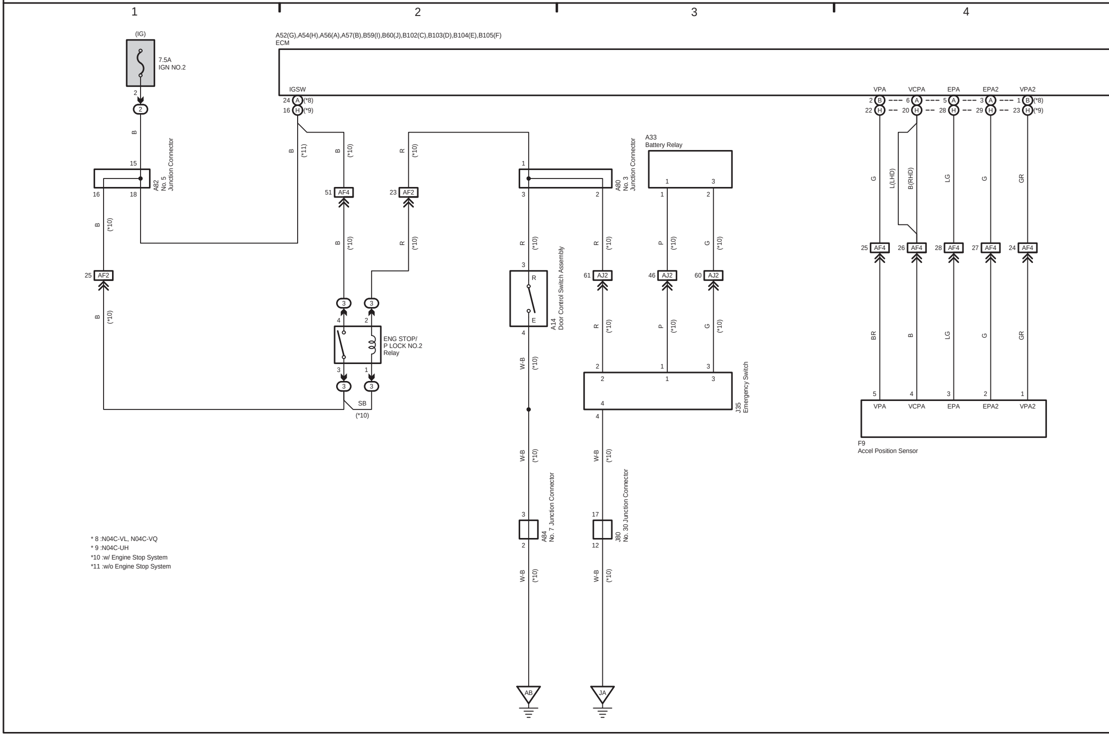
(Cont. next page)

Engine Stop System (N04C-UH)

Engine Control (N04C-UH, N04C-VL, N04C-VQ)

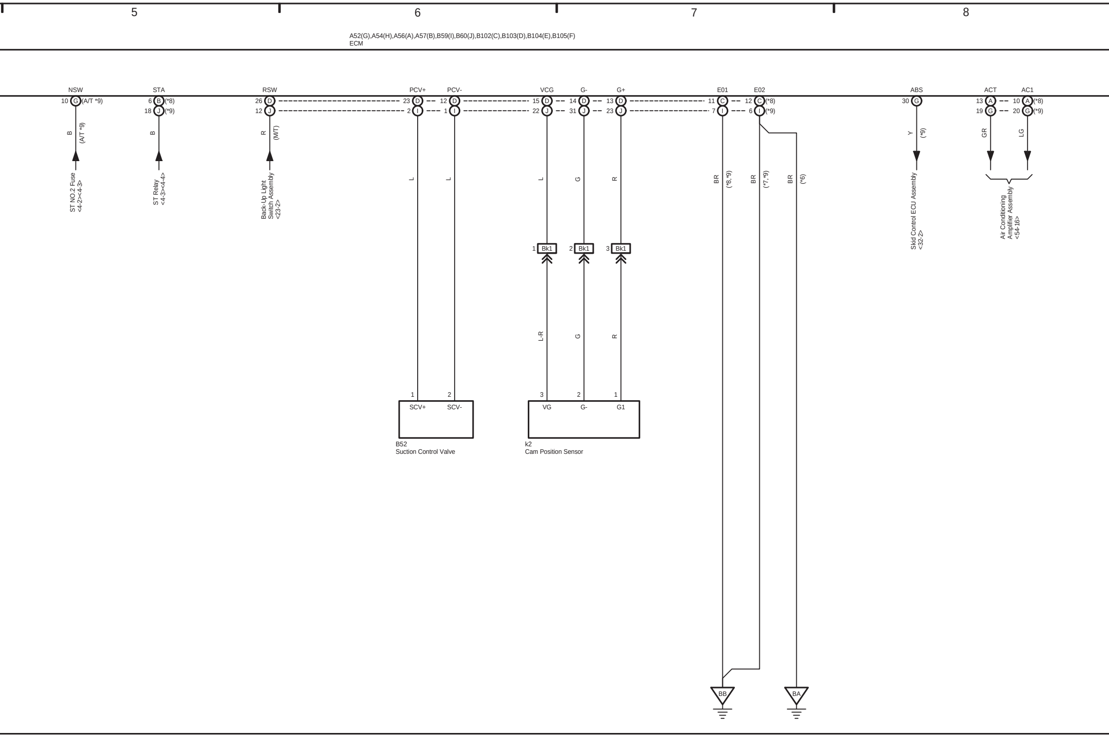

1
2
3
4
(IG)
7.5A
IGN NO.2
A52(G),A54(H),A56(A),A57(B),B59(I),B60(J),B102(C),B103(D),B104(E),B105(F)
ECM
IGSW
24 A (*8)
16 H (*9)
VPA
VCPA
EPA
EPA2
VPA2
A82
No. 5
Junction Connector
A80
No. 3
Junction Connector
A33
Battery Relay
ENG STOP/
P LOCK NO.2
Relay
A14
Door Control Switch Assembly
J35
Emergency Switch
A84
No. 7 Junction Connector
J80
No. 30 Junction Connector
F9
Accel Position Sensor
AF2
AF4
AJ2
SB
B
R
P
G
W-B
BR
LG
GR
L(LHD)
B(RHD)
(*10)
(*11)
AB
JA

* 8 :N04C-VL, N04C-VQ
* 9 :N04C-UH
*10 :w/ Engine Stop System
*11 :w/o Engine Stop System

(Cont. next page)

