

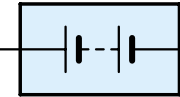

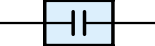



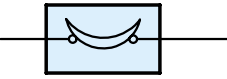


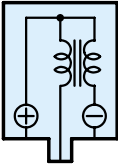


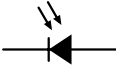

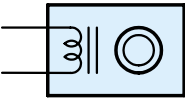

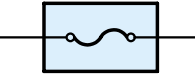
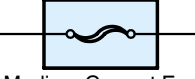



# LAND CRUISER / LAND CRUISER PRADO ELECTRICAL WIRING DIAGRAM

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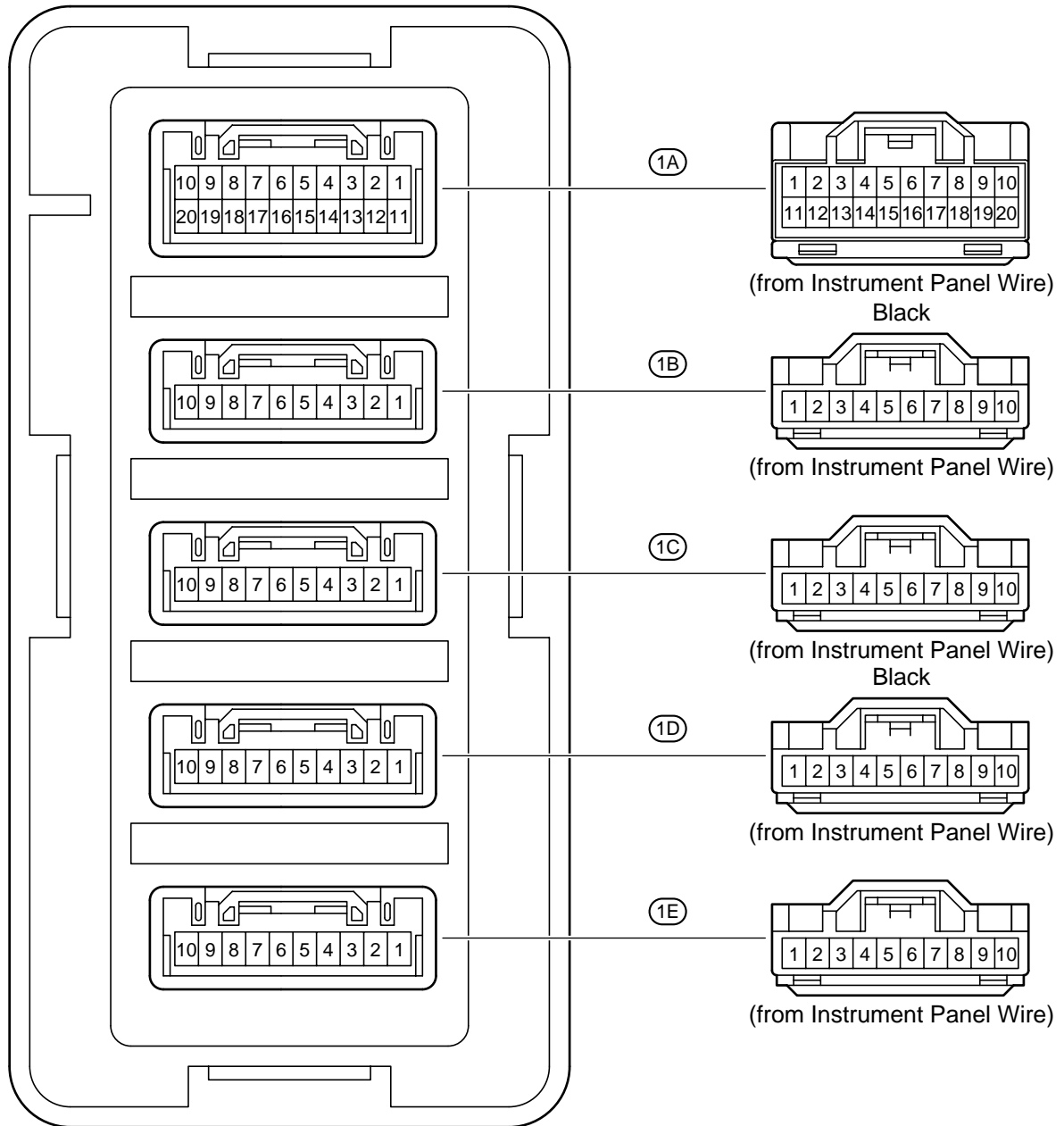
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# E GLOSSARY OF TERMS AND SYMBOLS

 <p><b>BATTERY</b> Stores chemical energy and converts it into electrical energy. Provides DC current for the auto's various electrical circuits.</p>	 <p><b>GROUND</b> The point at which wiring attaches to the Body, thereby providing a return path for an electrical circuit; without a ground, current cannot flow.</p>
 <p><b>CAPACITOR (Condenser)</b> A small holding unit for temporary storage of electrical voltage.</p>	<p><b>HEADLIGHTS</b> Current flow causes a headlight filament to heat up and emit light. A headlight may have either a single (1) filament or a double (2) filament</p> <p><b>1. SINGLE FILAMENT</b></p>  <p><b>2. DOUBLE FILAMENT</b></p> 
 <p><b>CIGARETTE LIGHTER</b> An electric resistance heating element.</p>	
 <p><b>CIRCUIT BREAKER</b> Basically a reusable fuse, a circuit breaker will heat and open if too much current flows through it. Some units automatically reset when cool, others must be manually reset.</p>	 <p><b>HORN</b> An electric device which sounds a loud audible signal.</p>
 <p><b>DIODE</b> A semiconductor which allows current flow in only one direction.</p>	 <p><b>IGNITION COIL</b> Converts low-voltage DC current into high-voltage ignition current for firing the spark plugs.</p>
 <p><b>DIODE, ZENER</b> A diode which allows current flow in one direction but blocks reverse flow only up to a specific voltage. Above that potential, it passes the excess voltage. This acts as a simple voltage regulator.</p>	 <p><b>LIGHT</b> Current flow through a filament causes the filament to heat up and emit light.</p>
 <p><b>PHOTODIODE</b> The photodiode is a semiconductor which controls the current flow according to the amount of light.</p>	 <p><b>LED (LIGHT EMITTING DIODE)</b> Upon current flow, these diodes emit light without producing the heat of a comparable light.</p>
 <p><b>DISTRIBUTOR, IIA</b> Channels high-voltage current from the ignition coil to the individual spark plugs.</p>	 <p><b>METER, ANALOG</b> Current flow activates a magnetic coil which causes a needle to move, thereby providing a relative display against a background calibration.</p>
 <p><b>FUSE</b> A thin metal strip which burns through when too much current flows through it, thereby stopping current flow and protecting a circuit from damage.</p>  <p><b>FUSIBLE LINK</b> (for Medium Current Fuse) A heavy-gauge wire placed in high amperage circuits which burns through on overloads, thereby protecting the circuit. The numbers indicate the crosssection surface area of the wires.</p>  <p>(for High Current Fuse or Fusible Link)</p>	 <p><b>METER, DIGITAL</b> Current flow activates one or many LED's, LCD's, or fluorescent displays, which provide a relative or digital display.</p>
	 <p><b>MOTOR</b> A power unit which converts electrical energy into mechanical energy, especially rotary motion.</p>

