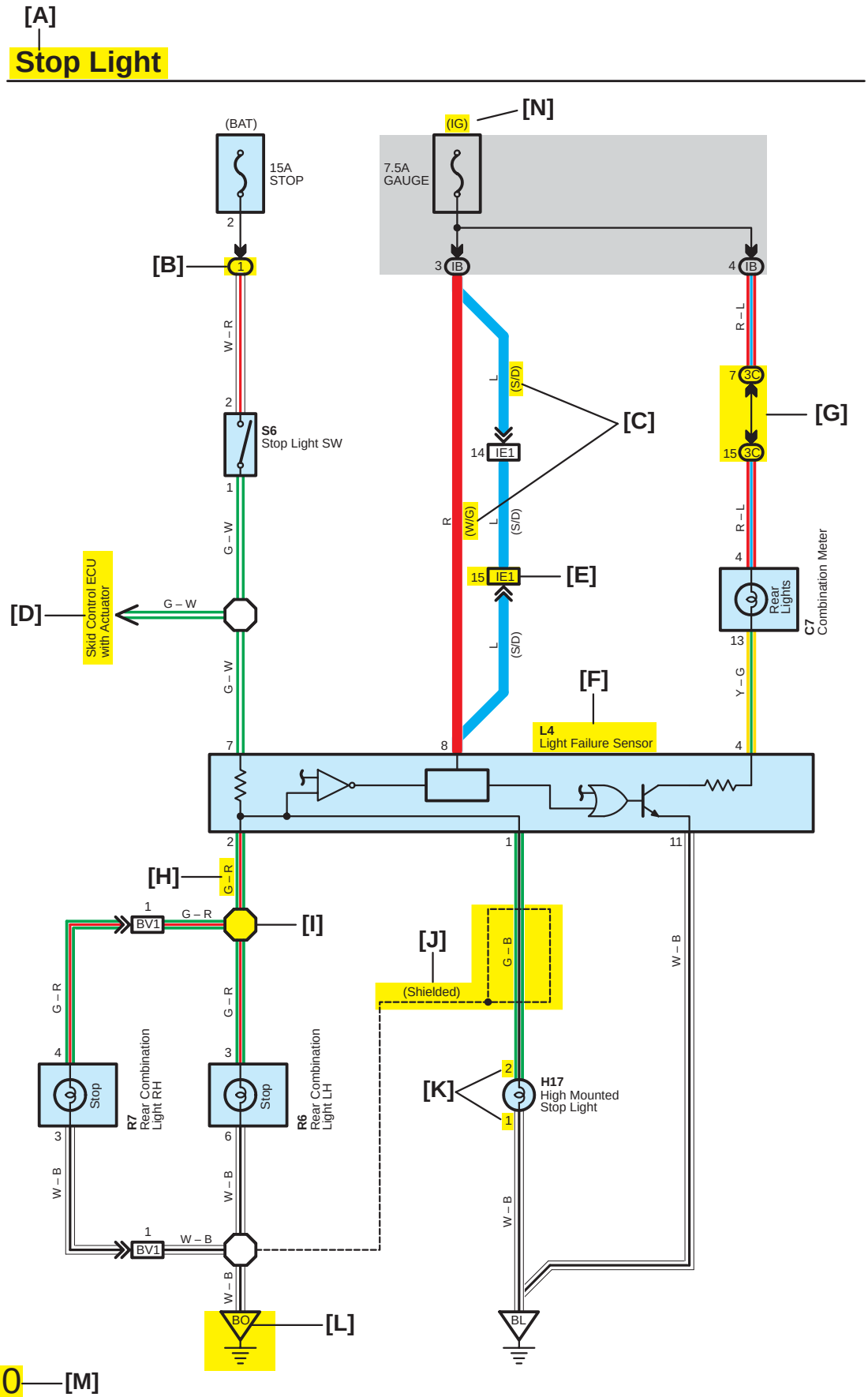
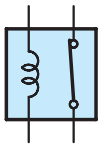
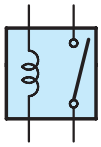
* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.



RELAY



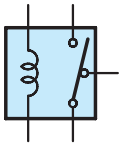
1. NORMALLY CLOSED



2. NORMALLY OPEN

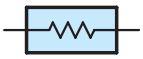
Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.

RELAY, DOUBLE THROW



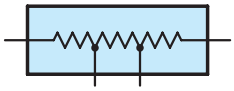
A relay which passes current through one set of contacts or the other.

RESISTOR



An electrical component with a fixed resistance, placed in a circuit to reduce voltage to a specific value.

RESISTOR, TAPPED

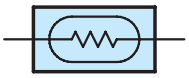


A resistor which supplies two or more different non adjustable resistance values.

RESISTOR, VARIABLE or RHEOSTAT

A controllable resistor with a variable rate of resistance.
Also called a potentiometer or rheostat.

SENSOR (Thermistor)



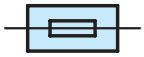
A resistor which varies its resistance with temperature.

SENSOR, SPEED

(Reed Switch Type)

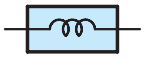
Uses magnetic impulses to open and close a switch to create a signal for activation of other components.

SHORT PIN



Used to provide an unbroken connection within a junction block.

SOLENOID

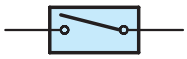


An electromagnetic coil which forms a magnetic field when current flows, to move a plunger, etc.

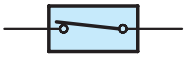
SPEAKER

An electromechanical device which creates sound waves from current flow.

SWITCH, MANUAL



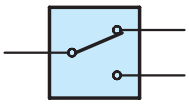
1. NORMALLY OPEN



2. NORMALLY CLOSED

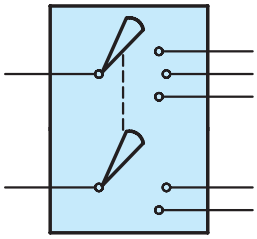
Opens and closes circuits, thereby stopping (1) or allowing (2) current flow.

SWITCH, DOUBLE THROW



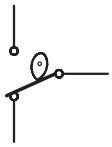
A switch which continuously passes current through one set of contacts or the other.

