HONDA **Service Bulletin** **05-026**

Applies To: **1999 – 02 Odyssey** – ALL
2003 Odyssey – From VIN 2HKRL18..3H500001 thru 2HKRL18..3H504511
and from VIN 5FNRL18..3B000001 thru 5FNRL18..3B067057
2003 Pilot – From VIN 2HKYF18..3H500001 thru 2HKYF18..3H567864

July 20, 2005

Warranty Extension: EGR Valve Contamination or EGR Port Clogging May Cause DTC P0401, DTC P1491, or Engine Hesitation/Surge

(Replaces 00-009, *Odyssey Warranty Extension: EGR Port Clogging*, dated March 4, 2003)

BACKGROUND

In some 1999–03 Odysseys and 2003 Pilots, the EGR system may become contaminated or clogged. If this happens, the vehicle may hesitate or surge during light acceleration, and the MIL (malfunction indicator lamp) may come on with DTC P0401 (EGR insufficient flow) or P1491 (EGR valve insufficient lift).

Because of these possible problems, affected vehicles now have a warranty extension that covers EGR port clogging and/or EGR valve sticking.

Here are the details of the extended coverage:

- On 1999–01 Odysseys thru VIN 2HKRL18..1H586575, EGR port clogging and EGR valve sticking is covered for 8 years or 80,000 miles, whichever occurs first.
- On 2001 Odysseys after VIN 2HKRL18..1H586575, all 2002 Odysseys, 2003 Odysseys within the affected VIN ranges, and 2003 Pilots within the affected VIN range, EGR valve sticking is covered for 8 years or 80,000 miles, whichever occurs first.

For a vehicle to be eligible, the EGR valve malfunction must be confirmed with the hesitation/surge diagnosis in this bulletin, or the MIL must be on with DTC P0401 or P1491 stored.

VEHICLES PREVIOUSLY REPAIRED

To see if a vehicle was previously repaired according to S/B 00-009, do a VIN status inquiry. The warranty symptom code for vehicles repaired by S/B 00-009 is **L38**.

CUSTOMER NOTIFICATION

Depending on the vehicle and its problem, customers will be sent one of these letters:

Letter 1 is being sent to owners of *1999–00 Odysseys and 2001 Odysseys thru VIN 2HKRL18..1H586575*. ***These vehicles were not yet repaired according to S/B 00-009.*** This letter explains the 8/80 warranty extension. It also tells how EGR system contamination or clogging can cause engine hesitation or surging and cause the MIL to come on. The repair for these vehicles is to install an EGR pipe kit.

Letter 2 is being sent to owners of *1999-2001 Odysseys that were already repaired according to S/B 00-009, and all other vehicles within the affected VIN ranges.* This letter explains the 8/80 warranty extension. It also tells how EGR valve contamination can cause engine hesitation or surging. The repair for these vehicles is to replace the EGR valve.

Examples of both letters are at the end of this service bulletin.

CORRECTIVE ACTION

On 1999–01 Odysseys thru VIN 2HKRL18..1H586575 ***not yet*** repaired according to S/B 00-009:

If DTC P0401 or P1491 is stored, or if the engine hesitate or surges, clean the EGR port, install an EGR pipe kit, and clear the DTC(s) with the HDS (see **REPAIR PROCEDURE B: EGR PORT CLEANING AND INSTALLATION OF EGR PIPE KIT**).

On 1999–01 Odysseys thru VIN 2HKRL18..1H586575 ***already*** repaired according to S/B 00-009, and all other vehicles within the affected VIN ranges:

Test-drive the vehicle with the HDS connected to check the EGR valve (see page 2). If needed, replace the valve, and clear any stored DTCs (see **DIAGNOSIS OF HESITATION/SURGE**).

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Skill Level
R
REPAIR

CUSTOMER INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Honda automobile dealer.

PARTS INFORMATION

For 1999–01 Odysseys thru VIN 2HKRL18..1H586575 ***not yet*** repaired according to S/B 00-009:

EGR Pipe Kit:

1999–00 – P/N 06175-P8F-A01, H/C 7374135
2001 – P/N 06175-P8F-A71, H/C 7374127

For 1999–01 Odysseys thru VIN 2HKRL18..1H586575 ***already*** repaired according to S/B 00-009, and all other vehicles within the affected VIN ranges:

EGR Valve Set: P/N 18011-PGK-A02, H/C 7382161
(Contains EGR valve and EGR valve gasket)

TOOL INFORMATION

NOTE: This tool kit was previously sent to your dealership for S/B 00-009. It's only needed on 1999–01 Odysseys thru VIN 2HKRL18..1H586575 ***not yet*** repaired according to S/B 00-009.

