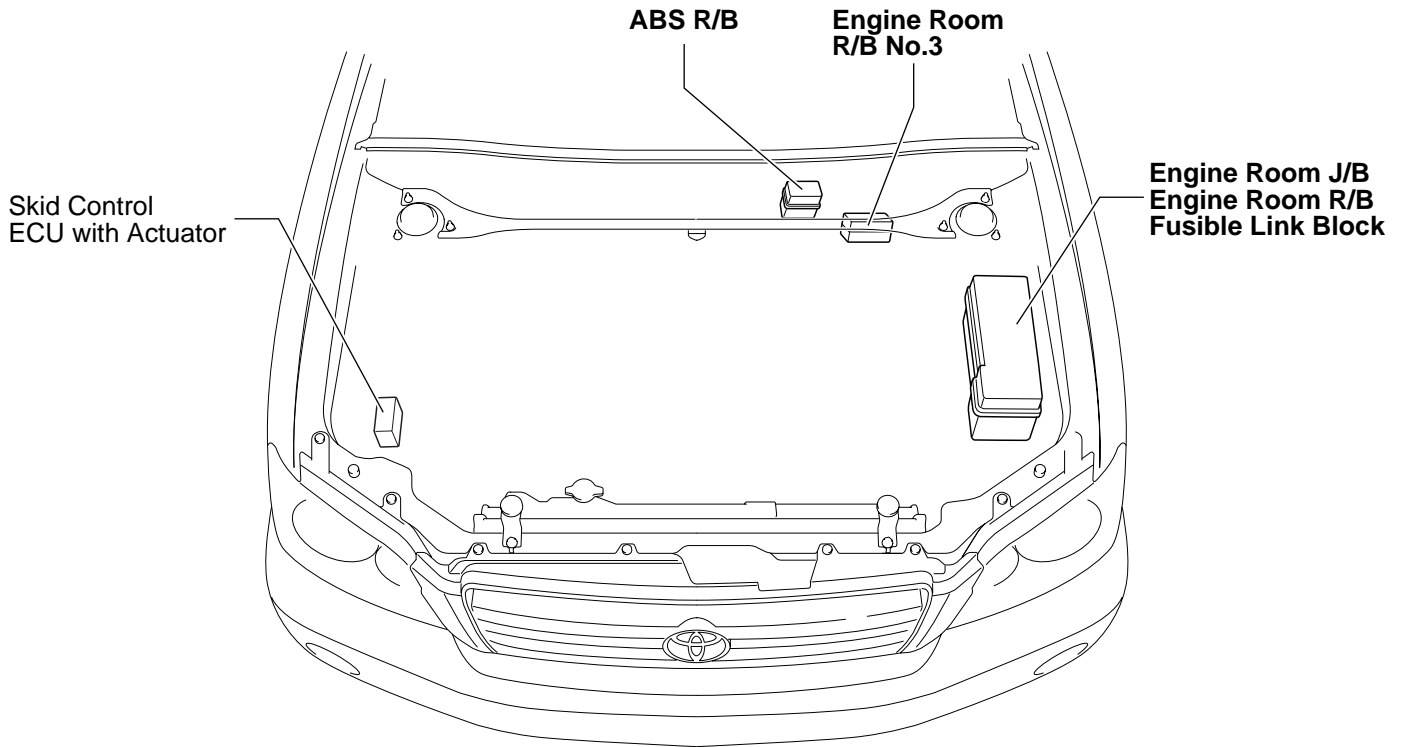
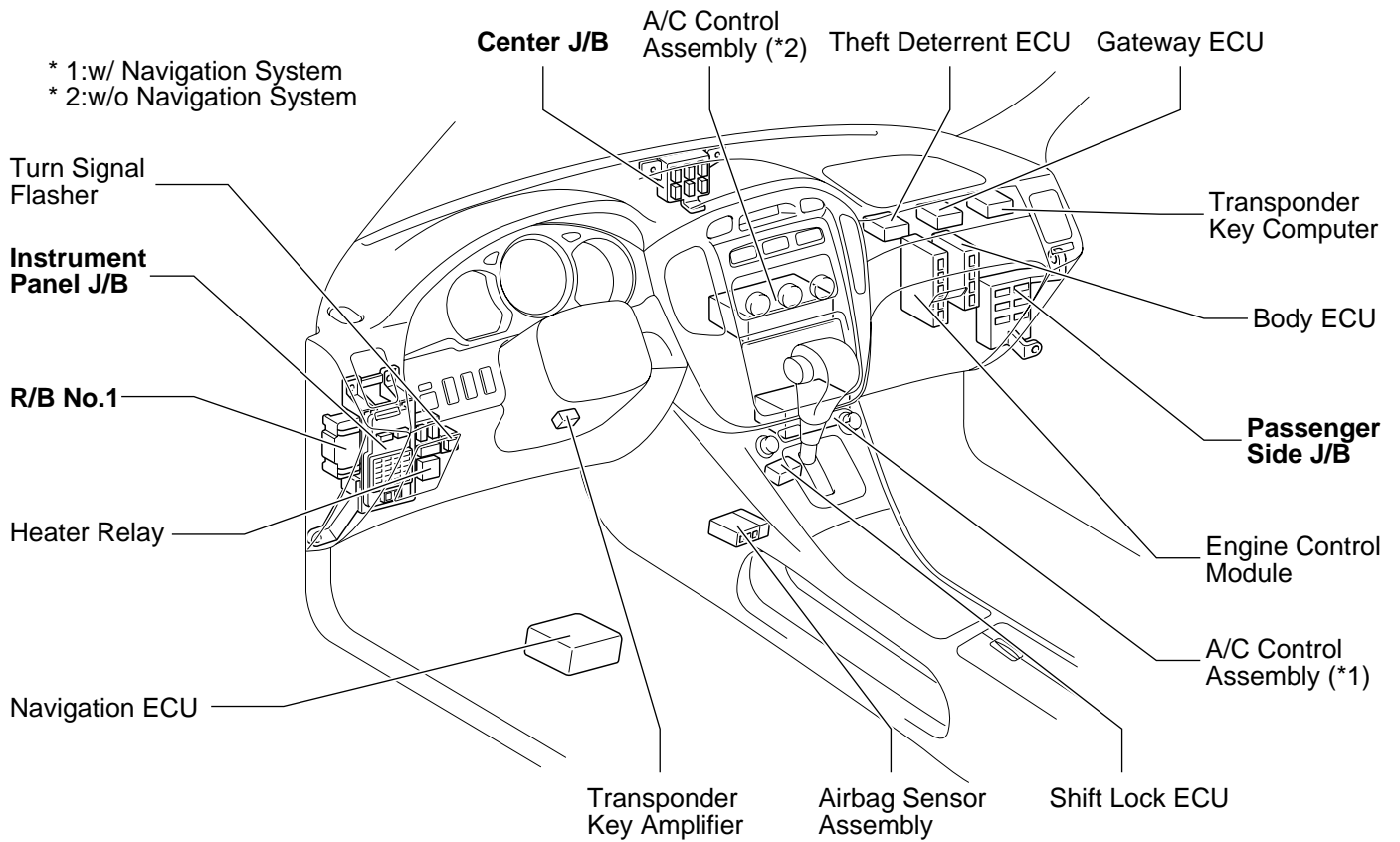


