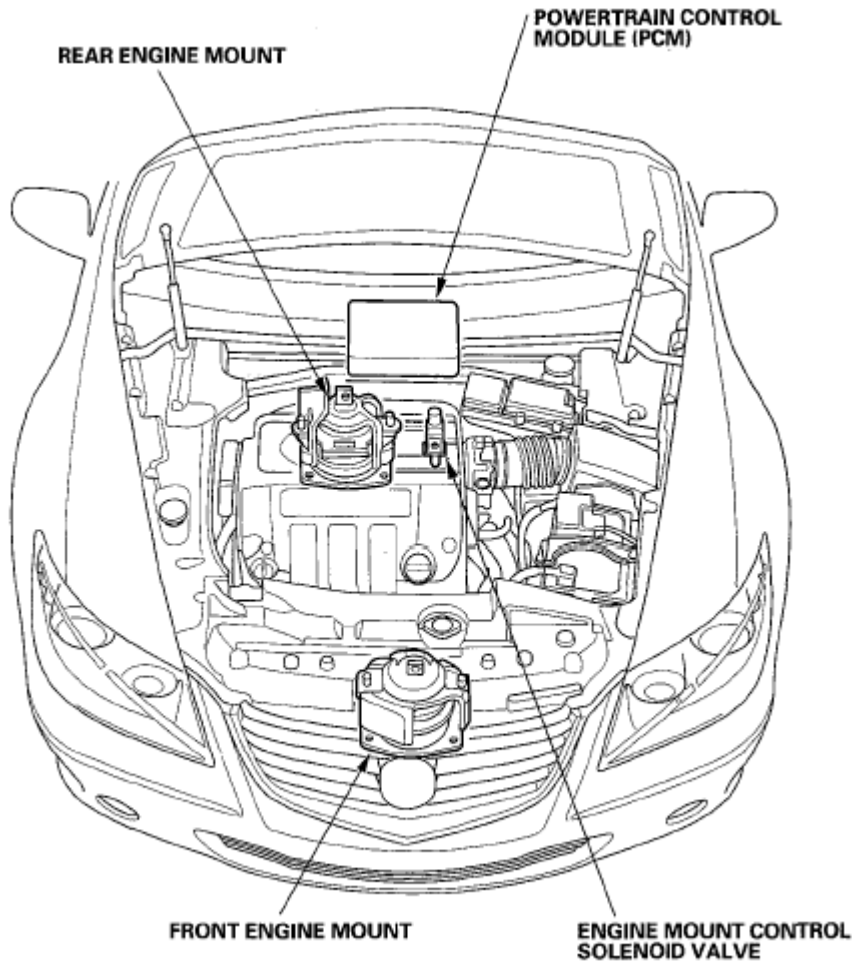


2005-08 ENGINE

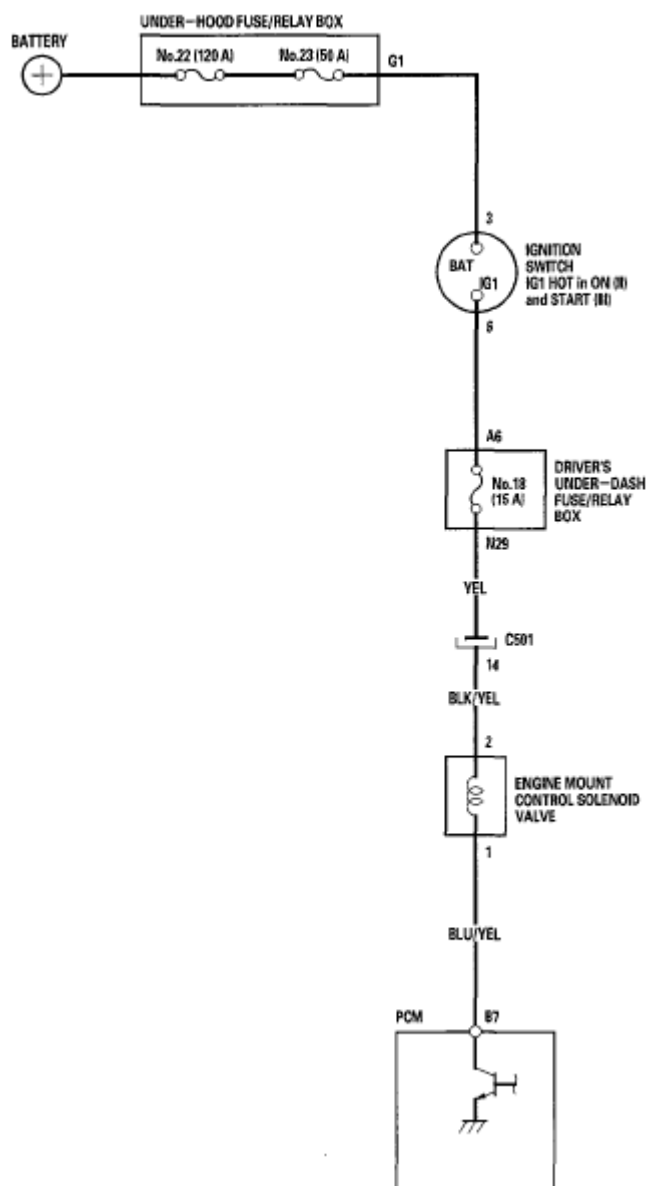
Engine Mount Control System - RL

COMPONENT LOCATION INDEX



**Fig. 1: Identifying Engine Mount Control System Components Location**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM



**Fig. 2: Engine Mount Control System Circuit Diagram**  
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

## TROUBLESHOOTING

### Special Tools Required

Vacuum pump/gauge, 0-30 in.Hg Snap-on YA4000A or equivalent, commercially available

**NOTE:** Check the vacuum hoses and lines for damage and proper connections before troubleshooting.

Follow this procedure if the engine vibrates excessively when idling.

1. Start the engine, and let it idle (see **IDLE SPEED INSPECTION**).
2. Raise the engine speed from idling to 2,000 RPM.

3. Check the MOUNT CTRL SOL in the PGM-FI DATA LIST with the HDS.

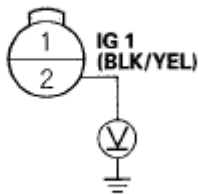
*Is ON indicated at idling and OFF indicated at 2,000 RPM?*

**YES** - Go to step 4.

**NO** - Update the powertrain control module (PCM) if it does not have the latest software (see **UPDATING THE PCM** ), or substitute a known-good PCM (see **SUBSTITUTING THE PCM** ), then recheck. If the engine mount control system works properly, and the PCM was updated, the troubleshooting is complete. If the PCM was substituted, replace the original PCM (see **PCM REPLACEMENT** ).

4. Shift the transmission to P or N position.
