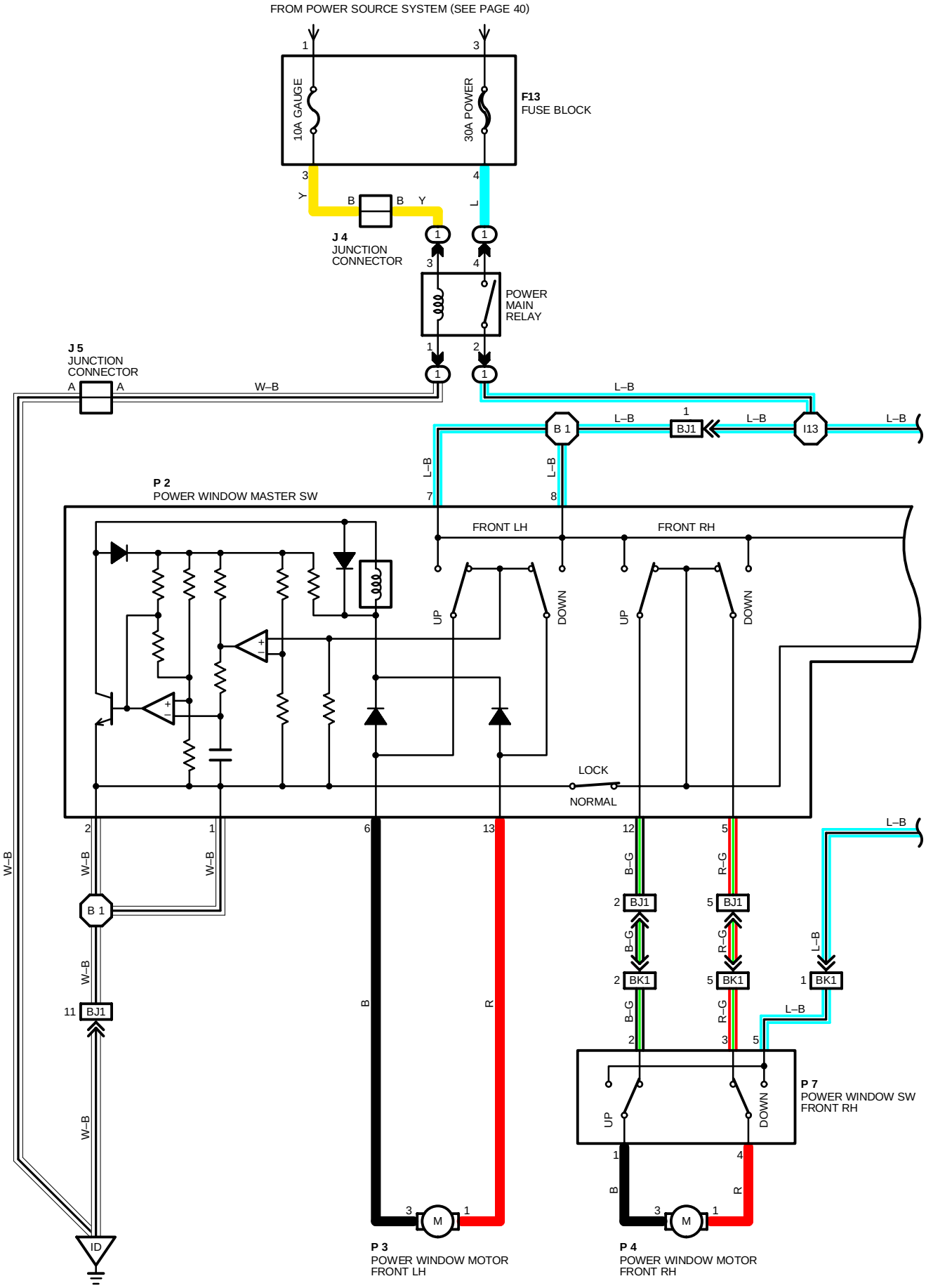