* 6 :N04C-VL
* 7 :N04C-VQ
* 8 :N04C-VL, N04C-VQ
* 9 :N04C-UH

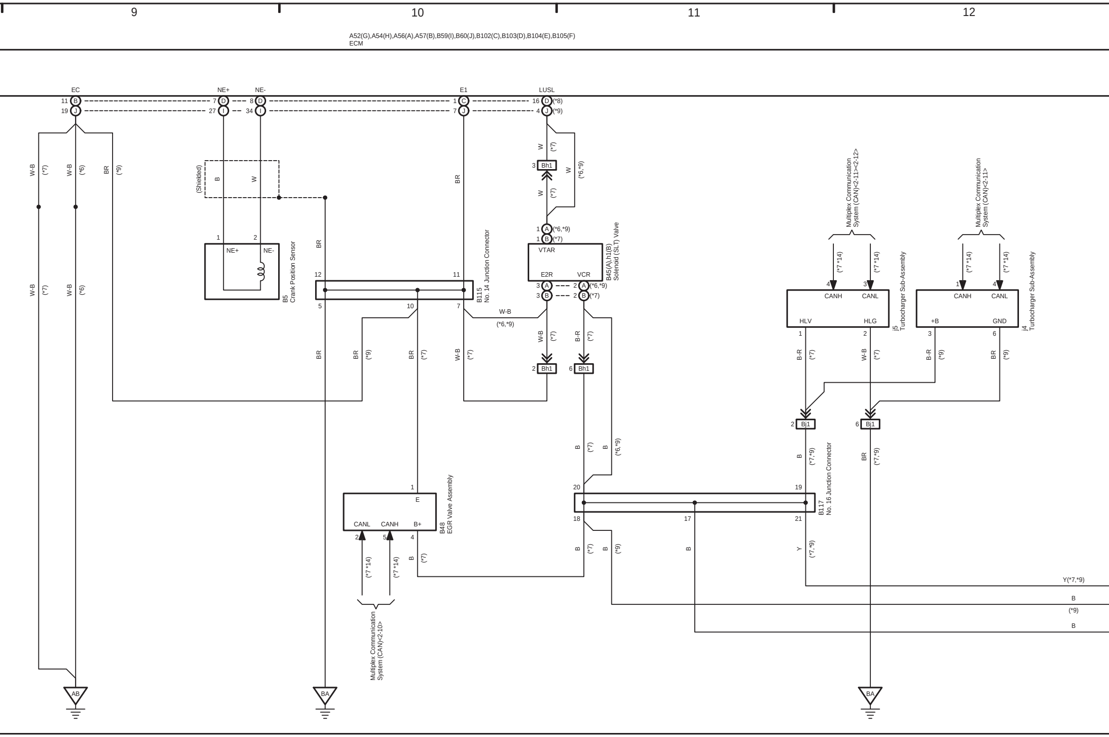
Engine Control (N04C-UH, N04C-VL, N04C-VQ)


5
6
7
8
A52(G),A54(H),A56(A),A57(B),B59(I),B60(J),B102(C),B103(D),B104(E),B105(F)
ECM
NSW
10 G (A/T *9)
B
(A/T *9)
ST NO.2 Fuse
<4-2><4-3>
STA
6 B (*8)
18 J (*9)
B
ST Relay
<4-3><4-4>
RSW
26 D
12 J
R
(M/T)
Back-Up Light
Switch Assembly
<23-2>
PCV+
23 D
2 I
PCV-
12 D
1 I
L
L
1
2
SCV+
SCV-
B52
Suction Control Valve
VCG
15 D
22 J
G-
14 D
31 J
G+
13 D
23 J
L
G
R
1 Bk1
2 Bk1
3 Bk1
L-R
G
R
3
2
1
VG
G-
G1
k2
Cam Position Sensor
E01
11 C
7 I
E02
12 C (*8)
6 I (*9)
BR
(*8, *9)
BR
(*7, *9)
BR
(*6)
BB
BA
ABS
30 G
Y
(*9)
Skid Control ECU Assembly
<32-2>
ACT
13 A
19 G
AC1
10 A (*8)
20 G (*9)
GR
LG
Air Conditioning
Amplifier Assembly
<54-16>

(Cont. next page)

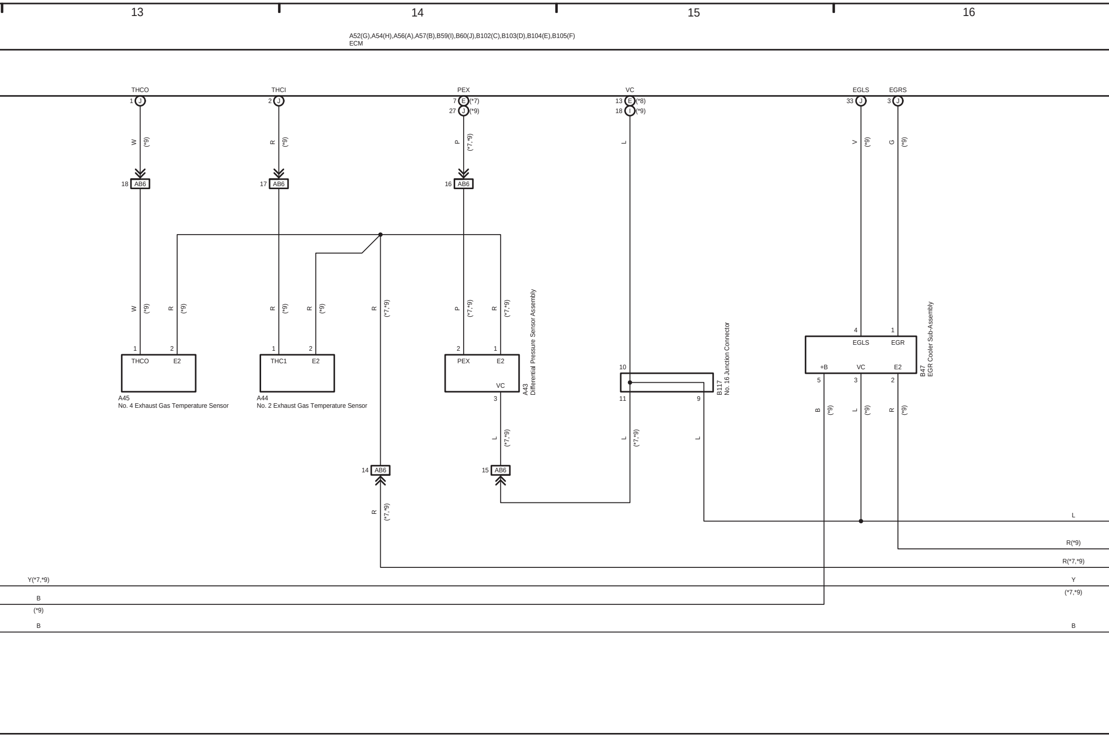
Engine Control (N04C-UH, N04C-VL, N04C-VQ)

* 6 :N04C-VL
* 7 :N04C-VQ
* 8 :N04C-VL, N04C-VQ
* 9 :N04C-UH
*14 :w/ Multiplex Communication System (CAN)


