



NUMBER: 08-018-05

GROUP: Electrical

DATE: March 18, 2005

This bulletin is supplied as technical information only and is not an authorization for repair. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without written permission of DaimlerChrysler Corporation.

SUBJECT:

Compass Display Does Not Update

OVERVIEW:

This bulletin involves flash reprogramming the Electronic Overhead Module (EOM).

MODELS:

| | | |
|------|------|----------------|
| 2005 | (LX) | 300/Magnum |
| 2005 | (WK) | Grand Cherokee |

SYMPTOM/CONDITION:

The compass heading indication does not change as the vehicle direction changes.

DIAGNOSIS:

If the vehicle operator describes the Symptom, perform the Repair Procedure.

SPECIAL TOOLS/EQUIPMENT REQUIRED:

| | |
|--------|-------------------------------------|
| NPN | Battery Charger |
| CH9401 | StarSCAN Tool |
| CH9404 | StarSCAN Vehicle Cable |
| CH9409 | StarSCAN Documentation Kit |
| CH9410 | StarSCAN Ethernet Cable, 12 ft. |
| CH9412 | StarSCAN Software Update Device Kit |
| | TechCONNECT PC or equivalent |
| | Latest StarSCAN Software Update CD |



Stick with the Specialists™

FLASH PROCEDURE - USING THE INTERNET TO RETRIEVE THE FLASH FILE:

NOTE: The latest released version of the StarSCAN® software must be installed on the StarSCAN® tool before the "Using The Internet To Retrieve The Flash File" repair procedure can be performed.

NOTE: The StarSCAN® diagnostic scan tool fully supports Internet connectivity. However, in order to take advantage of this feature you must first configure the StarSCAN® for your dealership's network. For instruction on setting up your StarSCAN® for the dealer's network; refer to the StarSCAN® Quick Start Networking Guide available on the www.dcctools.com website under the "download center".

NOTE: Make sure the StarSCAN® is configured to the dealership's network before proceeding.

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

1. Connect the CH9404 StarSCAN® vehicle cable to the StarSCAN® and the vehicle.
2. Connect the CH9410 StarSCAN® ethernet cable to the StarSCAN® and the dealer's network drop (optional).
3. Retrieve the old EOM part number. Using the StarSCAN® at the "Home" screen:
 - a. Select "ECU View".
 - b. Touch the screen to highlight the appropriate controller in the list of modules.
 - c. Select "More Options".
 - d. Select "ECU Flash"
 - e. Record the "Part Number", displayed on the "Flash EOM" screen, for later reference.
4. If the StarSCAN® is connected to the dealer's network drop and the vehicle, proceed to [Step #5](#). If the StarSCAN® is not connected to the dealer's network drop and the vehicle, proceed to [Step #10](#).
5. select "Browse for new file".
6. Select the appropriate flash file.
7. Select "Download to Scantool".
8. Select "Close" after the download is complete. Proceed to [Step #11](#).
9. Connect the CH9410 StarSCAN® ethernet cable to the StarSCAN® and the dealer's network drop (if not already connected).
10. Download the flash file from the Internet to the StarSCAN®. Using the StarSCAN® at the "Home" screen:
 - a. Select "Flash Download".
 - b. Select "Enter information manually". Press the "Next" button and follow the on screen instructions.
 - c. Select the appropriate flash file.
 - d. Select "Download to Scantool".
 - e. Select "Close" after the download is complete.
11. Connect the CH9404 StarSCAN® vehicle cable to the StarSCAN® and the vehicle (if not already connected).
12. Open the hood, install a battery charger and verify that the charging rate provides approximately 13.5 volts.

13. Download the flash file from StarSCAN® to the vehicle. Using StarSCAN® at the “Home” screen:
 - a. Select “ECU View”.
 - b. Browse the list of module using the scroll arrows. Highlight the EOM.
 - c. Select “More Options”.
 - d. Select “ECU Flash”.
 - e. Highlight the appropriate module flash file from the list.
 - f. Select “Update Controller”.
 - g. When update is completed, select “OK”.

NOTE: Due to the EOM programming procedure, a DTC may be set in other modules (TCM, BCM, MIC, SKREEM, etc.) within the vehicle, if so equipped. Some DTC's may cause the MIL to illuminate. Check all modules using “ECU View” from the Home screen, 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. From the “Home” screen select “System View”, then select “All DTC's”. Select the “Clear All Stored DTC's” if there are any DTC's stored.

14. Use the procedures outline in TechCONNECT, 8-Electrical/Overhead Console/Electronic Vehicle Info Center/Standard Procedure, to reprogram the compass variance and compass calibration.

FLASH PROCEDURE - USING SOFTWARE UPDATE CD TO RETRIEVE THE FLASH FILE:

NOTE: Before flashing this module, make sure the StarSCAN® is operating at the latest software version and that this latest software version is available from the latest StarSCAN® update CD. To determine the latest StarSCAN® software version level available refer to www.dcctools.com website under the "Latest News" link.

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

NOTE: For detailed information on the operation of the StarSCAN®, refer to the Quick Reference documentation provided in the StarSCAN® documentation kit. In addition, more recent information may also be available at the www.dcctools.com website. Look under "Training Aids" and also under "Download Center > Frequently Asked Questions" for more help.

1. Retrieve the old EOM part number. Using the StarSCAN® at the “Home” screen:
 - a. Select “ECU View”.
 - b. Touch the screen to highlight the EOM in the list of modules.
 - c. Record the "Part Number", displayed on the "ECU Overview" screen, for later reference.
2. Insert the USB Key, into the USB port on the TechCONNECT or equivalent PC, ([Fig. 1](#)).