SWITCH, IGNITION



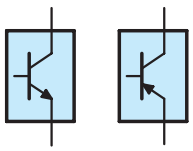
A key operated switch with several positions which allows various circuits, particularly the primary ignition circuit, to become operational.

SWITCH, WIPER PARK



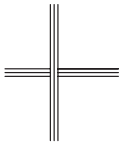
Automatically returns wipers to the stop position when the wiper switch is turned off.

TRANSISTOR

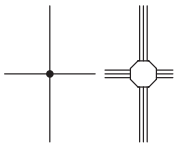


A solidstate device typically used as an electronic relay; stops or passes current depending on the voltage applied at "base".

WIRES

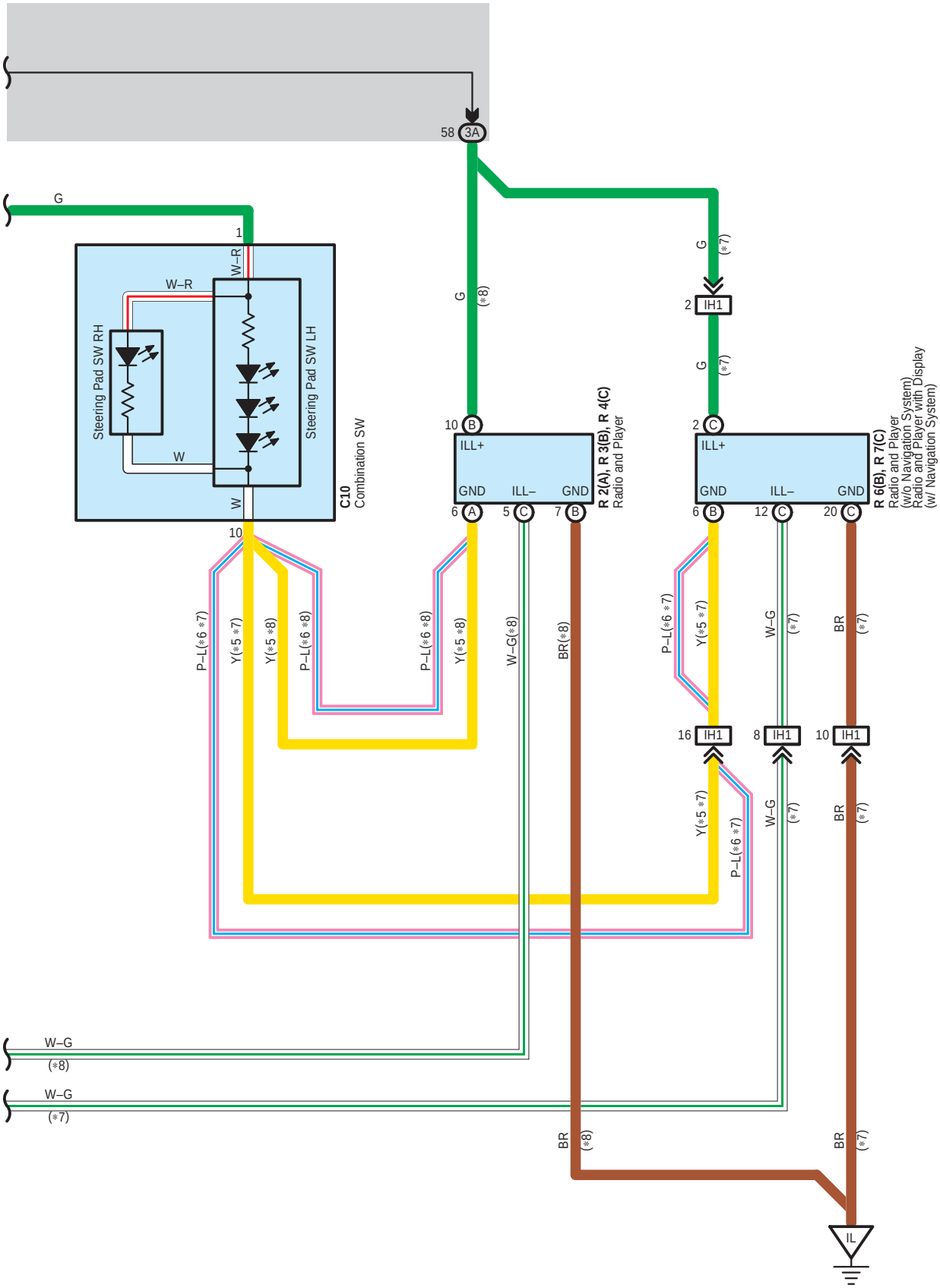


(1) NOT CONNECTED



(2) SPLICED

Wires are always drawn as straight lines on wiring diagrams.
Crossed wires (1) without a black dot at the junction are not joined;
crossed wires (2) with a black dot or octagonal (⬡) mark at the junction are spliced (joined) connections.


58 3A
G
1
W–R
W–R
Steering Pad SW RH
Steering Pad SW LH
W
W
10
C10
Combination SW
G (*8)
10 B
ILL+
GND
ILL–
GND
6 A
5 C
7 B
R 2(A), R 3(B), R 4(C)
Radio and Player
G (*7)
2 IH1
G (*7)
2 C
ILL+
GND
ILL–
GND
6 B
12 C
20 C
R 6(B), R 7(C)
Radio and Player
(w/o Navigation System)
Radio and Player with Display
(w/ Navigation System)
P–L(*6 *7)
Y(*5 *7)
Y(*5 *8)
P–L(*6 *8)
P–L(*6 *8)
Y(*5 *8)
W–G(*8)
BR(*8)
P–L(*6 *7)
Y(*5 *7)
W–G
(*7)
BR
(*7)
16 IH1
8 IH1
10 IH1
Y(*5 *7)
P–L(*6 *7)
W–G
(*7)
BR
(*7)
W–G
(*8)
W–G
(*7)
BR
(*8)
BR
(*7)
IL

System Outline

Key Reminder System

With the ignition key inserted in the key cylinder (Unlock warning SW on), the ignition SW still off and driver's door open (Door courtesy SW on), when a signal is input to TERMINAL (A) 10 of the combination meter, the combination meter operates, current flows from TERMINAL (A) 1 of the combination meter to TERMINAL (A) 20 GROUND and key reminder buzzer sounds.

