SYSTEM OUTLINE

CURRENT ALWAYS THROUGH THE **POWER** FUSE FLOWS TO **TERMINAL 5** OF THE POWER MAIN RELAY. WITH THE IGNITION SW TURNED ON, CURRENT FLOWS THROUGH THE **GAUGE** FUSE TO **TERMINAL 1** OF THE POWER MAIN RELAY → **TERMINAL 2** → TO **GROUND**. THIS ACTIVATES THE RELAY, AND CURRENT FLOWS FROM **TERMINAL 3** OF THE POWER MAIN RELAY → **TERMINAL 7** OF THE POWER WINDOW MASTER SW, TO **TERMINAL 4** OF THE POWER WINDOW CONTROL SW (PASSENGER'S SIDE) AND TO **TERMINAL 4** OF THE QUARTER POWER WINDOW SW LH, RH (CONVERTIBLE).

1. MANUAL OPERATION BY POWER WINDOW SW (DRIVER'S WINDOW)

WITH THE IGNITION SW TURNED ON AND WITH THE POWER WINDOW MASTER SW IN **UP** POSITION, CURRENT TO **TERMINAL 7** OF THE POWER WINDOW MASTER SW FLOWS TO **TERMINAL 8** OF THE MASTER SW → **TERMINAL 1** OF THE POWER WINDOW MOTOR LH → MOTOR → **TERMINAL 2** → **TERMINAL 6** OF THE MASTER SW → **TERMINAL 9** → **GROUND**, CAUSING THE POWER WINDOW MOTOR TO ROTATE IN THE UP DIRECTION. THE WINDOW ASCENDS ONLY WHILE THE SW IS BEING PUSHED. IN DOWN OPERATION, THE FLOW OF CURRENT FROM **TERMINAL 7** OF THE POWER WINDOW MASTER SW TO **TERMINAL 6** OF THE MASTER SW CAUSES THE FLOW OF CURRENT FROM **TERMINAL 2** OF THE MOTOR → MOTOR → **TERMINAL 1** → **TERMINAL 8** OF THE MASTER SW → **TERMINAL 9** → **GROUND**, FLOWING IN THE OPPOSITE DIRECTION TO MANUAL UP OPERATION, CAUSING THE MOTOR TO ROTATE IN REVERSE AND LOWERING THE WINDOW.

2. AUTO DOWN OPERATION

WITH THE IGNITION SW ON AND THE DRIVER'S SW OF THE POWER WINDOW MASTER SW IN DOWN POSITION, CURRENT TO **TERMINAL 7** OF THE MASTER SW FLOWS TO **TERMINAL 6** OF THE MASTER SW → **TERMINAL 2** OF THE POWER WINDOW MOTOR LH → MOTOR → **TERMINAL 1** → **TERMINAL 8** OF THE MASTER SW → **TERMINAL 9** → **GROUND**, CAUSING THE MOTOR TO ROTATE TOWARDS THE DOWN SIDE. THEN THE SOLENOID IN THE MASTER SW IS ACTIVATED AND IT LOCKS THE DRIVER'S SW BEING PUSHED, CAUSING THE MOTOR TO CONTINUE TO ROTATE IN AUTO DOWN OPERATION.

WHEN THE WINDOW HAS COMPLETELY DESCENDED, THE CURRENT FLOWING BETWEEN **TERMINAL 8** OF THE MASTER SW AND **TERMINAL 9** INCREASES. AS A RESULT, THE SOLENOID STOPS OPERATING, THE DRIVER'S SW TURNS OFF AND THE FLOW FROM **TERMINAL 7** OF THE MASTER SW TO **TERMINAL 6** IS CUT OFF, STOPPING THE MOTOR SO THAT AUTO STOP OCCURS.

