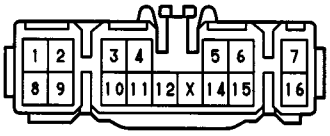
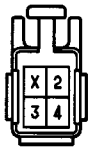
D 5 GRAY

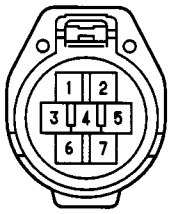


D 9, D10

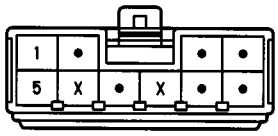
D11, D12



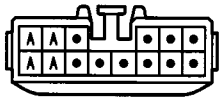
D13, D14 GRAY



I 9 BLACK



J 1

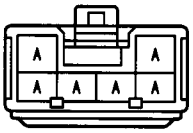


(HINT:SEE PAGE 7)

J 4

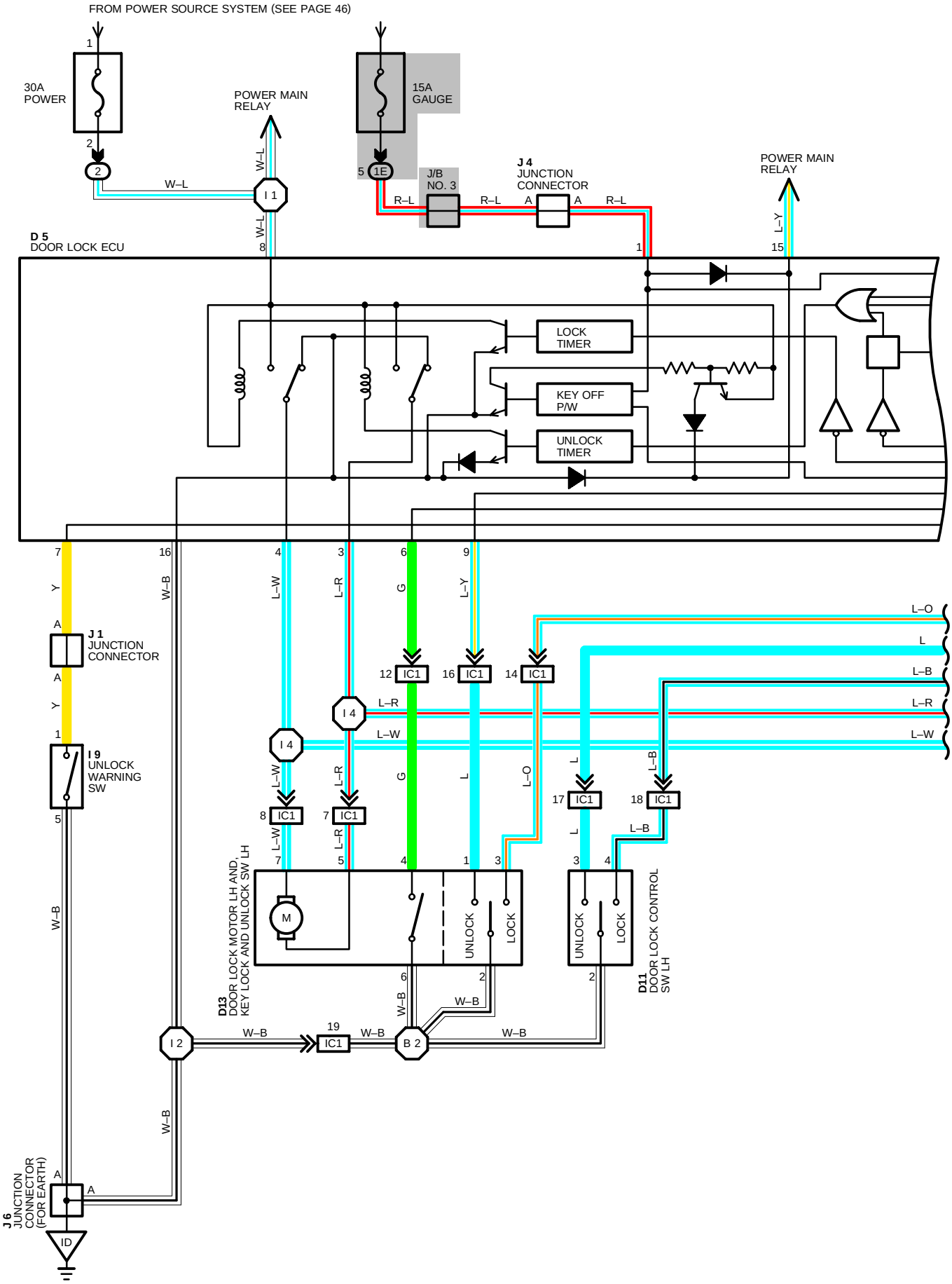
(HINT:SEE PAGE 7)

