# CHRYSLER

November 5, 2008

Mr. Daniel Smith
Associate Administrator, Safety Assurance
National Highway Traffic Safety Administration
1200 New Jersey Ave. S.W.
Washington, D.C.  20590

Dear Mr. Smith:

Reference:  NHTSA Identification Number 08V-528

Enclosed are representative copies of communications relating to the 2009 model year vehicles involved in the referenced recall.  Chrysler expects to notify dealers on November 6, 2008 and to begin owner notification during the week of November 10, 2008.  The exact number of manufactured vehicles in the recall is 685.

This completes Chrysler's package of information for this recall as required by the Defects Report Regulation.

Sincerely,

Stephan J. Speth, Director
Vehicle Compliance and Safety Affairs

Enclosure:    Dealer and Owner Letter for Recall H33


cc: K.C. DeMeter

![Chrysler logo] **CHRYSLER**

Dealer Service Instructions for:

# Safety Recall H33
# Powertrain Control Module

## Models

2009      **(PM) Dodge Caliber**

           **(MK) Jeep® Compass and Patriot**

           **(JS)  Chrysler Sebring and Dodge Avenger**

           **(JC)  Dodge Journey**

*NOTE: This recall applies only to the above vehicles built from July 10, 2008 through August 26, 2008 **(MDH 071011 through 082606)**.*

> **IMPORTANT: Some of the involved vehicles may be in dealer new vehicle inventory. Federal law requires you to complete this recall service on these vehicles before retail delivery.** Dealers should also consider this requirement to apply to used vehicle inventory and should perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

## Subject

The Powertrain Control Module (PCM) on about 680 of the above vehicles may have been manufactured with an adhesive that could cause the printed circuit board to break. This can cause the engine to stall and result in a crash without warning.

## Repair

The PCM must be replaced and the correct software programmed into the new module.

## Parts Information

| Part Number | Description |
| --- | --- |
| **CBA0H331** | **Module, Powertrain Control** (with manual or CVT transaxle) |
| **CBA0H332** | **Module, Powertrain Control** (with 4 speed automatic transaxle) |

**Each dealer** to whom vehicles in the recall were assigned will receive enough Powertrain Control Modules to service about 20% of those vehicles.

## Special Tools

**The following specials tool are required to perform this repair:**

- CH9401*          StarSCAN Tool
- CH9404D*          StarSCAN Vehicle Cable
- CH9409*          StarSCAN Documentation Kit
- CH9410*          StarSCAN Ethernet Cable 12 ft.
- CH9412*          StarSCAN Software Update Device Kit
- CH9801          StarMOBILE Tool
- CH9804          StarMOBILE Vehicle Cable
- NPN          TechCONNECT PC
- NPN          StarSCAN/StarMOBILE Software Update CD

\* Part of CH9400 kit.

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**Service Procedure**

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CAUTION: **To avoid a possible voltage spike that could damage the PCM, the ignition key must be in the "OFF" position and the negative battery cable must be disconnected before unplugging the PCM connectors.**

## A. PCM Replacement for PM/MK Models (See Section "B" for JS/JC models):

1. Open the hood. Install a battery charger and verify that the charging rate provides 13.0 to 13.5 volts. Do not allow the charger to time out during the flash process. Set the battery charger timer (if so equipped) to continuous charge.

   **NOTE: Use an accurate stand alone voltmeter. The battery charger voltmeter may not be sufficiently accurate. Voltages outside of the specified range will cause an unsuccessful flash. If voltage reading is too high, apply an electrical load by activating the park or headlamps and/or HVAC blower motor to lower the voltage.**

2. Determine the PCM software part number using the following procedure:

   **Using StarSCAN:**

   a. Connect the CH9404 StarSCAN vehicle cable to the StarSCAN and the vehicle.

   b. Place the Ignition in the "**RUN**" position, then Power "**ON**" the StarSCAN.

   c. Starting at the "Home" screen select "**ECU View**".

   d. Touch the screen to highlight "**PCM**" in the list of modules.

   e. Select "**More Options**".

   f. Select "**ECU Flash**".

   g. Record the part number at the top of the Flash PCM screen for later reference.

