



# PREMIER

THE FIRST NAME IN QUALITY COUPLINGS

## 880RK SERVICE GUIDELINES



**880R  
Coupling**

### **BEFORE GETTING STARTED:**

- ▶ This procedure should only be performed by a qualified mechanic.
- ▶ Measure the wear on the coupling's pintle hook. If the wear is at or exceeds 20% of the cross section, the coupling is considered Out of Service. Do Not continue.
- ▶ Tools required: snap ring pliers; grease gun; 1 1/4" & 1 1/16" sockets; long flat-bladed screw driver.
- ▶ CAUTION: When removing and replacing snap rings the appropriate snap ring plier tools are necessary. Do not attempt removal or replacement without the correct snap ring plier tools. In addition, use caution when removing and replacing snap rings – Do not over expand them as damage could result. Also, when assembling a snap ring into position - Make certain that the snap ring is fully seated into the groove.
- ▶ Safety glasses are required for all of the following procedures.
- ▶ Prior to disassembly, familiarize yourself with the location of all the various parts in the coupling. This will assist in the assembly process.
- ▶ See attached Image Reference Section(s) with photos and/or drawings to identify various product parts.

### **DISASSEMBLY**

- 1) The 880 Coupling body should be positioned with the flat side down (on its mounting base), with the latch in the closed position. See Image #2 on Image Reference Section; the 782 Latch is located at the top of the coupling and the 781 Handle should be sticking out the bottom of the coupling body, with the handle lever pointed to the left.
- 2) Locate the 384Z Bolt, which resides within the 782 Latch, in the top body hole. Remove the 387 Locknut from the left side of the 384Z Bolt and slide the 384Z Bolt out of the right side of the body.
- 3) Looking at the front of the closed 782 Latch, grasp it at the front and pull it toward you, out of the coupling body. There will be tension from the attached spring as you do this. As you pull the 782 Latch out, you should see the 382A Spring attached on the right side. Turn the 782 Latch clockwise, toward the spring, so that it pops off of the mounting peg, or it can be removed with needle nose pliers.
- 4) Locate the 785Z Pin that resides in the middle body hole. Remove the 785Z-1 Snap Ring from the left side of the 785Z Pin and slide the Pin out of the right side of the body.
- 5) Locate the bottom body hole and remove the 274A Locknut from the left side of the 374 Bolt and slide the bolt out of the right side of the body. You will need this 374 Bolt later, for reassembly purposes.
- 6) Remove the remaining parts from the body: 266 Spring; 582A Spring; 279 Shoe; 783 Lever; and 781 Handle.
- 7) Discard or remove all old parts, except for the 374 Bolt.
- 8) With all parts removed from the coupling body, clean and inspect the body for wear and/or damage. If wear exists or damage is noted, do not attempt to repair. DO NOT ATTEMPT WELD REPAIR OF ANY DAMAGED AND/OR WORN PART.

### **DISASSEMBLY IS COMPLETE**

### **IMPORTANT NOTES TO CLEAN, INSPECT & LUBRICATE:**

- ▶ Use only genuine PREMIER replacement parts on any repairs. Use of other parts, which can have different specifications or tolerances, may fail to alert you to non-obvious damage to the hitch which can lead to hitch failure.
- ▶ All body holes, part holes and pins need to be thoroughly cleaned and lubricated with a heavy grease before the parts are reassembled. If a



bushing resides in a part, lubricate the hole prior to installing the bushing. (DO NOT LUBRICATE PINTLE HOOK WEAR SURFACE).

- ▶ Clean, inspect and lubricate latch components every 90 days or sooner if required by the operating environment.
- ▶ Clean and inspect the coupling for damage and excessive wear prior to each and every use.
- ▶ Do not over-tighten fasteners as this may cause damage.

