# Auxiliary Suspensions

# INSTALLATION INSTRUCTIONS

4AS00081 20K WHEEL BEARING AND SEAL ASSEMBLY





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QUESTIONS? CALL CUSTOMER SERVICE 1-800-222-6283 **IMPORTANT:** IT IS IMPORTANT THAT THE ENTIRE INSTALLATION INSTRUCTIONS BE READ THOROUGHLY BEFORE PROCEEDING WITH THE INSTALLATION.

# 1. INTRODUCTION

Thank you for choosing a Link Auxiliary Suspension. We want to help you get the best results from this suspension and to operate it safely. This instruction contains information to assist in the installation of the wheel bearings and seal for your Link Auxiliary Suspension. This instruction is intended solely for use with this product.

All information in this instruction is based on the latest information available at the time of printing. Link Manufacturing reserves the right to change its products or manuals at any time without notice.

Damaged components should be returned to Link with a pre-arranged Returned Materials Authorization (RMA) number through the Customer Service Department. The damaged component may then be replaced if in compliance with warranty conditions.

# 2. SAFETY SYMBOLS, TORQUE SYMBOL, and NOTES

# 3. SAFE WORKING PRACTICES

<b>▲</b> DANGER	DANGER indicates a hazardous situation which if not avoided, will result in death or serious injury.
<b>▲</b> WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
<b>ACAUTION</b>	CAUTION indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE	NOTICE indicates a potentially hazardous situation which, if not avoided, may result in property damage.
TORQUE	TORQUE indicates named fasteners are to be tightened to a specified torque value.
NOTE:	A Note provides information or suggestions that help you correctly perform a task.

**ACAUTION** When handling parts, wear appropriate gloves, eyeglasses, ear protection, and other safety equipment.

Proper tightening of fasteners is important to the performance and safety of the suspension. Follow all torque specifications throughout the instructions.

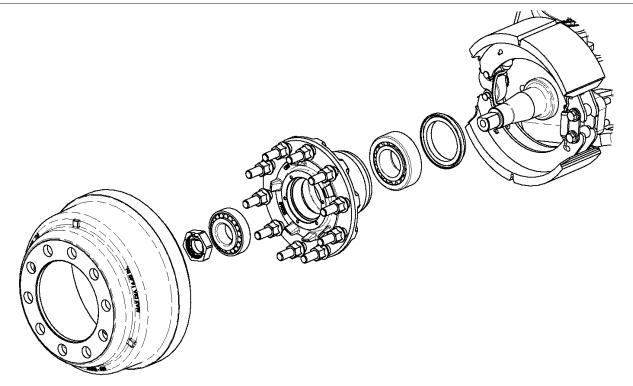
**NOTE:** For instructional purposes, the proceeding will show the installation of the left hand side. The installation of the right hand side is the same.

### 4. DISASSEMBLY

- A. REMOVE THE WHEEL, DRUM, HUBCAP, PRO-TORQ NUT, BEARING RACES, BEARINGS, HUB, AND SEAL.
- B. DISCARD BEARINGS, BEARING RACES AND SEAL.
- C. IF OTHER COMPONENTS ARE IN PROPER CONDITION, SET ASIDE FOR RE-ASSEMBLY. ANY OTHER COMPONENTS NOT IN PROPER CONDITION, ORDER AS NEEDED.

# 5. ASSEMBLY

- A. INSTALL THE NEW SEAL, THE NEW INNER BEARING RACE, THE NEW INNER BEARING, THE HUB, THE NEW OUTER BEARING RACE, AND THE NEW OUTER BEARING FOLLOWING TMC'S RECOMMENDED PRACTICES.
- B. COMPLETE THE INSTALLATION AS DETAILED ON THE FOLLOWING PAGES.



# C. REMOVE THE KEEPER FROM THE NUT:

1) IF THE KEEPER IS PRE-ASSEMBLED, USE A SMALL SCREWDRIVER TO CAREFULLY PRY THE KEEP-ER ARM FROM THE UNDERCUT GROOVE ON THE SIDE UNTIL THE KEEPER IS RELEASED

#### D. SEAT THE BEARING WITH THE BEARING RACES:

- 1) ASSEMBLE THE NUT TO THE SPINDLE.
- 2) TORQUE THE NUT TO 200 FT-LBS AND SPIN THE HUB AT LEAST ONE FULL ROTATION.
- 3) TORQUE THE NUT AGAIN TO 200 FT-LBS AND SPIN THE HUB AT LEAST ONE FULL ROTATION.
- 4) TORQUE THE NUT TO 200 FT-LBS AND THEN BACK OFF THE NUT UNTIL LOOSE.

### E. ADJUST THE BEARING:

- 1) TORQUE THE NUT TO 100 FT-LBS AND SPIN THE HUB AT LEAST ONE FULL ROTATION.
- 2) TORQUE THE NUT AGAIN TO 100 FT-LBS AND SPIN THE HUB AT LEAST ONE FULL ROTATION.
- 3) TORQUE THE NUT TO 100 FT-LBS AND THEN BACK OFF THE NUT SLIGHTLY.
- 4) CHECK FOR ACCEPTABLE END PLAY. REPEAT STEPS D AND E IF NECESSARY.

