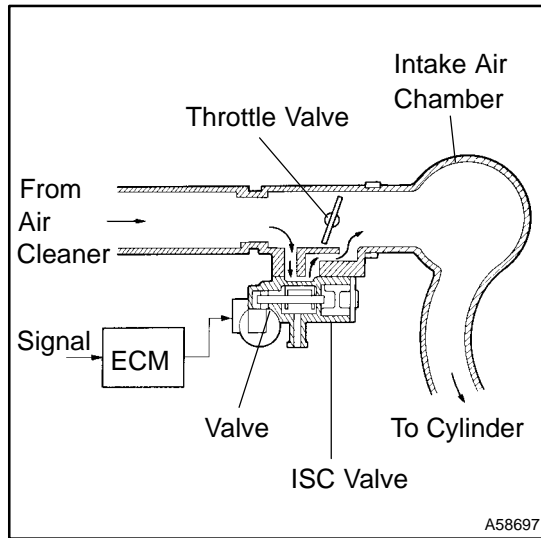


DTC	P0505	IDLE CONTROL SYSTEM MALFUNCTION
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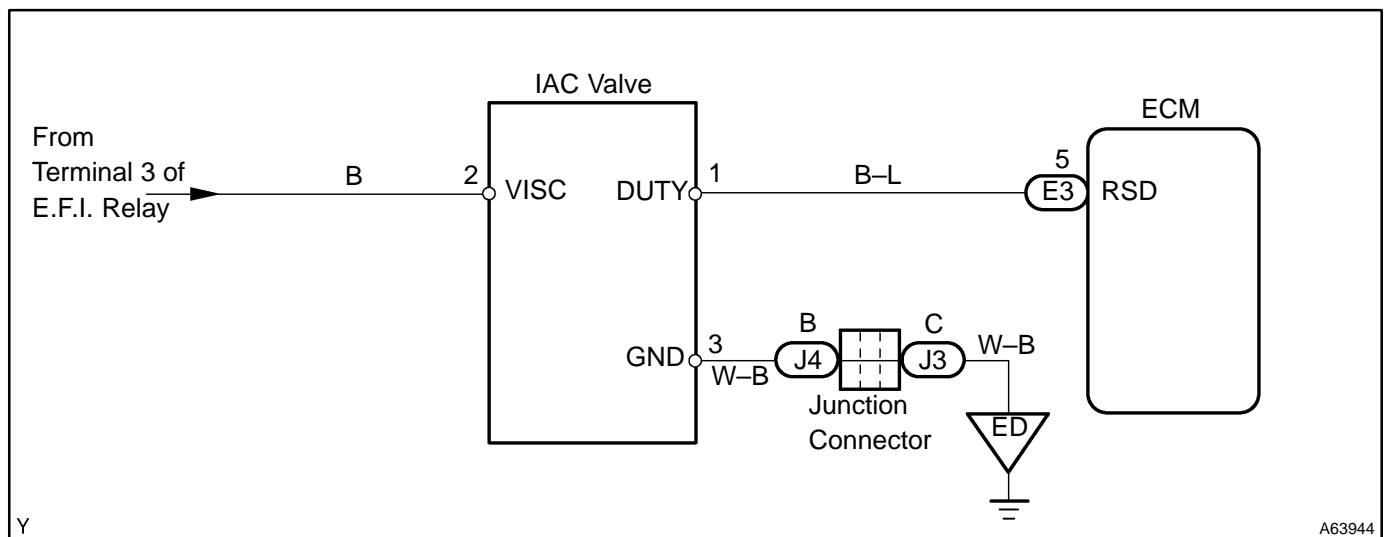
CIRCUIT DESCRIPTION



The rotary solenoid type ISC valve is located under the throttle body and intake air bypassing the throttle valve is directed to the ISC valve through the passage. In this way the intake air volume bypassing the throttle valve is regulated, controlling the engine speed. The ECM operates the ISC valve only to perform idle-up and provide feedback for the target idling speed.