EGR Pipe Installation Kit: T/N 07ZAD-P8AA000
(Contains EGR pipe installation tool and drill bit)

WARRANTY CLAIM INFORMATION

1999–01 Odysseys thru VIN 2HKRL18..1H586575 not yet repaired according to S/B 00-009:

Operation Number: 120124

Flat Rate Time: 1.5 hours

Failed Part: P/N 18011-PGK-A02
H/C 7382161

Defect Code: 5KE00

Symptom Code: P7500

Skill Level: Repair Technician

1999–01 Odysseys thru VIN 2HKRL18..1H586575 already repaired according to S/B 00-009, and all other vehicles within the affected VIN ranges:

OP#	Description	FRT
125501	Two-person test-drive using the HDS to diagnose the EGR valve and clear any DTCs	0.6
121150	Replace the EGR valve	0.3

Failed Part: P/N 18011-PGK-A02
H/C 7382161

Defect Code: 5KE00

Symptom Code: P7500

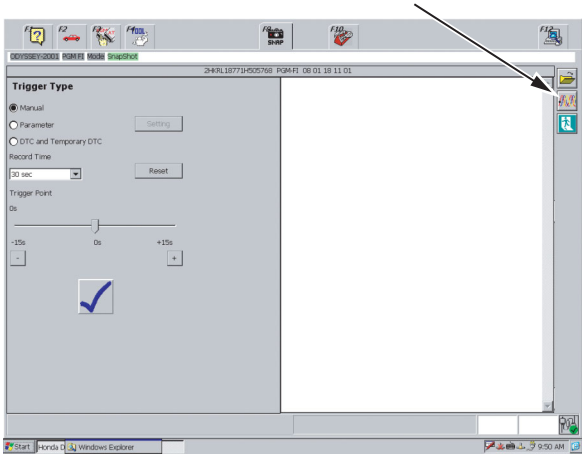
Skill Level: Repair Technician

DIAGNOSIS OF HESITATION/SURGE

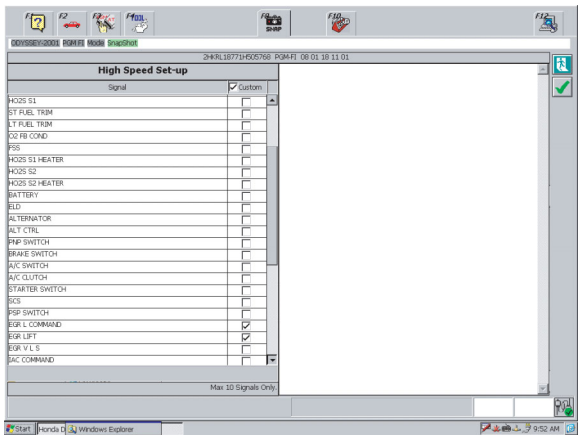
NOTE: If you are working on a 1999–01 Odyssey thru VIN 2HKRL18..1H586575 ***not yet*** repaired according to S/B 00-009, ***do not do this diagnosis***; go to **REPAIR PROCEDURE B: EGR PORT CLEANING AND INSTALLATION OF EGR PIPE KIT**.

1. Verify that the HDS has software version 1.017.006 or later installed. Previous versions will not do this diagnosis.
2. Connect the HDS to the vehicle's 16P data link connector (DLC).
3. Turn the ignition switch to ON (II). Turn on the HDS.
4. At the screen prompts, enter the VIN and the odometer reading, and then verify the correct date/time.
5. Select the **Mode** Menu. Then select **Honda Systems**.
6. From the **System Selection** menu screen, select **PGM FI**.
7. From the **Mode** menu screen, select **Snapshot**.
8. From the **Trigger Type** menu, select the **High Speed Set-up** button.

HIGH SPEED SET-UP

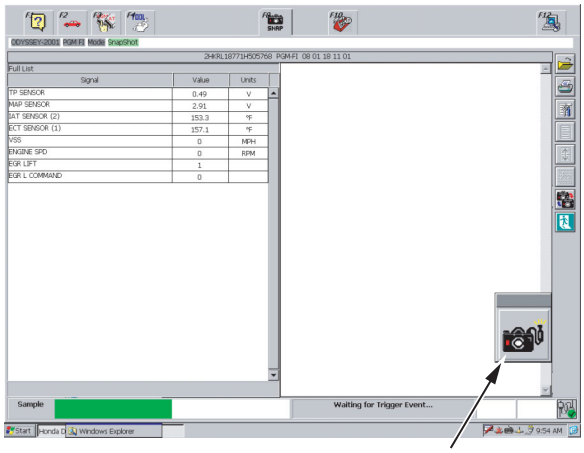


9. From the **High Speed** menu screen, select these parameters: **Engine Speed, VSS, ECT Sensor, Map Sensor, TP Sensor, EGR-L-Command**, and **EGR LIFT**. Then select the green **Check** button.



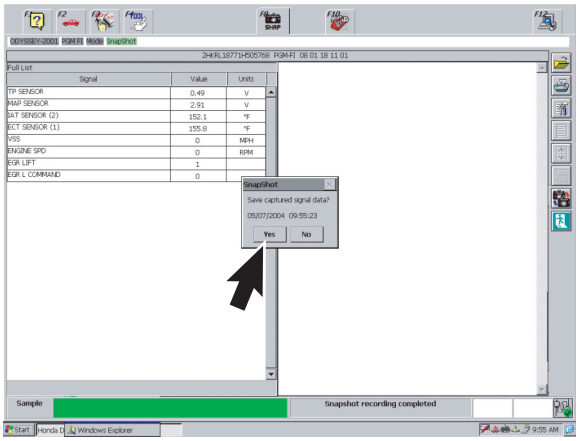
10. When the **Trigger Type** menu is displayed, select **Manual**, select **Record Time** for 30 seconds, and move the trigger point to the middle. Then select the **Blue Check** button. Make sure the defaulted trigger point is in the middle.
11. With the engine completely warmed up, have an assistant drive the vehicle while you operate the HDS. Drive the vehicle between 40 and 55 mph on a smooth road. Apply light throttle with the transmission in 5th gear (between 1,500 and 2,000 rpm). If hesitation is felt, select the **Snapshot Manual Trigger** button.

