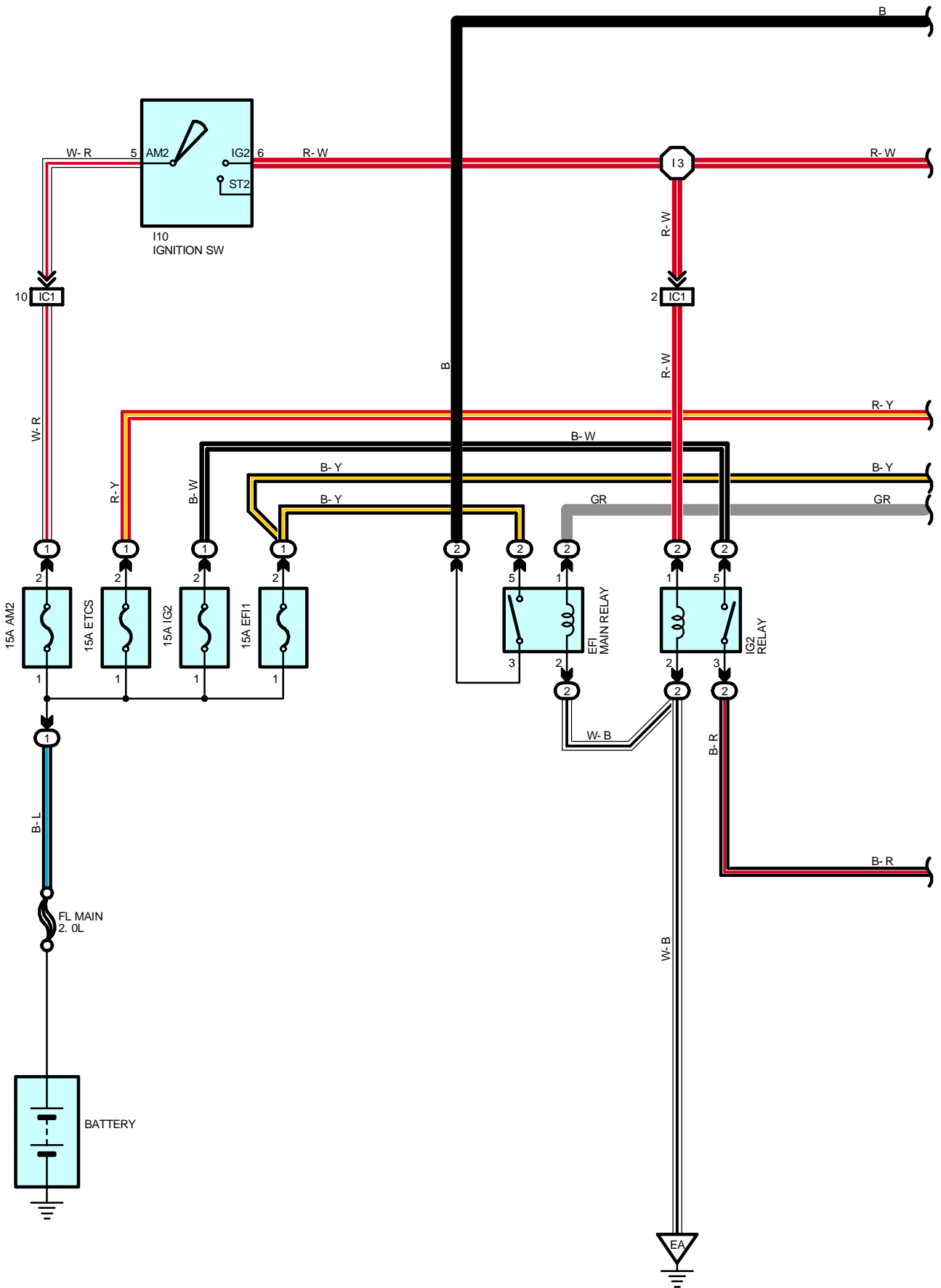
