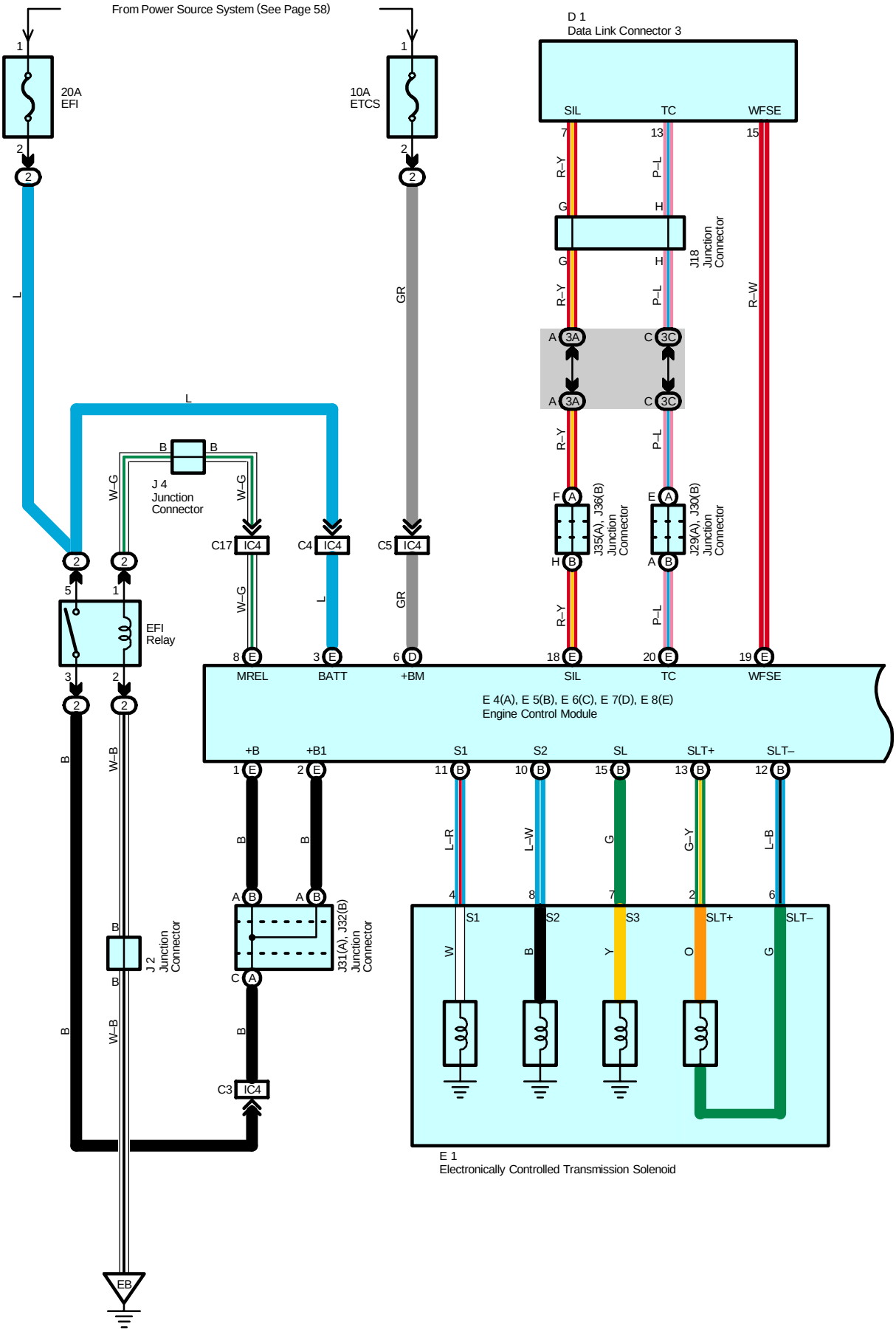