   **Using StarMOBILE:**

   a. Connect the CH9410 StarMOBILE ethernet cable to the StarMOBILE and the dealer's network drop.

   b. Connect the CH9404 StarMOBILE vehicle cable to the StarMOBILE and the vehicle.

**Service Procedure (Continued)**

c. Place the Ignition in the "**RUN**" position, then Power "**ON**" the StarMOBILE.

d. Record the StarMOBILE I.P. address displayed on the StarMOBILE screen.

e. From the desktop, launch the "StarMOBILE Desktop Client" software.

f. Establish a connection with the StarMOBILE scan tool.

g. Starting at the "Home" screen select "**ECU View**".

h. Touch the screen to highlight "**PCM**" in the list of modules.

i. Select "**More Options**".

j. Select "**ECU Flash**".

k. Record the part number at the top of the Flash PCM screen for later reference.

3. Place the Ignition in the "**OFF**" position.

4. Disconnect the negative battery cable.

5. Unlock and disconnect the electrical connectors from the PCM.

6. Remove the air cleaner box.

7. Remove the three PCM mounting bolts (Figure 1).

8. Tip the PCM out and remove it from the mounting bracket.

9. Place the new PCM into the mounting bracket.

10. Install the three mounting bolts and tighten them to 80 in. lbs. (9 N·m) (Figure 1).

11. Connect the PCM electrical connectors and engage the electrical connector locks.

12. Install the air cleaner box.

13. Connect the negative battery cable.

14. Continue with Section C. Program PCM.
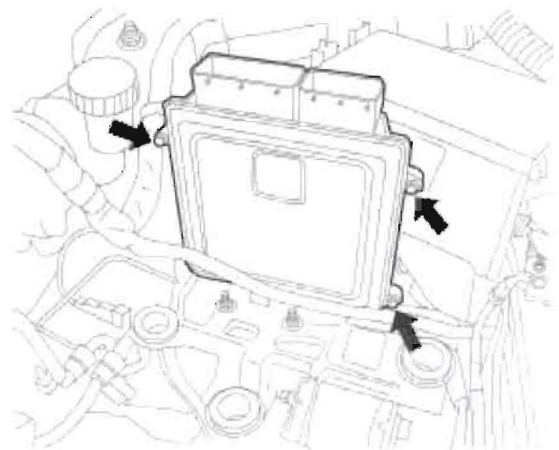


**Figure 1**

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**Service Procedure (Continued)**
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## B. PCM Replacement for JS/JC Models:

1. Open the hood. Install a battery charger and verify that the charging rate provides 13.0 to 13.5 volts. Do not allow the charger to time out during the flash process. Set the battery charger timer (if so equipped) to continuous charge.

   **NOTE: Use an accurate stand alone voltmeter. The battery charger voltmeter may not be sufficiently accurate. Voltages outside of the specified range will cause an unsuccessful flash. If voltage reading is too high, apply an electrical load by activating the park or headlamps and/or HVAC blower motor to lower the voltage.**

2. Determine the PCM software part number using the following procedure:

   **Using StarSCAN:**

   a. Connect the CH9404 StarSCAN vehicle cable to the StarSCAN and the vehicle.

   b. Place the Ignition in the "**RUN**" position, then Power "**ON**" the StarSCAN.

   c. Starting at the "Home" screen select "**ECU View**".

   d. Touch the screen to highlight "**PCM**" in the list of modules.

   e. Select "**More Options**".

   f. Select "**ECU Flash**".

   g. Record the part number at the top of the Flash PCM screen for later reference.

   **Using StarMOBILE:**

   a. Connect the CH9410 StarMOBILE ethernet cable to the StarMOBILE and the dealer's network drop.

   b. Connect the CH9404 StarMOBILE vehicle cable to the StarMOBILE and the vehicle.

   c. Place the Ignition in the "**RUN**" position, then Power "**ON**" the StarMOBILE.

   d. Record the StarMOBILE I.P. address displayed on the StarMOBILE screen.

   e. From the desktop, launch the "StarMOBILE Desktop Client" software.

   f. Establish a connection with the StarMOBILE scan tool.

g. Starting at the "Home" screen select "**ECU View**".

h. Touch the screen to highlight "**PCM**" in the list of modules.

i. Select "**More Options**".

j. Select "**ECU Flash**".

k. Record the part number at the top of the Flash PCM screen for later reference.

