



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 15-033
Date Opened: 09/28/2015
Investigator: Kyle Bowker
Approver: Jennifer Timian
Subject: Transfer Switch Heat Related Failures
Reviewer: Bruce York-B

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: IOTA ENGINEERING, LLC
Products: IOTA Automatic Transfer Switches
Population: 2,000 (Estimated)
Problem Description: Connections and wiring in the automatic transfer switch may degrade and over heat, increasing the risk of fire, personal injury and property damage.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	22	TBD	22
Crashes/Fires:	0	TBD	TBD
Injury Incidents:	0	TBD	TBD
Number of Injuries:	0	TBD	TBD
Fatality Incidents:	0	TBD	TBD
Number of Fatalities:	0	TBD	TBD
Other*:	22	TBD	22

***Description of Other:** Fire and non-fire thermal events characterized by electrical arcing; glowing combustion of electrical conductors; evolution of heat, odor, smoke and/or soot; charring, melting and/or other heat related damage to subject components and associated wiring.

ACTION / SUMMARY INFORMATION

Action: A Preliminary Evaluation has been opened.

Summary:

The Office of Defects Investigation (ODI) has received 22 complaints related to thermal damage of automatic transfer switches manufactured by IOTA Engineering LLC (IOTA). The subject components are used in recreation vehicle and travel trailer applications to provide automatic power switching between two or three separate 120/240 volt AC input sources, including shore supply power cords, onboard generators and onboard inverters.

Since 2010, ODI has received notification of 13 safety recalls conducted by 8 different vehicle manufacturers related to the subject condition (10V-418, 10V-594, 11V-183, 11V-439, 11V-494, 11V-577, 12V-060, 12V-341, 12V-347, 12V-451, 12V-516, 13V-026, 15V-561). Several of the safety recalls have been amended to increase the affected vehicle population or modify the remedy procedure. Meanwhile, ODI continues to receive reports that allege complainants' vehicles are outside of the recall scope; that complainants were not notified of the recall and therefore did not have the remedy applied prior to the subject incident; that the subject vehicle manufacturer was no longer in business and therefore unable to apply the recall remedy; and that the subject vehicle manufacturer was purchased by another manufacturer who declined to honor the recall obligations of the previous manufacturer. Additionally, IOTA never filed a defect information report in accordance with 49 CFR 573.3(f).

A Preliminary Evaluation has been opened to evaluate the scope and timeliness of the subject safety recalls and to determine whether IOTA sold potentially defective equipment to any other vehicle manufacturers who have not yet

submitted defect information reports in accordance with 49 CFR 573.6.

The ODI complaint reports cited above can be reviewed online at <http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID> under the following identification numbers: 10458296, 10461090, 10465791, 10469372, 10480786, 10491941, 10503017, 10512327, 10522811, 10534897, 10554925, 10567361, 10568410, 10568426, 10585655, 10610552, 10621358, 10629759, 10631603, 10649954, 10716665, 10726758.