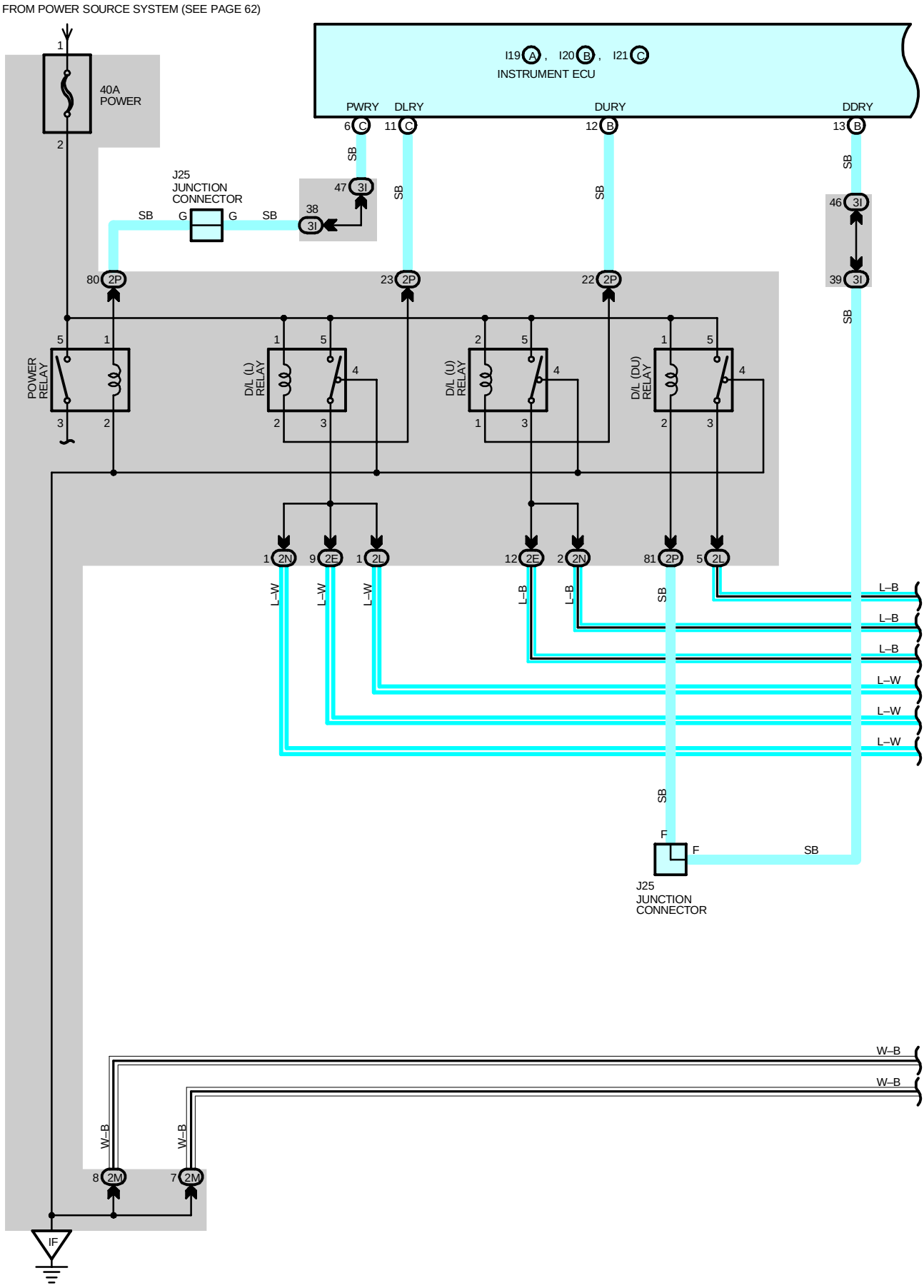
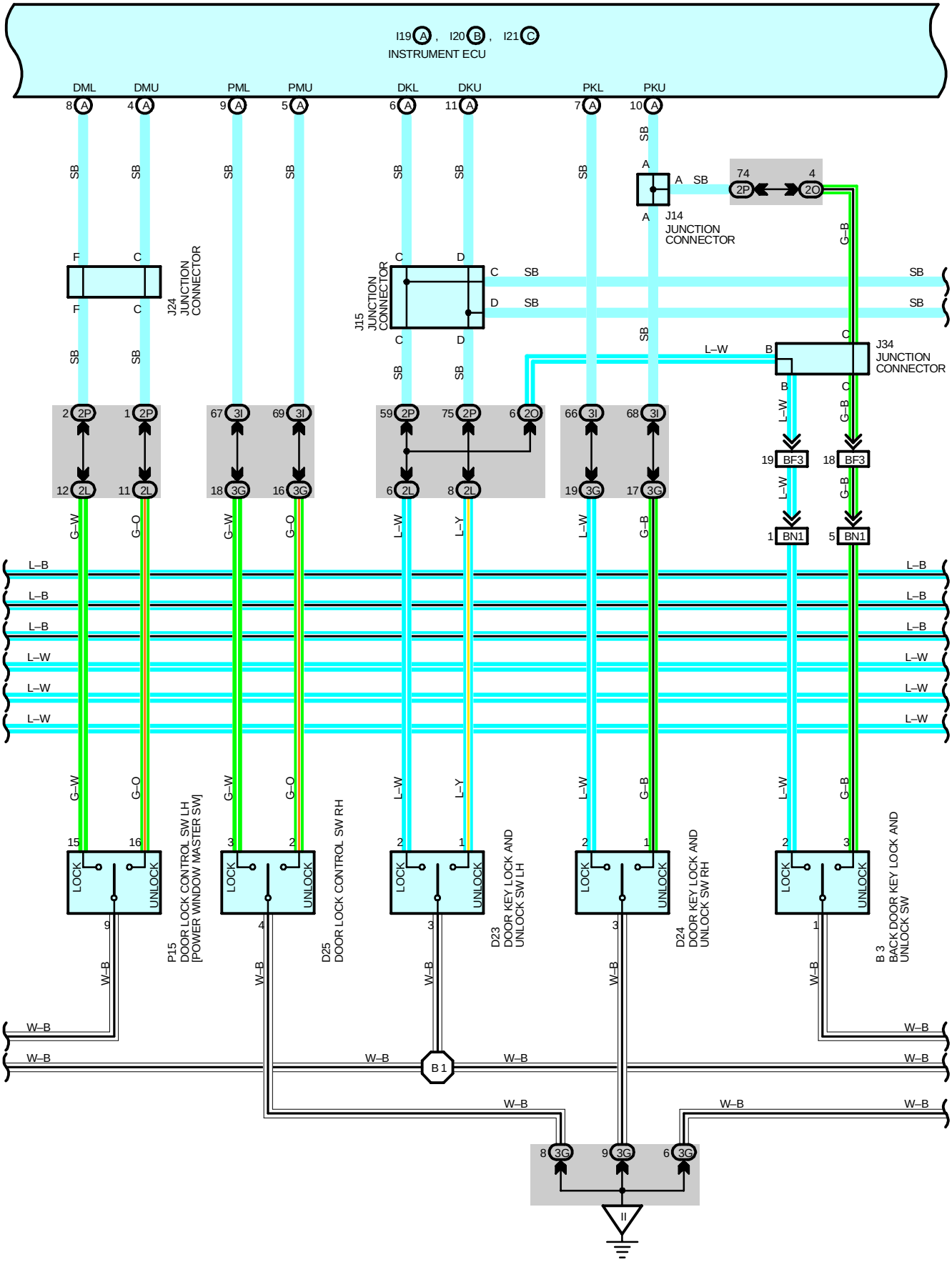
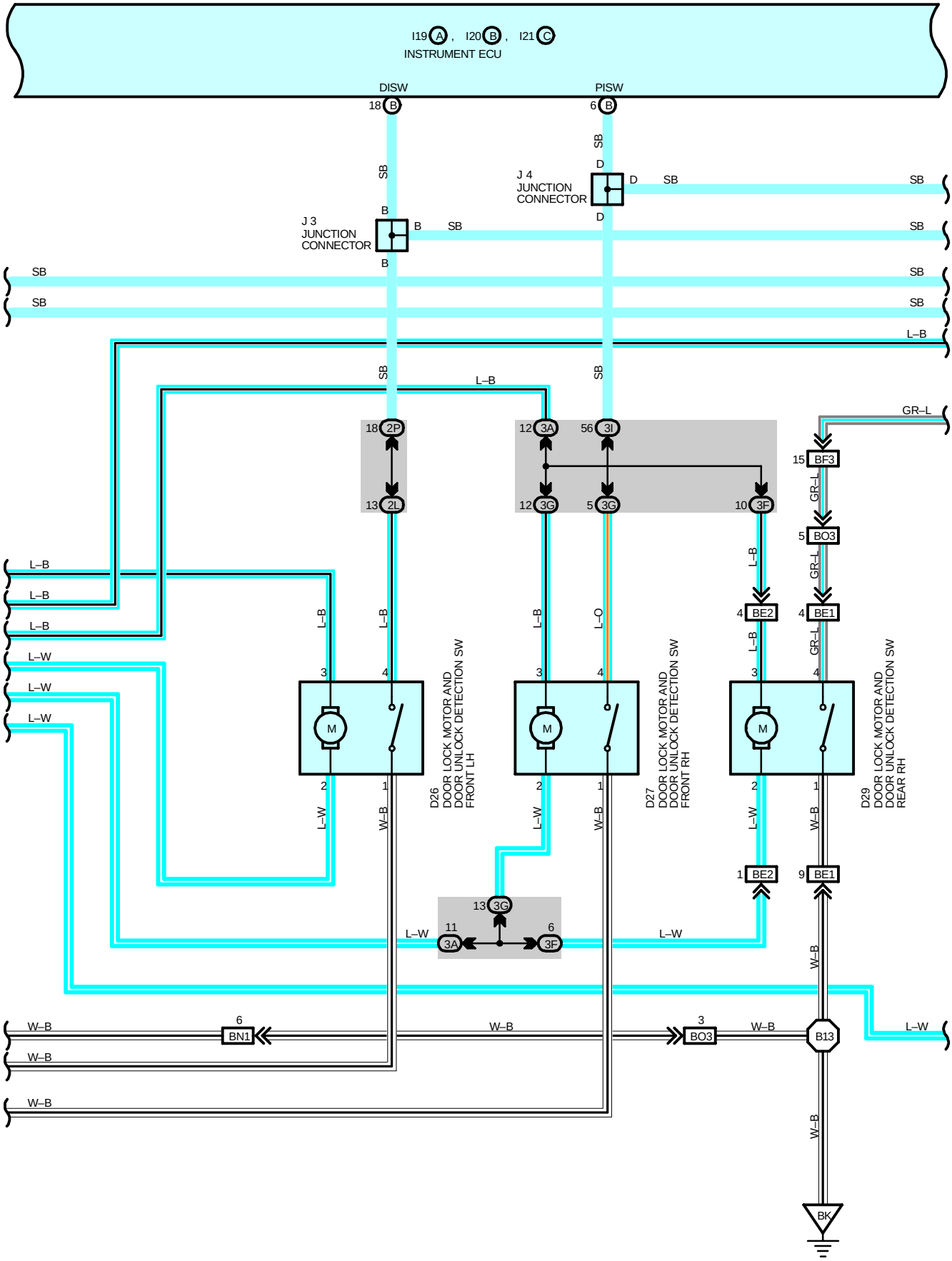
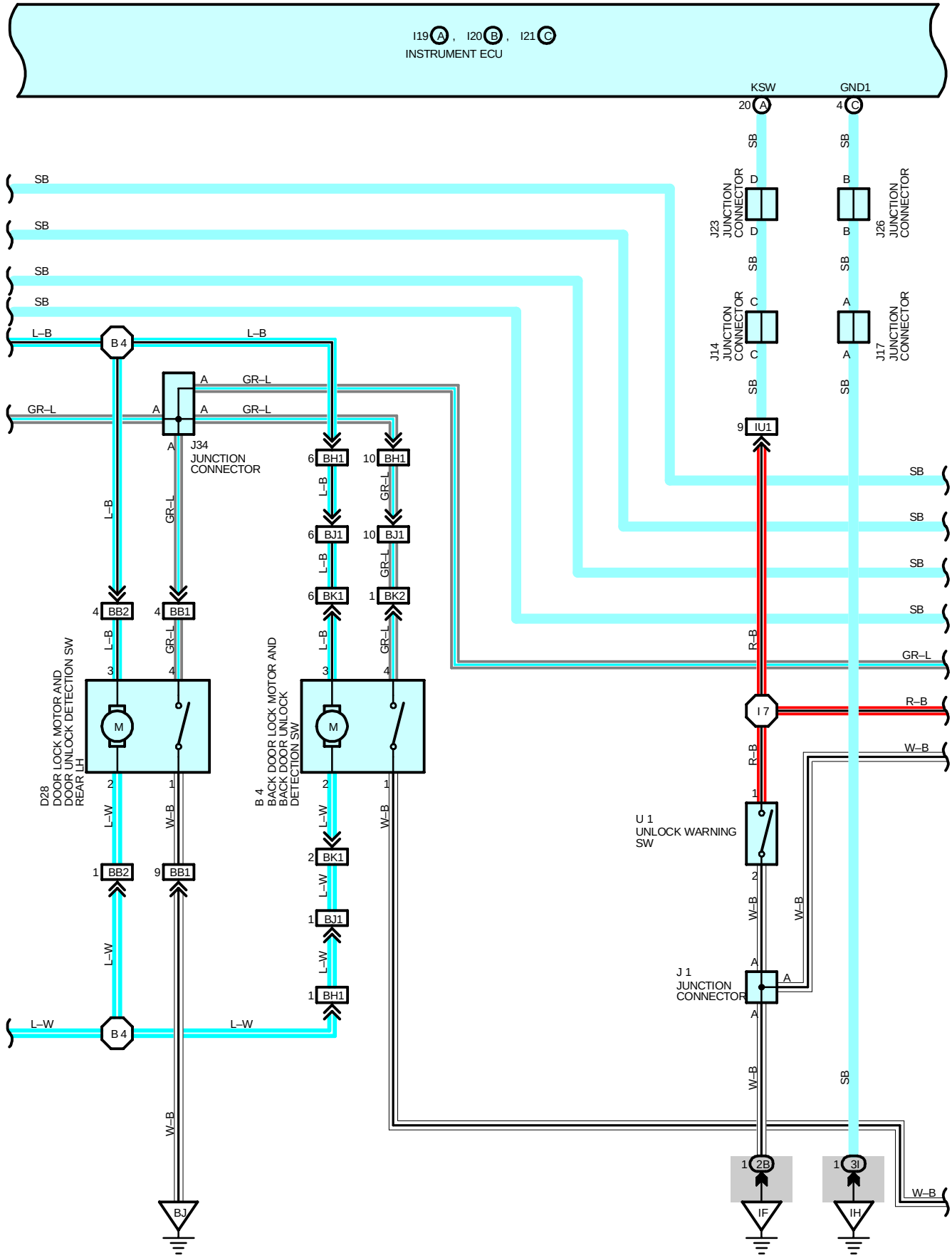
MULTIPLEX COMMUNICATION SYSTEM