#### F. INSTALL THE KEEPER:

- 1) ALIGN THE FLAT OF THE KEEPER WITH THE MILLED FLAT ON THE SPINDLE AND INSERT THE SINGLE KEEPER TAB INTO THE UNDERCUT GROOVE OF THE NUT. INSERT KEEPER TAB WITH THE ORANGE SIDE FACING OUT.
- 2) ENGAGE THE MATING TEETH OF THE KEEPER TO THE NUT.
- 3) COMPRESS AND INSERT THE KEEPER ARMS, ONE AT A TIME, INTO THE UNDERCUT GROOVE WITH A SMALL SCREWDRIVER.

#### G. INSPECT THE INSTALLATION:

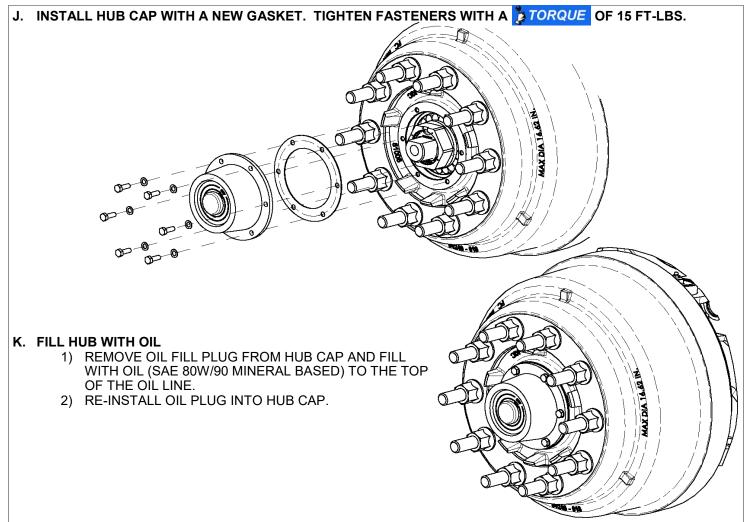
 MAKE SURE THAT THE KEEPER TAB AND KEEPER ARM ARE FULLY SEATED INTO THE UNDERCUT GROOVE.

# H. INSTALL BRAKE DRUM

# I. ACCEPTABLE END PLAY:

- 1) THE DIAL INDICATOR SHOULD BE ATTACHED TO THE HUB OR BRAKE DRUM WITH ITS MAGNETIC BASE. ADJUST THE DIAL INDICATOR SO THAT ITS PLUNGER IS AGAINST THE END OF THE SPINDLE WITH ITS LINE OF ACTION APPROXIMATELY PARALLEL TO THE AXIS OF THE SPINDLE.
- 2) WITH THE DRUM SECURED TO THE HUB, GRASP THE ASSEMBLY AT 3 O'CLOCK AND 9 O'CLOCK POSITIONS. PUSH AND PULL THE ASSEMBLY IN AND OUT WHILE OSCILLATING THE ASSEMBLY APPROXIMATELY 45 DEGREES. STOP OSCILLATING THE HUB SO THAT THE DIAL INDICATOR TIP IS IN THE SAME POSITION AS IT WAS BEFORE OSCILLATING BEGAN. READ THE BEARING END-PLAY AS THE TOTAL INDICATOR MOVEMENT.
- 3) ACCEPTABLE END PLAY IS .001" .005".





Wherever possible, Link Manufacturing, LTD encourages the use of best practices in the industry in service and support of the products it manufactures. Many of these recommended practices that Link Manufacturing, LTD supports can be found in documentation compiled by The Technology & Maintenance Council (TMC). To obtain copies of the following Recommend Practice (RP's), contact TMC at

TMC/ATA Phone: 703-838-1763
2200 Mill Road Website: tmc.truckline.com

Alexandria, VA 22314 Online ordering: <u>www.truckline.com/store</u>

TMC RP 222C	User's Guide to Wheels and Rims
TMC RP 607B	Preventative Maintenance and Inspection of S-Cam Foundation Brakes
TMC RP 608B	Brake Drums and Rotors
TMC RP 609B	Self Adjusting and Manual Brake Adjuster Removal, Installation, and Maintenance
TMC RP 618A	Wheel Bearing Adjustment Procedure
TMC RP 622A	Wheel Seal and Bearing Removal, Installation, and Maintenance
TMC RP 631B	Recommendations For Wheel End Lubrication
TMC RP 644A	Wheel End Conditions Analysis Guide
TMC RP 645	Tie Rod End Inspection and Maintenance Procedure
TMC RP 648	Troubleshooting Ride Complaints
TMC RP 651	Steer Axle Maintenance Guidelines
TMC RP 1503	Brake Maintenance Guidelines for Severe Vocational Applications
TMC RP 1515	Auxiliary Axle Maintenance Guidelines For Vocational Vehicles