## **ASSEMBLY**

- 1) From the top, look inside the coupling body and locate two protrusions pointing inward toward each other, but not touching.
- 2) Grasp the 781 Handle at the handle end so that the lever pointing left, and the spring mounting peg is on the right. In this position, push the 781 Handle up thru the coupling from the bottom, so that it rests on top side of the two protrusions.
- 3) Locate the spring mounting peg on the top right side of the 781 Handle and place one end of the 382A Spring onto it. Make sure it is fully seated in the groove on the peg. Grasp the 782 Latch with one hand and position it so that the spring mounting peg is on the right side. Place the other end of the 382A Spring onto the 782 Latch mounting peg. Again, make sure it is fully seated in the groove. Keeping tension on the spring, rotate the 782 Latch so that it rests in the open position (see Image #3).
- 4) The 382A Spring should be connecting the 782 Latch and 781 Handle with tension.
- 5) While keeping tension in the 382A Spring, grasp the 782 Latch in one hand and the 781 Handle in the other. Start pulling the 781 Handle out of the bottom of the coupling and downward toward the mounting base, so that the top of the handle clears the two protrusions and then slide it back up behind them and up into the body.
- 6) With this relocation of the 781 Handle, the 782 Latch should be positioned back on top of the coupling body to rest in the open position (see Image #4).
- 7) From the right side of the coupling, look into the top body hole and align the 782 Latch hole. Place the 384Z Bolt into this hole from the right side and push it through the 782 Latch hole and out the left side of the coupling body. Make certain that one of the flats of the 384Z Bolt head is flush with the flat on the body sidewall.
- 8) Thread 387 Locknut by hand onto the threaded end of the 384Z Bolt. Do Not tighten.
- 9) From the right side of the coupling, look into the middle body hole and align the 781 Handle hole. Place the 785Z Pin into this hole from the right side and push it through the 781 Handle hole and out the left side of the coupling body. Make certain that the flat of the 785Z Pin head is flush with the flat on the body sidewall.
- 10) Use snap ring pliers to place the 785Z-1 Snap Ring into the groove on the left end of the 785Z Pin. Verify that the snap ring is fully seated into the groove.
- 11) Place your open palm on the back, top side of the 782 Latch. Caution: Keep all body parts clear of the underside of 782 Latch and the top of the pintle hook. With your open palm, rotate the 782 Latch toward you, in the direction of the pintle hook, until it locks closed.
- 12) Find the old/used 374 Bolt and have it handy.
- 13) Take the 582A Spring in your left hand. Hold it with the straight leg pointing directly away from you and the long portion of the hooked leg pointing down and hooking out toward the right. In your right hand hold the 783 Lever with the bolt hole on top and the handle of the lever pointing to the left (see Image #5).
- 14) Take the 582A Spring behind the 783 Lever and then align the right side hole in the spring with the left side hole in the 783 Lever. The hooked leg of the spring should wrap around the bottom back side of the lever (see Image #6).
- 15) While holding these in position, insert them into the bottom of the coupling body and align the holes on the left bottom bolt hole. The handle of the 783 Lever should protrude out of the lever opening.
- 16) Keeping the hooked spring leg in position around the lever, push the old/used 374 Bolt into the left side of the body bolt hole and through the 582A Spring and 783 Lever, with approximately 3/4" of the threaded end sticking out the right side of the 783 Lever hole.
- 17) Look into the bottom opening of the body and, from the right side, insert a long flat-bladed screwdriver into the right side of the bottom body bolt hole until it reaches across to the straight leg of the 582A Spring on the left. Use the screwdriver to rotate the straight leg of the spring down, clockwise, and into the recessed ledge on of the interior body sidewall (see Image #7). Test to make sure that the spring is set, by pushing forward on the 783 Lever. There should be an increase in spring force as you push on it.
- 18) While making sure that the 582A Spring and 783 Lever stay flush to the left inside body wall, push the 783 Lever forward and lift the 781 Handle upward, in order to open the 782 Latch.



- 19) Push the 783 Lever all the way against the left interior sidewall and slightly pull the 374 Bolt out from the left, until the threaded end is just flush within the right side hole of the 783 Lever.
- 20) Grasp the 279 Shoe with the bolt hole on the bottom and the nipple pointing toward you. Insert the 279 Shoe down into the body from the top of the coupling, until it rests inside.
- 21) Again use caution as you place your open palm on the back, top side of the 782 Latch and rotate it toward you, in the direction of the pintle hook, until it locks closed.
- 22) Make sure the backside of the 279 Shoe bolt hole sits all the way down against the 781 Handle (see Image #8).
- 23) Palm side up, place one or two fingers into the bottom opening of the coupling body and feel the upper inside body cavity up under the pintle hook. You should feel a deep indented area. This is where one end of the 266 Spring is going to reside.
- 24) From the bottom opening, place the 266 Spring into the body and put one end of it over the nipple on the 279 Shoe. Now slightly compress the spring while sliding the other end up into the recessed body cavity.
- 25) Align the 279 Shoe hole with the bottom body bolt hole, from the right side of the body. Place the new 374 Bolt into this hole from the right side and push it into the 279 Shoe. As you continue to push it thru to the left, it should push out the old 374 Bolt from the left side.

