U.S. Department of Transportation

National Highway Traffic Safety Administration

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION

NHTSA

Authentic US Government Information
National Highway Traffic Safety Administration
uses a *digital certificate* to ensure
the content has remained unchanged

Investigation: EQ 14-009
Prompted by: 14V-021
Date Opened: 07/17/2014 **Date Closed:** 11/10/2014
Investigator: Cynthia Glass
Approver: Jennifer Timian
Subject: Furnace Intake Fan May Melt

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: SUBURBAN MANUFACTURING CO
Products: SF-30 FQ Furnace
Population: 138,743

Problem Description: The plastic furnace intake fan may melt which can cause the furnace to overheat and cause a vehicle fire.

ACTION / SUMMARY INFORMATION

Action: This EQ Investigation is Closed.

Summary:

See the attached closing report.

EQ 14-009: Suburban Manufacturing Company Furnace Fan May Melt
Closing Report
October 27, 2014

BACKGROUND

In a letter dated January 23, 2014, Trails West Manufacturing of Idaho, Inc. (Trails West) notified the NHTSA that it decided a defect exists in certain Model Year 2010-2014 RPM bumper pull recreational trailers manufactured October 2009 through January 2014 and equipped with a Suburban Manufacturing Company (Suburban) SF-30 FQ furnace. According to Trails West, in its affected vehicles, the plastic furnace intake fan may melt which can cause the furnace to overheat causing other plastic pieces to melt from the lack of air flow. The melting and overheating could result in a trailer fire. This matter was assigned recall number 14V-021.

On July 18, 2014, the Recall Management Division opened this Equipment Query (EQ) Investigation to investigate whether additional vehicle applications may be impacted and, where that may be the case, ensure safety defect decisions are made and safety recalls initiated.

Suburban provided a customer list identifying the vehicle manufacturers that may have incorporated the subject furnace into their vehicles. On July 18, 2014, an information request letter (IR) letter was sent to the vehicle manufacturers as well as Suburban.

VEHICLE MANUFACTURER AND SUBURBAN RESPONSES

In response to the IR letters, Show Hauler Trucks filed a defect report and indicated they would conduct a recall of their vehicles. The vehicle recall campaign is: 14V-462.

Three (3) manufacturers submitted responses explaining that they did not purchase any of the subject furnaces and would not be conducting safety recalls. Those manufacturers are as follows:

LQ Conversions
NRC Modifications
Sierra Custom Interiors

Suburban responded that “to the best of its knowledge, none of the Suburban SF-30 FQ’s installed by numerous other RV manufacturers across the US, and used by a much larger group of RV owners, have ever been involved in incidents similar to those reported by Trails West.“ Suburban claimed that Trails West ignored the installation instructions and misinformed customers on the use of the furnace. Suburban’s installation instructions say “Do not install the furnace with the vent facing the forward end of the coach.” Suburban contends that “Trails West ignored this instruction and installed the furnace in the very front of the trailer, with the vent located on an angle, but still forward facing wall.” Suburban’s installation instructions and owner’s manual also include the warning: “WARNING! Do not operate furnace while vehicle is in motion or being towed.” Suburban contends that “Trails West ignored this warning and instead specifically instructed its owners to use the furnaces in transit.”

As part of Suburban's evaluation of this issue, third party testing was performed to evaluate the furnace operation in various installation and usage configurations. The independent evaluation determined conclusively "that the root cause of the issues with the Trails West trailers is the forward facing furnace assembly when combined with the use of the furnace during transit". Suburban concluded that "Trails West created this situation and Suburban is not prepared to assume design responsibility for their trailer to resolve it." Accordingly, Suburban is not conducting a recall campaign.

Four (4) manufacturers' submitted responses stating that they are in total compliance with Suburban's installation instructions and no safety defect exists as it relates to the installation of the subject furnace in their vehicles. Accordingly, the following manufacturers are not conducting a recall campaign:

Crossroads RV
Forest River
Keystone RV
Winnebago Industries

RECALL MANAGEMENT DIVISION ACTION

All vehicle and motor vehicle equipment manufacturers who purchased the defective Suburban SF-30 FQ furnace have been identified and have either filed recall reports and are conducting recalls, or have provided responses explaining why they are not conducting recalls. Accordingly, this equipment query investigation is closed. Copies of documents associated with this investigation, including responses to IR letters, can be found in this Equipment Query's document repository by clicking the "Associated Documents" button.