



**Stoughton Trailers, LLC**

May 3, 2018

To: Stoughton Model AHV Trailer Dealers

Stoughton Trailers, LLC (Stoughton) has found an area of uncertain performance that needs to be addressed on our 2018 model year AHV model, (commonly referred to as "Grain Haulers" or "Ag Hoppers"). The potential defect is described below:

There is a panel connection issue in the upper slope panel to top slope sheet on trailers produced from June 2017 to December 2017. The fasteners used in this connection are not sufficient to carry the weight of the load in this group of trailers. There is a potential of losing fasteners and damaging the panels. The 40' unit will be affected at the front and rear while a 42' unit will only be affected at the front.

All parts will be provided by Stoughton Trailers along with reimbursement of the labor charges under warranty.

Please contact your customers to make arraignments to have the units repaired.

If you have units in your possession that need the repair please complete those prior to releasing to a customer.

We will be ordering the repair kits for each unit listed for the dealer in our system. If the repair kits need to be delivered to another facility, please let us know.

Your assistance with this repair is very much appreciated. Should you have any questions or concerns, please contact:

Tom Daily  
Phone: 608-873-2510  
Fax: 608-873-2566  
[Tomd@stoughtontrailers.com](mailto:Tomd@stoughtontrailers.com)

or

Jackie Kell  
Phone: 608-873-2580  
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[JACKIE@stoughtontrailers.com](mailto:JACKIE@stoughtontrailers.com)

Enclosed:  
Repair document SK-09435



## REPAIR DOCUMENT

### Ag Hopper Trailer – Slope Sheet Repair

Repair Document #: **SK-09435**  
Date: April 16, 2018  
Revision:  
Revision Date: N/A

#### **Contact Information:**

If you have any questions about this Repair Document, please contact the Stoughton Trailers Customer Service Department by telephone (608)-873-2555 or by email ([warranty@stoughtontrailers.com](mailto:warranty@stoughtontrailers.com)).

#### **Subject:**

Repair procedure for Ag Hopper trailers front top shelf attachment to front top rail, front top slope sheet (10" wide) and upper slope sheet. This repair for Ag Hopper trailers will eliminate problems with front top slope sheet (10" wide) and upper slope sheet cracking.

#### **Models:**

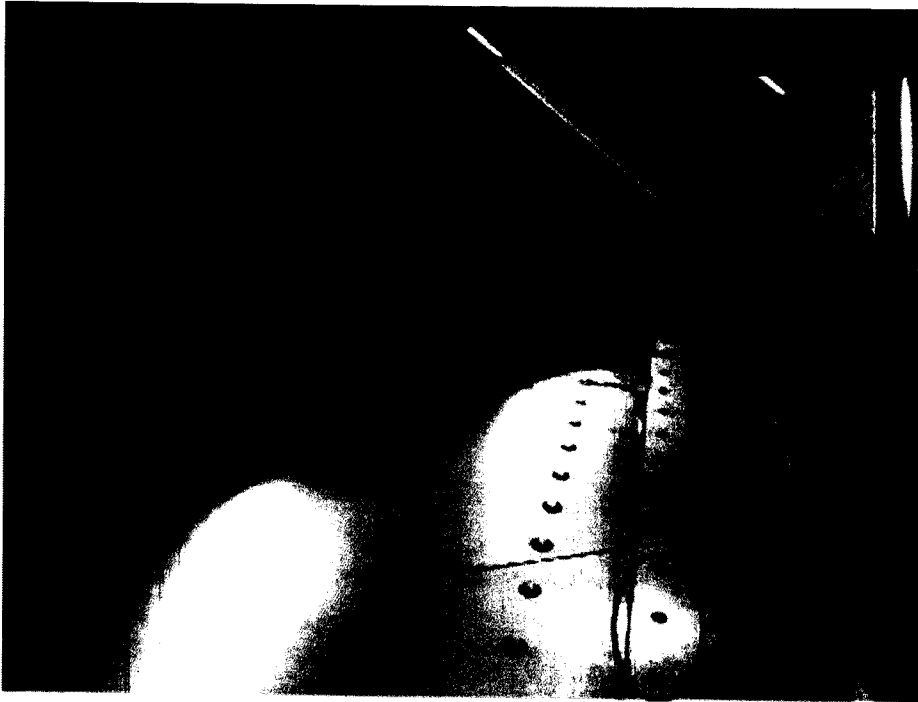
Trailers that qualify for this upgrade can be identified by the following:

1. Model: AHV
2. Model Years: 2018

#### **Issue:**

The repair and upgrade addresses inadequately chosen fastener that connects front top slope sheet (6.75" wide) and upper slope sheet. Failure of this fastener causes these two sheets to crack right under side top rail near side walls (see images).