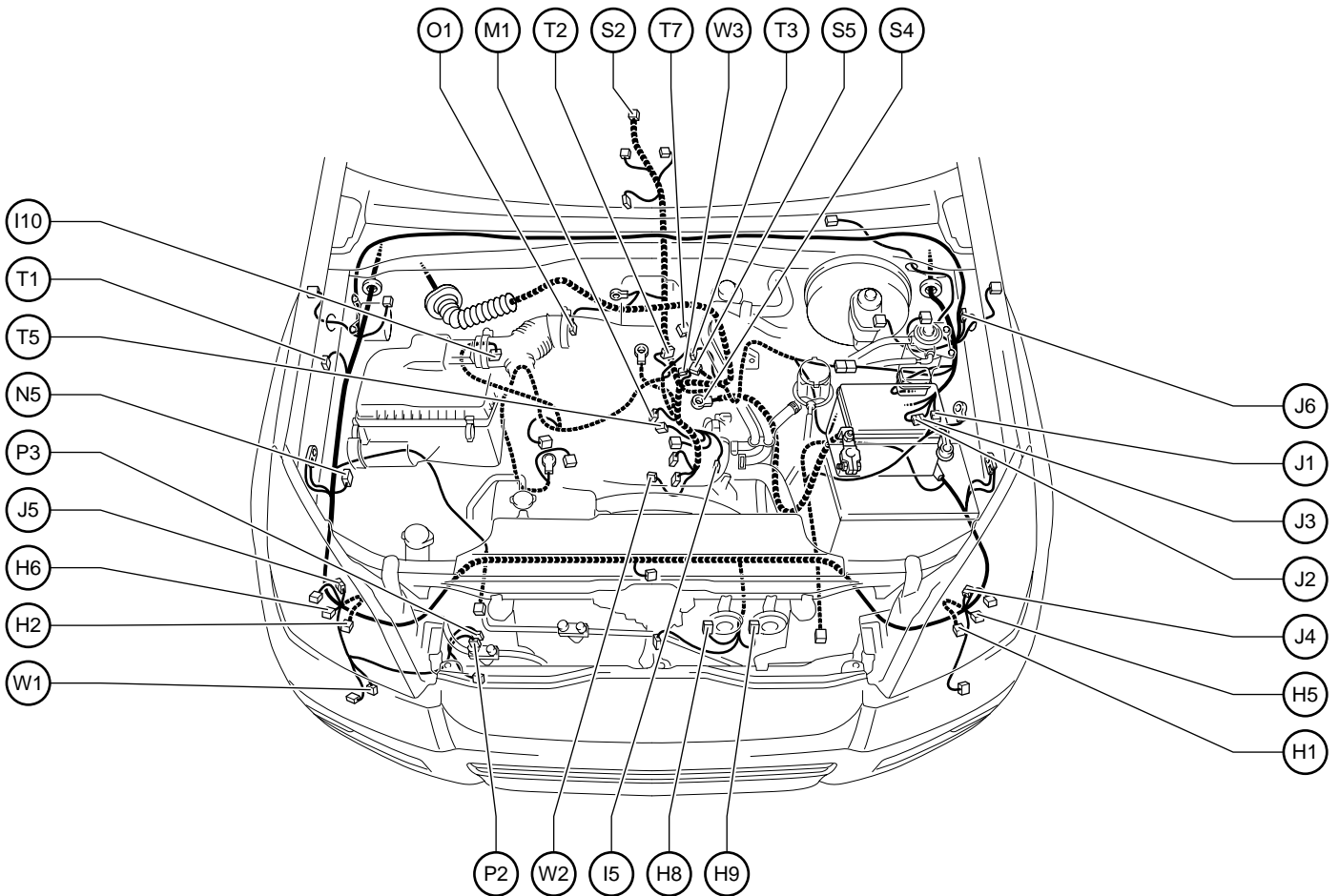
# F RELAY LOCATIONS

○ : J/B No.1	<b>LHD : Instrument Panel Reinforcement Left (See Page 21)</b>
	<b>RHD : Instrument Panel Reinforcement Right (See Page 21)</b>



## Position of Parts in Engine Compartment

[LHD : 5L-E]



H 1 Headlight Beam Level Control Actuator LH  
 H 2 Headlight Beam Level Control Actuator RH  
 H 5 Headlight LH  
 H 6 Headlight RH  
 H 8 Horn (High)  
 H 9 Horn (Low)

I 5 Injection Pump  
 I 10 Intake Air Temp. Sensor

J 1 Junction Connector  
 J 2 Junction Connector  
 J 3 Junction Connector  
 J 4 Junction Connector  
 J 5 Junction Connector  
 J 6 Junction Connector

M 1 Magnetic Spill Valve

N 5 Noise Filter (Condenser Fan)

O 1 Oil Pressure SW

P 2 Pressure SW

P 3 Pressure SW

S 2 Speed Sensor (Combination Meter)

