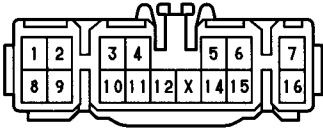


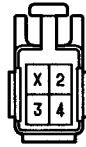
D 6 GRAY



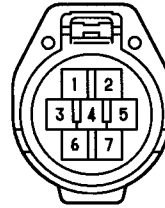
D10, D11



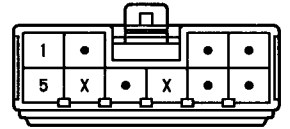
D12, D13



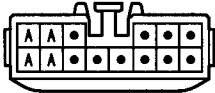
D14, D15 GRAY



I12 BLACK



J 1



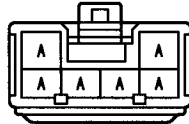
(HINT:SEE PAGE 7)

J 4



(HINT:SEE PAGE 7)

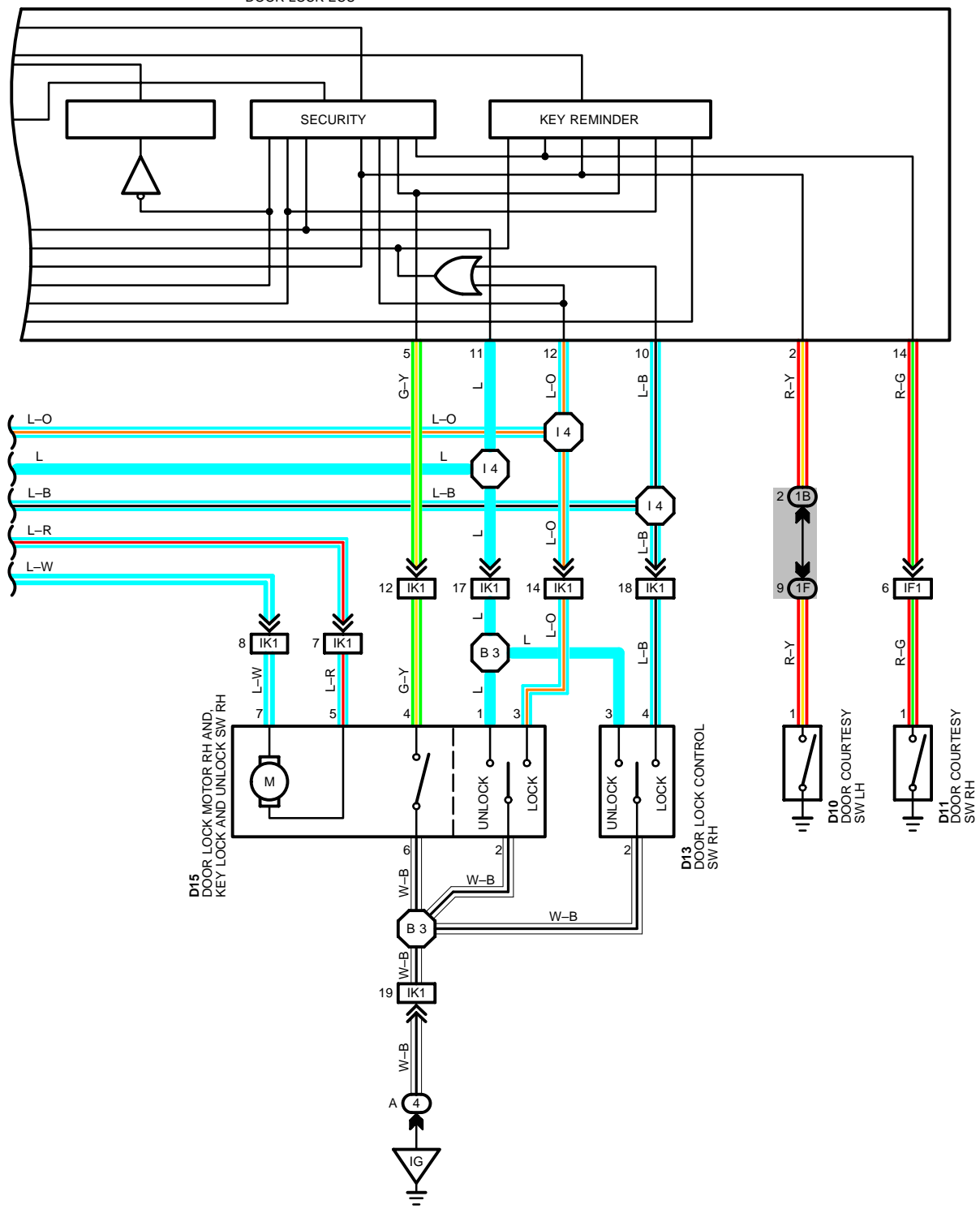
J 6



(HINT:SEE PAGE 7)



**D 6**  
DOOR LOCK ECU



# DOOR LOCK

## SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO **TERMINAL 8** OF THE DOOR LOCK CONTROL RELAY AND **TERMINAL 4** OF THE POWER MAIN RELAY THROUGH POWER FUSE.