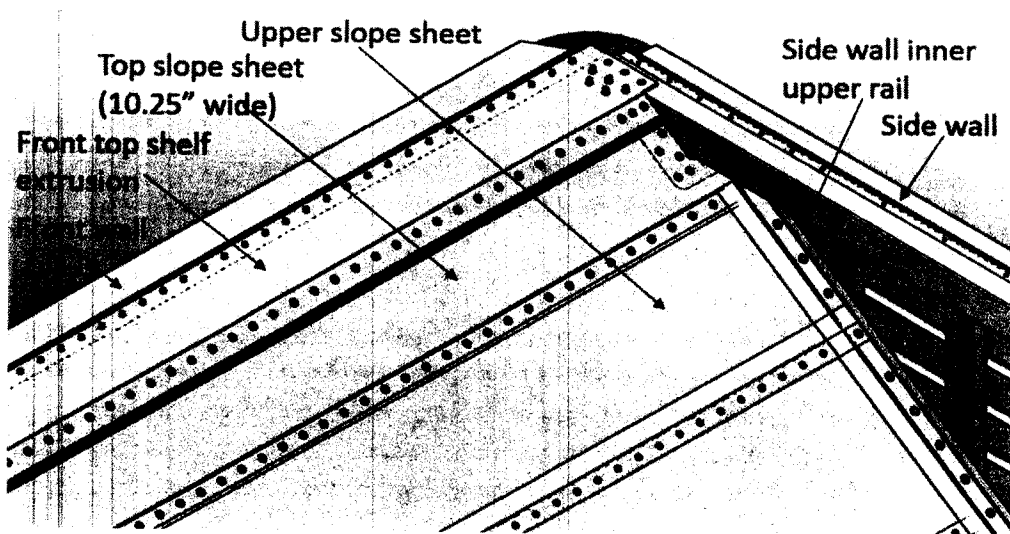




- Front wall tarp cap
- Front top shelf extrusion
- Top slope sheet (6.75" wide)
- Upper slope sheet
- Missing fasteners

**Remedy:**

The upgrade will be performed at the front (front and rear on 40' long trailers) top shelf, top slope sheet (6.75" wide) and upper slope sheet. Top slope sheet (6.75" wide) and all of the connecting fasteners will be replaced. Front top shelf to front top rail fasteners need to be replaced. Top slope sheet will become 10.25" wide instead of 6.75" wide, this new sheet will eliminate a line of fasteners that failed on the picture above (circled). If damage already occurred, upper slope sheet will need to be replaced and slope rails checked for cracking. See below.



**Warning:**

During all steps of the repair and upgrade procedures one must use appropriate safety precautions.

- Use personal safety equipment when working on any trailer (i.e. safety glasses, hearing protection, safety shoes, etc.).
- Check to insure landing gear is in proper working order and providing proper support prior to upgrade.
- The trailer must be empty before any repairs or upgrades are made.

**Parts Required (no damage to trailer):**

<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
01-29261-000-00	SHEET, TOP SLOPE	1
04-97073-000-00	RVT, BLIND 1/4DX.282-.344 GP	18
04-97100-000-00	PIN, HUCKBOLT 1/4DX.250-.375 GP	84
04-97103-000-00	PIN, HUCKBOLT 1/4DX.345-.500 GP	24
04-97108-000-00	RVT, BLIND,1/4DX.345-.406GP	43
04-97116-000-00	COLLAR, HUCKBOLT, 1/4D, STEEL	108

