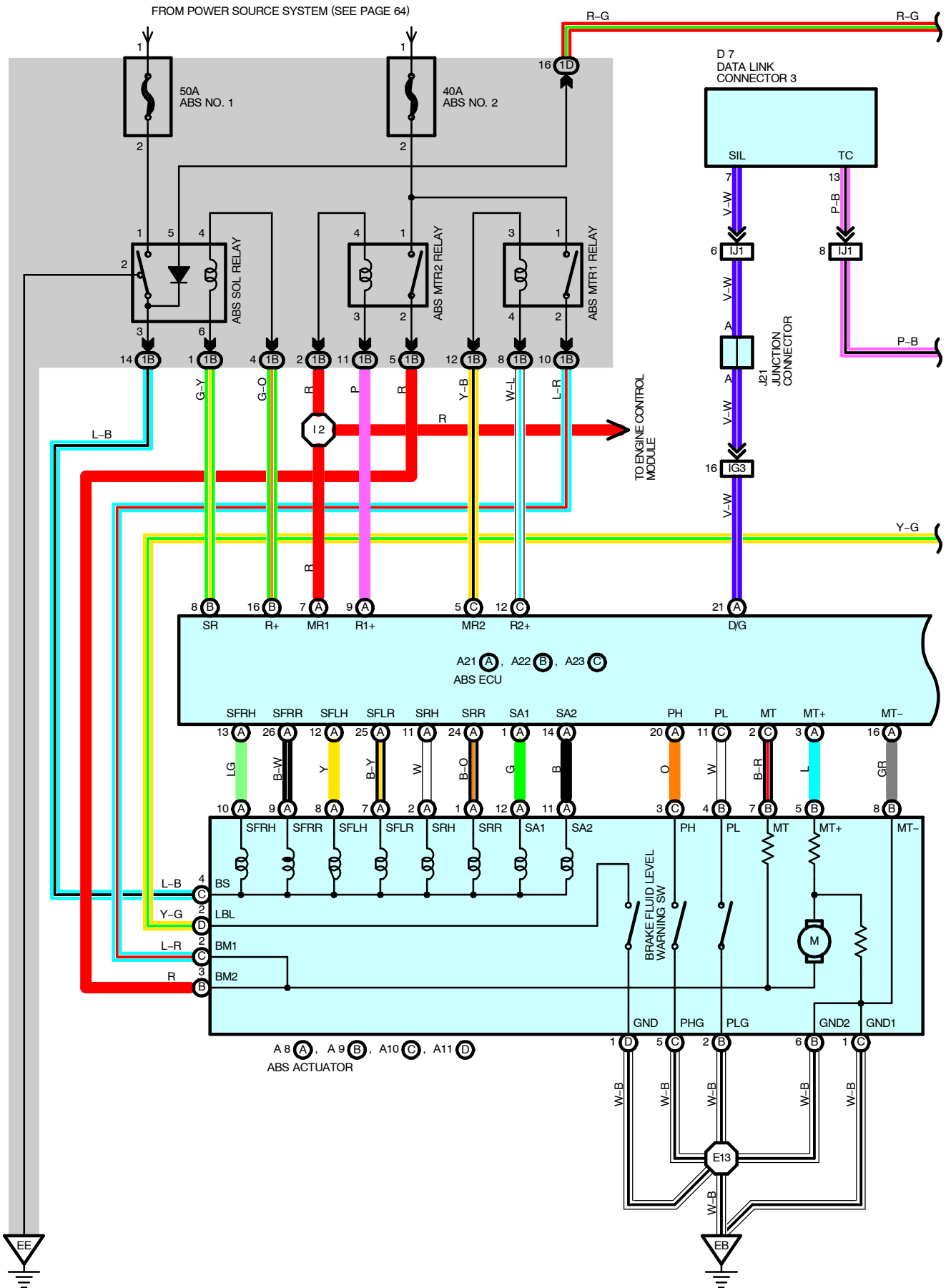
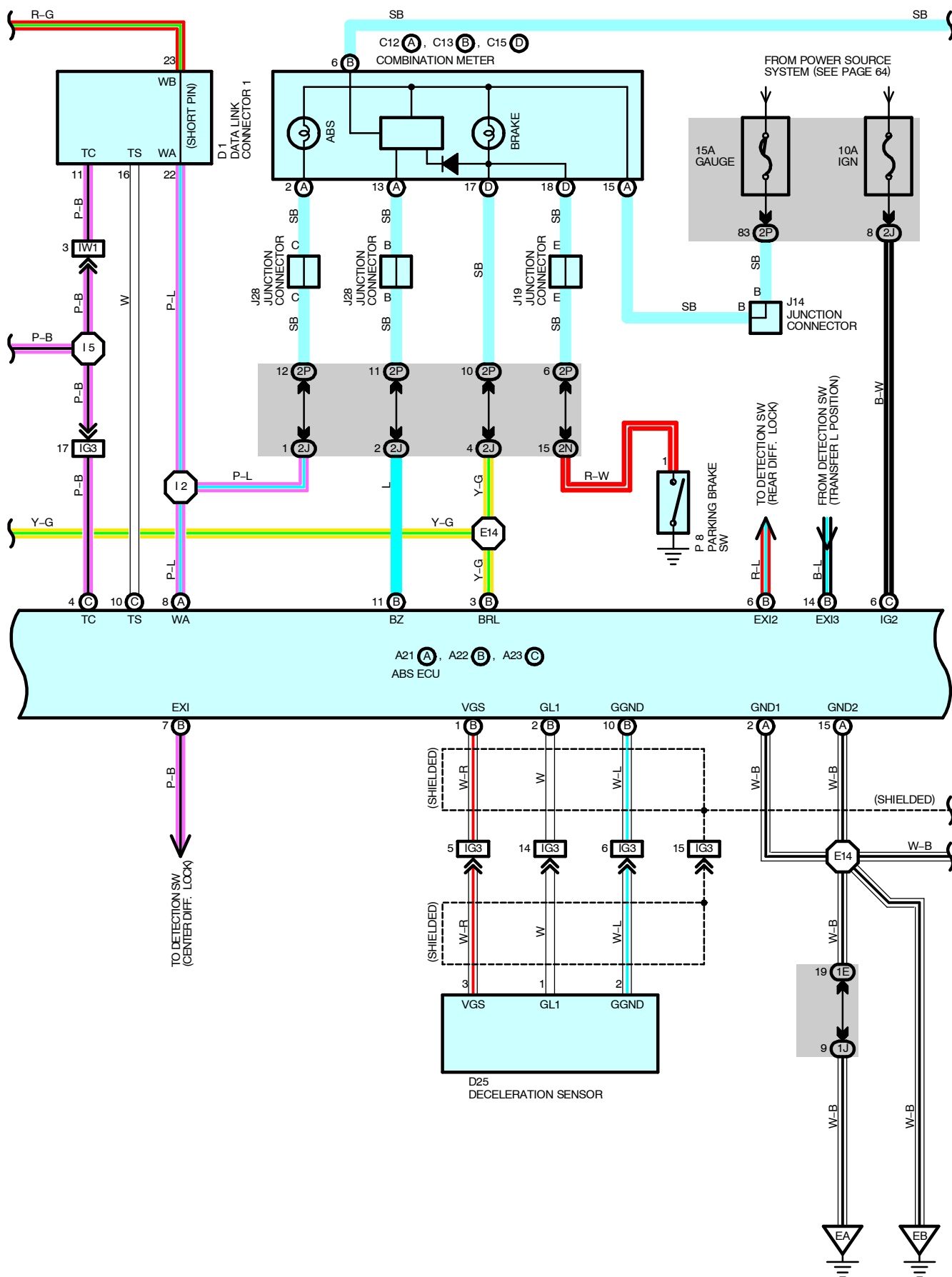
