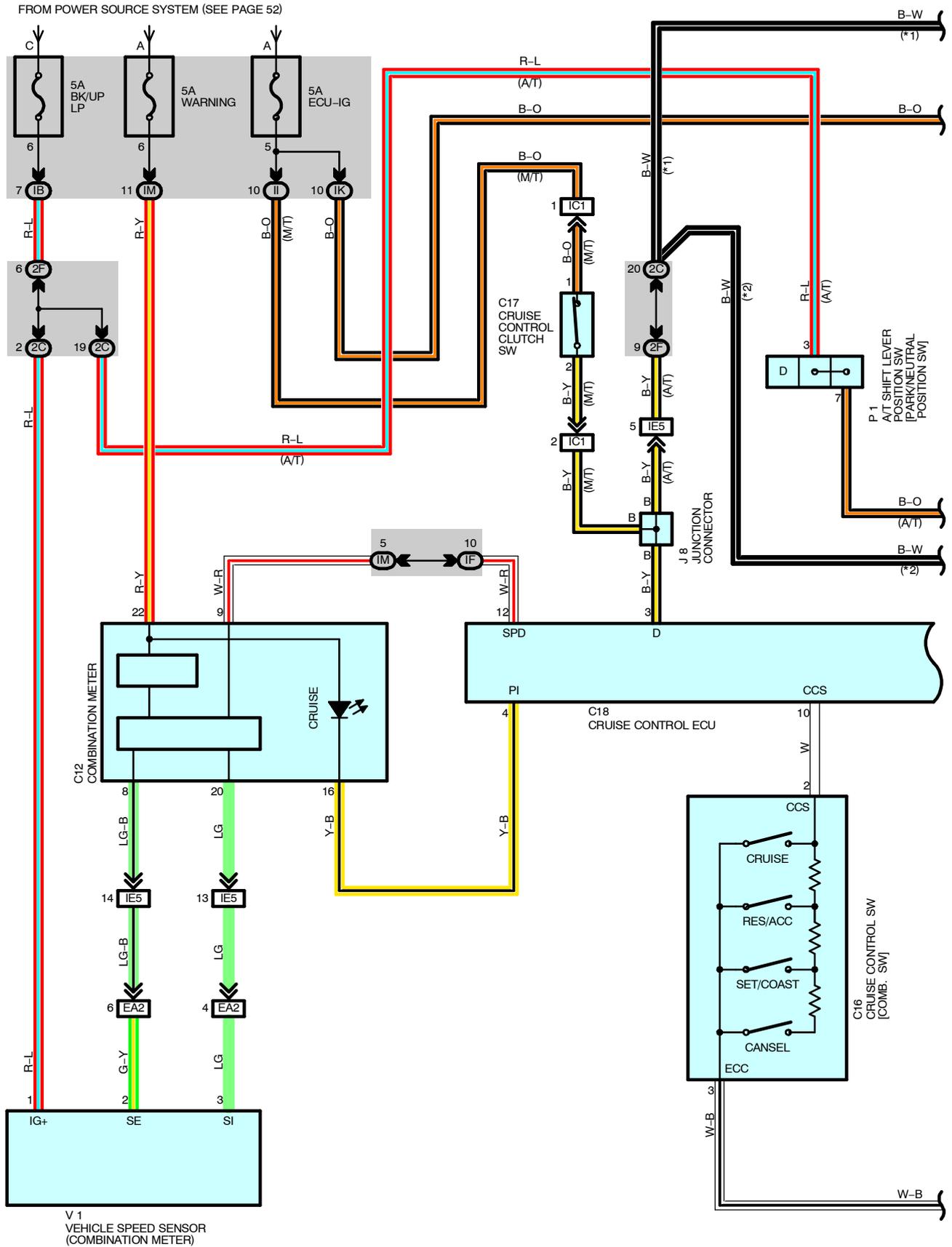


# CRUISE CONTROL





# CRUISE CONTROL

## SYSTEM OUTLINE

The cruise control system allows to travel at a constant speed, by the operation of the switch, without having to depress the accelerator pedal. In this system, the engine throttle valve opening angle is adjusted automatically to control the vehicle at a constant speed.

### 1. SET OPERATION

When the cruise control main SW is turned ON, the cruise control system enters into standby mode, and the indicator light in the combination meter is turned ON.

### 2. SET SPEED CONTROL

When the SET/COAST switch is operated while traveling with the main SW ON, the speed when the switch is operated to OFF (Switch released) is memorized, and the vehicle speed is controlled at that speed.

### 3. COAST CONTROL

When the SET/COAST switch is operated to ON, the motor in the actuator rotates the throttle valve until it is closed fully to decrease the vehicle speed, and the speed when the switch is operated to OFF is memorized, and the vehicle speed is controlled at that speed.

Furthermore, every time the SET/COAST switch is operated momentarily (Approximately 0.5 sec.) to ON, the memorized vehicle speed is decreased by approximately 1.5km/h.

