

OSHKOSH CORPORATION

ISO 9001 CERTIFIED

2307 OREGON STREET
POST OFFICE BOX 2566
OSHKOSH, WISCONSIN 54903-2566
888-686-7278



Re: Load Span Tag Axle Change & Replacement

Dear Mr. [REDACTED]

In a continued effort to ensure the long term reliability of your Oshkosh S Series front discharge concrete mixer(s), Oshkosh and Hendrickson have recently introduced a design change to the Load Span Tag Axle (LSTA). This change was made to increase the durability of the axle. The change went into effect at Oshkosh on January 30, 2017. Vehicles built on or after this date are equipped with the updated LSTA, Oshkosh Part No. 4359153 (Hendrickson Part No. BAH13Z-XXX,), which incorporates the above-referenced change.

We have become aware that, in a limited number of instances, slowly progressive cracks can develop in the axle seat connections on the previous generation LSTA assemblies, Oshkosh Part No. 3724561 (Hendrickson Part No. BAH13X-XXK) and Oshkosh Part No. 4317305 (Hendrickson Part No. BAH13Y-XXK). To maintain the high level of customer service expected from both Oshkosh and Hendrickson, Hendrickson will be coordinating an offer to replace previous generation LSTA assemblies on applicable Oshkosh S Series front discharge mixer(s). This replacement would be completed at no cost to you. The full details of this activity can be found in the attached Technical Publication, TB-H807.

Please read the technical bulletin thoroughly to become familiar with the repairs. Also included with this letter is a listing of concrete mixer Vehicle Identification Numbers (VIN) purchased by your fleet that were originally equipped with the previous generation LSTA assemblies, based on Oshkosh records. It is anticipated that this replacement activity will begin in June 2017. A Hendrickson representative will be contacting you approximately 30 days in advance of this activity, so it can be scheduled at your convenience.

Thank you for your ongoing support. If you have any questions please contact Hendrickson at the numbers below.

Hendrickson Service Department – 740.929.5682

Contact name – [REDACTED]

Sincerely,

OSHKOSH Corporation

Enclosure

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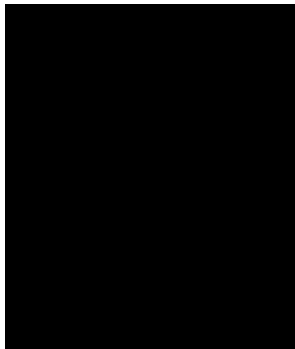


**Addendum to Oshkosh Letter
Load Span Tag Axle Change and Replacement**

Fleet Name:



Affected Oshkosh Vehicle Identification Numbers (VIN) currently being operated by the above-referenced fleet:



TECHNICAL BULLETIN

Oshkosh Load Span Tag Axle (LSTA)

SUBJECT: Axle Weldment Replacement Kit and
Installation Procedure

LIT NO: TB-H807

DATE: April 2017

REVISION: A

INTRODUCTION

AXLE WELDMENT REPLACEMENT KIT NO. 016816-00 CONTENTS

Description	Qty.
Axle Weldment Subassembly R-016191-00, Includes Kingpins	1
3/4" Fastener Kit No. 016826-00	2
Contents:	
3/4"-10 UNC x 3 1/2" Hex Cap Screw	2
3/4"-10 UNC x 7" Hex Cap Screw	2
3/4"-10 UNC Nylon Locknut	4
3/4" Washer	4
Cotter Pin	2
Stabilizer Spacer (Length 2.5")	2
7/8" Fastener Kit No. 016125-00	1
Contents:	
7/8"-14 UNF x 9" Hex Cap Screw	4
7/8"-14 UNF Hex Nut	4
7/8" Washer	8
Medium Strength Threadlocker Loctite # 242	1
NOTE: All fasteners are Grade 8	

This publication is intended to assist with the identification and replacement of axle weldment components on a limited number of Load Span Tag Axle (LSTA) assemblies manufactured by Hendrickson and equipped on Oshkosh S-Series front discharge mixers. The applicable LSTA assemblies were manufactured between March 25, 2008 and January 30, 2017. The new production version of the LSTA assembly (Hendrickson Part No. BAH13Z-XXX) is not affected.