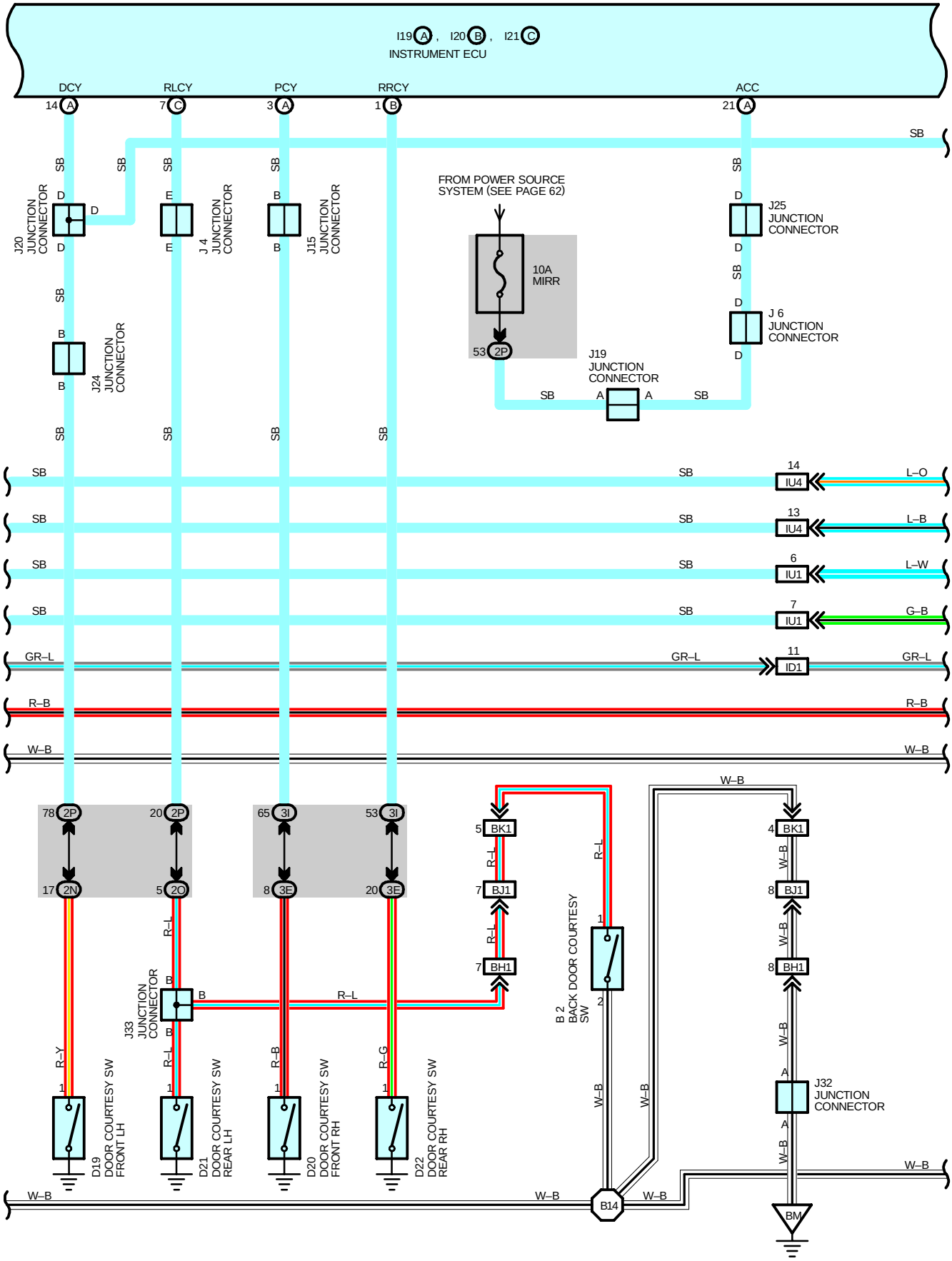

I19 A , I20 B , I21 C
INSTRUMENT ECU
DML
DMU
PML
PMU
DKL
DKU
PKL
PKU
J14 JUNCTION CONNECTOR
J24 JUNCTION CONNECTOR
J15 JUNCTION CONNECTOR
J34 JUNCTION CONNECTOR
P15 DOOR LOCK CONTROL SW LH [POWER WINDOW MASTER SW]
D25 DOOR LOCK CONTROL SW RH
D23 DOOR KEY LOCK AND UNLOCK SW LH
D24 DOOR KEY LOCK AND UNLOCK SW RH
B 3 BACK DOOR KEY LOCK AND UNLOCK SW
LOCK
UNLOCK
B 1

