

Safety Defect and Noncompliance Report Guide for Vehicles  
**PART 573 Defect and Noncompliance Responsibility and Reports**<sup>1</sup>

**On March 10, 2011, The Charles Machine Works, Inc. [MFR] decided that a defect which relates to motor vehicle safety exists in the motor vehicles listed below, and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573 Defect and Noncompliance Responsibility and Reports.**

**Date this report was prepared:** 04/12/2011 \_\_\_\_\_

**Furnish the manufacturer's identification code for this recall (if applicable):** DSB

**1. Identify the full corporate name of the fabricating manufacturer of the vehicle being recalled. If the recalled vehicle is imported, provide the name and mailing address of the designated agent as prescribed by 49 U.S.C. §30164.**

The Charles Machine Works, Inc., P.O. Box 66, Perry, OK 73077  
\_\_\_\_\_

**Identify the corporate official, by name and title, whom the agency should contact with respect to this recall.**

Susan Harmon, P.E. – Product Safety Engineer  
\_\_\_\_\_

**Telephone Number:** 580-572-2853 **Fax No.:** 580-572-3525

**Name and Title of Person who prepared this report.**

Susan Harmon, P.E.

Product Safety Engineer

**Signed:**



<sup>1</sup> Each manufacturer must furnish a report, to the Associate Administrator for Enforcement, for each defect or noncompliance condition which relates to motor vehicle safety.

This guide was developed from 49 CFR Part 573, "Defect and Noncompliance Responsibility and Reports" and also outlines information currently requested. Any questions, please consult the complete Part 573 or contact Ms. Jennifer Timian at (202) 366-5210, by FAX at (202) 366-7882, or by E-Mail to [RMD.ODI@dot.gov](mailto:RMD.ODI@dot.gov).

**I. Identify the Vehicle Models Involved in the Recall**

**2. Identify the Vehicles Involved in the Recall, for each make and model or applicable vehicle line (provide illustrations or photographs as necessary to describe the vehicle), provide:**

**Make(s):** Ditch Witch **Model Years Involved:** 2009-2011 **Model(s):** T9S

**Production Dates: Beginning:** August, 2009 **Ending:** February, 2011

**VIN Range: Beginning:** 1DSB122R291701817 **Ending:** 1DSB122R5B1701736

**Vehicle Type:** Const Equip – trailer mounted vacuum excavator **Bodystyle:** FX30 or FX60 500 gal spoils

**Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall:**

All T9S trailers with mounted 500 gallon vacuum excavators produced 08/09-02/11 are included

---

**Make(s):** Ditch Witch **Model Years Involved:** 2009-2011 **Model(s):** T9SH

**Production Dates: Beginning:** August, 2009 **Ending:** February, 2011

**VIN Range: Beginning:** 1DSB122R3A1701801 **Ending:** 1DSB122R2A1701899

**Vehicle Type:** Const Equip – trailer mounted vacuum excavator **Bodystyle:** FX30 or FX60 500 gal spoils

**Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall:**

All T9SH trailers with mounted 500 gallon vacuum excavators produced 08/09-02/11 are included

---

**Make(s):** Ditch Witch **Model Years Involved:** 2009-2011 **Model(s):** T12SE

**Production Dates: Beginning:** August, 2009 **Ending:** February, 2011

**VIN Range: Beginning:** 1DSB122C391702521 **Ending:** 1DSB122C3B1702783

**Vehicle Type:** Const Equip – trailer mounted vacuum excavator **Bodystyle:** FX30 or FX60 500 gal spoils

**Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall:**

All T12SE trailers with mounted 500 gallon vacuum excavators produced 08/09-02/11 are included

---

**Make(s):** Ditch Witch **Model Years Involved:** 2000-2011 **Model(s):** T18S

**Production Dates: Beginning:** December, 2000 **Ending:** February, 2011

**VIN Range: Beginning:** 7T2602 **Ending:** 1DSB202S2B1702265

**Vehicle Type:** Const Equip – trailer mounted vacuum excavator **Bodystyle:** FX30 or FX60 800 gal spoils

**Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall:**

All T18S trailers with mounted 800 gallon vacuum excavators produced 12/00-02/11 are included

---

**Identify the approximate percentage of the production of all the recalled models manufactured by your company between the inclusive dates of manufacture provided above, that the recalled model population represents. For example, if the recall involved Vehicles equipped with certain items of equipment from January 1, 1996 through April 1, 1997, then what was the percentage of the recalled Vehicles of all Vehicles manufactured during that time period.**

**II. Identify the Recall Population**

**3. Furnish the total number of vehicles recalled potentially containing the defect or noncompliance.**

<b>Model</b>	<b>Year</b>	<b>Number of Vehicles Potentially Involved</b>
T9S	2009-2011	94
T9SH	2009-2011	14
T12SE	2009-2011	56
T18S	2000-2011	1438

**Total Number Potentially Affected by the Recall:** 1602

**4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance:**

**Identify and describe how the recall population was determined--in particular how the recalled models were selected and the basis for the beginning and final dates of manufacture of the recalled vehicles:**

The Charles Machine Works, Inc. began manufacturing Ditch Witch® branded trailer mounted vacuum excavators in 2000. In March, 2011 it was discovered that a change to the 500 gallon and 800 gallon spoils tank mounts made in 2008 was not sufficient to support the weight of full tanks. The mounts were breaking which would allow the tank to fall from the trailer. Upon investigating this issue, two rear trailer cross-members were discovered broken. Through finite element analysis (FEA), it was determined that, due to the weight distribution, the rear cross-member on the trailer could be overloaded when an 800 gallon spoils tank was completely full of spoils. FEA was completed on the other tank sizes and concluded that the cross member could sufficiently support the weight of the other tank sizes.