*Note: quantities of parts above will double for 40' LG trailer*

**Additional Parts (if damage to trailer occurred only):**

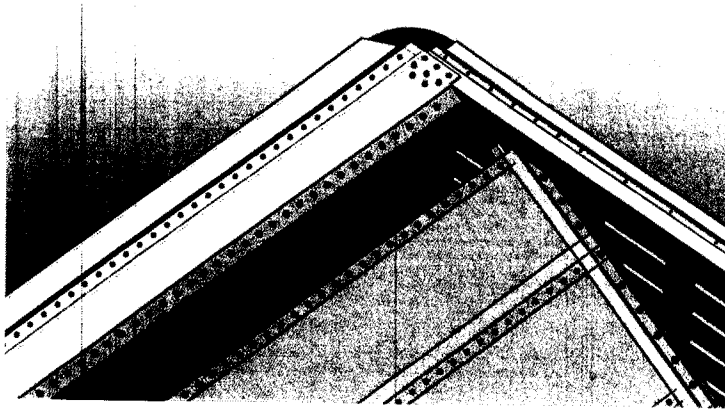
<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
01-29297-000-00	SHEET, UPPER SLOPE	1
SK-09432-000-00	ANGLE, SLOPE RAIL REINF	2
04-95001-100-00	CSR, HH, 1/4-20X1, GR5/ZP	12
04-95501-000-00	LKNUT, HEX, 1/4-20, NE-NYLON INS ZP	12
04-96012-000-00	WSHR, FLT, 1/4, SAE ZP	24
04-97083-000-00	RVT, M-BOLT 1/4DX.350-.625 GP	8
04-98002-625-00	RVT, BR HD,3/16X5/8, 2117-T4 AL	43
04-98003-750-00	RVT, BR HD,1/4X3/4, 2117-T4 AL	2
04-98003-812-00	RVT, BR HD,1/4X13/16, 2117-T4 AL	2
SK-07124-KIT	Clip Kit	2

**Tools**

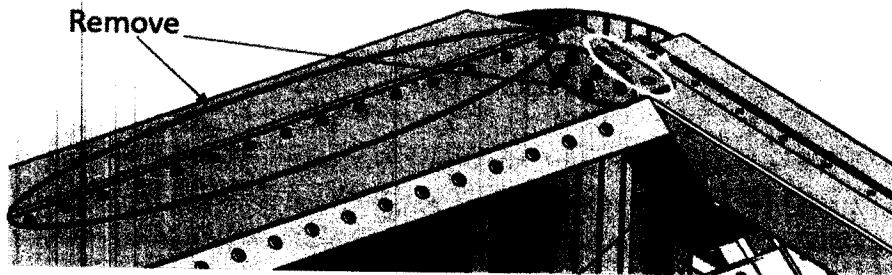
- Drill
- Grinder
- Rivet Gun
- Huck Gun

**Procedure:**

1. Remove tarp cap.
2. Drill out fasteners around perimeter of front top slope sheet (6.75" wide) and remove it (See below).



3. Drill out fasteners connecting top shelf extrusion with front top rail and steel reinforcement bracket that now exposed. Do not remove fasteners into side wall inner upper rail (See below).