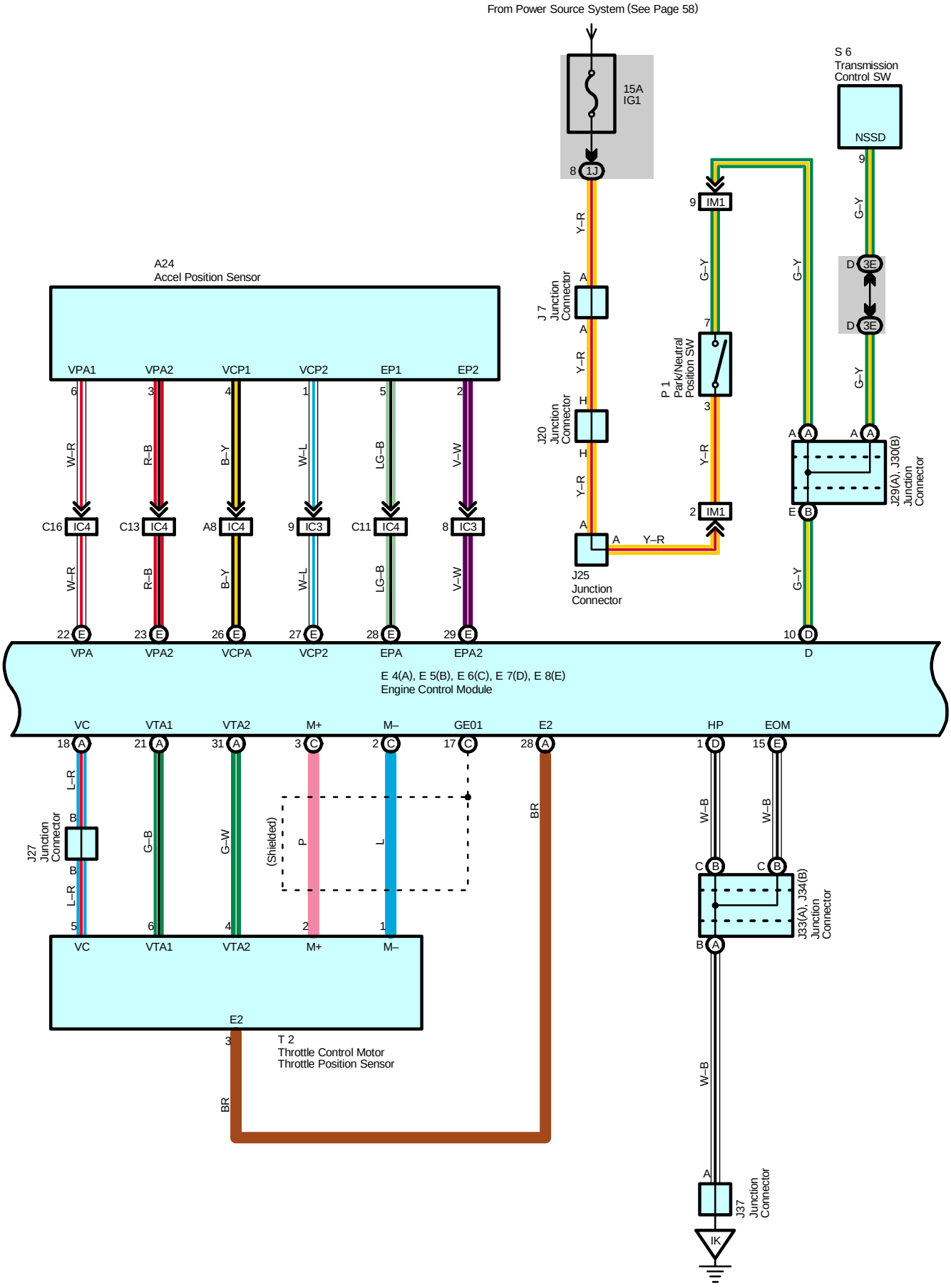
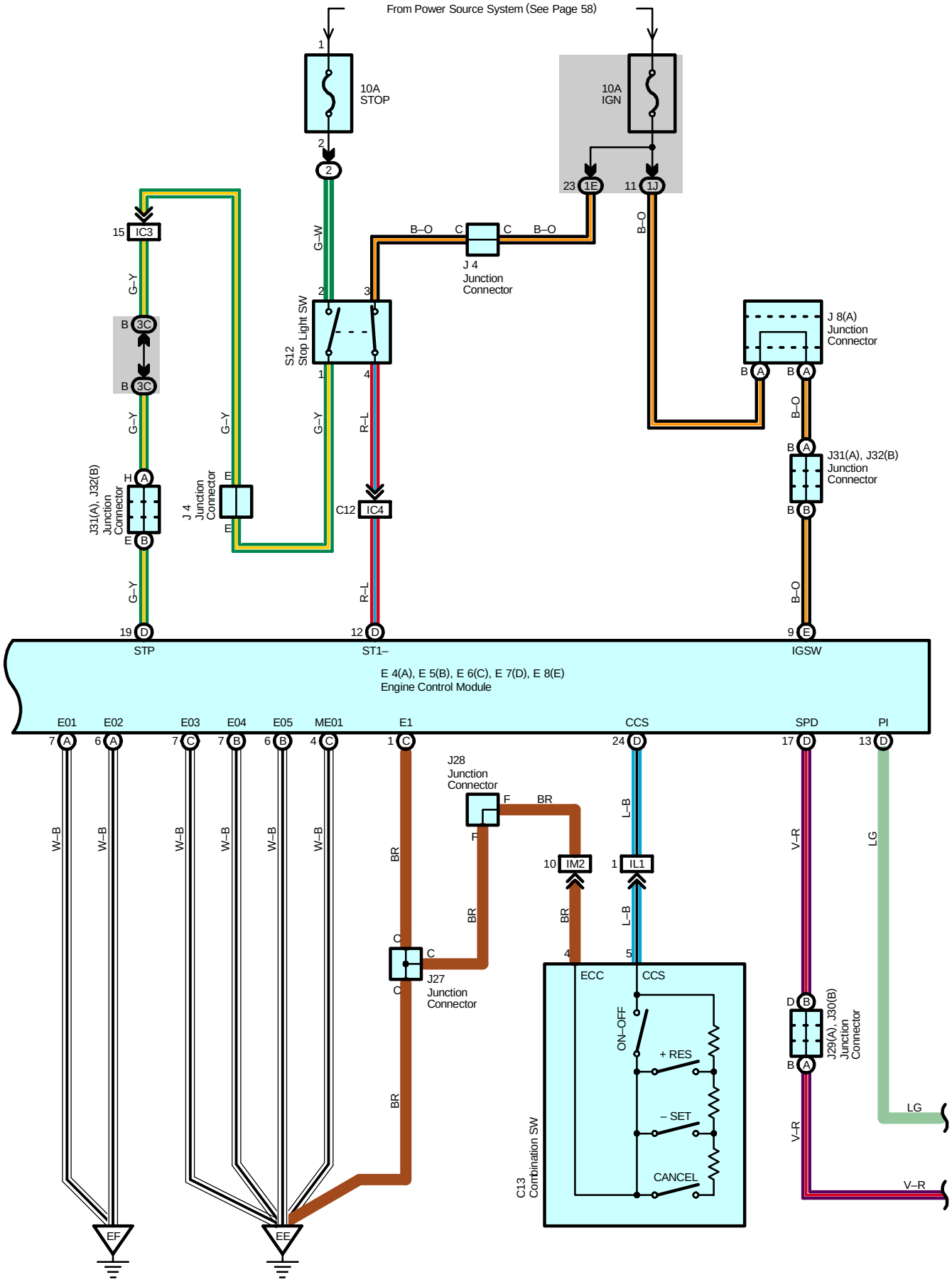