3. STOPPING OF AUTO DOWN AT DRIVER'S WINDOW

WHEN THE DRIVER'S SW IS PUSHED TO THE UP SIDE DURING AUTO **DOWN** OPERATION, A GROUND CIRCUIT OPENS IN THE MASTER SW AND CURRENT DOES NOT FLOW FROM **TERMINAL 8** OF THE MASTER SW TO **TERMINAL 9**, SO THE MOTOR STOPS, CAUSING AUTO DOWN OPERATION TO STOP. IF THE DRIVER'S SW IS PUSHED CONTINUOUSLY, THE MOTOR ROTATES IN THE UP DIRECTION IN MANUAL UP OPERATION.

4. MANUAL OPERATION BY POWER WINDOW SW (PASSENGER'S WINDOW)

WITH POWER WINDOW CONTROL SW (PASSENGER'S SIDE) PUSHED TO THE UP SIDE, CURRENT FROM **TERMINAL 4** OF THE POWER WINDOW CONTROL SW FLOWS TO **TERMINAL 1** OF THE POWER WINDOW CONTROL SW → **TERMINAL 2** OF THE WINDOW MOTOR RH → MOTOR → **TERMINAL 1** → **TERMINAL 3** OF THE POWER WINDOW CONTROL SW → **TERMINAL 5** → **TERMINAL 4** OF THE POWER WINDOW MASTER SW → WINDOW LOCK SW → **TERMINAL 9** → **GROUND**, CAUSING THE POWER WINDOW MOTOR (PASSENGER'S SIDE) TO ROTATE IN THE UP DIRECTION. UP OPERATION CONTINUES ONLY WHILE THE POWER WINDOW SW IS PUSHED TO THE UP SIDE. WHEN THE WINDOW DESCENDS, CURRENT TO THE MOTOR FLOWS IN THE OPPOSITE DIRECTION, FROM **TERMINAL 1** TO MOTOR → **TERMINAL 2**, AND THE MOTOR ROTATES IN REVERSE. WHEN THE WINDOW LOCK SW IS PUSHED OUT TO THE NORMAL SIDE, THE GROUND CIRCUIT TO THE PASSENGER'S WINDOW BECOMES OPEN.

AS A RESULT, EVEN IF OPEN/CLOSE OPERATION OF THE PASSENGER'S WINDOW IS TRIED, CURRENT FROM **TERMINAL 7** OF THE POWER WINDOW MASTER SW IS NOT GROUNDED AND THE MOTOR DOES NOT ROTATE, SO THE PASSENGER'S WINDOW CANNOT BE OPERATED AND WINDOW LOCK OCCURS.