LSTA Assemblies

Manufactured between 03/25/2008 and 01/30/2017

Hendrickson Part No.	Oshkosh Part No.	Affected Serial Numbers
BAH13X-XXX	3724561	HAUX119723 through HAUX125012 HO0812030001 through HO1605044962
BAH13Y-XXX	4317305	HO1610114483 through HO1701090014

Hendrickson has learned the above-referenced axle weldment components may develop slowly progressive cracks in the axle seat connections under various service conditions. Such cracks will be clearly visible during routine vehicle inspections. If this condition is allowed to progress over time, such cracks could result in damage to the LSTA connections to the adjacent suspension trailing arms. Therefore, Hendrickson is offering to all applicable owners, at no charge, an Axle Weldment Replacement Kit (No. 016816-00) for affected LSTA assemblies. This kit includes the same new LSTA subassembly (including bolt-on cast axle seats) that is used in Part No. BAH13Z-XXX.

FIGURE 1

LSTA ASSEMBLY VERSIONS

BAH13X-XXX	BAH13Y-XXX	BAH13Z-XXX New Production Version
Original Fabricated Axle Seat	Revised Fabricated Axle Seat	Bolt-on Cast Axle Seat
		

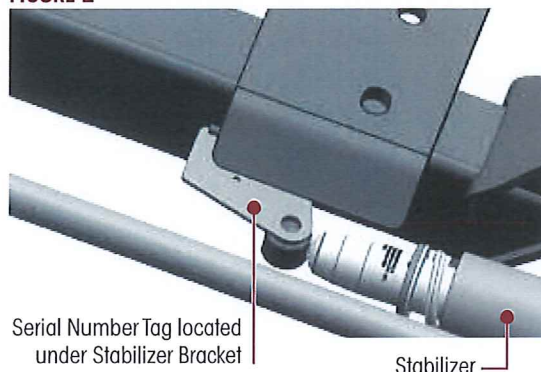
WARNING

A TECHNICIAN USING A SERVICE PROCEDURE OR TOOL WHICH HAS NOT BEEN RECOMMENDED BY HENDRICKSON MUST FIRST SATISFY HIMSELF THAT NEITHER HIS SAFETY NOR THE VEHICLE'S SAFETY WILL BE JEOPARDIZED BY THE METHOD OR TOOL SELECTED. INDIVIDUALS DEVIATING IN ANY MANNER FROM THE INSTRUCTIONS PROVIDED WILL ASSUME ALL RISKS OF CONSEQUENTIAL PERSONAL INJURY OR DAMAGE TO EQUIPMENT INVOLVED.

INSPECTION

Locate the Oshkosh vehicle identification tag and the Hendrickson serial number tag, see Figure 2, to determine whether an Oshkosh S-Series front discharge mixer in your fleet is equipped with an affected LSTA.

FIGURE 2



AXLE REPLACEMENT

Immediately contact Hendrickson technical services (phone: 800.660.2829 or e-mail: lifftaxletech@hendrickson-intl.com) to:

- Report whether any affected LSTA's in your fleet show signs of any of the above-referenced cracks or other damage that may develop in the axle seat connections or adjacent components,
- Order an Axle Weldment Replacement Kit (No. 016816-00); and
- Advise whether your fleet may have sold to another party an Oshkosh S-Series front discharge mixer equipped with an affected LSTA. (Please identify the names and contact information of any/all such parties.)

DO NOT attempt to repair any cracks or other damage that may develop in the axle seat connections or adjacent components. Hendrickson will work with Oshkosh and the vehicle owner to coordinate the installation of an Axle Weldment Replacement Kit per the following procedure. The replacement will take approximately four (4) hours to accomplish and will be completed at no charge. Alternatively, the vehicle owner may install the Axle Weldment Replacement Kit by following this procedure, and Hendrickson will reimburse the installation cost of such service kit.

DO NOT re-use, discard or destroy any affected axle weldment components removed from the subject Oshkosh S-Series front discharge mixers. Rather, all such axle weldments should be returned to Hendrickson. When your fleet orders an Axle Weldment Replacement Kit, Hendrickson will make arrangements to pick up all affected axle weldments to be replaced.

DISASSEMBLY

YOU WILL NEED:

- | | | |
|-------------------------------------|-------------------------|--|
| ■ ½" Drive impact gun | ■ Grease gun and grease | ■ Flat blade screw driver |
| ■ 1 ⅛" and 1 ½" Impact socket | ■ Pliers | ■ Torque Wrench that is capable of reaching 570 ft. lbs. |
| ■ 7/16", 1 ⅛" Open / box end wrench | ■ Mallet | |
| | ■ Brass punch | |

1. Chock the drive wheels.
2. Remove air lines to brakes on LSTA.
3. Remove the fenders, wheels and tires, and brake drums. **DO NOT** remove the hubs.