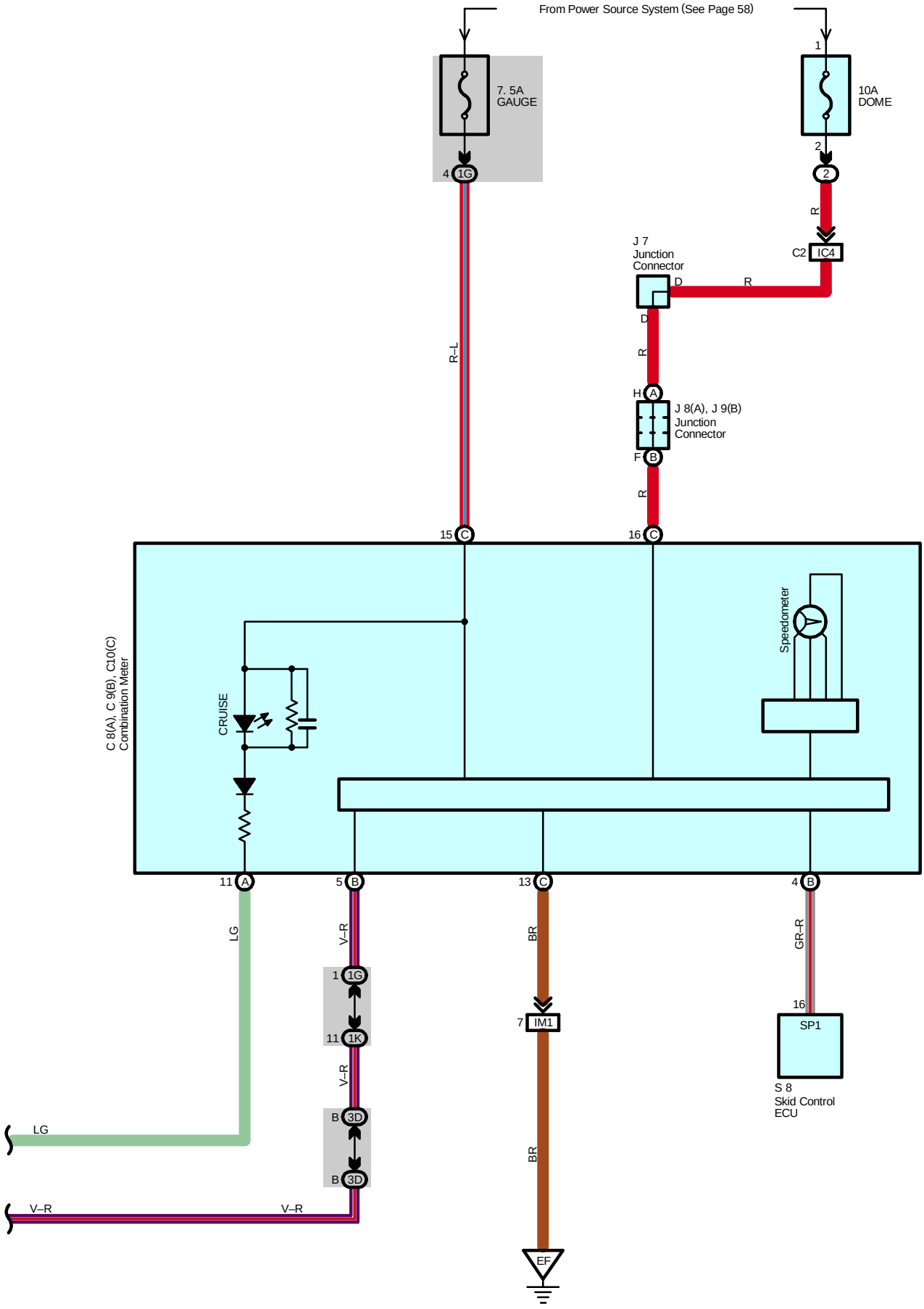