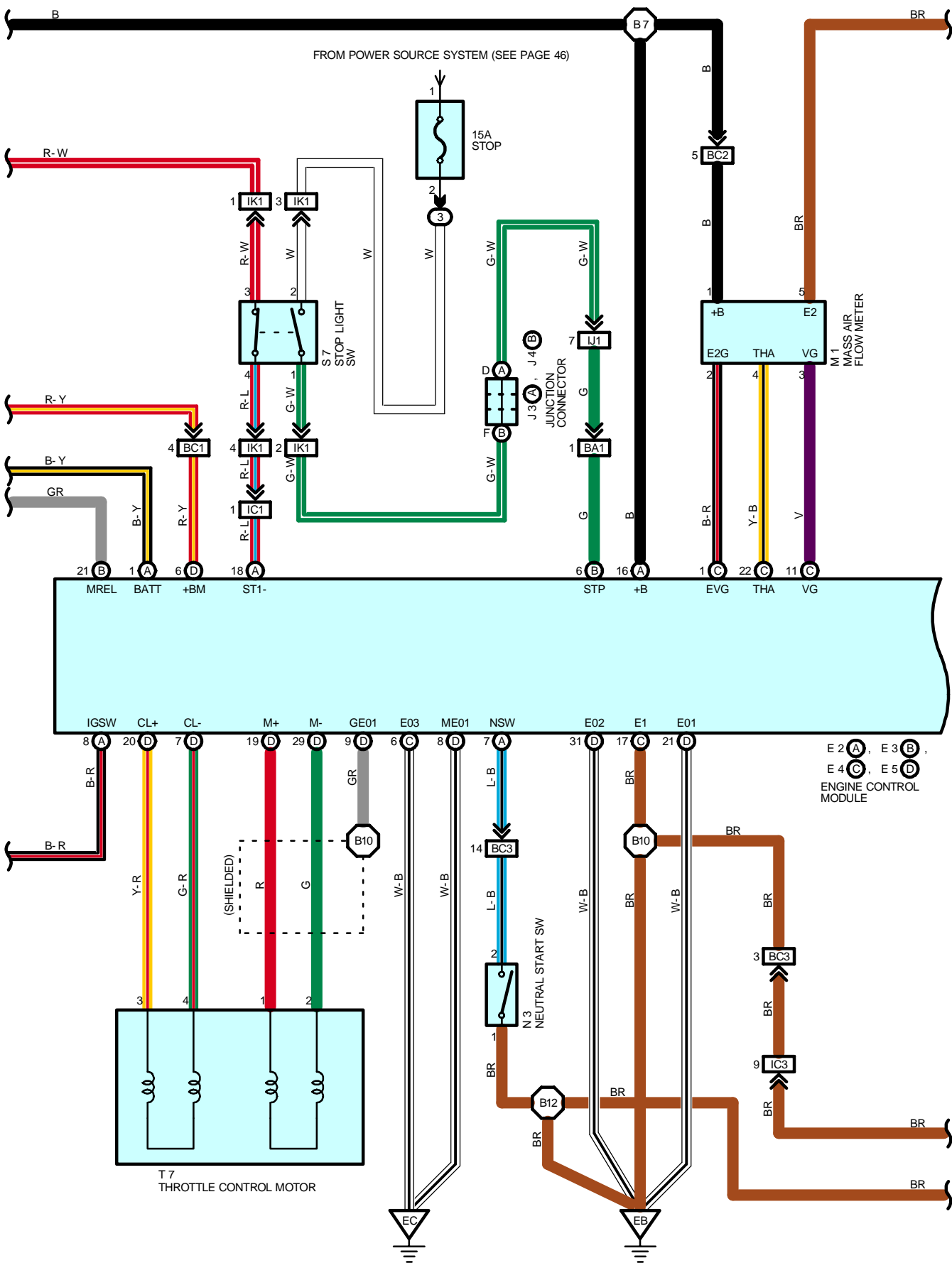
