INTRODUCTION

The purpose of this manual is to familiarize yourself with an Eveley steer axle. Topics included will cover:

- Installation
- Adjustments
- Maintenance
- Inspections

This manual also contains information in chronological order to get your axle working as soon as possible. Tables, diagrams, and charts for a common sense approach are included to make this package as complete as possible. Your serial # will help identify Your invoice number will also help to identify your axle.

This manual is intended to retain the safety, dependability, and performance engineered into every EVELEY axle. Study this manual carefully before you perform any installation or maintenance procedures.

Before any repair or maintenance work that requires raising a vehicle is attempted, secure it with lift stands that are properly rated. Also make sure wheel chocks are accurately inserted. **DO NOT DEPEND ON WHEEL JACKS**

Without proper training, safety equipment, and tools, serious if not fatal accidents can occur.

Read and understand procedures in this manual before attempting any work.

- **DO NOT** sand, chisel, hammer, or alter linings in any way.
- **DO NOT** blow brake assemblies with high pressure air lines. Dust from linings should not be inhaled.
- **DO NOT** weld on wheel or heat wheel nuts with tire on.
- **DO NOT** use a chisel to remove/install spindle nuts.
- **ALWAYS** use the right socket size and torque wrench, following torque procedures.
Eveley International Corp.
A Customer Focused Company

Eveley Self Steer Axle
Design and Purchasing Criteria

The Eveley International Corp. self-steering axle has been designed to be installed on many industry standard suspension models from several suspension manufacturers. The wide variety of designs allow the Eveley Steering axle to adapt to many applications

It is manufactured in different capacities to accommodate specific load ranges, and designs that offer straight, drop center, or camel back beams, and a variety of track widths for standard and nonstandard tracks. This design also offers a full choice of wheel ends, brake sizes, drum and disc brake application, choice of spindle ends, and steering angles up to 30 degrees.

The unique design of these axles allows for a front or rear mounted tie rod assembly in various positions to accommodate the customer’s suspension design. The design also uses many industry standard parts which are readily available in the aftermarket.

When installed to Eveley installation and maintenance procedures, the Eveley self-steering axle offers the user greater safety, less tire wear, better gas mileage and improved maneuverability. All these design features make Eveley self-steering axle trailers a strong investment in the future.

**Important note**
When ordering and Eveley self-steering axle the customer will be requested to complete our engineering information request sheet (EIS). Copies of which are available upon request from the Eveley engineering Department. This form and its information will allow us to ensure that the suspension and axle are compatible to each other, before an order is accepted. The information you supply will be checked and accepted or changed by our engineering department. The EIS will then be returned to the customer for final review, changes if required, and an acceptance by the customer. Once this process is completed an assembly number will be assigned to your order, this number can be used for future purchases with the same specifications.

**NO SELF-STEERING AXLE ORDERS WILL BE ACCEPTED OR PROCESSED WITHOUT AN EIS SIGNED BY BOTH CUSTOMER AND EVELEY ENGINEERING.**
SELF STEER APPLICATION GUIDE

CUSTOMER CONTACT INFORMATION

COMPANY NAME: ____________________________ PHONE: _______________________________
CONTACT NAME: ___________________________ FAX: _______________________________
DATE: _______________________________ E-MAIL __________________________

BRAKE SIZE
16 ½ X 7 DRUM ______
12 ¾ X 7 ½ DRUM ______
ADB 22 DISC ______

WHEEL SIZE __________________________
PART NO. __________________________
INSET _________ OUTSET________
HUB & DRUM / ROTOR TYPE __________
PART NO __________________________

SUSPENSION MAKE & MODEL: __________________________
AIR RIDE ______
SPRING ______

PLEASE PROVIDE A SKETCH OF TRAILER CONFIGURATION IN THE SPACE BELOW

track ______
width out/out tires ______

frame width ______
spindle type ______

ride ht ______
capacity ______

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STANDARD STEER AXLE S2439-13

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SETTING CASTOR

- Bottom of king pin must point toward the front of the trailer
- Castor must be set when axle is set at ride height
- Factory setting is 1.5°. Castor can be from 0.0°-3.0°
AIRRIDE UNDERSLUNG AXLE SEAT
WELDING SPECIFICATIONS

Brackets which wrap around the axle should touch the axle as shown in view “A” in figure 3. With this type of fit, loads on the bracket are transferred directly to the axle. If a gap exists between the axle and the bracket as shown in view “B” in Fig. 3, these loads are transferred to the weld. This may overstress and crack the weld.

