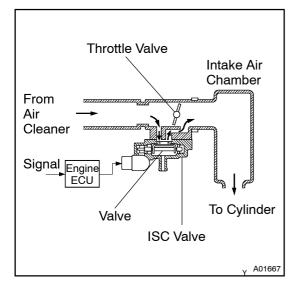
DI31F-02

DTC P0505/33 Idle Control System Malfunction

CIRCUIT DESCRIPTION



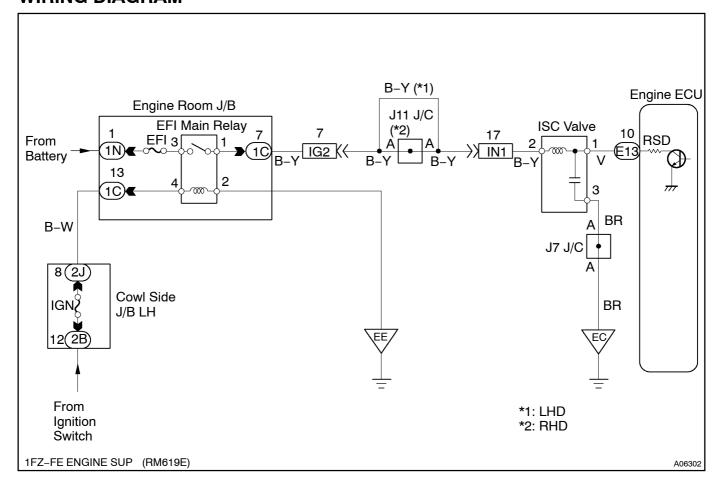
The rotary solenoid type ISC valve is located in front of the intake air chamber and intake air bypassing the throttle valve is directed to the ISC valve through a passage.

In this way the intake air volume bypassing the throttle valve is regulated, controlling the engine speed.

The engine ECU operates only the ISC valve to perform idle–up and provide feedback for the target idling speed.

DTC No.	DTC Detecting Condition	Trouble Area
P0505/33	Open or short in ISC valve circuit.	Open or short in ISC valve circuit ISC valve
		• Engine ECU

WIRING DIAGRAM



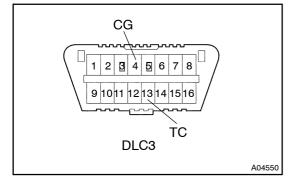
INSPECTION PROCEDURE

HINT:

Read[freeze[frame[data[Jusing[hand-held[tester.]Because[freeze[frame[jecords[the]engine[conditions]when the malfunction[is[detected, when troubleshooting it is useful for determining whether the was funning for stopped, the engine warmed up for not, the air-fuel fratio [lean or frich, etc. at the time of the malfunction.

When using hand-held tester

1 Checkengine dle speed.



PREPARATION:

- (a) Warm up engine formal operating emperature.
- (b) Switch off all accessories.
- (c) Switch off air conditioning.
- (d) Shift ransmission nto N' pr heutral position.
- (f) Using ST, connect erminals 3 (TC) and 4 (CG) of the DLC3.
 - SST□ 09843-18040

CHECK:

Check[the_difference_of_engine_speed_between_the_ones_less than \$\$ec. and in ore than \$\$ec. after connecting terminals \$\] 3 (TC) and \$\[CG) \] fthe DLC3.

OK:

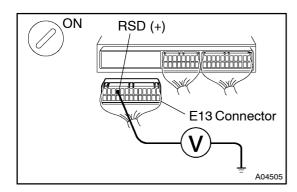
Difference of engine speed: More than 100 rpm

OK

Proceed to next circuit inspection shown on problem [symptom] able [see] page [Dl-21).

NG

2 Check voltage between terminal RSD of engine ECU connector and body ground.



PREPARATION:

- (a) Remove the glove compartment door.
- (b) Disconnect the E13 connector of engine ECU.
- (c) Turn the ignition switch ON.

CHECK:

Measure voltage between terminal RSD of engine ECU connector and body ground.

OK:

Voltage: 9 - 14 V

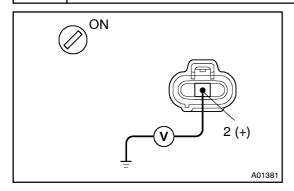
ок

Go to step 5.



3

Check voltage between terminal of ISC valve connector and body ground.



PREPARATION:

- (a) Disconnect the ISC valve connector.
- (b) Turn the ignition switch ON.

CHECK:

Measure voltage between terminal 2 of ISC valve connector and body ground.

OK:

Voltage: 9 - 14 V



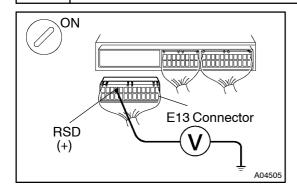
Check for open and short in harness and connector between ISC valve and engine room J/B.



4[] Check[for[open[and[short[in[harness[and[connector[in[RSD[circuit. NG[] Repair or replace. OK Replace[ISC[valve. 5□ Check[for[open[and[short[in[harness[and[connector[between[terminal[3]of[]SC valve connector and body ground. NG□ Repair or replace. OK 6∏ Check operation of the SC valve (See page FI-42). Replace[ISC[valve. NG∏ OK $\label{lem:check_lem} Check \cite{the_blockage_of_lSC_valve_and_the_bassage_to_bypass_the_throttle_valve.}$ **7**[] Repair[or[]eplace[]SC[]valve[and[]throttle[]body. NG[OK Proceed to next circuit inspection shown on problem[symptom[table[See page[DI-21).

When not using hand-held tester

1 Check voltage between terminal RSD of engine ECU and body ground.



PREPARATION:

- (a) Remove the glove compartment door.
- (b) Disconnect the E13 connector of engine ECU.
- (c) Turn the ignition switch ON.

CHECK:

Measure voltage between terminal RSD of engine ECU connector and body ground.

OK:

Voltage: 9 - 14 V

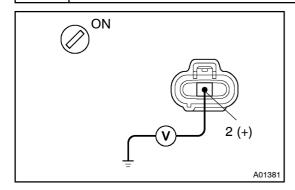


Go to step 4.



2

Check voltage between terminal of ISC valve connector and body ground.



PREPARATION:

- (a) Disconnect the ISC valve connector.
- (b) Turn the ignition switch ON.

CHECK:

Measure voltage between terminal 2 of ISC valve connector and body ground.

OK:

Voltage: 9 – 14 V



Check for open and short in harness and connector between ISC valve and engine room J/B.



3□ Check[for[open[and[short[in[harness[and[connector[in[RSD[circuit. NG[] Repair or replace. OK Replace[ISC[valve. **4**[] Check[for[open[and[short[in[harness[and[connector[between[terminal[3]of[]SC valve connector and body ground. NG□ Repair or replace. OK 5∏ Check operation of the SC valve (See page FI-42). Replace[ISC[valve. NG∏ OK $\label{lem:check_lem} Check \cite{the_blockage_of_lSC_valve_and_the_bassage_to_bypass_the_throttle_valve.}$ 6□ Repair[or[]eplace[]SC[]valve[and[]throttle[]body. NGOK Proceed to next circuit inspection shown on problem[symptom[table[See page[DI-21).