



Via Fed Ex and Facsimile (202) 366-7882

06V-206  
(12 pages)

Associate Administrator for Safety Assurance (NSA-01)  
National Highway Traffic Safety Administration  
400 7th Street, SW  
Washington, DC 20590

Attention:

Enclosed please find the completed Part 573 Defect or Noncompliance Report on behalf of Stratos Boats, Inc., regarding certain boat trailers manufactured by Stratos.

Please direct all future inquiries to me at the address listed below or my direct dial (612/337-1859). Genmar is the parent company of Stratos.

Sincerely,

Jeffrey E. Melby  
Vice President, Environmental and Safety

Enclosures

RECEIVED  
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OFFICE OF DEFECTS  
INVESTIGATION

612.339.7600 Fax 612.337.1950

2900 IDS Center  
80 South Eighth Street  
Minneapolis, Minnesota 55402-2100

**Safety Defect and Noncompliance Report Guide for Vehicles**  
**PART 573 Defect and Noncompliance Responsibility and Reports**

On May 26, 2006, Stratos Boats, Inc. 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 Reports.

Date this report was prepared; May 31, 2006

Furnish the manufacturer's identification code for this recall (if applicable): STR1

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.

Stratos Boats, Inc. [Note that Stratos manufactures trailers for its line of Stratos Boats and its line of Champion Boats. Each line has a separate dealer organization. Notification letters will go out to Champion purchasers and dealers, and Stratos purchasers and dealers.]

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

Jeffery E. Melby, Vice President, Environmental and Safety, Genmar Holdings, Inc., 80 S. 8<sup>th</sup> Street, Minneapolis, MN 55402

Telephone Number: 612/337-1859 Fax No.: 612/337-1960

Name and Title of Person who prepared this report.

Jason Bragg, Customer Service Manager, Stratos Boats, Inc.

Signed: 

Each manufacturer must furnish a report, to the Associate Administrator for Safety Assurance, 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 Mr. Jon White at (202) 366-5227 or by FAX at (202) 366-7882.

**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):** Champion Boat Trailer **Model Years Involved:** 2003, 2004, 2005, 2006 **Model(s):** see Attachment A

**Production Dates: Beginning:** June 1, 2002 **Ending:** December 31, 2005

**VIN Range: Beginning:** \_\_\_\_\_ **Ending:** \_\_\_\_\_

**Vehicle Type:** BT **Bodystyle:** Single or Double Axle

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

Retractable Trailer Tongue

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**Make(s):** Stratos Boat Trailer **Model Years Involved:** 2002, 2003, 2004, 2005, 2006 **Model(s):** see Attachment B

**Production Dates: Beginning:** 7/1/01 **Ending:** December 31, 2005

**VIN Range: Beginning:** \_\_\_\_\_ **Ending:** \_\_\_\_\_

**Vehicle Type:** BT **Bodystyle:** Single or Double Axle

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

Retractable Trailer Tongue

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**II. Identify the Recall Population**

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

Vehicle Model	Model Year	Number of Potentially Involved
2179T	2002, 2003	
1872C	2002, 2003	
1972	2002	
2072C	2002, 2003	
2072CT	2002, 2003	
2074CT	2002, 2003	
1864A	2003	
C2001	2003, 2004, 2005, 2006	
C2001T	2004, 2005, 2006	
C2101	2003, 2004, 2005, 2006	
C2101T	2003, 2004, 2005, 2006	
C2201T	2003, 2004, 2005, 2006	
C2401T	2003, 2004, 2005, 2006	
S1801	2004	
S1901	2004, 2005, 2006	
S1901T	2004, 2005, 2006	
S1902	2004, 2005, 2006	
S1902T	2004	
S2001	2004, 2005, 2006	
S2001T	2004, 2005, 2006	
S2102	2004, 2005, 2006	
S2102T	2004, 2005, 2006	
S2101	2004, 2005	
S2101T	2004, 2005, 2006	
S2201T	2004, 2005, 2006	
S2202T	2004, 2005	
S2301T	2004, 2005, 2006	
S2103	2004, 2005, 2006	
S2103T	2004, 2005, 2006	

**Total Number Potentially Affected by the Recall: 3,608**

4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance: 50%

**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 recall population is every trailer that was equipped with the retractable tongue over the model years 2002 - 2006. Stratos is compiling a list that includes the trailer serial numbers, selling dealer, and first registered owner of the trailers that will be inspected and if necessary, repaired under the recall.

### **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.**

Attachment C, which is a draft of the inspection instructions that will be sent to customers, provides an illustration of this narrative.

