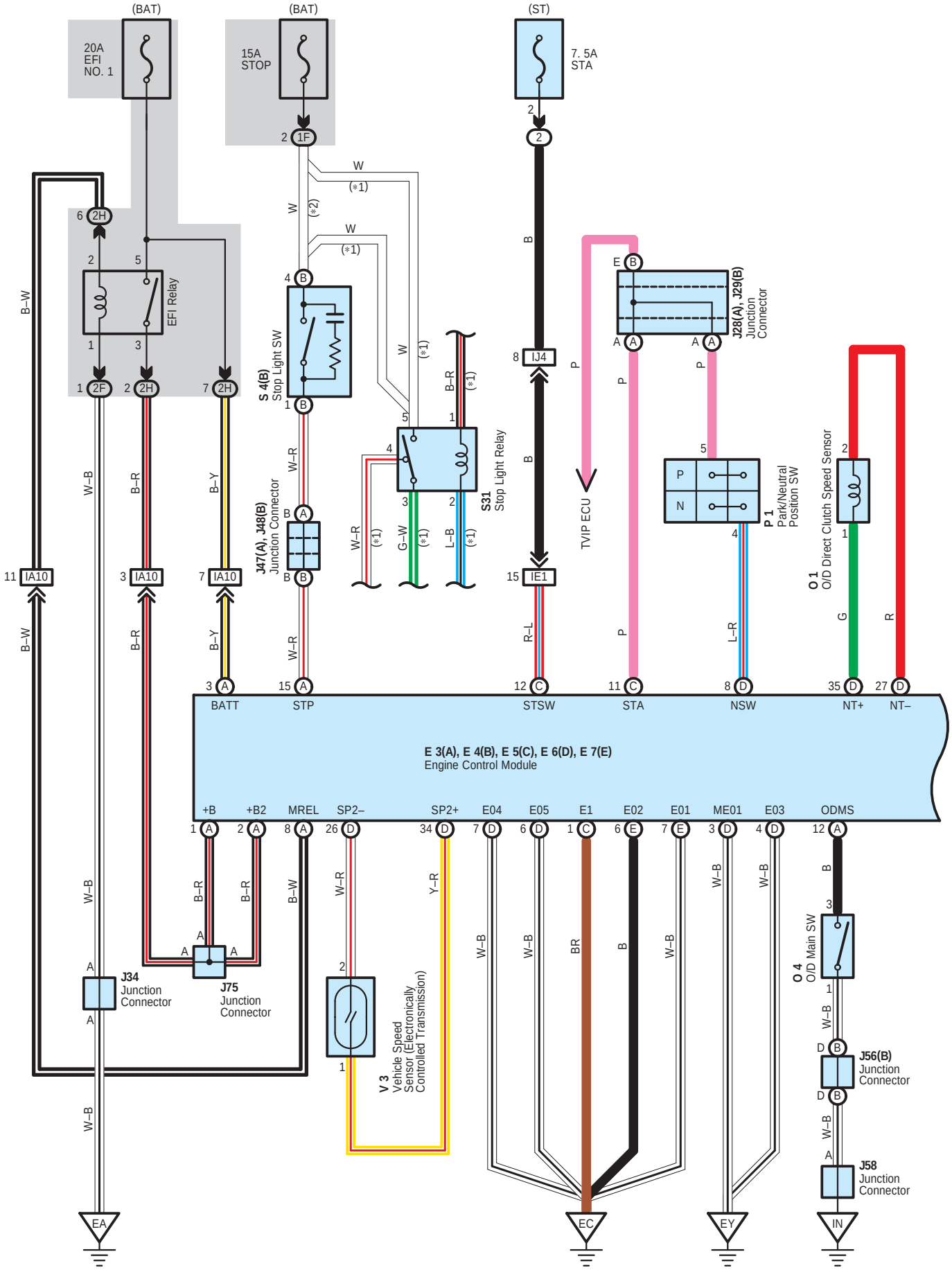
