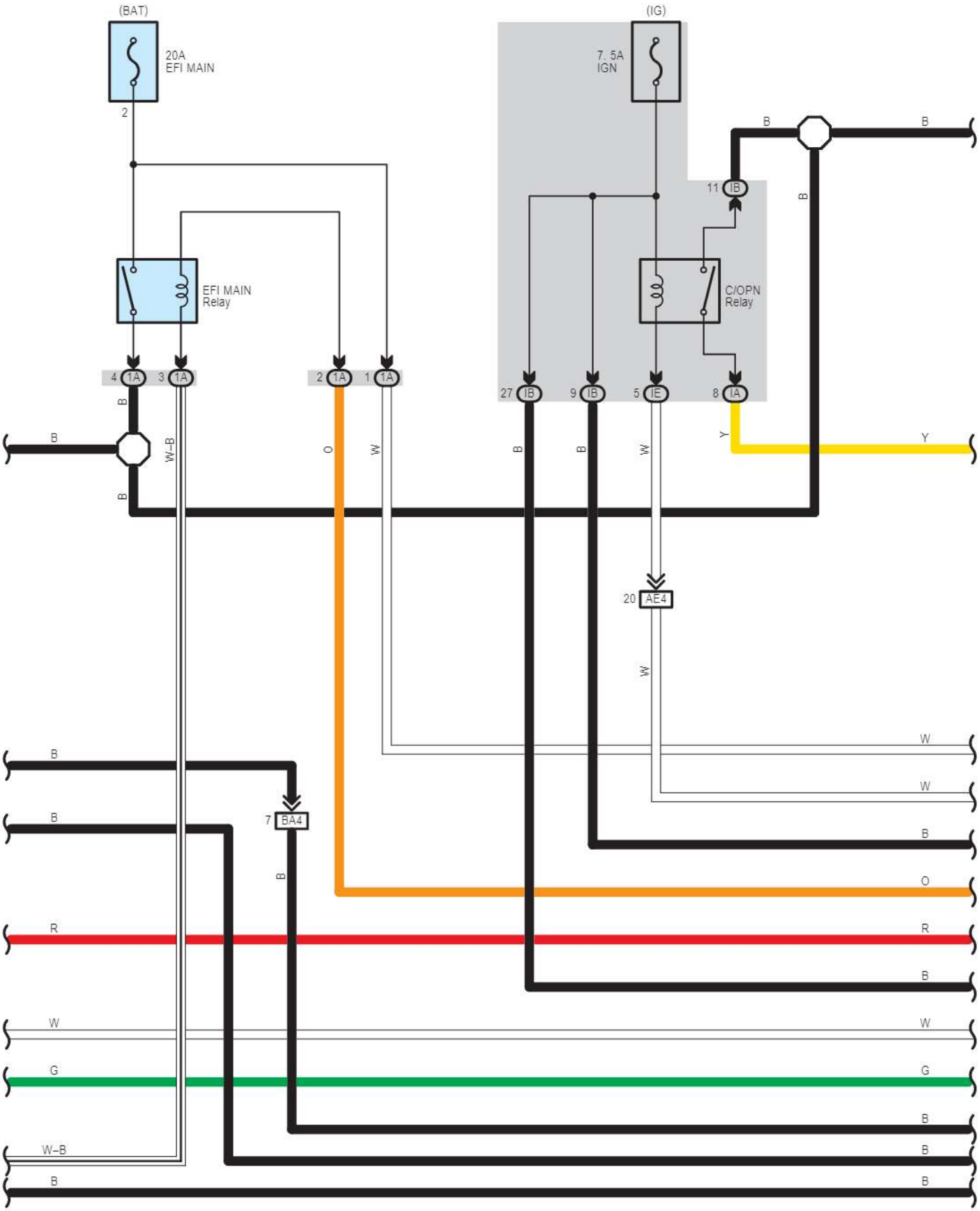
: Ground Points

Code	See Page	Ground Points Location
A1	65 (2AZ–FE)	Front Left Fender
B1	65 (2AZ–FE)	Left Side of the Cylinder Head
B2		
E1	66	Left Kick Panel
K1	67	Left Center Pillar

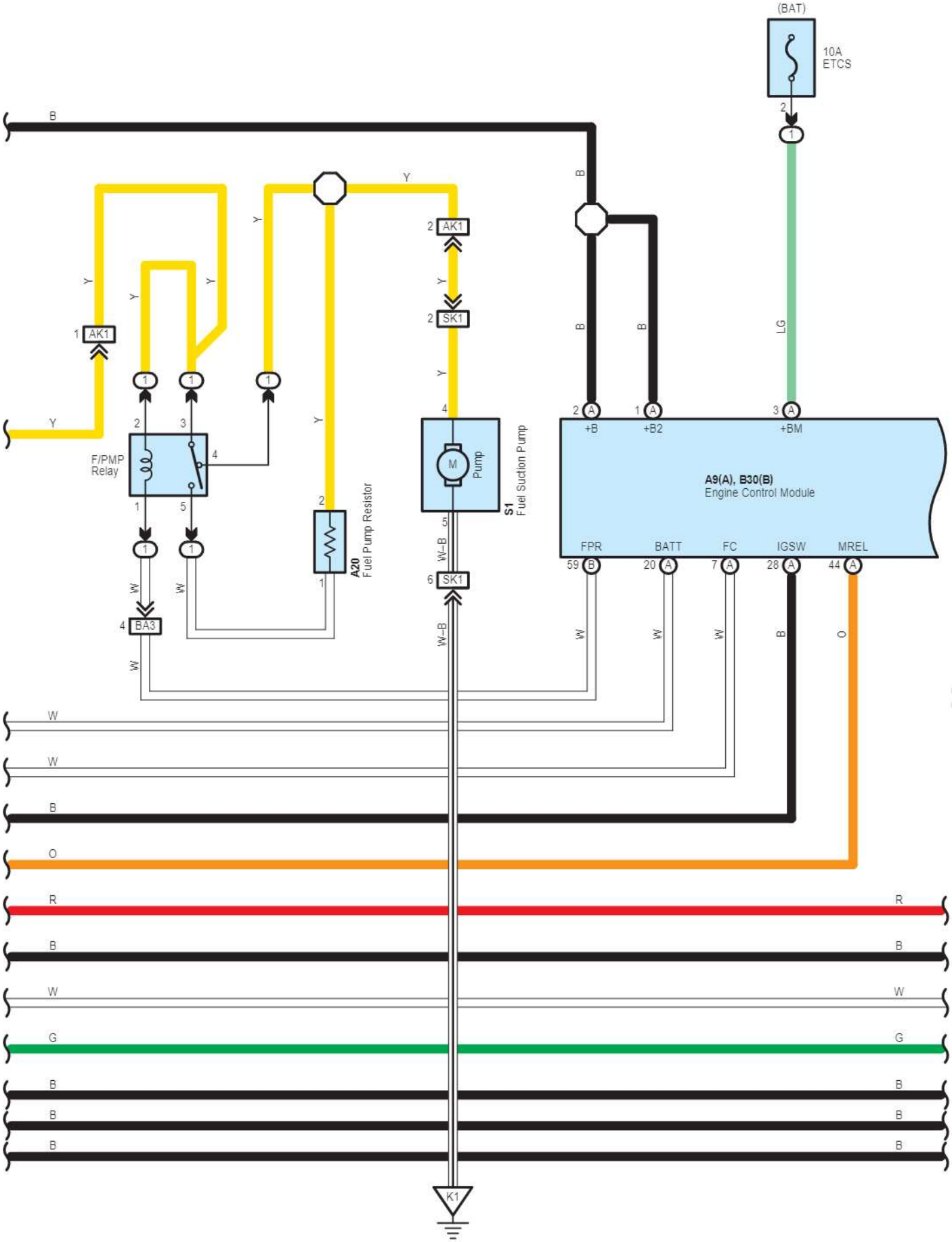
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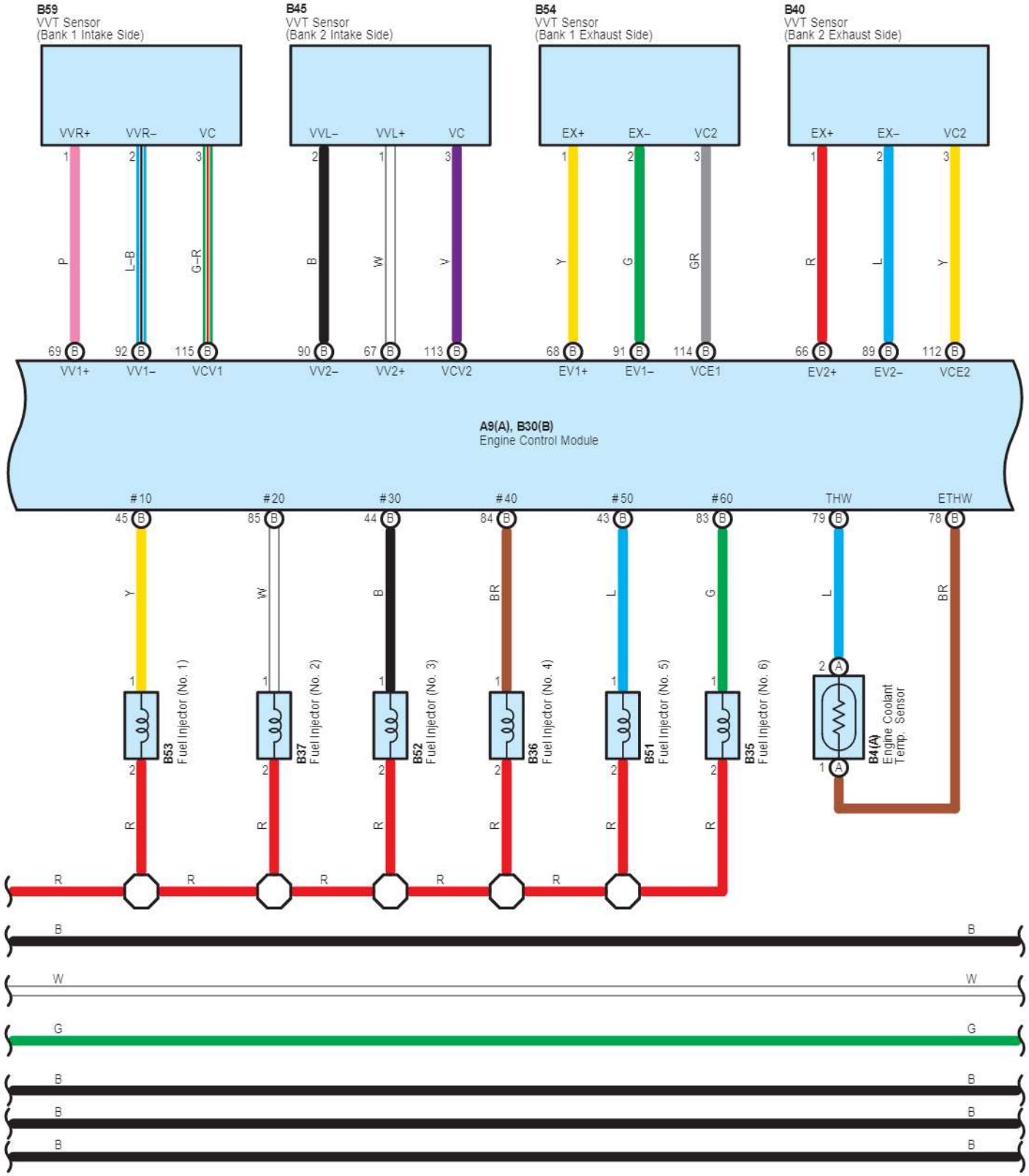
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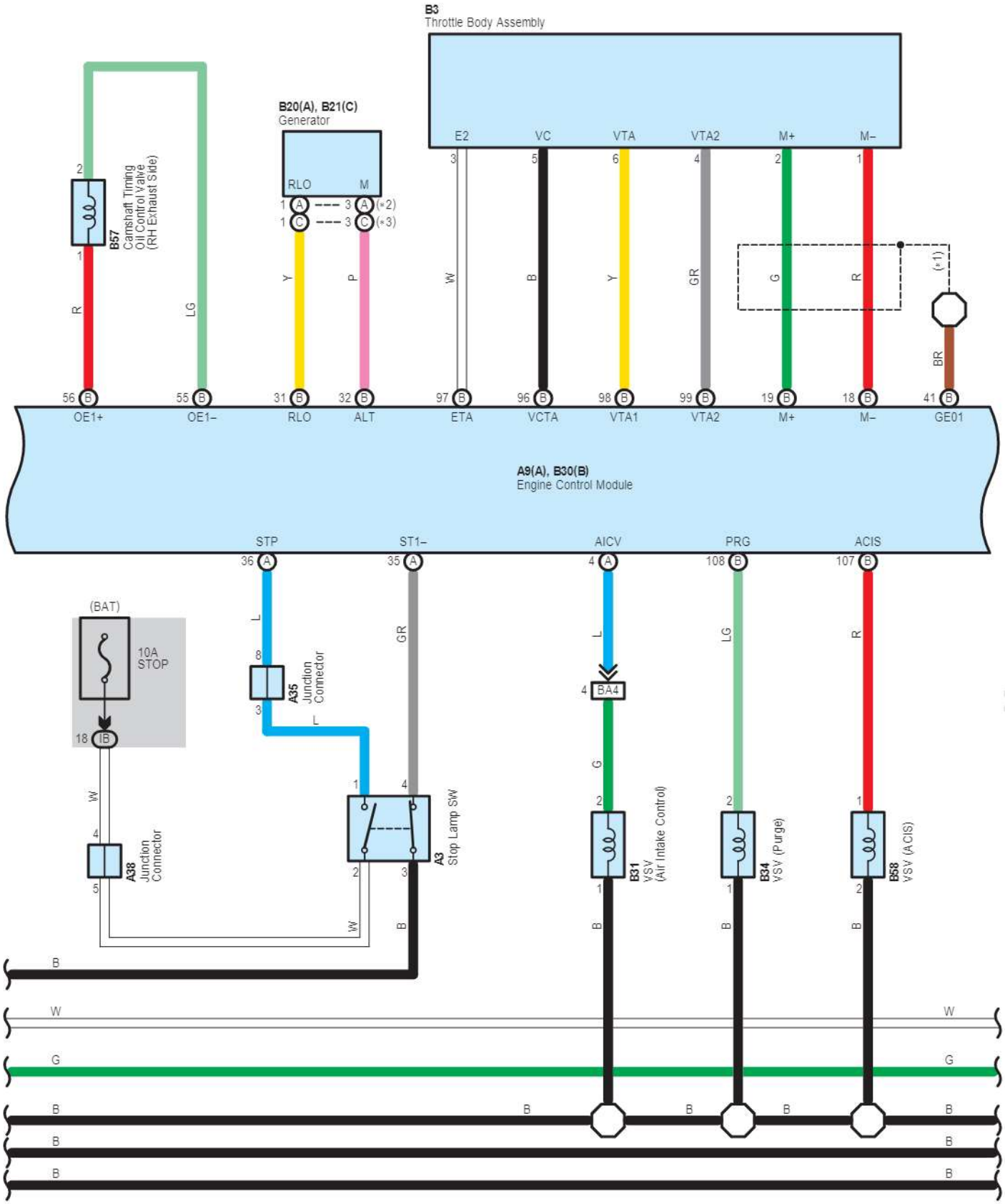
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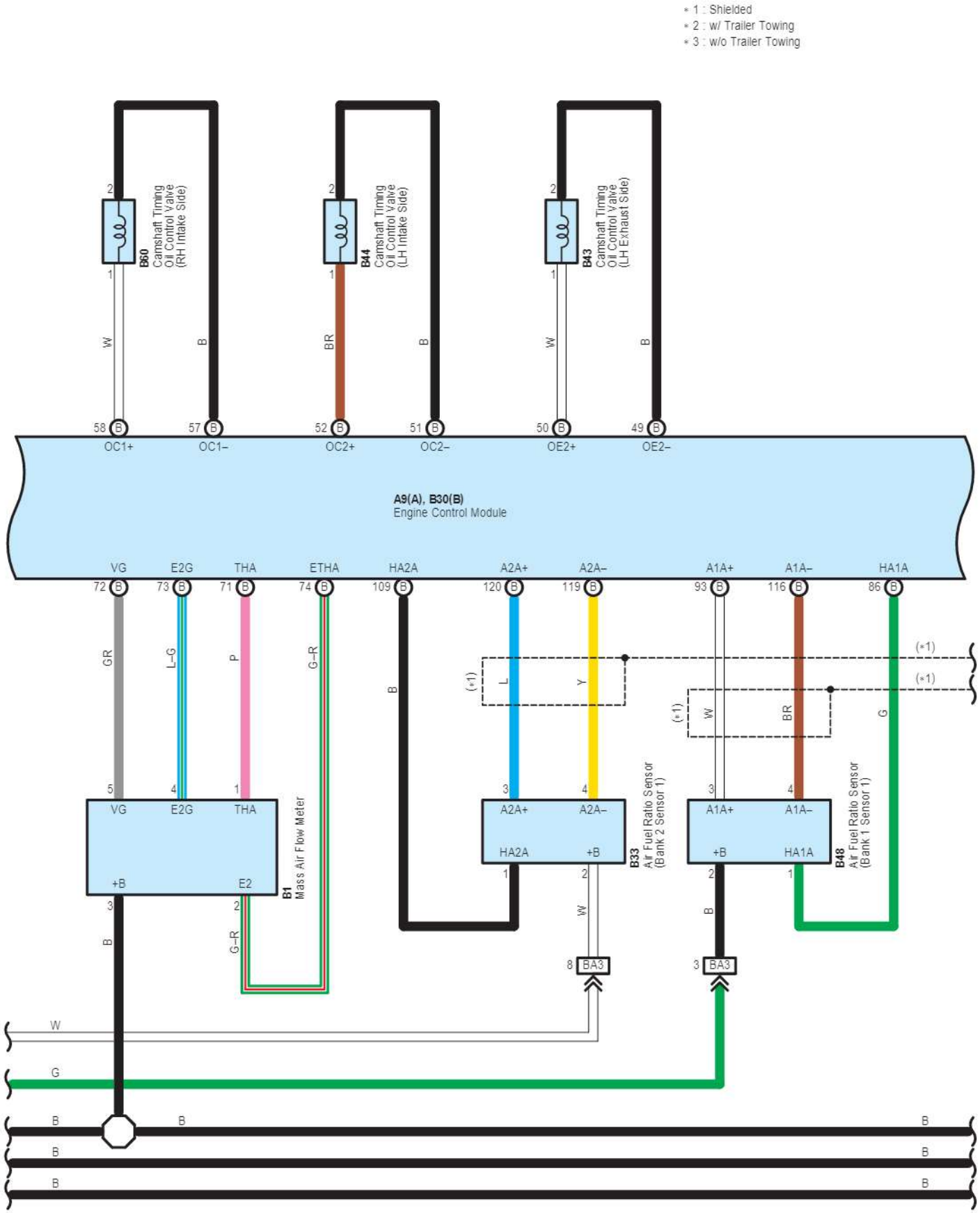
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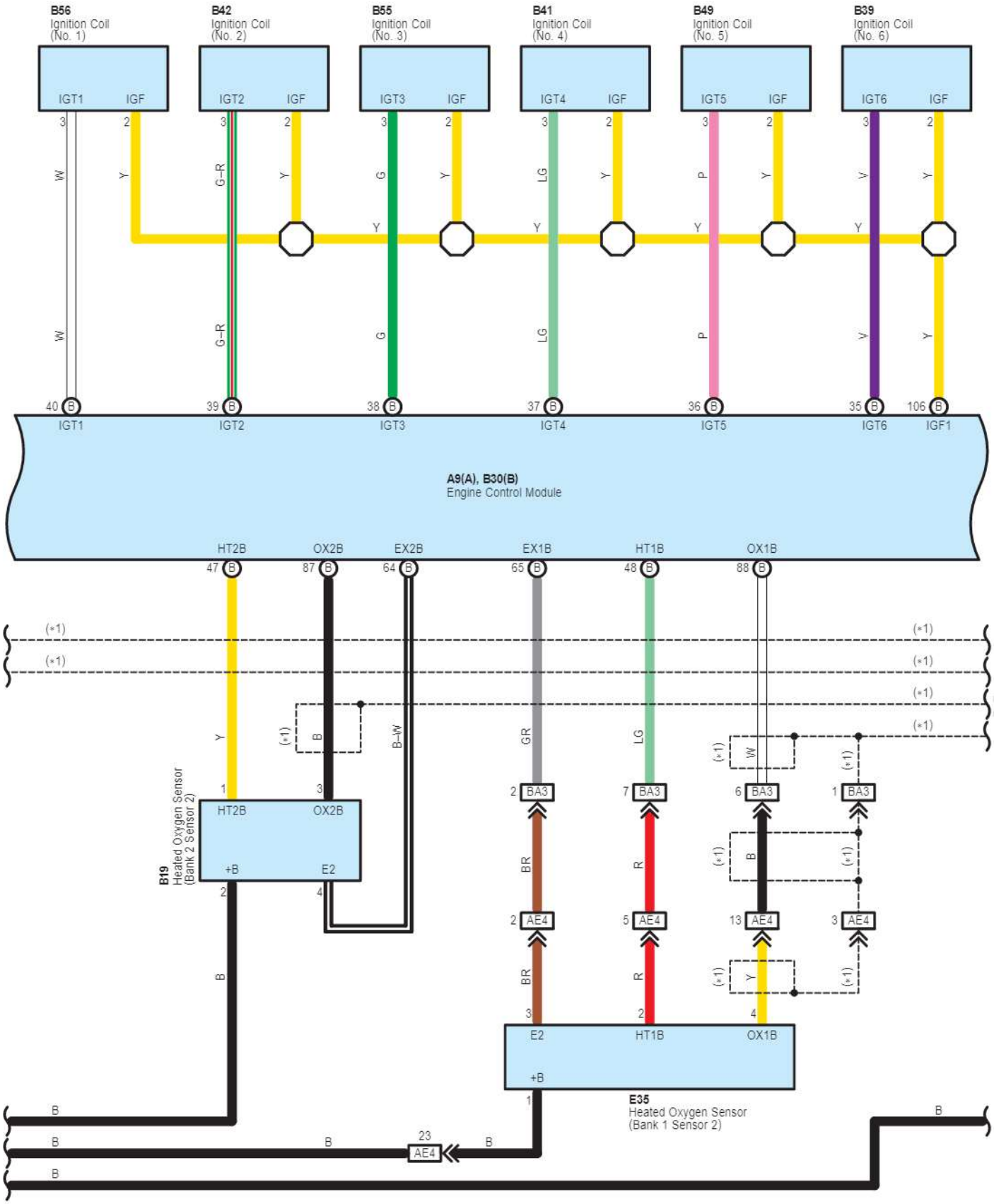
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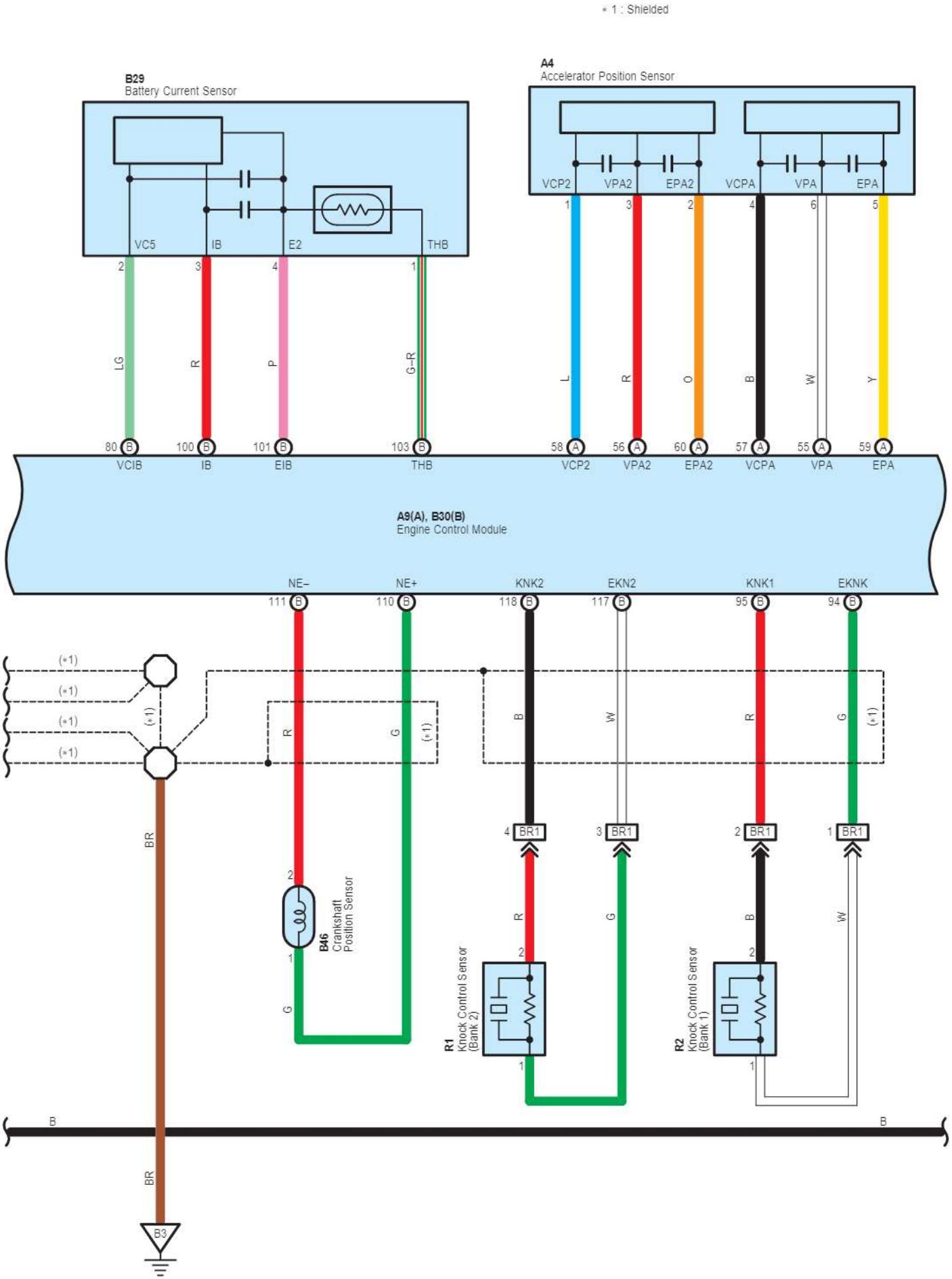
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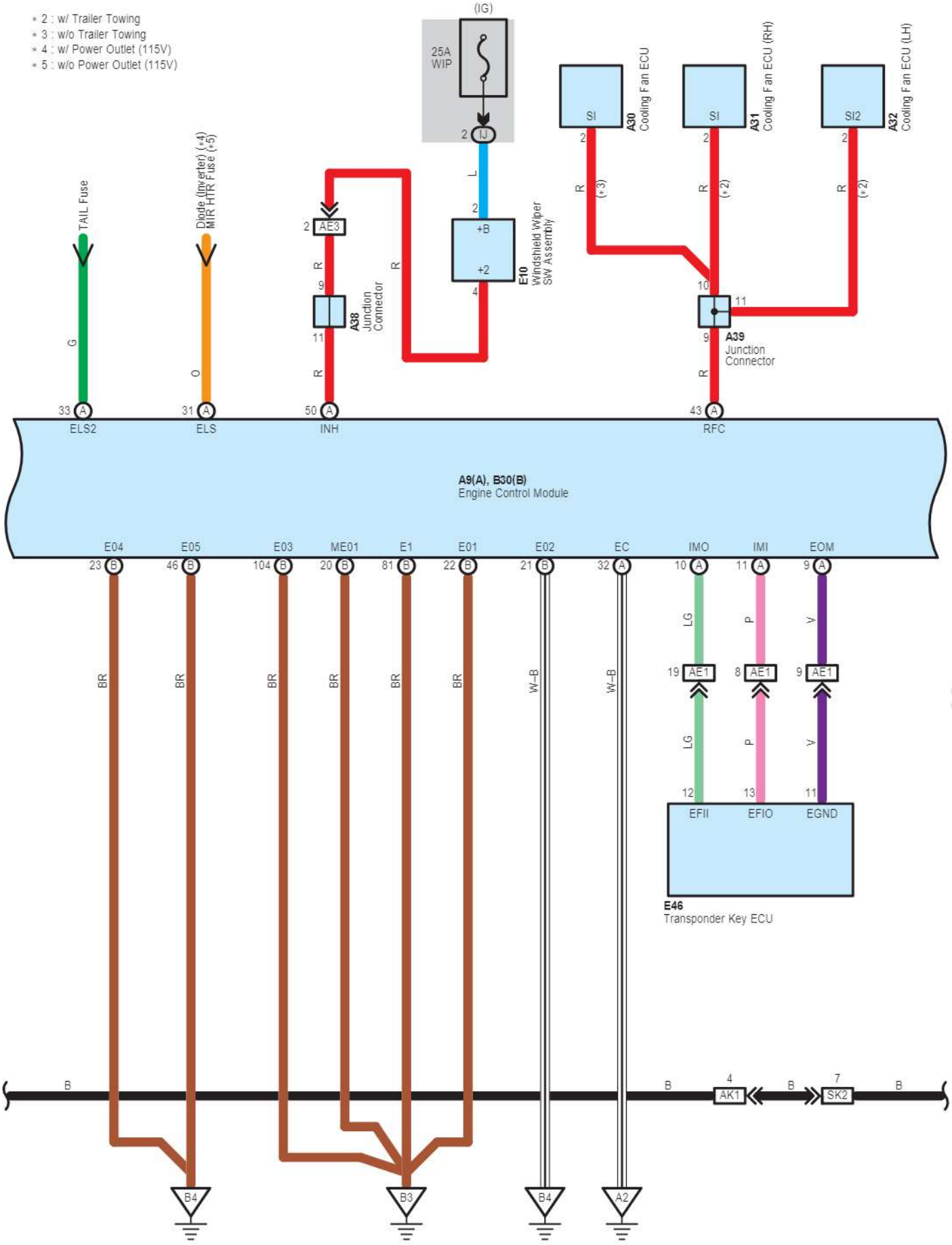
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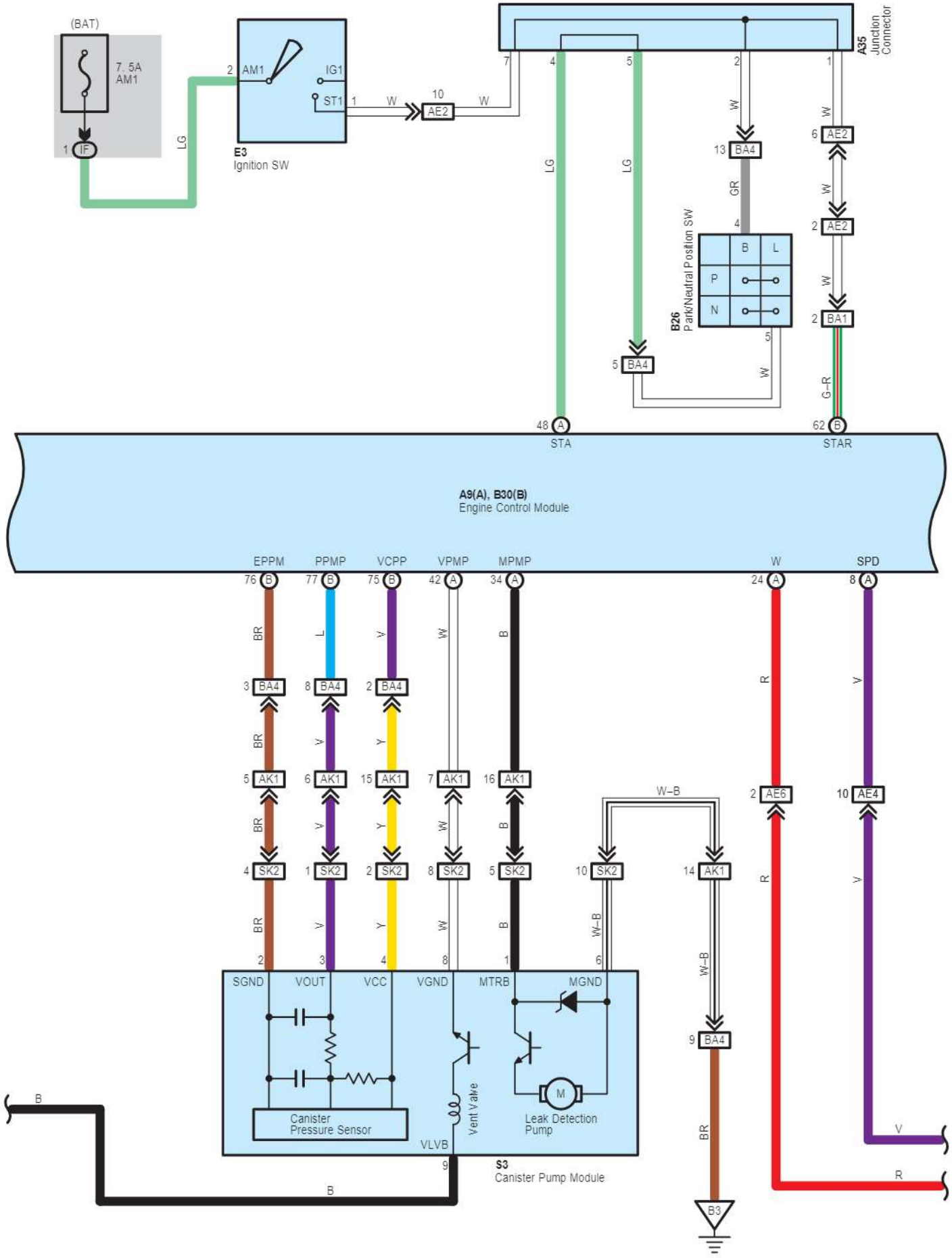
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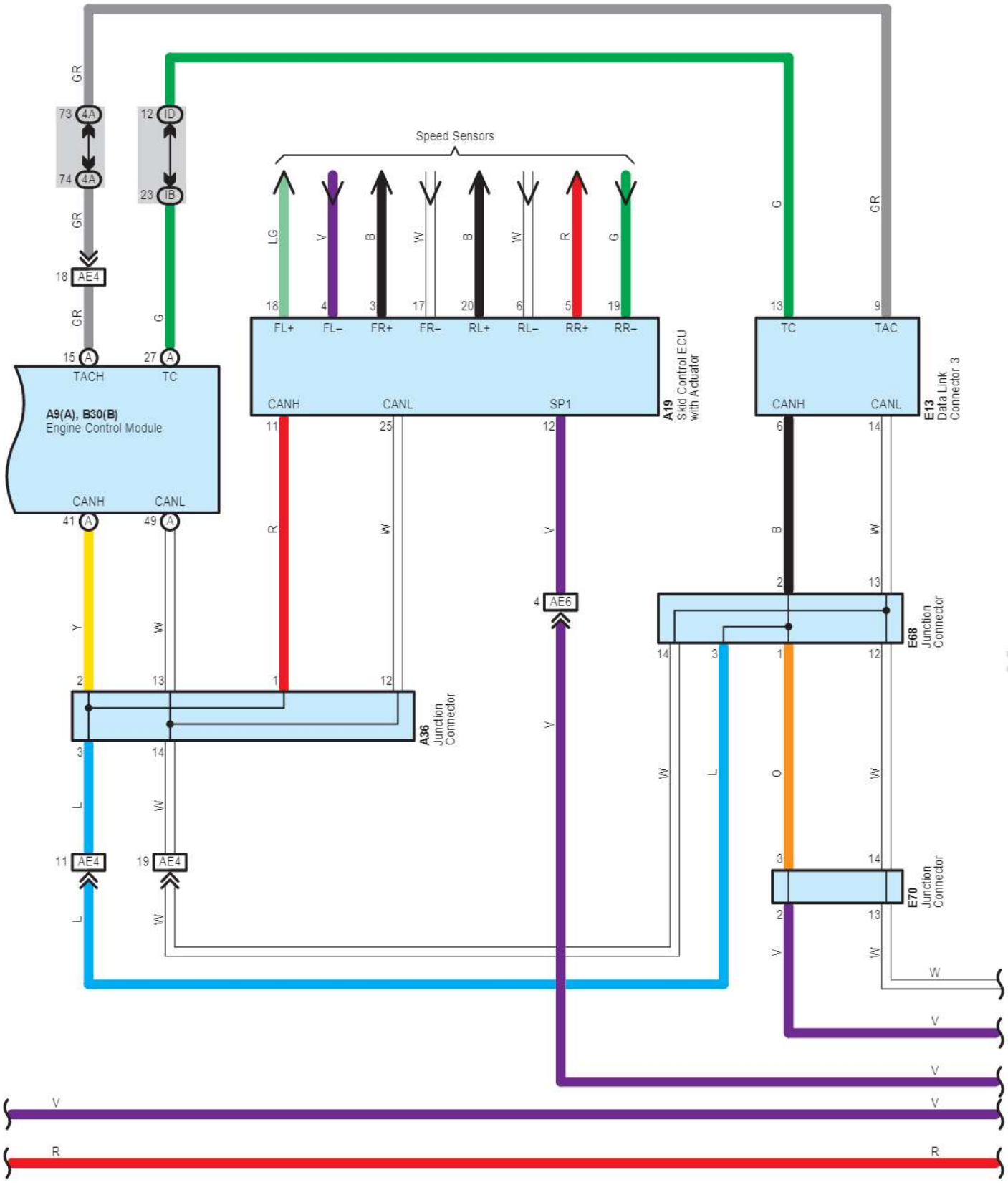
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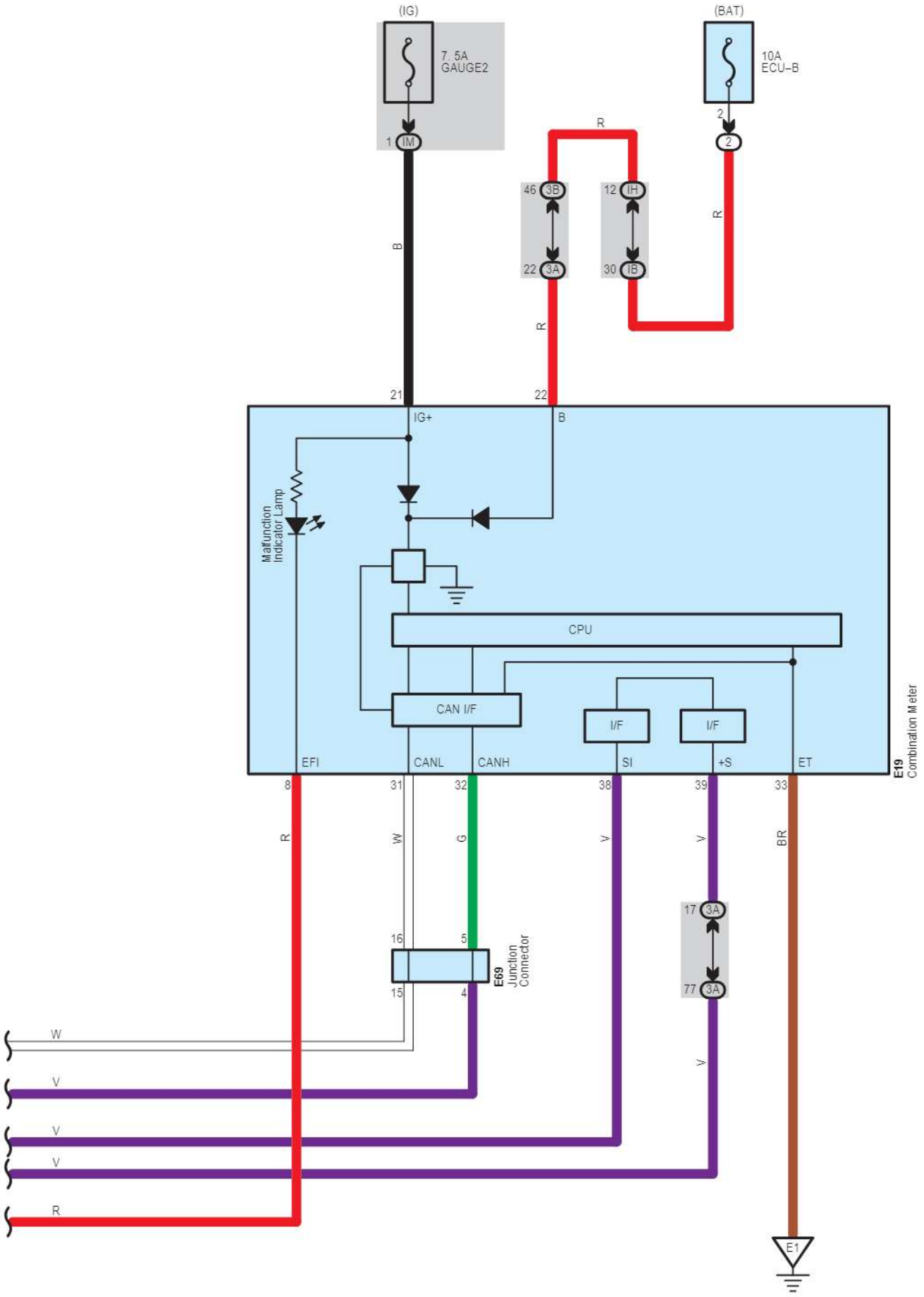
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System Outline

The engine control system utilizes a microcomputer and maintains overall control of the engine, transaxle etc. An outline of the engine control is given here.

1. Input Signals

(1) Engine coolant temp. signal circuit

The engine coolant temp. sensor detects the engine coolant temp. and has a built–in thermistor with a resistance which varies according to the engine coolant temp. The engine coolant temp. is input into TERMINAL THW of the engine control module as a control signal.

(2) Intake air temp. signal circuit

The intake air temp. sensor is installed in the mass air flow meter and detects the intake air temp., which is input as a control signal to TERMINAL THA of the engine control module.

(3) Oxygen sensor signal circuit

The oxygen density in the exhaust emission is detected and is input as a control signal from the heated oxygen sensors to TERMINALS OX1B and OX2B of the engine control module.

(4) RPM signal circuit

Camshaft position is detected by the VVT sensor (Bank 1 exhaust side, bank 1 intake side and bank 2 exhaust side), VVT sensor (Bank 2 intake side) and their signals are input to TERMINALS EV1+, EV2+, VV1+ and VV2+ of the engine control module as control signals. Also, the engine RPM is detected by the crankshaft position sensor installed in the cylinder block and the signal is input into TERMINAL NE+ of the engine control module as a control signal.

(5) Throttle position sensor signal circuit

The throttle position sensor detects the throttle valve opening angle as a control signal, which is input into TERMINALS VTA1 and VTA2 of the engine control module.

(6) Vehicle speed circuit

The vehicle speed sensor detects the vehicle speed, and the signal is input into TERMINAL SPD of the engine control module via the combination meter, from TERMINAL SP1 of the skid control ECU with actuator.

(7) Battery signal circuit

Voltage is constantly applied to TERMINAL BATT of the engine control module. When the ignition SW turned on, the voltage for engine control module start–up power supply is applied to TERMINAL +B and +B2 of engine control module via EFI MAIN relay.

(8) Intake air volume signal circuit

The intake air volume is detected by the mass air flow meter, and is input as a control signal to TERMINAL VG of the engine control module.

(9) Stop lamp SW signal circuit

The stop lamp SW is used to detect whether the vehicle is braking or not, and the signal is input into TERMINAL STP of the engine control module as a control signal.

(10) Starter signal circuit

To confirm whether the engine is cranking, the voltage applied to the starter motor when the engine is cranking is detected, and is input into TERMINAL STA of the engine control module as a control signal.

(11) Engine knock signal circuit

Engine knocking is detected by the knock control sensors, and is input into TERMINALS KNK1 and KNK2 of the engine control module as a control signal.

(12) Air fuel ratio signal circuit

The air fuel ratio is detected and input as a control signal into TERMINALS A1A+, A2A+ of the engine control module.

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2. Control System

* SFI system
  The SFI system monitors the engine condition through the signals input from each sensors to the engine control module. The control signal is sent to the engine control module TERMINALS #10, #20, #30, #40, #50 and #60 to operate the injector (Fuel injection). The SFI system controls the fuel injection by the engine control module in response to the driving conditions.
* ESA system
  The ESA system monitors the engine condition through the signals input from each sensors to the engine control module. The best ignition timing is decided according to this data and the data memorized in the engine control module. The control signal is output to TERMINALS IGT1, IGT2, IGT3, IGT4, IGT5 and IGT6, and these signals control the igniter to provide the best ignition timing.
* Heated oxygen sensor heater control system
  The heated oxygen sensor heater control system turns the heater on when the intake air volume is low (Temp. of exhaust emission is low), and warms up the heated oxygen sensors to improve their detection performance. The engine control module evaluates the signals from each sensors, and outputs current to TERMINALS HT1B or HT2B to control the heater.
* Air fuel ratio sensor heater control system
  The air fuel ratio sensor heater control system turns the heater on when the intake air volume is low (Temp. of exhaust emission is low), and warms up the air fuel ratio sensor to improve detection performance of the sensor.
  The engine control module evaluates the signals from each sensor, current is output to TERMINALS HA1A and HA2A, controlling the heater.
* ACIS
  The ACIS includes a valve in the bulkhead separating the surge tank into two parts. This valve is opened and closed in accordance with the driving conditions to control the intake manifold length in two stages, for increased engine output in all ranges from low to high speeds.
* ETCS–i
  The ETCS–i controls the engine output at its optimal level in accordance with the opening of the accelerator pedal, under all driving conditions.
* VVT–i
  Controls the camshaft to an optimal valve timing in accordance with the engine condition.

3. Diagnosis System

When there is a malfunction in the engine control module signal system, the malfunctioning system is recorded in the memory. The malfunctioning system can be found by reading the code displayed on the malfunction indicator lamp.

4. Fail–Safe System

When a malfunction has occurred in any system, there is a possibility of causing engine trouble due to continued control based on that system. In that case, the fail–safe system either controls the system using the data (Standard values) recorded in the engine control module memory, or else stops the engine.

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Engine Control for 2GR–FE

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	56	B30 B	51 (2GR–FE)	B54	51 (2GR–FE)
A4	56	B31	51 (2GR–FE)	B55	51 (2GR–FE)
A9 A	50 (2GR–FE)	B33	51 (2GR–FE)	B56	51 (2GR–FE)
A19	50 (2GR–FE)	B34	51 (2GR–FE)	B57	51 (2GR–FE)
A20	50 (2GR–FE)	B35	51 (2GR–FE)	B58	51 (2GR–FE)
A30	50 (2GR–FE)	B36	51 (2GR–FE)	B59	51 (2GR–FE)
A31	50 (2GR–FE)	B37	51 (2GR–FE)	B60	51 (2GR–FE)
A32	50 (2GR–FE)	B39	51 (2GR–FE)	E3	54
A35	56	B40	51 (2GR–FE)	E10	54
A36	56	B41	51 (2GR–FE)	E13	54
A38	56	B42	51 (2GR–FE)	E19	54
A39	50 (2GR–FE)	B43	51 (2GR–FE)	E35	55
B1	51 (2GR–FE)	B44	51 (2GR–FE)	E46	55
B3	51 (2GR–FE)	B45	51 (2GR–FE)	E68	55
B4 A	51 (2GR–FE)	B46	51 (2GR–FE)	E69	55
B19	51 (2GR–FE)	B48	51 (2GR–FE)	E70	55
B20 A	51 (2GR–FE)	B49	51 (2GR–FE)	R1	51 (2GR–FE)
B21 C	51 (2GR–FE)	B51	51 (2GR–FE)	R2	51 (2GR–FE)
B26	51 (2GR–FE)	B52	51 (2GR–FE)	S1	61
B29	51 (2GR–FE)	B53	51 (2GR–FE)	S3	61

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)

▭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B		
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IE		
IF		
IH		
IJ		
IM	31	

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: **Connector Joining Wire Harness and Wire Harness**

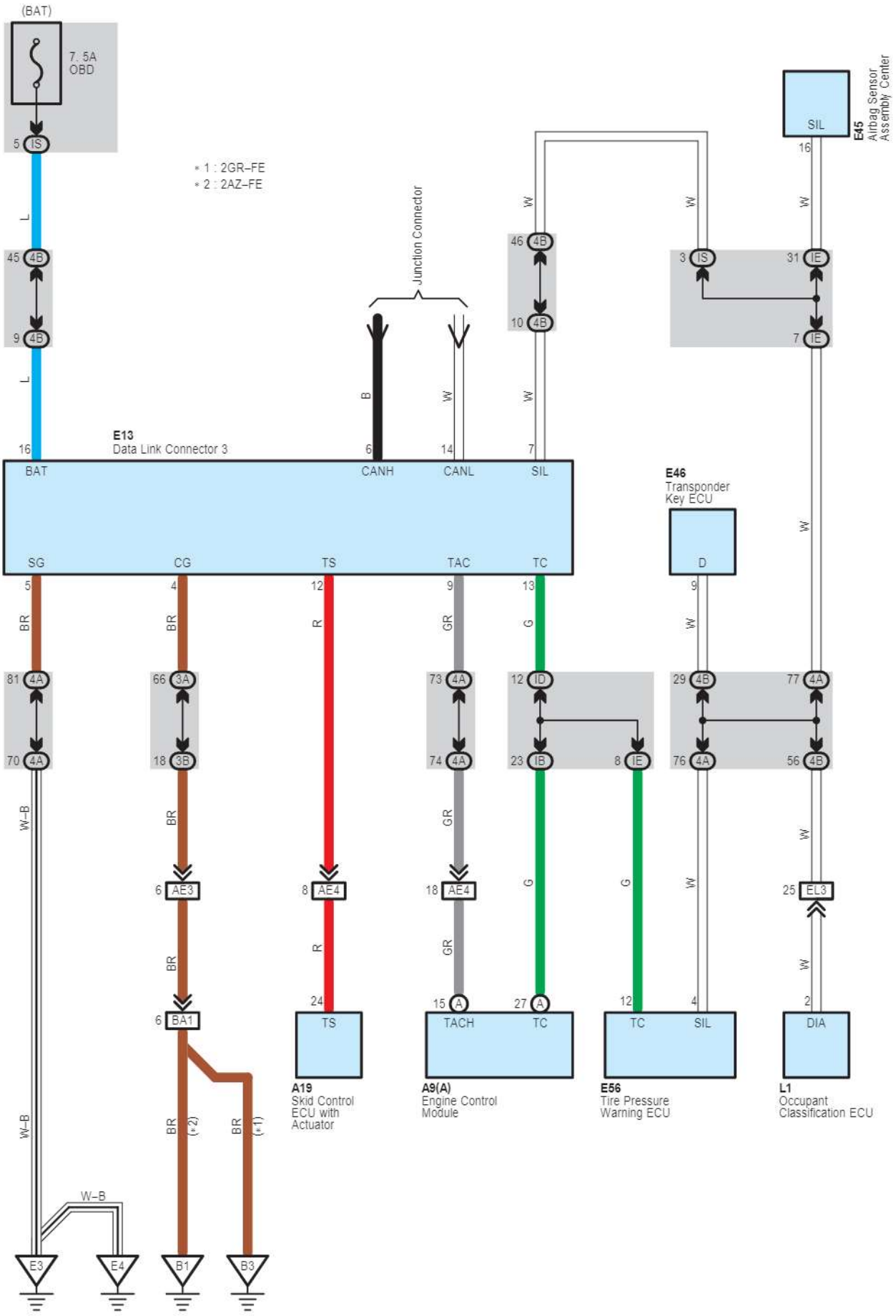
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE1	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE2		
AE3		
AE4		
AE6		
AK1	66	Engine Room Main Wire and Floor Wire (Left Kick Panel)
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
BA3		
BA4		
BR1	64 (2GR–FE)	Engine Wire and Sensor Wire (Left Side of the Cylinder Block)
SK1	66	Fuel Gauge Wire and Floor Wire (Under the Console Box)
SK2		

: **Ground Points**

Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
A2		
B3	64 (2GR–FE)	Left Side of the Cylinder Head
B4		
E1	66	Left Kick Panel
K1	67	Left Center Pillar

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Data Link Connector 3



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○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
A9	A	50 (2GR–FE)	A19	52 (2AZ–FE)	E46	55
		52 (2AZ–FE)	E13	54	E56	55
A19		50 (2GR–FE)	E45	55	L1	62

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IE		
IS	31	

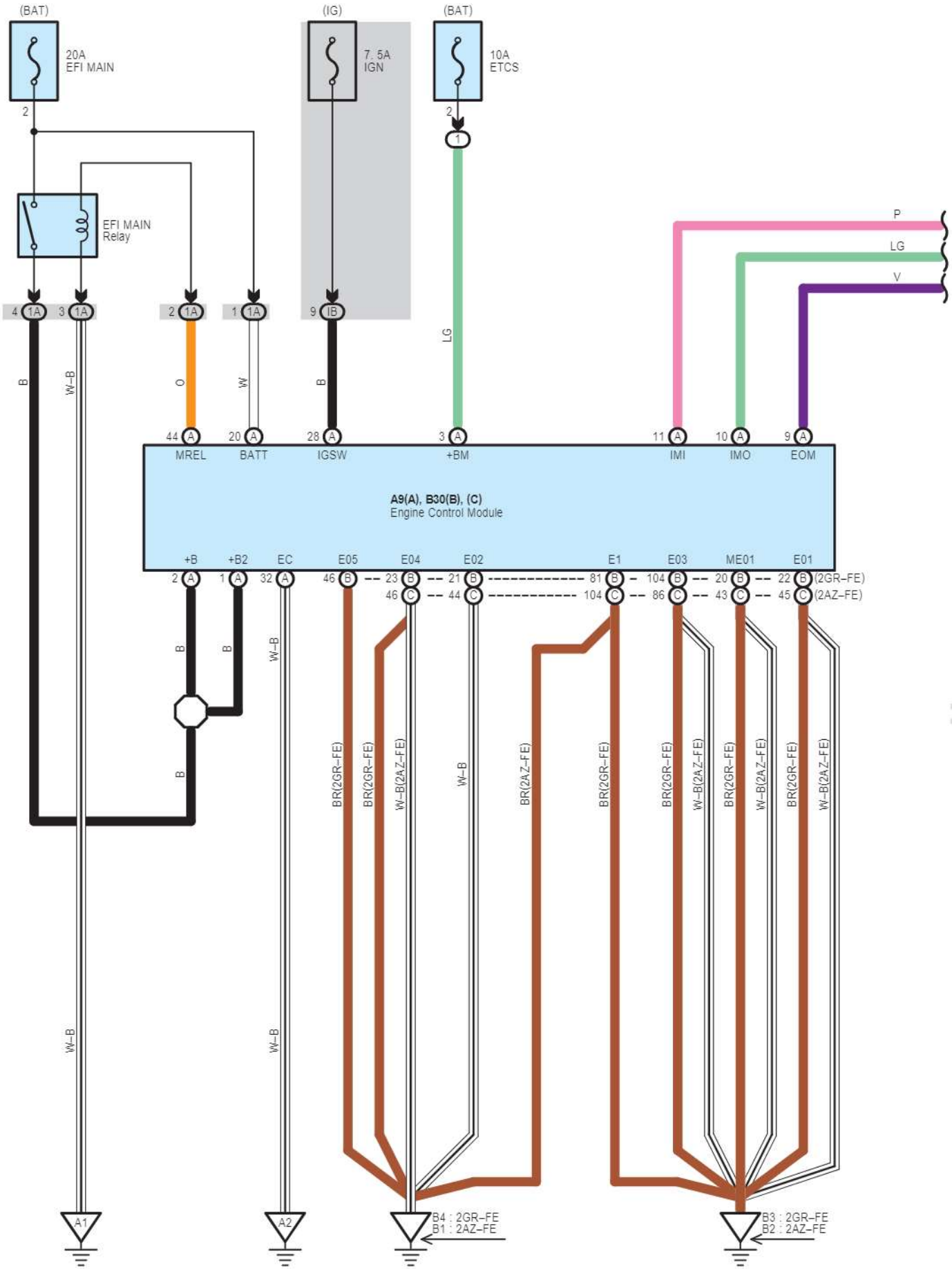
▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE3	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE4		
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
	65 (2AZ–FE)	
EL3	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)

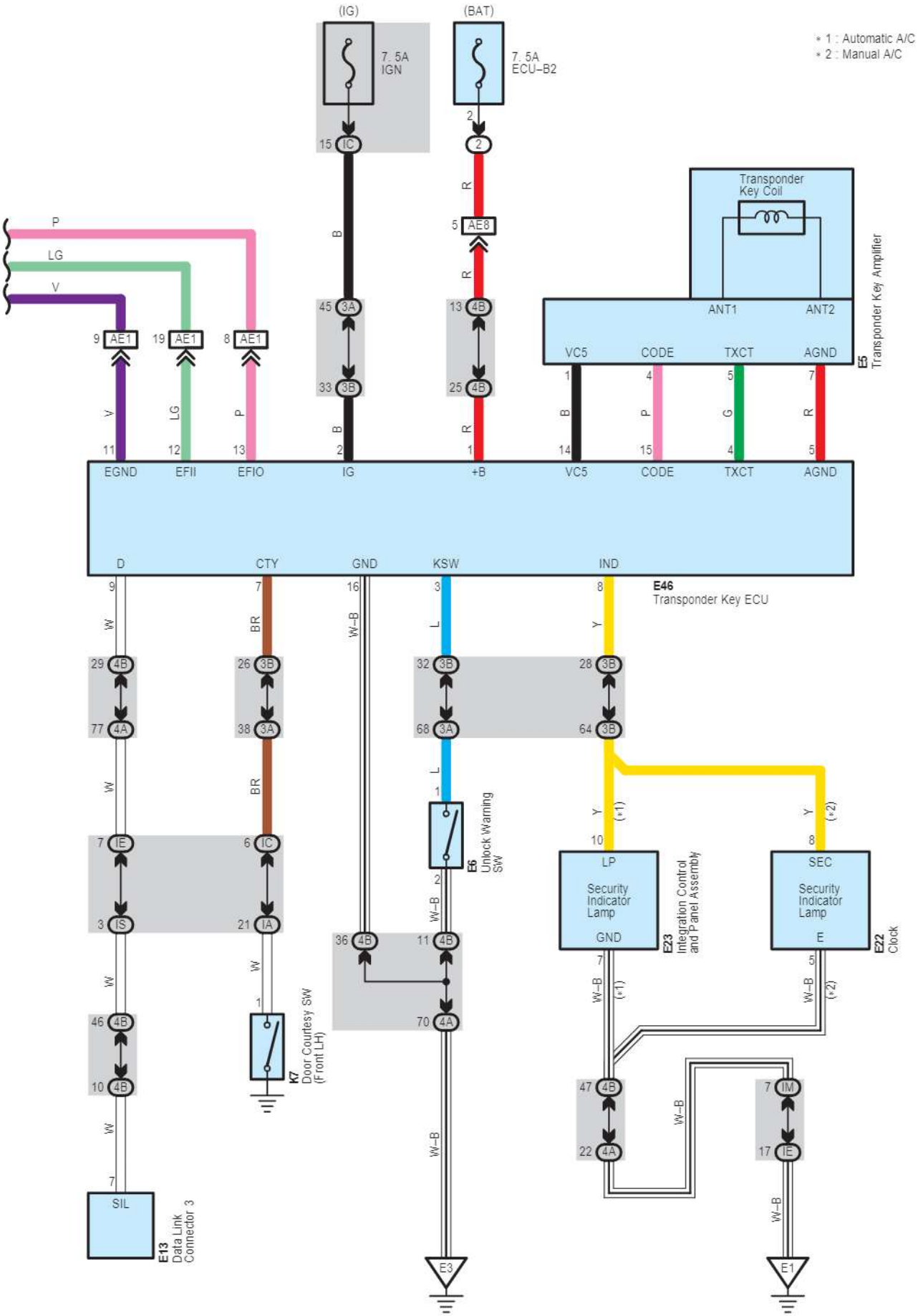
▽ : Ground Points

Code	See Page	Ground Points Location
B1	65 (2AZ–FE)	Left Side of the Cylinder Head
B3	64 (2GR–FE)	
E3	66	Instrument Panel Reinforcement Center
E4	66	Right Kick Panel

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Engine Immobiliser System

○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
A9	A	50 (2GR–FE)	E5	54	E23	54
		52 (2AZ–FE)	E6	54	E46	55
B30	B	51 (2GR–FE)	E13	54	K7	59
	C	53 (2AZ–FE)	E22	54		

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IC	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IE		
IM	31	
IS		

▭ : Connector Joining Wire Harness and Wire Harness

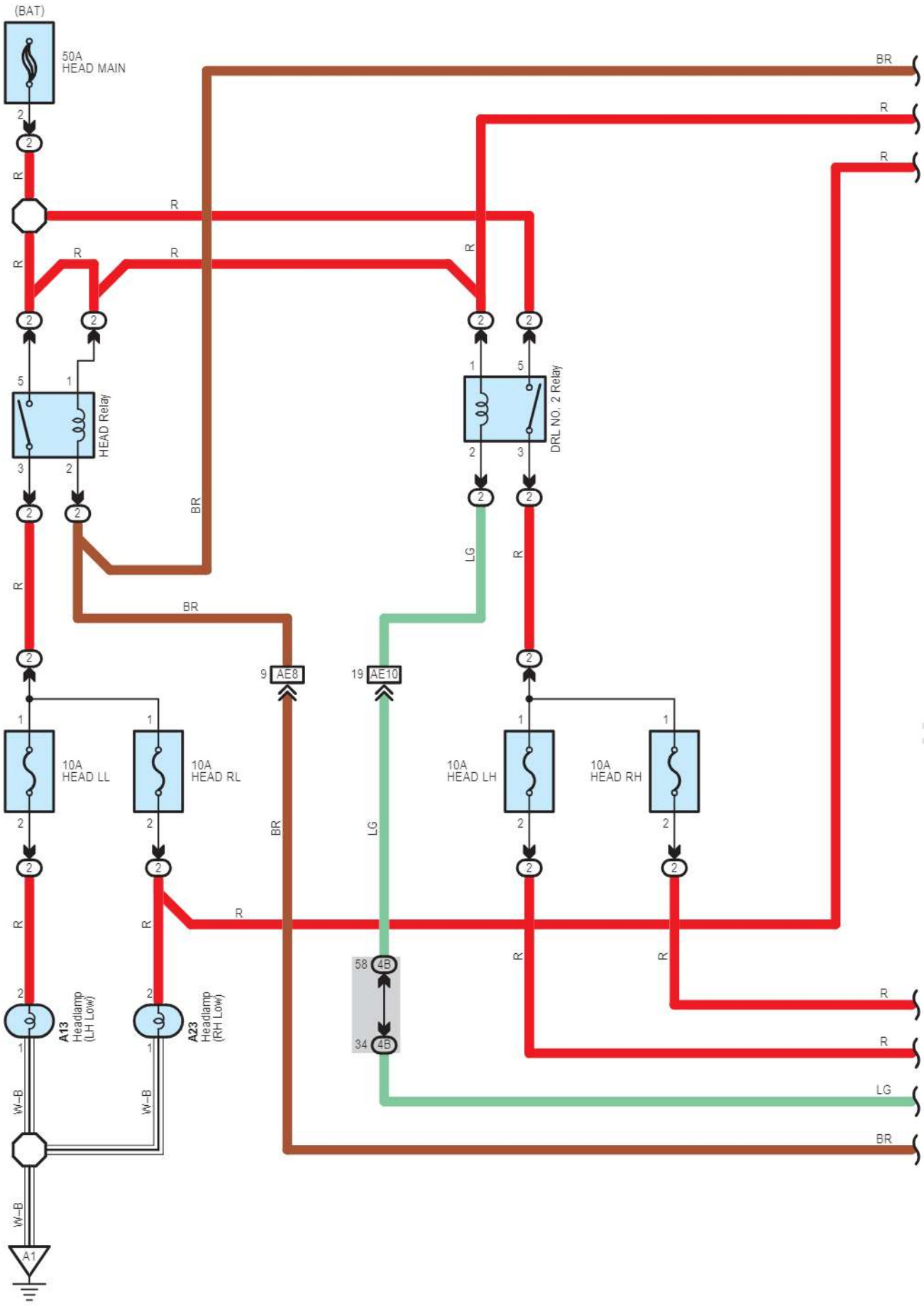
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE1	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE8	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)

▽ : Ground Points

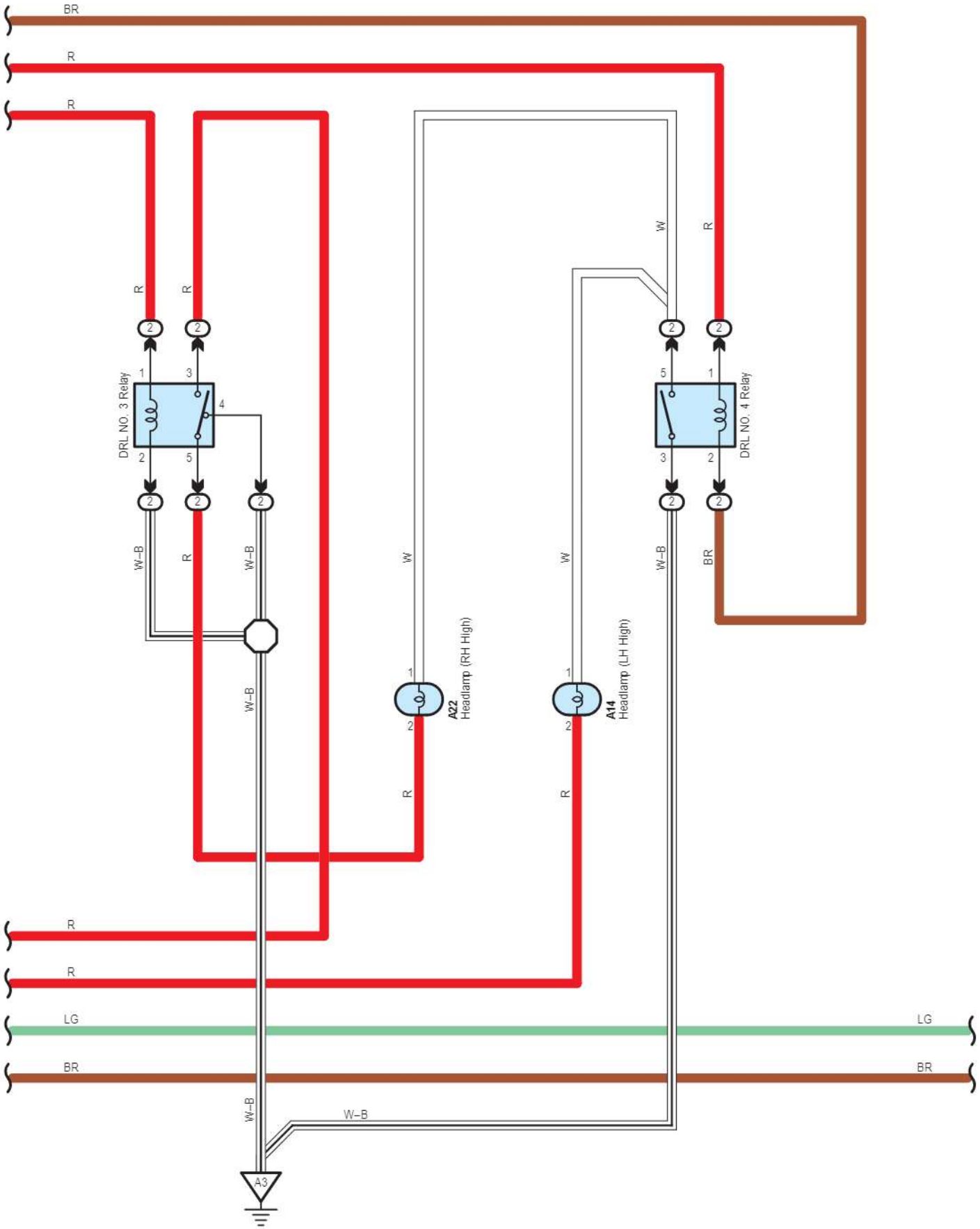
Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
	65 (2AZ–FE)	
A2	64 (2GR–FE)	
	65 (2AZ–FE)	
B1	65 (2AZ–FE)	Left Side of the Cylinder Head
B2		
B3	64 (2GR–FE)	
B4		
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center