: Parts Location

Code		See Page	Code		See Page	Code		See Page
C7	A	44 (C/P)	D5		50 (*1)	J12	A	45 (C/P)
		46 (*1)	J10	A	45 (C/P)		B	47 (*1)
C8	B	44 (C/P)			47 (*1)	U1		45 (C/P)
		46 (*1)	J11	B	45 (C/P)			47 (*1)
D5		48 (C/P)			47 (*1)			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2F	30	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2G	31	
3A	36 (*2)	Instrument Panel Wire and Passenger Side J/B (Instrument Panel Brace RH)
	37 (*3)	
3B	36 (*2)	
3C	37 (*3)	

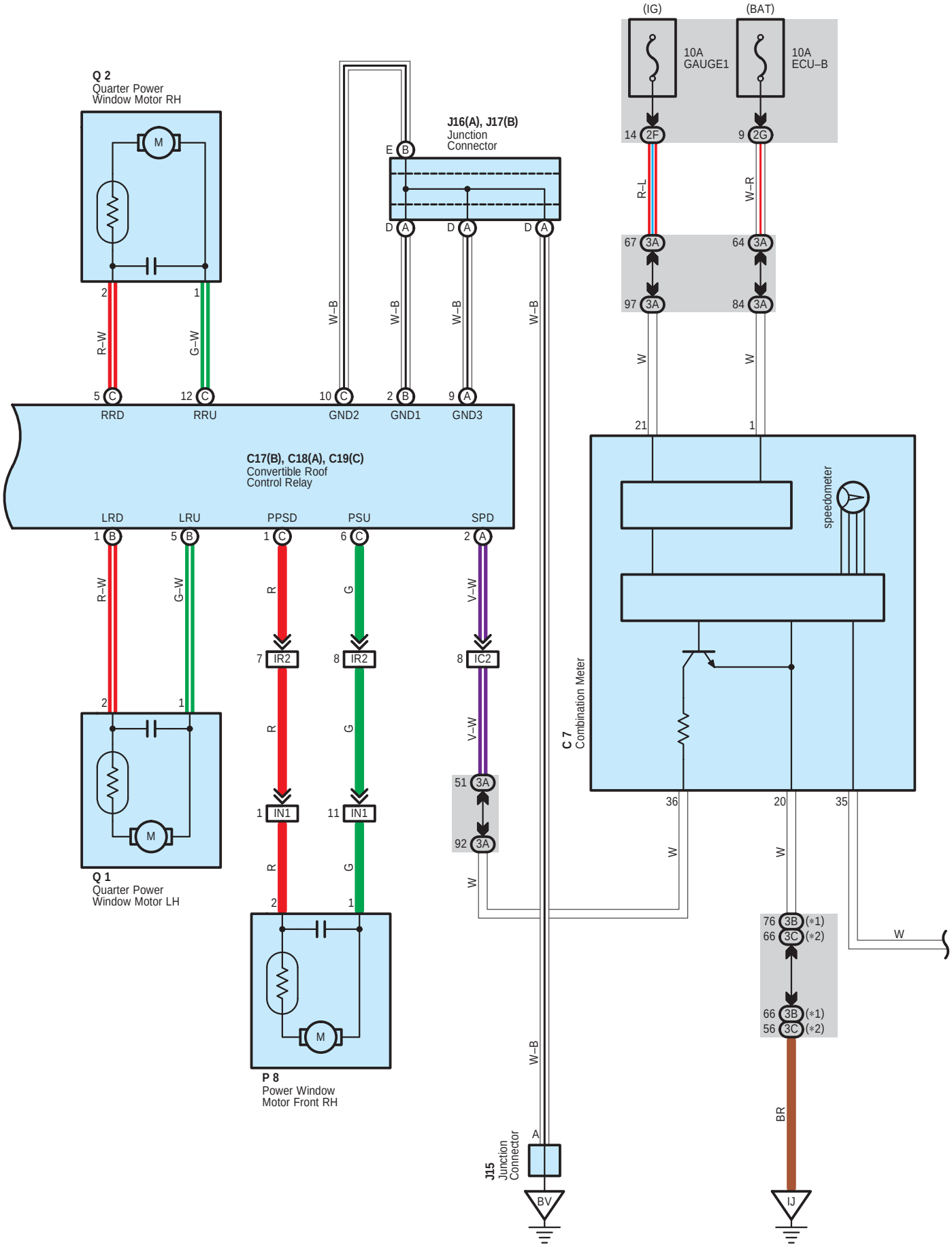
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	56 (C/P)	Instrument Panel Wire and Floor No.1 Wire (Left Kick Panel)
	58 (*1)	
IF1	56 (C/P)	Instrument Panel Wire and Instrument Panel Wire (Instrument Panel Brace LH)
	58 (*1)	

: Ground Points

Code	See Page	Ground Points Location
IJ	56 (C/P)	Instrument Panel Brace LH
	58 (*1)	
IM	56 (C/P)	Instrument Panel Reinforcement RH
	58 (*1)	

* 1 : Convertible * 2 : C/P, Convertible w/ VSC * 3 : Convertible w/o VSC


(IG)
(BAT)
10A
GAUGE1
10A
ECU–B
14 2F
9 2G
R–L
W–R
Q 2
Quarter Power
Window Motor RH
J16(A), J17(B)
Junction
Connector
E B
D A
D A
D A
67 3A
64 3A
97 3A
84 3A
W
W
W–B
W–B
W–B
W–B
2
1
R–W
G–W
5 C
12 C
10 C
2 B
9 A
RRD
RRU
GND2
GND1
GND3
21
1
C17(B), C18(A), C19(C)
Convertible Roof
Control Relay
speedometer
LRD
LRU
PPSD
PSU
SPD
1 B
5 B
1 C
6 C
2 A
R–W
G–W
R
G
V–W
7 IR2
8 IR2
8 IC2
V–W
C 7
Combination Meter
51 3A
92 3A
36
20
35
W
W
W
2
1
R
G
1 IN1
11 IN1
R
G
W
76 3B (*1)
66 3C (*2)
W
66 3B (*1)
56 3C (*2)
Q 1
Quarter Power
Window Motor LH
P 8
Power Window
Motor Front RH
W–B
BR
J15
Junction
Connector
A
BV
IJ

