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TECHNICAL SERVICE BULLETIN

DATE: 12/28/2021

TSB # TSB202101

RE: TKOLB FRONT IDLER SHAFTS

Model: TKOLBSD & TKOLBHD

Model Years: 2021-2022

Production Build Dates: June 2020 – September 2021

We have identified some failures of the Front Idler Shaft on the latest design of TKOLBs due to a fatigue issue. Trail King has a new shaft that will replace shafts built within the production range listed above.

Replacement of the Idler Shaft will take no more than 15 hours to complete from start to finish. Trail King will supply an upgraded front idler shaft, bearings as needed, hardware and allow for up to 15 total of labor for the repair.

Contact Trail King Customer Service for authorization for repair. Customer Service can be reached at 1-800-843-3324. Ask for Cassidy Black or Scott Stenseth.

Please see the attached replacement procedure for instructions of the repair.

Ty Hanten

**Director of Quality
Trail King Industries Inc.
Mitchell, SD 57301**

Idler Shaft Replacement Procedure – Removal

Please follow the recommended steps provided to safely remove and reinstall the front idler shaft assembly. Trail King acknowledges that not all shops will follow this procedure based on their own experience and some modification may be required to complete the same task. At any point if you have questions, please contact Trail King Customer Service for assistance.

Step 1.

Using Truck or mobile hydraulic pump, rotate belt and chain until the master link/Z-bar is centered in the inspection door opening similar to picture shown.



Step 2.

Loosen the belt tension to allow enough play to easily remove the master link/Z-bar. You will need to pull the cotter pins and slide the master link back in order to remove the bar itself as illustrated by the picture.



Step 3.

Once the bar is removed use the extra master link provided to drive out existing link from the inside as shown leaving it installed for future rotation. Repeat procedure on Curbside. (Note: Reinstall cotter pins.)



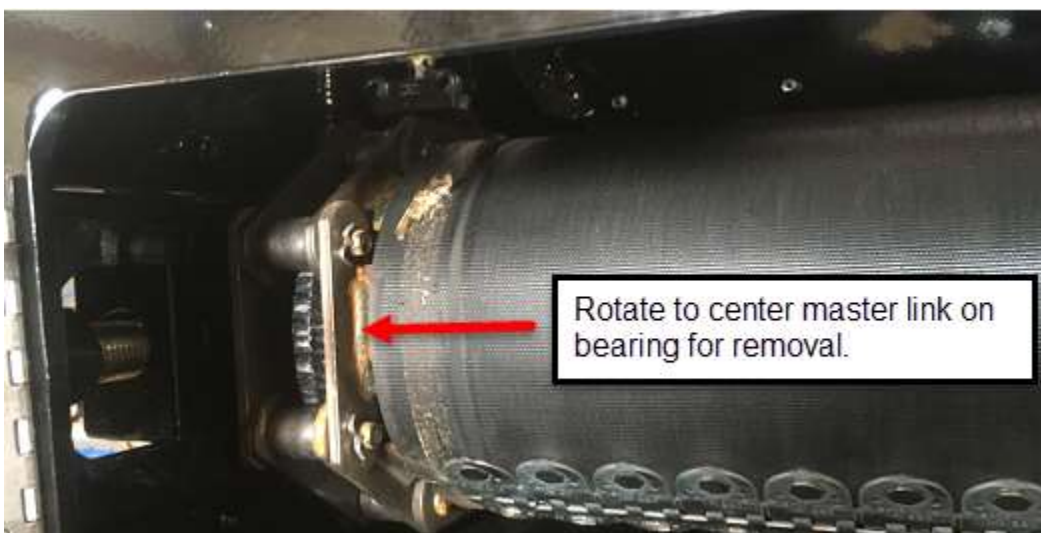
Step 4.

Rotate belt and chain so that clip is accessible for removal of belt splice rod. (Note: Rotate between landing gear and 5th wheel for this step for easy access to remove rod.)



Step 5.

Once the rod is removed rotate the chain till the master link/z bar is centered at the front for removal. After the chain has been centered the master links may be removed for access to front shaft. (NOTE: Disconnect hydraulic lines from tractor or pump.)



Step 6.

Remove the front fenders and front fender mounts.



Step 7.

Remove the 5th Wheel plate



Step 8. Loosen the chain tension by backing off the tension bolts completely for easy replacement.