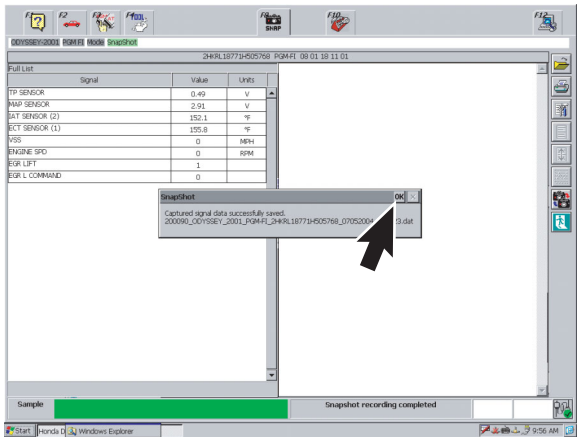
    NOTE: The snapshot must be done with two people so that one person can drive and the other can operate the HDS.



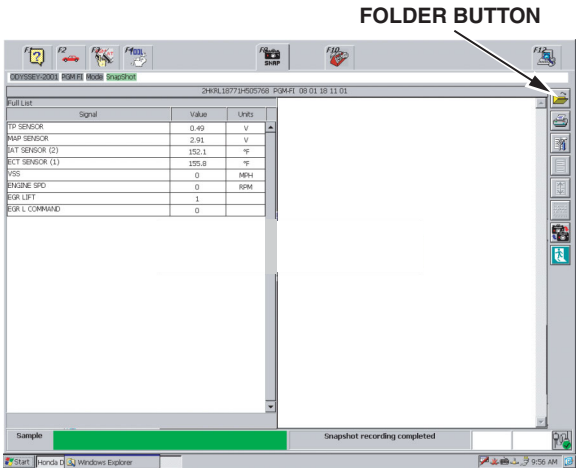
SNAPSHOT MANUAL TRIGGER BUTTON

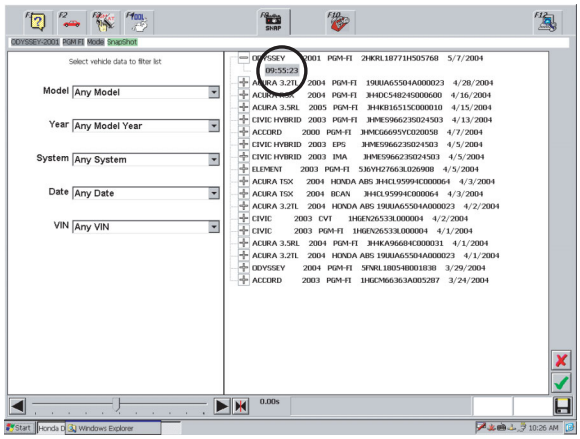
12. When the drive is complete, the **Snapshot** dialog box is displayed. Select **Yes**, then select **OK**. This stores the snapshot.



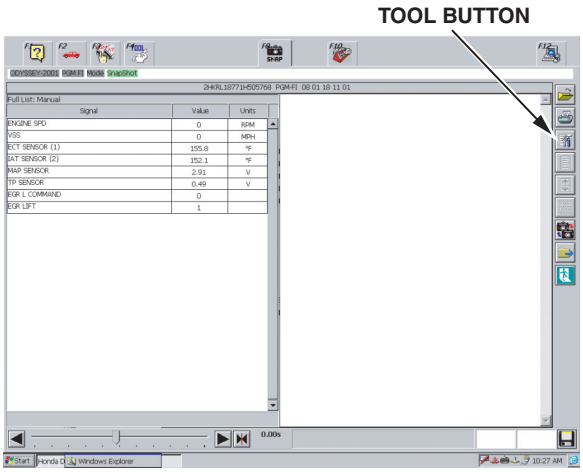


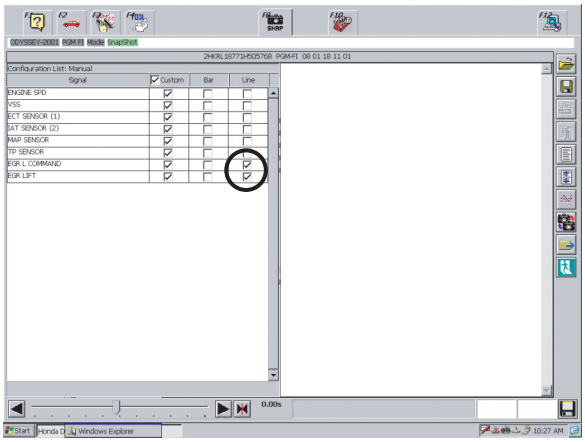
13. Select the **Folder** button, then select the **Snapshot** you just created.