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	27	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B		
1C		
1G		
2C	30	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
2F	30	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2H	31	
2M	30	
3A	36 (*2)	Instrument Panel Wire and Passenger Side J/B (Instrument Panel Brace RH)
3B		

: Connector Joining Wire Harness and Wire Harness

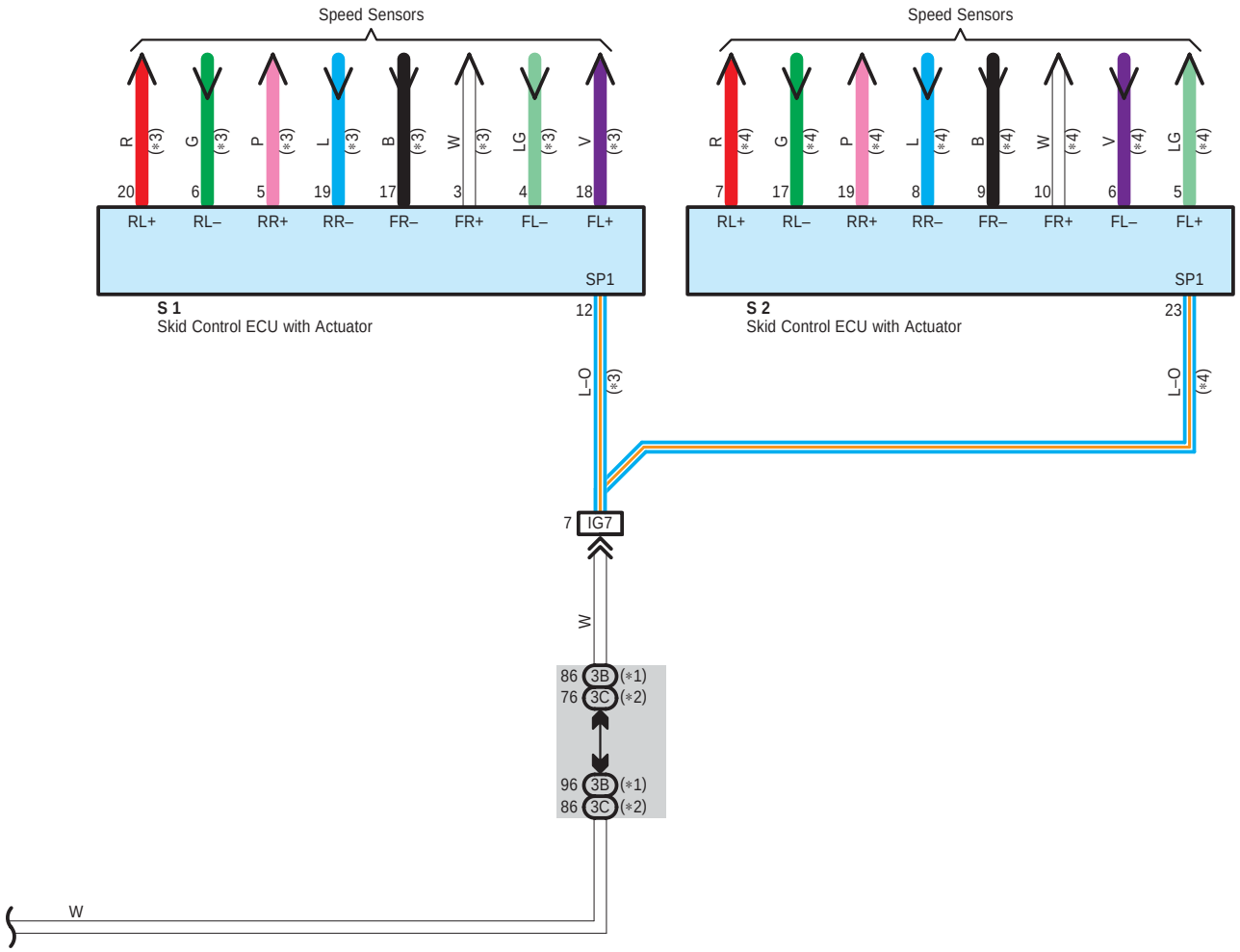
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID1	56 (C/P)	Engine Room Main Wire and Floor No.1 Wire (Left Side of Driver Side J/B)
	58 (*1)	
IG4	56 (C/P)	Engine Room Main Wire and Instrument Panel Wire (Behind the Radio and Player)
	58 (*1)	
IG7	56 (C/P)	
	58 (*1)	
IG8	56 (C/P)	
	58 (*1)	
IM1	57 (C/P)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
	59 (*1)	
IM2	57 (C/P)	
	59 (*1)	
IO2	57 (C/P)	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
IR1	59 (*1)	

: Ground Points

Code	See Page	Ground Points Location
EB	54 (3MZ–FE)	Right Fender
ED	54 (3MZ–FE)	Left Fender
IJ	56 (C/P)	Instrument Panel Brace LH
	58 (*1)	
IM	56 (C/P)	Instrument Panel Reinforcement RH
	58 (*1)	

* 1 : Convertible * 2 : C/P, Convertible w/ VSC * 3 : Convertible w/o VSC

∗ 1 : C/P, Convertible w/ VSC
∗ 2 : Convertible w/o VSC
∗ 3 : w/ VSC
∗ 4 : w/o VSC



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 Operation

When the ON–OFF SW is turned on, the system starts preparations necessary for the cruise control and turns on the indicator light in the combination meter.

2. Set Speed Control

When the – SET SW is operated with the cruise control SW turned on during travelling, the constant vehicle speed is controlled.