3. Place the Ignition in the "**OFF**" position.

4. Disconnect and remove the battery charger.

5. Disconnect the negative battery cable.

6. Disconnect both PCM electrical connectors (Figure 2).

7. Remove the two PCM mounting bracket retaining nuts and remove the PCM and mounting bracket as an assembly (Figure 2).

8. Remove the four mounting screws that hold the PCM to the mounting bracket.

9. Install the new PCM on to the mounting bracket.

10. Install the four PCM-to-mounting bracket retaining screws. Tighten the screws to 95 lbs. in. (11 N·m) (Figure 2).

11. Install the PCM and bracket into the vehicle. Tighten the two mounting nuts to 95 in. lbs. (11 N·m).

12. Connect both PCM electrical connectors (Figure 2).

13. Connect the negative battery cable.
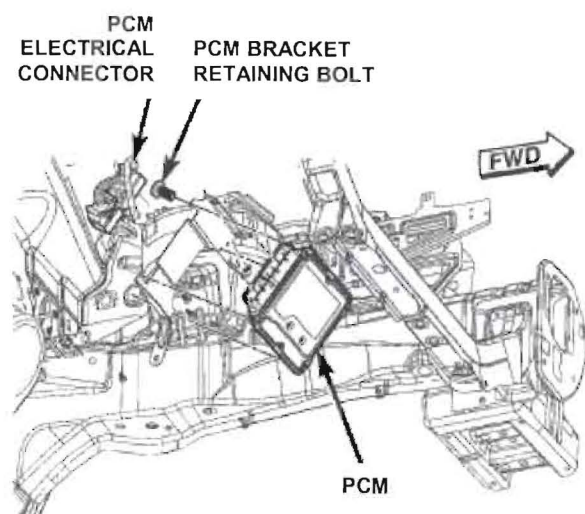
14. Continue with **Section C. Program PCM**.



Figure 2

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**Service Procedure (Continued)**

## C. Program PCM

**NOTE: Either StarSCAN or StarMOBILE can be used to perform this recall. This procedure must be performed with the latest software release level.  If the reprogramming flash for the PCM is aborted or interrupted, repeat the procedure.**

### PCM Programming Procedure using StarSCAN

1.  Open the hood.  Install a battery charger and verify that the charging rate provides 13.0 to 13.5 volts.  Do not allow the charger to time out during the flash process.  Set the battery charger timer (if so equipped) to continuous charge.

    **NOTE:  Use an accurate stand alone voltmeter.  The battery charger voltmeter may not be sufficiently accurate.  Voltages outside of the specified range will cause an unsuccessful flash.  If voltage reading is too high, apply an electrical load by activating the park or headlamps and/or HVAC blower motor to lower the voltage.**

2.  Connect the CH9410 StarSCAN ethernet cable to the StarSCAN and the dealer's network drop.

3.  Connect the CH9404 StarSCAN vehicle cable to the StarSCAN and the vehicle.

4.  Place the Ignition in the "**RUN**" position, then Power "**ON**" the StarSCAN.

5.  Download the flash file from the internet to the StarSCAN.  With the StarSCAN on the "**Home**" screen, follow the procedure below:

    a. Select "**ECU View**".

    b. Touch the screen to highlight "**PCM**" in the list of modules.

    c. Select "**More Options**".

    d. Select "**ECU Flash**".

    e. Select "**Browse for New File**".

    f. Enter Identification name and password.

    g. Press "**Finish**".

    h. Highlight the appropriate calibration based on the part number recorded in the PCM replacement procedure Step 2g for StarSCAN.

**Service Procedure (Continued)**

    i. Select "**Download to Scantool**".

    j. Select "**Close**" after the download is complete, then select "**Back**".

    k. Highlight the listed calibration.

    l. Select "**Update Controller**" and follow the on screen instructions.

    m. When the update is completed, select "**OK**".

    n. Verify that the part number at the top of the Flash PCM screen has updated to the new part number.

