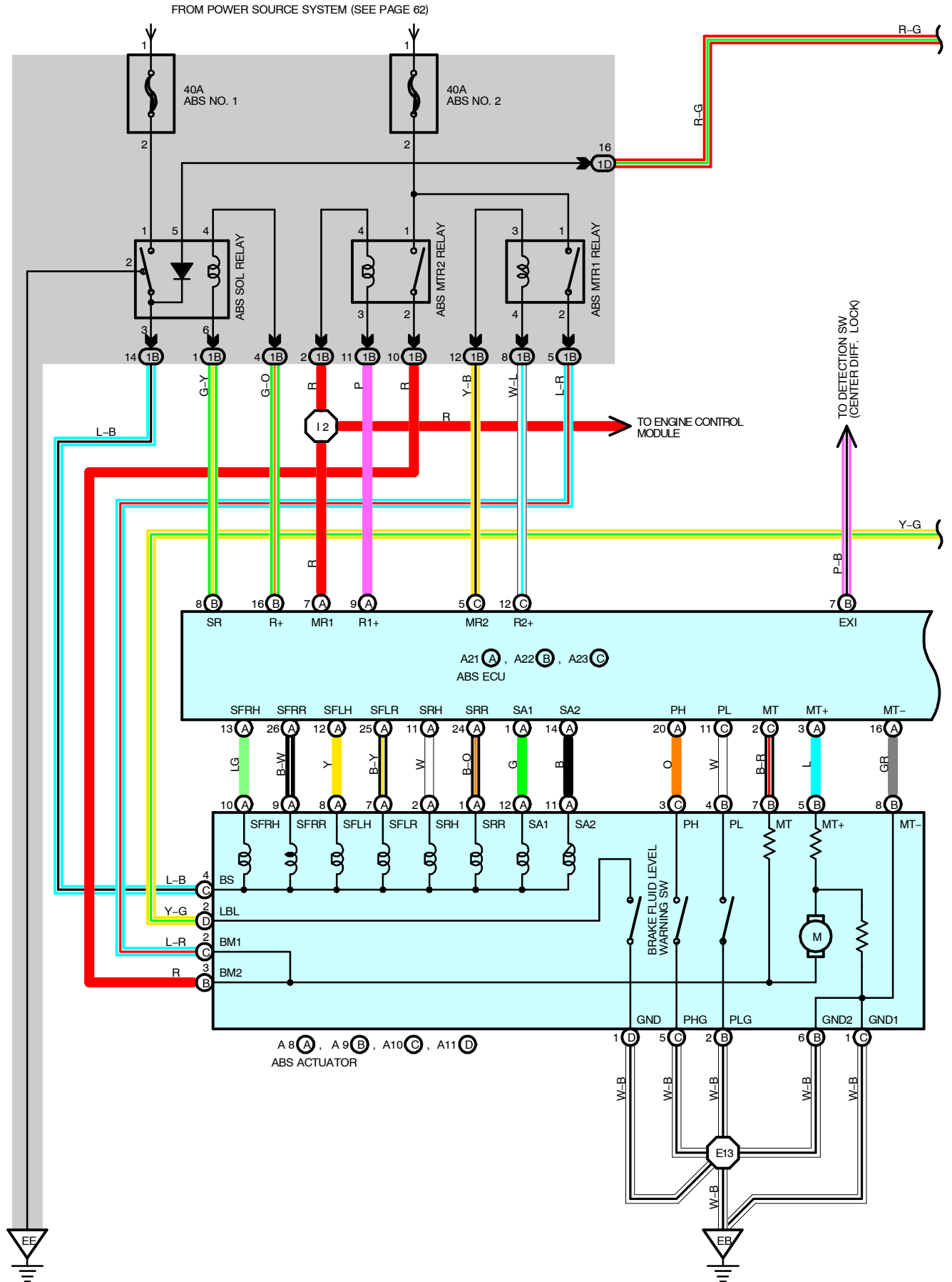