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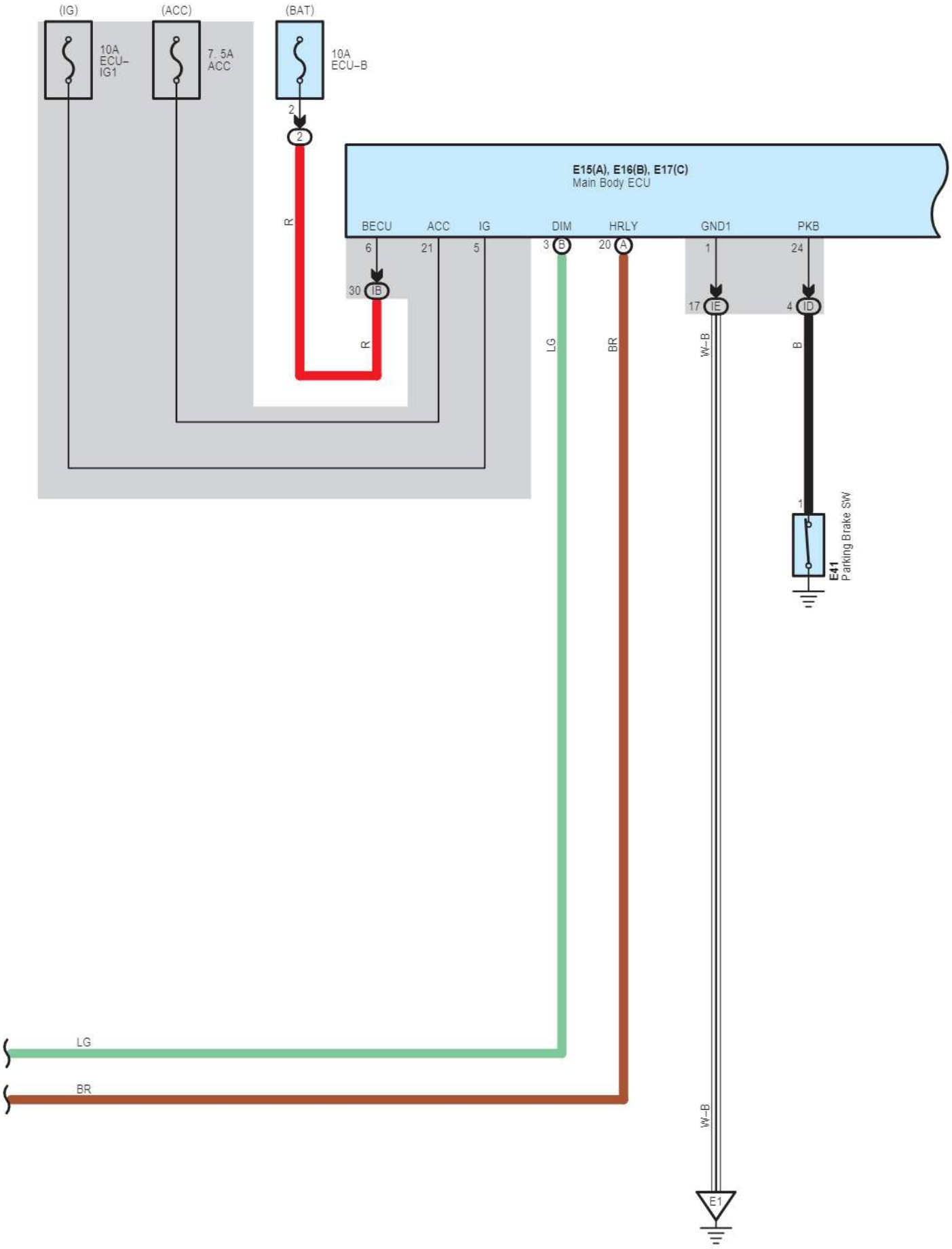
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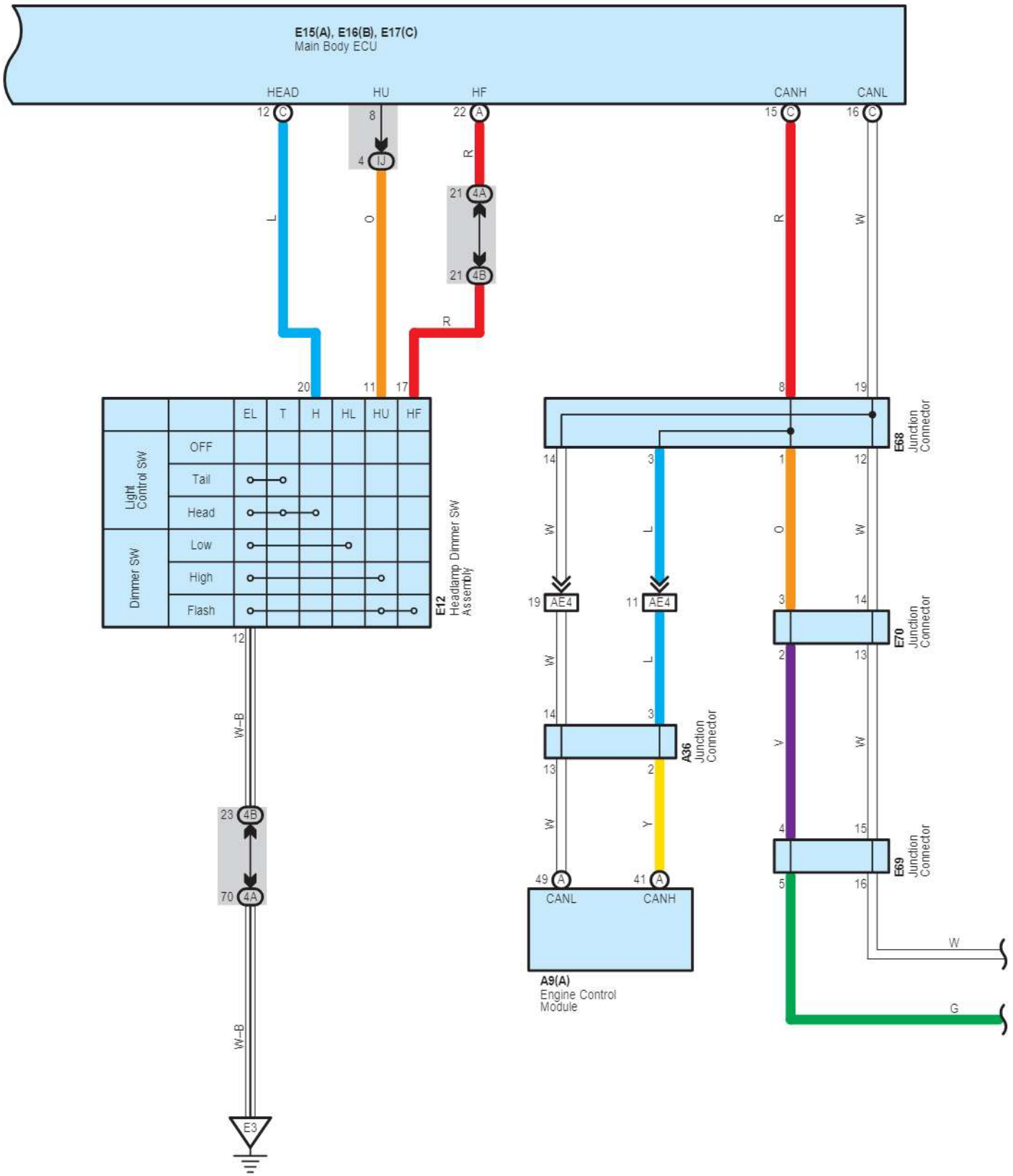
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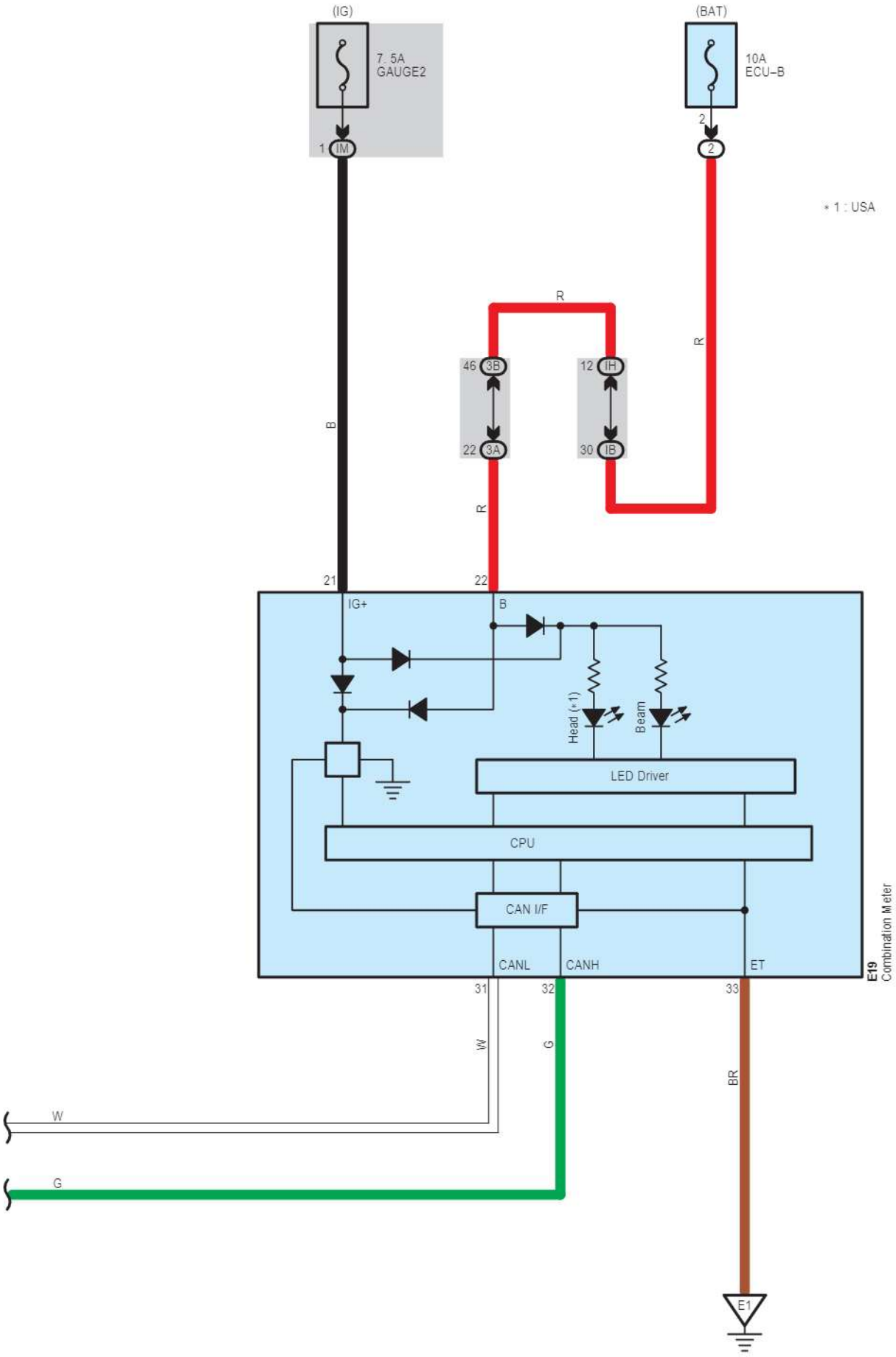
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: Parts Location

Code	See Page	Code	See Page	Code	See Page
A9 A	50 (2GR–FE)	A22	52 (2AZ–FE)	E17 C	54
	52 (2AZ–FE)	A23	50 (2GR–FE)	E19	54
A13	50 (2GR–FE)		52 (2AZ–FE)	E41	55
	52 (2AZ–FE)	A36	56	E68	55
A14	50 (2GR–FE)	E12	54	E69	55
	52 (2AZ–FE)	E15 A	54	E70	55
A22	50 (2GR–FE)	E16 B	54		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IE		
IH		
IJ		
IM	31	

: Connector Joining Wire Harness and Wire Harness

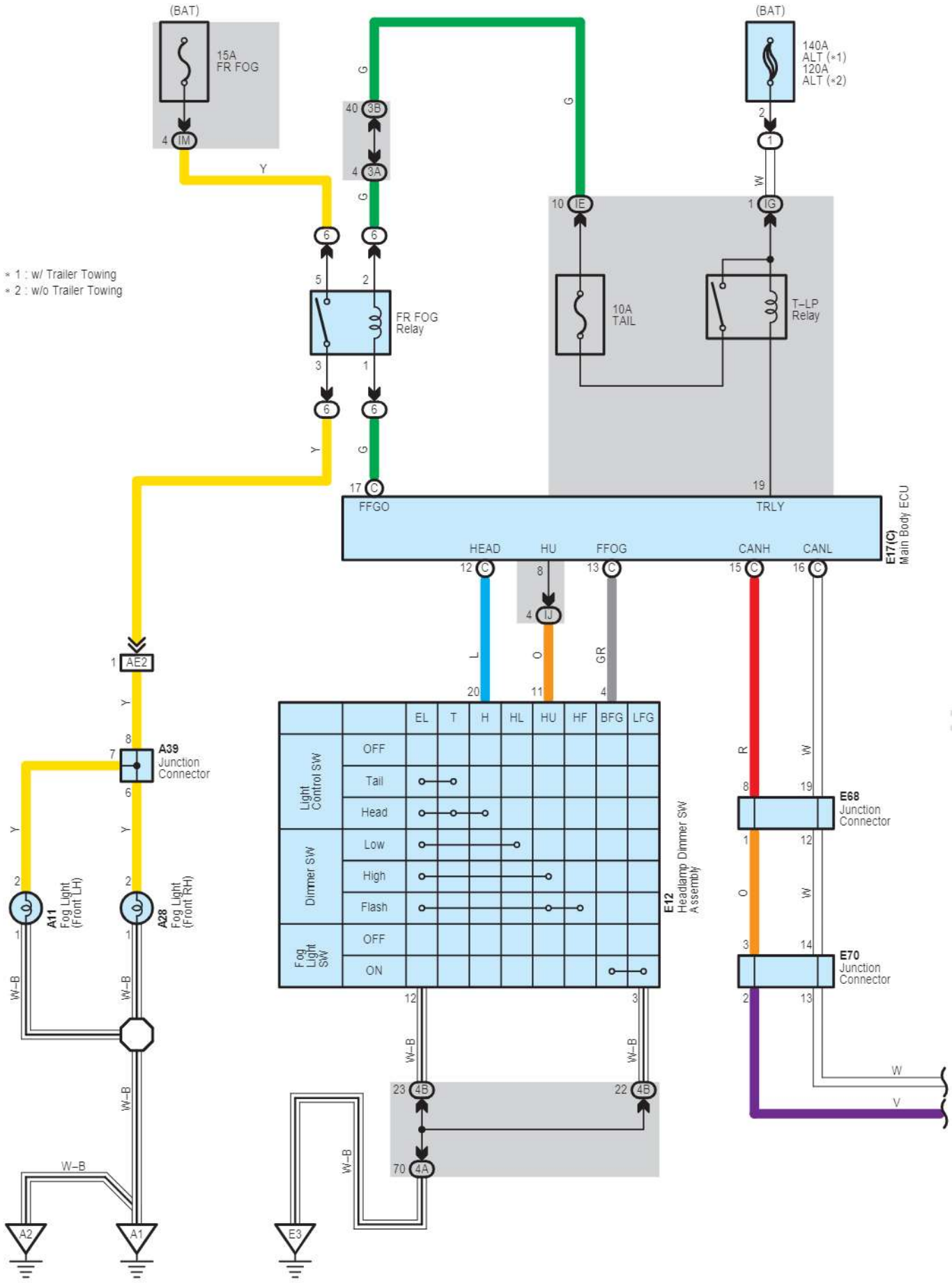
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE8	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)
AE10		

: Ground Points

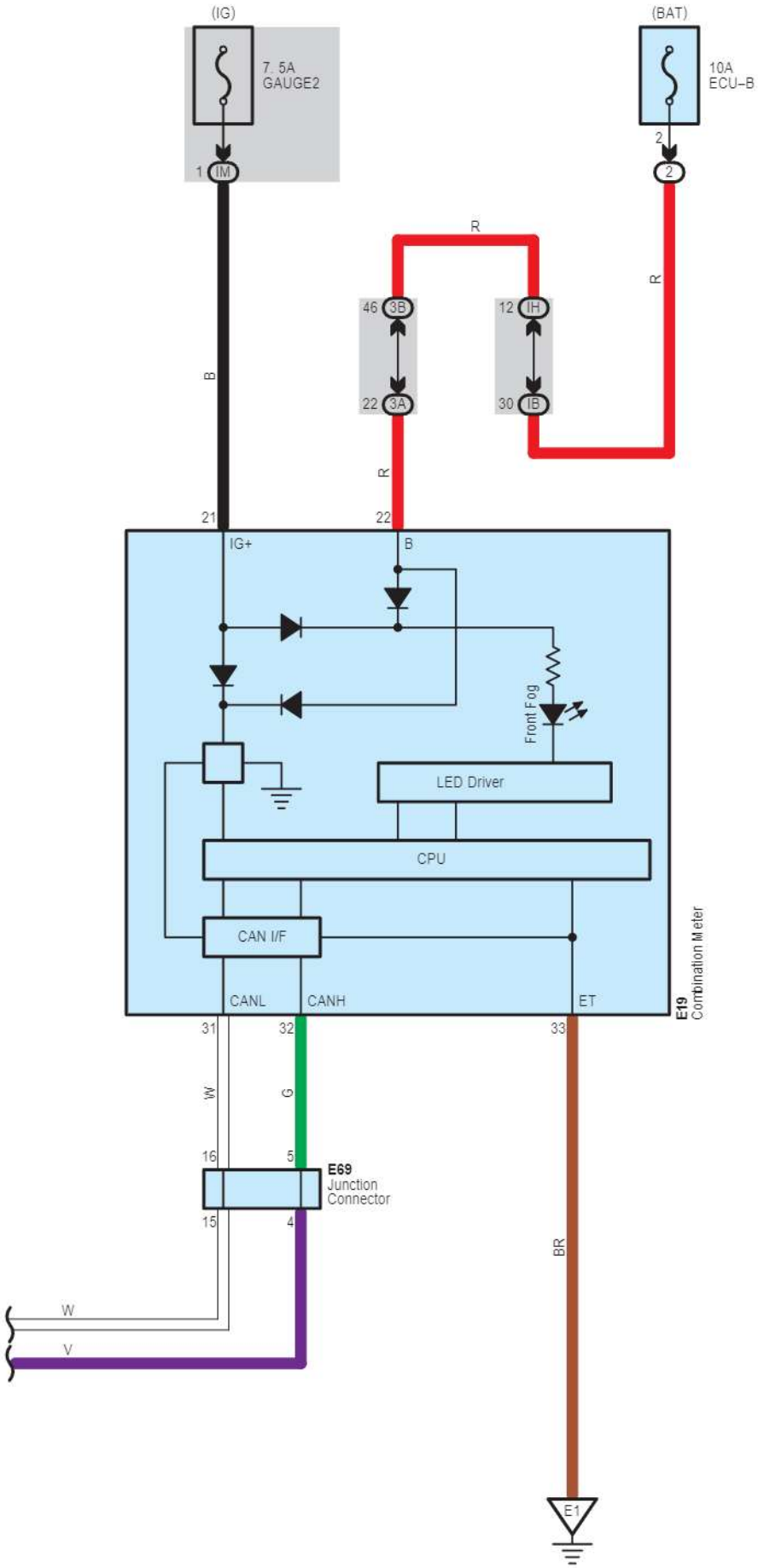
Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
	65 (2AZ–FE)	
A3	64 (2GR–FE)	Front Right Fender
	65 (2AZ–FE)	
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center

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Front Fog Light



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Front Fog Light

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A11	50 (2GR–FE)	A39	50 (2GR–FE)	E19	54
	52 (2AZ–FE)		52 (2AZ–FE)	E68	55
A28	50 (2GR–FE)	E12	54	E69	55
	52 (2AZ–FE)	E17 C	54	E70	55

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	
6	28	R/B No.6 (Cowl Side Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IG	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IH	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IJ		
IM	31	

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE2	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)

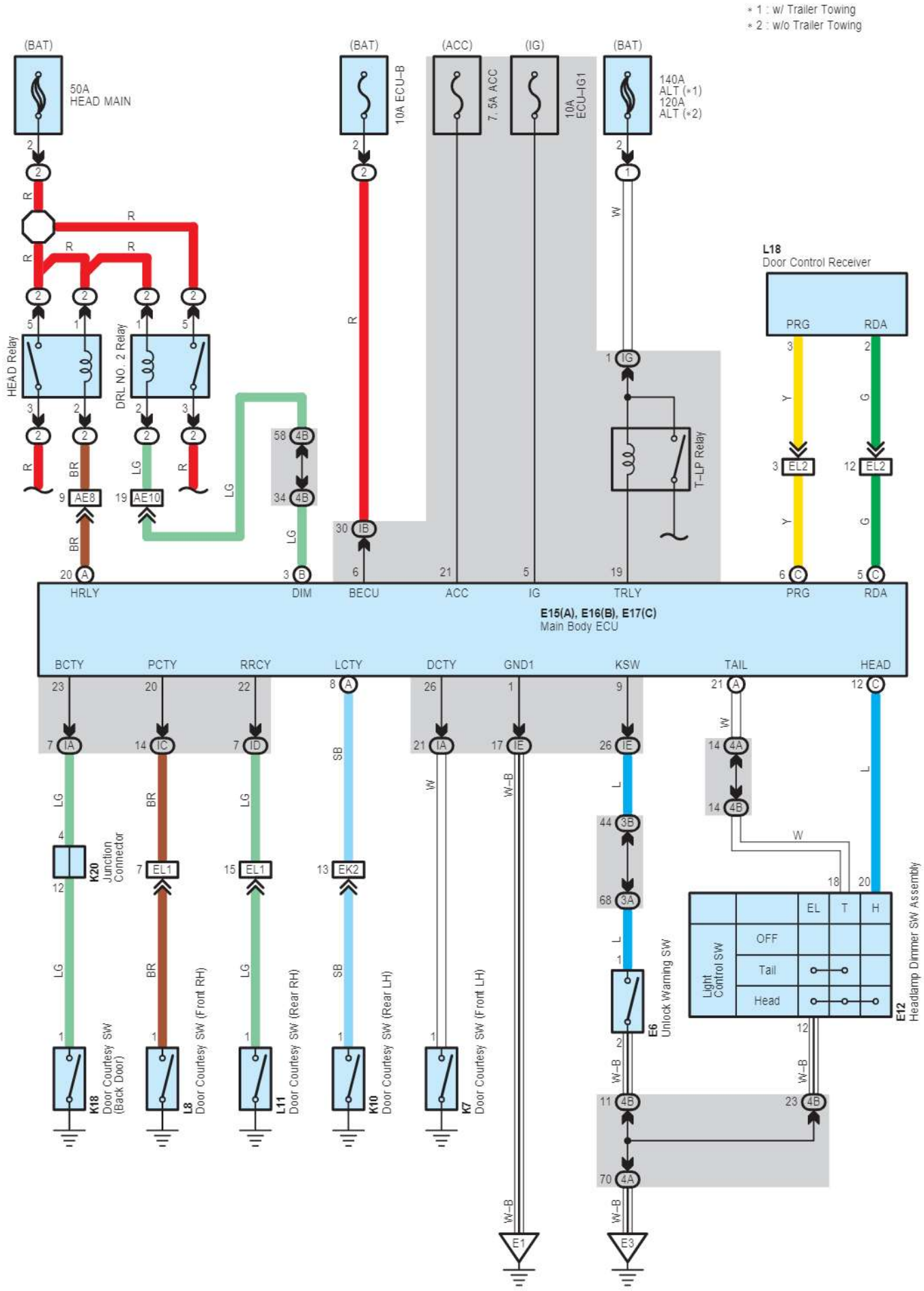
: Ground Points

Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
	65 (2AZ–FE)	
A2	64 (2GR–FE)	
	65 (2AZ–FE)	
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center

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Light Auto Turn Off System



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: Parts Location

Code	See Page	Code	See Page	Code	See Page
E6	54	E17 C	54	K20	59
E12	54	K7	59	L8	60
E15 A	54	K10	59	L11	60
E16 B	54	K18	59	L18	60

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IC	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
ID		
IE		
IG	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)

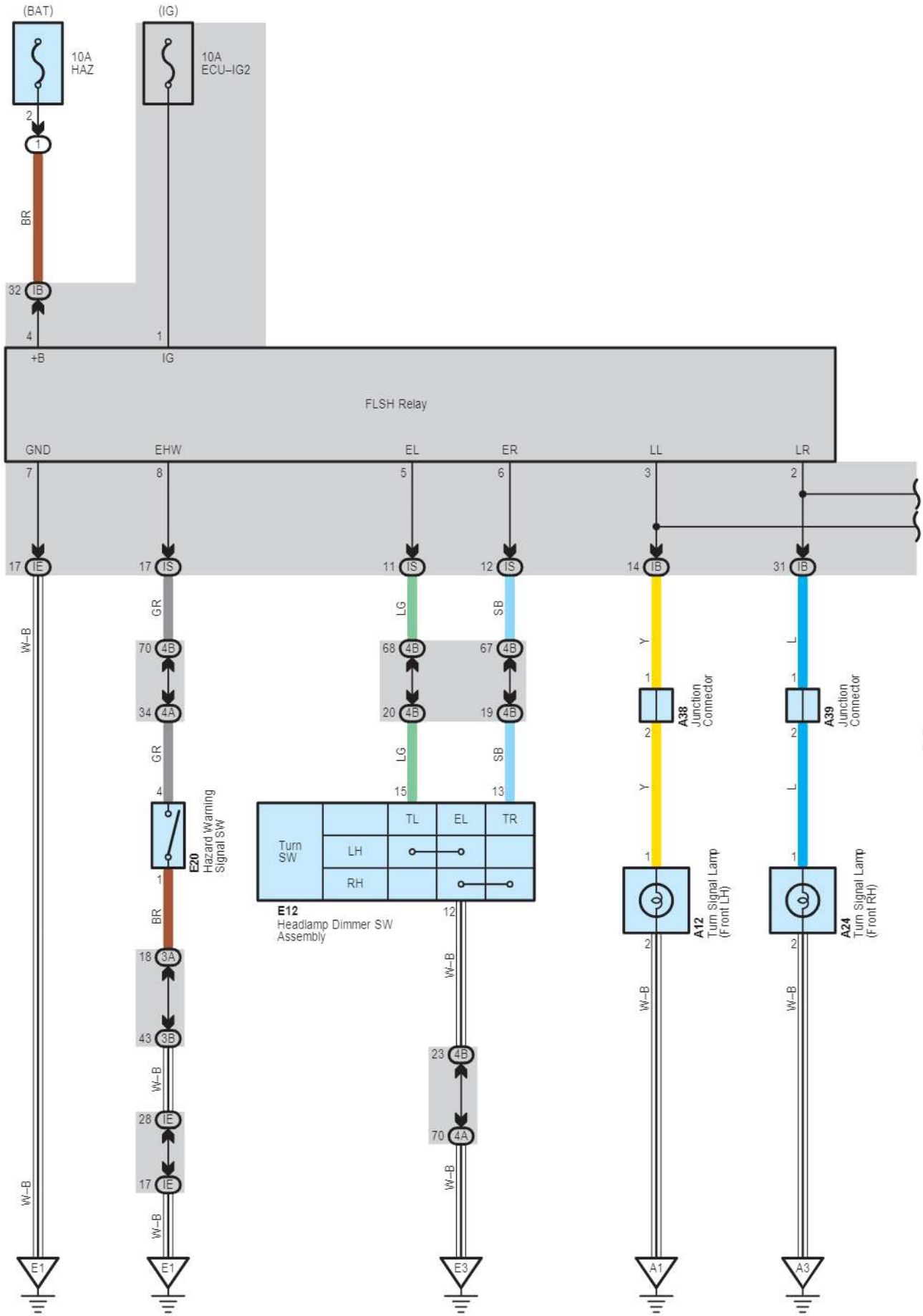
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE8	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)
AE10		
EK2	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)
EL1	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
EL2		

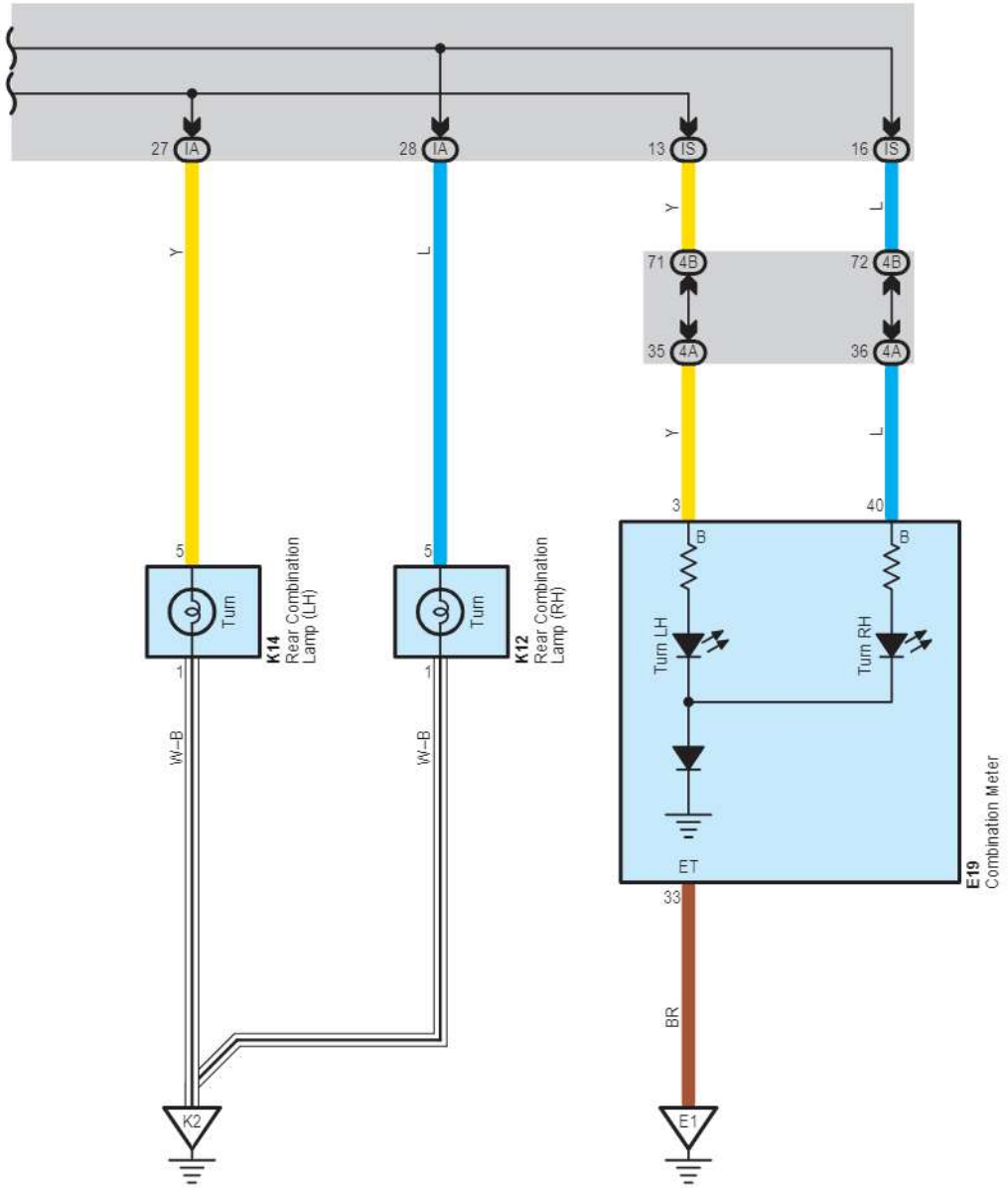
: Ground Points

Code	See Page	Ground Points Location
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center

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Turn Signal and Hazard Warning Light

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A12	50 (2GR–FE)	A38	56	E19	54
	52 (2AZ–FE)	A39	50 (2GR–FE)	E20	54
A24	50 (2GR–FE)		52 (2AZ–FE)	K12	59
	52 (2AZ–FE)	E12	54	K14	59

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	

▭ : Junction Block and Wire Harness Connector

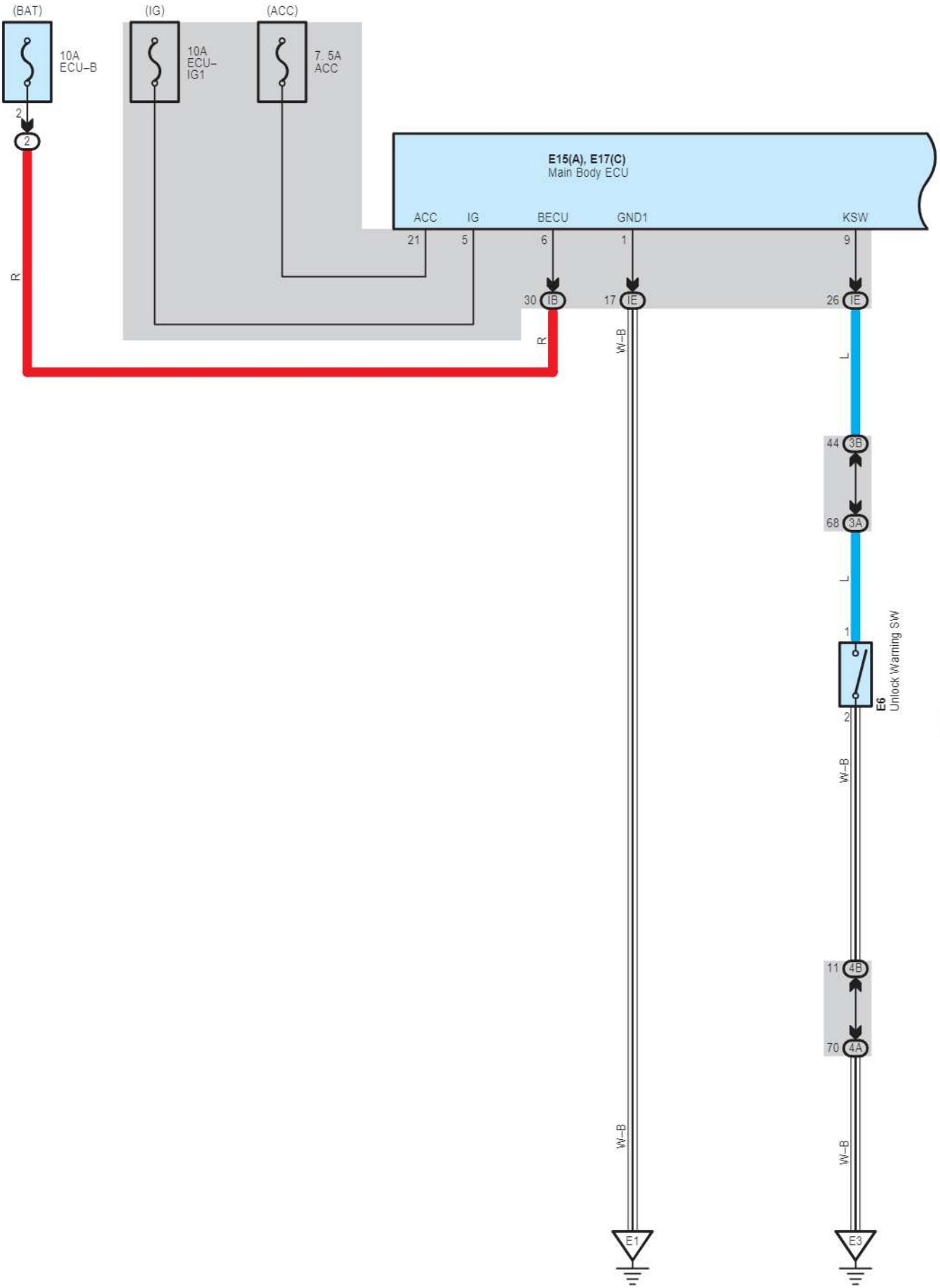
Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IS	31	

▽ : Ground Points

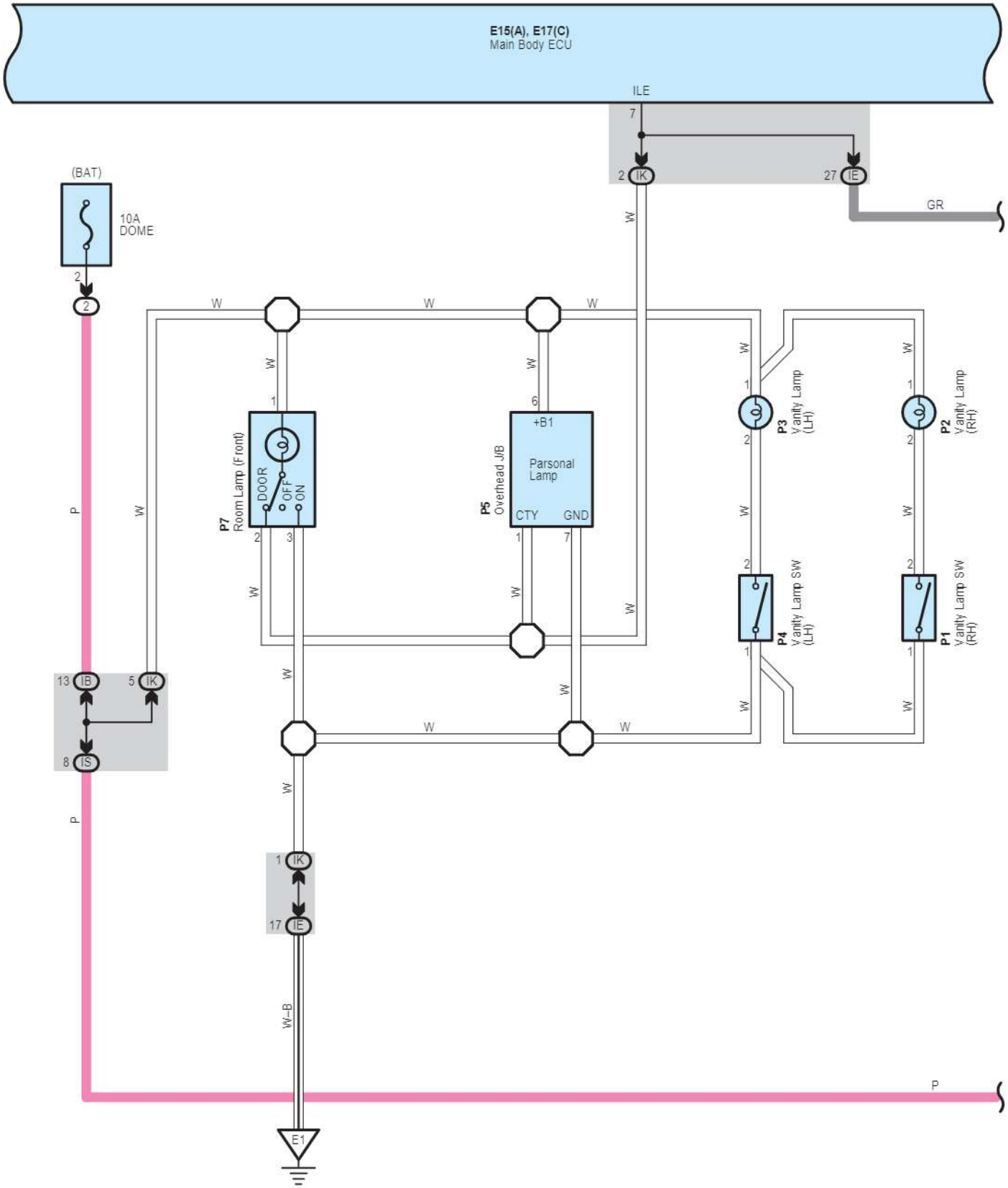
Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
	65 (2AZ–FE)	
A3	64 (2GR–FE)	Front Right Fender
	65 (2AZ–FE)	
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center
K2	67	Left Quarter Panel

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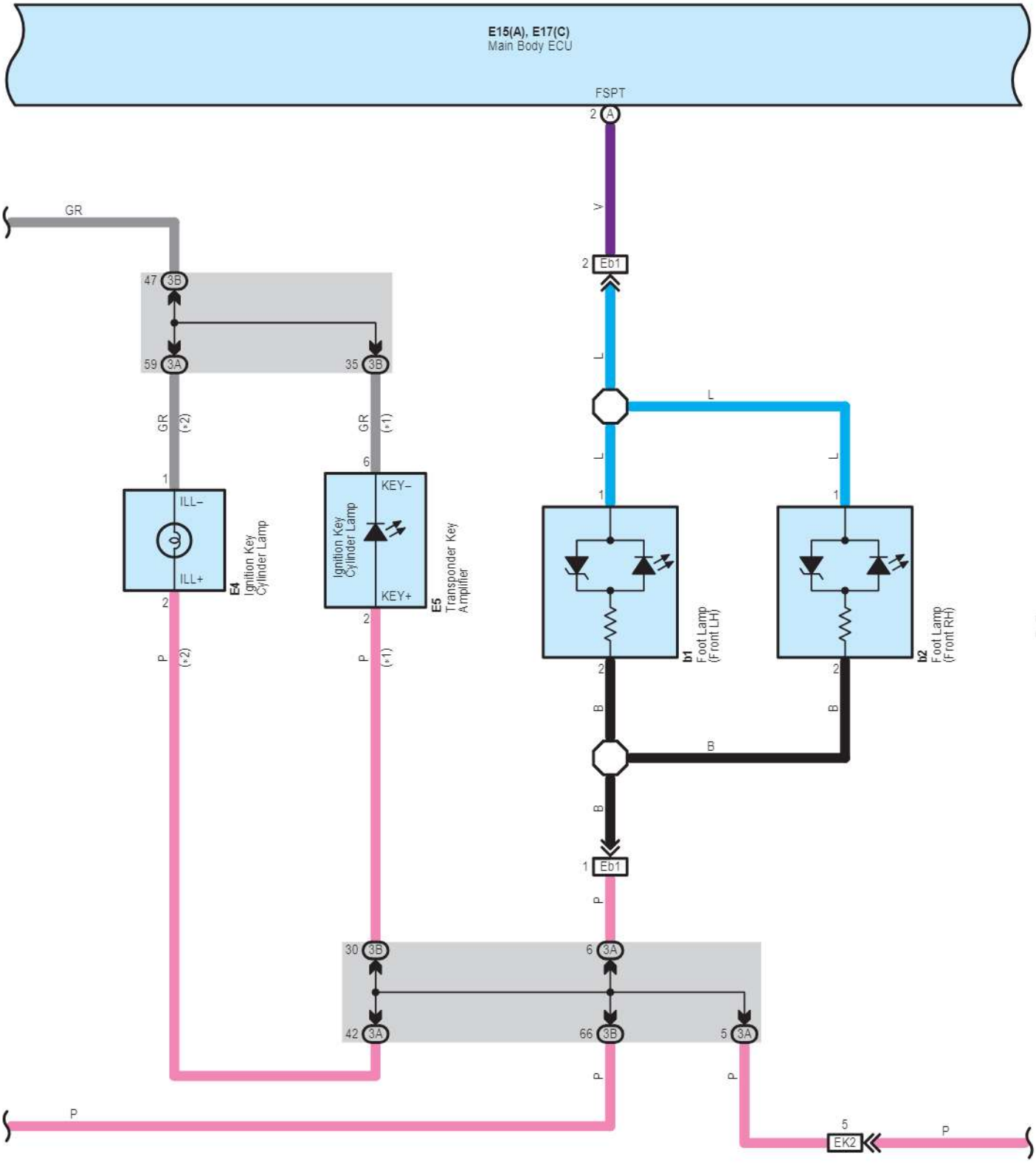


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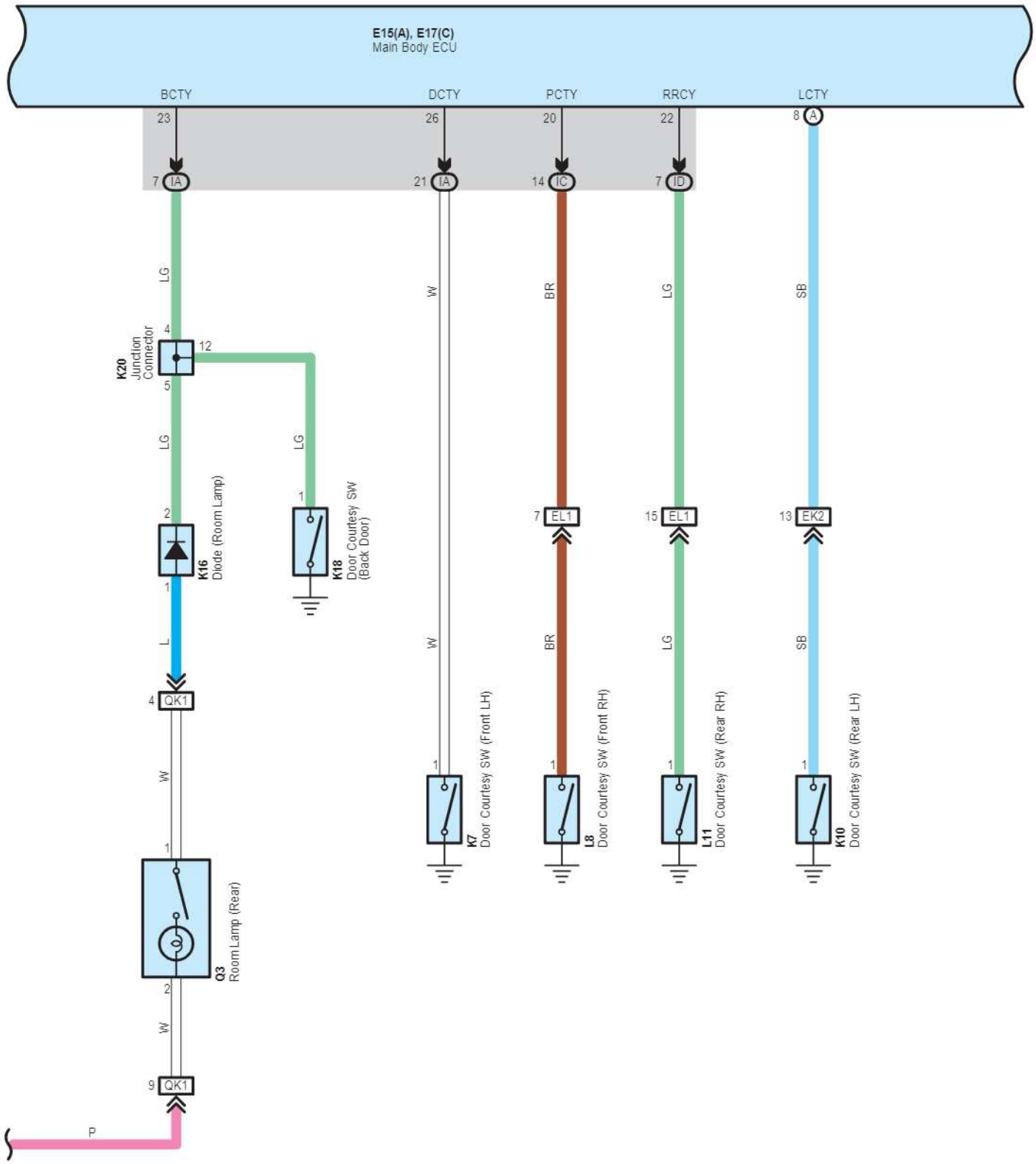


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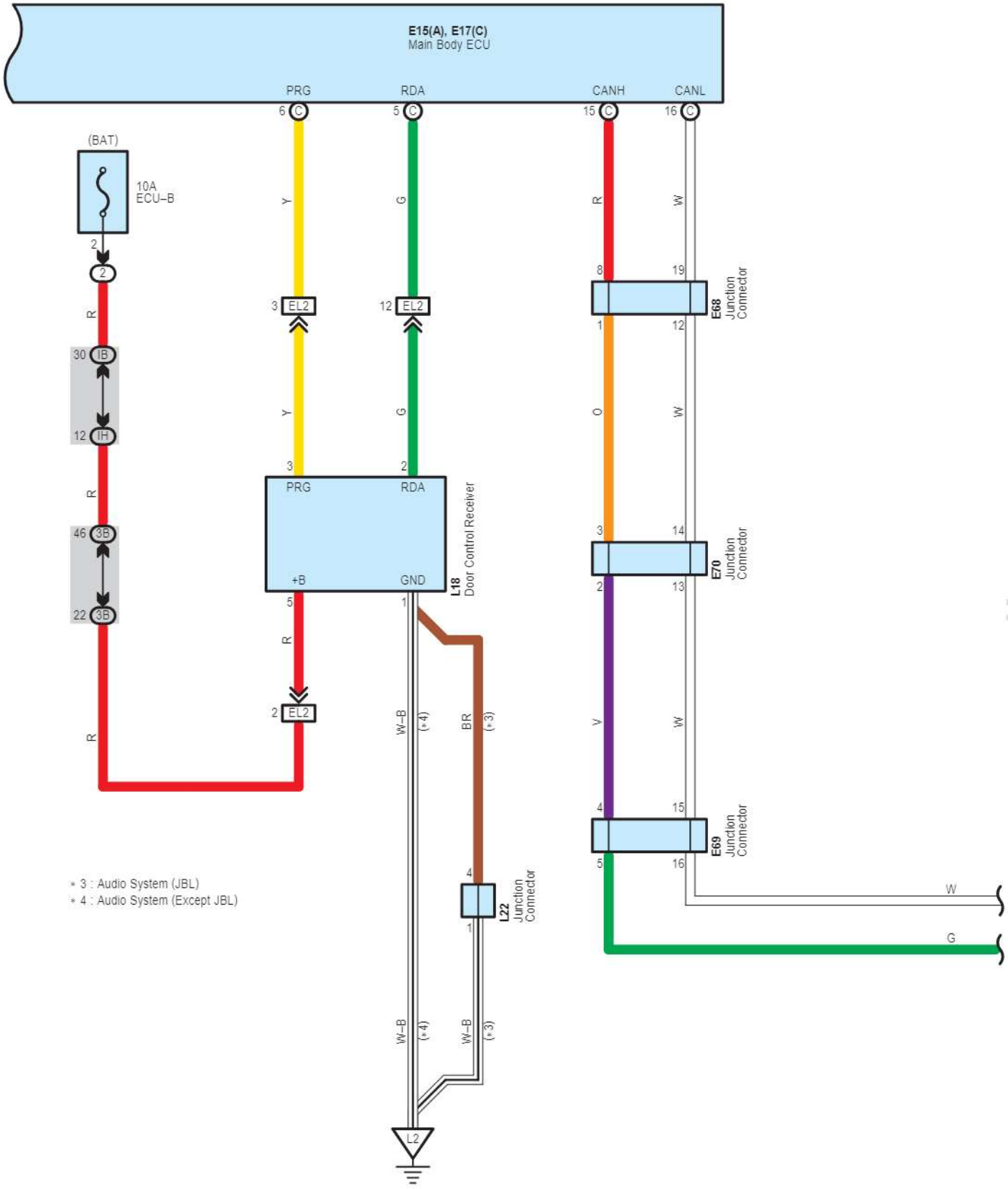
* 1 : w/ Engine Immobiliser System
* 2 : w/o Engine Immobiliser System



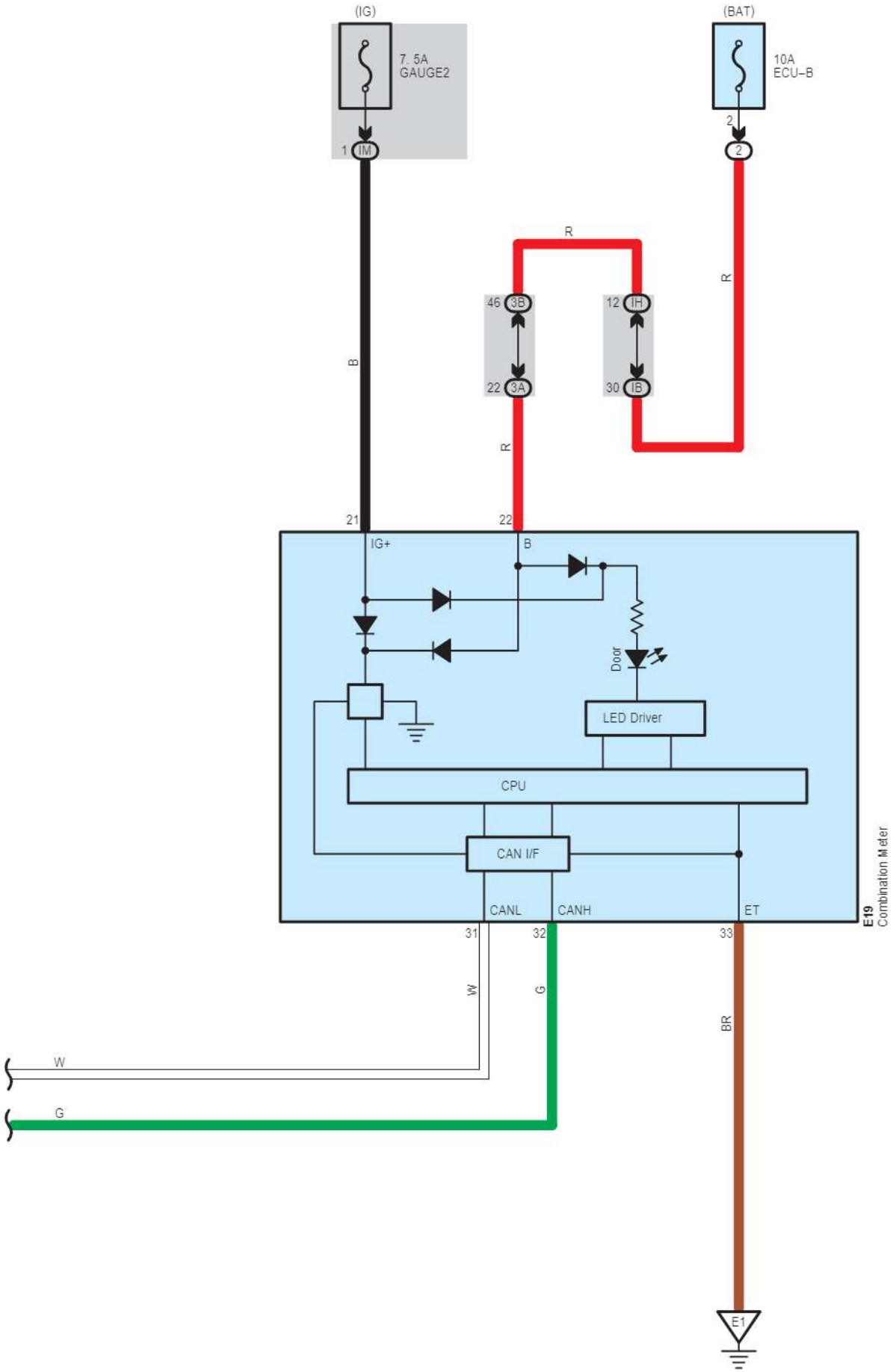
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Interior Light

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
E4	54	K7	59	P1	61
E5	54	K10	59	P2	61
E6	54	K16	59	P3	61
E15 A	54	K18	59	P4	61
E17 C	54	K20	59	P5	61
E19	54	L8	60	P7	61
E68	55	L11	60	Q3	61
E69	55	L18	60	b1	57
E70	55	L22	60	b2	57

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

▭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IC	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
ID		
IE		
IH		
IK	30	Roof Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IS		

▭ : Connector Joining Wire Harness and Wire Harness

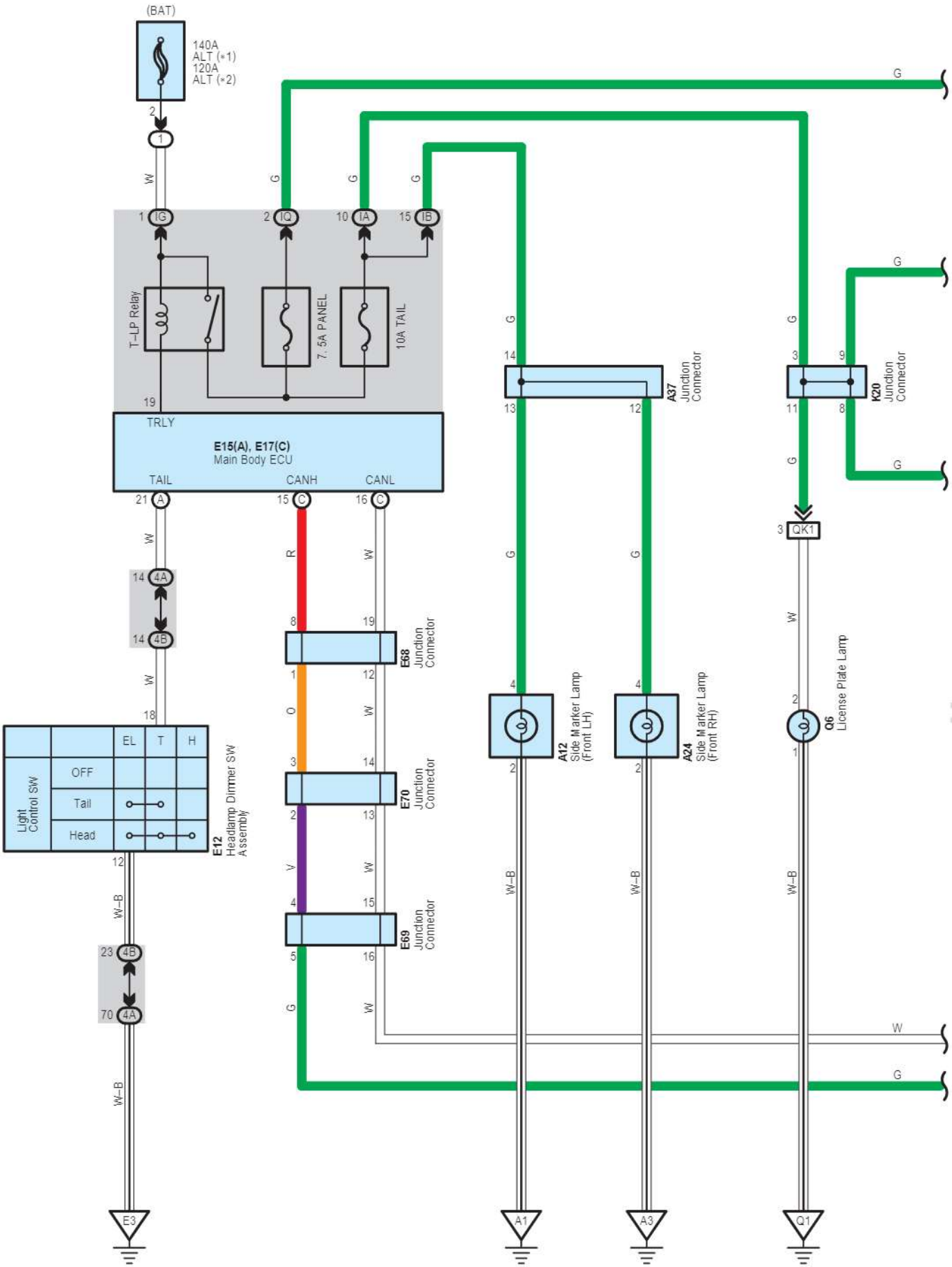
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EK2	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)
EL1	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
EL2		
Eb1	66	Instrument Panel Wire and Illumination Wire (Instrument Panel Brace RH)
QK1	67	Back Door No.1 Wire and Floor Wire (Right Rear Quarter Panel)

▽ : Ground Points

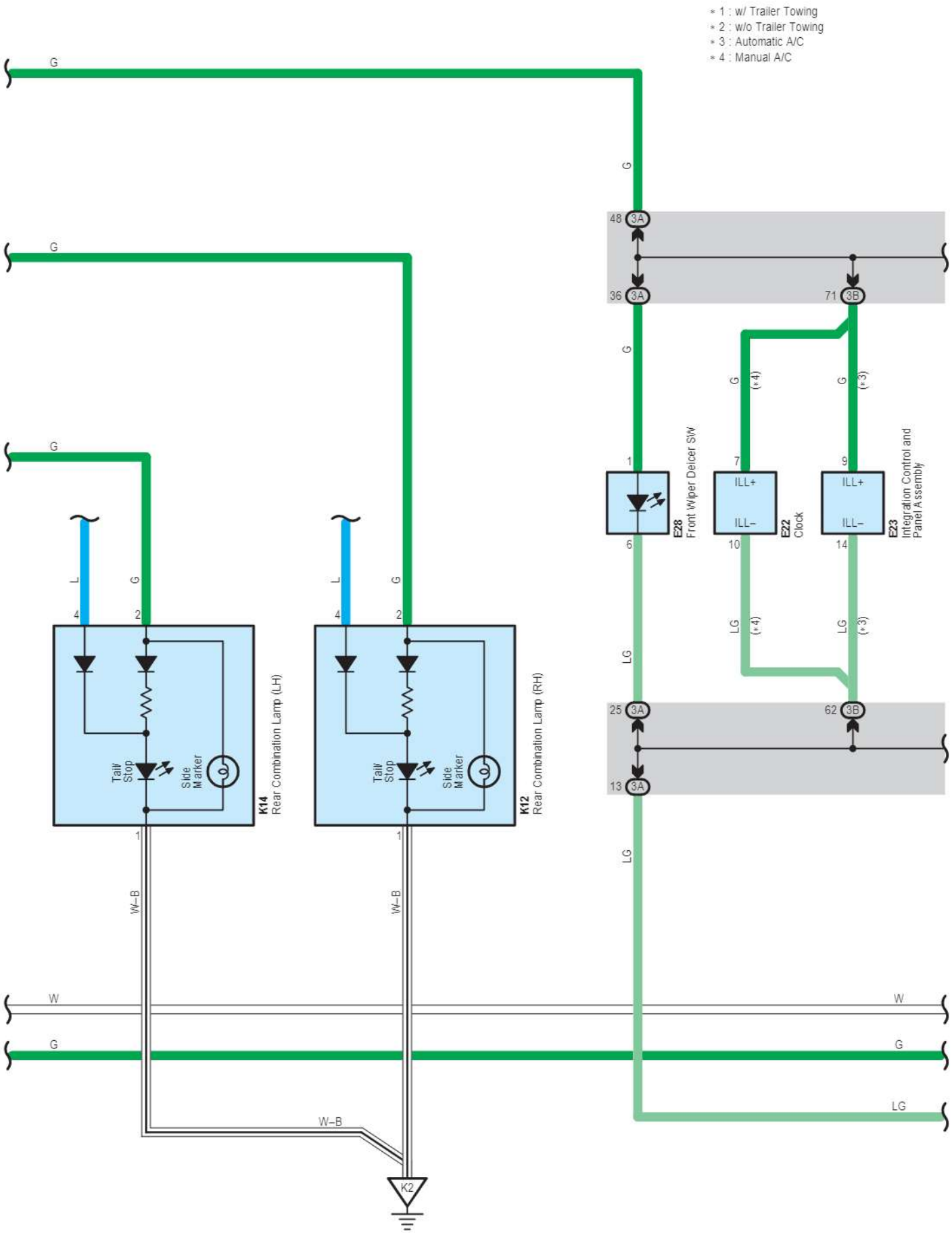
Code	See Page	Ground Points Location
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center
L2	67	Right Quarter Panel

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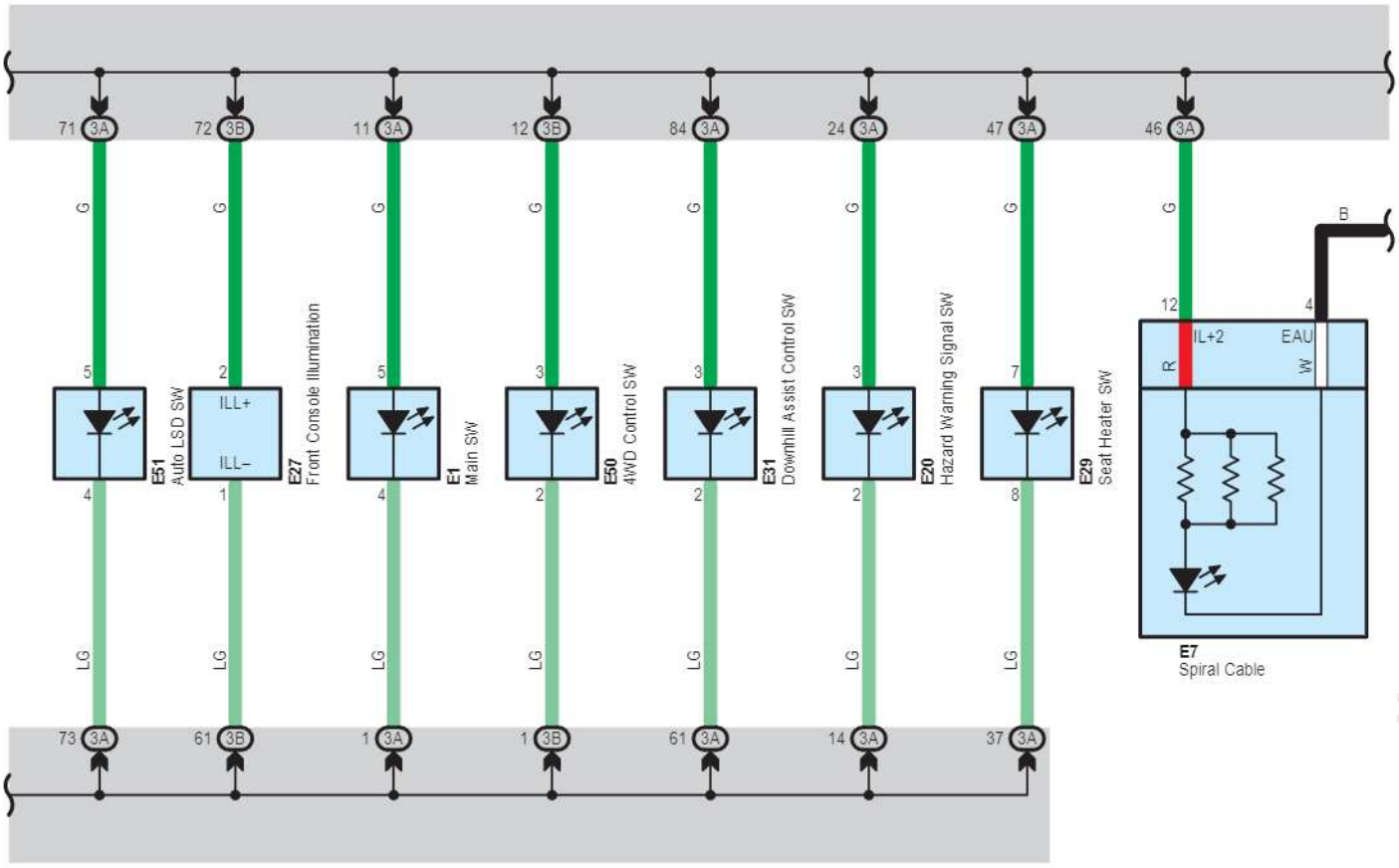
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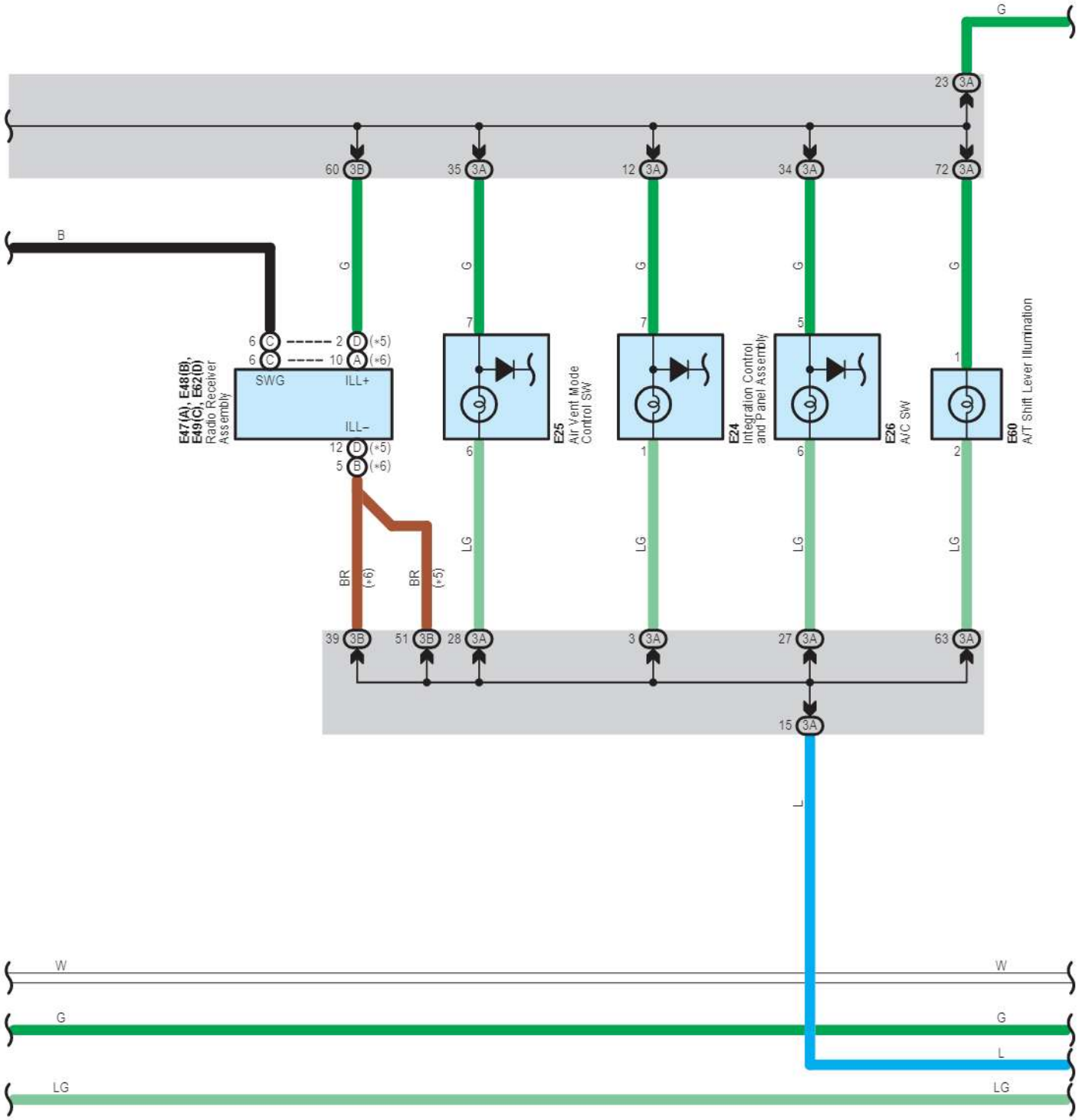
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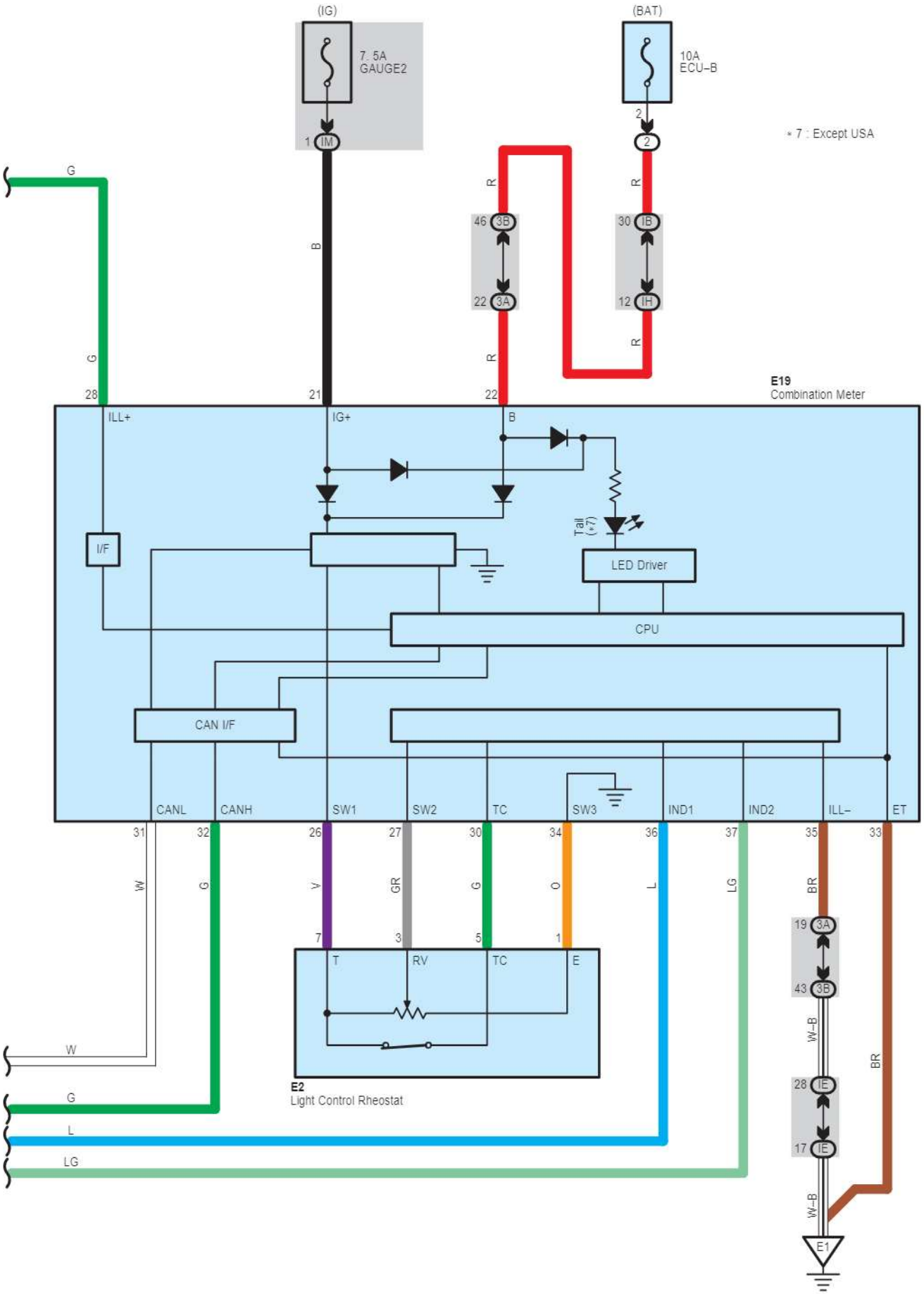


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* 5 : Audio System (JBL)
* 6 : Audio System (Except JBL)



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: Parts Location

Code	See Page	Code	See Page	Code	See Page
A12	50 (2GR–FE)	E20	54	E49 C	55
	52 (2AZ–FE)	E22	54	E50	55
A24	50 (2GR–FE)	E23	54	E51	55
	52 (2AZ–FE)	E24	54	E60	55
A37	56	E25	54	E62 D	55
E1	54	E26	54	E68	55
E2	54	E27	54	E69	55
E7	54	E28	54	E70	55
E12	54	E29	54	K12	59
E15 A	54	E31	54	K14	59
E17 C	54	E47 A	55	K20	59
E19	54	E48 B	55	Q6	61

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IG	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IH	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	
IQ		

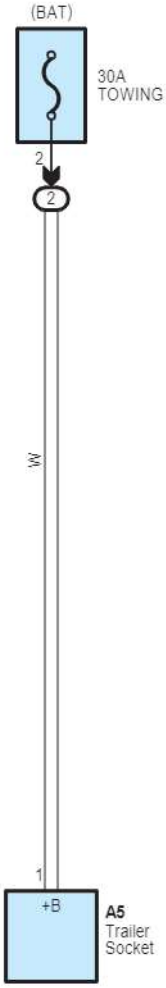
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
QK1	67	Back Door No.1 Wire and Floor Wire (Right Rear Quarter Panel)

: Ground Points

Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
	65 (2AZ–FE)	
A3	64 (2GR–FE)	Front Right Fender
	65 (2AZ–FE)	
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center
K2	67	Left Quarter Panel
Q1	67	Left Side of the Back Door

