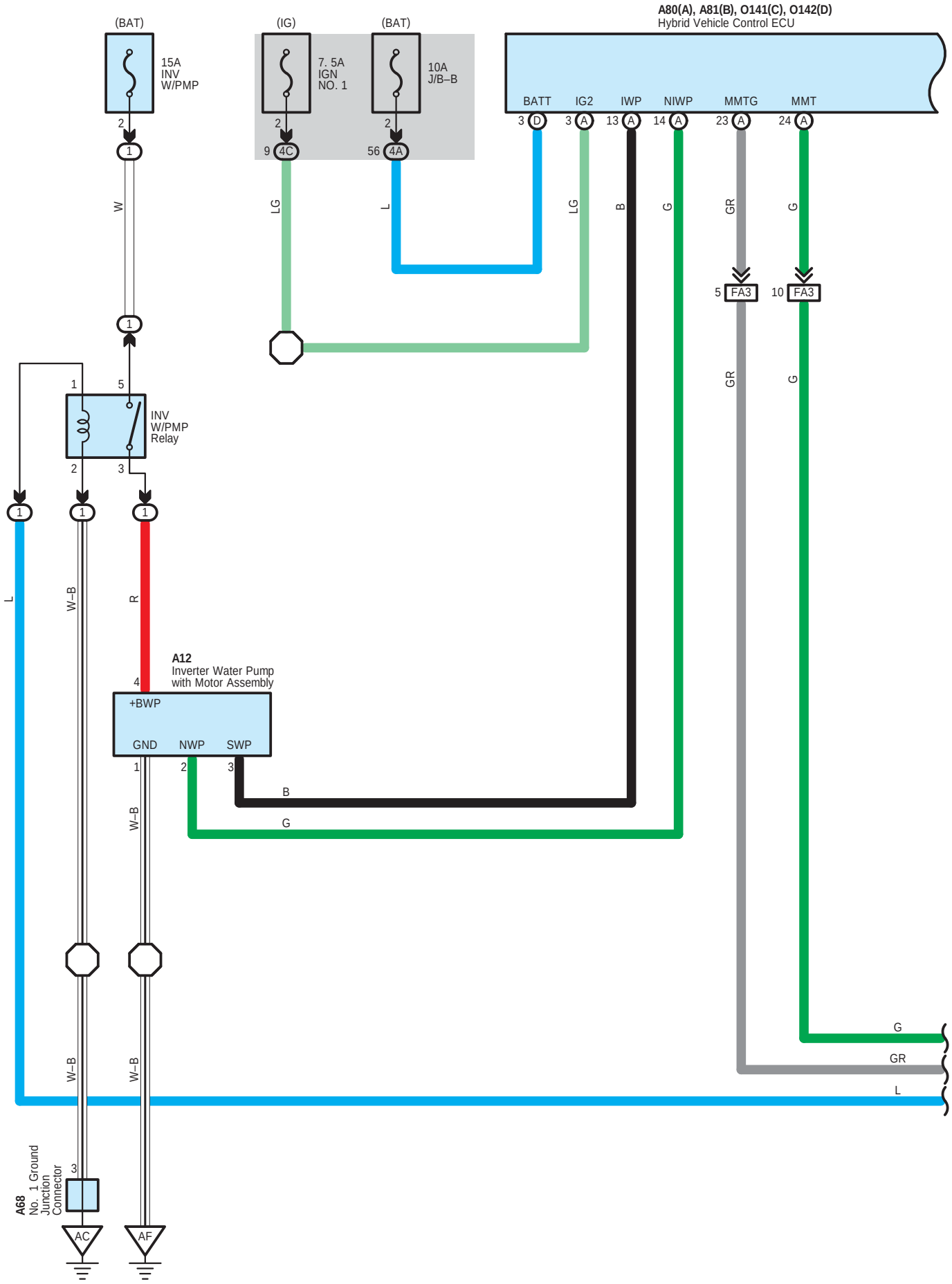
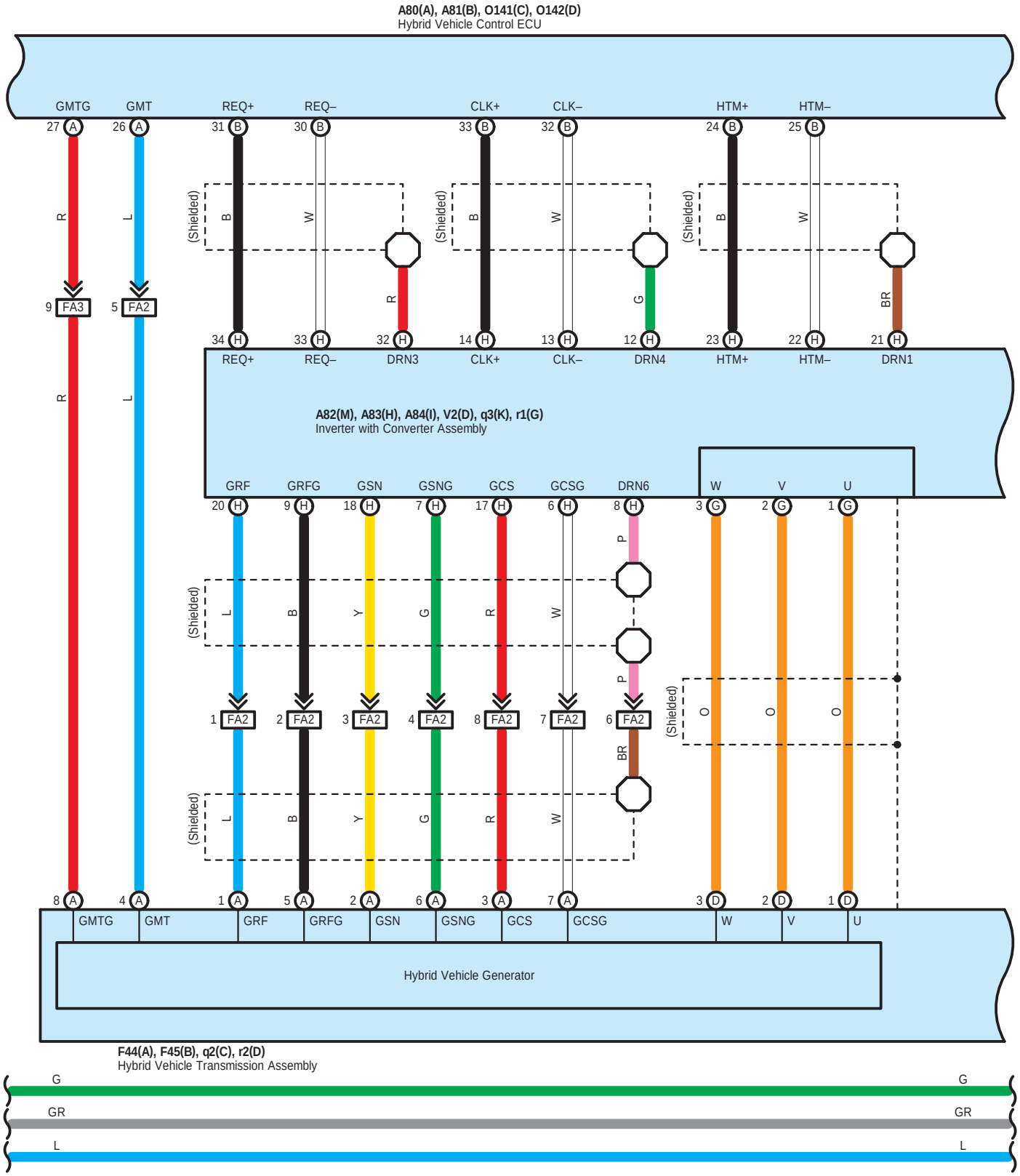
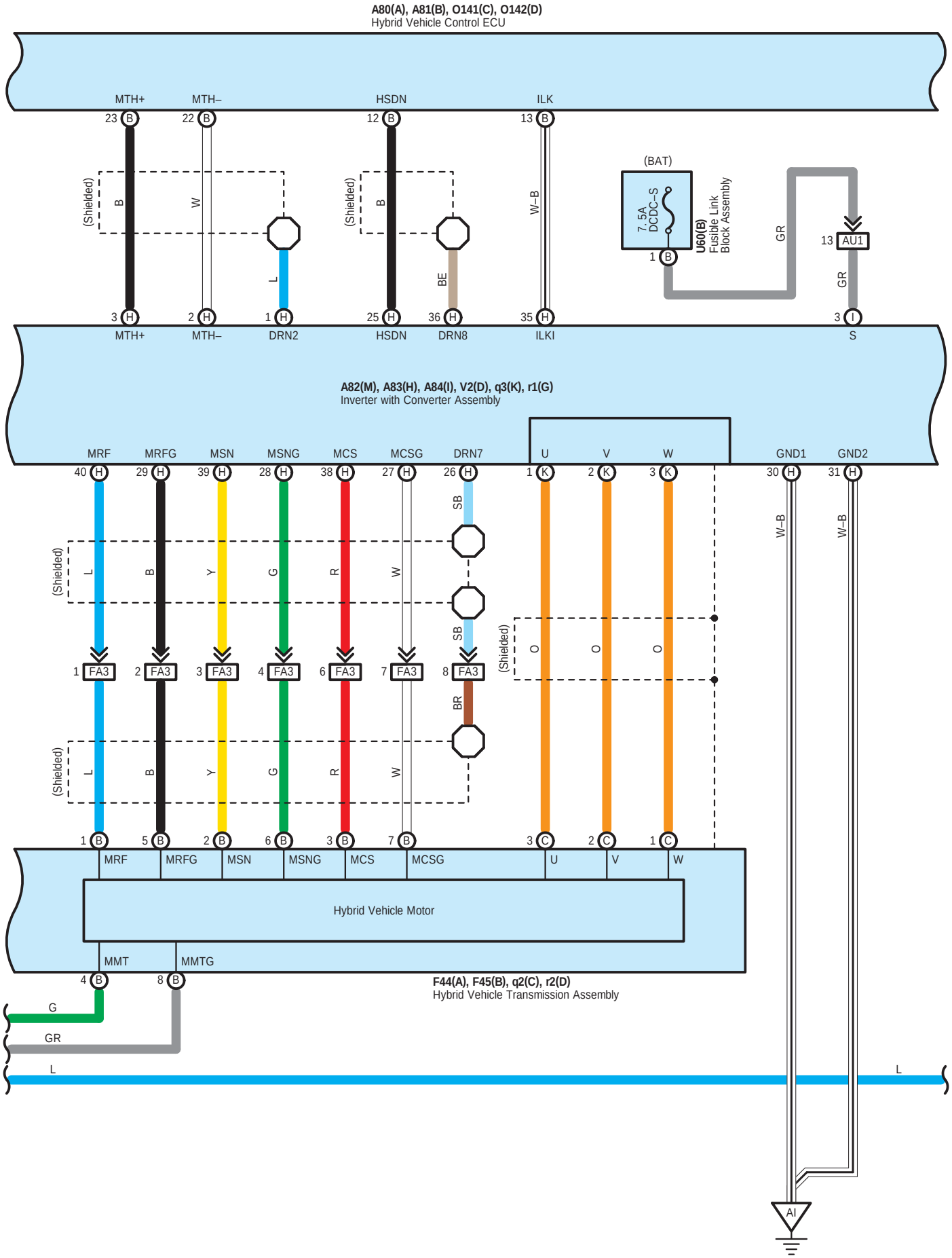
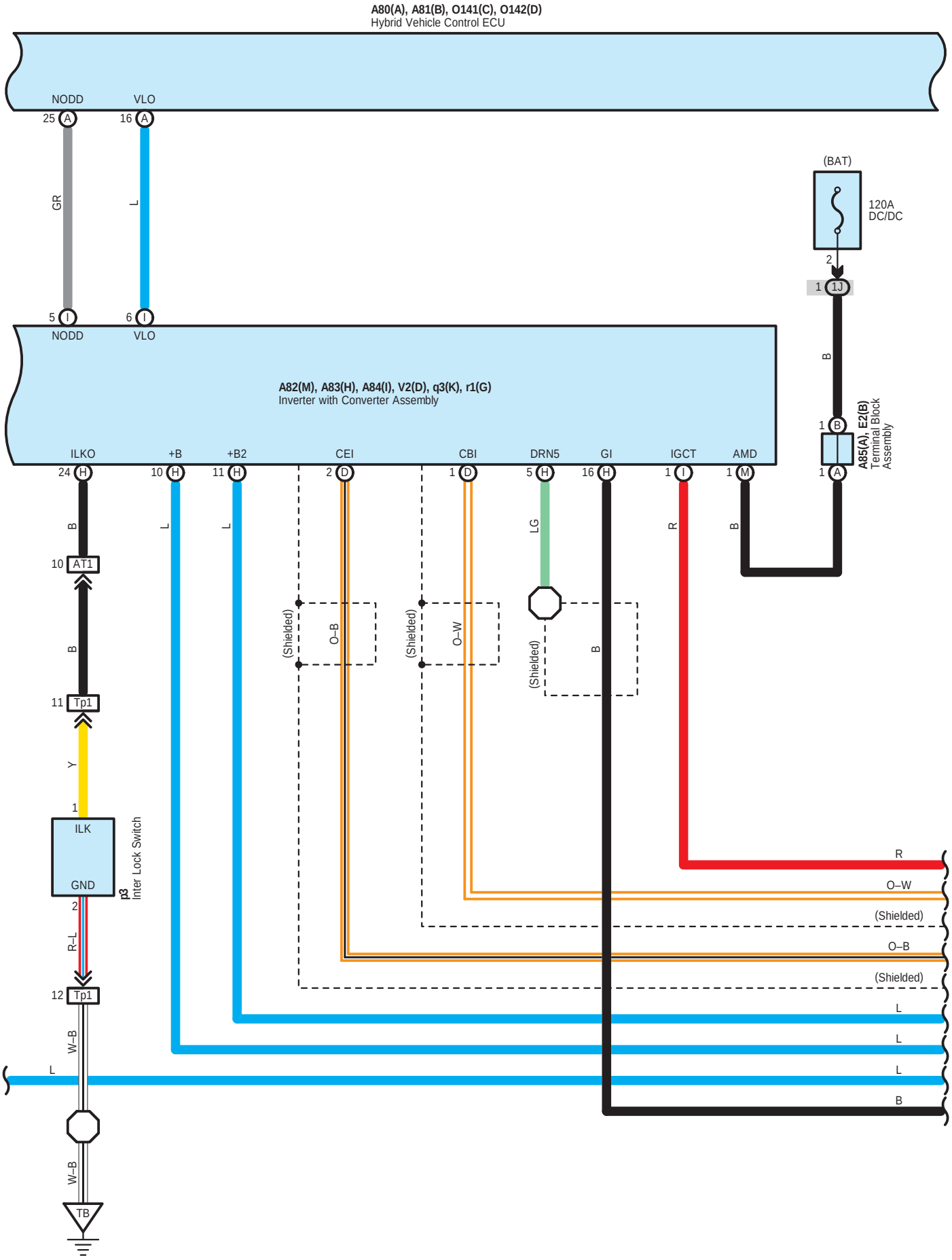
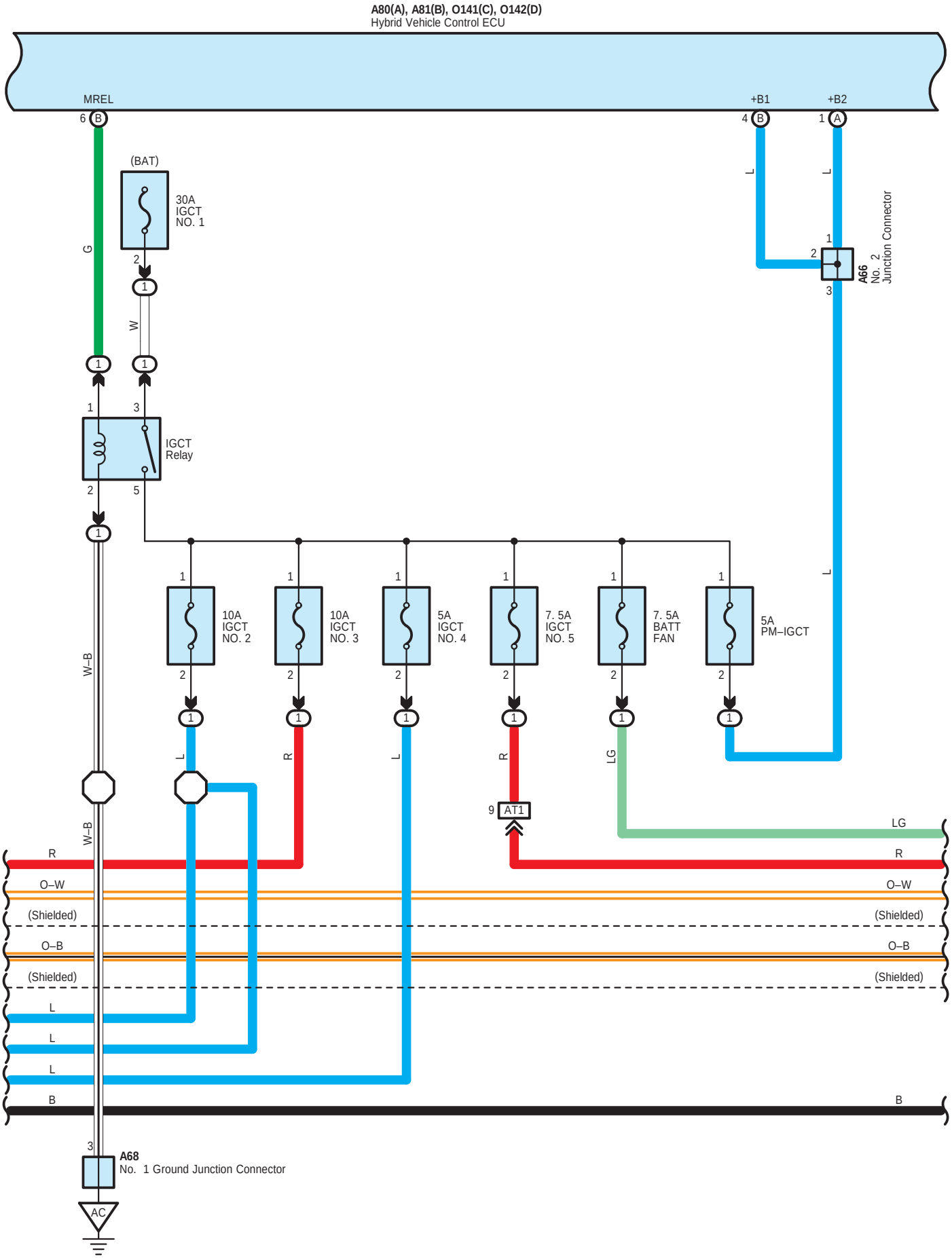
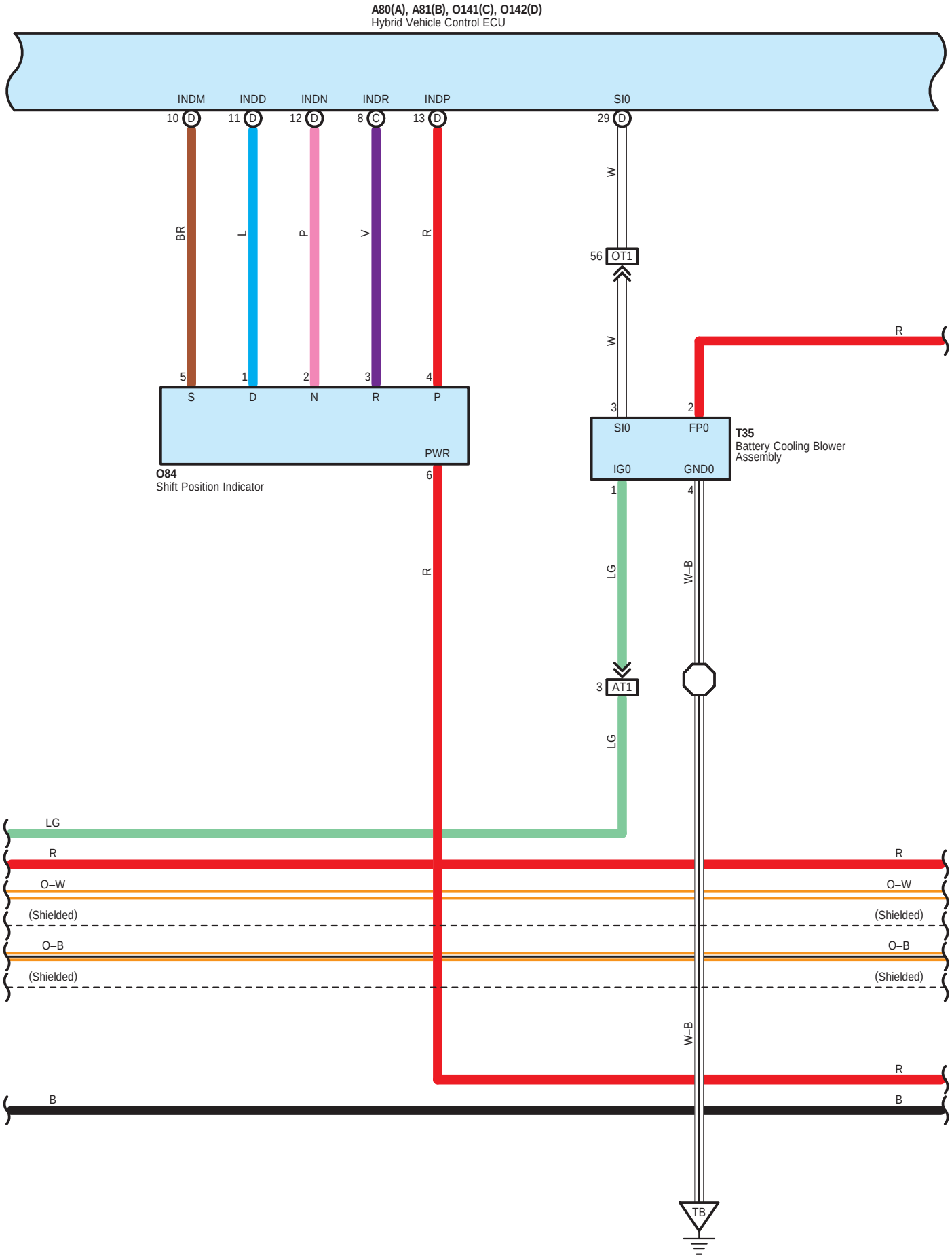

