

ISC Valve Circuit

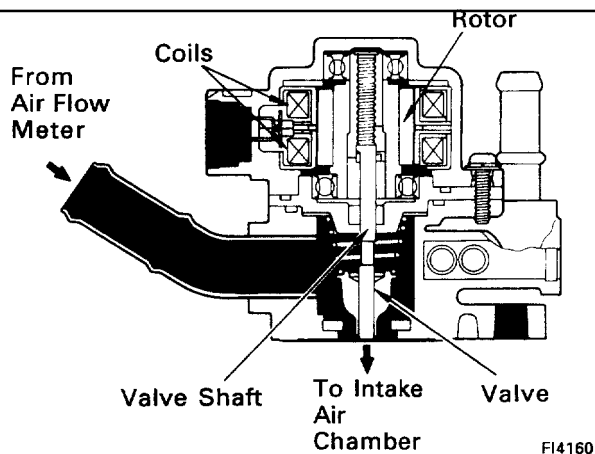
CIRCUIT DESCRIPTION

The ISC valve is provided on the intake air chamber and intake air bypassing the throttle valve is directed to the ISC valve through a hose.

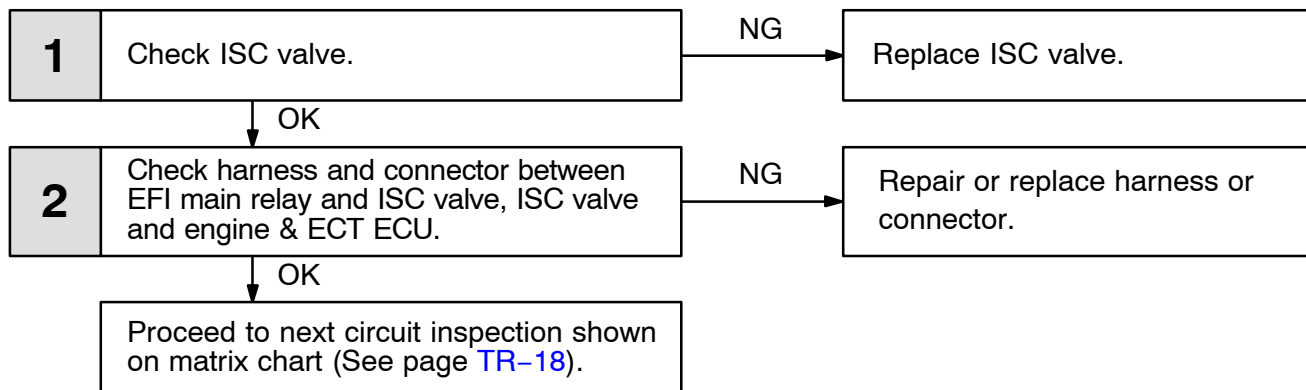
A step motor is built into the ISC valve. It consists of four coils, the magnetic rotor, valve shaft and valve. When current flows to the coils due to signals from the ECU, the rotor turns and moves the valve shaft forward or backward, changing the clearance between the valve and the valve seat.

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

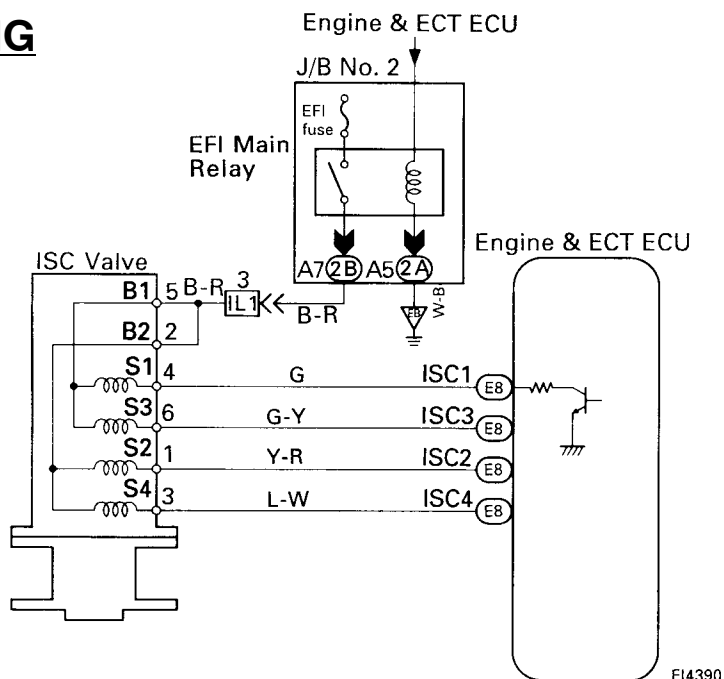
There are 125 possible positions to which the valve can be opened.