9
10
11
12
A52(G),A54(H),A56(A),A57(B),B59(I),B60(J),B102(C),B103(D),B104(E),B105(F)
ECM
EC
NE+
NE-
E1
LUSL
11 B
19 J
7 D
27 I
8 D
34 I
1 C
7 J
16 D (*8)
4 J (*9)
W-B (*7)
W-B (*6)
BR (*9)
(Shielded)
B
W
BR
W (*7)
3 Bh1
W (*6,*9)
1 A (*6,*9)
1 B (*7)
VTAR
E2R
VCR
B45(A),h1(B)
Solenoid (SLT) Valve
3 A — 2 A (*6,*9)
3 B — 2 B (*7)
B5
Crank Position Sensor
NE+
NE-
1
2
B115
No. 14 Junction Connector
12
11
5
10
7
W-B
(*6,*9)
BR (*9)
BR (*7)
W-B (*7)
W-B (*7)
B-R (*7)
2 Bh1
6 Bh1
B (*7)
B (*6,*9)
B48
EGR Valve Assembly
E
CANL
CANH
B+
1
2
5
4
(*7 *14)
B (*7)
Multiplex Communication System (CAN)<2-10>
B117
No. 16 Junction Connector
20
19
18
17
21
B (*7)
B (*9)
B
Y (*7,*9)
Multiplex Communication System (CAN)<2-11><2-12>
Multiplex Communication System (CAN)<2-11>
j5
Turbocharger Sub-Assembly
CANH
CANL
HLV
HLG
4
3
1
2
j4
Turbocharger Sub-Assembly
CANH
CANL
+B
GND
1
4
3
6
B-R (*7)
W-B (*7)
B-R (*9)
BR (*9)
2 Bj1
6 Bj1
B (*7,*9)
BR (*7,*9)
Y(*7,*9)
B
(*9)
B
AB
BA
BA

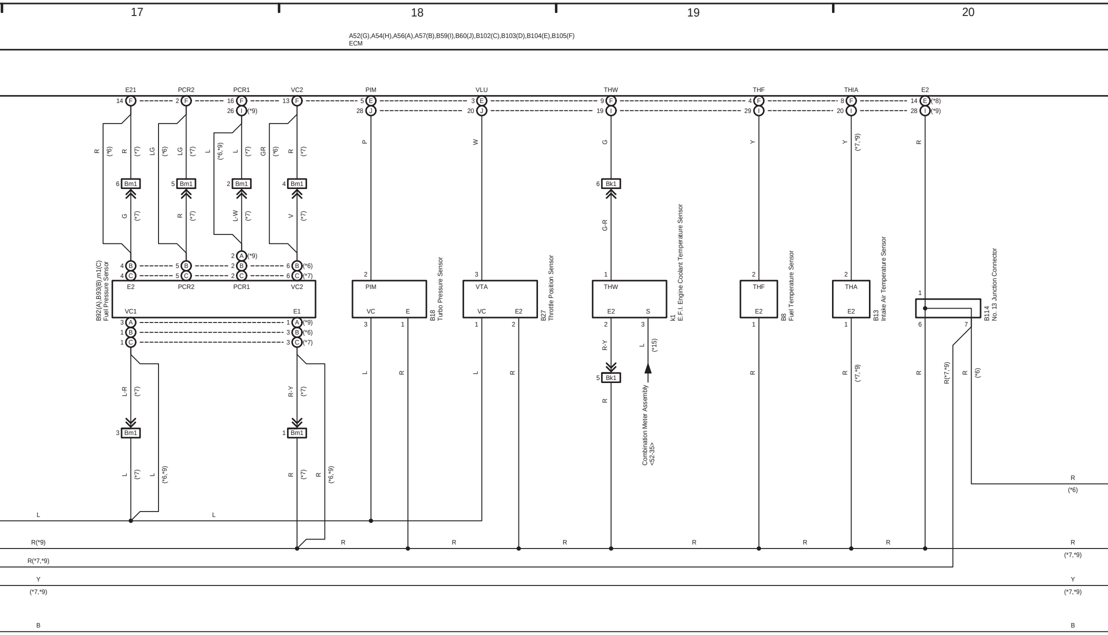
Engine Control (N04C-UH, N04C-VL, N04C-VQ)

* 7 :N04C-VQ
* 8 :N04C-VL, N04C-VQ
* 9 :N04C-UH


13
14
15
16
A52(G),A54(H),A56(A),A57(B),B59(I),B60(J),B102(C),B103(D),B104(E),B105(F)
ECM
THCO
1 J
THCI
2 J
PEX
7 E (*7)
27 J (*9)
VC
13 E (*8)
18 I (*9)
EGLS
33 J
EGRS
3 J
W (*9)
R (*9)
P (*7,*9)
L
V (*9)
G (*9)
18 AB6
17 AB6
16 AB6
W (*9)
R (*9)
R (*9)
R (*9)
R (*7,*9)
P (*7,*9)
R (*7,*9)
1 2
THCO E2
A45
No. 4 Exhaust Gas Temperature Sensor
1 2
THC1 E2
A44
No. 2 Exhaust Gas Temperature Sensor
2 1
PEX E2
VC
3
A43
Differential Pressure Sensor Assembly
10
11 9
B117
No. 16 Junction Connector
4 1
EGLS EGR
+B VC E2
5 3 2
B47
EGR Cooler Sub-Assembly
B (*9)
L (*9)
R (*9)
L (*7,*9)
L (*7,*9)
L
14 AB6
15 AB6
R (*7,*9)
L
R(*9)
R(*7,*9)
Y(*7,*9)
Y
(*7,*9)
B
(*9)
B
B

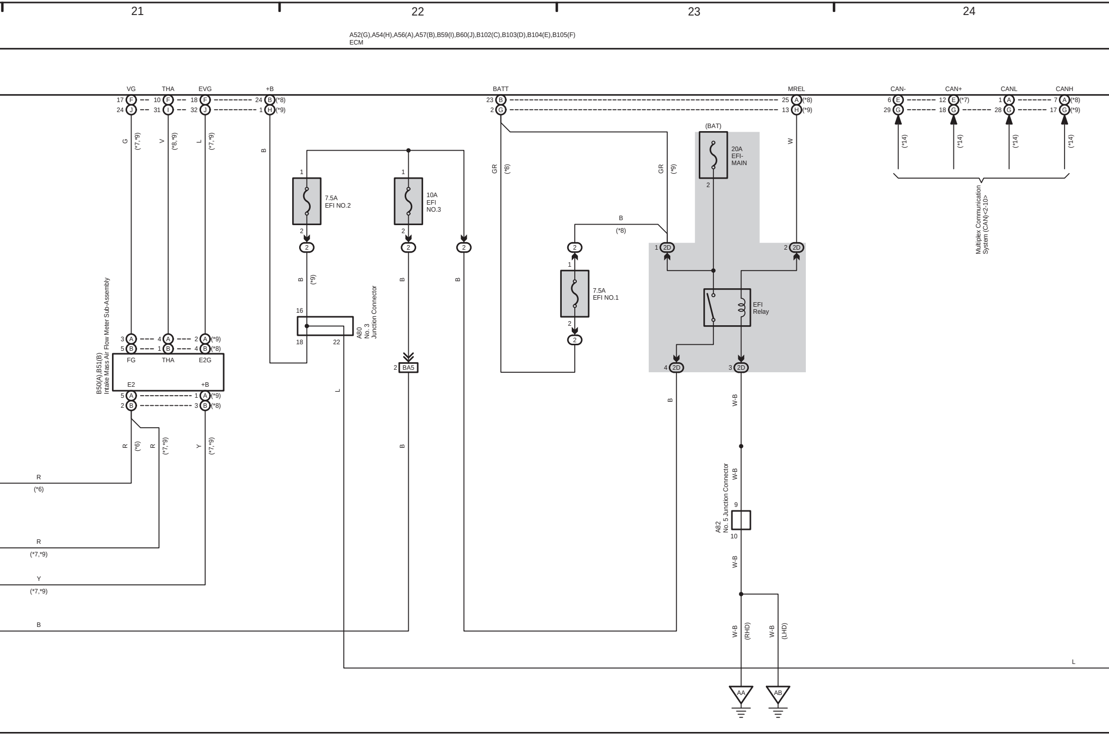
Engine Control (N04C-UH, N04C-VL, N04C-VQ)

