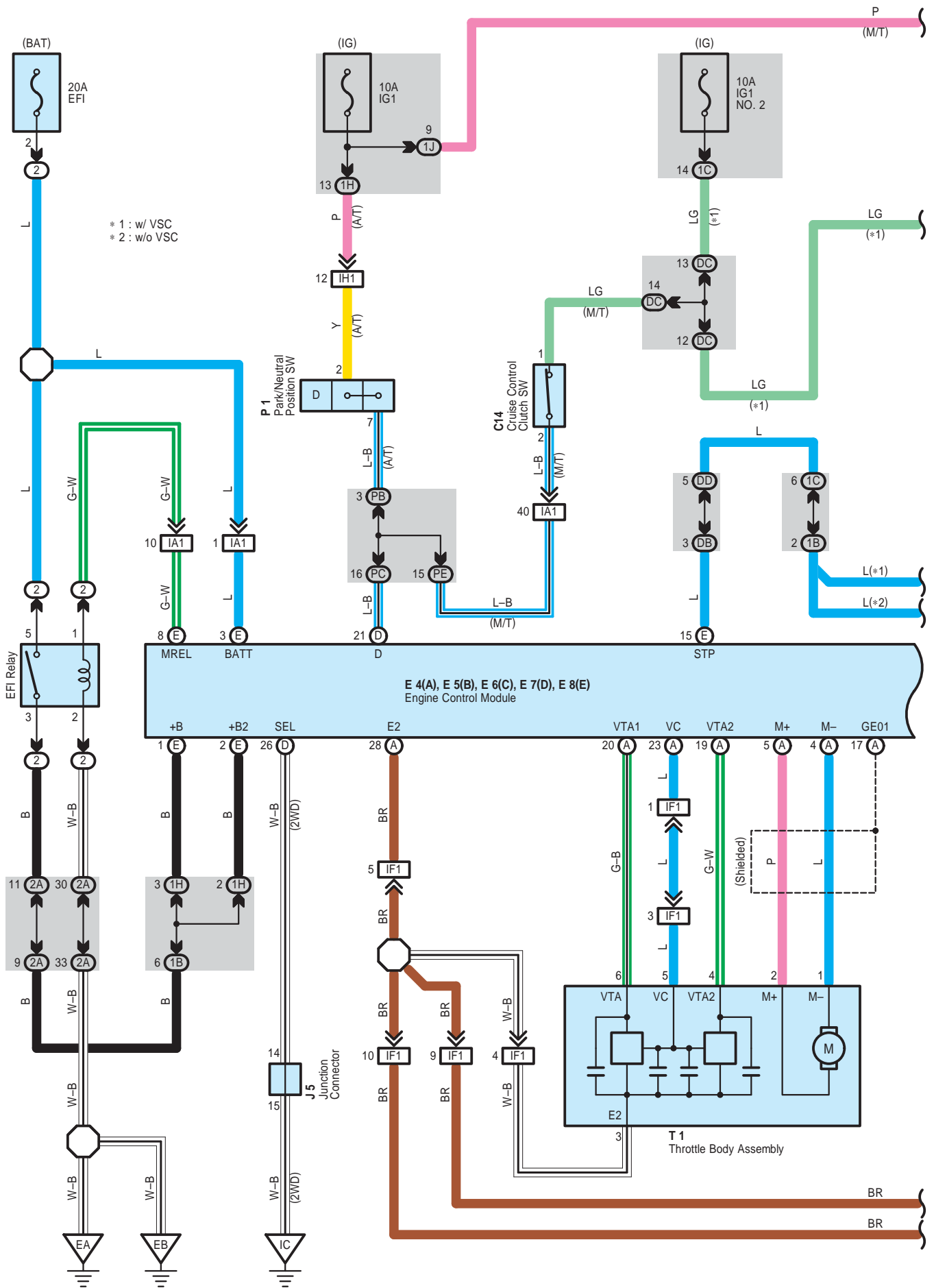