Step 9.

Remove the red and blue supply airlines from the back of the front bulkhead/access plate as well as the tap oiler hoses as shown below.



Step 10.

Remove front bulkhead plate.

Bolt locations



(Pic 7)



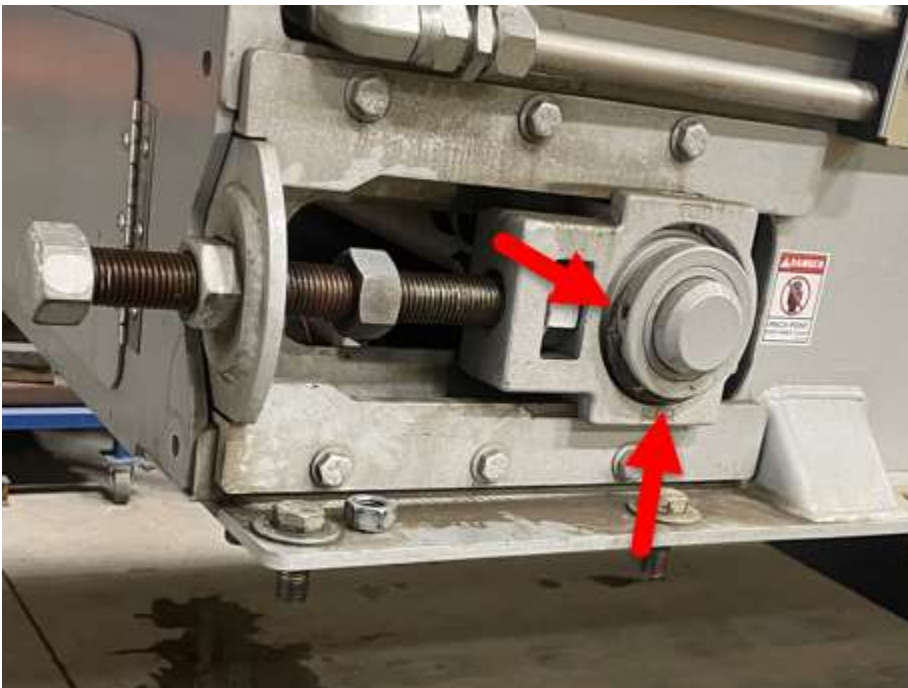
Step 11.

Remove the master links at the front to split chain for access to idler shaft as shown in picture below.



Step 11.

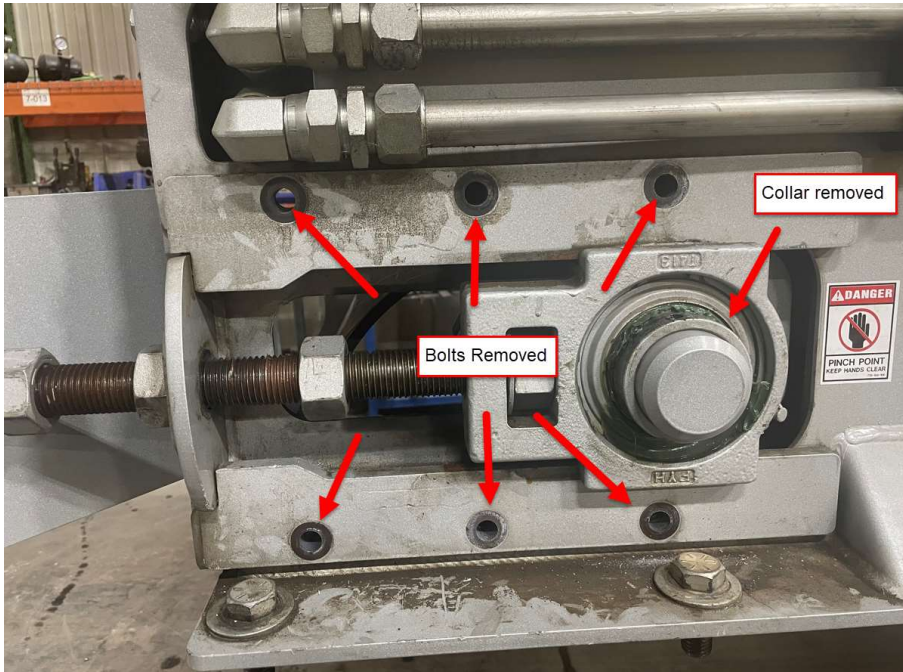
Remove the 2 set screws and bearing collars from both sides of the trailer. Then remove the 6 bolts from bearing cages as well.