* 6 :N04C-VL
* 7 :N04C-VQ
* 8 :N04C-VL, N04C-VQ
* 9 :N04C-UH
*15 :w/o Multiplex Communication System (CAN)


17
18
19
20
A52(G),A54(H),A56(A),A57(B),B59(I),B60(J),B102(C),B103(D),B104(E),B105(F)
ECM
E21
PCR2
PCR1
VC2
PIM
VLU
THW
THF
THIA
E2
(*8)
(*9)
(*6)
(*7)
Bm1
Bk1
B92(A),B93(B),m1(C)
Fuel Pressure Sensor
E2
PCR2
PCR1
VC2
VC1
E1
B18
Turbo Pressure Sensor
PIM
VC
E
B27
Throttle Position Sensor
VTA
VC
E2
k1
E.F.I. Engine Coolant Temperature Sensor
THW
E2
S
(*15)
Combination Meter Assembly
<52-35>
B8
Fuel Temperature Sensor
THF
E2
B13
Intake Air Temperature Sensor
THA
E2
B114
No. 13 Junction Connector
R(*9)
R(*7,*9)
Y
(*7,*9)
B
R
(*6)
L
P
W
G
Y
G-R
R-Y
L-R
L-W
LG
GR
V

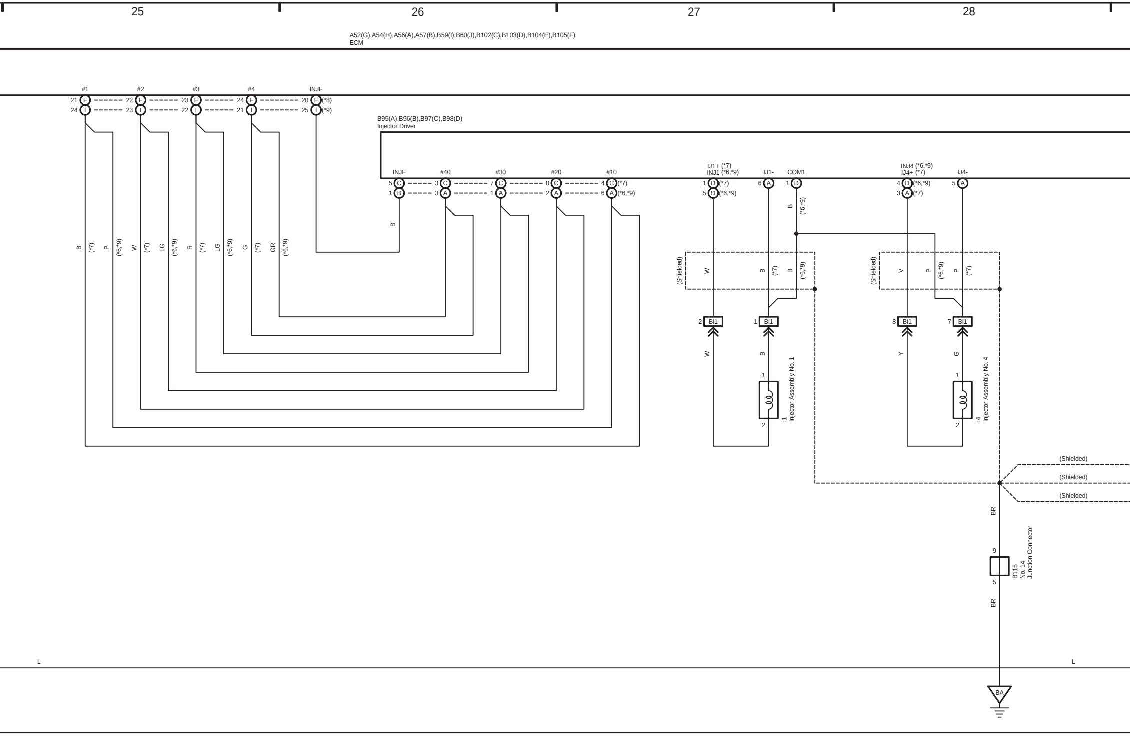
Engine Control (N04C-UH, N04C-VL, N04C-VQ)

* 6 :N04C-VL
* 7 :N04C-VQ
* 8 :N04C-VL, N04C-VQ
* 9 :N04C-UH
*14 :w/ Multiplex Communication System (CAN)


21
22
23
24
A52(G),A54(H),A56(A),A57(B),B59(I),B60(J),B102(C),B103(D),B104(E),B105(F)
ECM
VG
THA
EVG
+B
BATT
MREL
CAN-
CAN+
CANL
CANH
17 F
24 J
10 F
31 I
18 F
32 J
24 B (*8)
1 H (*9)
23 B
2 G
25 A (*8)
13 H (*9)
6 E
29 G
12 E (*7)
18 G
1 A
28 G
7 A (*8)
17 G (*9)
G (*7,*9)
V (*8,*9)
L (*7,*9)
B
GR (*8)
GR (*9)
W
(*14)
Multiplex Communication System (CAN)<2-10>
(BAT)
20A EFI-MAIN
7.5A EFI NO.2
10A EFI NO.3
7.5A EFI NO.1
EFI Relay
B (*8)
1 2D
2 2D
4 2D
3 2D
2
B (*9)
A80 No. 3 Junction Connector
16
18
22
2 BA5
B50(A),B51(B) Intake Mass Air Flow Meter Sub-Assembly
3 A
5 B
4 A
1 B
2 A (*9)
4 B (*8)
FG
THA
E2G
E2
+B
5 A
2 B
1 A (*9)
3 B (*8)
R (*6)
R (*7,*9)
Y (*7,*9)
L
B
W-B
A82 No. 5 Junction Connector
9
10
W-B (RHD)
W-B (LHD)
AA
AB

