

Cruise Control System

TOYOTA

Celica, Corona, Cressida, Pickup, Supra

DESCRIPTION

The cruise control system is a unit made up of electronic circuits. A main switch is used to turn system "ON" and "OFF". An indicator light on main switch shows that system is activated. A control switch with 2 settings, "SET (COAST)" and "RESUME (ACCEL)" is used to set desired vehicle speed. System will not operate at speeds under 25 MPH.

OPERATION

MAIN SWITCH

When the main switch is turned on and the ignition switch in the "ON" position, the exciting coil of the relay will be energized and the relay will turn on, supplying current to the system. When the ignition switch is turned to "OFF" the relay will also turn off, and remain inoperative even when main switch is turned on.

CONTROL SWITCH

The control switch has an ON-OFF switch type circuit. When the set switch is turned on, the "CRUISE" light illuminates. With the switch on "SET", the controller cancels the preset vehicle speed.

The control switch has a "RESUME", which is designed to increase the set speed, or return it to that speed at which the vehicle was previously being driven before the set speed was canceled.

By pushing the switch towards "ACCEL" end of the switch causes the speed to increase continuously. Releasing it will set the vehicle speed at the vehicle's current speed.

Releasing the "RESUME" end of the switch momentarily causes the vehicle speed to automatically return to the set speed at which the vehicle was being driven before set speed was canceled.

TROUBLE SHOOTING

CRUISE CONTROL CANNOT BE SET

Meter and Stop fuse blown. Control main switch faulty.

DOES NOT CANCEL EVEN WHEN CANCEL OPERATION IS PERFORMED

Parking switch faulty. Speed sensor faulty. Stop light switch faulty.

CANNOT BE RESTORED WITH RESUME SWITCH

Clutch switch faulty (Manual Transmission only). Neutral start switch faulty (Automatic Transmission only). Actuator faulty. Control resume switch faulty. Computer faulty. Wiring or ground faulty.

WARNING LIGHT DOES NOT LIGHT

Meter fuse blown. Main switch faulty.

CANNOT OBTAIN DESIRED SPEED

Actuator faulty. Computer faulty.

HUNTING OCCURS BETWEEN ACCELERATION AND DECELERATION

Throttle body problem.

SPEED IS GREATLY REDUCED WHEN ASCENDING SLOPE

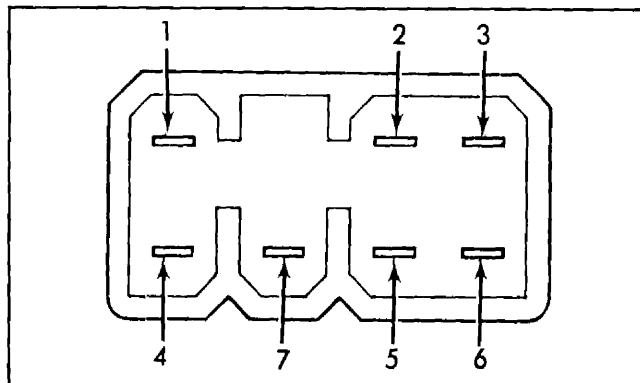
Actuator faulty. Computer faulty.

TESTING

COMPUTER & SENSOR

1) Remove side kick panel. Unplug wiring connector from computer. Inspect computer at connector on wire harness side. With ignition switch "ON" and using a voltmeter, measure the voltage between terminal 13 and body ground with the main switch "ON". See Fig. 1. If there is no battery voltage, check the control switch.

Fig. 1: Control Switch Terminals for Toyota Cruise Control



2) Using a voltmeter, measure the voltage between terminal 8 and body ground. When parking brake lever is pulled, voltage should be 0 volt. When parking brake lever is returned, voltage should be 12 volt.

3) Turn ignition switch "OFF". Using a voltmeter, measure the voltage between terminal 11 and body ground. If there is no battery voltage, check the stop light switch.

4) Using voltmeter, measure the voltage between terminal 12 and body ground. When brake pedal is depressed, voltage should be 12 volt. When brake pedal is returned, voltage should be 0 volt. If voltage is not correct, check the brake pedal switch.

5) Turn ignition switch switch to "ACC". Using an ohmmeter, check the continuity between terminal 9 and body ground. On manual transmission models, check with clutch pedal depressed. On automatic transmission models, check when shift lever is in neutral position. If there is no continuity between terminals, check the clutch switch or neutral start switch.

6) Using an ohmmeter, measure the resistance between the terminals. Resistance between 6—10 should be approximately 68 ohms. Resistance between 4—10 should be approximately 30 ohms. If the ohms are not correct, check the actuator.

7) Using an ohmmeter, check the continuity between terminal 3 and body ground when the set switch is turned "ON". If there is no continuity between terminals, check the control switch.