When welding axle seat in position mig welding is preferred. Welding wire should be 7018 or equivalent and should be performed so that welding is done in a flat position. If this is not possible welding should be performed using the stick method.

- When an axle seat is attached to an axle with U-bolts and a weld, tighten the U-bolts to the specified torque 1000 ft/lbs (1356 N/m) before welding. This ensures that the load on the seat is not transferred into the weld.
- Before welding, remove all oil-paint and dirt from the surface to be welded. Check that the beam centres are correct, and that the axle fits tight into the axle seat, and that the U-bolts are torqued to the required specification.
- Never weld when the axle is cold. The axle and brackets to be welded should be stored overnight in a heated room and be at a temperature of at least 60°F prior to welding. This will reduce the chance of forming an area of brittle material adjacent to the weld. If temperature requirements are not met, moderately pre-heat the weld area to a maximum temperature of 200°F using a “Rosebud”. Do not concentrate heat in one area. Rather, slowly heat a wide area around the joint to be welded. Verify axle temperature using a temperature sensitive crayon or other appropriate means.
- The weld arc should not be started at the end of the bead. Instead, the electrode should be started away
from the end of the bead and moved as shown in figure 5.

- The weld arc should not be finished at the end of the bead. Instead, the electrode should be finished away from the end of the bead as shown. Any craters which remain should be filled during this movement.

![Figure 5](image)

- After welding, the U-bolts should be checked to ensure that the torque specification has not changed. Do not weld on the bottom of the axle.
AIRRIDE TOPMOUNT AXLE SEAT
WELDING SPECIFICATIONS

- Any approved 7018 Welding Rod or the equivalent, can be used.
- When welding the axle to the trailing beam saddle there must be three passes on each side, alternating, side to side and front to back. The finished weld size must be a minimum 1/2” (13mm) fillet weld. Ensure that each pass is done in different directions and starting points.
- Before welding, remove all oil paint and dirt from the surface to be welded. Check that the beam centres are correct, and that the axle fits tight into the axle seat, and that the U-bolts are torqued to the required specification.
- Never weld when the axle is cold. The axle and brackets to be welded should be stored overnight in a heated room and be at a temperature of at least 60°F prior to welding. This will reduce the chance of forming an area of brittle material adjacent to the weld. If temperature requirements are not met, moderately pre-heat the weld area to a maximum temperature of 200°F using a “Rosebud”. Do not concentrate heat in one area. Rather, slowly heat a wide area around the joint to be welded. Verify axle temperature using a temperature sensitive crayon or other appropriate means.
- The axle must be clamped to the axle saddle to ensure axle is seated securely in saddle. Axle must sit in saddle as shown in Figure 3. Page 9
- Tack weld the axle saddle to the axle. A 1” long tack in the middle of the saddle front and back is sufficient.
- The weld arc should not be started at the end of the bead. Instead, the electrode should be started away from the end of the bead and moved as shown in figure 6.
- The weld arc should not be finished at the end of the bead. Instead, the electrode should be finished away from the end of the bead as shown. Any craters which remain should be filled during this movement.

Figure 6
When welding the axle to the trailing beam saddle there must be three passes on each side, alternating, side to side and front to back. The finished weld size must be a minimum 1/2" (13mm) fillet weld. Ensure that each pass is done in different directions and starting points. See figure 3.

Figure 3
STEER AXLE INSTALLATION AND ALIGNMENT

- The Eveley steering axle assembly is manufactured and assembled with a TOE Value of zero (0) degrees.
- Shipping braces are welded to axle to guarantee this setting does not change in the shipping process. These braces should not be removed until the assembly is securely attached to the trailer frame and aligned to the closest fixed axle assembly.
- Place the fixed axle in the position first, ensure that the axle assembly is centered on the frame, and the dimensions are equal. Check dimension “c” king pin to center of spindle ends. This should be equal on both sides. Secure assembly to the frame.
- Place the steering axle assembly onto the frame at the required axle spacing. Ensure the steering axle assembly is centered on the frame and dimensions “A” are equal. Check the distance from the C/L on the spindle on the fixed axle to the C/L of the spindle on the steering axle dimension “E”. This dimension should be the same on both sides.
- For reference only check dimensions “D” trailer king pin to C/L steering axle king pins, both sides should be the same. Secure steering axle assembly to the frame.
TOE IN ALIGNMENT PROCEDURE

