

# HILUX ELECTRICAL WIRING DIAGRAM

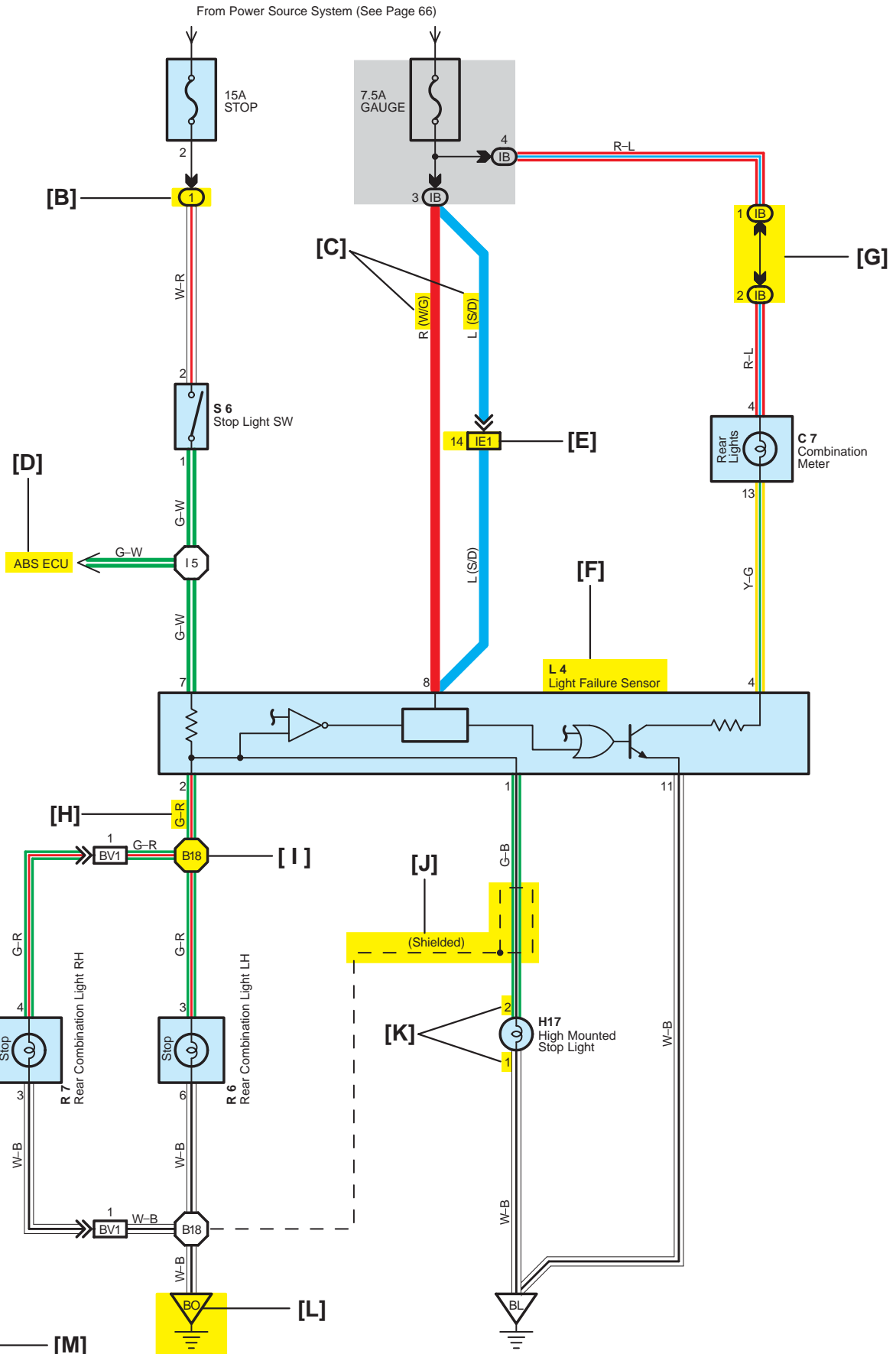
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# B HOW TO USE THIS MANUAL

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

[A]