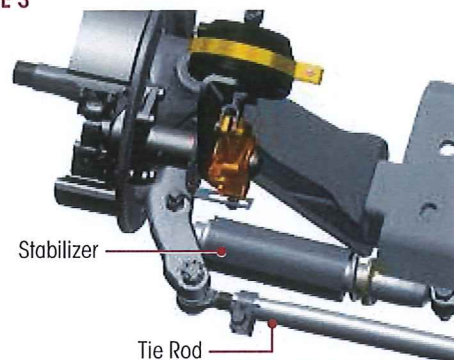
Axle Weldment Replacement Procedure for Oshkosh LSTA

4. Keep the axle on truck trailing arms.
5. Drop the trailing arms until axle sets off 12"-18" from the floor.
6. Support the axle with jack stands.

WARNING

THE STABILIZER IS EQUIPPED WITH A COIL SPRING THAT CONTAINS STORED ENERGY ONCE INSTALLED ON THE AXLE. PRIOR TO AND DURING STABILIZER REMOVAL AND INSTALLATION, THE STABILIZER MUST BE PROPERLY COMPRESSED AND RESTRAINED. FAILURE TO DO SO MAY ALLOW THE STABILIZER TO RELEASE THE STORED ENERGY, RESULTING IN POSSIBLE DAMAGE TO COMPONENTS AND/OR PERSONAL INJURY.

FIGURE 3



NOTE Wheel end hub is not shown for illustrations purposes only

7. Using the appropriate tools, restrain stabilizers to restrain the stabilizer coil springs.
8. Remove the stabilizers with 1 1/8" socket and wrench, see Figure 3.
9. Remove the cotter pin, castle nut and tie rod with 1 5/16" impact socket, see Figure 4.
10. Remove the snap ring from the upper kingpin housing and knuckle, see Figure 5.
11. Use the flat blade screw driver to remove the grease caps and zerk fittings from the upper kingpin housing and lower knuckle.

FIGURE 4

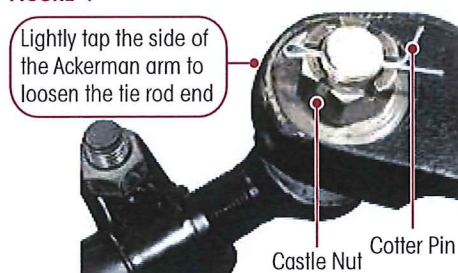


FIGURE 5

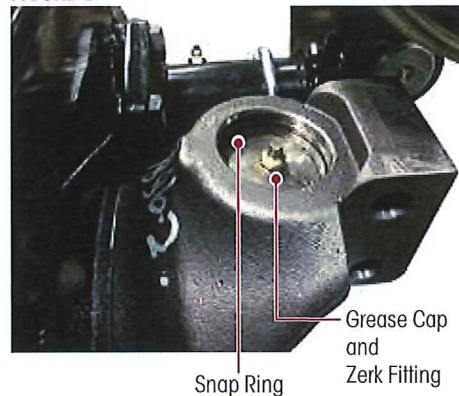
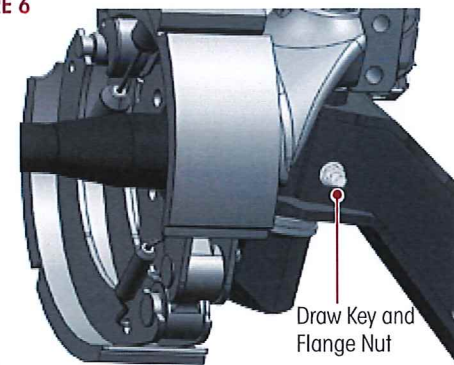


FIGURE 6



NOTE Wheel end hub is not shown for illustrations purposes only

WARNING

12. Remove the draw key, see Figure 6.

IF UPPER KINGPIN ASSEMBLY, KNUCKLE, AND BRAKE ASSEMBLY ARE NOT SECURED, THEY COULD MOVE/FALL AS THE KINGPIN EXITS THE KINGPIN HUB. THIS COULD RESULT IN PERSONAL INJURY.

13. Support and secure the knuckle assembly to prevent movement when removing the kingpin.

SERVICE HINT

Prior to disassembly of the upper kingpin assembly, knuckle and brake assembly, note the orientation of the shims, shown in Figure 9.