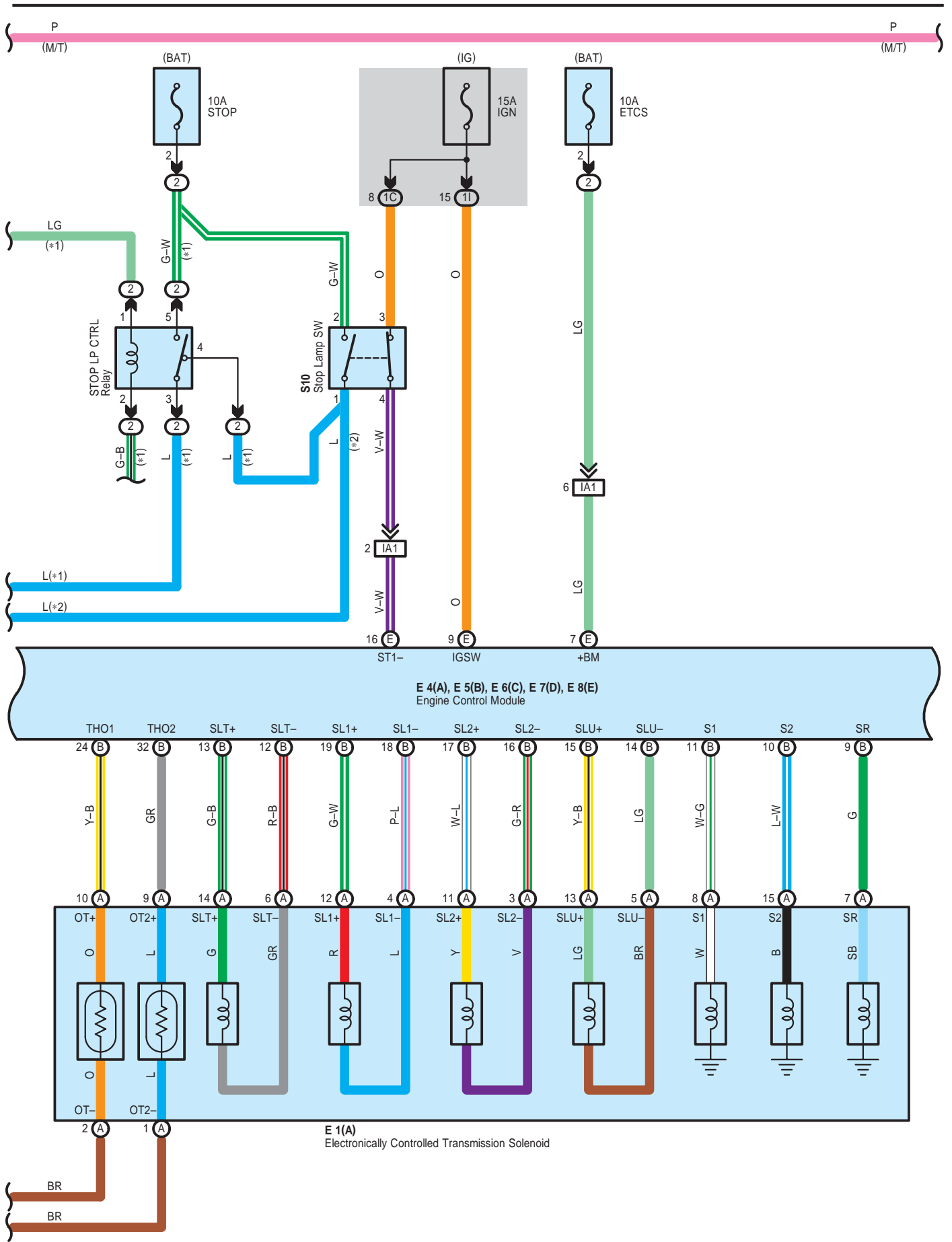
