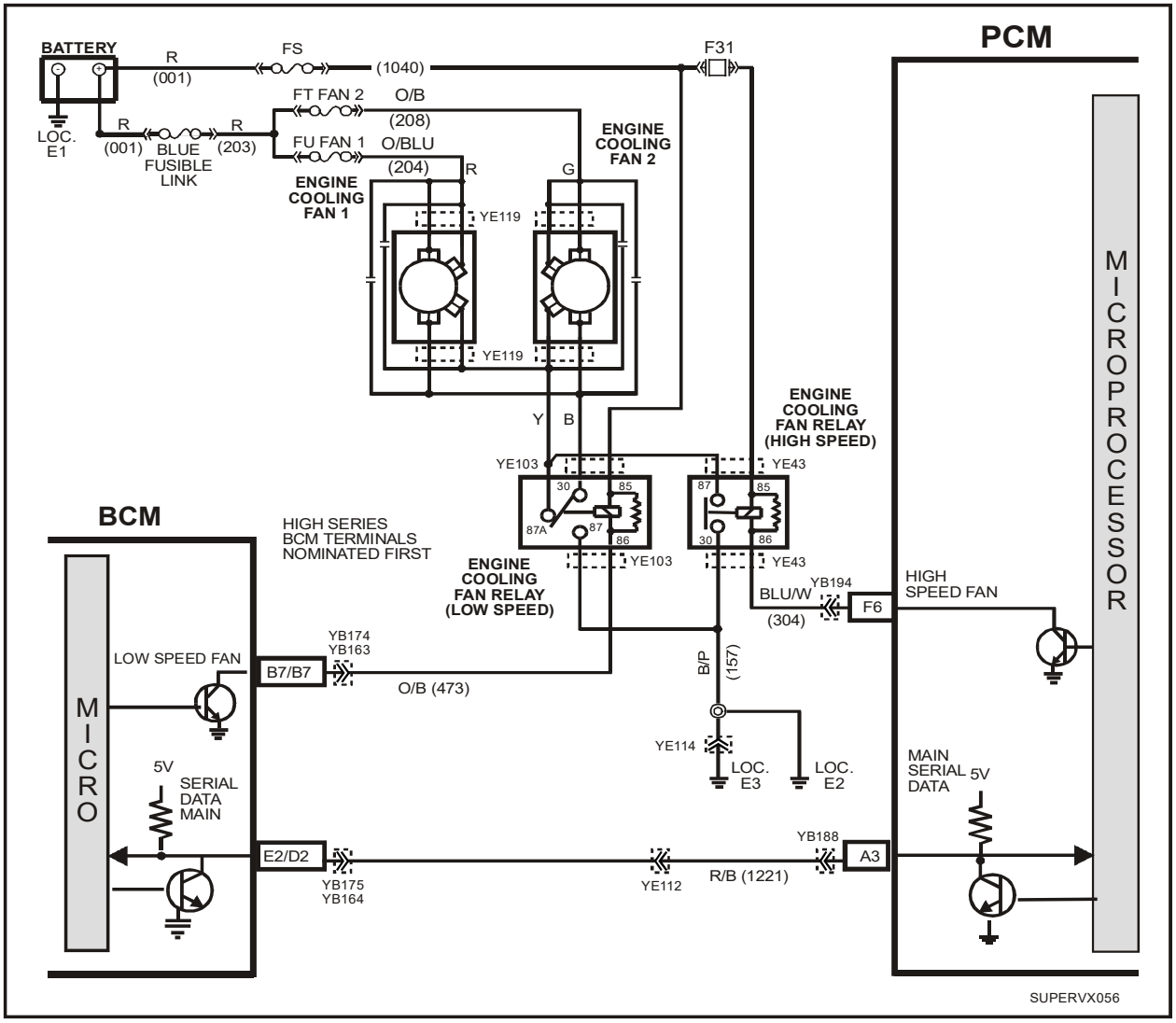

DTC 92 V6 PCM - LOW SPEED FAN – NO BCM RESPONSE

CIRCUIT DESCRIPTION;

The PCM determines operation of the two speed engine cooling fan based on A/C request signal input, engine coolant temperature and vehicle speed.

The engine cooling fan low speed relay (labeled LO FAN in relay housing) is energised by the BCM. When the PCM determines that the engine cooling fan low speed relay should be turned "ON", the PCM will send a message on circuit 1221 to the BCM. This message will ask the BCM to earth circuit 473 and energise the engine cooling fan low speed relay. After the BCM provides the earth for circuit 473, the BCM will send a message back to the PCM saying that the earth circuit was commanded.

When the BCM does not receive communications from the PCM when the ignition is switched "ON", then the starter motor will be enabled after a one second delay.

CONDITIONS FOR RUNNING THE DTC

- Engine is idling.
- PCM supplies a signal to the BCM.

CONDITIONS FOR SETTING THE DTC

- The PCM sends a request to the BCM to turn on the engine cooling fan low speed relay via the serial data normal mode message and the BCM does not send a message back to the PCM.

ACTION TAKEN WHEN THE DTC SETS

- The PCM stores the DTC information into memory when the diagnostic runs and fails.
- The Malfunction Indicator Lamp (MIL) will not be illuminated.
- The PCM records the operating conditions at the time the diagnostic fails. The PCM stores this information in the History Data.
- When DTC 31 is set, the engine will not start if DTC 31 is current.

CONDITIONS FOR CLEARING THE MIL/DTC

- A History DTC clears after forty consecutive warm-up cycles.
- Use a Tech 2 scan tool in order to clear the MIL/DTC.

DIAGNOSTIC AIDS

The Tech 2 scan tool has a special test to check this signal. To access this special test, select F3: BCM, then select F1: THEFT STATUS. The Tech 2 scan tool will either display "OK TO START" or "NO START".

- Dirty, Damaged, or Loose Connections or Damaged Harness - Check for any damage to the harness which could cause an intermittent open or short to earth or backed out terminals at the PCM connectors, broken locks, improperly formed or damaged terminals.

TEST DESCRIPTION

The numbers below refer to the step numbers on the diagnostic table.

2. If the engine cranks after a one second delay it means the BCM did not see a message from the PCM when the ignition was turned "ON".
3. An open or short to earth on circuit 1221 will disable any communication of serial data.

DTC 92 V6 PCM - LOW SPEED FAN – NO BCM RESPONSE

STEP	ACTION	VALUE	YES	NO
1.	Was the "On-Board Diagnostic" (OBD) System Check performed?		Go to Step 2	Go to OBD System Check in this Section
2.	Is DTC 31 set?		Go to DTC 31 Diagnostic Table in this Section	Go to Step 3
3.	1. Engine at idle speed. 2. Using Tech 2 scan tool, select "LOW FAN". Does Tech 2 scan tool "BCM Response" display change from "FAN OFF" to "FAN ON" when test is enabled?		Go to Step 4	Go to Table A-12.1 in this Section
4.	Does Tech 2 scan tool "BCM Response" display change from "FAN OFF" to "FAN ON" when test is enabled?		DTC 92 is intermittent. Refer to "Diagnostic Aids" above.	Refer Section 12J-1 LOW SERIES BCM or Section 12J-2 HIGH SERIES BCM in VX Service Information for additional diagnosis.