

# Idle Control System

## Troubleshooting Flowchart — Alternator FR Signal

**Inspection of Alternator FR signal.**

Connect the ECU test harness between the ECU and connector (page 6-116). Disconnect "D" connector from the main wire harness only, not the ECU.

Turn the ignition switch ON.

Measure voltage between D9 (+) terminal and A26 (-) terminal.

Is there approx. 5 V?

NO

YES

Turn the ignition switch OFF.

Reconnect "D" connector to the main wire harness.

Warm up engine to normal operating temperature (cooling fan comes on).

Measure voltage between D9 (+) terminal and A26 (-) terminal.

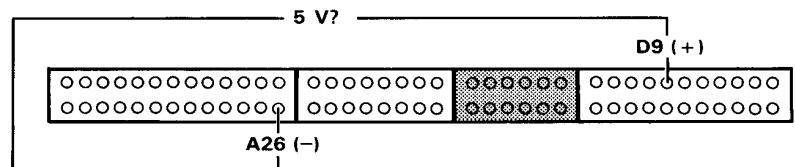
Does the voltage decrease when headlights and rear defogger are turned on?

NO

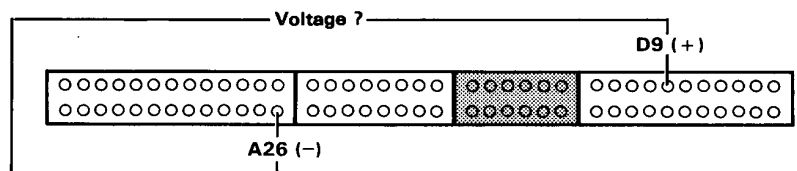
YES

**Alternator FR signal is OK.**

(To page 6-161)



Substitute a known-good ECU and recheck. If prescribed voltage is now available, replace the original ECU.



Stop the engine.



(From page 6-160)

Disconnect "D" connector from ECU only, not the main wire harness.

Disconnect the negative battery cable from the battery.

Check for continuity between D9 terminal and body ground.

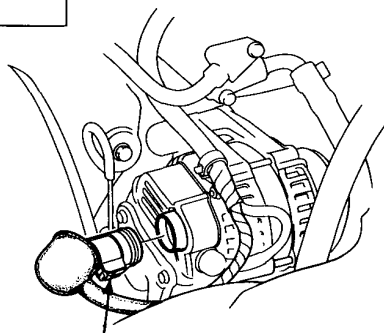
Does continuity exist ?

YES

Disconnect GRN connector from the alternator.

NO

Disconnect GRN connector from the alternator.



GRN CONNECTOR

Connect WHT/RED wire to body ground.

Check for continuity between D9 terminal and body ground.

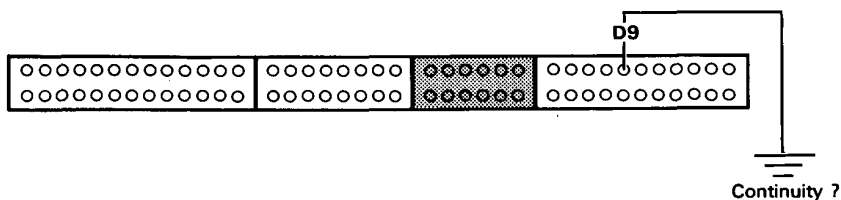
Does continuity exist ?

YES

NO

Repair open in WHT/RED wire between ECU (D9) and alternator.

See Alternator Inspection (section 23).



Check for continuity between D9 terminal and body ground.

Does continuity exist ?

NO

See Alternator Inspection (section 16).

YES

Repair short in WHT/RED wire between ECU (D9) and alternator.