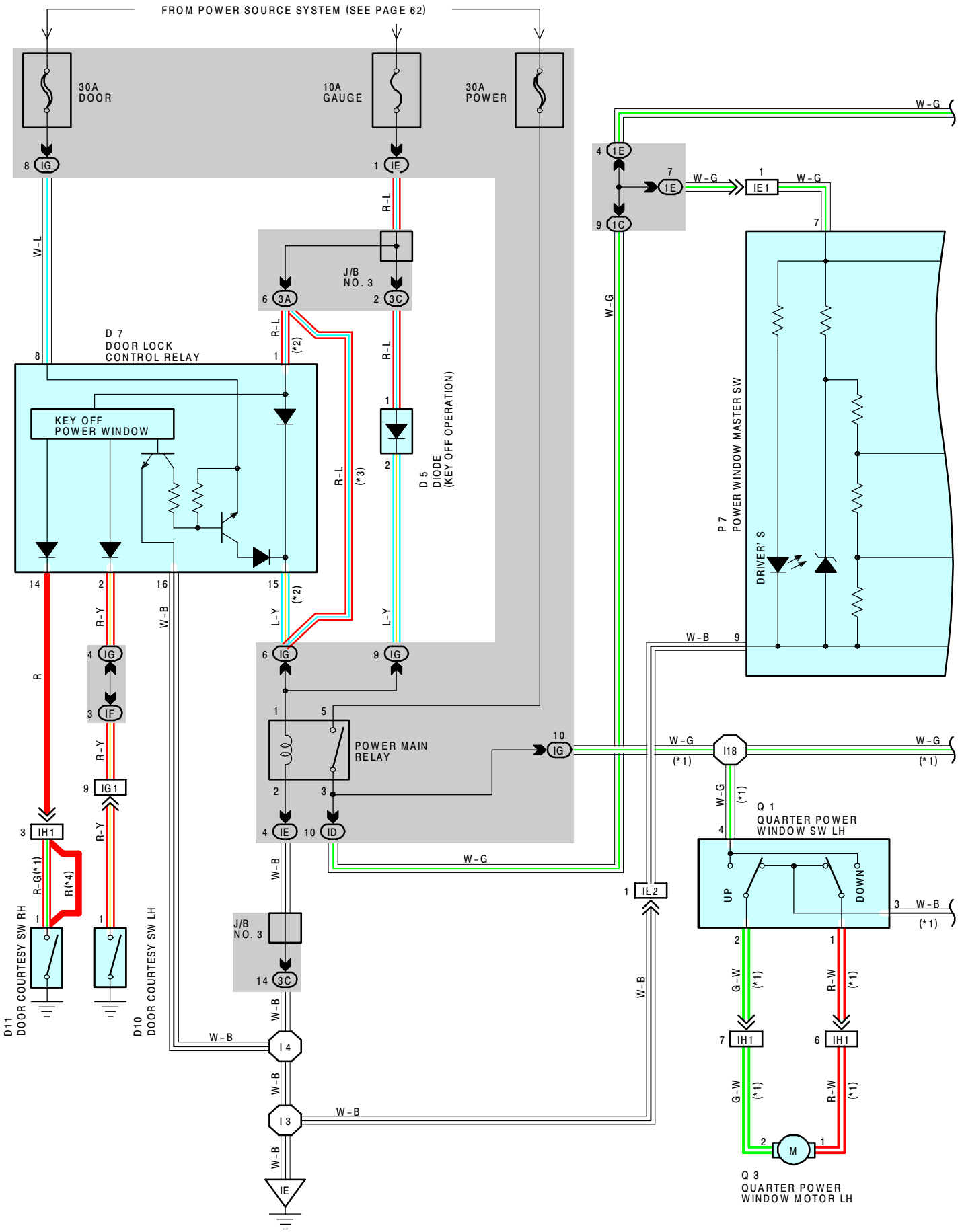
5. KEY OFF POWER WINDOW OPERATION

WITH THE IGNITION SW TURNED FROM ON TO OFF, THE DOOR LOCK ECU OPERATES AND CURRENT FLOWS FROM THE **DOOR** FUSE TO **TERMINAL 8** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 15** → **TERMINAL 1** OF THE POWER MAIN RELAY → **TERMINAL 2** → **GROUND** FOR ABOUT **60** SECONDS. THE SAME AS NORMAL OPERATION, CURRENT FLOWS FROM THE POWER FUSE TO **TERMINAL 5** OF THE POWER MAIN RELAY → **TERMINAL 3** → **TERMINAL 7** OF THE POWER WINDOW MASTER SW AND **TERMINAL 4** OF POWER WINDOW CONTROL SW (PASSENGER'S SIDE). AS A RESULT, FOR ABOUT **60** SECONDS AFTER THE IGNITION SW IS TURNED OFF, IT IS POSSIBLE TO RAISE AND LOWER THE POWER WINDOW BY THE FUNCTIONING OF THIS RELAY. ALSO, BY OPENING THE DOOR (DOOR COURTESY SW ON) WITHIN ABOUT **60** SECONDS AFTER TURNING THE IGNITION SW TO OFF, A SIGNAL IS INPUT TO **TERMINAL 2**, **14** OF DOOR LOCK CONTROL RELAY. AS A RESULT, THE ECU TURNS OFF, AND UP AND DOWN OF THE MOVEMENT OF THE WINDOW STOPS.