* 6 :N04C-VL
* 7 :N04C-VQ
* 8 :N04C-VL, N04C-VQ
* 9 :N04C-UH

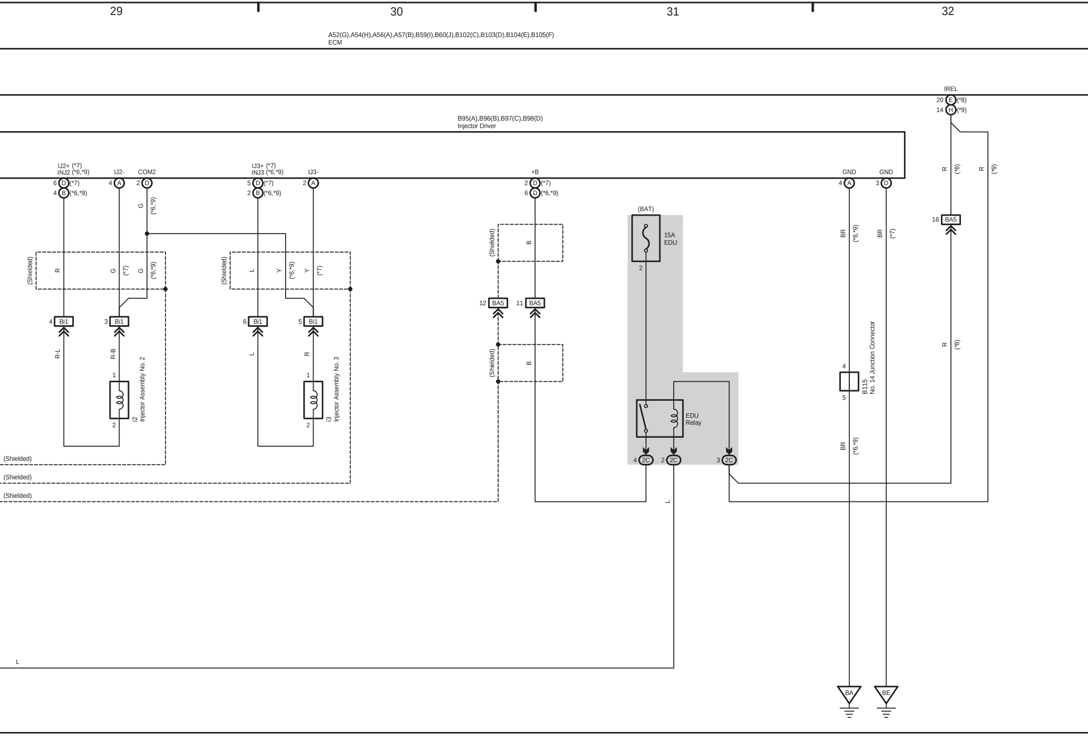
Engine Control (N04C-UH, N04C-VL, N04C-VQ)


25
26
27
28
A52(G),A54(H),A56(A),A57(B),B59(I),B60(J),B102(C),B103(D),B104(E),B105(F)
ECM
#1
#2
#3
#4
INJF
21 F
24 I
22 F
23 I
23 F
22 I
24 F
21 I
20 F (*8)
25 I (*9)
B95(A),B96(B),B97(C),B98(D)
Injector Driver
INJF
#40
#30
#20
#10
5 C
1 B
3 C
3 A
7 C
1 A
8 C
2 A
4 C (*7)
6 A (*6,*9)
IJ1+ (*7)
INJ1 (*6,*9)
1 D (*7)
5 D (*6,*9)
IJ1-
6 A
COM1
1 D
INJ4 (*6,*9)
IJ4+ (*7)
4 D (*6,*9)
3 A (*7)
IJ4-
5 A
B
(*7)
P
(*6,*9)
W
(*7)
LG
(*6,*9)
R
(*7)
LG
(*6,*9)
G
(*7)
GR
(*6,*9)
B
B
(*6,*9)
(Shielded)
W
B
(*7)
B
(*6,*9)
(Shielded)
V
P
(*6,*9)
P
(*7)
2 Bi1
1 Bi1
8 Bi1
7 Bi1
W
B
Y
G
1
2
i1
Injector Assembly No.1
1
2
i4
Injector Assembly No. 4
(Shielded)
(Shielded)
(Shielded)
BR
9
5
B115
No. 14
Junction Connector
BR
L
L
BA

(Cont. next page)

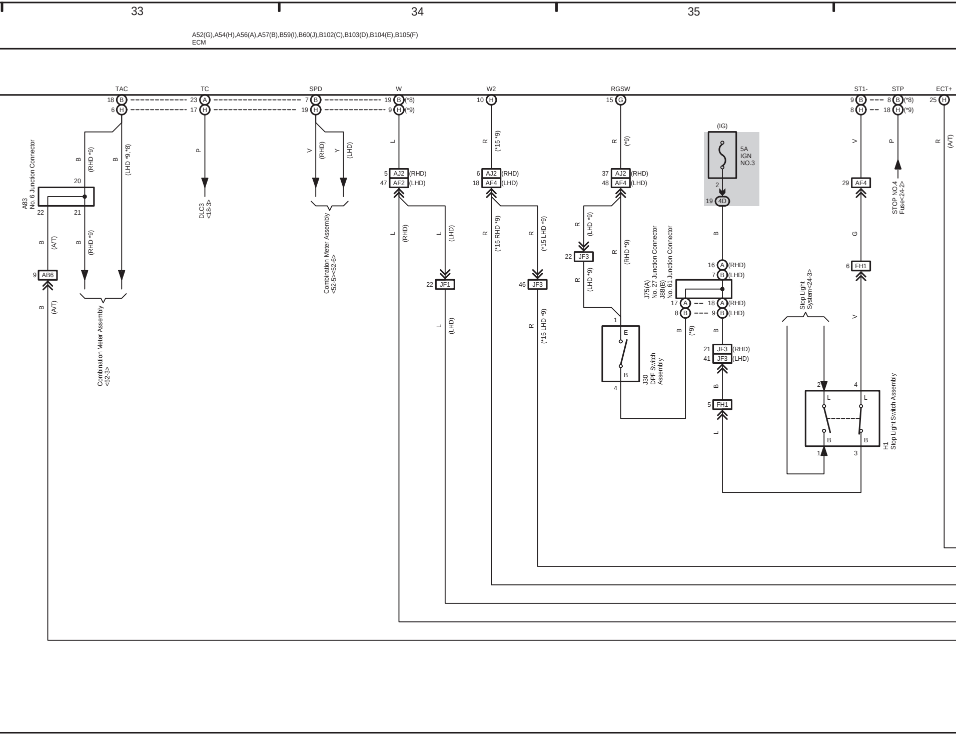
* 6 :N04C-VL
* 7 :N04C-VQ
* 8 :N04C-VL, N04C-VQ
* 9 :N04C-UH

Engine Control (N04C-UH, N04C-VL, N04C-VQ)