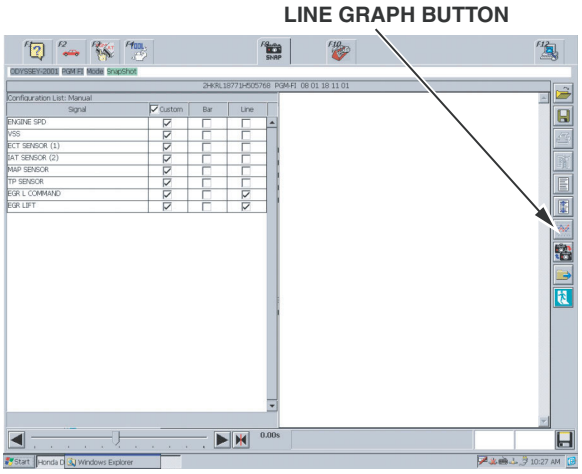


14. Select the **Tool** button. Under the line graph column, select **EGR L COMMAND** and **EGR LIFT**.

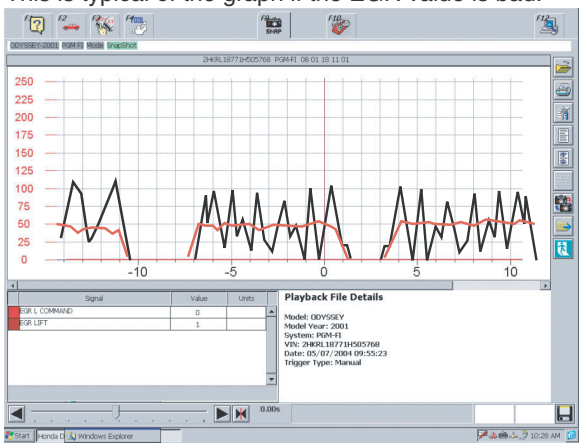




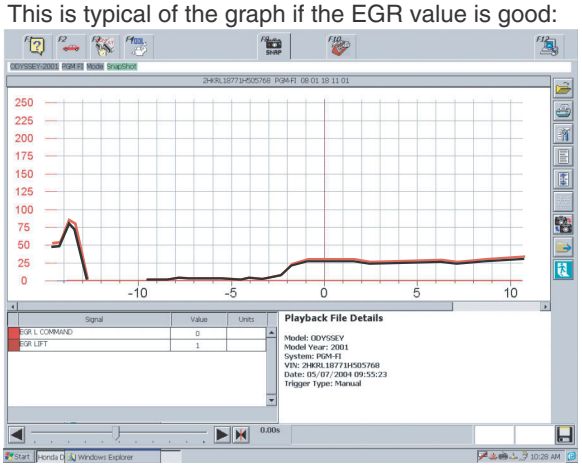
15. Select the **Line Graph** button.
    - If the **EGR LIFT** graph is different from the **EGR L COMMAND** graph, the EGR valve is bad. Go to **REPAIR PROCEDURE A: EGR VALVE REPLACEMENT**.
    - If the **EGR LIFT** graph follows the **EGR L COMMAND** graph, the EGR valve is OK. Continue with normal troubleshooting procedures.



This is typical of the graph if the EGR value is bad:



This is typical of the graph if the EGR value is good:

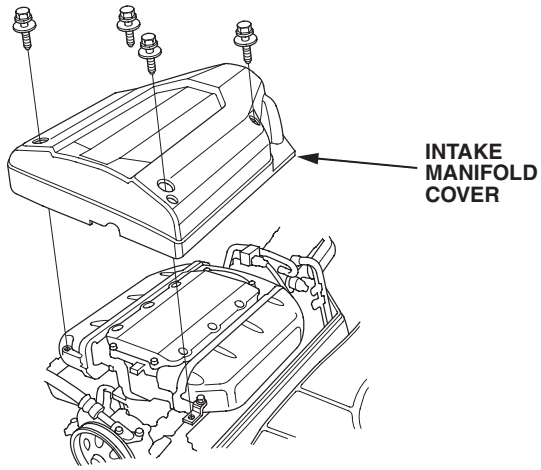


16. Clear any DTCs with the HDS.

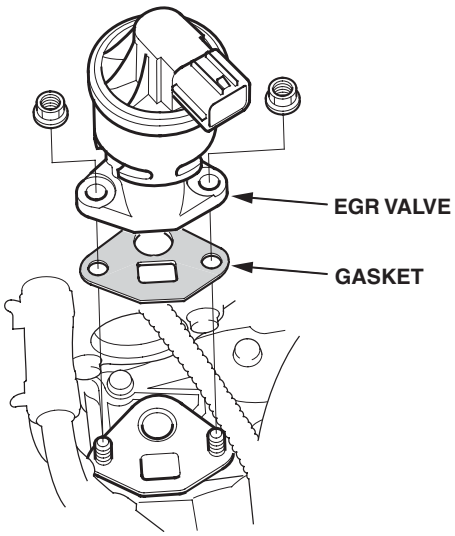
REPAIR PROCEDURE A: EGR VALVE REPLACEMENT

NOTE: This procedure is for 1999–01 Odysseys thru VIN 2HKRL18..1H586575 ***already*** repaired according to S/B 00-009, and all other vehicles within the affected VIN ranges.