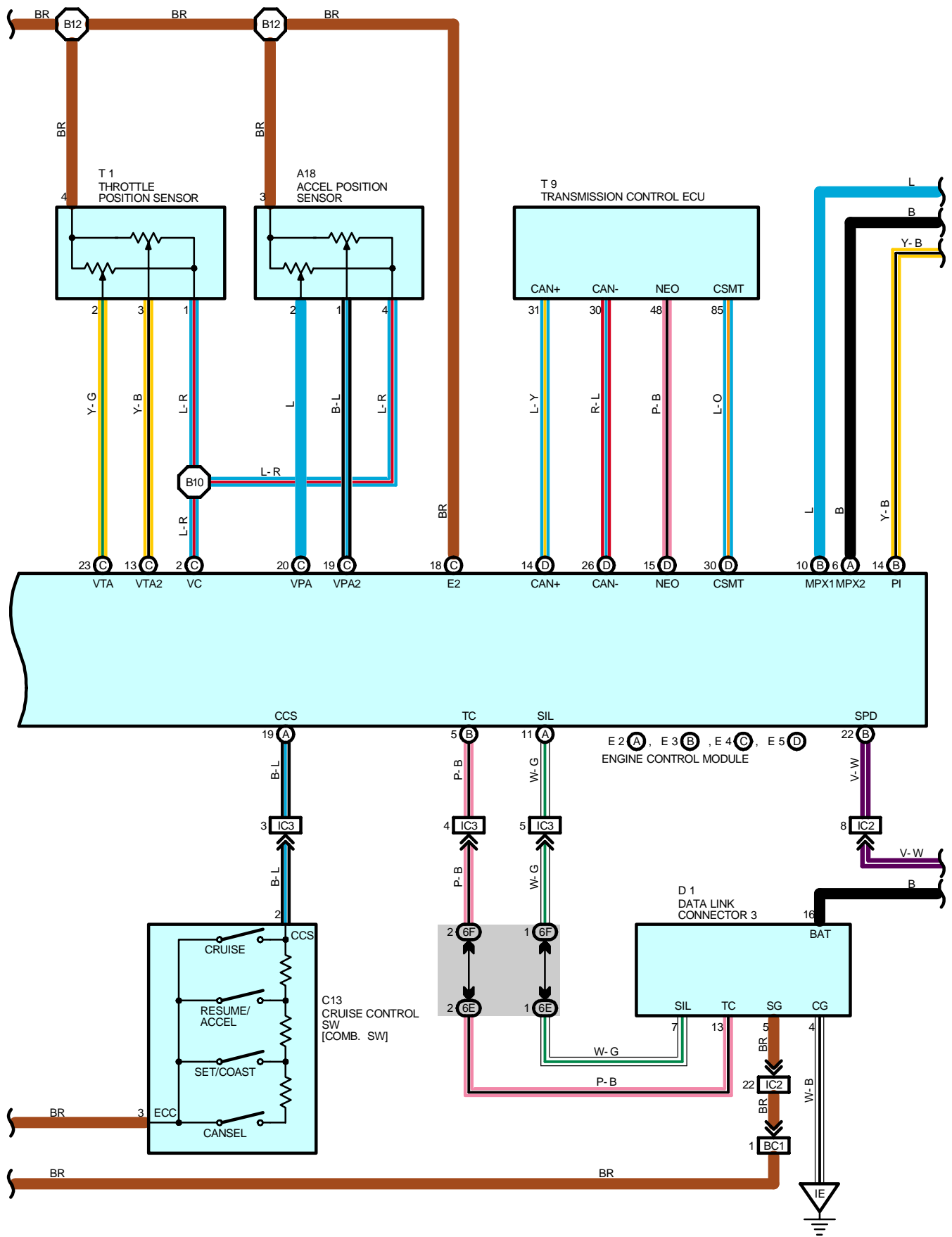