### 4. ACCEL CONTROL

When the RESUME/ACCEL switch is operated to ON, the motor in the actuator rotates the throttle valve to open direction to increase the vehicle speed, and the speed when the switch is operated to OFF is memorized, and the vehicle speed is controlled at that speed.

Furthermore, every time the RESUME/ACCEL switch is operated momentarily (Approximately 0.5 sec.) to ON, the memorized vehicle speed is increased by approximately 1.5km/h.

### 5. MANUAL CANCEL MECHANISM

If any of the following signals are input during cruise control traveling, the cruise control is canceled.

- (1) Stop lamp SW is ON (Brake pedal is depressed)
- (2) Park/Neutral Position SW D circuit is turned from ON to OFF
- (3) The CANCEL SW of the control SW is ON
- (4) The Main SW is turned OFF

### 6. RESUME CONTROL

After canceling the cruise control (Except when the main SW is OFF) if the vehicle speed is above the minimum speed limit (Approximately 40km/h, 25mph), operating the RESUME/ACCEL switch from OFF to ON will cause the system to accelerate and resume to the vehicle speed before manual cancellation.

### 7. ELECTRONICALLY CONTROLLED TRANSMISSION CONTROL

During cruise control traveling, communication control is made to fix the electronically controlled transmission in normal pattern. However, in this case the indicator of the electronically controlled transmission does not change.

### 8. OVERDRIVE FUNCTION

While traveling with the cruise control, if the overdrive cut speed is reached on an upgrade hill, (Memorized speed minus 4km/h) the overdrive is released (O/D OFF) immediately.

This function increases the vehicle's traction so that the vehicle speed does not drop.

### 9. AUTO CANCEL OPERATION

If any of the following conditions are detected, the set speed is erased and the control is canceled.

- (1) Disconnection or short in the Stop Light SW
- (2) Abnormality in vehicle speed signal
- (3) Abnormality in the actuator
- (4) The actual vehicle speed becomes slower than the minimum speed limit

## SERVICE HINTS

### C16 CRUISE CONTROL SW [COMB. SW]

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

### C18 CRUISE CONTROL ECU

- 9-GROUND : Approx. **12** volts with the ignition SW at **ON** position
- 12-GROUND : **4** pulses with **1** rotation of the rotor shaft
- 10-GROUND : Approx. **1540** Ω with the CANCEL SW on in the control SW
- Approx. **630** Ω with the SET/COAST SW on in the control SW
- Approx. **240** Ω with the RESUME/ACCEL SW on in the control SW
- 16-GROUND : Always continuity

## ○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page	
C5	<a href="#">32 (1ZZ-FE)</a>	E2	A	<a href="#">34 (2ZZ-GE)</a>	J9	<a href="#">37</a>
	<a href="#">34 (2ZZ-GE)</a>	E3	B	<a href="#">32 (1ZZ-FE)</a>	J10	<a href="#">37</a>
C12	<a href="#">36</a>			E5	D	<a href="#">34 (2ZZ-GE)</a>
C16	<a href="#">36</a>	<a href="#">32 (1ZZ-FE)</a>	<a href="#">35 (2ZZ-GE)</a>			
C17	<a href="#">36</a>	J2	D	<a href="#">34 (2ZZ-GE)</a>	S8	<a href="#">37</a>
C18	<a href="#">36</a>			<a href="#">33 (1ZZ-FE)</a>	V1	<a href="#">35 (2ZZ-GE)</a>
D1	<a href="#">36</a>	J8	D	<a href="#">34 (2ZZ-GE)</a>		<a href="#">37</a>
E2	A			<a href="#">32 (1ZZ-FE)</a>		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	<a href="#">25</a>	Engine Room Main Wire and Instrument Panel J/B (Instrument Panel Brace RH)
IF	<a href="#">25</a>	Instrument Panel Wire and Instrument Panel J/B (Instrument Panel Brace RH)
II		
IK		
IM		
2C	<a href="#">23</a>	Engine Wire and Engine Room J/B (Engine Compartment Left)
2F	<a href="#">23</a>	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	<a href="#">40 (1ZZ-FE)</a>	Engine Wire and Engine Room Main Wire (Inside of Engine Room R/B No.1)
	<a href="#">42 (2ZZ-GE)</a>	
EA2	<a href="#">40 (1ZZ-FE)</a>	
	<a href="#">42 (2ZZ-GE)</a>	
IC1	<a href="#">44</a>	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Reinforcement LH)
IE3	<a href="#">44</a>	Engine Room Main Wire and Instrument Panel Wire (Instrument Panel Brace LH)
IE5		
IG3	<a href="#">46</a>	Engine Room No.2 Wire and Instrument Panel Wire (Right Kick Panel)

## ▽ : GROUND POINTS

Code	See Page	Ground Points Location
IH	<a href="#">44</a>	Cowl Side Panel RH