# F RELAY LOCATIONS

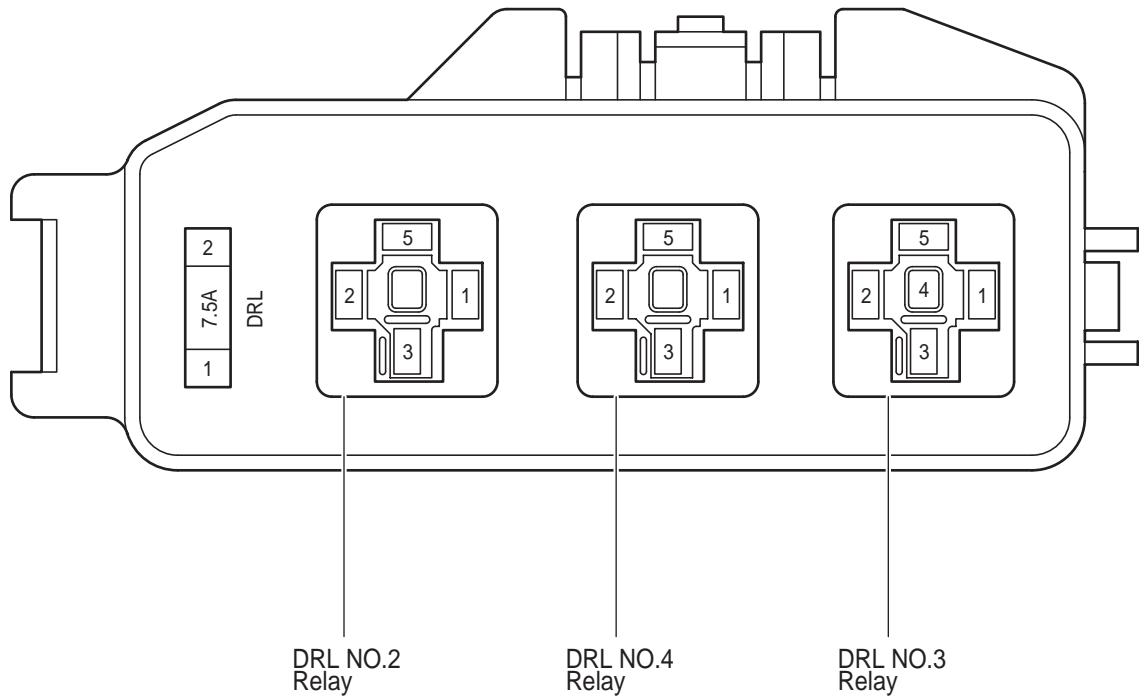
## [Engine Compartment]



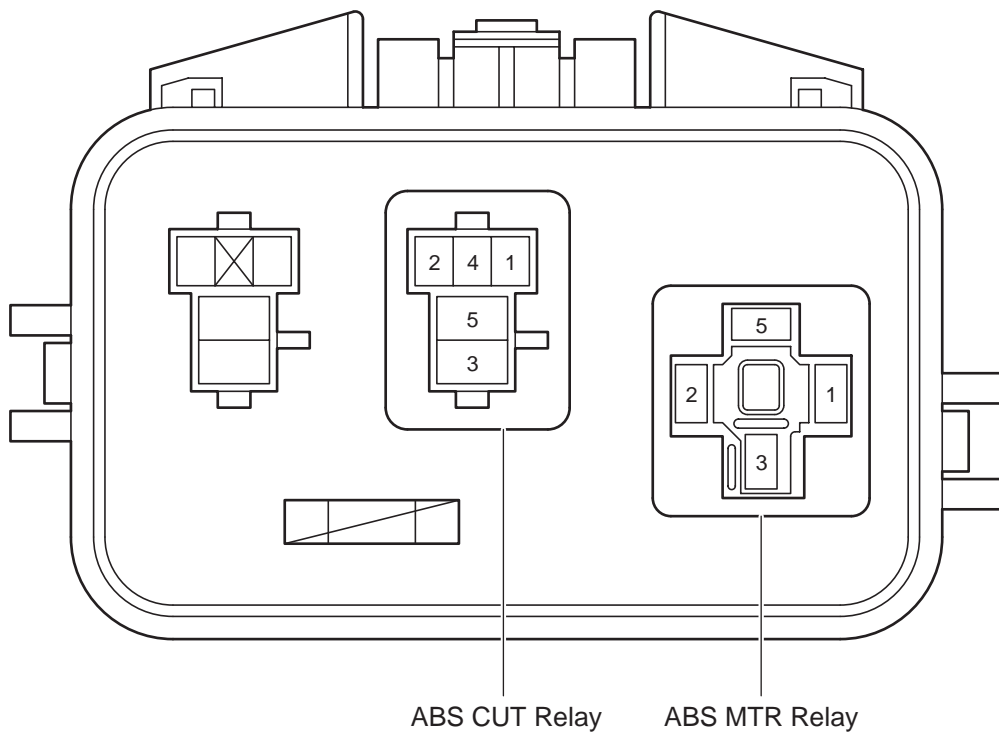
## [Instrument Panel]