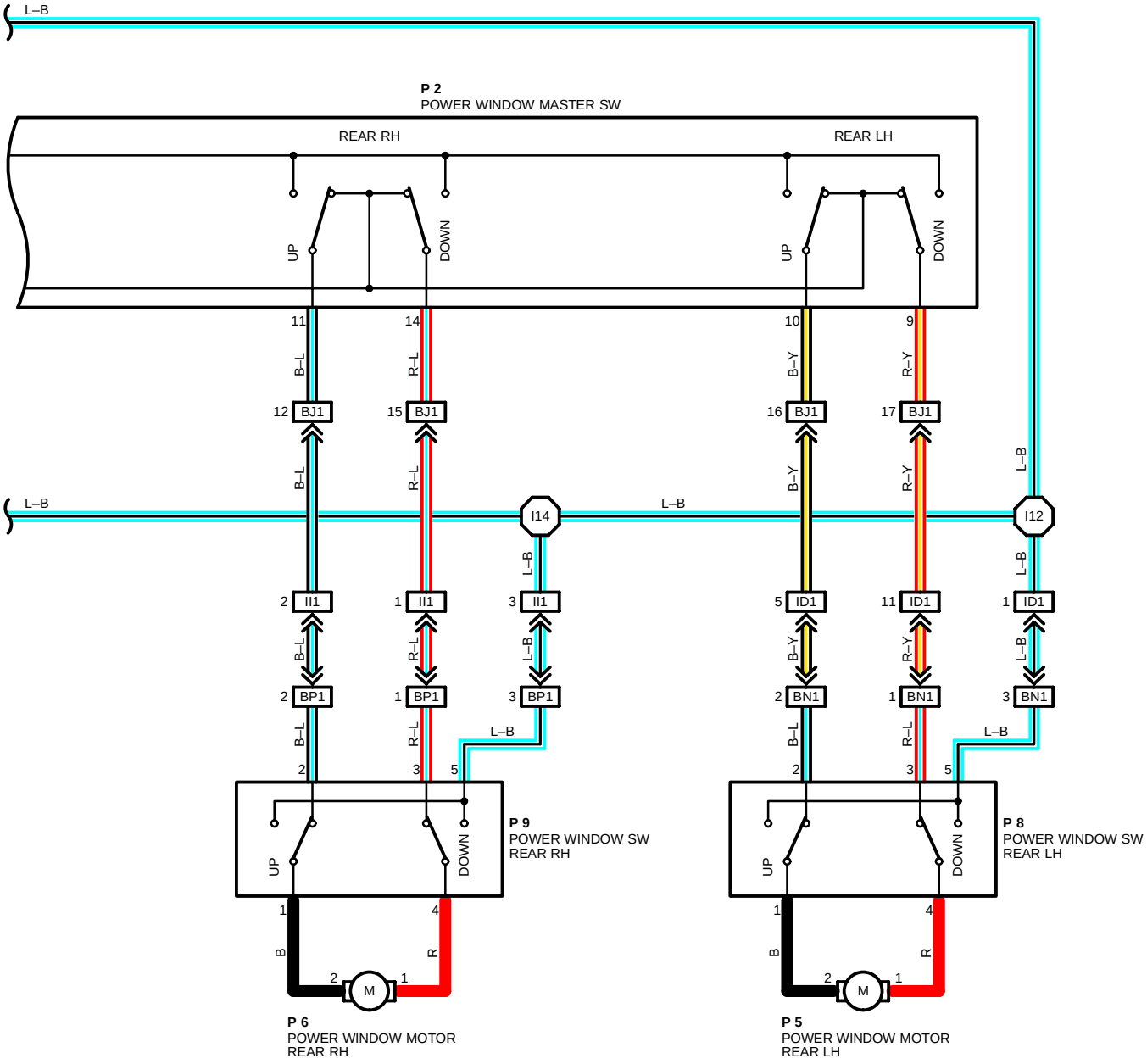
POWER WINDOW