1. Remove the intake manifold cover.



2. Remove the EGR valve.

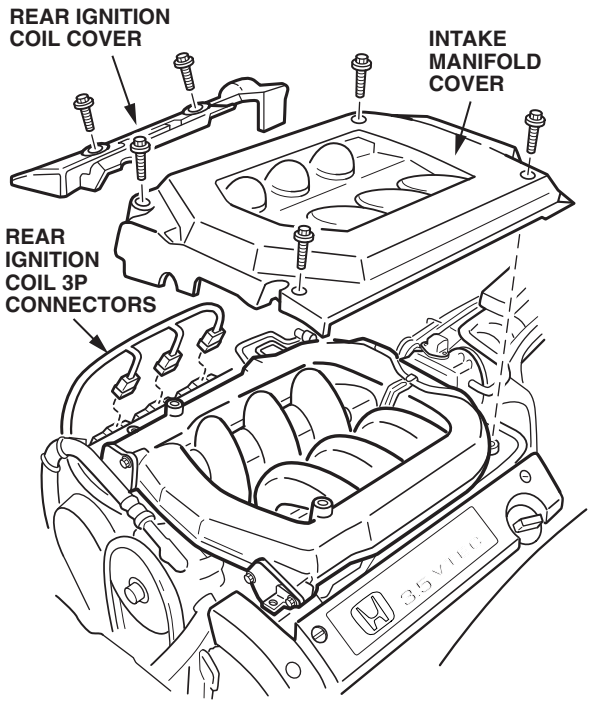


3. Install the new gasket and EGR valve. Torque the nuts to 22 N·m (16 lb-ft). Reconnect the EGR valve connector, and install the intake manifold cover.

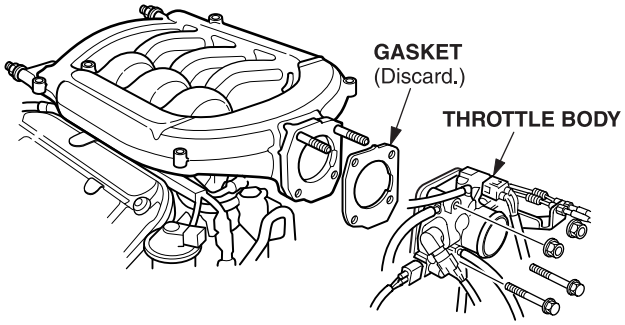
REPAIR PROCEDURE B: EGR PORT CLEANING AND INSTALLATION OF EGR PIPE KIT

NOTE: This procedure is only for 1999–01 Odysseys thru VIN 2HKRL18..1H586575 ***not yet*** repaired according to S/B 00-009.

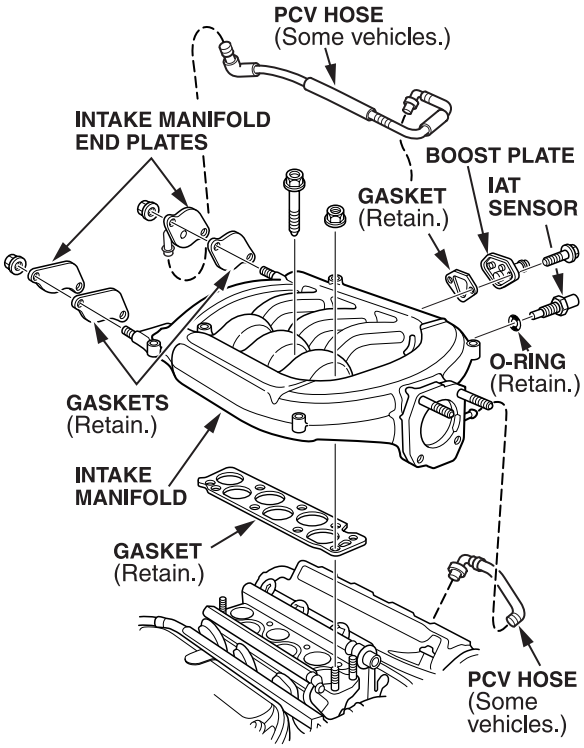
1. Verify that the HDS has software version 1.017.006 or later installed. Previous versions will not do this diagnosis.
2. Connect the HDS to the vehicle's 16P data link connector (DLC).
3. Turn the ignition switch to ON (II). Turn on the HDS.
4. At the screen prompts, enter the VIN and the odometer reading, then verify the correct date/time.
5. Select the **Mode** Menu. Then select **Honda Systems**.
6. From the **System Selection** Menu screen, select **PGM FI**.
7. From the **Mode** Menu screen, select **DTCs/Freeze Data**, then clear any DTCs.
8. Remove the intake manifold cover. Unplug the ignition coil 3P connectors on the rear bank, then remove the rear ignition coil cover.