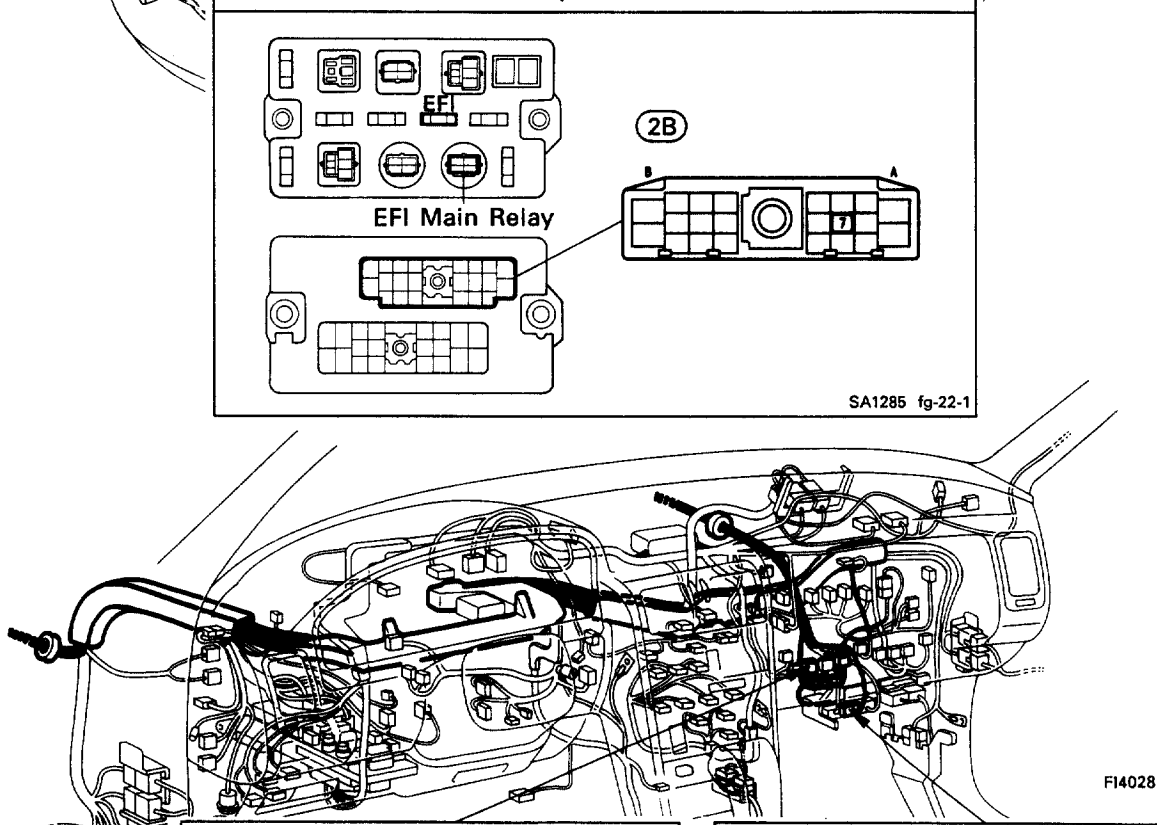
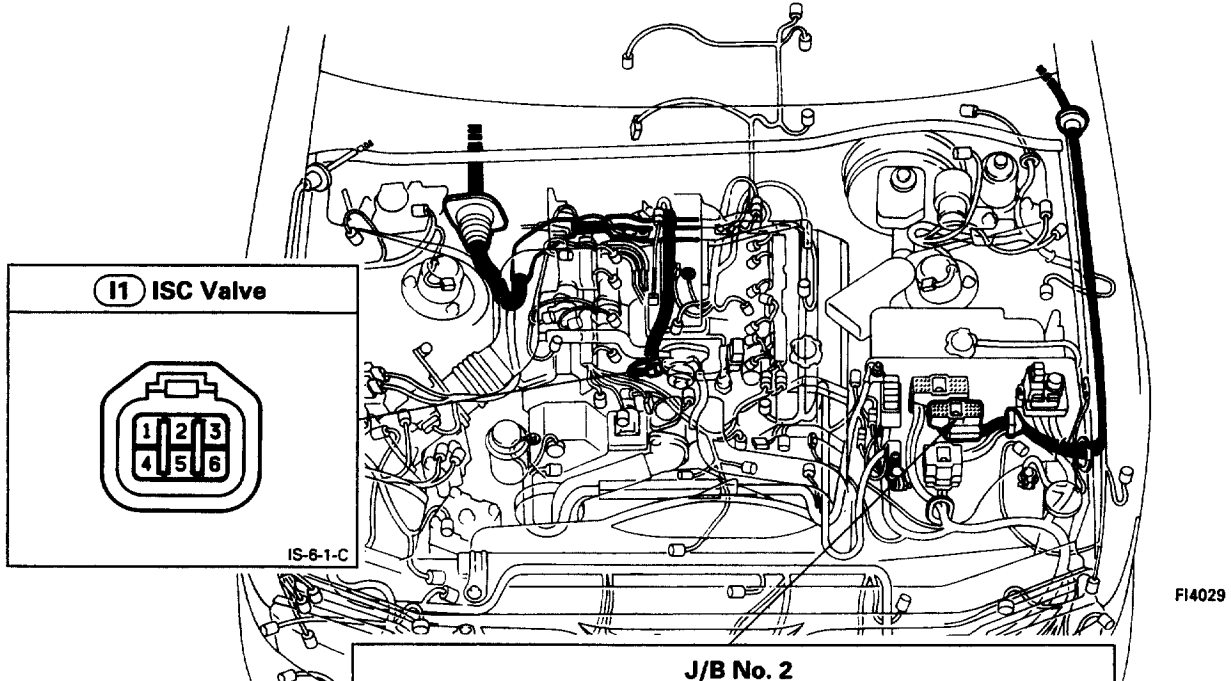
DIAGNOSTIC CHART