### 1. MANUAL LOCK OPERATION

TO CHANGE DOOR LOCK SW AND KEY SW TO **LOCK** POSITION, A LOCK SIGNAL IS INPUT TO **TERMINAL 10, 12** OF THE DOOR LOCK CONTROL RELAY AND CAUSES THE RELAY TO FUNCTION. CURRENT FLOWS FROM **TERMINAL 8** OF THE RELAY → **TERMINAL 4** → **TERMINAL 7** OF THE DOOR LOCK MOTOR → **TERMINAL 5** → **TERMINAL 3** OF THE RELAY → **TERMINAL 16** → TO **GROUND** AND DOOR LOCK SOLENOID CAUSES THE DOOR TO LOCK.

### 2. MANUAL UNLOCK OPERATION

TO CHANGE DOOR LOCK CONTROL SW AND KEY SW RH TO **UNLOCK** POSITION, AN UNLOCK SIGNAL IS INPUT TO **TERMINAL 11** OF THE DOOR LOCK CONTROL RELAY AND CAUSES THE RELAY TO FUNCTION. CURRENT FLOWS FROM **TERMINAL 8** OF THE RELAY → **TERMINAL 3** → **TERMINAL 5** OF THE DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE RELAY → **TERMINAL 16** → TO **GROUND** AND DOOR LOCK SOLENOID CAUSES DOOR TO UNLOCK.

### 3. DOUBLE OPERATION UNLOCK OPERATION

WHEN THE DOOR LOCK KEY SW (DRIVER'S) IS TURNED TO THE UNLOCK SIDE, ONLY THE DRIVER'S DOOR IS MECHANICALLY UNLOCKED. TURNING THE DOOR LOCK KEY SW (DRIVER'S) TO THE UNLOCK SIDE CAUSES A SIGNAL TO BE INPUT TO **TERMINAL 9** OF THE RELAY, AND IF THE SIGNAL IS INPUT AGAIN WITHIN 3 SECONDS BY TURNING THE SWITCH TO THE UNLOCK SIDE AGAIN, CURRENT FLOWS **TERMINAL 3** → **TERMINAL 5** OF DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE RELAY → **TERMINAL 16** → **GROUND**, CAUSING THE DOOR LOCK MOTOR TO OPERATE AND UNLOCK THE PASSENGER'S DOOR.

### 4. IGNITION KEY REMINDER OPERATION

\* OPERATING DOOR LOCK KNOB (IN DOOR LOCK SOLENOIDS OPERATION)

WITH IGNITION KEY IN CYLINDER (UNLOCK WARNING SW ON), WHEN THE DOOR IS OPENED AND LOCKED USING DOOR LOCK KNOB (DOOR LOCK MOTOR), THE DOOR IS LOCKED ONCE BUT EACH DOOR IS UNLOCKED SOON BY THE FUNCTION OF RELAY. AS A RESULT, THE CURRENT FLOWS FROM **TERMINAL 8** OF THE RELAY → **TERMINAL 3** → **TERMINAL 5** OF THE DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE RELAY → **TERMINAL 16** → TO **GROUND** AND CAUSES ALL THE DOORS TO UNLOCK.

\* OPERATING DOOR LOCK CONTROL SW OR DOOR LOCK KEY SW

WITH IGNITION KEY IN CYLINDER (UNLOCK WARNING SW ON), WHEN THE DOOR IS OPENED AND LOCKED USING DOOR LOCK CONTROL SW OR KEY SW, THE DOOR IS LOCKED ONCE BUT EACH DOOR IS UNLOCK BY THE FUNCTION OF SW CONTAINED IN SOLENOIDS, WHICH THE SIGNAL IS INPUT TO **TERMINAL 6** (DRIVER'S) OR **5** (PASSENGER'S) OF THE RELAY. ACCORDING TO THIS INPUT SIGNAL, THE CURRENT IN RELAY FLOWS FROM **TERMINAL 8** OF THE RELAY → **TERMINAL 3** → **TERMINAL 5** OF THE DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE RELAY → **TERMINAL 16** → TO **GROUND** AND CAUSES ALL THE DOOR TO UNLOCK.