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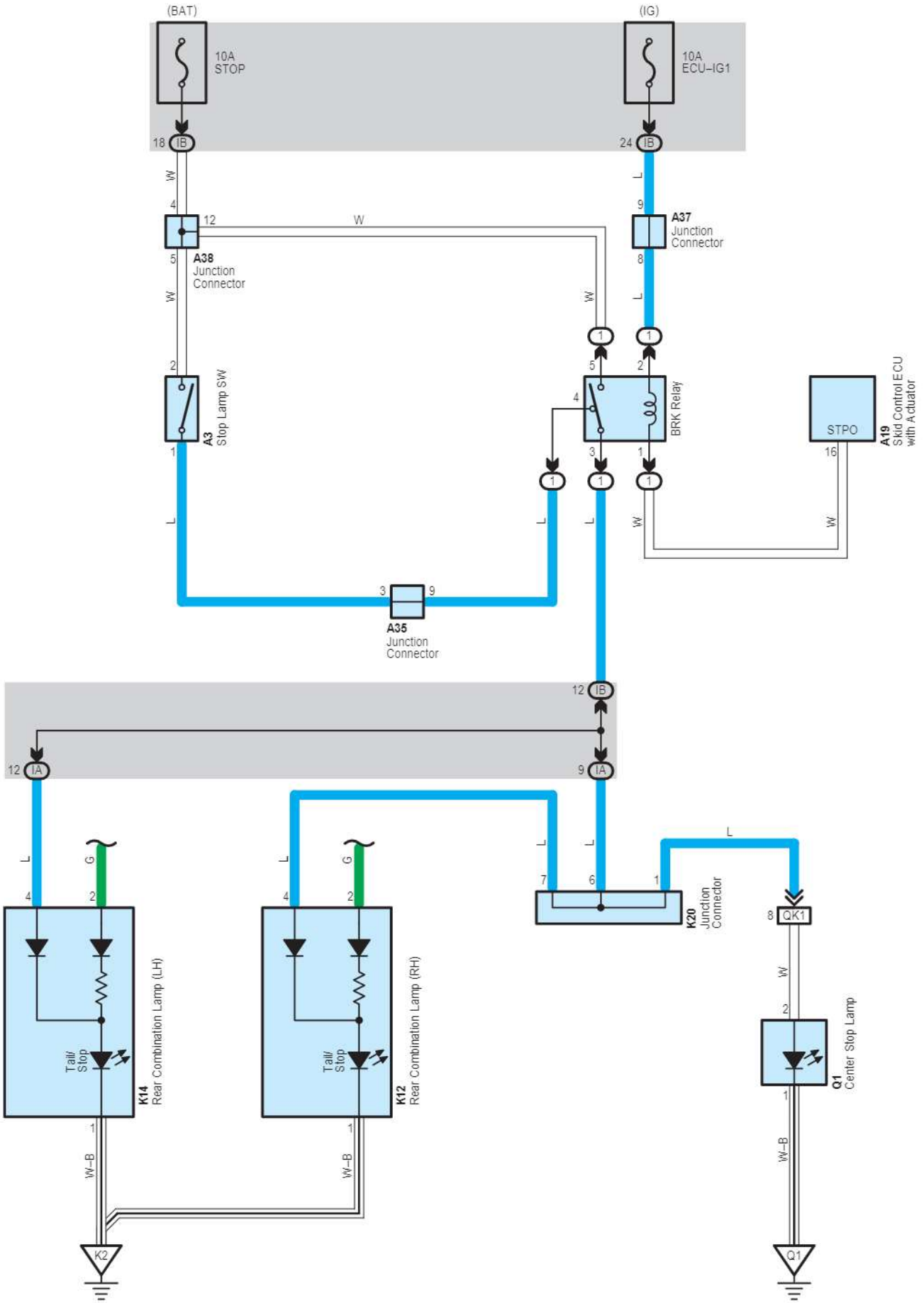
○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
A5	56				

⬭ : **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

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: Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	56	A37	56	K20	59
A19	50 (2GR–FE)	A38	56	Q1	61
	52 (2AZ–FE)	K12	59		
A35	56	K14	59		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)

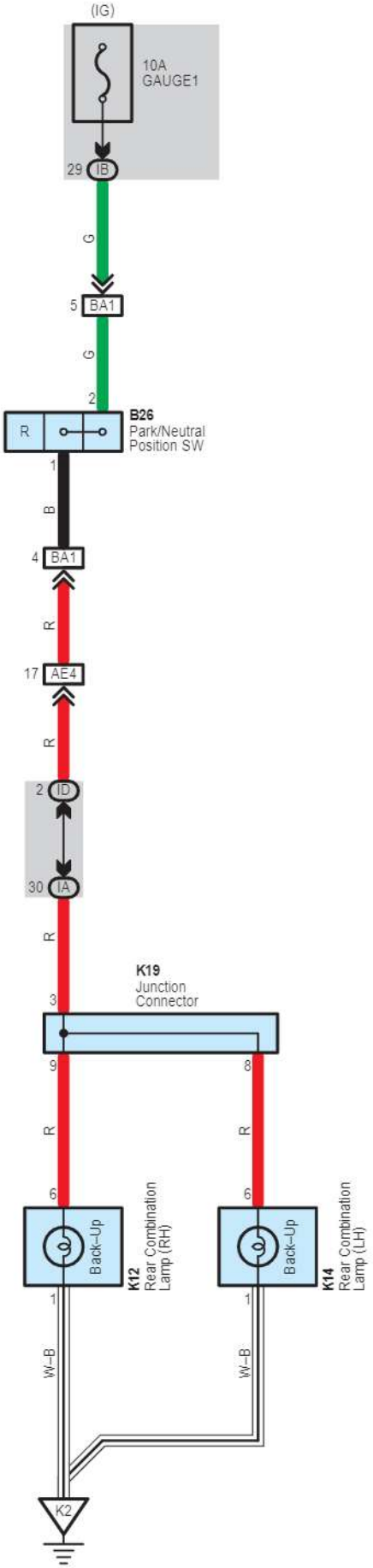
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
QK1	67	Back Door No.1 Wire and Floor Wire (Right Rear Quarter Panel)

: Ground Points

Code	See Page	Ground Points Location
K2	67	Left Quarter Panel
Q1	67	Left Side of the Back Door

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○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B26	51 (2GR–FE)	K12	59	K19	59
	53 (2AZ–FE)	K14	59		

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)

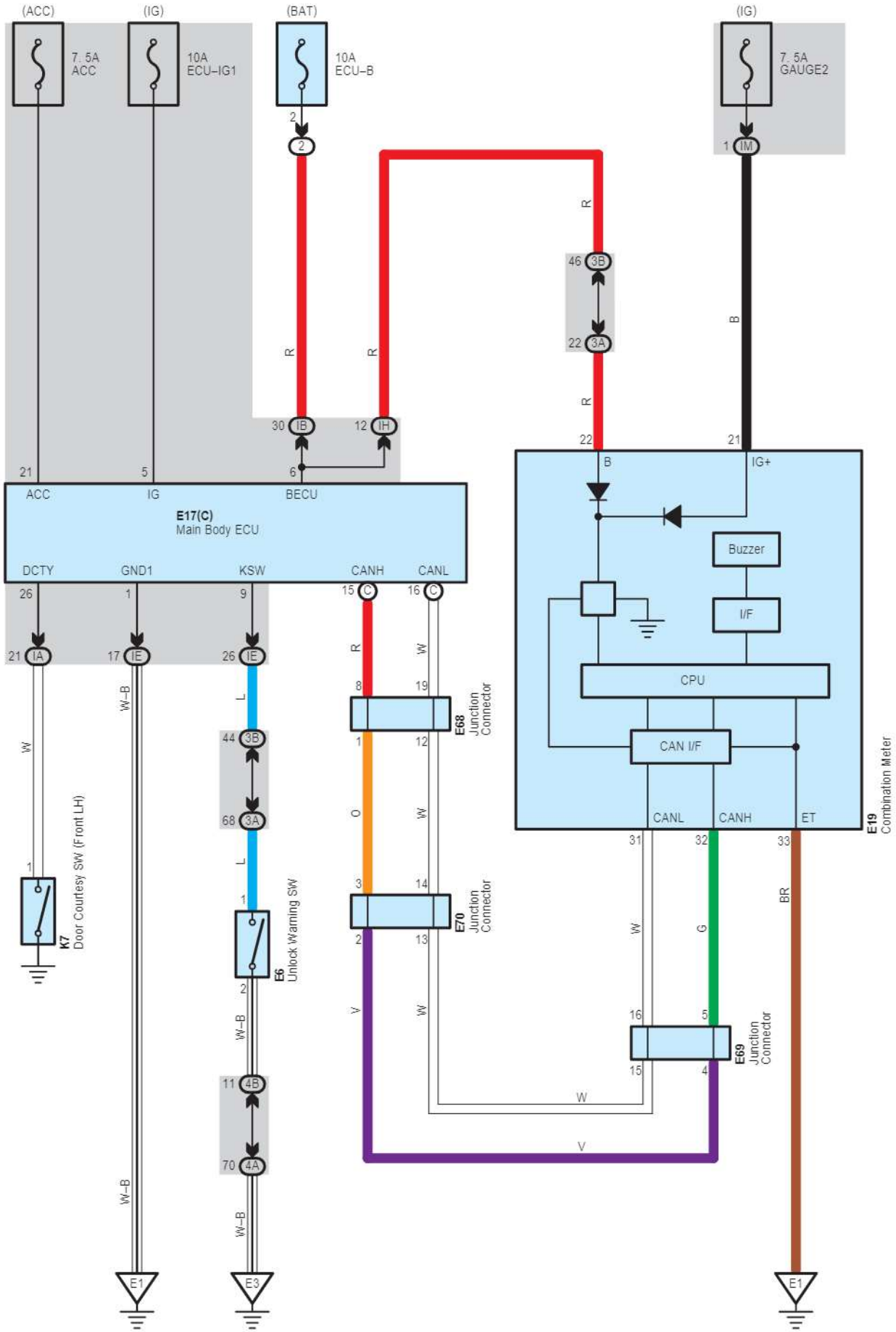
▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
	65 (2AZ–FE)	

▽ : Ground Points

Code	See Page	Ground Points Location
K2	67	Left Quarter Panel

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○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
E6	54	E68	55	K7	59
E17 C	54	E69	55		
E19	54	E70	55		

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

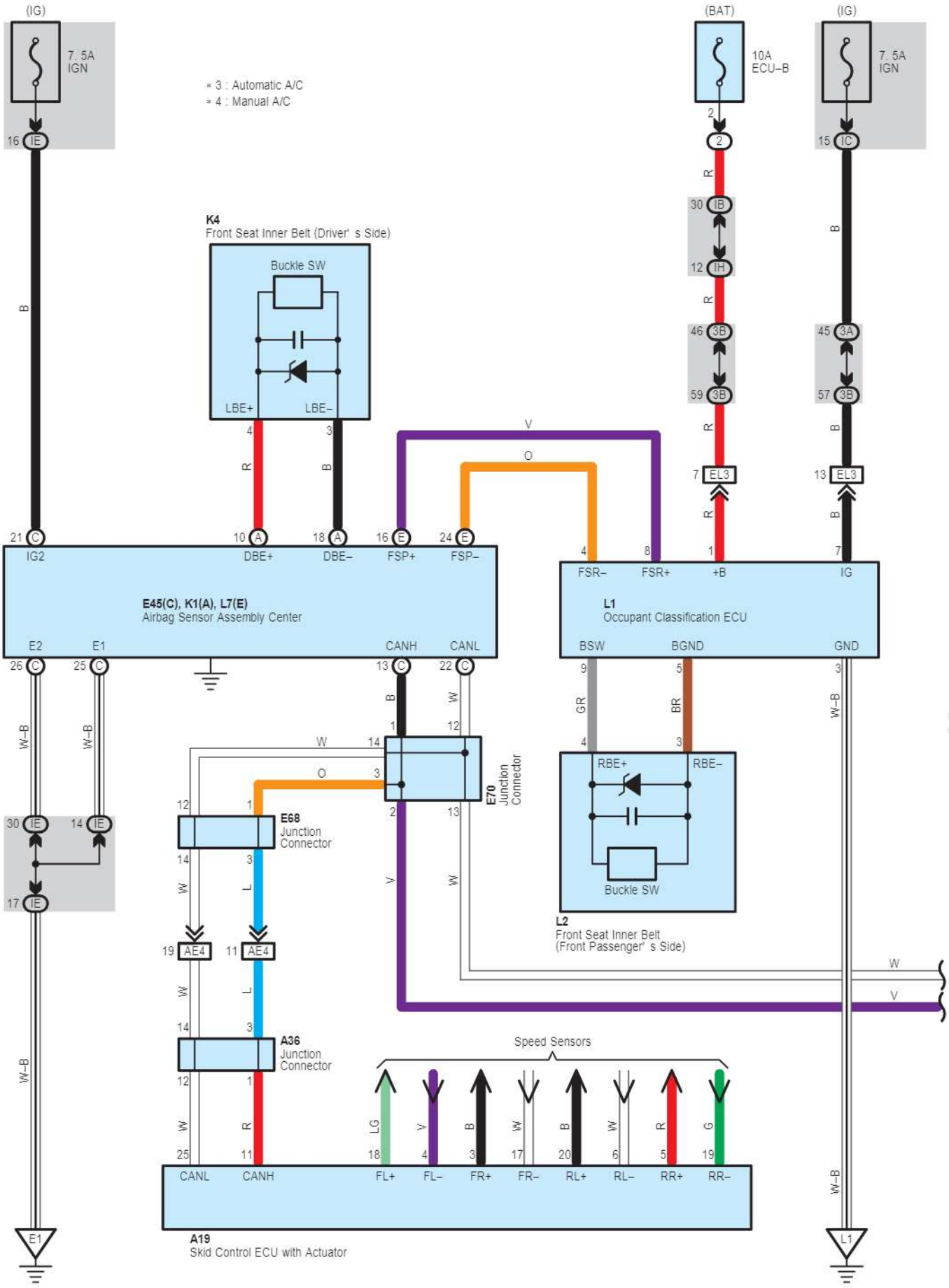
⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IH		
IM	31	

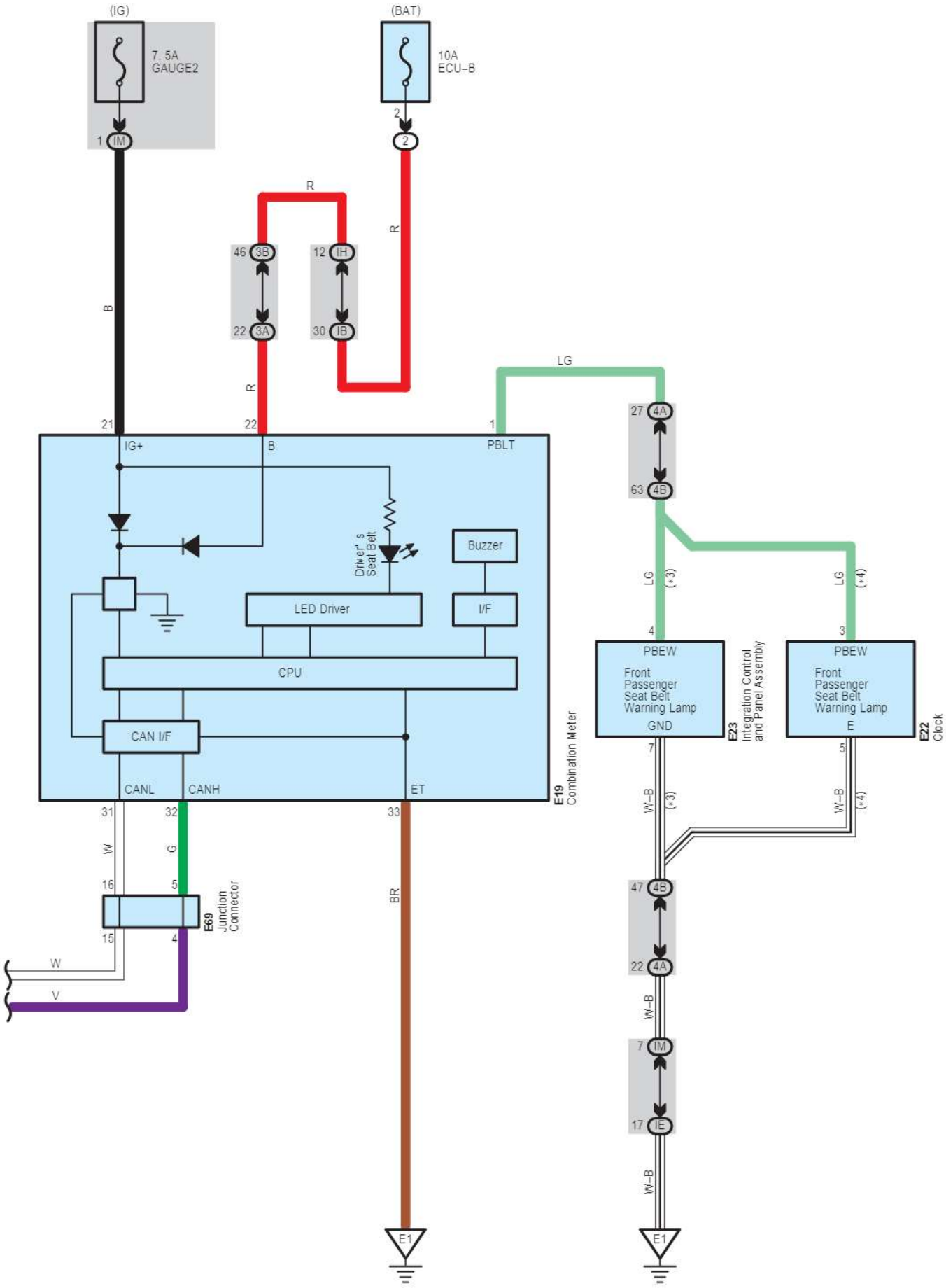
▽ : Ground Points

Code	See Page	Ground Points Location
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center

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Seat Belt Warning

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A19	50 (2GR–FE)	E23	54	K1 A	57
	52 (2AZ–FE)	E45 C	55	K4	62
A36	56	E68	55	L1	62
E19	54	E69	55	L2	62
E22	54	E70	55	L7 E	57

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IC	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IE		
IH		
IM	31	

: Connector Joining Wire Harness and Wire Harness

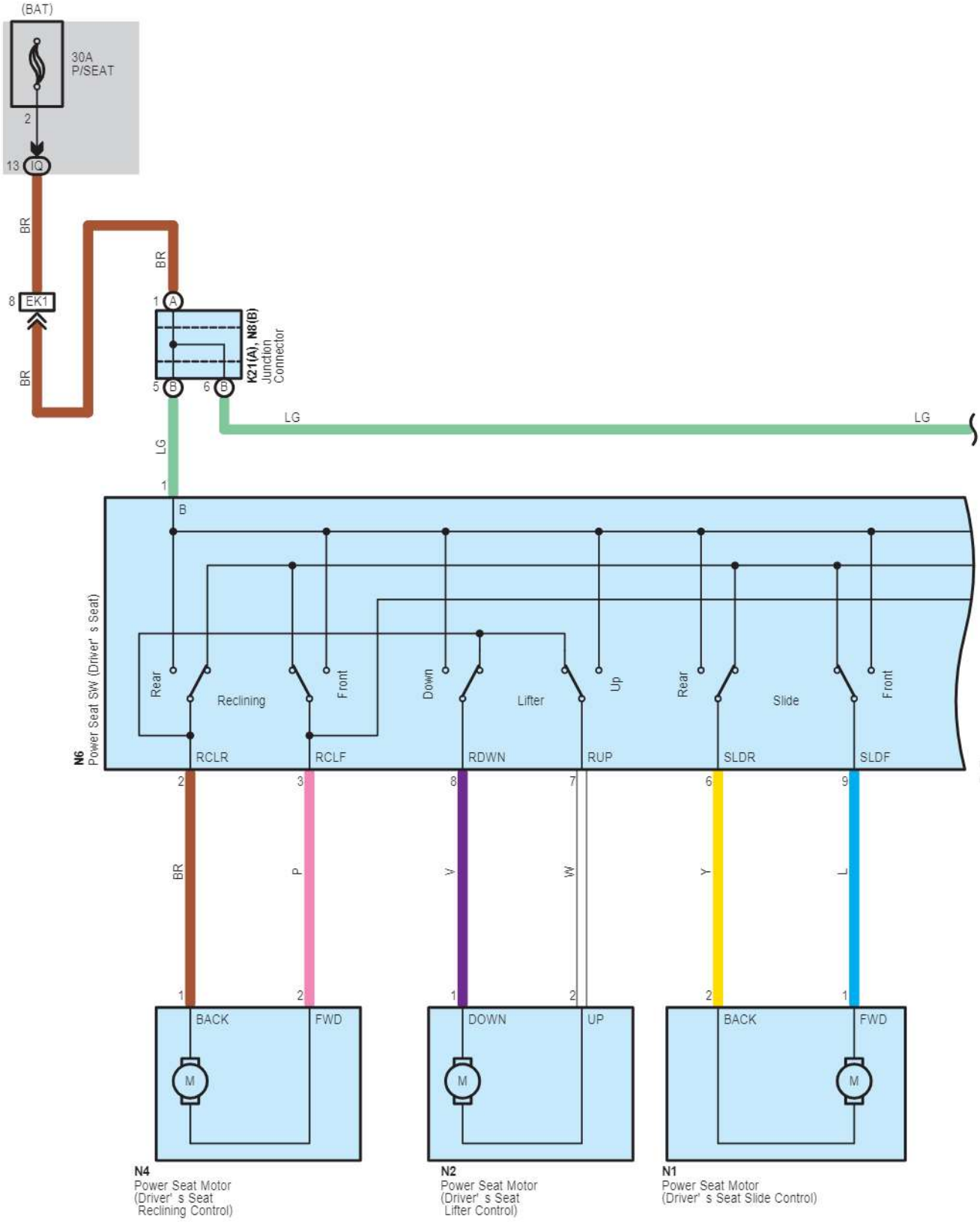
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
EL3	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)

: Ground Points

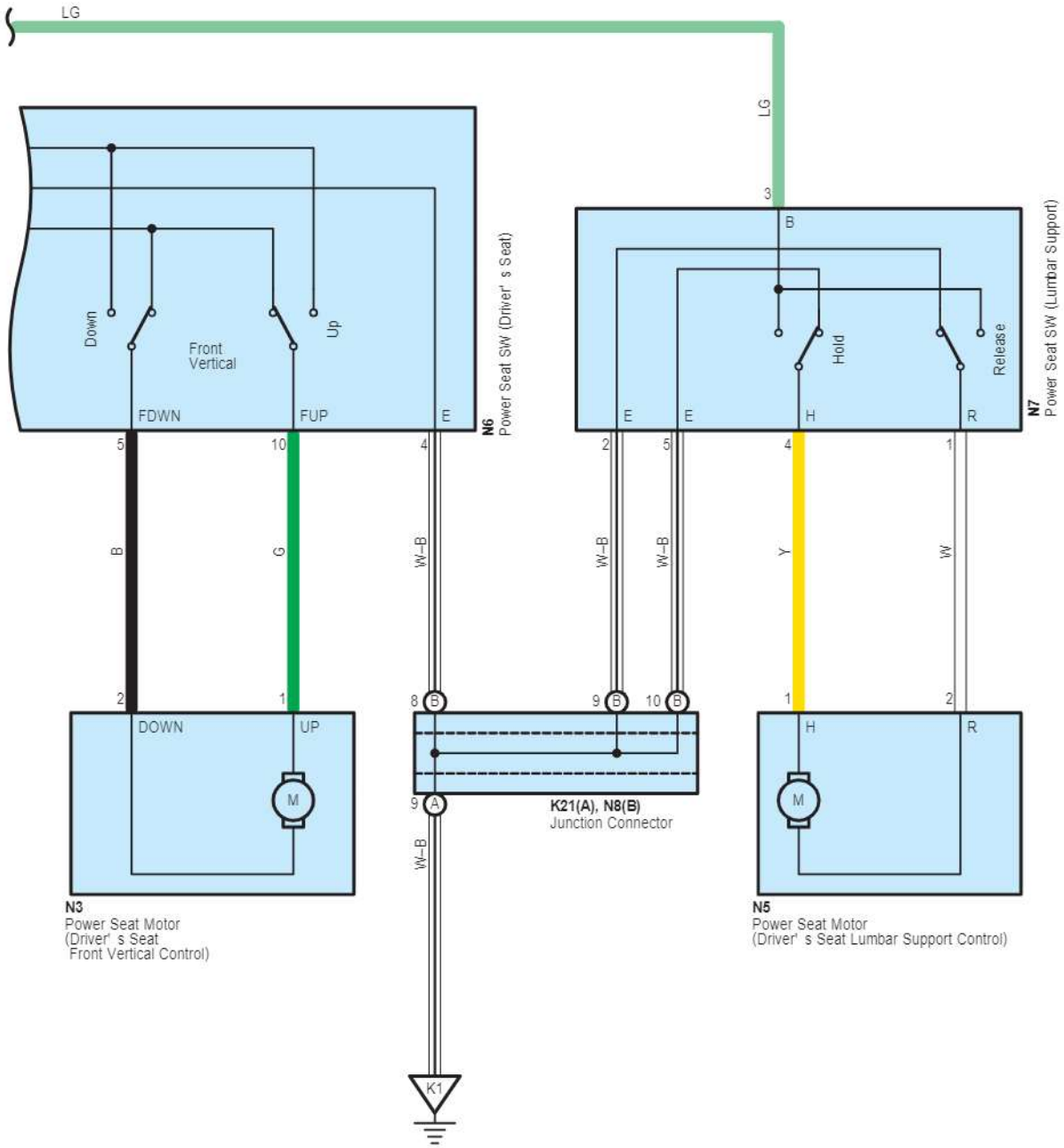
Code	See Page	Ground Points Location
E1	66	Left Kick Panel
L1	67	Right Center Pillar

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Power Seat

○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
K21 A	62	N3	62	N6	62
N1	62	N4	62	N7	62
N2	62	N5	62	N8 B	62

⬭ : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IQ	31	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)

▭ : **Connector Joining Wire Harness and Wire Harness**

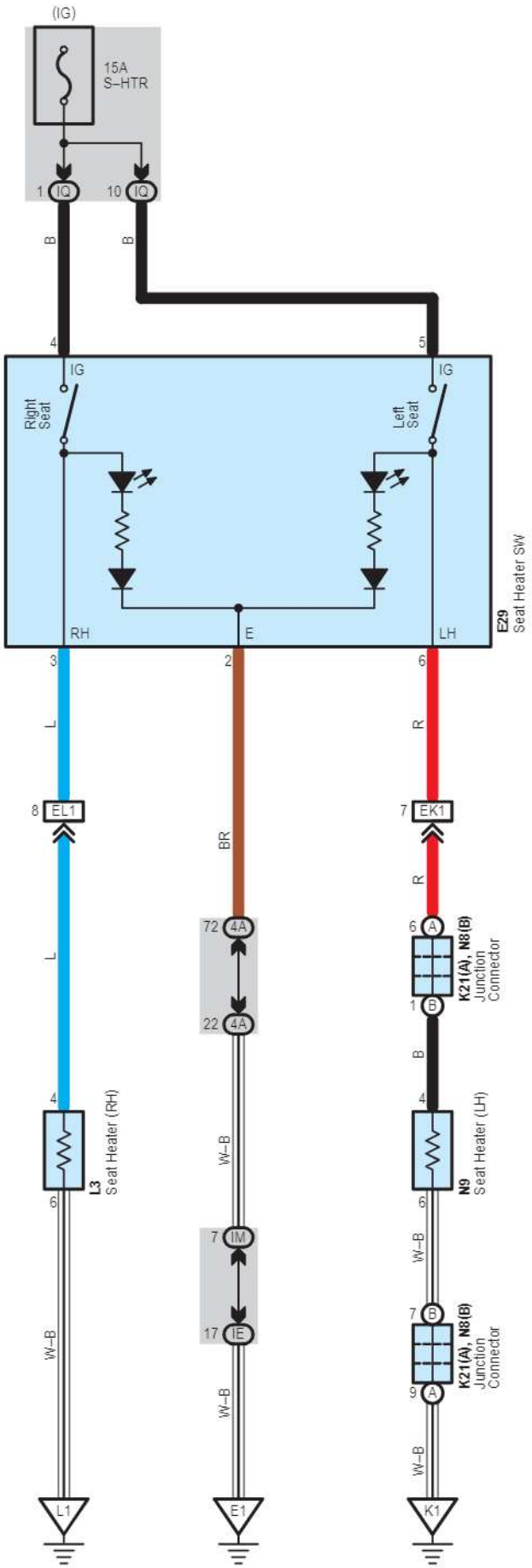
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EK1	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)

▽ : **Ground Points**

Code	See Page	Ground Points Location
K1	67	Left Center Pillar

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: Parts Location

Code		See Page	Code		See Page	Code	See Page
E29		54	L3		62	N9	62
K21	A	62	N8	B	62		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	
IQ		

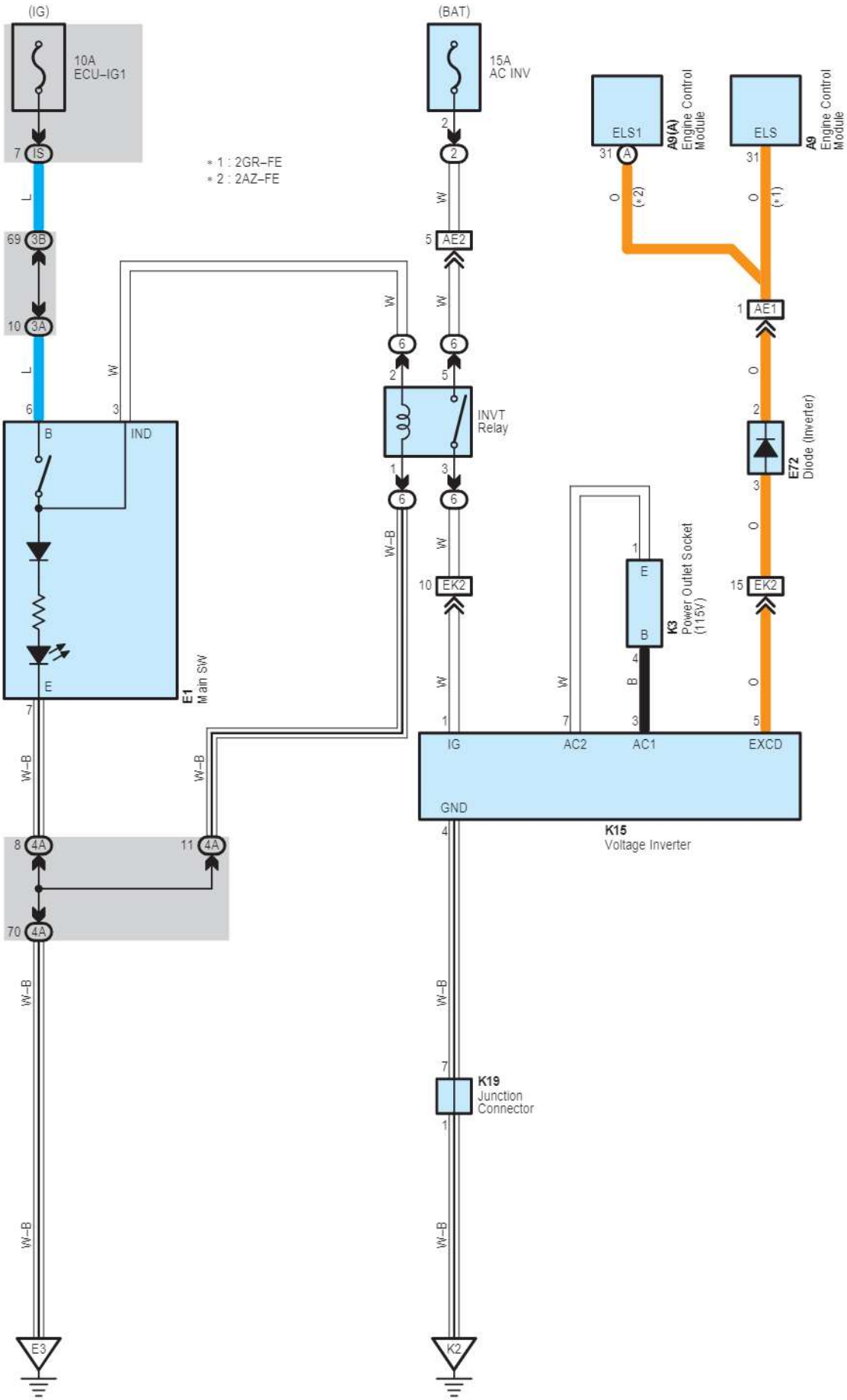
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EK1	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)
EL1	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
E1	66	Left Kick Panel
K1	67	Left Center Pillar
L1	67	Right Center Pillar

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: Parts Location

Code		See Page	Code	See Page	Code	See Page
A9	A	50 (2GR–FE)	E72	55	K19	59
		52 (2AZ–FE)	K3	57		
E1		54	K15	59		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	
6	28	R/B No.6 (Cowl Side Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IS	31	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)

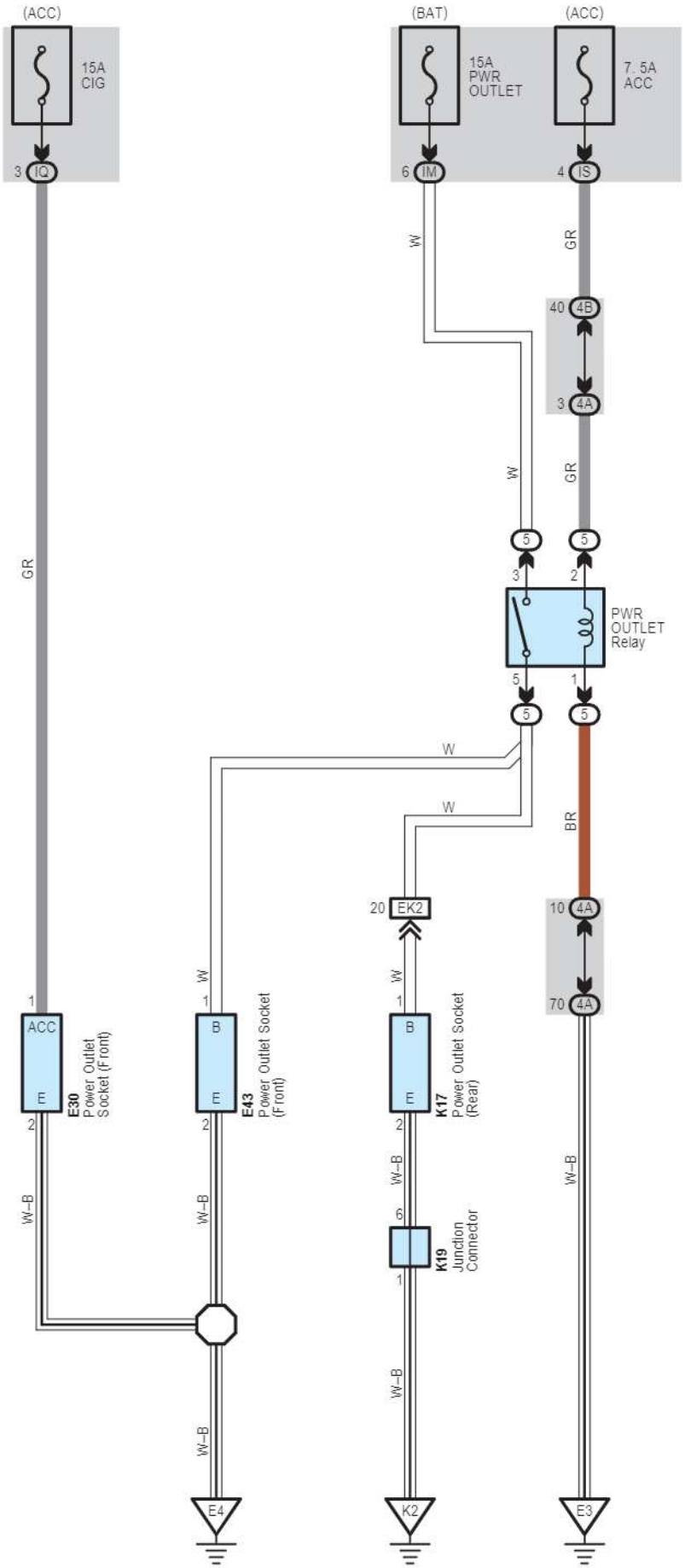
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE1	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE2		
EK2	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
E3	66	Instrument Panel Reinforcement Center
K2	67	Left Quarter Panel

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: Parts Location

Code	See Page	Code	See Page	Code	See Page
E30	54	K17	59		
E43	55	K19	59		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
5	28	R/B No.5 (Cowl Side Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IM	31	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IQ		
IS		

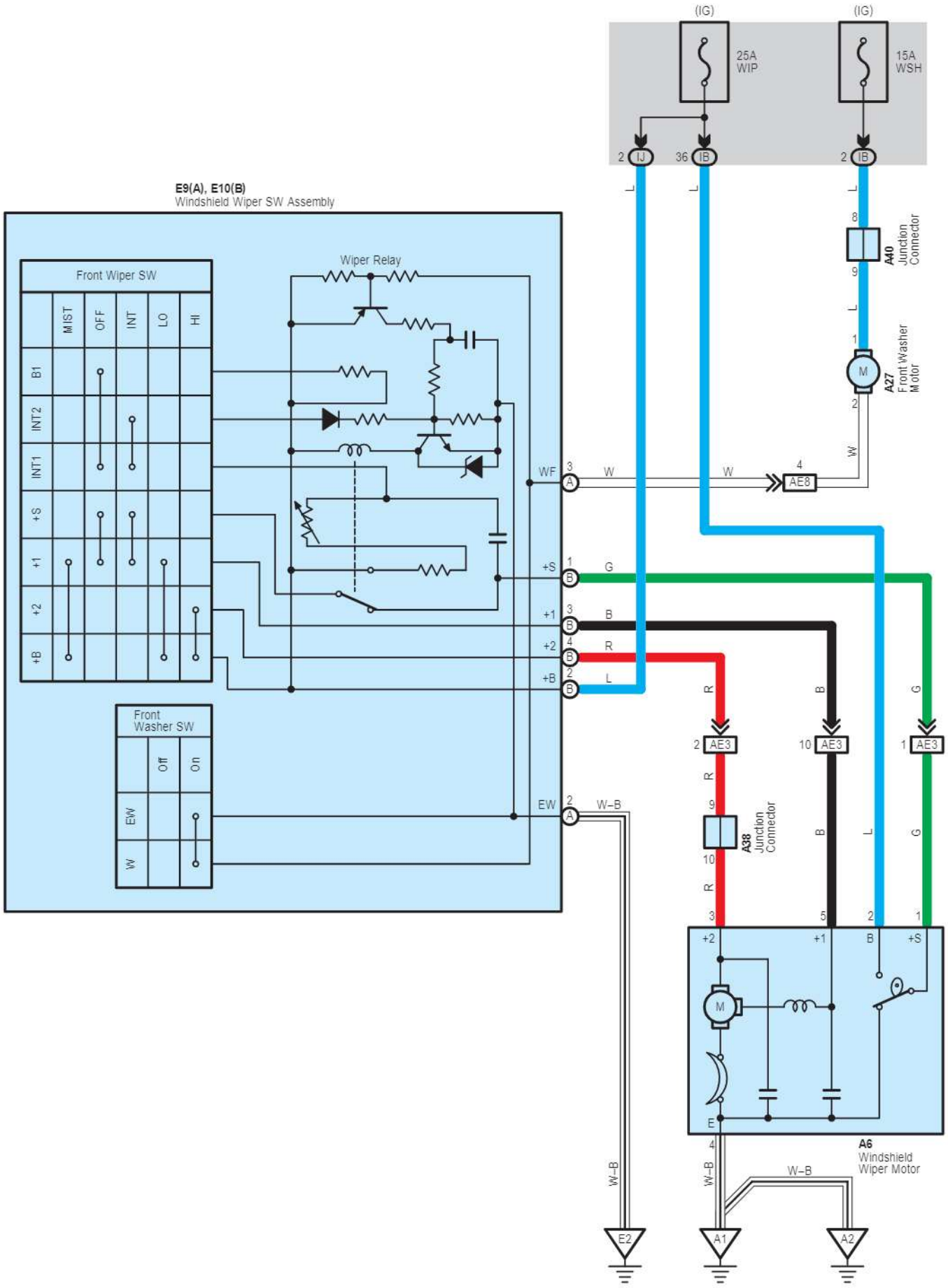
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EK2	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
E3	66	Instrument Panel Reinforcement Center
E4	66	Right Kick Panel
K2	67	Left Quarter Panel

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(IG)
(IG)
25A
WIP
15A
WSH
2 IJ
36 IB
2 IB
E9(A), E10(B)
Windshield Wiper SW Assembly
Front Wiper SW
MIST
OFF
INT
LO
HI
B1
INT2
INT1
+S
+1
+2
+B
Wiper Relay
Front
Washer SW
Off
On
EW
W
WF
+S
+1
+2
+B
EW
W
W–B
A40
Junction
Connector
A27
Front Washer
Motor
AE8
AE3
A38
Junction
Connector
A6
Windshield
Wiper Motor
E2
A1
A2
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○ : Parts Location

Code	See Page	Code	See Page	Code		See Page
A6	50 (2GR–FE)	A27	52 (2AZ–FE)	A40		52 (2AZ–FE)
	52 (2AZ–FE)	A38	56	E9	A	54
A27	50 (2GR–FE)	A40	50 (2GR–FE)	E10	B	54

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IJ	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)

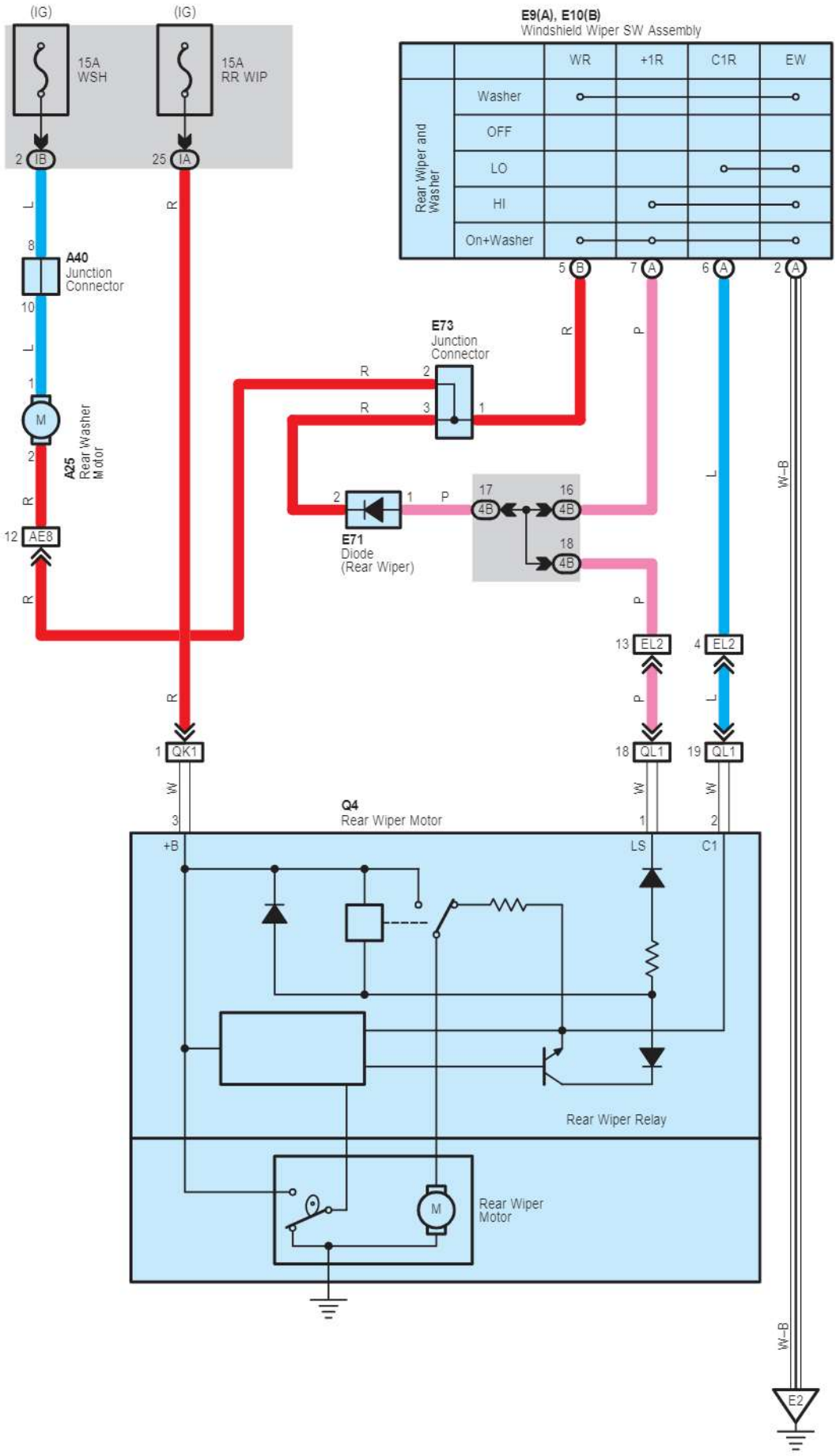
▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE3	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE8	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
	65 (2AZ–FE)	
A2	64 (2GR–FE)	
	65 (2AZ–FE)	
E2	66	Instrument Panel Reinforcement Left

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○ : Parts Location

Code	See Page	Code		See Page	Code	See Page
A25	50 (2GR–FE)	A40		52 (2AZ–FE)	E71	55
	52 (2AZ–FE)	E9	A	54	E73	55
A40	50 (2GR–FE)	E10	B	54	Q4	61

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
4B	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)

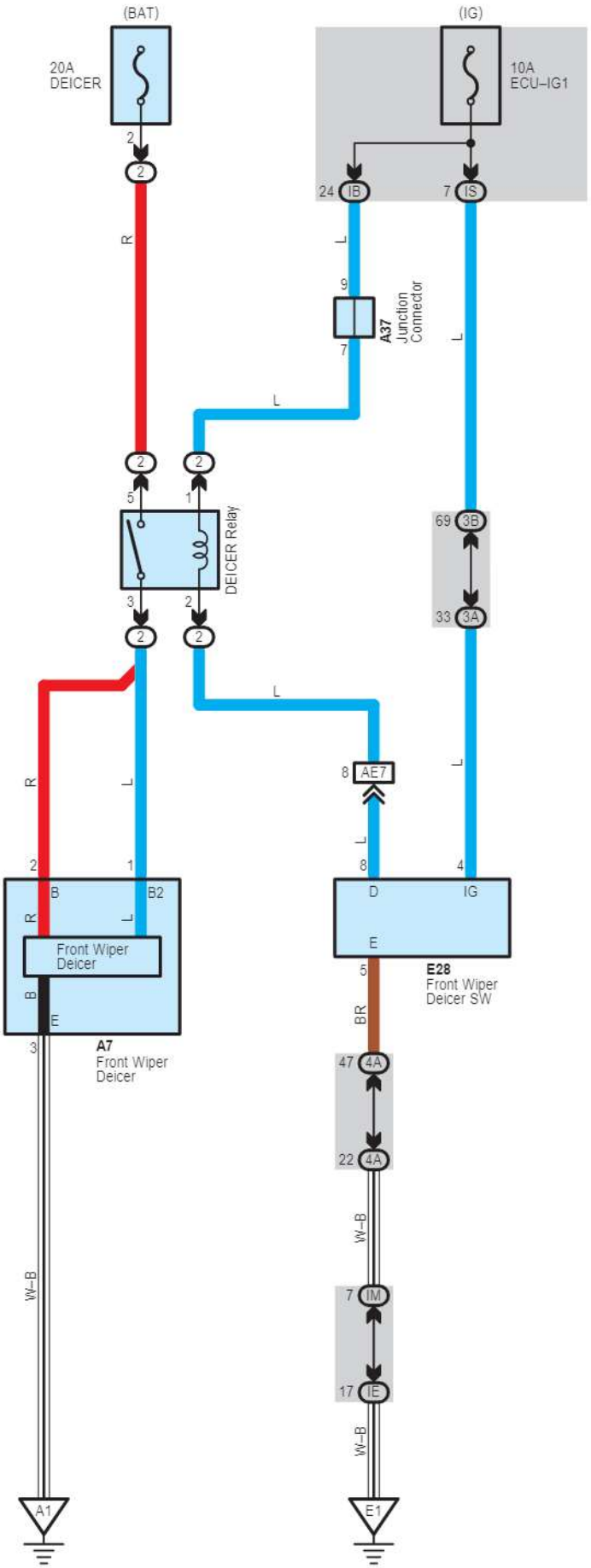
▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE8	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)
EL2	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
QK1	67	Back Door No.1 Wire and Floor Wire (Right Rear Quarter Panel)
QL1	67	Back Door No.2 Wire and Floor No.2 Wire (Right Rear Quarter Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
E2	66	Instrument Panel Reinforcement Left

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: Parts Location

Code	See Page	Code	See Page	Code	See Page
A7	50 (2GR–FE)	A37	56		
	52 (2AZ–FE)	E28	54		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	
IS		

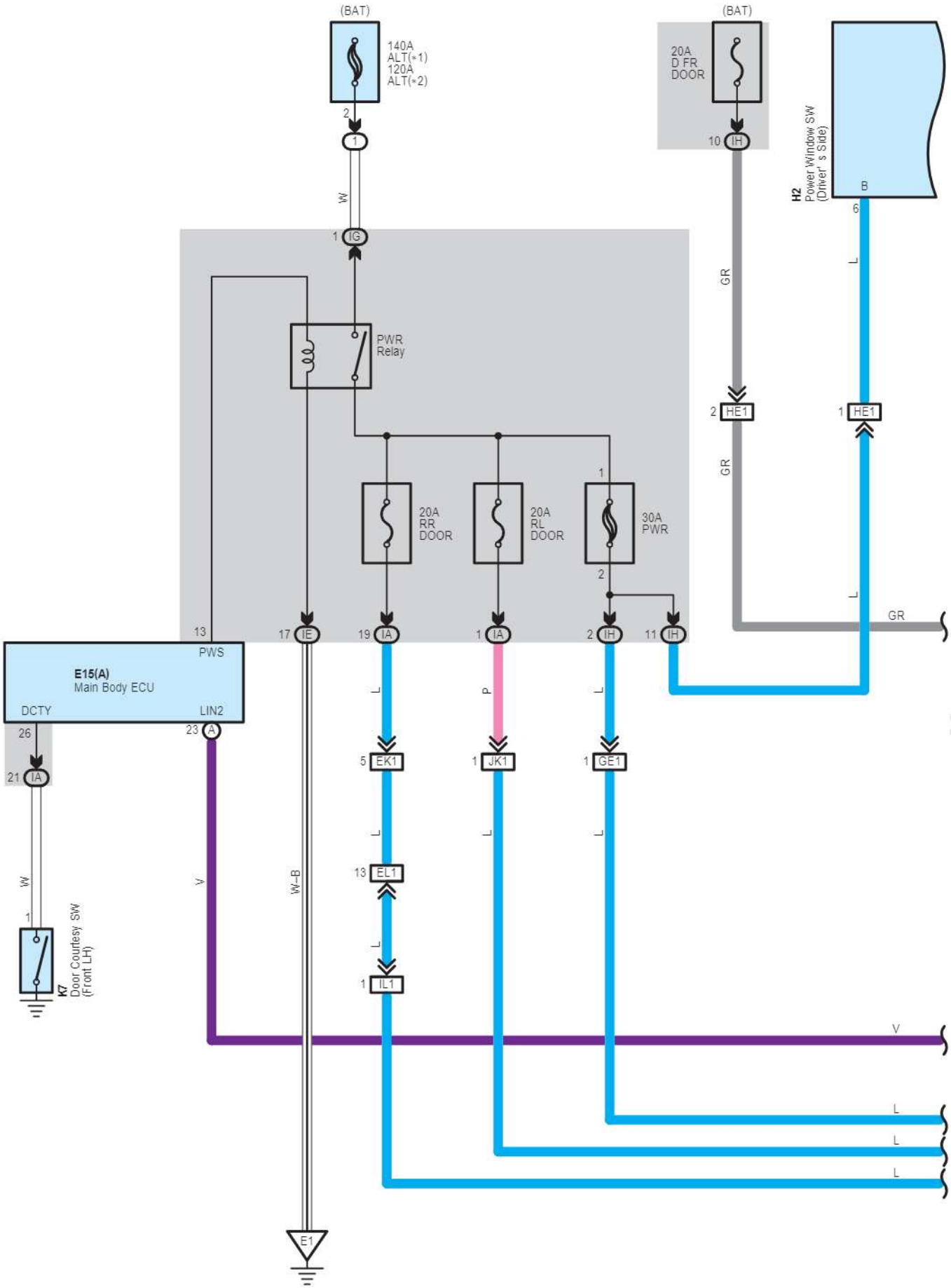
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE7	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)

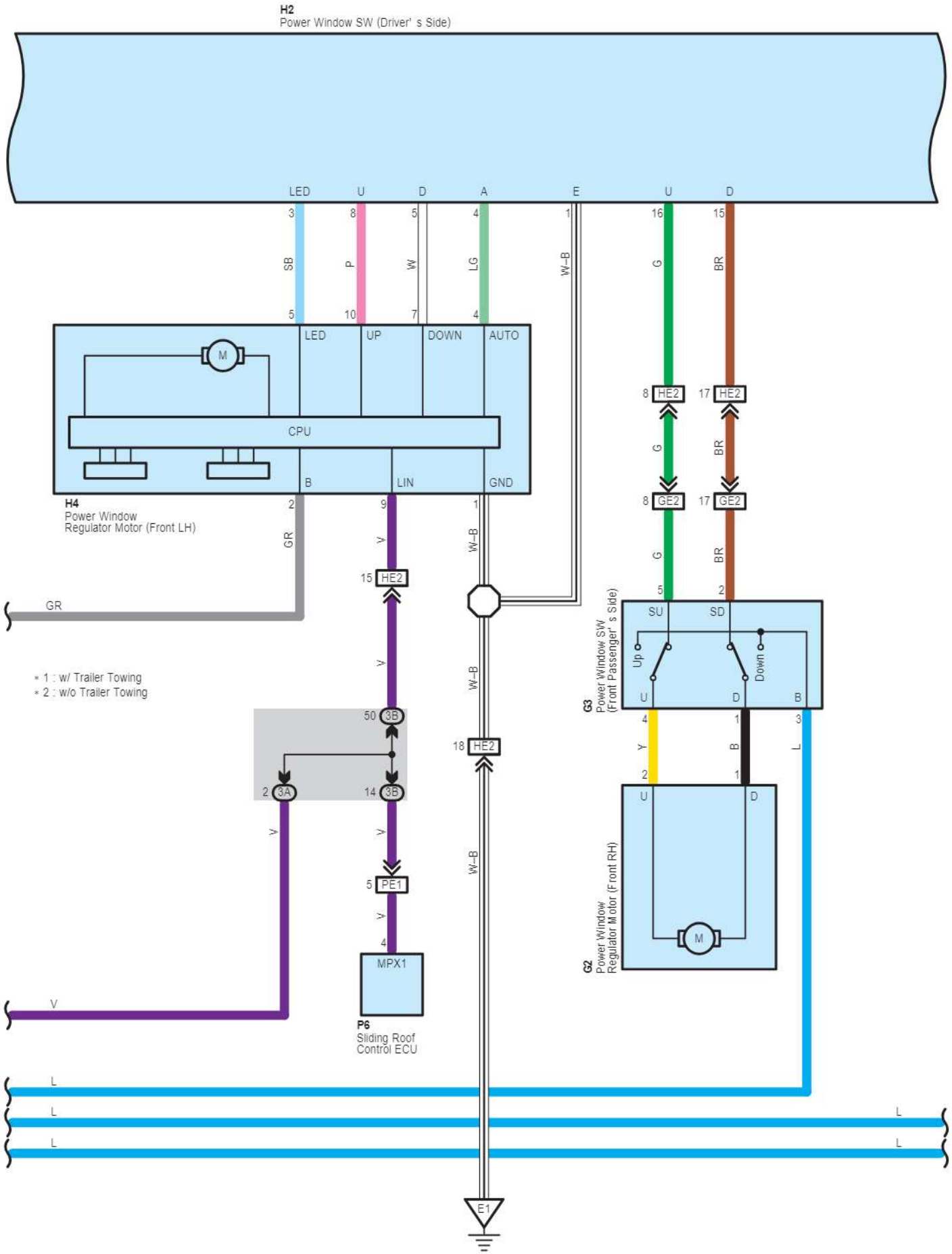
: Ground Points

Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
	65 (2AZ–FE)	
E1	66	Left Kick Panel

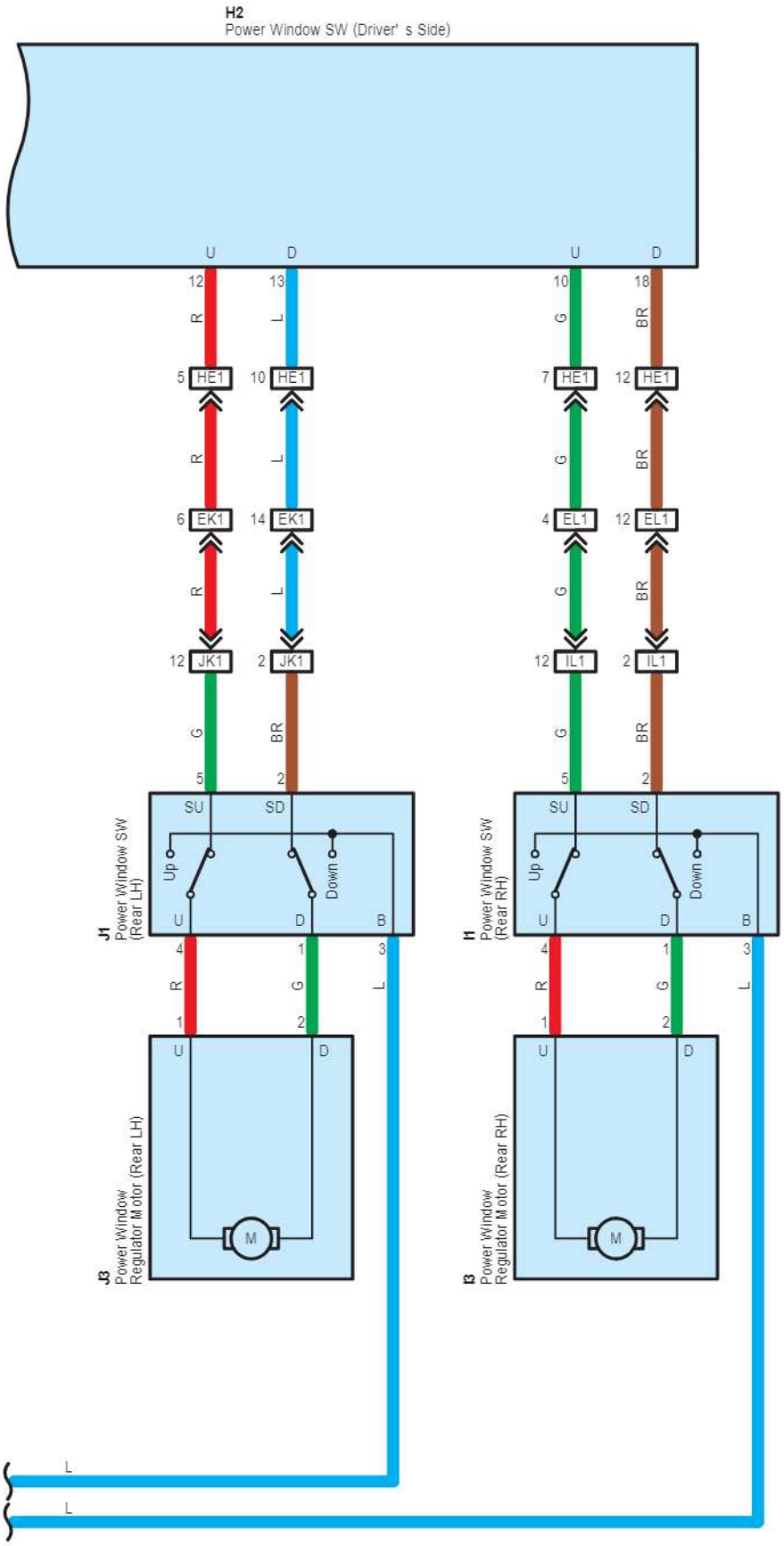
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: Parts Location

Code	See Page	Code	See Page	Code	See Page
E15 A	54	H4	58	J3	58
G2	58	I1	58	K7	59
G3	58	I3	58	P6	61
H2	58	J1	58		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IG	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IH	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)

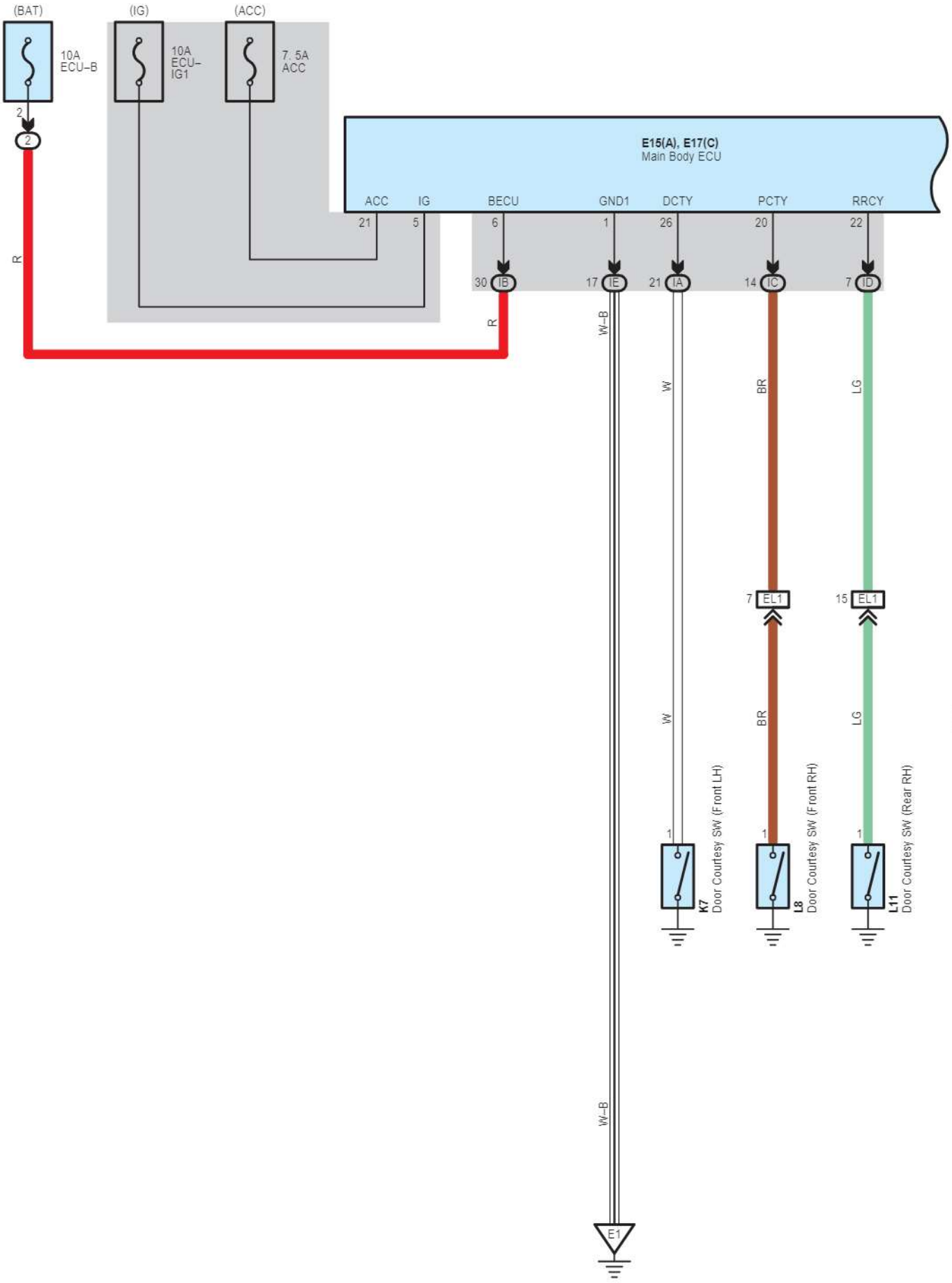
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EK1	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)
EL1	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
GE1	66	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
GE2		
HE1	66	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
HE2		
IL1	67	Rear Door No.1 RH Wire and Floor No.2 Wire (Right Center Pillar)
JK1	67	Rear Door No.1 LH Wire and Floor Wire (Left Center Pillar)
PE1	66	Roof Wire and Instrument Panel Wire (Left Side of the Instrument Panel)

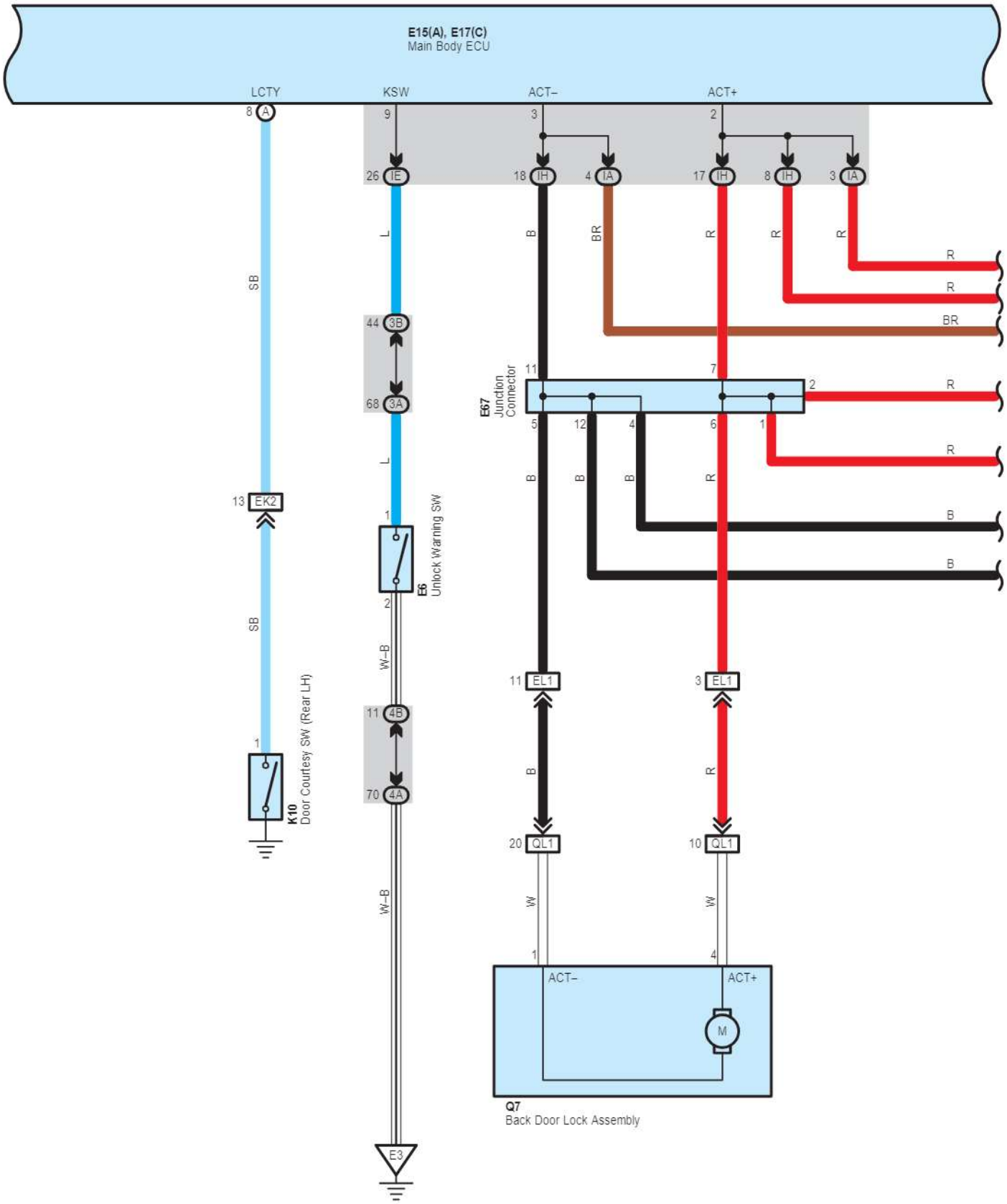
: Ground Points

Code	See Page	Ground Points Location
E1	66	Left Kick Panel

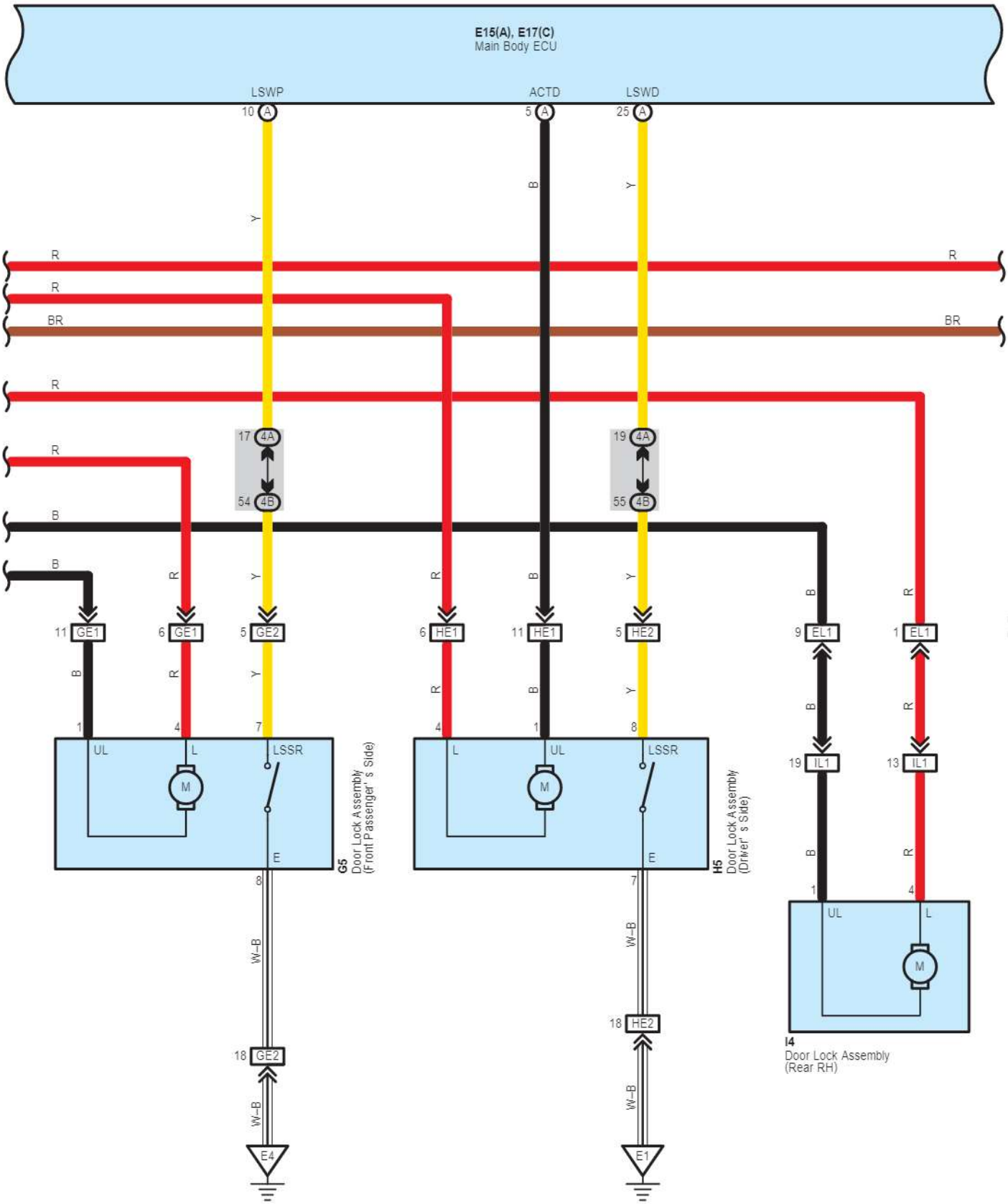
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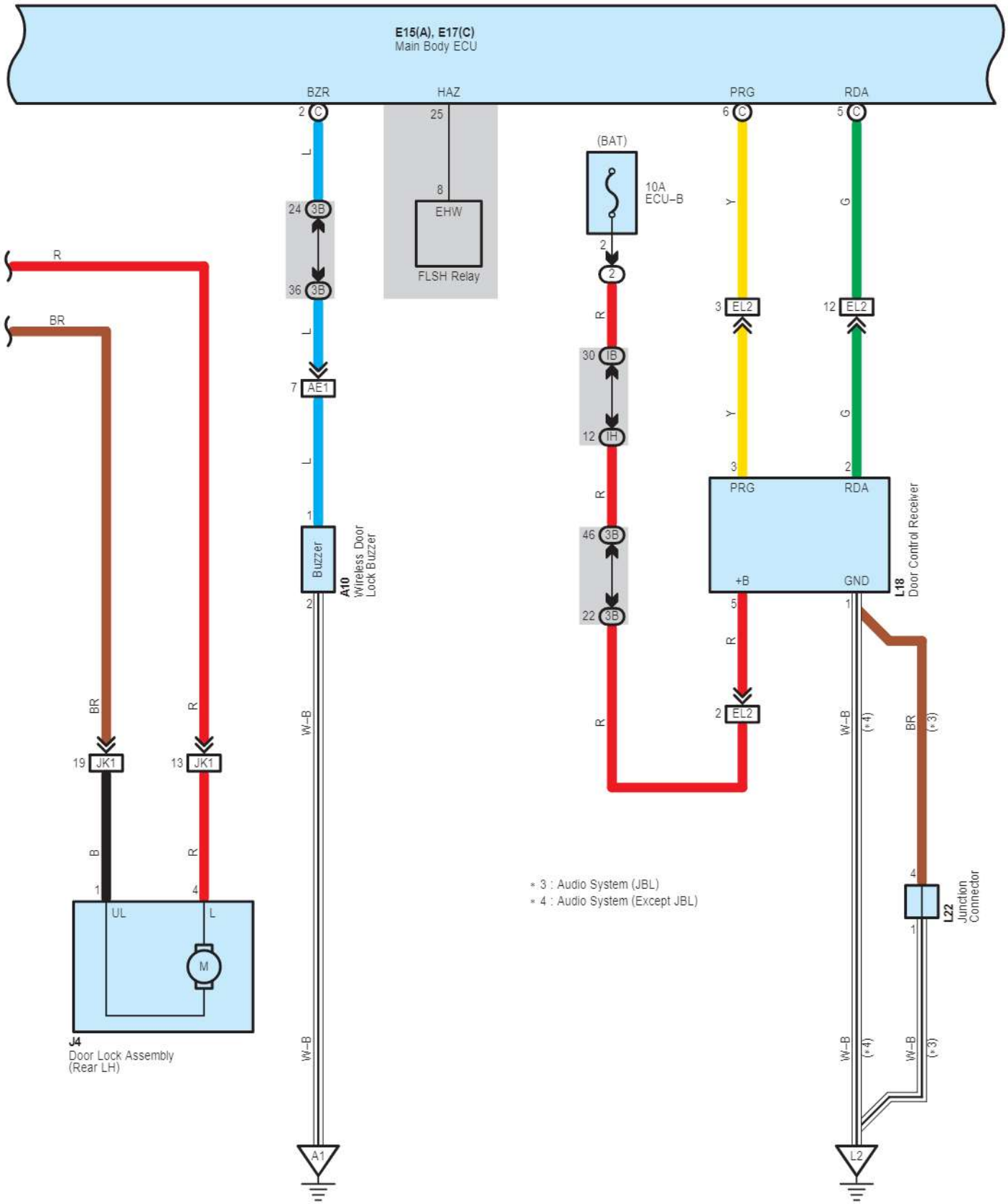
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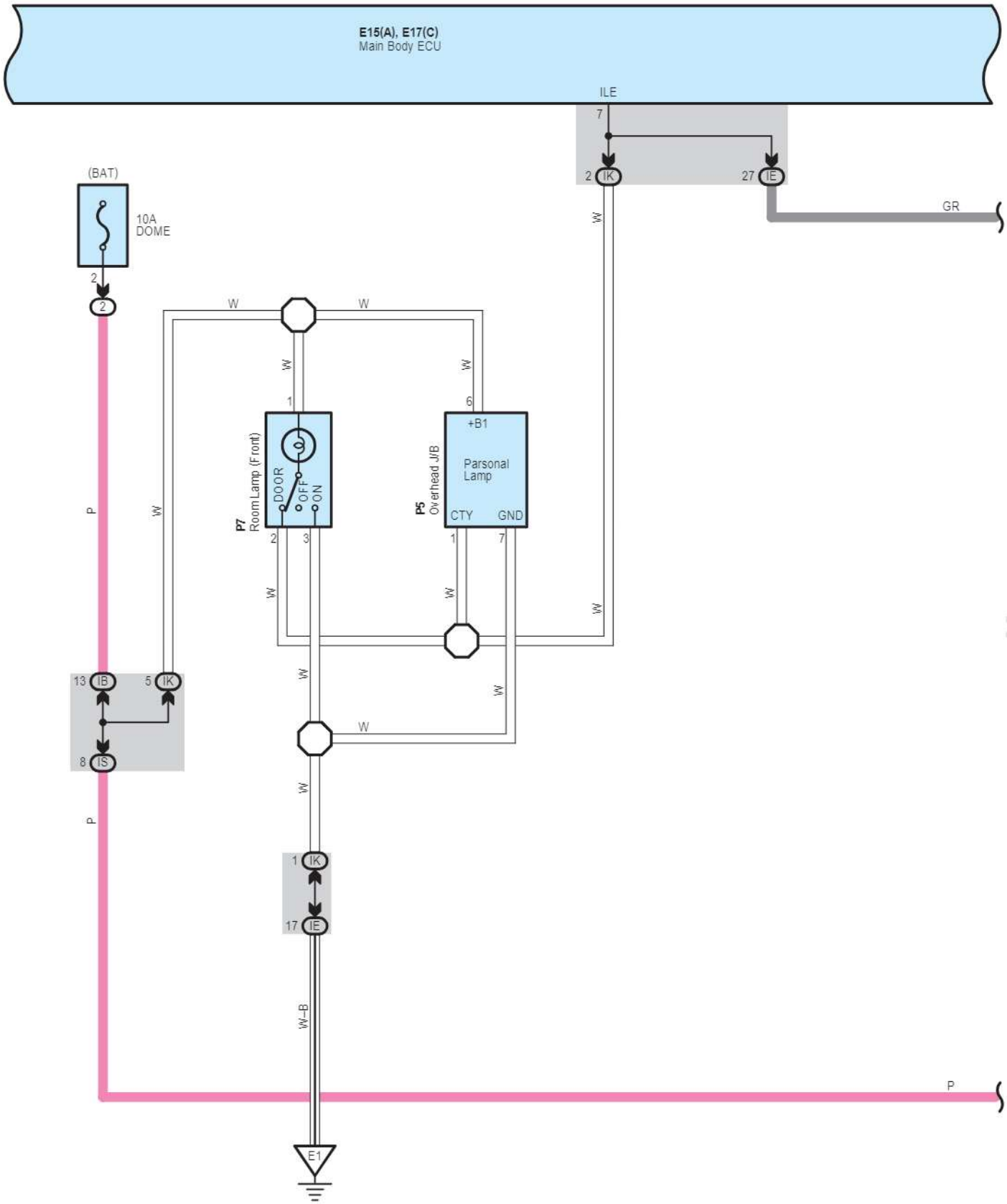
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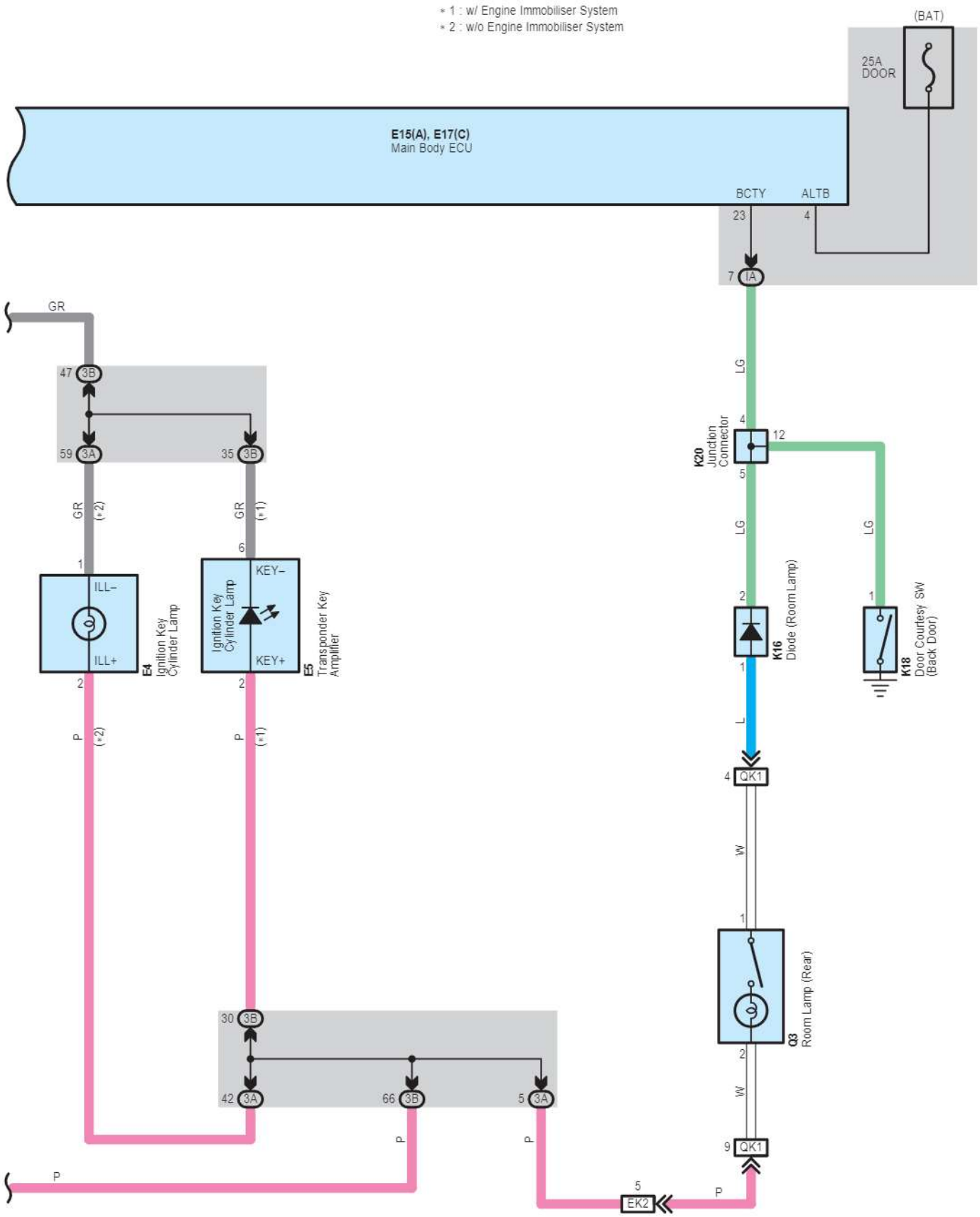
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Wireless Door Lock Control

