

NUMBER: 08-004-08 REV. A

**GROUP:** Electrical

DATE: April 12, 2008

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#### THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 08-004-08, DATED FEBRUARY 8, 2008, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE AN UPDATED VEHICLE BUILD DATE.

THE StarSCAN® FLASH FILES FOR THIS BULLETIN MUST BE RETRIEVED FROM THE INTERNET.

StarSCAN® SOFTWARE LEVEL MUST BE AT RELEASE 8.04 OR HIGHER FOR THIS BULLETIN.

StarMOBILE STANDALONE MODE OR StarMOBILE DESKTOP CLIENT MAY ALSO BE USED TO PERFORM THIS PROCEDURE.

#### SUBJECT:

Flash: Headlamps Slightly Jitter/Bounce Up And Down While Vehicle Is At Stop

## OVERVIEW:

This bulletin involves flashing the Automatic Headlamp Leveling Module (AHLM) with new software.

## MODELS:

2008

Grand Cherokee (International Markets)

NOTE: This bulletin applies to the above listed vehicles equipped with a Automatic Headlamp Leveling system (sales code LMP) built before \*\*April 2, 2008\*\* (MDH 0109XX).

## SYMPTOM/CONDITION:

(WH)

The customer may experience a headlamp jitter or bounce condition. This condition can also be described as movement of the beam pattern when the car is stop.

This may be due to the automatic headlamp leveling system trying to adjust the lamps when the car is not moving. The system works by reading the suspension sensor locations and converting them into digital counts. When a car is stopped, it is possible for the sensor position to be located between steps. If this occurs, the module attempts to interpret the sensor position by alternating the counts between two values. The module will then interpret the change in the counts as suspension movement and try to adjust the lights accordingly.



Stick with the Specialists<sup>™</sup>

Using a Scan Tool (StarSCAN®) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all engine systems are functioning as designed. If 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.

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

SPECIAL TOOLS / EQUIPMENT REQUIRED:

# **REPAIR PROCEDURE - USING THE INTERNET TO RETRIEVE THE FLASH FILE:**

- NOTE: Before performing this Repair Procedure, the operating software in the StarSCAN® must be programmed with software release level 8.04 or higher. The software release level is visible in the blue header at the top of the StarSCAN® screen.
- NOTE: The StarSCAN® diagnostic scan tool fully supports Internet connectivity. However, to take advantage of this feature you must first configure the StarSCAN® for your dealership's network. Make sure the StarSCAN® is configured to the dealership's network before proceeding. For instruction on setting up your StarSCAN® for the dealer's network refer to either: "DealerCONNECT > Service > StarSCAN and StarMOBILE tools > Online Documentation", or refer to the StarSCAN® Quick Start Networking Guide. The StarSCAN® Quick Start Networking Guide is also available on the www.dcctools.com website under the "Download Center".

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

1. Open the hood and install a battery charger. Using a voltmeter, verify that the charging rate provides 13.2 - 13.5 volts. Set the battery charger to continuous charge. Do not allow the charger to time out during the flash process. Remove the charger from the battery when the flash process is complete.

# NOTE: Do not allow the charging voltage to climb above 13.5 volts during the flash process.

- 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. Turn the ignition switch on.
- 5. Power ON the StarSCAN®.
- 6. Retrieve the old AHLM part number. Using the StarSCAN® at the "Home" screen: a. Select "ECU View"
  - b. Touch the screen to highlight the AHLM in the list of modules.
  - c. Select "More Options"
  - d. Select "ECU Flash".
  - e. Record the part number at the top of the "Flash AHLM" screen for later reference.
  - f. Select "Browse for New File". Follow the on screen instructions.
  - g. Select "Download to Scantool".
  - h. Select "Close" after the download is complete, then select "Back".
  - i. Highlight the listed calibration.
  - j. Select "Update Controller".
  - k. When the update is complete, select "OK".
- 7. Verify the part number at the top of the "Flash AHLM" screen has updated to the new part number.
- NOTE: Due to the AHLM programming procedure, a DTC may be set in other modules within the vehicle, if so equipped. Some DTC's may cause the MIL to illuminate. From the "Home" screen select "System View". Then select "All DTCs". Press "Clear All Stored DTCs" if there are any DTCs shown on the list.

#### POLICY:

Reimbursable within the provisions of the warranty.

## TIME ALLOWANCE:

Labor Operation No:	Description	Amount
18-52-68-01	Flash Module, Automatic Headlamp Leveling (B)	0.4 Hrs.

#### FAILURE CODE:

ZZ Service Action	ZZ
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