

NUMBER: 18-014-09 REV. A

GROUP: Vehicle Performance

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THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 18-014-09 DATED MAY 9, 2009 AND 18-049-07 DATED DECEMBER 13, 2007 EXCEPT FOR THE 2006 XK/XH 4.7L MODELS WHICH ARE COVERED BY SAFETY RECALL H19 AND 18-028-07 DATED APRIL 21, 2007, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS** AND INCLUDE THE ADDITION OF YEARS, MODELS AND ENGINES.

THE wITECH DIAGNOSTIC APPLICATION IS THE PREFERRED METHOD FOR FLASHING ECUs.

HELP USING THE WITECH DIAGNOSTIC APPLICATION FOR FLASHING AN ECU IS AVAILABLE BY SELECTING "HELP" THEN "HELP CONTENTS" AT THE TOP OF THE WITECH DIAGNOSTIC APPLICATION WINDOW.

THE wITECH SOFTWARE LEVEL MUST BE AT RELEASE 10.01 OR HIGHER TO PERFORM THIS PROCEDURE.

StarMOBILE DESKTOP CLIENT or StarSCAN MAY ALSO BE USED TO PERFORM THIS PROCEDURE.

WHENEVER A MODULE IS REPROGRAMMED, THE SOFTWARE IN THE DRBIII® MUST BE PROGRAMMED WITH THE LATEST REVISION LEVEL AVAILABLE.

SUBJECT:

FLASH: ESP System May Prematurely Activate Momentarily When Negotiating A Curve Or MIL Illumination Due To Diagnostic Trouble Code P0340, P0344 or P0116

OVERVIEW:

This bulletin involves selectively erasing and reprogramming the Powertrain Control Module (PCM) with new software.

MODELS:

| 2004 - **2007** | (HB) | Durango |
|-----------------|------|--|
| **2007 | (HG) | Aspen** |
| **2007 | (DR) | Ram Truck |
| 2005 - **2007** | (WK) | Grand Cherokee |
| 2005 - **2006** | (WH) | Grand Cherokee (International Markets) |
| | | |

Stick with the Specialists[™]

| 2006 - **2007** | (XK) | Commander |
|-----------------|------|-----------------------------------|
| 2006 - **2007** | (XH) | Commander (International Markets) |
| 2004 - 2006 | (KJ) | Liberty |

NOTE: **This bulletin applies to the HB/HG/WK/WH/XK/XH/KJ vehicles equipped with a 3.7L, 4.7L or 5.7L engine (sales code EKG, EVA, EVD, EZB or EZA).**

NOTE: **This bulletin applies to the DR vehicles equipped with a 5.7L engine (sales code EZB).**

SYMPTOM/CONDITION:

The customer may experience a premature and momentary activation of the Electronic Stability Program (ESP) system. The premature activation of the ESP system may or may not be accompanied with the illumination of the ESP indicator lamp located in the instrument cluster. The customer may experience the momentary ESP system activation on a "clover leaf" type turn, at speeds of approximately 25 to 40 MPH (40 to 64 KPH). This could also be described as a lack of throttle response or hesitation. Driving over speed bumps at a slight angle can also cause the same ESP event accompanied by lack of throttle response. The customer may also complain of low idle speed.

The customer may also experience MIL for one of the following Diagnostic Trouble Code:

- i. P0340 Camshaft Position Sensor Circuit Bank 1 Sensor 1
- ii. P0344 Camshaft Position Sensor Intermittent Bank 1 Sensor 1
- iii. P0116 Engine Coolant Temperature Sensor Performance

DIAGNOSIS:

Using a Scan Tool (StarSCAN® or DRBIII®) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all engine systems are functioning as designed. If other DTC's are present record them on the repair order and repair as necessary before proceeding further with this bulletin.

If the vehicle operator describes or experiences the Symptom/Condition, perform the Repair Procedure. If the PCM software is up to date and the above mentioned DTC's are present then further diagnosis is required.

