



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** EA 11-010  
**Prompted by:** Consumer complaints and PE10-022  
**Date Opened:** 09/06/2011 **Date Closed:** 11/29/2012  
**Investigator:** Scott Yon **Reviewer:** Scott Yon  
**Approver:** Frank Borris  
**Subject:** Loss of headlight illumination

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Chrysler Group LLC  
**Products:** Model Year (MY) 2005 and early 2006 Chrysler Minivans  
**Population:** 622,817  
**Problem Description:** Complainants allege that the headlights will not illuminate (turn on) or will extinguish (go out) after being turned on. This can occur while the vehicle is at rest, or while it is being driven.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	198	721	919
<b>Crashes/Fires:</b>	0	1	1
<b>Injury Incidents:</b>	0	1	1
<b>Number of Injuries:</b>	0	1	1
<b>Fatality Incidents:</b>	0	0	0
<b>Other*:</b>	0	1	1

\*Description of Other: Vehicle went in ditch (w/o striking anything) when headlights went off and on.

## ACTION / SUMMARY INFORMATION

**Action:** Close this Engineering Analysis.

### Summary:

The subject vehicle (SV) population includes MY 2005-2006 vehicles built between March 2004 and December 2005 manufactured with a TRW supplied headlight switch assembly (HSA). The HSA was the primary focus of the investigation; earlier and later vehicles utilized different HSAs.

Consumers complain that the headlights in the subject vehicles do not illuminate when the HSA is turned on, or that the headlights extinguish while on (subject failure). No other driving lights are affected. The front marker, tail, and instrument lamps operate. Also, the high beams can be illuminated by holding the turn signal stalk in the up position. As reported by consumers, turning the HSA off and on typically corrects the failure. Initially the failures occur infrequently but they become progressively more frequent with age. Chrysler has indicated its intention to offer of an extended lifetime warranty on the HSA, so that consumers with this problem can have their HSA replaced at no charge when they begin experiencing the subject failure. Commencing sometime in early 2013, Chrysler will send letters to SV owners notifying them of the lifetime warranty.

The SV headlight system design is essentially the same as that described in EA 05-009, which involved headlight anomalies in earlier model Chrysler minivans; refer to it for additional information. The subject failure is caused by friction between the plastic cam and metal surfaces of the electrical contacts in the HSA, which results in the production of plastic particles (debris). Analysis shows that debris can collect on the electrical contact that controls the headlights, resulting in an open circuit and preventing the headlights from turning on. Subsequent operation of the HSA may temporarily displace the debris, at which time the headlights operate correctly. Lubricant was applied to the

plastic cam beginning in December 2005, reducing debris production. Consequently, subsequent failure levels were lower.

The report counts shown above include only those that involve the subject failure. Reports involving other failure modes which were identified have not been included either because they were not safety related, or if they were safety related, because there was no defect trend. The single crash event listed in the Failure Report Summary Table above involved a deer strike allegedly due to loss of headlights in February 2006. No injuries were reported in this crash. An April 2004 non-crash incident ("Other" above) involved a momentary loss of headlights. The consumer drove into a ditch, and one minor injury was alleged.

The subject vehicles experienced a 2.2% warranty claim rate. While standing alone this would appear to be significant, a portion of these warranty claims likely involve other problems with the HSA unrelated to the subject failure.

In view of the on road experience of drivers in rapidly restoring headlight illumination by turning the headlight switch off and on again, the rate and particularly the recent trend in problems with the switch, and Chrysler's extended lifetime warranty coupled with the owner notification of that extended warranty, further investigation does not appear to be warranted. Accordingly, the investigation is closed. The closing of this investigation does not constitute a finding by NHTSA that a safety-related defect does not exist, and the agency reserves the right to take additional action if warranted by new circumstances.

Details on Chrysler's lifetime HSA warranty extension for the SV population will be available in the public file for this investigation.

The ODI reports cited above can be viewed at <http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID> under the following identification (ODI) numbers:

10147980,10151340,10153067,10153432,10162291,10175309,10179082,10187348,10188910  
10193050,10196419,10201731,10220268,10220507,10227979,10229505,10235140,10240342  
10255507,10265903,10266465,10266470,10272706,10274804,10275427,10280178,10282012  
10282084,10282328,10283301,10284070,10284383,10284715,10286030,10286884,10287001  
10289997,10290425,10291282,10291414,10293754,10293986,10295685,10296509,10297583  
10298198,10299721,10300329,10308618,10311902,10312285,10314758,10315221,10318838  
10320047,10320963,10322621,10323019,10323541,10324898,10326255,10326289,10327319  
10327326,10328095,10329688,10329903,10330820,10331366,10331565,10331647,10332728  
10333892,10334794,10336019,10336026,10336337,10340332,10342547,10344036,10344721  
10347172,10347878,10347880,10349012,10349316,10349646,10350182,10351379,10351881  
10351949,10352286,10353336,10353845,10353910,10357834,10359217,10362196,10362880  
10363059,10363989,10364120,10365625,10365796,10365879,10366118,10367229,10368446  
10370052,10370273,10370577,10374057,10375592,10377431,10379371,10380831,10389676  
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10395256,10395380,10397266,10398408,10400312,10400846,10402653,10403931,10404219  
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10417812,10419293,10420883,10424434,10424493,10425206,10425261,10426636,10427639  
10428548,10429195,10429285,10429437,10433073,10433132,10434935,10438110,10438290  
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10458784,10458929,10459032,10459318,10460386,10462872,10463062,10464007,10464367  
10466161,10467723,10468131,10468244,10469364,10470253,10470889,10472739,10473285