From Power Source System (See Page 58)
20A EFI
10A ETCS
D 1
Data Link Connector 3
SIL
TC
WFSE
J18 Junction Connector
J 4 Junction Connector
EFI Relay
C17 IC4
C4 IC4
C5 IC4
J35(A), J36(B) Junction Connector
J29(A), J30(B) Junction Connector
MREL
BATT
+BM
E 4(A), E 5(B), E 6(C), E 7(D), E 8(E)
Engine Control Module
+B
+B1
S1
S2
SL
SLT+
SLT–
J 2 Junction Connector
J31(A), J32(B) Junction Connector
C3 IC4
E 1
Electronically Controlled Transmission Solenoid
EB


From Power Source System (See Page 58)
15A
IG1
8 1J
S 6
Transmission
Control SW
NSSD
9
G–Y
D 3E
D 3E
G–Y
A24
Accel Position Sensor
VPA1 VPA2 VCP1 VCP2 EP1 EP2
6 3 4 1 5 2
W–R R–B B–Y W–L LG–B V–W
C16 IC4
C13 IC4
A8 IC4
9 IC3
C11 IC4
8 IC3
W–R R–B B–Y W–L LG–B V–W
22 E 23 E 26 E 27 E 28 E 29 E
VPA VPA2 VCPA VCP2 EPA EPA2
J 7
Junction
Connector
A
A
Y–R
H
J20
Junction
Connector
H
Y–R
A
A Y–R
J25
Junction
Connector
9 IM1
G–Y
7
P 1
Park/Neutral
Position SW
3
Y–R
2 IM1
G–Y
A A
A A
E B
J29(A), J30(B)
Junction
Connector
G–Y
10 D
D
E 4(A), E 5(B), E 6(C), E 7(D), E 8(E)
Engine Control Module
VC VTA1 VTA2 M+ M– GE01 E2
18 A 21 A 31 A 3 C 2 C 17 C 28 A
L–R G–B G–W P L BR
J27
Junction
Connector
B
B
L–R
5 6 4 2 1
VC VTA1 VTA2 M+ M–
(Shielded)
E2
3
T 2
Throttle Control Motor
Throttle Position Sensor
BR
HP EOM
1 D 15 E
W–B W–B
C B C B
J33(A), J34(B)
Junction
Connector
B A
W–B
A
J37
Junction
Connector
IK