○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
A10	50 (2GR–FE)	H5	58	L11	60
	52 (2AZ–FE)	I4	58	L18	60
E4	54	J4	58	L22	60
E5	54	K7	59	P5	61
E6	54	K10	59	P7	61
E15 A	54	K16	59	Q3	61
E17 C	54	K18	59	Q7	61
E67	55	K20	59		
G5	58	L8	60		

⬭ : **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

⬭ : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IC	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
ID		
IE		
IH		
IK	30	Roof Wire and Instrument Panel J/B (Cowl Side Left)
IS	31	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)

▭ : **Connector Joining Wire Harness and Wire Harness**

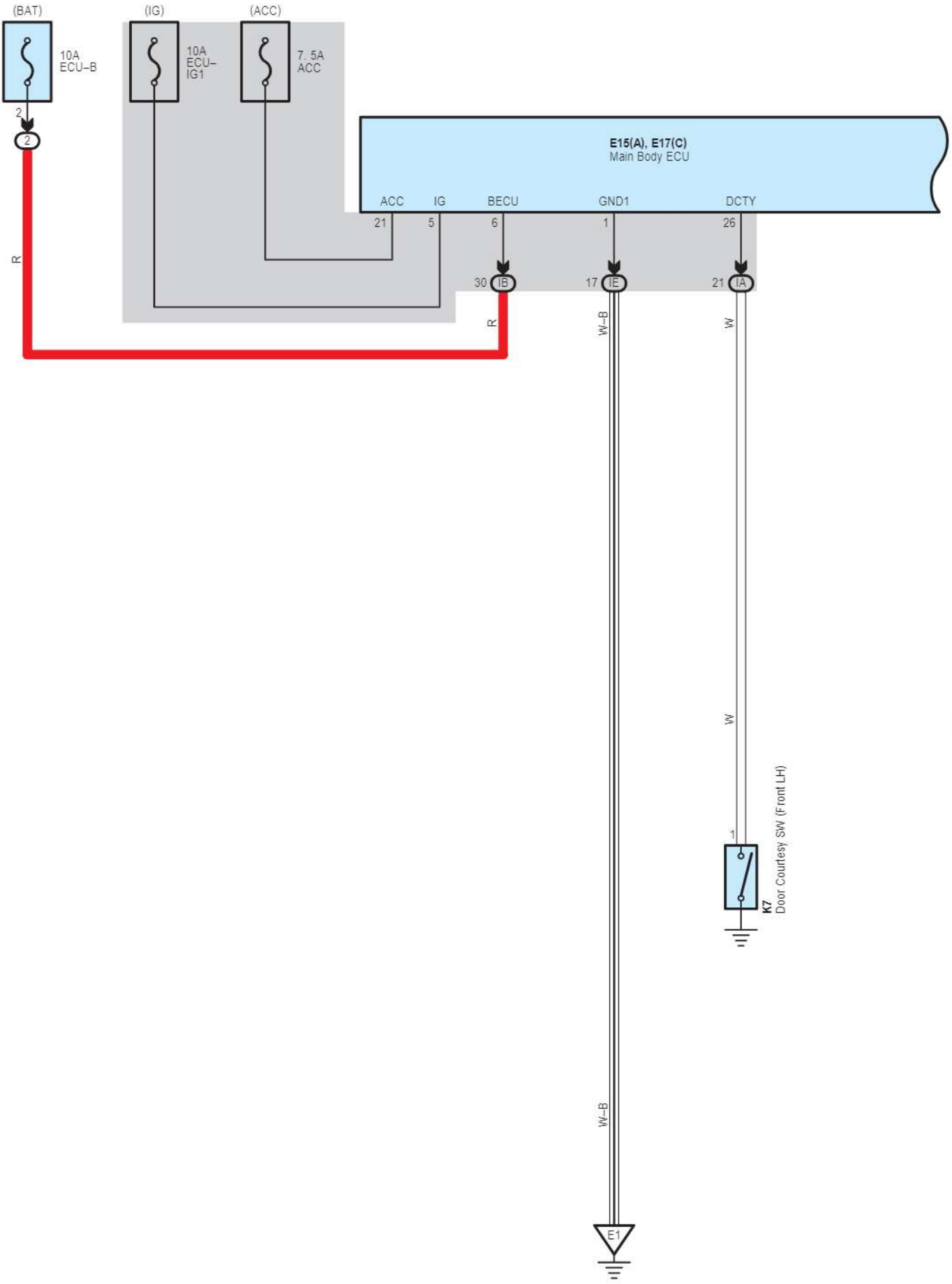
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE1	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
EK2	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)
EL1	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
EL2		
GE1	66	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
GE2		
HE1	66	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
HE2		
IL1	67	Rear Door No.1 RH Wire and Floor No.2 Wire (Right Center Pillar)
JK1	67	Rear Door No.1 LH Wire and Floor Wire (Left Center Pillar)
QK1	67	Back Door No.1 Wire and Floor Wire (Right Rear Quarter Panel)
QL1	67	Back Door No.2 Wire and Floor No.2 Wire (Right Rear Quarter Panel)

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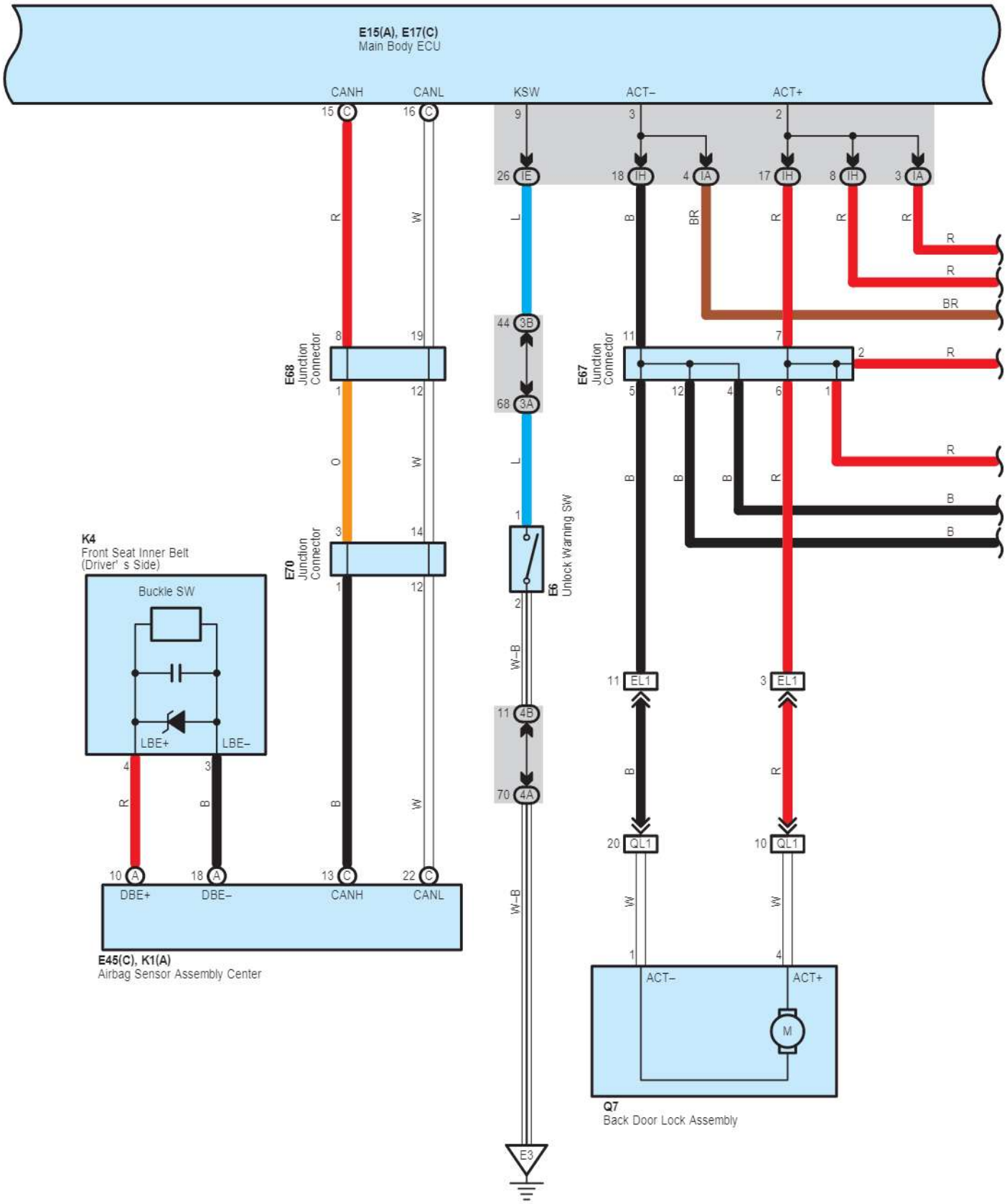
▽ : **Ground Points**

Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
	65 (2AZ–FE)	
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center
E4	66	Right Kick Panel
L2	67	Right Quarter Panel

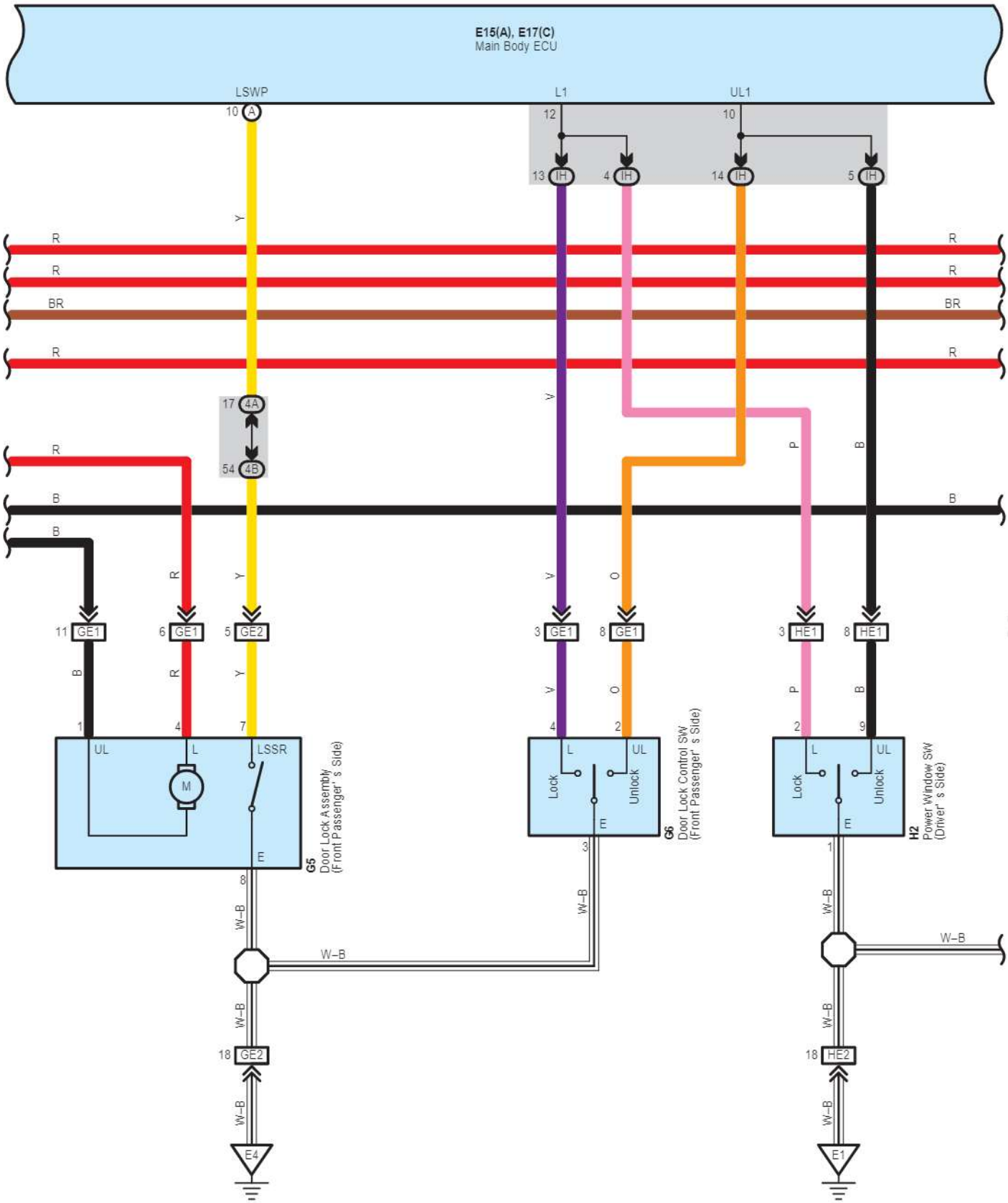
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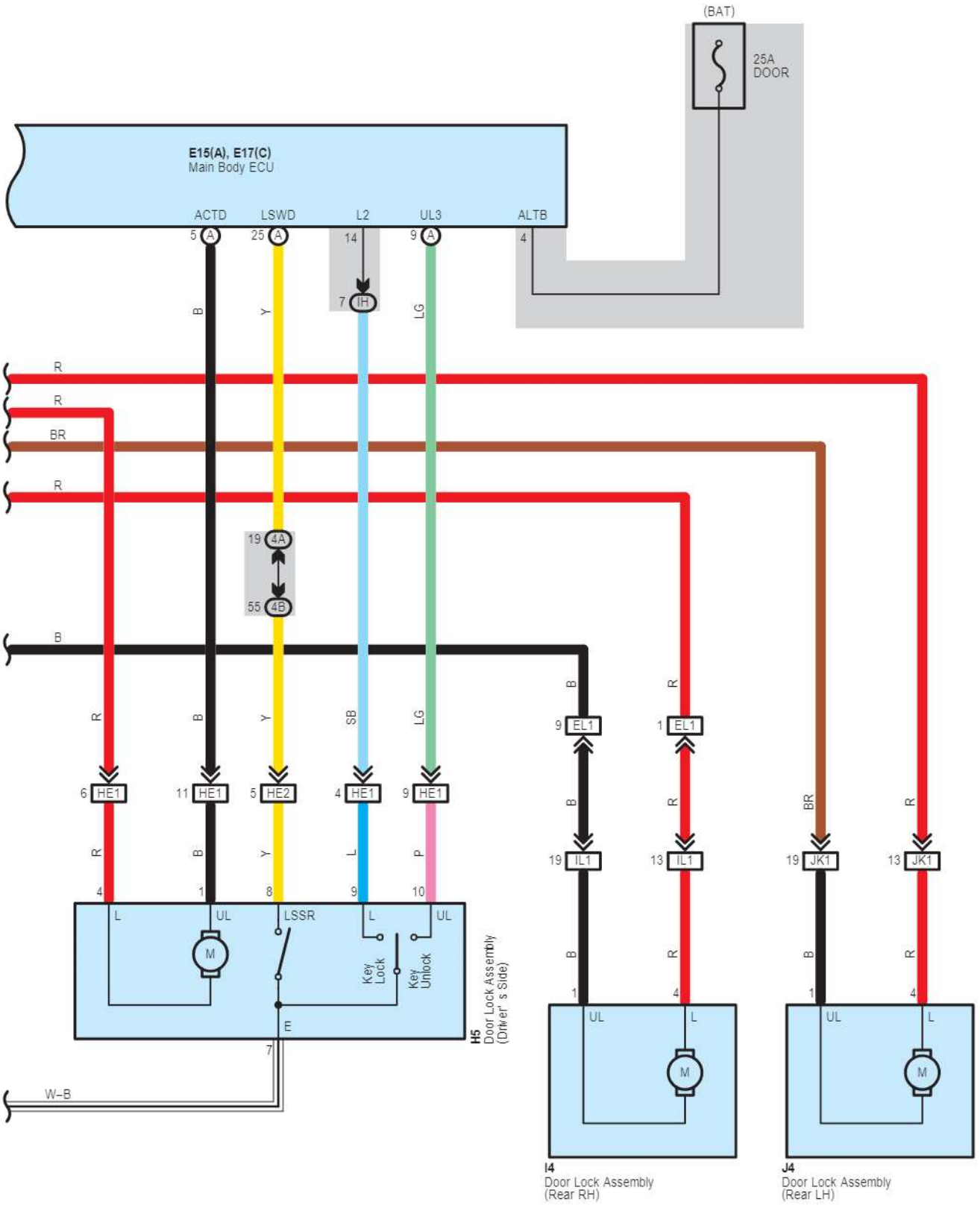
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Door Lock Control

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
E6	54	E70	55	J4	58
E15 A	54	G5	58	K1 A	57
E17 C	54	G6	58	K4	62
E45 C	55	H2	58	K7	59
E67	55	H5	58	Q7	61
E68	55	I4	58		

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IH		

▭ : Connector Joining Wire Harness and Wire Harness

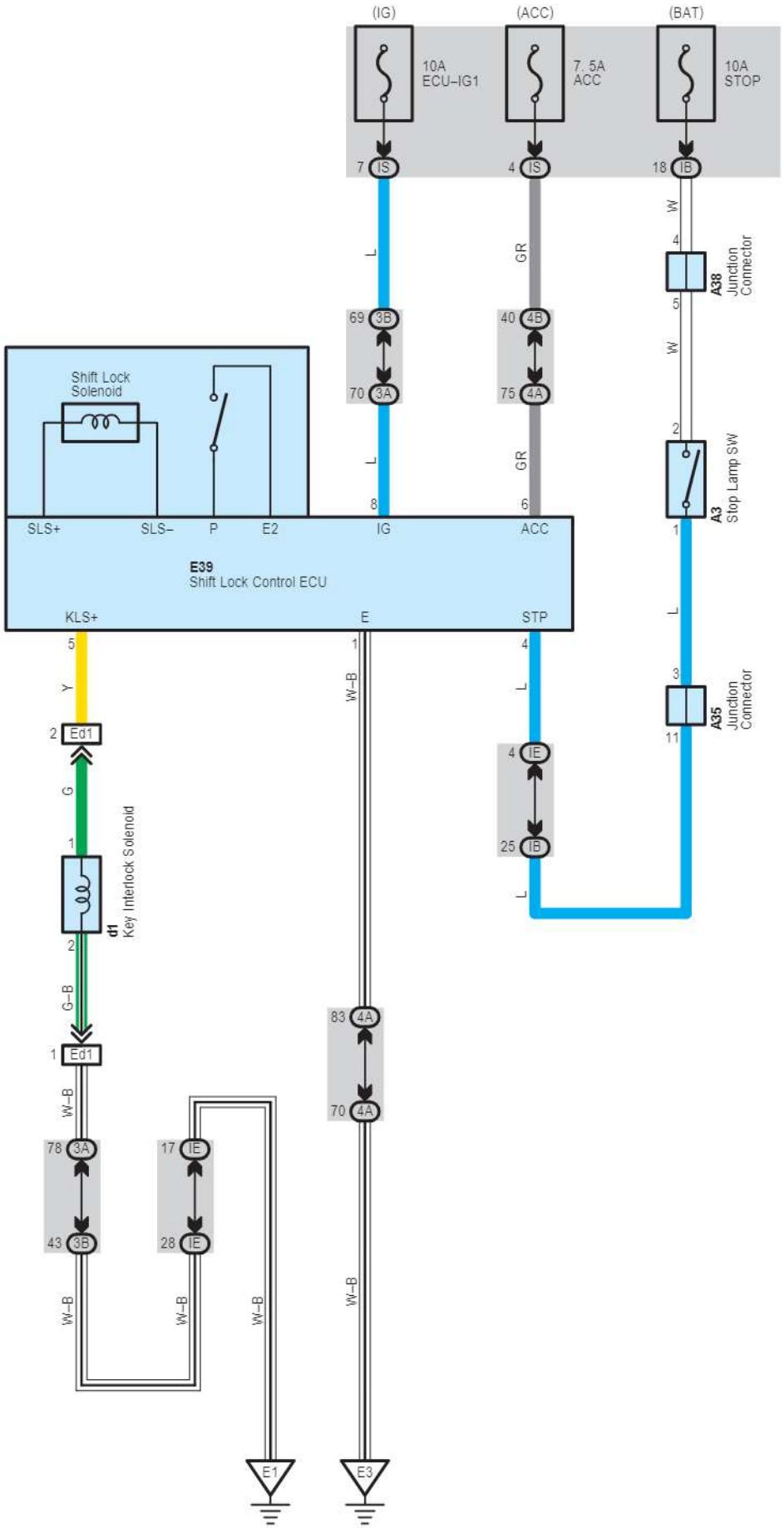
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EL1	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
GE1	66	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
GE2		
HE1	66	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
HE2		
IL1	67	Rear Door No.1 RH Wire and Floor No.2 Wire (Right Center Pillar)
JK1	67	Rear Door No.1 LH Wire and Floor Wire (Left Center Pillar)
QL1	67	Back Door No.2 Wire and Floor No.2 Wire (Right Rear Quarter Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center
E4	66	Right Kick Panel

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: Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	56	A38	56	d1	57
A35	56	E39	55		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IS	31	

: Connector Joining Wire Harness and Wire Harness

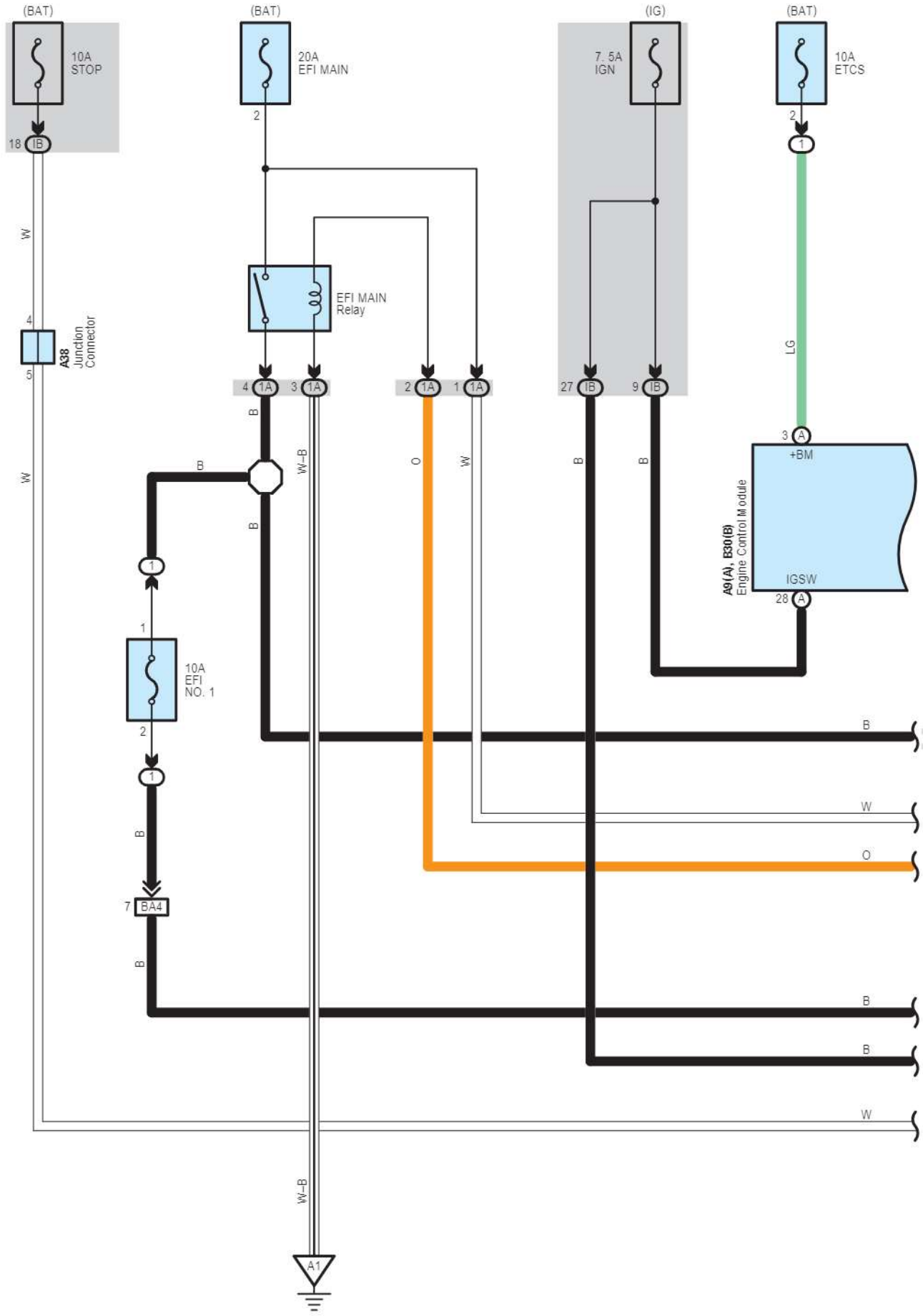
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
Ed1	66	Instrument Panel Wire and Solenoid Wire (Steering Column)

: Ground Points

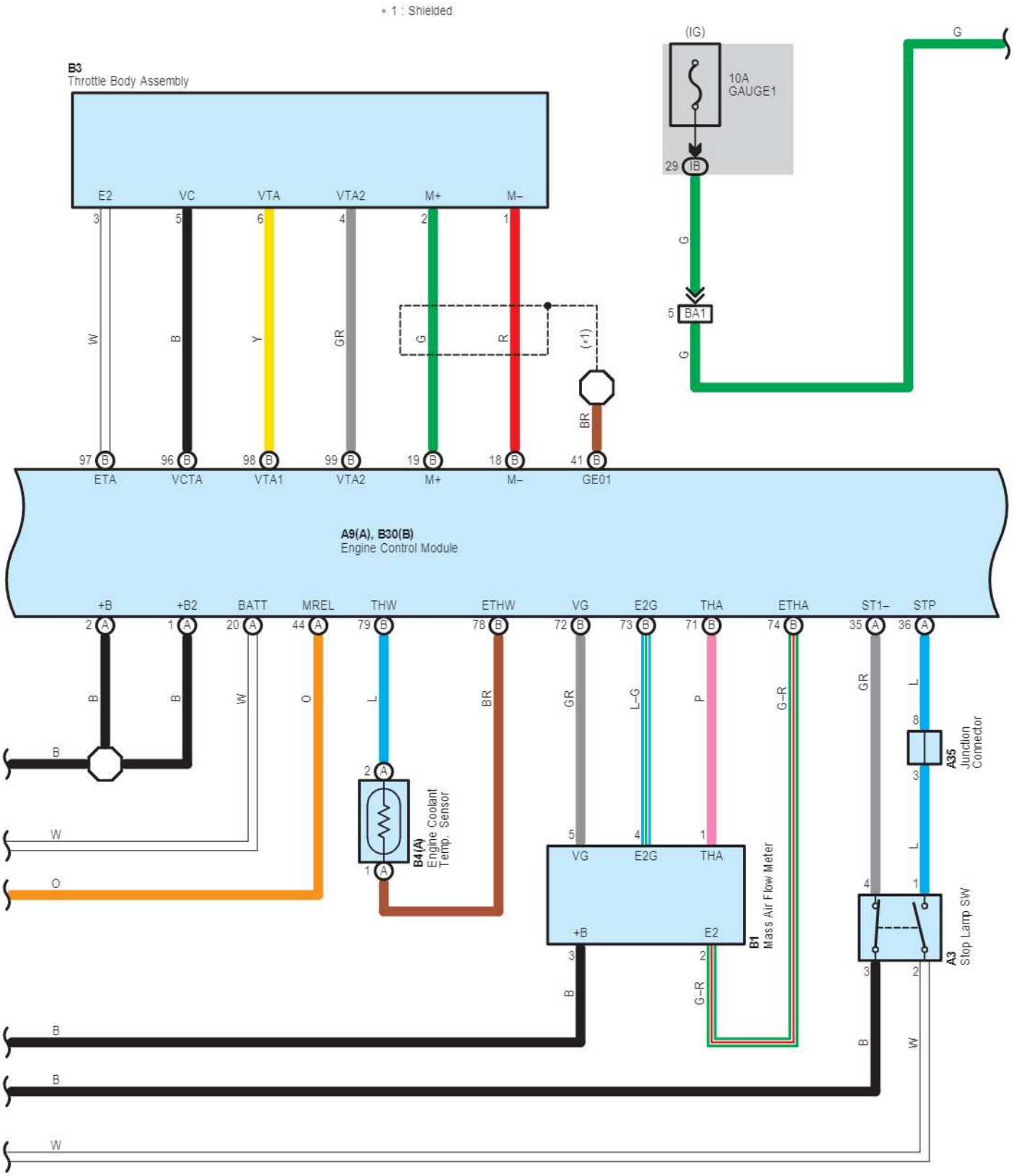
Code	See Page	Ground Points Location
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center

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ECT and A/T Indicator for 2GR–FE

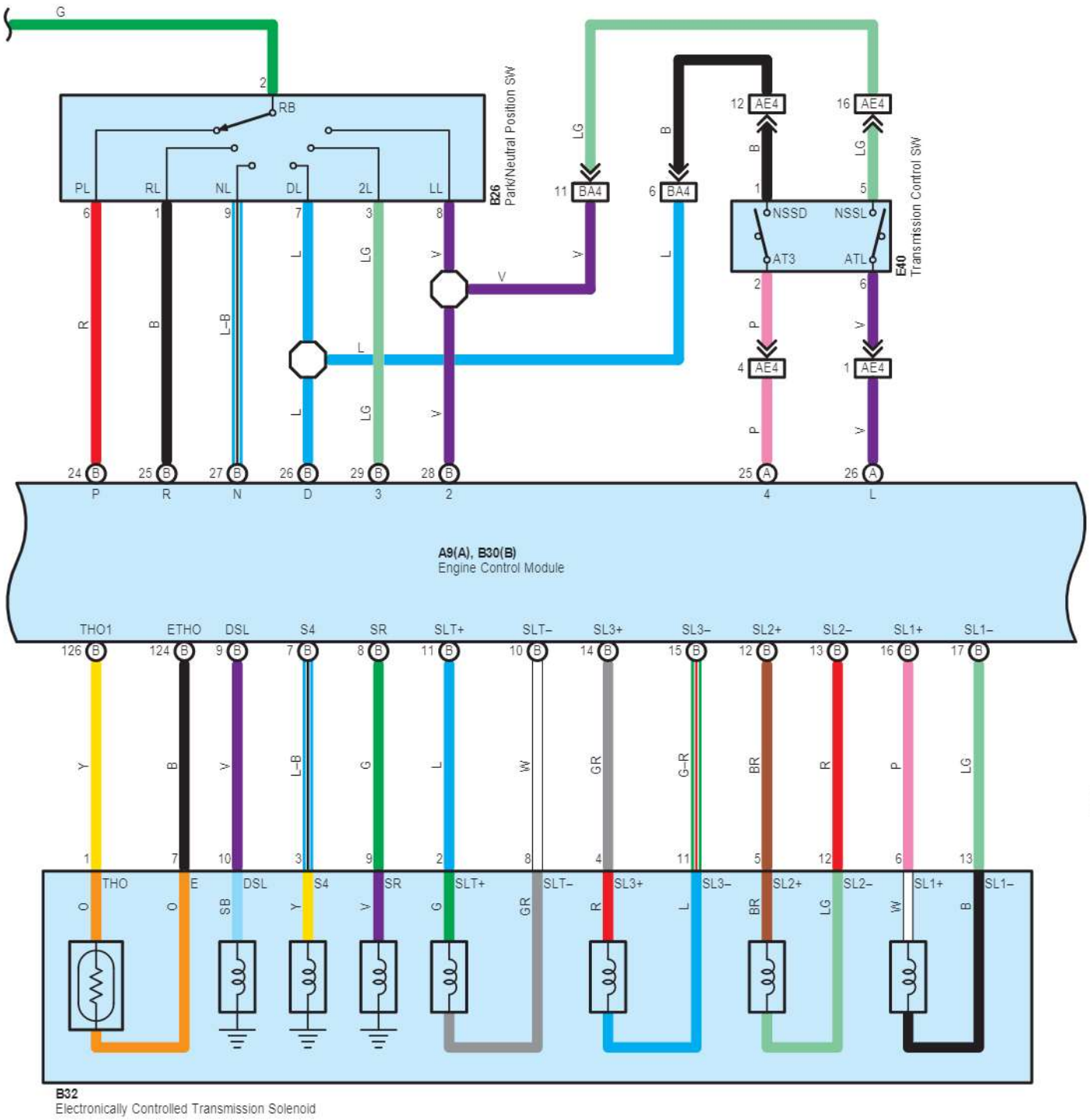


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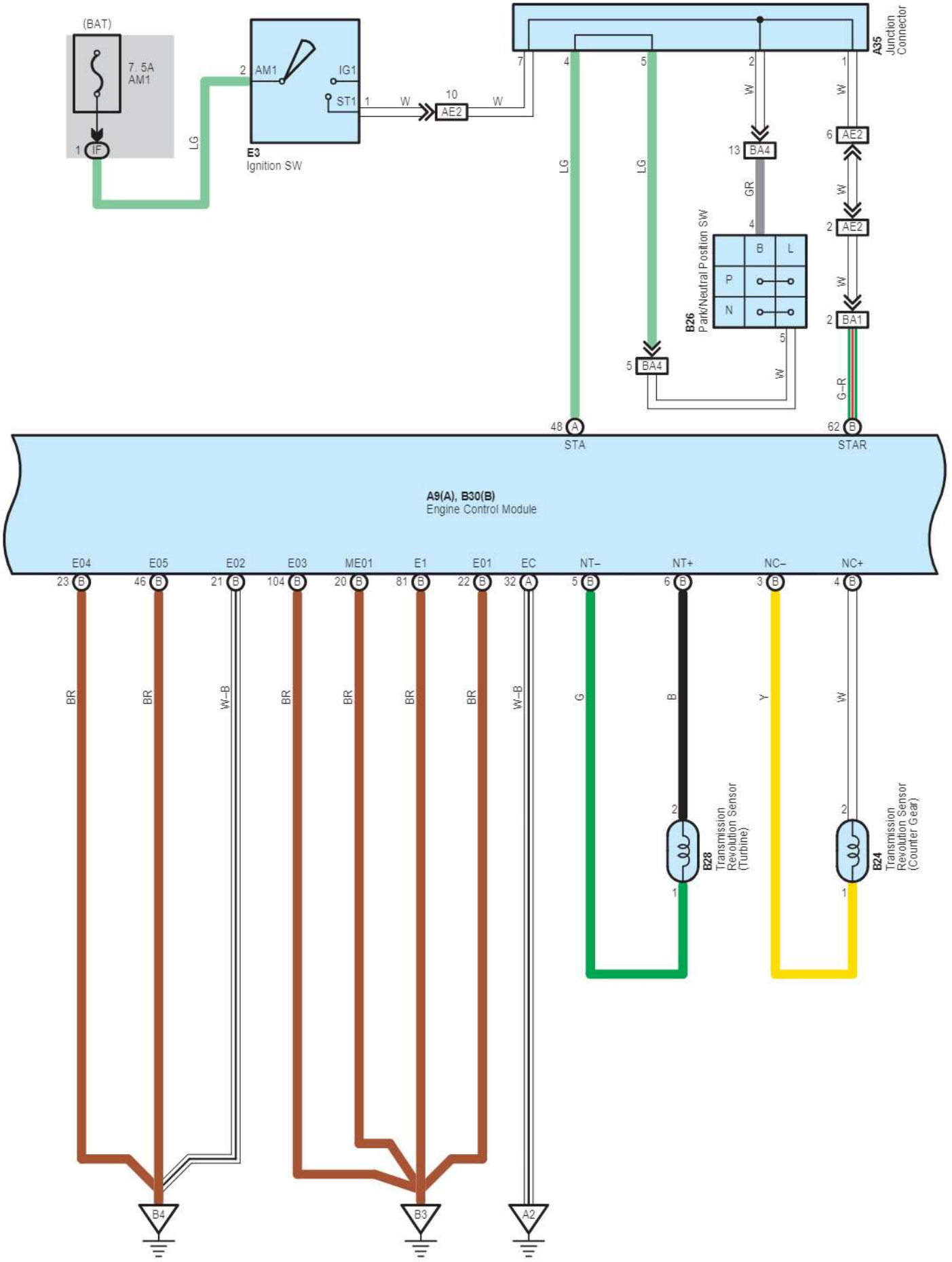


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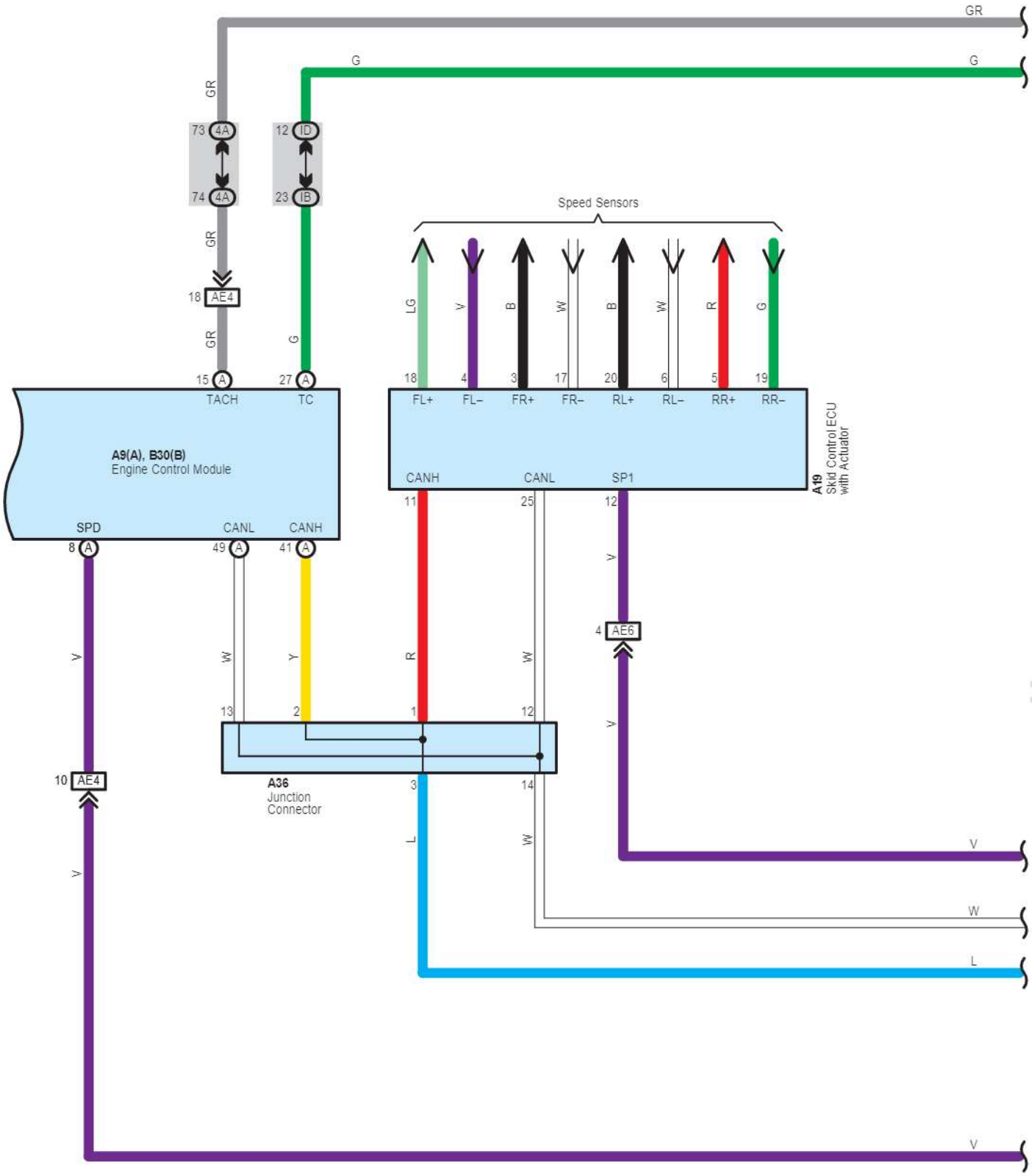
ECT and A/T Indicator for 2GR–FE



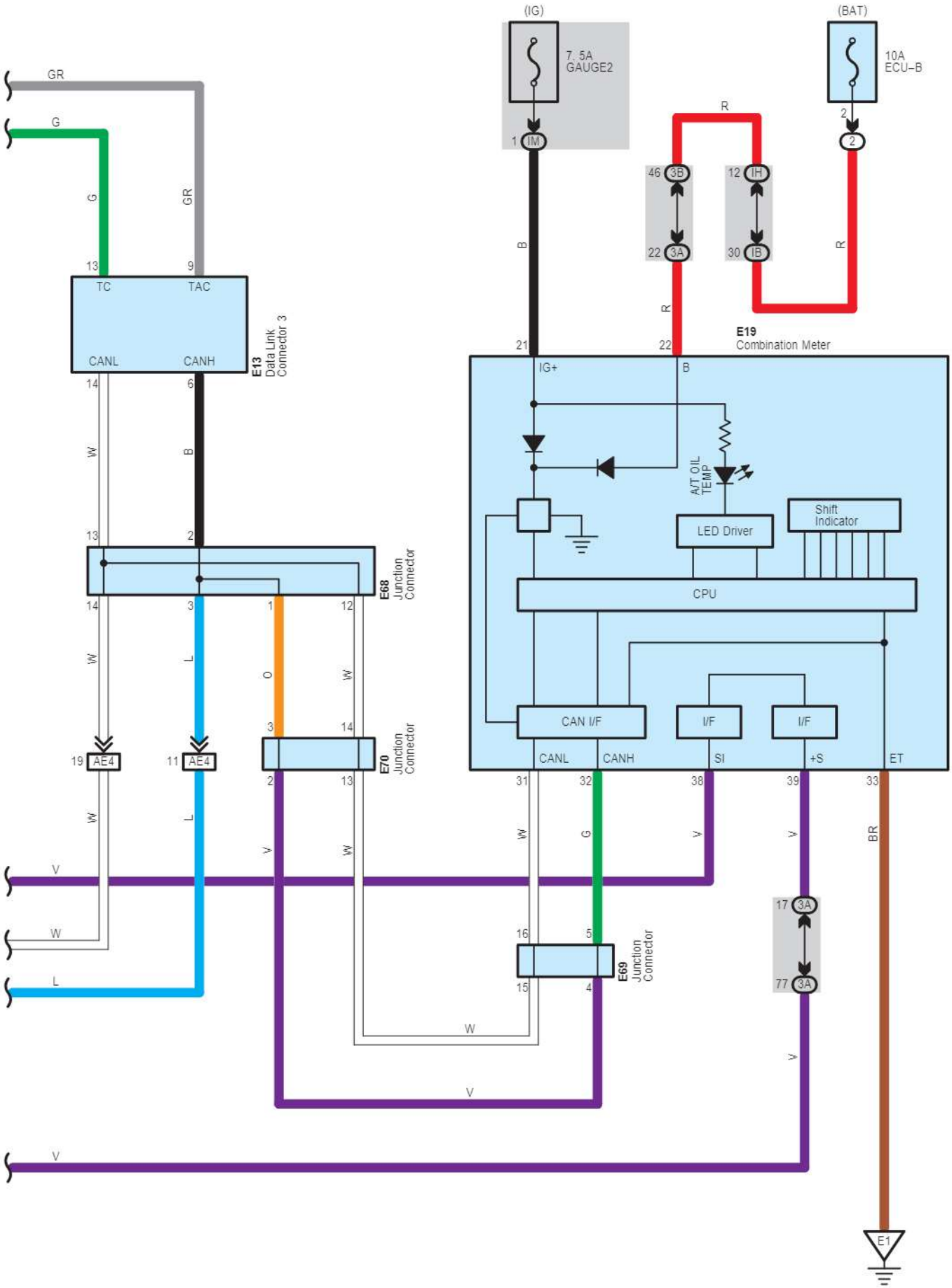
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ECT and A/T Indicator for 2GR–FE

System Outline

1. Line Pressure Optimal Control

Through the use of the solenoid valve SLT+, the line pressure is optimally controlled in accordance with the engine torque information, as well as with the internal operating conditions of the torque converter and the transaxle. Accordingly, the line pressure can be controlled minutely in accordance with the engine output, traveling condition, and the ATF temperature, thus realizing smooth shift characteristics and optimizing the workload in the oil pump.

2. Clutch Pressure Optimal Control

The engine control module monitors the signals from various types of sensor such as the input turbine speed sensor, allowing shift solenoid valves SL1+, SL2+ and SL3+ to minutely control the clutch pressure in accordance with engine output and driving conditions. As a result, smooth shift characteristics have been realized.

3. Shifting Control in Uphill/Downhill Traveling

This control minimizes the shifting of gears when the driver operates the accelerator pedal while driving on a winding road with ups and downs, in order to ensure a smooth drive.

4. Flex Lock–Up Clutch Control

The flex lock–up clutch control operates during acceleration, in the 4th and 5th gear in the D position, and during deceleration, in the 4th and 5th gear in the D position and in the 4th gear in the 4 position.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	56	B3	51 (2GR–FE)	E3	54
A9 A	50 (2GR–FE)	B4 A	51 (2GR–FE)	E13	54
A19	50 (2GR–FE)	B24	51 (2GR–FE)	E19	54
A35	56	B26	51 (2GR–FE)	E40	55
A36	56	B28	51 (2GR–FE)	E68	55
A38	56	B30 B	51 (2GR–FE)	E69	55
B1	51 (2GR–FE)	B32	51 (2GR–FE)	E70	55

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IF		
IH		
IM	31	

▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE2	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE4		
AE6		
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
BA4		

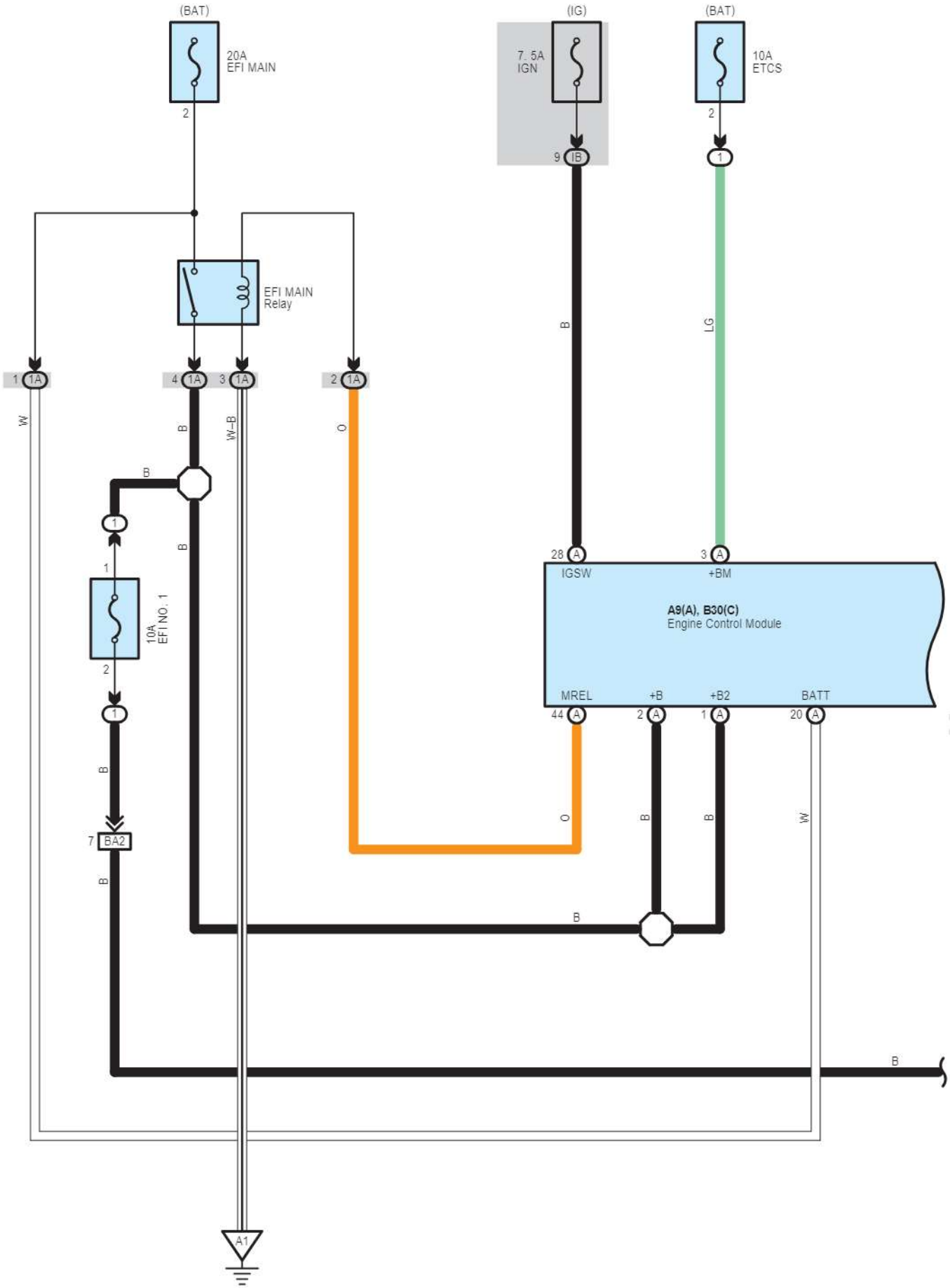
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▽ : **Ground Points**

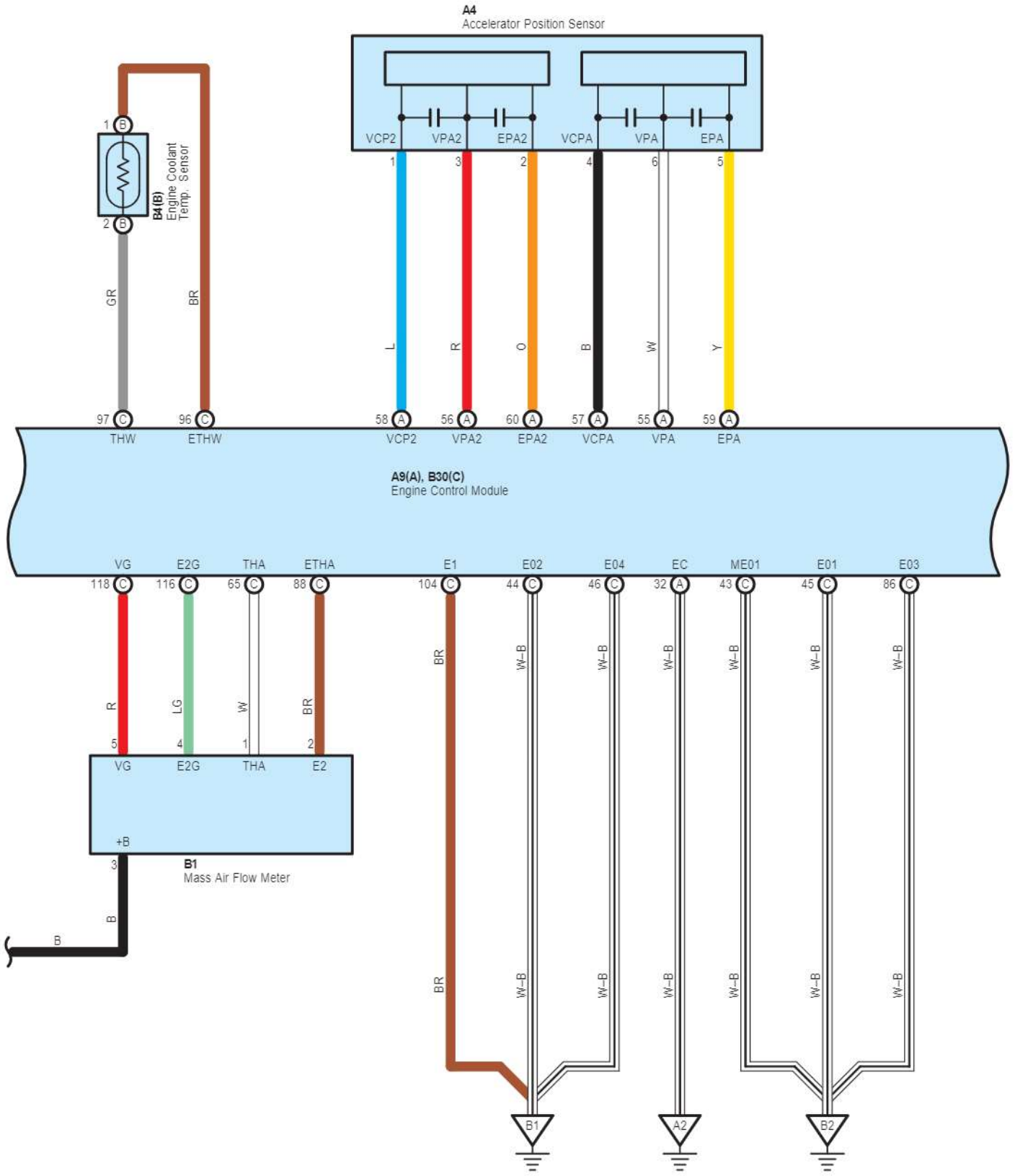
Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
A2		
B3	64 (2GR–FE)	Left Side of the Cylinder Head
B4		
E1	66	Left Kick Panel

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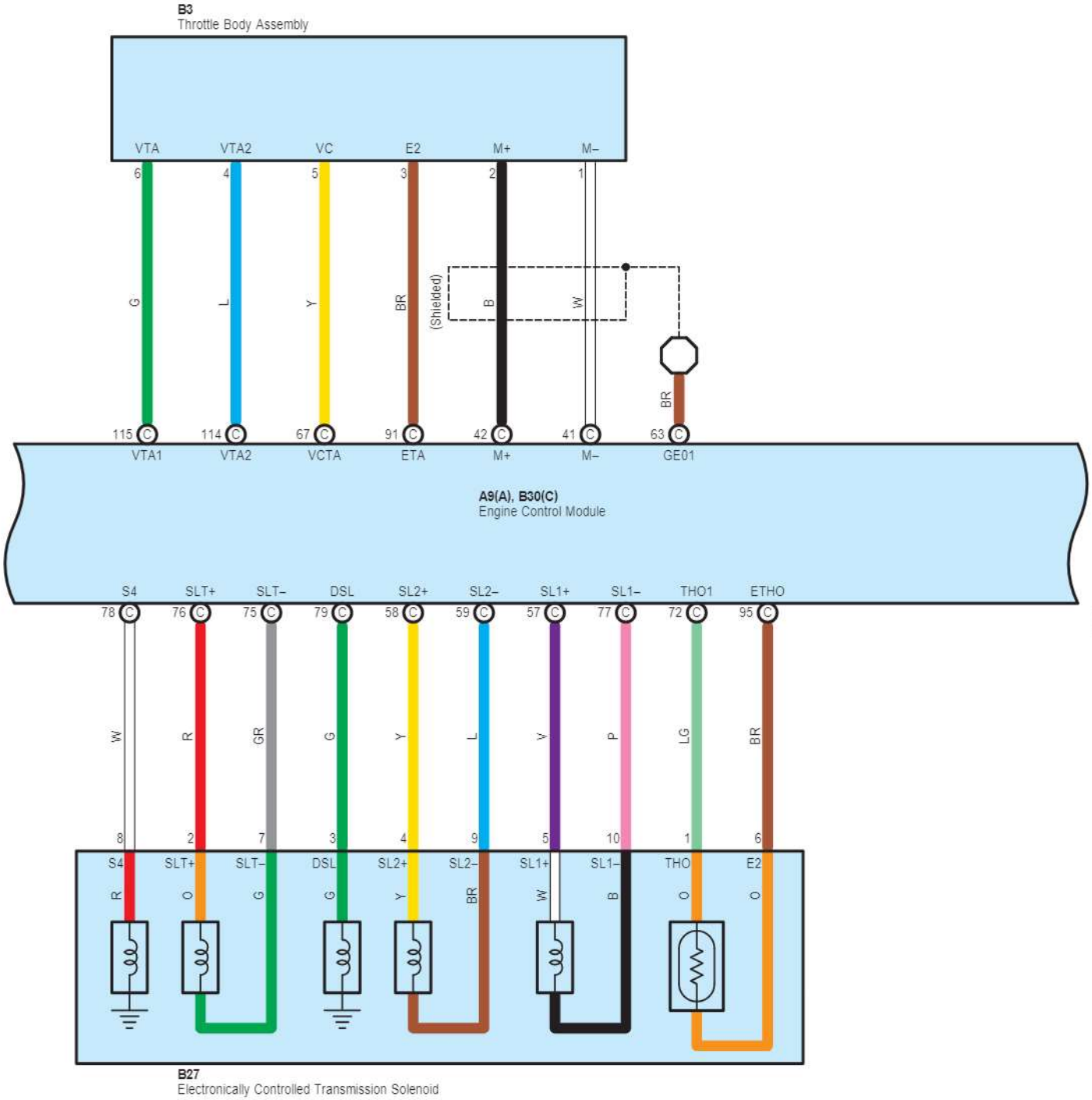
ECT and A/T Indicator for 2AZ–FE



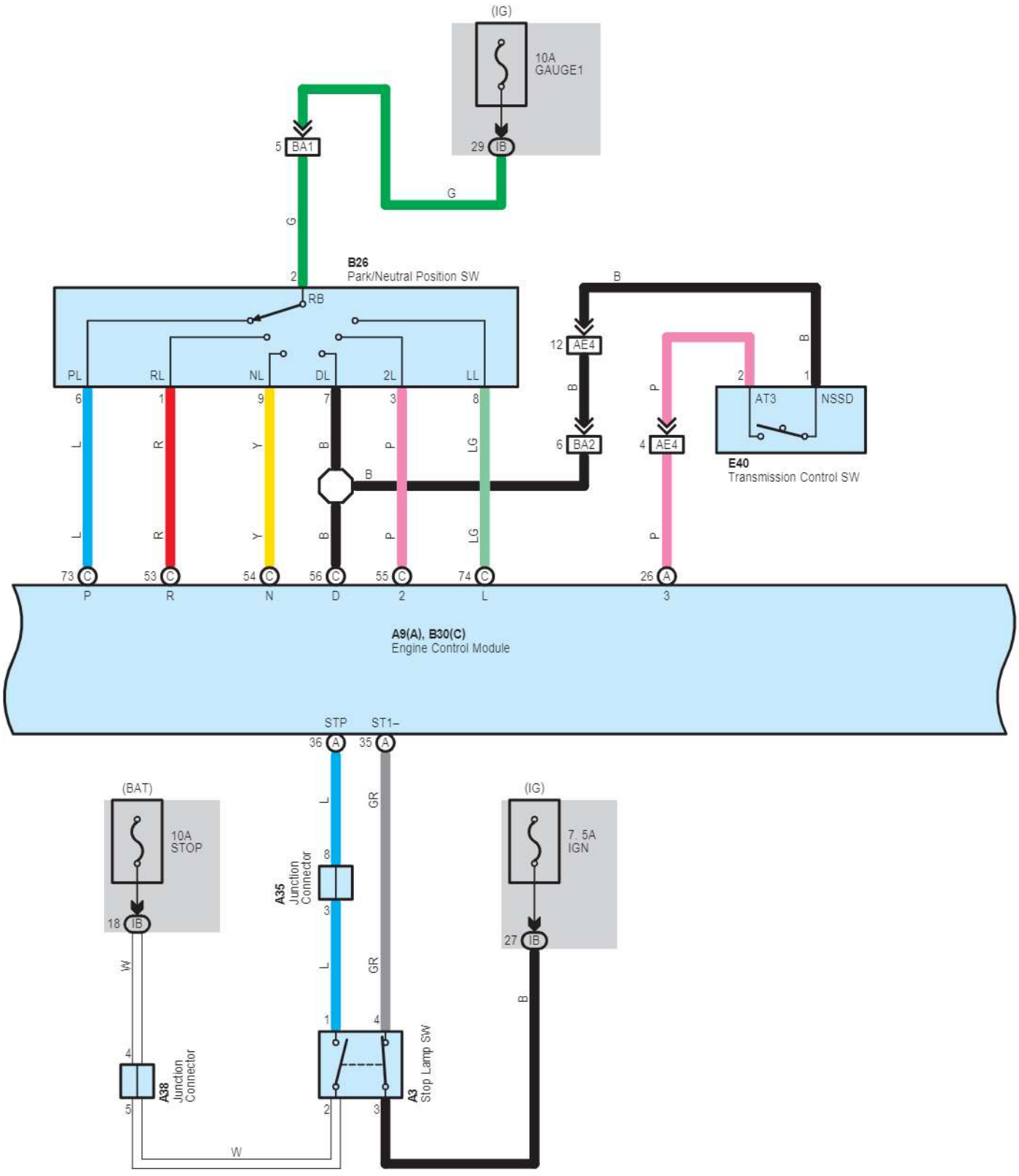
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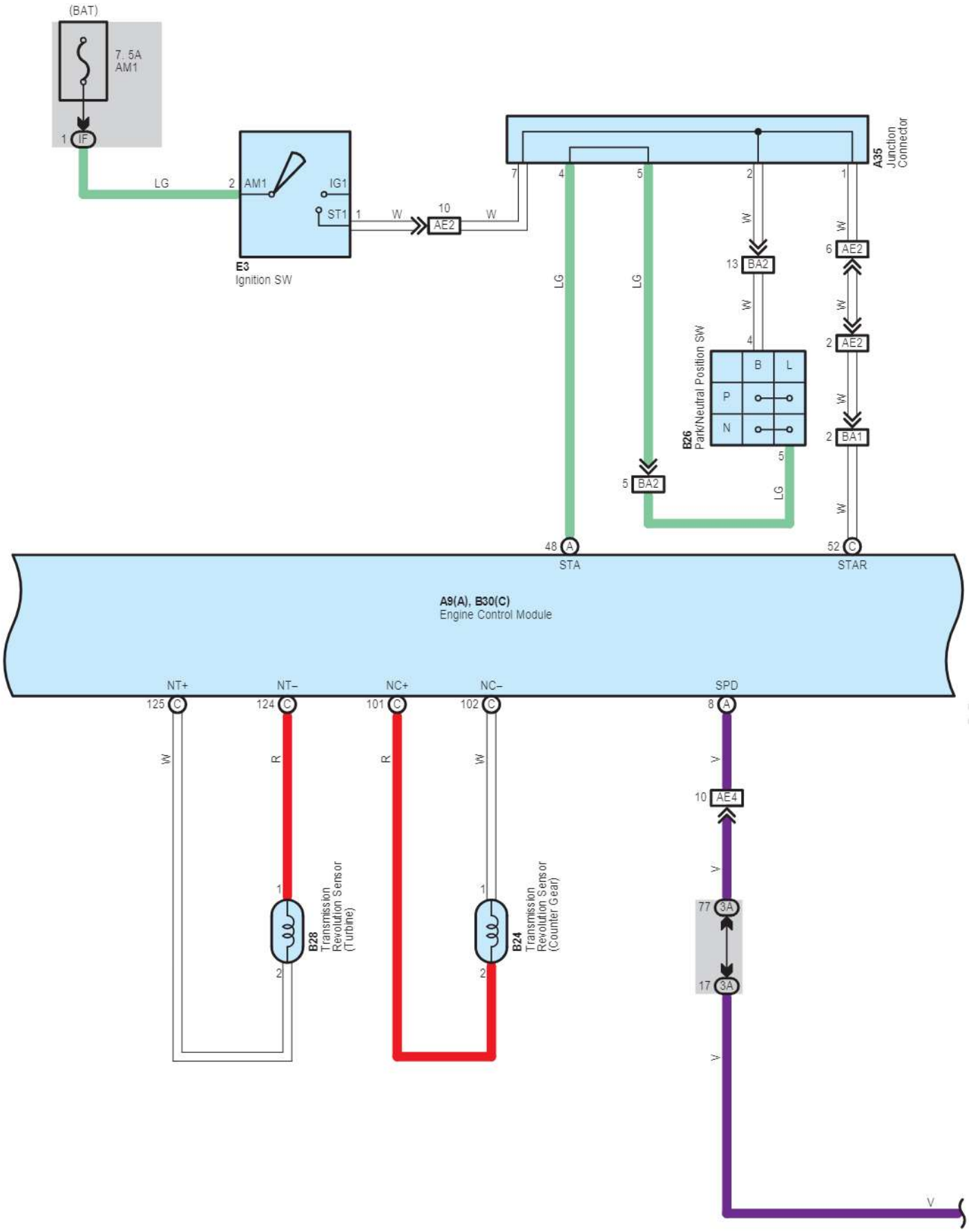


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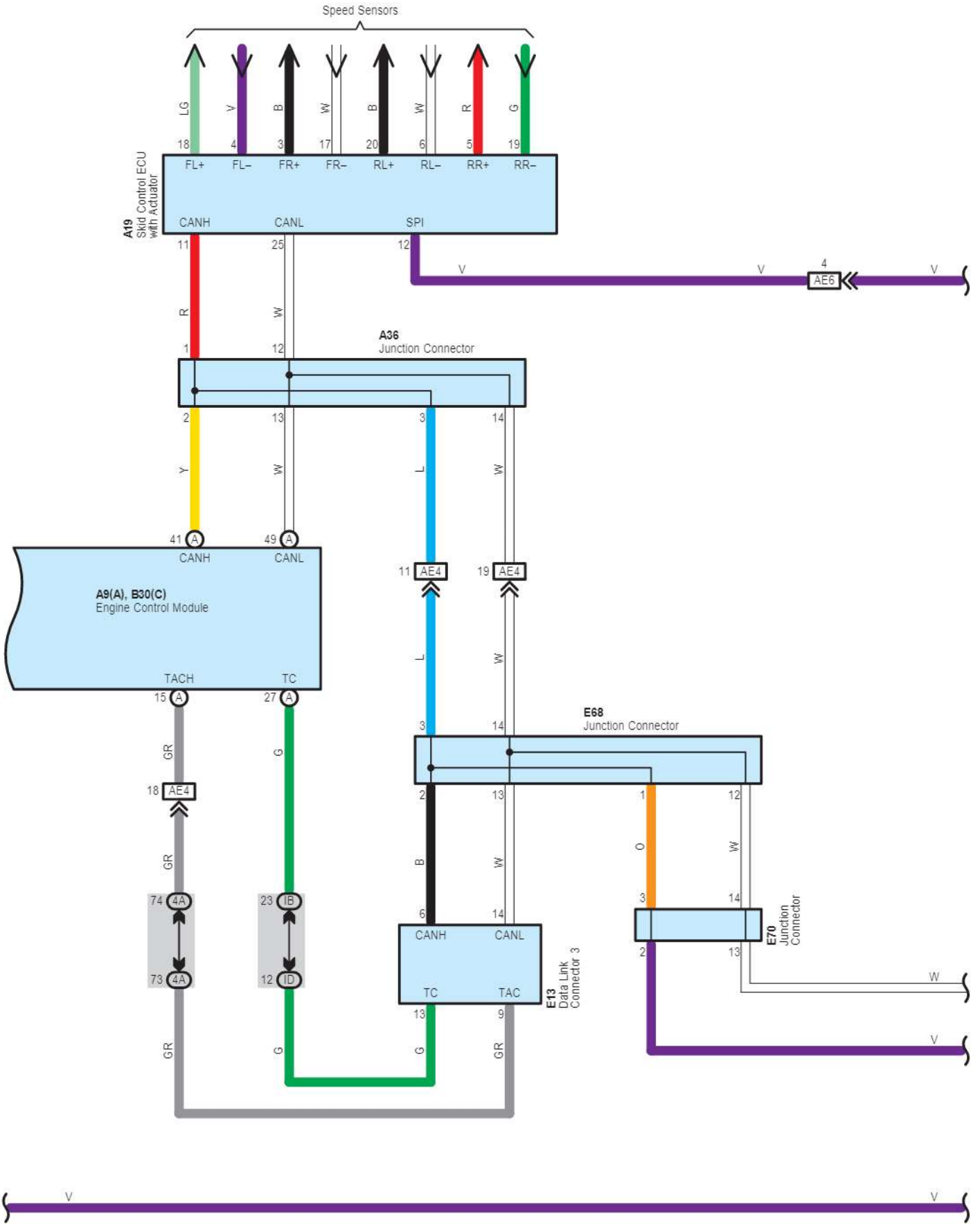


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ECT and A/T Indicator for 2AZ–FE

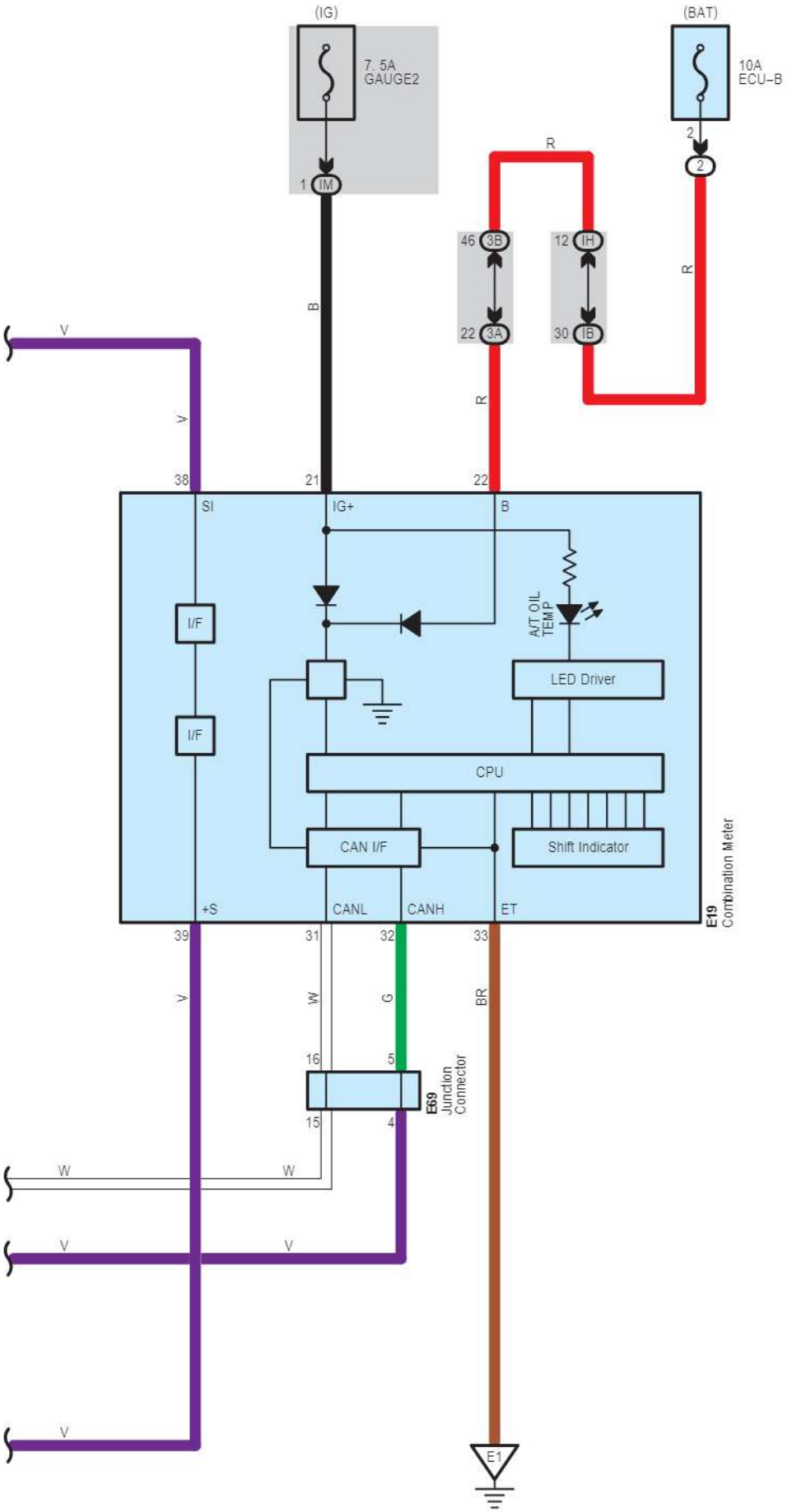


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ECT and A/T Indicator for 2AZ–FE



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System Outline

Previous automatic transaxle have selected each gear shift using mechanically controlled throttle hydraulic pressure, governor hydraulic pressure and lock–up hydraulic pressure. The electronically controlled transmission, however, electrically controls the line pressure, throttle pressure, lock–up pressure and accumulator pressure etc. through the solenoid valve. The electronically controlled transmission is a system which precisely controls gear shift timing and lock–up timing in response to the vehicle's driving conditions and the engine condition detected by various sensors. It makes smooth driving possible by shift selection for each gear which is the most appropriate to the driving conditions at that time, and by preventing downing, squat and gear shift shock when starting off.

