

SERVICE HINTS

POWER MAIN RELAY

(1) 2- (1) 4: CLOSED WITH IGNITION SW AT **ON** POSITION

M 1 MOON ROOF CONTROL RELAY

11-GROUND: ALWAYS CONTINUITY

6-GROUND: APPROX. 12VOLTS WITH IGNITION SW AT **ON** POSITION

5-GROUND: APPROX. 12VOLTS WITH IGNITION SW ON, AND MOON ROOF CONTROL SW AT **CLOSE** OR **UP** POSITION
(EXCEPT APPROX. 100MM (3.941IN.) 2SECOND IN THE BEFORE **CLOSED** POSITION)

4-GROUND: APPROX. 12VOLTS WITH IGNITION SW ON, AND MOON ROOF CONTROL SW AT **OPEN** OR **DOWN** POSITION

9-GROUND: APPROX. 12VOLTS → 0VOLTS WITH FROM OPEN TO CLOSE

0VOLTS WITH **UP** OR **DOWN** POSITION

0VOLTS → APPROX. 12VOLTS WITH APPROX. 100MM (3.941IN.) BEFORE **CLOSED** POSITION

8-GROUND: 0VOLTS → APPROX. 12VOLTS WITH FROM **UP** TO **DOWN**

M 2 MOON ROOF CONTROL SW

5-4: CLOSED WITH MOON ROOF CONTROL SW AT **UP** POSITION

6-4: CLOSED WITH MOON ROOF CONTROL SW AT **CLOSE** POSITION

2-4: CLOSED WITH MOON ROOF CONTROL SW AT **DOWN** POSITION

3-4: CLOSED WITH MOON ROOF CONTROL SW AT **OPEN** POSITION

4-GROUND: ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F13	20	J 5	20	M 2	21
J 4	20	N 1	21	M 3	21

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO. 1 (LEFT KICK PANEL)
2	16	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	22	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
IE1	24	ROOF NO. 1 WIRE AND COWL WIRE (LEFT KICK PANEL)

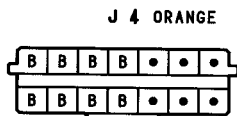
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	24	LEFT KICK PANEL

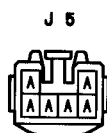
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I12	24	COWL WIRE	B15	28	ROOF NO. 1 WIRE

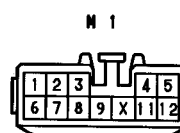
F13
(SEE PAGE 18)



(HINT:SEE PAGE 7)



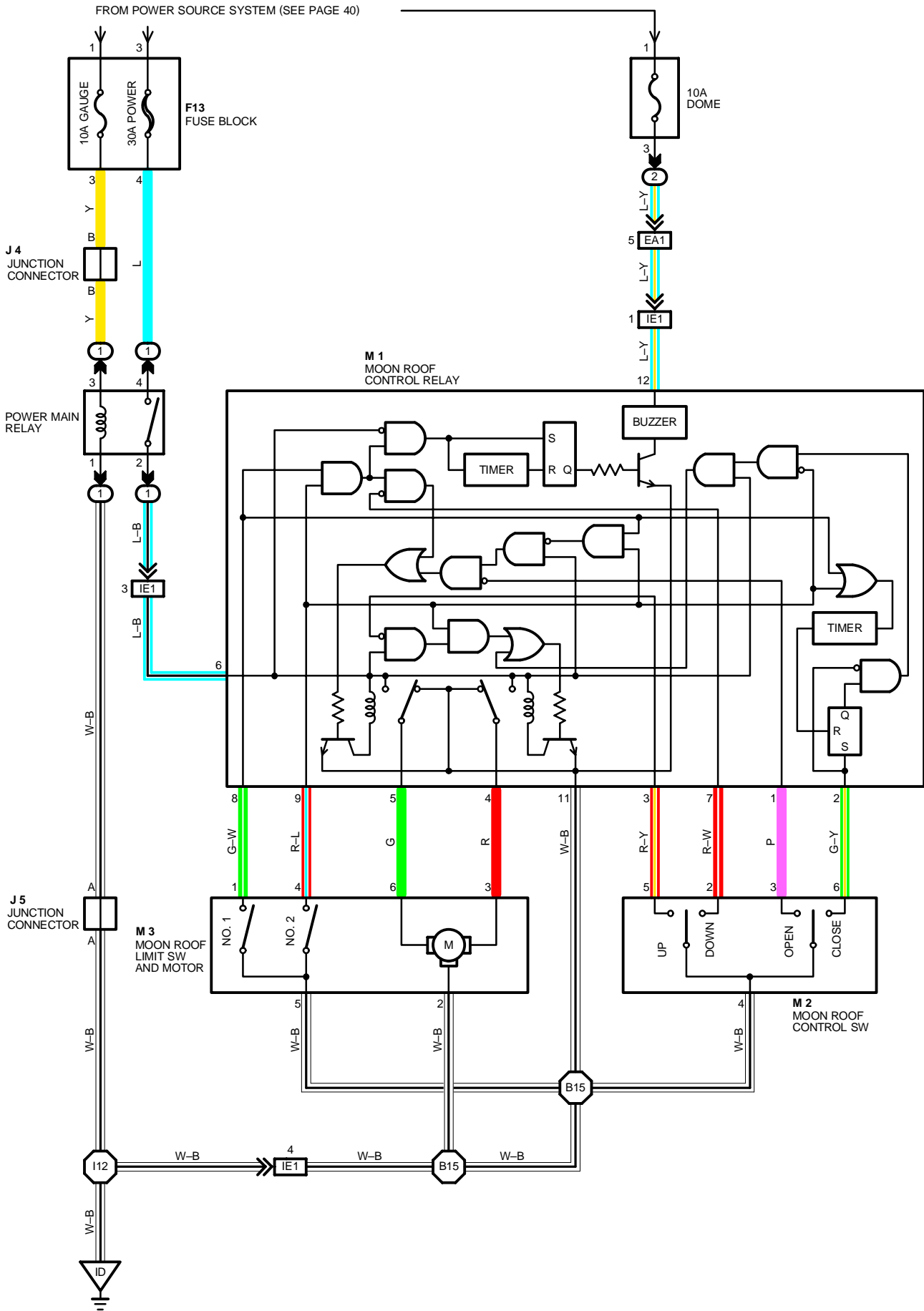
(HINT:SEE PAGE 7)