## Stop Light

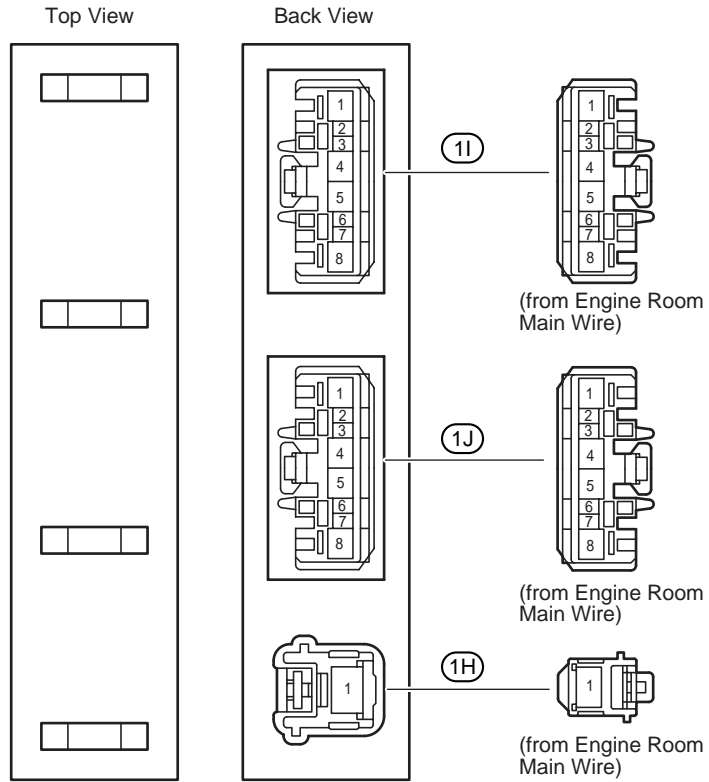


# F RELAY LOCATIONS

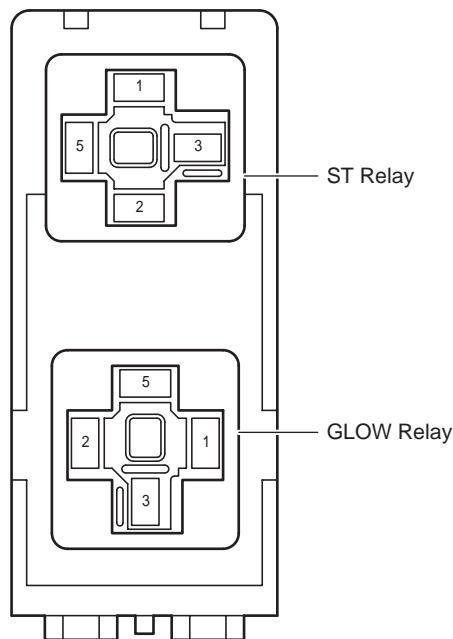
① : Engine Room R/B	Engine Compartment Left (See Page 20)
○ : Engine Room J/B	

## Unit B

(Inner Circuit : See Page 27)

