

# PGM-FI System

## DTC Troubleshooting (cont'd)

### DTC P0102: MAF Sensor Circuit Low Voltage (2003-2004 SULEV, LX-P models and 2005-2006 models)

1. Turn the ignition switch ON (II), and wait 2 seconds.
2. Check the MAF SENSOR in the DATA LIST with the HDS.

*Is about 0 gm/s or 0.1 V or less indicated?*

**YES**—Go to step 3.

**NO**—Intermittent failure, system is OK at this time. Check for poor connections or loose terminals at the MAF sensor and the ECM/PCM. ■

3. Check the No. 18 ACG (15 A) fuse in the under-dash fuse/relay box.

*Is the fuse OK?*

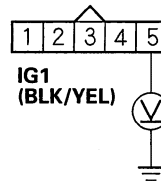
**YES**—Go to step 4.

**NO**—Repair short in the wire between the MAF sensor and the No. 18 ACG (15 A) fuse. Also replace the No. 18 ACG (15 A) fuse, then go to step 20.

4. Turn the ignition switch OFF.
5. Disconnect the MAF sensor/IAT sensor 5P connector.

6. Turn the ignition switch ON (II).
7. Measure voltage between MAF sensor/IAT sensor 5P connector terminal No. 5 and body ground.

#### MAF SENSOR/IAT SENSOR 5P CONNECTOR



Wire side of female terminals

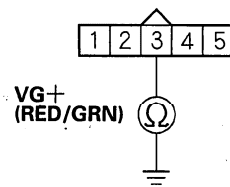
*Is there battery voltage?*

**YES**—Go to step 8.

**NO**—Repair open in the wire between the No. 18 ACG (15 A) fuse and the MAF sensor, then go to step 20.

8. Turn the ignition switch OFF.
9. Measure resistance between MAF sensor/IAT sensor 5P connector terminal No. 3 and body ground.

#### MAF SENSOR/IAT SENSOR 5P CONNECTOR



Wire side of female terminals

*Is there 190–210 k $\Omega$ ?*

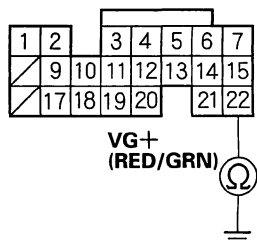
**YES**—Go to step 15.

**NO**—Go to step 10.



10. Jump the SCS line with the HDS.
11. Disconnect ECM/PCM connector C (22P).
12. Check for continuity between ECM/PCM connector terminal C22 and body ground.

**ECM/PCM CONNECTOR C (22P)**



Wire side of female terminals

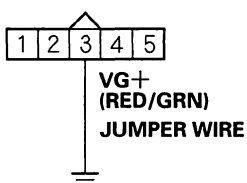
*Is there continuity?*

**YES**—Repair short in the wire between the ECM/PCM (C22) and the MAF sensor, then go to step 20.

**NO**—Go to step 13.

13. Connect MAF sensor/IAT sensor 5P connector terminal No. 3 to body ground with a jumper wire.

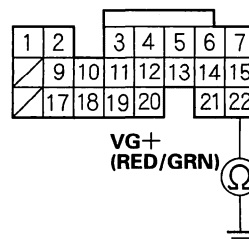
**MAF SENSOR/IAT SENSOR 5P CONNECTOR**



Wire side of female terminals

14. Check for continuity between ECM/PCM connector terminal C22 and body ground.

**ECM/PCM CONNECTOR C (22P)**



Wire side of female terminals

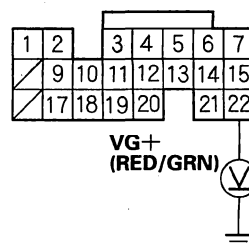
*Is there continuity?*

**YES**—Go to step 25.

**NO**—Repair open in the wire between the ECM/PCM (C22) and the MAF sensor, then go to step 20.

15. Reconnect the MAF sensor/IAT sensor 5P connector.
16. Start the engine. Hold the engine speed at 2,000 rpm without load (in Park or neutral).
17. Measure voltage between ECM/PCM connector terminal C22 and body ground.

**ECM/PCM CONNECTOR C (22P)**



Wire side of female terminals

*Is there about 1.5 V?*

**YES**—Go to step 25.

**NO**—Go to step 18.

(cont'd)

# PGM-FI System

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## DTC Troubleshooting (cont'd)

18. Turn the ignition switch OFF.
19. Replace the MAF sensor/IAT sensor (see page 11-226).
20. Reconnect all connectors.
21. Turn the ignition switch ON (III).
22. Reset the ECM/PCM with the HDS.
23. Do the ECM/PCM idle learn procedure (see page 11-316).
24. Check for Temporary DTCs or DTCs with the HDS.

*Are any Temporary DTCs or DTCs indicated?*

**YES**—If DTC P0102 is indicated, check for poor connections or loose terminals at the MAF sensor and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

**NO**—Troubleshooting is complete. ■

25. Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM (see page 11-6).
26. Check for Temporary DTCs or DTCs with the HDS.

*Are any Temporary DTCs or DTCs indicated?*

**YES**—If DTC P0102 is indicated, check for poor connections or loose terminals at the MAF sensor and the ECM/PCM, then go to step 1. If any other Temporary DTCs or DTCs are indicated, go to the indicated DTC's troubleshooting.

**NO**—If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see page 11-227). ■