



# Alternator (ALT) FR Signal

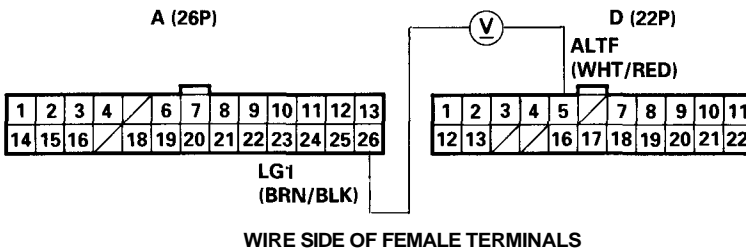
This signals the ECM when the Alternator (ALT) is charging.

### Inspection of ALT FR Signal.

#### Check for a short in the circuit:

1. Disconnect the GRN 4P connector from the ALT.
2. Turn the ignition switch ON (II).
3. Measure voltage between ECM connector terminals D5 and A26.

### ECM CONNECTORS



### WIRE SIDE OF FEMALE TERMINALS

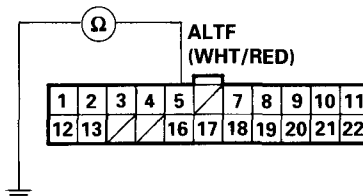
Is there approx. 5 V?

NO

YES

#### Check for a short in the wire:

1. Turn the ignition switch OFF.
2. Disconnect the negative battery cable from the battery.
3. Disconnect the ECM connector D (22P) from the ECM.
4. Check for continuity between ECM connector terminal D5 and body ground.



Is there continuity?

YES

NO

Repair short in the wire between the ECM (D5) and the ALT.

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

#### Check the operation of the ALT:

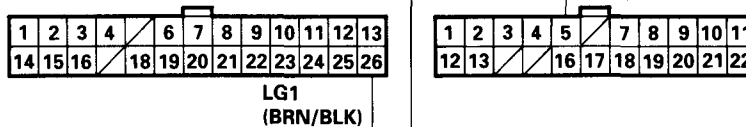
1. Turn the ignition switch OFF.
2. Reconnect the ALT GRN 4P connector to the ALT.
3. Start the engine. Hold the engine at 3,000 rpm with no load (A/T in **N** or **P** position, M/T in neutral) until the radiator fan comes on, then let it idle.
4. Measure voltage between ECM connector terminals D5 and A26.

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

YES

NO

ALT FR signal is OK.



(To page 11-120)

(cont'd)

# Idle Control System

## Alternator (ALT) FR Signal (cont'd)

(From page 11-119)

### Check for an open in the wire:

1. Turn the ignition switch OFF.
2. Disconnect the negative battery cable from the battery.
3. Disconnect the ECM connector D (22P) from the ECM.
4. Disconnect the GRN 4P connector from the ALT.
5. Connect No. 2 terminal to body ground with a jumper wire.
6. Check for continuity between ECM connector terminal D5 and body ground.

Is there continuity?

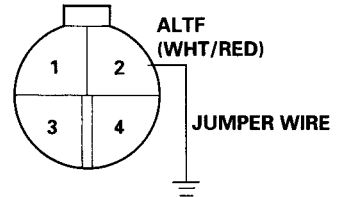
NO

Repair open in the wire between the ECM (D5) and the ALT.

YES

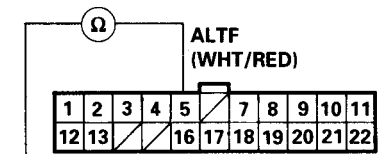
See the ALT inspection (see [section 23](#)).

ALT GRN 4P CONNECTOR



WIRE SIDE OF FEMALE TERMINALS

ECM CONNECTOR D (22P)



WIRE SIDE OF FEMALE TERMINALS