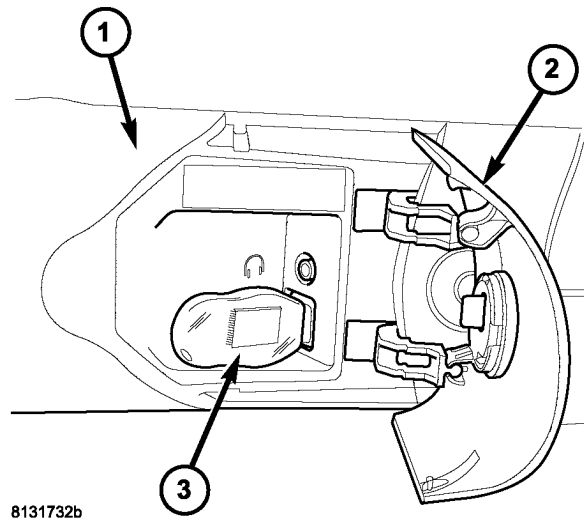


Fig. 1 USB KEY AND TechCONNECT PC

- 1 - TechCONNECT PC
- 2 - ACCESS DOOR (ON FRONT OF TechCONNECT PC)
- 3 - USB KEY IN THE TechCONNECT PC USB PORT

-
3. Insert the StarSCAN® Software Update CD into the TechCONNECT or equivalent PC. The StarSCAN® Software Update CD will start automatically.
 - a. Select “Controller Flash”.
 - b. Follow the on screen instructions.
 4. At the **“Select the type of information you wish to enter.”** screen:
 - a. If the old “Part Number” was recorded in [Step #1](#), proceed to [Step #5](#).
 - b. If the old “Part Number” is not known, proceed to [Step #6](#).
 5. Select “Enter part number”.
 - a. Follow the on screen instructions. Enter the “Part Number” (use capital letters) recorded in [Step #1](#) when prompted to do so. Follow the on screen instructions. Select “Next” after each step. Select “Finish” after completing the last step.
 - b. Proceed to [Step #7](#).
 6. Select “Enter YME Information”.
 - a. Follow the on screen instructions. Select “Next” after each step. Select “Finish” after completing the last step.
 - b. Proceed to [Step #7](#).
 7. Using the mouse highlight the appropriate “Calibration”
 - a. Select “Save to USB”.
 - b. Follow the on screen instructions. Select “Next” after each step. Select “Finish” after completing the last step.
 8. With the StarSCAN® powered OFF, connect the USB Key and Gender Changer to the StarSCAN® USB port, ([Fig. 2](#)).

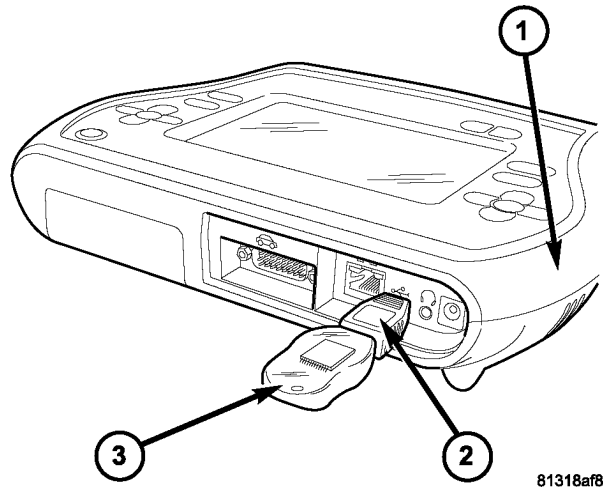


Fig. 2 USB KEY, GENDER CHANGER, AND StarSCAN®; TOOL

- 1 - StarSCAN® TOOL
- 2 - GENDER CHANGER
- 3 - USB KEY

-
9. Open the hood, install a battery charger and verify that the charging rate provides approximately 13.5 volts.
 10. Connect the StarSCAN® to the vehicle.
 11. Power ON the StarSCAN®.
 12. Download the file from the USB key to the StarSCAN®. Using the StarSCAN® at the “Home” screen:
 - a. Select “Flash Download”.
 - b. Select “Use USB device”.
 - c. Follow the on screen instructions. Select “Next”#after each step . Select “Finish” after completing the last step.
 - d. At the “Flash File List” screen, highlight the appropriate EOM “Calibration”.
 - e. Select “Download to Scantool”.
 - f. When the download is complete, select “Close”.
 13. Download the file from the StarSCAN® to the vehicle. Using the StarSCAN® at the “Home” screen:
 - a. Select “ECU View”.
 - b. Browse the list of controllers using the scroll arrows. Highlight the EOM.
 - c. Select “More Options”.
 - d. Select “ECU Flash”.
 - e. Highlight the appropriate EOM “Calibration” from the list.
 - f. Select “Update Controller”.
 - g. When update is completed, select “OK”.

NOTE: Due to the EOM programming procedure, a DTC may be set in other modules (TCM, BCM, MIC, SKREEM, etc.) within the vehicle, if so equipped. Some DTC's may cause the MIL to illuminate. Check all modules using "ECU View" from the Home screen, 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. From the "Home" screen select "System View", then select "All DTC's". Select the "Clear All Stored DTC's" if there are any DTC's stored.

- 14. Use the procedures outline in TechCONNECT, 8-Electrical/Overhead Console/Electronic Vehicle Info Center/Standard Procedure, to reprogram the compass variance and compass calibration.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

| Labor Operation No: | Description | Amount |
|---------------------|---------------|----------|
| 08-19-47-98 | Reprogram FCM | 0.4 Hrs. |

FAILURE CODE:

| | |
|----|-------------|
| 15 | Calibration |
|----|-------------|