3. Coast Control

When the – SET SW is kept turned on during cruise control travelling, the engine control module controls the throttle valve to decelerate the vehicle. Every time the – SET SW is turned on instantaneously, the vehicle speed is decelerated approximately 1.6 km/h.

4. Accel Control

When the + RES SW is kept turned on during cruise control travelling, the engine control module controls the throttle valve to accelerate the vehicle. Every time the + RES SW is turned on instantaneously, the vehicle speed is accelerated approximately 1.6 km/h.

5. Resume Control

When the vehicle speed is within the low speed limit (Approximately 40 km/h, 25 mph) if the cruise control is cancelled, use of the + RES SW accelerates the vehicle to the speed level used before canceling the cruise control.

6. Manual Cancel Mechanism

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

* The stop light SW is turned on.
* The CANCEL SW is turned on.
* The ON–OFF SW is turned off.
* The clutch pedla depressed (M/T).
* Gear is shifted from D position to N position. (A/T)
* Gear is shifted from 4 to 3 in S mode.

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.

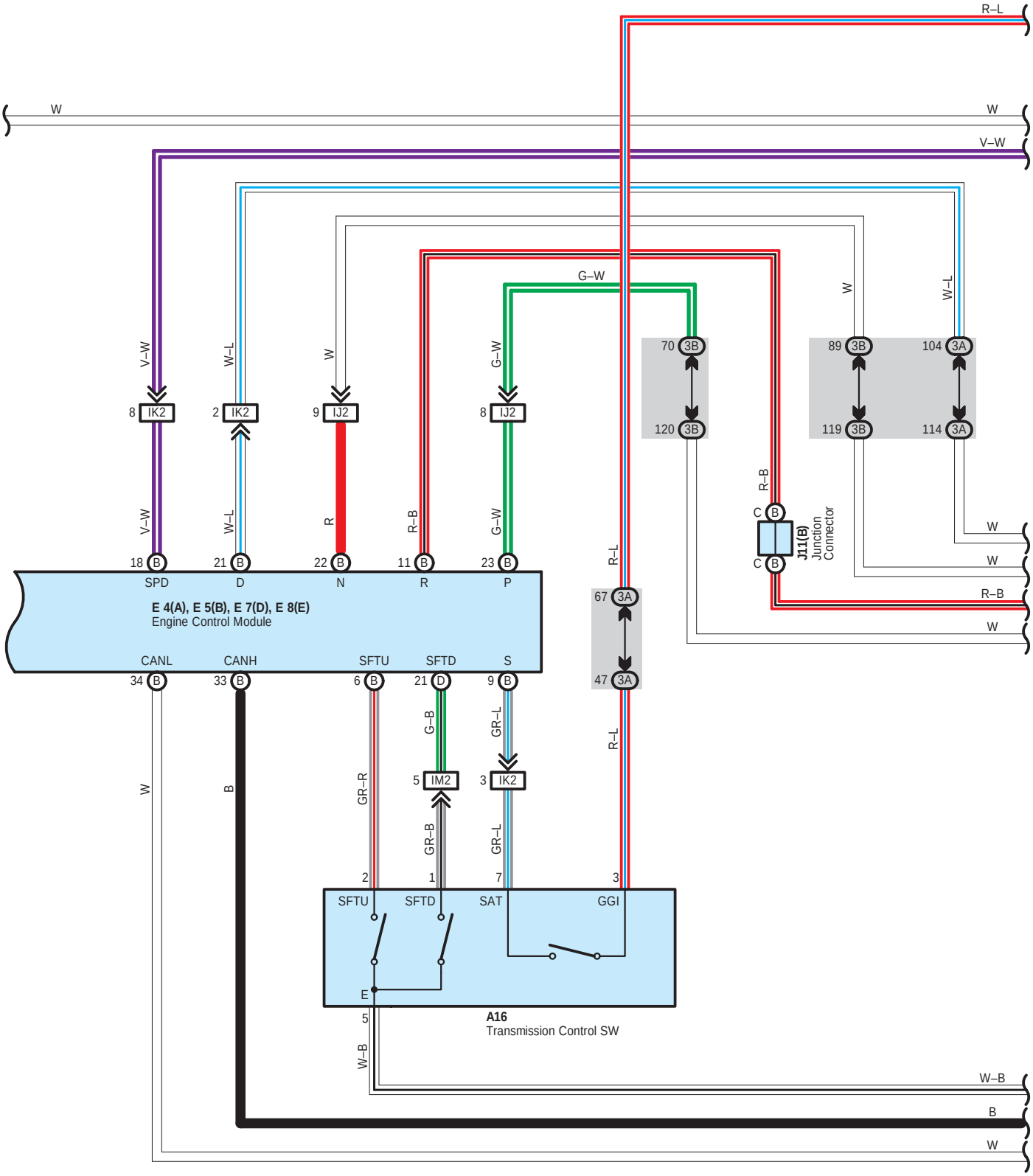
○ : Parts Location

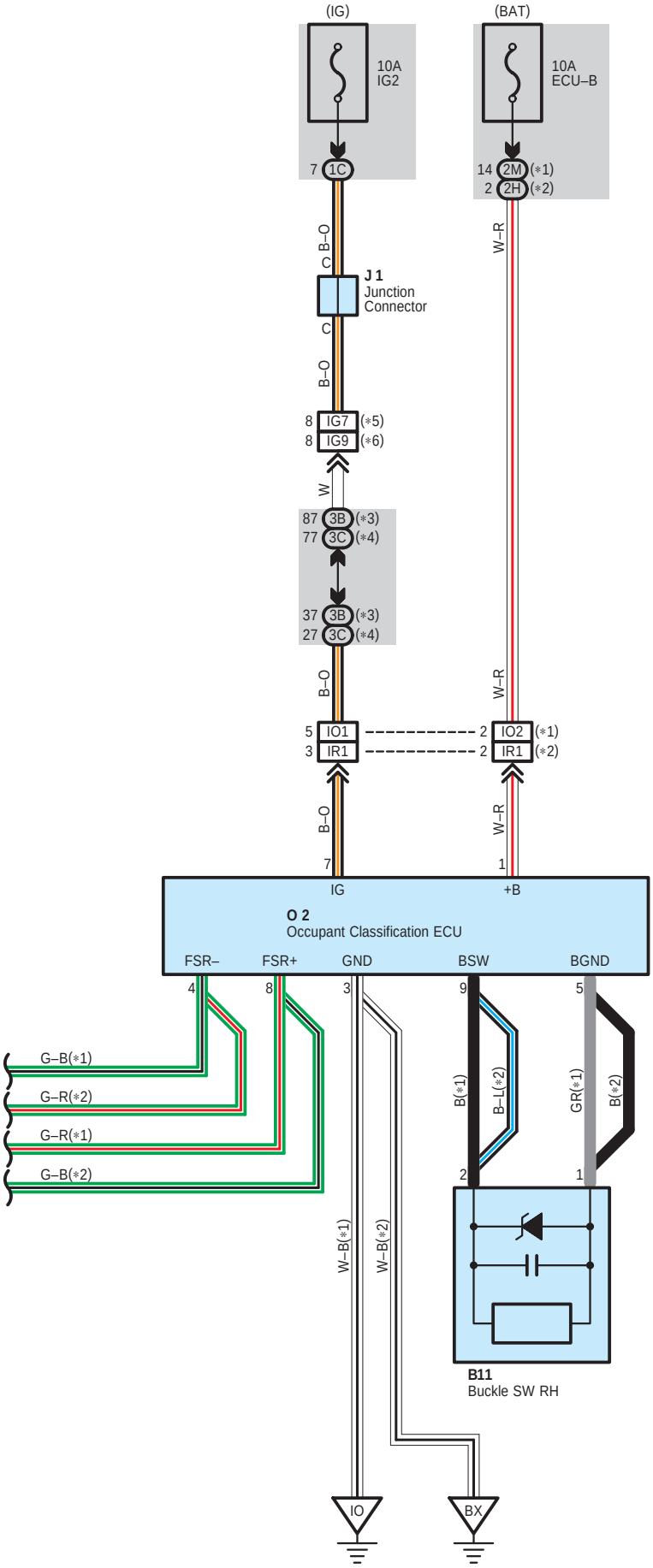
Code	See Page	Code	See Page	Code	See Page
A3	42 (2AZ–FE)	E4 A	44 (C/P)	J10 A	45 (C/P)
A17	44 (C/P)	E5 B	44 (C/P)	J11 B	45 (C/P)
C7 A	44 (C/P)	E7 D	44 (C/P)	S2	43 (2AZ–FE)
C10	44 (C/P)	E8 E	44 (C/P)	S12	45 (C/P)
C12	44 (C/P)	J1	45 (C/P)	T2	43 (2AZ–FE)
D3	44 (C/P)	J2	45 (C/P)		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	27	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1C		
2C	30	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
