OMB Control No.: 2127-0004

# **Part 573 Safety Recall Report**

# 14V-634

**Manufacturer Name :** Chrysler Group LLC

Submission Date: OCT 16,2014 NHTSA Recall No.: 14V-634 Manufacturer Recall No.: P60



#### **Manufacturer Information:**

Manufacturer Name: Chrysler Group LLC

Address: 800 Chrysler Drive

CIMS 482-00-91 Auburn Hills MI 48326-2757

Company phone: 1-800-853-1403

# **Population:**

Number of potentially involved: 434,581 Estimated percentage with defect: 0

### **Vehicle Information:**

Vehicle: 2011-2014 Dodge Charger Vehicle Type: LIGHT VEHICLES

Body Style : 4-DOOR Power Train : GAS

**Descriptive Information: Charger** 

Production Dates: APR 22, 2010 - JAN 02, 2014

#### **VIN (Vehicle Identification Number) Range**

 $\begin: NR \\ \begin: NR \\ \begin : NR \\ \begin : NR$ 

Vehicle: 2011-2014 Dodge Challenger

Vehicle Type: LIGHT VEHICLES

Body Style : 4-DOOR Power Train : GAS

**Descriptive Information: Challenger** 

Production Dates: APR 22, 2010 - JAN 02, 2014

#### **VIN (Vehicle Identification Number) Range**

Vehicle: 2012-2014 Jeep Grand Cherokee

Vehicle Type: LIGHT VEHICLES

Body Style : SUV Power Train : GAS

Descriptive Information : Grand Cherokee Production Dates : MAR 09, 2011 - JAN 02, 2014

VIN (Vehicle Identification Num	ber) Range	
Begin : NR	End: NR	☐ Not sequential VINs
Vehicle: 2011-2014 Chrysler 300 Vehicle Type: LIGHT VEHICLES Body Style: 4-DOOR Power Train: GAS Descriptive Information: 300 Production Dates: APR 22, 2010 -		
VIN (Vehicle Identification Num	ber) Range	
Begin: NR	End: NR	☐ Not sequential VINs
Vehicle: 2011-2014 Dodge Duran Vehicle Type: LIGHT VEHICLES Body Style: SUV Power Train: GAS Descriptive Information: Durango Production Dates: APR 22, 2010 -	) JAN 02, 2014	
VIN (Vehicle Identification Num	ber) Range	
Begin : NR	End : NR	☐ Not sequential VINs
Description of Defect:  Description of the Defect: Some Dodge Charger, Dodge Challenger, Dodge Durango, Chrysler 300 and Jeep Grand Cherokee vehicles equipped with the 3.6L engine and 160 Amp Alternator may experience a rapid alternator failure having limited or no detection, which can result in vehicle shutdown/shut off and/or fire.  Description of the Safety Risk: Vehicle shutdown/shut off and/or fire  Description of the Cause: NR Identification of Any Warning that can Occur: NR		
Supplier Identification: Component Manufacturer Name: NR Address: DENSO International Ame 24777 Denso Drive, P.O. Country: United States	erica, Inc. Box 5047 Southfield MICHIGAN 4808	865047

# **Chronology:**

- •In August, 2014, Chrysler opened an investigation into concerns of alternator-related engine stall while driving, increased steering effort, Antilock Brake System/Electronic Stability Control deactivation or fire / smoke in 2011-2012 MY Dodge Charger vehicles.
- Chrysler's investigation analyzed alternators from vehicles exhibiting these conditions, and found indications of thermal fatigue of the alternators' silicone diodes.
- •Based on warranty data analysis, 160 Amp alternator part returns and a common control system design, Chrysler expanded the investigation scope to include WD, WK, LC, and the LX platforms, equipped with Electric Hydraulic Power Steering ("EHPS"), but limited to the 3.6L equipped with a 160 Amp Alternator.
- •The root cause was determined to be thermal fatigue in the silicon diode within the alternator rectifier bridge, due to a combination of high operating temperatures and cyclical system load conditions, induced by the EHPS.
- •This condition can lead to failure of the 20 Amp Silicon Rubber potted Diode(s) in the 160 Amp alternator.
- Failure mode of the 160 Amp alternators can range from no output, reduced output, or a fully shorted to ground condition.
- •These modes can have corresponding variability in time to failure and warning to the driver.
- •During certain low battery voltage conditions associated with the 160 Amp alternator silicon diode thermal fatigue failures, a rapid sequential thermal failure of the silicon diodes may cause engine stalling without the advanced warning provided by prolonged illumination of the "Charging System Indication Lamp" or by the EVIC, the electronic vehicle information center.
- •Depending on the failure mode and timing, system voltage may drop to critical levels, disabling systems such as the, "Antilock Brake System/Electronic Stability Control", "Engine Control Module/Central Body Controller", or a total vehicle electrical system shut down (in the event of a short to ground failure mode).

# **Description of Remedy:**

Description of Remedy Program: NR

How Remedy Component Differs from Recalled Component: NR

Identify How/When Recall Condition was Corrected in Production: NR

# **Recall Schedule:**

Description of Recall Schedule: NR

Planned Dealer Notification Date: NOV 28, 2014 - NOV 28, 2014

Planned Owner Notification Date: NOV 28, 2014 - NOV 28, 2014

\* NR - Not Reported