6. **Vehicles equipped with a Continuously Variable Transaxle (CVT)**, ensure that the Transmission Control Module (**TCM**) has the latest software calibration available using the following procedure:

    a. From the "Home Screen," select "**ECU View**".

    b. Select "**TCM**".

    c. Select "**More Options**".

    d. Select "**ECU Flash**"

    e. Select "**Browse for File**".

    f. Follow the screen prompts to complete the process.

7. **Vehicles <u>equipped</u> with a Wireless Control Module (WCM)**, perform the following procedure:

    a. Starting at the "**Home**" screen, select "**ECU View**".

    b. Select "**WCM Wireless Control**".

    c. Select "**Misc. Functions**".

    d. Scroll down the list and select "**PCM Replaced**".

    e. Press the blue "**Start**" button on the StarSCAN screen.

    f. Press the "**Next**" button on the StarSCAN screen.

    g. Enter the Personal Identification Number (PIN) for that vehicle

    **NOTE: The PIN number can be obtained from the original selling invoice, DealerCONNECT>Parts>Key Codes, or contacting the District Manager.**

    h. Follow the screen prompts to complete the process.

> **Service Procedure (Continued)**

8. **Vehicles not equipped with a Wireless Control Module**, perform the following procedure:

   a. Starting at the "**Home**" screen, select "**ECU View**".

   b. Select "**PCM**".

   c. Select "**Misc. Functions**".

   d. Select "**Check PCM VIN**" and follow the on screen instructions.

   e. When complete, select "**Finish**".

9. Perform the learn Electronic Throttle Control (ETC) programming using the following procedure:

   a. From the "**Home**" screen, select "**ECU View**".

   b. Select "**PCM**".

   c. Select "**Misc. Functions**".

   d. Select "**Learn ETC**" and press the "**Start**" button on the StarSCAN screen.

   e. Follow the screen prompts to complete the process.

10. Check the PCM Odometer programming using the following procedure:

    a. From the "**Home**" screen, select "**ECU View**".

    b. Select "**PCM**".

    c. Select "**Misc. Functions**".

    d. Select "**Check PCM Odometer**" and press the "**Start**" button on the StarSCAN.

    e. Follow the on screen instructions.

    f. When complete, select "**Finish**".

11. Place the Ignition in the "**OFF**" position, then Power "**Off**" the StarSCAN.

12. Disconnect the Data Link Connector (DLC), wait 15 seconds, and reconnect the DLC to the vehicle.

13. Place the ignition in the "**RUN**" position and then Power "**ON**" the StarSCAN.

**Service Procedure (Continued)**

14. **Vehicles equipped with a four-speed transaxle**, perform Transmission Control Module (TCM) Quicklearn programming using the following procedure:

    a. From the "**Home**" screen, select "**ECU View**".

    b. Select "**TCM**".

    c. Select "**Misc. Functions**".

    d. Select "**Quicklearn**" and press the "**Start**" button on the StarSCAN.

    e. Follow the on screen instructions.

    f. When complete, select "**Finish**".

15. Clear any Diagnostic Trouble Codes (DTCs) as follows:

    **NOTE: Due to the PCM programming procedure, DTC(s) may be set in other modules (TCM, ABS, BCM, MIC, WCM, etc.) within the vehicle, if so equipped. Some DTC's may cause the MIL to illuminate.**

    a. From the "**Home**" screen select "**System View**".

    b. Select "**All DTCs**".

    c. Press "**Clear All Stored DTCs**" if there are any DTCs shown on the list.

    d. Follow the on screen instructions.

16. Turn the ignition key to the "**OFF**" position and remove the StarSCAN unit, StarSCAN cable, and battery charger from the vehicle.

| Service Procedure (Continued) |
| --- |

## PCM Module Programming Procedure using StarMOBILE

1. Open the hood. Install a battery charger and verify that the charging rate provides 13.0 to 13.5 volts. Do not allow the charger to time out during the flash process. Set the battery charger timer (if so equipped) to continuous charge.