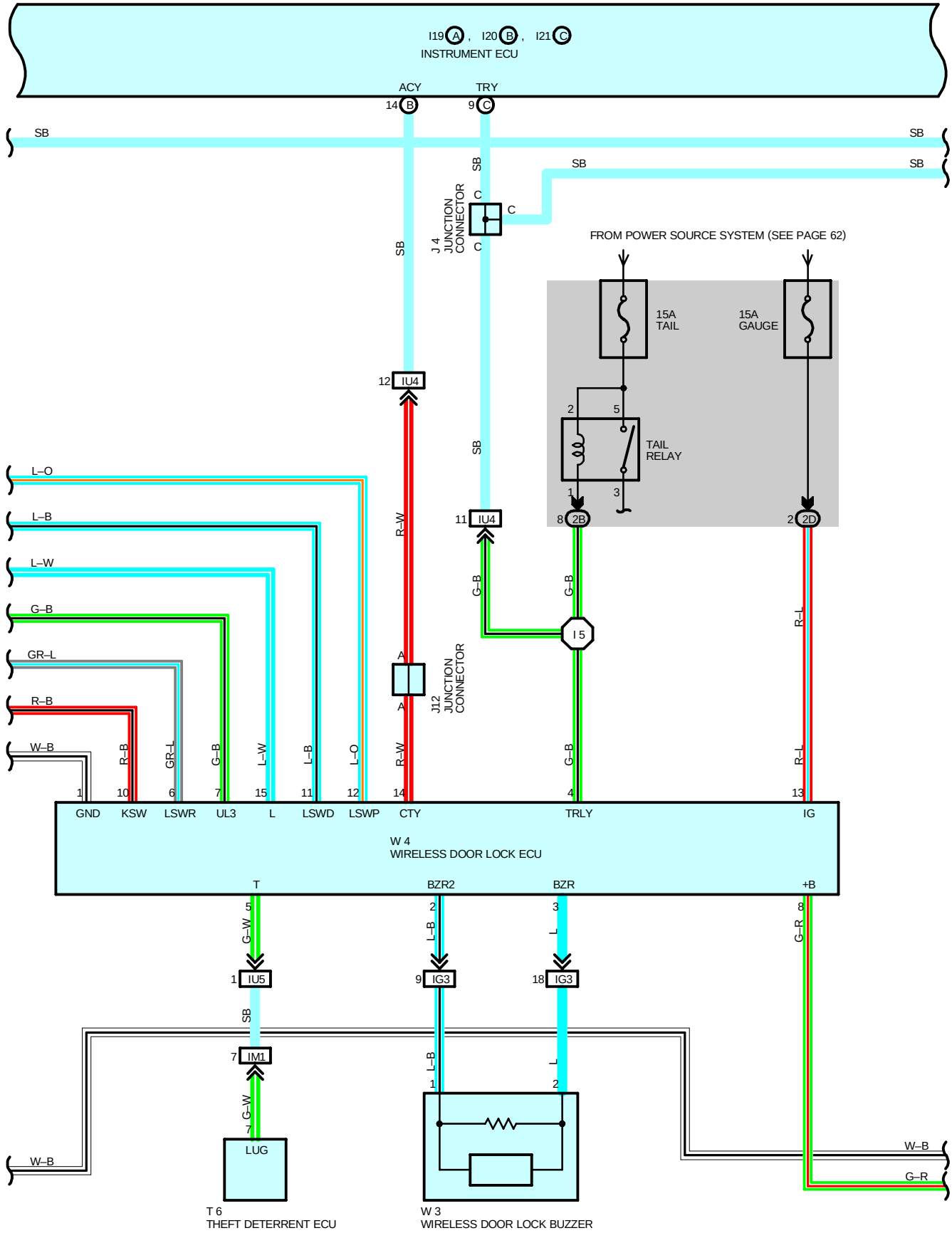
MULTIPLEX COMMUNICATION SYSTEM



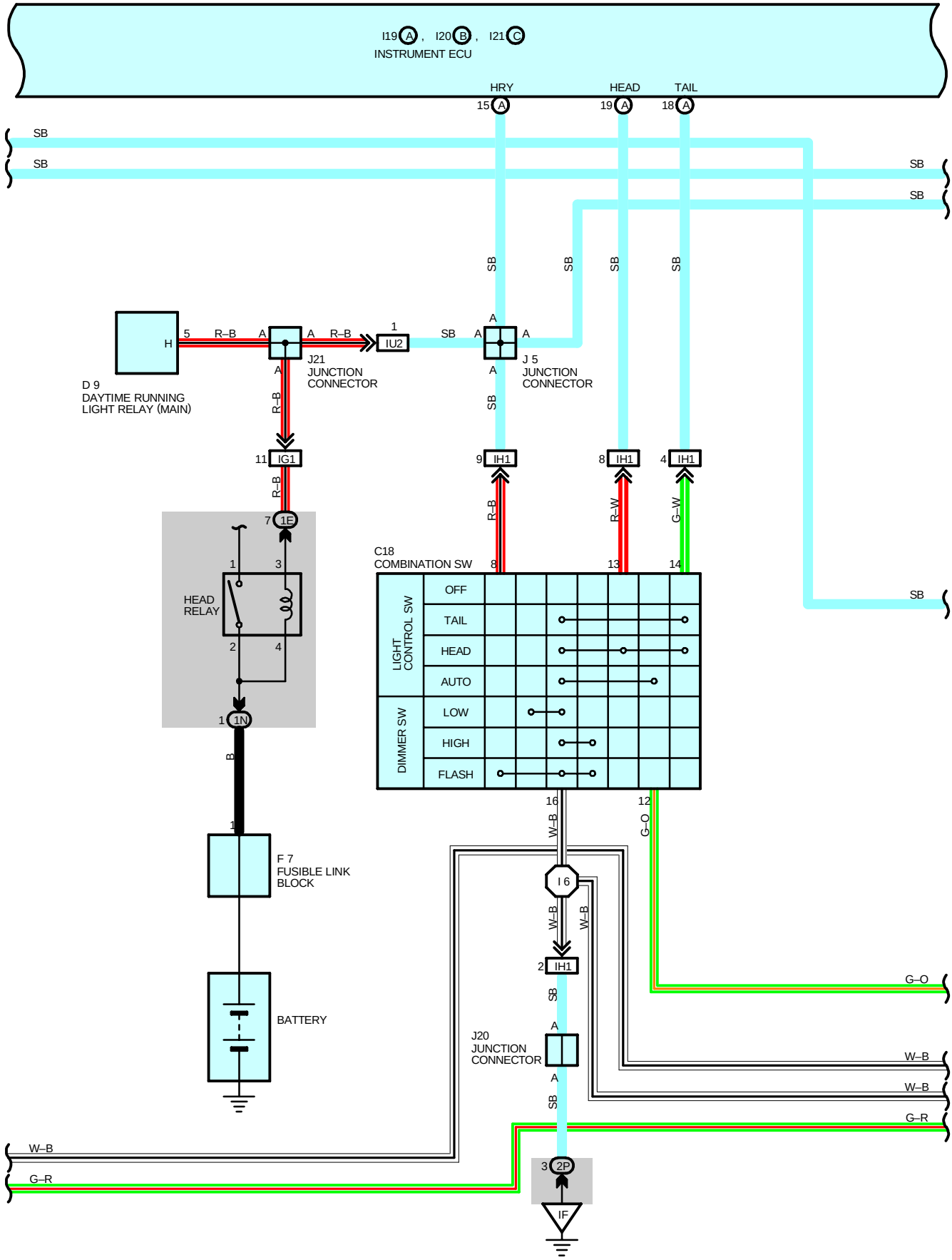

I19 A , I20 B , I21 C
INSTRUMENT ECU
KSW
GND1
20 A
4 C
SB
J23 JUNCTION CONNECTOR
J26 JUNCTION CONNECTOR
J14 JUNCTION CONNECTOR
J17 JUNCTION CONNECTOR
9 IU1
L–B
GR–L
B 4
J34 JUNCTION CONNECTOR
6 BH1
10 BH1
6 BJ1
10 BJ1
6 BK1
1 BK2
4 BB2
4 BB1
D28 DOOR LOCK MOTOR AND DOOR UNLOCK DETECTION SW REAR LH
B 4 BACK DOOR LOCK MOTOR AND BACK DOOR UNLOCK DETECTION SW
M
L–W
W–B
R–B
I 7
U 1 UNLOCK WARNING SW
J 1 JUNCTION CONNECTOR
1 BB2
9 BB1
2 BK1
1 BJ1
1 BH1
BJ
1 2B
1 3I
IF
IH