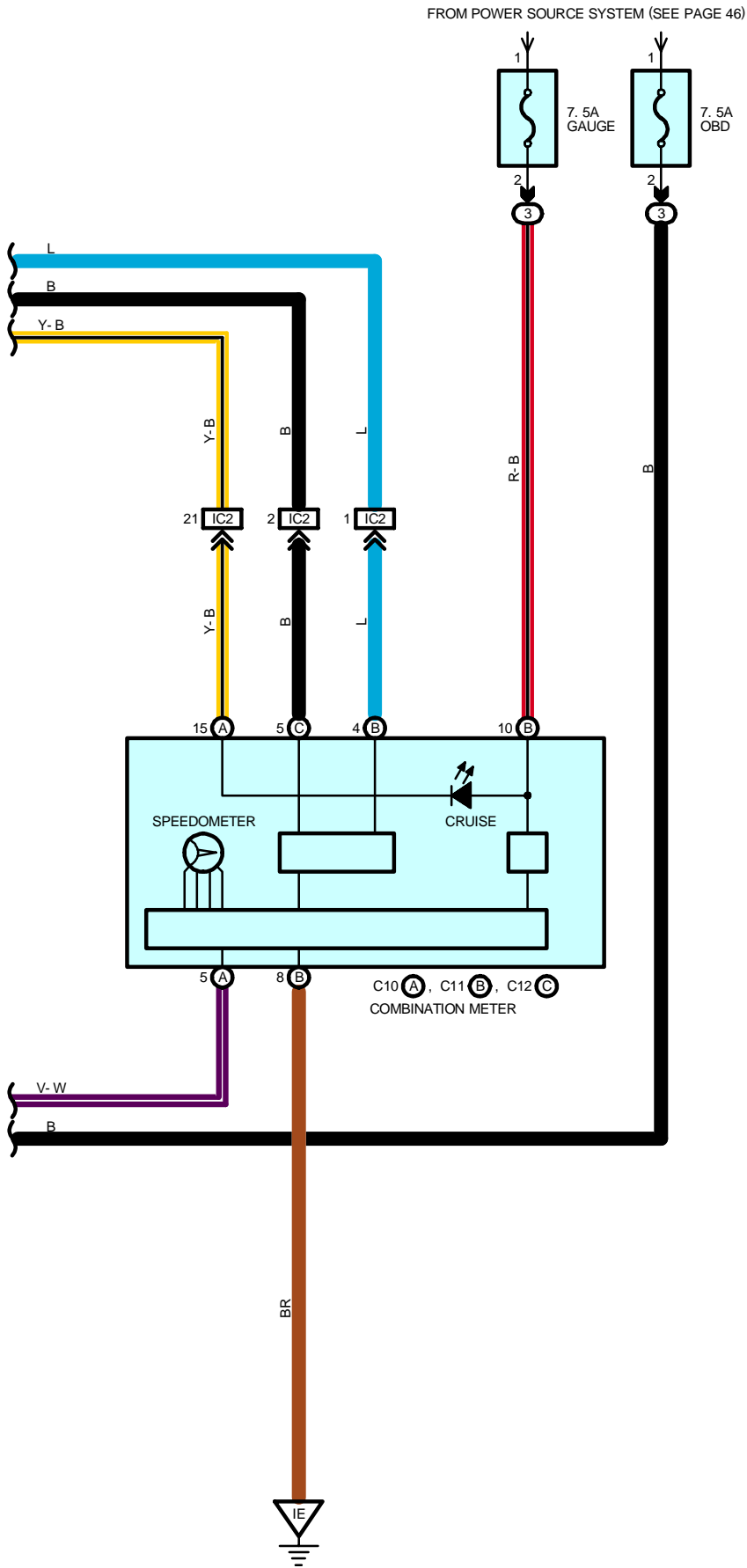
CRUISE CONTROL





CRUISE CONTROL





CRUISE CONTROL

SYSTEM OUTLINE

Current is applied at all times through the STOP fuse to TERMINAL 2 of the stop light SW. With the ignition SW turned on, the current flows through GAUGE fuse to TERMINAL (B) 10 of the cruise control indicator light. At the same time, the current through EFI 1 fuse flows to TERMINAL 5 of the EFI MAIN relay to TERMINAL 3 to TERMINAL (A) 16 of the engine control module and TERMINAL 1 of the mass air flow meter.

When the ignition SW is on and the cruise control SW is turned on, a signal is input from TERMINAL 2 of the cruise control SW to TERMINAL (A) 19 of the engine control module.

As a result, the engine control module functions and the cruise control system is ready for operation.

At the same time, the cruise control indicator light to light up, indicating that the cruise control is ready for operation.

1. SET OPERATION

When the cruise control SW is turned on and the set SW is pushed with the vehicle speed within the set limit (Approx. 40 km/h, 25 mph to 200 km/h, 124 mph), a signal is input to TERMINAL (A) 19 of the engine control module and the vehicle speed at the time set SW is released is memorized in the engine control module as the set speed.

2. SET SPEED CONTROL

During cruise control driving, the engine control module compares the set speed memorized in the engine control module with the actual vehicle speed input into TERMINAL (B) 22 of the engine control module from the combination meter, and controls the engine control module to maintain the set speed.

When the actual driving speed is lower than the set speed, the current flows from TERMINAL (D) 19 of the engine control module to TERMINAL 1 of the throttle control motor to TERMINAL 2 to TERMINAL (D) 29 of the engine control module to TERMINAL (D) 8 to GROUND. As a result, the throttle control motor causes the throttle valve to open which increases the vehicle speed. When the actual driving speed is higher than the set speed, the current flows from TERMINAL (D) 29 of the engine control module to TERMINAL 2 of the throttle control motor to TERMINAL 1 to TERMINAL (D) 19 of the engine control module to TERMINAL (D) 8 to GROUND and the throttle control motor causes the throttle valve to close which decreases the vehicle speed.

3. COAST CONTROL

During the cruise control driving, while the coast SW is on, the throttle control motor closes the throttle valve and decrease the driving speed. The vehicle speed when the coast SW is turned off is memorized and the vehicle continues at the new set speed.

4. ACCEL CONTROL

During cruise control driving, while the accel SW is turned on, the throttle control motor opens the throttle valve and increase the driving speed.