5. Disconnect the engine mount control solenoid valve 2P connector from the engine mount control solenoid valve.
6. Measure the voltage between engine mount control solenoid valve 2P connector terminal No. 2 and body ground.

**ENGINE MOUNT CONTROL  
SOLENOID VALVE 2P CONNECTOR**



Wire side of female terminals

**Fig. 3: Measuring Voltage Between Engine Mount Control Solenoid Valve Connector Terminal 2 And Body Ground**

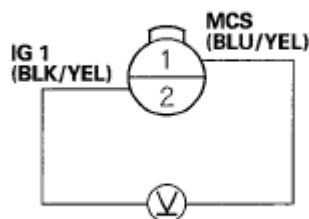
Courtesy of AMERICAN HONDA MOTOR CO., INC.

*Is there battery voltage?*

**YES** - Go to step 7.

**NO** - Repair open in the wire between engine mount control solenoid valve 2P connector terminal No. 2 and No. 18 (15A) fuse in the driver's under-dash fuse/relay box.

7. Measure the voltage between engine mount control solenoid valve 2P connector terminals No. 1 and No. 2, with the engine at idle.

ENGINE MOUNT CONTROL  
SOLENOID VALVE 2P CONNECTOR

Wire side of female terminals

**Fig. 4: Measuring Voltage Between Engine Mount Control Solenoid Valve 2P Connector Terminals 1 And 2**

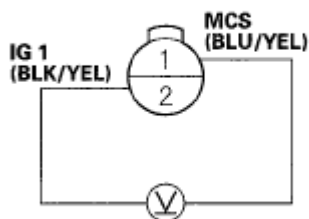
Courtesy of AMERICAN HONDA MOTOR CO., INC.

