



U.S. Department  
of Transportation  
**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** PE 11-041  
**Date Opened:** 01/20/2012  
**Investigator:** Peter Kivett **Reviewer:** Bruce York-B  
**Approver:** Frank Borris  
**Subject:** Collapse of Squad Seat Base

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** MEDTEC AMBULANCE CORPORATION  
**Products:** 2011 Medtec R152 Type 1 Ambulance  
**Population:** 500 (Estimated)  
**Problem Description:** Wood/sheet metal screws used to secure the squad seat base to the hinge bracket fail allowing the seat base to separate and collapse.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	1	0	1
<b>Crashes/Fires:</b>	0	0	0
<b>Injury Incidents:</b>	0	0	0
<b>Number of Injuries:</b>	1	0	1
<b>Fatality Incidents:</b>	0	0	0
<b>Other*:</b>	0	0	0

\*Description of Other:

## ACTION / SUMMARY INFORMATION

**Action:** This Preliminary Evaluation is opened.

### Summary:

The Office of Defects Investigation (ODI) received a Vehicle Owners Questionnaire (VOQ) concerning a squad bench seat failure on a 2011 Medtec R152 Type 1 Ambulance Emergency Response Vehicle. These vehicles are built on a Ford F-450 chassis designed for light emergency applications. The complainant, submitted by an emergency medical professional, indicated that he was injured due to a failure of the bench seat in the emergency cab while treating a patient en route to the hospital. Allegedly, while the complainant was sitting on the squad seat bench located in the emergency cab, the vehicle drove over a slight bump causing the seat to separate from its hinged bracket. This failure caused the complainant to fall into the lower storage area allegedly injuring his back in the process.

The rear cab of the vehicle is fitted to an incomplete Ford F450 chassis and includes various interior options. Medtec, the company that designed and installed the rear cab, originally used screws to fasten the bench seat base to the base of the vehicle. A piano style hinge allows the seat to swing open for access to storage below where additional emergency equipment is located. Over time these screws may loosen, allowing the seat base to displace and potentially causing a separation from the hinge. This separation caused the alleged safety related failure of the vehicle and injury to the complainant while treating a patient. Additionally, the front latch that assists in securing the seat was broken, which also contributed to the seat separation.

The remedy performed by the manufacturer, was to install new hardware. The new hardware consisted of a through bolt and locking-nut fastener arrangement. The manufacturer remedied all vehicles in the fleet that experienced the failure using the new robust hardware.

Although Medtec has repaired the vehicles in one fleet, ODI is concerned as to the adequacy of the remedy and whether this field action should be a safety recall. This Preliminary Evaluation has been opened investigate the alleged defect and actions taken by Medtec.

The report cited above can be reviewed online at [www-odi.nhtsa.dot.gov/complaints](http://www-odi.nhtsa.dot.gov/complaints) under the following identification (ODI) number: 10424476.