2F	30	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2M		
3A	36 (*2)	Instrument Panel Wire and Passenger Side J/B (Instrument Panel Brace RH)
3B		

* 1 : Convertible * 2 : C/P, Convertible w/ VSC * 3 : Convertible w/o VSC


R–L
W
W
V–W
G–W
W
W–L
V–W
W–L
W
G–W
8 IK2
2 IK2
9 IJ2
8 IJ2
70 3B
120 3B
89 3B
119 3B
104 3A
114 3A
R–B
C B
J11(B)
Junction
Connector
C B
W
W
R–B
W
V–W
W–L
R
R–B
G–W
18 B
21 B
22 B
11 B
23 B
SPD
D
N
R
P
R–L
67 3A
47 3A
E 4(A), E 5(B), E 7(D), E 8(E)
Engine Control Module
CANL
CANH
SFTU
SFTD
S
34 B
33 B
6 B
21 D
9 B
G–B
GR–L
R–L
W
B
GR–R
5 IM2
3 IK2
GR–B
GR–L
2
1
7
3
SFTU
SFTD
SAT
GGI
E
5
A16
Transmission Control SW
W–B
W–B
B
W


(IG)
(BAT)
10A
IG2
10A
ECU–B
7 1C
14 2M (*1)
2 2H (*2)
W–R
B–O
C
J 1
Junction
Connector
C
B–O
8 IG7 (*5)
8 IG9 (*6)
W
87 3B (*3)
77 3C (*4)
37 3B (*3)
27 3C (*4)
B–O
W–R
5 IO1
3 IR1
2 IO2 (*1)
2 IR1 (*2)
B–O
W–R
7
1
IG
+B
O 2
Occupant Classification ECU
FSR–
FSR+
GND
BSW
BGND
4
8
3
9
5
G–B(*1)
G–R(*2)
G–R(*1)
G–B(*2)
B(*1)
B–L(*2)
GR(*1)
B(*2)
2
1
W–B(*1)
W–B(*2)
B11
Buckle SW RH
IO
BX

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. 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) Oxygen density signal circuit

The oxygen density in the exhaust emission is detected by the heated oxygen sensor and input as a control signal to TERMINAL OX1B of the engine control module (HT1B)

(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 TERMINAL +B of the engine control module via the EFI relay.

(7) Stop light SW signal circuit

The stop light 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.

(8) 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.

(9) Engine knock signal circuit

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

(10) 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.