Step 12.

Remove the left and right-hand bearing/cage from the Idler shaft. (NOTE: Any paint or build up must be removed prior to pulling bearing/bearing frame from shaft on both sides.)

(BEARING PULLER MAY BE REQUIRED)



Idler Shaft Replacement Procedure – Installation

Step 13.

Install the new replacement shaft as shown in the picture. (NOTE: May require an extra set of hands during this step.)



Step 14.

Install the chain master links and Z bar.

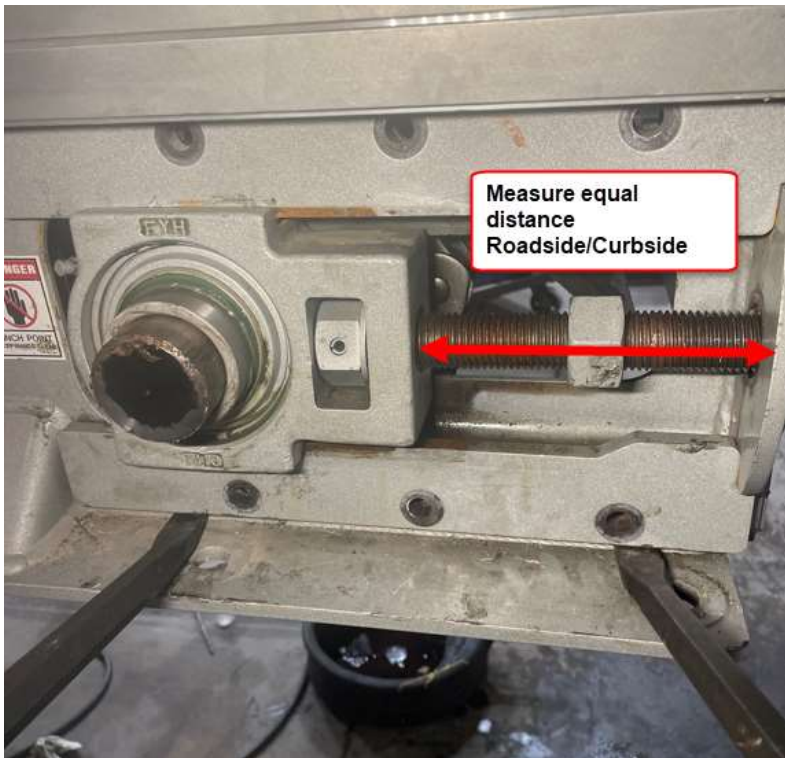


Step 15.

Coat shaft ends with anti-seize and reinstall bearing/cage assemble on shaft and tighten fasteners accordingly.

Step 16.

Centering shaft on bearings. (NOTE: Make sure the bearings are equal distance with front of trailer before centering shaft side to side.)