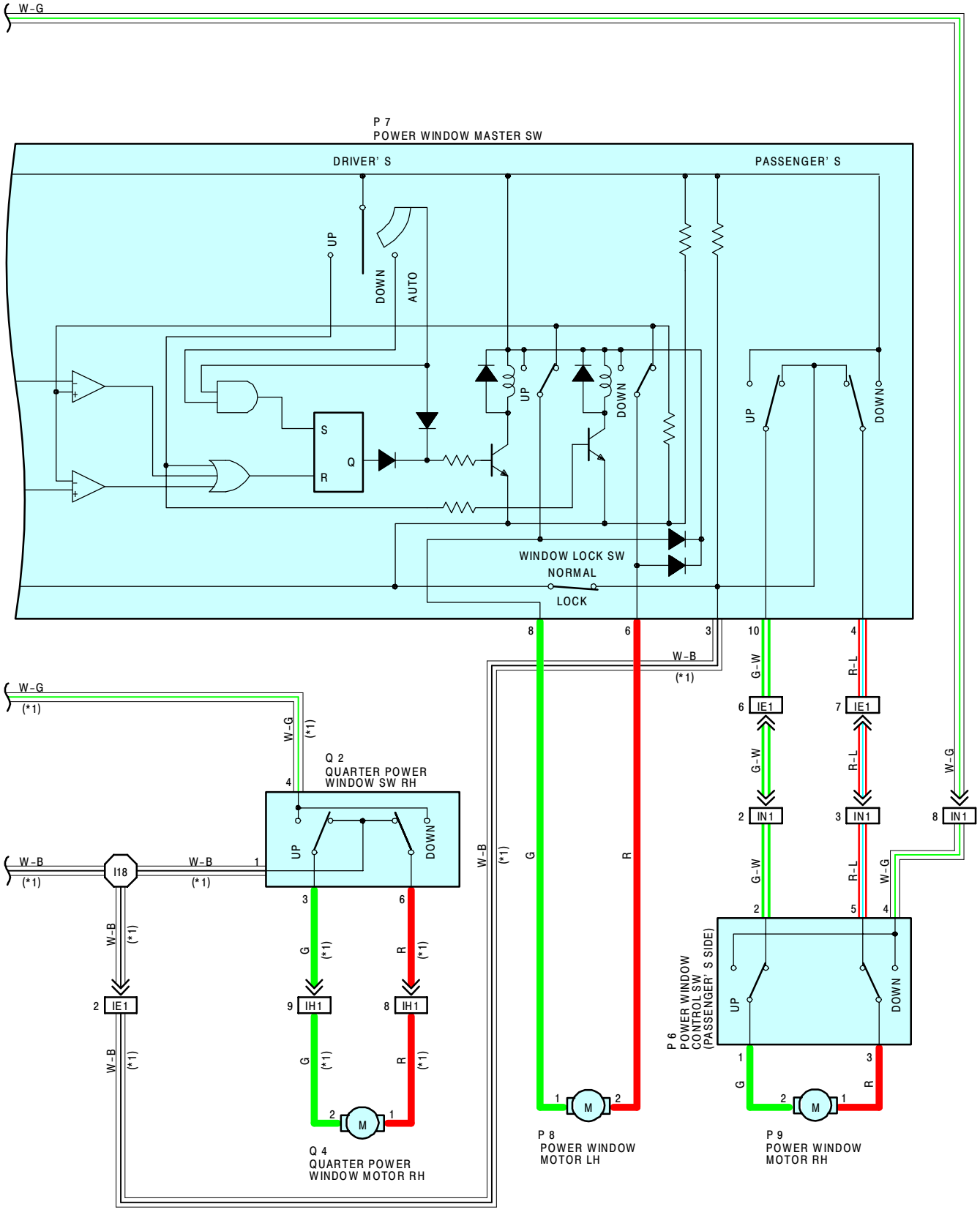
6. MANUAL OPERATION BY QUARTER WINDOW SW (CONVERTIBLE)