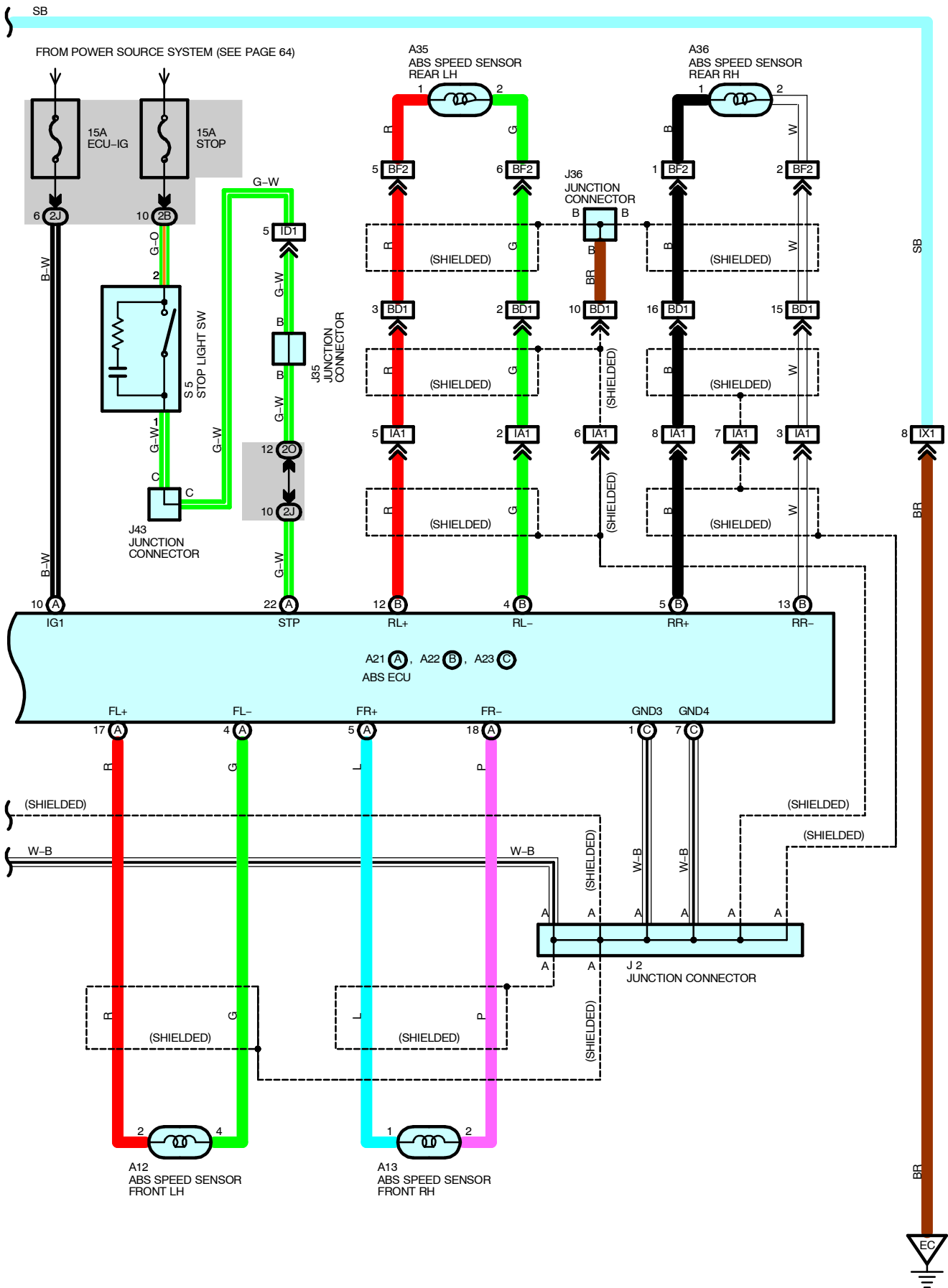