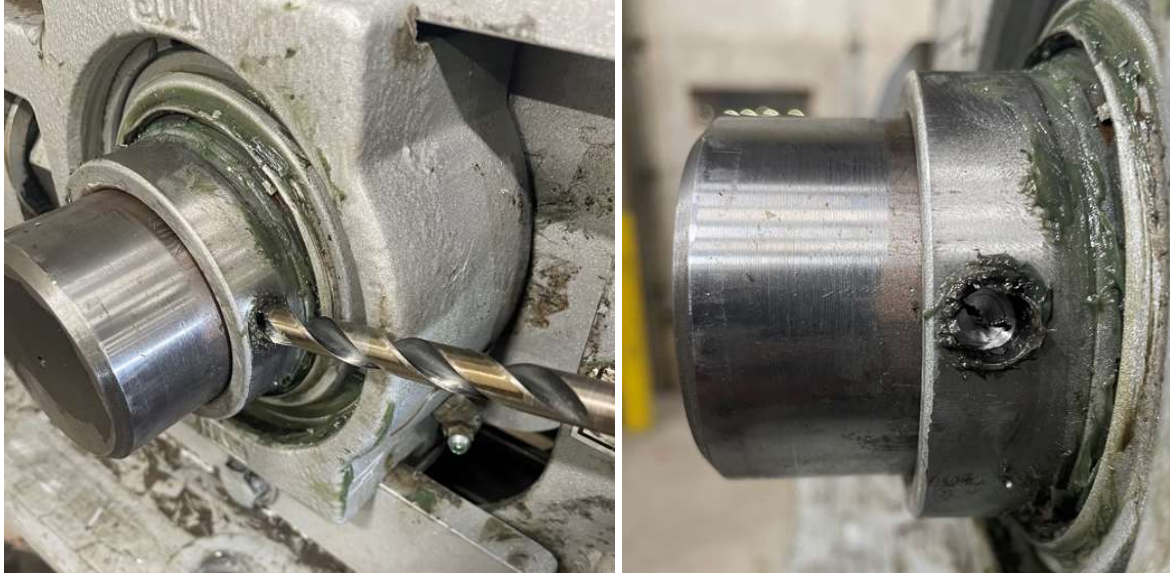


Measure equal distance side to side.

Step 17.

Installing the bearing collars.

1. Using a 3/8" drill bit - drill into shaft to countersink collar set screws. (NOTE: 2 per collar.)



2. Install collar and set screws. (NOTE: Use removeable Locktite on set screws before installation.)



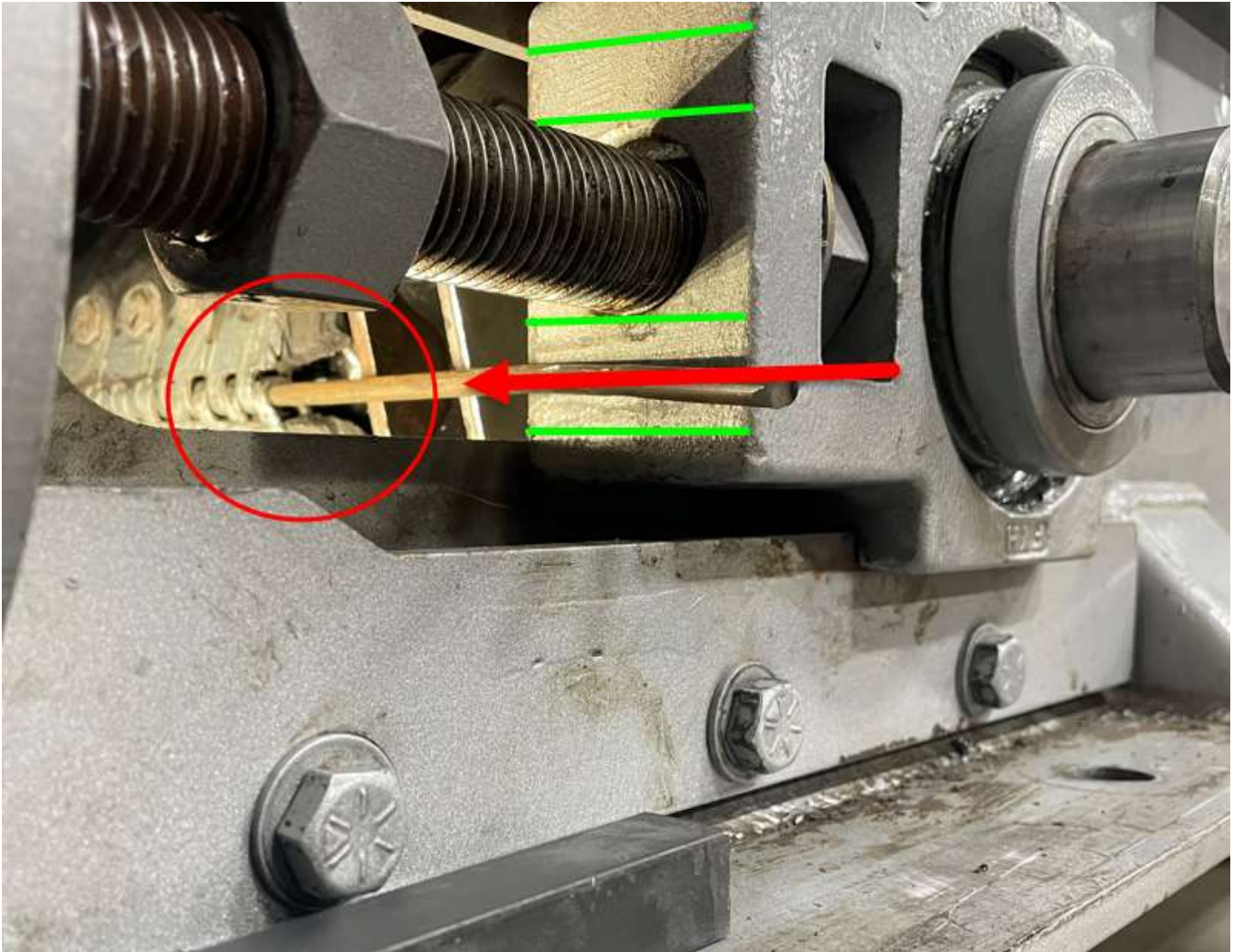
Step 18.