- Toe in alignment must be done with the trailer empty.
- Install tires, chalk a line around both tires for a reference to measure to. Set suspension to designed ride height. Operate the lock assembly, ensure that it has a clean entry into the sliding lock plate.
- Lock the axle in the fixed position and remove the shipping braces.
- Release the tension on the tie rod clamps and the locking plate.
- Check the tie rod chart below to determine the correct toe in dimension for your axle assembly.
- Check the dimensions across the chalk lines. Rotate the tie rod assembly to move the lines in at the front and out at the rear.
- The difference between the measurements at the front of the tires to the rear of the tires should be equal to the dimensions shown in the chart below.
- When completed, re-torque the tie rod end clamps and also the slider plate clamps to 150 ft lbs.
- Final check. Release the lock assembly. Steer the axle assembly in both directions to ensure that the tires do not interfere with the frame rail or air-spring. If adjustment is required it can be made by adjusting the steering bolt located on the back of the beam end. If adjustment is required, remember to lock the jam nut in place when you have completed the adjustment.

![Diagram of toe in alignment procedure](image)

FORWARD

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When installing a new air chamber the actuating rod must be cut to a specific length in order for the brake system to function properly. Measure from the bottom of the chamber housing to the specified point on the rod. Cut rod at this dimension.
SETTING THE AIRSPRING STABILIZER

Due to tire width, different load weights, trailer design, pressure settings will vary. This document is intended to assist the operator to maximize the use of the double convoluted air bag (dcab).

- Set the pressure in the control box at 30 psi with the trailer loaded.
- With the tires straight verify that there are 4 points of contact between stabilizer assembly and tie rod lock plate assembly
- Taking the trailer for a test drive increase the pressure to the airs bag until the tires start to resist turning while driving through a turn.
- Once the tires start to resist turning, back off the air bag pressure until the tires turn freely.

If the axle shakes, shimmies or hops at highway speeds the centering air-spring requires adjustment, which should be done by a qualified steering axle technician.

The geometry of the air suspension being used could affect the pressure settings required in the centering air-spring.
If the suspension air bag is above or ahead of the axle, more pressure may be required. If the air bag is behind the axle, less pressure may be required.
TMC’s Recommended Wheel Bearing Adjustment Procedure for Standard Spindle Nuts

Proper wheel bearing adjustment is critical to the performance of wheel seals and other related wheel end products. For that reason, we are proud to be a part of TMC’s Wheel End Task Force. We are happy to bring these standards to you in the form of this technical guide. Working together, in this way, STEMCO helps keep your rigs rolling.

The following seven step bearing adjustment recommendation for standard spindle nuts was developed by TMC’s Wheel End Task Force. It represents the combined input of manufacturers of wheel end components.

**STEP 1.** Bearing Lubrication:
Lubricate the wheel bearing with clean lubricant of the same type used in the axle sump or hub assembly.

**STEP 2.** Initial Adjusting Nut Torque:
Tighten the adjusting nut to a torque of 200 ft-lbs, while rotating the wheel.

**STEP 3.** Initial Back Off:
Back the adjusting nut off one full turn.

**STEP 4.** Re-Torque Adjustment:
Re-Torque adjusting nut to 50 ft-lbs while rotating the wheel.

**STEP 5.** Final Back Off:

<table>
<thead>
<tr>
<th>AXLE TYPE</th>
<th>THREADS PER INCH</th>
<th>FINAL BACK OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEER</td>
<td>12</td>
<td>1/6 Turn*</td>
</tr>
<tr>
<td>STEER</td>
<td>18</td>
<td>1/4 Turn*</td>
</tr>
<tr>
<td>DRIV</td>
<td>14</td>
<td>1/2 Turn</td>
</tr>
<tr>
<td>DRIV</td>
<td>18</td>
<td>1/4 Turn</td>
</tr>
<tr>
<td>TRAILER</td>
<td>16</td>
<td>1/4 Turn</td>
</tr>
<tr>
<td>TRAILER</td>
<td>12</td>
<td>1/4 Turn</td>
</tr>
</tbody>
</table>

*Install center pin to lock axle nut in position.