S 4 Starter

S 5 Starter

T 1 Theft Deterrent Horn

T 2 Throttle Control Motor

T 3 Throttle Open SW

T 5 Timing Control Valve

T 7 Turbo Pressure Sensor

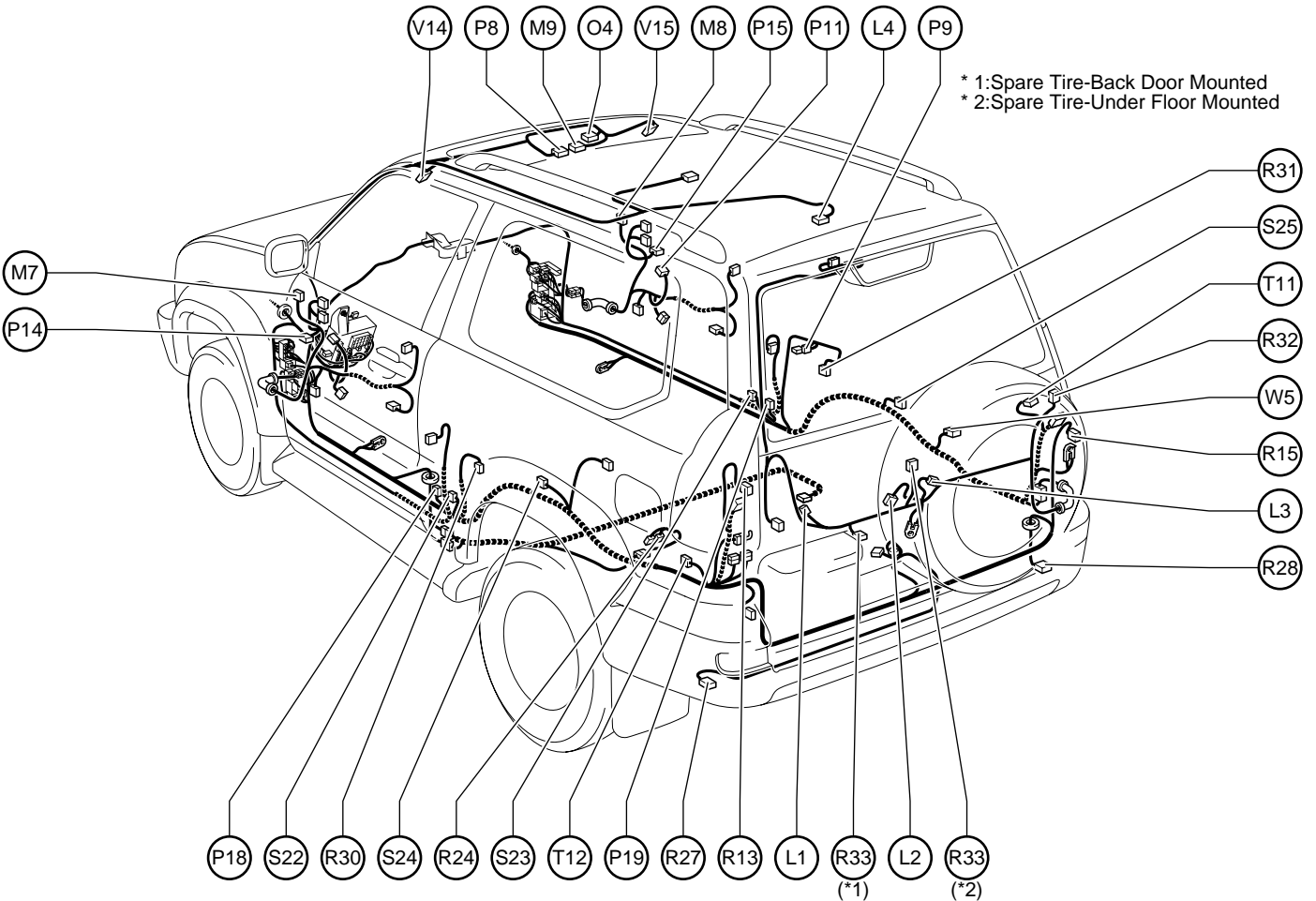
W 1 Washer Motor

W 2 Water Temp. Sender

W 3 Water Temp. Sensor

## Position of Parts in Body

[LHD : 3-Door]



L 1 License Plate Light  
 L 2 License Plate Light LH  
 L 3 License Plate Light RH  
 L 4 Luggage Compartment Light

M 7 Mirror Heater LH  
 Remote Control Mirror LH  
 M 8 Mirror Heater RH  
 Remote Control Mirror RH  
 M 9 Moon Roof Control ECU and Motor

O 4 Overhead J/B

P 8 Personal Light  
 P 9 Power Outlet (Rear)  
 P 11 Power Window Control SW Front RH  
 P 14 Power Window Motor Front LH  
 P 15 Power Window Motor Front RH  
 P 18 Pretensioner LH  
 P 19 Pretensioner RH

R 13 Rear Combination Light LH  
 R 15 Rear Combination Light RH  
 R 24 Rear Diff. Lock Motor  
 R 27 Rear Fog Light LH  
 R 28 Rear Fog Light RH  
 R 30 Rear Speaker LH  
 R 31 Rear Speaker RH  
 R 32 Rear Window Defogger  
 R 33 Rear Wiper Motor

S 22 Side Airbag Sensor Front LH  
 S 23 Side Airbag Sensor Front RH  
 S 24 Side Airbag Sensor Rear LH  
 S 25 Side Airbag Sensor Rear RH

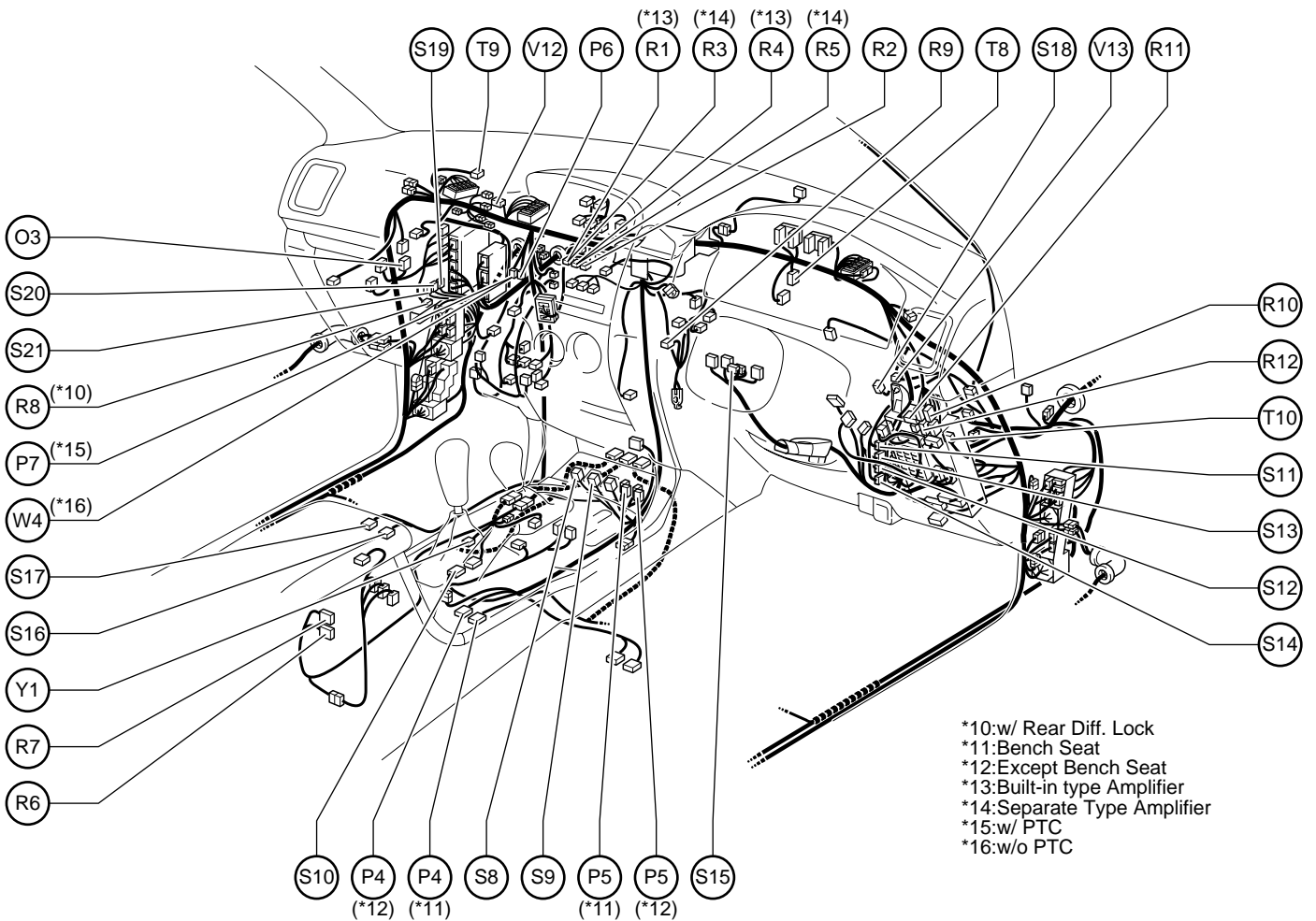
T 11 Theft Deterrent Siren  
 T 12 Trailer Socket

V 14 Vanity Light LH  
 V 15 Vanity Light RH

W 5 Woofer Speaker

## Position of Parts in Instrument Panel

[RHD]