(BAT)
15A
INV
W/PMP
(IG)
7. 5A
IGN
NO. 1
(BAT)
10A
J/B–B
A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
BATT
IG2
IWP
NIWP
MMTG
MMT
INV
W/PMP
Relay
A12
Inverter Water Pump
with Motor Assembly
+BWP
GND
NWP
SWP
FA3
FA3
A68
No. 1 Ground
Junction
Connector
AC
AF

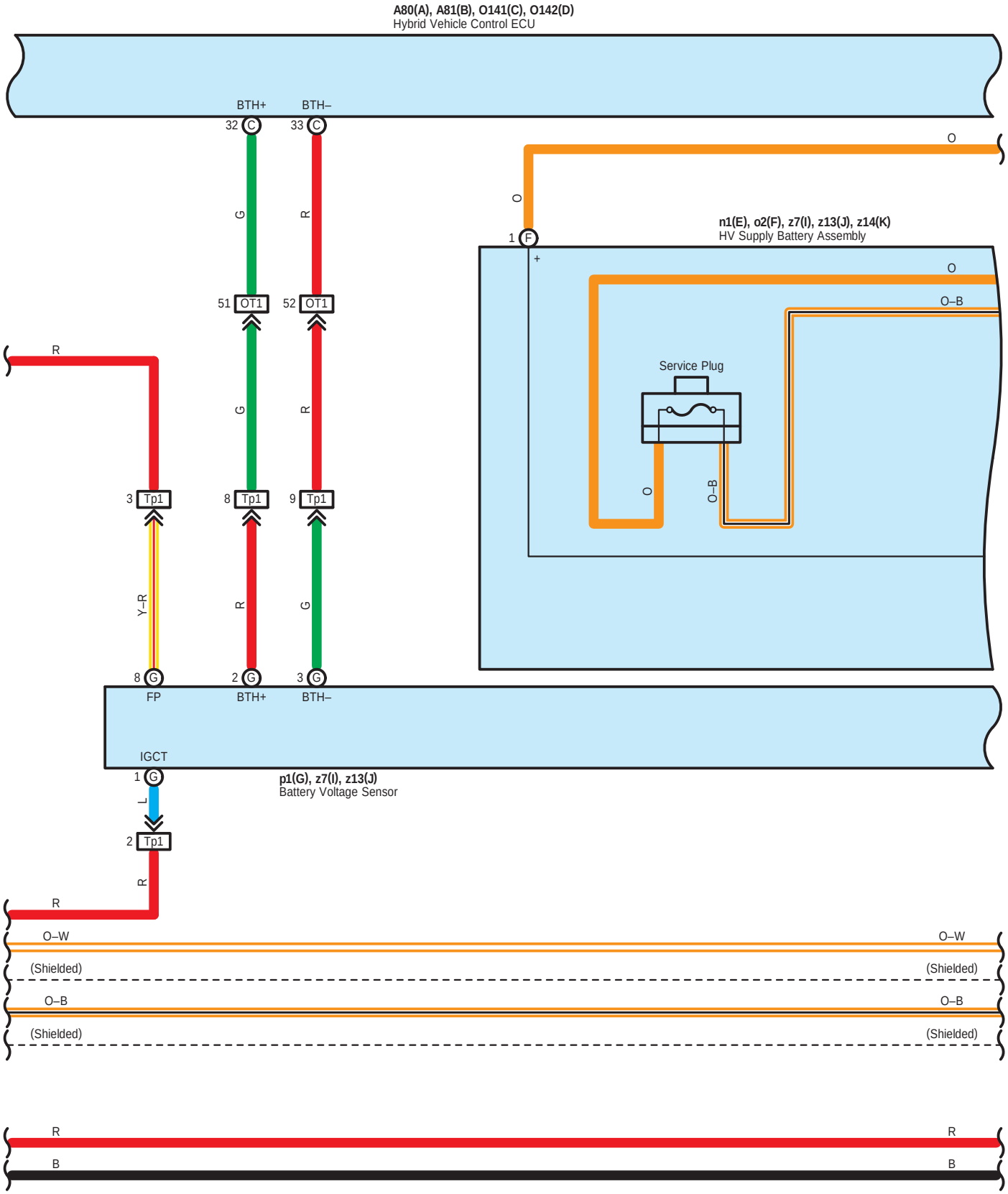

A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
GMTG
GMT
REQ+
REQ–
CLK+
CLK–
HTM+
HTM–
27 A
26 A
31 B
30 B
33 B
32 B
24 B
25 B
(Shielded)
R
L
B
W
G
BR
9 FA3
5 FA2
34 H
33 H
32 H
14 H
13 H
12 H
23 H
22 H
21 H
REQ+
REQ–
DRN3
CLK+
CLK–
DRN4
HTM+
HTM–
DRN1
A82(M), A83(H), A84(I), V2(D), q3(K), r1(G)
Inverter with Converter Assembly
GRF
GRFG
GSN
GSNG
GCS
GCSG
DRN6
W
V
U
20 H
9 H
18 H
7 H
17 H
6 H
8 H
3 G
2 G
1 G
P
L
Y
O
1 FA2
2 FA2
3 FA2
4 FA2
8 FA2
7 FA2
6 FA2
8 A
4 A
1 A
5 A
2 A
6 A
3 A
7 A
3 D
2 D
1 D
Hybrid Vehicle Generator
F44(A), F45(B), q2(C), r2(D)
Hybrid Vehicle Transmission Assembly
G
GR
L

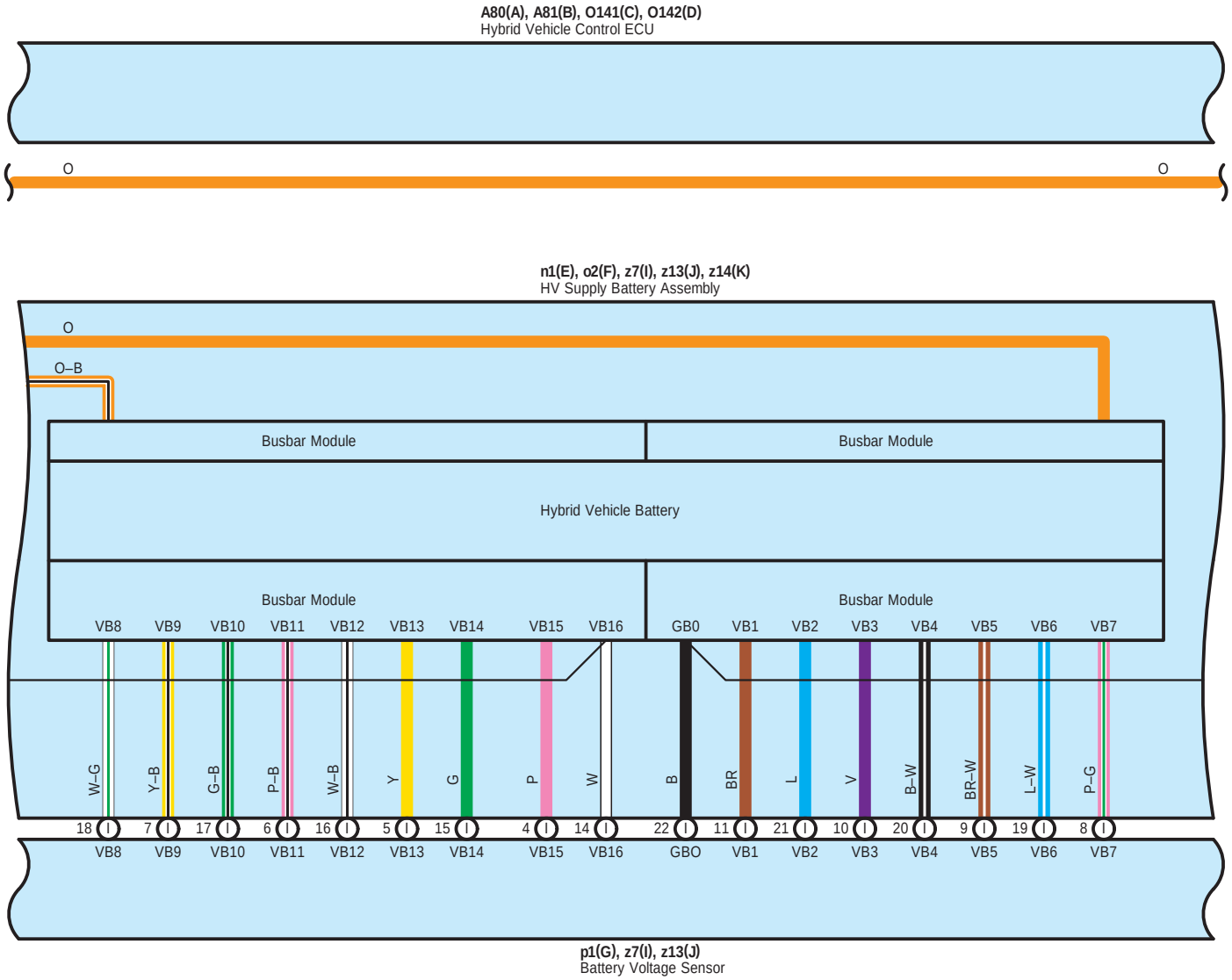

A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
MTH+
MTH–
HSDN
ILK
23 B
22 B
12 B
13 B
(Shielded)
B
W
L
BE
W–B
(BAT)
7.5A
DCDC–S
U60(B)
Fusible Link
Block Assembly
1 B
GR
13 AU1
3 H
2 H
1 H
25 H
36 H
35 H
3 I
MTH+
MTH–
DRN2
HSDN
DRN8
ILKI
S
A82(M), A83(H), A84(I), V2(D), q3(K), r1(G)
Inverter with Converter Assembly
MRF
MRFG
MSN
MSNG
MCS
MCSG
DRN7
U
V
W
GND1
GND2
40 H
29 H
39 H
28 H
38 H
27 H
26 H
1 K
2 K
3 K
30 H
31 H
SB
Y
G
R
O
BR
1 FA3
2 FA3
3 FA3
4 FA3
6 FA3
7 FA3
8 FA3
1 B
5 B
2 B
6 B
3 B
7 B
3 C
2 C
1 C
Hybrid Vehicle Motor
MMT
MMTG
4 B
8 B
F44(A), F45(B), q2(C), r2(D)
Hybrid Vehicle Transmission Assembly
G
GR
AI

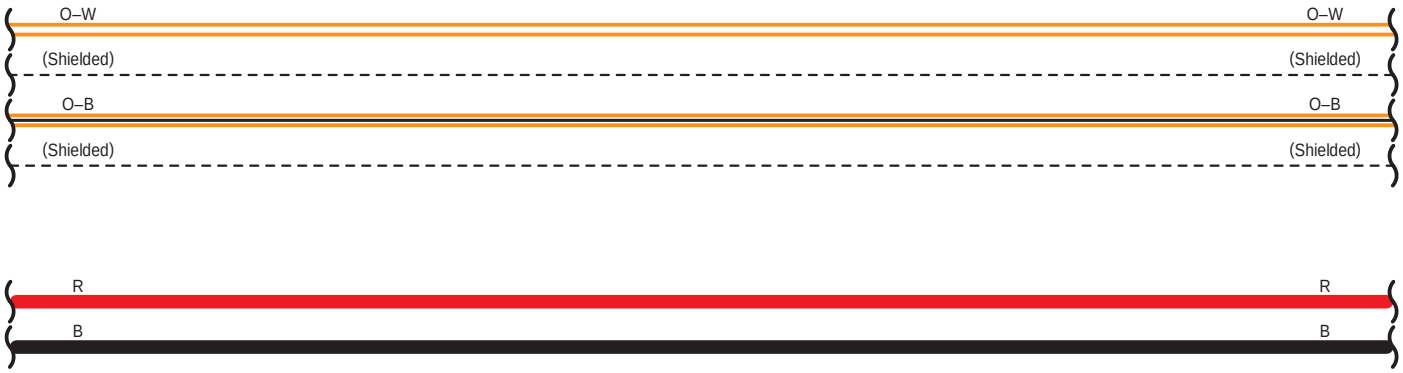

A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
NODD
VLO
25 A
16 A
GR
L
5 I
6 I
NODD
VLO
(BAT)
120A
DC/DC
2
1 1J
B
A82(M), A83(H), A84(I), V2(D), q3(K), r1(G)
Inverter with Converter Assembly
1 B
1 A
A85(A), E2(B)
Terminal Block
Assembly
ILKO
+B
+B2
CEI
CBI
DRN5
GI
IGCT
AMD
24 H
10 H
11 H
2 D
1 D
5 H
16 H
1 I
1 M
B
L
L
LG
R
B
10 AT1
B
11 Tp1
Y
1
ILK
GND
2
p3
Inter Lock Switch
R–L
12 Tp1
W–B
L
W–B
TB
(Shielded)
O–B
(Shielded)
O–W
(Shielded)
B
R
O–W
(Shielded)
O–B
(Shielded)
L
L
L
B