- 26) Thread the 274A Locknut onto the threaded end of the 374 Bolt and tighten until snug.
- 27) Go back up to the 387 Locknut and tighten it until snug.
- 28) Coupling is now assembled and should be opened and closed several times, testing for smooth and correct operation. DO NOT use the coupling if it does not operate properly. Call for assistance.
- 29) If operation is smooth, use a grease gun to lubricate the 384Z Bolt and 785Z Pin through the zerk fitting, with 2-3 pumps of grease.
- 30) Use only new fasteners torqued to SAE specifications when mounting the assembled coupling to its mounting structure.

**WARNING:**

Do NOT bind-up (jackknife) any application, as stresses can cause damage to the hitch, drawbar eye, other components or any combination of them. Jackknifing may result in failure of products or components, resulting in detachment of the trailer while in use.

**IMPORTANT GUIDELINES that apply to all Premier Air Adjusted Couplings**

- Do not weld on any coupling assembly
- Always use Grade-8 fasteners properly torqued
- Do not apply lubricants to the coupling hook
- Air service chamber must be Type-24 or Type-30 with 90-120 PSI air supply

- Clean & inspect coupling for damage & excessive wear prior to each and every use
- Lubricate all coupling components at a minimum of 90 day intervals
- Do not bind-up (Jackknife) any application as stresses can cause damage to products or components, resulting in failure and detachment of the trailer while in use



# IMAGE REFERENCE SECTION

IMAGE #1

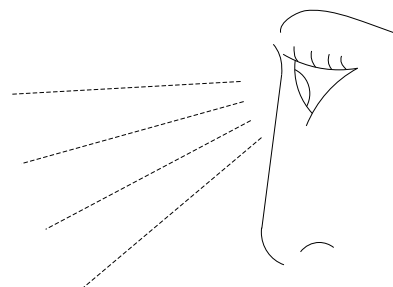
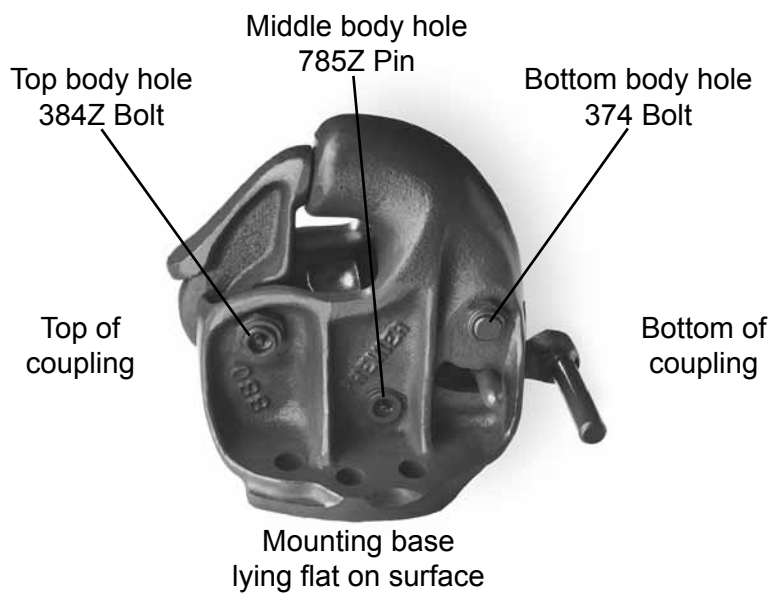


## 880RK Parts Kit Includes:

- |               |                   |
|---------------|-------------------|
| 266: Spring   | 781: Handle       |
| *271: Thimble | 782: Latch        |
| 274A: Locknut | 783: Lever        |
| 279: Shoe     | 785Z: Pin         |
| 374: Bolt     | 785Z-1: Snap Ring |
| 382A: Spring  |                   |
| 384Z: Bolt    |                   |
| 387: Locknut  |                   |
| 582A: Spring  |                   |

\*Not included in parts kit, available individually.