Reinstall airlines, chain oiler lines and front cover.



Step 19.

Rotate belt and chain slightly for belt connector rod installation as shown below. **(NOTE: In the event that you will operate hydraulics with the tractor, you may need to install the 5th wheel plate first so you don't have to move tractor for future plate installation.)**



Step 20:

Installation of the rod may require an additional person to help pinch the clip together in order to feed the connector rod into place. This can be done at the front of the trailer with the access doors open.

Step 21: With the rod is completely through the clip cut rod end so that both sides sit on chain tabs equally. Then tack weld rod ends to chain tabs.



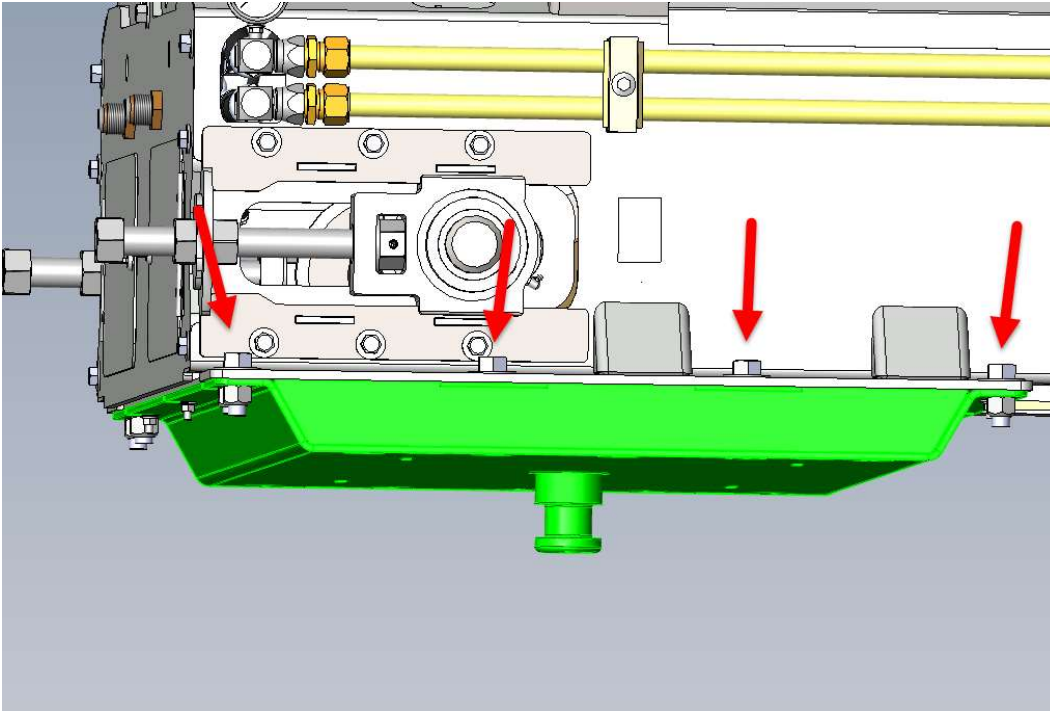
Step 22:

Tension belt and chain to 300 ft lbs. **(NOTE: Please reference standard work instruction on proper tension listed on the front of trailer per decals #800-000-424. If unable to read the decal instructions please refer to the owner's manual or contact Trail King Customer Service for assistance.)**



Step 21:

Reinstall the 5th Wheel plate at this time if it hasn't already been done and tighten fasteners.



Step 22:

Reinstall front fender brackets and fenders.



FINAL STEP: Rotate belt and chain one revolution to make sure everything is good.