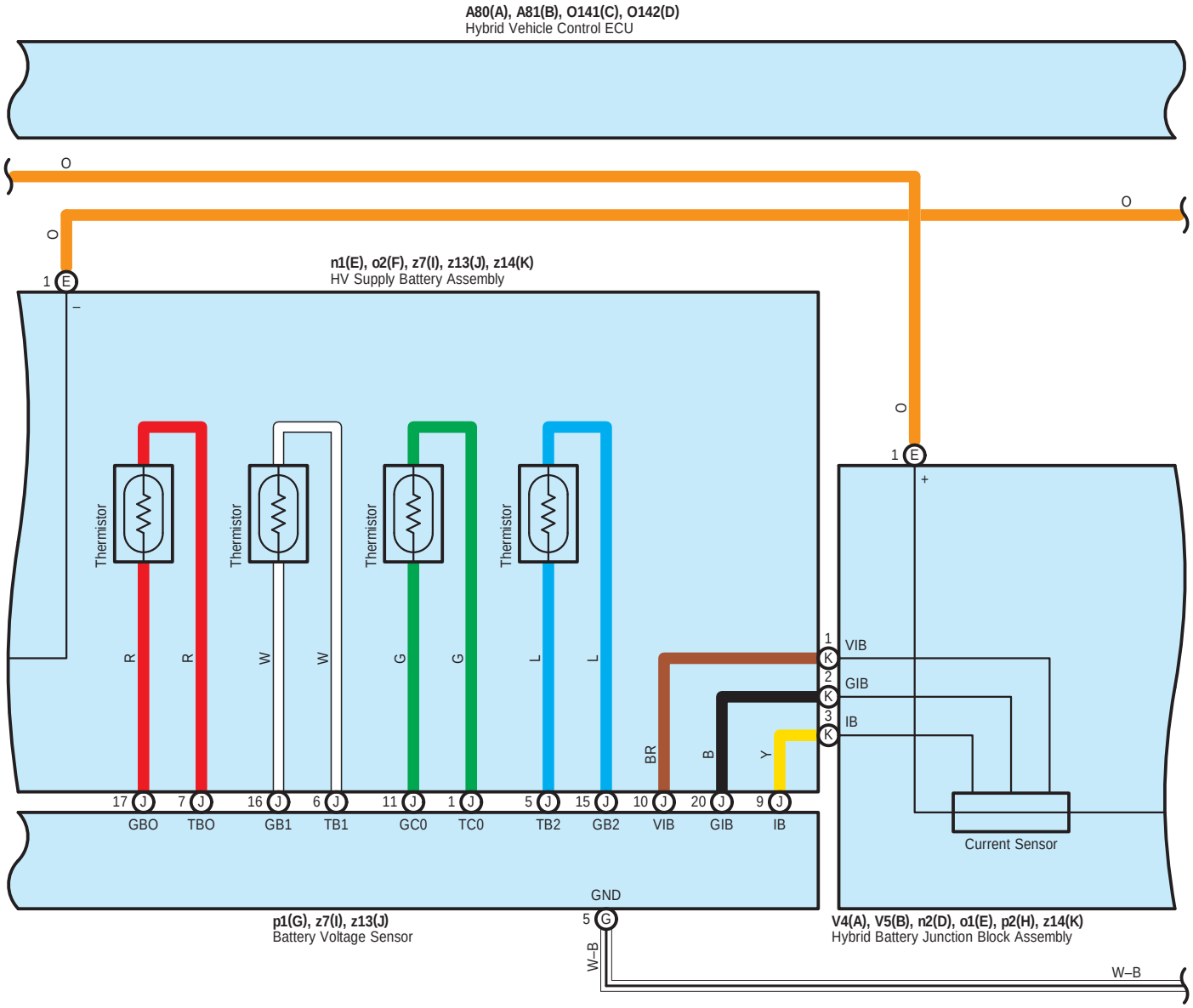

A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
MREL
6 B
+B1
4 B
+B2
1 A
(BAT)
30A
IGCT
NO. 1
G
W
IGCT
Relay
L
A66
No. 2
Junction Connector
10A
IGCT
NO. 2
10A
IGCT
NO. 3
5A
IGCT
NO. 4
7. 5A
IGCT
NO. 5
7. 5A
BATT
FAN
5A
PM–IGCT
W–B
R
LG
9 AT1
O–W
(Shielded)
O–B
B
A68
No. 1 Ground Junction Connector
AC


A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
INDM
INDD
INDN
INDR
INDP
SI0
10 D
11 D
12 D
8 C
13 D
29 D
BR
L
P
V
R
W
56 OT1
W
R
5
1
2
3
4
S
D
N
R
P
PWR
6
O84
Shift Position Indicator
3
2
SI0
FP0
IG0
GND0
T35
Battery Cooling Blower Assembly
1
4
R
LG
W–B
3 AT1
LG
LG
R
R
O–W
O–W
(Shielded)
(Shielded)
O–B
O–B
(Shielded)
(Shielded)
W–B
R
B
B
TB


A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
BTH+
BTH–
32 C
33 C
G
R
51 OT1
52 OT1
R
3 Tp1
8 Tp1
9 Tp1
Y–R
R
G
8 G
2 G
3 G
FP
BTH+
BTH–
IGCT
1 G
L
2 Tp1
R
R
p1(G), z7(I), z13(J)
Battery Voltage Sensor
O
O
1 F
+
n1(E), o2(F), z7(I), z13(J), z14(K)
HV Supply Battery Assembly
O
O–B
Service Plug
O
O–B
O–W
(Shielded)
O–B
(Shielded)
O–W
(Shielded)
O–B
(Shielded)
R
B
R
B

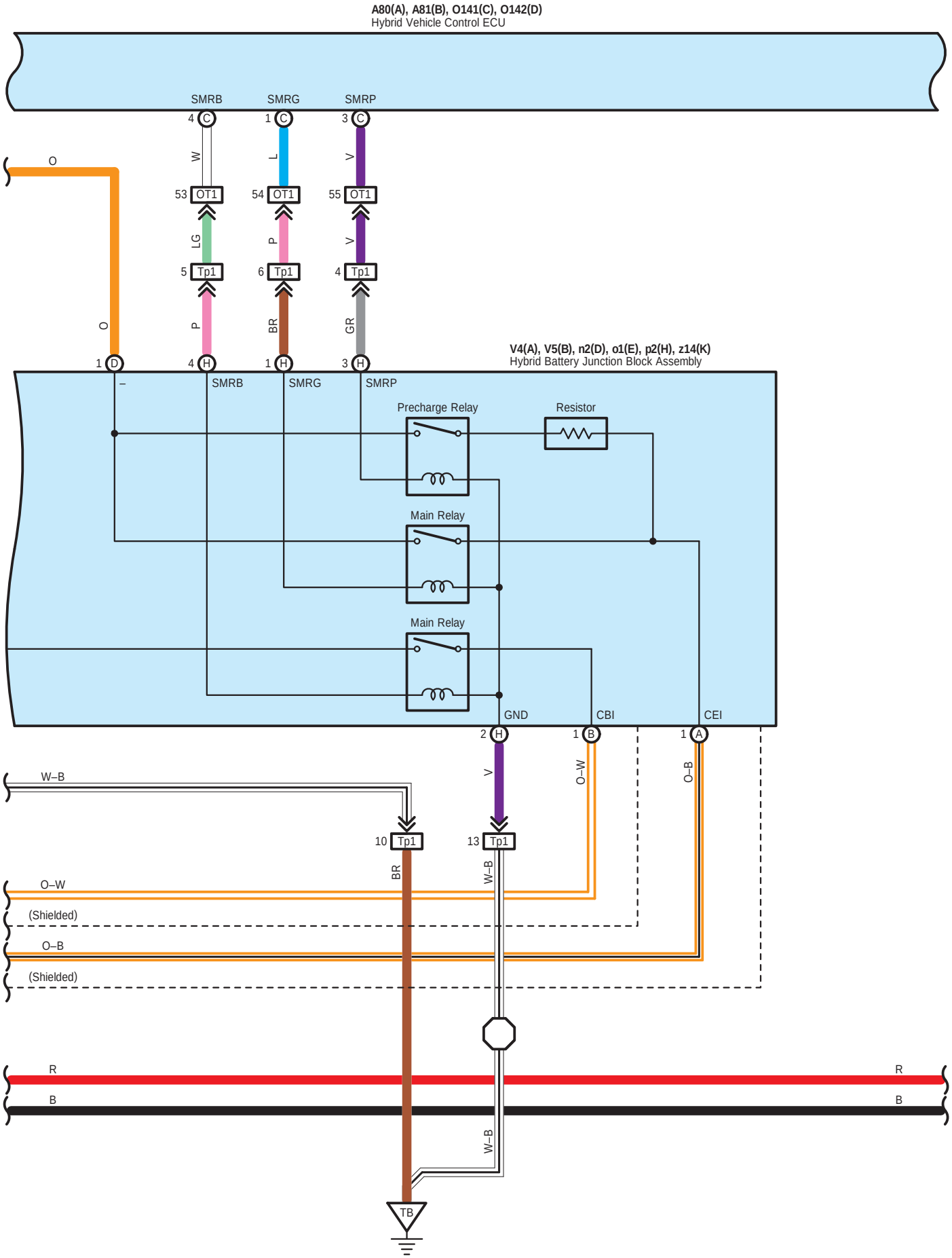

A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
O
O
n1(E), o2(F), z7(I), z13(J), z14(K)
HV Supply Battery Assembly
O
O–B
Busbar Module
Busbar Module
Hybrid Vehicle Battery
Busbar Module
Busbar Module
VB8 VB9 VB10 VB11 VB12 VB13 VB14 VB15 VB16 GB0 VB1 VB2 VB3 VB4 VB5 VB6 VB7
W–G Y–B G–B P–B W–B Y G P W B BR L V B–W BR–W L–W P–G
18 7 17 6 16 5 15 4 14 22 11 21 10 20 9 19 8
VB8 VB9 VB10 VB11 VB12 VB13 VB14 VB15 VB16 GBO VB1 VB2 VB3 VB4 VB5 VB6 VB7
p1(G), z7(I), z13(J)
Battery Voltage Sensor

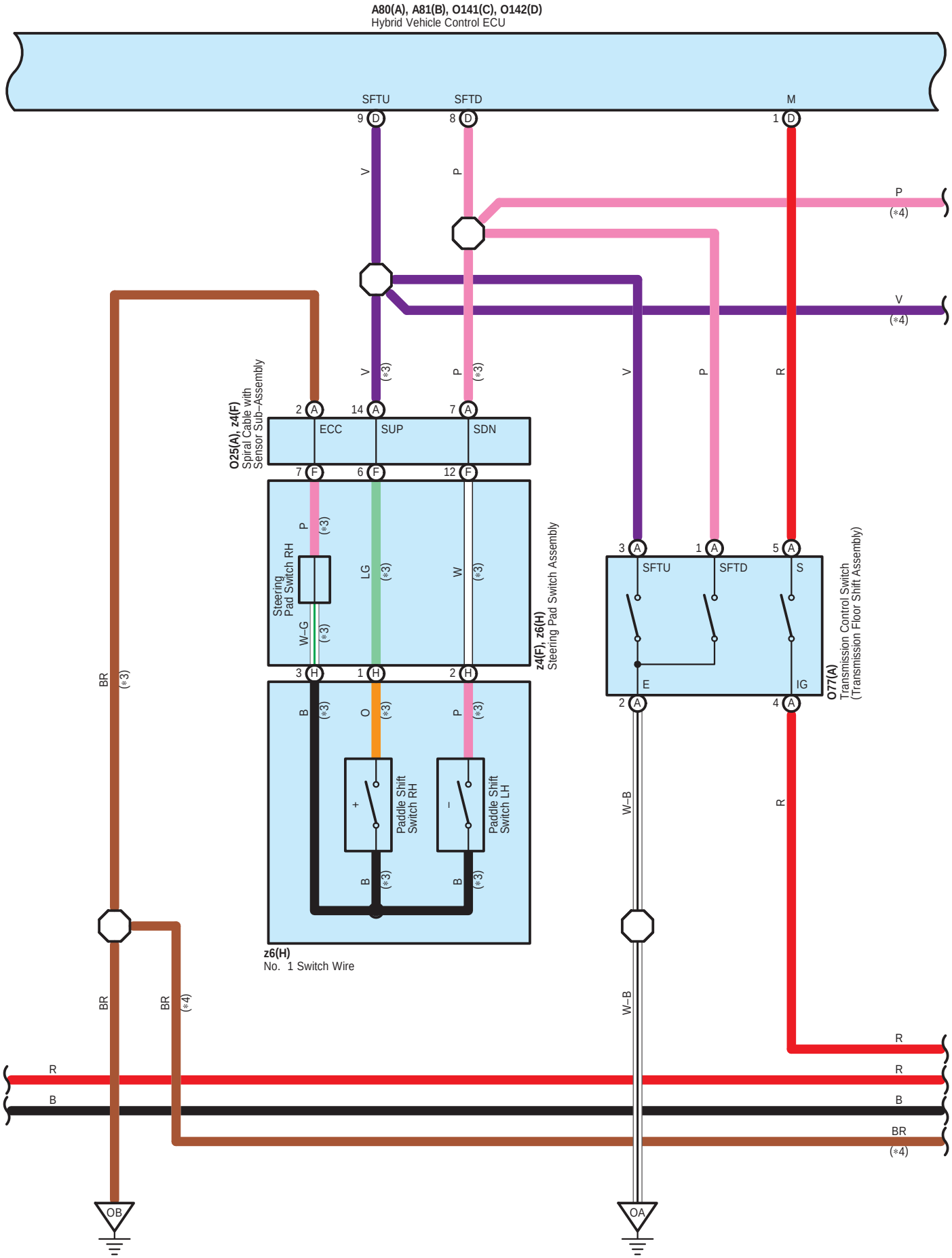

O–W
O–W
(Shielded)
(Shielded)
O–B
O–B
(Shielded)
(Shielded)
R
R
B
B

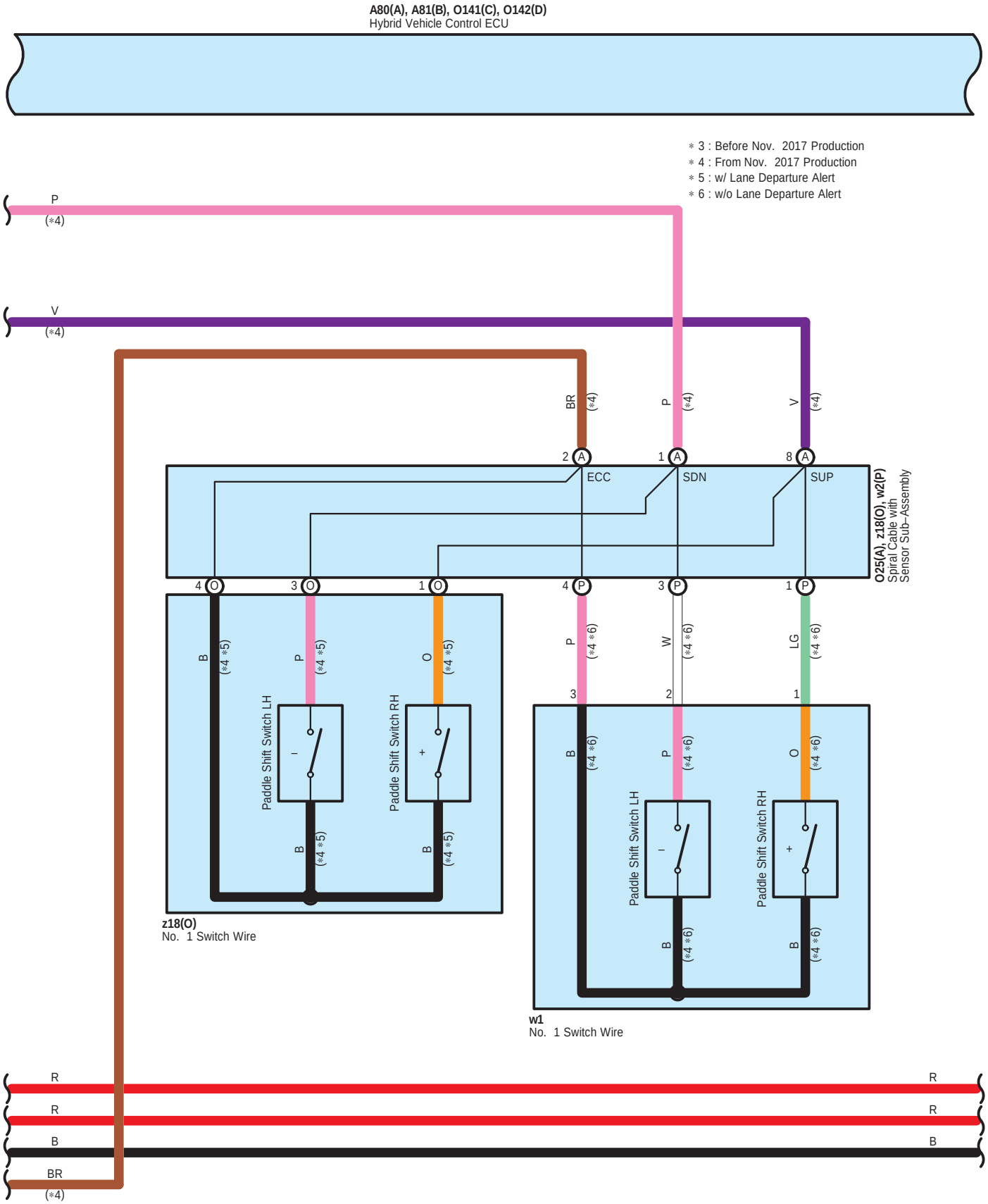

A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
O
O
O
O
n1(E), o2(F), z7(I), z13(J), z14(K)
HV Supply Battery Assembly
1 E
–
Thermistor
Thermistor
Thermistor
Thermistor
R
R
W
W
G
G
L
L
BR
B
Y
17 J
7 J
16 J
6 J
11 J
1 J
5 J
15 J
10 J
20 J
9 J
GBO
TBO
GB1
TB1
GC0
TC0
TB2
GB2
VIB
GIB
IB
1 E
+
1 K
VIB
2 K
GIB
3 K
IB
Current Sensor
GND
5 G
W–B
W–B
p1(G), z7(I), z13(J)
Battery Voltage Sensor
V4(A), V5(B), n2(D), o1(E), p2(H), z14(K)
Hybrid Battery Junction Block Assembly

