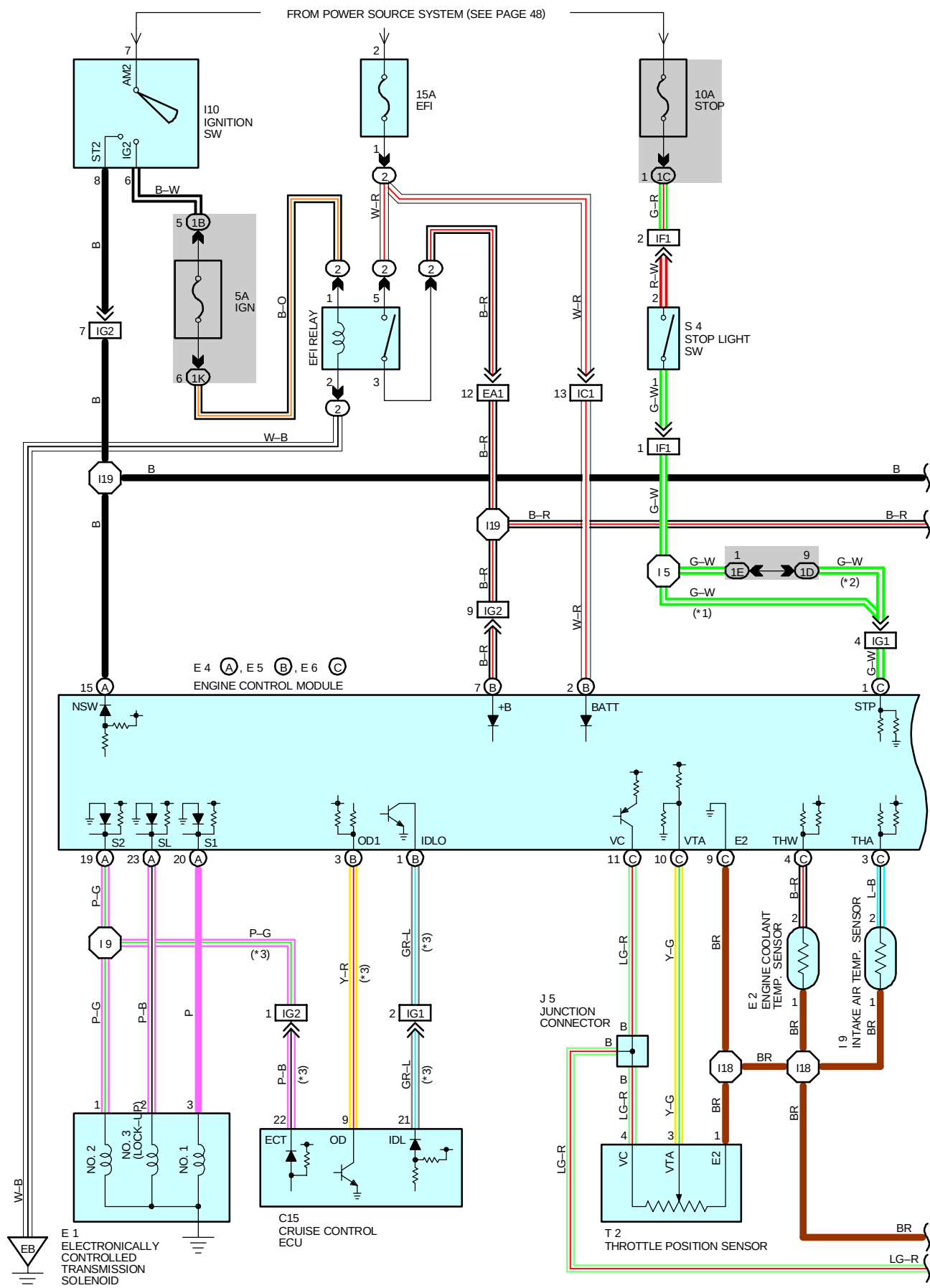