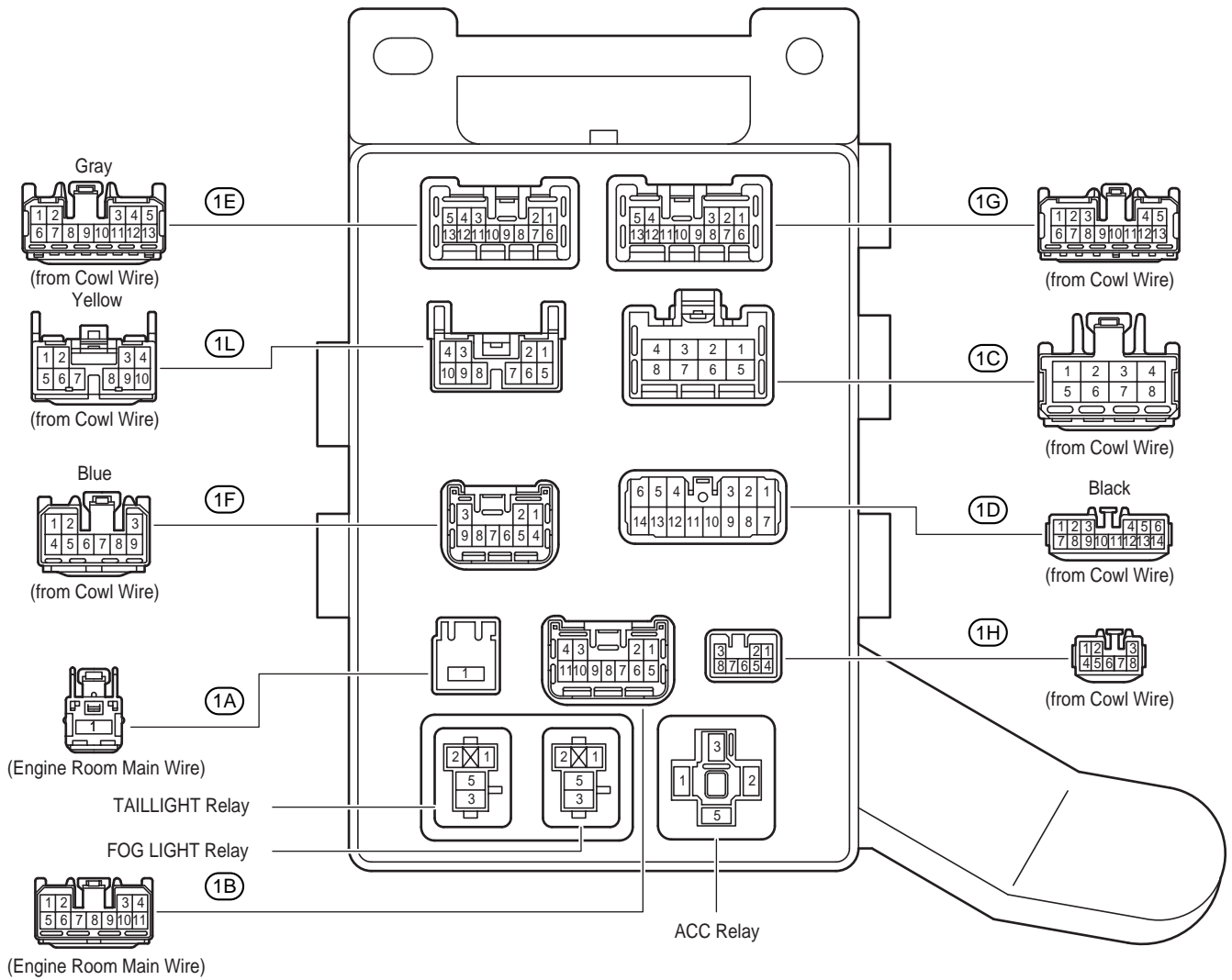
**③ : Engine Room R/B No.3 Engine Compartment Rear Left (See Page 20)**



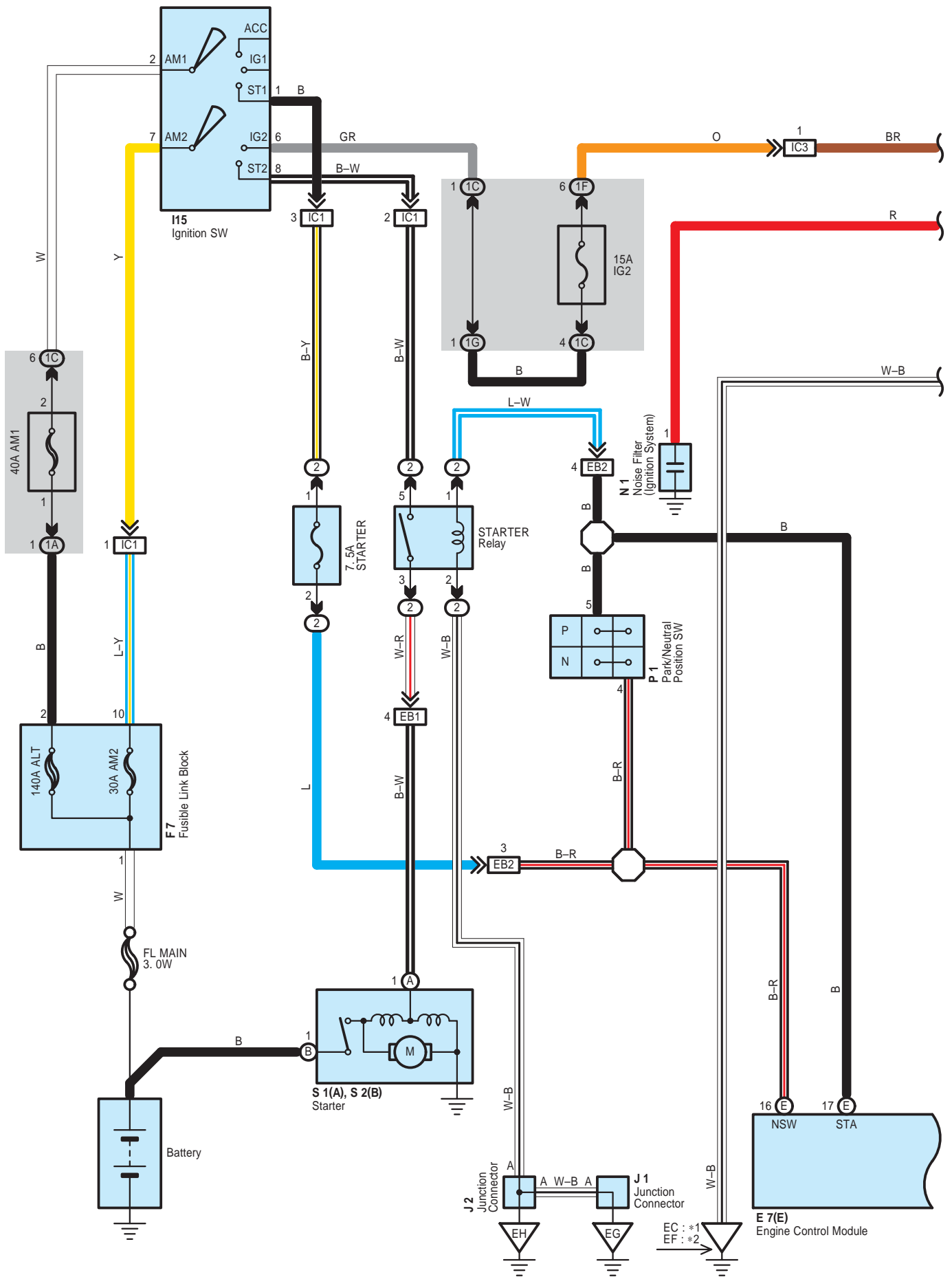
**⑤ : ABS R/B Engine Compartment Rear Left (See Page 20)**