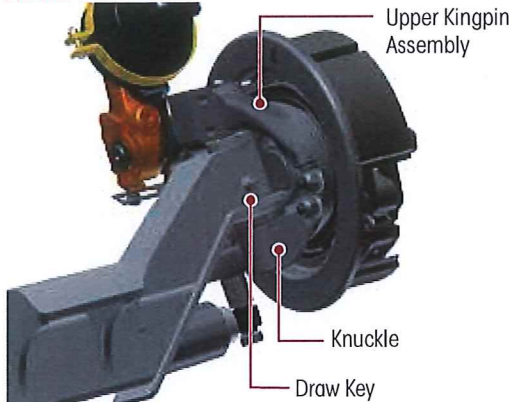
14. Use a brass punch and mallet to drive out the kingpin through the bottom knuckle assembly, see Figure 7.

NOTE

If the kingpin is frozen in the hub or difficult to remove contact Hendrickson technical services, phone: 800.660.2829 or e-mail: liftaxletech@hendrickson-intl.com.

15. Remove the upper kingpin assembly, knuckle, hub and brake assembly. These will be removed as one unit, see Figure 9.
16. Ensure to gather and re-use the thrust bearing and shims during re-assembly.
17. Remove the old axle from the trailing arms after **BOTH** kingpins are removed.

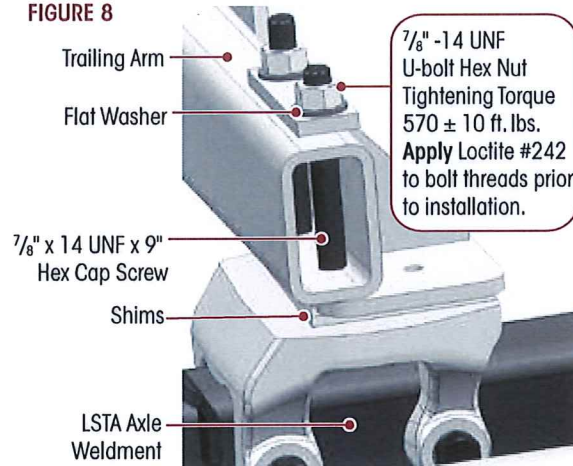
FIGURE 7



NOTE

Wheel end hub is not shown for illustrations purposes only

FIGURE 8



ASSEMBLY

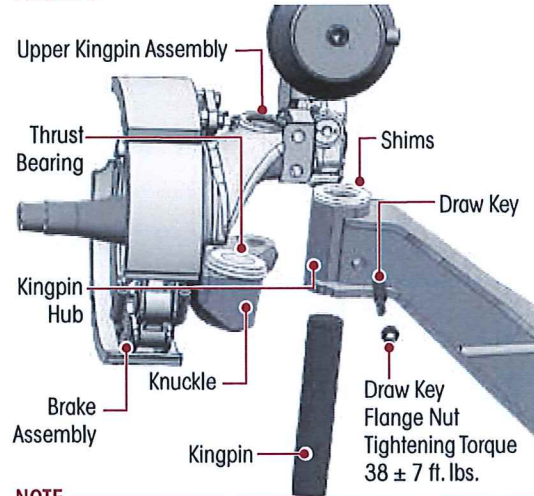
1. Slide the new axle weldment in place.
2. Install the flat washer onto the $\frac{7}{8}$ "-14 UNF x 9" Hex cap screw.
3. **Apply** Loctite # 242 to cap screw threads.
4. Insert the cap screw through axle weldment, shims, and trailing arms, see Figure 8.

SERVICE HINT

Place shims in the same orientation as when removed.

5. **Ensure** Loctite # 242 is applied to the cap screw threads prior to attaching fasteners.
6. Install $\frac{7}{8}$ " flat washer and hex nut onto the cap screw and tighten hex nut to $\boxed{570 \pm 10}$ foot pounds torque.
7. After the new axle has been set in place and secured, slide the upper housing assembly, knuckle, hub and brake assembly in place, see Figure 9.
8. Use the brass punch and mallet to drive the new kingpin up through the knuckle, see Figure 10.