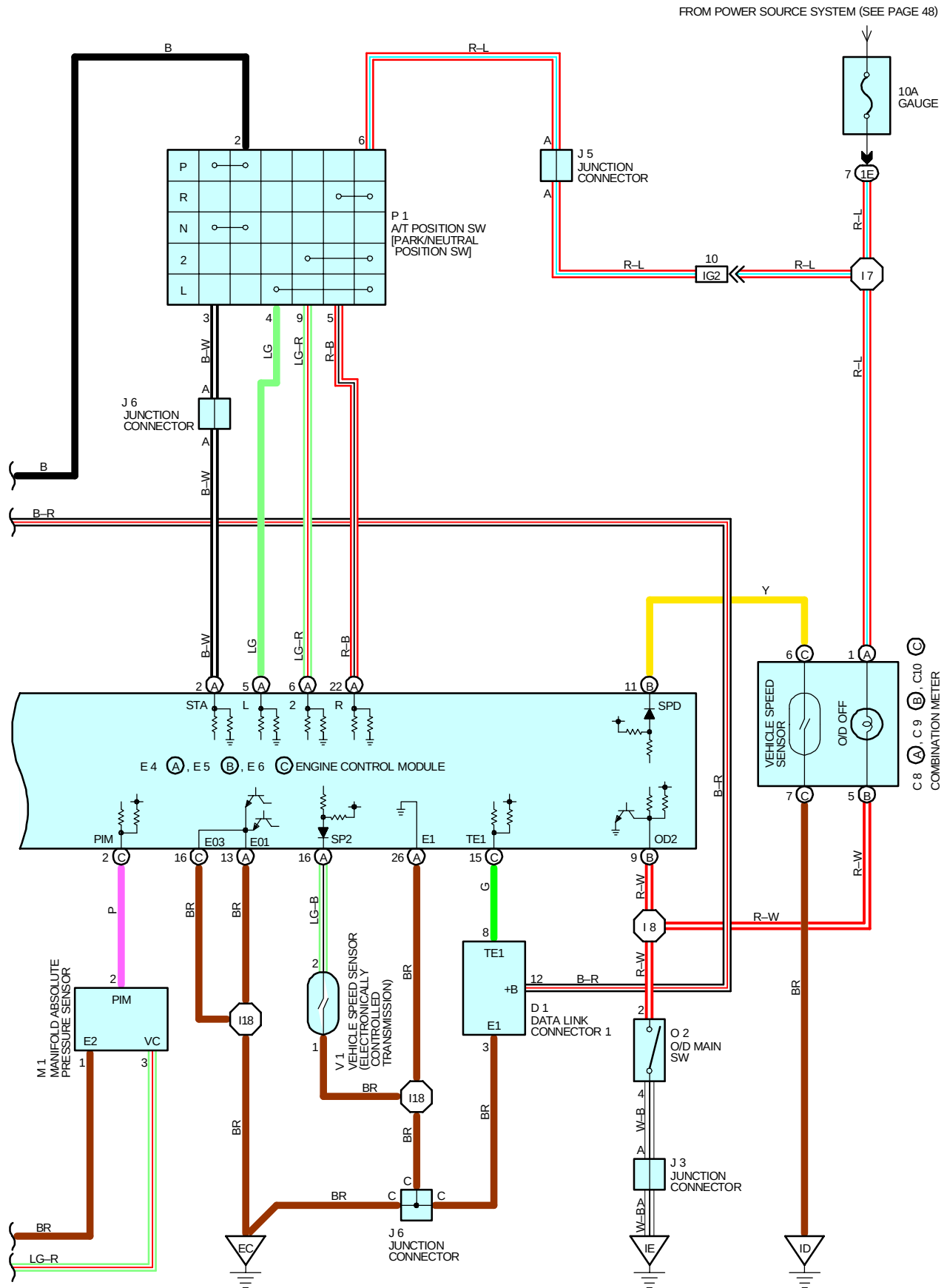