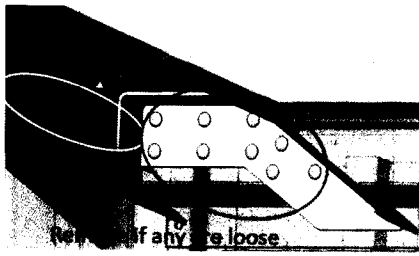


Steel Reinforcement bracket

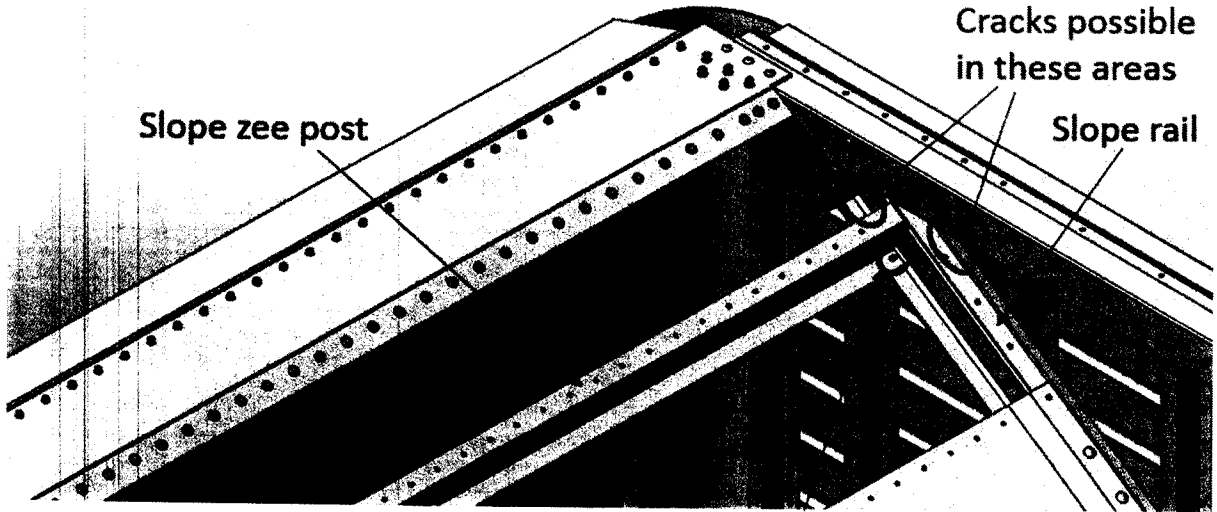
4. Install (43) 04-97108-000-00 RVT, BLIND, 1/4DX.345-.406GP at connection between top shelf extrusion and front top rail (alternative fastener is 1/4" DIA X 11/16" solid rivet (04-98003-688-00)). Install (5) per side 04-97103-000-00 PIN, HUCKBOLT 1/4DX.345-.500 GP at top shelf extrusion connection to steel reinforcement bracket with pin heads on the inside and collars on the outside.

Note: Steps 5-12 are only needed if damage occurred to the trailer, in no damage occurred- skip to step 13.

5. Check (9) monobolts at steel reinforcement bracket and side wall inner upper rail connection for loosening, if any fasteners are loose- drill them out and replace with 1/4" RVT, BLIND 1/4DX.282-.344 GP steel blind rivets.



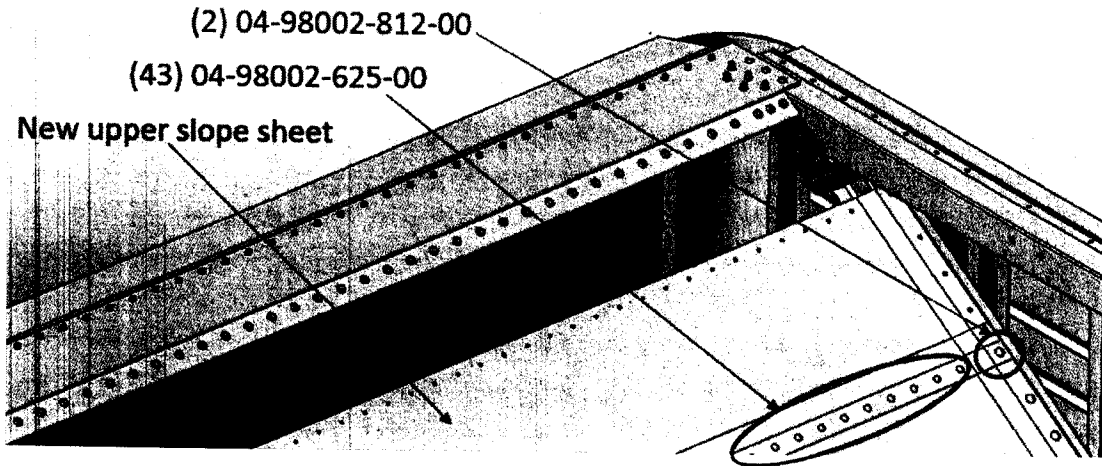
6. Drill out fasteners around perimeter of upper slope sheet and remove it (See below).



