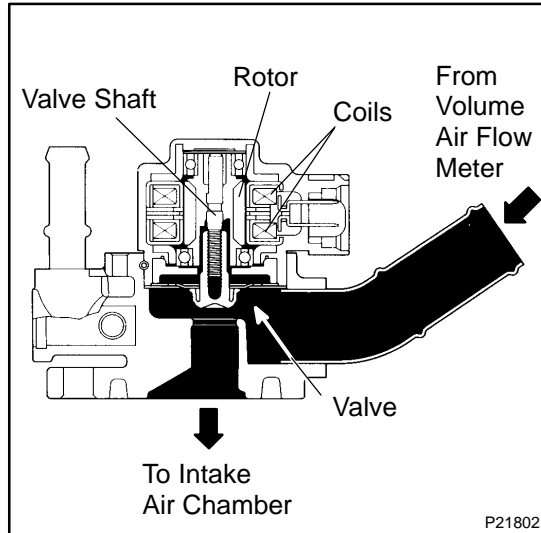


DTC**P0505****Idle Control System Malfunction****CIRCUIT DESCRIPTION**

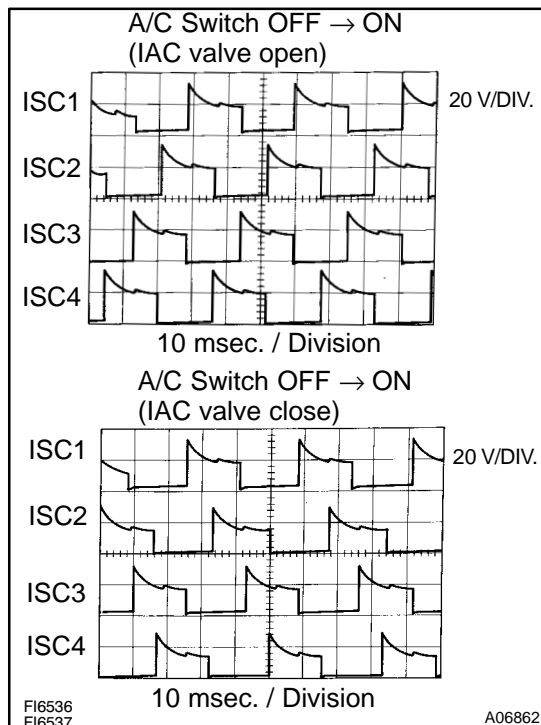
The IAC valve is provided on the intake air chamber and intake air bypassing the throttle valve is directed to the IAC valve through a hose.

A step motor is built into the IAC valve. It consists of four coils, the magnetic rotor, valve shaft and valve.

When current flows to the coils due to signals from the ECM, 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.

DTC No.	DTC Detecting Condition	Trouble Area
P0505	Idle speed continues to vary greatly from the target speed (2 trip detection logic)	<ul style="list-style-type: none"> • IAC valve is stuck or closed • Open or short in IAC valve circuit • Air intake (hose loose)