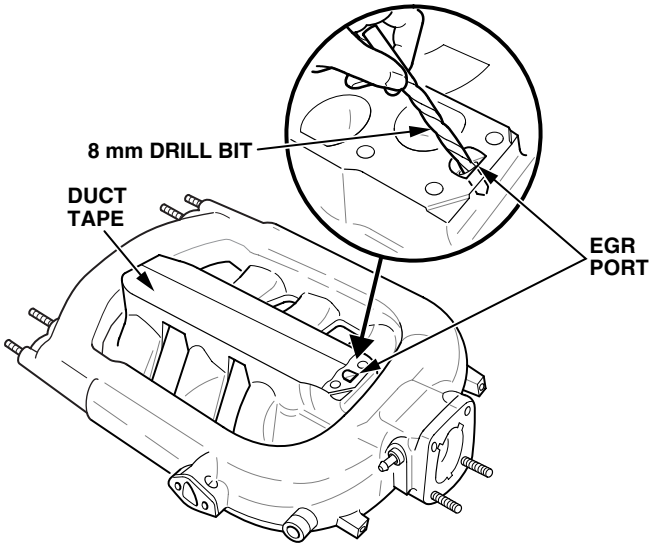
9. Disconnect the brake booster vacuum hose and the vacuum hose from the intake manifold.
10. Remove the throttle body from the intake manifold (two nuts and two bolts). Leave all hoses, cables, and electrical connectors connected to the throttle body. Discard the throttle body gasket.



11. Remove the PCV valve from the cylinder head cover. Remove the intake manifold (three nuts and six bolts).
12. Remove the end plates, the IAT sensor, and the boost plate from the intake manifold. If the PCV hose connects to the intake manifold instead of the end plate, remove the hose.

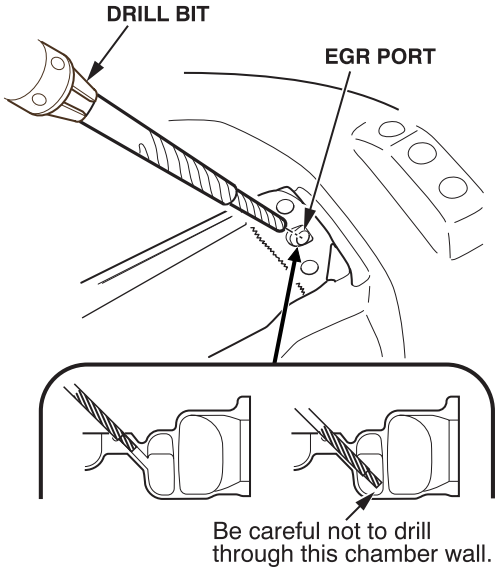


13. Cover the six ports on the bottom of the manifold with duct tape.



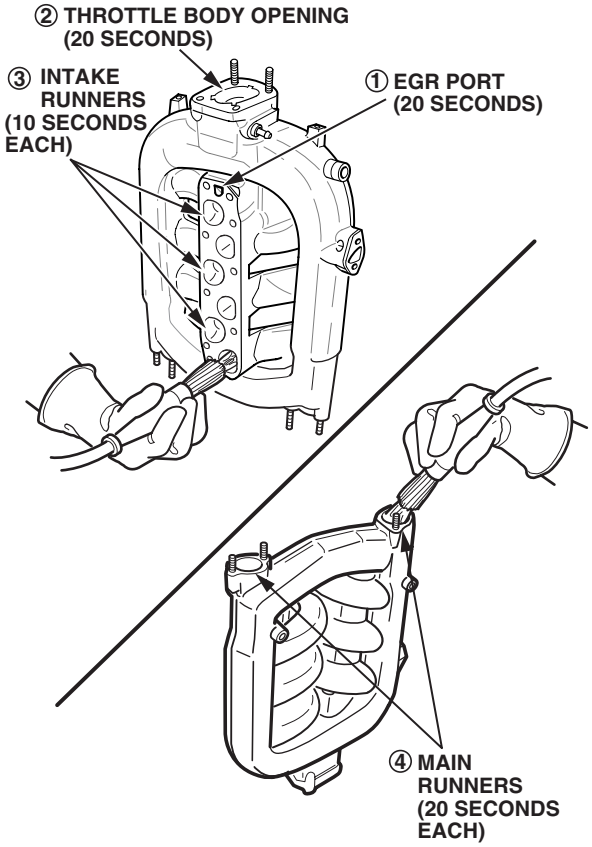
14. Use an 8 mm drill bit and carburetor cleaner to clean the EGR port in the intake manifold. Turn the drill bit only by hand. Do not use a power drill.
15. Put the special drill bit from the EGR pipe installation kit in your power drill. Coat the drill bit completely with clean engine oil.

    NOTE: The oil coating is critical to drilling the hole accurately, and it contributes to drill bit life.
16. Insert the guide part of the drill bit into the EGR port. Make sure it is inserted fully. Then drill out the EGR port using steady pressure on the drill. Make sure the port is drilled through completely.

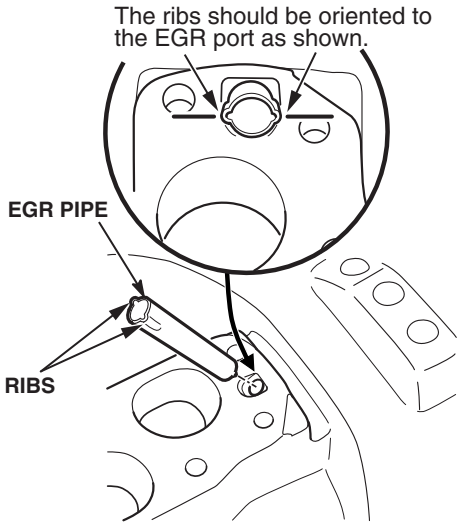


    Clean up the aluminum chips from drilling, then remove the duct tape.

