

Part 573 Safety Recall Report

16E-091

Manufacturer Name : Tesla Motors, Inc.

Submission Date : DEC 06, 2016

NHTSA Recall No. : 16E-091

Manufacturer Recall No. : NR



Manufacturer Information :

Manufacturer Name : Tesla Motors, Inc.

Address : 3500 Deer Creek Road
Palo Alto CA 94304

Company phone : 650-413-4000

Population :

Number of potentially involved : 6,729

Estimated percentage with defect : 1 %

Equipment Information :

Brand / Trade 1 : Tesla

Model : NEMA 14-30 Universal Mobile Connector Adapter

Part No. : 1018243-00-A

Size : NR

Function : NR

Descriptive Information : Recall population includes 138 of this part number.

Production Dates : AUG 28, 2012 - OCT 08, 2012

Brand / Trade 2 : Tesla

Model : NEMA 14-30 Universal Mobile Connector Adapter

Part No. : 1018243-00-B

Size : NR

Function : NR

Descriptive Information : Recall population includes 1803 of this part number.

Production Dates : JAN 08, 2013 - JAN 09, 2014

Brand / Trade 3 : Tesla

Model : NEMA 10-30 Universal Mobile Connector Adapter

Part No. : 1016174-00-B

Size : NR

Function : NR

Descriptive Information : Recall population includes 3691 of this part number.

Production Dates : JAN 08, 2013 - MAR 25, 2015

Brand / Trade 4 : Tesla

Model : NEMA 6-50 Universal Mobile Connector Adapter

Part No. : 1016021-00-B

Size : NR

Function : NR

Descriptive Information : Recall population includes 644 of this part number.

Production Dates : NOV 19, 2012 -DEC 09, 2013

Brand / Trade 5 : Tesla

Model : NEMA 6-50 Universal Mobile Connector Adapter

Part No. : 1016021-00-A

Size : NR

Function : NR

Descriptive Information : Recall population includes 453 of this part number.

Production Dates : AUG 10, 2012 -NOV 14, 2012

Description of Defect :

Description of the Defect : The NEMA 14-30, NEMA 10-30, and NEMA 6-50 Universal Mobile Connector (UMC) adapters are accessories that allow the Tesla UMC cable to plug into NEMA 14-30, NEMA 10-30, and NEMA 6-50 electrical outlets. For certain UMC adapters that were manufactured by a third-party supplier, ultrasonically welded electrical connections within the adapter may be of insufficient quality, and could exhibit increased electrical resistance.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If an ultrasonically welded electrical connection within the UMC adapter exhibits increased electrical resistance, it may lead to overheating or arcing.

Description of the Cause : Due to manufacturing variances, some ultrasonically welded electrical connections within the UMC adapter may be of insufficient quality.

Identification of Any Warning that can Occur : The vehicle may detect a charging fault and interrupt charging. Additionally, the UMC adapter may become hot to the touch.

Supplier Identification :**Component Manufacturer**

Name : ISC Engineering
Address : 4351 Schaeffer Avenue
Chino CALIFORNIA 91710
Country : United States

Chronology :

In early 2014, Tesla conducted a voluntary recall of NEMA 14-50 UMC adapters for overheating. The recall included NEMA 14-50 UMC adapters that had been manufactured by a third-party supplier between 9/15/2012 and 1/10/2014, because adapters manufactured after that date were made using an improved manufacturing process. At the time of the 2014 recall, there had never been an overheating event for NEMA 14-30, 10-30, or 6-50 adapters, so they were not subject to the recall.

On 11/2/2016 and 11/24/2016 Tesla learned of two NEMA 14-30 UMC adapters that had experienced overheating. Both events were minor and neither resulted in any injuries or property damage. Tesla recovered and performed analysis including CT scans on both adapters. The conclusion from these investigations was that in both cases the overheating occurred at ultrasonically welded connections within the adapters, which were manufactured during the same period of time (between 9/12/2012 and 1/10/2014) that was the subject of the prior recall of the NEMA 14-50 adapters. These are the only such events Tesla is aware of outside the previously-recalled NEMA 14-50 UMC adapters, and there continue to be no reports of any such events for any adapters manufactured after 1/10/2014.

The analysis of the two NEMA 14-30 adapters was completed on 11/29/2016. On 11/30/2016, Tesla decided to initiate a recall campaign to replace all original NEMA 14-30 UMC adapters that were manufactured by our original supplier. While the number of incidents is extremely small at two, and neither incident involved any injuries or property damage, the Company determined that a voluntary recall is appropriate as a precautionary measure.

At the same time, Tesla also decided to recall all NEMA 10-30 and 6-50 UMC adapters that were manufactured by our original supplier. Although Tesla is not aware of any similar issues with these adapters, the Company determined that a voluntary recall is appropriate as a precautionary measure.

Description of Remedy :

Description of Remedy Program : We are producing new adapters with an improved design and manufacturing process that resolves the issue. We are contacting customers directly to send them a replacement adapter, and providing an envelope for them to return their old adapter.

How Remedy Component Differs Recall replacement parts incorporate design, manufacturing, and quality

from Recalled Component : control changes that result in significant quality improvements and lower internal resistance.

Identify How/When Recall Condition was Corrected in Production : Production of the original NEMA 14-30 adapters ended in early 2014. Following the 2014 recall of NEMA 14-50 UMC adapters, Tesla manufactured a limited number of NEMA 14-30 adapters in-house using the same manufacturing line used to manufacture the revised NEMA 14-50 adapter. These adapters and Tesla's future production incorporate design, manufacturing, and quality control changes that result in significant quality improvements and lower internal resistance.

Recall Schedule :

Description of Recall Schedule : All Tesla stores and service centers worldwide will be notified on December 6, 2016. Customers will be sent a courtesy email alerting them to the recall on December 6, 2016. Owner notification letters will be mailed out pending NHTSA approval.

Planned Dealer Notification Date : DEC 06, 2016 - DEC 06, 2016

Planned Owner Notification Date : DEC 06, 2016 - DEC 06, 2016

Purchaser Information :

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name : NR

Address : NR

NR

Country : NR

Company Phone : NR

* NR - Not Reported