PARTS REQUIRED:

| Qty. | Part No. | Description |
|------|------------|--------------------------------|
| 1 | 04275086AB | Label, Authorized Modification |

SPECIAL TOOLS / EQUIPMENT REQUIRED: VEHICLES UPDATED USING StarSCAN®

| NPN | Battery Charger |
|---------|----------------------------------|
| CH9401 | StarSCAN® Tool |
| CH9404D | StarSCAN® Vehicle Cable |
| CH9409 | StarSCAN® Documentation Kit |
| CH9410 | StarSCAN® Ethernet Cable, 12 ft. |

| CH9412 | StarSCAN® Software Update Device Kit |
|--------|--------------------------------------|
| | TechCONNECT PC or equivalent |

VEHICLES UPDATED USING DRBIII®

| NPN | Battery Charger |
|---------------|--|
| CH2002 | General Purpose Interface Bus Cable Assembly |
| CH6000A | Scan Tool (DRBIII®) |
| CH7000A/7001A | J1962 Cable with red DRBIII® connector |
| | TechCONNECT Workstation |

REPAIR PROCEDURE - USING StarSCAN Or wiTech:

NOTE: If this flash process is interrupted/aborted, the flash should be restarted.

- Reprogram the PCM with the latest software. Follow the detailed service procedures available in DealerCONNECT/TechCONNECT, Refer To Group 8 - Electrical > Electronic Control Modules - Service Information > Module - Powertrain Control > Standard Procedures > PCM/ECM Programming - Gas. After PCM reprogramming, the following must be performed:
 - a. Clear any DTC's that may have been set in other modules due to reprogramming. The wiTECH application will automatically present all DTCs after the flash and allow the tech to clear them.
- 2. Type the necessary information on the "Authorized Modification Label" and attach it near the VECI label.

REPAIR PROCEDURE FOR DOMESTIC VEHICLES USING DRBIII® AND DOWNLOADING THE FLASH FILE FROM DealerCONNECT:

NOTE: Whenever a module is reprogrammed, the software in the DRBIII®; must be programmed with the latest revision level available.

NOTE: If this flash process is interrupted/aborted, the flash process should be restarted and then follow the directions on the DRBIII®.

- 1. Before beginning the flash procedure, remove any old flash files from the DRBIII® memory. To clear the memory from the MAIN MENU:
 - a. Simultaneously press the "MORE" and "YES" keys.
 - b. A screen will appear requesting a "COLD BOOT".
 - c. Follow the on screen instructions by selecting the "F4" key.
 - d. When the DRBIII® reboots to the MAIN MENU, proceed to Step #2
- 2. With the ignition switch in the "RUN" position, determine the original part number of the PCM currently in the vehicle. Using the DRBIII® select:
 - a. "DRBIII® Standalone".
 - b. "1998 2005 Diagnostics".
 - c. "All (Except Below)".
 - d. "Engine".
 - e. "Module Display".
 - f. Record the "PCM part #" on the repair order for later reference.

- Connect the DRBIII® to TechCONNECT. Open TechTOOLS and verify that the "DRBIII® Status: Connected" message is in the upper right corner of the TechTOOLS screen.
- 4. Enter the "PCM part #" recorded in Step #2 in the "Parts Criteria" area and select "Show Updates". TechTOOLS will populate the appropriate flash file.
- 5. Select the flash file.
- 6. Select the "DRBIII" radio button which is next to the "Download/Update" button.
- 7. Select the "Download/Update" button.
- 8. Monitor the "Flash Download/Update Progress" window on the TechCONNECT and follow the instructions on TechCONNECT. When the flash process is complete, proceed to Step #9.
- 9. Disconnect the DRBIII® from TechCONNECT.
- 10. Open the hood, install a battery charger and verify that the charging rate provides approximately 13.5 volts.
- 11. Connect the DRBIII® to the vehicle.
- 12. Download the flash file from the DRBIII® to the vehicle. Using the DRBIII® select: a. "Vehicle Flash".
 - b. Follow the directions on the DRBIII® screen. When the flash process is complete, proceed to the next step.
- 13. Reset the "Pinion Factor" as necessary.
- 14. Perform the transmission Quick Learn Procedure as necessary.
- NOTE: Due to the PCM programming procedure, a DTC may be set in other modules (TCM, BCM, MIC, SKIM, etc.) within the vehicle, if so equipped. Some DTC's may cause the MIL to illuminate. Check all modules using "Module Scan", record the DTC's, and erase these DTC's prior to returning the vehicle to the customer. Erase any DTC's in the PCM only after all other modules have had their DTC's erased.