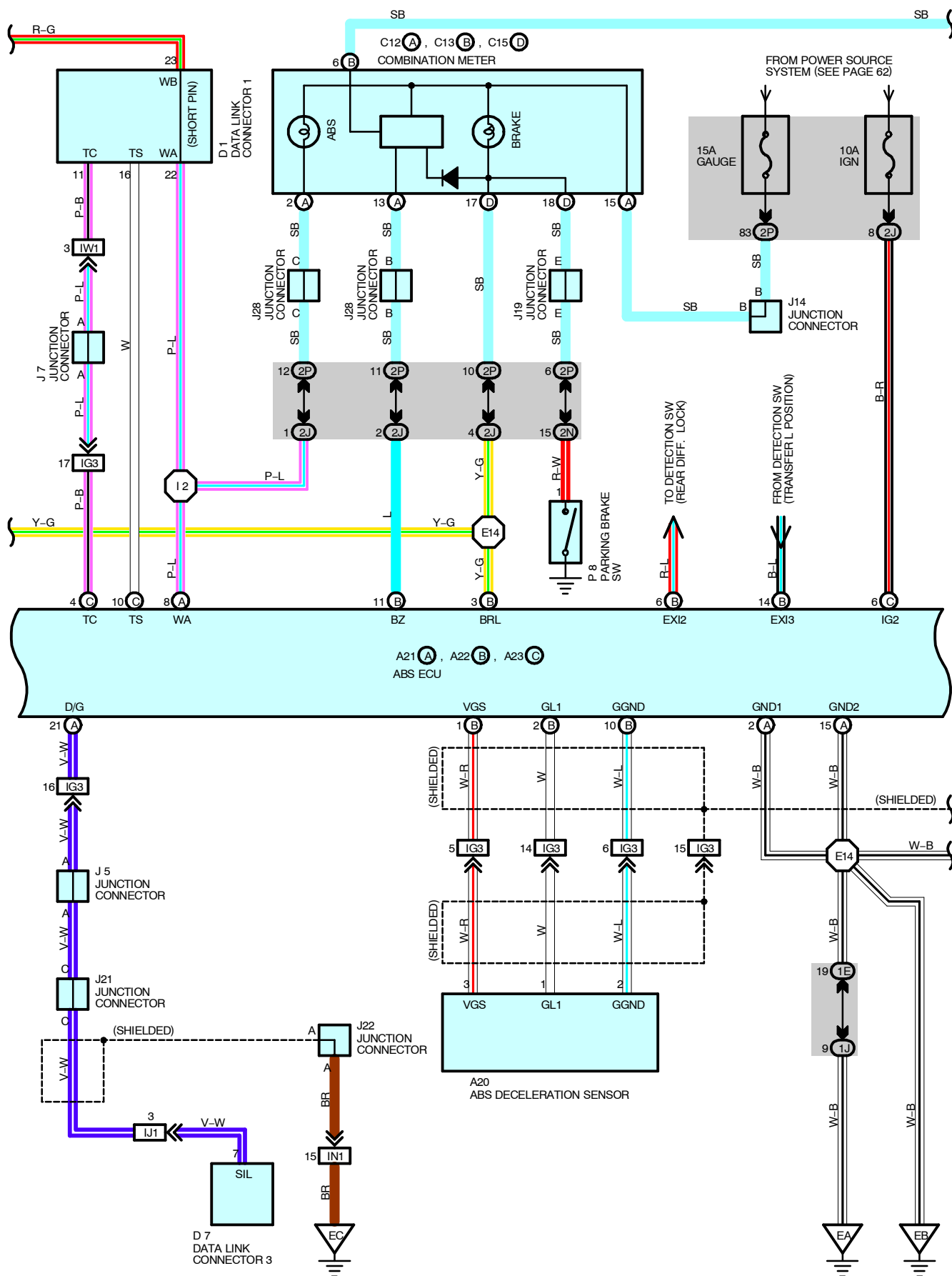