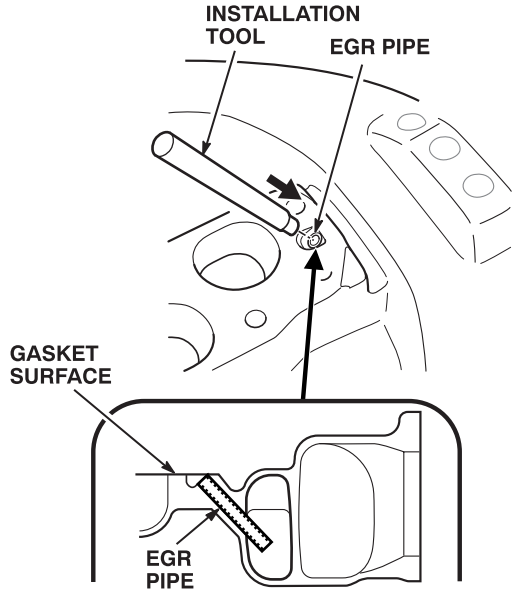
17. Put the manifold in a parts washer (solvent or soap and water), and clean it thoroughly.
    - Flush out the EGR port for **20 seconds**.
    - Flush out the manifold from the throttle body opening. Run cleaner down each side for **20 seconds**.
    - Flush each intake runner for **10 seconds**. Start at the throttle body end, and work toward the back.
    - Turn the manifold so the throttle body opening is facing down. Flush each main runner for **20 seconds**.
    - Dry the manifold with compressed air and clean shop towels.



18. Place the EGR pipe from the kit into the EGR port.



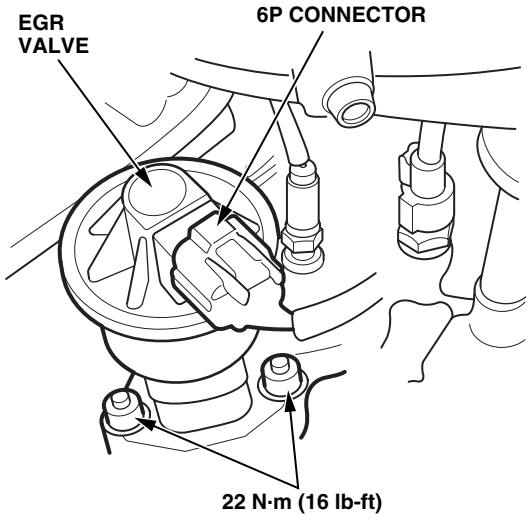
19. Use the installation tool and a small hammer to drive the EGR pipe into the port until it is flush with the port. Make sure the pipe will not contact the gasket after installation.



20. Install the end plates, and torque the nuts to 12 N·m (8.7 lb-ft). Install the IAT sensor with the original O-ring, and torque it to 18 N·m (13 lb-ft). Install the boost plate with the original gasket, and torque the bolts to 12 N·m (8.7 lb-ft). If necessary, install the PCV hose.

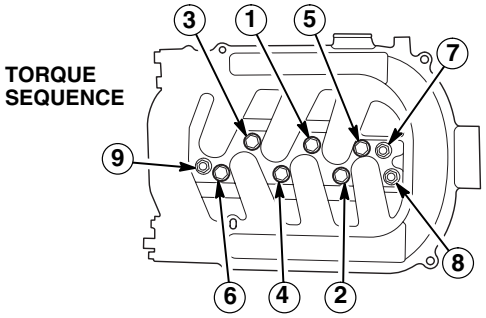
21. Inspect the EGR port in the front of the injector base on the engine. If it is partially or fully clogged, clean the port.

22. Disconnect the 6P connector from the EGR valve. Remove the EGR valve.



23. Install the new EGR valve with a new gasket. Torque the mounting nuts to 22 N·m (16 lb-ft). Reconnect the 6P connector.

24. Install the intake manifold with the original gasket. Torque the mounting nuts and bolts to 22 N·m (16 lb-ft) sequentially in two or three steps. Route the PCV hose so it does not get pinched under the intake manifold.



25. Install the PCV valve in the cylinder head cover.

26. Install the throttle body with a new gasket. Torque the mounting nuts and bolts to 22 N·m (16 lb-ft).

27. Reinstall the brake booster vacuum hose and the vacuum hose. Connect the 3P ignition coil connectors, and install the covers.

Example of Customer Letter for 1999, 2000, and 2001 Odysseys thru VIN 2HKRL18...IH586575

Summer 2005

Warranty Extension: EGR System Clogging

Dear Odyssey Owner:

We sent you a warranty extension notice covering EGR system clogging in November 2001. Your warranty extension is now expanded to include EGR valve contamination.

In some 1999–01 Odysseys, the exhaust gas recirculation (EGR) system can become clogged and/or the EGR valve can be contaminated. If this happens, your vehicle may hesitate or surge during light acceleration, and the malfunction indicator lamp on the instrument panel may come on.