SYSTEM OUTLINE

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** kΩ (**20**°C, **68**°F)

A13 ABS SPEED SENSOR FRONT RH

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

A35, A36 ABS SPEED SENSOR REAR LH, RH

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

: PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
A8	A	38	A35		42	J14	41
A9	B	38	A36		42	J19	41
A10	C	38	C12	A	40	J21	41
A11	D	38	C13	B	40	J28	41
A12		38	C15	D	40	J35	42
A13		38	D1		38	J36	42
A21	A	40	D7		40	J43	41
A22	B	40	D25		40	P8	43
A23	C	40	J2		41	S5	41

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	23	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1D		
1E		
1J	23	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
2B	26	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2J	26	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2N	26	Floor Wire and Cowl Side J/B LH (Left Kick Panel)
2O		
2P	28	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	48	Floor Wire and Engine Room No.2 Wire (Left Kick Panel)
ID1	48	Dash Wire and Floor Wire (Left Kick Panel)
IG3	50	Engine Room No.2 Wire and Dash Wire (Behind the Combination Meter)
IJ1	50	Dash Wire and Detector Wire (Instrument Panel Center)
IW1	54	Engine Room No.2 Wire and Dash Wire (Behind the Glove Box)
IX1	54	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
BD1	56	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	46	Front Right Side of Fender Apron
EB		
EC	46	Rear Bank of Right Cylinder Head
EE	46	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	46	Engine Room No.2 Wire	I2	50	Engine Room No.2 Wire
E14			I5	50	Dash Wire