The vehicle speed when the accel SW is turned off is memorized and the vehicle continues at the new set speed.

5. RESUME CONTROL

Unless the vehicle speed falls below the minimum speed limit (Approx. 40 km/h, 25 mph) after canceling the speed by the cancel SW, pushing the resume SW will cause the vehicle to resume the speed set before cancellation.

6. MANUAL CANCEL MECHANISM

If any of the following operations occurs during cruise control operation, the magnetic clutch of the actuator turns off and the motor rotates to close the throttle valve and the cruise control is released.

- * When shifting the gear, a signal is input into TERMINAL (A) 7 of the engine control module.
- * Depressing the brake pedal (Stop light SW on). "Signal is input to TERMINAL (B) 6 of the engine control module"
- * Pushing the cancel SW (Cancel SW on). "Signal is input to TERMINAL (A) 19 of the engine control module"
- * Pushing the cruise SW off. "Signal is input to TERMINAL (A) 19 of the engine control module"

7. TAP-UP CONTROL FUNCTION

When the difference between the actual vehicle speed and the set speed is less than 5 km/h (3 mph), the set speed can be increased 1.6 km/h (1 mph) each time by operating the RESUME/ACCEL SW quickly within 0.6 seconds.

8. TAP-DOWN CONTROL FUNCTION

When the difference between the actual vehicle speed and the set speed is less than 5 km/h (3 mph), the set speed can be lowered 1.6 km/h (1 mph) each time by operating the SET/COAST SW quickly within 0.6 seconds.

9. AUTO CANCEL FUNCTION

A) If any of the following operating conditions occurs during cruise control operation, the set speed is erased, cruise control is released. (Cruise control SW turns off).

When this occurs, the ignition SW must be turned off once before the main SW will turn on.

- * Open circuit for TERMINAL (A) 18 of the engine control module and TERMINAL 3 of the stop light SW.
- * Abnormality in the vehicle speed signal.
- * Malfunction in the electronically controlled throttle parts.

B) If any of the following conditions occurs during cruise control operation, the set speed is erased and the cruise control is released.

- * When the vehicle speed falls below the minimum speed limit (Approx. 40 km/h 25 mph).
- * When the vehicle speed falls more than 16 km/h (10 mph) below the set speed, E.G. on an upward slope.

SERVICE HINTS

C13 CRUISE CONTROL SW [COMB. SW]

- 2-3 : Continuity with MAIN SW on
- 2-3 : Approx. **1540** Ω with CANCEL SW on
- Approx. **240** Ω with RESUME/ACCEL SW on
- Approx. **630** Ω with SET/COAST SW on

E2 (A), E3 (B), E4 (C), E5 (D) ENGINE CONTROL MODULE

- (B) 6-GROUND : Approx. **12** volts with brake pedal depressed
- (A) 1, (D) 6-GROUND : Always approx. **12** volts
- (A)19-GROUND : Approx. **1540** Ω with CANCEL SW on in cruise control SW
- Approx. **630** Ω with SET/COAST SW on in cruise control SW
- Approx. **240** Ω with RESUME/ACCEL SW on in cruise control SW
- (C) 6, (C) 17, (D) 21, (D) 31, (D) 8-GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A18	30	E3	B 34	N3	31
C10	A 32	E4	C 34	S7	33
C11	B 32	E5	D 34	T1	31
C12	C 32	I10	33	T7	31
C13	32	J3	A 33	T9	35
D1	32	J4	B 33		
E2	A 34	M1	31		

○ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Fusible Link Block (Engine Compartment Left)
2	23	Engine Room R/B (Left Side of Room Partition Panel)
3	24	R/B No.3 (Left Side of Instrument Panel)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
6E	26	Instrument Panel Wire and J/B No.6 (Instrument Panel Brace LH)
6F		

CRUISE CONTROL

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	38	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
IC3		
IJ1	40	Floor Wire and Instrument Panel Wire (Right Kick Panel)
IK1	40	Instrument Panel Wire and Switch Wire (Instrument Panel Brace LH)
BA1	42	Engine Room Main Wire and Floor Wire (Right Side of Room Partition Panel)
BC1	42	Engine Wire and Engine Room Main Wire (Quarter Panel LH)
BC2		
BC3		

: GROUND POINTS

Code	See Page	Ground Points Location
EA	36	Suspension Tower Rear LH
EB	36	Engine Block LH
EC		
IE	38	Left Kick Panel

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I3	40	Instrument Panel Wire	B10	42	Engine Wire
B7	42	Engine Room Main Wire	B12		