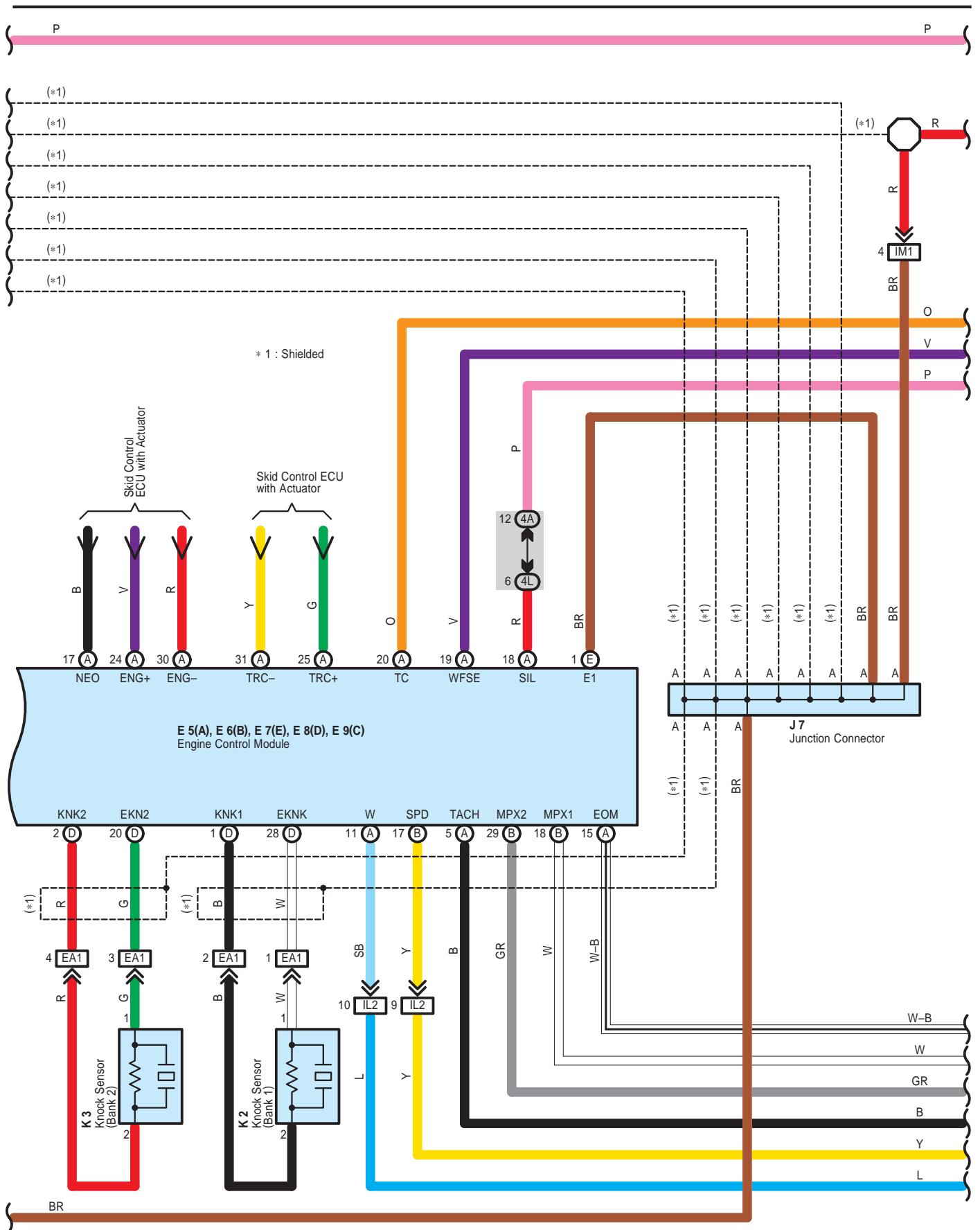


(Inner Circuit : See Page 35)



# Starting and Ignition





# Engine Control for 2AZ-FE

## 2. Control System

### \* SFI system

The SFI system monitors the engine condition through the signals input from each sensor (Input signals from (1) to (12) etc.) to the engine control module. And the control signal is output to TERMINALS #1, #2, #3 and #4 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 (Input signals from (1) to (12) etc.). 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
A6	40 (2AZ-FE)	E6	B 42	K1	41 (2AZ-FE)
A10	A 42	E7	E 42	M1	41 (2AZ-FE)
A11	B 42	E8	D 42	O1	41 (2AZ-FE)
A17	B 42	E9	C 42	P1	41 (2AZ-FE)
A27	42	F12	44	P2	41 (2AZ-FE)
B9	A 42	G1	40 (2AZ-FE)	P5	44
B10	B 42	G5	43	S15	43
C1	40 (2AZ-FE)	H10	43	S27	41 (2AZ-FE)
C2	40 (2AZ-FE)	I8	B 41 (2AZ-FE)	S28	A 43
C6	40 (2AZ-FE)	I9	B 41 (2AZ-FE)	S29	B 43
C7	B 40 (2AZ-FE)	I10	B 41 (2AZ-FE)	S30	A 43
C11	A 42	I11	B 41 (2AZ-FE)	S31	B 43
C12	B 42	J2	41 (2AZ-FE)	T3	41 (2AZ-FE)
C17	44	J6	43	T13	41 (2AZ-FE)
D3	42	J7	43	T14	43
E2	B 40 (2AZ-FE)	J16	43	V16	41 (2AZ-FE)
E5	A 42	J19	44	V15	45

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	24	R/B No.1 (Lower Finish Panel)
2	22	Engine Room R/B (Engine Compartment Left)