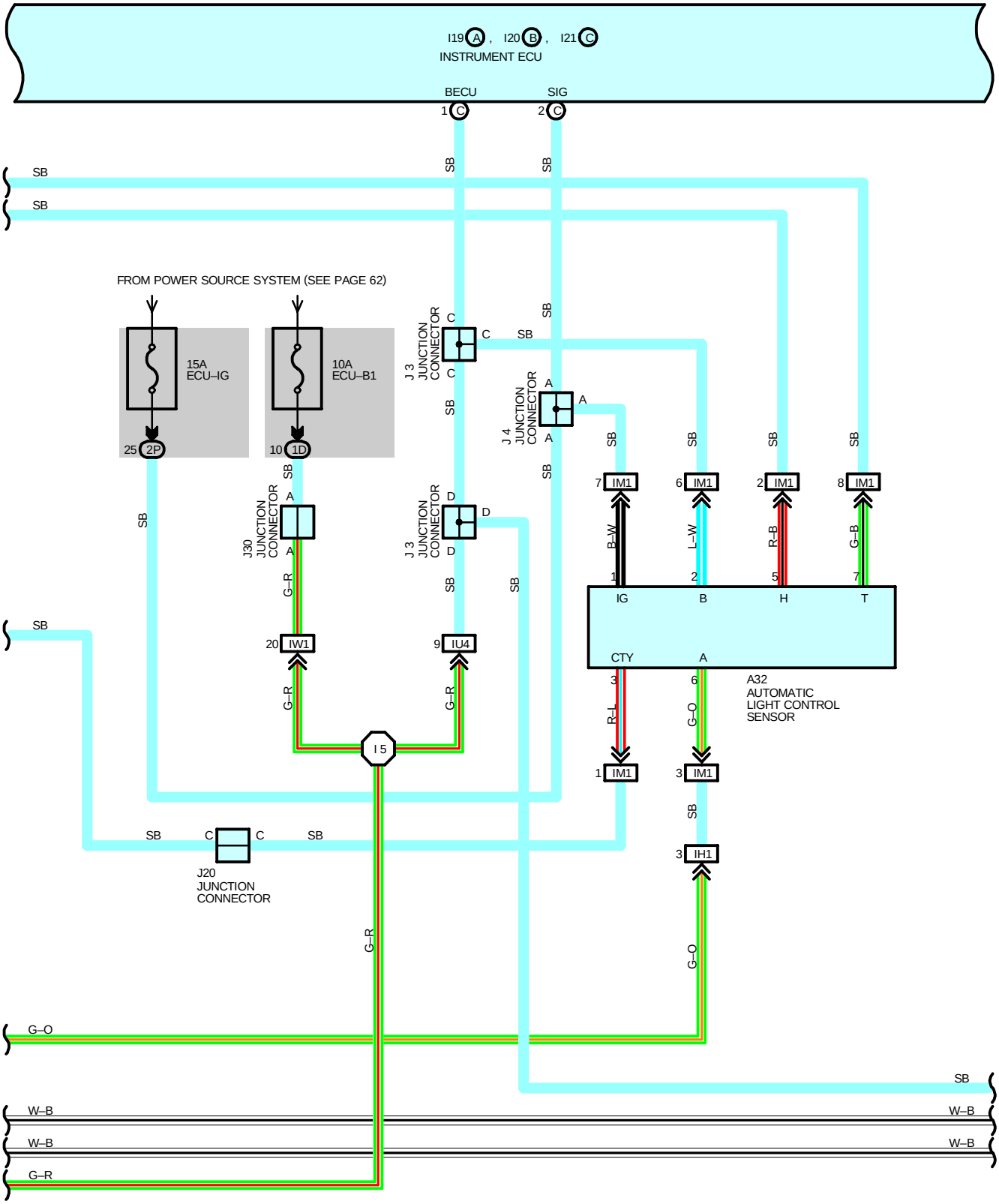
MULTIPLEX COMMUNICATION SYSTEM



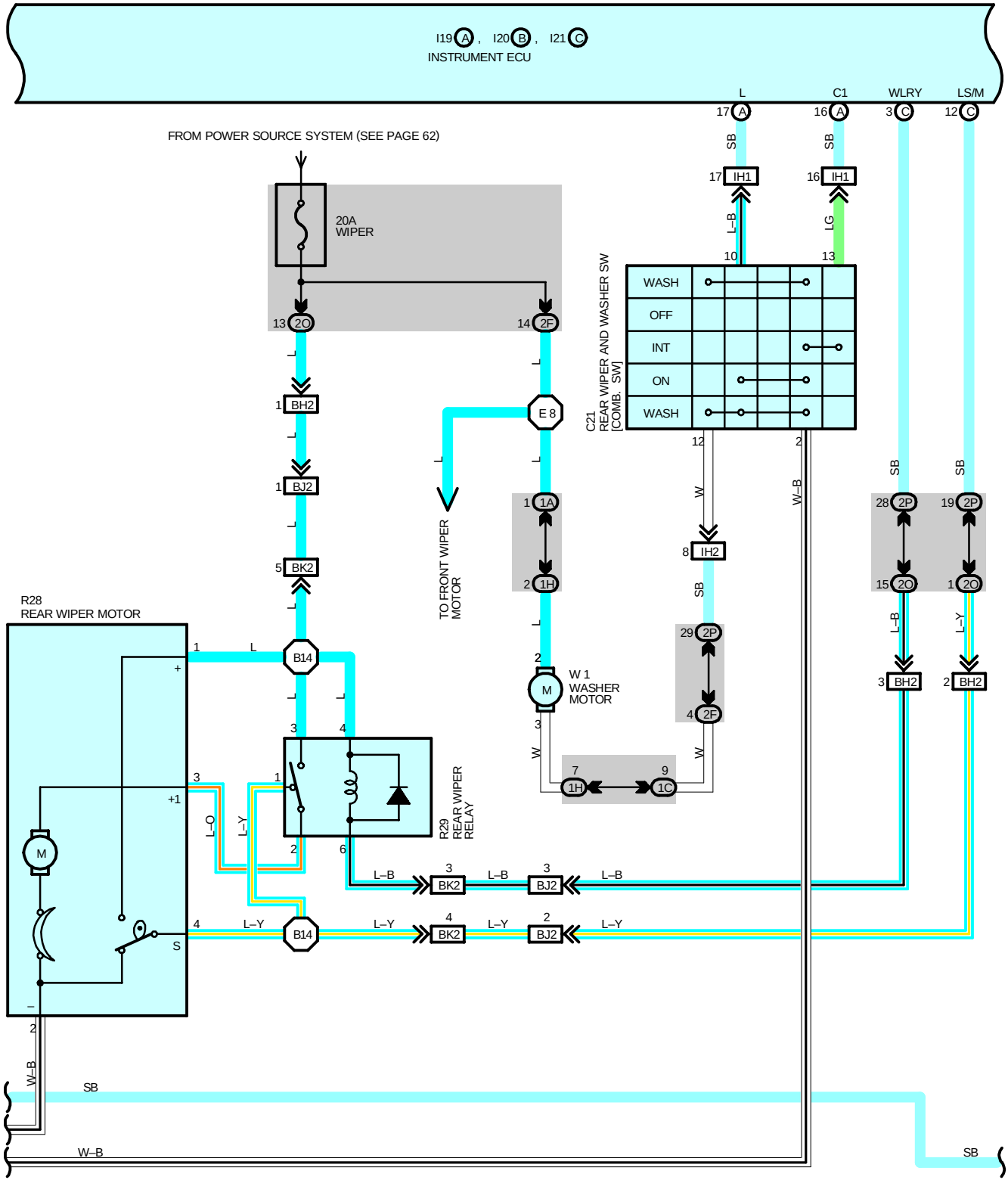

I19 A , I20 B , I21 C
INSTRUMENT ECU
ACY
14 B
TRY
9 C
SB
SB
SB
SB
SB
J 4 JUNCTION CONNECTOR
C
C
C
FROM POWER SOURCE SYSTEM (SEE PAGE 62)
15A TAIL
15A GAUGE
2
5
TAIL RELAY
1
3
12 IU4
11 IU4
8 2B
2 2D
L–O
L–B
L–W
G–B
GR–L
R–B
W–B
R–W
G–B
G–B
R–L
R–L
A
A
J12 JUNCTION CONNECTOR
I 5
1 GND
10 KSW
6 LSWR
7 UL3
15 L
11 LSWD
12 LSWP
14 CTY
4 TRLY
13 IG
W 4
WIRELESS DOOR LOCK ECU
T
BZR2
BZR
+B
5
G–W
2
L–B
3
L
8
G–R
1 IU5
9 IG3
18 IG3
SB
7 IM1
L–B
L
G–W
1
2
LUG
W–B
W–B
G–R
T 6
THEFT DETERRENT ECU
W 3
WIRELESS DOOR LOCK BUZZER