The retractable tongue consists of three pieces: brake actuator housing that contains the trailer ball clasp and brake actuator, steel frame insert that is welded to the brake actuator housing to create the retractable tongue, and the steel housing on the trailer frame into which the tongue retracts. A large, steel pin keeps the tongue in place, and once removed, allows the tongue to drop down and retract into the steel housing on the trailer frame. The steel frame insert may not have been inserted into the brake actuator housing the proper distance before the parts were welded together.

The steel frame insert was created by welding 2 sections of steel, C channel together to form a steel tube. The bottom C channel ("insert bottom") is not the same length as the top ("insert top") to allow access into the brake actuator housing from below to connect brake lines, etc. If the coupler is built properly, the insert bottom should extend into the brake actuator housing. If it is not, there will be a slight gap between the bottom insert and the end of the brake actuator housing and the bottom insert will not be welded to the brake actuator housing. The attached pictures show a properly built tongue and one with a gap.

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

The defect is caused by not always placing the insert into the housing the proper distance before these pieces were welded. It should be noted that this occurred intermittently and could be due to new welders, change of supervisors, inaccurate communications on assembly received from the supplier of the insert piece (outside vendor).

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

If the tongue was not manufactured to the required specifications (gap), the bottom of the unsupported top insert could over time crack in the area of the gap. If the insert cracks while the loaded trailer is connected to a vehicle, the weight of the boat can cause the tongue to buckle and contact the road surface, and may lead to a traffic accident

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

None

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

The tongue insert was purchased from a supplier but Stratos was responsible for welding the tongue piece.

~~**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.**

Stratos has received 4 warranty claims over the past 6 weeks. The investigation has been challenging because on all 4 occasions Stratos learned of the claim after the owner had hired local welding shops to repair the trailer tongue. Of the 4 claims, 2 of the trailers were manufactured in 2003 (August and October), 1 in 2004 (September) and 1 in 2005 (May). In all cases, there was a small gap between the lower insert and the brake actuator housing.

Testing in May 2006 (SAE J 684.4 Mar 94) showed that the gap tongue was not as strong as the correctly welded tongue in vertical compression/tension testing. It should be noted that the results of testing for the gap tongue met the standard for the GVWR of the boats manufactured by Stratos. However, improperly loaded boats, excessive storage of gear and equipment on the boats, improper trailer hitch heights (ball on the towing vehicle), equipment abuse, etc. may have been intervening causes of the failure. None of the properly constructed tongues have failed in this manner.

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

The program is being formulated and will be submitted to NHTSA under separate cover. The program includes a notification to customers that directs how to inspect the tongue for the defect, directs the customer to visit one of the Stratos or Champion dealers for the repair of the tongue. Stratos and Champion dealers will be instructed how to inspect and, if necessary, repair the tongue. Repair kits will be provided to the dealers by Stratos. A verification form will be completed and returned to Stratos to track the progress of the recall campaign.

The remedy consists of the installation of a prefabricated metal piece that is bolted to both the bottom insert and the brake actuator housing. The remedy secures the bottom insert to the housing. Testing performed by Stratos shows that this repair makes the gap tongues as strong as the properly welded tongue (vertical tension and compression tests).

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

The prefabricated metal piece will not be visible from the sides and top of the tongue. The remedy component/assembly will have 2 visible bolts on the sides of the brake actuator housing. The bolts that secure the piece to the lower insert are visible if viewed from below the tongue. The main body of the piece fits under the brake actuator housing and above the lower insert.

**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.**

The integration of the retractable tongue into the trailers had been phased out over the past 6 months because this option was replaced by a swing-away tongue option.

**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.**

A mass mailing of a notification letter to first registered purchasers and dealers will be initiated immediately following receipt of NHTSA approval of the notification documents. The mailings will be sent within one week of receipt of approval (assume that the mailing will be completed by June 15).

The purchaser notification letters will be sent to the first registered purchaser (obtained from returned warranty registration cards). The notification letter requests that if the first registered purchaser is no longer the owner of the trailer, that they contact Stratos with any information regarding the current owner. Also, if a warranty registration card was not returned, Stratos does not have the first purchasers name and contact information. In this case, Stratos will send a list of trailers to the selling dealer and request that the dealer attempt to track down and contact the owner.

