



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation:	AQ 15-002	Date Closed:	04/07/2020
Prompted by:	Part 573 Timeliness Concern	Reviewer:	Bruce York-B
Date Opened:	06/22/2015		
Investigator:	Ryan Rahimpour		
Approver:	Stephen Ridella		
Subject:	Terex reporting		

MANUFACTURER & PRODUCT INFORMATION

Manufacturer:	Terex South Dakota, Inc.
Products:	2001-2003 Terex and others XT52, XT55, XT60
Population:	1,332
Problem Description:	Investigation into timeliness and scope of reporting a defect in aerial boom arms and Terex's compliance with other reporting requirements under the Safety Act and related regulations.

ACTION / SUMMARY INFORMATION

Action: This AQ is closed.

Summary:

This Audit Query (AQ15-002) was opened on June 22, 2015 to investigate the timing and scope of Terex South Dakota, Inc. (Terex)'s determination and notification to NHTSA of a safety defect, as well as Terex's compliance with reporting requirements under the National Traffic and Motor Vehicle Safety Act and regulations.

On May 29, 2015, Terex submitted a Defect Information Report to NHTSA describing a safety defect in the Lower Boom of 2002 XT55 and XT60 series aerial devices installed on certain trucks, encompassing approximately 48 vehicles (NHTSA Recall No. 15V-353). Based on available information, NHTSA decided to investigate the scope of Recall No. 15V-353, along with the timeliness of Terex's defect determination and notification to NHTSA. NHTSA also decided to investigate Terex's compliance with reporting requirements for manufacturer communications under 49 C. F.R. § 579.5, as the last document submitted by Terex pursuant to that requirement prior to the opening of this investigation was during the third quarter of 2009.

Information obtained from Terex's response to NHTSA's Special Order in this investigation revealed that, following the first reports of cracks (as early as 2004) and stress testing conducted on the boom arms at the upper and lower cylinder connections (also in 2004), Terex created "Z-Kits" 887 and 1290 to offer a preventative welding reinforcement on the affected units. Terex did not conclude these cracks or test results indicated a safety defect existed on the aerial devices and did not issue a safety recall at that time. Additional reports of devices developing cracks, an incident involving the failure of a boom arm that allowed an aerial device lift bucket to drop while occupied, and a report identifying a deficiency in the metal used by Terex to manufacture the boom arms prompted Terex to further investigate the cracks occurring in the XT series aerial devices. Terex's testing and evaluations indicated that at the time of manufacture, the material provided by the tubing supplier did not meet the requirements of the Terex specifications indicated on the Lower Boom engineering prints. Terex performed a search of its purchasing records to identify the batch of material that it felt was suspect and issued Recall No. 15V-353.

After NHTSA opened this investigation, Terex continued to test additional material to determine if it was compliant with Terex's specifications. This testing revealed that vehicles containing material that did not meet specifications were built outside of the date range specified for the original recall population. Based on its findings, Terex expanded the date range for the recall to encompass a period that included several months before and after any vehicle containing nonconforming material was built.

On April 20, 2016 Terex issued NHTSA Recall No. 16V-233 to address the expanded group of vehicles built with material which did not conform to its material specifications and to repair them with a new aerial device meeting the correct specifications. Additionally, Terex provided NHTSA with copies of manufacturer communications it had not previously submitted pursuant to 49 C.F.R. § 579.5 and committed to implementing changes to come into compliance

with reporting requirements.

Based on the specific circumstances of this investigation and available information, including Terex's expansion of the recall to address the safety defect on its XT series of aerial devices, its actions to come into compliance with reporting requirements, and to adjudicate this query without it unduly lingering further, NHTSA is closing this investigation. However, NHTSA reserves the right to revisit the issues that were investigated during this AQ. NHTSA will continue to monitor Terex submissions to the agency and will take further action, if warranted.