*Is there battery voltage?*

**YES** - Go to step 8.

**NO** - Repair open in the wire between PCM (B7) and the engine mount control solenoid valve 2P connector. If the wire is OK, update the PCM if it does not have the latest software (see **UPDATING THE PCM**), or substitute a known-good PCM (see **SUBSTITUTING THE PCM**), and recheck. If the engine mount control system works properly, and the PCM was updated, the troubleshooting is complete. If the PCM was substituted, replace the original PCM (see **PCM REPLACEMENT**).

8. Raise the engine speed above 1,000 RPM.
9. Measure the voltage between engine mount control solenoid valve 2P connector terminals No. 1 and No. 2.

ENGINE MOUNT CONTROL  
SOLENOID VALVE 2P CONNECTOR

Wire side of female terminals

**Fig. 5: Measuring Voltage Between Engine Mount Control Solenoid Valve 2P Connector Terminals 1 And 2**

Courtesy of AMERICAN HONDA MOTOR CO., INC.

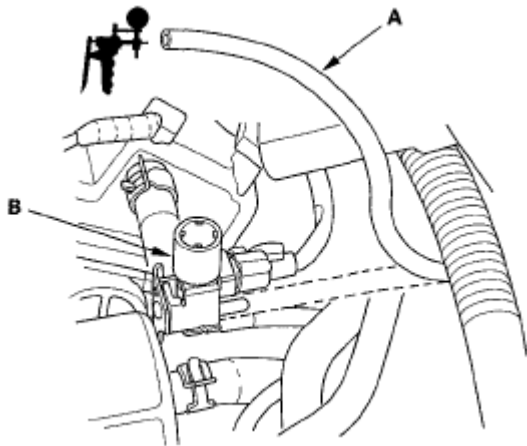
*Is there battery voltage?*

**YES** - Repair short to body ground in the wire between PCM (B7) and the engine mount control solenoid valve. If the wire is OK, update the PCM if it does not have the latest software (see **UPDATING THE PCM**), or substitute a known-good PCM (see **SUBSTITUTING THE PCM**), and recheck. If the engine mount control system works properly, and the PCM was updated, the troubleshooting is complete. If the PCM was substituted, replace the original PCM (see **PCM**

**REPLACEMENT** ).

**NO** - Go to step 10.

10. Disconnect the vacuum hose (A) that is closest to the solenoid connector from the engine mount control solenoid valve (B), and connect a commercially available vacuum pump/gauge, 0-30 in.Hg, to the hose. Apply about 20 in.Hg of vacuum, and wait for 20 seconds.



**Fig. 6: Identifying Vacuum Hose And Engine Mount Control Solenoid Valve**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

*Do the engine mounts hold vacuum?*

**YES** - Go to step 11.

**NO** - Either the vacuum hose or one of the engine mounts has a vacuum leak. Repair as needed.

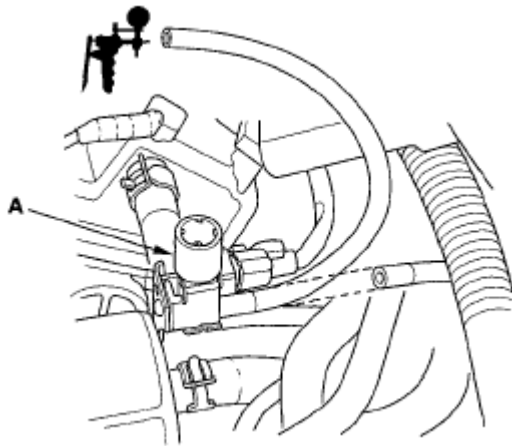
11. Release the vacuum, then apply vacuum again.

*Is there a noticeable change in idle smoothness with and without vacuum applied?*

**YES** - Go to step 12.

**NO** - Replace the front engine mount and/or rear engine mount.

12. Connect a commercially available vacuum pump/ gauge, 0-30 in.Hg, to the engine mount control solenoid valve port (A) that is closest to the solenoid connector.



**Fig. 7: Identifying Engine Mount Control Solenoid Valve Port**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

*Is there manifold vacuum at idle, and a decrease in manifold vacuum when you raise the engine speed above 1,000 RPM?*

**YES** - The system is OK.

**NO** - Replace the engine mount control solenoid valve.