1. Gear Shift Operation

During driving the engine warm up condition signal is input from engine coolant temp. sensor to TERMINAL THW of the engine control module, and the vehicle speed signal is input from the speed sensor to skid control ECU with actuator, and are sent to the engine control module through communication control. At the same time, the throttle valve opening signal is sent from the throttle position sensor to the TERMINALS VTA1 and VTA2 of the engine control module, as the throttle angle signal.

2. Lock–Up Operation

When the engine control module decides based on each signal that the lock–up condition has been met, the current flows through TERMINAL DSL of the engine control module to TERMINAL 3 of the electronically controlled transmission solenoid to GROUND.

3. Stop Lamp SW Circuit

If the brake pedal is depressed (Stop lamp SW on) when driving in lock–up condition, a signal is input to TERMINAL STP of the engine control module. The engine control module operates and cuts the current to the solenoid to release lock–up.

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	56	B3	53 (2AZ–FE)	E13	54
A4	56	B4 | B	53 (2AZ–FE)	E19	54
A9 | A	52 (2AZ–FE)	B24	53 (2AZ–FE)	E40	55
A19	52 (2AZ–FE)	B26	53 (2AZ–FE)	E68	55
A35	56	B27	53 (2AZ–FE)	E69	55
A36	56	B28	53 (2AZ–FE)	E70	55
A38	56	B30 | C	53 (2AZ–FE)		
B1	53 (2AZ–FE)	E3	54		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	23 (2AZ–FE)	Engine Room R/B No.1 (Engine Compartment Left)
2	27 (2AZ–FE)	Engine Room R/B No.2 (Engine Compartment Right)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IF		
IH		
IM	31	

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ECT and A/T Indicator for 2AZ–FE

: Connector Joining Wire Harness and Wire Harness

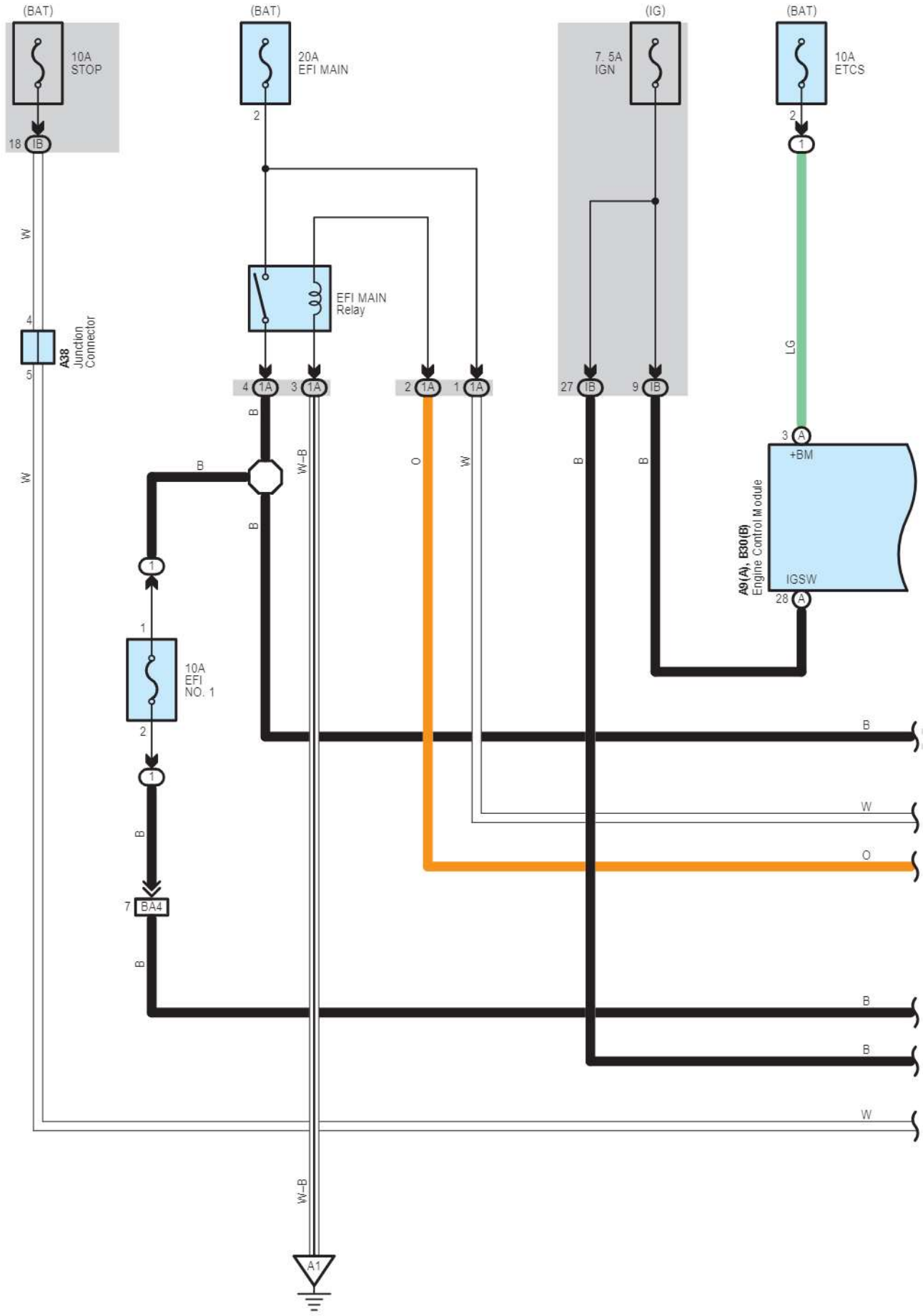
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE2	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE4		
AE6		
BA1	65 (2AZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
BA2		

: Ground Points

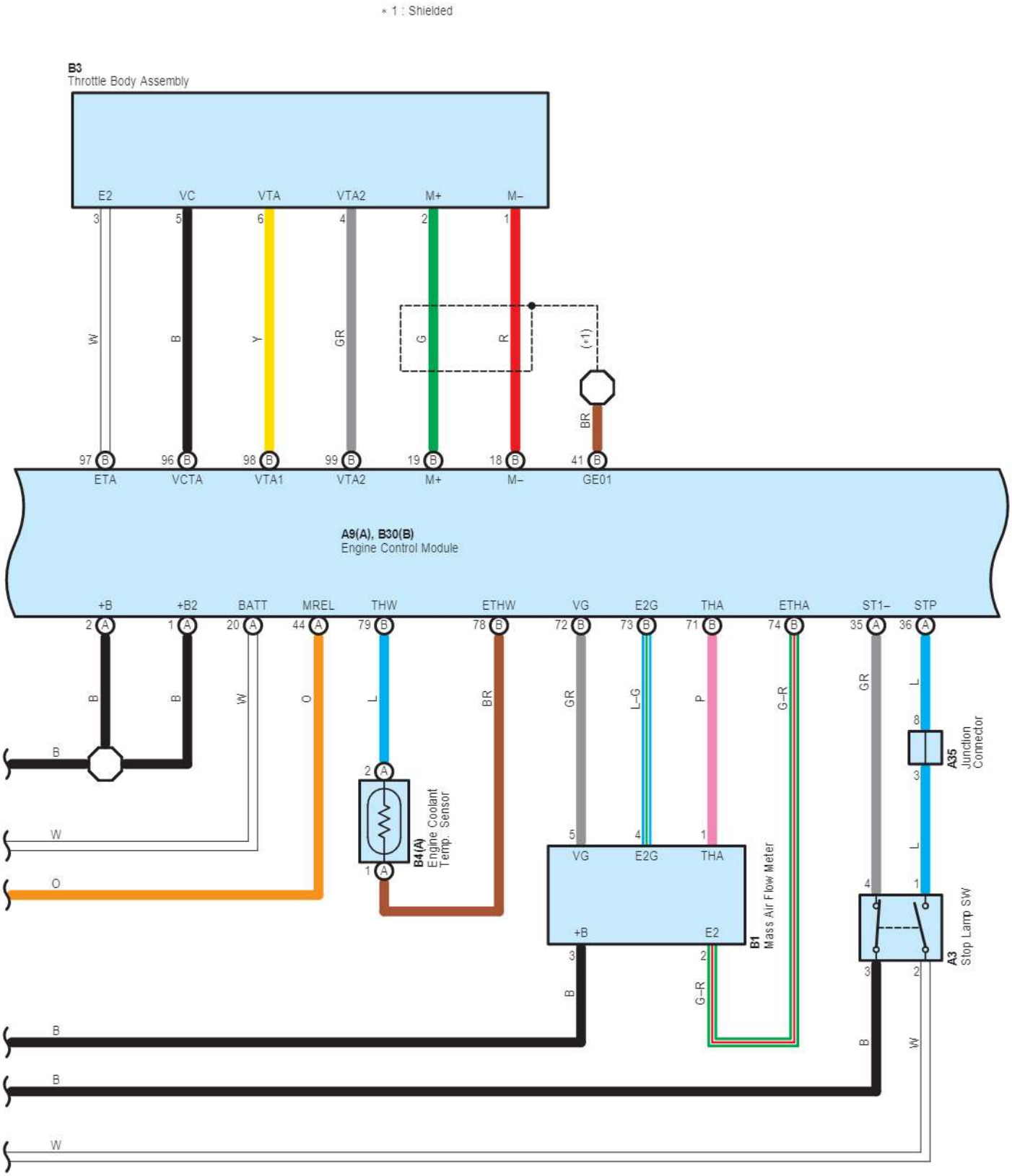
Code	See Page	Ground Points Location
A1	65 (2AZ–FE)	Front Left Fender
A2		
B1	65 (2AZ–FE)	Left Side of the Cylinder Head
B2		
E1	66	Left Kick Panel

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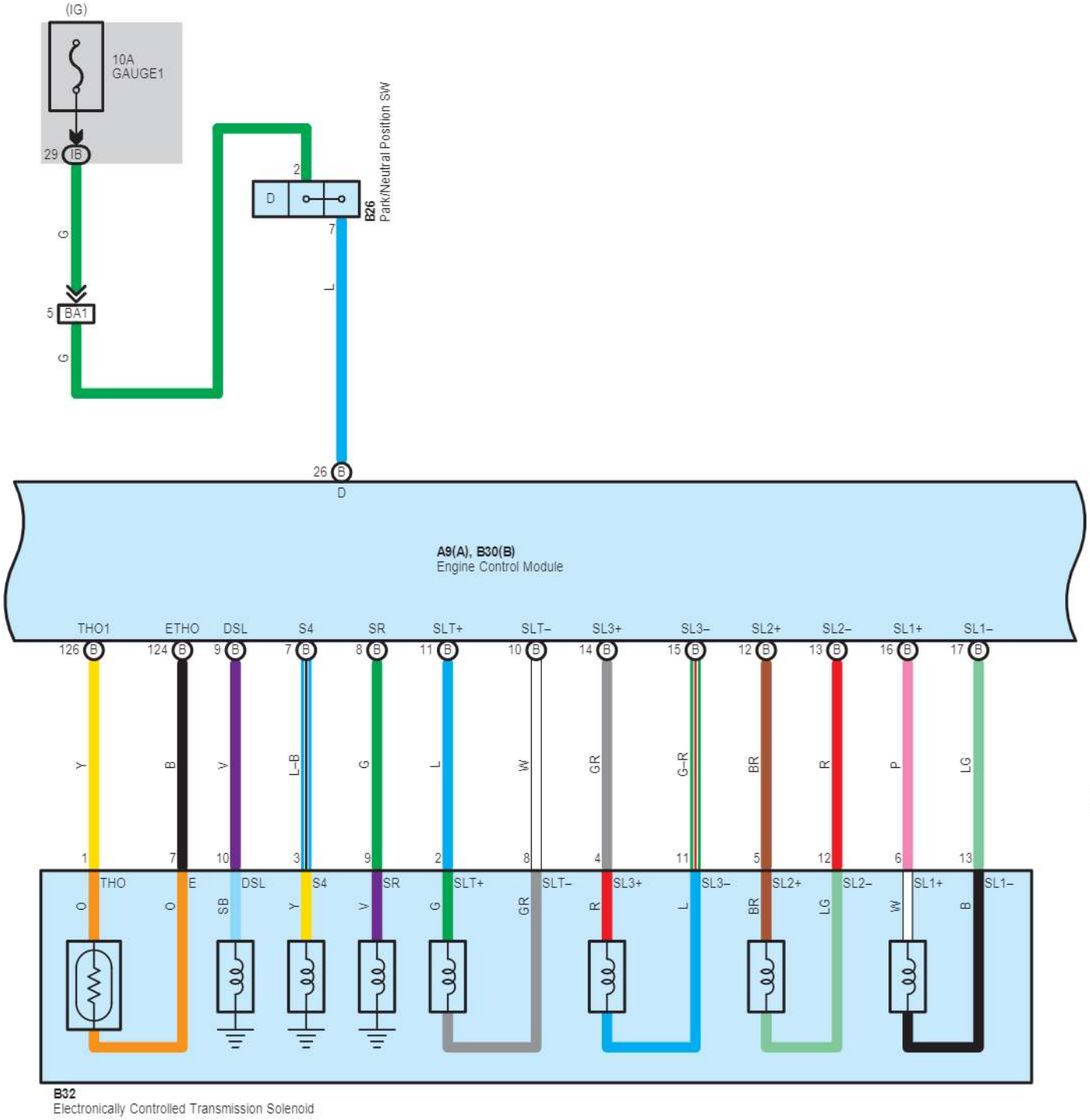
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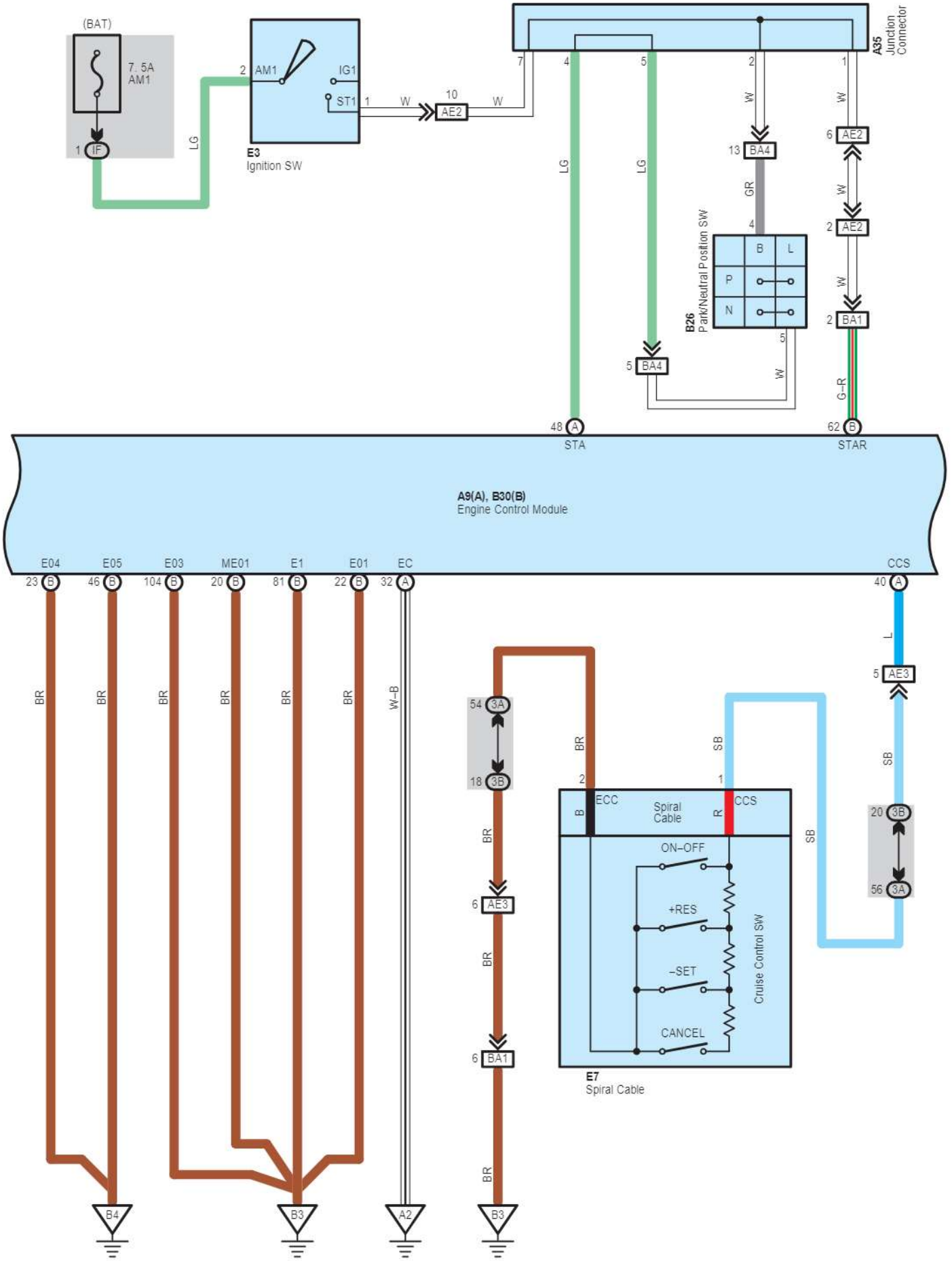
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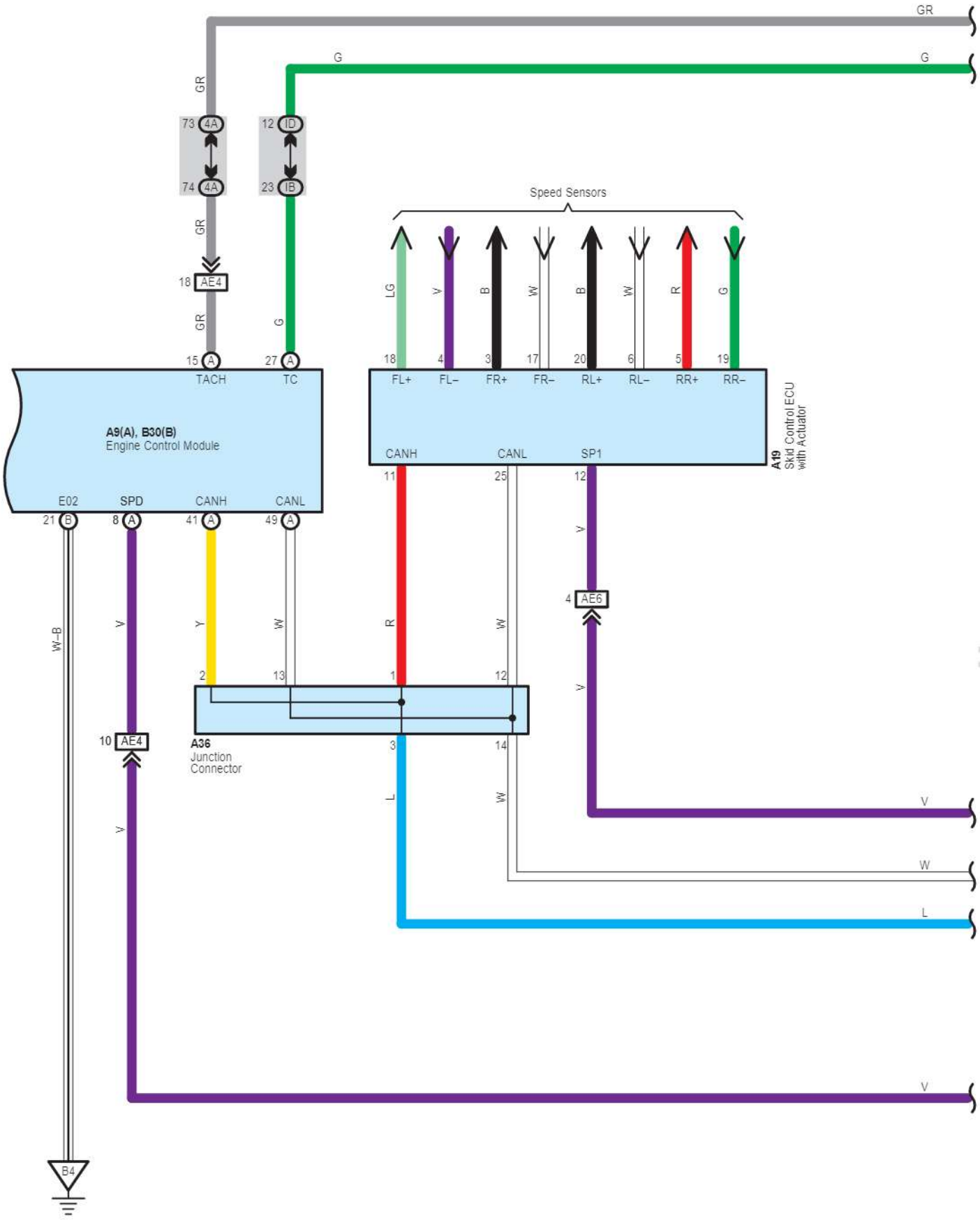
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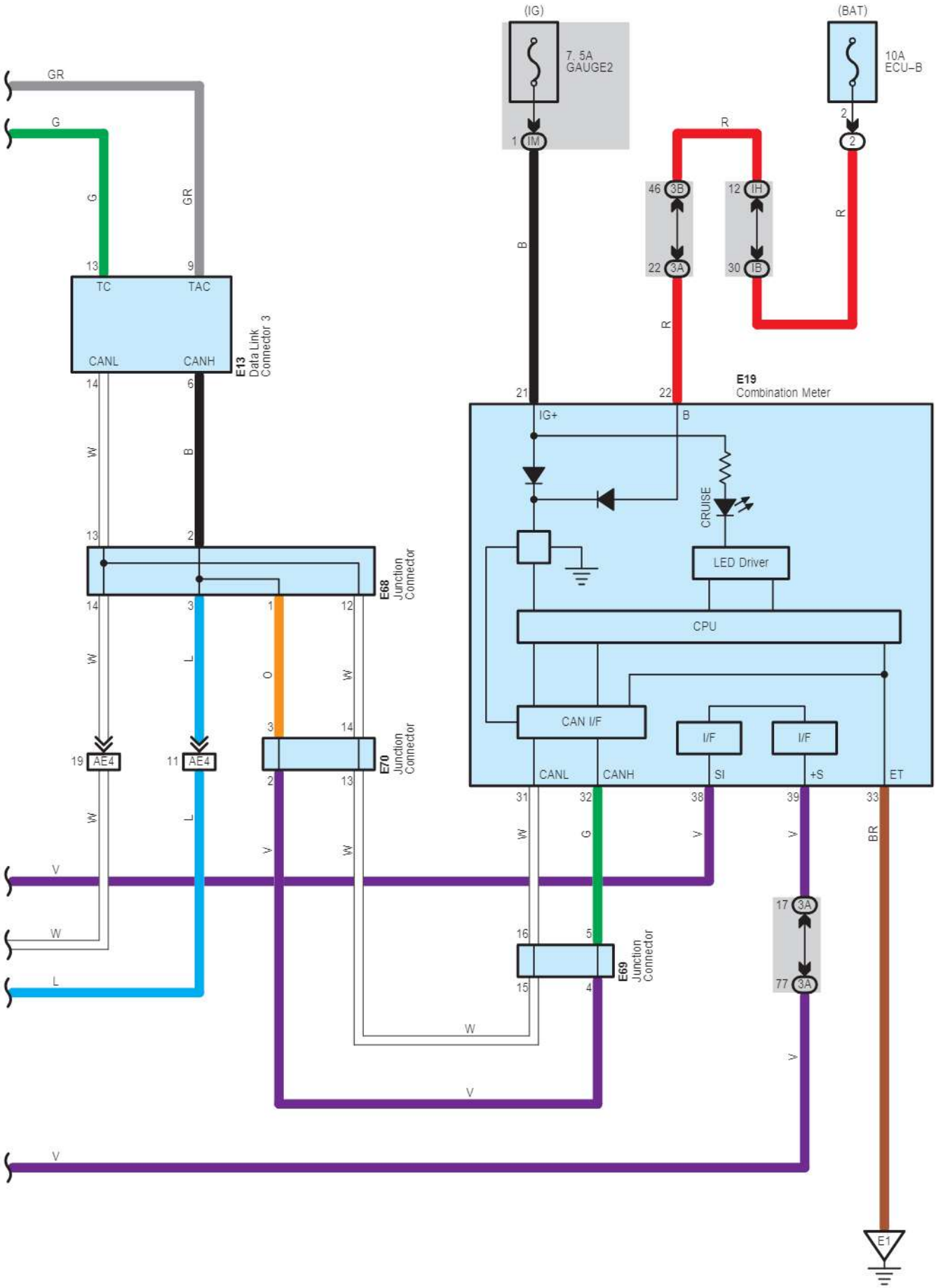
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Cruise Control for 2GR–FE

System Outline

The cruise control system is a constant vehicle speed controller in which control of the switch on the instrument panel makes it possible to automatically adjust the opening of the engine throttle valve without depressing of the accel pedal.

1. Set Control

When the –SET switch is turned from ON to OFF during driving with the main switch ON, the vehicle speed at that time is registered and the vehicle is controlled at that constant speed.

2. Coast Control

When the –SET switch is kept ON during driving with the cruise control, the cruise control required opening gets zero to reduce the vehicle speed. If the SET/COAST switch is turned OFF, the vehicle speed at that time is registered and the vehicle is controlled at the constant speed.

3. Tap Up Control

Whenever +RES switch is tapped ON instantaneously (For approximately 0.5 sec.), the registered vehicle speed increases by about 1.6 km/h.

4. Tap Down Control

Whenever the –SET switch is tapped ON instantaneously (For approximately 0.5 sec.), the registered vehicle speed decreased by about 1.6 km/h.

5. Accel Control

When +RES switch kept ON during driving with the cruise control, the engine control module controls the throttle valve to accelerate the vehicle.
It also registers the vehicle speed when +RES switch is turned OFF and controls the vehicle at the constant speed.

6. Manual Cancel Mechanism

If any of the following signals is input during cruise control travelling, the cruise control is cancelled.

* The stop lamp SW is turned on.
* The CANCEL SW is turned on.
* The ON–OFF SW is turned off.
* Gear is shifted from D position to other positions than D.

7. Auto Cancel Function

If any of the following conditions is encountered, the cruise control is automatically cancelled.

* The stop light SW wiring is faulty or short–circuited.
* The vehicle speed signal is faulty.
* The electronically controlled throttle malfunctions.

8. Other Cancel Function

If any operate VSC system the cruise control is cancelled.

9. Overdrive Control Function

The overdrive control may be cancelled if the vehicle travels on the slope during cruise control travelling. After the overdrive control has been cancelled, when climbing hill is judged to finish from throttle opening information, the vehicle returns to the overdrive control mode again after the overdrive return timer is completed.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	56	B3	51 (2GR–FE)	E13	54
A9 A	50 (2GR–FE)	B4 A	51 (2GR–FE)	E19	54
A19	50 (2GR–FE)	B26	51 (2GR–FE)	E68	55
A35	56	B30 B	51 (2GR–FE)	E69	55
A36	56	B32	51 (2GR–FE)	E70	55
A38	56	E3	54		
B1	51 (2GR–FE)	E7	54		

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)

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: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IF		
IH		
IM	31	

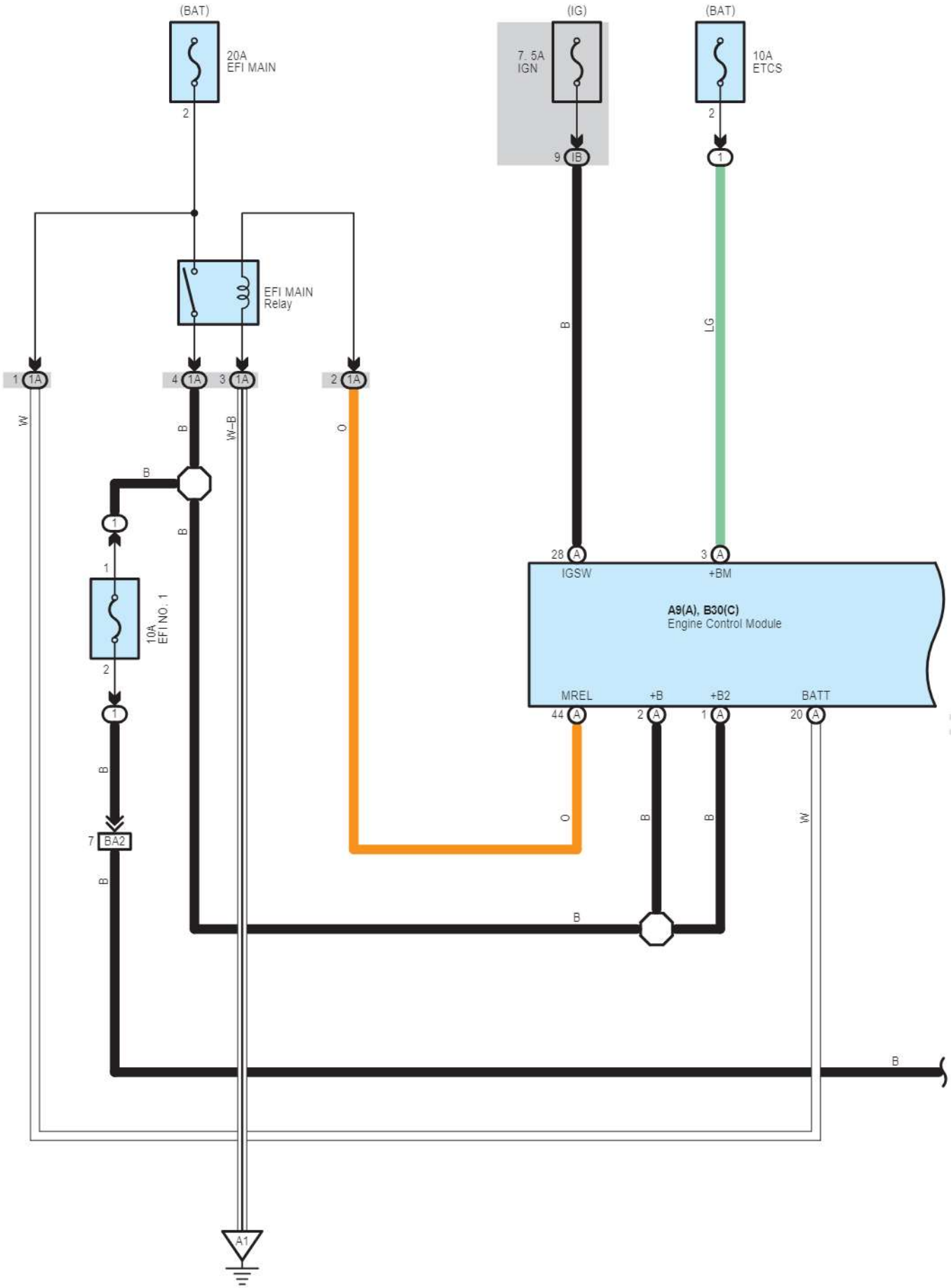
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE2	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE3		
AE4		
AE6		
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
BA4		

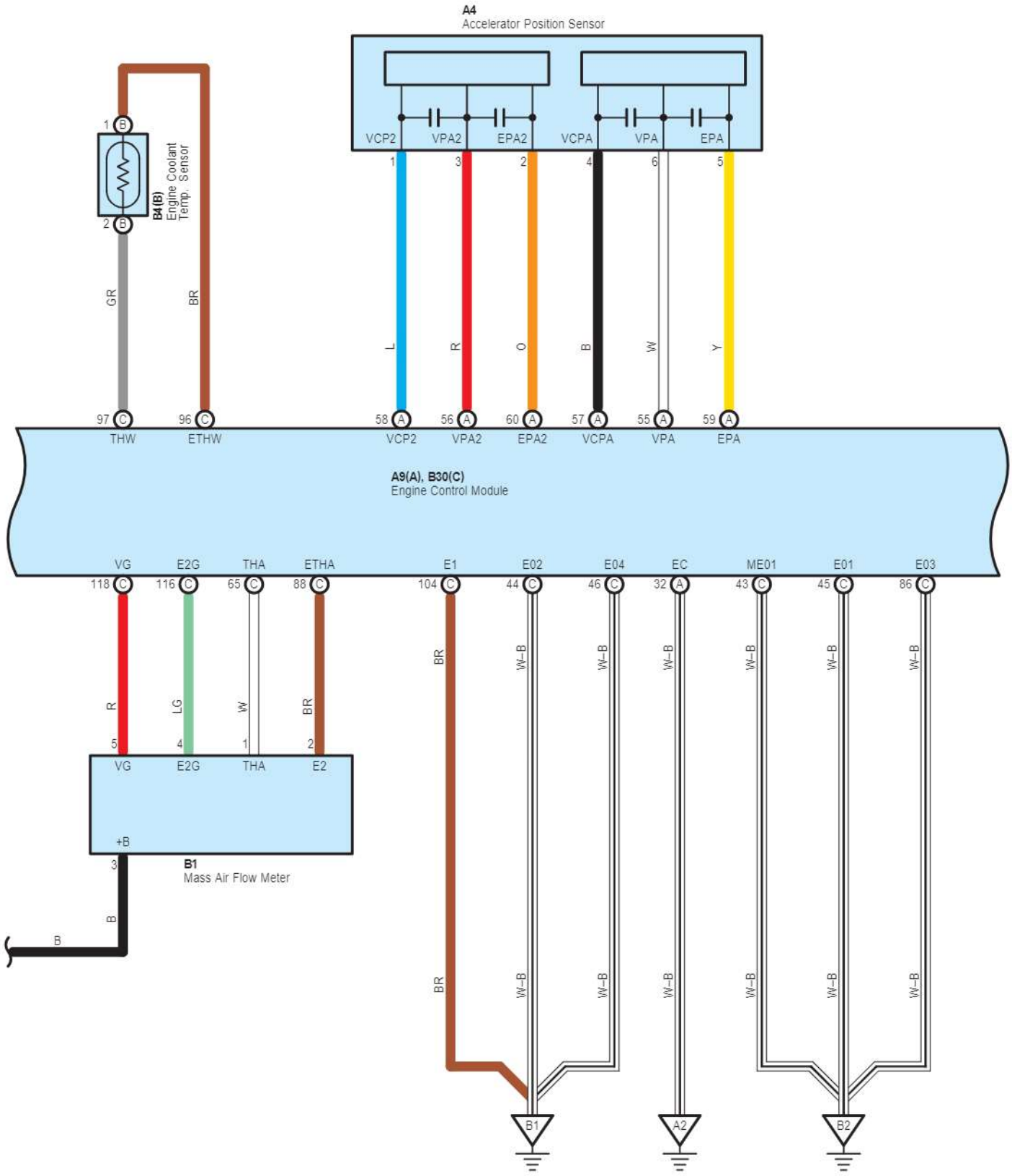
: Ground Points

Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
A2		
B3	64 (2GR–FE)	Left Side of the Cylinder Head
B4		
E1	66	Left Kick Panel

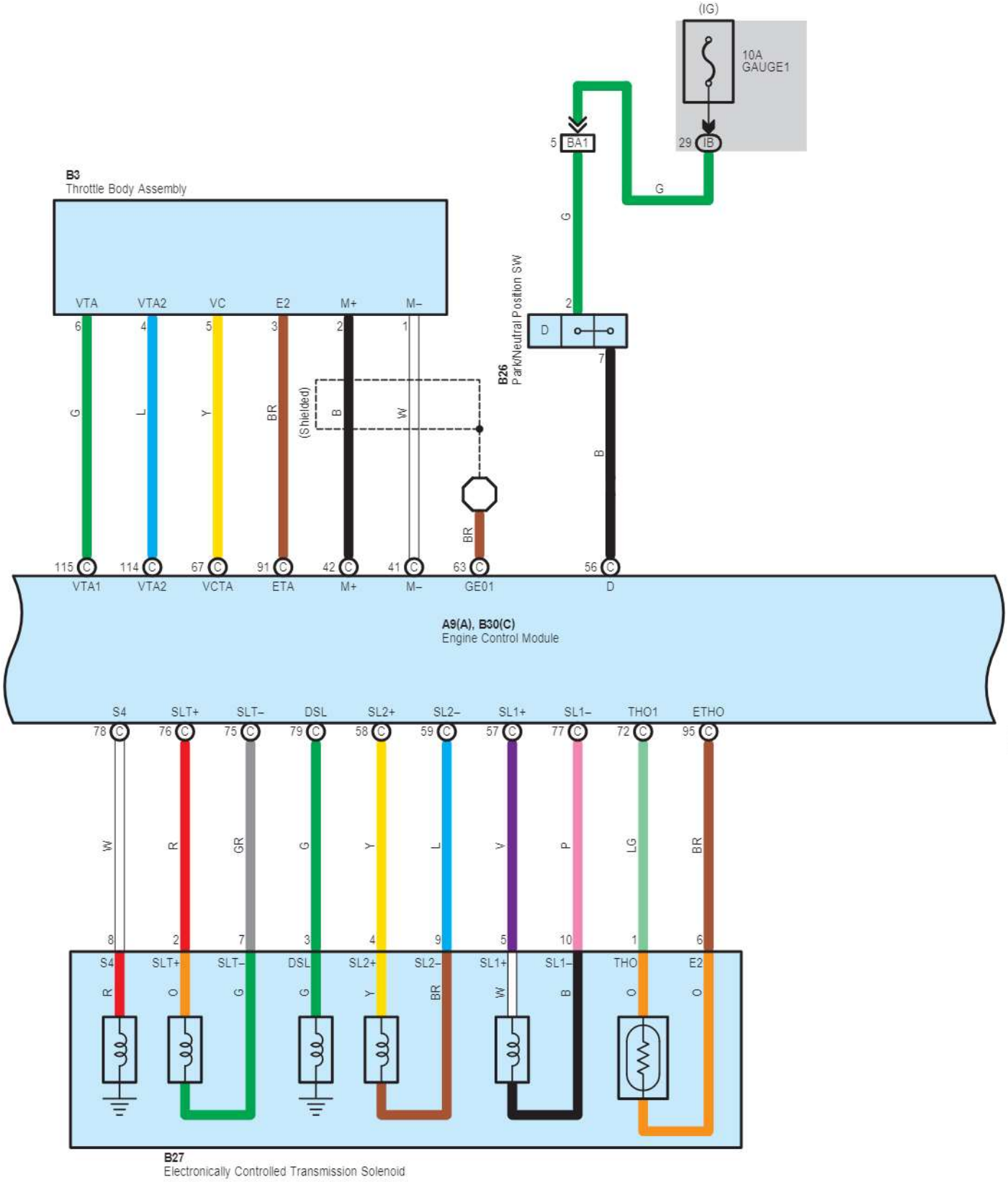
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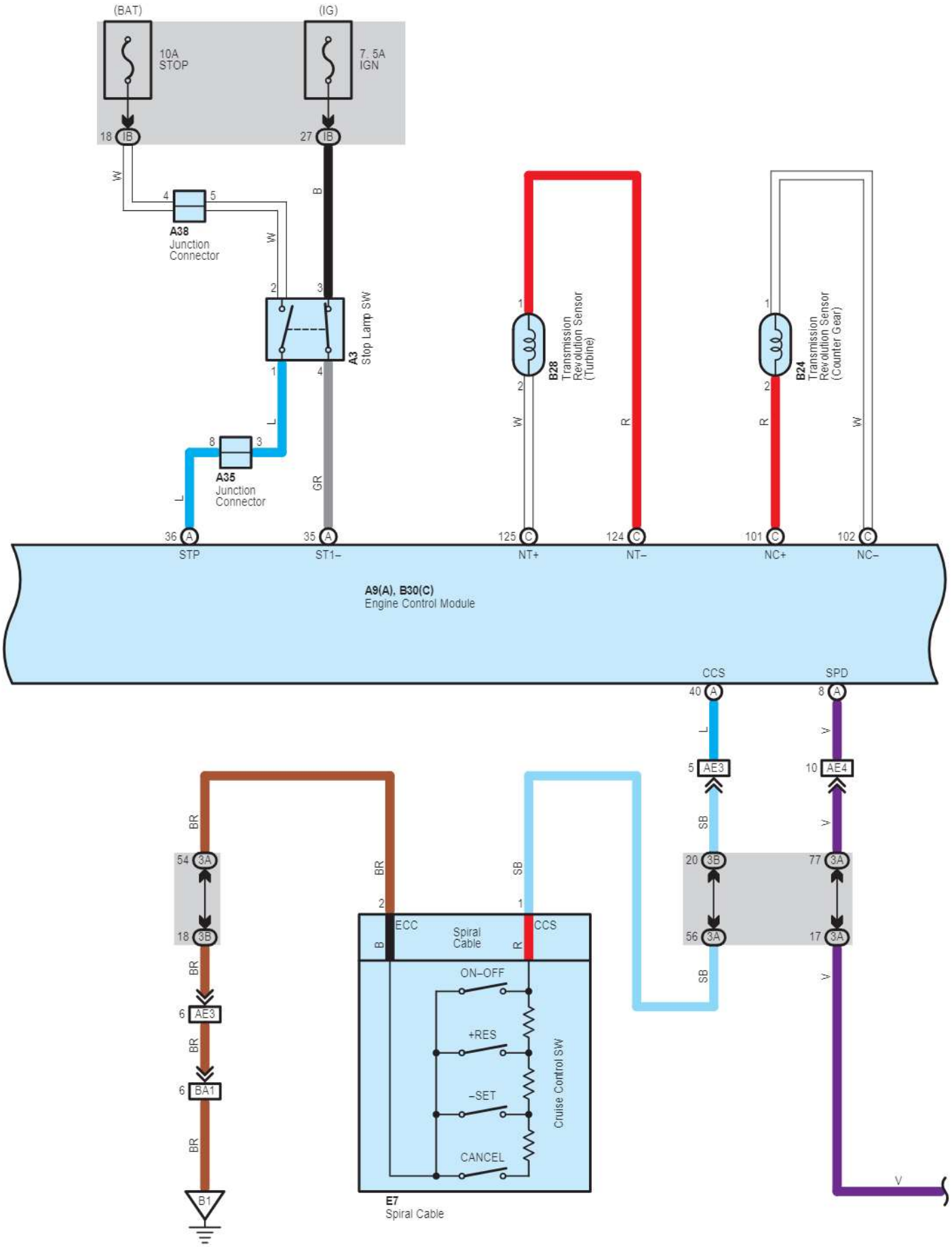
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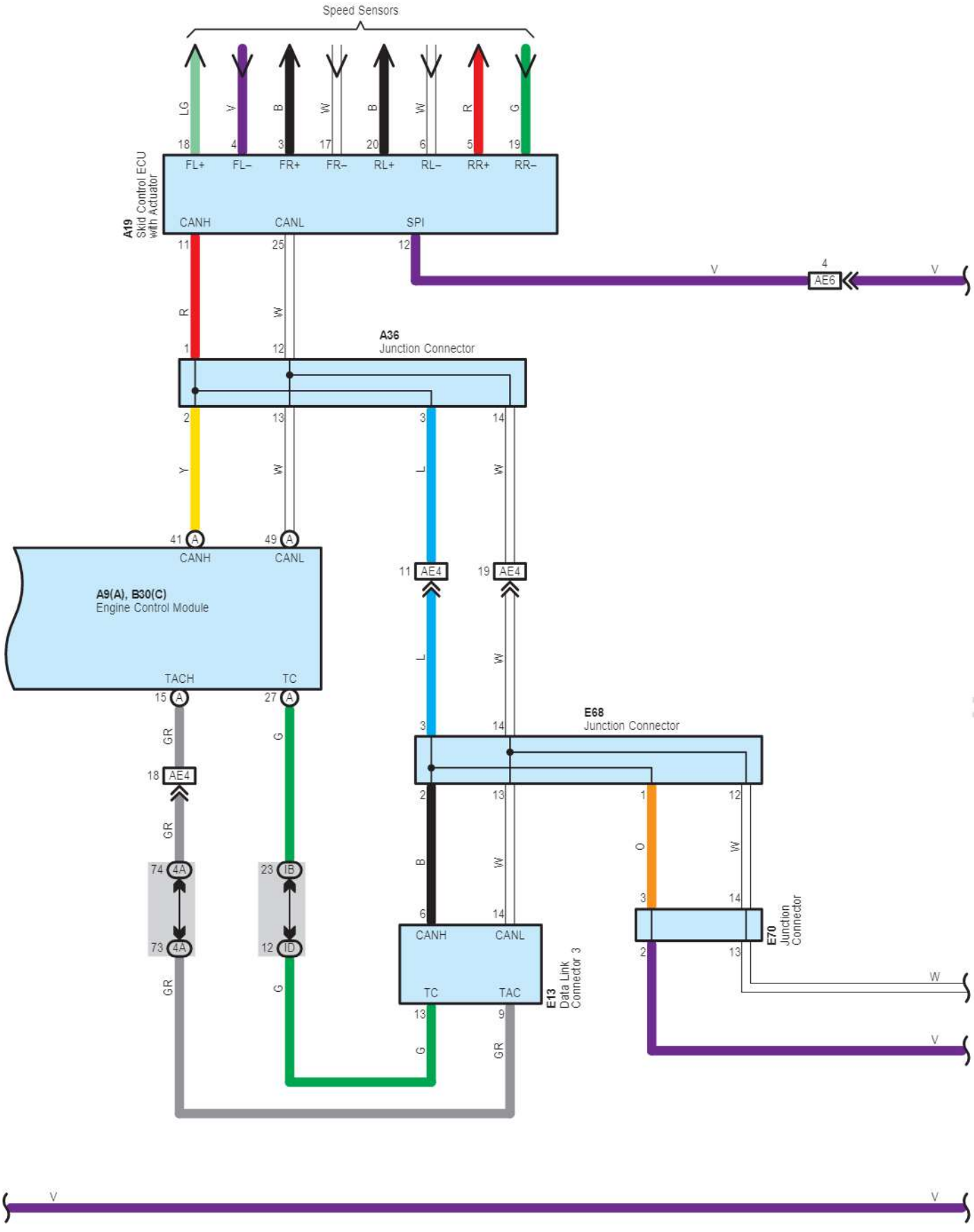
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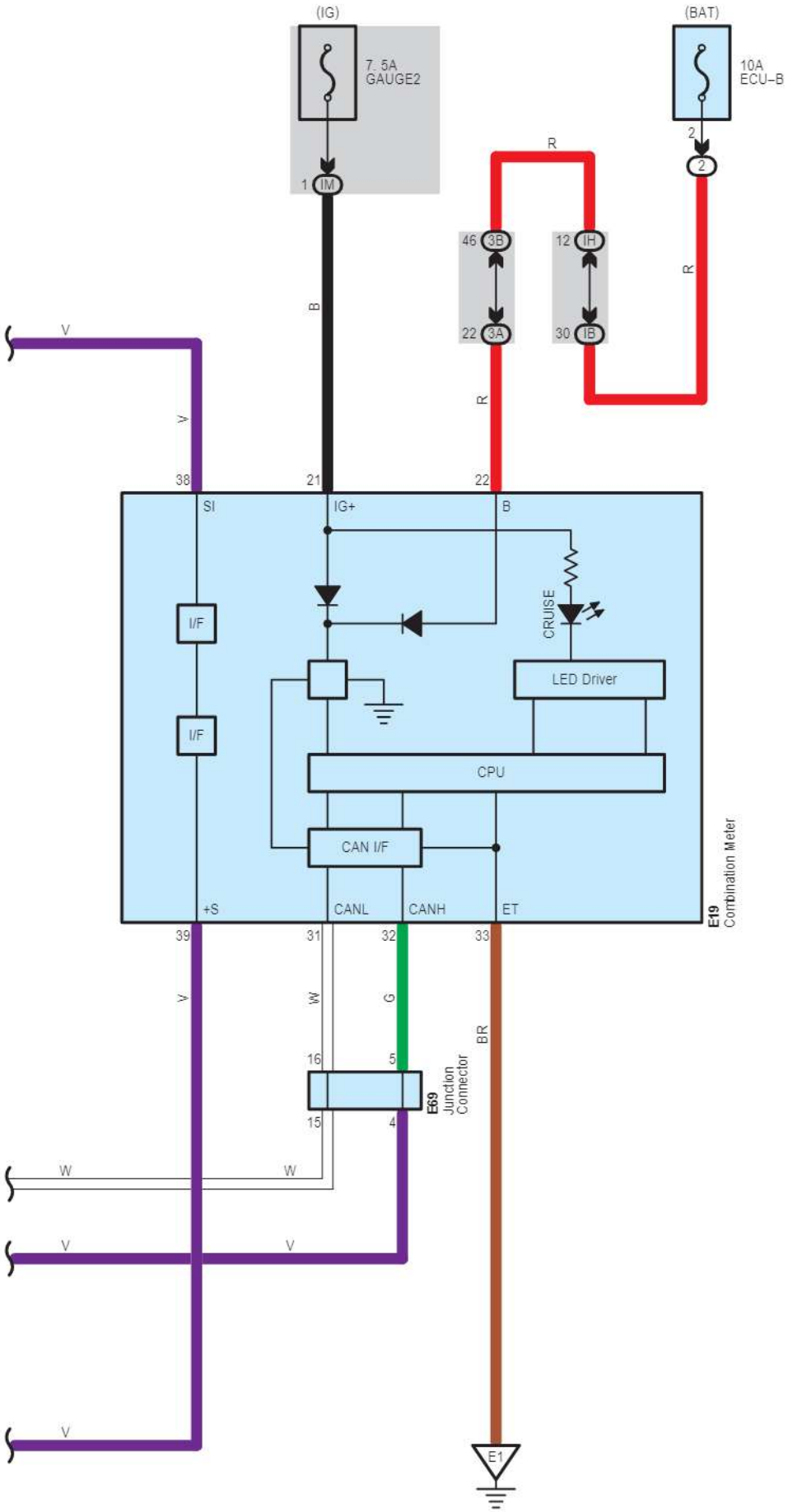
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Cruise Control for 2AZ–FE

System Outline

The cruise control system is a constant vehicle speed controller in which control of the switch on the instrument panel makes it possible to automatically adjust the opening of the engine throttle valve without depressing of the accel pedal.

1. Set Control

When the –SET switch is turned from ON to OFF during driving with the main switch ON, the vehicle speed at that time is registered and the vehicle is controlled at that constant speed.

2. Coast Control

When the –SET switch is kept ON during driving with the cruise control, the cruise control required opening gets zero to reduce the vehicle speed. If the SET/COAST switch is turned OFF, the vehicle speed at that time is registered and the vehicle is controlled at the constant speed.

3. Tap Up Control

Whenever +RES switch is tapped ON instantaneously (For approximately 0.5 sec.), the registered vehicle speed increases by about 1.6 km/h.

4. Tap Down Control

Whenever the –SET switch is tapped ON instantaneously (For approximately 0.5 sec.), the registered vehicle speed decreased by about 1.6 km/h.

5. Accel Control

When +RES switch kept ON during driving with the cruise control, the engine control module controls the throttle valve to accelerate the vehicle.
It also registers the vehicle speed when +RES switch is turned OFF and controls the vehicle at the constant speed.

6. Manual Cancel Mechanism

If any of the following signals is input during cruise control travelling, the cruise control is cancelled.
* The stop lamp SW is turned on.
* The CANCEL SW is turned on.
* The ON–OFF SW is turned off.
* Gear is shifted from D position to other positions than D.

7. Auto Cancel Function

If any of the following conditions is encountered, the cruise control is automatically cancelled.
* The stop light SW wiring is faulty or short–circuited.
* The vehicle speed signal is faulty.
* The electronically controlled throttle malfunctions.

8. Other Cancel Function

If any operate VSC system the cruise control is cancelled.

9. Overdrive Control Function

The overdrive control may be cancelled if the vehicle travels on the slope during cruise control travelling. After the overdrive control has been cancelled, when climbing hill is judged to finish from throttle opening information, the vehicle returns to the overdrive control mode again after the overdrive return timer is completed.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	56	B1	53 (2AZ–FE)	B30 C	53 (2AZ–FE)
A4	56	B3	53 (2AZ–FE)	E7	54
A9 A	52 (2AZ–FE)	B4 B	53 (2AZ–FE)	E13	54
A19	52 (2AZ–FE)	B24	53 (2AZ–FE)	E19	54
A35	56	B26	53 (2AZ–FE)	E68	55
A36	56	B27	53 (2AZ–FE)	E69	55
A38	56	B28	53 (2AZ–FE)	E70	55

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	23 (2AZ–FE)	Engine Room R/B No.1 (Engine Compartment Left)
2	27 (2AZ–FE)	Engine Room R/B No.2 (Engine Compartment Right)

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: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IH		
IM	31	

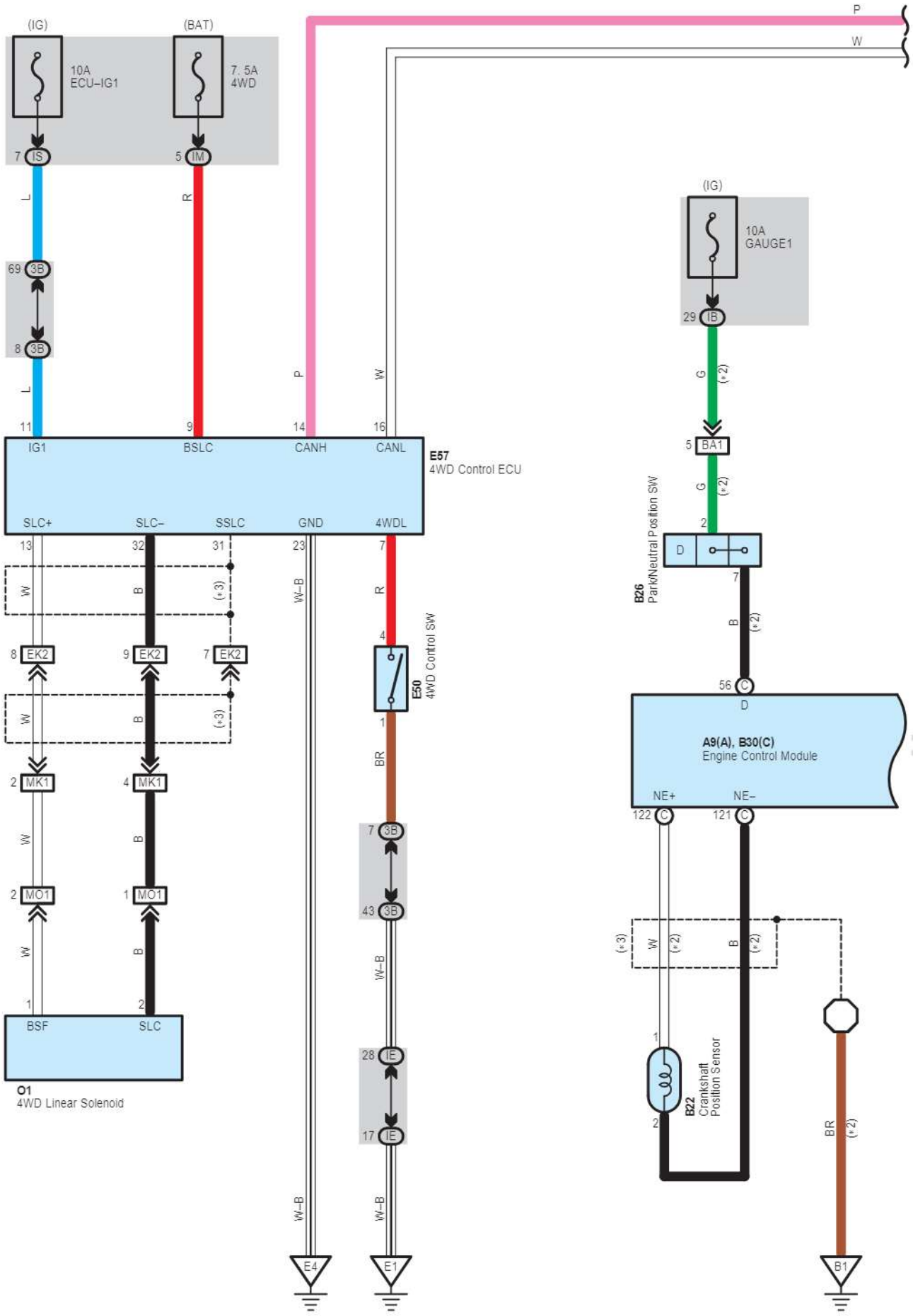
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE3	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE4		
AE6		
BA1	65 (2AZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
BA2		

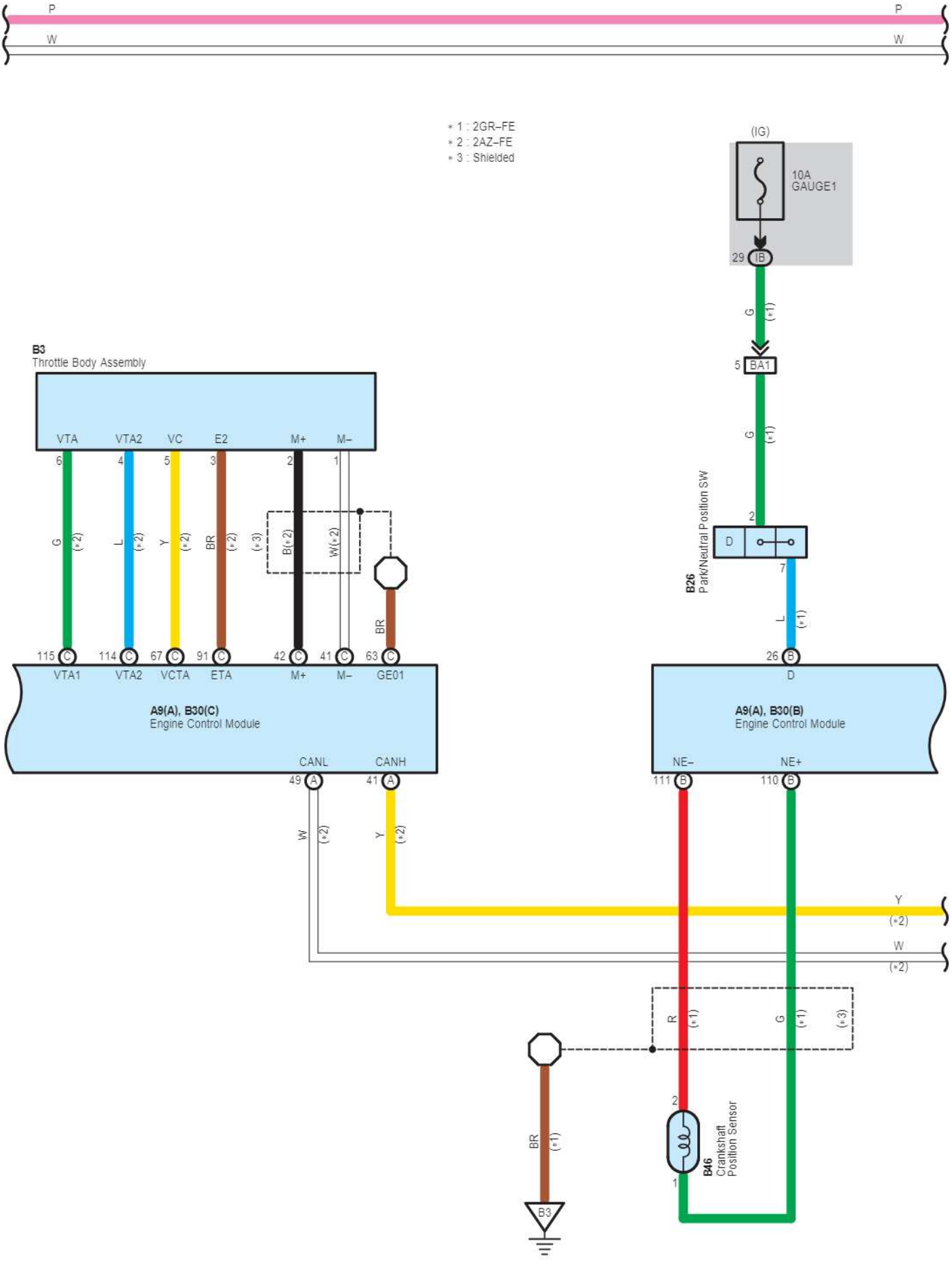
: Ground Points

Code	See Page	Ground Points Location
A1	65 (2AZ–FE)	Front Left Fender
A2		
B1	65 (2AZ–FE)	Left Side of the Cylinder Head
B2		
E1	66	Left Kick Panel