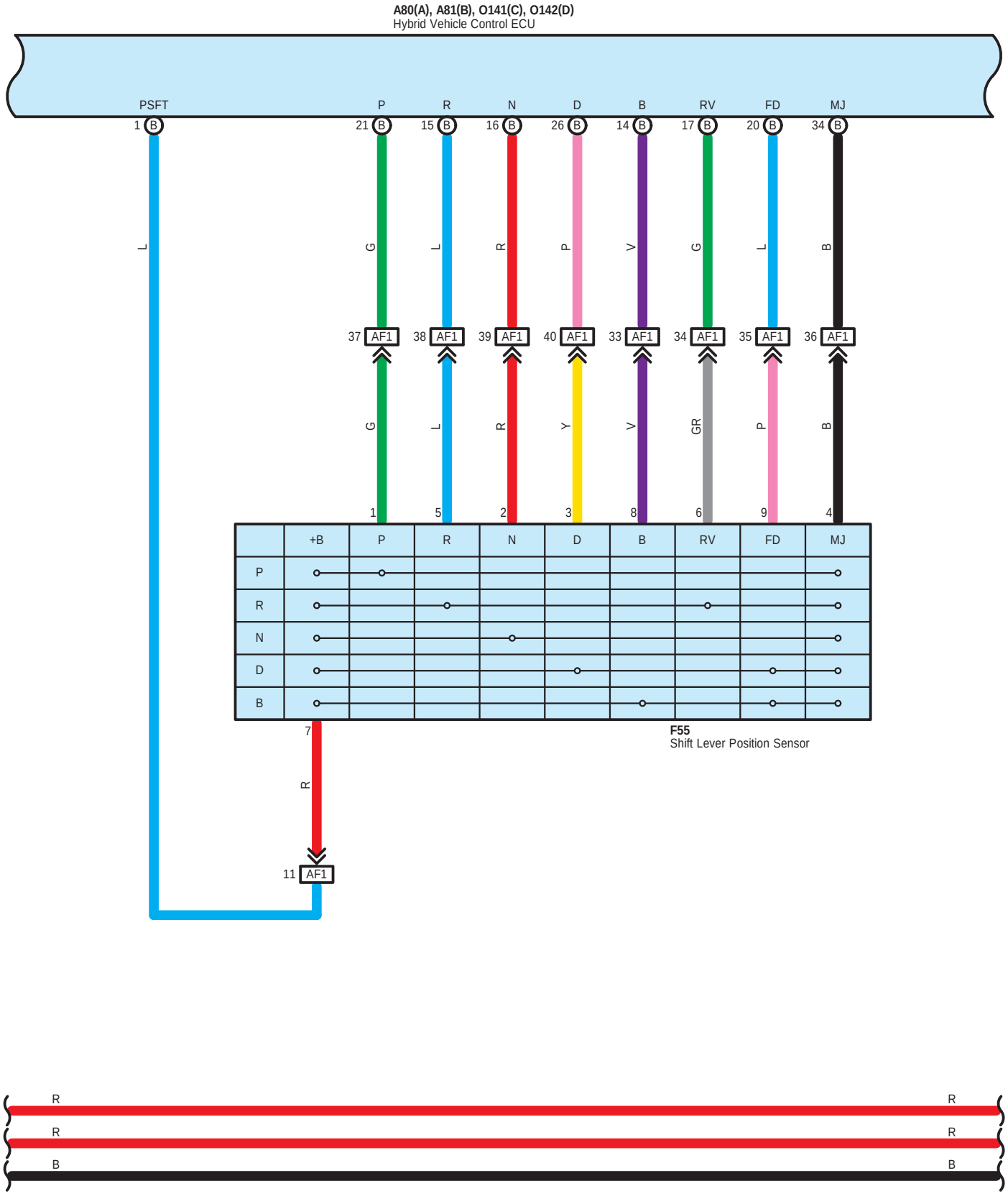
O–W
O–W
(Shielded)
(Shielded)
O–B
O–B
(Shielded)
(Shielded)

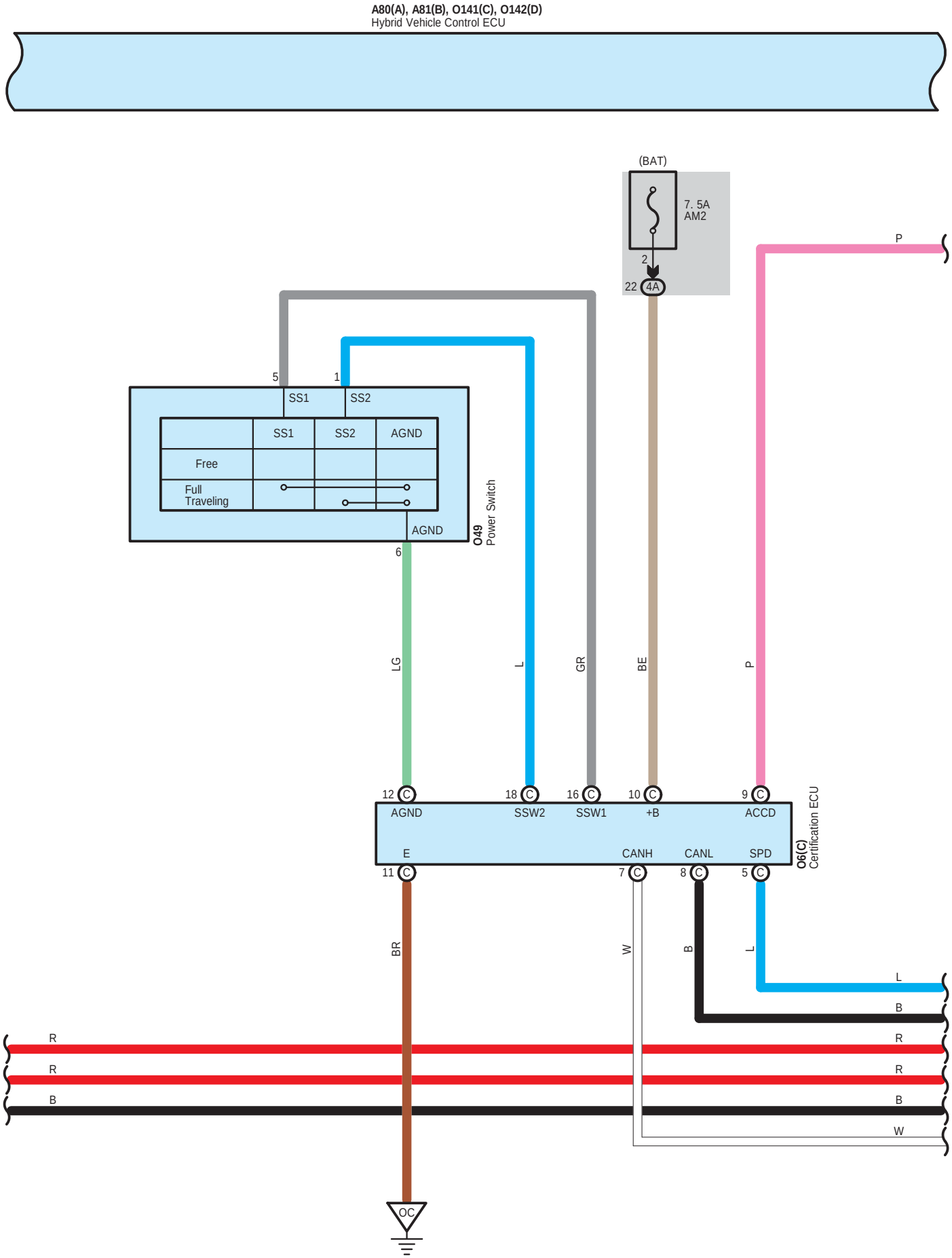
R
R
B
B

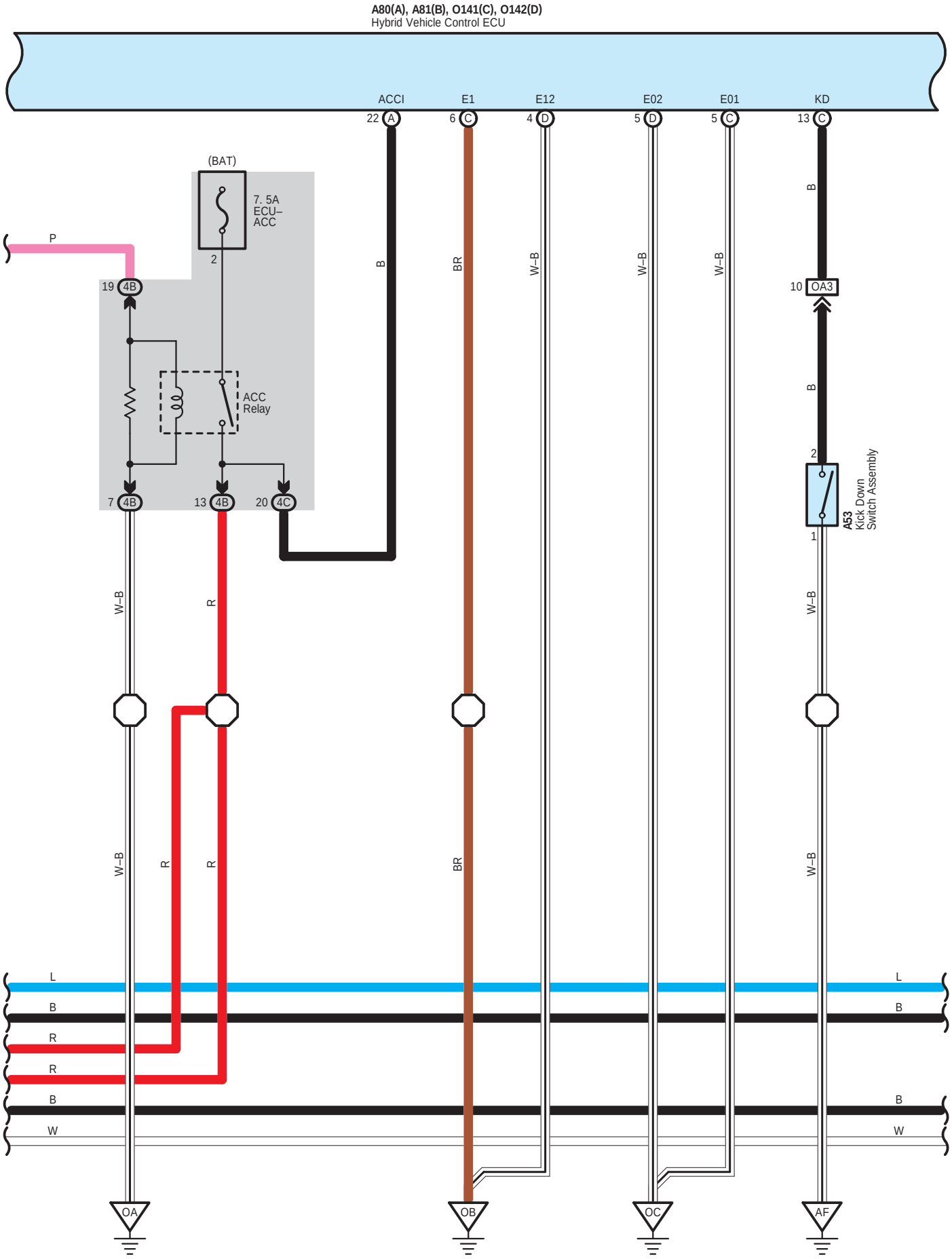

A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
SMRB
SMRG
SMRP
4 C
1 C
3 C
W
L
V
O
53 OT1
54 OT1
55 OT1
LG
P
V
5 Tp1
6 Tp1
4 Tp1
P
BR
GR
O
1 D
4 H
1 H
3 H
V4(A), V5(B), n2(D), o1(E), p2(H), z14(K)
Hybrid Battery Junction Block Assembly
–
SMRB
SMRG
SMRP
Precharge Relay
Resistor
Main Relay
Main Relay
GND
CBI
CEI
2 H
1 B
1 A
V
O–W
O–B
W–B
10 Tp1
13 Tp1
BR
W–B
O–W
(Shielded)
O–B
(Shielded)
R
R
B
B
W–B
TB

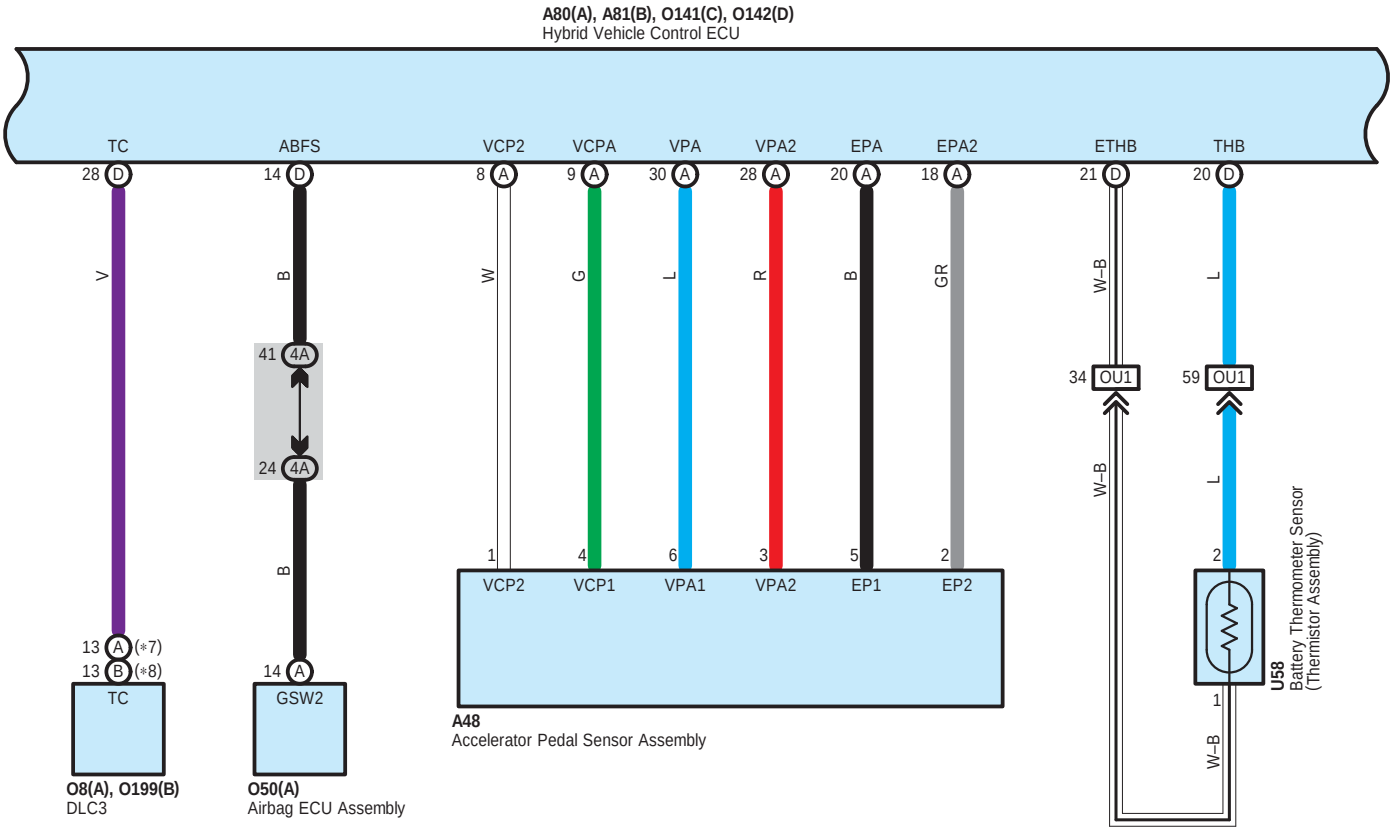

A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
SFTU
SFTD
M
9 D
8 D
1 D
V
P
P
(*4)
V
(*4)
V
(*3)
P
(*3)
V
P
R
O25(A), z4(F)
Spiral Cable with
Sensor Sub-Assembly
2 A
14 A
7 A
ECC
SUP
SDN
7 F
6 F
12 F
Steering
Pad Switch RH
P
(*3)
W-G
(*3)
LG
(*3)
W
(*3)
z4(F), z6(H)
Steering Pad Switch Assembly
3 H
1 H
2 H
B
(*3)
O
(*3)
P
(*3)
Paddle Shift
Switch RH
Paddle Shift
Switch LH
B
(*3)
B
(*3)
z6(H)
No. 1 Switch Wire
3 A
1 A
5 A
SFTU
SFTD
S
E
IG
2 A
4 A
O77(A)
Transmission Control Switch
(Transmission Floor Shift Assembly)
BR
(*3)
W-B
R
W-B
R
BR
BR
(*4)
R
R
R
B
B
BR
(*4)
OB
OA


A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
∗ 3 : Before Nov. 2017 Production
∗ 4 : From Nov. 2017 Production
∗ 5 : w/ Lane Departure Alert
∗ 6 : w/o Lane Departure Alert
P
(∗4)
V
(∗4)
BR
(∗4)
P
(∗4)
V
(∗4)
2 A
1 A
8 A
ECC
SDN
SUP
O25(A), z18(O), w2(P)
Spiral Cable with
Sensor Sub-Assembly
4 O
3 O
1 O
4 P
3 P
1 P
B
(∗4 ∗5)
P
(∗4 ∗5)
O
(∗4 ∗5)
P
(∗4 ∗6)
W
(∗4 ∗6)
LG
(∗4 ∗6)
Paddle Shift Switch LH
Paddle Shift Switch RH
B
(∗4 ∗5)
B
(∗4 ∗5)
3
2
1
B
(∗4 ∗6)
P
(∗4 ∗6)
O
(∗4 ∗6)
Paddle Shift Switch LH
Paddle Shift Switch RH
B
(∗4 ∗6)
B
(∗4 ∗6)
z18(O)
No. 1 Switch Wire
w1
No. 1 Switch Wire
R
R
B
BR
(∗4)
R
R
B