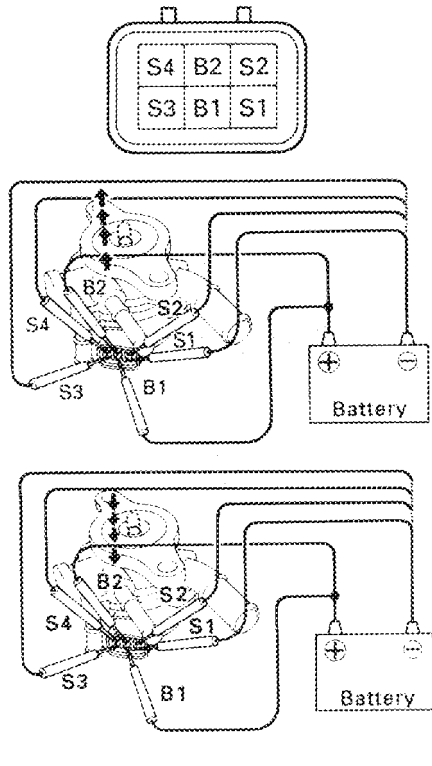
WIRING ROUTING



WIRING ROUTING



INSPECTION PROCEDURE

1 Check ISC valve.**P** Disconnect ISC valve connector.**C** Measure resistance between terminals shown below.

Terminals	Resistance
B1 - S1	10 Ω - 30 Ω
B1 - S3	10 Ω - 30 Ω
B1 - S2	10 Ω - 30 Ω
B1 - S4	10 Ω - 30 Ω

OK

Remove ESC valve.

- (1) Connect the battery positive lead to terminals B1 and B2 and the negative lead to terminals S1-S2-S3-S4 in that order.
- (2) Connect the battery positive lead to terminals B1 and B2, and the negative lead to terminals S4-S3-S2-S1 in that order.

- (1) **The valve moves in the closing direction.**
- (2) **The valve moves in the opening direction.**

OK

NG Replace ISC valve.**2** Check harness and connector between EFI main relay and ICS valve, ISC valve and engine & ECT ECU.

OK

NG Repair or replace harness or connector.

Proceed to next circuit inspection shown on matrix chart (See page [TR-18](#)).