L–B
P 2
POWER WINDOW MASTER SW
REAR RH
REAR LH
UP
DOWN
UP
DOWN
11
14
10
9
B–L
R–L
B–Y
R–Y
12 BJ1
15 BJ1
16 BJ1
17 BJ1
B–L
R–L
B–Y
R–Y
L–B
L–B
I14
L–B
I12
L–B
2 II1
1 II1
3 II1
5 ID1
11 ID1
1 ID1
B–L
R–L
L–B
B–Y
R–Y
L–B
2 BP1
1 BP1
3 BP1
2 BN1
1 BN1
3 BN1
B–L
R–L
L–B
B–L
R–L
L–B
2
3
5
2
3
5
P 9
POWER WINDOW SW
REAR RH
P 8
POWER WINDOW SW
REAR LH
UP
DOWN
UP
DOWN
1
4
1
4
B
R
B
R
2
M
1
2
M
1
P 6
POWER WINDOW MOTOR
REAR RH
P 5
POWER WINDOW MOTOR
REAR LH

POWER WINDOW

SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, CURRENT FLOWS THROUGH THE GAUGE FUSE TO **TERMINAL 1** OF THE POWER MAIN RELAY → **TERMINAL 3** → TO **GROUND**. THIS ACTIVATES THE RELAY AND THE CURRENT FLOWING TO **TERMINAL 2** OF THE RELAY FROM POWER CB FLOWS TO **TERMINAL 4** OF THE RELAY → **TERMINALS 7** AND **8** OF THE POWER WINDOW MASTER SW, TO **TERMINAL 5** (PASSENGER'S) AND **TERMINAL 3** (REAR LH, RH) OF THE POWER WINDOW SW.

1. MANUAL UP OPERATION (DRIVER'S WINDOW)

WITH THE IGNITION SW TURNED ON AND WITH THE POWER WINDOW MASTER SW (MANUAL SW) IN **UP** POSITION, THE CURRENT FLOWING TO **TERMINALS 7** AND **8** OF THE POWER WINDOW MASTER SW FLOWS TO **TERMINAL 6** OF THE MASTER SW → **TERMINAL 2** OF THE POWER WINDOW MOTOR → **TERMINAL 1** → **TERMINAL 13** OF THE MASTER SW → **TERMINAL 2** AND **1** → TO **GROUND** AND CAUSES 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 **TERMINALS 7** AND **8** OF THE POWER WINDOW MASTER SW TO **TERMINAL 13** OF THE MASTER SW CAUSES THE FLOW OF CURRENT FROM **TERMINAL 1** OF THE MOTOR → **TERMINAL 2** → **TERMINAL 6** OF THE MASTER SW → **TERMINAL 2** AND **1** → TO **GROUND**, FLOWING IN THE OPPOSITE DIRECTION TO MANUAL UP OPERATION AND CAUSING THE MOTOR TO ROTATE IN REVERSE, LOWERING THE WINDOW.

2. AUTO DOWN OPERATION

WITH THE IGNITION SW ON AND WITH THE AUTO SW OF THE POWER WINDOW MASTER SW IN **DOWN** POSITION, CURRENT FLOWING TO **TERMINAL 7** OR **8** OF THE MASTER SW FLOWS TO **TERMINAL 13** OF THE MASTER SW → **TERMINAL 1** OF THE POWER WINDOW MOTOR → **TERMINAL 2** → **TERMINAL 6** OF THE MASTER SW → **TERMINAL 2** → TO **GROUND**, CAUSING THE MOTOR TO ROTATE TOWARDS THE DOWN SIDE.

THEN THE SOLENOID IN THE MASTER SW IS ACTIVATED AND IT LOCKS THE AUTO SW BEING PUSHED, CAUSING THE MOTOR TO CONTINUE TO ROTATE IN AUTO DOWN OPERATION.

WHEN THE WINDOW HAS COMPLETELY DESCENDED, THE CURRENT FLOW BETWEEN **TERMINAL 6** OF THE MASTER SW AND **TERMINAL 2** INCREASES. AS A RESULT, THE SOLENOID STOPS OPERATING, THE AUTO SW TURNS OFF AND FLOW FROM **TERMINAL 7** OF THE MASTER SW TO **TERMINAL 13** IS CUT OFF, STOPPING THE MOTOR SO THAT AUTO STOP OCCURS.