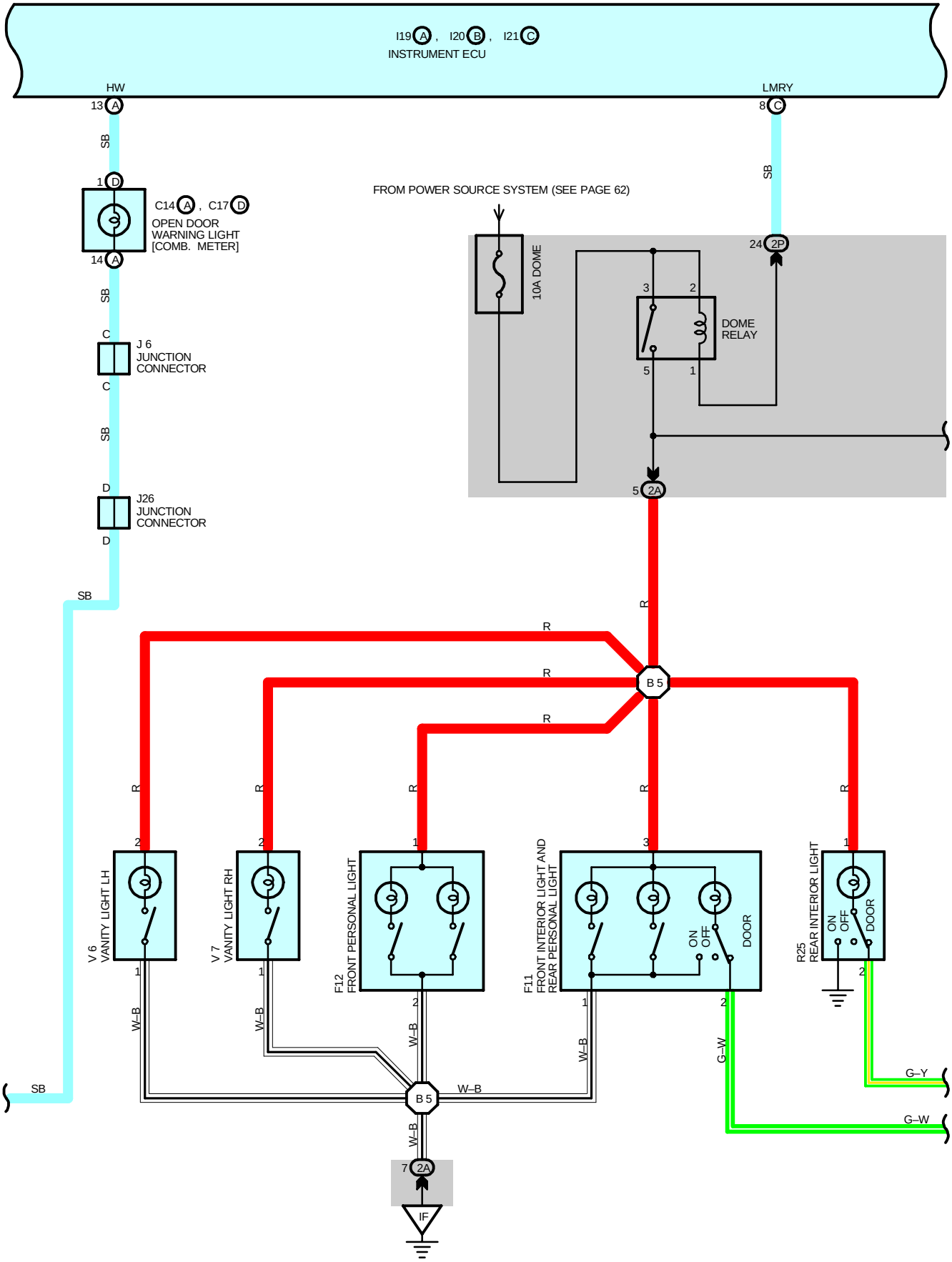
MULTIPLEX COMMUNICATION SYSTEM



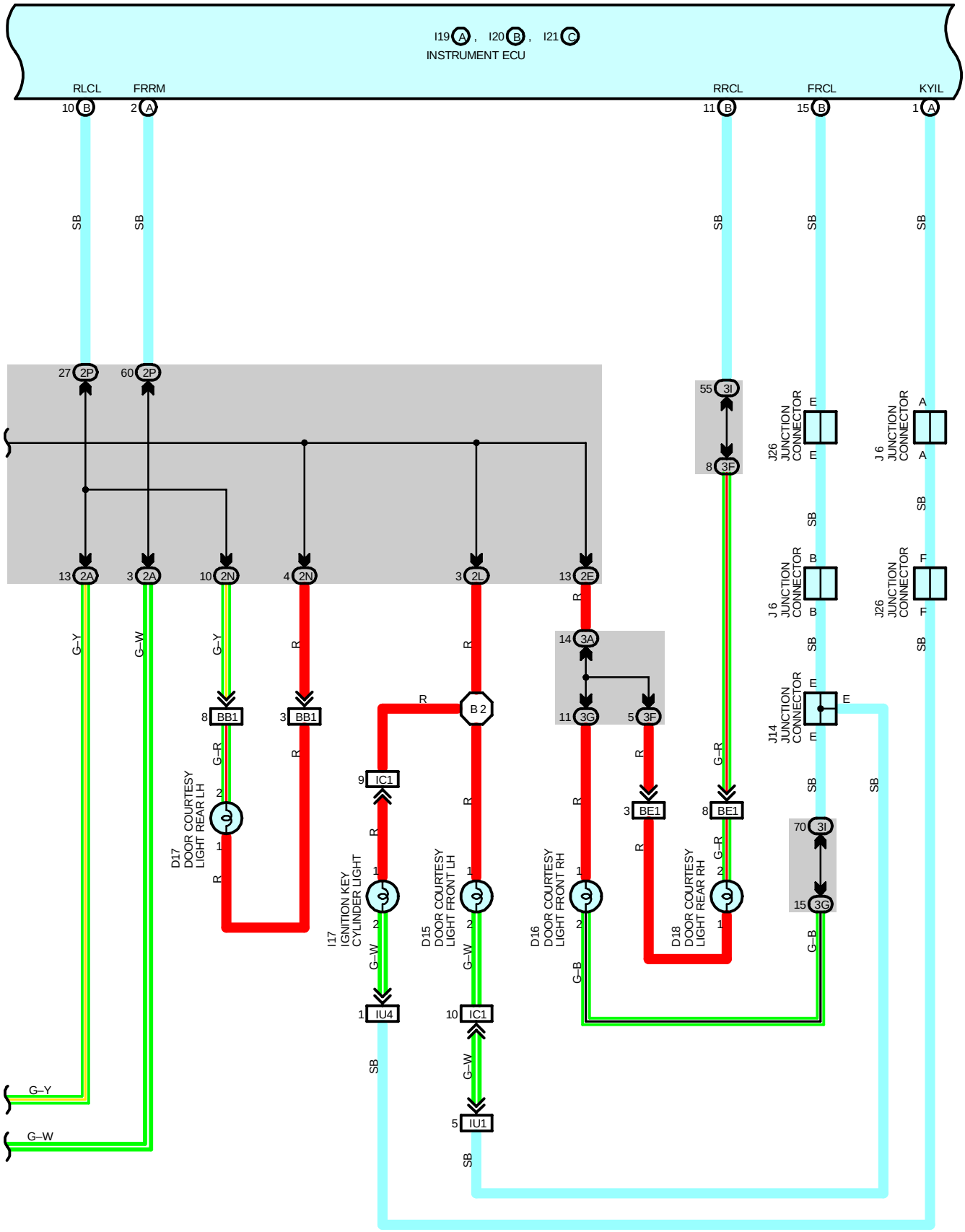

I19 A , I20 B , I21 C
INSTRUMENT ECU
BECU
SIG
1 C
2 C
SB
SB
SB
SB
FROM POWER SOURCE SYSTEM (SEE PAGE 62)
15A
ECU–IG
10A
ECU–B1
25 2P
10 1D
J 3
JUNCTION
CONNECTOR
C
C
SB
C
C
J 4
JUNCTION
CONNECTOR
A
A
A
SB
SB
SB
SB
SB
7 IM1
6 IM1
2 IM1
8 IM1
B–W
L–W
R–B
G–B
1
2
5
7
IG
B
H
T
J30
JUNCTION
CONNECTOR
A
A
G–R
20 IW1
J 3
JUNCTION
CONNECTOR
D
D
D
SB
9 IU4
G–R
SB
SB
SB
CTY
A
3
6
A32
AUTOMATIC
LIGHT CONTROL
SENSOR
R–L
G–O
1 IM1
3 IM1
SB
3 IH1
I 5
SB
C
C
SB
J20
JUNCTION
CONNECTOR
G–R
G–O
G–O
SB
W–B
W–B
W–B
W–B
G–R