SYSTEM OUTLINE

PREVIOUS AUTOMATIC TRANSAXLE HAVE SELECTED EACH GEAR SHIFT USING MECHANICALLY CONTROLLED THROTTLE HYDRAULIC PRESSURE, GOVERNOR HYDRAULIC PRESSURE AND LOCK-UP HYDRAULIC PRESSURE. THE ELECTRONICALLY CONTROLLED TRANSMISSION, HOWEVER, ELECTRICALLY CONTROLS THE LINE PRESSURE AND LOCK-UP PRESSURE ETC., THROUGH THE SOLENIOD VALVE. THE ENGINE CONTROL MODULE CONTROLS THE SOLENOID VALVE BASED ON THE INPUT SIGNALS FROM EACH SENSOR MAKES SMOOTH DRIVING POSSIBLE BY SHIFT SELECTION FOR EACH GEAR WHICH IS MOST APPROPRIATE TO THE DRIVING CONDITIONS AT THAT TIME.

1. GEAR SHIFT OPERATION

DURING DRIVING, THE ENGINE CONTROL MODULE SELECTS THE SHIFT FOR EACH GEAR WHICH IS MOST APPROPRIATE TO THE DRIVING CONDITIONS, BASED ON INPUT SIGNALS FROM THE ENGINE COOLANT TEMP. SENSOR TO **TERMINAL THW** OF THE ENGINE CONTROL MODULE, AND ALSO THE INPUT SIGNALS TO **TERMINAL SP2** OF THE ENGINE CONTROL MODULE FROM THE VEHICLE SPEED SENSOR DEVOTED TO THE ENGINE CONTROL MODULE. CURRENT IS THEN OUTPUT TO THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENIOD. WHEN SHIFTING TO 1ST SPEED, THE CURRENT FLOWS FROM **TERMINAL S1** OF THE ENGINE CONTROL MODULE TO **TERMINAL 3** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENIOD → **GROUND**, AND CONTINUITY TO THE NO. 1 SOLENIOD CAUSES THE SHIFT. FOR 2ND SPEED, THE CURRENT FLOWS FROM **TERMINAL S1** OF THE ENGINE CONTROL MODULE TO **TERMINAL 3** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENIOD → **GROUND**, AND FROM **TERMINAL S2** OF THE ENGINE CONTROL MODULE TO **TERMINAL 1** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENIOD → **GROUND**, AND CONTINUITY TO SOLENOID NO.1 AND NO.2 CAUSES THE SHIFT. FOR 3RD SPEED, THERE IS NOT CONTINUITY TO NO.1 SOLENOID, ONLY TO NO.2, CAUSING THE SHIFT. SHIFTING INTO 4TH SPEED (OVERDRIVE) TAKES PLACE WHEN THERE IS NO CONTINUITY TO EITHER NO. 1 OR NO. 2 SOLENOID.

2. LOCK-UP OPERATION

WHEN THE ENGINE CONTROL MODULE JUDGES FROM EACH SIGNAL THAT LOCK-UP OPERATION CONDITIONS HAVE BEEN MET, THE CURRENT FLOWS FROM **TERMINAL SL** OF THE ENGINE CONTROL MODULE TO **TERMINAL 2** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENIOD → **GROUND**, CAUSING CONTINUITY TO THE LOCK-UP SOLENIOD AND CAUSING LOCK-UP OPERATION.

3. STOP LIGHT SW CIRCUIT

IF THE BRAKE PEDAL IS DEPRESSED (STOP LIGHT SW ON) WHEN DRIVING IN LOCK-UP CONDITION, A SIGNAL IS INPUT TO **TERMINAL STP** OF THE ENGINE CONTROL MODULE, THE ENGINE CONTROL MODULE OPERATES AND CONTINUITY TO THE LOCK-UP SOLENIOD IS CUT.

4. OVERDRIVE CIRCUIT*** O/D MAIN SW ON**

WHEN THE O/D MAIN SW IS TURNED ON (SW POINT IS OPEN), A SIGNAL IS INPUT TO **TERMINAL OD2** OF THE ENGINE CONTROL MODULE AND ENGINE CONTROL MODULE OPERATION CAUSES GEAR SHIFT WHEN THE CONDITIONS FOR OVERDRIVE ARE MET.