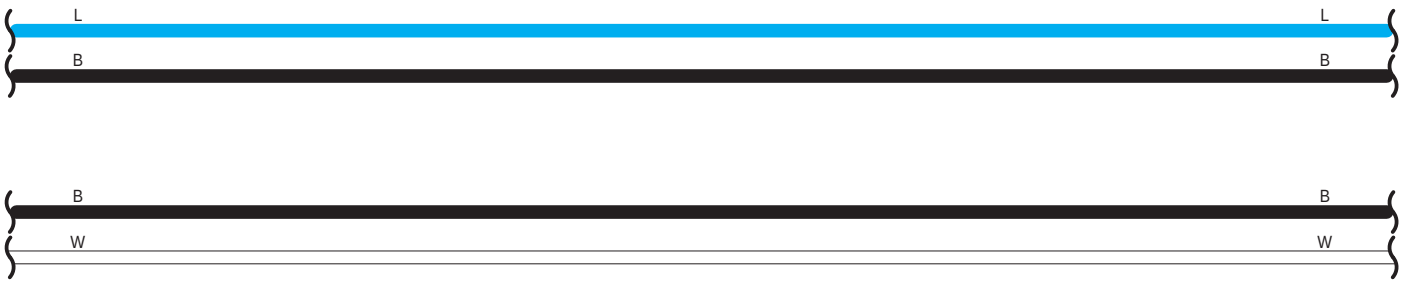

A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
PSFT
P
R
N
D
B
RV
FD
MJ
1 B
21 B
15 B
16 B
26 B
14 B
17 B
20 B
34 B
L
G
L
R
P
V
G
L
B
37 AF1
38 AF1
39 AF1
40 AF1
33 AF1
34 AF1
35 AF1
36 AF1
G
L
R
Y
V
GR
P
B
1
5
2
3
8
6
9
4
+B
P
R
N
D
B
RV
FD
MJ
7
R
11 AF1
F55
Shift Lever Position Sensor
R
R
B

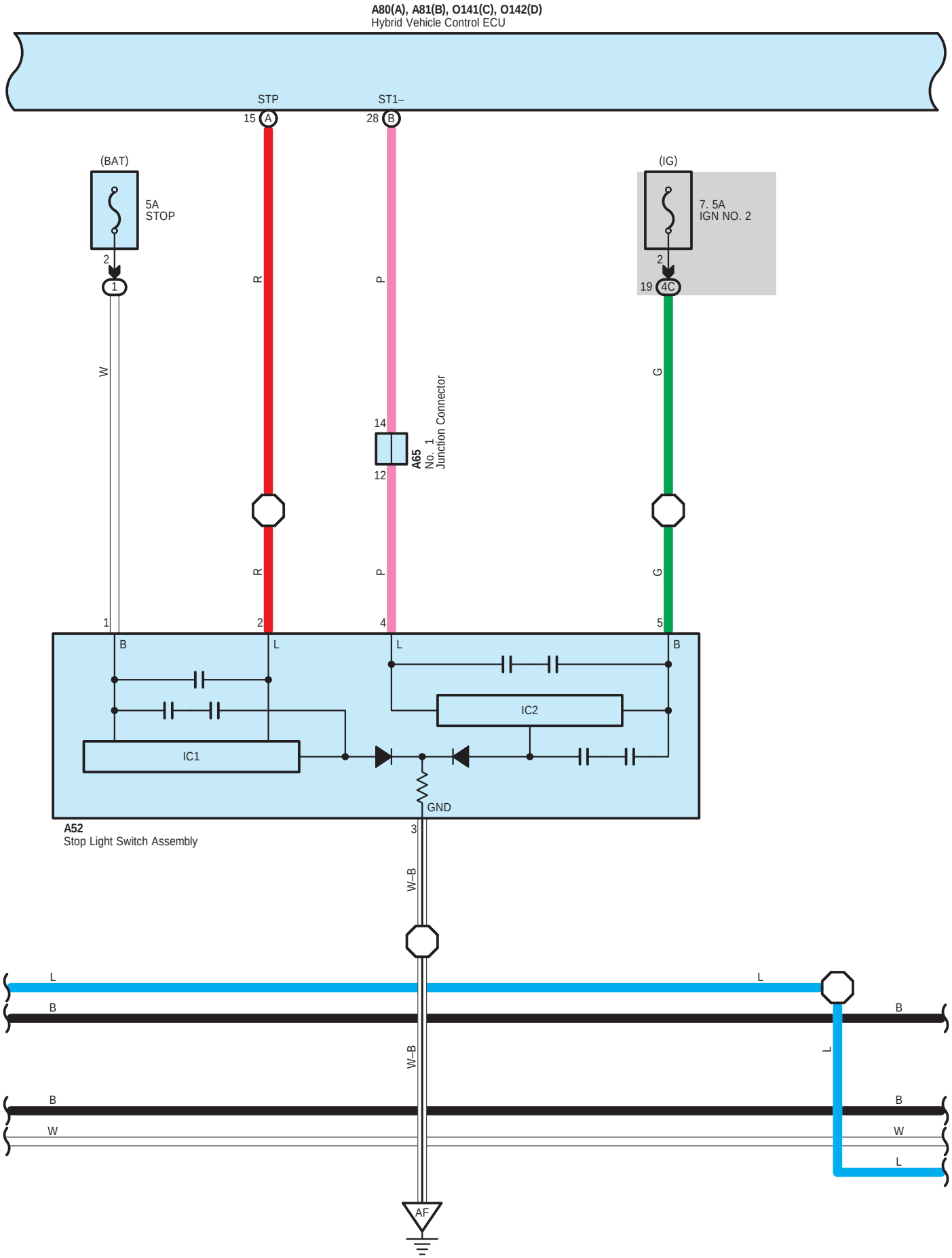

A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
(BAT)
7. 5A
AM2
2
22 4A
P
5
1
SS1
SS2
SS1
SS2
AGND
Free
Full
Traveling
AGND
6
O49
Power Switch
LG
L
GR
BE
P
12 C
18 C
16 C
10 C
9 C
AGND
SSW2
SSW1
+B
ACCD
E
CANH
CANL
SPD
O6(C)
Certification ECU
11 C
7 C
8 C
5 C
BR
W
B
L
L
B
R
R
R
R
B
B
W
OC

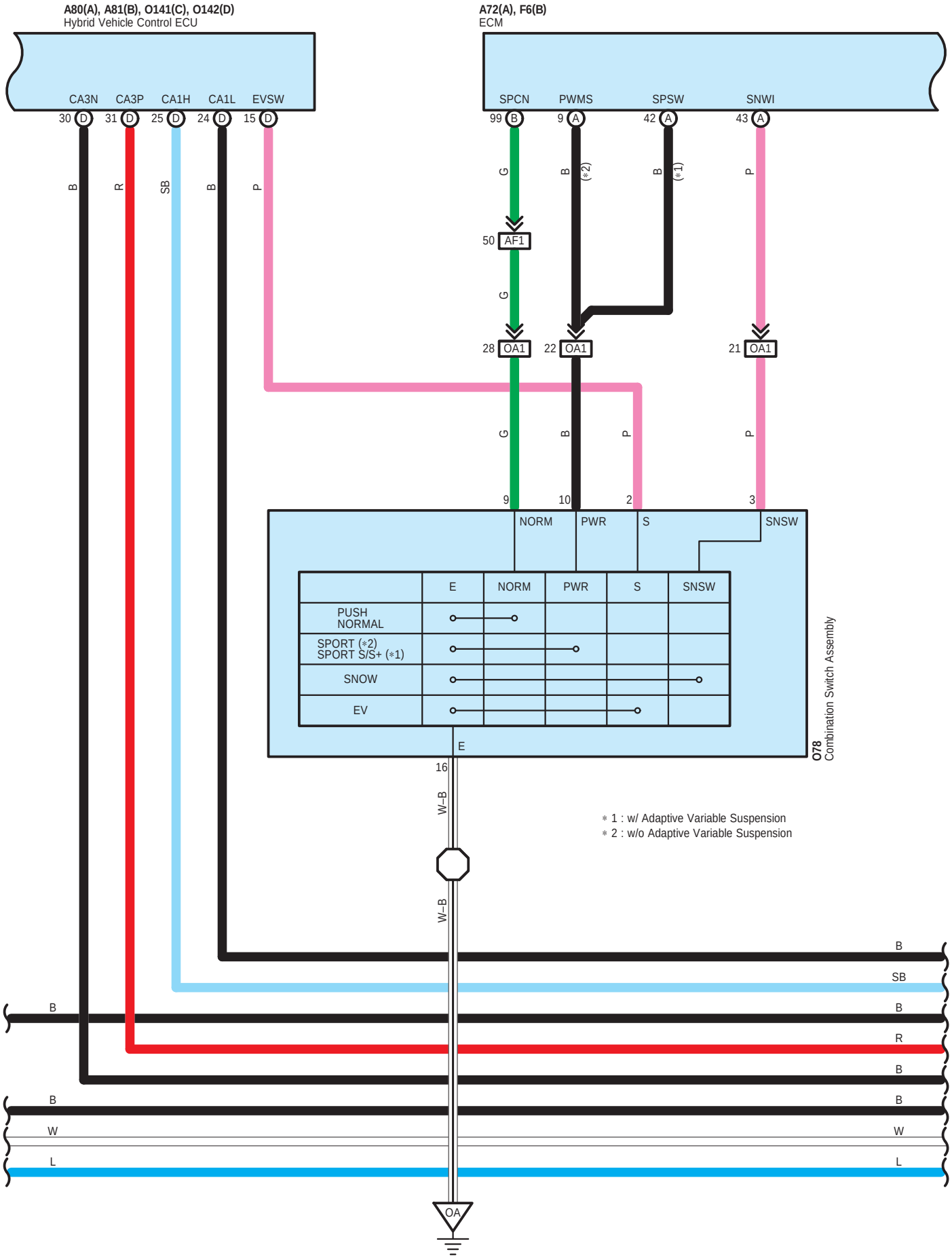

A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
ACCI
E1
E12
E02
E01
KD
22 A
6 C
4 D
5 D
5 C
13 C
(BAT)
7. 5A
ECU–
ACC
2
P
19 4B
ACC
Relay
7 4B
13 4B
20 4C
B
BR
W–B
W–B
W–B
B
10 OA3
B
2
1
A53
Kick Down
Switch Assembly
W–B
R
W–B
R
R
BR
W–B
L
B
R
R
B
W
L
B
B
W
OA
OB
OC
AF

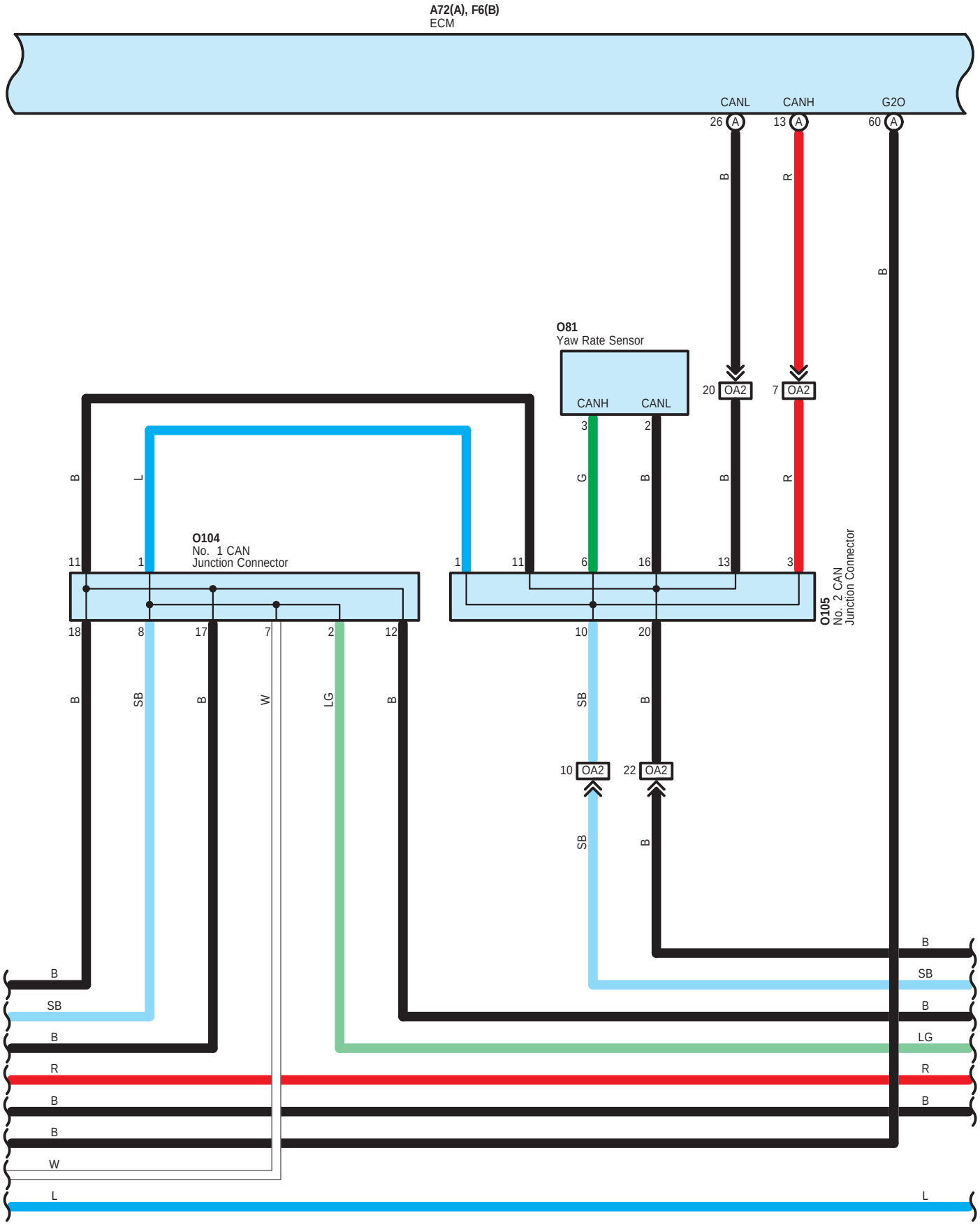


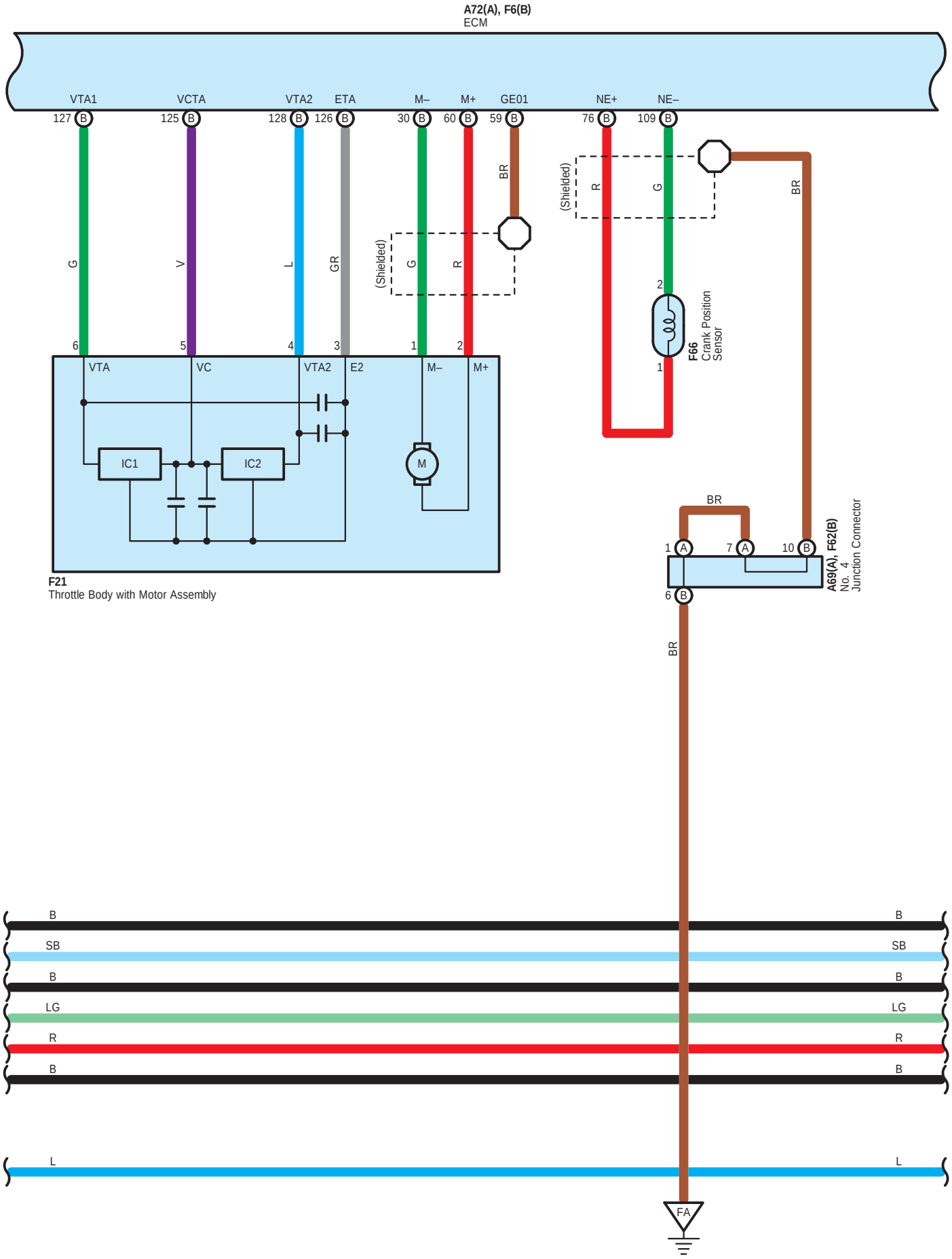
* 7 : Before Oct. 2018 Production
* 8 : From Oct. 2018 Production