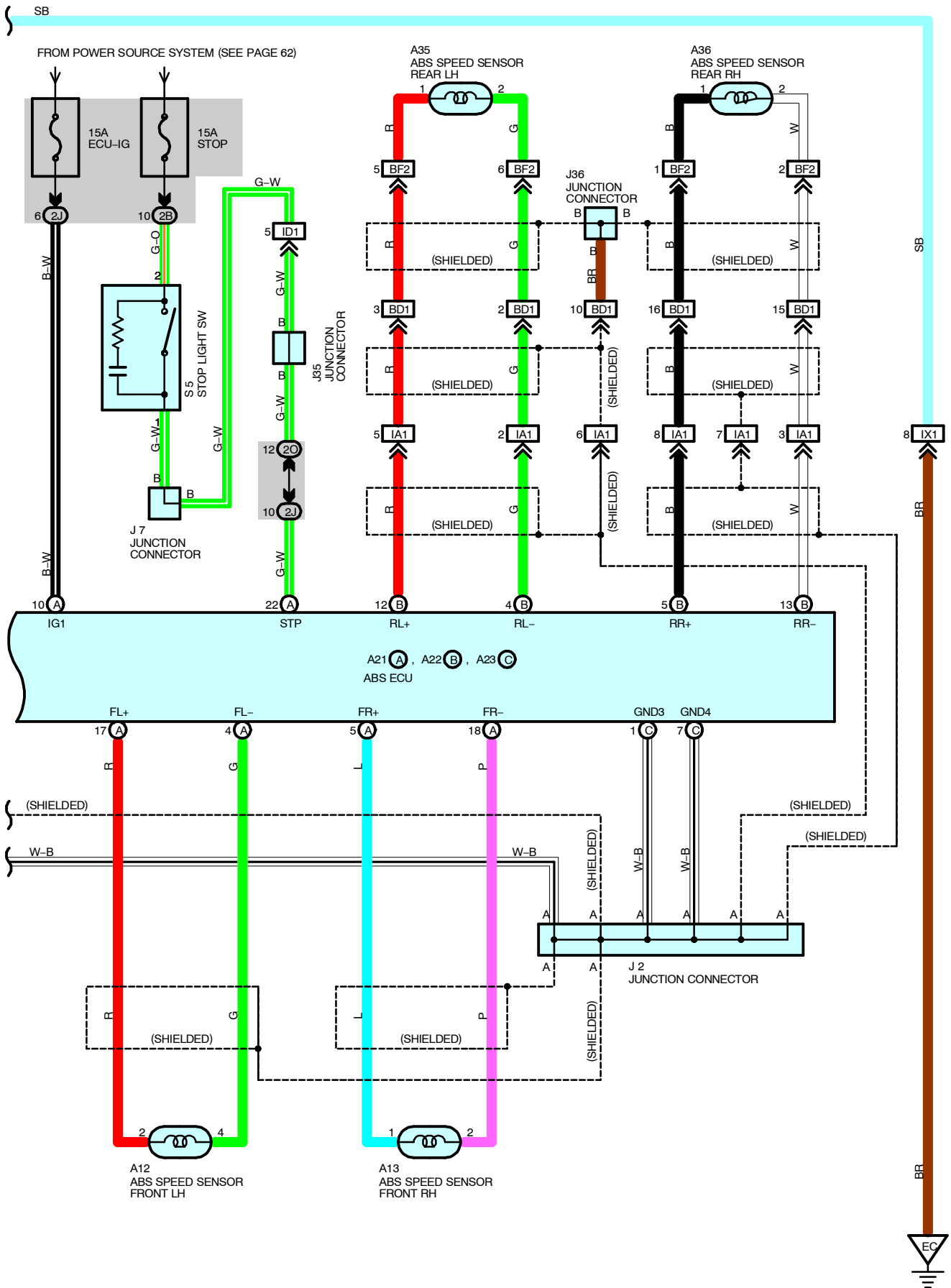