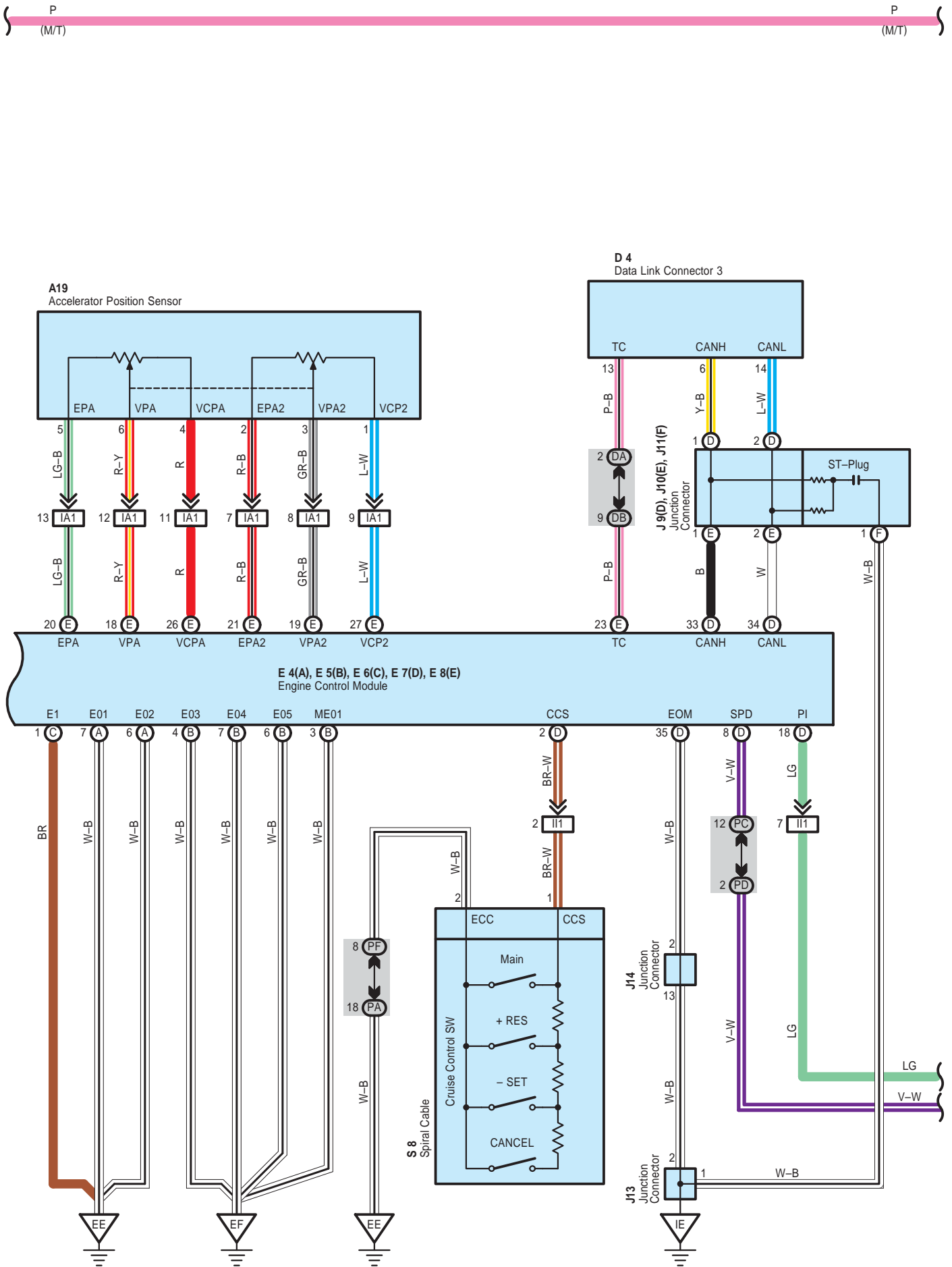