WITH THE QUARTER POWER WINDOW SW PUSHED TO UP SIDE, CURRENT FROM **TERMINAL 4** OF THE QUARTER POWER WINDOW SW LH, RH FLOWS TO **TERMINAL 2** (LH), **3** (RH) → **TERMINAL 2** OF THE QUARTER POWER WINDOW MOTOR → MOTOR → **TERMINAL 1** OF THE MOTOR → **TERMINAL 1** (LH), **6** (RH) OF THE QUARTER POWER WINDOW SW → **TERMINAL 3** (LH), **1** (RH) → **TERMINAL 3** OF THE POWER WINDOW MASTER SW → WINDOW LOCK SW → **TERMINAL 9** → **GROUND**, CAUSING THE QUARTER POWER WINDOW MOTOR TO ROTATE IN THE UP DIRECTION. UP OPERATION CONTINUES ONLY WHILE THE QUARTER POWER WINDOW SW IS PUSHED TO UP SIDE. WHEN THE WINDOW DESCENDS, THE CURRENT FLOW TO THE MOTOR FLOWS IN THE OPPOSITE DIRECTION, FROM **TERMINAL 1** OF THE MOTOR → MOTOR → **TERMINAL 2**, AND THE MOTOR ROTATES IN REVERSE.

WHEN THE WINDOW LOCK SW IS PUSHED OUT TO THE NORMAL SIDE, THE **GROUND** CIRCUIT TO THE QUARTER POWER WINDOW BECOMES OPEN. AS A RESULT, EVEN IF OPEN/CLOSE OPERATION OF QUARTER WINDOW IS TRIED, CURRENT FROM **TERMINAL 3** (LH), **1** (RH) OF THE QUARTER POWER WINDOW SW IS NOT GROUNDED AND THE MOTOR DOES NOT ROTATE, SO THE QUARTER POWER WINDOW CAN NOT BE OPERATED AND WINDOW LOCK OCCURS.


FROM POWER SOURCE SYSTEM (SEE PAGE 62)
30A DOOR
10A GAUGE
30A POWER
8 IG
1 IE
W-L
R-L
J/B NO. 3
6 3A
2 3C
D 7 DOOR LOCK CONTROL RELAY
KEY OFF POWER WINDOW
(*2)
(*3)
D 5 DIODE (KEY OFF OPERATION)
14
2
16
15
R
R-Y
W-B
L-Y
4 IG
3 IF
9 IG1
6 IG
9 IG
POWER MAIN RELAY
10 IG
4 1E
7 1E
9 1C
W-G
1 IE1
P 7 POWER WINDOW MASTER SW
DRIVER'S
W-B 9
I18
(*1)
Q 1 QUARTER POWER WINDOW SW LH
UP
DOWN
3 W-B
3 IH1
R-G(*1)
R(*4)
1
D11 DOOR COURTESY SW RH
D10 DOOR COURTESY SW LH
4 IE
10 ID
J/B NO. 3
14 3C
I 4
I 3
IE
1 IL2
G-W
R-W
7 IH1
6 IH1
M
Q 3 QUARTER POWER WINDOW MOTOR LH

*1 : CONVERTIBLE
*2 : W/ DOOR LOCK CONTROL
*3 : W/O DOOR LOCK CONTROL
*4 : L/B, C/P



SERVICE HINTS

D 7 DOOR LOCK CONTROL RELAY
8-GROUND : ALWAYS APPROX. **12** VOLTS
16-GROUND : ALWAYS CONTINUITY
1-GROUND : APPROX. **12** VOLTS WITH THE IGNITION SW AT **ON** POSITION
2-GROUND : CONTINUITY WITH THE LH DOOR OPEN
14-GROUND : CONTINUITY WITH THE RH DOOR OPEN
15-GROUND : APPROX. **12** VOLTS WITH THE IGNITION SW ON AND STAYS AT **12** VOLTS FOR **60** SECONDS AFTER THE IGNITION SW IS TURNED OFF, BUT IF THE DOOR IS OPENED IN THIS **60** SECOND PERIOD, VOLTAGE WILL DROP TO **0** VOLTS

D10, D11 DOOR COURTESY SW LH, RH
1-GROUND : CLOSED WITH THE DOOR OPEN

P 6 POWER WINDOW CONTROL SW (PASSENGER'S SIDE)
4-GROUND : APPROX. **12** VOLTS WITH THE IGNITION SW ON AND STAYS AT **12** VOLTS FOR **60** SECONDS AFTER THE IGNITION SW IS TURNED OFF, BUT IF THE DOOR IS OPENED IN THIS **60** SECONDS PERIOD, VOLTAGE WILL DROP TO **0** VOLTS