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A1		40 (3MZ–FE)	F8		48 (C/P)	R2	A	45 (C/P)
		42 (2AZ–FE)			50 (*1)			47 (*1)
A11	A	44 (C/P)	I7	A	41 (3MZ–FE)	R3	B	45 (C/P)
		46 (*1)		B	43 (2AZ–FE)			47 (*1)
C5		44 (C/P)	J2		45 (C/P)	R6	B	45 (C/P)
		46 (*1)			47 (*1)			47 (*1)
C7	A	44 (C/P)	J10	A	45 (C/P)	R7	C	45 (C/P)
		46 (*1)			47 (*1)			47 (*1)
C8	B	44 (C/P)	J11	B	45 (C/P)	S1		41 (3MZ–FE)
		46 (*1)			47 (*1)	S2		41 (3MZ–FE)
C10		44 (C/P)	J12	A	45 (C/P)			43 (2AZ–FE)
		46 (*1)		B	47 (*1)			

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	24	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

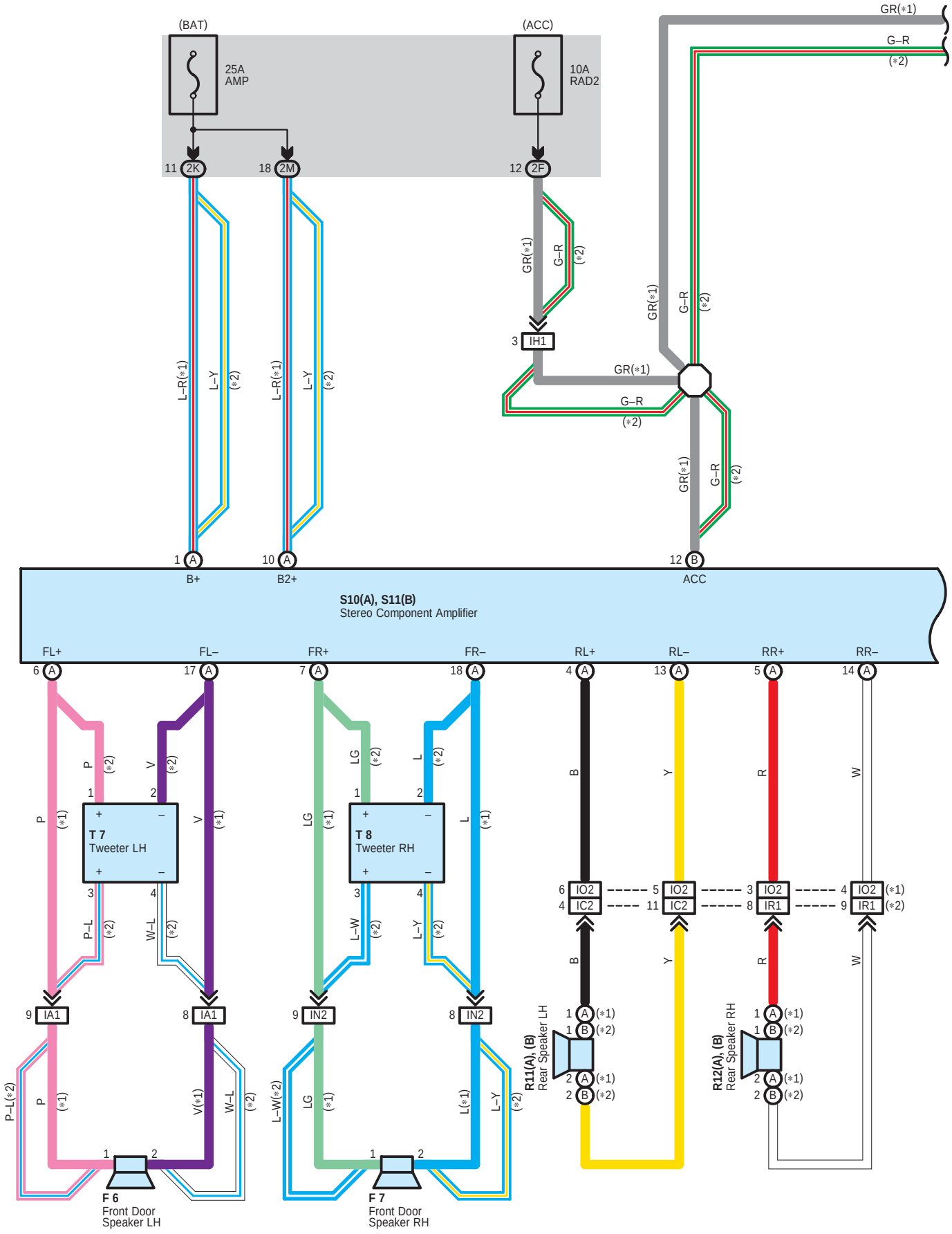
Code	See Page	Junction Block and Wire Harness (Connector Location)
1L	27	Engine Wire and Engine Room J/B (Engine Compartment Left)
2A	30	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
2F	30	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2G	31	
2K	30	
3A	36 (*2)	Instrument Panel Wire and Passenger Side J/B (Instrument Panel Brace RH)
	37 (*3)	
3B	36 (*2)	
3C	37 (*3)	