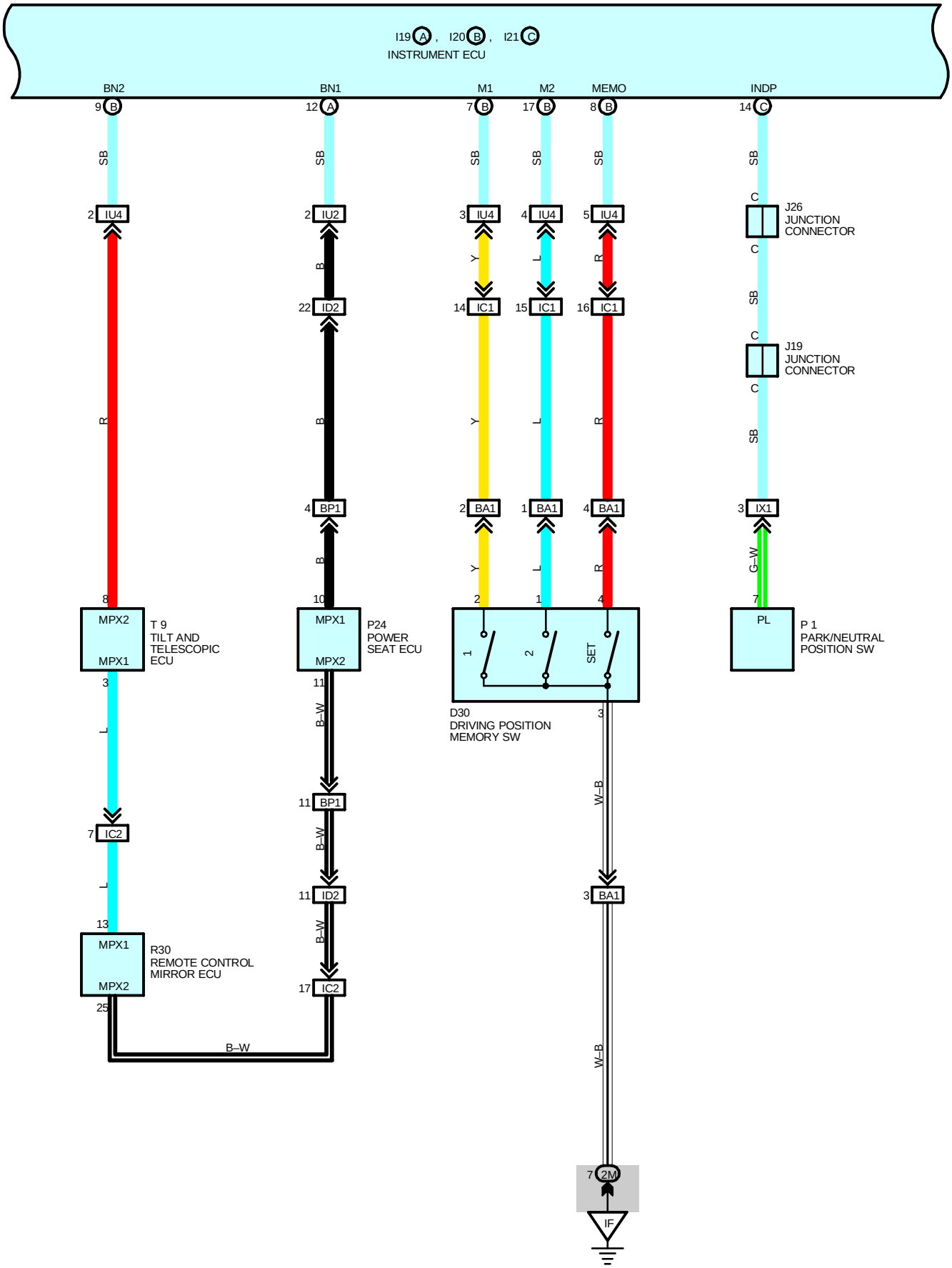
MULTIPLEX COMMUNICATION SYSTEM



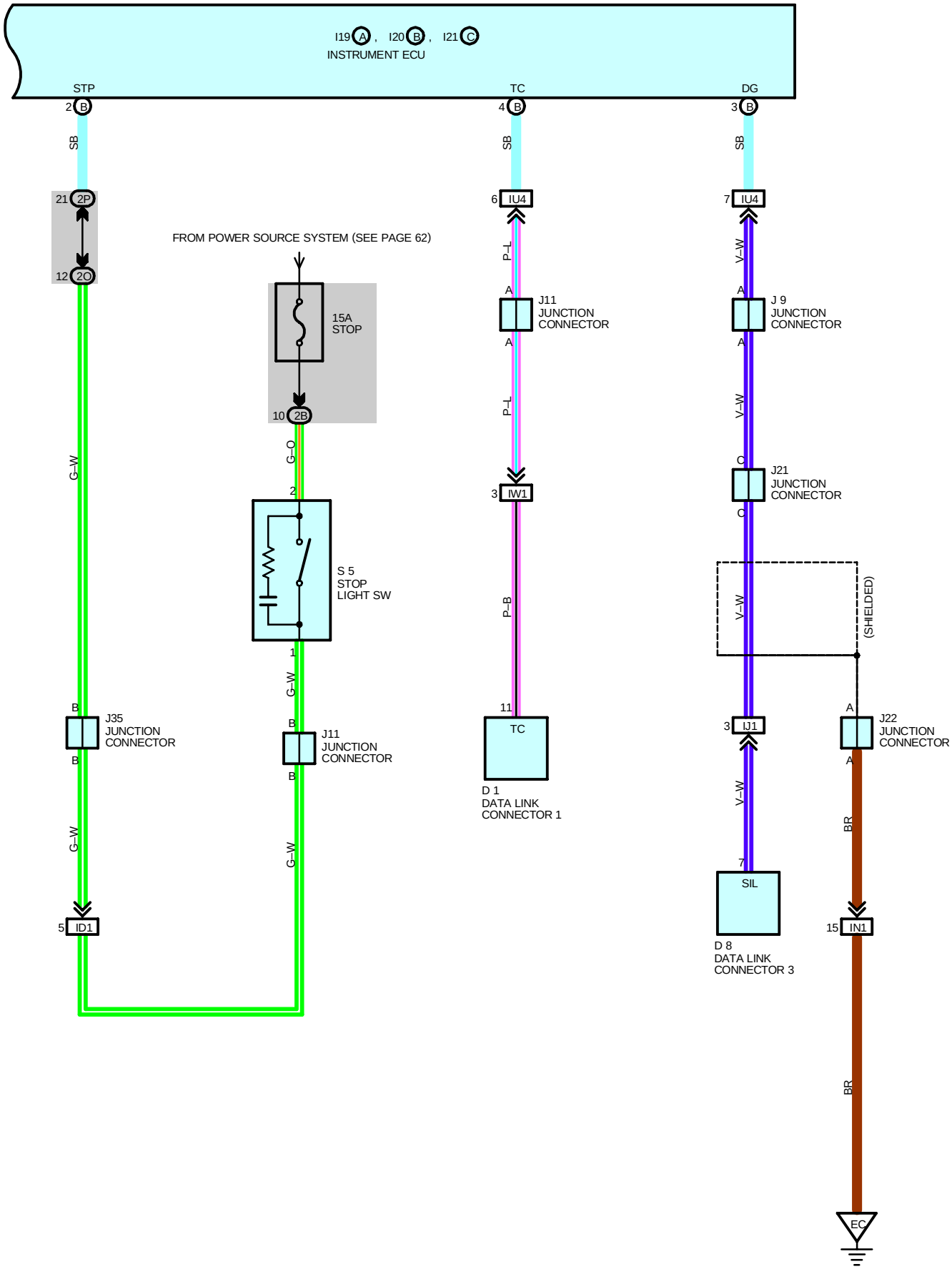

I19 A , I20 B , I21 C
INSTRUMENT ECU
HW
13 A
LMRY
8 C
SB
1 D
C14 A , C17 D
OPEN DOOR WARNING LIGHT [COMB. METER]
14 A
C
J 6 JUNCTION CONNECTOR
D
J26 JUNCTION CONNECTOR
FROM POWER SOURCE SYSTEM (SEE PAGE 62)
10A DOME
DOME RELAY
24 2P
5 2A
R
B 5
V 6 VANITY LIGHT LH
V 7 VANITY LIGHT RH
F12 FRONT PERSONAL LIGHT
F11 FRONT INTERIOR LIGHT AND REAR PERSONAL LIGHT
ON
OFF
DOOR
R25 REAR INTERIOR LIGHT
W–B
G–W
G–Y
7 2A
IF

MULTIPLEX COMMUNICATION SYSTEM




I19 A , I20 B , I21 C
INSTRUMENT ECU
BN2
BN1
M1
M2
MEMO
INDP
9 B
12 A
7 B
17 B
8 B
14 C
SB
2 IU4
2 IU2
3 IU4
4 IU4
5 IU4
C
J26
JUNCTION
CONNECTOR
J19
JUNCTION
CONNECTOR
B
Y
L
R
22 ID2
14 IC1
15 IC1
16 IC1
4 BP1
2 BA1
1 BA1
4 BA1
3 IX1
G–W
8
10
2
1
4
7
MPX2
MPX1
T 9
TILT AND
TELESCOPIC
ECU
P24
POWER
SEAT ECU
PL
P 1
PARK/NEUTRAL
POSITION SW
1
2
SET
D30
DRIVING POSITION
MEMORY SW
3
11
B–W
W–B
11 BP1
11 ID2
17 IC2
3 BA1
7 IC2
13
25
R30
REMOTE CONTROL
MIRROR ECU
7 2M
IF

MULTIPLEX COMMUNICATION SYSTEM



SYSTEM OUTLINE

1. COMMUNICATION OUTLINE

Communication is made among the instrument, power seat, remote control mirror, and telescopic ECUs.
When the ECU receives a signal from related switches, i.e., the driving position memory SW, the instrument ECU sends signals to the power seat, remote control mirror, and telescopic ECUs, and moves each part to the position set by the driving position memory SW.
For details, please refer to the new car features and/or the repair manual.

SERVICE HINTS

I19 (A), I20 (B), I21 (C) INSTRUMENT ECU

(A)21–GROUND : Approx. **12** Volts with ignition SW **ACC** or **ON** position
(B) 2–GROUND : Approx. **12** volts with stop light SW at on
(C) 1–GROUND : Always approx. **12** volts
(C) 2–GROUND : Approx. **12** volts with ignition SW at **ON** or **ST** position

S5 STOP LIGHT SW

2–1 : Closed with brake pedal depressed

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A32	38	D29	40	J24	39
B2	40	D30	40	J25	39
B3	40	F7	36	J26	39
B4	40	F11	40	J30	39
C14 A	38	F12	40	J32	40
C17 D	38	I17	38	J33	40
C18	38	I19 A	38	J34	40
C21	38	I20 B	38	J35	40
D1	36	I21 C	38	P1	37
D8	38	J1	39	P15	41
D9	38	J3	39	P24	42
D15	40	J4	39	R25	41
D16	40	J5	39	R28	41
D17	40	J6	39	R29	41
D18	40	J9	39	R30	41
D19	40	J11	39	S5	39
D20	40	J12	39	T6	39
D21	40	J14	39	T9	39
D22	40	J15	39	U1	39
D23	40	J17	39	V6	41
D24	40	J19	39	V7	41
D25	40	J20	39	W1	37
D26	40	J21	39	W3	37
D27	40	J22	39	W4	39
D28	40	J23	39		

MULTIPLEX COMMUNICATION SYSTEM

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	21	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1C		
1D		
1E		
1H	21	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1N	21	Engine Room No.3 Wire and Engine Room J/B (Engine Compartment Left)
2A	24	Roof Wire and Cowl Side J/B LH (Left Kick Panel)
2B	24	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2D		