   **NOTE: Use an accurate stand alone voltmeter. The battery charger voltmeter may not be sufficiently accurate. Voltages outside of the specified range will cause an unsuccessful flash. If voltage reading is too high, apply an electrical load by activating the park or headlamps and/or HVAC blower motor to lower the voltage.**

2. Connect the CH9410 StarMOBILE ethernet cable to the StarMOBILE and the dealer's network drop.

3. Connect the CH9404 StarMOBILE vehicle cable to the StarMOBILE and the vehicle.

4. Place the Ignition in the "**RUN**" position, then Power "**ON**" the StarMOBILE.

5. Record the StarMOBILE I.P. address displayed on the StarMOBILE screen.

6. From the desktop, launch the "StarMOBILE Desktop Client" software.

7. Establish a connection with the StarMOBILE scan tool.

8. Download the flash file from the internet to the StarMOBILE. With the StarMOBILE on the "**Home**" screen, follow the procedure below:

   a. Select "**ECU View**".

   b. Touch the screen to highlight "**PCM**" in the list of modules.

   c. Select "**More Options**".

   d. Select "**ECU Flash**".

   e. Select "**Browse for New File**".

   f. Enter Identification name and password.

   g. Press "**Finish**".

   h. Highlight the appropriate calibration based on the part number recorded in Step 2k. of the PCM replacement procedure for StarMOBILE.

**Service Procedure (Continued)**

    i. Select "**Download to Client**".

    j. Select "**Close**" after the download is complete, then select "**Back**".

    k. Highlight the listed calibration.

    l. Select "**Update Controller**" and follow the on screen instructions.

    m. When the update is completed, select "**OK**".

    n. Verify that the part number at the top of the Flash PCM screen has updated to the new part number.

9. **Vehicles equipped with a Continuously Variable Transaxle (CVT)**, ensure that the Transmission Control Module (TCM) has the latest software calibration available using the following procedure:

    a. From the "**Home Screen**" select "**ECU View**".

    b. Select "**TCM**".

    c. Select "**More Options**".

    d. Select "**ECU Flash**"

    e. Select "**Browse for File**".

    f. Follow the screen prompts to complete the process.

10. **Vehicles <u>equipped</u> with a Wireless Control Module (WCM)**, perform the following procedure:

    a. Starting at the "**Home**" screen, select "**ECU View**".

    b. Select "**WCM Wireless Control**".

    c. Select "**Misc. Functions**".

    d. Scroll down the list and select "**PCM Replaced**".

    e. Press the blue "**Start**" button on the Desktop Client.

    f. Press the "**Next**" button on the Desktop Client.

    g. Enter the Personal Identification Number (PIN) for that vehicle

    **NOTE: The PIN number can be obtained from the original selling invoice, DealerCONNECT>Parts>Key Codes, or contacting the District Manager.**

    h. Follow the screen prompts to complete the process.

**Service Procedure (Continued)**

11.  **Vehicles not equipped with a Wireless Control Module**, perform the following procedure:

   a. Starting at the "**Home**" screen, select "**ECU View**".

   b. Select "**PCM**".

   c. Select "**Misc. Functions**".

   d. Select "**Check PCM VIN**" and follow the on screen instructions.

   e. When complete, select "**Finish**".

12.  Perform the learn Electronic Throttle Control (ETC) programming using the following procedure:

   a. From the "**Home**" screen, select "**ECU View**".

   b. Select "**PCM**".

   c. Select "**Misc. Functions**".

   d. Select "**Learn ETC**" and press the "**Start**" button on the Desktop Client.

   e. Follow the screen prompts to complete the process.

13.  Check the PCM Odometer programming using the following procedure:

   a. From the "**Home**" screen, select "**ECU View**".

   b. Select "**PCM**".

   c. Select "**Misc. Functions**".

   d. Select "**Check PCM Odometer**" and press the "**Start**" button on the Desktop Client.

   e. Follow the on screen instructions.

   f. When complete, select "**Finish**".

14.  Place the Ignition in the "**OFF**" position, then Power "**Off**" the StarMOBILE.

15.  Disconnect the Data Link Connector (DLC), wait 15 seconds, and reconnect the DLC to the vehicle.

16.  Place the ignition in the "**RUN**" position, power "**ON**" the StarMOBILE and restart the Desktop Client.

> **Service Procedure (Continued)**

17. **Vehicles equipped with a four-speed transaxle**, perform Transmission Control Module (TCM) Quicklearn programming using the following procedure:

    a. From the "**Home**" screen, select "**ECU View**".

    b. Select "**TCM Transmission Control Module**".

    c. Select "**Misc. Functions**".

    d. Select "**Quicklearn**" and press the "**Start**" button on the Desktop Client.

    e. Follow the on screen instructions.

    f. When complete, select "**Finish**".