29
30
31
32
A52(G),A54(H),A56(A),A57(B),B59(I),B60(J),B102(C),B103(D),B104(E),B105(F)
ECM
IREL
20 E (*8)
14 H (*9)
B95(A),B96(B),B97(C),B98(D)
Injector Driver
IJ2+ (*7)
INJ2 (*6,*9)
6 D (*7)
4 B (*6,*9)
IJ2-
4 A
COM2
2 D
G (*6,*9)
IJ3+ (*7)
INJ3 (*6,*9)
5 D (*7)
2 B (*6,*9)
IJ3-
2 A
+B
2 D (*7)
6 D (*6,*9)
GND
4 A
GND
3 D
R (*8)
R (*9)
(BAT)
15A
EDU
2
16 BA5
BR (*6,*9)
BR (*7)
(Shielded)
R
G (*7)
G (*6,*9)
(Shielded)
L
Y (*6,*9)
Y (*7)
(Shielded)
B
12 BA5
11 BA5
4 Bi1
3 Bi1
6 Bi1
5 Bi1
R-L
R-B
L
R
1
2
i2
Injector Assembly No. 2
1
2
i3
Injector Assembly No. 3
(Shielded)
B
EDU
Relay
4
5
B115
No. 14 Junction Connector
R (*8)
BR (*6,*9)
4 2C
2 2C
3 2C
(Shielded)
(Shielded)
(Shielded)
L
L
BA
BE

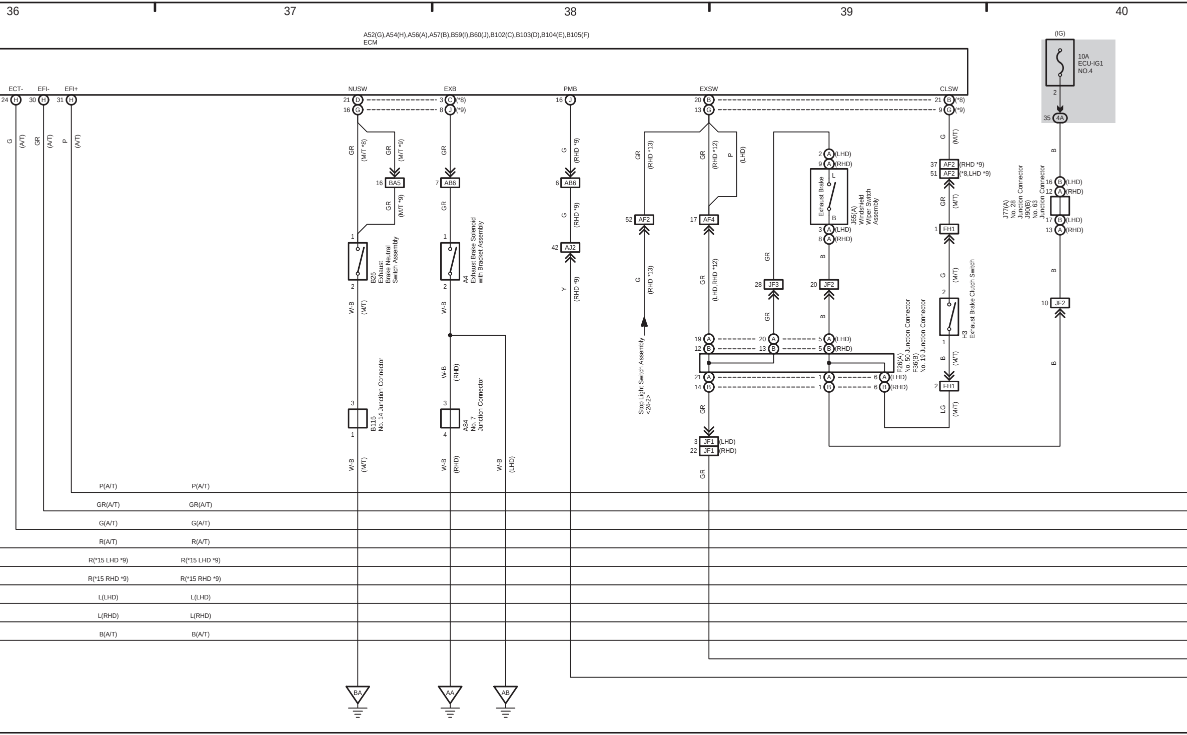
Engine Control (N04C-UH, N04C-VL, N04C-VQ)

* 8 :N04C-VL, N04C-VQ
* 9 :N04C-UH
*15 :w/o Multiplex Communication System (CAN)


33
34
35
A52(G),A54(H),A56(A),A57(B),B59(I),B60(J),B102(C),B103(D),B104(E),B105(F)
ECM
TAC
TC
SPD
W
W2
RGSW
ST1-
STP
ECT+
18 B
6 H
23 A
17 H
7 B
19 H
19 B (*8)
9 H (*9)
10 H
15 G
9 B
8 H
8 B (*8)
18 H (*9)
25 H
B (RHD *9)
B (LHD *9,*8)
P
V (RHD)
Y (LHD)
L
R (*15 *9)
R (*9)
(IG)
5A IGN NO.3
2
19 4D
V
P
R (A/T)
20
A83 No. 6 Junction Connector
22
21
DLC3 <18-3>
5 AJ2 (RHD)
47 AF2 (LHD)
6 AJ2 (RHD)
18 AF4 (LHD)
37 AJ2 (RHD)
48 AF4 (LHD)
29 AF4
STOP NO.4 Fuse<24-2>
B (A/T)
B (RHD *9)
Combination Meter Assembly <52-5><52-6>
L (RHD)
L (LHD)
R (*15 RHD *9)
R (*15 LHD *9)
R (LHD *9)
R (RHD *9)
B
G
22 JF3
9 AB6
22 JF1
46 JF3
R (LHD *9)
16 A (RHD)
7 B (LHD)
6 FH1
J75(A) No. 27 Junction Connector
J88(B) No. 61 Junction Connector
17 A
18 A (RHD)
8 B
9 B (LHD)
B (A/T)
Combination Meter Assembly <52-3>
L (LHD)
R (*15 LHD *9)
1
E
B
4
J30 DPF Switch Assembly
B (*9)
B
21 JF3 (RHD)
41 JF3 (LHD)
B
5 FH1
L
Stop Light System<24-3>
V
2
4
L
L
B
B
1
3
H1 Stop Light Switch Assembly

Exhaust Brake (N04C-UH, N04C-VL, N04C-VQ)