M 3



MOON ROOF



SYSTEM OUTLINE

CURRENT IS APPLIED AT ALL TIMES THROUGH POWER CB TO **TERMINAL 2** OF POWER WINDOW MAIN RELAY AND ALSO THROUGH **DOVE FUSE** TO **TERMINAL 12** OF MOON ROOF CONTROL RELAY.

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS FROM **TERMINAL 1** OF POWER WINDOW MAIN RELAY → **TERMINAL 3** → TO **GROUND** THROUGH GAUGE FUSE. AS A RESULT, POWER WINDOW MAIN RELAY IS ACTIVATED AND THE CURRENT TO **TERMINAL 2** OF POWER MAIN RELAY FLOWS FROM **TERMINAL 4** OF THE RELAY TO **TERMINAL 6** OF MOON ROOF CONTROL RELAY.

1. SLIDE OPEN OPERATION

WHEN THE IGNITION SW IS TURNED ON AND THE MOON ROOF CONTROL SW IS PUSHED TO THE **OPEN** POSITION, A SIGNAL IS INPUT FROM **TERMINAL 5** OF MOON ROOF CONTROL SW TO **TERMINAL 1** OF MOON ROOF CONTROL RELAY. MOON ROOF LIMIT SW NO. 2 ON AT THIS TIME.

WHEN THIS OCCURS, THE RELAY IS ACTIVATED AND THE CURRENT TO **TERMINAL 6** OF MOON ROOF CONTROL RELAY FLOWS FROM **TERMINAL 5** → **TERMINAL 6** OF MOON ROOF MOTOR → **TERMINAL 3** → **TERMINAL 4** OF MOON ROOF CONTROL RELAY → **TERMINAL 11** → TO **GROUND** AND ROTATES THE MOTOR TO OPEN THE MOON ROOF WHILE THE SW IS BEING PUSHED TO **OPEN** POSITION.

2. SLIDE CLOSE OPERATION

WITH THE IGNITION SW TURNED ON, THE MOON ROOF COMPLETELY OPEN AND MOON ROOF LIMIT SWITCH NO.1 AND NO. 2 BOTH ON, WHEN THE MOON ROOF CONTROL SW IS PUSHED TO THE **CLOSE** POSITION A SIGNAL IS INPUT FROM **TERMINAL 2** OF MOON ROOF CONTROL SW TO **TERMINAL 2** OF MOON ROOF CONTROL RELAY.

WHEN THIS OCCURS, THE RELAY IS ACTIVATED AND THE CURRENT TO **TERMINAL 6** OF MOON ROOF CONTROL RELAY FLOWS FROM **TERMINAL 4** → **TERMINAL 3** OF MOON ROOF MOTOR → **TERMINAL 6** → **TERMINAL 5** OF MOON ROOF CONTROL RELAY → **TERMINAL 11** TO **GROUND** AND ROTATES THE MOTOR TO CLOSE THE MOON ROOF WHILE THE SW IS BEING PUSHED TO **CLOSE** POSITION.