Rivet at the slope zee post bottom flange

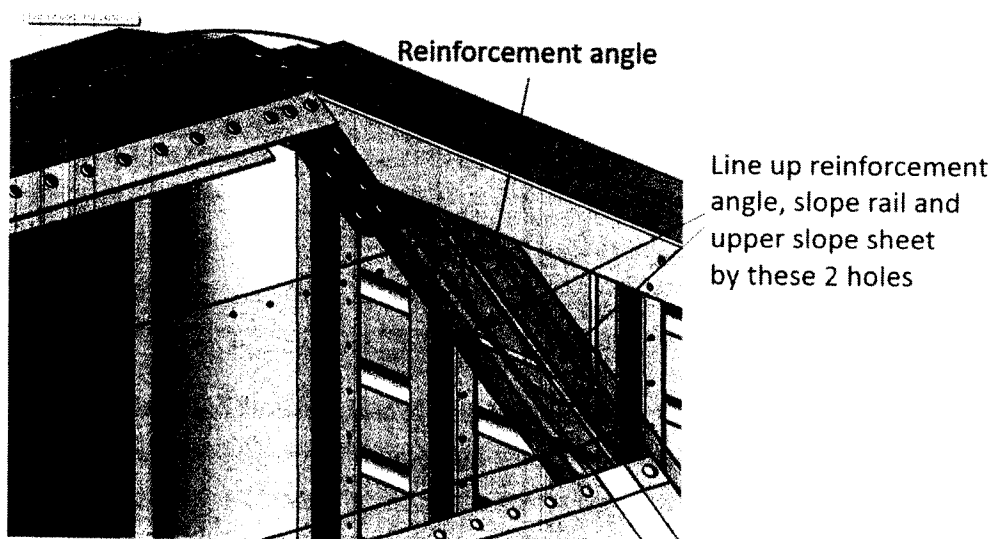
7. Check slope rails (extrusions located on each side of the slope and attached to side walls) towards the top of the trailer for any cracks at flanges. If any cracks occurred at the top and/or bottom flange of the slope rail, then detach top zee post (drill out 2 rivets (1 per side) at the bottom slope rail flange to bottom zee post flange connection and slightly move the zee post out of the way to gain access to slope rail flanges). Stop drill the cracks at the top and/or bottom flange, clean around cracked area, clamp together and reweld on both sides of the flange. When cooled off- grind down the excess so that the new upper slope sheet, and zee post will fit flat on the flange.

8. Install new upper slope sheet and fasten it with solid rivets at the bottom row ((43) 04-98002-625-00 at lap and zee post and (2) 04-98003-812-00 at slope rail, lap and zee post) (See below).

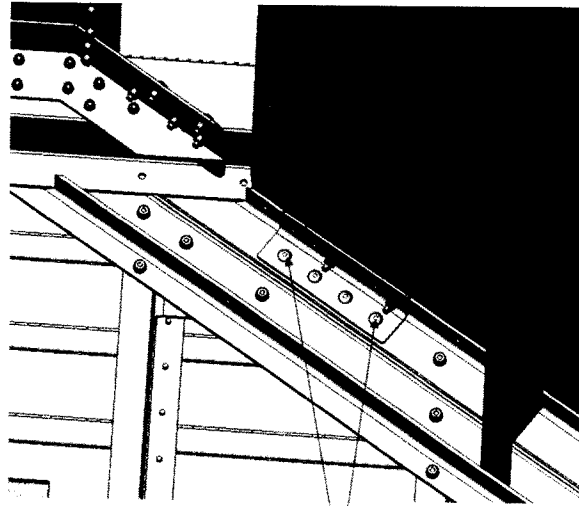


Note: Steps 9-13 will be completed underneath the slope.

9. From underneath the slope, line up the reinforcement angle SK-09432-000-00 (highlighted yellow on picture below, upper slope sheet and slope rail are transparent) with existing holes in upper slope sheet and slope rail. Install (2) 1/4-20x1 bolts, washers on both sides and nuts without tightening them all the way.