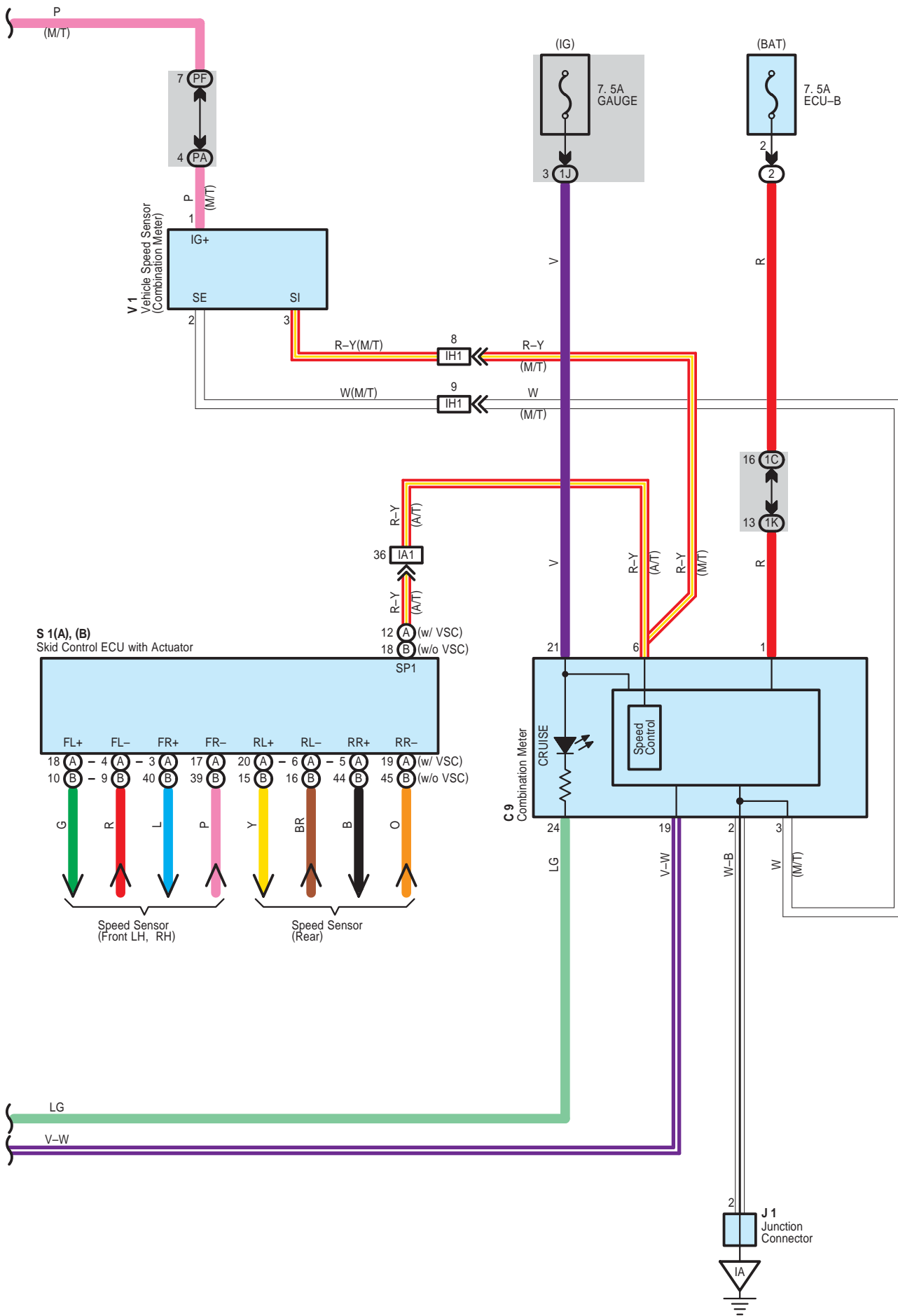
Cruise Control for 1GR-FE





Cruise Control for 1GR-FE





Cruise Control for 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 main 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 1.6 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 1.6 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 lamp SW is turned on.
- * The CANCEL SW is turned on.
- * The main SW is turned off.
- * Gear is shifted from D position to other positions than D (A/T).
- * Clutch pedal depressed (M/T).

7. Auto Cancel Function

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

- * The stop lamp SW wiring is faulty or short-circuited.
- * The vehicle speed signal is faulty.
- * The electronically controlled throttle malfunctions.
- * The actual vehicle speed becomes –16 km/h slower than the set speed.
- * The actual vehicle speed becomes slower than the minimum speed limit.

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.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A19	44	E7	D 44	J14	45
C9	44	E8	E 44	P1	41 (1GR-FE)
C14	44	J1	45	S1	A 41 (1GR-FE)
D4	44	J5	45		B 41 (1GR-FE)
E1	A 40 (1GR-FE)	J9	D 45	S8	45
E4	A 44	J10	E 45	S10	45
E5	B 44	J11	F 45	T1	41 (1GR-FE)
E6	C 44	J13	45	V1	41 (1GR-FE)

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	24	Engine Room R/B (Engine Compartment Left)

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	28	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
1C		
1H	29	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
1I		
1J		
1K		
2A	24	Engine Room J/B (Engine Compartment Left)
DA	34	Instrument Panel Wire and Instrument Panel J/B No.1 (Left Kick Panel)
DB		
DC	34	Engine Room Main Wire and Instrument Panel J/B No.1 (Left Kick Panel)
DD		
PA	36	Engine Wire and Instrument Panel J/B No.2 (Right Side of Glove Box)
PB		
PC	36	Instrument Panel Wire and Instrument Panel J/B No.2 (Right Side of Glove Box)
PD		
PE		
PF		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	54	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IF1	55	Engine Wire and Engine Wire (Behind the Glove Box)
IH1	55	Engine Wire and Instrument Panel Wire (Right Side of Glove Box)
II1	55	Instrument Panel Wire and Instrument Panel Wire (Instrument Panel Brace RH)

 : **Ground Points**

Code	See Page	Ground Points Location
EA	52 (1GR-FE)	Front Right Fender
EB	52 (1GR-FE)	Front Left Fender
EE	52 (1GR-FE)	Rear Side of Right Bank Cylinder Block
EF	52 (1GR-FE)	Rear Side of Left Bank Cylinder Block
IA	54	Left Kick Panel
IC	54	Instrument Panel Brace RH
IE	54	Right Kick Panel