O 3 Option Connector (Door Control Receiver)

P 4 Parking Brake SW  
 P 5 Power Outlet (Front)  
 P 6 PTC Heater  
 P 7 PTC Heater

R 1 Radio and Player  
 R 2 Radio and Player  
 R 3 Radio and Player  
 R 4 Radio and Player  
 R 5 Radio and Player  
 R 6 Rear Blower SW  
 R 7 Rear Cooler Control SW  
 R 8 Rear Diff. Lock Control ECU  
 R 9 Rear Diff. Lock SW  
 R10 Rear Fog Light SW  
 R11 Remote Control Mirror SW  
 R12 Rheostat

S 8 Seat Heater SW Front LH  
 S 9 Seat Heater SW Front RH  
 S10 Shift Lock Control ECU

S 11 Skid Control ECU  
 S12 Skid Control ECU  
 S13 Skid Control ECU  
 S14 Skid Control ECU  
 S15 Steering Sensor  
 S16 Stereo Component Amplifier  
 S17 Stereo Component Amplifier  
 S18 Stop Light SW  
 S19 Suspension Control ECU  
 S20 Suspension Control ECU  
 S21 Suspension Control ECU

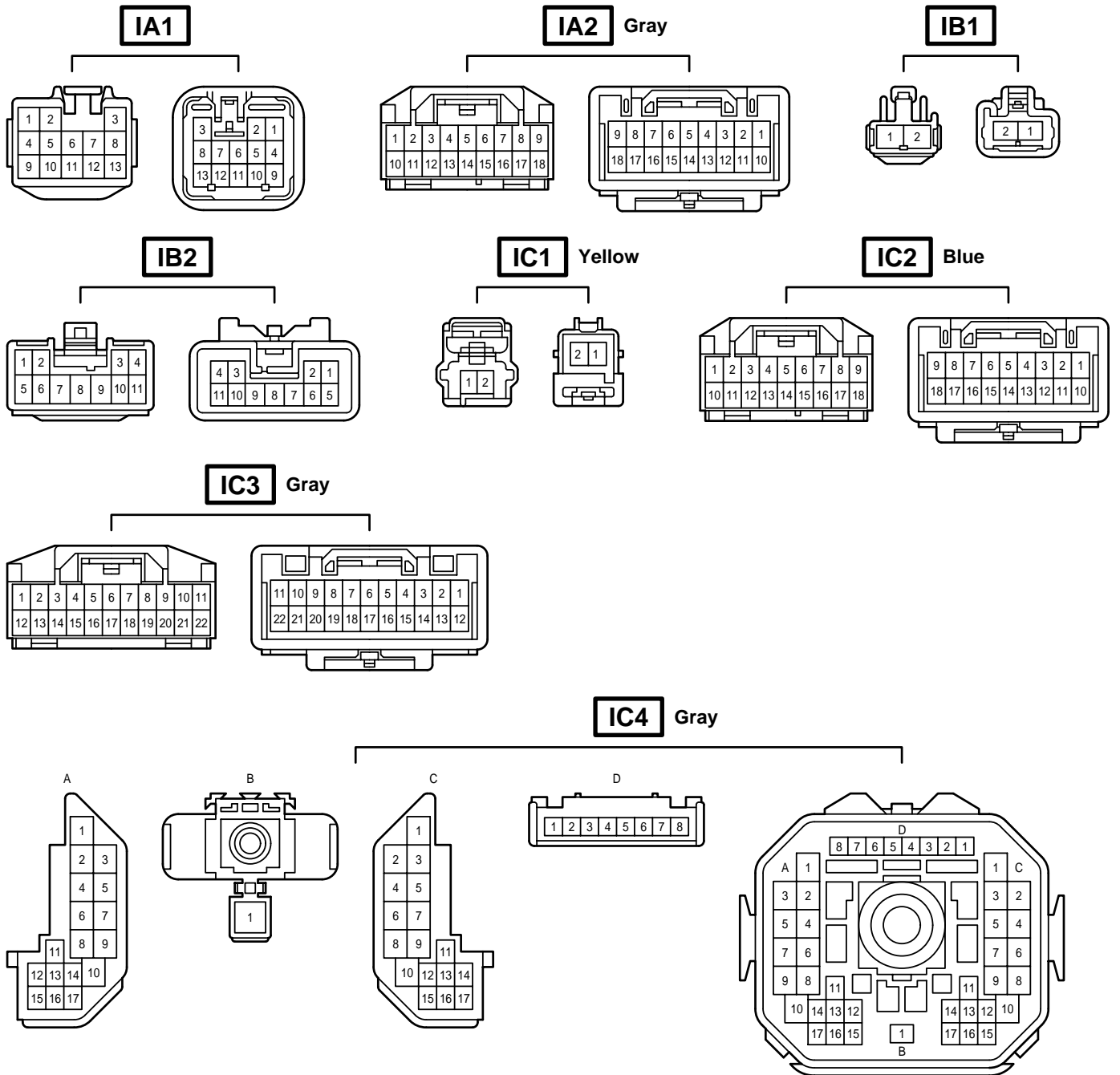
T 8 Theft Deterrent ECU  
 T 9 Transponder Key Computer  
 T10 Turn Signal Flasher

V12 Viscous Heater Amplifier  
 V13 VSC Warning Buzzer

W 4 Water Temp. Sensor (A/C)