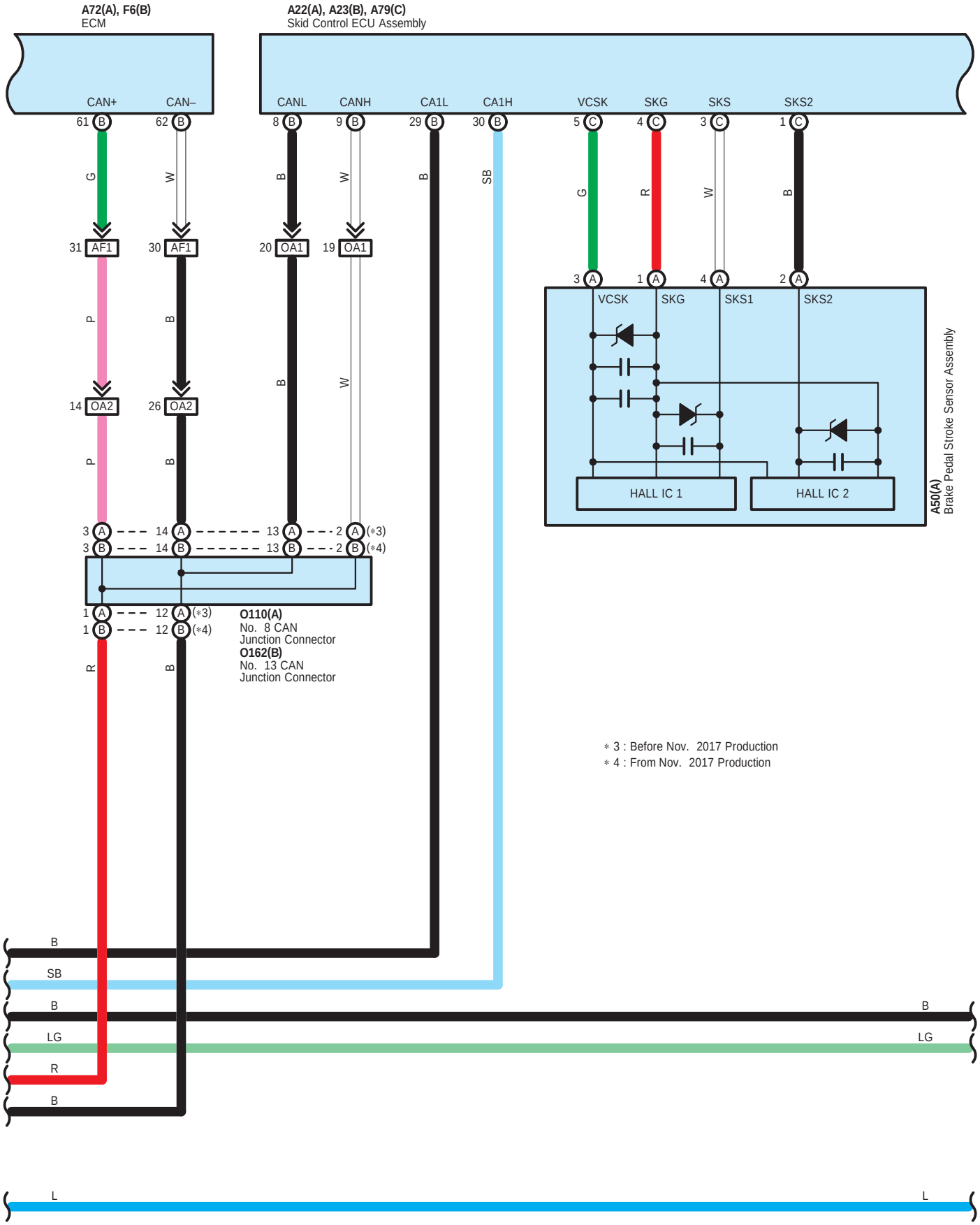


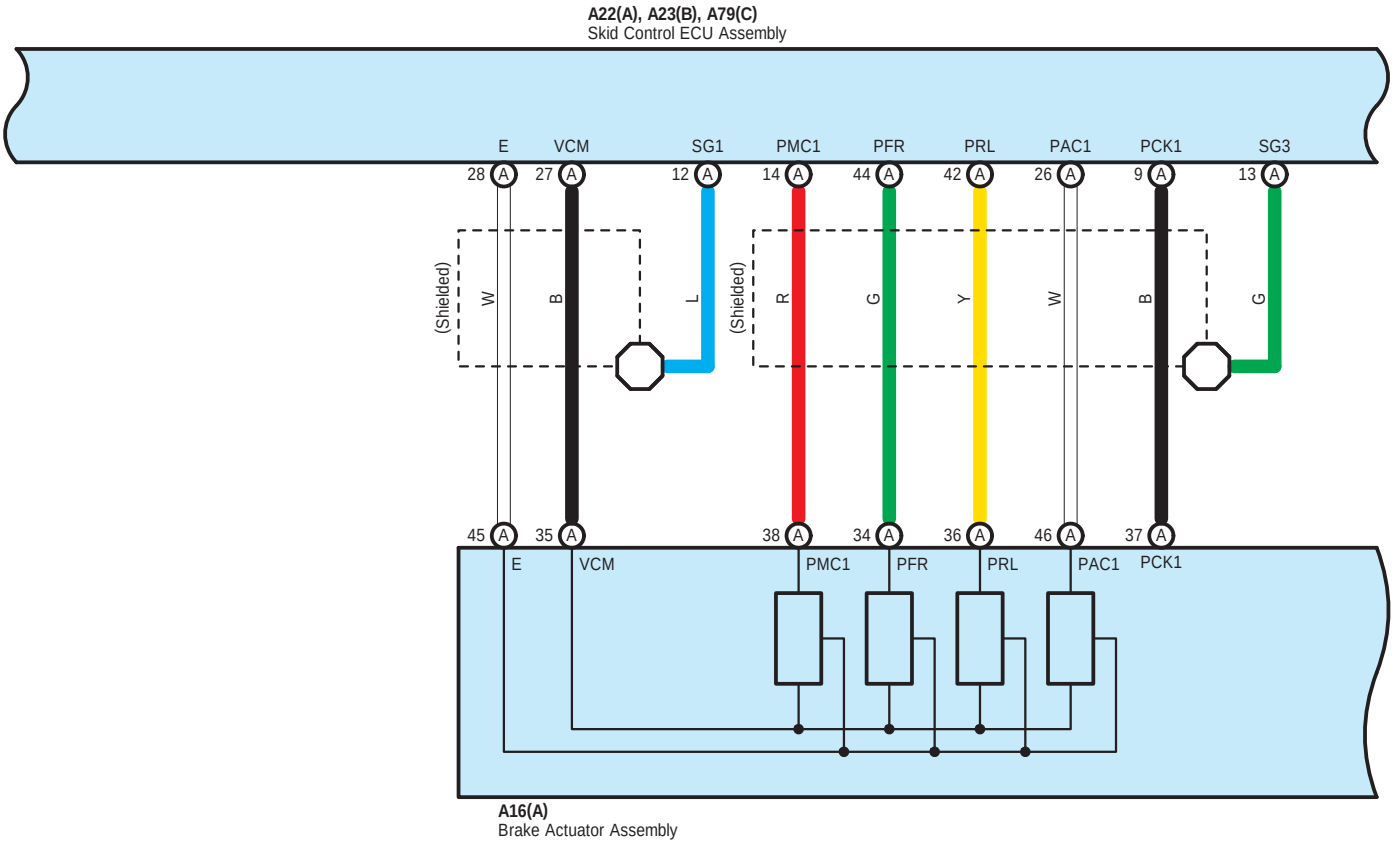

A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
STP
ST1–
15 A
28 B
(BAT)
5A
STOP
2
1
W
R
P
(IG)
7. 5A
IGN NO. 2
2
19 4C
G
14
12
A65
No. 1
Junction Connector
R
P
G
1
2
4
5
B
L
L
B
IC2
IC1
GND
A52
Stop Light Switch Assembly
3
W–B
L
B
L
B
W–B
B
B
W
W
L
AF


A80(A), A81(B), O141(C), O142(D)
Hybrid Vehicle Control ECU
CA3N
CA3P
CA1H
CA1L
EVSW
30 D
31 D
25 D
24 D
15 D
A72(A), F6(B)
ECM
SPCN
PWMS
SPSW
SNWI
99 B
9 A
42 A
43 A
50 AF1
28 OA1
22 OA1
21 OA1
9
10
2
3
NORM
PWR
S
SNSW
E
NORM
PWR
S
SNSW
PUSH NORMAL
SPORT (*2) SPORT S/S+ (*1)
SNOW
EV
O78
Combination Switch Assembly
16
W–B
W–B
* 1 : w/ Adaptive Variable Suspension
* 2 : w/o Adaptive Variable Suspension
OA

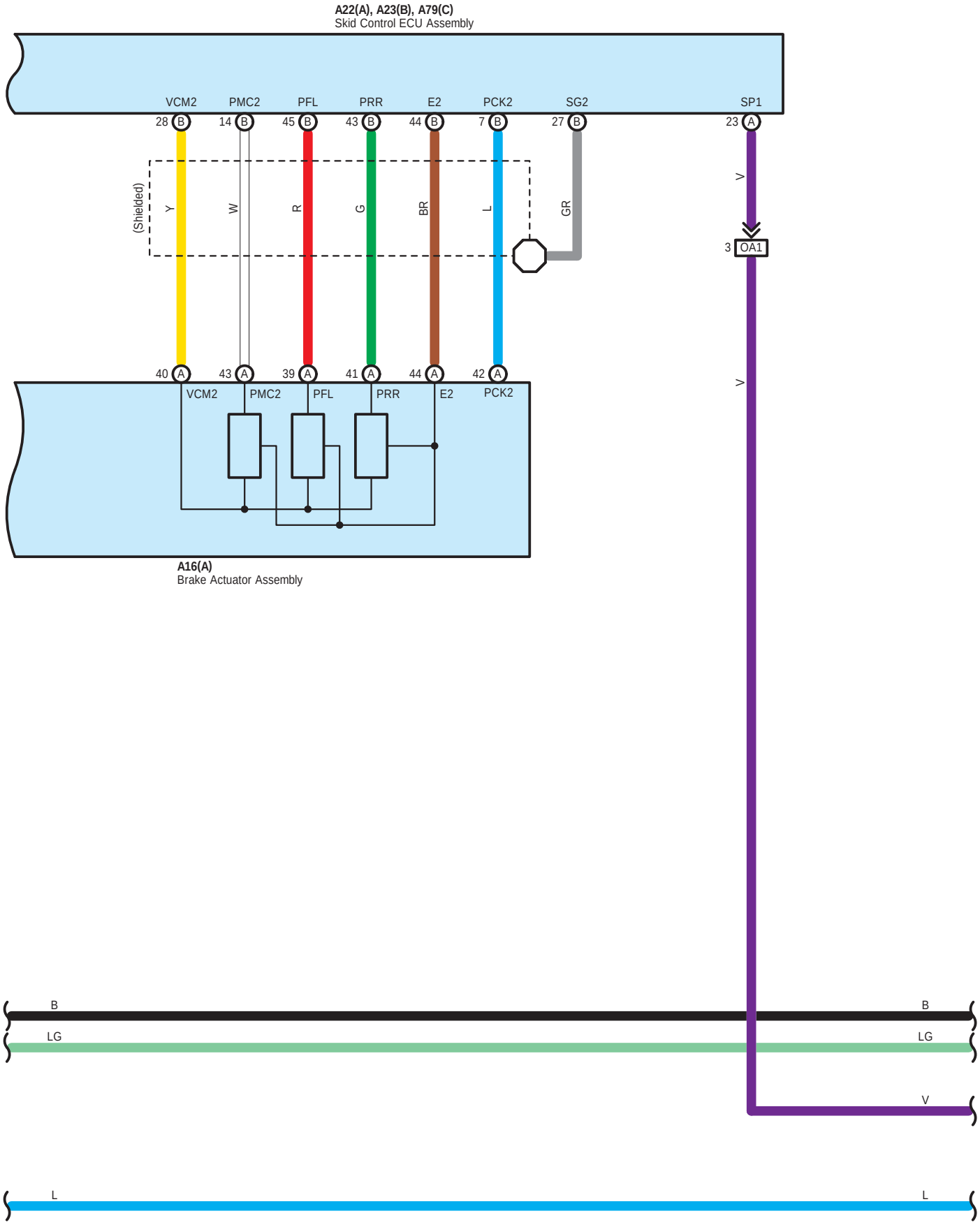

A72(A), F6(B)
ECM
CANL
CANH
G2O
26 A
13 A
60 A
B
R
B
O81
Yaw Rate Sensor
CANH
CANL
3
2
20 OA2
7 OA2
G
B
B
R
B
L
O104
No. 1 CAN
Junction Connector
11
1
1
11
6
16
13
3
O105
No. 2 CAN
Junction Connector
18
8
17
7
2
12
10
20
B
SB
B
W
LG
B
SB
B
10 OA2
22 OA2
SB
B
B
SB
B
LG
R
R
B
B
B
B
W
L
L

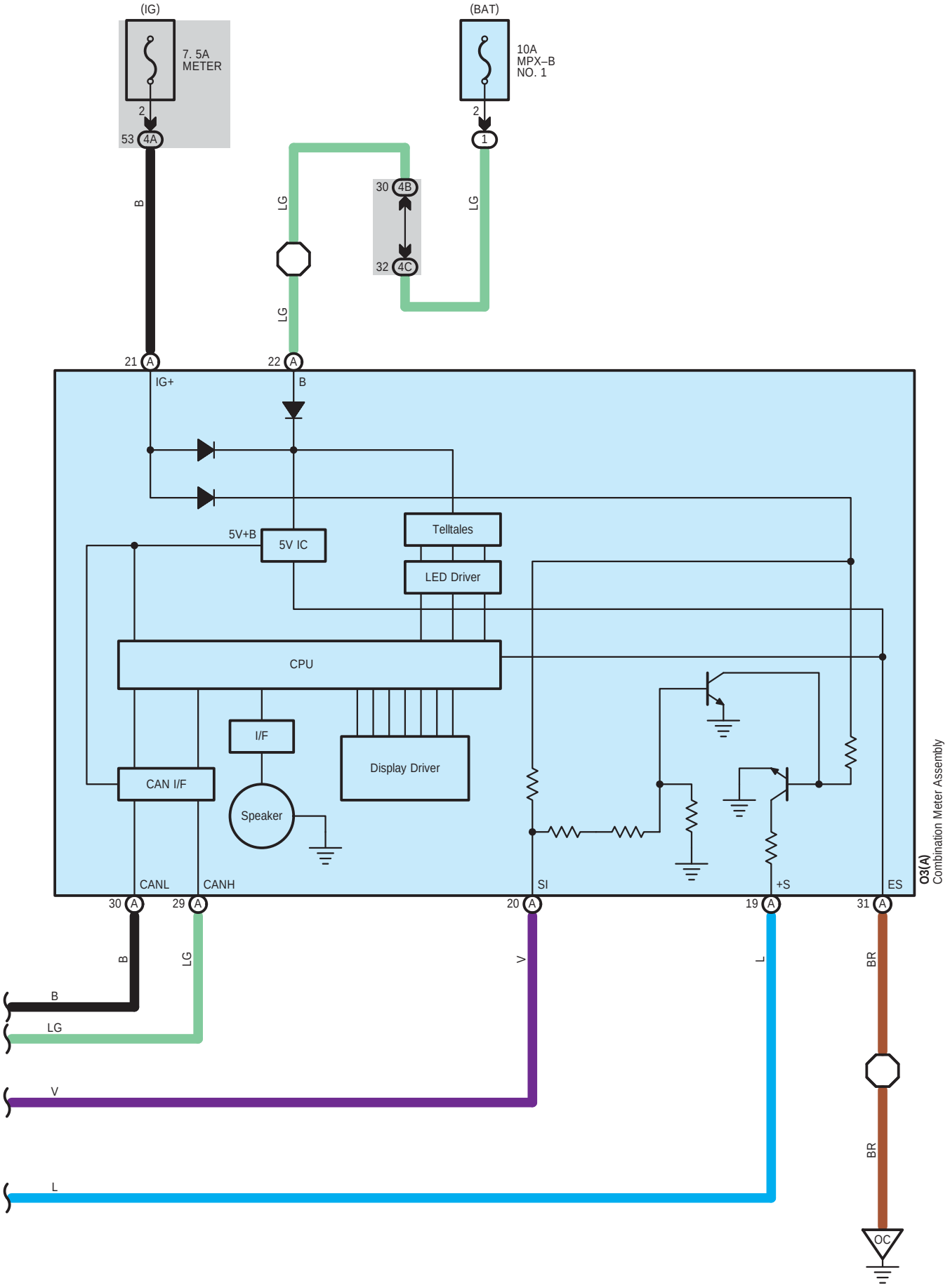

A72(A), F6(B)
ECM
VTA1
VCTA
VTA2
ETA
M–
M+
GE01
NE+
NE–
127 B
125 B
128 B
126 B
30 B
60 B
59 B
76 B
109 B
G
V
L
GR
(Shielded)
G
R
BR
(Shielded)
R
G
BR
2
1
F66
Crank Position Sensor
6
5
4
3
1
2
VTA
VC
VTA2
E2
M–
M+
IC1
IC2
M
F21
Throttle Body with Motor Assembly
BR
1 A
7 A
10 B
6 B
A69(A), F62(B)
No. 4
Junction Connector
BR
B
SB
B
LG
R
B
B
SB
B
LG
R
B
L
L
FA


A72(A), F6(B)
ECM
A22(A), A23(B), A79(C)
Skid Control ECU Assembly
CAN+
CAN–
CANL
CANH
CA1L
CA1H
VCSK
SKG
SKS
SKS2
61 B
62 B
8 B
9 B
29 B
30 B
5 C
4 C
3 C
1 C
G
W
B
W
B
SB
G
R
W
B
31 AF1
30 AF1
20 OA1
19 OA1
3 A
1 A
4 A
2 A
VCSK
SKG
SKS1
SKS2
P
B
B
W
14 OA2
26 OA2
P
B
HALL IC 1
HALL IC 2
A50(A)
Brake Pedal Stroke Sensor Assembly
3 A
14 A
13 A
2 A (*3)
3 B
14 B
13 B
2 B (*4)
1 A
12 A (*3)
1 B
12 B (*4)
O110(A)
No. 8 CAN
Junction Connector
O162(B)
No. 13 CAN
Junction Connector
R
B
* 3 : Before Nov. 2017 Production
* 4 : From Nov. 2017 Production
B
SB
B
B
LG
LG
R
B
L
L

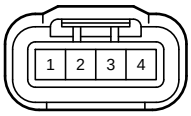

A22(A), A23(B), A79(C)
Skid Control ECU Assembly
E
VCM
SG1
PMC1
PFR
PRL
PAC1
PCK1
SG3
28
27
12
14
44
42
26
9
13
(Shielded)
W
B
L
(Shielded)
R
G
Y
W
B
G
45
35
38
34
36
46
37
E
VCM
PMC1
PFR
PRL
PAC1
PCK1
A16(A)
Brake Actuator Assembly