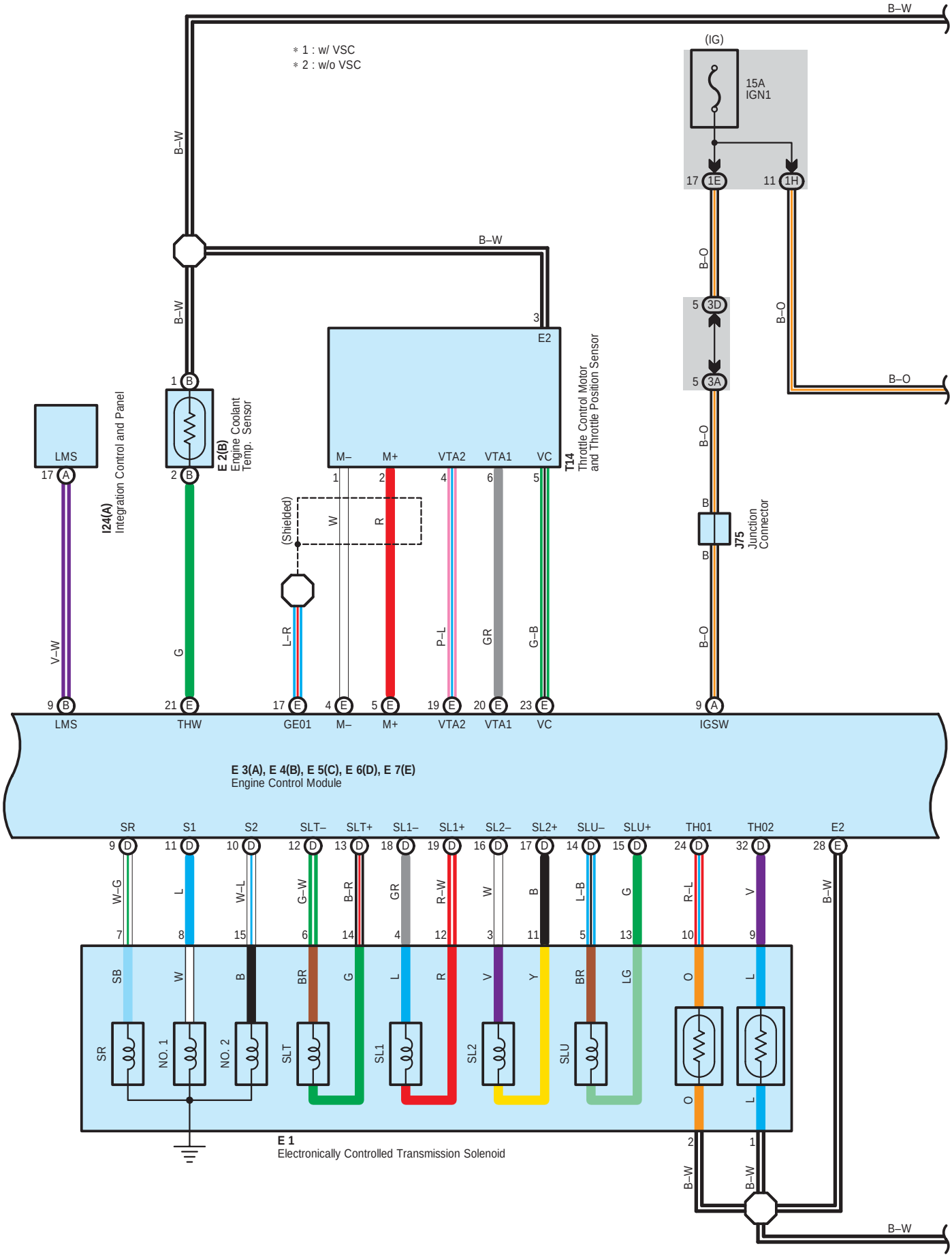
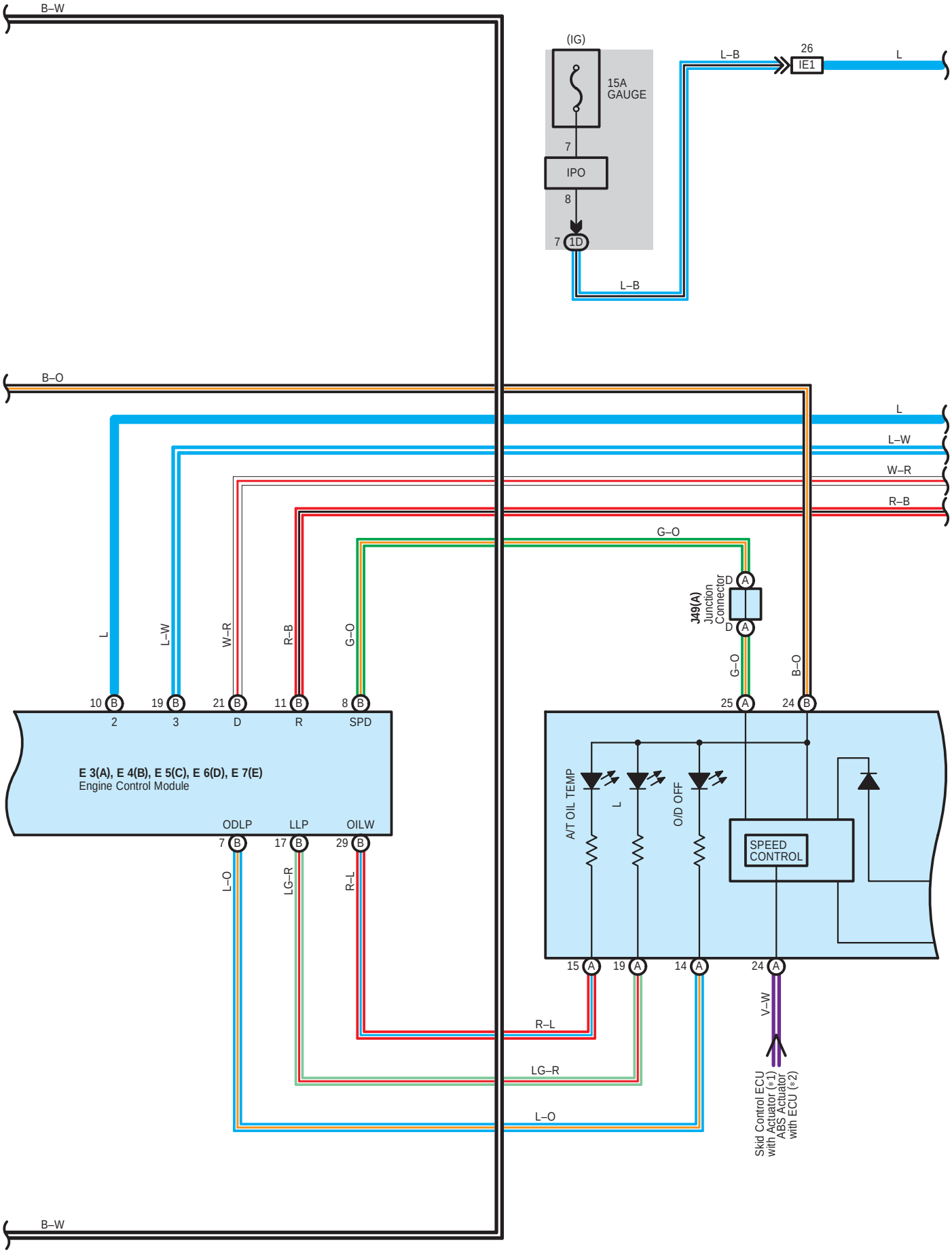
ECT and A/T Indicator (Double Cab)