Y 1 Yaw Rate Sensor

# Connector Joining Wire Harness and Wire Harness



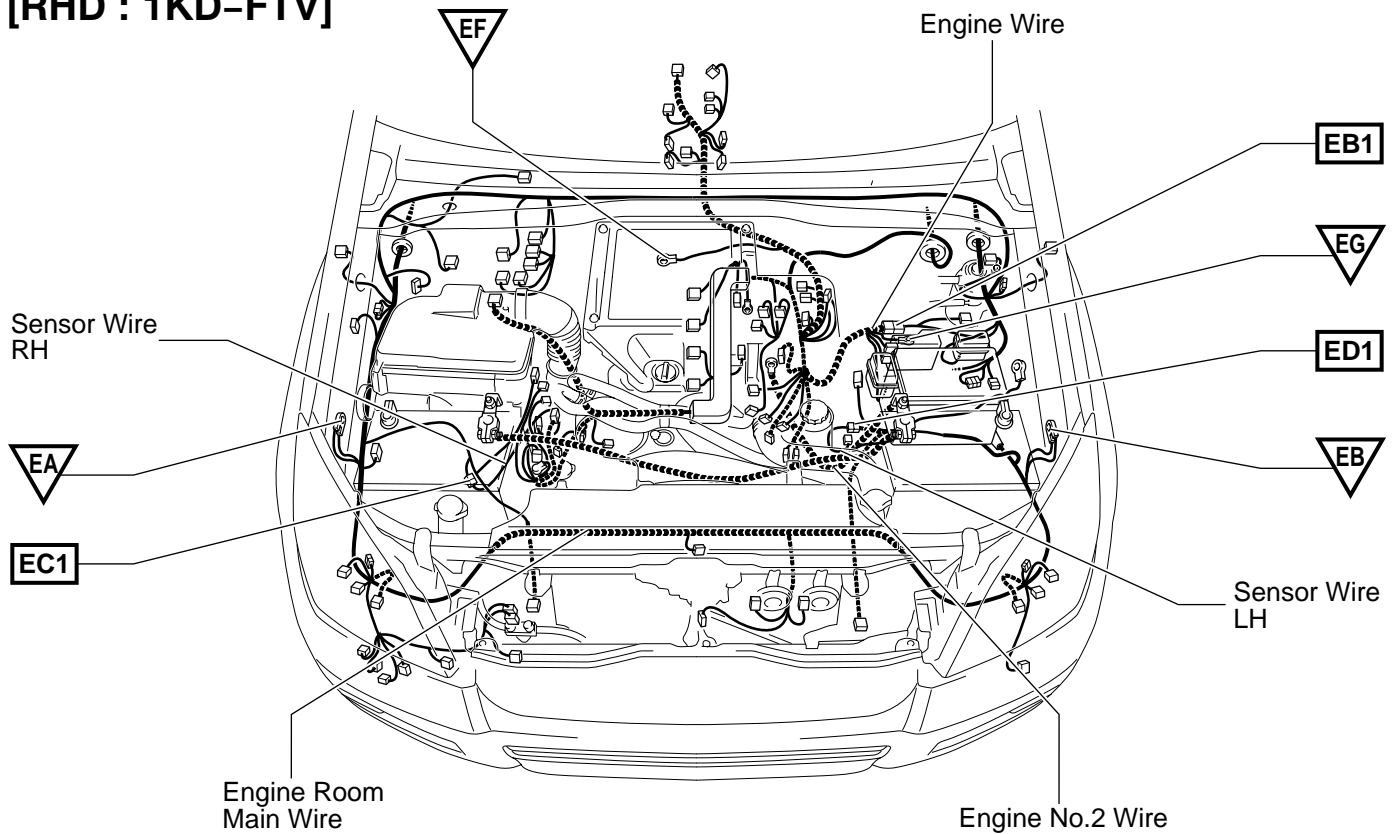
Code	Joining Wire Harness and Wire Harness (Connector Location)
IA1	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2	
IB1	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
IB2	
IC1	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC2	
IC3	
IC4	

# G ELECTRICAL WIRING ROUTING

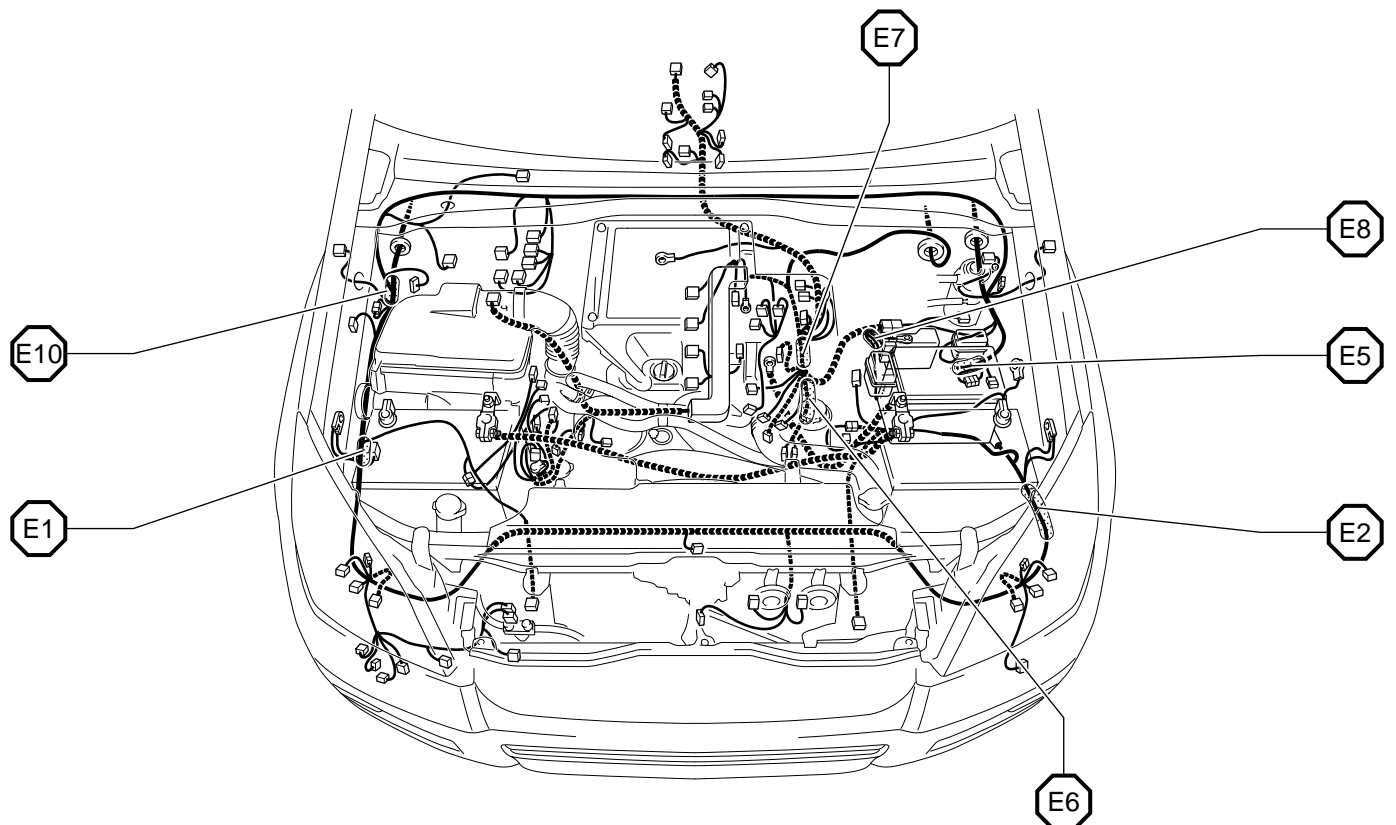
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

[RHD : 1KD-FTV]