18. Clear any Diagnostic Trouble Codes (DTCs) as follows:

    **NOTE: Due to the PCM programming procedure, DTC(s) may be set in other modules (TCM, ABS, BCM, MIC, WCM, etc.) within the vehicle, if so equipped. Some DTC's may cause the MIL to illuminate.**

    a. From the "**Home**" screen select "**System View**".

    b. Select "**All DTCs**".

    c. Press "**Clear All Stored DTCs**" if there are any DTCs shown on the list.

    d. Follow the on screen instructions.

19. Turn the ignition key to the "**OFF**" position and remove the StarMOBILE unit, StarMOBILE cable, and battery charger from the vehicle.

## Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab.　Claims submitted will be used by Chrysler to record recall service completions and provide dealer payments.

Use the following labor operation number and time allowance:

| | Labor Operation Number | Time Allowance |
|---|---|---|
| Replace PCM module and program new module (PM/MK Models) | 08-H3-31-82 | 0.7 hours |
| Replace PCM module and program new module (JC/JS Models) | 08-H3-31-83 | 0.8 hours |

### Related Operation

| | | |
|---|---|---|
| Vehicles equipped with Continuously Variable Transaxle (CVT) | 08-H3-31-50 | 0.1 hours |

Add the cost of the recall parts package plus applicable dealer allowance to your claim.

NOTE:　See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

## Dealer Notification

To view this notification on DealerCONNECT, select "Global Recall System" on the Service tab, then click on the description of this notification.

## Owner Notification and Service Scheduling

All involved vehicle owners known to Chrysler are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification postcard to allow owners to update our records if applicable.

Dealers are encouraged to consider alternative scheduling and servicing approaches for this recall. This repair does not require hoists or other full service facility special equipment and is a Chrysler Mobile Service approved repair.

## Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an <u>updated</u> VIN list of <u>their incomplete</u> vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the **"Service"** tab and then click on **"Global Recall System."** Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

**Dealers <u>must</u> perform this repair on all unsold vehicles _before_ retail delivery.** Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

*Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.*

## Additional Information

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services Field Operations
Chrysler

# CHRYSLER

## SAFETY RECALL H33 – POWERTRAIN CONTROL MODULE

Dear: (Name)

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Chrysler has decided that a defect, which relates to motor vehicle safety, exists in some **2009 model year Chrysler Sebring; Dodge Avenger, Caliber, and Journey; and Jeep® Compass and Patriot vehicles.**

| | |
|---|---|
| *The problem is...* | **The Powertrain Control Module (PCM) on your vehicle (VIN: xxxxxxxxxxxxxxxx) may have been manufactured with an adhesive that could cause the printed circuit board to break. This can cause the engine to stall and result in a crash without warning.** |
| *What your dealer will do...* | **Chrysler will repair your vehicle free of charge (parts and labor).** To do this, your dealer will replace the PCM and install new software. The work will take about 1 hour to complete. However, additional time may be necessary depending on service schedules. |
| *What you must do to ensure your safety...* | Simply **contact your dealer** right away to schedule a service appointment. Ask the dealer to hold the part for your vehicle or to order it before your appointment. **Remember to bring this letter with you to your dealer.** |
| *If you need help...* | If you have questions or concerns which your dealer is unable to resolve, please contact Chrysler at 1-800-853-1403. |

Please help us update our records by filling out the attached prepaid postcard, if any of the conditions listed on the card apply to you or your vehicle.

If you have already experienced this condition and have paid to have it repaired, you may send your original receipts and/or other adequate proof of payment to the following address for reimbursement: Chrysler Recall Customer Assistance, P.O. Box 21-8007, Auburn Hills, MI 48321-8007, Attention: Reimbursement.

If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, DC 20590, or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to http://www.safercar.gov.

We're sorry for any inconvenience, but we are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Services Field Operations
Chrysler
Notification Code H33

*Buckle up for Safety!*

*Note to lessors receiving this recall:* Federal regulation requires that you forward this recall notice to the lessee within 10 days.