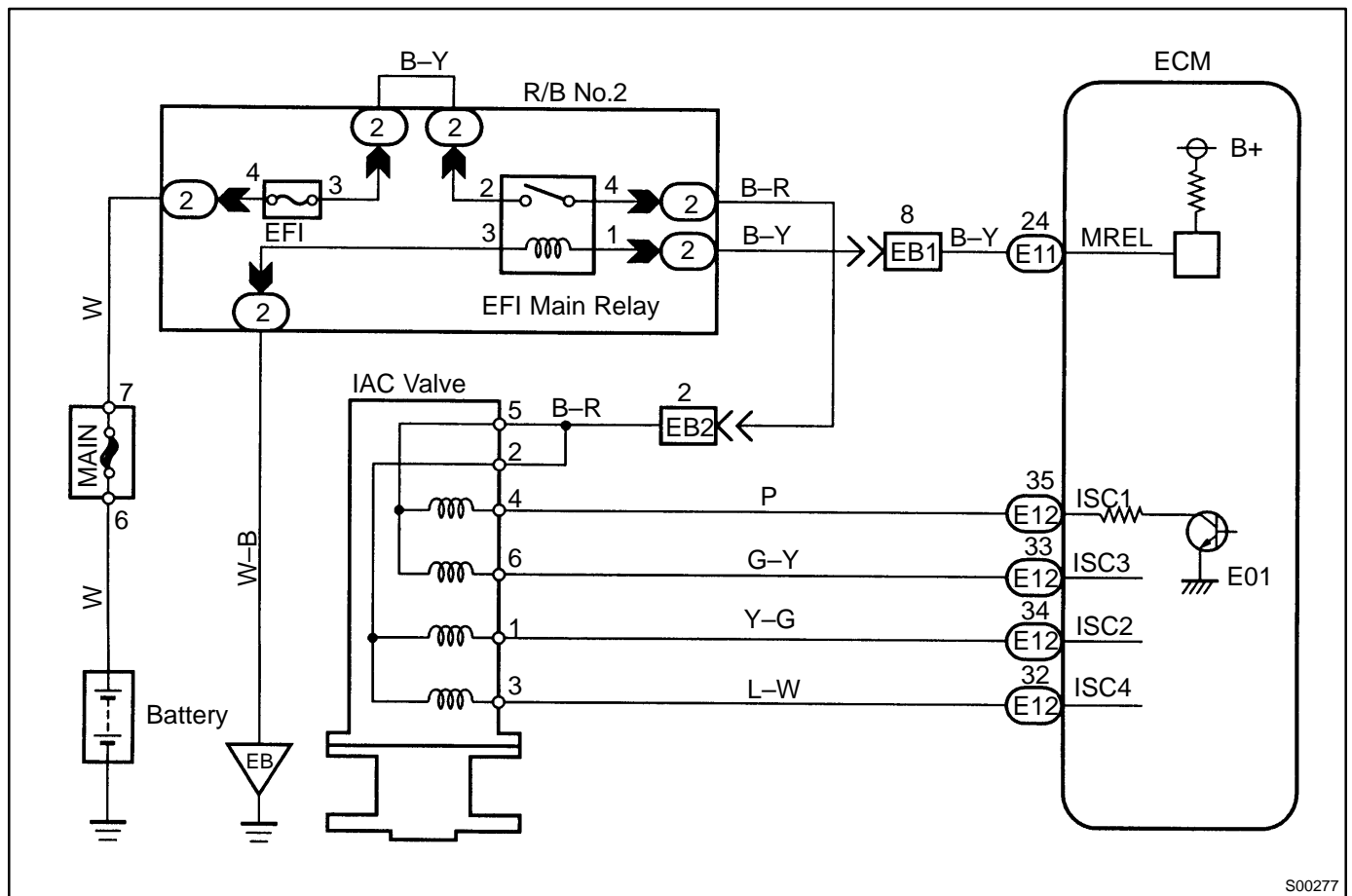
**Reference: INSPECTION USING OSCILLOSCOPE**

With the engine idling measure between terminals ISC1, ISC2, ISC3, ISC4 and E01 of ECM when A/C switch ON or OFF.

HINT:

The correct waveforms are as shown.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	Check IAC valve (See page SF-46).
OK	<div data-bbox="683 1361 798 1462">NG</div> <div data-bbox="798 1361 1487 1462">Replace IAC valve.</div>
2	Check for open and short in harness and connector between EFI main relay (Marking: EFI MAIN) and IAC valve, IAC valve and ECM (See page IN-29).
OK	<div data-bbox="683 1733 798 1834">NG</div> <div data-bbox="798 1733 1487 1834">Repair or replace harness or connector.</div>
Proceed to next circuit inspection shown on matrix chart (See page DI-171).	