IMAGE #2



Direction of view  
for assembly



## IMAGE REFERENCE SECTION

IMAGE #3

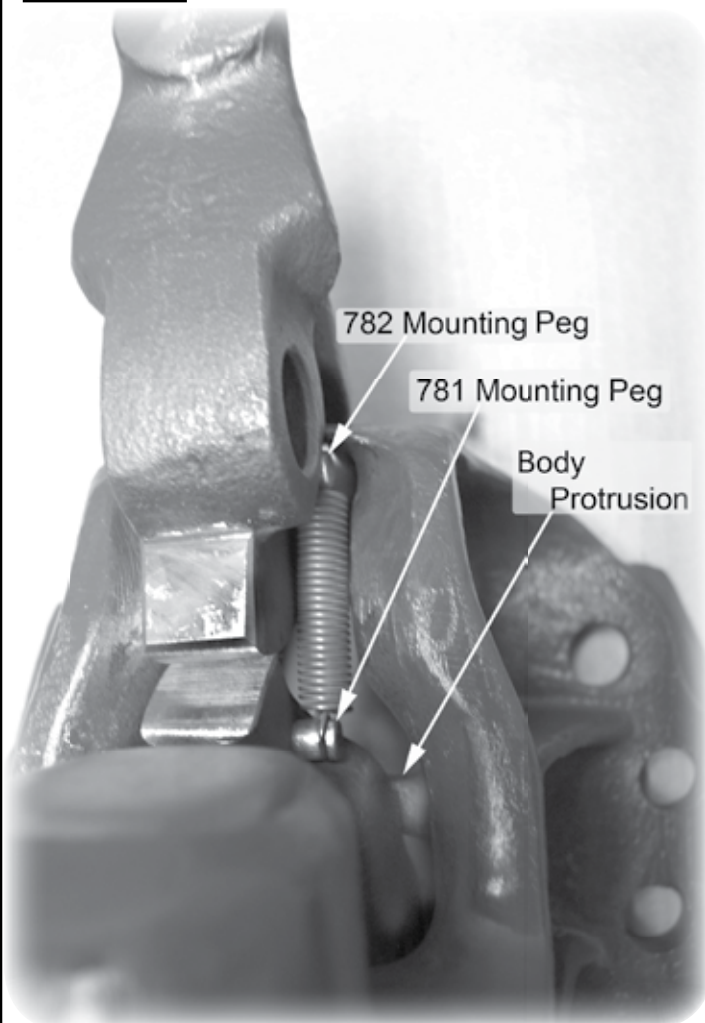