*** O/D OFF SW OFF**

WHEN THE O/D MAIN SW IS TURNED OFF (SW POINT IS CLOSED), THE CURRENT FLOWING THROUGH THE O/D OFF INDICATOR LIGHT FLOWS THROUGH THE O/D MAIN SW TO **GROUND**, CAUSING THE INDICATOR LIGHT TO LIGHT UP. AT THE SAME TIME, A SIGNAL IS INPUT TO **TERMINAL OD2** OF THE ENGINE CONTROL MODULE AND ENGINE CONTROL MODULE OPERATION PREVENTS SHIFT INTO OVERDRIVE.

SERVICE HINTS

E 4(A), E 5(C), E 6(B) ENGINE CONTROL MODULE

S1,S2-E1 : UNDER 1.0 VOLTS (IGNITION SW ON)
 STP-E1 : 9.0-14.0 VOLTS (BRKAPEDAL IS DEPRESSED)
 UNDER 1.0 VOLTS (BRAKE PEDAL IS NOT DEPRESSED)
 THW-E2 : 0.2-1.0 VOLTS (IGNITION SW ON AND COOLANT TEMP. 80°C (176°F)
 VTA-E2 : UNDER 1.0 VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED)
 3.2-4.9 VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY OPEN)
 VC-E2 : 4.5-5.5 VOLTS (IGNITION SW ON)
 OD2-E1 : 9.0-14.0 VOLTS (IGNITION SW AND O/D MAIN SW TURNED ON)
 UNDER 1.0 VOLTS (IGNITION SW ON AND O/D MAIN SW TURNED OFF)
 SPD-E1 : 0↔4.5-5.5 VOLTS REPEAT (IGNITION SW ON AND VEHICLE MOVING)
 SP2-E1 : 0↔9.0-14.0 VOLTS REPEAT (IGNITION SW ON AND VEHICLE MOVING)
 NSW-E1 : UNDER 1.0 VOLTS (IGNITION SW ON AND P OR N POSITION)
 9.0-14.0 VOLTS (IGNITION SW ON AND R, D, 2, L POSITION)
 2-E1 : 9.0-14.0 VOLTS (IGNITION SW ON AND PARK/NEUTRAL POSITION SW 2 POSITION)
 UNDER 1.0 VOLTS (IGNITION SW ON AND EXCEPT PARK/NEUTRAL POSITION SW 2 POSITION)
 LE1 : 9.0-14.0 VOLTS (IGNITION SW ON AND PARK/NEUTRAL POSITION SW L POSITION)
 UNDER 1.0 VOLTS (IGNITION SW ON AND EXCEPT PARK/NEUTRAL POSITION SW L POSITION)
 +B-E1 : 9.0-14.0 VOLTS (IGNITION SW ON)
 BATT-E1 : 9.0-14.0 VOLTS (ALL CONDITIONS)

RESISTANCE AT ENGINE CONTROL MODULE WIRING CONNECTORS

(DISCONNECT WIRING CONNECTOR)

VTA-E2 : 2.0-10.2 KΩ (THROTTLE VALVE FULLY OPEN)
 0.2-5.7 KΩ (THROTTLE VALVE FULLY CLOSED)
 VC-E2 : 3.0-7.0 KΩ
 THW-E2 : 0.2-0.4 KΩ (COOLANT TEMP. 80°C, 176°F)
 S1,S2,SL-GROUND : 11.0-15.0 Ω (ALWAYS CONTINUITY)

0 2 O/D MAIN SW

2-4 : CLOSED WITH THE O/D MAIN SW OFF, OPEN WITH O/D MAIN SW ON

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 8	A 26	E 4	A 26	J 6	27
C 9	B 26	E 5	B 26	M 1	25
C10	C 26	E 6	C 26	O 2	27
C15	26	I 9	25	P 1	25
D 1	24	I10	27	S 4	27
E 1	24	J 3	27	T 2	25
E 2	24	J 5	27	V 1	25

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	22	ENGINE ROOM R/B (ENGINE COMPARTMENT LEFT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	20	INSTRUMENT PANEL WIRE AND DRIVER SIDE J/B (LEFT KICK PANEL)
1C		
1D		
1E		
1K	20	ENGINE ROOM MAIN WIRE AND DRIVER SIDE J/B (LEFT KICK PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	30	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF THE ENGINE ROOM R/B)
IC1	32	INSTRUMENT PANEL WIRE AND ENGINE ROOM MAIN WIRE (LEFT KICK PANEL)
IF1	34	INSTRUMENT PANEL WIRE AND SWITCH WIRE (NEAR THE STEERING COLUMN)
IG1	34	ENGINE WIRE AND INSTRUMENT PANEL WIRE (NEAR THE BLOWER UNIT)
IG2		