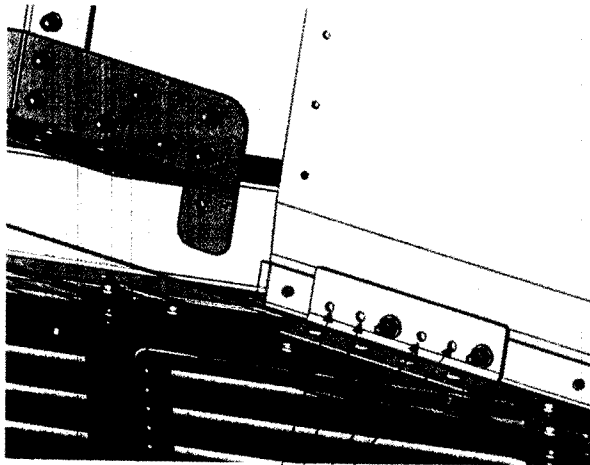


10. Holding reinforcement angle tight against both mating surfaces- slope rail web and bottom side of slope rail flange, transfer drill (4) 1/4" DIA holes through slope rail web. Install (4) 1/4" DIA blind rivets (04-97083-000-00 SST monobolts, .350"-.625" GP) (See below).

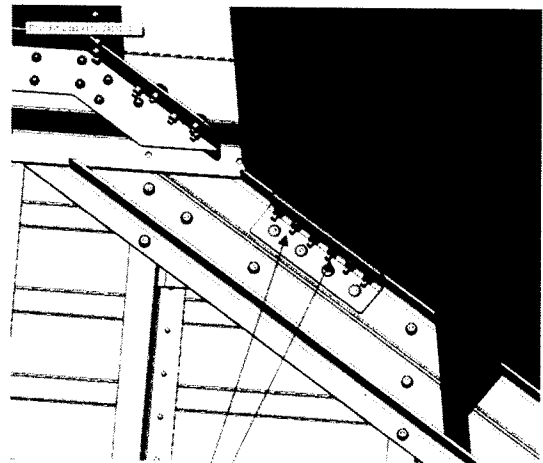


Transfer drill (4) 1/4" holes and install (4) mono-bolts 04-97083-000-00

11. Using 5" or longer 1/4" DIA drill bit, transfer drill remaining (4) holes into slope rail flange and upper slope sheet, holes will end up under slight angle. Install (4) 1/4-20x1 bolts, washers on both sides and nuts, at this point tighten all (6) nuts. (See below).
12. Repeat steps 9-11 on the other side of the trailer.

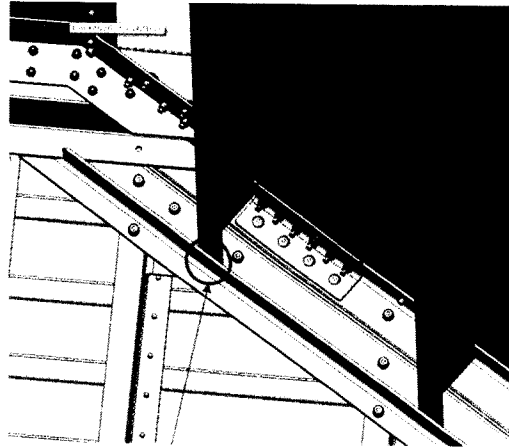


Transfer drill (4) 1/4" with 5" or longer drill bit



Install remaining (4) 1/4-20x1 bolts, washers on both sides and nuts, tighten all (6) nuts

13. Reinstall top zee post and fasten it at the bottom flange with (2) solid rivets 04-98003-750-00 (1 per side) (See below). If damage occurred to bottom flange of the slope rail, then refer to Appendix A.1.