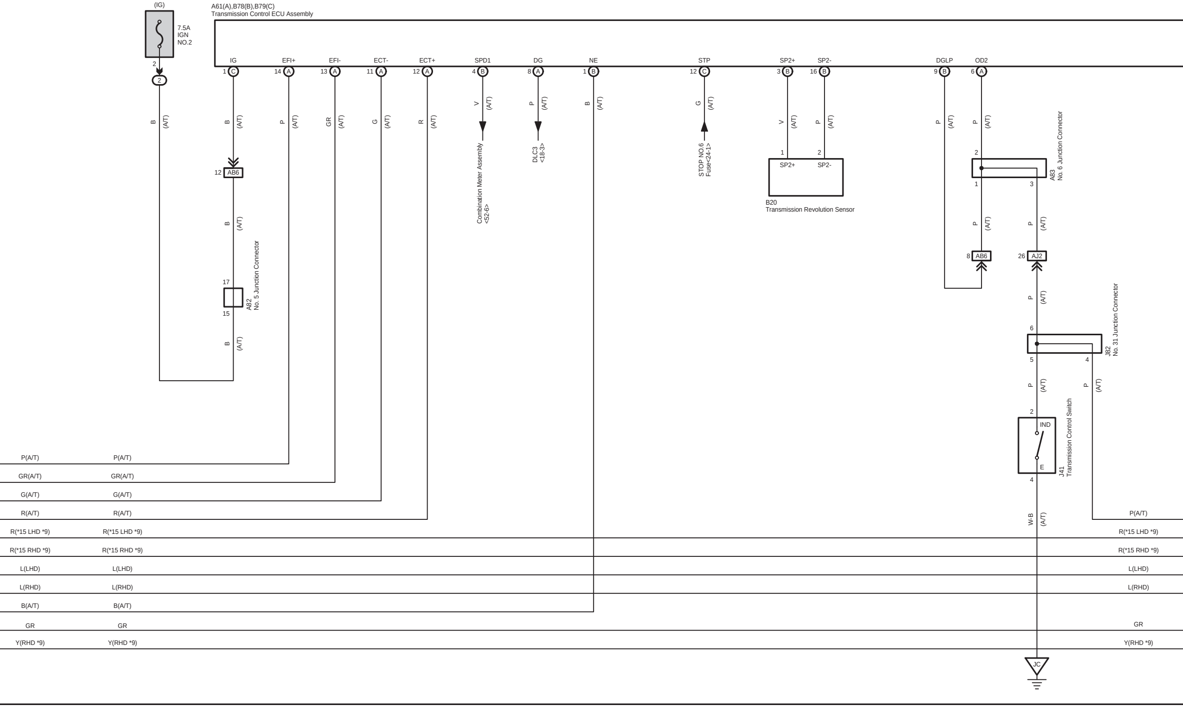
* 8 :N04C-VL, N04C-VQ
* 9 :N04C-UH
*12 :w/ Exhaust Switch
*13 :w/o Exhaust Switch
*15 :w/o Multiplex Communication System (CAN)


36
37
38
39
40
A52(G),A54(H),A56(A),A57(B),B59(I),B60(J),B102(C),B103(D),B104(E),B105(F)
ECM
ECT-
EFI-
EFI+
NUSW
EXB
PMB
EXSW
CLSW
(IG)
10A
ECU-IG1
NO.4
35 4A
24 H
30 H
31 H
21 D
16 G
3 C (*8)
8 J (*9)
16 J
20 B
13 G
21 B (*8)
9 G (*9)
G (A/T)
GR (A/T)
P (A/T)
GR (M/T *8)
GR (M/T *9)
16 BA5
7 AB6
6 AB6
G (RHD *9)
42 AJ2
Y (RHD *9)
1
2
B25
Exhaust Brake Neutral Switch Assembly
A4
Exhaust Brake Solenoid with Bracket Assembly
W-B (M/T)
W-B (RHD)
W-B (LHD)
B115
No. 14 Junction Connector
A84
No. 7 Junction Connector
3
4
GR (RHD *13)
52 AF2
G (RHD *13)
Stop Light Switch Assembly
<24-2>
GR (RHD *12)
P (LHD)
17 AF4
GR (LHD,RHD *12)
2 A (LHD)
9 A (RHD)
Exhaust Brake
L
B
J65(A)
Windshield Wiper Switch Assembly
3 A (LHD)
8 A (RHD)
28 JF3
20 JF2
19 A
12 B
20 A
13 B
5 A (LHD)
5 B (RHD)
21 A
14 B
1 A
1 B
6 A (LHD)
6 B (RHD)
F26(A)
No. 50 Junction Connector
F36(B)
No. 19 Junction Connector
3 JF1 (LHD)
22 JF1 (RHD)
GR
G (M/T)
37 AF2 (RHD *9)
51 AF2 (*8,LHD *9)
1 FH1
H3
Exhaust Brake Clutch Switch
B (M/T)
2 FH1
LG (M/T)
B
16 B (LHD)
12 A (RHD)
17 B (LHD)
13 A (RHD)
J77(A)
No. 28 Junction Connector
J90(B)
No. 63 Junction Connector
10 JF2
P(A/T)
GR(A/T)
G(A/T)
R(A/T)
R(*15 LHD *9)
R(*15 RHD *9)
L(LHD)
L(RHD)
B(A/T)
BA
AA
AB

ECT

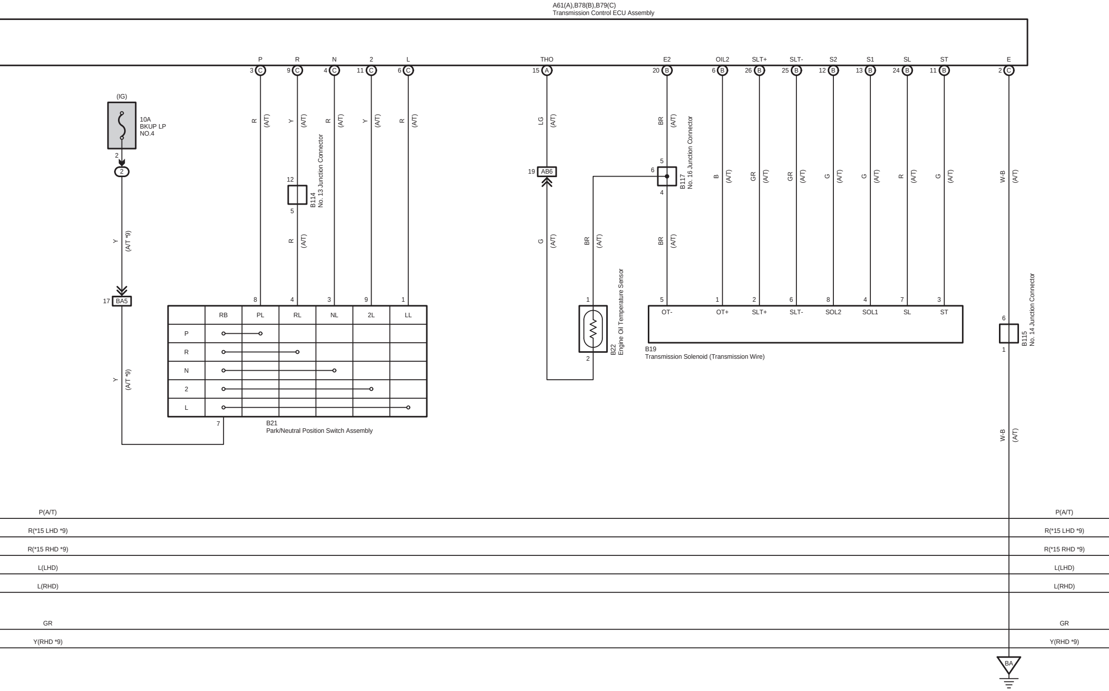
* 9 :N04C-UH
*15 :w/o Multiplex Communication System (CAN)