**VII. Furnish Recall Communications**

**9. 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 including 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) for review prior to mailing.**

**Note that these documents are to be submitted separately form those provide in accordance with Part 573.8 requirements.**

## Attachment A

### Champlon Boat Trailers

Boat Model	Trailer Model	2003	2004	2005	2006
187/188	C2001	X	X	X	X
188	C2001T		X	X	X
193/196	C2101	X	X	X	X
193/196	C2101T	X	X	X	X
21sx/206/203	C2201T	X	X	X	X
223	C2401T	X	X	X	X

## Attachment B

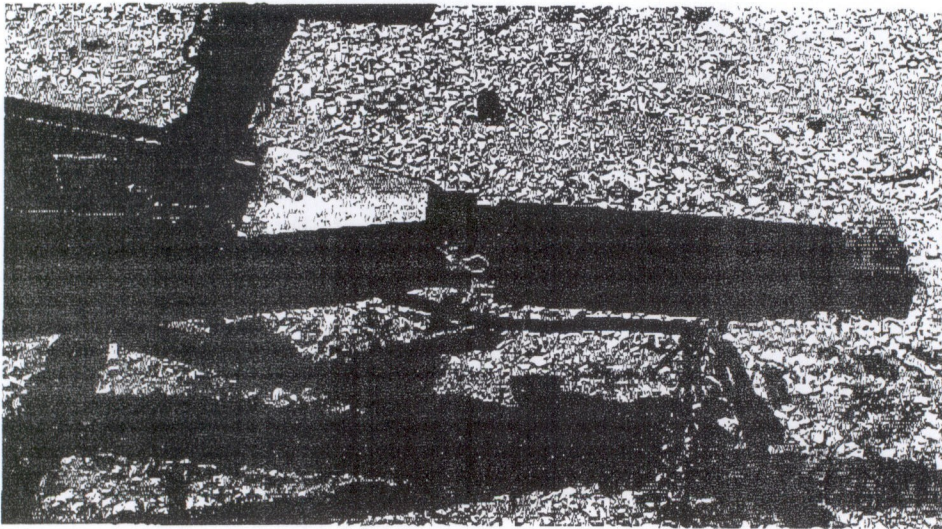
### Stratos Boat Trailers

Boat Model	Trailer Model	2002	2003	2004	2005	2006
21 MSX	2179T	X	X			
180 F/S	1864A		X			
18XL/185	1872C	X	X			
19XL/190 F-S	1972	X				
19XL/190 F-S	1972T					
19XL/190 F-S	1972D		X			
19XL/190 F-S	1972DT		X			
20 XL	2072C	X	X			
20 XL	2072CT	X	X			
21 XL	2074CT	X	X			
170F-S / 17XL	S1801			X		
180B/180F-S	S1901			X	X	X
195 / 275 / 283/ 294 / 295	S1901			X	X	X
180B/180F-S	S1901T			X	X	X
195 / 275 / 283/ 294 / 295	S1901T			X	X	X
18x1 / 185 / 285 286	S1902			X	X	X
18x1 / 185 / 285 286	S1902T			X		
190 f-s / 191 f-s 19xl / 200 xl	S2001			X	X	X
190 f-s / 191 f-s 19xl / 200 xl	S2001T			X	X	X
385 XF/386XF	S2102			X	X	X
385 XF/386XF	S2102T			X	X	X
200 f-s	S2101			X	X	
200 f-s	S2101T			X	X	X
201	S2201T			X	X	X
21MSX	S2202T			X	X	
290 F-S	S2301T			X	X	X
375 XF / 486 SF	S2103			X	X	X
375 XF / 486 SF	S2103T			X	X	X