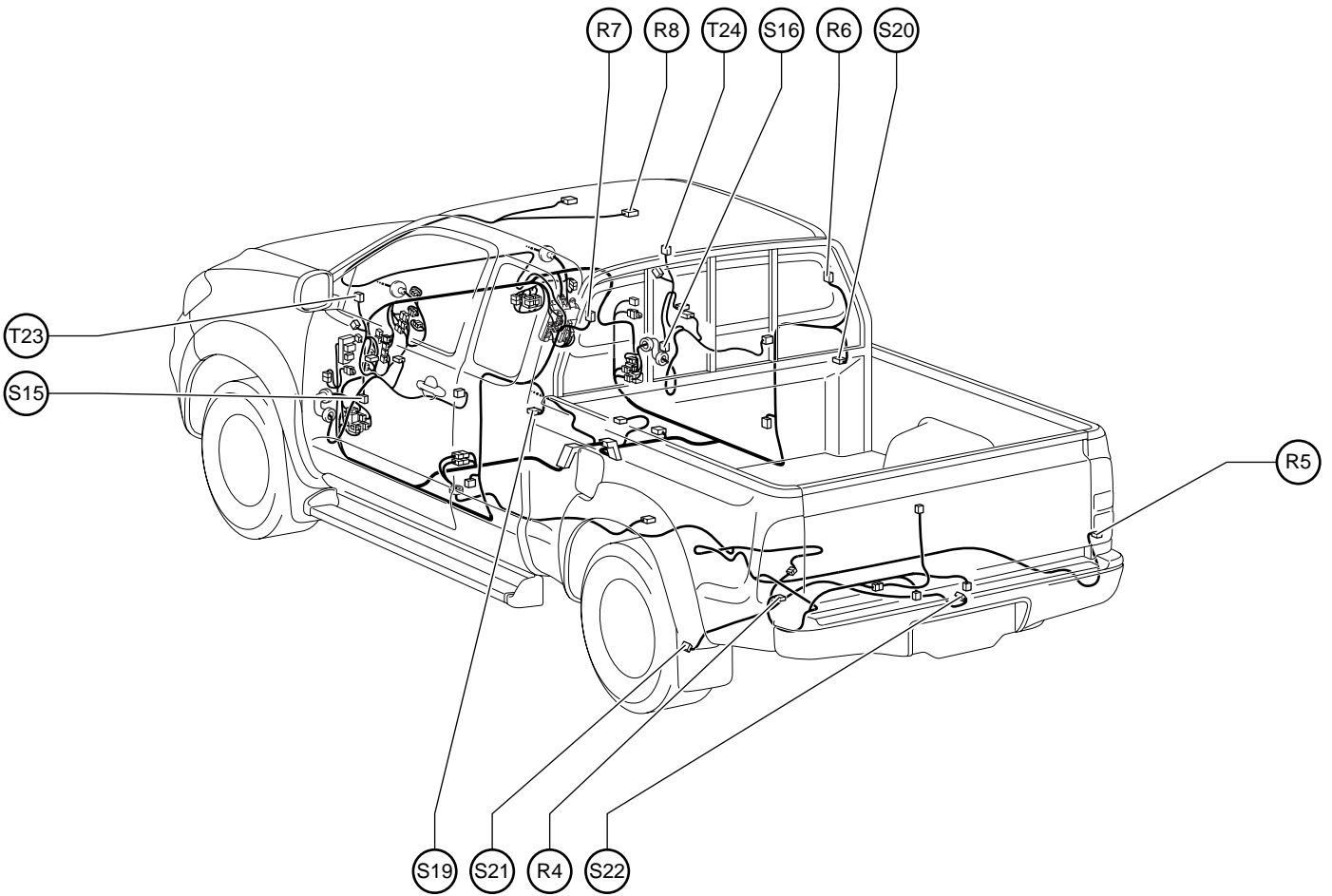


## Unit C



## Position of Parts in Body

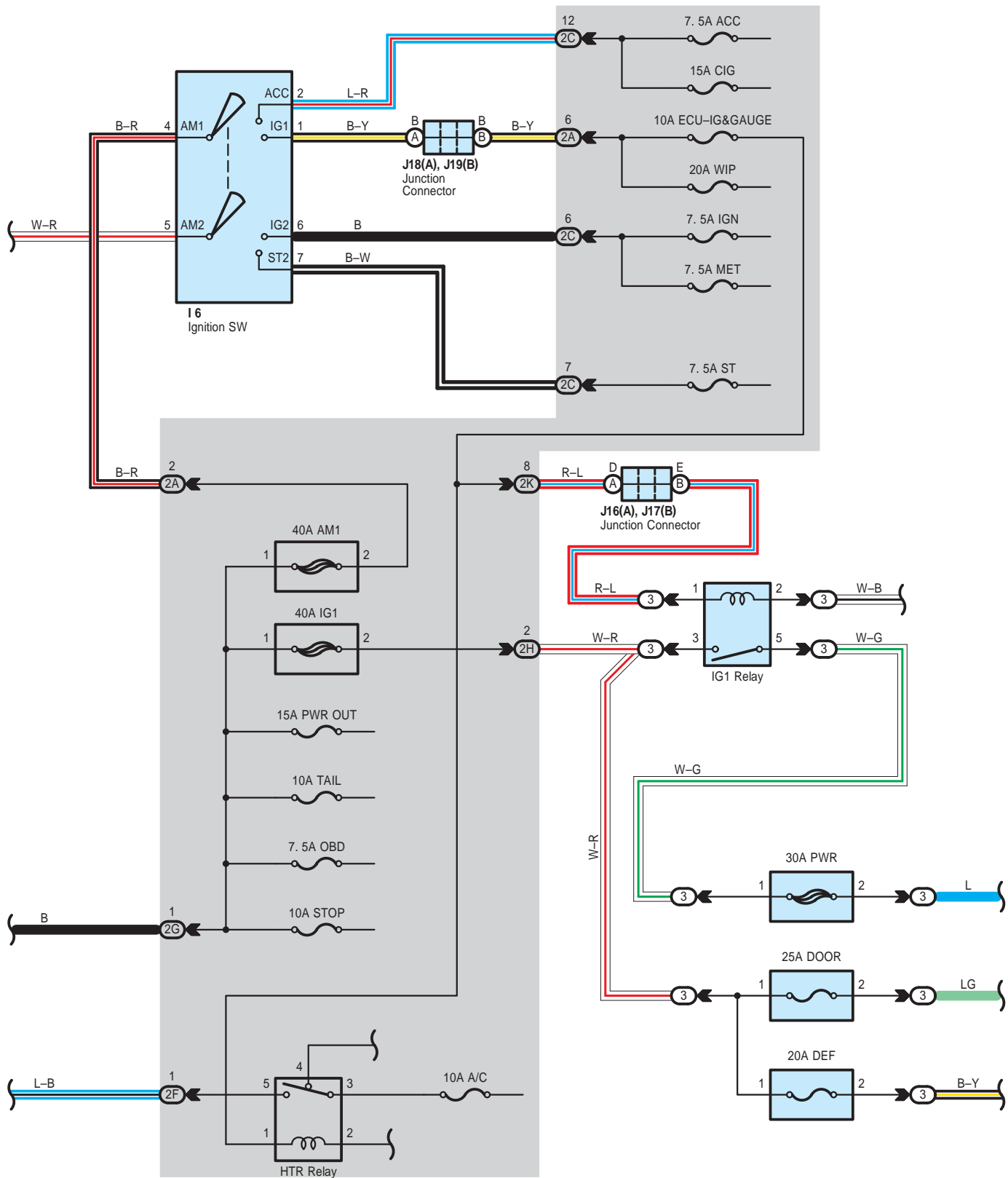
**[Extra Cab]**



R 4 Rear Combination Lamp (LH)  
 R 5 Rear Combination Lamp (RH)  
 R 6 Rear Window Defogger  
 R 7 Rear Window Defogger  
 R 8 Room Lamp

T 23 Tweeter (LH)  
 T 24 Tweeter (RH)

S 15 Speaker (Front Door LH)  
 S 16 Speaker (Front Door RH)  
 S 19 Speaker (Rear LH)  
 S 20 Speaker (Rear RH)  
 S 21 Speed Sensor (Rear LH)  
 S 22 Speed Sensor (Rear RH)



## 2. Control System

### \* EGR control

The EGR control system detects the signals from each sensor, then the current is output to the TERMINAL EGR to control the VRV (EGR).

### \* Common rail pressure control

The target rail pressure is calculated according to the engine status (Accelerator opening, engine speed) and environmental change detected by sensors. The fuel amount to be pressure-fed from the supply pump is calculated so as to match the indicated value of rail pressure sensor with the target value and the signal is sent to the intake amount adjusting valve of the supply pump in order to control the rail pressure.

### \* Fuel injection timing control

The fuel injection timing is controlled by calculating the basic fuel injection timing based on the engine status (Accelerator opening, engine speed), making corrections according to environmental change detected by sensors, then sending a signal to the solenoid control valve of the injector via the injector driver (EDU).

### \* Fuel injection volume control

The fuel injection volume is controlled by calculating the basic fuel injection volume based on the engine status (Accelerator opening, engine speed), making corrections according to environmental change detected by sensors and the inside pressure conditions in the rail, then sending a signal to the solenoid control valve of the injector via the injector driver (EDU).

### \* Pilot injection control

The fuel injection volume and timing are controlled by calculating the pilot injection volume/timing based on the engine status (Accelerator opening, engine speed), making corrections according to environmental change detected by sensors, then sending a signal to the solenoid control valve of the injector via the injector driver (EDU).