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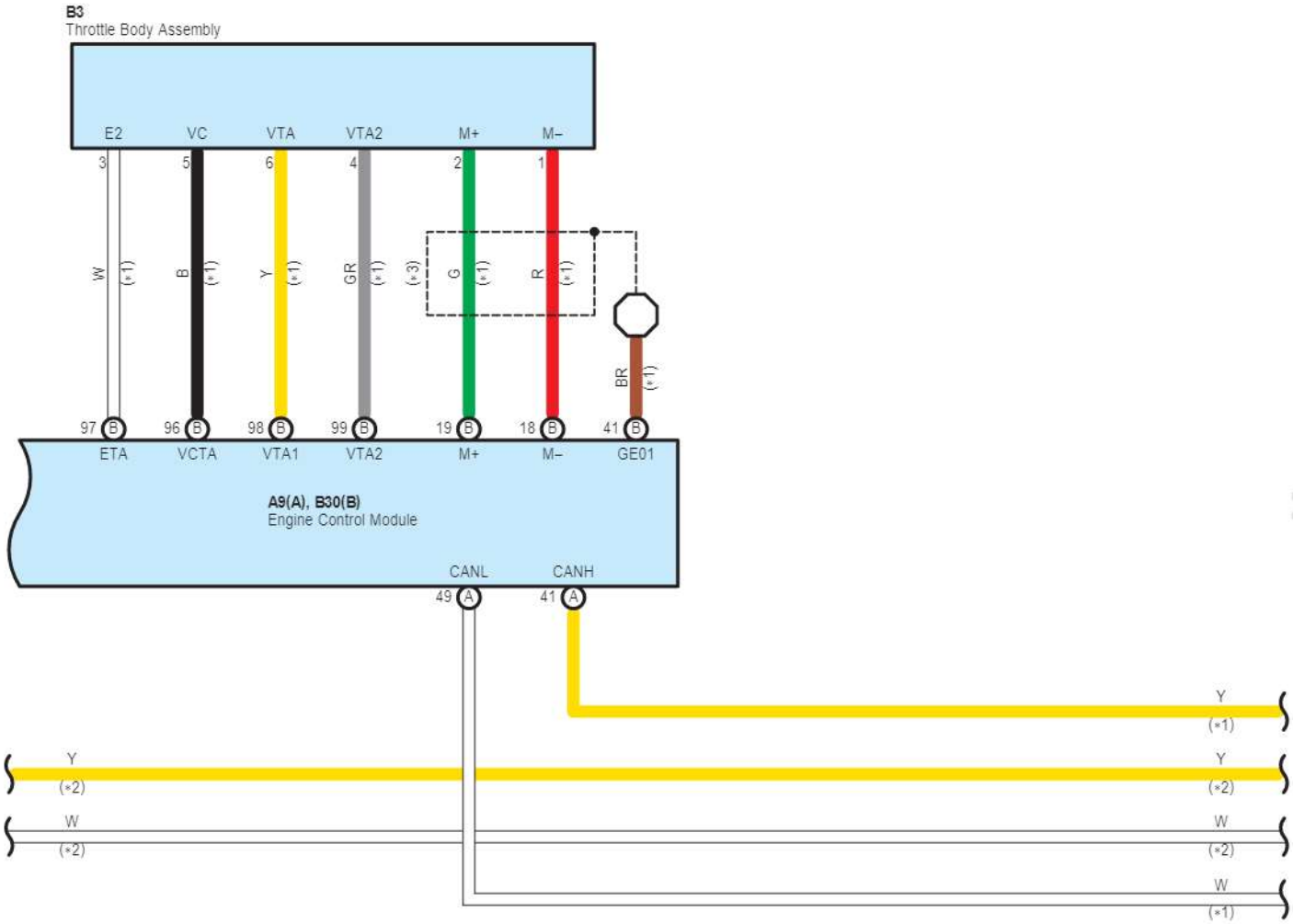
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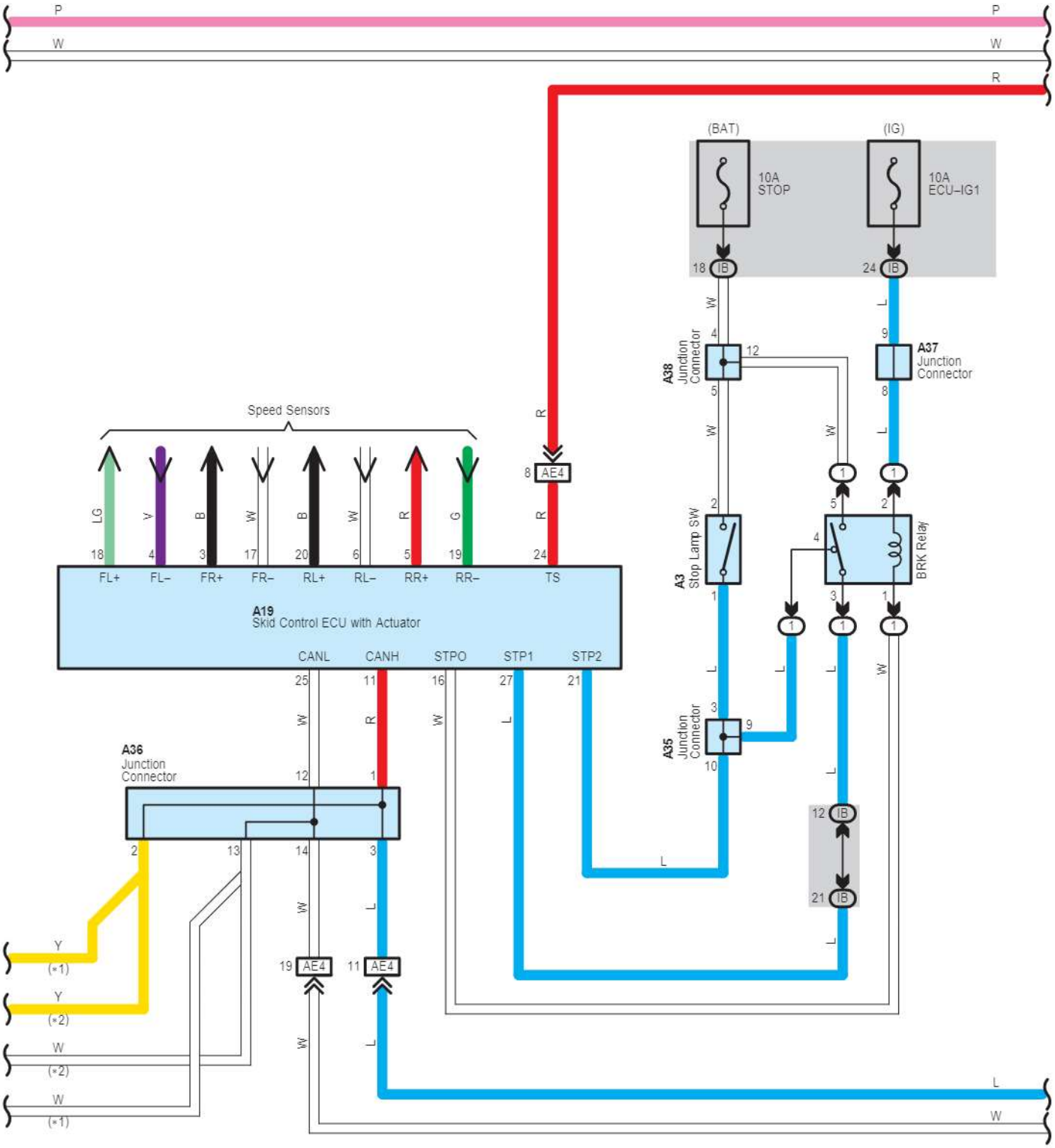
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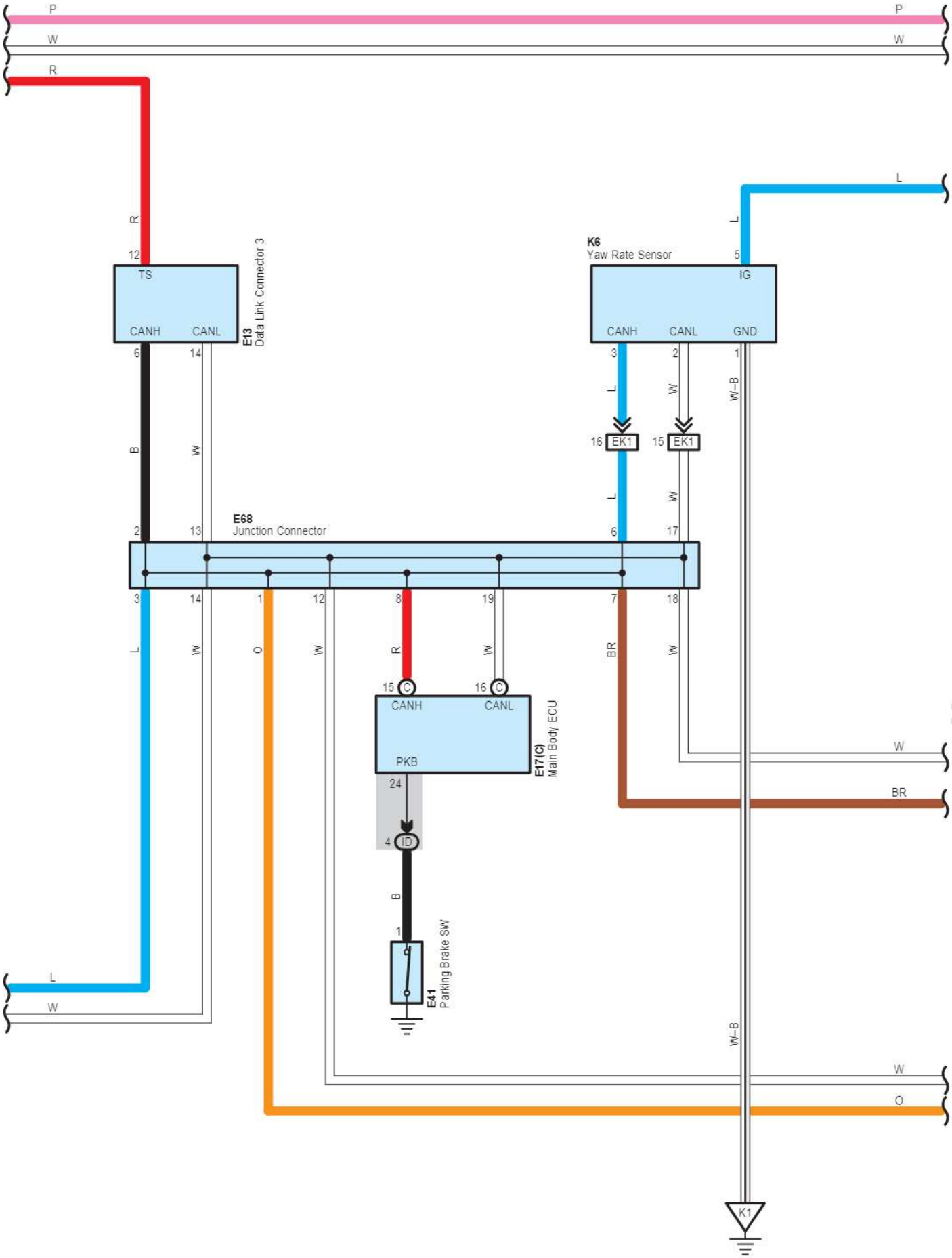
* 1 : 2GR–FE
* 2 : 2AZ–FE
* 3 : Shielded



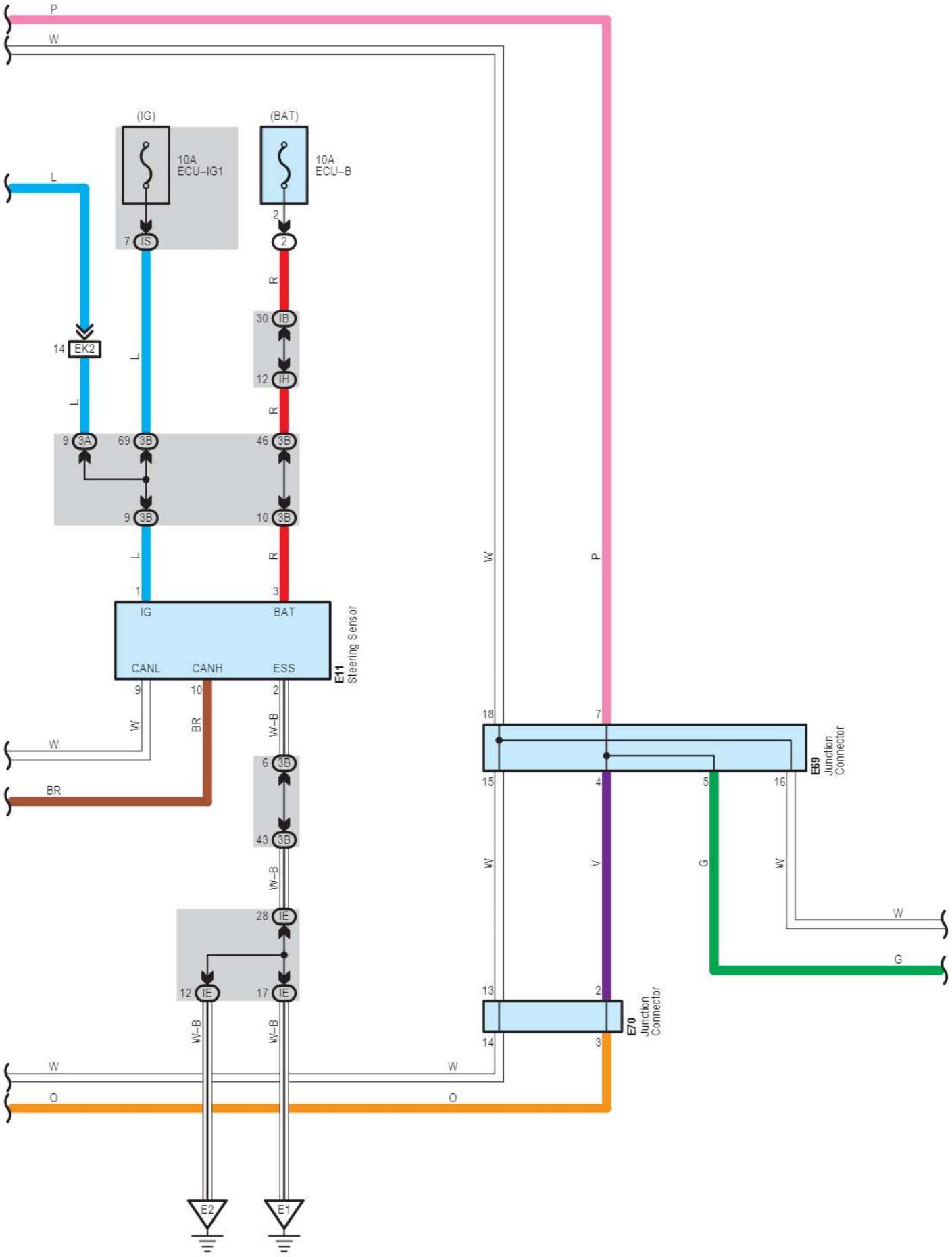
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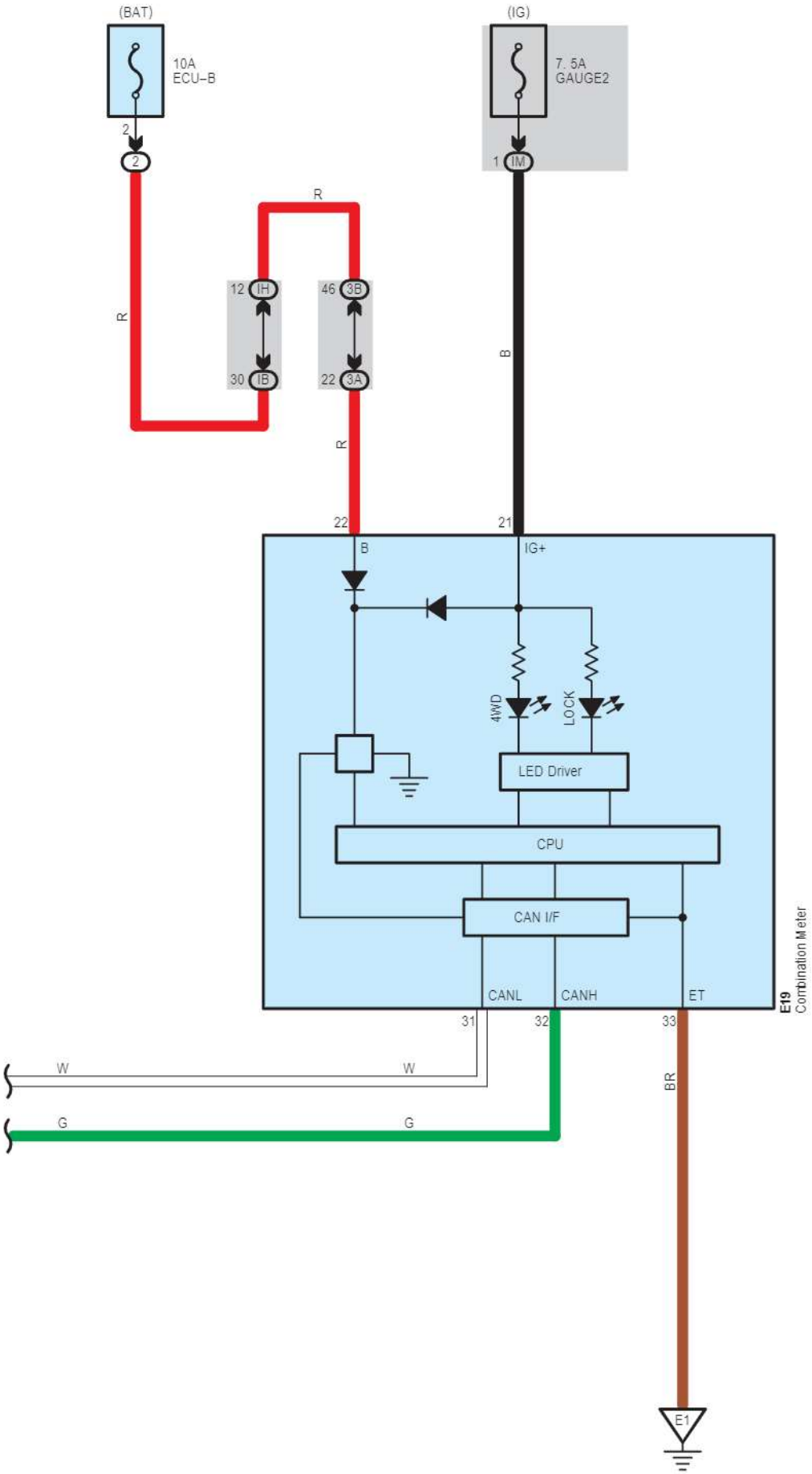
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System Outline

Driving conditions are detected through indicators such as wheel speed, yaw rate sensor and steering angle signals, which are sent by ECUs, sensors and switches. The current delivered to the solenoid is controlled to provide the optimum torque to the rear wheels, in accordance with the driving conditions.

- Auto mode control
  - The torque distribution to the rear wheels is increased at vehicle start, to ensure a stable start.
  - The torque distribution to the rear wheels is reduced during slow speed driving to stabilize.
  - During stable driving, the torque distribution to the rear wheels is discontinued, making the vehicle front wheel drive and reducing fuel consumption.
  - During deceleration using the brakes, the 4 wheel drive is released to enhance the effect of the ABS/VSC control.
- Lock mode control
  - The torque distribution to the rear wheels is fixed at the maximum level.
  - At vehicle start, the torque distribution to the rear wheels is set at the maximum level to facilitate escape from the stuck condition.
  - The mode automatically reverts to auto mode at a vehicle speed of 40 km/h or over.

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	56	B3	53 (2AZ–FE)	E19	54
A9 A	50 (2GR–FE)	B22	53 (2AZ–FE)	E41	55
	52 (2AZ–FE)	B26	51 (2GR–FE)	E50	55
A19	50 (2GR–FE)		53 (2AZ–FE)	E57	55
	52 (2AZ–FE)	B30 B	51 (2GR–FE)	E68	55
A35	56	B30 C	53 (2AZ–FE)	E69	55
A36	56	B46	51 (2GR–FE)	E70	55
A37	56	E11	54	K6	59
A38	56	E13	54	O1	61
B3	51 (2GR–FE)	E17 C	54		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IE		
IH		
IM	31	
IS		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
	65 (2AZ–FE)	
EK1	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)
EK2		
MK1	67	Floor No.4 Wire and Floor Wire (Left Quarter Panel)
MO1	67	Floor No.4 Wire and Frame No.3 Wire (Near the Rear Differential)

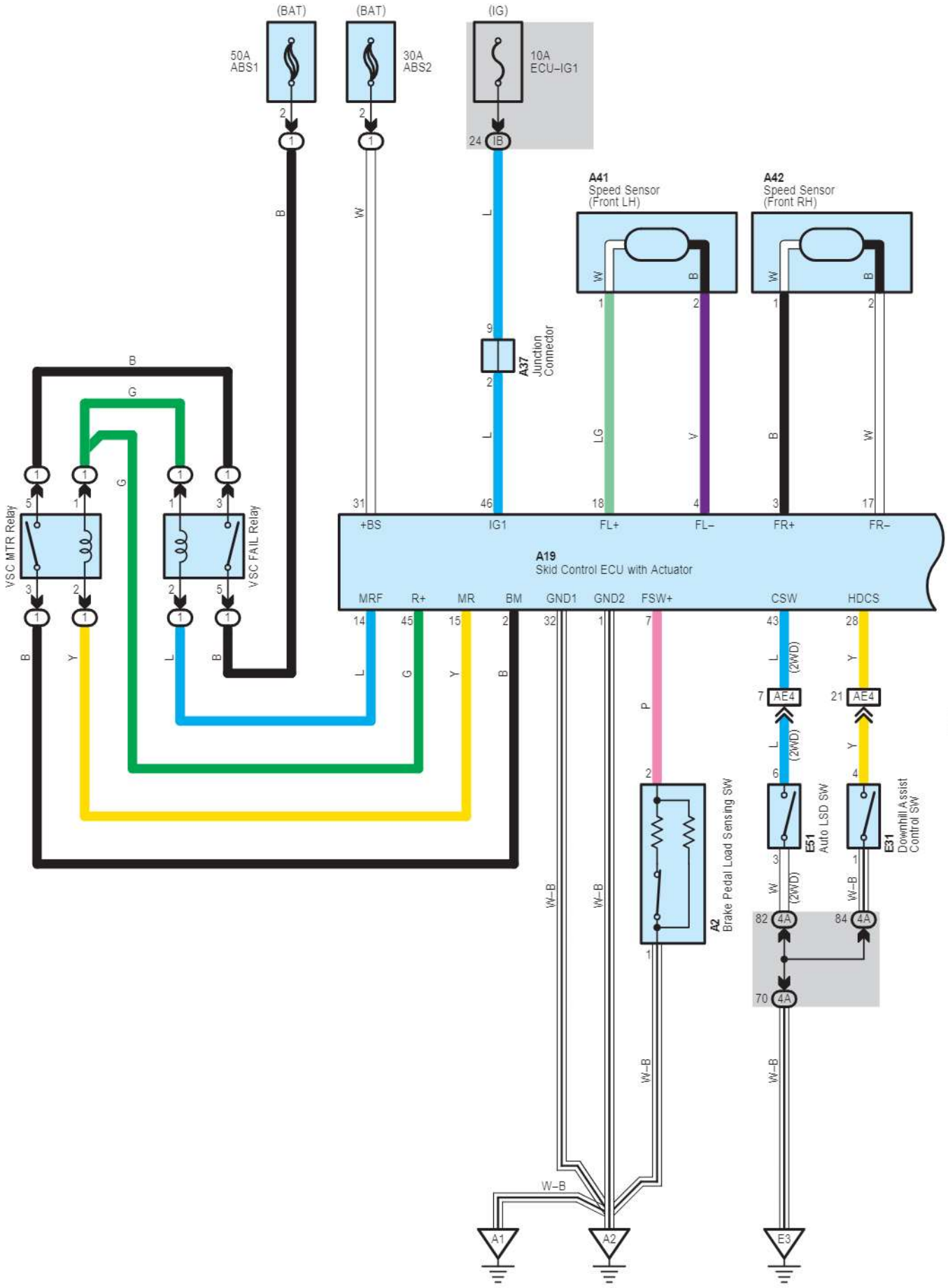
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▽ : **Ground Points**

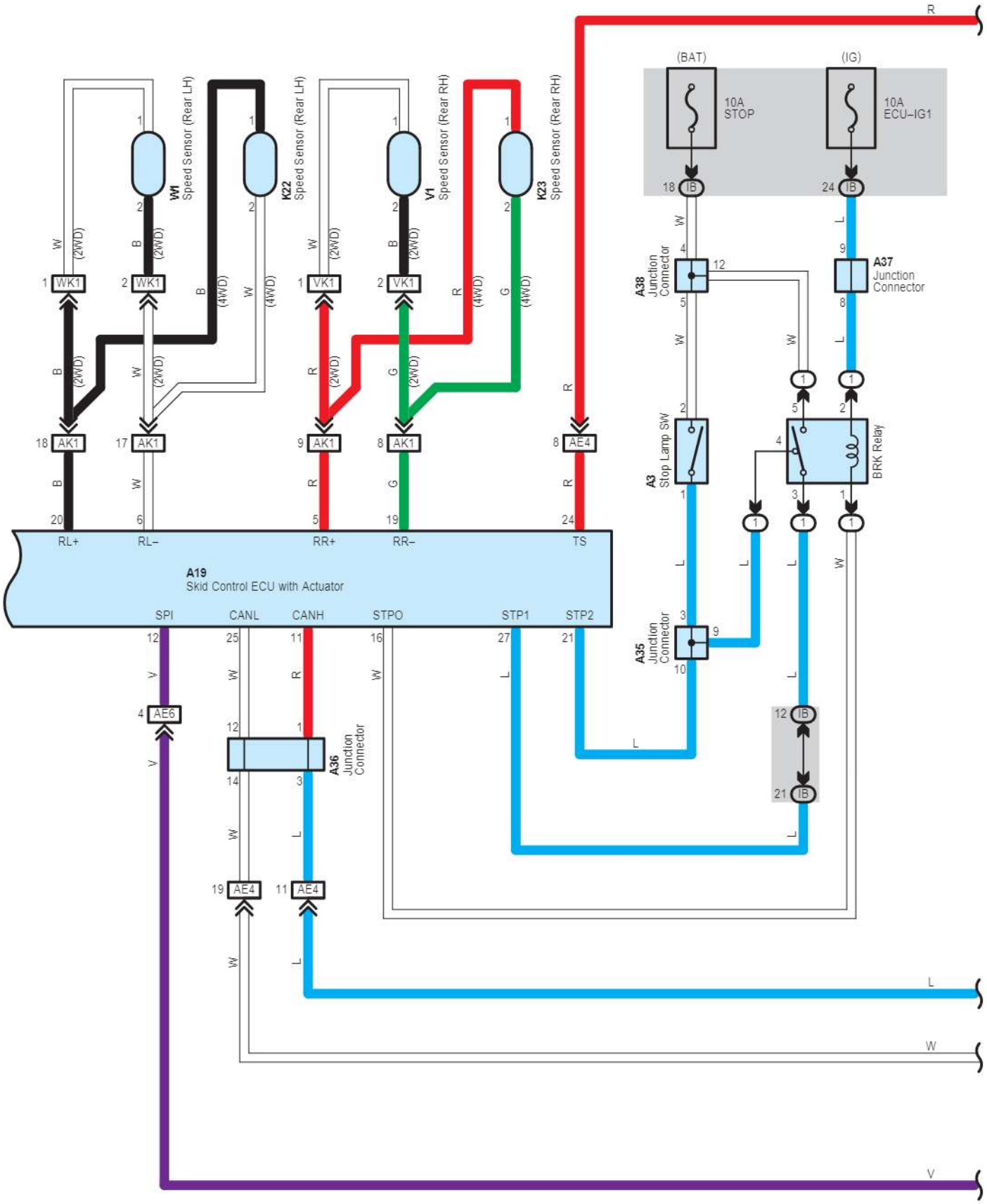
Code	See Page	Ground Points Location
B1	65 (2AZ–FE)	Left Side of the Cylinder Head
B3	64 (2GR–FE)	
E1	66	Left Kick Panel
E2	66	Instrument Panel Reinforcement Left
E4	66	Right Kick Panel
K1	67	Left Center Pillar

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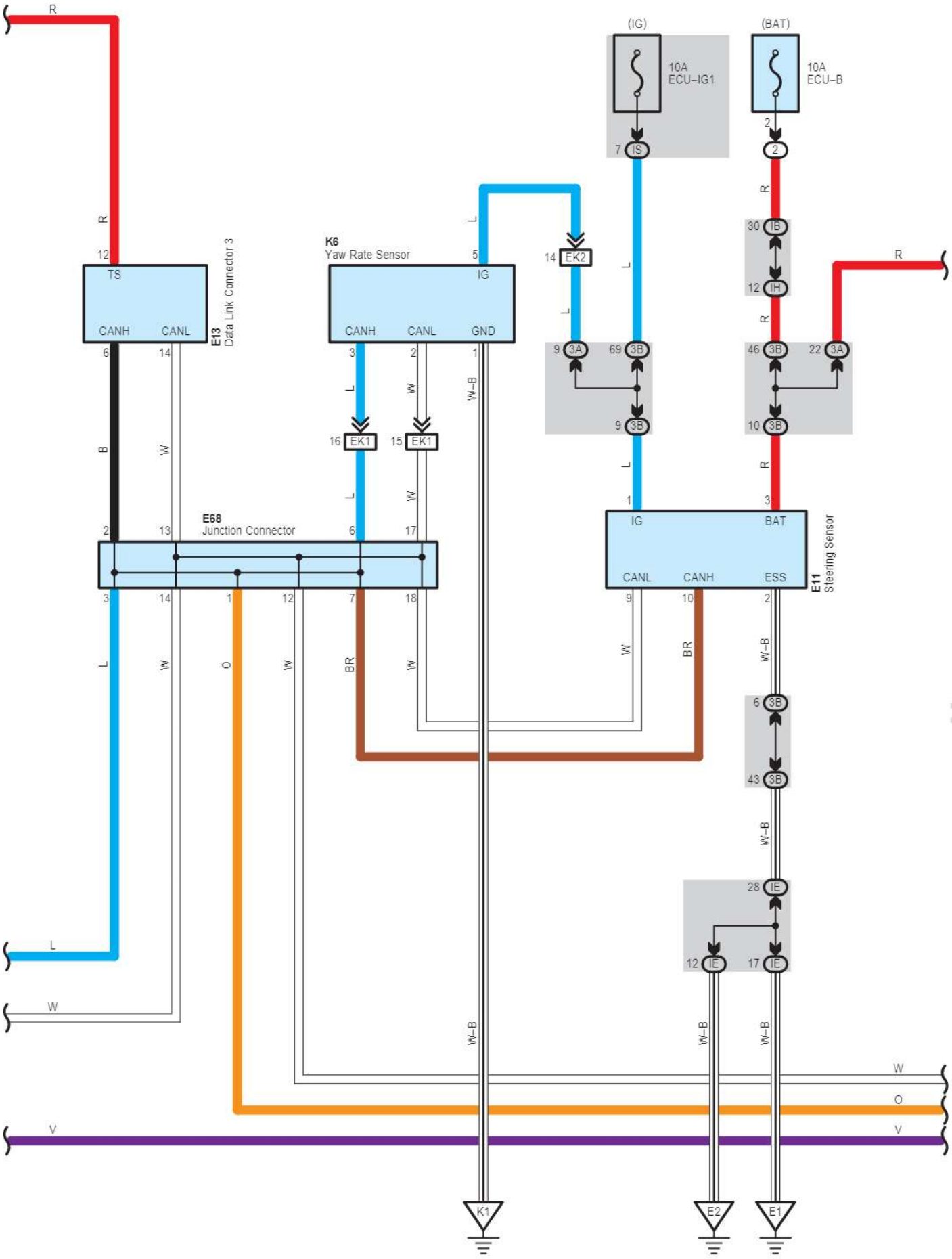
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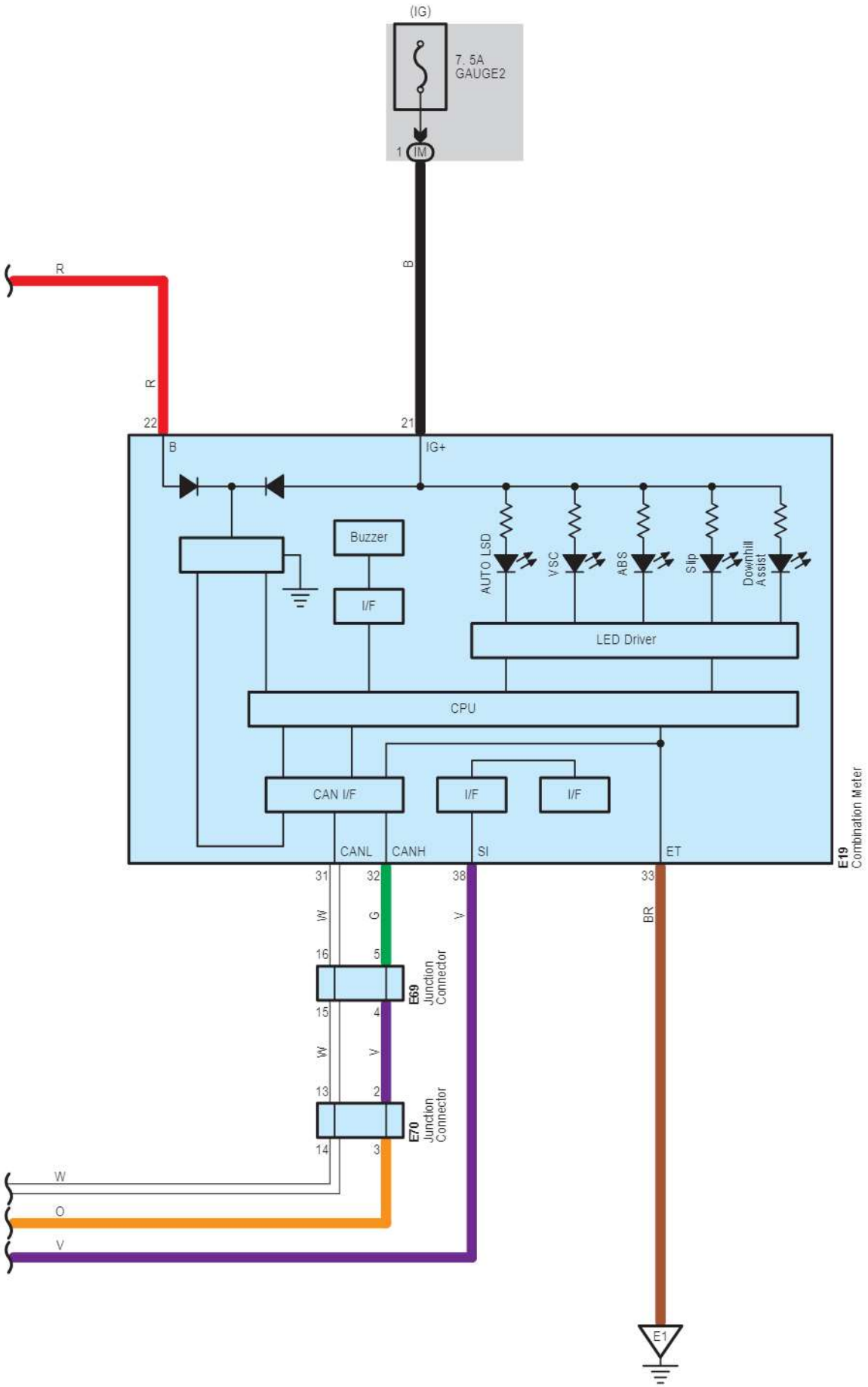
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System Outline

1. ABS Operation

If the brake pedal is depressed suddenly, the ABS controls the hydraulic pressure of the wheel cylinders for all the four wheels to automatically avoid wheel locking and ensure the directional and steering stability of the vehicle. If the brake pedal is depressed suddenly, the skid control ECU controls the solenoids in the actuators using the signals from the sensors to move the brake fluid to the reservoir in order to release the braking pressure applied to the wheel cylinder. If the skid control ECU detects that the fluid pressure in the wheel cylinder is insufficient, the ECU controls the solenoids in the actuators to increase the braking pressure.

2. Traction Control Operation

The traction control system controls the engine torque, the hydraulic pressure of the driving wheel cylinders, slipping of the wheels which may occur at start or acceleration of the vehicle, to ensure an optimal driving power and vehicle stability corresponding to the road conditions.

3. VSC Operation

Unexpected road conditions, vehicle speed, emergency situation, and any other external factors may cause large under– or over–steering of the vehicle. If this occurs, the VSC system automatically controls the engine power and wheel brakes to reduce the under– or over–steering.

To reduce large over–steering :

If the VSC system determines that the over–steering is large, it activates the brakes for the outer turning wheels depending on the degree of the over–steering to produce the moment toward the outside of the vehicle and reduce the over–steering.

To reduce large under–steering :

If the VSC system determines that the under–steering is large, it controls the engine power and activates the rear wheel brakes to reduce the under–steering.

4. Fail Safe Function

If an error occurs in the skid control ECU, sensor signals, and/or actuators, the skid control ECU inhibits the brake actuator control and inputs the error signal to the engine control module. According to the error signal, the brake actuator turns off the solenoid and the engine control module rejects any electronically controlled throttle open request from the VSC system. As a result, the vehicle functions regardless of the ABS, TRAC, and VSC systems.

5. Downhill Assist Control Operation

The downhill assist control operation controls braking action of each wheel to help prevent out–of–balance vehicle posture when descending a steep hill or traveling at a speed exceeding the threshold of wheel gripping capability. When the downhill assist control is in operation, the brake system control vehicles speed within the range of 5 to 7 km/h.

6. Hill–Start Assist Control Operation

When starting on a steep hill for ascending, the hill–start support control automatically puts the brake on momentarily – from the moment when the driver releases his foot from the brake pedal until he steps on the accelerator pedal – to help the driver start the vehicle safely and smoothly.

Please bear in mind, however, that it activates the brake system for only 3 seconds.

7. Auto LSD

Auto LSD fulfills the function of LSD (Limited Slip Differential) by using the system of TRAC. It control to focus on 'getting out', which ensures to recover from run–off condition and to take off on roads with much travel resistance such as sand.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	56	A41	52 (2AZ–FE)	E69	55
A3	56	A42	50 (2GR–FE)	E70	55
A19	50 (2GR–FE)		52 (2AZ–FE)	K6	59
	52 (2AZ–FE)	E11	54	K22	59
A35	56	E13	54	K23	59
A36	56	E19	54	V1	61
A37	56	E31	54	W1	61
A38	56	E51	55		
A41	50 (2GR–FE)	E68	55		

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: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IH		
IM	31	
IS		

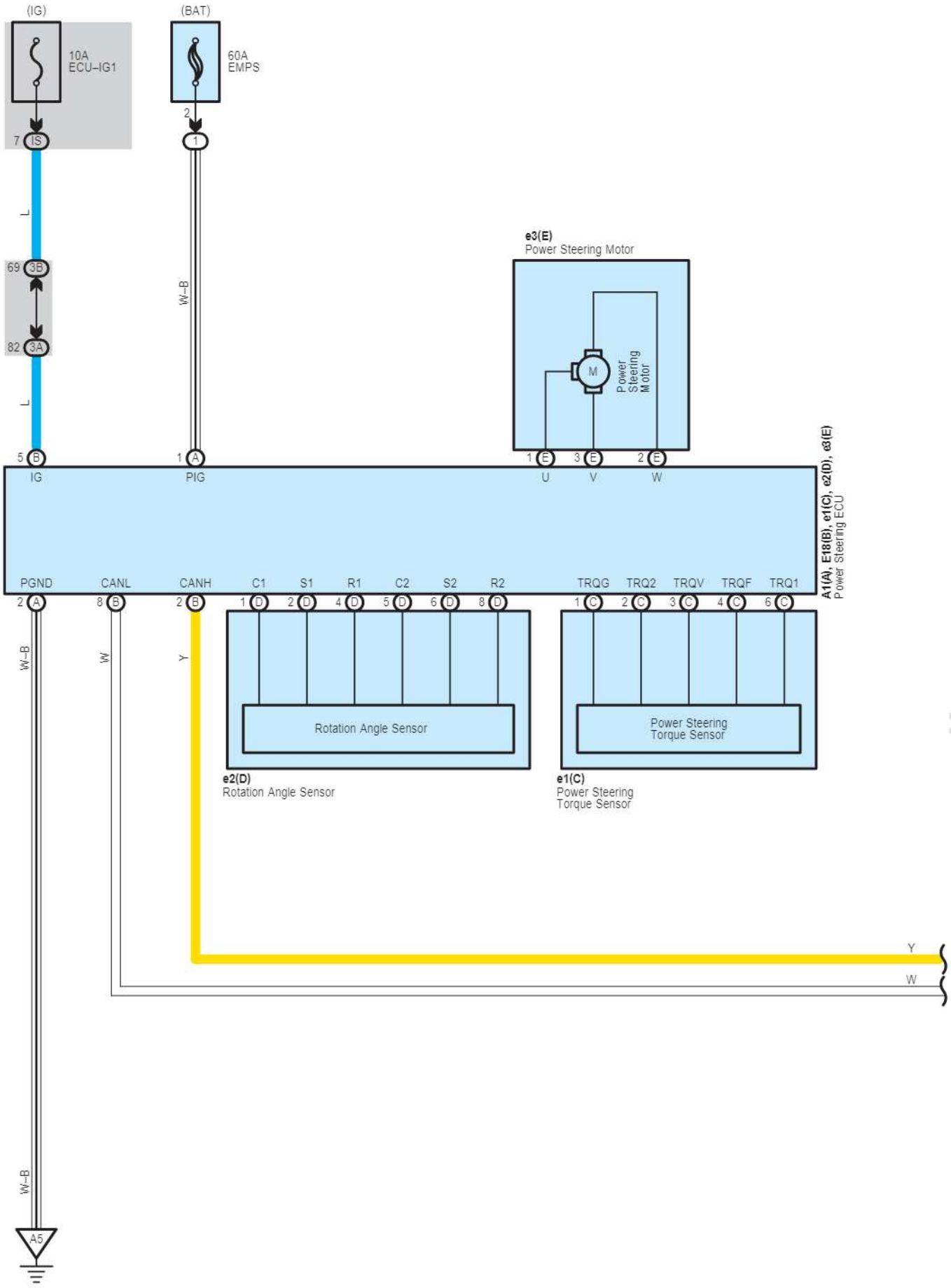
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE6		
AK1	66	Engine Room Main Wire and Floor Wire (Left Kick Panel)
EK1	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)
EK2		
VK1	67	Skid Control Sensor Wire Rear RH and Floor Wire (Quarter Wheel House Panel RH)
WK1	67	Skid Control Sensor Wire Rear LH and Floor Wire (Quarter Wheel House Panel LH)

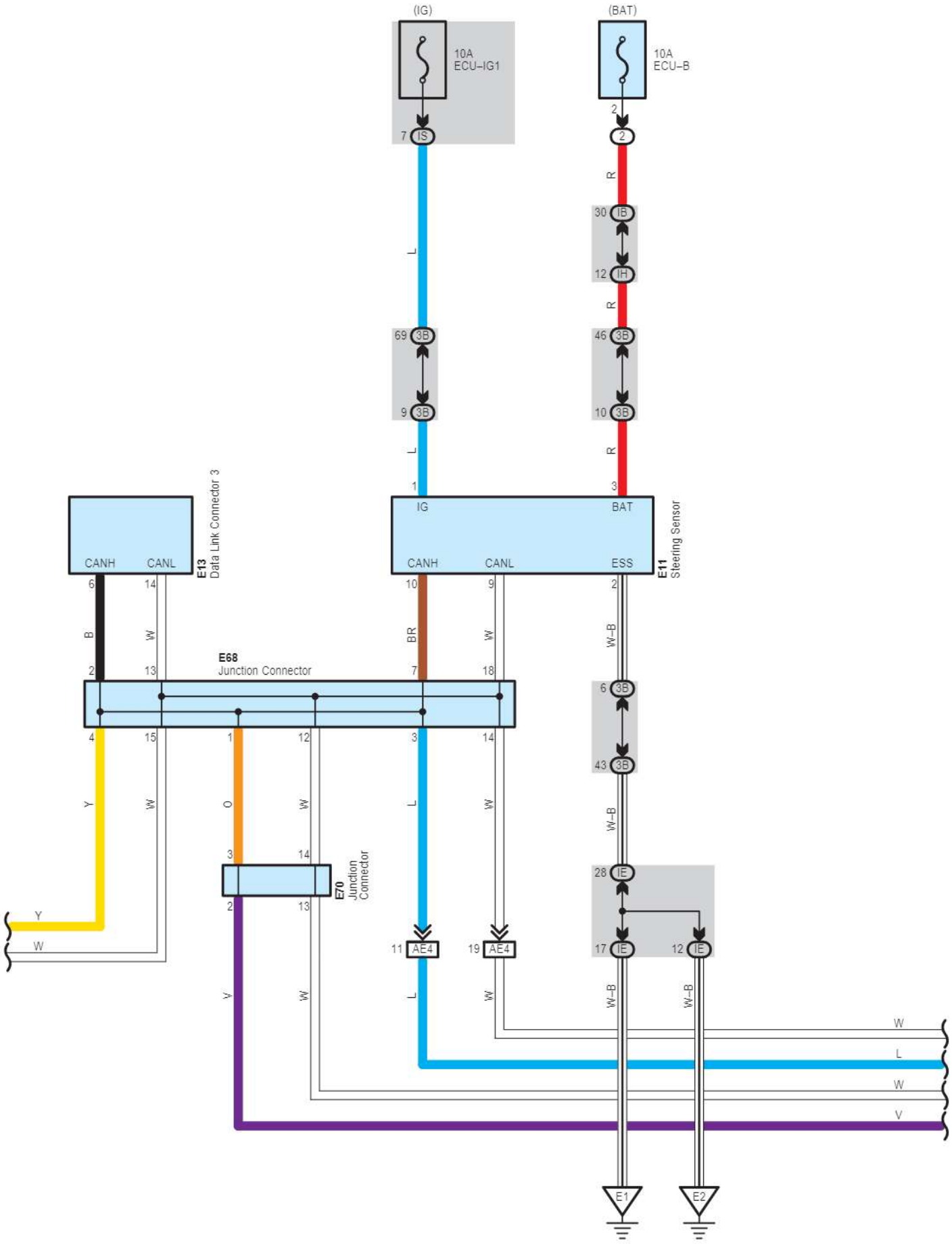
: Ground Points

Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
	65 (2AZ–FE)	
A2	64 (2GR–FE)	
	65 (2AZ–FE)	
E1	66	Left Kick Panel
E2	66	Instrument Panel Reinforcement Left
E3	66	Instrument Panel Reinforcement Center
K1	67	Left Center Pillar

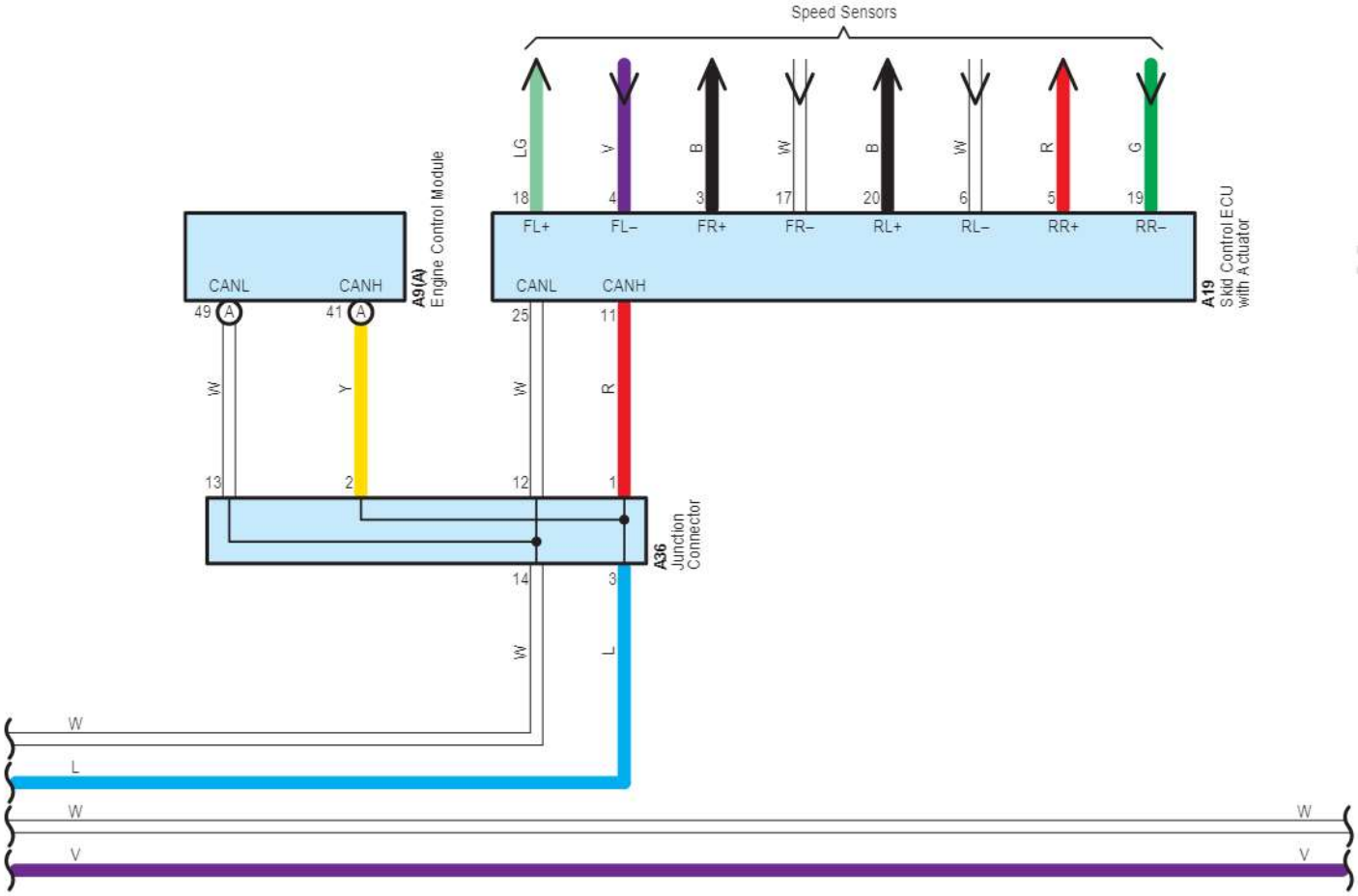
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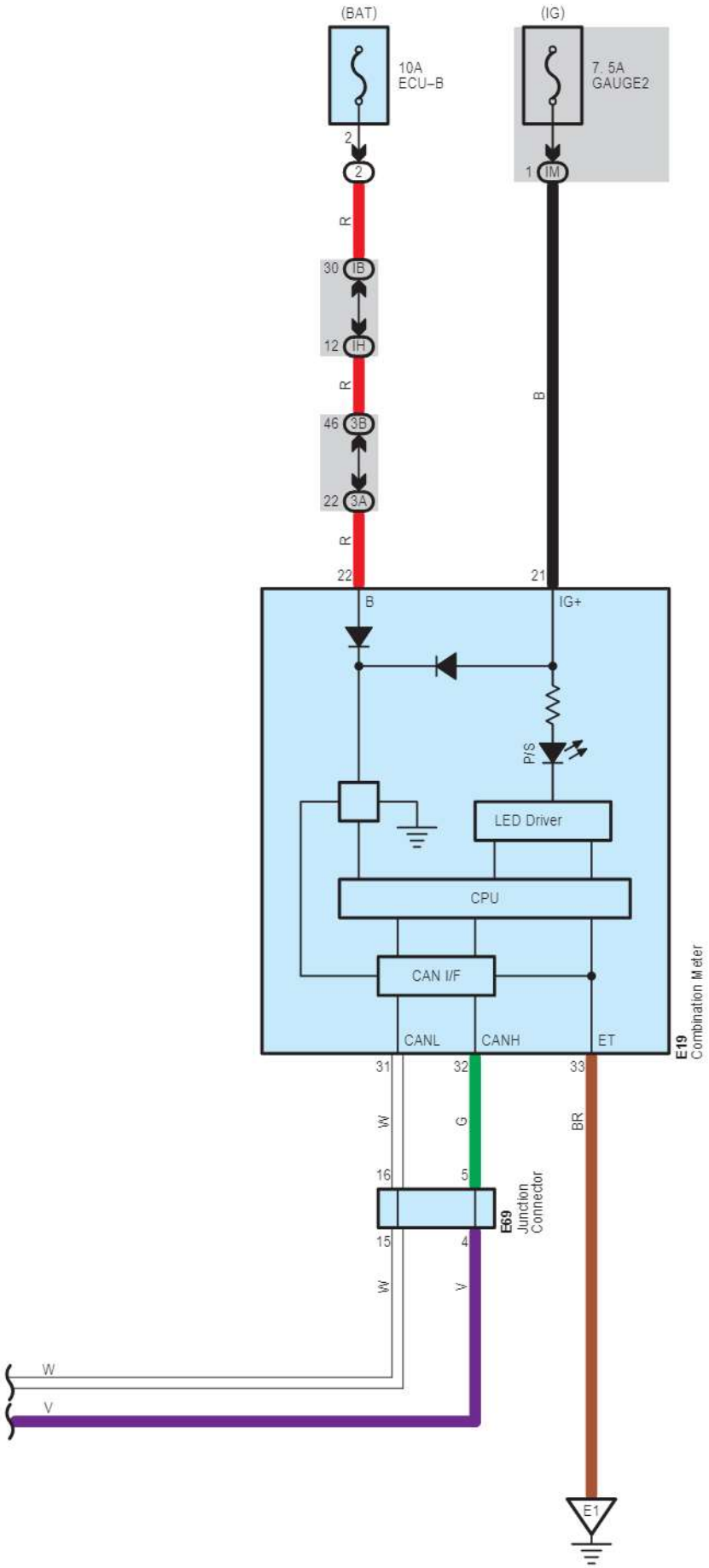
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System Outline

* To reduce driver's steering force, assist current is calculated from torque sensor signal and vehicle speed signal to output them to the motor.
* When abnormality is found in the system, the power relay and motor relay (Built in the ECU) are shut off to stop the assistance and the warning lamp (P/S) illuminates in the meter.

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A1	A	56	E11		54	E70		55
A9	A	50 (2GR–FE)	E13		54	e1	C	57
		52 (2AZ–FE)	E18	B	54	e2	D	57
A19		50 (2GR–FE)	E19		54	e3	E	57
		52 (2AZ–FE)	E68		55			
A36		56	E69		55			

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

▭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IH		
IM	31	
IS		

▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
A5	66	Left Side of the Instrument Panel
E1	66	Left Kick Panel
E2	66	Instrument Panel Reinforcement Left

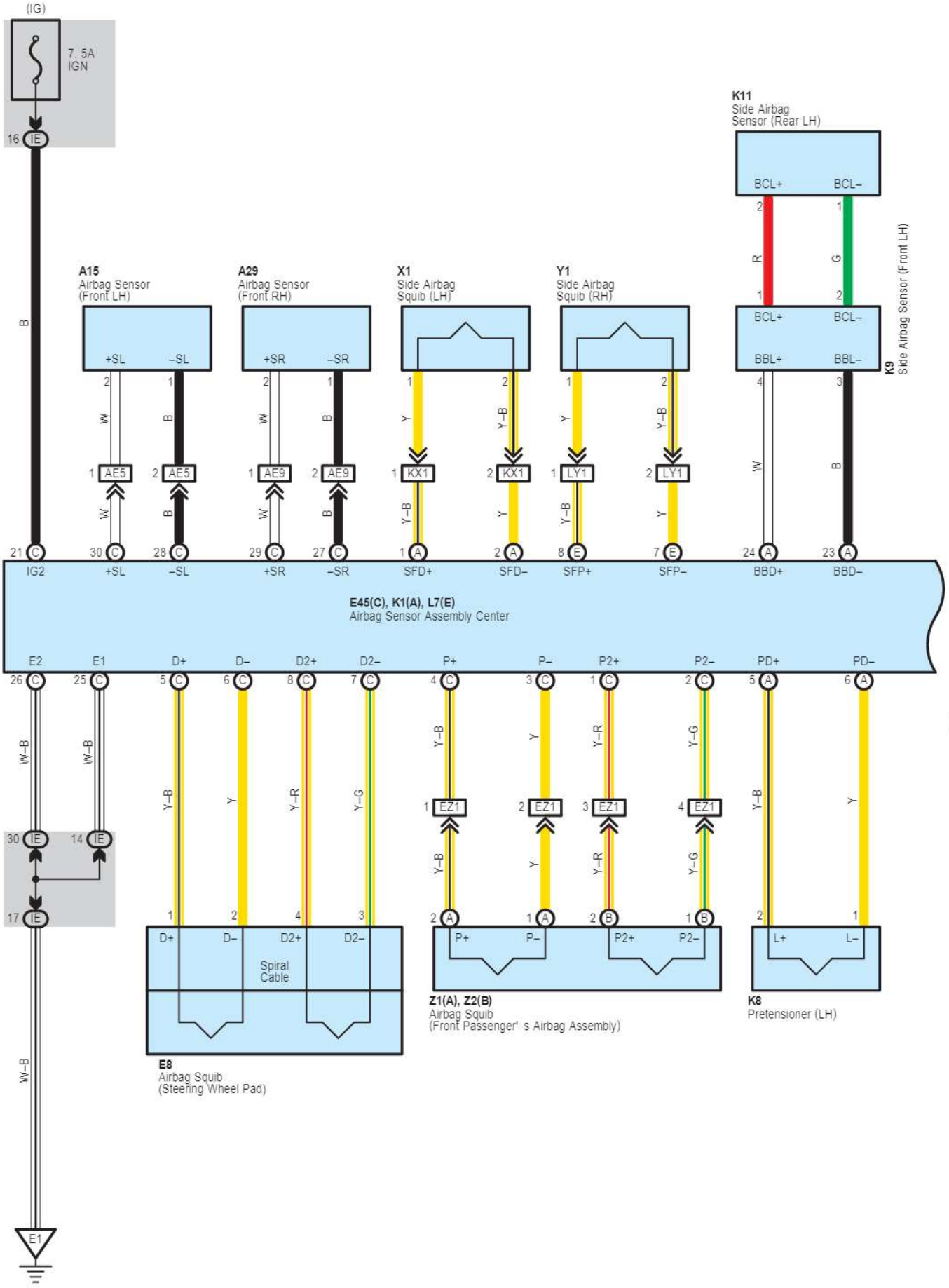
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NOTICE: When inspecting or repairing the SRS, perform service in accordance with the following precautionary instructions and the procedure, and precautions in the Repair Manual applicable for the model year.

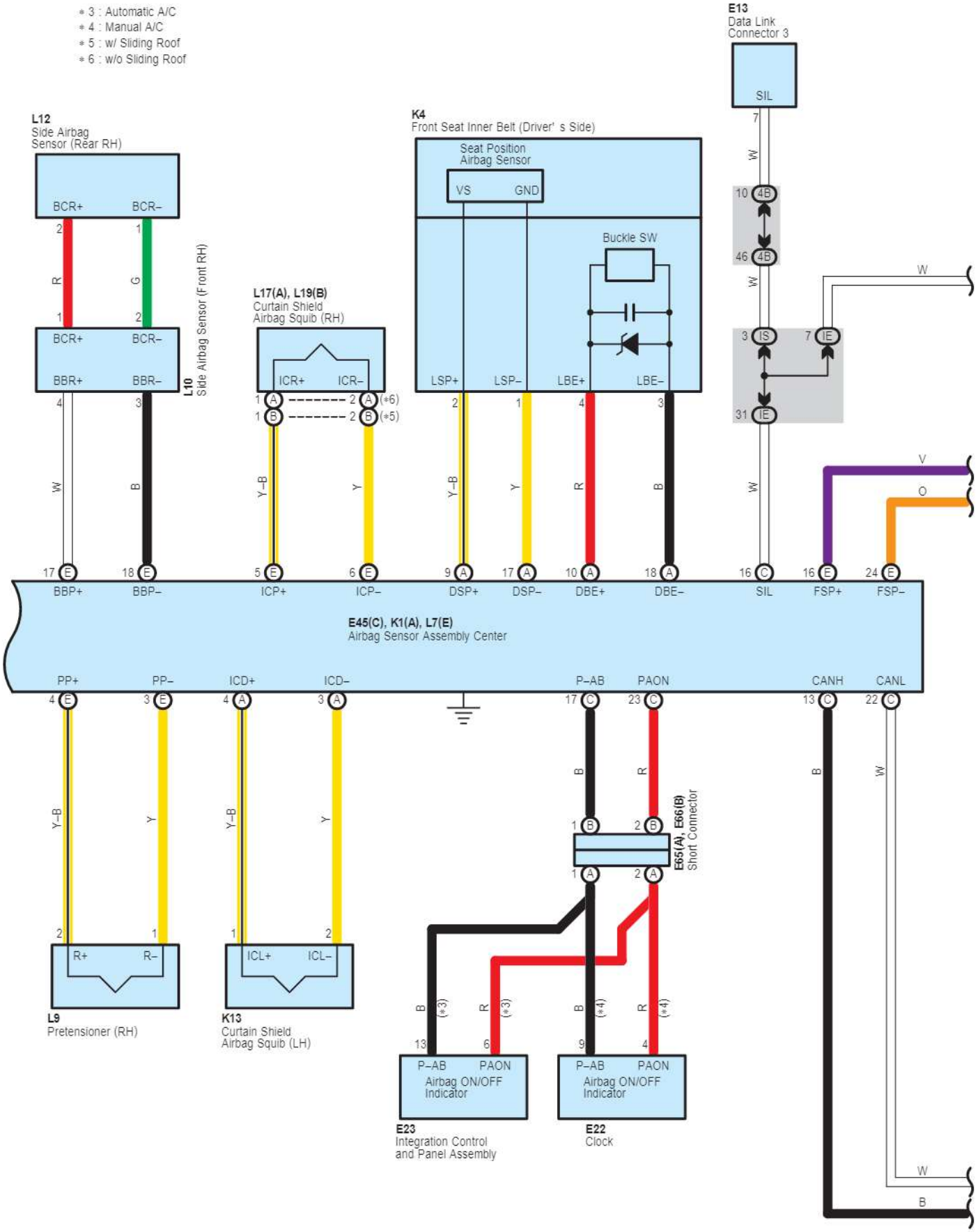
- Malfunction symptoms of the SRS are difficult to confirm, so the DTCs become the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect the DTCs before disconnecting the battery.
- **Work must be started more than 90 seconds after the ignition SW is turned to the "LOCK" position and the negative (–) terminal cable is disconnected from the battery.**
  (The SRS is equipped with a back–up power source so that if work is started within 90 seconds from disconnecting the negative (–) terminal cable of the battery, the SRS may deploy.)
- When the negative (–) terminal cable is disconnected from the battery, the memory of the clock and audio system will be cleared. So before starting work, make a record of the contents in the audio memory system. When work is finished, reset the audio systems as they were before and adjust the clock. Some vehicles have power tilt steering, power telescopic steering, power seat and power outside rear view mirror which are all equipped with memory function. However, it is not possible to make a record of these memory contents. So when the work is finished, it will be necessary to explain it to your customer, and ask the customer to adjust the features and reset the memory. To avoid erasing the memory in each system, never use a back–up power supply from outside the vehicle.
- Before repair, remove the airbag sensor if shocks are likely to be applied to the sensor during repair.
- Do not expose the following parts directly to hot air or flame;
- Even in cases of a minor collision where the SRS does not deploy, the following parts should be inspected;
- Never use SRS parts from another vehicle. When replacing parts, replace with new parts.
- For the purpose of reuse, never disassemble and repair the following parts.
- If the following parts have been dropped, or have cracks, dents and other defects in their case, bracket, and connector, replace with new one.
- Use a volt/ohmmeter with high impedance (10 kΩ/V minimum) for troubleshooting electrical circuits of the system.
- Information labels are attached to the periphery of the SRS components. Follow the instructions of the notice.
- After work on the SRS is completed, check the SRS warning light.
- If the vehicle is equipped with a mobile communication system, refer to the precaution in the IN section of the Repair Manual.

* Steering wheel pad
* Front passenger airbag assembly
* Side airbag assembly
* Curtain shield airbag assembly
* Seat belt pretensioner
* Center airbag sensor assembly
* Front airbag sensor assembly
* Side airbag sensor assembly
* Rear airbag sensor assembly

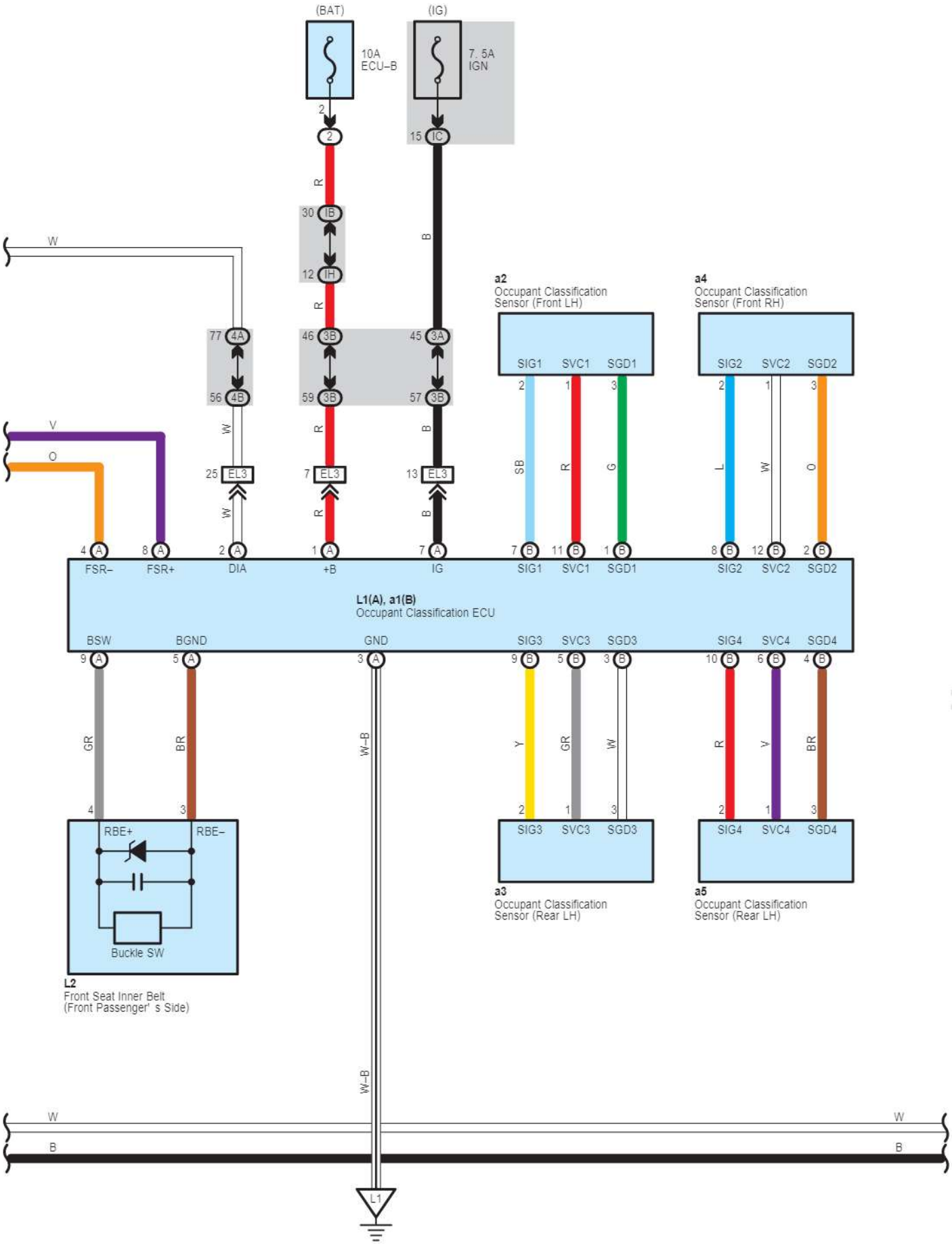
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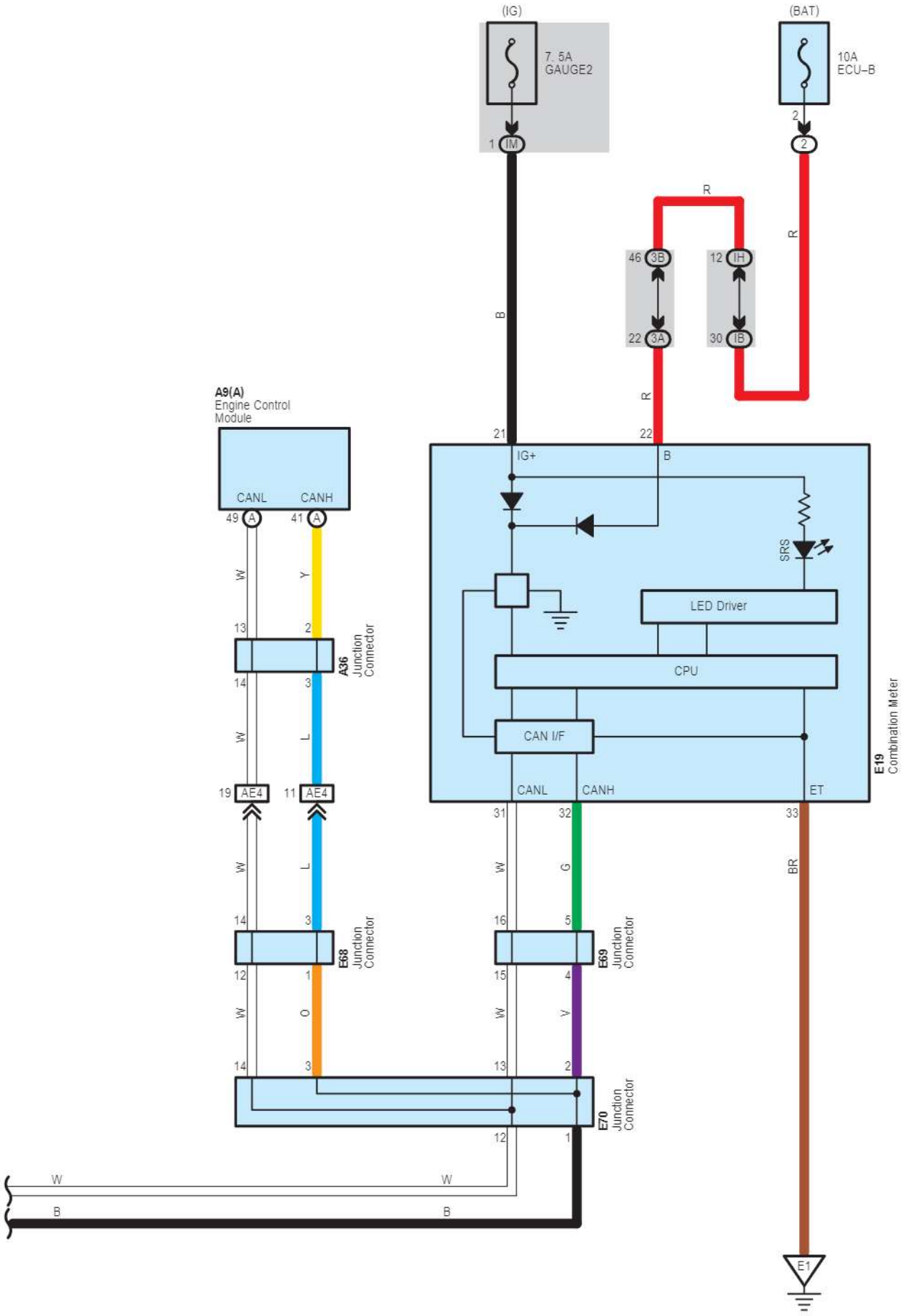
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System Outline

* The system reaches an ignition judgment to deploy the following device based on the signals received from the front airbag sensor and deceleration sensor.
  – Driver Airbag
  – Front Passenger Airbag
  – Seat Belt Pretensioner
* The system reaches an ignition judgment to deploy the following device based on the signals received from the side airbag sensors.
  – Side Airbags
  – Curtain Shield Airbags
* The dual–stage SRS airbag system has been used for the driver and front passenger airbags. This system controls the optimal airbag inflation by judging the extent of impact, seat position (driver seat), whether or not the seat belt is fastened (driver seat) and information from the front passenger occupant classification system.
* The front passenger occupant classification system judges whether the front passenger seat is occupied by an adult or child (with child seat) or is unoccupied, according to the load applied to the front passenger seat and whether the seat belt is buckled. Based on the results, it restricts the deployment of the front passenger airbag, front passenger side airbag, and front passenger seat belt pretensioner. In addition, the system informs the driver of the result of the judgment through the use of the AIRBAG ON/OFF indicator lights.
* A Roll Sensing Curtain Shield Airbag system has been adopted in order to deploy the curtain shield airbags and the pretensioners, in the event that the vehicle rolls over.
* The airbag sensor assembly transmits a signal to the engin control module in order to stop the fuel pump when the airbag is deployed.