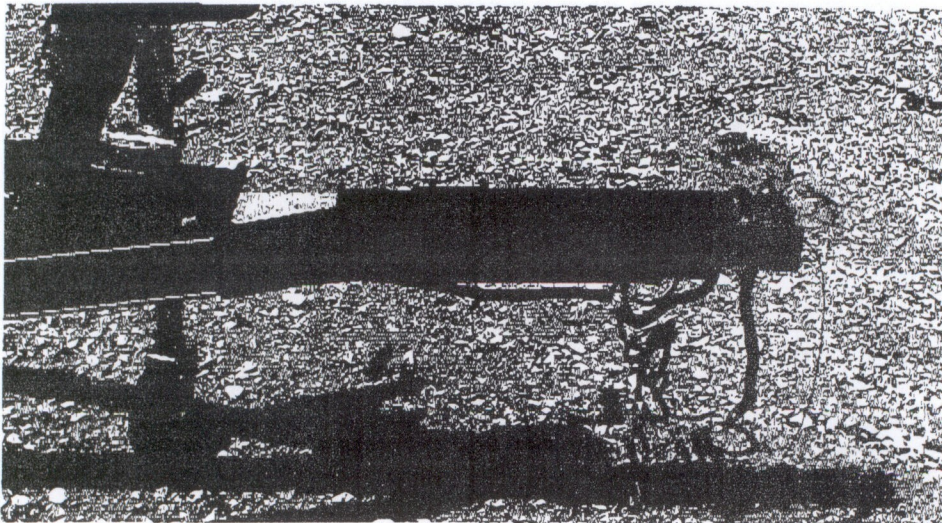
## Attachment C

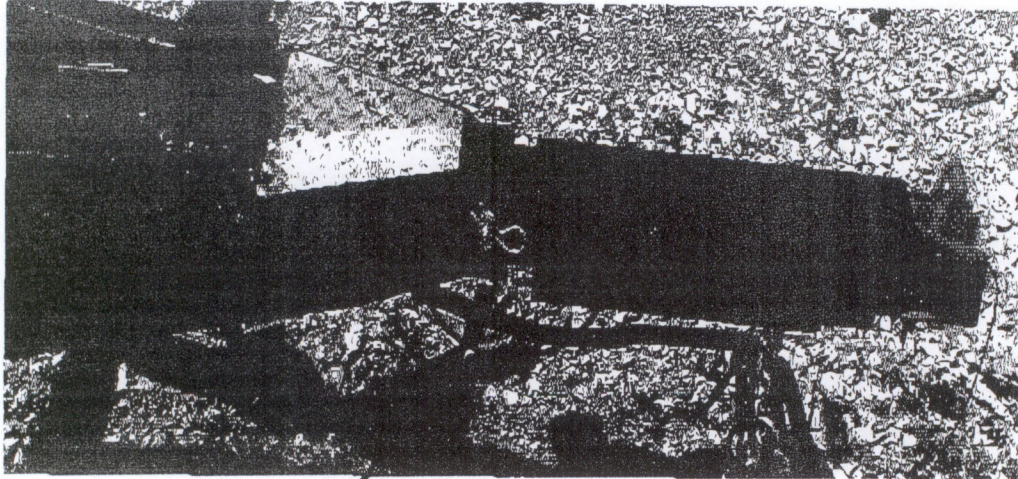
# Stratos Boats Retractable Trailer Tongue Inspection Procedure

If your Stratos boat trailer tongue looks like the tongue pictured below, your trailer has a retractable tongue with a pull-out pin and you should follow the inspection procedures outlined in this document.

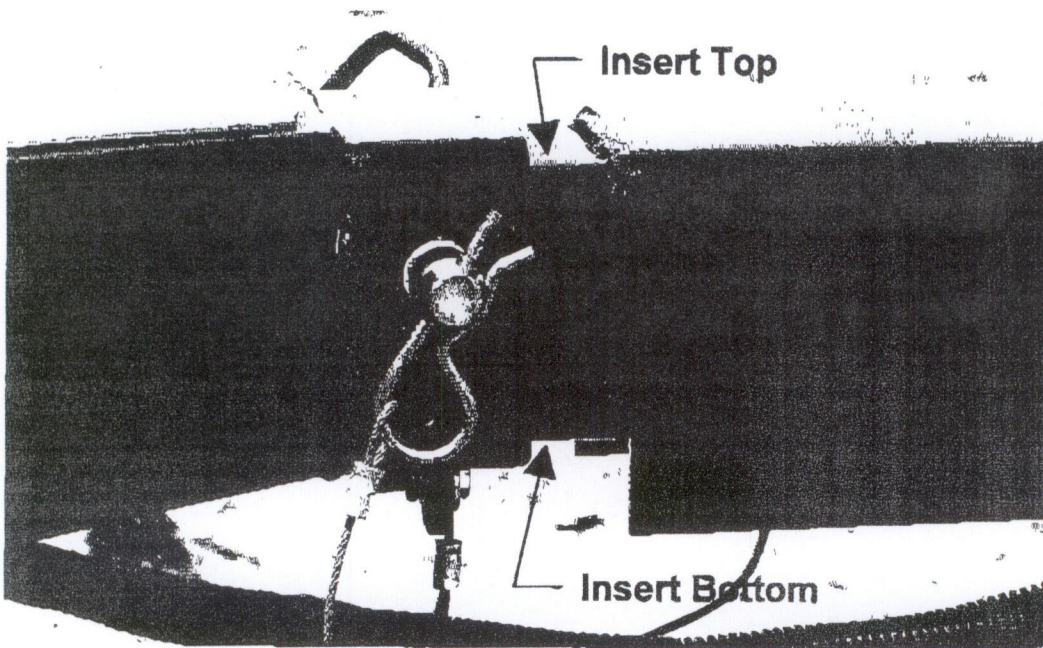


If your Stratos boat trailer tongue looks like the tongue pictured below you were sent this information in error, your trailer does not have a retractable tongue, and you may disregard this notice.