---

---

---

---

---

---

**III. Describe the Defect or Noncompliance**

**5. Describe the defect or noncompliance. The description should address the nature and physical location of the defect or noncompliance. Illustrations should be provided as appropriate.**

Spoils tank mounts are breaking which could allow the spoils tank to fall from the trailer. Additionally, the weight distribution of the tank on the trailer can overload the rear trailer cross-member.

**Describe the cause(s) of the defect or noncompliance condition.**

Weight distribution on the trailer and mounts.

**Describe the consequence(s) of the defect or noncompliance condition.**

The spoils tank could fall from the trailer.

**Identify any warning which can (a) precede or (b) occur.**

Cracks in the rear trailer cross-member.

**If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.**

N/A

**Identify the name and title of the chief executive officer or knowledgeable representative of the supplier:**

N/A

**IV. Provide the Chronology in Determining the Defect/Noncompliance**

*If the recall is for a defect, complete item 6, otherwise item 7.*

**6. With respect to a defect, furnish a chronological summary (including dates) of all the principle events that were the basis for the determination of the defect. The summary should include, but not be limited to, the number of reports, accidents, injuries, fatalities, and warranty claims.**

March 4, 2011 - we were notified by one of our dealerships that the tank mounts had broken on one of their customer's vacuum excavators. While the tank was being dumped/tilted, the tank fell off of the trailer. No injuries were reported. The customer had several other vacuum excavators in several states and they were all inspected by the dealership.

March 8 – dealership found another machine with broken mounts.

March 9 -- we stopped shipment of 500 gallon and 800 gallon vacuum excavators.

March 10 -- dealership found a machine that did not have broken mounts, but the rear cross-member was broken.

March 11 -- we contacted another dealership that sells a heavy volume of vacuum excavators in a different state and requested that they do an inspection of some of their customer's machines. They found no broken mounts, but did find bent rear cross members.

March 23 – we restarted shipment of reworked or newly produced vacuum excavators.

**7. With respect to a noncompliance, identify and provide the test results or other data (in chronological order and including dates) on which the noncompliance was determined.**

---

---

---

---

---

**V. Identify the Remedy**

**8. A description of the manufacturer's program for remedying the defect or noncompliance. This program shall include a plan for reimbursing an owner or purchaser who incurred costs to obtain a remedy for the problem addressed by the recall within a reasonable time in advance of the manufacturer's notification of owners, purchasers and dealers, in accordance with §573.13 of this part. A manufacturer's plan may incorporate by reference a general reimbursement plan it previously submitted to NHTSA, together with information specific to the individual recall. Information required by §573.13**

**that is not in a general reimbursement plan shall be submitted in the manufacturer's report to NHTSA under this section. If a manufacturer submits one or more general reimbursement plans, the manufacturer shall update each plan every two years, in accordance with §573.13. The manufacturer's remedy program and reimbursement plans will be available for inspection by the public at NHTSA headquarters.**

Kits were created to redistribute the weight of the spoils tank more uniformly across the trailer. Customer lists and affected machine serial #'s will be mailed to Ditch Witch dealerships. The dealership will order the appropriate kit and install it at no charge on their customer's machines at the dealership shop. There will be no cost to the customer.

---

---

---

---

---

**9. Furnish a description of the manufacturer's remedy for the defect or noncompliance. Clearly describe the differences between the recall condition and the remedy.**

500 gallon spoils tank (T9S, T9SH, T12SE) – previously, the weight of the tank rested entirely on the welds of 4 tank mounts. This mount has been redesigned and the number of contact points with the trailer has been increased to 6 mounts/supports. Additionally a support has been added to the rear of the tank to distribute some of the weight across the frame of the trailer.

800 gallon spoils tank (T18S) – previously, the weight of the tank rested entirely on the welds of 4 tank mounts. This mount has been redesigned and the number of contact points with the trailer has been increased to 8 mounts/supports. Additionally, a support has been added to the rear of the tank to distribute some of the weight across the frame of the trailer.

---

---

**Clearly describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly.**

500 gallon tank (T9S, T9SH, T12SE) – two metal plate supports welded at the outside rear bottom of the tank skid

800 gallon tank (T18S) – one 2x2 steel bar welded at the outside rear bottom of the tank skid

---

**Identify and describe how and when the recall condition was corrected in production. If the production remedy was identical to the recall remedy in the field, so state. If the product was discontinued, so state.**

Inventory has been reworked at our facility and production was re-started on March 23, 2011 with the same correction that is being proposed for the recall.

---

---

---

---

**VI. Identify the Recall Schedule**

**10. Furnish a schedule or agenda (with specific dates) for notification to other manufacturers, dealers/retailers, and purchasers. Please, identify any foreseeable problems with implementing the recall.**

Dealership letter to be mailed the week of April 4<sup>th</sup>. They will order kits to satisfy their needs for repairing the machines on their customer lists. The customer letter will be mailed the week of April 18<sup>th</sup>. The customer will contact the dealer to schedule an appointment to bring their machine in for repair. No foreseeable issues with implementation.

---

---

---

**VII. Furnish Recall Communications**

**11. Furnish a final copy of all notices, bulletins, and other communications that relate directly to the defect or noncompliance and which are sent to more than one manufacturer, distributor, or purchaser. This includes all communications (including both original and follow-up) concerning this recall from the time your company determines the defect or noncompliance condition on, not just the initial notification. A DRAFT copy of the notification documents should be submitted to this office by Fax (202-366-7882) or by E-Mail to [RMD.ODI@dot.gov](mailto:RMD.ODI@dot.gov) for review prior to mailing.**

**Note that these documents are to be submitted separately from those provided in accordance with Part 579.5 requirements.**