IMAGE #4

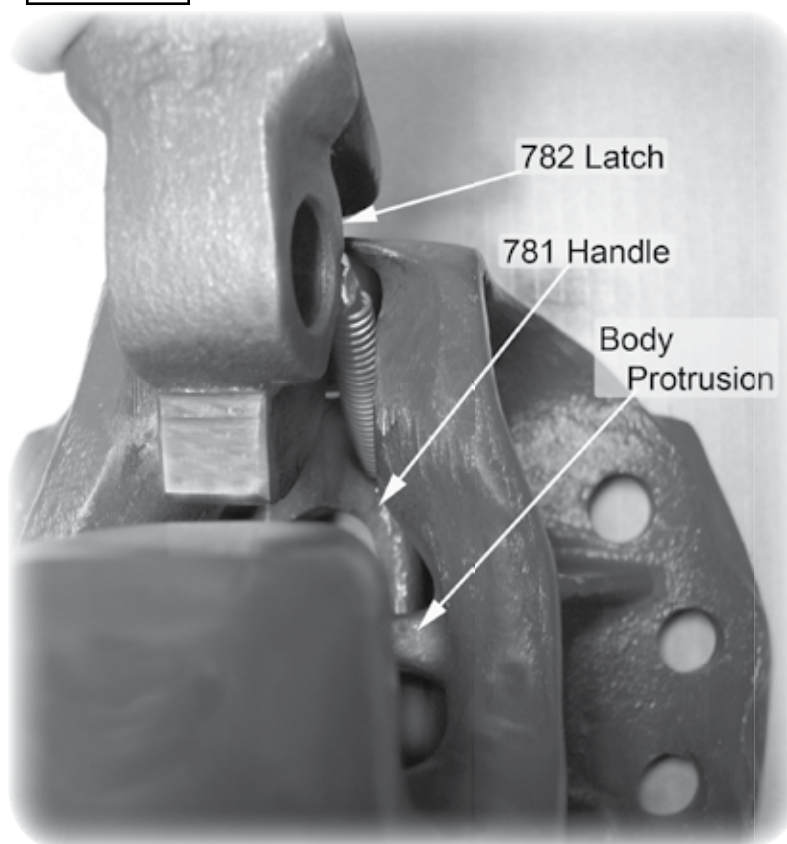


IMAGE #5

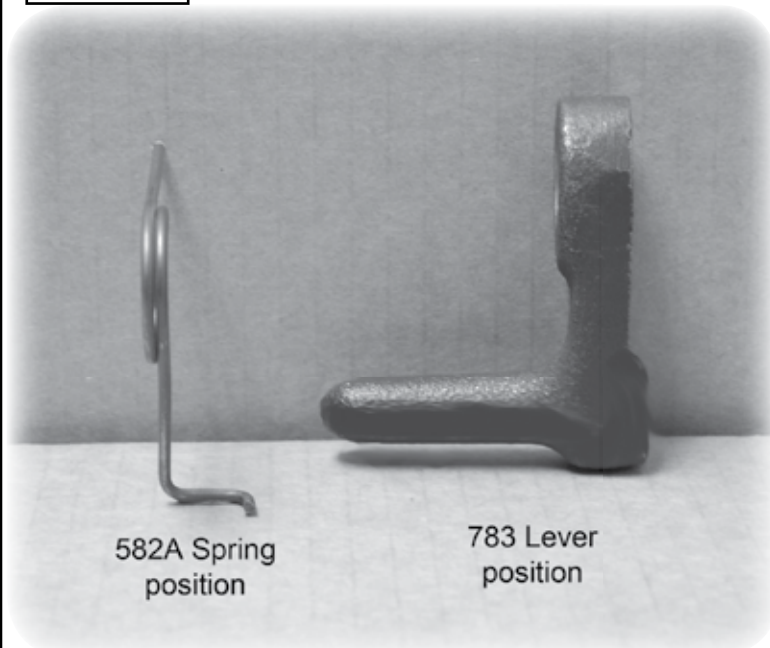


