



890L & 890CL SERVICE GUIDELINES

BEFORE GETTING STARTED:

- ► This procedure should only be performed by a qualified mechanic.
- ► Tools required: Snap ring pliers, flat-bladed screw driver, 1/8" allen wrench, 1 1/4" socket, small hammer.
- 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 the attached Image Reference Section to identify the various product parts as well as the noted positions (i.e. TOP, BOTTOM, FRONT & BASE) of the coupling body. This will assist in the assembly process.

DISASSEMBLY

- As stated above, take a few moments to view the coupling's components and their respective positions, prior to proceeding with disassembly.
- Place the coupling on a flat work surface, with mounting base down, pintle hook pointing away from you with the handles on the left side. Remove the 891P Pin from the 891 Handle.
- 3) Place the coupling's latch system in the opened position by rotating the 896 Handle clockwise until it stops. While holding the 896 Handle in the maximum rotated position, grasp and rotate the 891 Handle

- clockwise to full rotation, then release 896 Handle. The 896 Handle should hold the 891 Handle from rotating back to its previous position.
- 4) Remove one of the 894Z-1 Snap Rings that secure the 894 Pin. While holding the 892 Hook, push the 894 Pin out and then remove the 892 Hook. If the 894 Pin is stuck, use a brass pin or other soft material to tap it out. Do not ever strike any components with steel pins or hammers.
- 5) Measure the wear area on the pintle horn of the 892 Hook. If the wear is at or exceeds 20% of the cross section, the coupling is to be considered Out of Service.
- 6) Keep clear of the 891 Handle's rotational space (as it will release quickly), and rotate the 896 Handle until the 891 Handle assembly is released.
- 7) Prior to further disassembly, position the coupling (see Image #2, Fig. 2) with the topside facing down onto work surface and view the latch & spring components in particular, noting their respective positions. This will be helpful for proper reassembly.
- 8) Reposition the coupling with mounting base down, pintle hook if in place would be pointing away from you, and the handles are on the left side, as previously described. Remove the 387 Locknut which secures 891 Handle.
- 9) Using a brass or other soft material as a punch, tap on the center of the threaded end of the 891 Handle, to free it from the tapered seats in the 893 Pawl and remove it from the coupling body. Note: When the 891 Handle is removed; the 893 Pawl, 893A Spring, and 891C Bushing are also free to be removed. If necessary you can now remove the 895Z-1 Snap Ring that resides on the handle end of the 891 Handle.
- 10) Remove the 275-50 Snap Ring from the end of the 896 Handle.
- 11) Position coupling body with the topside facing down onto work surface (see Image #2, Fig. 2 bottom view). Remove the 895C Set Screw that secures the 895 Latch to the 896 Handle. Grasp 896 Handle and pull sideways, removing it from the body. When the 896 Handle is removed, the 895 Latch and 895A



- Spring are also free to be removed. Please note that Thread Locker is used to secure the 895C Set Screw. Therefore, it may be necessary to slightly heat-up the part with a torch, in order to remove the set screw. CAUTION: Do Not to apply heat to the 895A Spring or permanent damage will occur.
- 12) If the 891P Pin & Cable are damaged, you can now remove them. Using a chisel or flat-bladed screwdriver placed at the base of the 16DS Drive Screw, tap with a hammer to wedge the 16DS up and out of the hole it resides in, and remove the 891P Pin & Cable.
- 13) Disassembly is now complete. Clean and inspect parts and body for wear and/or damage. If wear exists or damage is noted, replace affected part. NEVER ATTEMPT WELD REPAIR OF ANY DAMAGED OR WORN COMPONENT.