## ECT and A/T Indicator for 3MZ-FE

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	29	Cowl Wire and Instrument Panel J/B (Lower Finish Panel)
1G		
1K	28	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
2A	27	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
2B		
2F		
3A	30	Instrument Panel Wire and Center J/B (Behind the Instrument Panel Center)
3B		
3C		
3D		
3E		
3F		
3H	31	
3J		
3K		
4A	33	Cowl Wire and Passenger Side J/B (Right Side of Grove Box)
4D		
4E		
4F		
4H		
4K	32	
4L		
4M		

### : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	50	Front Door LH Wire and Cowl Wire (Left Kick Panel)
IC3	50	Engine Room Main Wire and Cowl Wire (Left Cowl Side Panel)
IC4		
IF3	50	Instrument Panel Wire and Cowl Wire (Right Side of Instrument Panel J/B)
IK2	51	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
IK3		
IL2	51	Instrument Panel Wire and Cowl Wire (Upper Side of Passenger Side J/B)
IM1	51	Engine Wire and Cowl Wire (Right Kick Panel)

### : Ground Points

Code	See Page	Ground Points Location
EC	48 (3MZ-FE)	Left Side of Cylinder Head
ED	48 (3MZ-FE)	Rear Side of Cylinder Head
EH	48 (3MZ-FE)	Under the Left Headlight
IB	50	Right Instrument Panel Brace

# Headlight with Daytime Running Light

## System Outline

### 1. Daytime Running Light Operation

The headlight is turned on when all the following conditions are satisfied

- \* When the ignition switch is ON position
- \* When the generator is generating electricity
- \* When the light control SW is OFF position
- \* When the parking brake SW is OFF position

### 2. Headlight Operation

- \* The headlight comes on at the LOW position when the dimmer SW is turned to the low beam position with the light control SW being HEAD position.
- \* If the dimmer SW is turned to the HIGH position with the light control SW being HEAD position, the headlight comes on at the high beam position. Moreover, the high beam indicator light appears on the combination meter.
- \* Regardless of the light control SW positions, the headlight comes on at the low beam position when the dimmer SW is turned to FLASH position. Moreover, the high beam indicator light appears on the combination meter.

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B9	A	H1	38 (3MZ-FE)	H4	40 (2AZ-FE)
B10	B		40 (2AZ-FE)	J1	39 (3MZ-FE)
B11	C	H2	38 (3MZ-FE)		41 (2AZ-FE)
B12	D		40 (2AZ-FE)	J3	39 (3MZ-FE)
C11	A	H3	38 (3MZ-FE)		41 (2AZ-FE)
C12	B		40 (2AZ-FE)	M3	43
C13	42	H4	38 (3MZ-FE)	P3	43

## ○ : Relay Blocks

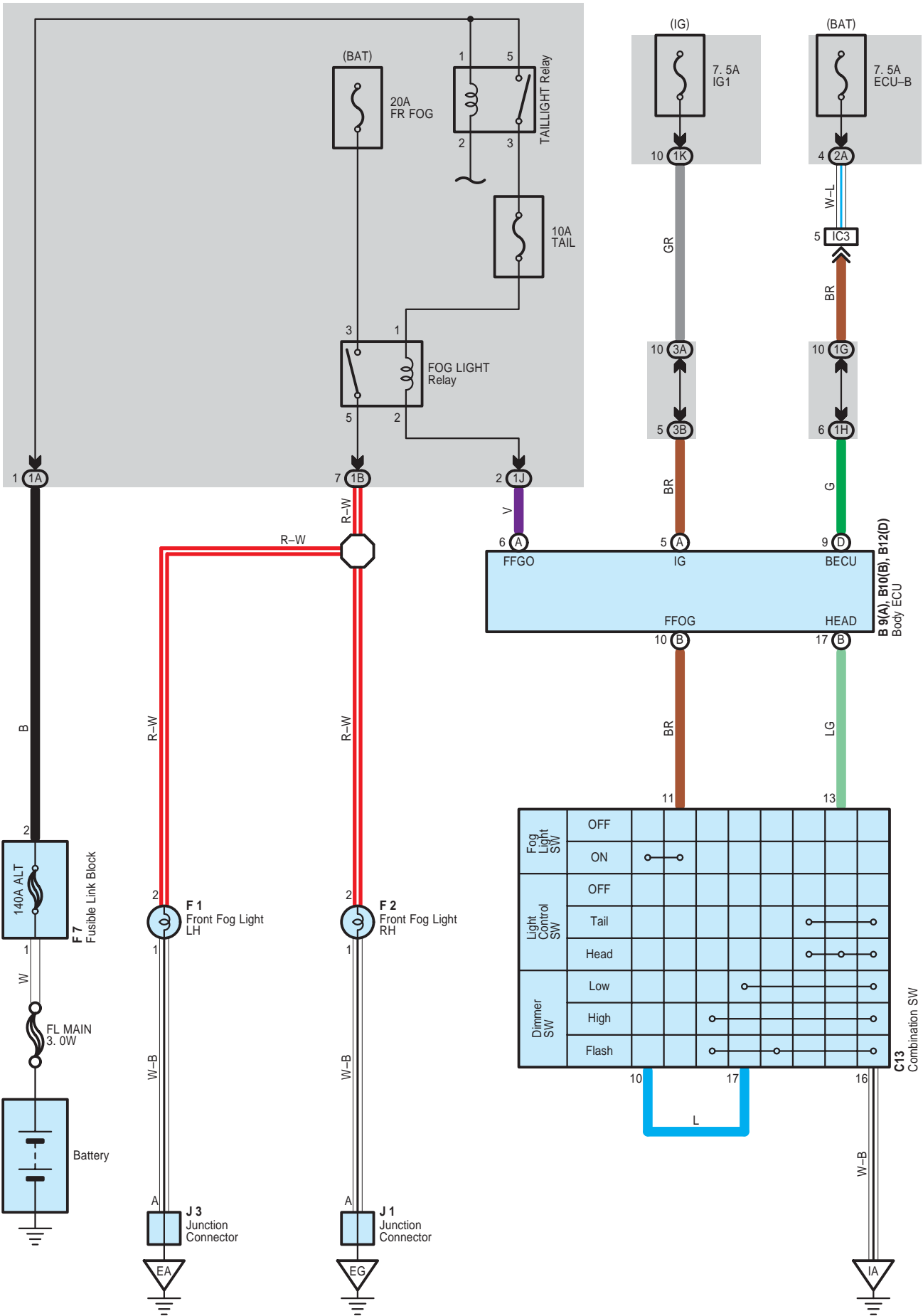
Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
3	23	Engine Room R/B No.3 (Engine Compartment Rear Left)