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A9 A	50 (2GR–FE)	E66 B	55	L10	60
	52 (2AZ–FE)	E68	55	L12	60
A15	50 (2GR–FE)	E69	55	L17 A	60
	52 (2AZ–FE)	E70	55	L19 B	60
A29	50 (2GR–FE)	K1 A	57	X1	62
	52 (2AZ–FE)	K4	62	Y1	62
A36	56	K8	59	Z1 A	57
E8	54	K9	59	Z2 B	57
E13	54	K11	59	a1 B	62
E19	54	K13	59	a2	62
E22	54	L1 A	62	a3	62
E23	54	L2	62	a4	62
E45 C	55	L7 E	57	a5	62
E65 A	55	L9	60		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IC	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IE		
IH		
IM	31	
IS		

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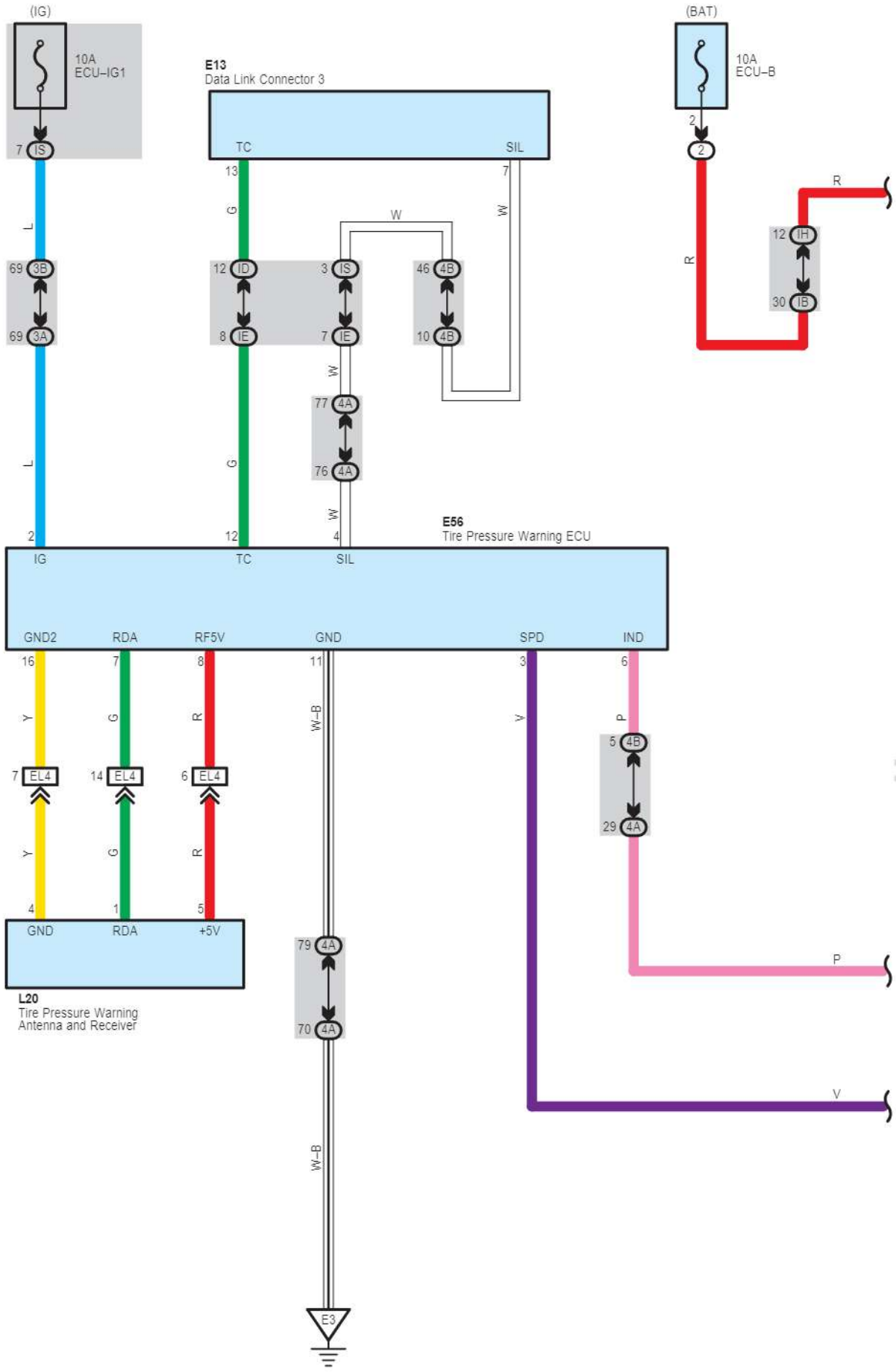
: **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE5		
AE9	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)
EL3	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
EZ1	66	Instrument Panel Wire and Instrument Panel Wire Assembly (Behind the Glove Box)
KX1	68	Floor Wire and Seat Airbag Wire LH (Left Side of the Driver's Seat)
LY1	68	Floor No.2 Wire and Seat Airbag Wire RH (Under the Front Passenger's Seat)

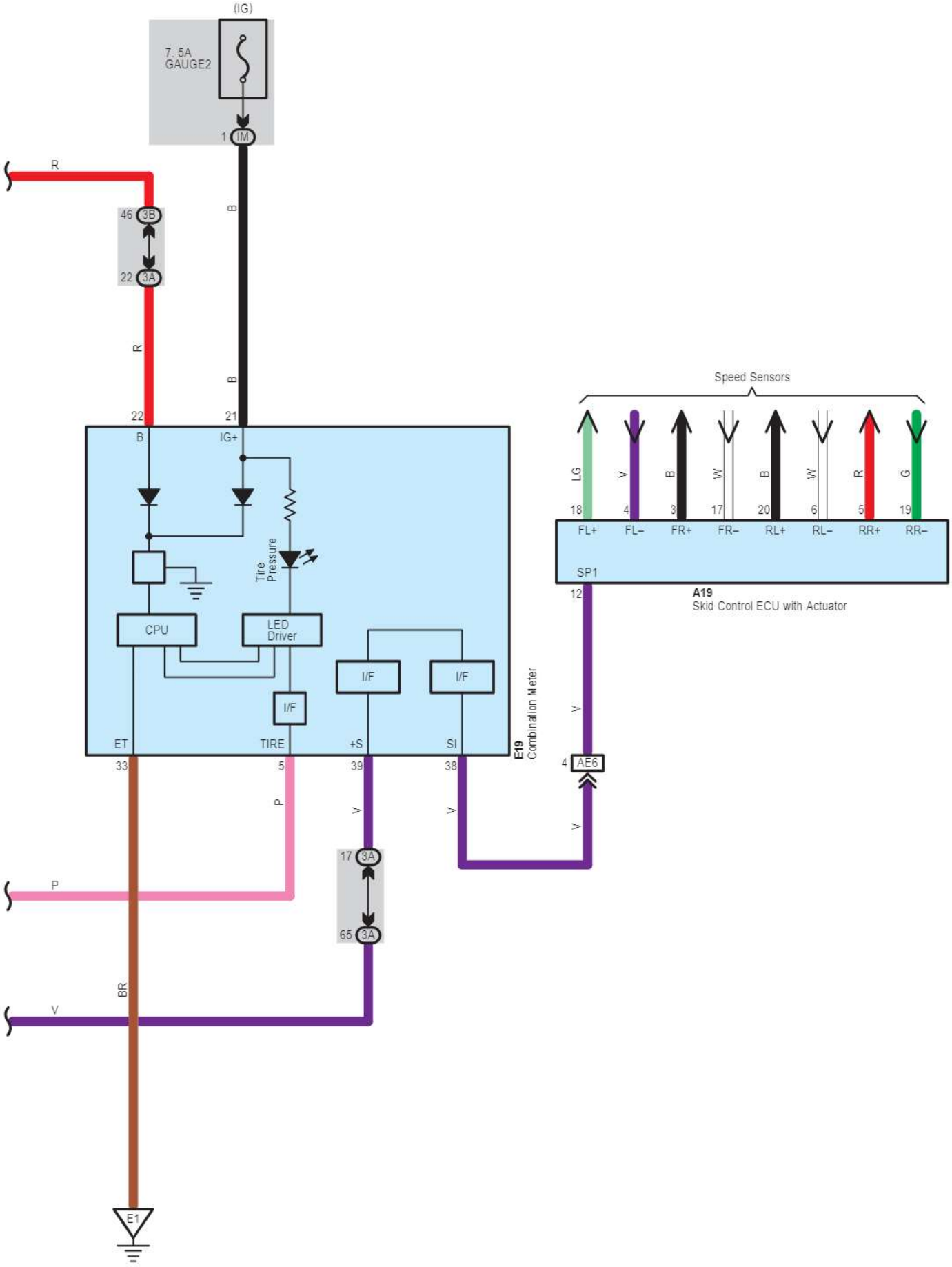
: **Ground Points**

Code	See Page	Ground Points Location
E1	66	Left Kick Panel
L1	67	Right Center Pillar

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Tire Pressure Warning System

System Outline

* In the tire pressure warning system, the warning light illuminates to alert the driver about the low tire pressure when the vehicle continues driving with one of the five tires (Include spare tire) under such low pressure to cause possible driving disturbance.
* The air pressure sensors installed in the wheels measure air pressure in the tires directly.

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A19	50 (2GR–FE)	E13	54	E56	55
	52 (2AZ–FE)	E19	54	L20	60

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IB	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
ID		
IE		
IH		
IM	31	
IS		

: Connector Joining Wire Harness and Wire Harness

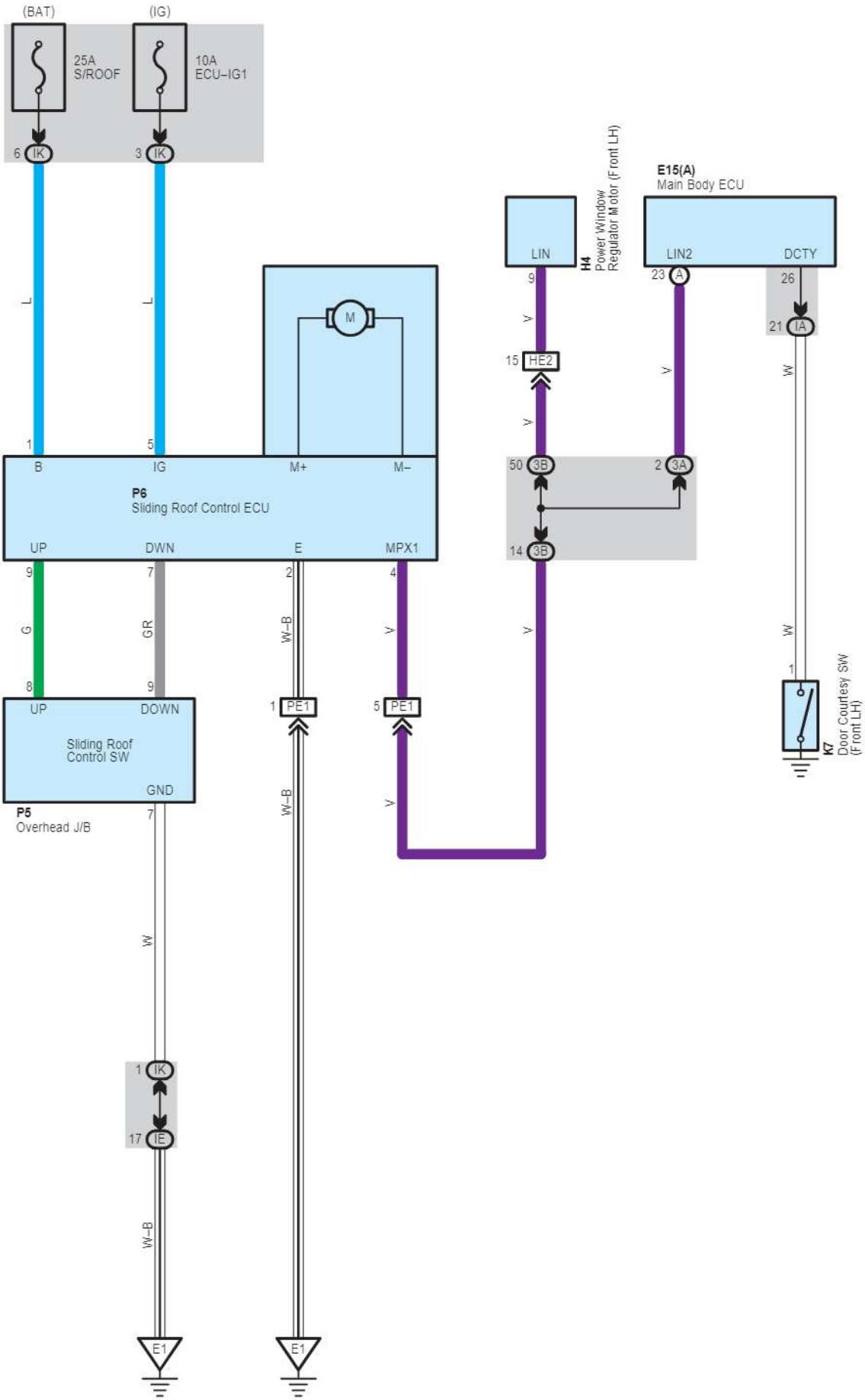
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE6	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
EL4	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
E3	66	Instrument Panel Reinforcement Center

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: Parts Location

Code		See Page	Code	See Page	Code	See Page
E15	A	54	K7	59	P6	61
H4		58	P5	61		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
IA	30	Floor Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IK	30	Roof Wire and Instrument Panel J/B (Cowl Side Left)

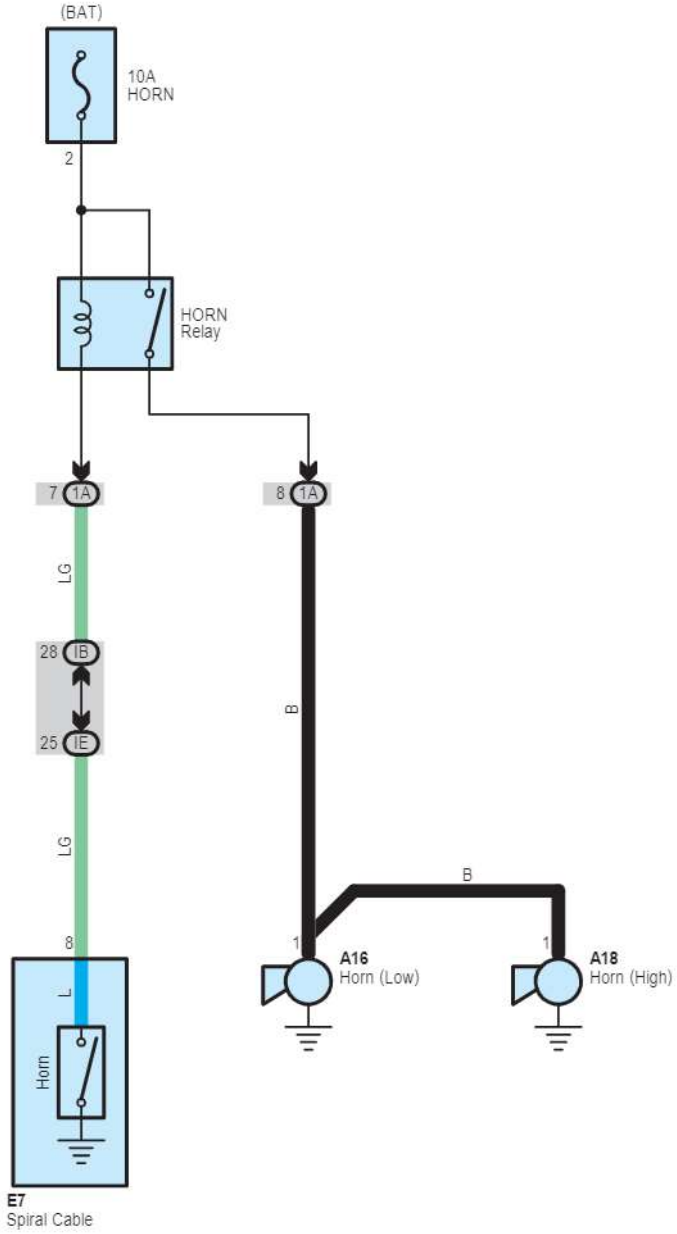
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
HE2	66	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
PE1	66	Roof Wire and Instrument Panel Wire (Left Side of the Instrument Panel)

: Ground Points

Code	See Page	Ground Points Location
E1	66	Left Kick Panel

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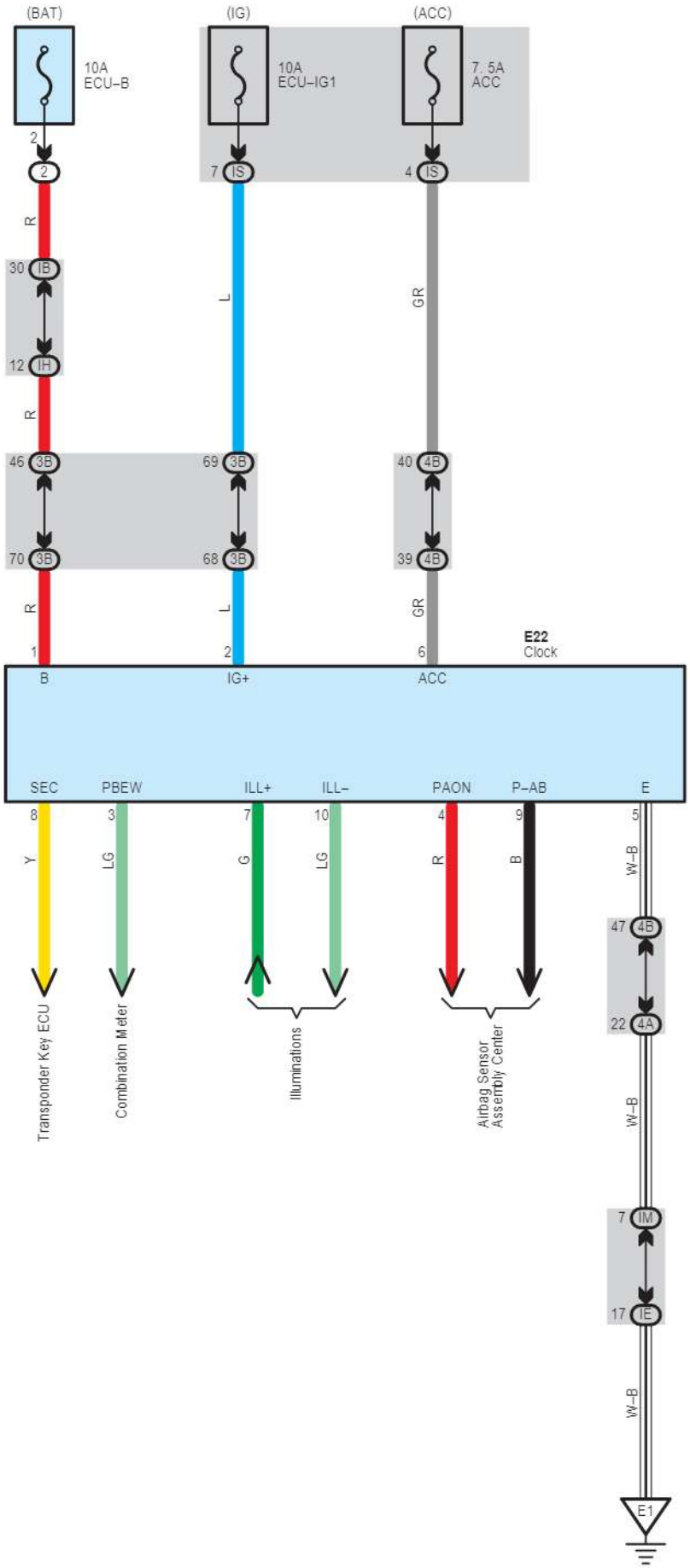
○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
A16	50 (2GR–FE)	A18	50 (2GR–FE)	E7	54
	52 (2AZ–FE)		52 (2AZ–FE)		

⬭ : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)

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: Parts Location

Code	See Page	Code	See Page	Code	See Page
E22	54				

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

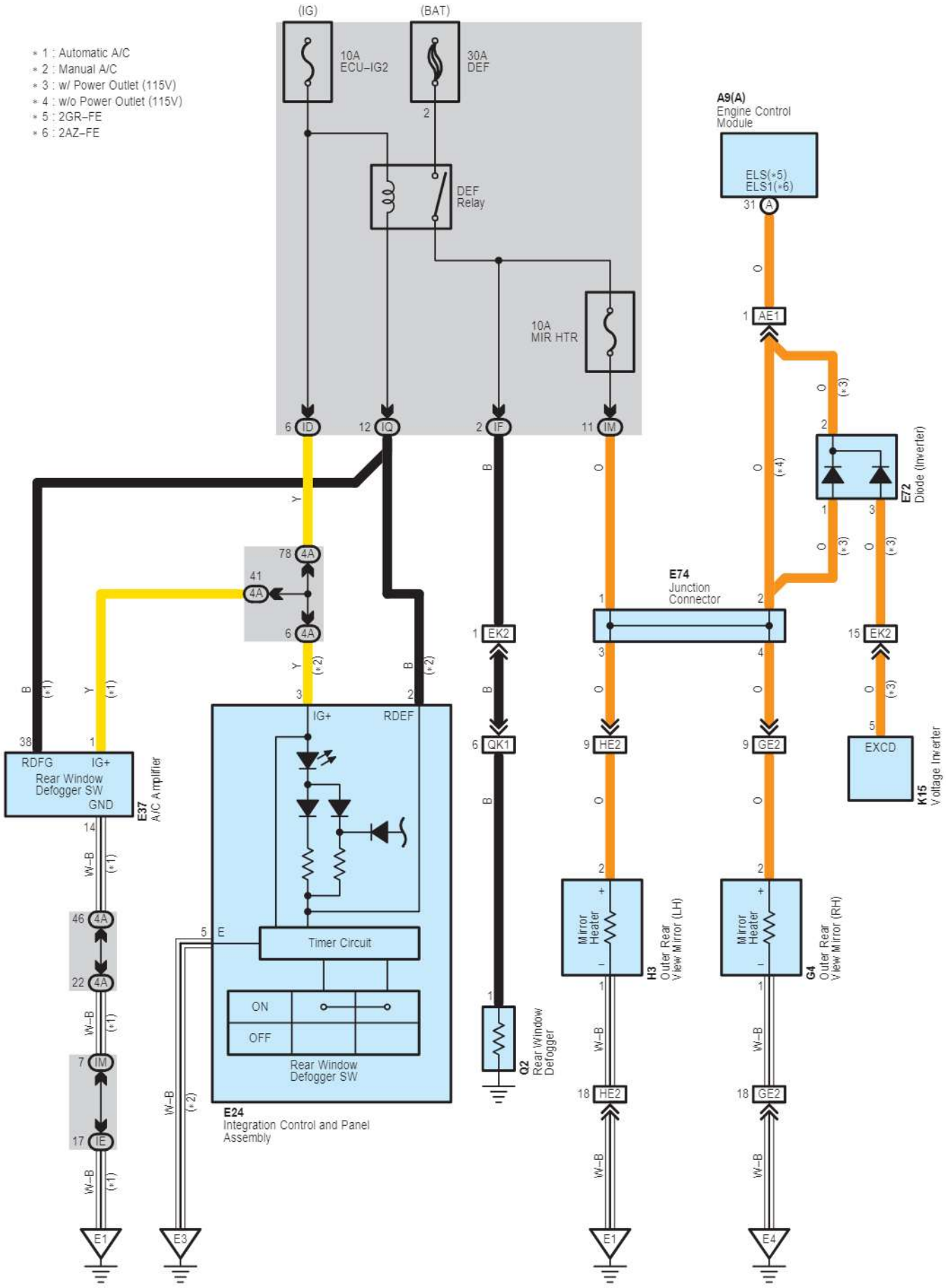
Code	See Page	Junction Block and Wire Harness (Connector Location)
3B	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IH		
IM	31	
IS		

: Ground Points

Code	See Page	Ground Points Location
E1	66	Left Kick Panel

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Rear Window Defogger and Mirror Heater



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: Parts Location

Code		See Page	Code	See Page	Code	See Page
A9	A	50 (2GR–FE)	E72	55	K15	59
		52 (2AZ–FE)	E74	55	Q2	61
E24		54	G4	58		
E37		55	H3	58		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IE		
IF		
IM	31	
IQ		

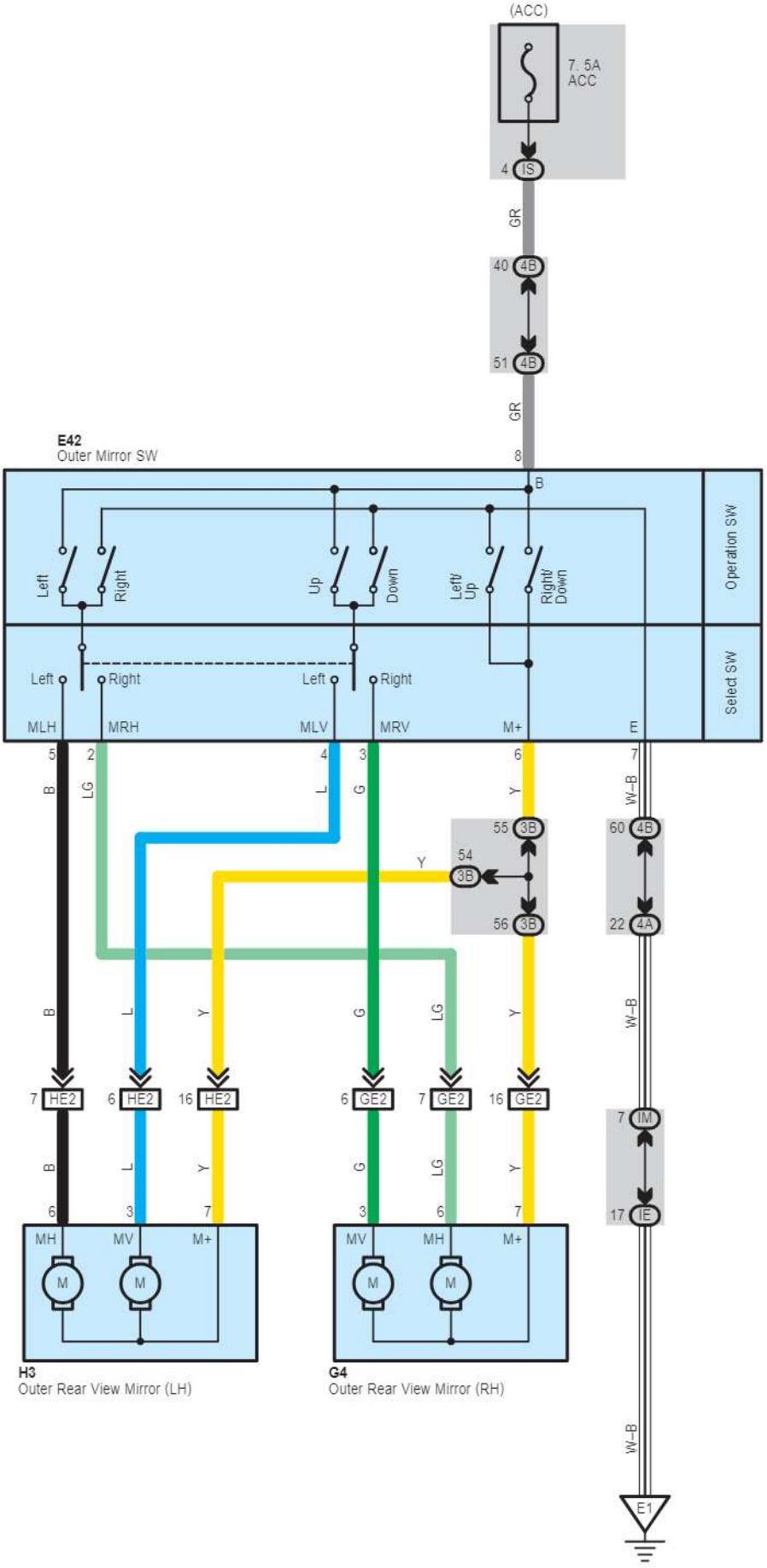
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE1	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
EK2	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)
GE2	66	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
HE2	66	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
QK1	67	Back Door No.1 Wire and Floor Wire (Right Rear Quarter Panel)

: Ground Points

Code	See Page	Ground Points Location
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center
E4	66	Right Kick Panel

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: Parts Location

Code	See Page	Code	See Page	Code	See Page
E42	55	G4	58	H3	58

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3B	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IE	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	
IS		

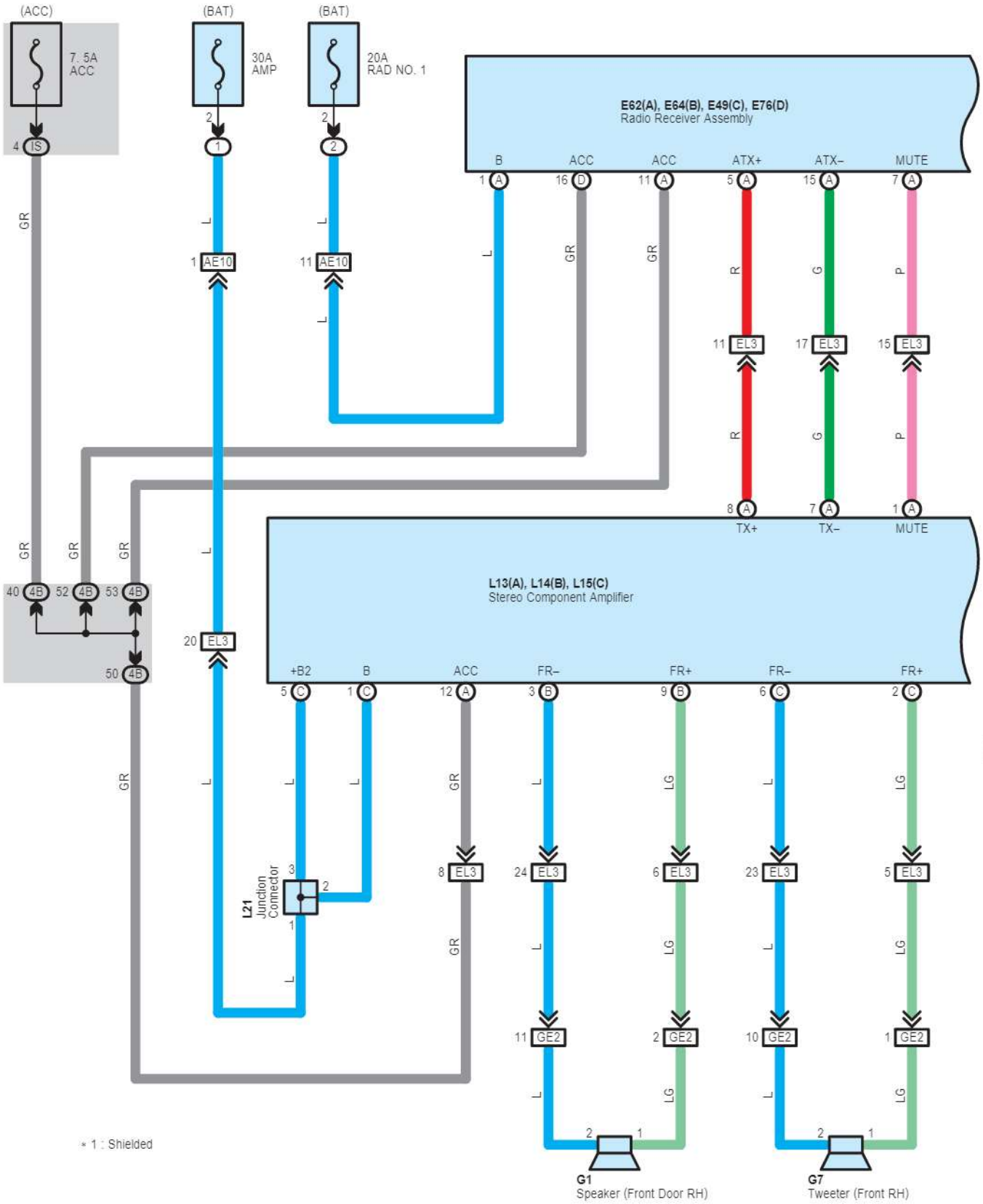
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
GE2	66	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
HE2	66	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)

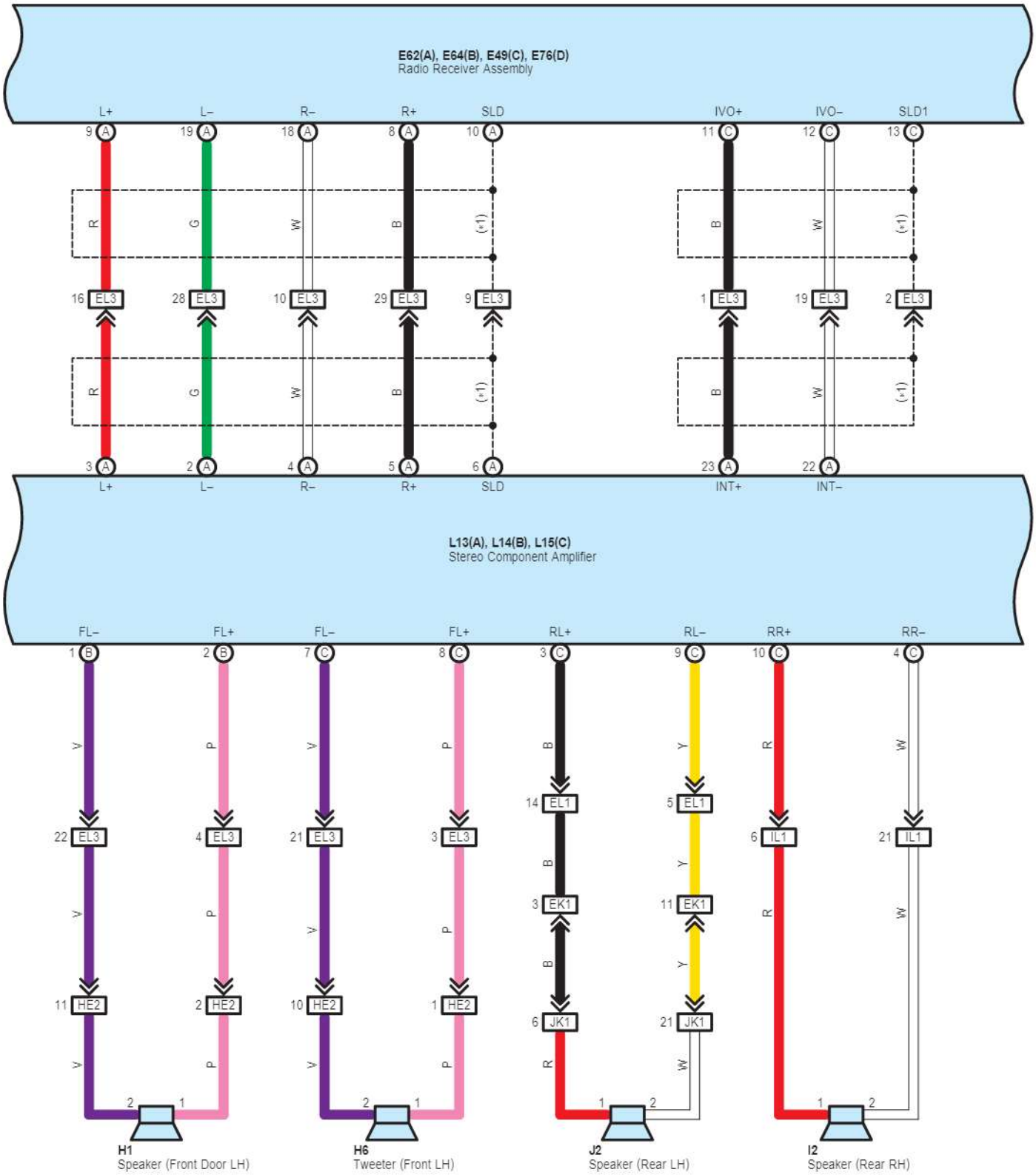
: Ground Points

Code	See Page	Ground Points Location
E1	66	Left Kick Panel

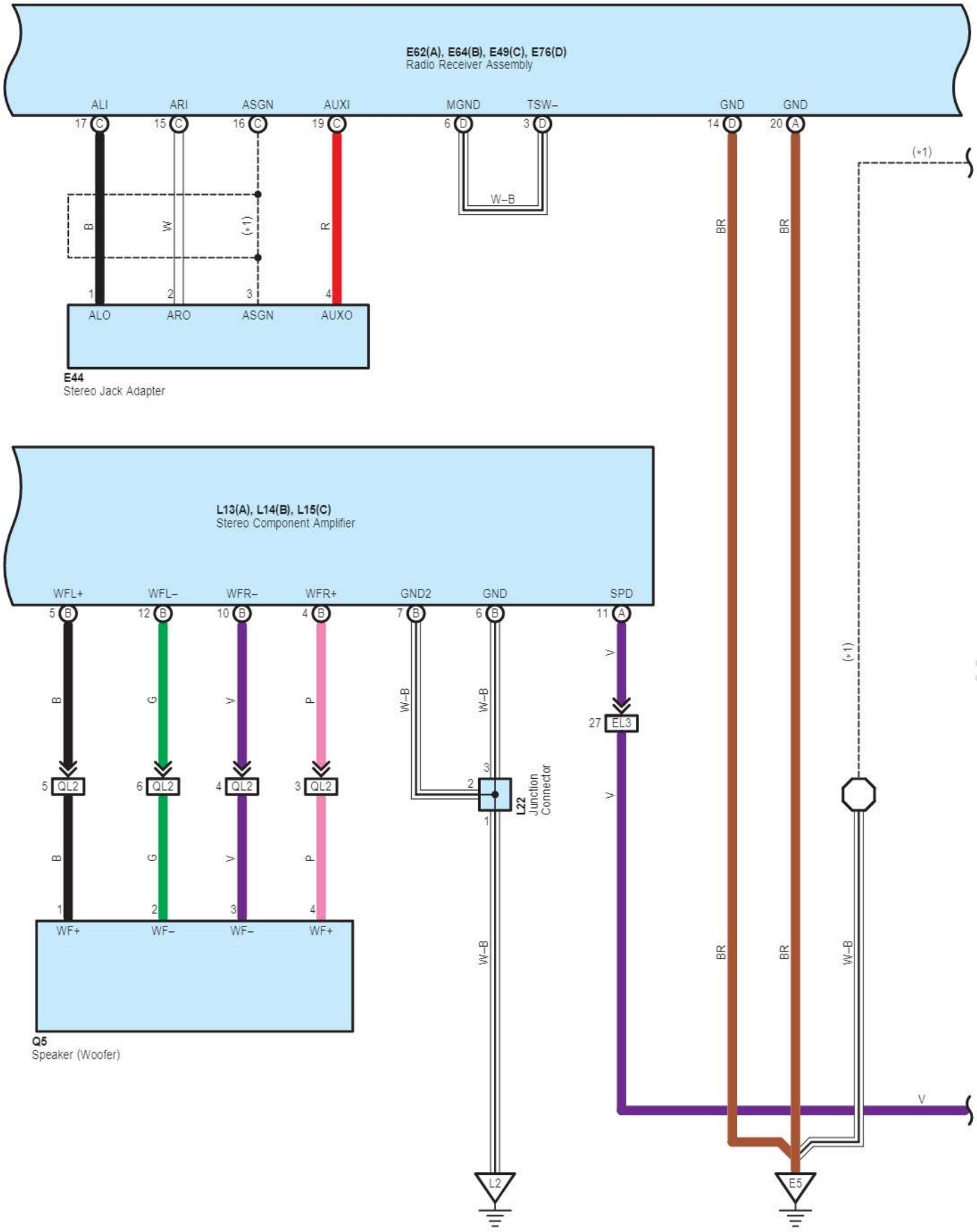
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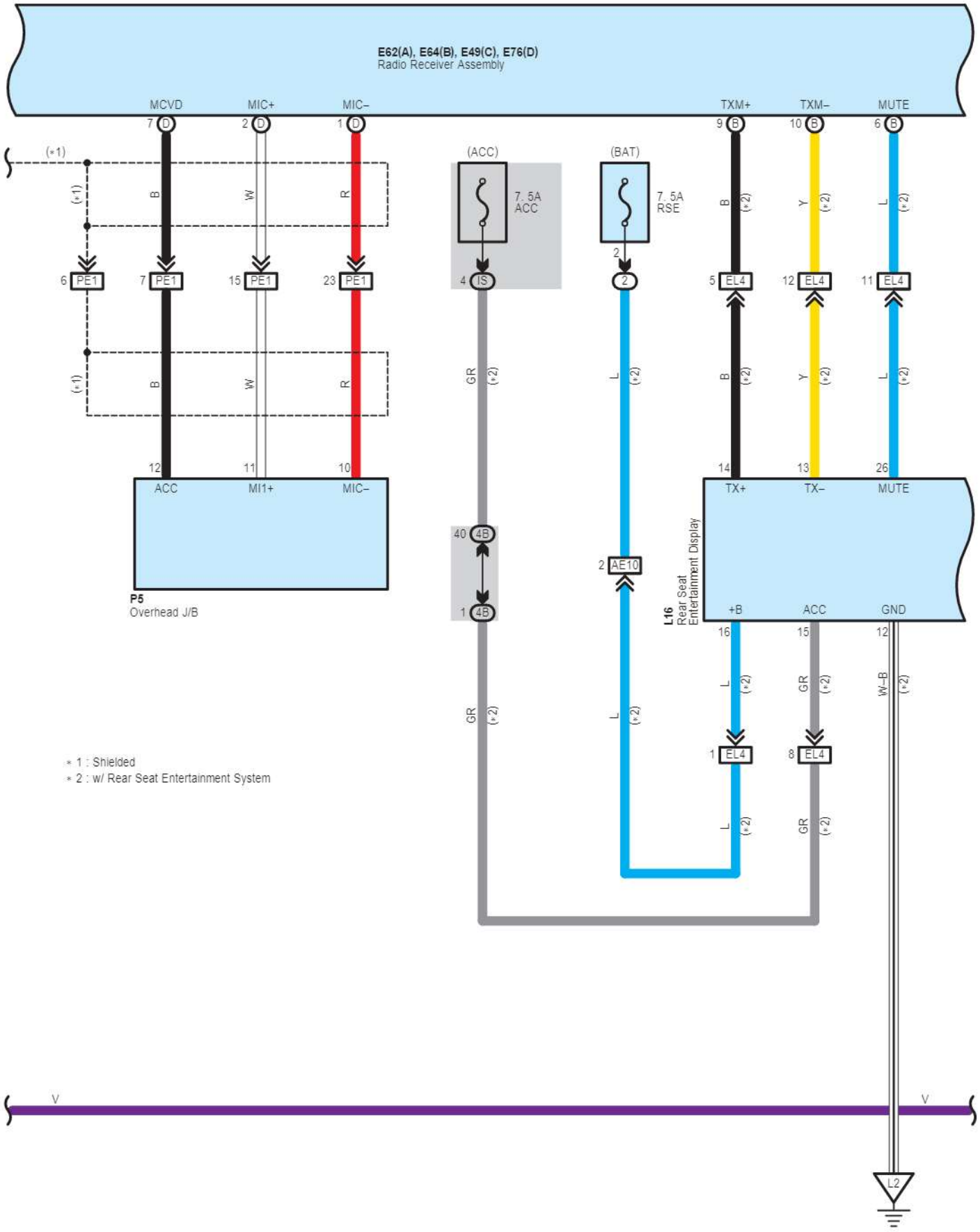
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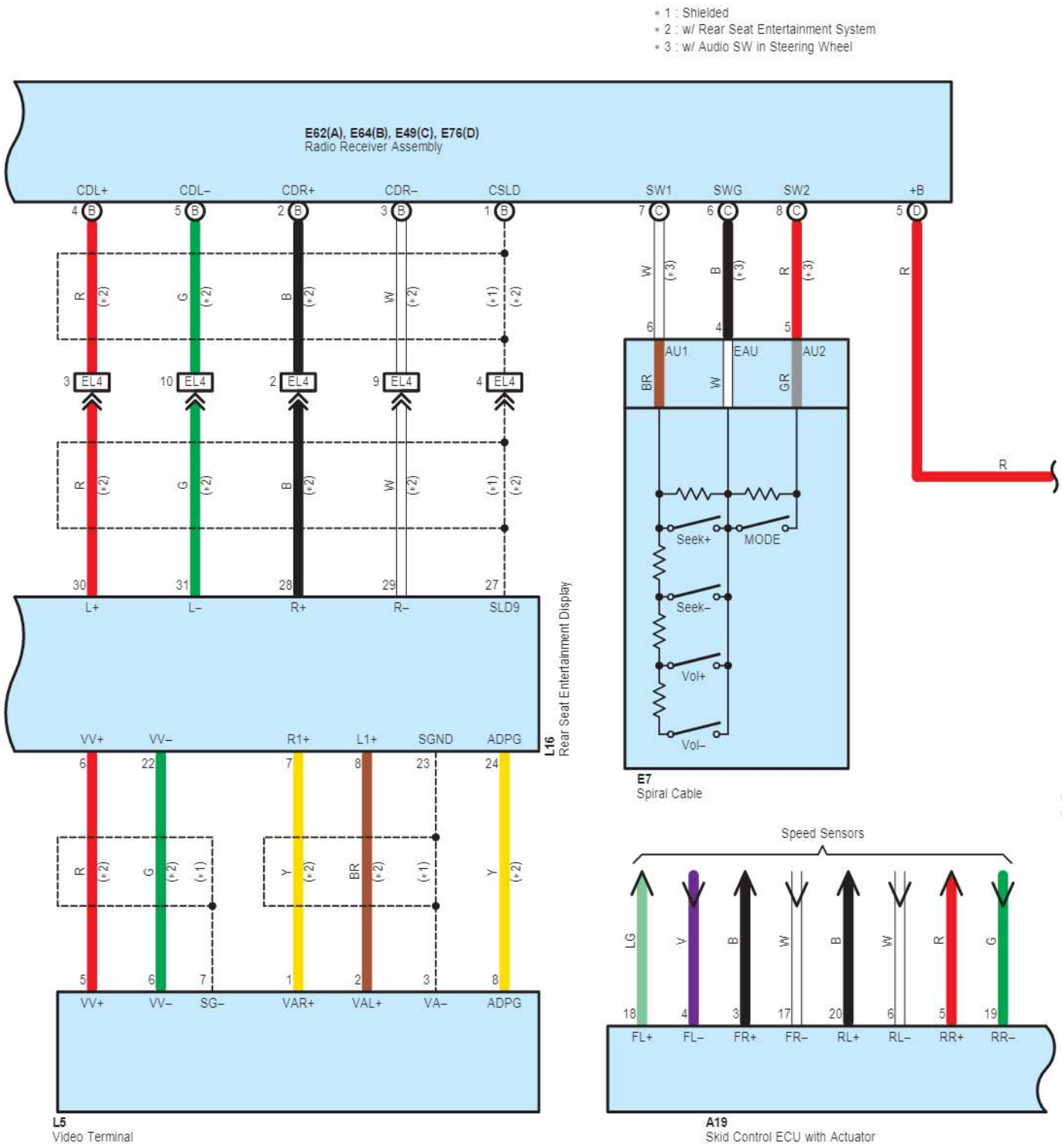
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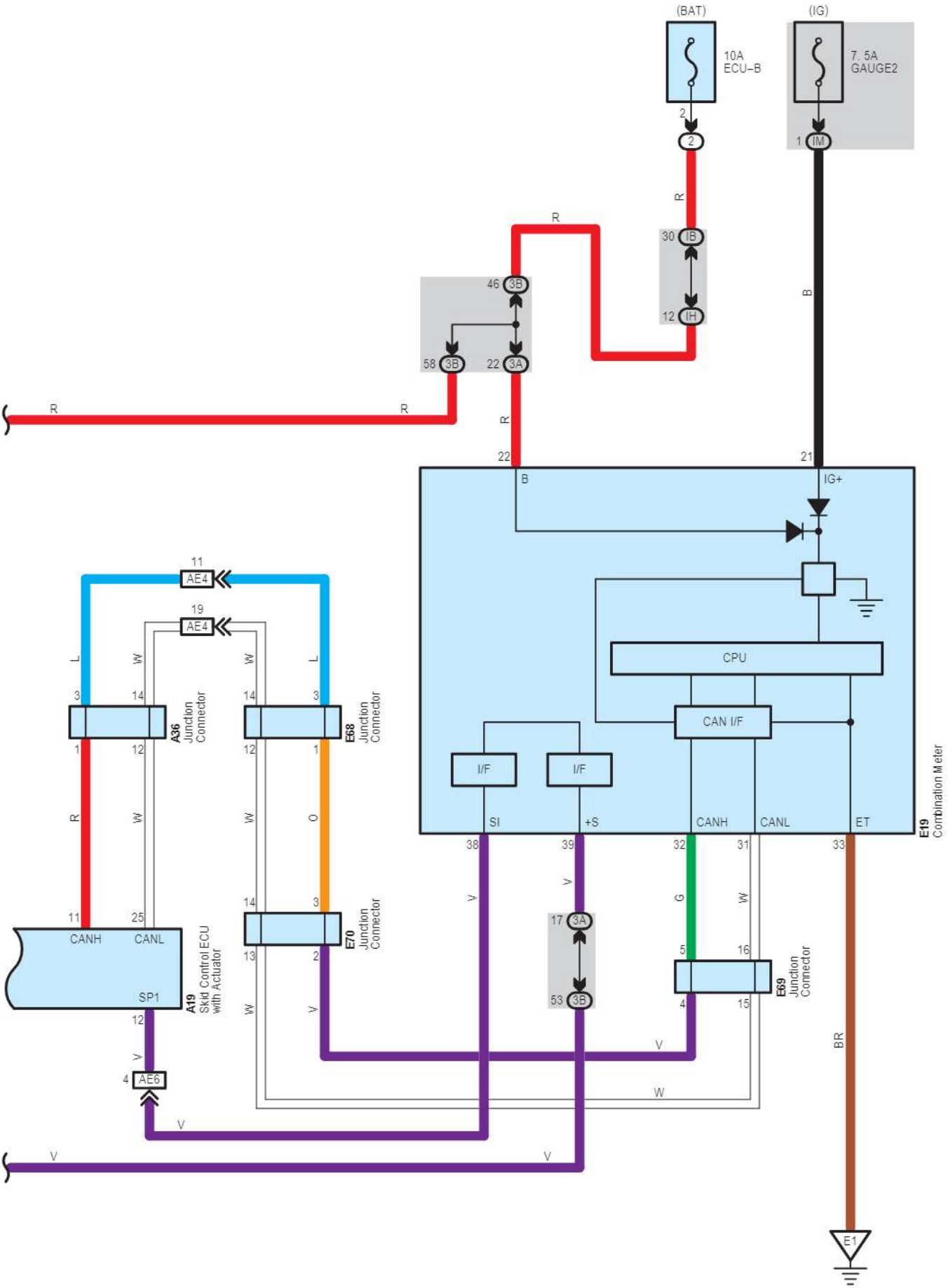
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○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A19	50 (2GR–FE)	E69	55	L13 A	60
	52 (2AZ–FE)	E70	55	L14 B	60
A36	56	E76 D	55	L15 C	60
E7	54	G1	58	L16	60
E19	54	G7	58	L21	60
E44	55	H1	58	L22	60
E49 C	55	H6	58	P5	61
E62 A	55	I2	58	Q5	61
E64 B	55	J2	58		
E68	55	L5	57		

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4B	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IH	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	
IS		

▭ : Connector Joining Wire Harness and Wire Harness

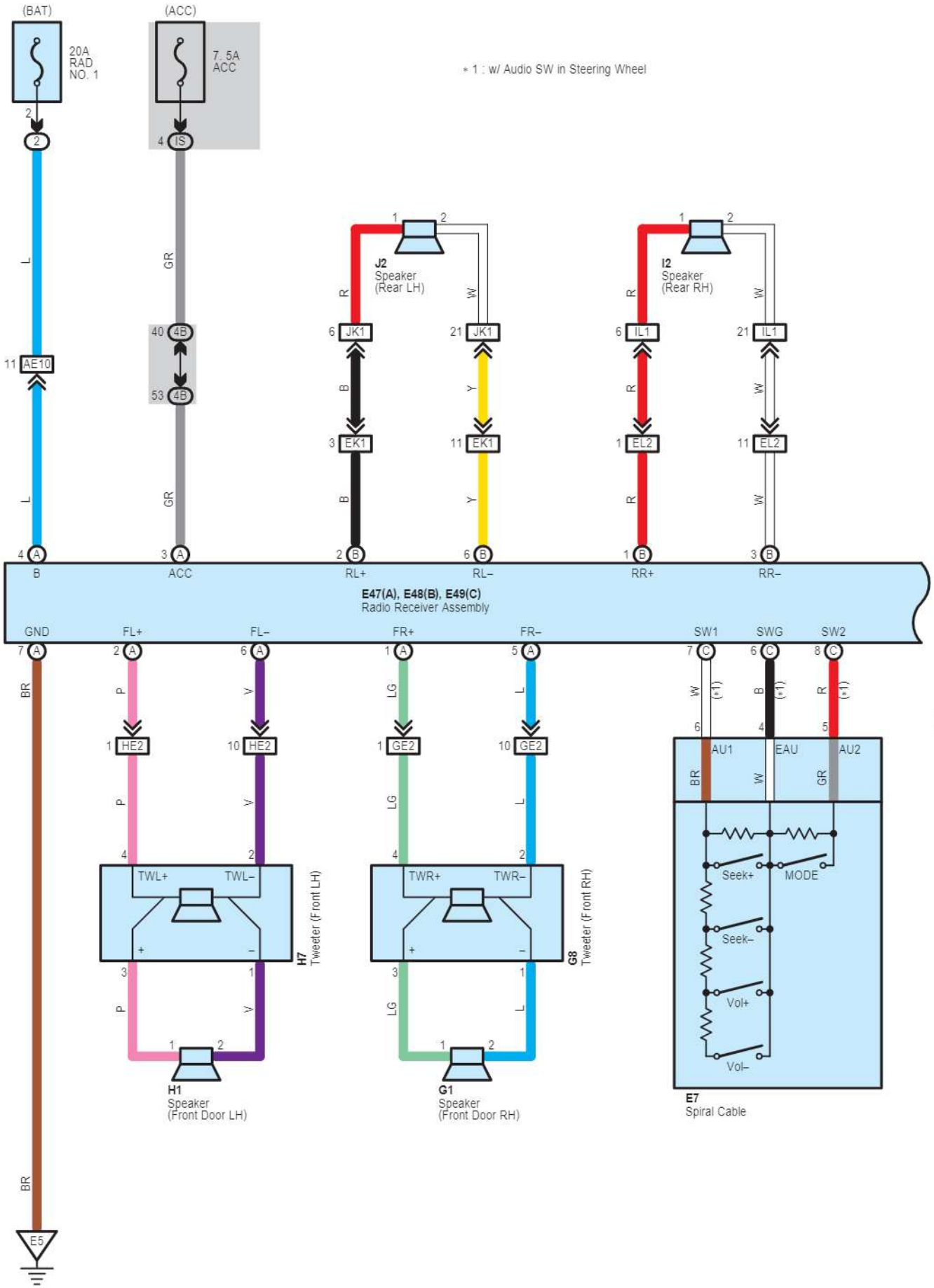
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE6		
AE10	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)
EK1	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)
EL1	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
EL3		
EL4		
GE2	66	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
HE2	66	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IL1	67	Rear Door No.1 RH Wire and Floor No.2 Wire (Right Center Pillar)
JK1	67	Rear Door No.1 LH Wire and Floor Wire (Left Center Pillar)
PE1	66	Roof Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
QL2	67	Back Door No.3 Wire and Floor No.2 Wire (Right Rear Quarter Panel)

▽ : Ground Points

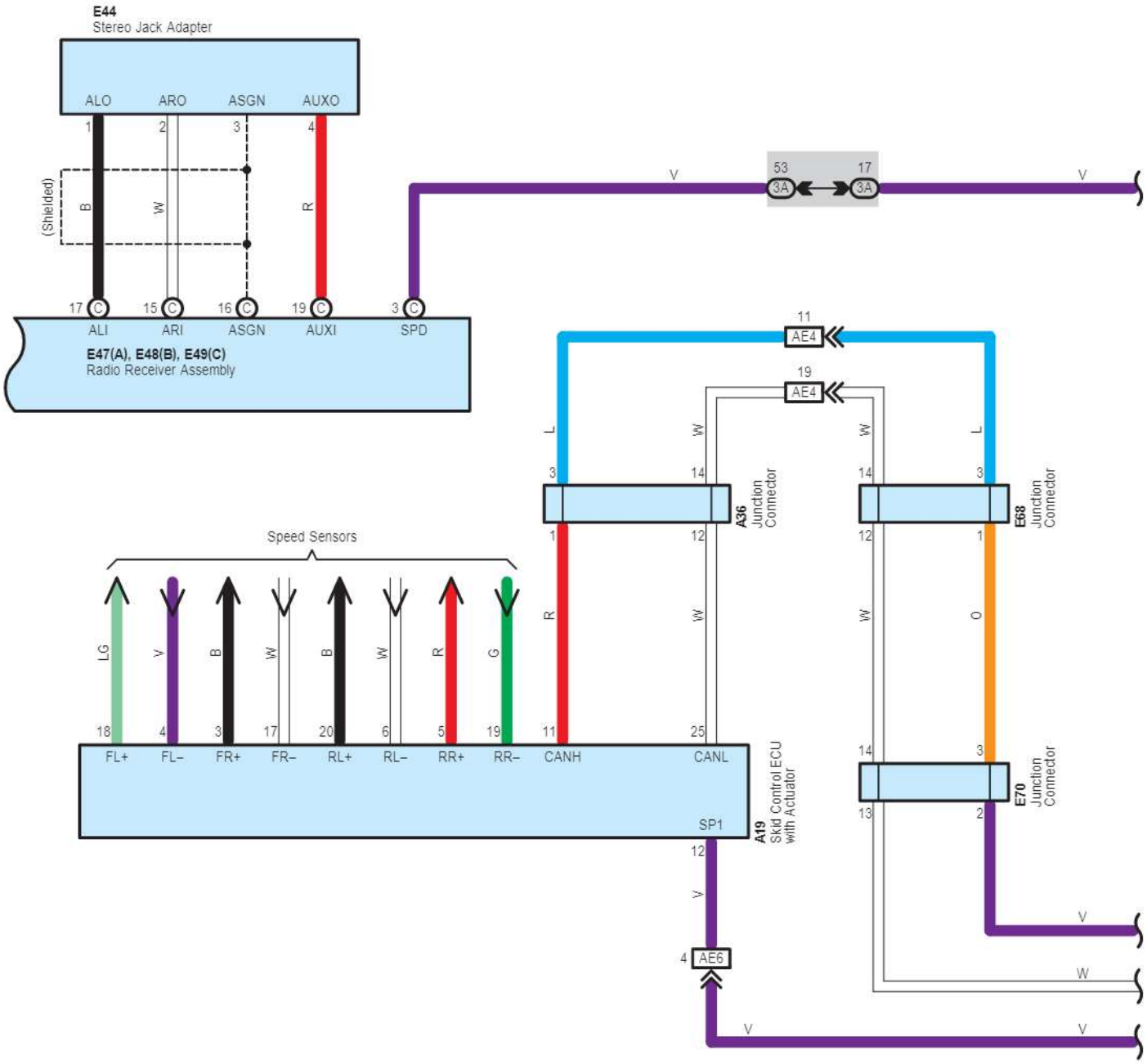
Code	See Page	Ground Points Location
E1	66	Left Kick Panel
E5	66	Instrument Panel Reinforcement Center
L2	67	Right Quarter Panel

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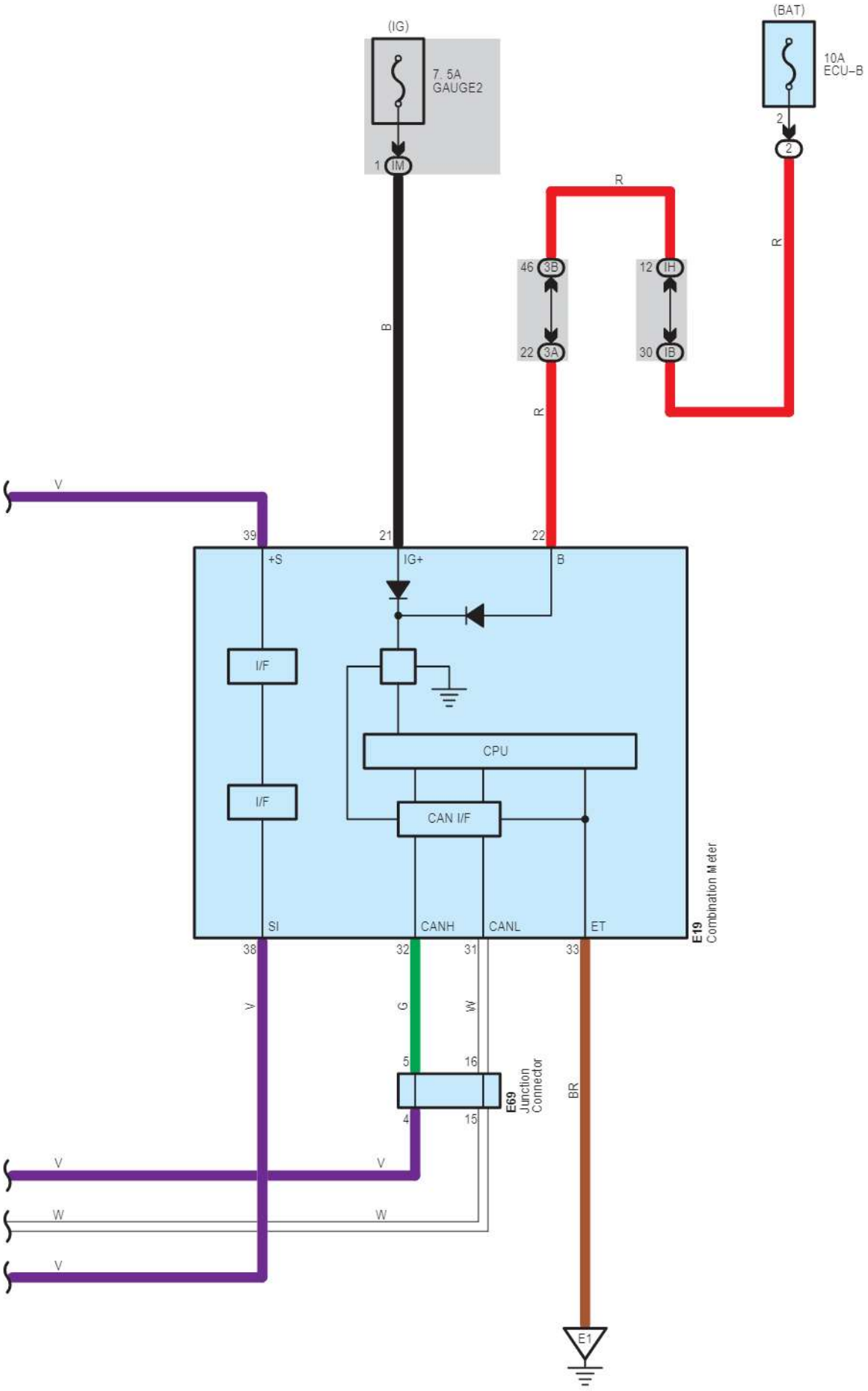
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: Parts Location

Code	See Page	Code		See Page	Code	See Page
A19	50 (2GR–FE)	E47	A	55	G1	58
	52 (2AZ–FE)	E48	B	55	G8	58
A36	56	E49	C	55	H1	58
E7	54	E68		55	H7	58
E19	54	E69		55	I2	58
E44	55	E70		55	J2	58

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4B	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IH	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	
IS		

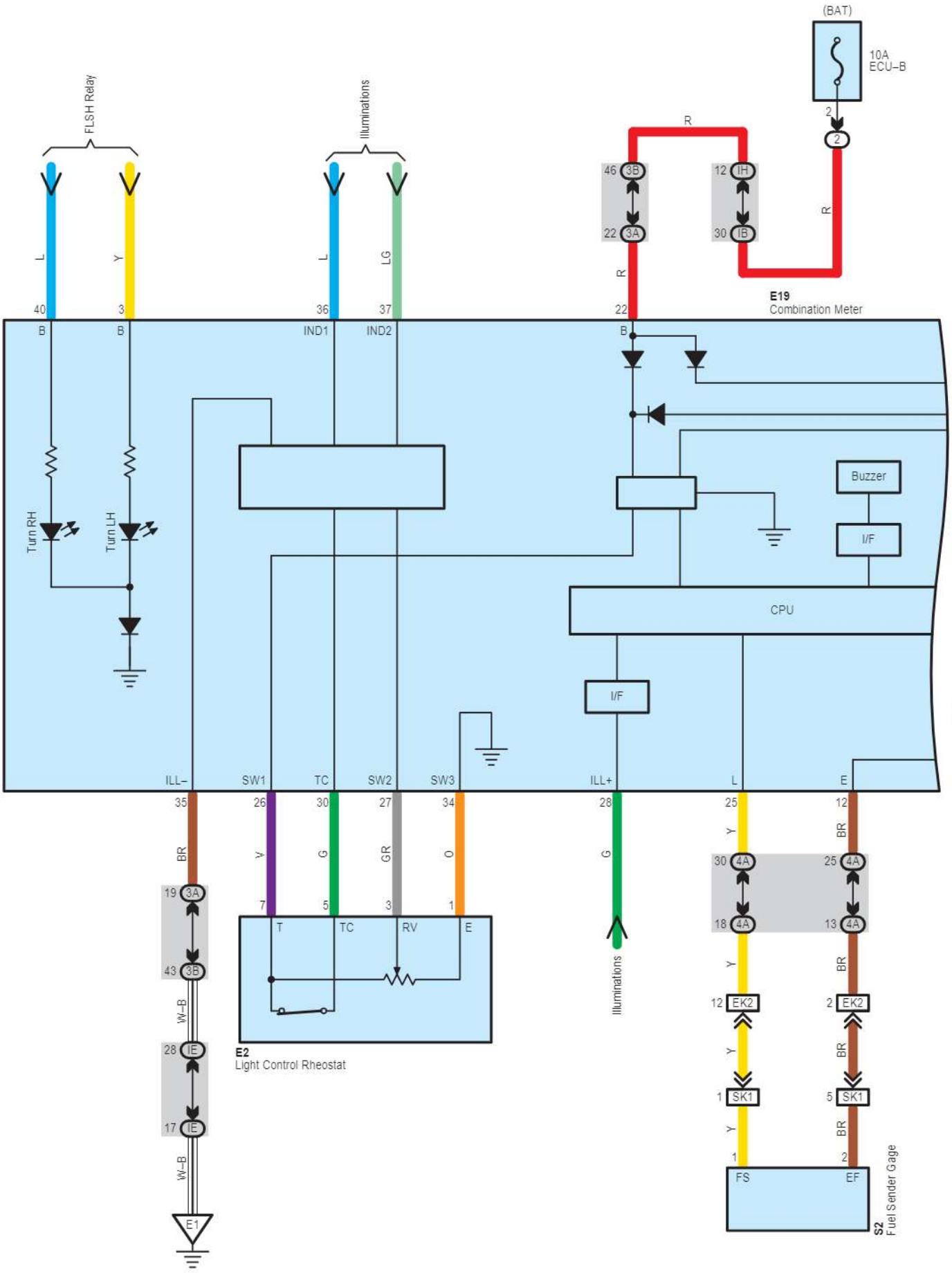
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE6		
AE10	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)
EK1	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)
EL2	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
GE2	66	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
HE2	66	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IL1	67	Rear Door No.1 RH Wire and Floor No.2 Wire (Right Center Pillar)
JK1	67	Rear Door No.1 LH Wire and Floor Wire (Left Center Pillar)

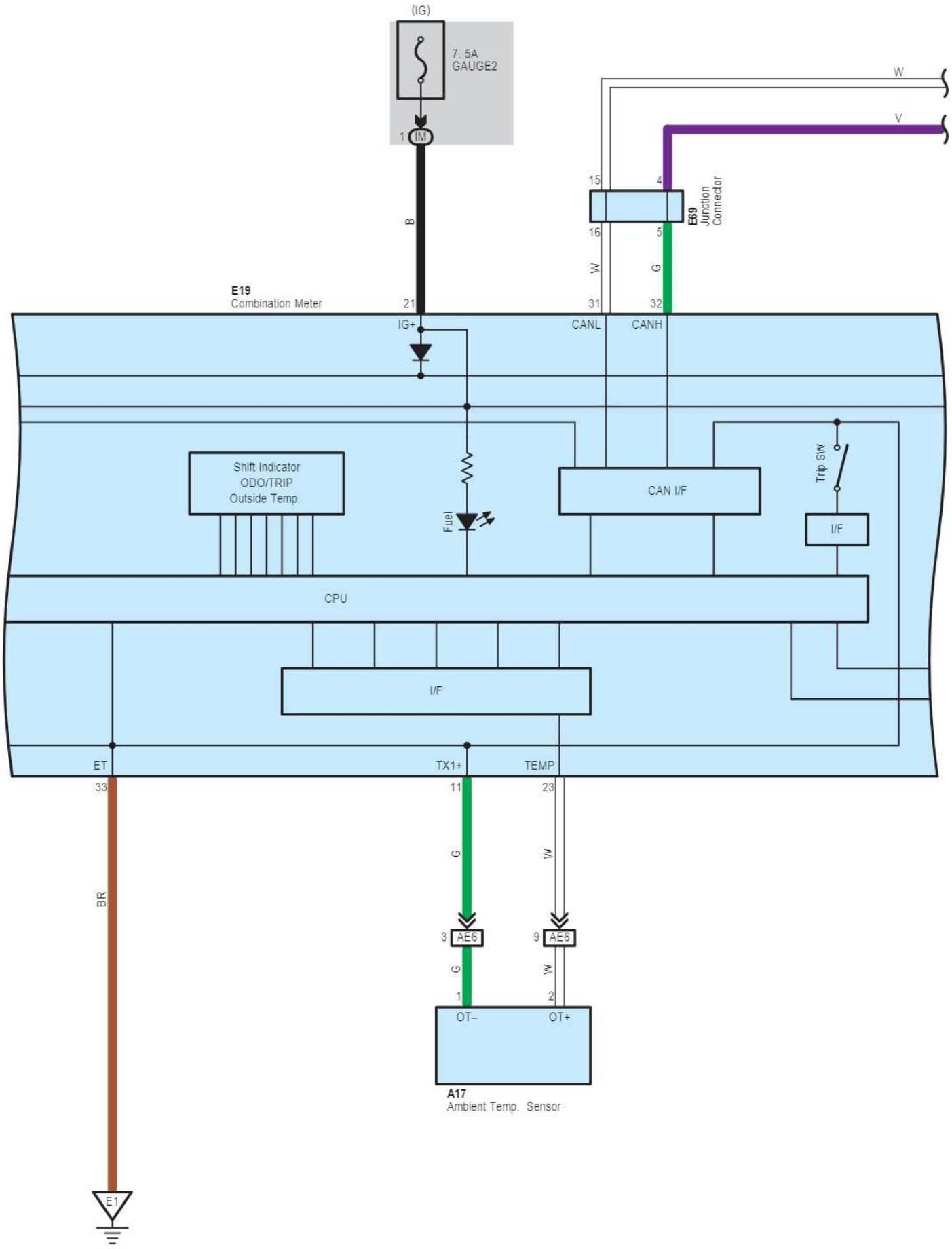
: Ground Points

Code	See Page	Ground Points Location
E1	66	Left Kick Panel
E5	66	Instrument Panel Reinforcement Center

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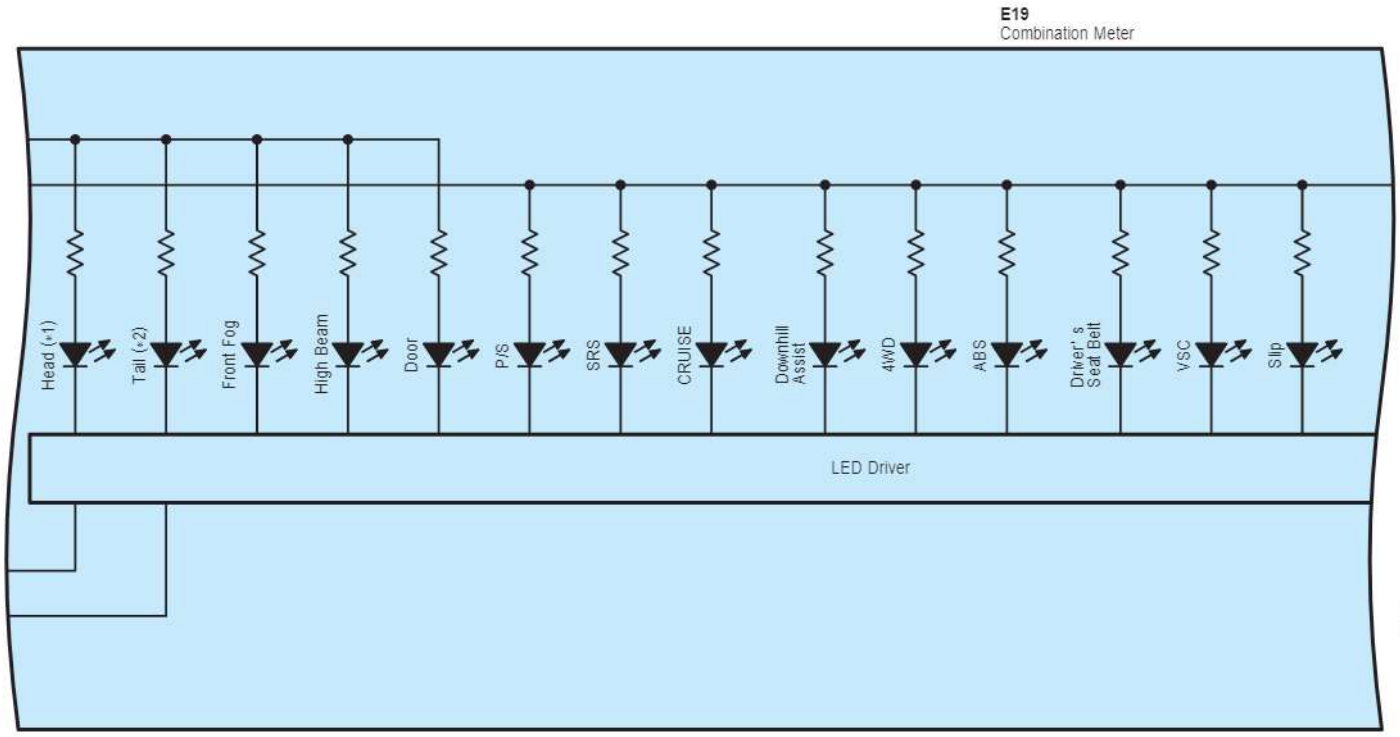
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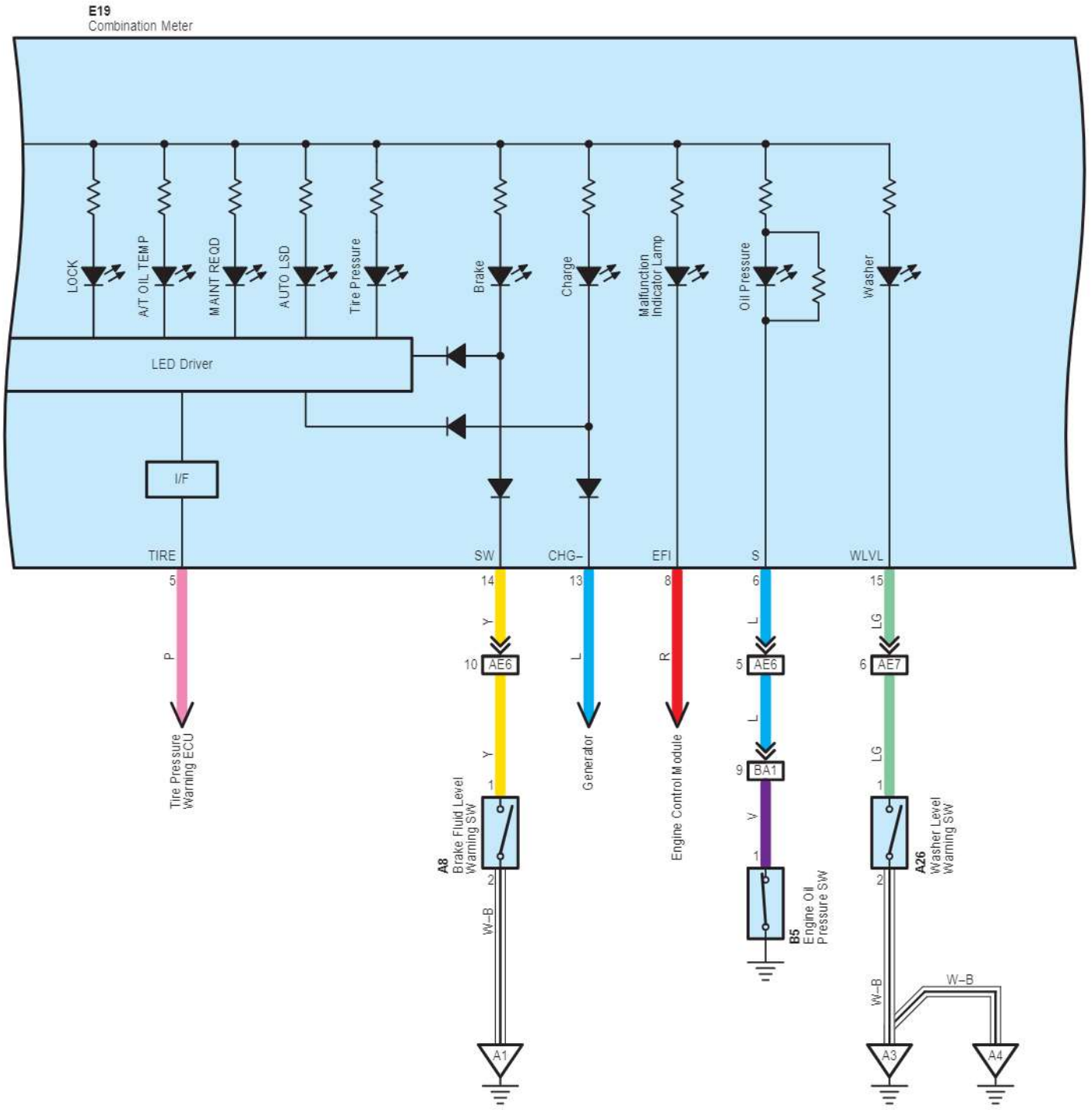
* 1 : USA
* 2 : Except USA