DTC No.	DTC Detecting Condition	Trouble Area
P0505	Idle speed continues to be apart greatly from target speed	<ul style="list-style-type: none"> • PCV hose • Open or short in ISC valve circuit • ISC valve is stuck or closed • Open or short in A/C switch circuit • Air induction system • ECM

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

Read freed frame data using hand-held tester. Because freeze frame records the engine conditions when the malfunction is detected, when troubleshooting it is useful for determining whether the vehicle was running or stopped, the engine warmed up or not, the air-fuel ratio lean or rich, etc. at the time of the malfunction.

1 PERFORM ACTIVE TEST BY OBD II SCAN TOOL OR HAND-HELD TESTER(CHECK OPERATION OF THE ISC VALVE)

- (a) Warm up the engine to the normal operating temperature.
- (b) Switch off all the accessories.
- (c) Switch off the A/C.
- (d) Shift the lever into the neutral position.
- (e) Connect the hand-held tester or OBD II scan tool to the DLC3 on the vehicle.
- (f) Check the difference of the engine speed in less than 5 seconds and more than 5 seconds.

Difference of engine speed: More than 100 rpm.

OK → **CHECK FOR INTERMITTENT PROBLEMS**

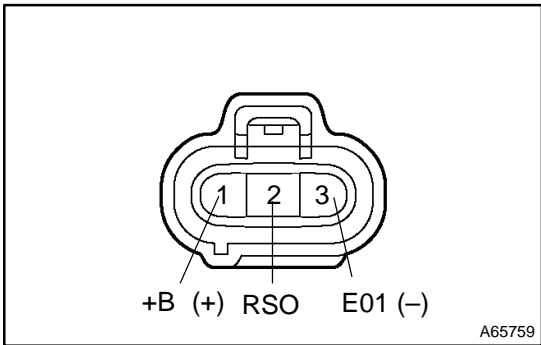
NG

2 CHECK CONNECTION OF PCV HOSE

NG → **REPAIR OR REPLACE PCV HOSE**

OK

3 CHECK HARNESS AND CONNECTOR



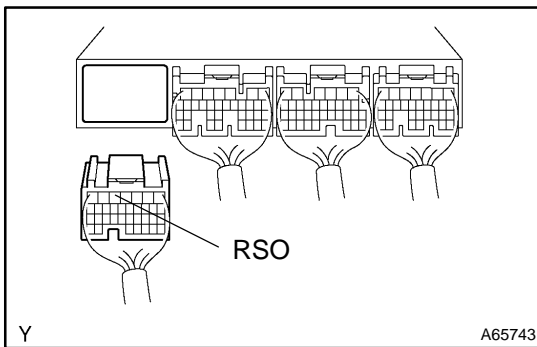
- (a) Disconnect the ISC valve connector.
- (b) Turn the ignition switch ON.
- (c) Measure voltage between terminals +B and E01 of the ISC valve connector.

Voltage: 9 - 14 V

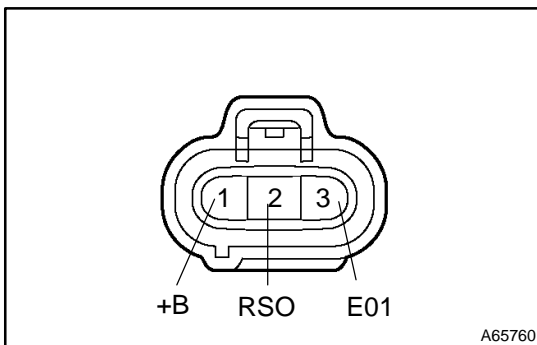
OK → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

NG

4 CHECK HARNESS AND CONNECTOR(RSO CIRCUIT)



- (a) Disconnect the ECM E3 connector.
- (b) Check continuity between the terminals RSO of the ECM connector and RSO of the ISC valve connector.
Resistance: 1 Ω or less
- (c) Check for short between the terminals RSO of the ECM connector and GND of the ISC valve connector.
Resistance: 1 M Ω or more



NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

5 INSPECT THLOTTLE BODY IDLE SPEED CONTROL VALVE ASSY (See page 10-2)

NG

REPLACE THLOTTLE BODY IDLE SPEED CONTROL VALVE ASSY

OK

CHECK AND REPLACE ECM