## 3. Diagnosis System

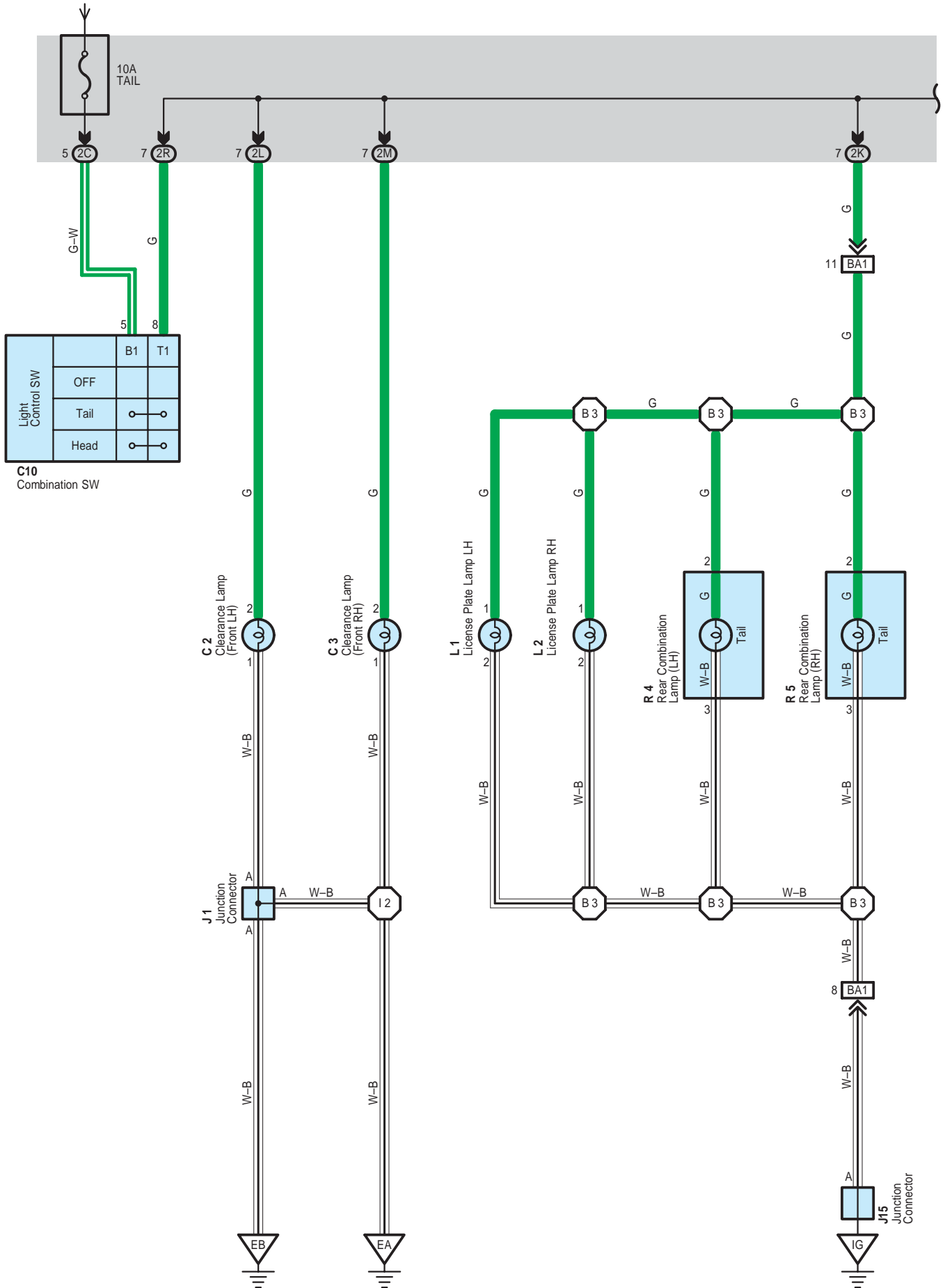
With the diagnosis system, when there is a malfunctioning in the engine ECU signal system, the malfunction system is recorded in the memory. The malfunctioning system can be found by reading the display (Code) of the check engine warning light.

## 4. Fail-Safe System

When a malfunction occurs 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 ECU memory or else stops the engine.

# Taillight and Illumination

From Power Source System (See Page 60)



**Service Hints****S14 Stop Lamp SW**

2-1 : Closed with the brake pedal depressed

 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
C13	40 (Double Cab)	J28	38	R5	41 (Double Cab)
	42 (Extra Cab)	R4	41 (Double Cab)		43 (Extra Cab)
	44 (Single Cab)		43 (Extra Cab)		45 (Single Cab)
J15	38		45 (Single Cab)	S14	39

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
2F	28	Engine Room Main Wire and Driver Side J/B (Instrument Panel Brace RH)
2K	28	Floor Wire and Driver Side J/B (Instrument Panel Brace RH)
2M	28	Engine Room Main Wire and Driver Side J/B (Instrument Panel Brace RH)

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	52 (Double Cab)	Frame Wire and Floor Wire (Under the Front Seat LH)
	54 (Extra Cab)	
	56 (Single Cab)	
BD1	52 (Double Cab)	Frame No.2 Wire and Frame Wire (Under the Back Panel LH)
	54 (Extra Cab)	
	56 (Single Cab)	