**STEP 6.** Jam Nut Torque:

<table>
<thead>
<tr>
<th>AXLE TYPE</th>
<th>NUT SIZE</th>
<th>TORQUE SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEER</td>
<td>Less Than 2½&quot;</td>
<td>2½&quot; And Over</td>
</tr>
<tr>
<td>STEER</td>
<td>200-300 ft-lbs</td>
<td></td>
</tr>
<tr>
<td>DRIV</td>
<td>Dowel Type Washer</td>
<td></td>
</tr>
<tr>
<td>DRIV</td>
<td>Tang Type Washer</td>
<td></td>
</tr>
<tr>
<td>DRIV</td>
<td>200-275 ft-lbs</td>
<td></td>
</tr>
<tr>
<td>TRAILER</td>
<td>Less Than 2½&quot;</td>
<td>2½&quot; And Over</td>
</tr>
<tr>
<td>TRAILER</td>
<td>200-300 ft-lbs</td>
<td></td>
</tr>
<tr>
<td>TRAILER</td>
<td>300-400 ft-lbs</td>
<td></td>
</tr>
<tr>
<td>TRAILER</td>
<td>300-400 ft-lbs</td>
<td></td>
</tr>
</tbody>
</table>

**STEP 7.** Acceptable End Play:

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.

Grasp the wheel or hub assembly at the 3 o’clock and 9 o’clock positions. Push and pull the wheel end assembly in and out while oscillating the wheel approximately 45 degrees. Stop oscillating the hub so that the dial indicator tip is in the same position as it was before oscillation began. Read the bearing end play as the total indicator movement.

**NOTE:** Acceptable end play is 0.015” to 0.025”.

For more information on TMC products, consult manufacturers’ specifications.

STEMCO assumes no responsibility for bearing warranty.
Pre-Torq® Installation Procedure for Hubs with Manually Adjusted Wheel Bearings

**STEP 1. Remove The Keeper From The Nut:**
Use a screwdriver to carefully pry the keeper arm from the undercut groove on each side until the keeper is released.

**STEP 2. Set the Bearing:**
1. With hub or hub/drum only:
   - (A) Tighten the nut to 200 ft-lbs.
   - Spin the wheel at least one full rotation.
   - (B) Tighten the nut to 200 ft-lbs.
   - Spin the wheel at least one full rotation.
   - (C) Tighten the nut to 200 ft-lbs.
2. Back the nut off until it is loose.

**STEP 3. Adjust The Bearing:**
1. With hub or hub/drum only:
   - Using a torque wrench:
     - (A) Tighten the nut to 100 ft-lbs.
     - Spin the wheel at least one full rotation.
     - (B) Tighten the nut to 100 ft-lbs.
     - Spin the wheel at least one full rotation.
     - (C) Tighten the nut to 100 ft-lbs.
2. Back the nut off one raised face mark (according to chart).

**FINAL BACKOFF**

<table>
<thead>
<tr>
<th>Application</th>
<th>Part Numbers</th>
<th>Backoff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trailer Axle Nut</td>
<td>447-4723, 447-4724, 449-4973</td>
<td>1/8 turn</td>
</tr>
<tr>
<td>Trailer Axle Nut</td>
<td>447-4743</td>
<td>1/4 turn</td>
</tr>
<tr>
<td>Steering Spindle Nut</td>
<td>448-4836, 448-4838, 448-4839, 448-4863, 448-4865</td>
<td>1/4 turn</td>
</tr>
<tr>
<td>Steering Spindle Nut</td>
<td>448-4864</td>
<td>1/4 turn</td>
</tr>
<tr>
<td>Steering Spindle Nut</td>
<td>448-4867, 448-4860</td>
<td>1/4 turn</td>
</tr>
<tr>
<td>Drive Axle Nut</td>
<td>449-4904, 449-4973, 449-4974, 449-4975</td>
<td>1/8 turn</td>
</tr>
</tbody>
</table>

**STEP 4. Install The Keeper:**

1. Insert the keeper tab into the undercut groove of the nut and engage the keyway tang in the axle keyway. Insert keeper tab with the orange side facing out.
2. Engage the mating teeth.
3. Compress and insert the keeper arms, one at a time, into the undercut groove with a screwdriver.