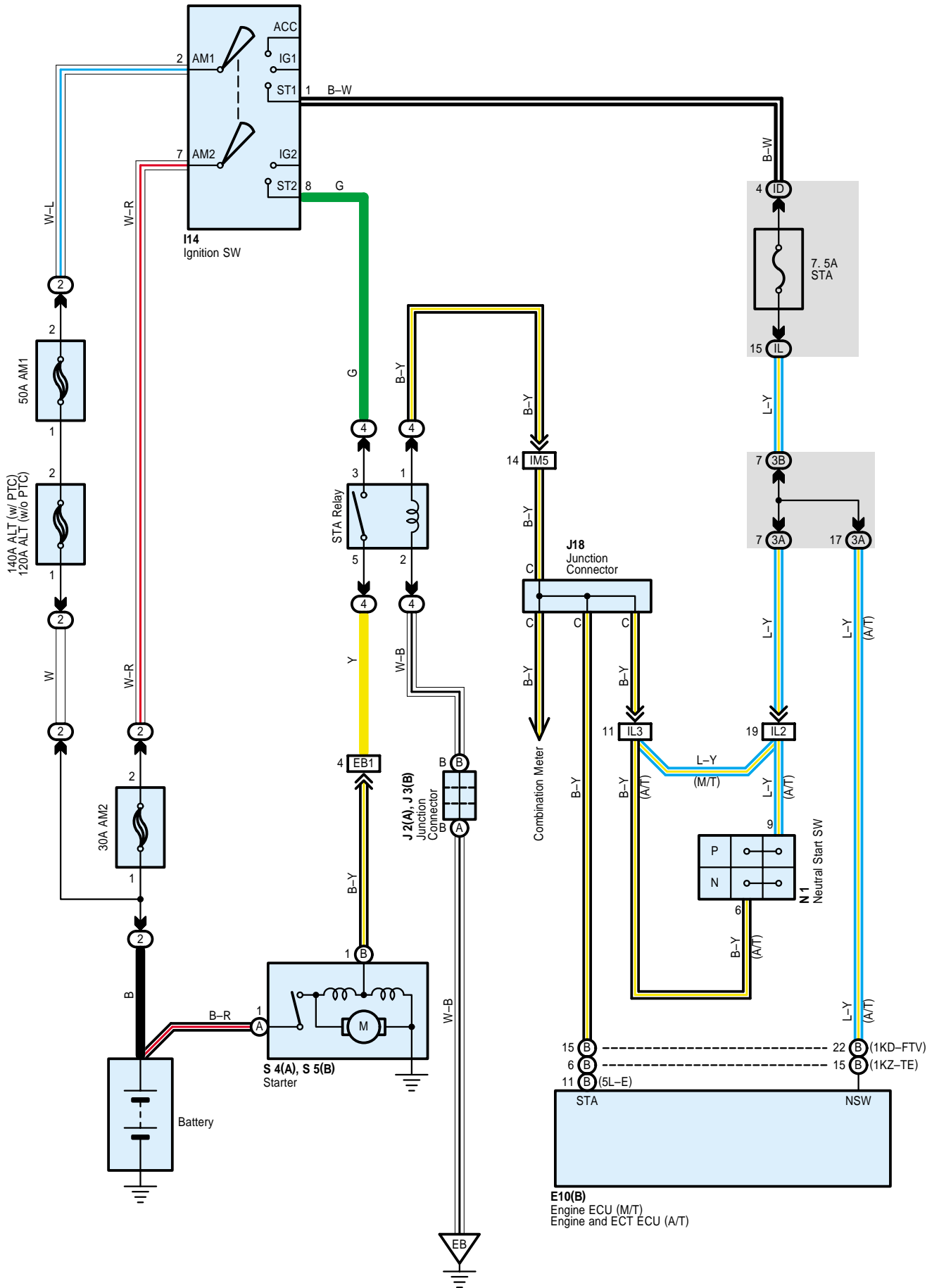


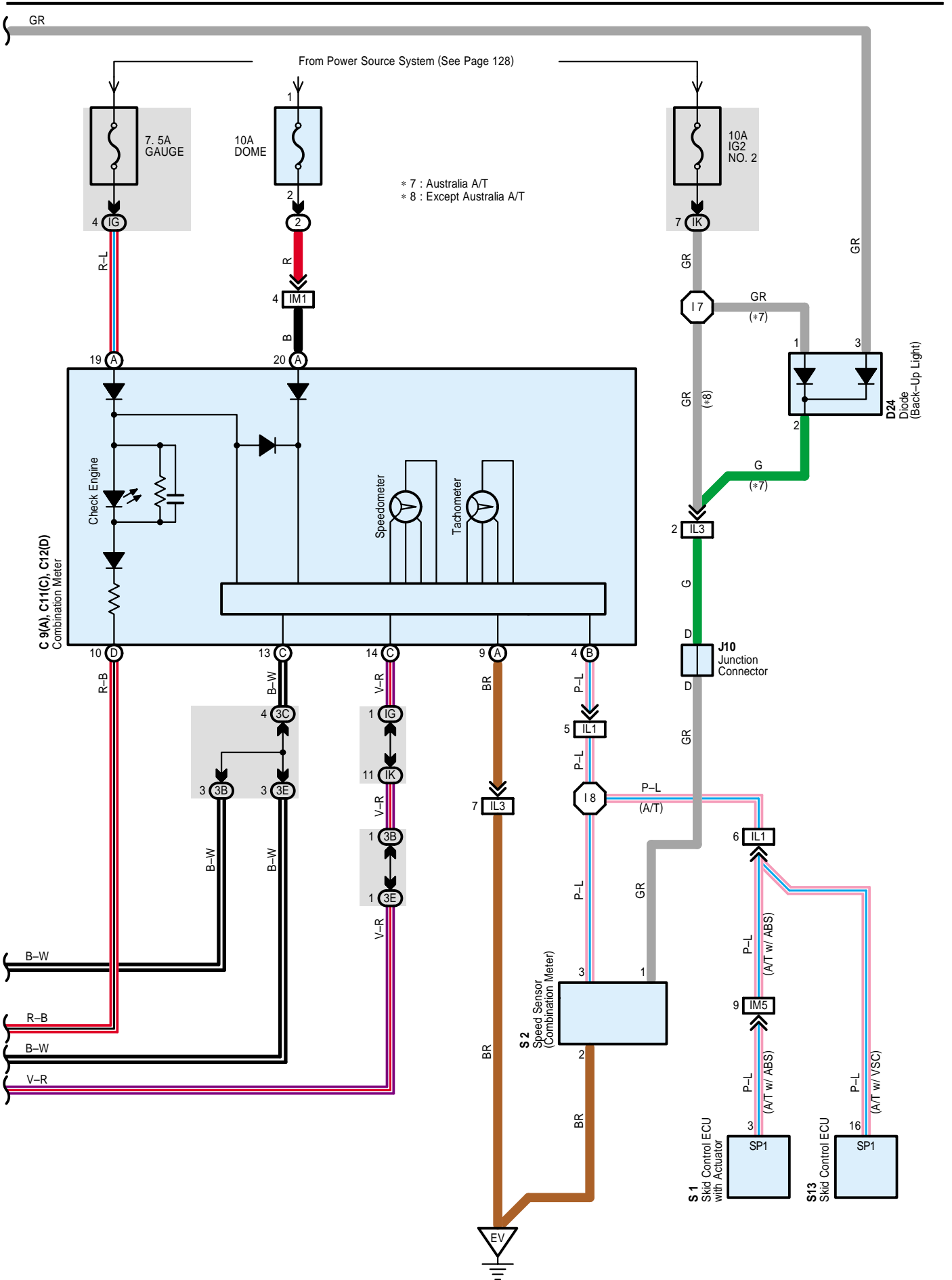
○ : Location of Splice Points



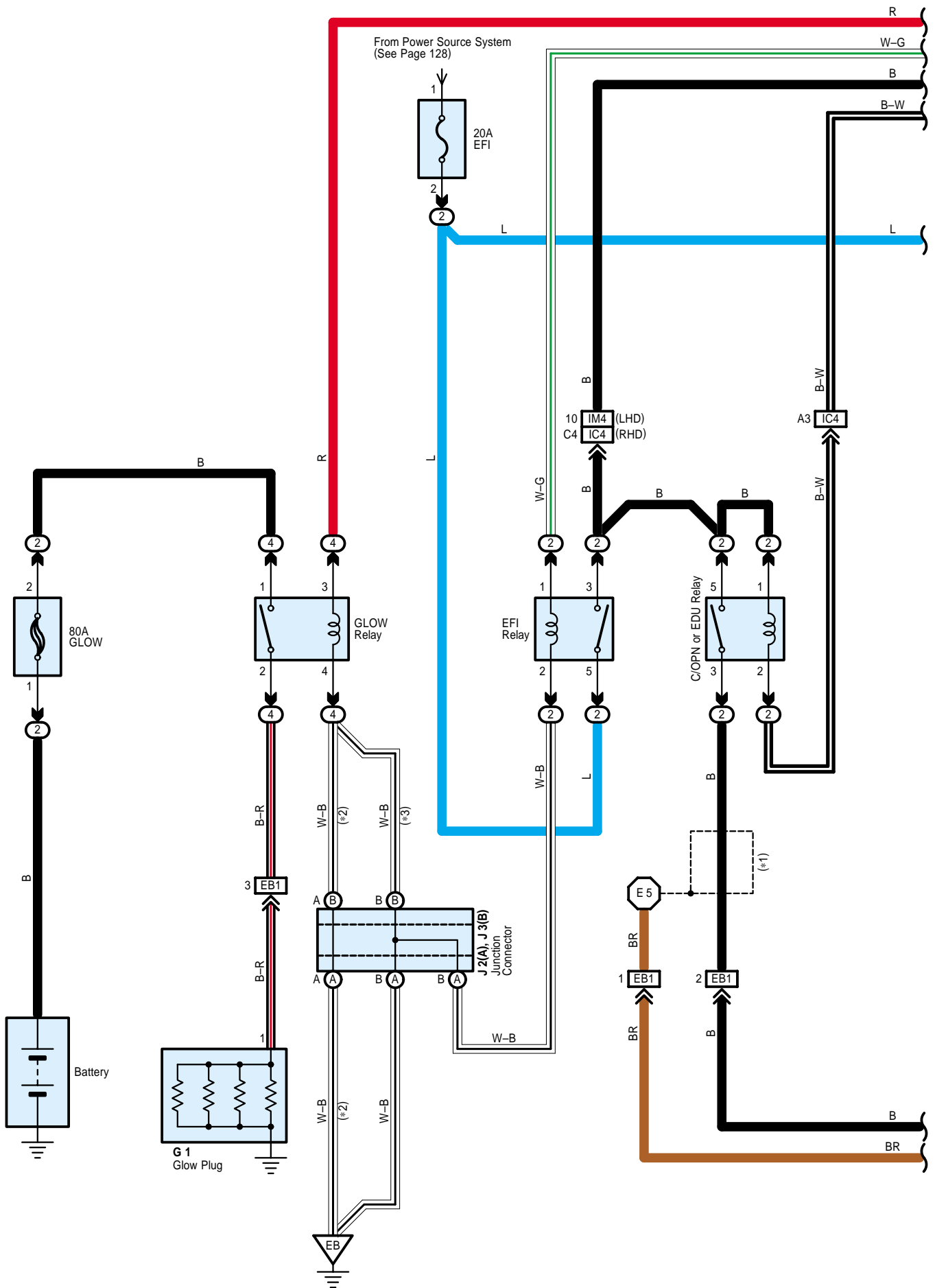


# Starting (Diesel)





# Engine Control (1KD-FTV)



# Multiplex Communication System (LHD)

○ : Parts Location

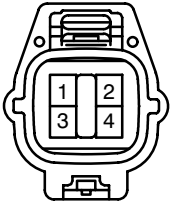
Code		See Page	Code		See Page	Code	See Page
A19		38 (*1)	E5		44 (*4)	J27	52 (*6)
		40 (*2)			46 (*5)		54 (*7)
		42 (*3)	E9	A	49 (LHD)	J28	52 (*6)
		44 (*4)	E10	B	49 (LHD)		54 (*7)
		46 (*5)	F13		49 (LHD)	J29	52 (*6)
B7	A	48 (LHD)	H5		39 (*1)		54 (*7)
B8	B	48 (LHD)			41 (*2)	J30	52 (*6)
B9	C	48 (LHD)			43 (*3)		54 (*7)
B10		52 (*6)			45 (*4)	J31	52 (*6)
		54 (*7)			47 (*5)		54 (*7)
B11		52 (*6)	39 (*1)	J34	52 (*6)		
		54 (*7)	41 (*2)		K2	50 (LHD)	
B13		56 (*8)	H6	43 (*3)	L4	53 (*6)	
		57 (*9)		45 (*4)		55 (*7)	
B14		56 (*8)		47 (*5)	M9	53 (*6)	
		57 (*9)		39 (*1)		55 (*7)	
C9	A	49 (LHD)		H8	41 (*2)	O4	53 (*6)