ABS







SYSTEM OUTLINE

ABS OPERATION

If the brake pedal is depressed suddenly, the ABS controls the hydraulic pressure of the wheel cylinders to automatically avoid wheel locking and ensure the directional and steering stability of the vehicle.

In sudden braking, the ABS 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 ABS ECU detects that the fluid pressure in the wheel cylinder is insufficient, the ABS ECU controls the solenoids in the actuators to increase the braking pressure.

FAIL-SAFE FUNCTION

If an error occurs in the ABS ECU, sensor signals, and/or actuators, the ABS ECU inhibits the brake actuator control. According to this, the brake actuator turns off the solenoid, and the vehicle operates without the ABS system.

SERVICE HINTS

A21 (A), A22 (B), A23 (C) ABS ECU

(A)10-GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position

(C) 6-GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position

(A)22-GROUND : Approx. **12** volts with brake pedal depressed

(A) 2, (A) 15, (C) 1, (C) 7-GROUND : Always continuity

(C)10-GROUND : Approx. **12** volts with ignition SW at **ON** position and the data link connector 1 **TS-E1** not connected

(C) 4-GROUND : Approx. **12** volts with ignition SW at **ON** position and the data link connector 1 **TC-E1** not connected

A11 (D) BRAKE FLUID LEVEL WARNING SW [ABS ACTUATOR]

(D) 2-(D) 1 : Closed with the float down

A12 ABS SPEED SENSOR FRONT LH

2-4 : Approx. **1.07** k Ω (**20**°C, **68**°F)

A13 ABS SPEED SENSOR FRONT RH

1-2 : Approx. **1.07** k Ω (**20**°C, **68**°F)

A35, A36 ABS SPEED SENSOR REAR LH, RH

1-2 : Approx. **1.2** k Ω (**25**°C, **77**°F)

: PARTS LOCATION

Code		See Page	Code		See Page	Code		See Page
A8	A	36	A35		40	J14		39
A9	B	36	A36		40	J19		39
A10	C	36	C12	A	38	J21		39
A11	D	36	C13	B	38	J22		39
A12		36	C15	D	38	J28		39
A13		36	D1		36	J35		40
A20		38	D7		38	J36		40
A21	A	38	J2		39	P8		41
A22	B	38	J5		39	S5		39
A23	C	38	J7		39			

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	21	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1D		
1E		
1J	21	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
2B	24	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2J	24	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2N	24	Floor Wire and Cowl Side J/B LH (Left Kick Panel)
2O		
2P	26	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)

ABS



: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	46	Floor Wire and Engine Room No.2 Wire (Left Kick Panel)
ID1	46	Dash Wire and Floor Wire (Left Kick Panel)
IG3	48	Engine Room No.2 Wire and Dash Wire (Behind the Combination Meter)
IJ1	48	Dash Wire and Detector Wire (Instrument Panel Center)
IN1	50	Engine Wire and Dash Wire (Behind the Glove Box)
IW1	52	Engine Room No.2 Wire and Dash Wire (Behind the Glove Box)
IX1	52	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
BD1	54	Floor No.3 Wire and Floor Wire (Left Rear Side Quarter Panel)
BF2	56	Frame Wire and Floor No.3 Wire (Left Side of Rear Floor Crossmember)



: GROUND POINTS

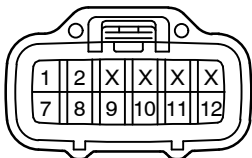
Code	See Page	Ground Points Location
EA	44	Front Right Side of Fender Apron
EB		
EC	44	Rear Bank of Right Cylinder Head
EE	44	Front Left Side of Fender Apron



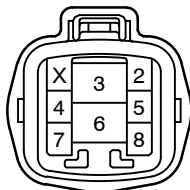
: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E13	44	Engine Room No.2 Wire	I2	48	Engine Room No.2 Wire
E14					