 : **Ground Points**

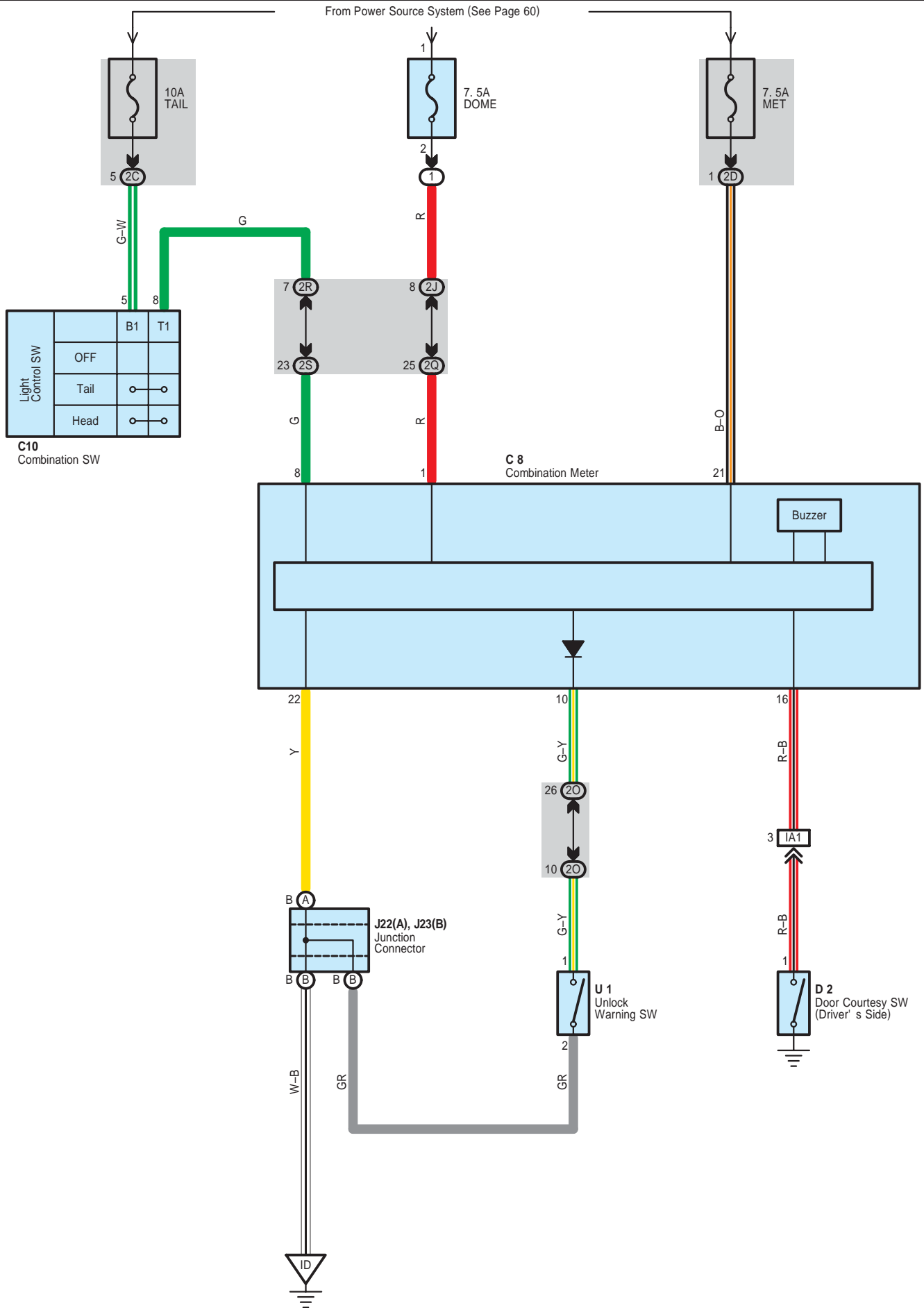
Code	See Page	Ground Points Location
IF	48	Cowl Side Panel RH
IG	48	Cowl Side Panel LH

 : **Splice Points**