P 7 POWER WINDOW MASTER SW
9-GROUND : ALWAYS CONTINUITY
7-GROUND : APPROX. **12** VOLTS WITH THE IGNITION SW ON AND STAYS AT **12** VOLTS FOR **60** SECONDS AFTER THE IGNITION SW IS TURNED OFF, BUT IF THE DOOR IS OPENED IN THIS **60** SECONDS PERIOD, VOLTAGE WILL DROP TO **0** VOLTS
8-GROUND : APPROX. **12** VOLTS WITH THE IGNITION SW AT **ON** POSITION AND THE MASTER SW AT **UP** POSITION
6-GROUND : APPROX. **12** VOLTS WITH THE IGNITION SW AT **ON** POSITION AND THE MASTER SW AT **DOWN** OR **AUTO DOWN** POSITION

Q 1, Q 2 QUARTER POWER WINDOW SW LH, RH
4-GROUND : APPROX. **12** VOLTS WITH IGNITION SW ON AND STAYS AT **12** VOLTS FOR **60** SECONDS AFTER THE IGNITION SW IS TURNED OFF, BUT IF A DOOR IS OPENED IN THIS **60** SECONDS PERIOD, VOLTAGE WILL DROP TO **0** VOLTS

WINDOW LOCK SW
OPEN WTH THE WINDOW LOCK SW AT **NORMAL** POSITION

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 5	32	**P 6**	34 (L/B), 35 (C/P)	**P 9**	34 (L/B), 35 (C/P)
D 7	32		36 (CONVERTIBLE)		36 (CONVERTIBLE)
D10	34 (L/B), 35 (C/P)	**P 7**	34 (L/B), 35 (C/P)	**Q 1**	33 (CONVERTIBLE)
	36 (CONVERTIBLE)		36 (CONVERTIBLE)	**Q 2**	33 (CONVERTIBLE)
D11	34 (L/B), 35 (C/P)	**P 8**	34 (L/B), 35 (C/P)	**Q 3**	37 (CONVERTIBLE)
	36 (CONVERTIBLE)		36 (CONVERTIBLE)	**Q 4**	37 (CONVERTIBLE)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
ID	20	INSTRUMENT PANEL WIRE AND INPANE J/B (LEFT KICK PANEL)
IE		
IF		
IG		
1C	22	INSTRUMENT PANEL WIRE AND J/B NO.1 (LEFT KICK PANEL)
1E		
3A	24	INSTRUMENT PANEL WIRE AND J/B NO.3 (BEHIND THE INSTRUMENT PANEL CENTER)
3C		

▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	42	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IE2		
IG1	42	INSTRUMENT PANEL WIRE AND FLOOR WIRE (LEFT KICK PANEL)
IH1	42	FLOOR WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IN1	44	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

: GROUND POINTS

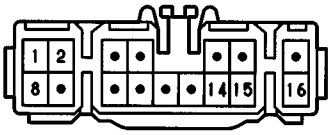
CODE	SEE PAGE	GROUND POINTS LOCATION
IE	42	INSTRUMENT PANEL BRACE LH

: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 3	44	INSTRUMENT PANEL WIRE	**I18**	44	INSTRUMENT PANEL WIRE
I 4					

D 5 BLACK

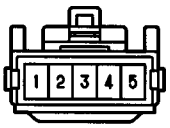
D 7



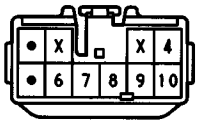
D10

D11

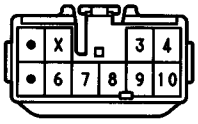
P 6



(L/B, C/P) P 7 BLUE



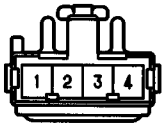
(CONVERTIBLE) P 7 BLUE



P 8

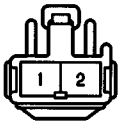
P 9

Q 1



Q 2 BLACK

Q 3 BLACK



Q 4 BLACK