IMAGE #6





IMAGE #7

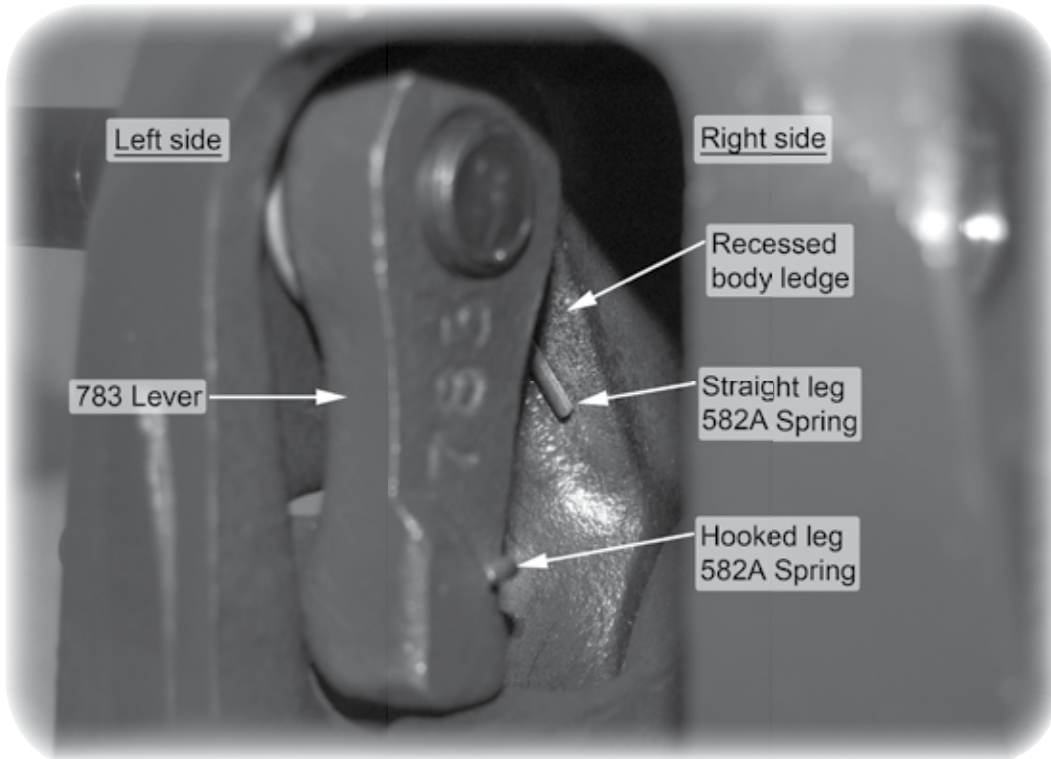
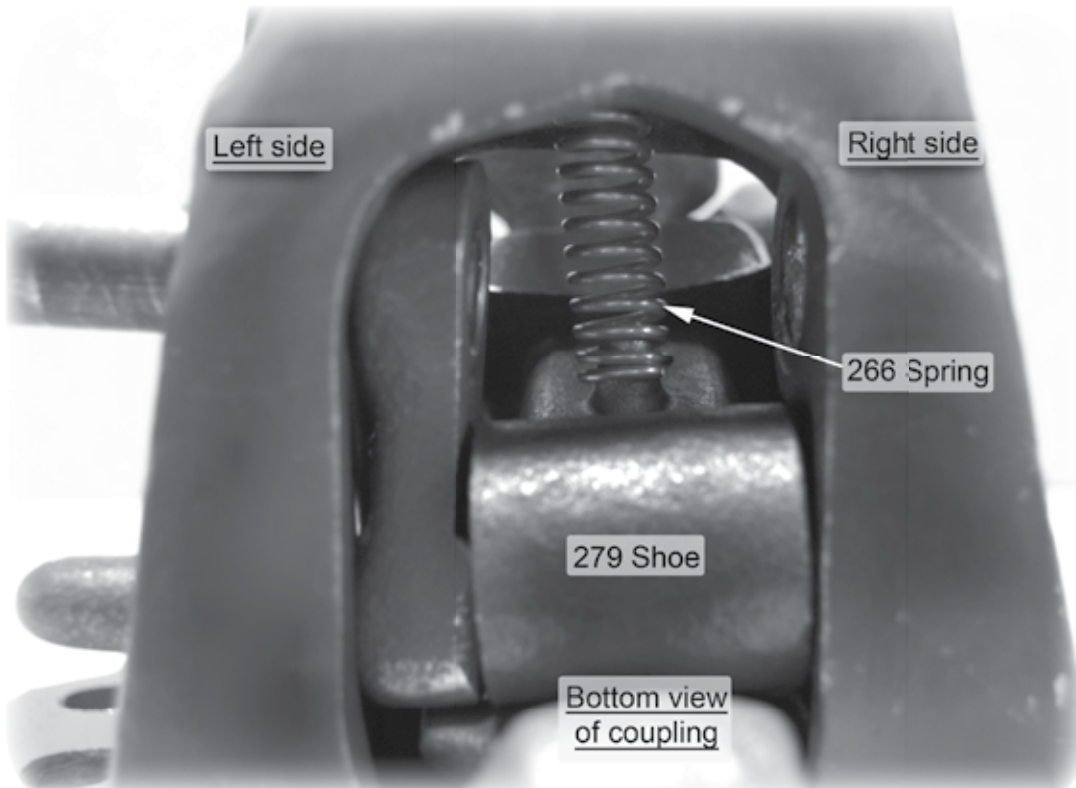