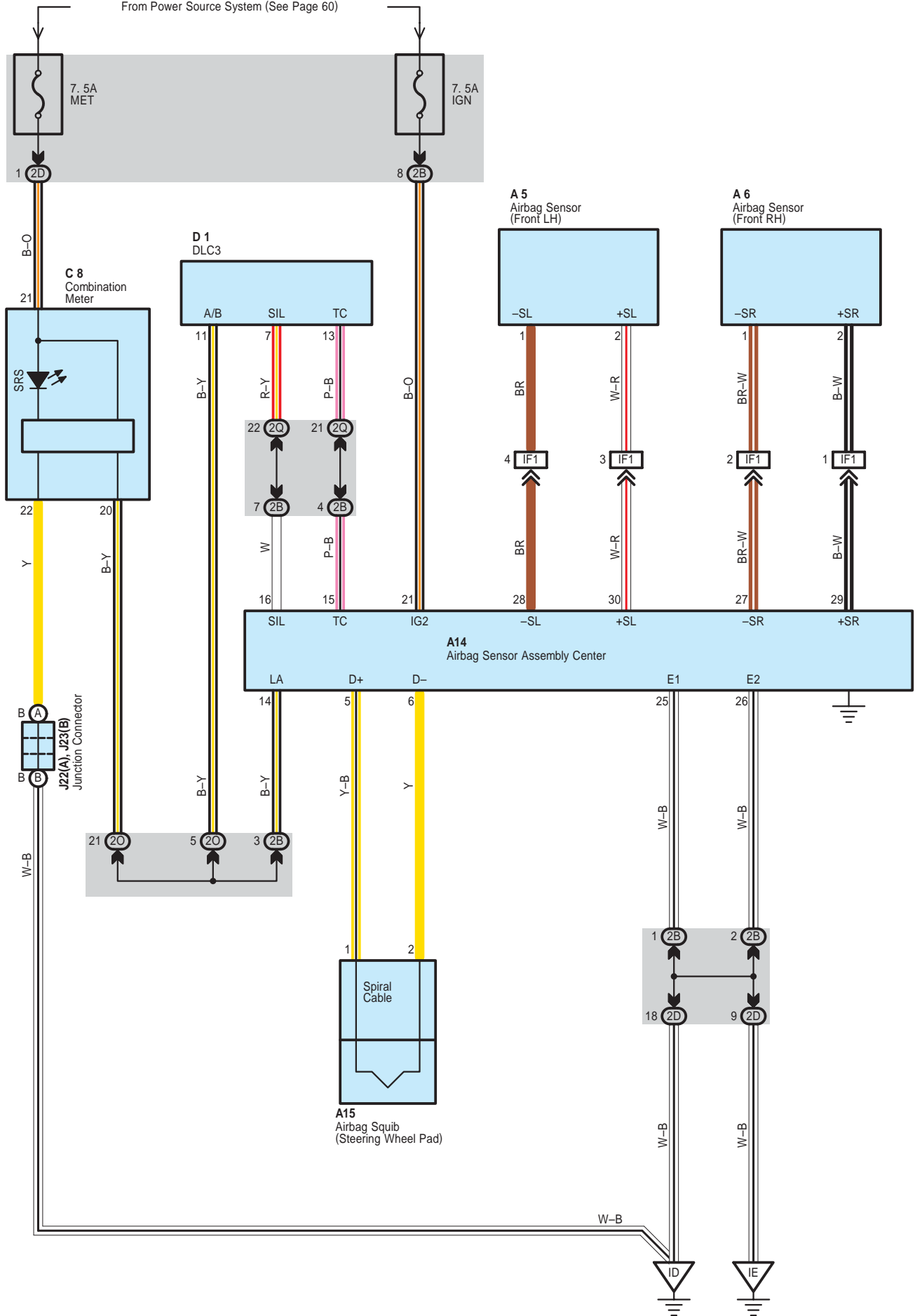
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B3	52 (Double Cab)	Frame Wire	B3	56 (Single Cab)	Frame Wire
	54 (Extra Cab)				