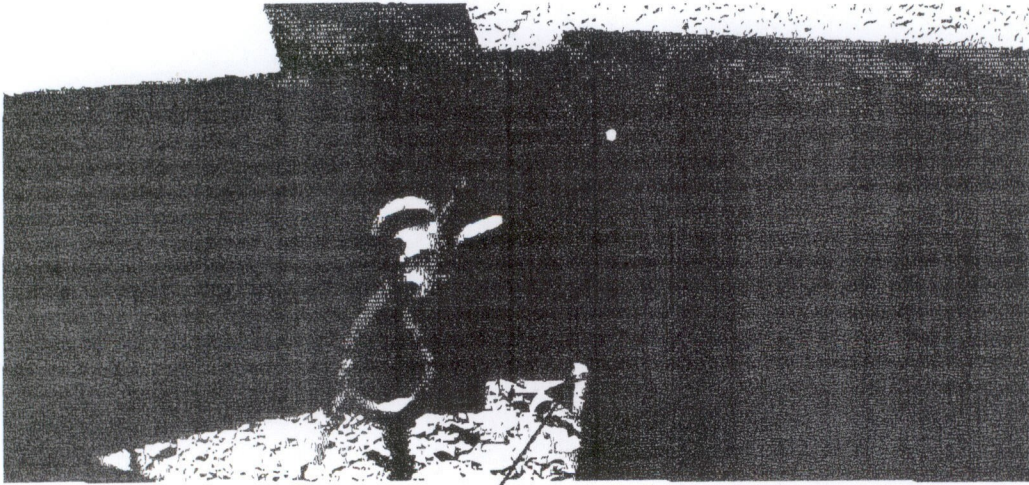
Area to inspect



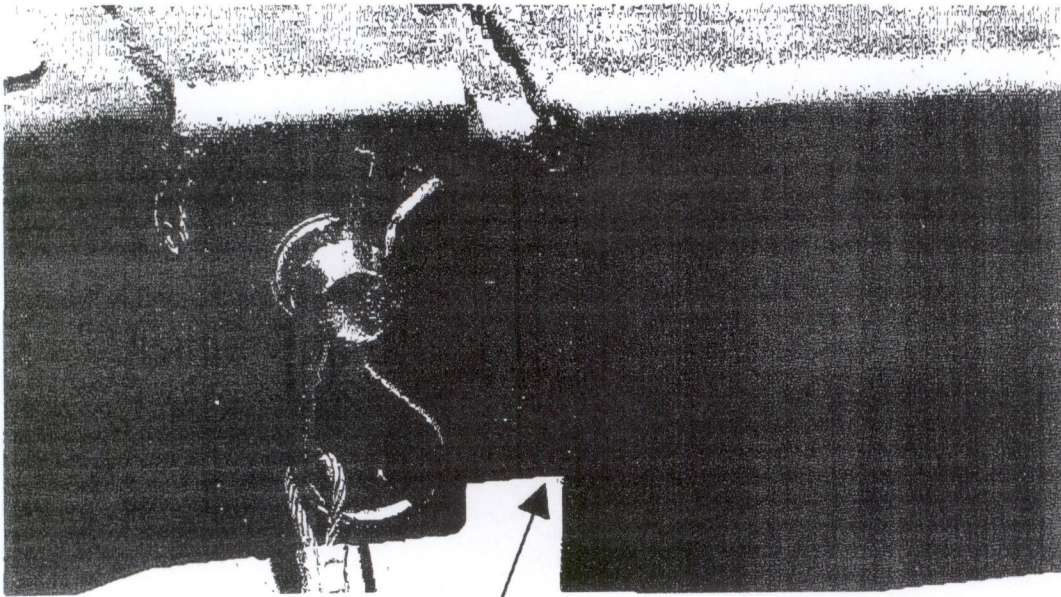
Insert Top

Insert Bottom

The 'Insert Bottom' is welded to the 'Insert Top'. Both of these pieces should extend into the 'Brake Actuator Housing'. If the 'Insert Bottom' does not extend into the 'Brake Actuator Housing' there will be a noticeable gap as shown on the next page. A gap requires the corrective repair. Please take your trailer to your local Stratos Dealer for final inspection and corrective repair.



Visible Gap



No Visible Gap