B
B
LG
LG
L
L


A22(A), A23(B), A79(C)
Skid Control ECU Assembly
VCM2
PMC2
PFL
PRR
E2
PCK2
SG2
SP1
28 B
14 B
45 B
43 B
44 B
7 B
27 B
23 A
(Shielded)
Y
W
R
G
BR
L
GR
V
3 OA1
V
40 A
43 A
39 A
41 A
44 A
42 A
VCM2
PMC2
PFL
PRR
E2
PCK2
A16(A)
Brake Actuator Assembly
B
B
LG
LG
V
L
L

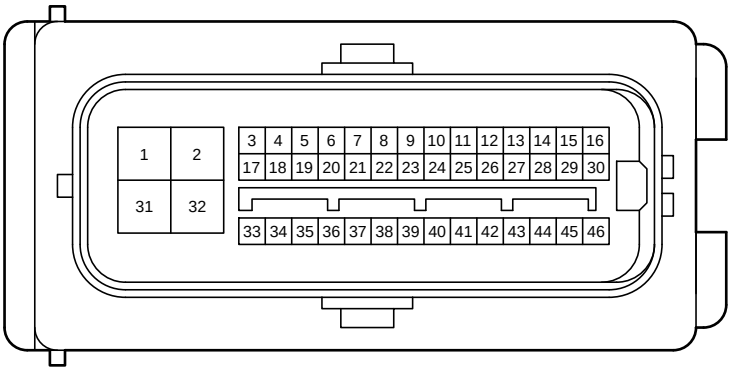

(IG)
7. 5A
METER
2
53 4A
(BAT)
10A
MPX–B
NO. 1
2
1
B
LG
30 4B
32 4C
LG
LG
21 A
22 A
IG+
B
5V+B
5V IC
Telltales
LED Driver
CPU
I/F
Display Driver
CAN I/F
Speaker
CANL
CANH
SI
+S
ES
30 A
29 A
20 A
19 A
31 A
O3(A)
Combination Meter Assembly
B
LG
V
L
BR
BR
B
LG
V
L
OC