2E	24	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2F		
2L	24	Front Door LH Wire and Cowl Side J/B LH (Left Kick Panel)
2M		
2N	24	Floor Wire and Cowl Side J/B LH (Left Kick Panel)
2O		
2P	26	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3A	30	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3E	30	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3F		
3G	30	Front Door RH Wire and Cowl Side J/B RH (Right Kick Panel)
3I	30	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	46	Front Door LH Wire and Dash Wire (Left Kick Panel)
IC2		
ID1	46	Dash Wire and Floor Wire (Left Kick Panel)
ID2		
IG1	48	Engine Room No.2 Wire and Dash Wire (Behind the Combination Meter)
IG3		
IH1	48	Instrument Panel Integration Wire and Column Wire (Near the Ignition SW)
IH2		
IJ1	48	Dash Wire and Detector Wire (Instrument Panel Center)
IM1	50	Instrument Panel Integration Wire and Instrument Panel No.3 Wire (Right Side of Instrument Panel)
IN1	50	Engine Wire and Dash Wire (Behind the Glove Box)
IU1	50	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IU2		
IU4		
IU5		
IW1	52	Engine Room No.2 Wire and Dash Wire (Behind the Glove Box)
IX1	52	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
BA1	54	Front Door LH Wire and Front Door LH Sub Wire (Front Door LH)
BB1	54	Rear Door LH Wire and Floor Wire (Left Side of Center Pillar)
BB2		
BE1	54	Rear Door RH Wire and Floor No.2 Wire (Right Side of Center Pillar)
BE2		
BF3	54	Floor No.3 Wire and Floor Wire (Left Rear Side Quarter Panel)
BH1	54	Luggage Room Wire and Floor Wire (Left Rear Side Quarter Panel)
BH2		
BJ1	56	Pillar No.1 Wire and Luggage Room Wire (Left Rear Side Roof Panel)
BJ2		
BK1	56	Pillar No.1 Wire and Back Door Upper Wire (Left Side of Back Door)
BK2		
BN1	56	Back Door Lower Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)
BO3	56	Floor No.2 Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)
BP1	58	Floor Wire and Front Seat LH Wire (Front Side Under the Driver's Seat)

: GROUND POINTS

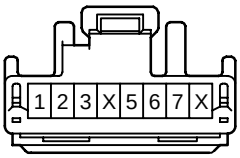
Code	See Page	Ground Points Location
EC	44	Rear Bank of Right Cylinder Head
IF	46	Set Bolt of Cowl Side J/B LH
IH	46	Set Bolt of Cowl Side J/B RH
II		
BJ	54	Under the Driver's Seat
BK	54	Front Side Under the Front Passenger's Seat
BM	54	Left Rear Side Quarter Panel

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E8	44	Engine Room No.2 Wire	B2	56	Front Door LH Wire
I5	48	Dash Wire	B4	56	Floor Wire
I6	48	Column Wire	B5		
I7	48	Dash Wire	B13	56	Floor No.2 Wire
B1	56	Front Door LH Wire	B14	56	Back Door Upper Wire

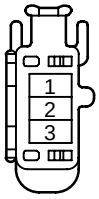
MULTIPLEX COMMUNICATION SYSTEM

A32
BLACK



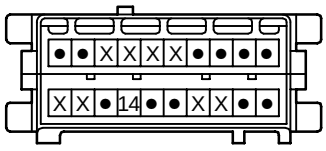
B2

B3

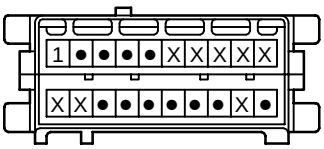


B4
BLACK

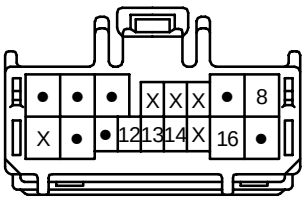
C14 (A)
GRAY



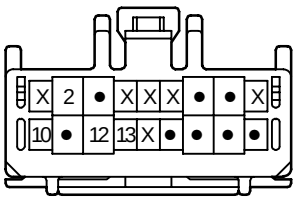
C17 (D)