## ○ : Junction Block and Wire Harness Connector

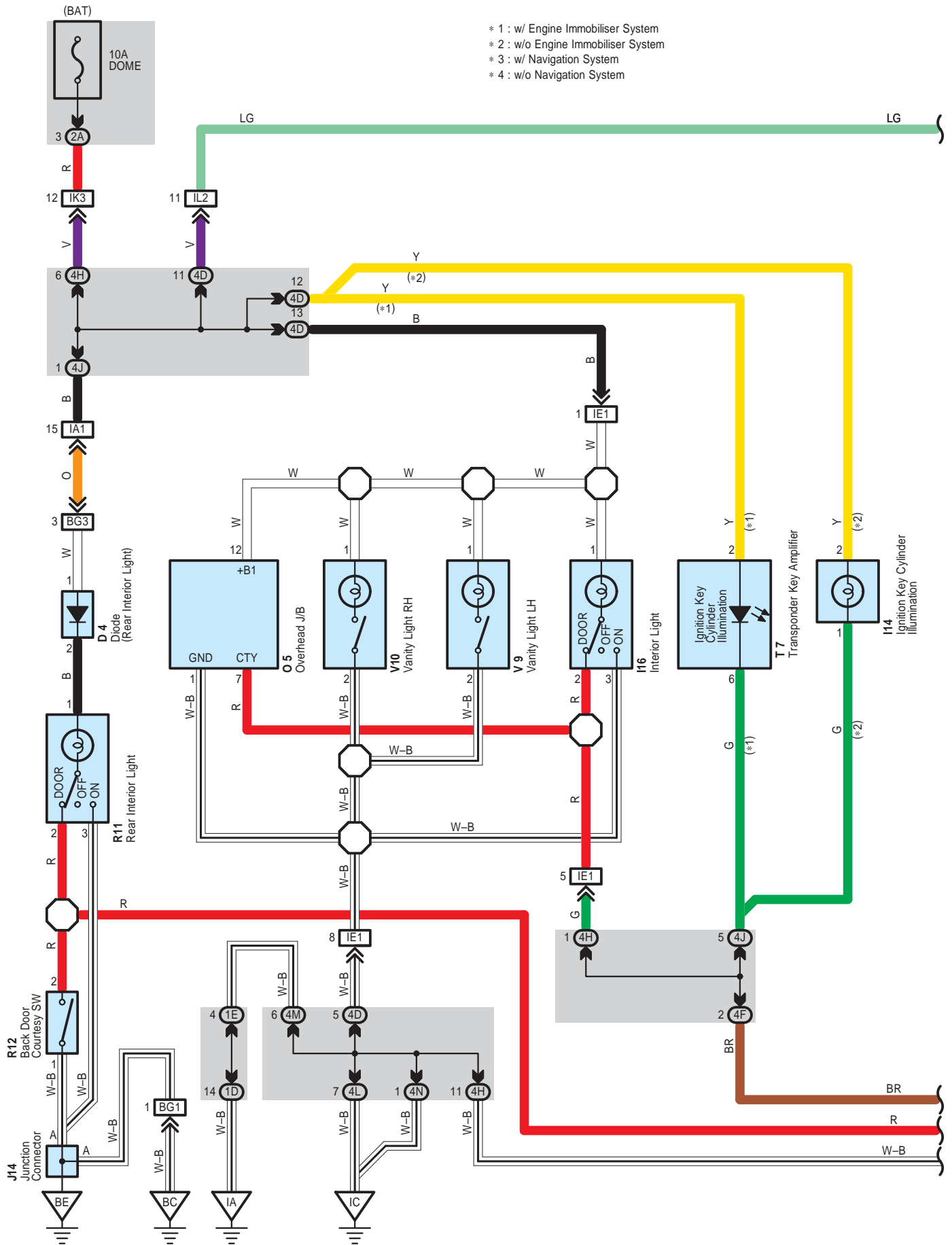
Code	See Page	Junction Block and Wire Harness (Connector Location)
1G	29	Cowl Wire and Instrument Panel J/B (Lower Finish Panel)
1H		
1J	28	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1K		
2A	27	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
2B		
2F		
2G		
3A	30	Instrument Panel Wire and Center J/B (Behind the Instrument Panel Center)
3B		
3C		
3F		
4A	33	Cowl Wire and Passenger Side J/B (Right Side of Groove Box)
4F		
4H	32	
4L		
4M		
4N		