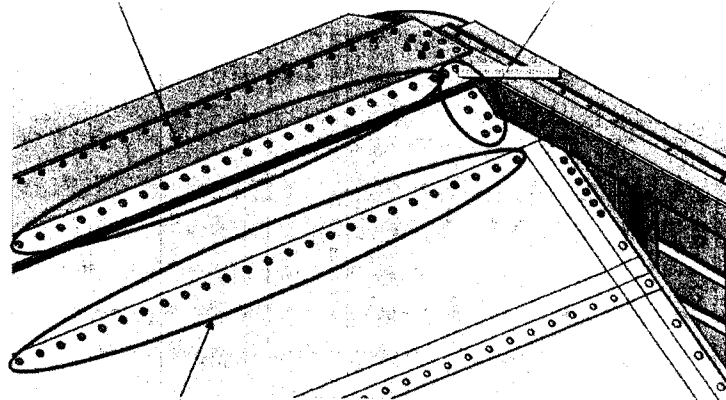


Fasten with 04-98003-750-00 rivet,  
(1) per side

14. Reinstall revised top slope sheet that is now 10.25" wide, it will reside over top of both- top shelf and upper slope sheet and fasten with (7) per side ((14) total) 04-97103-000-00 pins 1/4" DIA and 04-97116-000-00 collars at steel reinforcement bracket connection with all pin heads on outside and collars on the inside.
15. Drill out (41) 13/64" dia to 17/64" dia holes in revised top slope sheet (10.25" wide) and top shelf. Fasten with (41) 04-97100-000-00 pins 1/4" DIA and 04-97116-000-00 collars at top shelf lap (pin heads on the outside and collars on the inside).
16. Using holes in zee post and upper slope sheet, transfer drill (43) 17/64" holes from underneath the slope into top slope sheet (10.25" wide). Fasten top slope sheet (10.25" wide), upper slope sheet and zee post with (43) 04-97100-000-00 pins 1/4" DIA and 04-97116-000-00 collars (pin heads on the outside and collars on the inside) (See below).

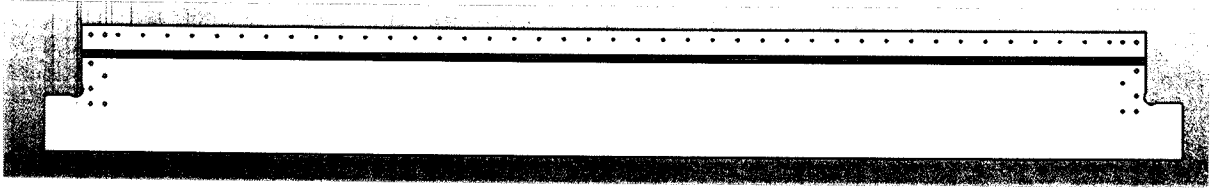
Enlarge hole DIA to 17/64". Fasten with (41) 04-97100-000-00 pins and 04-97116-000-00 collars

Fasten with (7) per side 04-97103-000-00 pins and 04-97116-000-00 collars



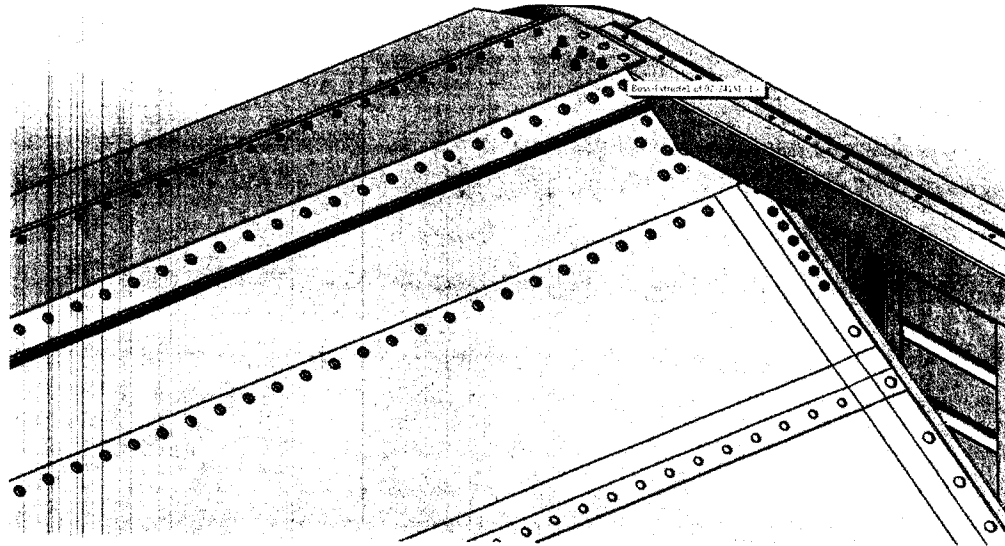
Transfer drill (43) 17/64" holes into top slope sheet (10.25" wide). Fasten with (43) 04-97100-000-00 pins and 04-97116-000-00 collars

