Part 573 Safety Recall Report 16V-378

Manufacturer Name : Vermeer Manufacturing Company
Submission Date : MAY 24, 2016
NHTSA Recall No. : 16V-378
Manufacturer Recall No. : IK3304

Manufacturer Information :

Manufacturer Name : Vermeer Manufacturing Company
Address : 1210 VERMEER ROAD EAST
PO BOX 200 PELLA IA 50219-0200
Company phone : 641-628-3141

Population :

Number of potentially involved : 636
Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2012-2016 Vermeer BC900XL
Vehicle Type : TRAILERS
Body Style :
Power Train : NR
Descriptive Information : The specified units were identified from manufacturing and design records maintained by Vermeer Manufacturing Company as all having the same tongue weldment design.
Production Dates : JUN 08, 2012 - MAY 31, 2016

VIN Range 1 :	Begin :	1VR712163C1000101	End :	1VR712169F1000544	☐ Not sequential
VIN Range 2 :	Begin :	1VR712163F1002001	End :	1VR712161G1002192	☐ Not sequential

Description of Defect :

Description of the Defect : Model BC900XL brush chipper units, S/N 101-544, 2001 - TBD, were equipped with a mainframe weldment, Item number 163733323 (Exhibit A). At the location where the Tube-Tongue (Item 1, Exhibit A) intersects the Plate-Frame Front Cross Member (Item 8, Exhibit A), during manufacturing the weld joint may have been undercut creating a high stress concentration factor. This high stress concentration can increase material stresses in the Tube-Tongue (Item 4, Exhibit A) at the start/stop point of the weld that could result in bending and/or fatigue fractures (cracks) which can eventually result in the failure of the tube at the Plate-Frame Front Cross Member (Item 8, Exhibit A) of the mainframe weldment. The failure will result in the separation of the mainframe from the tow vehicle.

FMVSS 1 : NR
FMVSS 2 : NR

Description of the Safety Risk : Separation of the brush chipper from the two vehicle while being towed down the public roadways.

Description of the Cause :	The high stress concentration caused by the undercut weld during the manufacturing process.
Identification of Any Warning that can Occur :	Small cracks at the location of the tongue to main frame interface.

Supplier Identification :

Component Manufacturer

Name :	NR
Address :	NR
	NR
Country :	NR

Chronology :

12-FEB-2016 Vermeer Environmental Service Department received a report from a dealership in Wisconsin of a failed tongue on the BC900XL.
16-FEB-2016 Vermeer Environmental Engineering Department traveled to the dealership in Wisconsin to investigate the failure. The engineer noted that the tongue had previous damage in the hitch area due to being dragged on the ground after separating from the tow vehicle.
17-FEB-2016 Vermeer Environmental Engineering reviewed the Finite Element Analysis of the BC900XL frame. The stress levels in the area of the tongue were below the design guidelines.
18-FEB-2016 Vermeer metallurgical analysis of the failed parts indicated that the parts were manufactured with the correct material per engineering specifications.
25-FEB-2016 Vermeer Environmental Engineering reevaluated the tongue with higher loads and determined that the stress levels were below design guidelines.
9-MAY-2016 Vermeer Environmental Service Department received a report from a dealership in Wisconsin of a second failed tongue on the BC900XL.
16-MAY-2016 Vermeer Environmental Service Department received a report from a dealership in Wisconsin of a third failed tongue on the BC900XL.
19-MAY-2016 Vermeer Environmental Engineering evaluation of the last two tongue failures were the result of a high stress riser due to undercut welds in the tongue.
20-MAY-2016 Vermeer Product Safety determined that a product safety campaign be initiated.

Description of Remedy :

Description of Remedy Program :	The fixed tongue will be cut off next to the connection to the main frame and another tongue will be inserted into the main frame and bolted into place to remove the high stress concentration and potential tongue tube cracking. This design is currently used on the next larger model brush chipper without any reported issues.

How Remedy Component Differs from Recalled Component :	The field kit is currently under development and will include a new bolt in tongue that will be inserted into the main frame.
Identify How/When Recall Condition was Corrected in Production :	The field fix and production fix will be identical. The date is TBD for production at this time.

Recall Schedule :

Description of Recall Schedule :	TBD- but letters no later than 7/19/2016
Planned Dealer Notification Date :	NR - NR
Planned Owner Notification Date :	NR - NR

* NR - Not Reported