## CURT MFG., LLC PART 573 Defect and Noncompliance Report for Equipment

11E-041

On 9-30-2011 CURT Manufacturing LLC decided that a defect which relates to motor vehicle safety exists in items of motor vehicle equipment listed below, and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573 Defect and Noncompliance Responsibility and Reports.

Date this report was prepared: 9-30-2011

Furnish the manufacturer's identification code for this recall (if applicable):  $\underline{N/A}$ 

1. Identify the full corporate name of the fabricating manufacturer/brand name/trademark owner of the recalled item of equipment. If the recalled item of equipment is imported, provide the name and <u>mailing address</u> of the designated agent as prescribed by 49 U.S.C. §30164.

CURT Manufacturing, LLC 6208 Industrial Drive Eau Claire, WI 54701

Identify the corporate official, by name and title, whom the agency should contact with respect to this recall.

Frank Espinoza III

Telephone Number: <u>1-800-738-7213</u> Fax No.: <u>715 831 1581</u>

Name and Title of Person who prepared this report.

Frank Espinoza III

Signed: <u>fespinoza@curtmfg.com</u>

#### **I. Identify the Recalled Items of Equipment**

2. Identify the Items of Equipment Involved in this Recall, for each make and model or applicable item of equipment product line (provide illustrations or photographs as necessary to describe the item of equipment), provide:

Generic name of the item: <u>Wire Harness with Converter Module</u>

Models: 2009 to 2011 Hyundai Vera Cruz, Kia Sorento

Part Number: 56024

Function: Connects tow vehicle lighting circuits to trailer lighting circuits

Other information which characterizes/distinguishes the items of equipment to be recalled: None

Identify the approximate percentage of the production of all the recalled models manufactured by your company between the inclusive dates of manufacture provided above, that the recalled model population represents.

100% of product sold since 6/8/2009 first production

#### **II. Identifying the Recall Population**

**3.** Furnish the total number of items of equipment recalled potentially containing the defect or noncompliance.

		Number of Items
Model	Year	<b>Potentially Involved</b>
56024	2009 – 2011	2,398

**Total Number Potentially Affected by the Recall:** 2,398

4. Furnish the approximate percentage of the total number of items of equipment estimated to actually contain the defect or noncompliance:

100%

Identify and describe how the recall population was determined--in particular how the recalled models were selected and the basis for the beginning and final dates of manufacture of the recalled items of equipment:

100% of affected products

#### **III. Describe the Defect or Noncompliance**

## **5.** Describe the defect or noncompliance. The description should address the nature and physical location of the defect or noncompliance. Illustrations should be provided as appropriate.

The product connects to a 30 amp circuit provided by the vehicle manufacturer for trailer light power. If not properly located, circuit contamination can cause the CURT converter module to fail under a high current short / overload condition before the vehicle's 30 amp fuse opens.

#### **Describe the cause(s) of the defect or noncompliance condition.**

Contamination on the printed circuit board caused by moisture intrusion can defeat the module's internal circuit protection.

#### **Describe the consequence(s) of the defect or noncompliance condition.**

The module can overheat which could result in a fire.

**Identify any warning which can (a) precede or (b) occur.** Smoke from the module or a melted surface.

If the defect or noncompliance is in a component or assembly purchased from a supplier, identify

the supplier by corporate name and address.

N/A

Identify the name and title of the chief executive officer or knowledgeable representative of the supplier:

N/A

#### IV. Provide the Chronology in Determining the Defect/Noncompliance

#### If the recall is for a defect, complete item 6, otherwise item 7.

6. With respect to a defect, furnish a chronological summary (including dates) of all the principal events that were the basis for the determination of the defect. The summary should include, but not be limited to, the number of reports, accidents, injuries, fatalities, and warranty claims.

#### 2-25-2011 Tracker # 3963

Notified by installer of a potential problem with t-connector, Part No. 56024. Advised that unit had been installed on vehicle approximately eight months ago. It appeared the convertor had shorted and then melted due to high temperature.