: GROUND POINTS

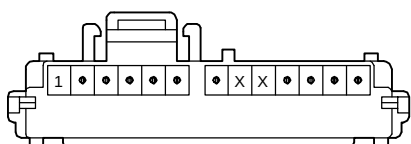
CODE	SEE PAGE	GROUND POINTS LOCATION
EB	30	FRONT SIDE OF THE LEFT FENDER
EC	30	RIGHT SIDE OF THE SURGE TANK
ID	32	LEFT KICK PANEL
IE	32	INSTRUMENT PANEL BRACE LH



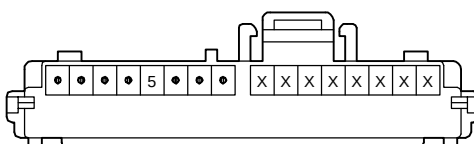
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 5	34	INSTRUMENT PANEL WIRE	I 9	34	INSTRUMENT PANEL WIRE
I 7			I18	34	ENGINE WIRE
I 8			I19		

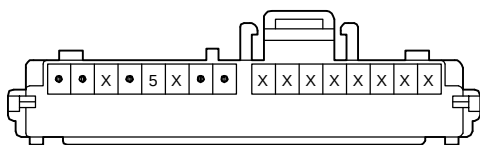
C 8 (A) BROWN



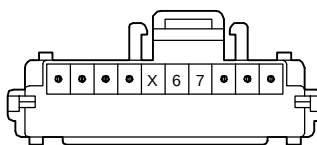
(USA, CANADA) C 9 (B)



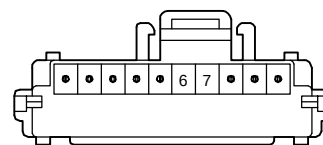
(PUERTO RICO) C 9 (B)



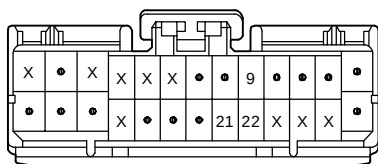
(USA, CANADA) C10 (C) GRAY



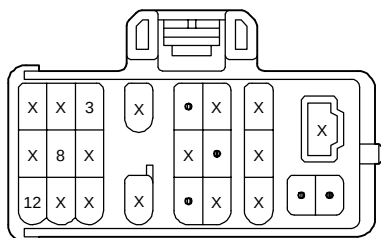
(PUERTO RICO) C10 (C) GRAY



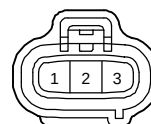
C15 GREEN



D 1 BLACK



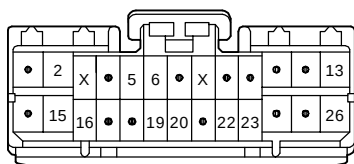
E 1 BLACK



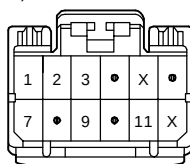
E 2 GREEN



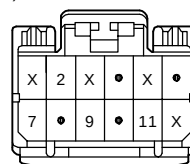
E 4 (A)



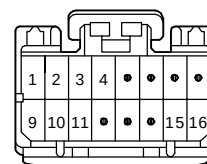
(W/ CRUISE CONTROL) E 5 (B)



(W/O CRUISE CONTROL) E 5 (B)



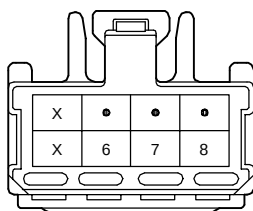
E 6 (C)



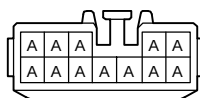
I 9 DARK GRAY



I10

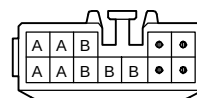


J 3 BLUE



(HINT : SEE PAGE 7)

J 5 GRAY



(HINT : SEE PAGE 7)