**NOTE:**
Recommended practice is to replace the keeper each time the Pro Torq nut assembly is removed for maintenance purposes.

**STEP 5. Inspect the Installation:**

Failure to follow this instruction could cause the wheel to come off and cause bodily injury. The PRO-TORQ® Spindle Nut is sold as an assembly with the keeper in place. DO NOT attempt to place the nut on the spindle or tighten or loosen the nut on the spindle while the keeper is locked inside the nut. Doing so may deform the keeper and allow the nut to untighten during operation. DO NOT bend or manipulate keyway tang in any way. Doing so may cause the tang to break off in service. Failure to back off the nut will cause the bearings to run hot and be damaged.

**This procedure will consistently produce a bearing setting of .001” to .003” end play.**

**STEP 6. Acceptable End Play:**

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. Grasp the wheel or hub assembly at the 3 o’clock and 9 o’clock positions. Push and pull the wheel-end assembly in and out while oscillating the wheel approximately 45 degrees. Stop oscillating the hub so that the dial indicator tip is in the same position as it was before oscillation began. Read the bearing end-play as the total indicator movement.

**NOTE:** Acceptable end-play is .0005”-.006”.

For further technical systems, consult manufacturer’s specifications.

**Stemco Assumes no responsibility for bearing warranty.**
All cam tubes and grease points use DELO NLGI EP2 BLUE GREASE. It is recommended that a comparable grease be used when this is unavailable.
EVERY 1,000 MILES
☑ CHECK OIL LEVEL IN WHEEL HUB AND INSPECT FOR LEAKS

15,000 MILES OR TWICE A YEAR MINIMUM
☑ CHECK BRAKE ADJUSTMENT
☑ REPACK WHEEL BEARINGS (GREASE APPLICATION)

25,000-30,000 MILES
☑ CHECK BRAKE LINING AND REPLACE IF REQ’D.
☑ INSPECT ALL CAMSHAFT BEARINGS AND SEALS FOR WEAR
☑ LUBRICATE CAMSHAFT BUSHING AND SLACK ADJUSTERS
☑ INSPECT BRAKE DRUMS FOR GLAZING GROOVES HOT SPOTS HEAT CRACKS OUT OF ROUND

100,000 MILES, ONCE A YEAR OR AT BRAKE RELINE
☑ REPLACE SPINDLE BEARING LUBRICATION
☑ INSPECT BRAKE CHAMBER AND SLACK ADJUSTERS
☑ INSPECT ALL BRAKE COMPONENTS AND REPLACE IF NECASSARY
☑ LUBRICATE CAMSHAFT BUSHINGS AND BRAKE ADJUSTERS
NUT AND BOLT TORQUE SPECS

It is very important to follow the manufacturers’ procedures and recommendations when dismantling and servicing some components on trailer axles and steer axles. For the proper procedures please refer to the manufacturers’ web sites listed below for more detailed information.

Torque Specifications

- **Hub Cap Bolts**  
  5/16-18unc  
  12-16 ft/lbs (22N/m)

- **Air Chamber Mounting Bolts**  
  5/8-11unc  
  100-115 ft/lbs (156N/m)

- **Dust Shield mounting Bolts**  
  5/16-18unc  
  12-16 ft/lbs (22N/m)

- **Cam Bracket Mounting Bushing**  
  5/16-18unc  
  12-16 ft/lbs (22N/m)

- **King pin cap**  
  7/16-20 unf  
  50 ft lbs (68N/m)

- **Draw Key**  
  7/16-20 unf  
  50 ft lbs (68N/m)

- **Steering Arms**  
  7/8-14 unf  
  150 ft lbs (204N/m)

- **Tie Rod Clamp Bolts**  
  3/4-10 unc  
  150 ft lbs (204N/m)

- **Lock Lever Housing Bolt**  
  5/8-11 unc  
  Lock must pivot freely

- **Bellows Plate Bolt**  
  3/8-16 unc  
  30 ft lbs (41N/m)

- **Steering Arms**  
  7/8-14 unf  
  150 ft lbs (204N/m)