From Power Source System (See Page 58)
10A STOP
10A IGN
23 1E
11 1J
15 IC3
B 3C
B 3C
G–Y
G–W
B–O
J 4 Junction Connector
S12 Stop Light SW
J 8(A) Junction Connector
J31(A), J32(B) Junction Connector
J 4 Junction Connector
C12 IC4
R–L
19 D
STP
12 D
ST1–
9 E
IGSW
E 4(A), E 5(B), E 6(C), E 7(D), E 8(E)
Engine Control Module
E01
E02
E03
E04
E05
ME01
E1
CCS
SPD
PI
W–B
BR
L–B
V–R
LG
J28 Junction Connector
J27 Junction Connector
10 IM2
1 IL1
24 D
17 D
13 D
ECC
CCS
ON–OFF
+ RES
– SET
CANCEL
C13 Combination SW
J29(A), J30(B) Junction Connector
EF
EE


From Power Source System (See Page 58)
7. 5A
GAUGE
4
1G
1
10A
DOME
2
2
R
C2
1C4
J 7
Junction
Connector
D
R
D
R
H
A
J 8(A), J 9(B)
Junction
Connector
F
B
R
R–L
15
C
16
C
C 8(A), C 9(B), C10(C)
Combination Meter
CRUISE
Speedometer
11
A
5
B
13
C
4
B
LG
V–R
BR
GR–R
1
1G
11
1K
7
IM1
16
SP1
S 8
Skid Control
ECU
V–R
B
3D
B
3D
LG
V–R
V–R
BR
EF

Cruise Control (1GR–FE)

System Outline

The cruise control system is a constant vehicle speed controller in which control of the switch on the instrument panel makes it possible to automatically adjust the opening of the engine throttle valve without depressing of the accel pedal.

1. Set Operation

When the ON–OFF SW is turned on, the system starts preparations necessary for the cruise control and turns on the indicator light in the combination meter.