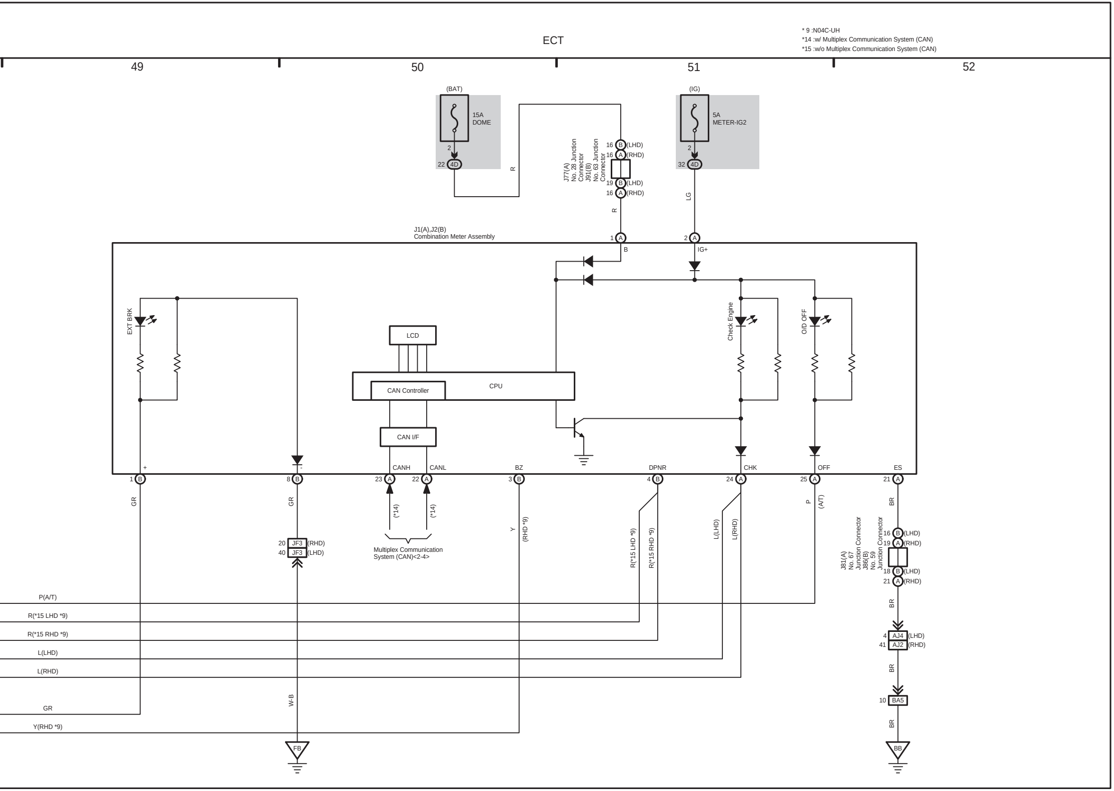
41 42 43 44


(IG)
7.5A
IGN
NO.2
A61(A),B78(B),B79(C)
Transmission Control ECU Assembly
IG
EFI+
EFI-
ECT-
ECT+
SPD1
DG
NE
STP
SP2+
SP2-
DGLP
OD2
1 C
14 A
13 A
11 A
12 A
4 B
8 A
1 B
12 C
3 B
16 B
9 B
6 A
2
B (A/T)
P (A/T)
GR (A/T)
G (A/T)
R (A/T)
V (A/T)
12 AB6
A82
No. 5 Junction Connector
17
15
Combination Meter Assembly
<52-6>
DLC3
<18-3>
STOP NO.6
Fuse<24-1>
B20
Transmission Revolution Sensor
A83
No. 6 Junction Connector
8 AB6
26 AJ2
J82
No. 31 Junction Connector
IND
E
J41
Transmission Control Switch
W-B (A/T)
JC
P(A/T)
GR(A/T)
G(A/T)
R(A/T)
R(*15 LHD *9)
R(*15 RHD *9)
L(LHD)
L(RHD)
B(A/T)
GR
Y(RHD *9)

ECT

* 9 :N04C-UH
*15 :w/o Multiplex Communication System (CAN)


A61(A),B78(B),B79(C)
Transmission Control ECU Assembly
P R N 2 L THO E2 OIL2 SLT+ SLT- S2 S1 SL ST E
3 C 9 C 4 C 11 C 6 C 15 A 20 B 6 B 26 B 25 B 12 B 13 B 24 B 11 B 2 C
(IG)
10A
BKUP LP
NO.4
2
2
Y (A/T *9)
17 BA5
Y (A/T *9)
R (A/T)
Y (A/T)
R (A/T)
Y (A/T)
R (A/T)
12
B114
No. 13 Junction Connector
5
R (A/T)
8 4 3 9 1
RB PL RL NL 2L LL
P
R
N
2
L
7
B21
Park/Neutral Position Switch Assembly
LG (A/T)
19 AB6
G (A/T)
BR (A/T)
1
B22
Engine Oil Temperature Sensor
2
BR (A/T)
5
6
B117
No. 16 Junction Connector
4
BR (A/T)
B (A/T)
GR (A/T)
GR (A/T)
G (A/T)
G (A/T)
R (A/T)
G (A/T)
5 1 2 6 8 4 7 3
OT- OT+ SLT+ SLT- SOL2 SOL1 SL ST
B19
Transmission Solenoid (Transmission Wire)
W-B (A/T)
6
B115
No. 14 Junction Connector
1
W-B (A/T)
P(A/T)
R(*15 LHD *9)
R(*15 RHD *9)
L(LHD)
L(RHD)
GR
Y(RHD *9)
BA



ECT

* 9 :N04C-UH
*14 :w/ Multiplex Communication System (CAN)
*15 :w/o Multiplex Communication System (CAN)

49
50
51
52
(BAT)
15A
DOME
2
22 4D
R
(IG)
5A
METER-IG2
2
32 4D
LG
J77(A)
No. 28 Junction Connector
J91(B)
No. 63 Junction Connector
16 B (LHD)
16 A (RHD)
19 B (LHD)
16 A (RHD)
R
J1(A),J2(B)
Combination Meter Assembly
1 A
B
2 A
IG+
EXT BRK
LCD
CPU
CAN Controller
CAN I/F
Check Engine
O/D OFF
+
-
CANH
CANL
BZ
DPNR
CHK
OFF
ES
1 B
8 B
23 A
22 A
3 B
4 B
24 A
25 A
21 A
GR
GR
(*14)
(*14)
Multiplex Communication System (CAN)<2-4>
Y
(RHD *9)
R(*15 LHD *9)
R(*15 RHD *9)
L(LHD)
L(RHD)
P
(A/T)
BR
20 JF3 (RHD)
40 JF3 (LHD)
J81(A)
No. 67 Junction Connector
J86(B)
No. 59 Junction Connector
16 B (LHD)
19 A (RHD)
18 B (LHD)
21 A (RHD)
BR
4 AJ4 (LHD)
41 AJ2 (RHD)
BR
10 BA5
BR
BB
P(A/T)
R(*15 LHD *9)
R(*15 RHD *9)
L(LHD)
L(RHD)
GR
Y(RHD *9)
W-B
FB