



**NUMBER:** 08-037-05

**GROUP:** Electrical

**DATE:** July 27, 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:**

SmartBeam System - Diagnostic Tips

**OVERVIEW:**

This bulletin involves diagnostic tips to address possible SmartBeam concerns.

**MODELS:**

2005 (WK) Grand Cherokee

**NOTE: This bulletin applies to vehicle equipped with the SmartBeam high beam headlamp system (sales code LMS).**

**DISCUSSION:**

A quality analysis of SmartBeam system related repairs has revealed that a number of repairs may not have been necessary.

It is important to understand that the SmartBeam system, when activated, **ONLY** controls the high beam portion of the headlamp system. The SmartBeam system varies the high beam headlamp illumination intensity. The variation in high beam headlamp illumination intensity will range from a low beam level headlamp illumination intensity all the way to a full high beam headlamp illumination intensity. SmartBeam also controls the high beam headlamps from a high beam level of lamp illumination intensity down to a low beam headlamp illumination intensity, and any level of headlamp illumination intensity in between.

Before performing any diagnostics:

- Verify that the StarSCAN tool is operating with the latest update scan tool software.
- Check for any aftermarket or installed options that might be blocking the SmartBeam camera or is attached to the rear view mirror. Remove or relocate any obstructions.

The following are some diagnostic tips when reviewing symptoms that may relate to the SmartBeam system.

**ISSUE: The LED on the rear view mirror is flashing/blinks or LED flashes initially at start up and then remains on constantly (illuminated).**

**DIAGNOSTIC TIP:**

1. A **continuously** flashing LED is NORMAL when the SmartBeam system has detected system problem. DO NOT REPLACE THE MIRROR for a continuously flashing LED. The flashing LED is providing information that can be used to diagnose a possible problem. The following describes what each LED flashing sequence means.
  - a. Continuous Flashing - 1 flash per second - this indicates that the mirror is in "Aim Mode" and is waiting to be calibrated. The SmartBeam aiming procedure should be performed. Refer to TechCONNECT, select the SERVICE INFO tab, 8 - Electrical, Lamps/Lighting - Exterior, SmartBeam, Standard Procedure.
  - b. Continuous Flashing - 2 flashes per second - this indicates that the last attempt to calibrate the mirror has failed. This can be corrected by correctly performing the SmartBeam aiming procedure. Refer to TechCONNECT, select the SERVICE INFO tab, 8 - Electrical, Lamps/Lighting - Exterior, SmartBeam, Standard Procedure.
  - c. A series of flashes at initial ignition on (start up), followed by a STEADY ON LED illumination. These flashes can indicate a SmartBeam hardware failure that may require the mirror to be replaced. Do not confuse the initial flashes followed by a steady on LED for a continuously flashing LED. If a mirror is replaced due to a short series of flashes at ignition on followed by a steady on LED, count the number of initial flashes that occur prior to the LED remaining on constantly. Record the number of flashes on the repair order. Refer to TechCONNECT, select the SERVICE INFO tab, 8 - Electrical, Lamps/Lighting - Exterior, Diagnostics & Testing, DTC Codes, SmartBeam, Lamps/Lighting - Exterior.

**ISSUE: Headlamps are coming on during daylight hours or the dash lights and/or Navigation system is dimming during daylight hours.**

**DIAGNOSTIC TIP:**

Refer to Service Bulletin 08-010-05. DO NOT REPLACE THE MIRROR. This issue is a low beam illumination problem with the headlamp system. The rear view mirror component of SmartBeam does not control the low beam Automatic On (and Off) portion of the headlamp system. The SmartBeam system ONLY controls the headlamp high beams. Replacing the mirror will not correct this issue.

**ISSUE: UConnect feature does not work or the handsfree cell phone will not connect.**

**DIAGNOSTIC TIP:**

Refer to Service Bulletin 08-013-05 and any other published service related bulletin(s). For UConnect, the rear view mirror only contains the two user interface buttons and the microphone. The buttons and microphone have a very low failure rate. Most of the UConnect system is controlled by the Hands Free Module (HFM). Always attempt to duplicate the customer's concerns with a "known good" Bluetooth cell phone. Refer to TechCONNECT, select the SERVICE INFO tab, 8-Electrical, Navigation/Telecommunication.

**POLICY:**

Information Only.