# Front Fog Light

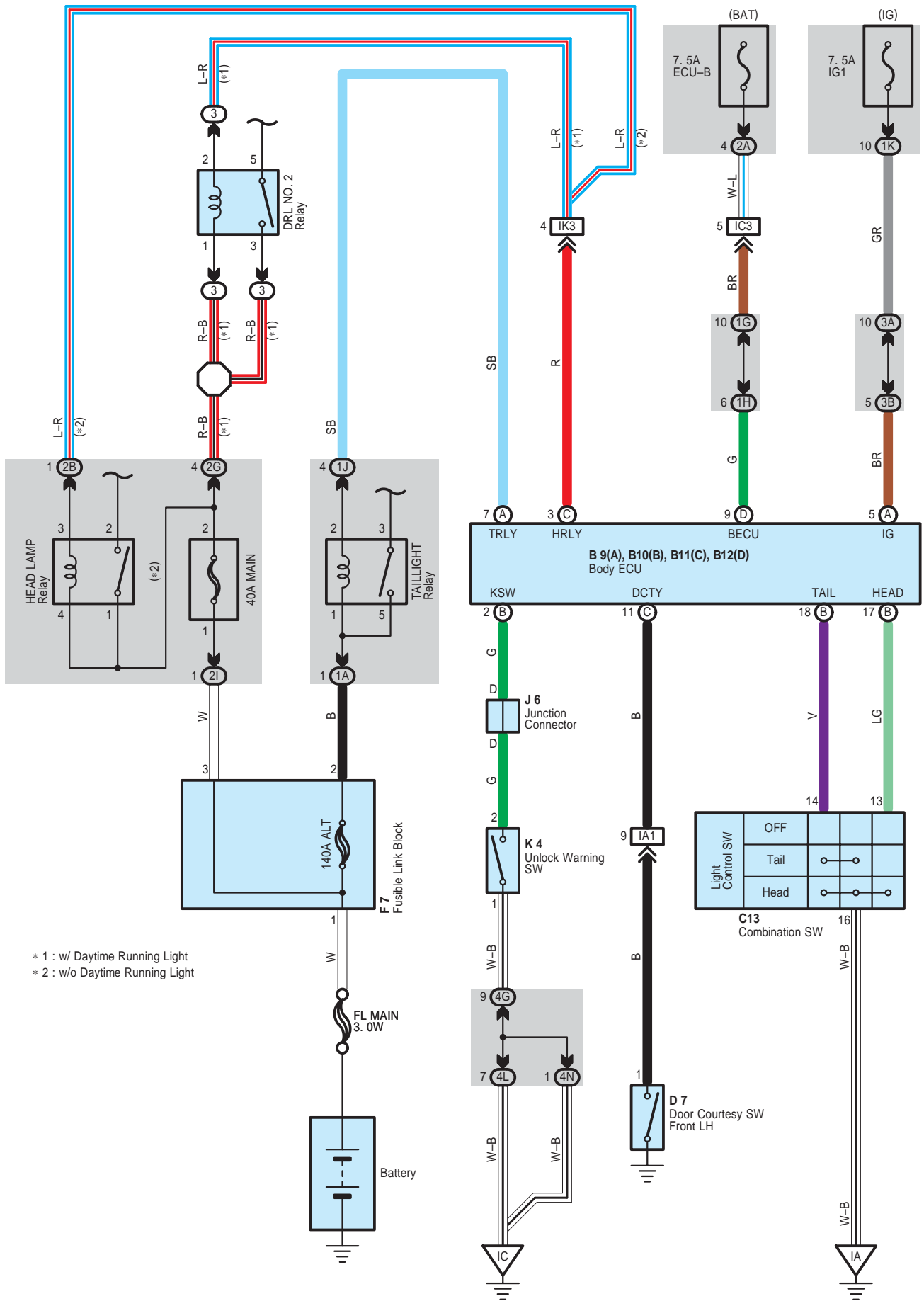


# Interior Light



- \* 1 : w/ Engine Immobiliser System
- \* 2 : w/o Engine Immobiliser System
- \* 3 : w/ Navigation System
- \* 4 : w/o Navigation System

# Light Auto Turn Off System



# Trailer Towing

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A10	42	J10	44	S15	43
B9	A 42	J12	44	T8	43
C13	42	J13	44	T9	45
F7	38 (3MZ-FE)	J20	43	T10	45
	40 (2AZ-FE)	M3	43		

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	29	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1D	29	Cowl Wire and Instrument Panel J/B (Lower Finish Panel)
1E		
1H		
2B	27	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
2F		
3B	30	Instrument Panel Wire and Center J/B (Behind the Instrument Panel Center)
3E		
4C	33	Cowl Wire and Passenger Side J/B (Right Side of Grove Box)
4E		
4G		
4L	32	
4M		

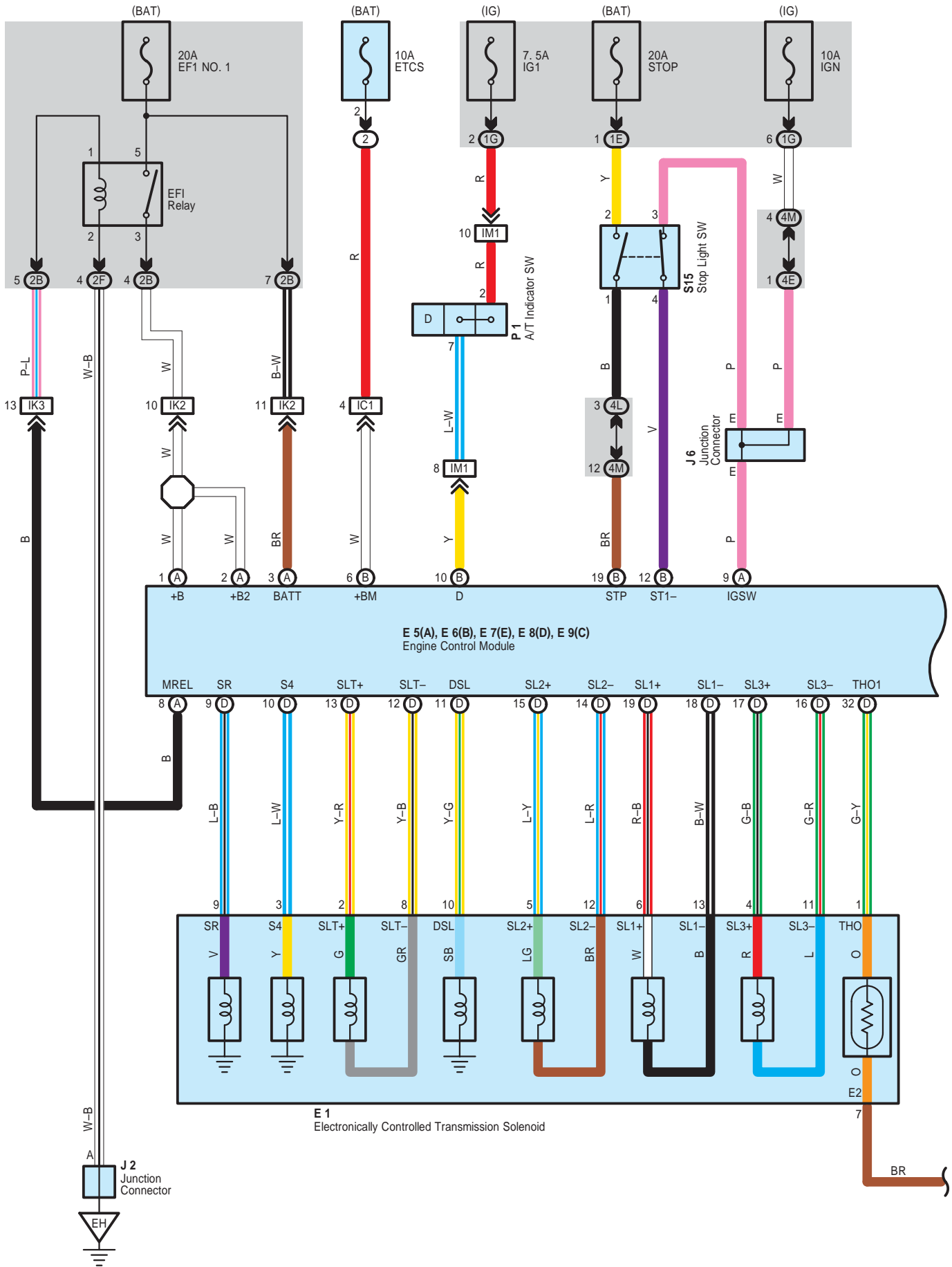
## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	50	Cowl Wire and Floor No.2 Wire (Left Kick Panel)
IA2		
IC2	50	Engine Room Main Wire and Cowl Wire (Left Cowl Side Panel)
IC3		
IL2	51	Instrument Panel Wire and Cowl Wire (Upper Side of Passenger Side J/B)