NOTE: The following step is required by law.

15. Type the necessary information on the "Authorized Modification Label" p/n 04275086AB and attach near the VECI label.

REPAIR PROCEDURE FOR EXPORT VEHICLES USING DRBIII® AND DOWNLOADING THE FLASH FILE FROM DealerCONNECT:

NOTE: Whenever a controller is programmed, the software in the DRBIII®; must be programmed with the latest revision level available.

NOTE: If this flash process is interrupted/aborted, the flash should be restarted and then follow the directions on the DRBIII®.

- 1. Before beginning the reprogramming procedure, remove any old flash reprogramming files from the DRBIII® memory. To clear the memory from the MAIN MENU:
 - a. Simultaneously press the "MORE" and "YES" keys.
 - b. A screen will appear requesting a "COLD BOOT".
 - c. Follow the on screen instructions by selecting the "F4" key.
 - d. When the DRBIII® reboots to the MAIN MENU, proceed to Step #2
- 2. With the ignition switch in the "RUN" position, determine the original part number of the PCM currently in the vehicle. Using the DRBIII® select:
 - a. "DRBIII® Standalone"

- b. "1998 2006 Diagnostics"
- c. "All (Except Below)"
- d. "Engine"
- e. "Module Display"
- f. Record the "PCM part #" on the repair order for later reference.
- g. Disconnect the DRBIII® from the vehicle.
- h. Connect the DRBIII® to the ITIL/ISIS PC and NULL modem cable.
- 3. Log into DealerCONNECT. Proceed to: Service / Repair Flash.
- 4. Select vehicle Year, Model, and Engine (YME). Then select the "Submit" button at the bottom of the screen.
- 5. Compare the calibration part number available for flash reprogramming to the module part number recorded earlier. Select the new calibration if applicable.
- 6. Download the new calibration to the PC.
- 7. Using the "DRBIII WINFLASH II" application on the PC, download the flash calibration file to the DRBIII® from the PC.
- 8. Disconnect the DRBIII® from the PC and NULL modem cable.
- 9. Open the hood, install a battery charger and verify that charging rate provides approximately 13.5 volts.
- 10. Connect the DRBIII® to the vehicle.
- 11. Turn the ignition switch to the "Run" position (engine not running).
- 12. Reprogram the PCM by downloading the flash from the DRBIII® to the vehicle. Using the DRBIII® select:
 - a. "Vehicle Flash"
 - b. Follow the directions on the DRBIII® screen. When the flash process is complete, proceed to the next step.
- 13. Reset the "Pinion Factor" if necessary.
- 14. Perform the transmission Quick Learn Procedure if necessary.
- 15. Update the Sentry Key Immobilizer Module (SKIM) or Sentry Key Remote Entry Module (SKREEM), Secret Key data if necessary.
- NOTE: Due to the PCM programming procedure, a DTC may be set in other modules (TCM, BCM, MIC, SKIM, etc.) within the vehicle, if so equipped. Some DTC's may cause the MIL to illuminate. Check all modules using "Module Scan", record the DTC's, and erase these DTC's prior to returning the vehicle to the customer. Erase any DTC's in the PCM only after all other modules have had their DTC's erased.

NOTE: The following step is required by law when reprogramming a PCM and/or TCM.

16. Type the necessary information on the "Authorized Software Update" label, p/n 04275086AB and attach near the VECI label.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

| Labor Operation No: | Description | Amount |
|------------------------------------|---|--|
| 18-19-06-F7 | Module, Powertrain Control (PCM) - Reprogram (C) | 0.2 Hrs. HB, HG, DR, WK, WH, XK, XH and 2006 KJ bodies |
| | | 0.5 Hrs. 2004 and 2005 KJ bodies |
| International Related Operation | | |
| 18-00-00-WT | StarSCAN/StarMOBILE (International) (C) | 0.2 Hrs. |

FAILURE CODE:

| FM | Flash Module |
|----|--------------|