3. STOPPING OF AUTO DOWN AT DRIVER'S WINDOW

WHEN THE MANUAL SW (DRIVER'S) 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 6** OF THE MASTER SW → TO **GROUND**, SO THE MOTOR STOPS, CAUSING AUTO DOWN OPERATION TO STOP. IF THE MANUAL 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 SW (PASSENGER'S) PULLED TO THE UP SIDE, CURRENT FLOWING FROM **TERMINAL 5** OF THE POWER WINDOW SW FLOWS TO **TERMINAL 1** OF THE POWER WINDOW SW → **TERMINAL 2** OF THE POWER WINDOW MOTOR → **TERMINAL 1** → **TERMINAL 4** OF THE POWER WINDOW SW → **TERMINAL 3** → **TERMINAL 5** OF THE MASTER SW → **TERMINAL 1** OR **2** → TO **GROUND** AND CAUSES THE POWER WINDOW MOTOR (PASSENGER'S) TO ROTATE IN THE UP DIRECTION. UP OPERATION CONTINUES ONLY WHILE THE POWER WINDOW SW IS PULLED TO THE UP SIDE. WHEN THE WINDOW DESCENDS, THE CURRENT FLOWING TO THE MOTOR FLOWS IN THE OPPOSITE DIRECTION, FROM **TERMINAL 1** TO **TERMINAL 2**, AND THE MOTOR ROTATES IN REVERSE. WHEN THE WINDOW LOCK SW IS PUSHED TO THE LOCK 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, THE CURRENT FROM **TERMINAL 1** AND **2** OF THE POWER WINDOW MASTER SW IS NOT GROUNDED AND THE MOTOR DOES NOT ROTATE, SO THE PASSENGER'S WINDOW CAN NOT BE OPERATED AND WINDOW LOCK OCCURS.

FURTHERMORE REAR LH, RH WINDOW OPERATE THE SAME AS THE ABOVE CIRCUIT.

SERVICE HINTS

P 2 POWER WINDOW MASTER SW

7, 8–GROUND : APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION
1, 2–GROUND : ALWAYS CONTINUITY
6–GROUND : APPROX. **12** VOLTS WITH IGNITION SW ON AND MASTER SW (DRIVER'S WINDOW) UP
13–GROUND : APPROX. **12** VOLTS WITH IGNITION SW ON AND MASTER SW (DRIVER'S WINDOW) DOWN OR DOWN HOLD

WINDOW LOCK SW

OPEN WITH WINDOW LOCK SW AT **LOCK** POSITION

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F13	20	**P 3**	21	**P 7**	21
J 4	20	**P 4**	21	**P 8**	21
J 5	20	**P 5**	21	**P 9**	21
P 2	21	**P 6**	21		

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO. 1 (LEFT KICK PANEL)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	24	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
II1	24	COWL WIRE AND FLOOR NO. 2 WIRE (RIGHT KICK PANEL)
BJ1	26	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
BK1	26	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
BN1	26	REAR DOOR LH WIRE AND FLOOR NO. 1 WIRE (LEFT CENTER PILLAR)
BP1	26	REAR DOOR RH WIRE AND FLOOR NO. 2 WIRE (RIGHT CENTER PILLAR)

: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	24	LEFT KICK PANEL

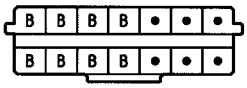
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 12	24	COWL WIRE	**I14**	24	COWL WIRE
I 13			**B 1**	24	FRONT DOOR RH WIRE

F13

(SEE PAGE 18)

J 4 ORANGE

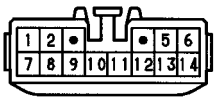


(HINT:SEE PAGE 7)

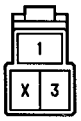
J 5

(HINT:SEE PAGE 7)

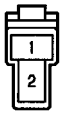
P 2



P 3, P 4



P 5, P 6



P 7, P 8, P 9