IMAGE #8



# **ATTENTION !**

**End Users must read and follow this information.**

**DISTRIBUTORS & OEM'S:** Please ensure that your customers are made aware of the following information on this page.

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>(1) <b>VERIFY THAT BOTH COUPLING'S AND DRAWBAR EYE'S RATED CAPACITIES MEET YOUR APPLICATION(S) REQUIREMENTS.</b></li><li>(2) DO NOT OVERLOAD COUPLING OR DRAWBAR EYE.</li><li>(3) INSPECT COUPLING, LATCH AND DRAWBAR EYE FOR CRACKS, BENDING DAMAGE OR EXCESSIVE WEAR. <b>DO NOT USE IF ANY OF THESE CONDITIONS EXIST!</b></li><li>(4) CHECK FOR GAP BETWEEN CLOSED LATCH AND TOP OF HORN OR COUPLING BALL. <b>DO NOT USE IF GAP IS 3/8 IN. OR MORE.</b></li><li>(5) MAKE SURE COUPLING IS LATCHED AND THAT LATCH WILL NOT OPEN.</li><li>(6) PRIOR TO USE, ALWAYS CONNECT SAFETY CHAINS OF ADEQUATE STRENGTH FOR LOAD(S) BEING TOWED.</li><li>(7) DO NOT BIND-UP (JACKKNIFE) ANY APPLICATION AS STRESSES CAN CAUSE DAMAGE TO THE COUPLING, DRAWBAR EYE, OTHER COMPONENTS OR ANY COMBINATION OF THEM. JACKKNIFING MAY RESULT IN FAILURE OF PRODUCTS OR COMPONENTS, RESULTING IN DETACHMENT OF THE TRAILER WHILE IN USE.</li></ul> | <ul style="list-style-type: none"><li>(8) DO NOT APPLY LUBRICANTS TO THE COUPLING HOOK OR DRAWBAR EYE LOOP, AS THEY CAN COVER UP POSSIBLE DAMAGE AND ACCELERATE WEAR.</li><li>(9) ALWAYS ABIDE BY ALL APPLICABLE STATE AND FEDERAL REGULATIONS GOVERNING SAFE AND PROPER TRANSPORTATION.</li><li>(10) NEVER STRIKE ANY OF THESE COMPONENTS WITH A HAMMER OR ANY OTHER DEVICE.</li><li>(11) ALWAYS VERIFY PROPER OPERATION OF LATCHING SYSTEM AND COUPLING COMPONENTS PRIOR TO DRIVE OFF.</li><li>(12) NEVER USE A COUPLING THAT YOU DO NOT FULLY UNDERSTAND HOW TO PROPERLY OPERATE AND VERIFY SECURE LATCHING OF.</li><li>(13) <b>NEVER REPLACE ANY PART IN ANY OF PREMIER'S ASSEMBLIES WITH NON-PREMIER COMPONENTS. DOING SO WILL VOID ALL WARRANTY AND POTENTIALLY COMPROMISE THE UNIT'S INTEGRITY, WHICH COULD RESULT IN PROPERTY DAMAGE, SERIOUS INJURY, OR DEATH.</b></li></ul> |
|---|---|



# WARNING!

## Important

**Installation Instructions:  
Do NOT attempt install  
without first reading all  
attached instructions.**

**Installation must be  
performed by a qualified  
mechanic only.**

PREMIER MANUFACTURING COMPANY  
THE FIRST NAME IN QUALITY COUPLINGS  
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880RK Service Guidelines  
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**WARRANTY:** We warrant all Premier products to be free from defects in material or workmanship for one year. We will repair or replace, at our option, any Premier product which our examination reveals to be defective, provided that the product is returned to our factory, at Tualatin, Oregon transportation prepaid, within one year of purchase by the first retail purchaser. Our warranty does not extend to products which have been subject to misuse, neglect, improper installation, maintenance or application, nor does our warranty extend to products which have been repaired or altered outside of Premier's facility unless the repair or alteration has been expressly authorized in writing by Premier. ***This warranty is in lieu of all other warranties, express or implied, and excludes warranties of merchantability, fitness for a particular purpose and otherwise, and in no event will Premier be liable for incidental, special, contingent or consequential damages.***

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