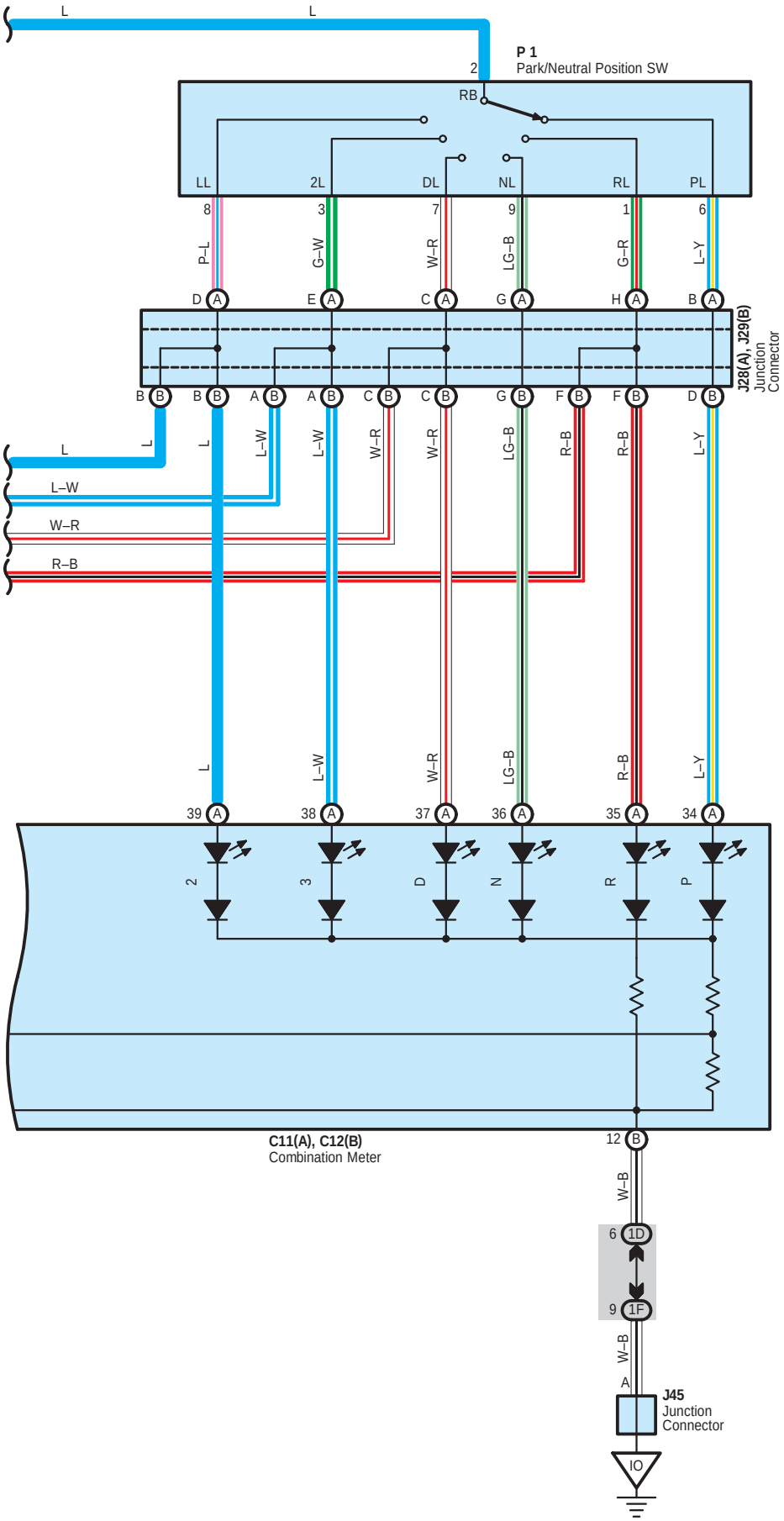



＊1 : w/ VSC
＊2 : w/o VSC
B–W
(IG)
15A
IGN1
17 1E
11 1H
B–O
5 3D
5 3A
B–O
B–O
B–O
B–O
B–W
B–W
B–W
3
E2
T14
Throttle Control Motor
and Throttle Position Sensor
M– M+ VTA2 VTA1 VC
1 2 4 6 5
1 B
2 B
E 2(B)
Engine Coolant
Temp. Sensor
LMS
17 A
I24(A)
Integration Control and Panel
(Shielded)
W
R
L–R
P–L
GR
G–B
V–W
G
B
J75
Junction
Connector
B
B–O
9 B
21 E
17 E
4 E
5 E
19 E
20 E
23 E
9 A
LMS
THW
GE01
M–
M+
VTA2
VTA1
VC
IGSW
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
SR S1 S2 SLT– SLT+ SL1– SL1+ SL2– SL2+ SLU– SLU+ TH01 TH02 E2
9 D 11 D 10 D 12 D 13 D 18 D 19 D 16 D 17 D 14 D 15 D 24 D 32 D 28 E
W–G L W–L G–W B–R GR R–W W B L–B G R–L V B–W
7 8 15 6 14 4 12 3 11 5 13 10 9
SB W B BR G L R V Y BR LG O L O L
SR NO. 1 NO. 2 SLT SL1 SL2 SLU
E 1
Electronically Controlled Transmission Solenoid
2 1
B–W B–W
B–W

ECT and A/T Indicator (Double Cab)



＊1 : w/ VSC
＊2 : w/o VSC



ECT and A/T Indicator (Double Cab)

System Outline

The electronically controlled transmission electrically controls the, throttle pressure, lock–up pressure, and accumulator pressure etc. through the solenoid valve.
The electronically controlled transmission is a system which precisely controls the gear shift timing and lock–up timing in response to the vehicle's driving conditions and the engine condition detected by various sensors. It makes smooth driving possible by shift selection of the gear which is the most appropriate to the driving conditions at that time, and by preventing downing, squat and gear shift shock when starting off.

1. Gear Shift Operation

When driving, the engine warm up condition is input as a control signal from the engine coolant temp. sensor to TERMINAL THW of the engine control module, and the vehicle speed is input to TERMINAL SP2+ of the engine control module from the vehicle speed sensor. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINALS VTA1, VTA2 of the engine control module as a throttle angle signal. Based on these signals, the engine control module selects the best shift position for the driving conditions and sends current to the electronically controlled transmission solenoid.

2. Lock–Up Operation