A12
Black



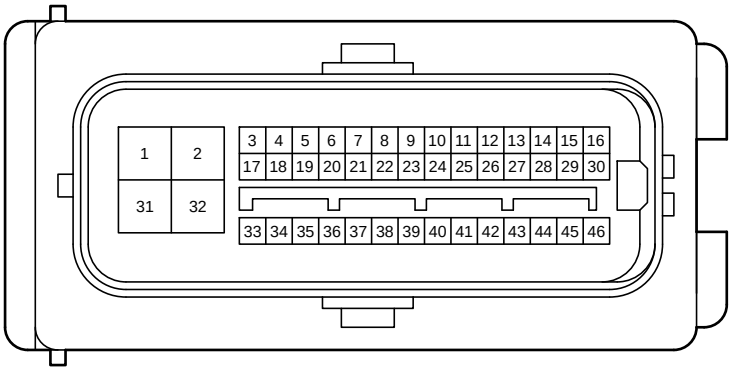
90980-11885

A16
Black



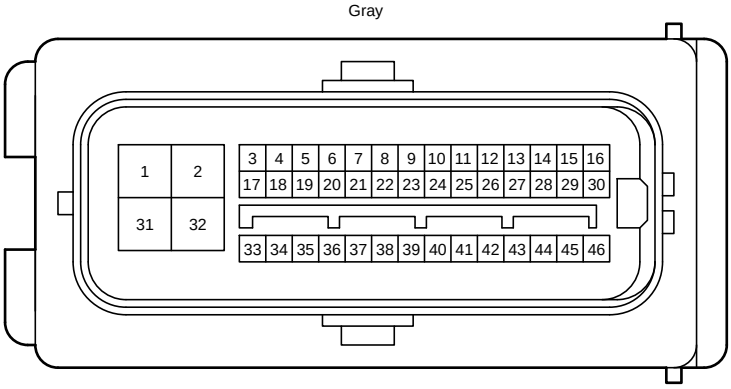
90980-12297

A22
Black



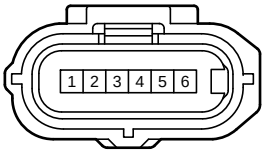
90980-12297

A23
Gray



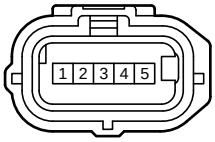
90980-12426

A48
Black



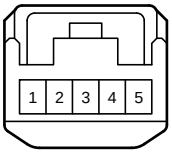
90980-12831

A50
Black



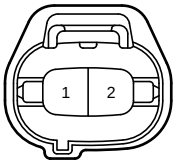
90980-12292

A52
White



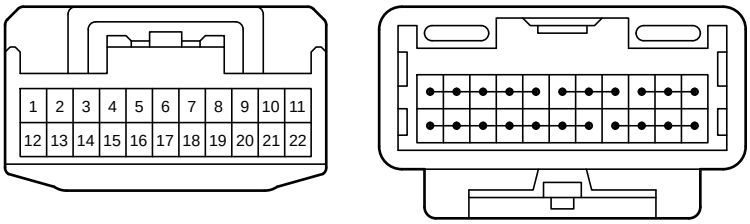
90980-12366

A53
Black



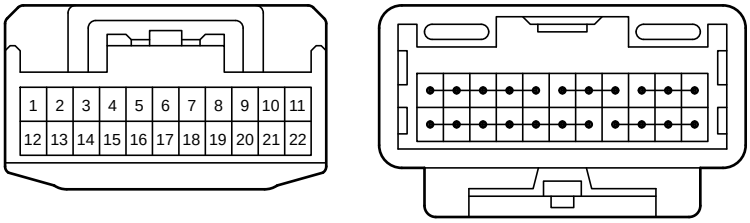
90980-11156

A65
White



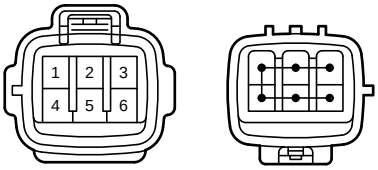
90980-12372

A66
White



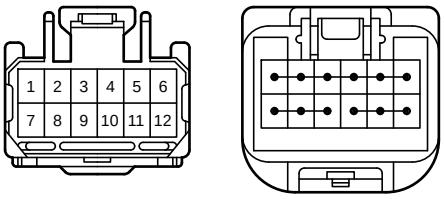
90980-12372

A68
White



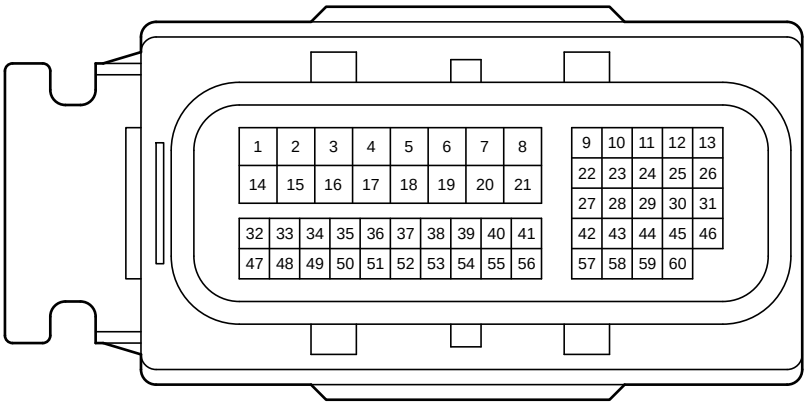
90980-11194

A69
Gray



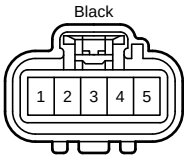
90980-11661

A72
Black



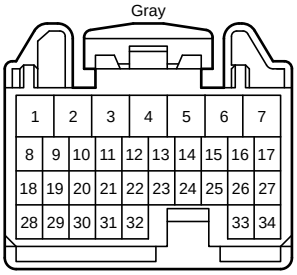
90980-12931

A79
Black



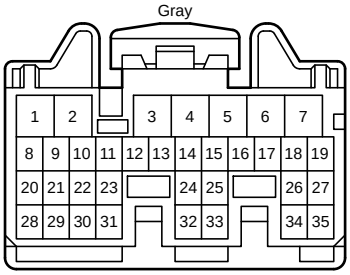
90980-11904

A80
Gray



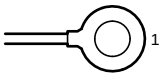
90980-12430

A81
Gray

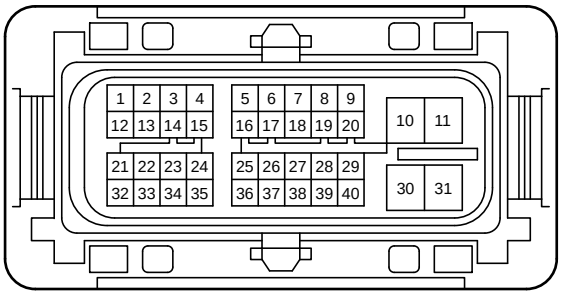


90980-12428

A82

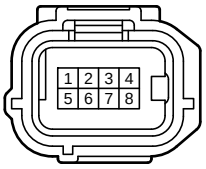


A83
Black



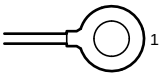
90980-12995

A84
Black

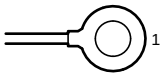


90980-12520

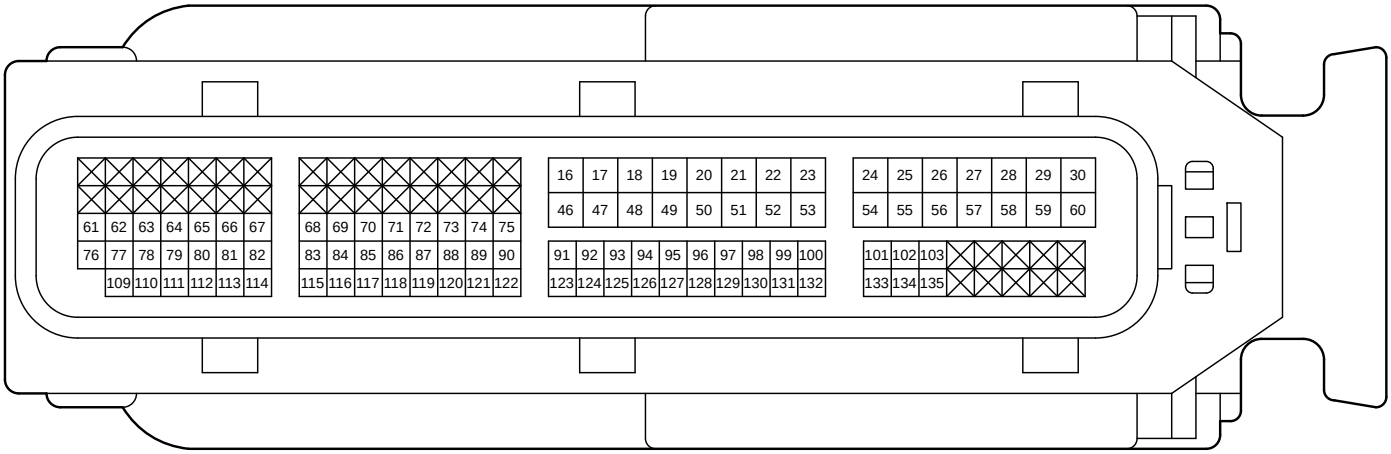
A85



E2

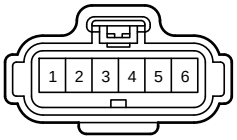


F6
Black



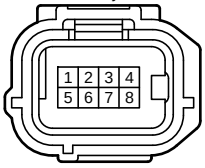
90980-12974

F21
Black



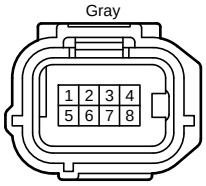
90980-11858

F44
Gray



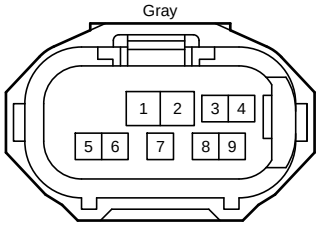
90980-12520

F45
Gray



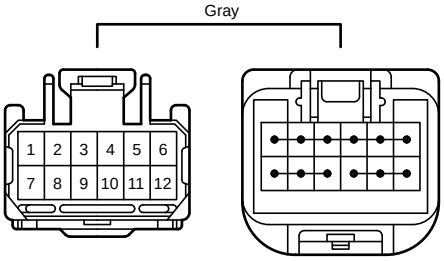
90980-12520

F55
Gray



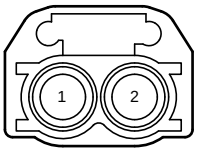
90980-12A23

F62
Gray



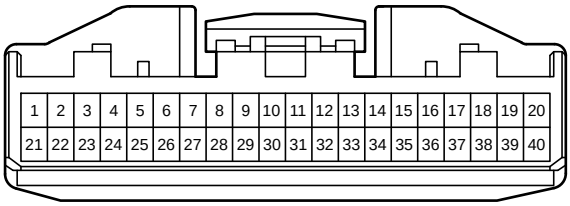
90980-11661

F66
Black



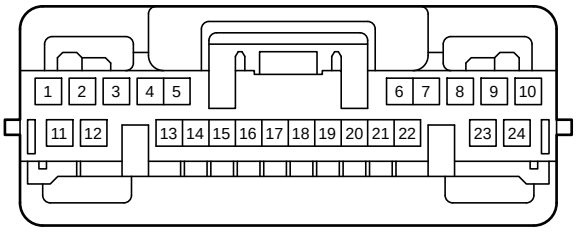
90980-12028

O3
Black



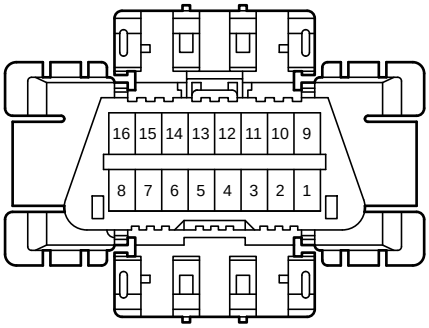
90980-12557

O6
Black



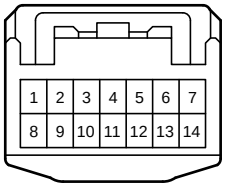
90980-12A42

O8
White



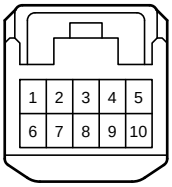
90980-11665

O25
Black



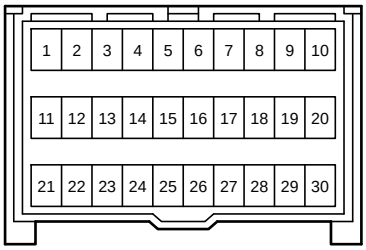
90980-12370

O49
Black



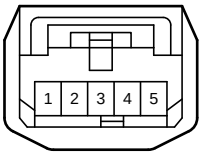
90980-12368

O50
Yellow



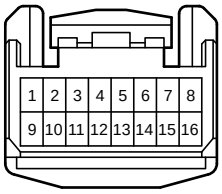
90980-12391

O77
White



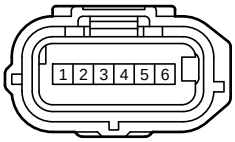
90980-12954

O78
Black



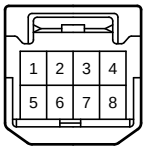
90980-12553

O81
Black



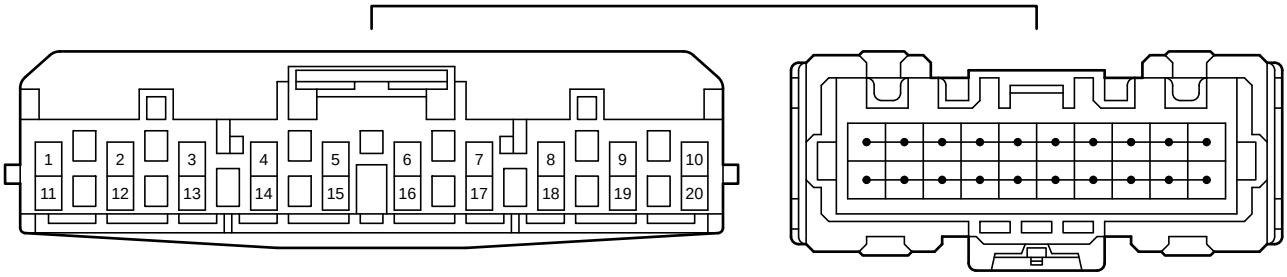
90980-12303

O84
White



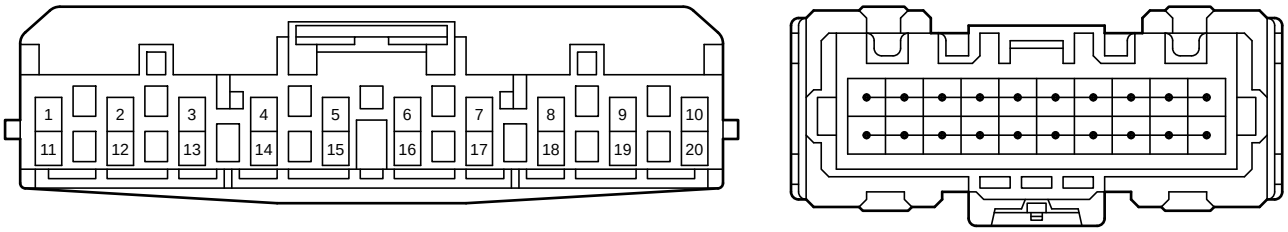
90980-12910

O104
White



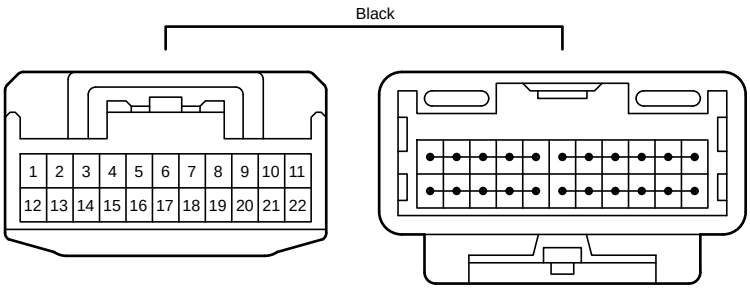
90980-12A58

O105
White



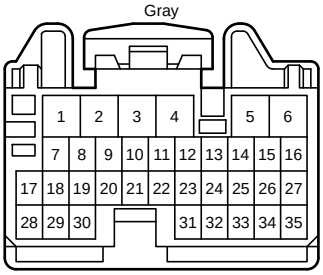
90980-12A58

O110
Black



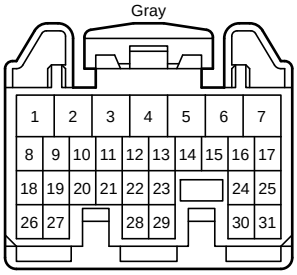
90980-12372

O141
Gray



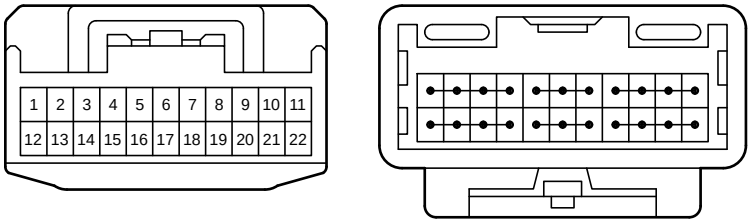
90980-12429

O142
Gray



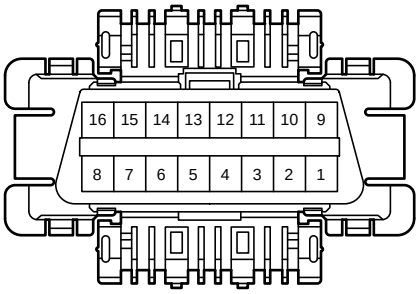
90980-12431

O162
Black



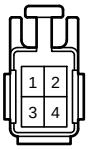
90980-12372

O199
White



90980-12D97

T35
Black



90980-10795

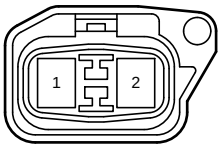
U58
Black

90980-11070

U60
Gray

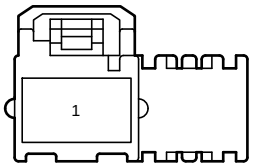
90980-11243

V2
White



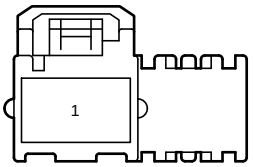
90980-12628

V4
White



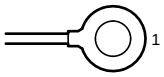
82824-47570

V5
White

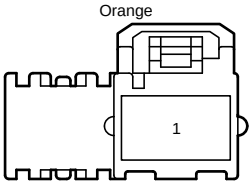


82824-74010

n1

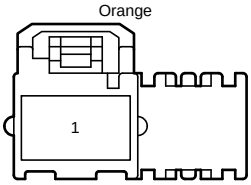


n2
Orange



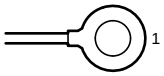
82824-47580

o1
Orange

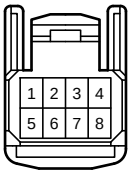


82824-47570

o2

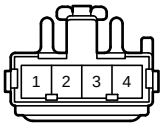


p1
White



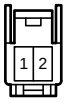
90980-12551

p2
White



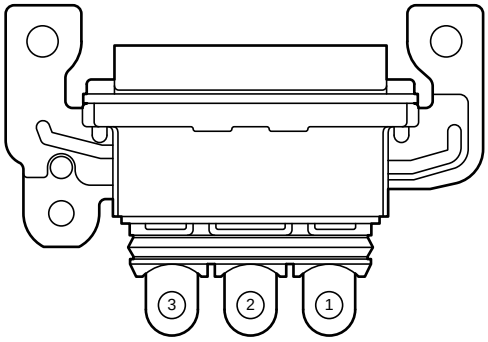
90980-11013

p3
White



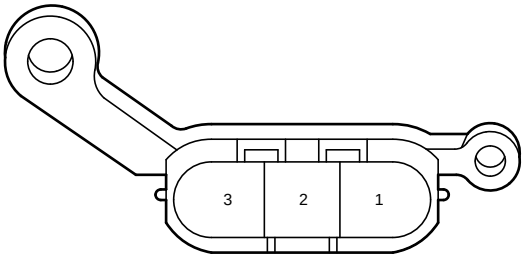
90980-11918

q2
White



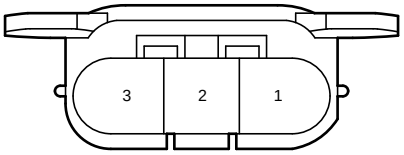
82824-30650

q3
White



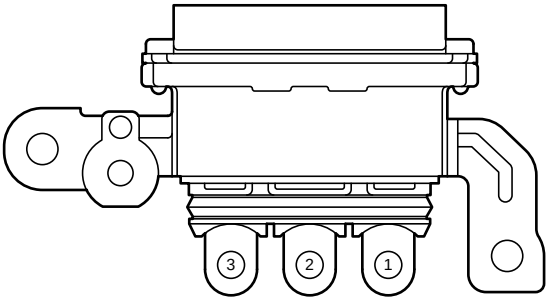
82824-30560

r1
White



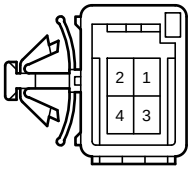
82824-30630

r2
White



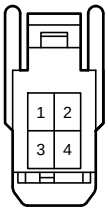
82824-30640

w1
White



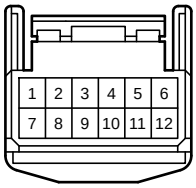
90980-12212

w2
White



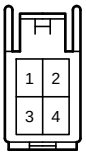
90980-12360

z4
Black



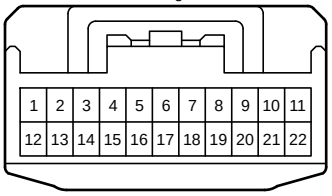
90980-12559

z6
White



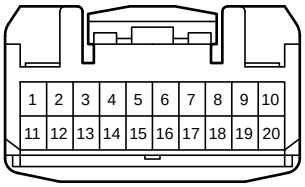
90980-12211

z7
Orange



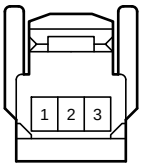
90980-12545

z13
White



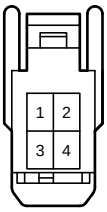
90980-12259

z14
White



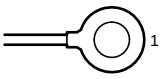
90980-12695

z18
White

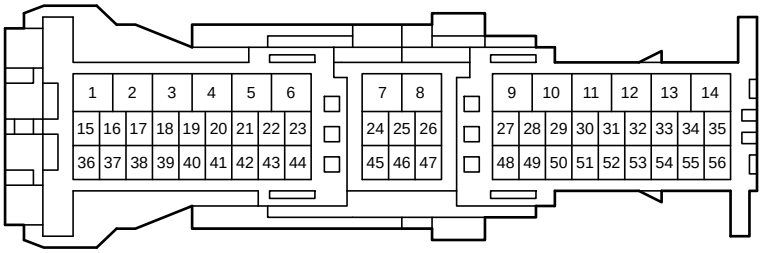


90980-12360

1J

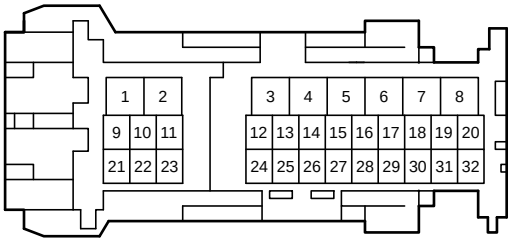


4A
White



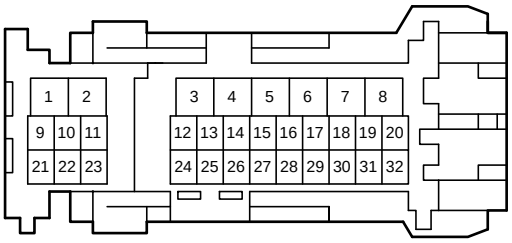
90980-12943

4B
White



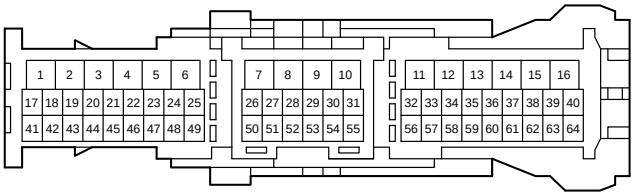
90980-12A48

4C
White

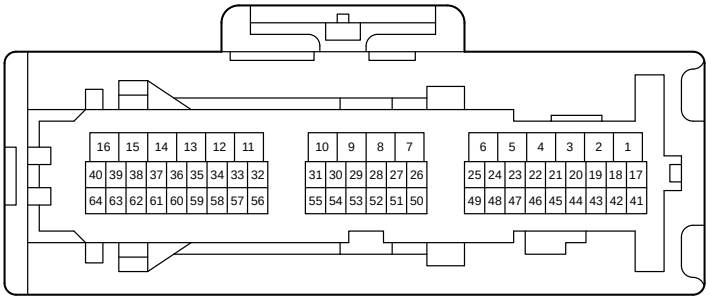


90980-12A47

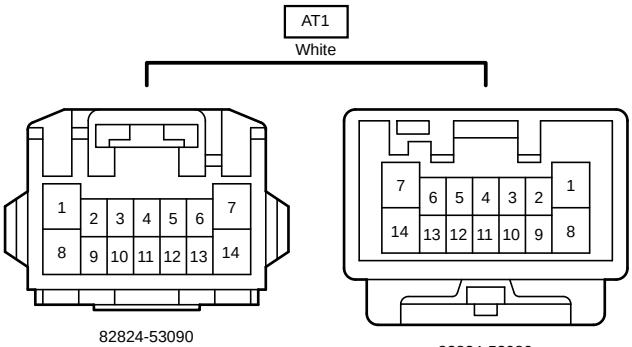
AF1
White



90980-12774

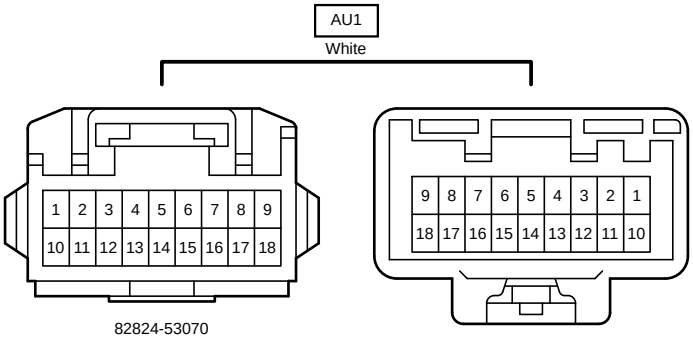


90980-12798



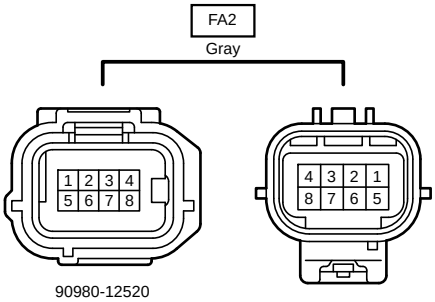
82824-53090

82824-53080



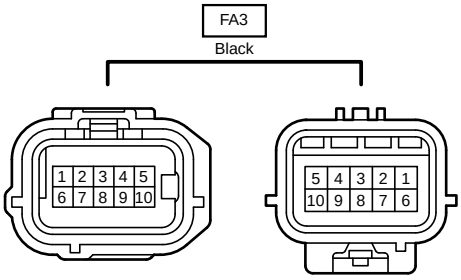
82824-53070

82824-53060



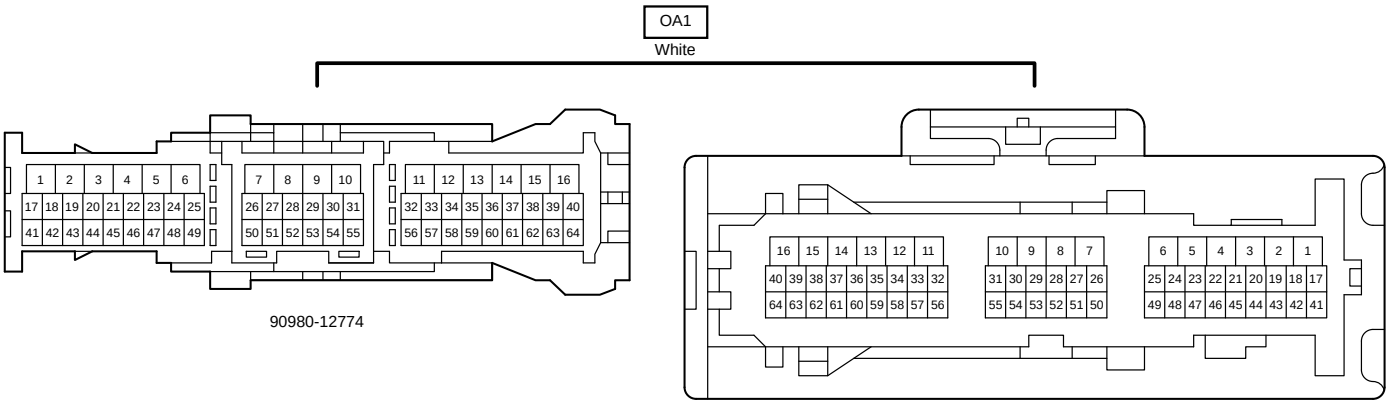
90980-12520

90980-12519



90980-12380

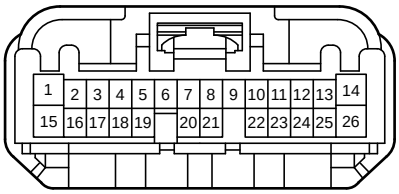
90980-12379



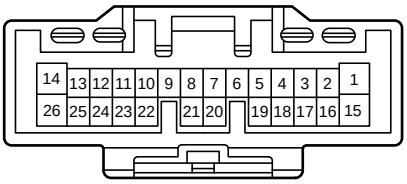
90980-12774

90980-12798

OA2
White

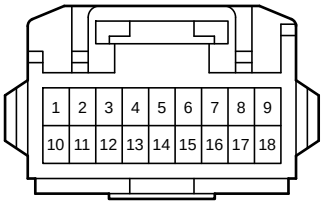


82824-24090

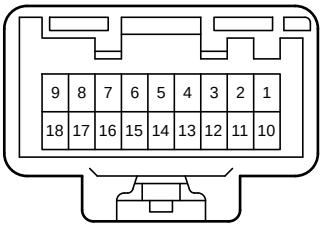


82824-24080

OA3
White

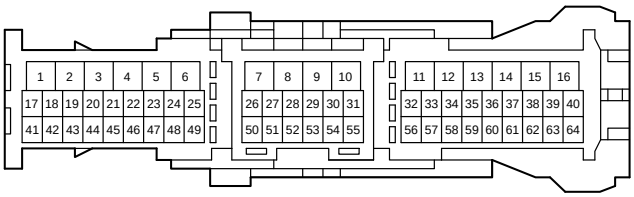


82824-53070

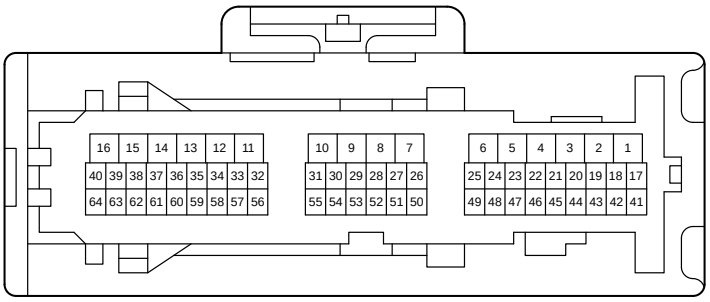


82824-53060

OT1
White

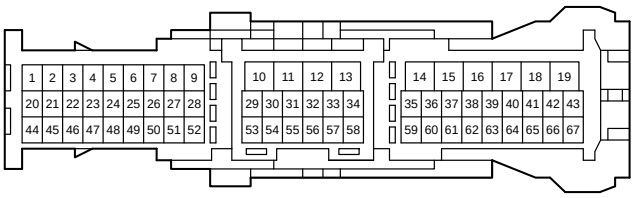


90980-12774

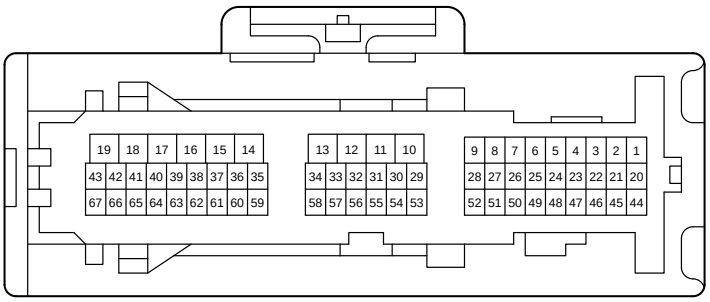


90980-12798

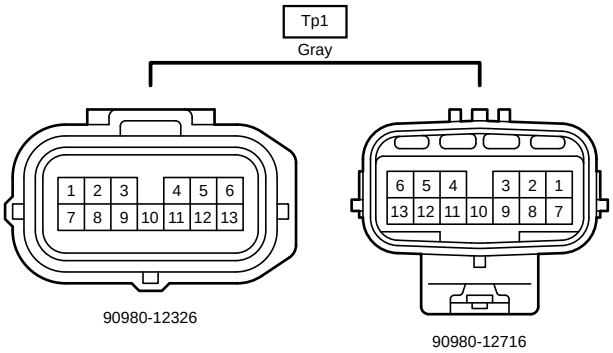
OU1
White



90980-12783



90980-12800


Tp1
Gray
1 2 3 4 5 6
7 8 9 10 11 12 13
6 5 4 3 2 1
13 12 11 10 9 8 7
90980-12326
90980-12716