- **Lever Arm Plate Bolt**  
  5/8-11 unc  
  Plate must pivot

- **Lever Arm Pivot Bolt**  
  1”-8 unc  
  Arm must pivot freely

- **Lever Arm Adjusting Bolt**  
  5/8-11 unc  
  Adjust to position

- **Lever Arm Adjusting Jam Nut**  
  5/8-11 unc  
  Tighten firmly

- **Adjustable Stop Bolt**  
  3/4-16 unf  
  Adjust to position

- **Adjustable Stop Jam Nut**  
  3/4-16 unf  
  Tighten firmly

Any bolt or nut not listed please refer to industry standards
KING PIN OVERHAUL AND REPLACEMENT PROCEDURE
(NEEDLE BEARING)

- Remove the tie rod from the axle.
- Remove king pin caps and draw keys from axle. Discard the draw keys and O-rings.
- Support the knuckle while driving the king pin from the assembly.
- When the king pin is removed rotate the knuckle back and forth to free the thrust bearing and shims from the assembly. Save the shims for reassembly.
- Remove the seals from the top and bottom of the knuckle and discard. Drive the bearings from the knuckle bore. To do this, make a 2 sided mandrel. The first side have the diameter small enough to fit into the knuckle bore of the bearing. It will have to be long enough to push both bearings completely thru the knuckle bore. The other side of the mandrel should have a diameter so the bearing slips on and have a step which will bottom out when the bearing is flush with the top face of the knuckle. Discard the needle bearings.

- Inspect and clean all re-useable parts for reassembly. Replace worn parts.
- Using the mandrel, gently drive the first bearing into the bore followed by the second.
• Slide the king pin thru the installed bearings and make sure it rotates freely. If not remove the bearings and hone the knuckle bore.
• To install the seal, place the closed end facing into the bore of the knuckle. Place a round disc / plate on top of the seal. Using the king pin gently tap the disc / plate until the seal is seated.
• To reassemble the knuckle to the beam end, align the bore holes so that the king pin can be inserted.
• Partially insert the king pin so that the shim / shims can be inserted where shown. Insert as many or different thickness of shims so that the thrust bearing has to be gently tapped in by a rubber mallet.
• Align the king-pins so the draw key slots match up with the holes in the beam ends. The king-pins are marked LH and RH. The markings are on the top sides of the king pins. The beam ends are also marked LT and RT to designate top left or right hand side.
• Drive the king pin in using a rubber mallet or a hammer with some king of protection for the king pin (hard wood Lumber / brass rod). Center the king pin so equal spacing can be felt by hand on the outside knuckle faces.
• Drive the draw keys in alternately with the flats facing towards the king pin.
• Torque the flange nuts to 50 ft-lbs. After 1,000mi (1,600km) re-torque.
• Bolt the king pin caps on with new O-rings installed. Grease until you can see it escaping from the beam ends.
KING PIN OVERHAUL AND REPLACEMENT PROCEDURE
(EVELEY BUSHING)

- Remove the tie rod from the axle.
- Remove king pin caps and draw keys from axle. Discard the draw keys and 0-rings.
- Support the knuckle while driving the king pin from the assembly.
- When the king pin is removed rotate the knuckle back and forth to free the thrust bearing and shims from the assembly. Save the shims for reassembly.
- Remove the seals from the top and bottom of the knuckle and discard.
- With a screwdriver or needle nose pliers, lift the end of the Eveley bushing out of the knuckle bore. Grab the removed part of the Eveley bushing with a pair of pliers and rotate the bushing out from the bore.

- Inspect and clean all re-useable parts for reassembly. Replace worn parts.
- By hand rotate and push the Eveley bushing into the knuckle bore. When the bushing is partially started, use pliers to completely install it. When finished the bushing should be just below the knuckle / king pin cap face.
- Slide the king pin thru the installed Eveley bushings and make sure the king pin rotates by hand. If not remove the bushings and hone the knuckle bore.
- To install the seal, place the closed end facing into the bore of the knuckle. Place a round disc / plate on top of the seal. Using the king pin gently tap the disc / plate until the seal is seated.
To reassemble the knuckle to the beam end, align the bore holes so that the king pin can be inserted.