When the engine control module decides based on each signal that the lock–up condition has been met, the current flows through TERMINAL SLU+ of the engine control module to TERMINAL 5 of the electronically controlled transmission solenoid to TERMINAL 13 to TERMINAL SLU– of the engine control module to GROUND.

3. Stop Light SW Circuit

If the brake pedal is depressed (Stop light SW on) when driving in lock–up position, a signal is input to TERMINAL STP of the engine control module. As a result, the engine control module cuts the current to the solenoid to release the lock–up.

4. Overdrive Circuit

* O/D main SW on
  When the O/D main SW is switched to ON position, a signal is input to TERMINAL ODMS of the engine control module, and enables shift change to the overdrive range, through the control of the engine control module.
* O/D main SW off
  When the O/D main SW is switched to OFF position, a signal is input to TERMINAL ODMS of the engine control module, and prohibits shift change to the overdrive range through the control of the engine control module. When in the overdrive range already, shift down is made.

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
C11	A	72	I24	A	73	J58		74
C12	B	72	J28	A	74	J75		74
E1		70	J29	B	74	O1		71
E2	B	70	J34		71	O4		75
E3	A	73	J45		74	P1		71
E4	B	73	J47	A	74	S4	B	75
E5	C	73	J48	B	74	S31		75
E6	D	73	J49	A	74	T14		71
E7	E	73	J56	B	74	V3		71

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	42	Engine Room R/B No.2 (Engine Compartment Left)

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	49	Cowl Wire and Driver Side J/B (Lower Finish Panel)
1E		
1F		
1H		
2F	45	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
2H		
3A	52	Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal)
3D		

: **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA10	92	Engine Room Main Wire and Cowl Wire (Left Kick Panel)
IE1	93	Engine Wire and Cowl Wire (Right Side of Instrument Panel)
IJ4	93	Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH)

: **Ground Points**

Code	See Page	Ground Points Location
EA	90	Front Left Fender Apron
EC	90	Rear Bank of Left Cylinder Head
EY	90	Front Left Side of Cylinder Head
IN	92	Right Kick Panel
IO	92	Left Kick Panel