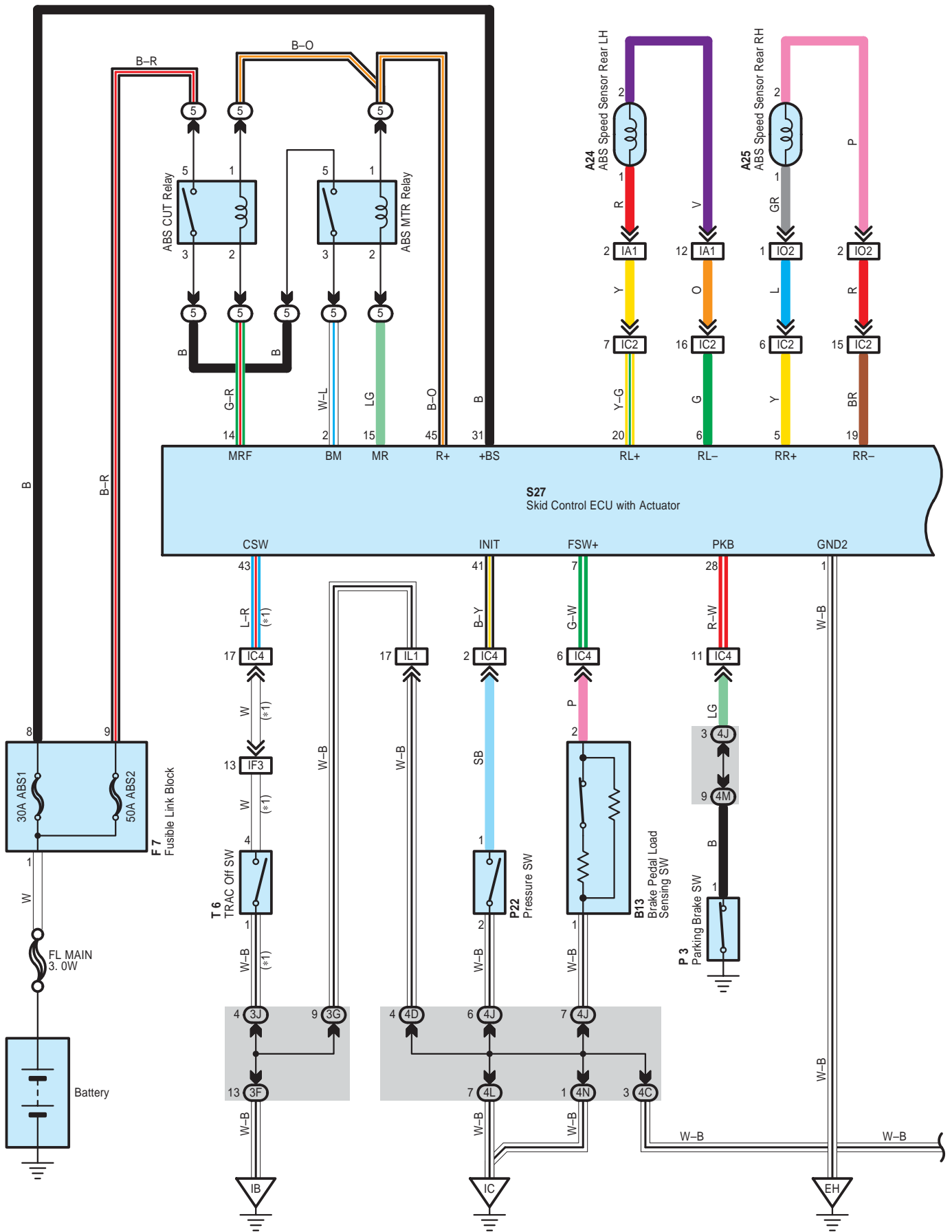
## ▽ : Ground Points

Code	See Page	Ground Points Location
IA	50	Left Cowl Side Panel
BC	52	Left Side of Rear Cross Member

# Cruise Control for 3MZ-FE



# ABS, TRAC, VSC and Tire Pressure Warning System



# Wireless Door Lock Control

## System Outline

In this system, the wireless door lock ECU receives weak radio wave transmitted from the transmitter and outputs a signal to the body ECU. Accordingly, all the doors are can be locked and unlocked by remote control.

### 1. Normal Operation

#### \* Lock operation

When the lock SW on the transmitter is pressed, all the doors are locked.

#### \* Unlock operation

When the unlock SW on the transmitter is pressed once, only the driver door is unlocked. When the unlock SW is pressed again within 3 seconds, all the doors are unlocked.

### 2. Auto Lock Function

After all the doors are unlocked by pushing the UNLOCK SW of the transmitter, unless each of the doors is opened or the ignition key is inserted, all the doors are locked again.

### 3. Wireless Door Lock Stop Function

If any of the following conditions are detected, the wireless door lock does not function.

#### Lock operation

#### \* When any door is open (Door courtesy SW on)

#### \* The ignition key is inserted into the ignition SW (Unlock warning SW on)

#### \* Ignition SW is on

#### Unlock operation

#### \* Ignition SW is on

### 4. Visual Confirmation of Lock or Unlock

When doors are locked by using the transmitter, the hazard light flashes once. When doors are unlocked by using the transmitter, the hazard light flashes twice. If UNLOCK SW of the transmitter is pushed while all the doors are locked, doors are unlocked and the interior light and ignition key cylinder light are turned on simultaneously.

### 5. Panic Mode Function

When the panic SW on the transmitter is pressed, the panic mode is activated. The panic mode is canceled when the unlock SW or panic SW is pressed.

### 6. Repeat Function

If the lock detection signal in response to the output signal is not received after the wireless door lock ECU has output the lock signal, the lock signal is output again.

## ○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A10	A	42	D11		44	J16		43
A11	B	42	D12		44	J18		44
A17	B	42	D13		44	J19		44
B9	A	42	D14		44	K4		43
B10	B	42	D15		44	O5		44
B11	C	42	E6	B	42	P5		44
B12	D	42	G5		43	R12		45
B15		44	I14		43	S30	A	43
C11	A	42	I16		44	S31	B	43
C12	B	42	J5		43	T4		43
D3		42	J6		43	T7		43
D7		44	J10		44	T8		43
D8		44	J12		44	W5		39 (3MZ-FE)
D9		44	J13		44			41 (2AZ-FE)
D10		44	J14		44	W6		45