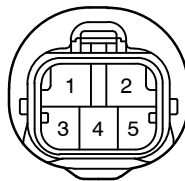
A8 (A)
BLACK



A9 (B)
BLACK



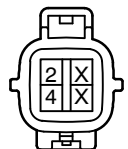
A10 (C)
GRAY



A11 (D)
GRAY



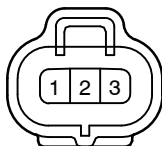
A12



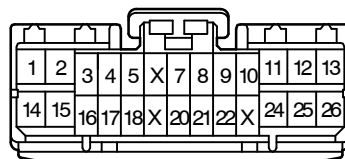
A13
GRAY



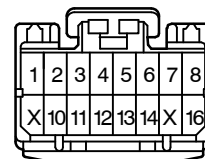
A20
BLACK



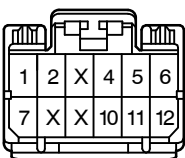
A21 (A)



A22 (B)



A23 (C)



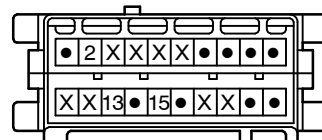
A35
GRAY



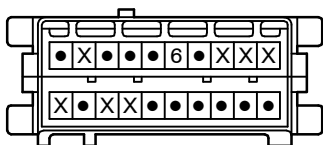
A36
GRAY



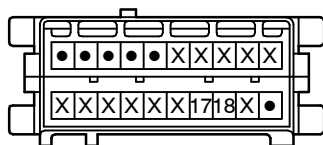
C12 (A)
GRAY



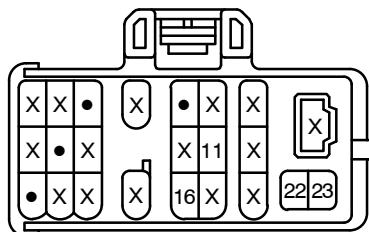
C13 (B)



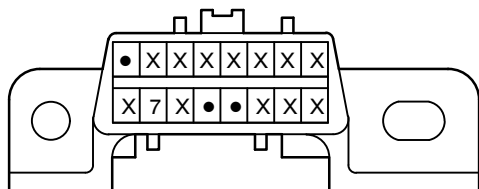
C15 (D)



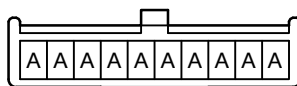
D1
BLACK



D7
BLACK

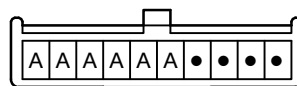


J2



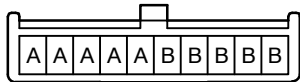
(Hint : See Page 7)

J5
BLACK



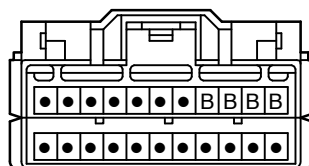
(Hint : See Page 7)

J7
GREEN



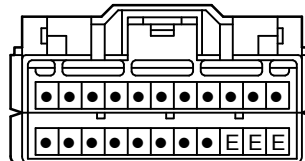
(Hint : See Page 7)

J14



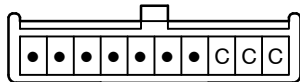
(Hint : See Page 7)

J19
GRAY



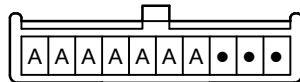
(Hint : See Page 7)

J21
BLUE



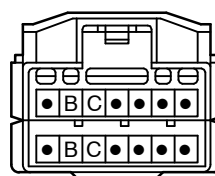
(Hint : See Page 7)

J22
RED



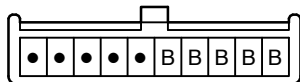
(Hint : See Page 7)

J28



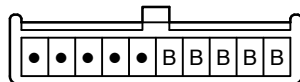
(Hint : See Page 7)

J35
GREEN



(Hint : See Page 7)

J36
GREEN

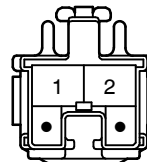


(Hint : See Page 7)

P8



S5
BLUE



MEMO