C10	B	49 (LHD)	43 (*3)		55 (*7)		
C11	C	49 (LHD)	45 (*4)		P8	53 (*6)	
C14		49 (LHD)	47 (*5)			55 (*7)	
C15		49 (LHD)	H9	39 (*1)	P11	53 (*6)	
D6		49 (LHD)		41 (*2)		55 (*7)	
D10		52 (*6)		43 (*3)	P12	53 (*6)	
		54 (*7)		45 (*4)	P13	53 (*6)	
D11		52 (*6)		47 (*5)	P14	53 (*6)	
		54 (*7)	50 (LHD)	55 (*7)			
D12		52 (*6)	I13	I15	P15	53 (*6)	
		54 (*7)				54 (*7)	55 (*7)
D13		52 (*6)	J4	39 (*1)	P16	53 (*6)	
D14		52 (*6)		41 (*2)	P17	53 (*6)	
D15		52 (*6)		43 (*3)	R10	51 (LHD)	
		54 (*7)		45 (*4)	S21	51 (LHD)	
D16		52 (*6)		47 (*5)	T1	39 (*1)	
		54 (*7)	J7	A		41 (*2)	
D17		52 (*6)	J8	B		43 (*3)	
D18		52 (*6)	J9			45 (*4)	
		52 (*6)	J12			47 (*5)	
D19		52 (*6)	J13		T8	51 (LHD)	
		54 (*7)	J14	A	T9	51 (LHD)	
D20		52 (*6)	J15		T10	51 (LHD)	
		54 (*7)	J16		T11	53 (*6)	
D21	A	52 (*6)	J17	A		55 (*7)	
	B	54 (*7)	J18		V14	53 (*6)	
D22		52 (*6)	J19	B		55 (*7)	
D23		52 (*6)	J23		V15	53 (*6)	
E5		38 (*1)	J24			55 (*7)	
		40 (*2)	J25	B		50 (LHD)	
		42 (*3)	50 (LHD)				