2. Set Speed Control

When the – SET SW is operated with the cruise control main SW turned on during travelling, the constant vehicle speed is controlled.

3. Coast Control

When the – SET SW is kept turned on during cruise control travelling, the engine control module controls the throttle valve to decelerate the vehicle. Every time the – SET SW is turned on instantaneously, the vehicle speed is decelerated approximately 1.5 km/h.

4. Accel Control

When the + RES SW is kept turned on during cruise control travelling, the engine control module controls the throttle valve to accelerate the vehicle. Every time the + RES SW is turned on instantaneously, the vehicle speed is accelerated approximately 1.5 km/h.

5. Resume Control

When the vehicle speed is within the low speed limit (Approximately 40 km/h, 25 mph) if the cruise control is cancelled, use of the + RES SW accelerates the vehicle to the speed level used before canceling the cruise control.

6. Manual Cancel Mechanism

If any of the following signals is input during cruise control travelling, the cruise control is cancelled.

* The stop light SW is turned on.
* The CANCEL SW is turned on.
* The ON–OFF SW is turned off.

7. Auto Cancel Function

If any of the following conditions is encountered, the cruise control is automatically cancelled.

* The stop light SW wiring is faulty or short–circuited.
* The vehicle speed signal is faulty.
* The electronically controlled throttle malfunctions.

8. Overdrive Control Function

Overdrive is sometimes cut off on gradients during cruise control driving. When end of climbing gradient is determined by throttle opening degree information after overdrive is canceled, control is reset to overdrive condition after overdrive resetting timer operation. Also, when overdrive is cut off during accelerator resuming control, control is reset to overdrive condition when accelerator resuming control is finished.

Service Hints

E4 (A), E5 (B), E6 (C), E7 (D), E8 (E) Engine Control Module

(E) 9–Ground : Approx. 12 volts with ignition SW at ON position
(D) 6, (E) 3–Ground : Always approx. 12 volts
(A)6, (A) 7, (B) 6, (B) 7, (C) 1, (C) 4, (C) 7, (D) 1, (E) 15–Ground : Always continuity
(D)19–Ground : Approx. 12 volts with brake pedal depressed
(D)24–Ground : Continuity with cruise control ON–OFF SW at on
Approx. 1540 Ω with CANCEL SW on in cruise control SW
Approx. 240 Ω with + RES SW on in cruise control SW
Approx. 630 Ω with – SET SW on in cruise control SW

C13 Combination SW

5–4 : Approx. 1540 Ω with CANCEL SW on
Approx. 240 Ω with + RES SW on
Approx. 630 Ω with – SET SW on

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A24		36	J2		35 (1GR–FE)	J31	A	38
C8	A	37	J4		38	J32	B	38
C9	B	37	J7		38	J33	A	38
C10	C	37	J8	A	38	J34	B	38
C13		37	J9	B	38	J35	A	38
D1		37	J18		38	J36	B	38
E1		34 (1GR–FE)	J20		38	J37		38
E4	A	37	J25		38	P1		35 (1GR–FE)
E5	B	37	J27		38	S6		39
E6	C	37	J28		38	S8		39
E7	D	37	J29	A	38	S12		39
E8	E	37	J30	B	38	T2		35 (1GR–FE)

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	24	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
1G	25	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
1J		
1K		
3A	28	Instrument Panel Wire and Center J/B (Instrument Panel Brace RH)
3C		
3D		
3E		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC3	48	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC4		
IL1	50	Instrument Panel Wire and Instrument Panel Wire (Right Upper Side of the Glove Box)
IM1	52	Engine Wire and Instrument Panel Wire (Right Side of Blower Unit)
IM2		

: Ground Points

Code	See Page	Ground Points Location
EB	46 (1GR–FE)	Front Left Fender
EE	46 (1GR–FE)	Rear Side of Right Bank Cylinder Block
EF	46 (1GR–FE)	Rear Side of Left Bank Cylinder Block
IK	48	Right Kick Panel