MOON ROOF LIMIT SW NO. 1 TURNS OFF (LIMIT SW NO. 2 IS ON) AND A **100MM** BEFORE FULLY **CLOSE** POSITION, SIGNAL IS INPUT FROM **TERMINAL 1** OF LIMIT SW NO. 1 TO **TERMINAL 8** OF MOON ROOF CONTROL RELAY. THIS SIGNAL ACTIVATES THE RELAY AND STOPS CONTINUITY FROM **TERMINAL 6** OF MOON ROOF CONTROL RELAY TO **TERMINAL 11**, AS A RESULT, THE MOON ROOF STOPS AT THIS POSITION.

TO CLOSE THE MOON ROOF COMPLETELY, PUSHING THE MOON ROOF CONTROL SW AGAIN TO THE CLOSE SIDE CAUSES A SIGNAL TO BE INPUT AGAIN TO **TERMINAL 2** OF MOON ROOF CONTROL RELAY. THIS ACTIVATES THE RELAY AND THE MOON ROOF WILL CLOSE AS LONG AS THE MOON ROOF CONTROL SW IS BEING PUSHED, ALLOWING THE MOON ROOF TO FULLY CLOSE.

3. TILT UP OPERATION

WHEN THE MOON ROOF CONTROL SW IS PUSHED TO **TILT UP** POSITION, WITH THE IGNITION SW TURNED ON AND THE MOON ROOF COMPLETELY CLOSED (MOON ROOF LIMIT SW NO. 2 IS OFF), A SIGNAL IS INPUT FROM **TERMINAL 1** OF MOON ROOF CONTROL SW TO **TERMINAL 3** OF MOON ROOF CONTROL RELAY. AS A RESULT, THE RELAY IS ACTIVATED AND THE CURRENT TO **TERMINAL 6** OF THE RELAY FLOWS FROM **TERMINAL 4** OF THE RELAY → **TERMINAL 3** OF MOON ROOF MOTOR → **TERMINAL 6** → **TERMINAL 5** OF THE RELAY → **TERMINAL 11** TO **GROUND** AND ROTATES THE MOTOR SO THAT TILT UP OPERATION OCCURS AS LONG AS THE MOON ROOF CONTROL SW IS PUSHED ON THE TILT UP SIDE.

4. TILT DOWN OPERATION

WHEN THE MOON ROOF CONTROL SW IS PUSHED TO **TILT DOWN** POSITION, WITH THE IGNITION SW TURNED ON AND THE MOON ROOF TILTED UP (NO. 1 AND NO. 2 MOON ROOF LIMIT SWITCHES ARE BOTH OFF), A SIGNAL IS INPUT FROM **TERMINAL 3** OF MOON ROOF CONTROL SW TO **TERMINAL 7** OF MOON ROOF CONTROL RELAY.

AS THE RESULT, THE RELAY IS ACTIVATED AND THE CURRENT TO **TERMINAL 6** OF THE RELAY FLOWS FROM **TERMINAL 5** OF THE RELAY → **TERMINAL 6** OF MOON ROOF MOTOR → **TERMINAL 3** → **TERMINAL 4** OF THE RELAY → **TERMINAL 11** → TO **GROUND** AND ROTATES THE MOTOR SO THAT TILT DOWN OPERATION OCCURS AS LONG AS THE MOON ROOF CONTROL SW IS PUSHED ON THE TILT DOWN SIDE. (DURING TILT DOWN, LIMIT SW NO. 1 IS CHANGES OFF TO ON.)

5. TILT UP REMINDER SYSTEM

WHEN THE IGNITION SW IS TURNED FROM ON TO ACC OR OFF WITH THE MOON ROOF STILL TILTED UP THE CURRENT DOES NOT FLOW TO **TERMINAL 6** OF MOON ROOF CONTROL RELAY.

THIS IS RECEIVED BY THE RELAY AS A SIGNAL THAT THE IGNITION SW IS TURNED OFF. AT THIS TIME, THE MOON ROOF LIMIT SW NO.1 AND NO. 2 ARE OFF, SO SIGNALS ARE INPUT TO **TERMINAL 8** AND **9** OF MOON ROOF CONTROL RELAY THAT THE MOON ROOF IS IN THE TILT OPERATION POSITION. WHEN THESE SIGNALS ARE INPUT TO THE MOON ROOF CONTROL RELAY, THE TIMER BUILT INTO THE RELAY OPERATES.

THUS THE CURRENT TO **TERMINAL 12** OF MOON ROOF CONTROL RELAY FLOWS THROUGH BUZZER OF MOON ROOF CONTROL RELAY AND **TERMINAL 11** OF MOON ROOF CONTROL RELAY TO **GROUND** AND THE BUZZER SOUNDS ABOUT **8** TIMES TO NOTIFY THAT THE MOON ROOF IS STILL IN THE TILT UP CONDITION.