Warranty Extension Details

To provide protection in the unlikely event your vehicle experiences this problem, we are extending the warranty coverage for EGR system clogging and EGR valve contamination to 8 years or 80,000 miles, whichever comes first. If your vehicle hesitates or surges during light acceleration and/or if the malfunction indicator lamp comes on, take your vehicle to any Honda dealer for service. If the dealer determines the cause to be EGR system clogging or EGR valve contamination and, if your vehicle is within the warranty extension time or mileage, the repair is *free of charge*.

What to do if you feel this notice is in error

Our records show that you are the current owner or lessee of a 1999–01 Odyssey receiving the warranty extension for EGR system clogging. If this is not the case, or the name/address information is incorrect, please fill out and return the enclosed, postage-paid *Information Change Card*. We will then update our records.

If you have questions

If you have questions about this notice, or feel you may have paid for a repair that is covered by this warranty extension, please call Automobile Customer Service at (800) 999-1009.

Sincerely,

American Honda Motor Co., Inc.
Honda Automobile Division

Example of Customer Letter for 2001 Odysseys after VIN 2HKRL18...IH586575, and all other vehicles within the affected VIN ranges

Summer 2005

Warranty Extension: EGR Valve

Dear Honda Owner:

In some 2001–03 Odysseys and 2003 Pilots, the exhaust gas recirculation (EGR) valve can become contaminated. If this happens, your vehicle may hesitate or surge during light acceleration, and the malfunction indicator lamp on the instrument panel may come on.

Warranty Extension Details

To provide protection in the unlikely event your vehicle experiences this problem, we are extending the EGR valve warranty coverage to 8 years or 80,000 miles, whichever comes first. If your vehicle hesitates or surges during light acceleration and/or if the malfunction indicator lamp comes on, take your vehicle to any Honda dealer for service. If the dealer determines the cause to be the EGR valve and, if your vehicle is within the warranty extension time or mileage, the repair is *free of charge*.

What to do if you feel this notice is in error

Our records show that you are the current owner or lessee of a 2001–03 Odyssey or 2003 Pilot receiving the EGR valve warranty extension. If this is not the case, or the name/address information is incorrect, please fill out and return the enclosed, postage-paid *Information Change Card*. We will then update our records.

If you have questions

If you have questions about this notice, or feel you may have paid for a repair that is covered by this warranty extension, please call Automobile Customer Service at (800) 999-1009.

Sincerely,

American Honda Motor Co., Inc.
Honda Automobile Division

July 20, 2005

Dear Service Manager:

American Honda is announcing an EGR warranty extension for all 1999-02 Odysseys, some 2003 Odysseys, and some 2003 Pilots.

In some 1999–03 Odysseys and 2003 Pilots, the EGR system may become contaminated or clogged. If this happens, the vehicle may hesitate or surge during light acceleration, and the MIL (malfunction indicator lamp) may come on with DTC P0401 (EGR insufficient flow) or P1491 (EGR valve insufficient lift). Because of these possible problems, affected vehicles now have a warranty extension that covers EGR port clogging and/or EGR valve sticking.

Here is the specific coverage:

- On 1999–01 Odysseys thru VIN 2HKRL18..1H586575, EGR port clogging and EGR valve sticking is covered for 8 years or 80,000 miles, whichever occurs first.

- On 2001 Odysseys after VIN 2HKRL18..1H586575, all 2002 Odysseys, 2003 Odysseys within the affected VIN ranges, and 2003 Pilots within the affected VIN range, EGR valve sticking is covered for 8 years or 80,000 miles, whichever occurs first.

Customer Notification
Notifications to all owners will begin mailing in early August and continue for six weeks. Since this is not a campaign, you will not receive a campaign responsibility report.

Inspection/Repair Strategy
The only vehicles needing inspection and/or possible repair are those returned by customers with the specific complaint of engine hesitation, engine surge, and/or a MIL that stays on. On 1999–01 Odysseys *not yet* repaired according to S/B 00-009, *Odyssey Warranty Extension: EGR Port Clogging*, the repair is to clean the EGR port and install an EGR pipe kit. On 1999-01 Odysseys *already* repaired according to S/B 00-009, all 2002 Odysseys, 2003 Odysseys within the affected VIN ranges, and 2003 Pilots within the affected VIN range, the inspection/repair is to test-drive the vehicle and, if needed, replace the EGR valve. For repair, VIN, and warranty information, refer to S/B 05-026, *Warranty Extension: EGR Valve Contamination or EGR Port Clogging May Cause DTC P0401, DTC P1491, or Engine Hesitation/Surge*.

Tool Information
The tool kit used on 1999–01 Odysseys *not yet* repaired according to S/B 00-009 (EGR Pipe Installation Kit: T/N 07ZAD-P8AA000) was previously sent to you for that bulletin. If you need another tool kit, order it through normal channels.

Parts Information
Since this is not a campaign, the warranty extension should not cause any change in your current EGR parts demand. To help us keep enough parts in stock for open ordering, do not order large quantities. If over-ordering causes rapid depletion of stock, ordering will be restricted in the future.

Sincerely,

American Honda Motor Co., Inc.
Honda Automobile Division