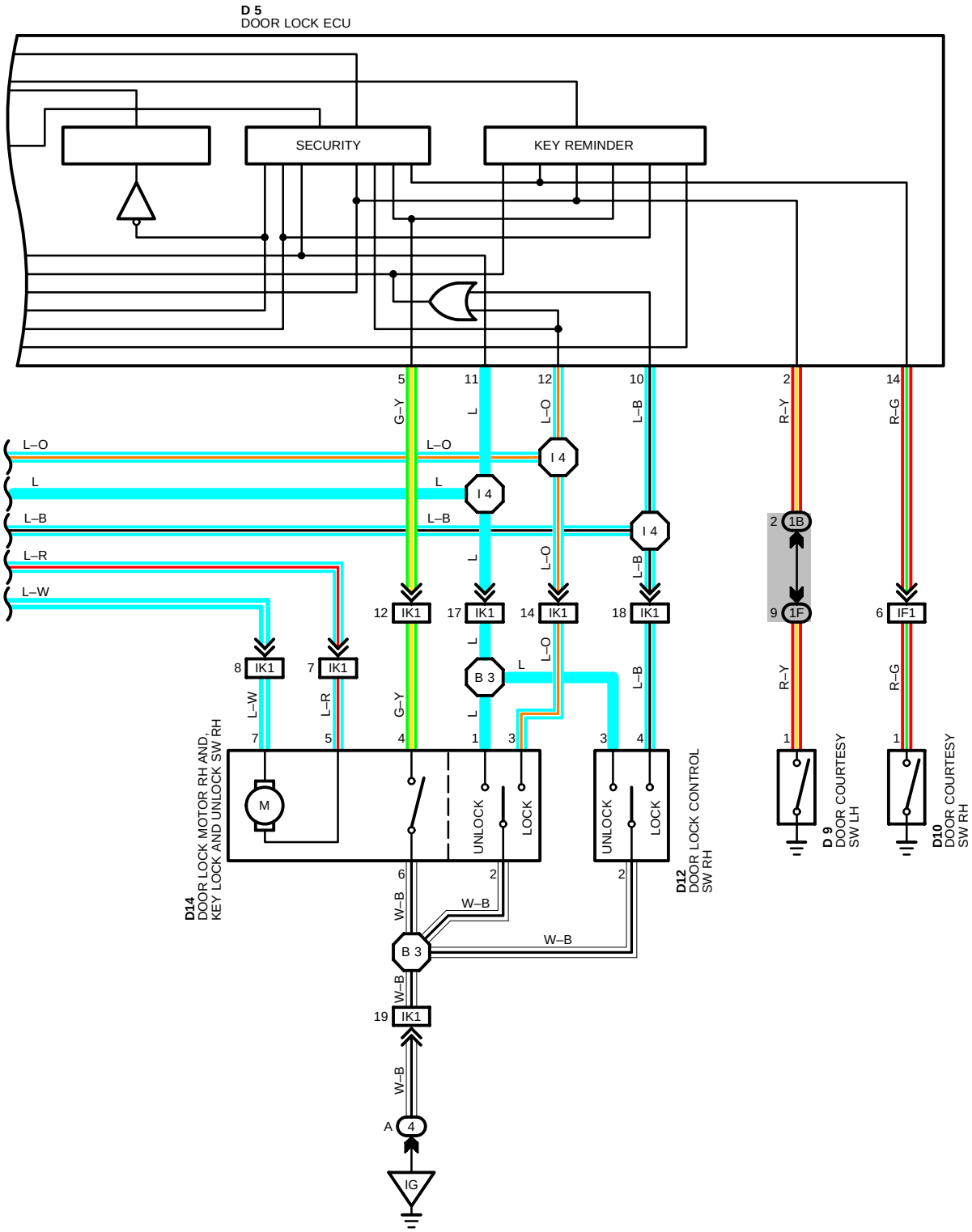
J 6



(HINT:SEE PAGE 7)