**Revised top slope sheet (10.25" wide) will look like this (See below).**

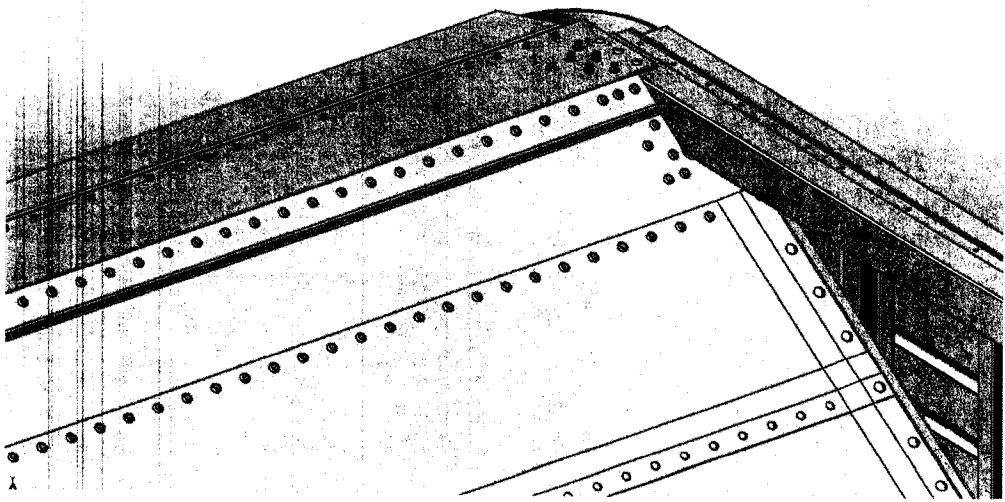


17. Repeat steps 1-4 and 14-16 at the rear if the trailer is 40' long and steps 1-16 if the rear slope on 40' trailer got damaged.

**Completed front slope of the trailer that has been damaged will look like this (See below).**



**Completed front slope of the trailer that has not been damaged will look like this (See below).**



### **Appendix A.1:**

Repair procedure for all trailers found to have cracking or loose fasteners on the Z post (Inspection #13).

<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
SK-07124	Clip	2
04-95001-100	Bolt, 1/4-20 x	10
04-95501	Locknut, 1/4-20	10

### **Tools**

- Drill
- Rivet Gun
  - With Chisel Head

### **Procedure**

1. Remove the rivet attaching the side extrusion to the Z crossmember, where crack has occurred.
2. Place the repair clip in position over crack and install a single bolt through the Z post, side extrusion, and repair clip.
3. Ensure that the clip is properly aligned with the Z post.
  - a. Tighten the lock nut to stabilize the repair clip to the Z post.
4. Drill out the remaining holes on the repair clip using a 1/4in drill bit.
5. Install the bolts in the remaining holes and tighten all locknuts (Fig A1).



Figure A1

**APPENDIX A.2**

VIN NUMBERS FOR AFFECTED UNITS
1DW1A4224JSA07138
1DW1A4226JSA07139
1DW1A4222JSA07140
1DW1A4224JSA07141
1DW1A4226JSA07142
1DW1A4228JSA07143
1DW1A422XJSA07144
1DW1A4221JSA07145
1DW1A4223JSA07146
1DW1A4225JSA07147
1DW1A4227JSA07148
1DW1A4229JSA07149
1DW1A4225JSA07150
1DW1A4227JSA07151
1DW1A4229JSA07152
1DW1A4220JSA07153
1DW1A4222JSA07154
1DW1A4224JSA07155
1DW1A4226JSA07156
1DW1A4228JSA07157
1DW1A422XJSA07158
1DW1A4221JSA07159
1DW1A4228JSA07160
1DW1A422XJSA07161
1DW1A4221JSA07162
1DW1A4223JSA07163
1DW1A4220JSA07167
1DW1A4029JSA07168
1DW1A4020JSA07169
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