- Partially insert the king pin so that the shim / shims can be inserted where shown. Insert as many or different thickness of shims so the thrust bearing has to be gently tapped in by a rubber mallet.
- Align the king pins so that the draw key slots match up with the holes in the beam ends. The king pins are marked LH and RH. The markings are on the top sides of the king pins. The beam ends are also marked LT and RT to designate the top left or right hand side.
- Drive the king pin in using a rubber mallet or a hammer with some kind of protection for the king pin (hard wood lumber / brass rod). Center the king pin so equal spacing can be felt by hand on the outside knuckle faces.
- Drive the draw keys in alternately with the flats facing toward the king pin. Torque the flange nuts to 50ft.lbs. After 1,000mi (1,600km) re-torque.
- Bolt the king pin caps on with new O-rings installed. Grease until you can see it escaping from the beam end.
GENERAL INFORMATION

- This Eveley International Axle Installation and Maintenance Manual includes information to assist you in identifying correct part numbers and ordering appropriate parts.
- When ordering genuine Eveley International replacement parts, please be sure you have the correct part number and description. If the part number is not available the axle part number will be required.
- Descriptions and specifications contained in this manual were in effect at the time of publication, and are subject to change without notice or liability.
- All shipments are F.O.B. shipping point Stoney Creek, Ontario.
- Exploded Parts Views contained in this manual are not to scale and may not show all parts included on the axle. These views are for reference only.
- Note: Many of our parts are now available packaged for re-sale or stocking. These parts come individually packed with part number identification on each package.

CUSTOMER SERVICE DEPARTMENT

Telephone: (905) 643-2697 North.America: 1-877-643-2697
Fax (905) 643-2125
Mailing: 665 ARVIN AVE
 Stoney Creek, Ontario
 L8E-5R2

PARTS DEPARTMENT

Telephone: (905) 561-3244 North.America: 1-800-267-4306
Fax (905) 560-2285
Mailing: 2814 BARTON ST E
 Stoney Creek, Ontario
 L8E-1V6
EVELEY INTERNATIONAL CORP.

PRODUCT WARRANTY

This warranty shall be limited to the original purchaser from the date of sale and covers all new components manufactured by Eveley International Corp. to be free of defects in material and workmanship, for one year (parts and labour) and up to five years (parts only) when installed, assembled, and maintained in accordance with Eveley International Corp. installation and maintenance procedures, under normal use and service.

The product installer is responsible for providing correct vehicle components and attachments, and providing the clearance for suspension components, axles, wheels and tires. The installer is also responsible to ensure that products supplied by Eveley International Corp. are operating within their engineering designed capabilities and capacities.

The product owner is responsible for pre-operation inspection, periodic inspections, maintenance, and use of the product as specified by Eveley International Corp.

This warranty is null and void if the products are subject to improper installation, modification, adjustment, unauthorized repair, damage as a result of abuse, accident, and/or negligence, and incorrect or insufficient maintenance or applications, including but not limited to, overloading product ratings or maximum vehicle weight specifications. This warranty is null and void if parts failure or system problems occur as a result of incorrect trailer or frame design. This is the responsibility of the trailer or equipment manufacturer.

The responsibility under this warranty is limited to the replacement or repair of defective parts at no charge and is at the discretion of Eveley International Corp. Products to be considered for warranty are to be returned pre-paid to Eveley International Corp. and will be subject to our inspection, or the field inspection by an authorized representative of Eveley International Corp. before warranty is approved.

In no event shall Eveley International Corp. be liable for any expense, loss or damage (direct, Incidental, consequential, or exemplary) including, but not limited to, towing expenses, equipment rental, downtime expenses, cargo damage, incidental expenses, or any other losses arising in connection with the sale, use or inability to use the product resulting from a warranty covered part found to be defective. Any allowance for labour costs associated with the repair or replacement of the subject component must be pre-approved in writing by Eveley International Corp.

Component parts included in the Eveley International Corp. product but purchased from outside vendors are guaranteed by Eveley International Corp. to the same extent as the guarantee offered by the outside vendor to Eveley International Corp.

Any Warranty implied by law, including any warranty of merchantability or fitness for a particular purpose, is limited to the expressed warranty terms provided in this warranty coverage.

All wearable items are not included in this warranty.

This warranty is limited to normal on highway use or written approval applications. This warranty does not cover, off road, mining, or raw wood applications.

This warranty coverage is for Canada and the United States only.

The use of non-genuine Eveley International Corp. replacement parts will void this warranty coverage.

No other warranty is expressed or implied by Eveley International Corp.