DOOR LOCK


FROM POWER SOURCE SYSTEM (SEE PAGE 46)
30A POWER
POWER MAIN RELAY
15A GAUGE
J/B NO. 3
J 4 JUNCTION CONNECTOR
POWER MAIN RELAY
D 5 DOOR LOCK ECU
LOCK TIMER
KEY OFF P/W
UNLOCK TIMER
J 1 JUNCTION CONNECTOR
I 9 UNLOCK WARNING SW
I 1
I 2
I 4
B 2
IC1
D13 DOOR LOCK MOTOR LH AND, KEY LOCK AND UNLOCK SW LH
D11 DOOR LOCK CONTROL SW LH
J 6 JUNCTION CONNECTOR (FOR EARTH)
M
UNLOCK
LOCK
W–L
R–L
L–Y
W–B
L–W
L–R
G
L
L–O
L–B
Y


D 5
DOOR LOCK ECU
SECURITY
KEY REMINDER
5
11
12
10
2
14
G–Y
L
L–O
L–B
R–Y
R–G
L–O
L
L–B
L–R
L–W
I 4
I 4
I 4
2
1B
9
1F
6
IF1
12
IK1
17
IK1
14
IK1
18
IK1
8
IK1
7
IK1
B 3
L
L–O
L–B
L–W
L–R
G–Y
R–Y
R–G
7
5
4
1
3
3
4
1
1
M
UNLOCK
LOCK
UNLOCK
LOCK
D14
DOOR LOCK MOTOR RH AND,
KEY LOCK AND UNLOCK SW RH
D12
DOOR LOCK CONTROL
SW RH
D 9
DOOR COURTESY
SW LH
D10
DOOR COURTESY
SW RH
6
2
2
W–B
W–B
W–B
B 3
W–B
19
IK1
W–B
A
4
IG

DOOR LOCK

SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO **TERMINAL 8** OF THE DOOR LOCK ECU 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 ECU AND CAUSES THE RELAY TO FUNCTION. CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 4** → **TERMINAL 7** OF THE DOOR LOCK MOTOR → **TERMINAL 5** → **TERMINAL 3** OF THE ECU → **TERMINAL 16** → TO **GROUND** AND DOOR LOCK SOLENOID CAUSES THE DOOR TO LOCK.

2. MANUAL UNLOCK OPERATION

TO CAHNGE DOOR LOCK CONTROL SW AND KEY SW RH TO **UNLOCK** POSITION, AN UNLOCK SIGNAL IS INPUT TO **TERMINAL 11** OF THE DOOR LOCK ECU AND CAUSES THE RELAY TO FUNCTION. CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL 5** OF THE DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE ECU → **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 ECU, 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 ECU → **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 ECU. AS A RESULT, THE CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL 5** OF THE DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE ECU → **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 ECU. ACCORDING TO THIS INPUT SIGNAL, THE CURRENT IN ECU FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL 5** OF THE DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE ECU → **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 ECU. BY THIS INPUT SIGNAL, THE RELAY WORKS AND CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL 5** OF THE DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE ECU → **TERMINAL 16** → TO **GROUND** AND CAUSES ALL THE DOORS TO UNLOCK.

SERVICE HINTS

D 5 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

I 9 UNLOCK WARNING SW
1–5 : CLOSED WITH IGNITION KEY IN CYLINDER

D13, D14 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

D 9, D10 DOOR COURTESY SW
1–GROUND : CLOSED WITH DOOR OPEN

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 5	26	**D12**	27	**J 1**	26
D 9	27	**D13**	27	**J 4**	26
D10	27	**D14**	27	**J 6**	26
D11	27	**I 9**	26		

: RELAY BLOCKS

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

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
1F	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)
IC1	30	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IK1	32	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)

: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL
IG	30	R/B NO. 4 SET BOLT

: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 1	32	COWL WIRE	**B 2**	34	FRONT DOOR LH WIRE
I 2			**B 3**	34	FRONT DOOR RH WIRE
I 4					