FIGURE 9



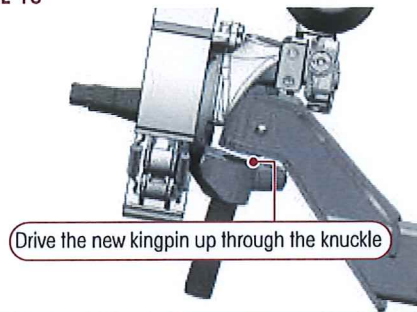
NOTE

Wheel end hub is not shown for illustrations purposes only



Axle Weldment Replacement Procedure for Oshkosh LSTA

FIGURE 10



NOTE

Wheel end hub is not shown for illustrations purposes only

FIGURE 11

Ensure the numbers on the end of the kingpin are facing up

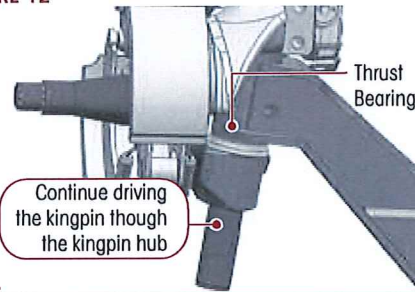


NOTE

Ensure the numbers on the end of the kingpin are facing up as shown in Figure 11 and that the draw key slot aligns with the draw key hole.

9. Once through the knuckle, place the thrust bearing on the kingpin, between the knuckle and kingpin hub. Continue driving the kingpin through the kingpin hub, see Figure 12.
10. Prior to when the kingpin goes into the upper kingpin housing, place the shims on the kingpin. Place between the kingpin hub and upper kingpin housing, see Figure 13.

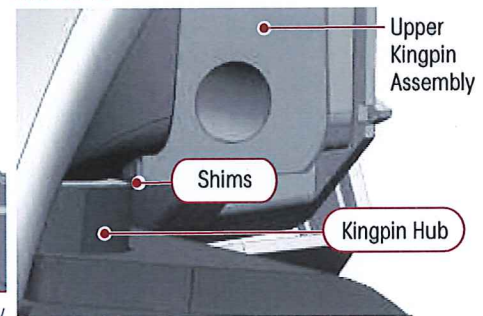
FIGURE 12



NOTE

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FIGURE 13

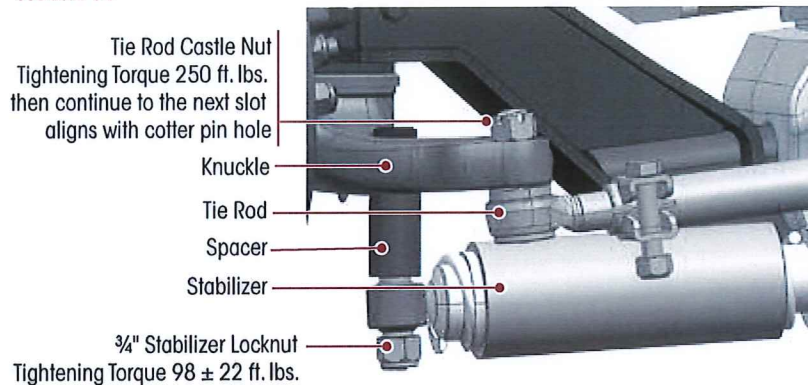


11. Continue driving the kingpin into the upper kingpin housing.
12. Drive the kingpin up until the draw key slot lines up with the draw key hole.
13. Install the draw key and flange nut and tighten to $\boxed{38} \pm 7$ foot pounds torque.
14. Install the grease caps, snap rings and zerk fittings.
15. Apply NLGI#2 grease to the kingpins using the zerk fittings.
16. Using the appropriate tools, install both stabilizers with the new 2.5" length spacers located under the knuckle, see Figure 14.
17. Install the $\frac{3}{4}$ " stabilizer fasteners (supplied in the kit) and snug, **DO NOT** tighten at this time.
18. Install the tie rod. Tighten tie rod castle nut to $\boxed{250}$ foot pounds torque, then continue turning nut until a slot aligns with the cotter pin hole, see Figure 14.
19. Install the cotter pin (supplied in the service kit).
20. Ensure both lift axle tires are in the straight ahead position.
21. Tighten the stabilizer fasteners to $\boxed{98} \pm 22$ foot pounds torque, see Figure 14.



22. Install the drums, wheels/tires and tighten the lug nuts to 475 foot pounds torque per the vehicle manufacturer's specifications.
23. Install the fenders and tighten 0.62-11 4.0" long spirallock bolt fasteners to 210 foot pounds torque per the vehicle manufacturer's torque specifications.
24. Check toe and reset to the Hendrickson recommended $\frac{1}{16}$ "- $\frac{1}{8}$ " toe-in.

FIGURE 14



www.hendrickson-intl.com



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