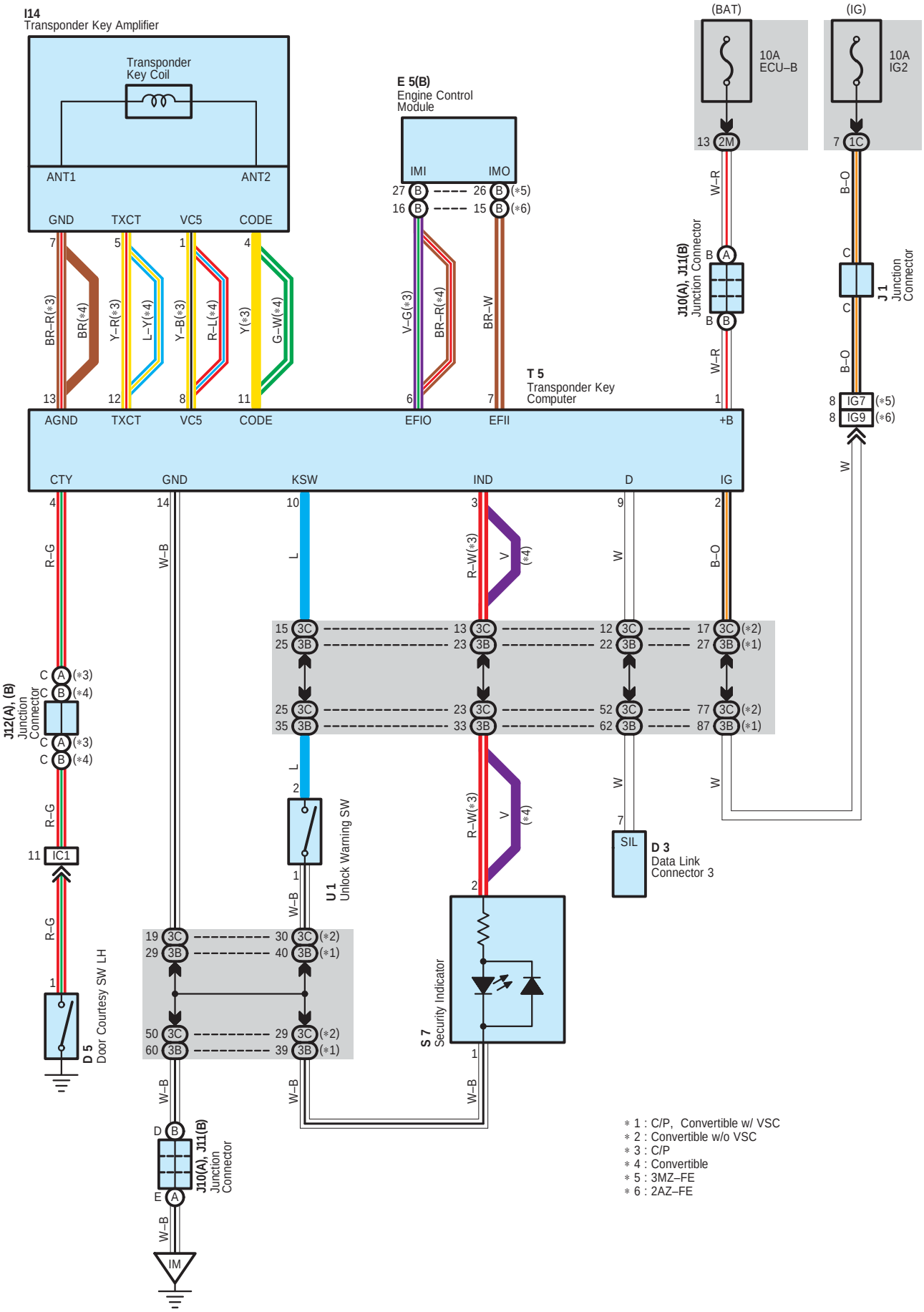
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	56 (C/P)	Instrument Panel Wire and Floor No.1 Wire (Left Kick Panel)
	58 (*1)	
IF1	56 (C/P)	Instrument Panel Wire and Instrument Panel Wire (Instrument Panel Brace LH)
	58 (*1)	
IG6	56 (C/P)	Engine Room Main Wire and Instrument Panel Wire (Behind the Radio and Player)
	58 (*1)	
IG7	56 (C/P)	
	58 (*1)	
IG9	56 (C/P)	
IH1	57 (C/P)	Instrument Panel No.2 Wire and Instrument Panel Wire (Behind the Radio and Player)
	59 (*1)	
IK1	57 (C/P)	Instrument Panel Wire and Instrument Panel Wire (Instrument Panel Reinforcement RH)
	59 (*1)	
IK2	57 (C/P)	
IM1	57 (C/P)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
	59 (*1)	
IM2	57 (C/P)	
	59 (*1)	

* 1 : Convertible * 2 : C/P, Convertible w/ VSC * 3 : Convertible w/o VSC

Audio System for Separate Type Amplifier without Navigation




I14
Transponder Key Amplifier
Transponder Key Coil
ANT1
ANT2
GND
TXCT
VC5
CODE
E 5(B)
Engine Control Module
IMI
IMO
(BAT)
(IG)
10A ECU–B
10A IG2
J10(A), J11(B) Junction Connector
J 1 Junction Connector
T 5
Transponder Key Computer
AGND
TXCT
VC5
CODE
EFIO
EFII
+B
IG7
IG9
CTY
GND
KSW
IND
D
IG
J12(A), (B) Junction Connector
IC1
D 5
Door Courtesy SW LH
U 1
Unlock Warning SW
S 7
Security Indicator
D 3
Data Link Connector 3
SIL
IM
∗ 1 : C/P, Convertible w/ VSC
∗ 2 : Convertible w/o VSC
∗ 3 : C/P
∗ 4 : Convertible
∗ 5 : 3MZ–FE
∗ 6 : 2AZ–FE

Fuse		System	Page
10A	ECU–B	Seat Belt Warning	228
		SRS	185
		Theft Deterrent and Door Lock Control	144
		VSC and Tire Pressure Warning System	170
		Wireless Door Lock Control	150
10A	ECU–IG	ABS and Tire Pressure Warning System	178
		Automatic Glare–Resistant EC Mirror with Compass	234
		Automatic Light Control	118
		Convertible Roof and Power Window (Convertible)	164
		Fog Light	116
		Headlight	112
		Interior Light	122
		Light Auto Turn Off System	120
		Moon Roof	158
		Multiplex Communication System (BEAN 2AZ–FE)	110
		Multiplex Communication System (CAN 3MZ–FE)	104
		Power Window (Coupe)	160
		Theft Deterrent and Door Lock Control	144
		VSC and Tire Pressure Warning System	170
		Wireless Door Lock Control	150
10A	FOG	Fog Light	116
10A	GAUGE1	ABS and Tire Pressure Warning System	178
		Back–Up Light	140
		Charging	76
		Clock	246
		Combination Meter	266
		Convertible Roof and Power Window (Convertible)	164
		Cruise Control (2AZ–FE)	198
		Cruise Control (3MZ–FE)	192
		Electronically Controlled Transmission and A/T Indicator (2AZ–FE)	212
		Electronically Controlled Transmission and A/T Indicator (3MZ–FE)	204
		Key Reminder	142
		Navigation System and Audio System	252
		Seat Belt Warning	228
		Shift Lock	220
		Turn Signal and Hazard Warning Light	132
		VSC and Tire Pressure Warning System	170
10A	HTR	Automatic Air Conditioning	278
		Engine Control (2AZ–FE)	90
		Engine Control (3MZ–FE)	78
		Manual Air Conditioning	286
		Radiator Fan and Condenser Fan	272
		Rear Window Defogger and Mirror Heater	244

* These are the page numbers of the first page on which the related system is shown.