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



# K CONNECTOR LIST

**A43**  
Black



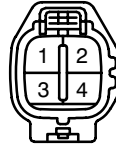
**A44**  
Black



**A45**  
Black



**A46**  
Dark Gray



**A47**  
Dark Gray



**B 1**  
Gray



**B 2**  
(w/ VSC) Gray



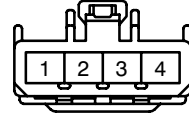
**B 2**  
(w/o VSC) Gray



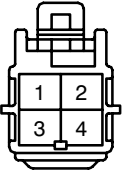
**B 3**  
Gray



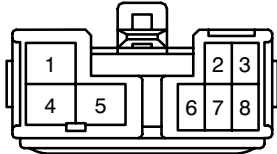
**B 4**  
Black



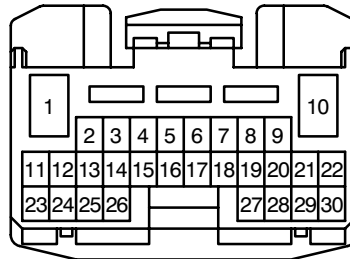
**B 5**  
Black



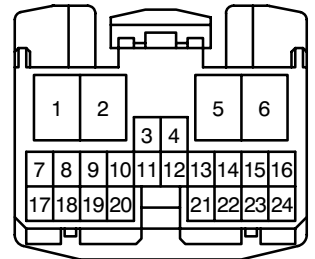
**B 6**  
Black



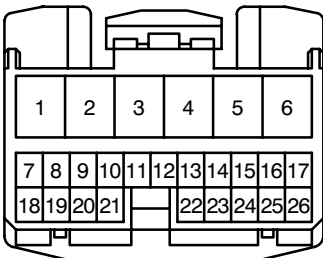
**B 7**



**B 8**



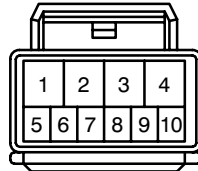
**B 9**



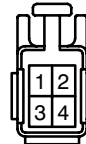
**B10**



**B11**



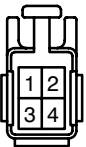
**B12**



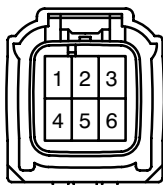
**B13**



**B14**



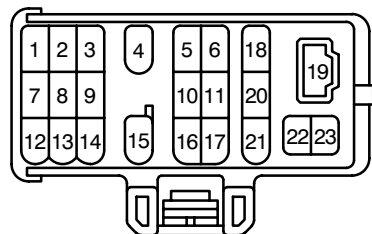
**B15**



**C 1**  
Black



**C 2**  
Black



## L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number	Code	Part Name	Part Number
A 1	A/C Ambient Temp. Sensor	90980-11070	A34	Air Vent Mode Control Servo Motor	90980-11909
A 2	A/C Condenser Fan Motor	90980-11237	A35	Airbag Sensor Assembly (w/ Side Airbag)	82824-50160
A 3	A/C Lock Sensor	90980-11016		Airbag Sensor Assembly (w/o Side Airbag)	90980-11869
	A/C Magnetic Clutch		A36	Airbag Sensor Assembly	90980-11872
A 4	A/C Magnetic Clutch	90980-11271	A37	Airbag Sensor Assembly (w/ Side Airbag)	82824-50150
A 5	A/C Magnetic Valve	90980-11075		Airbag Sensor Assembly (w/o Side Airbag)	90980-11867
A 6	A/T Oil Temp. Sensor (1GR-FE)	90980-11025	A38	Airbag Squib (Front Passenger Airbag Assembly)	90980-12160
	A/T Oil Temp. Sensor (1KD-FTV, 1KZ-TE)		A39	Airbag Squib (Steering Wheel Pad)	
	A/T Oil Temp. Sensor (3RZ-FE)	90980-10706	A40	Antenna Amplifier	90980-11146
A 7	ABS & BA & TRC & VSC Actuator	90980-11413	A41	Ashtray Illumination	90980-10825
A 8	ABS & BA & TRC & VSC Actuator	90980-10895	A42	ABS Speed Sensor Rear (3-Door)	90980-10941
A 9	ABS & BA & TRC & VSC Actuator	90980-11151		ABS Speed Sensor Rear (5-Door)	90980-10942
A10	ABS Speed Sensor Front LH	90980-11003	A43	Absorber Control Actuator Rear LH	90980-11930
A11	ABS Speed Sensor Front RH		A44	Absorber Control Actuator Rear RH	
A12	Absorber Control Actuator Front LH	90980-11929	A45	Acceleration Control Sensor Rear	90980-10845
A13	Absorber Control Actuator Front RH		A46	Air Fuel Ratio Sensor (Bank 1 Sensor 1)	90980-11178
A14	Air Flow Meter (1KD-FTV, 1GR-FE)	90980-11317	A47	Air Fuel Ratio Sensor (Bank 2 Sensor 1)	
	Air Flow Meter (3RZ-FE Unleaded Gasoline)	90980-12292	B 1	Back-Up Light SW	90980-11250
A15	Air Vent Control Servo Motor	90980-11144	B 2	Brake Fluid Level Warning SW (w/ VSC)	90980-11009
A16	Airbag Sensor Front LH	90980-11856		Brake Fluid Level Warning SW (w/o VSC)	90980-11207
A17	Airbag Sensor Front RH		B 3	Brake Vacuum Warning SW	90980-11252
A18	Alternator (1GR-FE)	90980-09372	B 4	Blower Motor Linear Controller	90980-11676
	Alternator (1KD-FTV)	90980-09213	B 5	Blower Resistor	90980-11136
	Alternator (3RZ-FE, 1KZ-TE, 5L-E)	90980-09212	B 6	Blower SW	90980-10877
A19	Alternator (1KD-FTV)	90980-11964	B 7	Body ECU	90980-12151
	Alternator (1KZ-TE, 5L-E)	90980-11349	B 8	Body ECU	90980-12149
	Alternator (3RZ-FE, 1GR-FE)	90980-11964	B 9	Body ECU	90980-12150
A20	A/C Amplifier	90980-10803	B10	Back Door Courtesy SW	90980-10871
A21	A/C Control Assembly (w/o Navigation System)	90980-12151	B11	Back Door Key Lock and Unlock SW	90980-12226
	A/C ECU (w/ Navigation System)			Back Door Lock Motor	
A22	A/C Control Assembly (w/o Navigation System)	90980-12149		Back Door Unlock Detection SW	
	A/C ECU (w/ Navigation System)		B12	Buckle SW LH	90980-10795
A23	A/C Control Assembly (w/o Navigation System)	90980-12150	Occupant Detection Sensor		
	A/C ECU (w/ Navigation System)		B13	Buckle SW LH	90980-12257
A24	A/C Room Temp. Sensor	90980-11918	Seat Position Sensor		
A25	A/C Solar Sensor	90980-12056	B14	Buckle SW RH	90980-10795
A26	A/C Thermistor	90980-11918		Occupant Detection Sensor	
A27	A/T Shift Indicator	90980-11911	B15	Buckle SW RH	90980-12257
A28	Accel Position Sensor	90980-11858		Seat Position Sensor	
A29	Acceleration Control Sensor Front	90980-10845	C 1	Camshaft Position Sensor	90980-10947
A30	Accessory Meter	90980-11911	C 2	Check Connector	90980-11323
A31	Air Inlet Control Servo Motor	90980-11909	C 3	Crankshaft Position Sensor (1GR-FE)	90980-12028
A32	Air Mix Control Servo Motor LH			Crankshaft Position Sensor (1KD-FTV)	90980-11016
A33	Air Mix Control Servo Motor RH			Crankshaft Position Sensor (1KZ-TE, 5L-E)	90980-11162
				Crankshaft Position Sensor (3RZ-FE)	90980-11016

Note: Not all of the above part numbers of the connector are established for the supply.