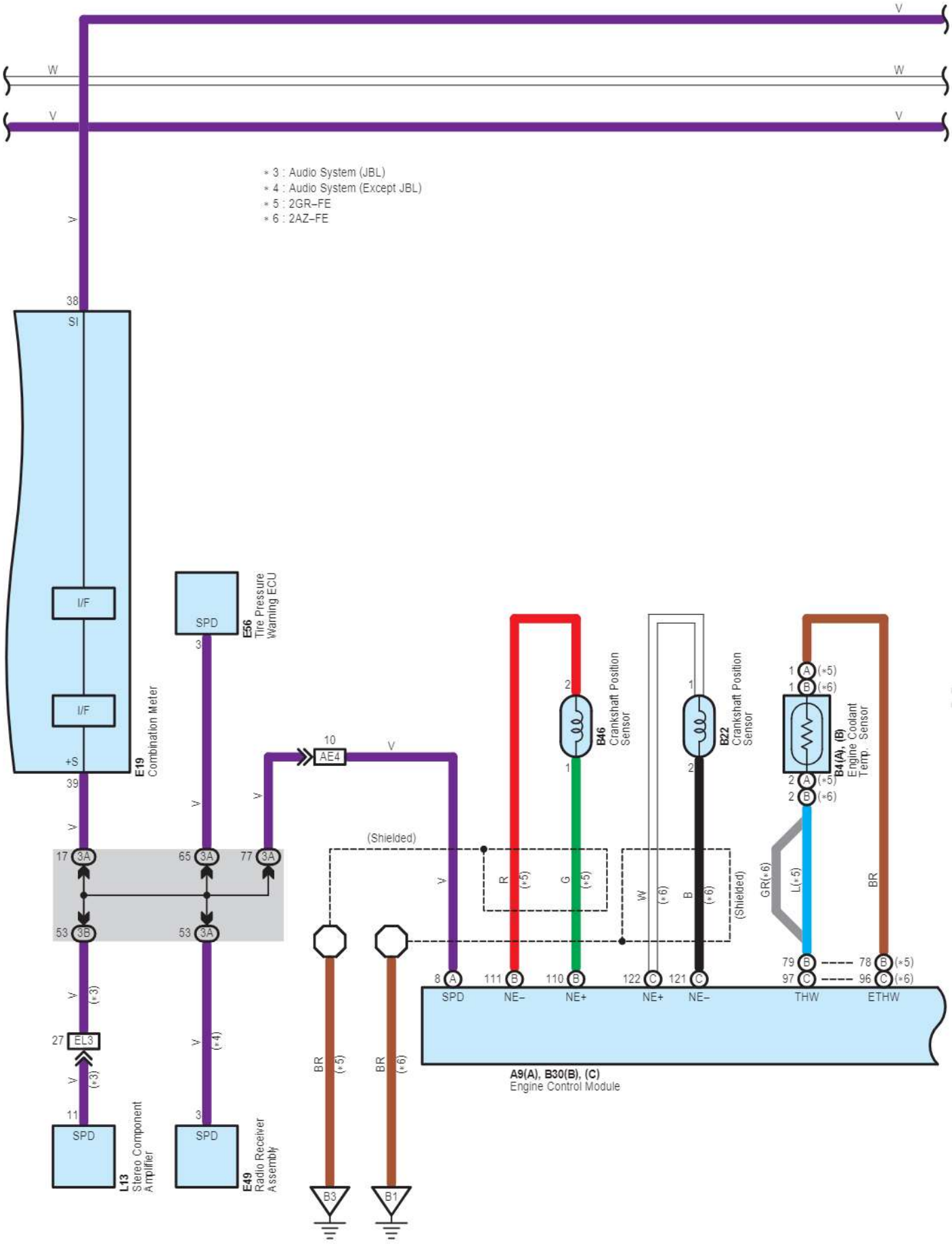


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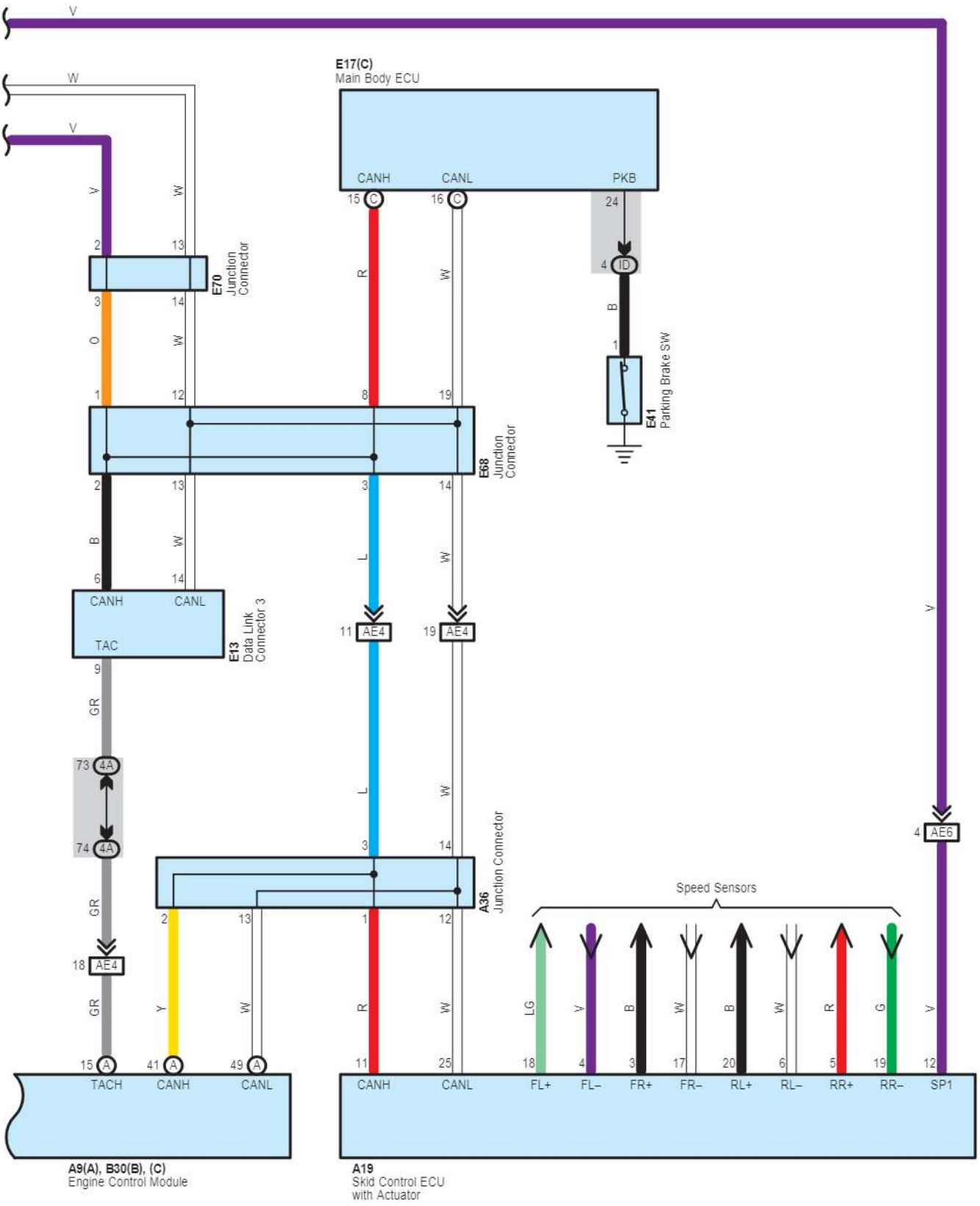




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Combination Meter

: Parts Location

Code		See Page	Code		See Page	Code	See Page
A8		50 (2GR–FE)	B4	A	51 (2GR–FE)	E19	54
		52 (2AZ–FE)		B	53 (2AZ–FE)	E41	55
A9	A	50 (2GR–FE)	B5		51 (2GR–FE)	E49	55
		52 (2AZ–FE)			53 (2AZ–FE)	E56	55
A17		50 (2GR–FE)	B22		53 (2AZ–FE)	E68	55
		52 (2AZ–FE)	B30	B	51 (2GR–FE)	E69	55
A19		50 (2GR–FE)		C	53 (2AZ–FE)	E70	55
		52 (2AZ–FE)	B46		51 (2GR–FE)	L13	60
A26		50 (2GR–FE)	E2		54	S2	61
		52 (2AZ–FE)	E13		54		
A36		56	E17	C	54		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IE		
IH		
IM	31	

: Connector Joining Wire Harness and Wire Harness

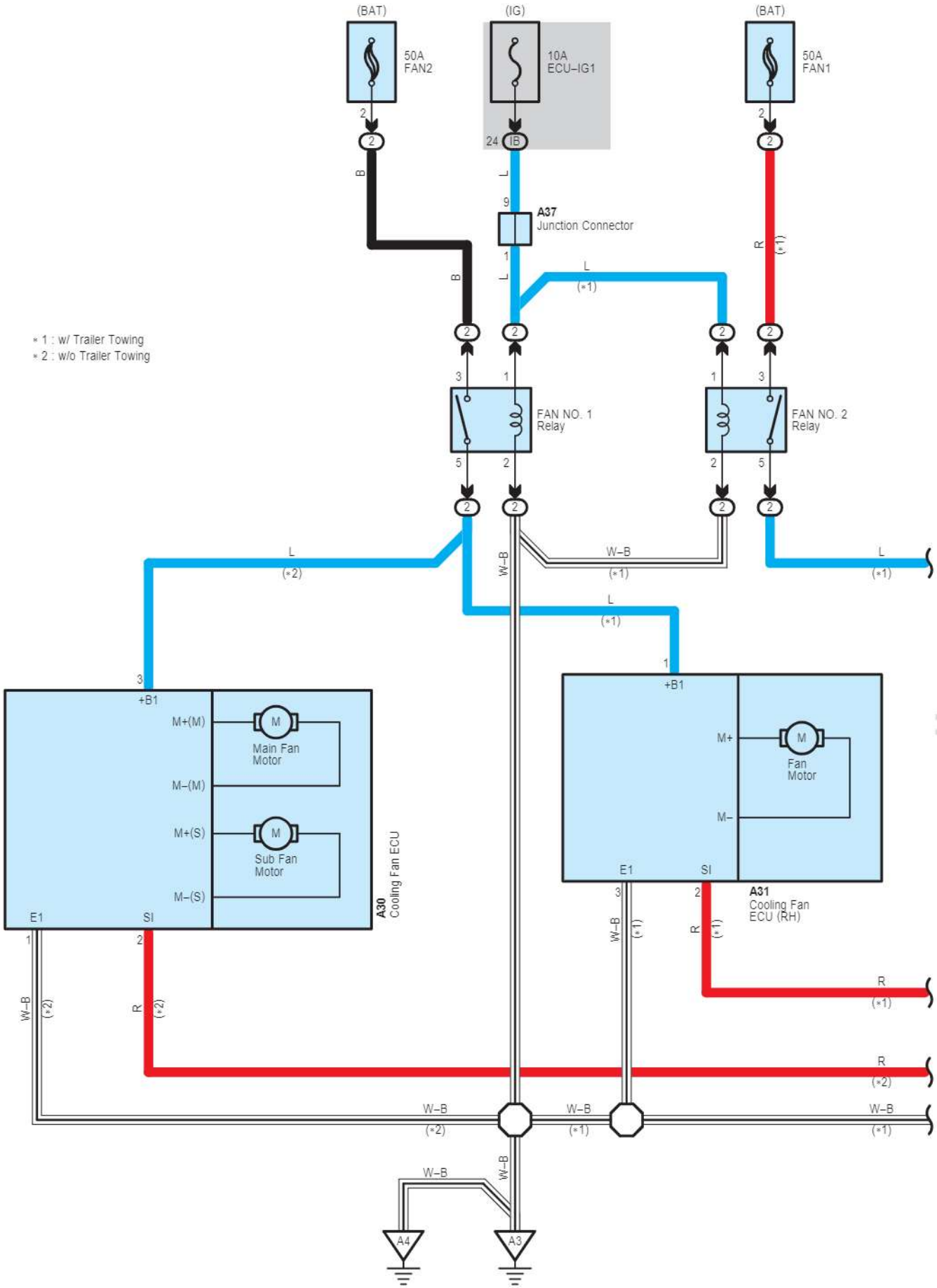
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE6		
AE7	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
	65 (2AZ–FE)	
EK2	66	Instrument Panel Wire and Floor Wire (Left Kick Panel)
EL3	66	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
SK1	66	Fuel Gauge Wire and Floor Wire (Under the Console Box)

: Ground Points

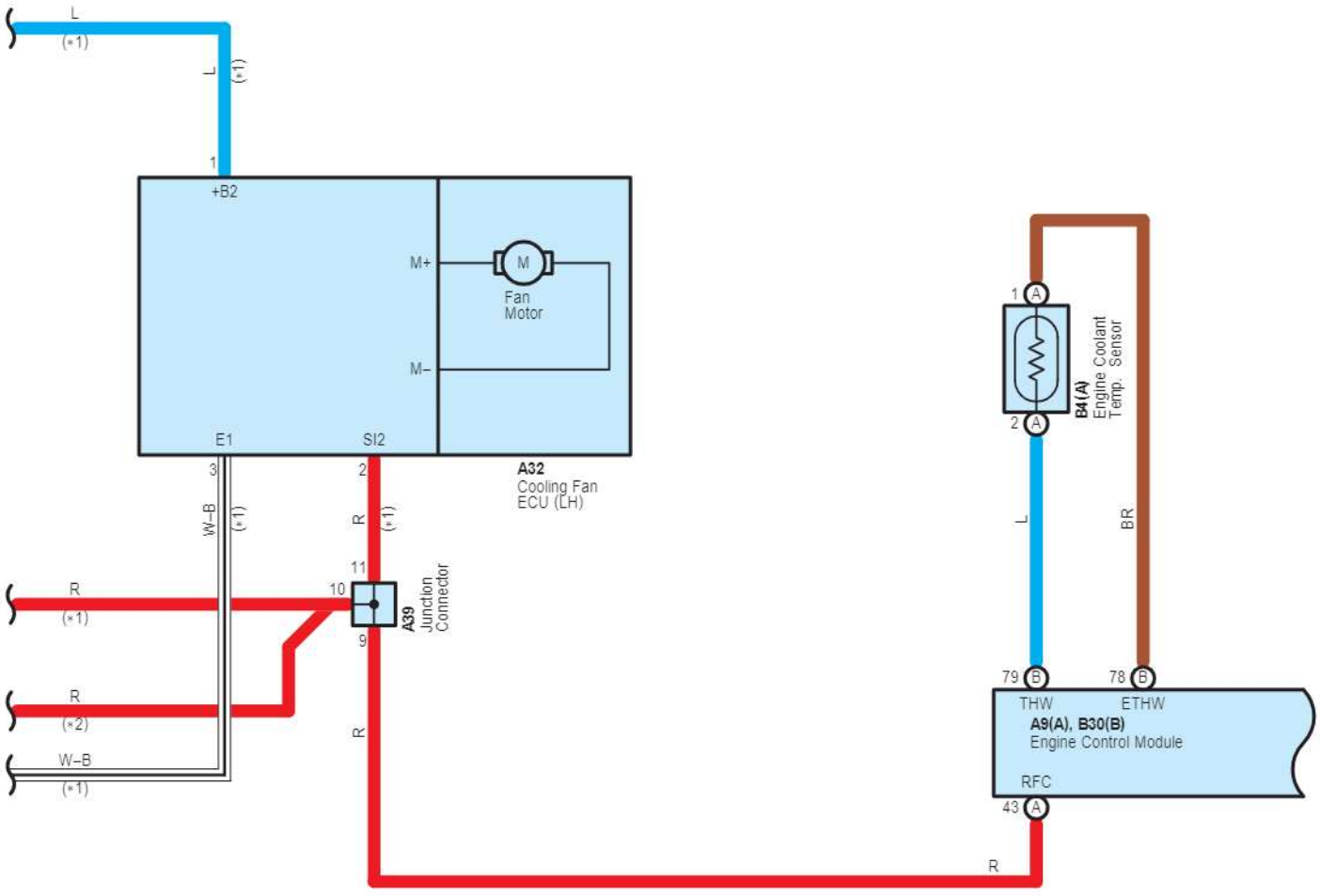
Code	See Page	Ground Points Location
A1	64 (2GR–FE)	Front Left Fender
	65 (2AZ–FE)	
A3	64 (2GR–FE)	Front Right Fender
	65 (2AZ–FE)	
A4	64 (2GR–FE)	
	65 (2AZ–FE)	
B1	65 (2AZ–FE)	Left Side of the Cylinder Head
B3	64 (2GR–FE)	
E1	66	Left Kick Panel

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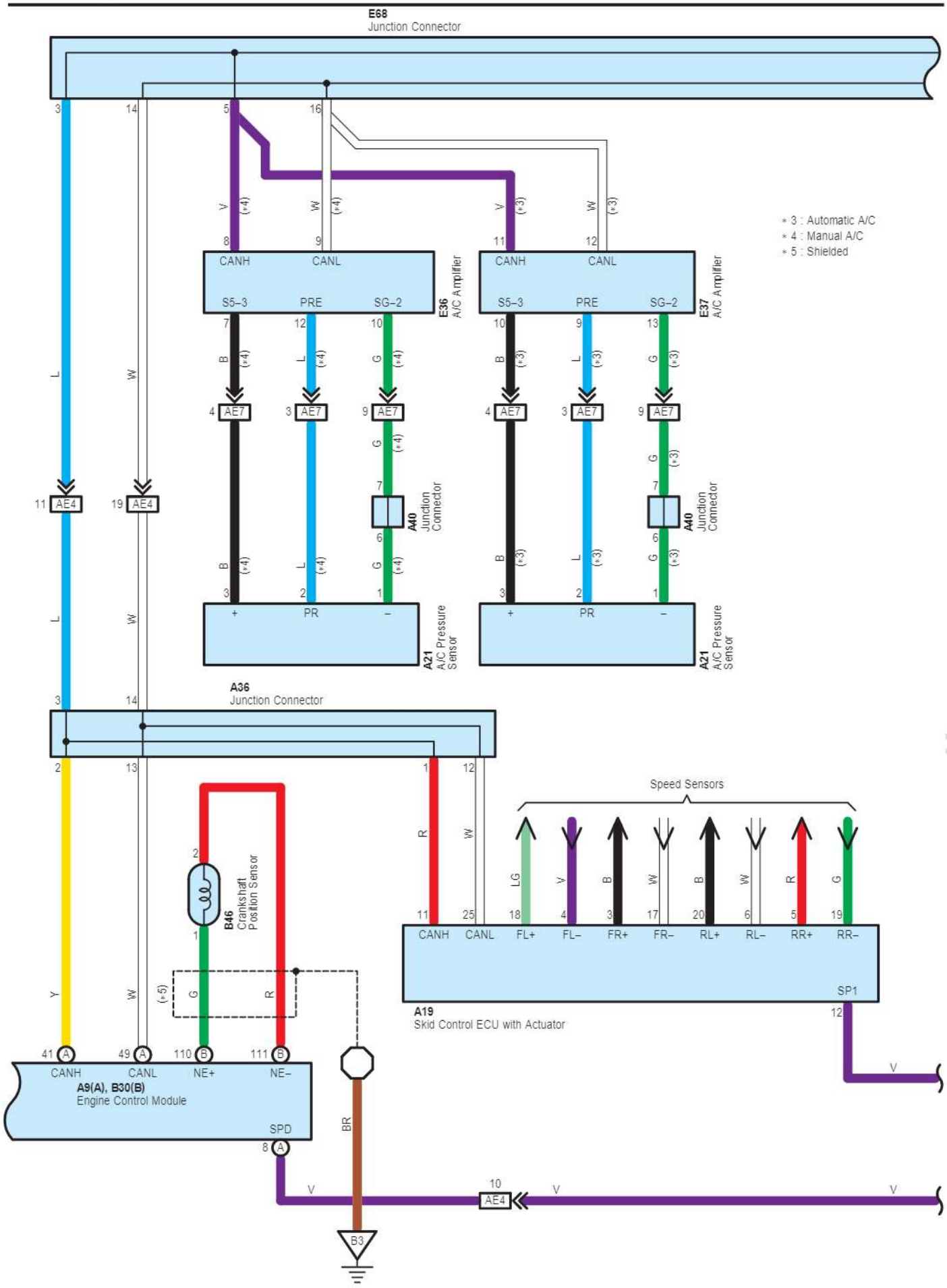


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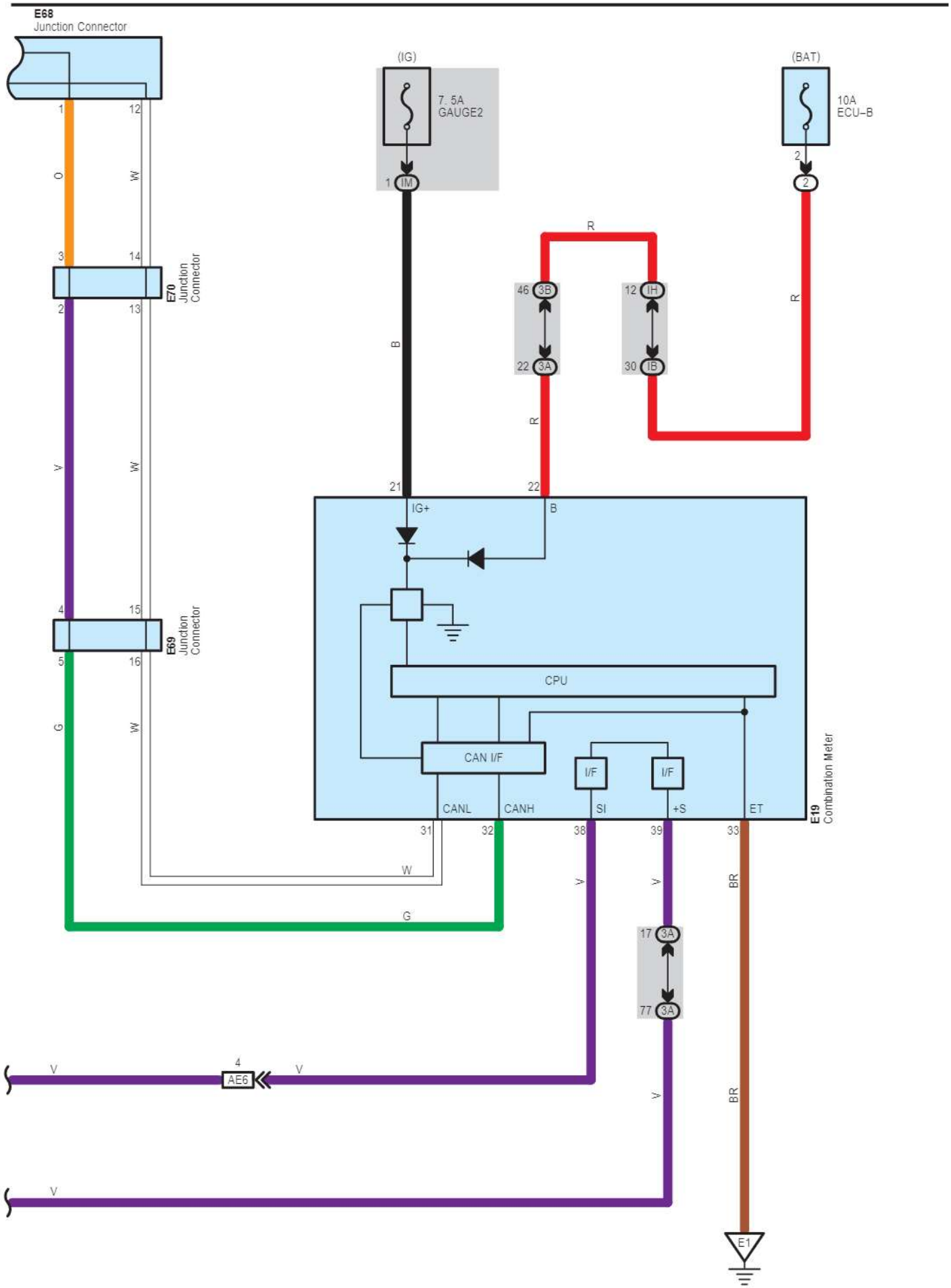


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Cooling Fan for 2GR–FE



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Cooling Fan for 2GR–FE

System Outline

In accordance with signals from the engine control module, which calculates the engine coolant temperature, the air conditioner refrigerant pressure and the engine and vehicle speeds, the cooling fan controller seamlessly controls rotational speed of the cooling fan, to maintain the balance between the cooling performance and the air conditioning performance.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A9 A	50 (2GR–FE)	A37	56	E36	55
A19	50 (2GR–FE)	A39	50 (2GR–FE)	E37	55
A21	50 (2GR–FE)	A40	50 (2GR–FE)	E68	55
A30	50 (2GR–FE)	B4 A	51 (2GR–FE)	E69	55
A31	50 (2GR–FE)	B30 B	51 (2GR–FE)	E70	55
A32	50 (2GR–FE)	B46	51 (2GR–FE)		
A36	56	E19	54		

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)

▭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IH	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	

▭ : Connector Joining Wire Harness and Wire Harness

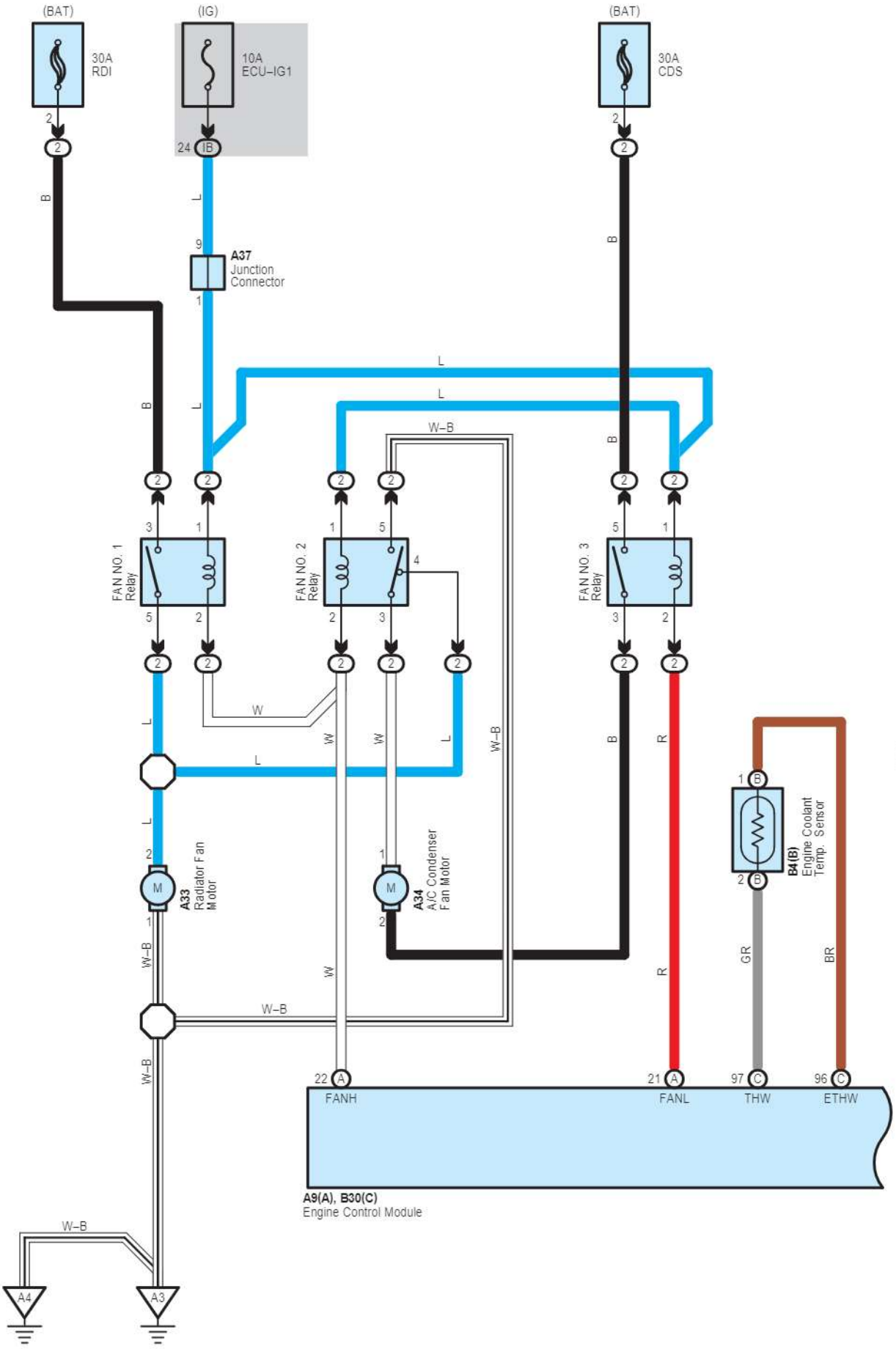
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE6		
AE7	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)

▽ : Ground Points

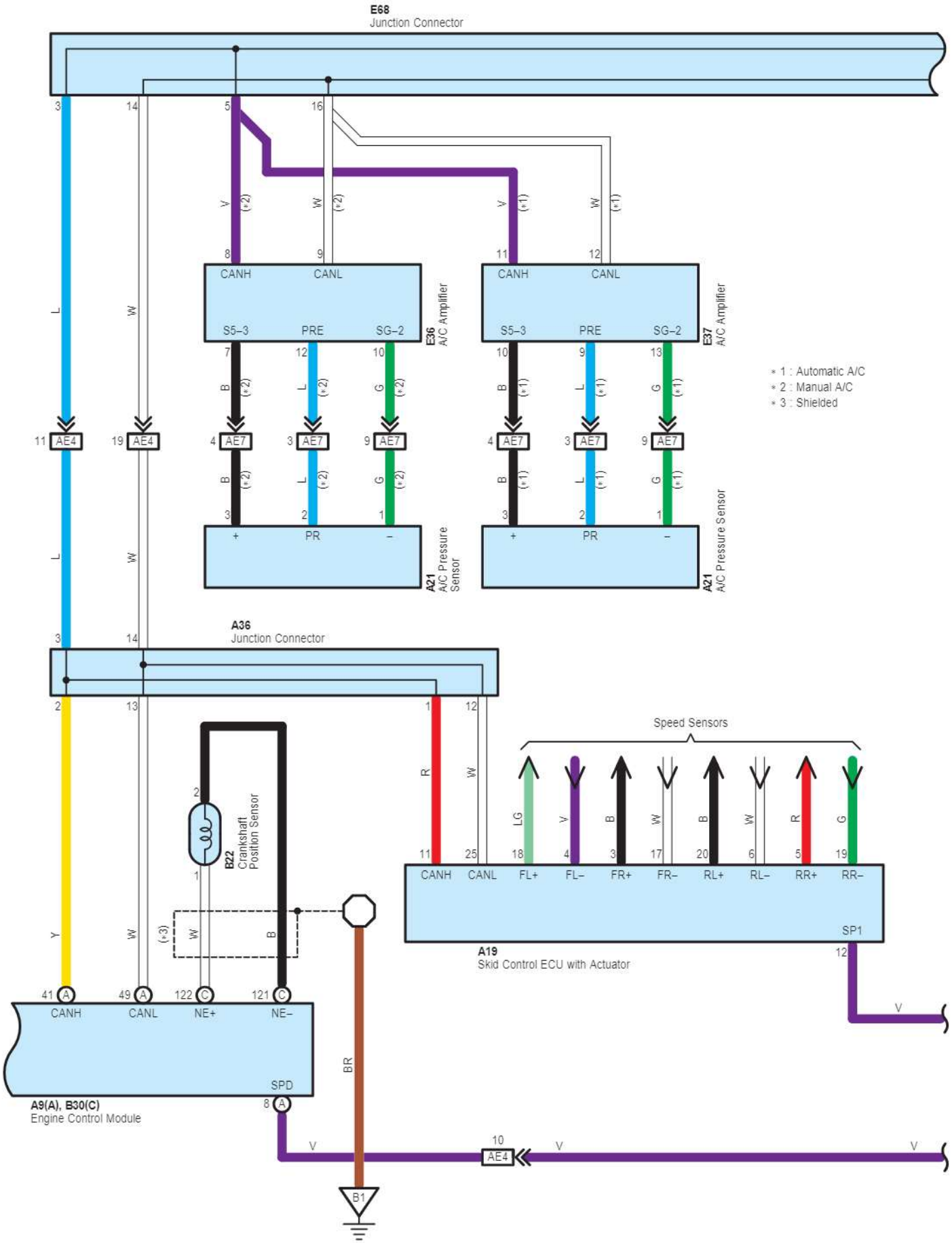
Code	See Page	Ground Points Location
A3	64 (2GR–FE)	Front Right Fender
A4		
B3	64 (2GR–FE)	Left Side of the Cylinder Head
E1	66	Left Kick Panel

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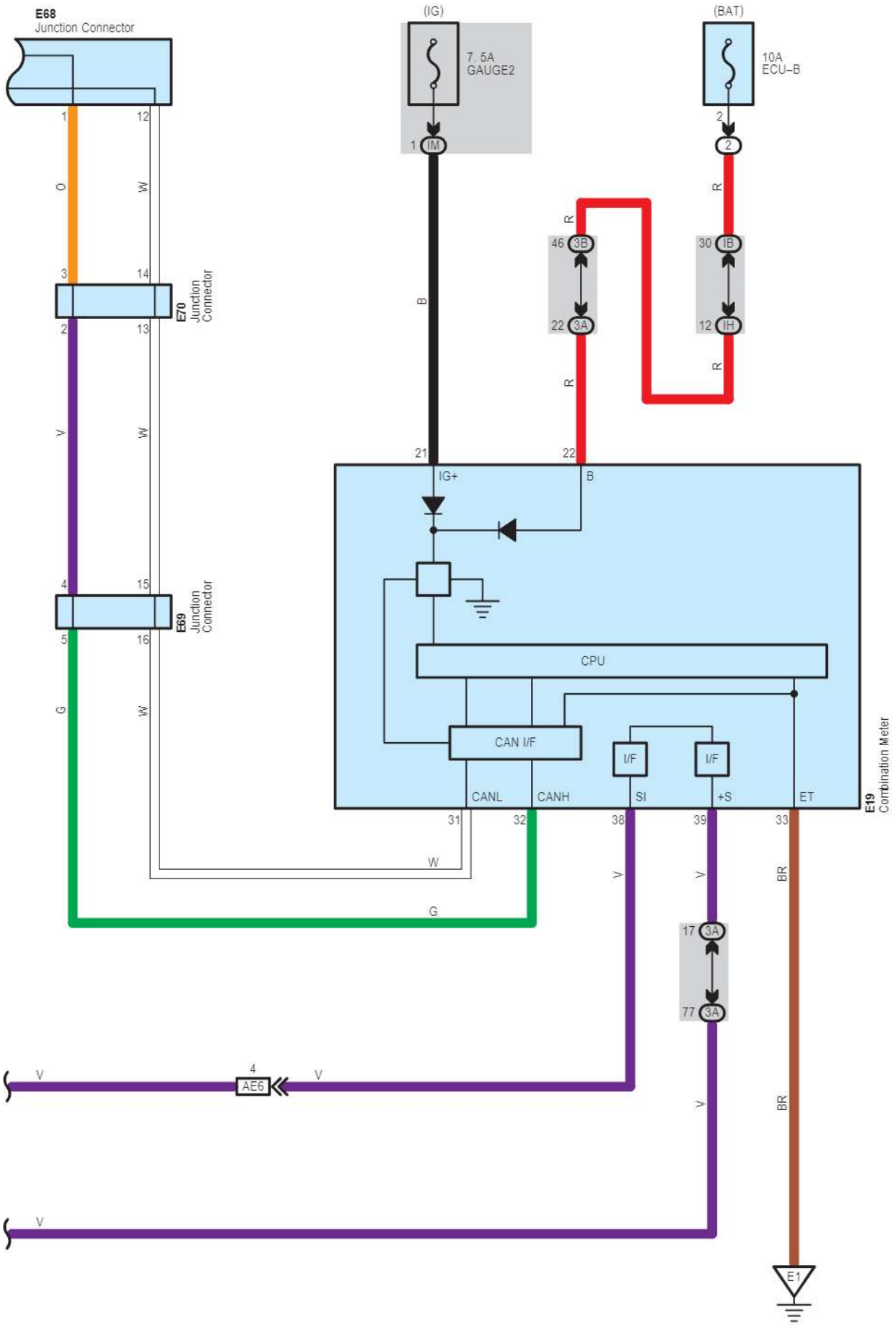


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Radiator Fan and Condenser Fan for 2AZ–FE



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System Outline

In accordance with signals from the engine control module, which calculates the engine coolant temperature, the air conditioner refrigerant pressure and the engine and vehicle speeds, the fan relay is activated to control the fan motor in two steps, to maintain the balance between the cooling performance and the air conditioning performance.

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A9 A	52 (2AZ–FE)	A37	56	E37	55
A19	52 (2AZ–FE)	B4 B	53 (2AZ–FE)	E68	55
A21	52 (2AZ–FE)	B22	53 (2AZ–FE)	E69	55
A33	52 (2AZ–FE)	B30 C	53 (2AZ–FE)	E70	55
A34	52 (2AZ–FE)	E19	54		
A36	56	E36	55		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	27 (2AZ–FE)	Engine Room R/B No.2 (Engine Compartment Right)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
3B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IH	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	

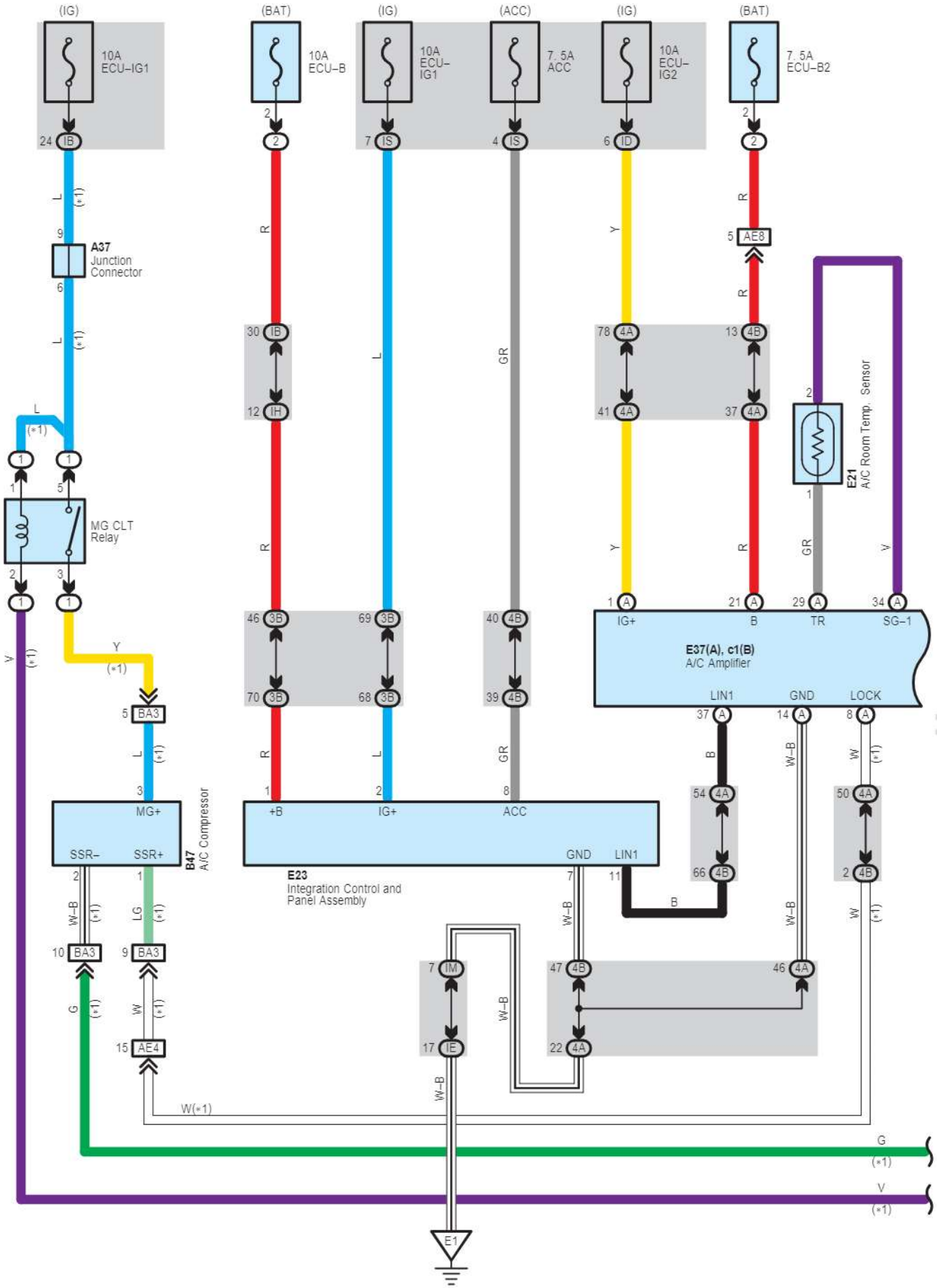
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE6		
AE7	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)

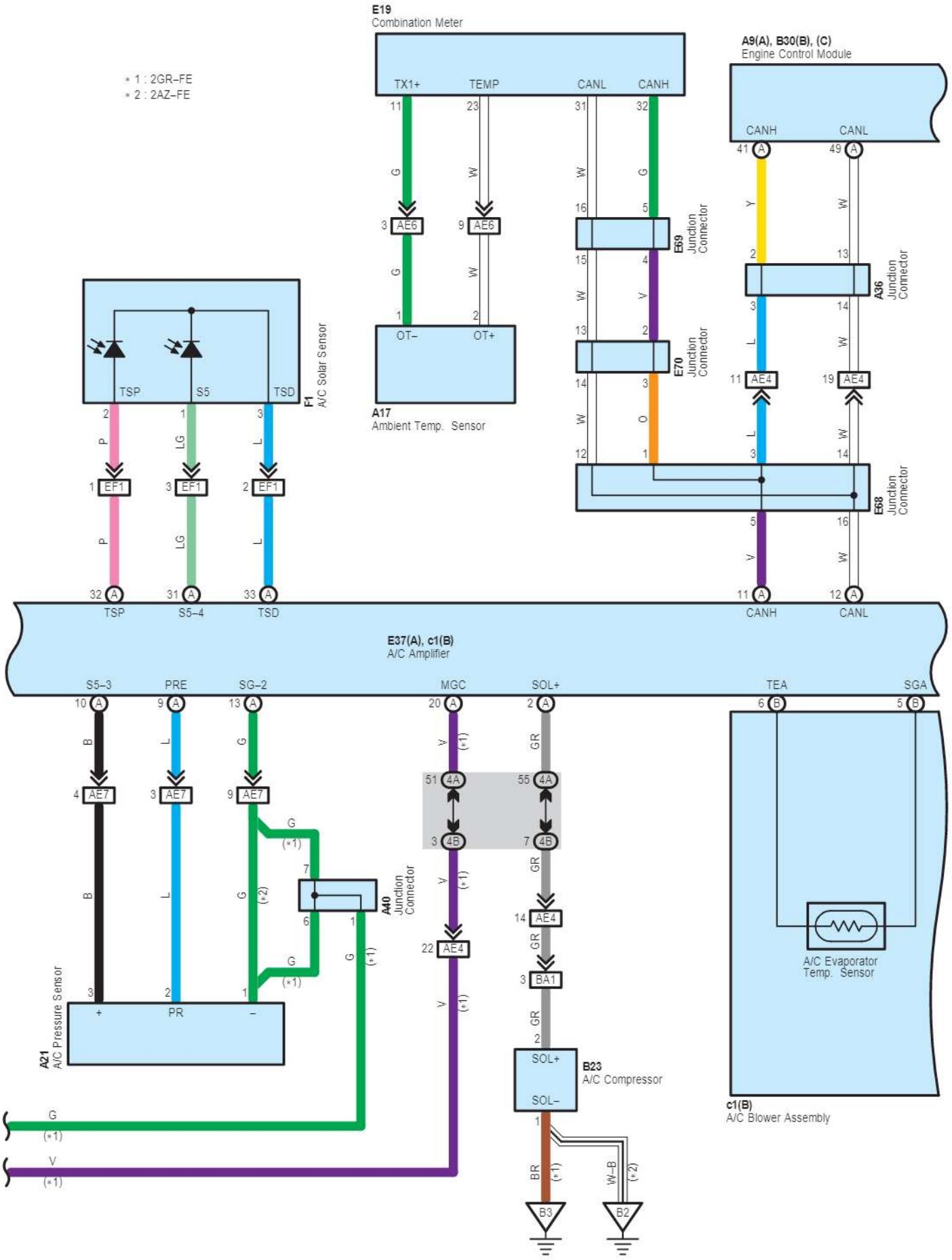
: Ground Points

Code	See Page	Ground Points Location
A3	65 (2AZ–FE)	Front Right Fender
A4		
B1	65 (2AZ–FE)	Left Side of the Cylinder Head
E1	66	Left Kick Panel

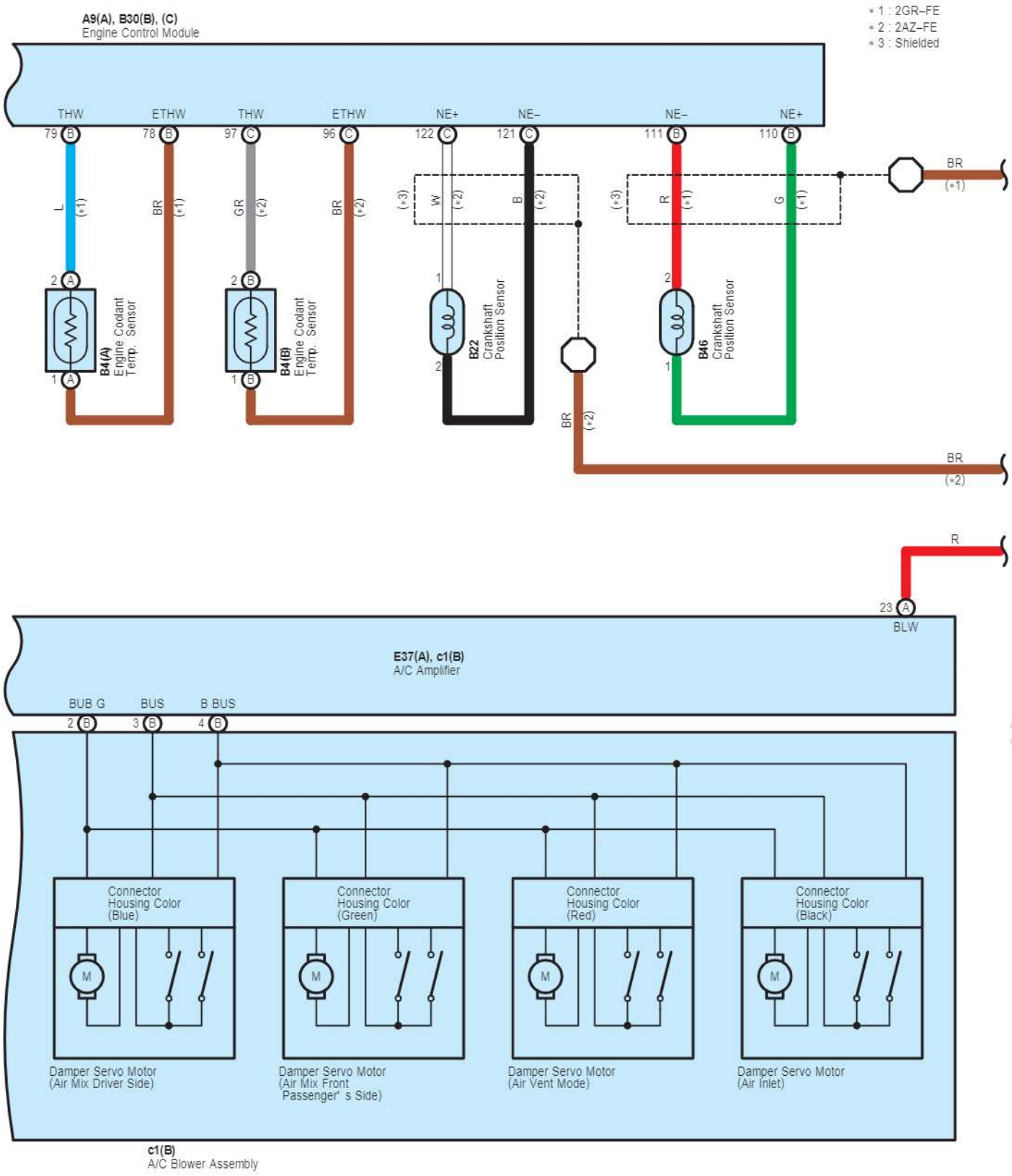
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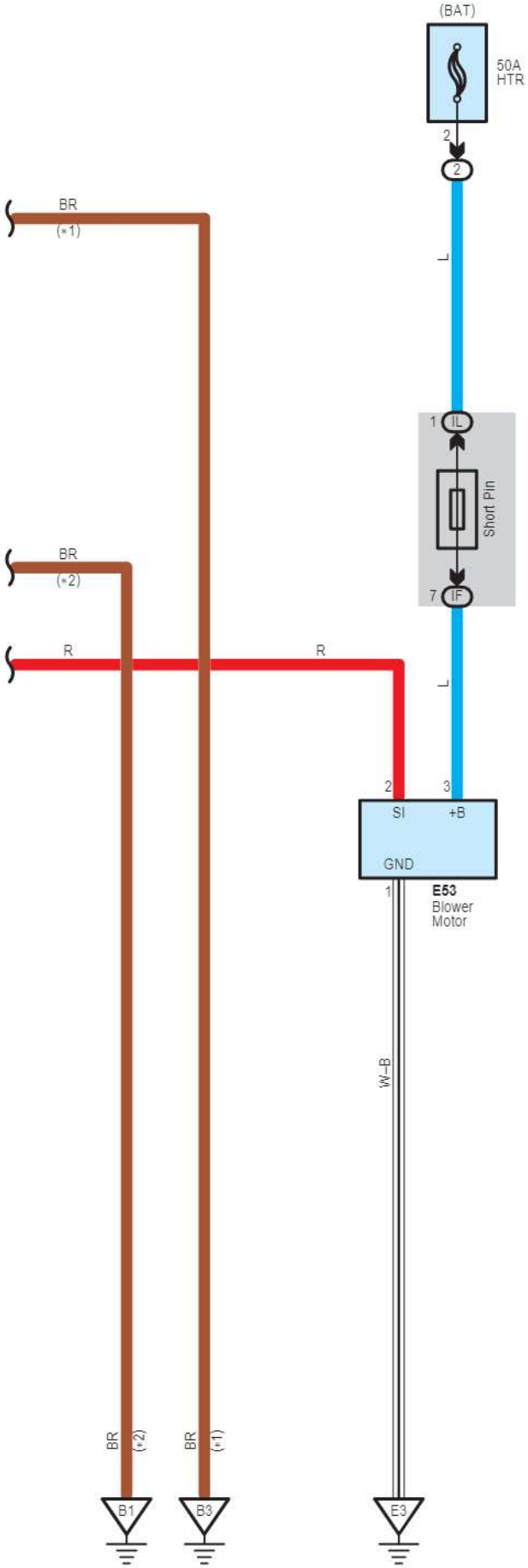
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○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A9 A	50 (2GR–FE)	B4 A	51 (2GR–FE)	E21	54
	52 (2AZ–FE)	B4 B	53 (2AZ–FE)	E23	54
A17	50 (2GR–FE)	B22	53 (2AZ–FE)	E37 A	55
	52 (2AZ–FE)	B23	51 (2GR–FE)	E53	55
A21	50 (2GR–FE)		53 (2AZ–FE)	E68	55
	52 (2AZ–FE)	B30 B	51 (2GR–FE)	E69	55
A36	56	B30 C	53 (2AZ–FE)	E70	55
A37	56	B46	51 (2GR–FE)	F1	57
A40	50 (2GR–FE)	B47	51 (2GR–FE)	c1 B	57
	52 (2AZ–FE)	E19	54		

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3B	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
4B		
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IE		
IF		
IH		
IL	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
IM	31	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IS		

▭ : Connector Joining Wire Harness and Wire Harness

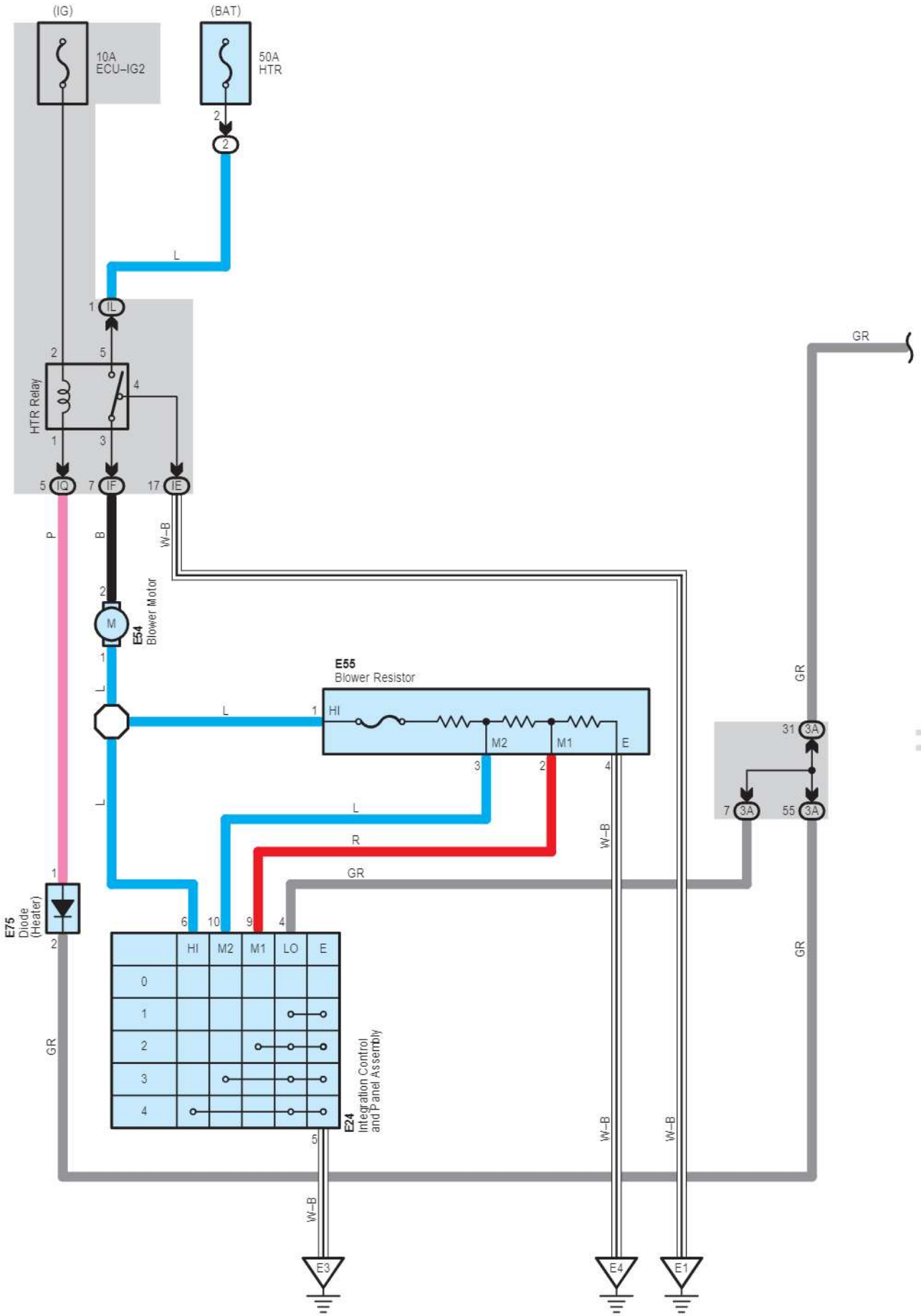
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE6		
AE7	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)
AE8		
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
	65 (2AZ–FE)	
BA3	64 (2GR–FE)	
EF1	66	Instrument Panel Wire and Instrument Panel No.2 Wire (Left Side of the Instrument Panel)

▽ : Ground Points

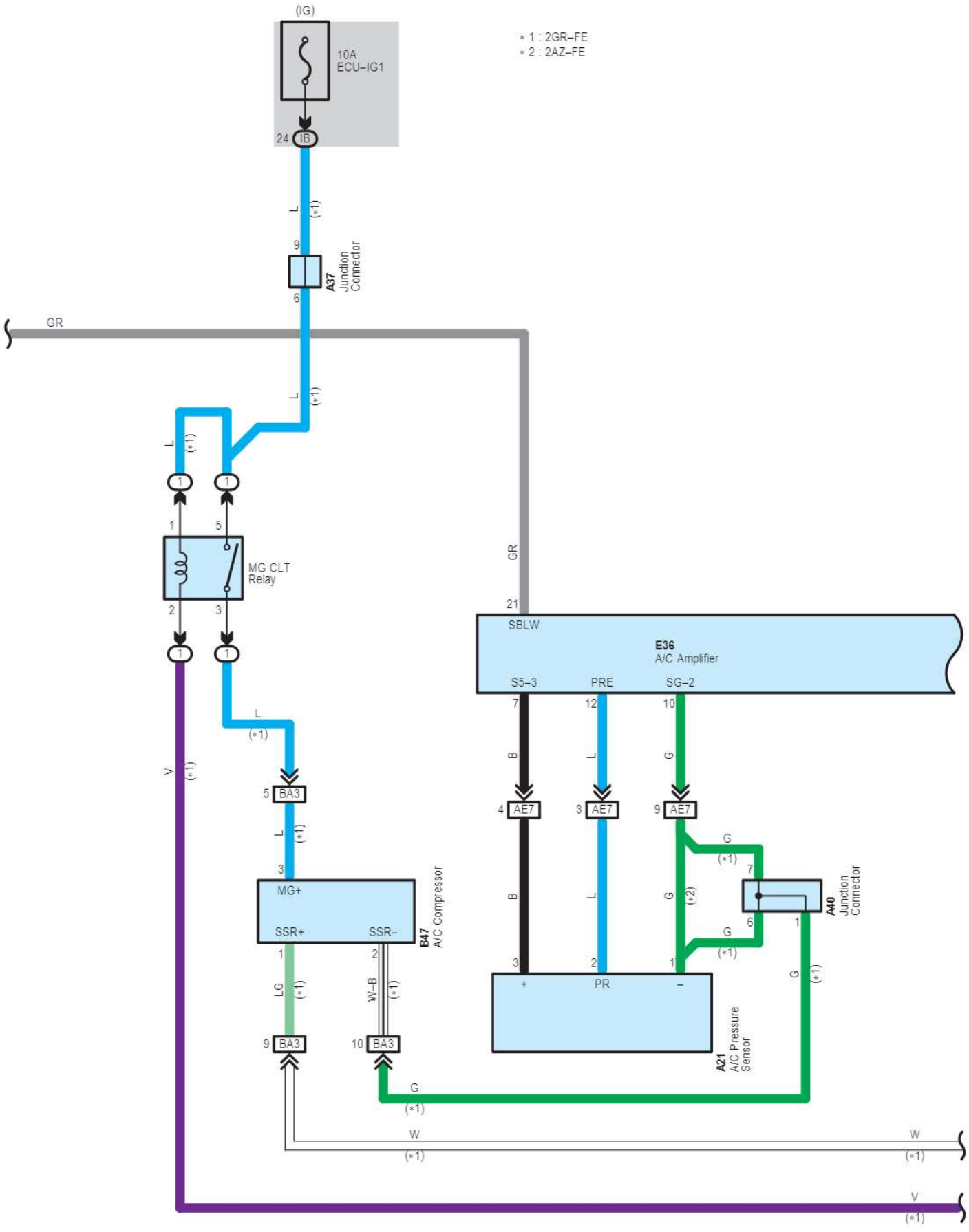
Code	See Page	Ground Points Location
B1	65 (2AZ–FE)	Left Side of the Cylinder Head
B2		
B3	64 (2GR–FE)	
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center

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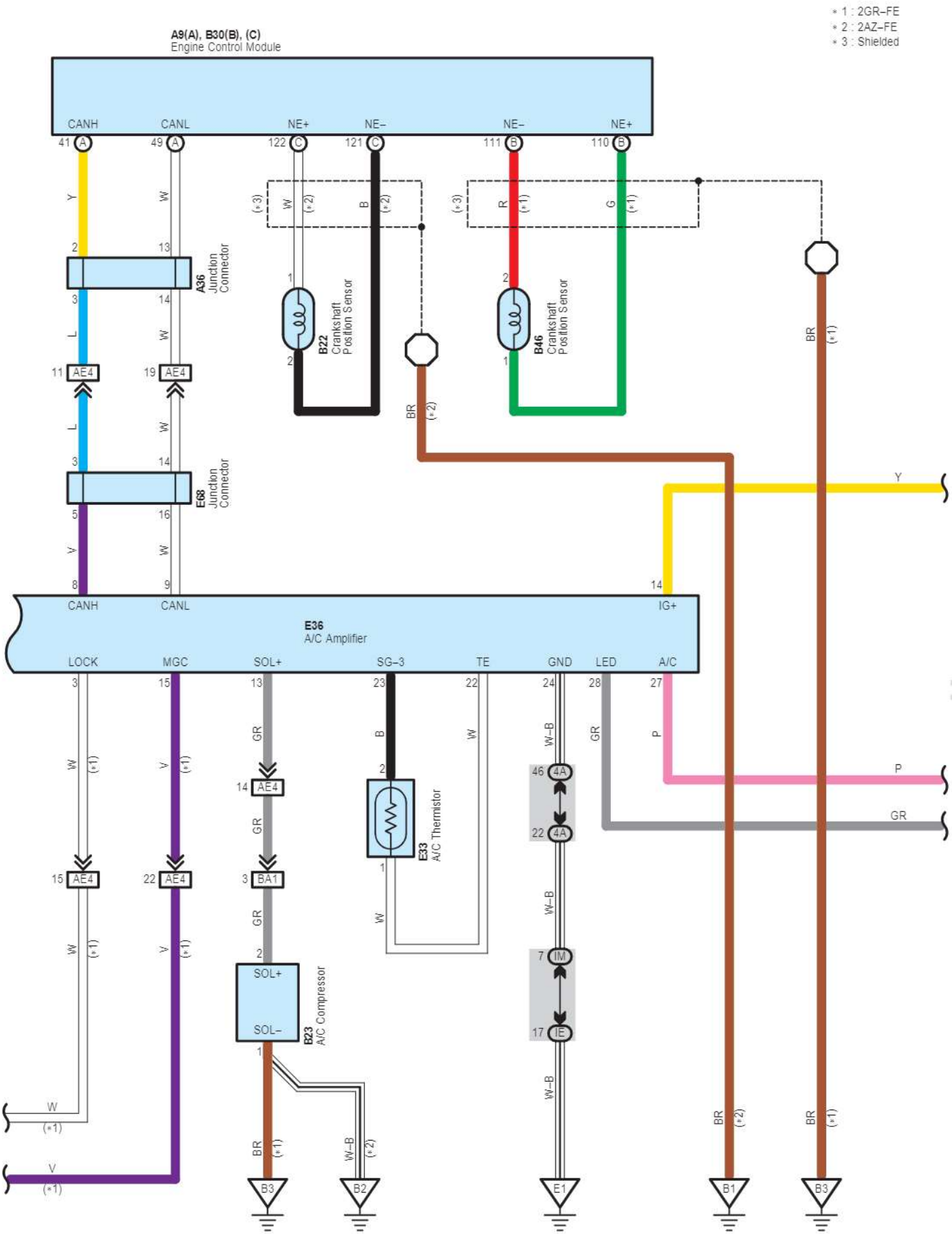
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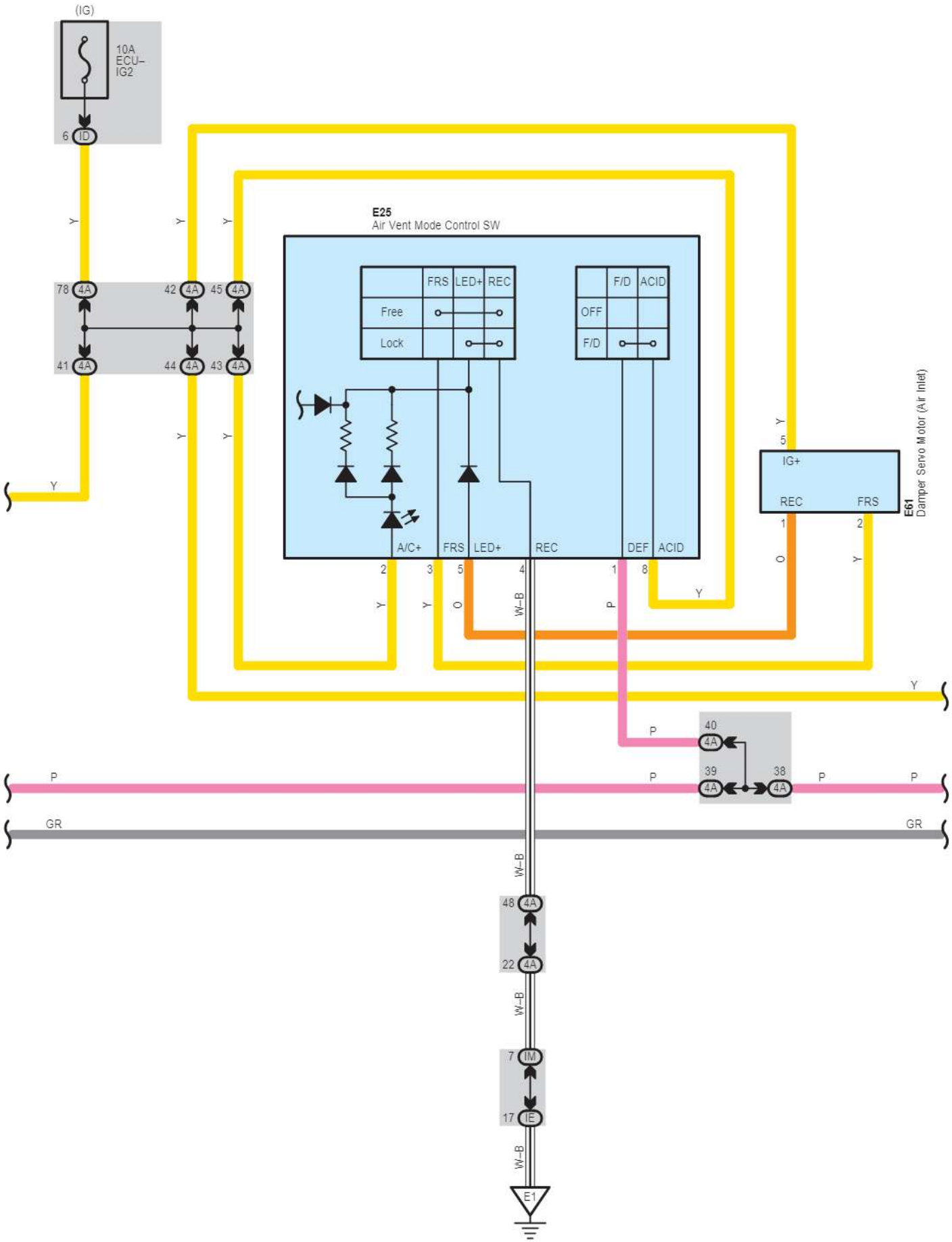


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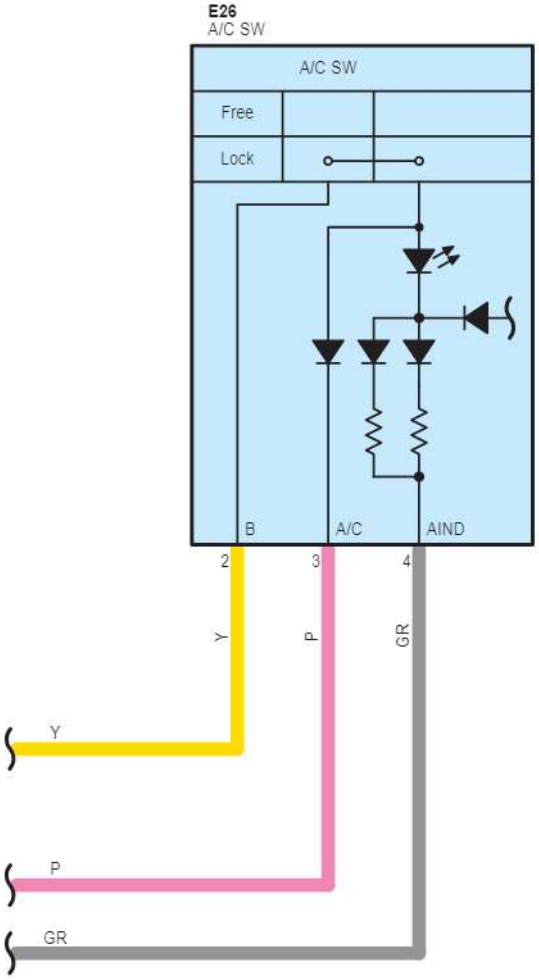


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* 1 : 2GR-FE
* 2 : 2AZ-FE
* 3 : Shielded
A9(A), B30(B), (C)
Engine Control Module
CANH
CANL
NE+
NE-
NE-
NE+
41 (A)
49 (A)
122 (C)
121 (C)
111 (B)
110 (B)
A36 Junction Connector
B22 Crankshaft Position Sensor
B46 Crankshaft Position Sensor
E68 Junction Connector
E36 A/C Amplifier
CANH
CANL
IG+
LOCK
MGC
SOL+
SG-3
TE
GND
LED
A/C
E33 A/C Thermistor
B23 A/C Compressor
SOL+
SOL-
B3
B2
E1
B1
B3
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: Parts Location

Code		See Page	Code		See Page	Code	See Page
A9	A	50 (2GR–FE)	B23		51 (2GR–FE)	E33	54
		52 (2AZ–FE)			53 (2AZ–FE)	E36	55
A21		50 (2GR–FE)	B30	B	51 (2GR–FE)	E54	55
		52 (2AZ–FE)		C	53 (2AZ–FE)	E55	55
A36		56	B46		51 (2GR–FE)	E61	55
A37		56	B47		51 (2GR–FE)	E68	55
A40		50 (2GR–FE)	E24		54	E75	55
		52 (2AZ–FE)	E25		54		
B22		53 (2AZ–FE)	E26		54		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (2GR–FE)	Engine Room R/B No.1 (Engine Compartment Left)
	23 (2AZ–FE)	
2	26 (2GR–FE)	Engine Room R/B No.2 (Engine Compartment Right)
	27 (2AZ–FE)	

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3A	38	Instrument Panel Wire and J/B No.3 (Instrument Panel Center)
4A	44	Instrument Panel Wire and J/B No.4 (Instrument Panel Center)
IB	30	Engine Room Main Wire and Instrument Panel J/B (Cowl Side Left)
ID	30	Instrument Panel Wire and Instrument Panel J/B (Cowl Side Left)
IE		
IF		
IL		
IM	31	
IQ		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
AE4	66	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
AE7	66	Engine Room Main Wire and Instrument Panel Wire (Right Side of the Instrument Panel)
BA1	64 (2GR–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.1 and Engine Room J/B No.1)
	65 (2AZ–FE)	
BA3	64 (2GR–FE)	

: Ground Points

Code	See Page	Ground Points Location
B1	65 (2AZ–FE)	Left Side of the Cylinder Head
B2		
B3	64 (2GR–FE)	
E1	66	Left Kick Panel
E3	66	Instrument Panel Reinforcement Center
E4	66	Right Kick Panel

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