\* IN CASE OF KEY LESS LOCK

WITH IGNITION KEY IN CYLINDER (UNLOCK WARNING SW ON), WHEN THE UNLOCK FUNCTION IS DISTURBED MORE THAN **0.2** SECONDS, FOR EXAMPLE PUSHING THE DOOR LOCK KNOB ETC., THE DOOR HOLDS ON LOCK CONDITION. CLOSING THE DOOR AFTER, DOOR COURTESY SW INPUTS THE SIGNAL INTO **TERMINAL 2** OR **14** OF THE RELAY. BY THIS INPUT SIGNAL, THE RELAY WORKS AND CURRENT FLOWS FROM **TERMINAL 8** OF THE RELAY → **TERMINAL 3** → **TERMINAL 5** OF THE DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE RELAY → **TERMINAL 16** → TO **GROUND** AND CAUSES ALL THE DOORS TO UNLOCK.

## SERVICE HINTS

### D 6 DOOR LOCK ECU

16-GROUND : ALWAYS CONTINUITY

2-GROUND : CONTINUITY WITH DRIVER'S DOOR OPEN

8-GROUND : ALWAYS APPROX. 12 VOLTS

3-GROUND : APPROX. 12 VOLTS 0.2 SECONDS WITH FOLLOWING OPERATION

\*DOOR LOCK CONTROL SW UNLOCKED

\*DOOR LOCK CONTROL SW LOCKED WITH IGNITION KEY IN CYLINDER AND DRIVER'S DOOR OPEN (IGNITION KEY REMINDER FUNCTION)

\*DOOR LOCK KNOB LOCKED WITH IGNITION KEY IN CYLINDER AND DRIVER'S DOOR OPEN (IGNITION KEY REMINDER FUNCTION)

\*UNLOCKING THE DRIVER'S, PASSENGER'S DOOR CYLINDER WITH KEY

4-GROUND : APPROX. 12 VOLTS 0.2 SECONDS WITH FOLLOWING OPERATION

\*DOOR LOCK CONTROL SW LOCKED

\*LOCKING THE DRIVER'S, PASSENGER'S DOOR CYLINDER WITH KEY

10-GROUND : 0 VOLTS WITH DOOR LOCK CONTROL SW LOCKED

14-GROUND : CONTINUITY WITH PASSENGER'S DOOR OPEN

6-GROUND : CONTINUITY WITH DRIVER'S DOOR LOCK KNOB UNLOCKED

5-GROUND : CONTINUITY WITH PASSENGER'S DOOR LOCK KNOB UNLOCKED

11-GROUND : 0 VOLTS WITH DOOR LOCK CONTROL SW UNLOCKED, PASSENGER'S DOOR LOCK CYLINDER UNLOCKED WITH KEY

1-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION  
 9-GROUND : 0 VOLTS WITH DRIVER'S DOOR LOCK CYLINDER UNLOCKED WITH KEY  
 15-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION  
 12-GROUND : 0 VOLTS WITH DRIVER'S, PASSENGER'S DOOR LOCK CYLINDER LOCKED WITH KEY

**I12 UNLOCK WARNING SW**

1-5 : CLOSED WITH IGNITION KEY IN CYLINDER

**D14, D15 KEY LOCK AND UNLOCK SW**

1-2 : CLOSED WITH DOOR LOCK CYLINDER UNLOCKED WITH KEY


2-3 : CLOSED WITH DOOR LOCK CYLINDER LOCKED WITH KEY

**D10, D11 DOOR COURTESY SW**

1-GROUND : CLOSED WITH DOOR OPEN

 : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>D 6</b>	28	<b>D13</b>	30 (5S-FE), 31 (4A-FE)	<b>J 1</b>	29
<b>D10</b>	30 (5S-FE), 31 (4A-FE)	<b>D14</b>	30 (5S-FE), 31 (4A-FE)	<b>J 4</b>	29
<b>D11</b>	30 (5S-FE), 31 (4A-FE)	<b>D15</b>	30 (5S-FE), 31 (4A-FE)	<b>J 6</b>	29
<b>D12</b>	30 (5S-FE), 31 (4A-FE)	<b>I12</b>	29		

 : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
<b>2</b>	23	R/B NO. 2 (LEFT KICK PANEL)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
<b>1B</b>	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
<b>1E</b>		
<b>1F</b>	18	FLOOR WIRE AND J/B NO. 1 (LEFT KICK PANEL)

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>IC1</b>	36	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
<b>IF1</b>	36	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
<b>IK1</b>	36	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)

 : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>ID</b>	36	LEFT KICK PANEL
<b>IG</b>	36	R/B NO. 4 SET BOLT

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>I 1</b>	36	COWL WIRE	<b>B 3</b>	38 (L/B)	FRONT DOOR RH WIRE
<b>I 2</b>				40 (C/P)	
<b>I 4</b>			<b>B 4</b>	38 (L/B)	FRONT DOOR LH WIRE
<b>B 2</b>	40 (C/P)				