#### 5-10-2011 Tracker # 4483

Notified by vehicle owner of a problem with t-connector, Part No. 56024. Advised that unit had been installed on vehicle approximately 1 and ½ years ago. Neighbor noticed smoke emanating from rear of vehicle. Customer unplugged t-connector from trailer and extinguished fire, then disconnected t-connector from vehicle. T-connector appeared to have shorted.

#### 8-23-2011 Tracker # 5229

Notified by Travelers Insurance Company of a fire potentially caused by t-connector, Part No. 56024. Tconnector appeared to have shorted and caused damage to vehicle. Investigation confirmed catastrophic failure of t-connector.

# 7. With respect to a noncompliance, identify and provide the test results or other data (in chronological order and including dates) on which the noncompliance was determined. Date: 09-02-2011

Bench test: Pins on the tail light input transistor were shorted with a resistor to simulate extreme corrosion due to moisture intrusion. On the bench this caused the circuit protection component of the module to be rendered inactive. With the module connected to a power source via an inline 30A fuse a low resistance load was applied. The tail light MOSFET overheated and caused the modules molding material to combust without tripping the 30A fuse. Same test with a 10 amp fuse caused the fuse to open instantly as designed with no heat generated.

#### V. Identify the Remedy

8. A description of the manufacturer's program for remedying the defect or noncompliance. This program shall include a plan for reimbursing an owner or purchaser who incurred costs to obtain a remedy for the problem addressed by the recall within a reasonable time in advance of the manufacturer's notification of owners, purchasers and dealers, in accordance with §573.13 of this part. A manufacturer's plan may incorporate by reference a general reimbursement plan it previously submitted to NHTSA, together with information specific to the individual recall. Information required by §573.13 that is not in a general reimbursement plan shall be submitted in the manufacturer's report to NHTSA under this section. If a manufacturer submits one or more general reimbursement plans, the manufacturer shall update each plan every two years, in accordance with §573.13. The manufacturer's remedy program and reimbursement plans will be available for inspection by the public at NHTSA headquarters.

CURT Manufacturing, LLC will replace inventory at our distributor's location, or replace all inventory of part number 56024.

*CURT Manufacturing, LLC. will pay \$75 to remove the 56024 T-Connector and install the 56151 T-Connector. The \$75 will be paid upon return of the recalled T-Connector.* 

### **9.** Furnish a description of the manufacturer's remedy for the defect or noncompliance. Clearly describe the differences between the recall condition and the remedy.

A 10 amp external fuse has been added to the module power input connection.

To address the potential for moisture intrusion the Installation Guide includes a module location label

note, and a module location note has also been added to the harness.

## Clearly describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly.

The catalog number for this application has changed from 56024 to 56151. The fuse and labels included are clearly visible.

Identify and describe how and when the recall condition was corrected in production. If the production remedy was identical to the recall remedy in the field, so state. If the product was discontinued, so state.

The 56024 product was discontinued and product 56151 was manufactured on 9-16-2011.

#### VI. Identify the Recall Schedule

**10.** Furnish a schedule or agenda (with specific dates) for notification to other manufacturers, dealers/retailers, and purchasers. Please, identify any foreseeable problems with implementing the recall.

Recall notification to be mailed on xx/xx/xxxx to listed distributors and customers.

Follow up calls to verify notification receipt on xx/xx/xxxx.

Replacement parts available to be sent per request from 10/10/2011 forward.

#### VII. Furnish Recall Communications

11. Furnish a final copy of all notices, bulletins, and other communications that relate directly to the defect or noncompliance and which are sent to more than one manufacturer, distributor, or purchaser. This includes all communications (including both original and follow-up) concerning this recall from the time your company determines the defect or noncompliance condition on, not just the initial notification. A DRAFT copy of the notification documents should be submitted to this office by Fax (202-366-7882) for review prior to mailing.

Note: These documents are to be submitted separately from those provided in accordance with Part 579.5 requirements.