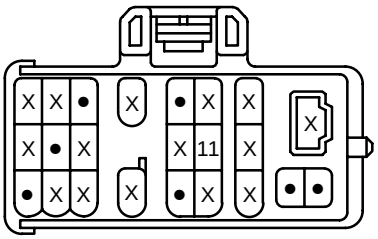
C18



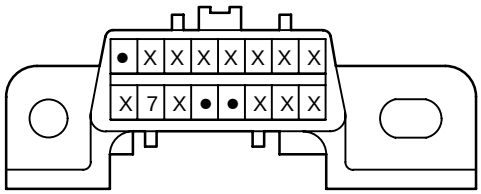
C21
BLACK



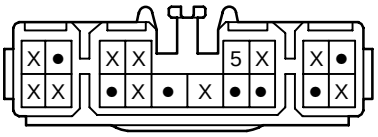
D1
BLACK



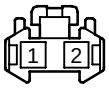
D8
BLACK



D9
GRAY

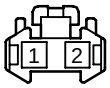


D15
GRAY



D16
GRAY

D17
GRAY



D18
GRAY

D19

D20

D21

D22

D23
GRAY

D24
GRAY

D25

D26
BLACK

D27
BLACK

D28
BLACK

D29
BLACK

D30
BLACK

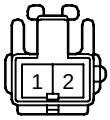
F7

(See Page 34)

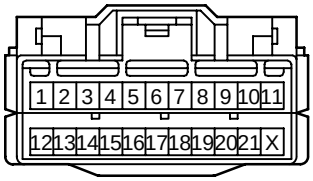
F11

F12

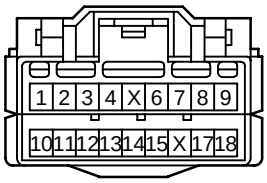
I17



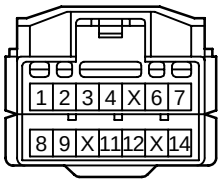
I19 (A)



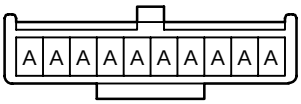
I20 (B)



I21 (C)
BLUE

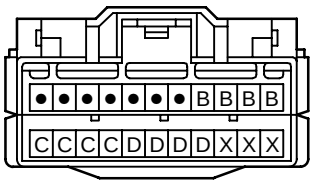


J1



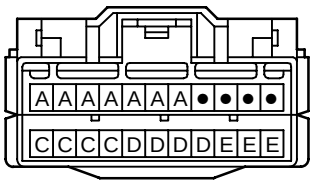
(Hint : See Page 7)

J3
GRAY



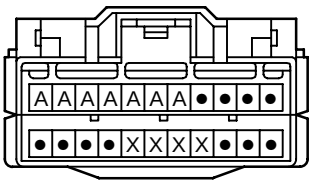
(Hint : See Page 7)

J4



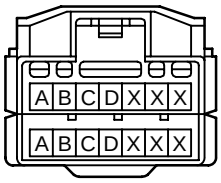
(Hint : See Page 7)

J5
GRAY



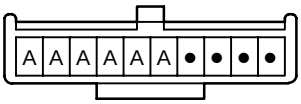
(Hint : See Page 7)

J6
BLUE



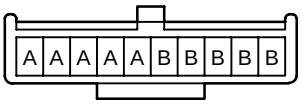
(Hint : See Page 7)

J9
BLACK



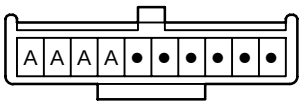
(Hint : See Page 7)

J11
GREEN



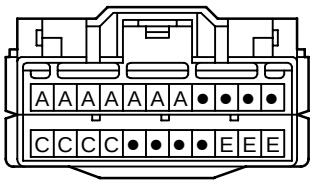
(Hint : See Page 7)

J12
BLUE



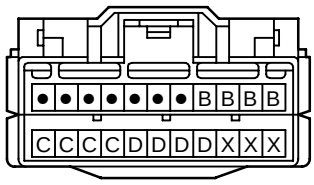
(Hint : See Page 7)

J14



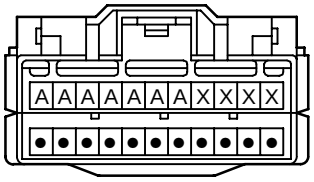
(Hint : See Page 7)

J15
GRAY



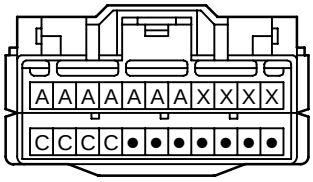
(Hint : See Page 7)

J17



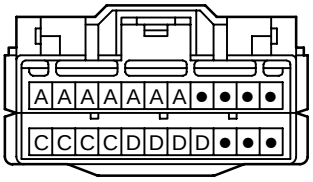
(Hint : See Page 7)

J19



(Hint : See Page 7)

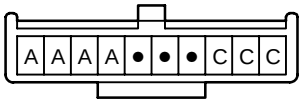
J20
GRAY



(Hint : See Page 7)

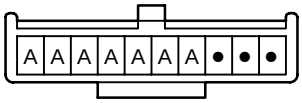
MULTIPLEX COMMUNICATION SYSTEM

J21
BLUE



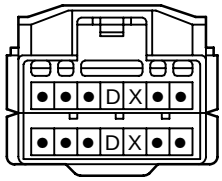
(Hint : See Page 7)

J22
RED



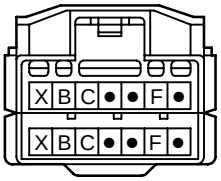
(Hint : See Page 7)

J23
BLUE



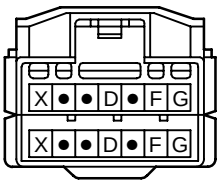
(Hint : See Page 7)

J24
GRAY



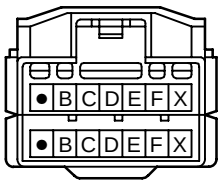
(Hint : See Page 7)

J25



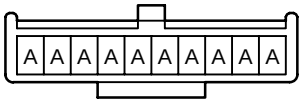
(Hint : See Page 7)

J26



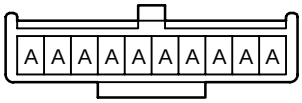
(Hint : See Page 7)

J30
BLUE



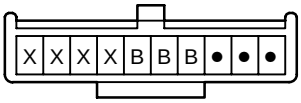
(Hint : See Page 7)

J32



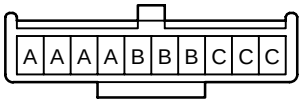
(Hint : See Page 7)

J33
BLUE



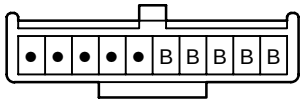
(Hint : See Page 7)

J34
BLUE



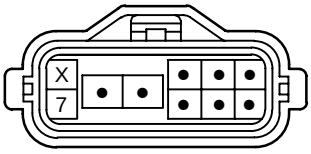
(Hint : See Page 7)

J35
GREEN

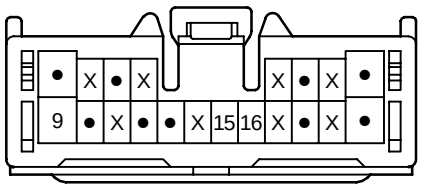


(Hint : See Page 7)

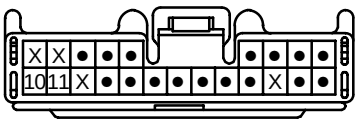
P1
GRAY



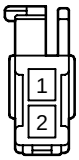
P15



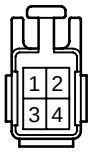
P24



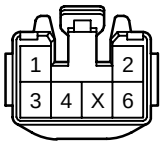
R25



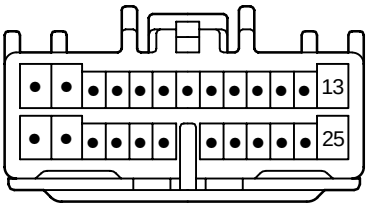
R28



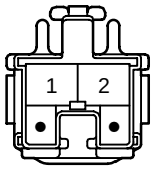
R29
BLACK



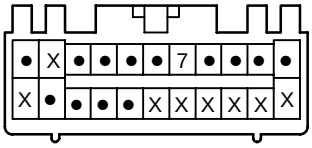
R30



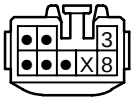
S5
BLUE



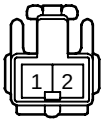
T6



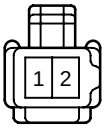
T9



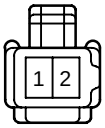
U1



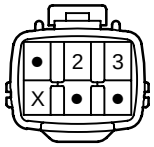
V6



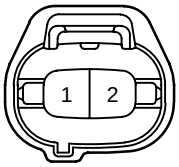
V7



W1
GRAY



W3
BLACK



W4