# Key Reminder and Light Reminder



From Power Source System (See Page 60)



# Door Lock Control

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2A	28	Instrument Panel Wire and Driver Side J/B (Instrument Panel Brace RH)
2D		
2H	28	Floor Wire and Driver Side J/B (Instrument Panel Brace RH)
2J	28	Engine Room Main Wire and Driver Side J/B (Instrument Panel Brace RH)
2K	28	Floor Wire and Driver Side J/B (Instrument Panel Brace RH)
2L	28	Engine Room Main Wire and Driver Side J/B (Instrument Panel Brace RH)
2N	29	Instrument Panel Wire and Driver Side J/B (Instrument Panel Brace RH)
2O		
2P		
2Q		
2R		
2S		

## : Connector Joining Wire Harness and Wire Harness

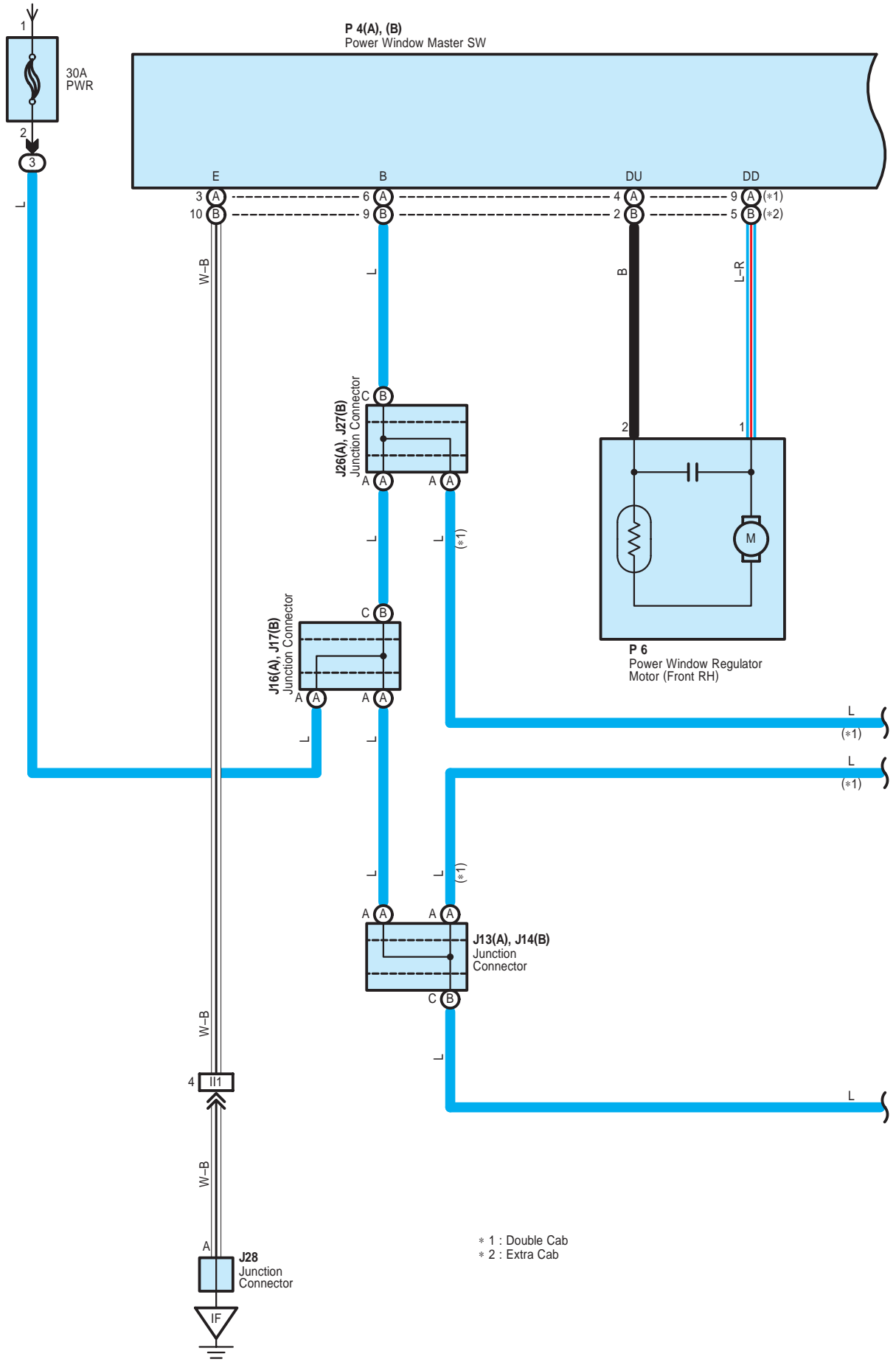
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	48	Instrument Panel Wire and Floor Wire (Left Kick Panel)
ID2	48	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
IH1	50	Instrument Panel Wire and Floor Wire (Right Kick Panel)
II1	50	Front Door RH Wire and Floor Wire (Right Kick Panel)
BB1	52 (Double Cab)	Rear Door No.1 Wire LH and Floor Wire (Center Pillar LH)
BC1	52 (Double Cab)	Rear Door No.1 Wire RH and Floor Wire (Center Pillar RH)

## : Ground Points

Code	See Page	Ground Points Location
EC	46	Rear Side of the Cylinder Block
ID	48	Instrument Panel Reinforcement Center
IE	48	Instrument Panel Reinforcement RH
IF	48	Cowl Side Panel RH

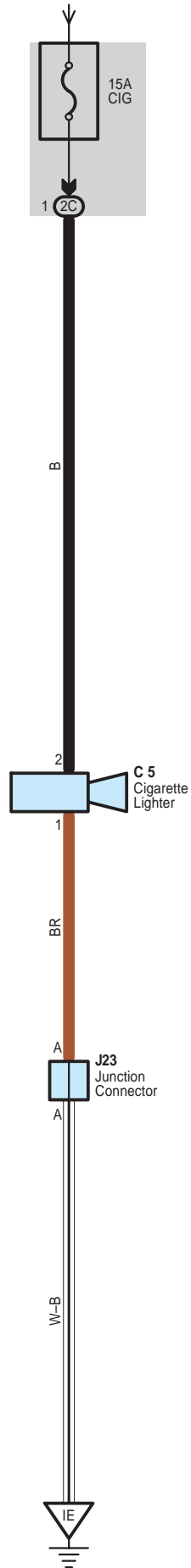
# Power Window

From Power Source System (See Page 60)



# Cigarette Lighter

From Power Source System (See Page 60)



## Service Hints

### O1 Outer Mirror SW

8-Ground : Approx. 12 volts with the ignition SW at ACC or ON position

7-Ground : Always continuity

6-7 : Continuity with the operation SW at LEFT or UP position

8-6 : Continuity with the operation SW at RIGHT or DOWN position

### : Parts Location

Code		See Page	Code		See Page	Code		See Page
J23		38	O2		40 (Double Cab)	O3		42 (Extra Cab)
J24	A	38			42 (Extra Cab)			
J25	B	38			44 (Single Cab)			
O1		39	O3		40 (Double Cab)			

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
20	29	Instrument Panel Wire and Driver Side J/B (Instrument Panel Brace RH)

### : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	48	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)

### : Ground Points

Code	See Page	Ground Points Location
IE	48	Instrument Panel Reinforcement RH

Example