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) With the coupling body positioned on its topside as shown in Image #2, Fig. 2. Slide the 896 Handle into the body from the left side until 1/4" of the handle is protruding past the inside surface of the body.
- 2) Place 895 Latch into position on the end of the 896 Handle and slide 896 Handle until flush with the opposite face surface of the 895 Latch.
- 3) Place the 895A Spring into position on the right side of the 895 Latch with the straight spring leg pointing towards you (see Image #2, Fig. 2 for spring position). While holding the 895A Spring in alignment, slide the 896 Handle thru the spring and out the right side of the body until the snap ring groove is exposed.
- 4) Locate counter-drilled hole in 896 Handle and align it with the tapped hole in 895 Latch. Install 895C Set Screw into 895 Latch, making certain it maintains alignment with 896 Handle counter-drilled hole, and then tighten in position. 895C Set Screw should be flush with the surface of the 895 Latch. If it is protruding, it is not aligned with the counter-drilled hole in the 896 Handle. (See Image #2, Fig. 4 for approx. handle position when completed.) Use a permanent thread locker to secure the 895C Set Screw.
- 5) Rotate the 896 Handle clockwise checking for spring resistance. If the 895A Spring is installed correctly, a smooth increasing spring resistance should be felt when handle is rotated. If no resistance or binding is felt, the spring and/or part is not installed correctly and must be corrected prior to proceeding further.
- 6) Install 275-50 Snap Ring into groove provided on the end of the 896 Handle. Install the 894Z-1 Snap Ring into groove provided on 891 Handle.
- 7) From the right side of the body, insert the 891C Bushing into the hole (where the 891 Handle will reside), with the cut out lugs going inward first. Make sure the 891C Bushing is flush with the interior body wall.
- 8) Place 893A Spring into body (opened spring legs pointing away from you), and align spring with the hole that the 891C Bushing is resting in. When aligned, push 891C Bushing into spring loop just enough to hold spring in position. (See Image #2, Figs. 2 & 4 for spring position and orientation.)
- 9) Grasp 893 Pawl and lower into position, making certain the closed loop of the spring is closest to you and catch the backside of the 893 Pawl on the spring as shown in Image #2, Fig 4. Align the 893 Pawl with the body hole and install 891 Handle from left side of body, through the spring, pawl, and 891C Bushing. While holding 893 Pawl, rotate the 891 Handle until handle end points away from you. Then

- engage tapered flats on handle with tapered seats in 893 Pawl and push handle snuggly into 893 Pawl. Grasp the end of the 891C Bushing and rotate it to align lugs with the tapered seats in the 893 Pawl and push inward to seat. (See Image #2, Figs. 2, 3 & 4 for parts position and orientation.) Please Note: The 893 Pawl can be put in backwards, potentially causing false latching to occur. See Image #2, Fig. 4 for proper orientation prior to placing into body.
- 10) Install 387 Locknut onto 891 Handle and tighten. Make certain that during tightening of the 387 Locknut that the 891 Handle's tapered seats and the 891C Bushing lugs maintain their proper position in the 893 Pawl and remain seated during tightening.
- 11) Verify that 2-3 threads of the 891 Handle are past the end of the 387 Locknut. This assures the tapered flats on the 891 Handle and the lugs on the 891C Bushing are engaged properly with the 893 Pawl.
- 12) Rotate 896 Handle clockwise to full rotation and hold in position. Rotate 891 Handle clockwise checking for resistance. If the 893A Spring is installed correctly, smooth increasing spring resistance should be felt when handle is rotated. If no resistance or binding is felt, the spring and/or parts are not installed correctly and must be corrected prior to proceeding further.
- 13) Place coupling on mounting base with shroud opening facing up. Place latch system in opened position again. (Rotate the 896 Handle clockwise until it stops. While holding the 896 Handle in the maximum rotated position, grasp and rotate the 891 Handle clockwise to full rotation, then release 896 Handle. The 896 Handle should hold the 891 Handle from rotating back to its previous position.)
- 14) Grasp 892 Hook and position into the coupling body aligning with the body holes. Slide the 894 Pin into

- body hole and on through the 892 Hook. Install the (2) 894Z-1 Snap Rings onto the ends of the 894 Pin, and verify that both are fully seated in their grooves.
- 15) If the 891P Pin & Cable were damaged and removed, you can now replace them. Securely mount the coupling in a vise, as if mounted on a vehicle. Place 891P Pin & Cable end over hole in body and insert the 16DS Drive Screw into the hole and tap into position until fully seated.
- 16) Test the coupling for proper operation, by opening and closing it several times. If coupling operates smoothly and correctly on all attempts, it is ready to be mounted onto the vehicle and put into service.
- 17) If the 891P Pin cannot be inserted into 891 Handle when in the locked position, or if the pawl is not fully seated into the 892 Hook, then remove the hook, grind a small amount (approx. 1/32" off the end of the pintle), reinstall and test again.
- 18) Retest the coupling for proper opening and closing operation. If coupling operates smoothly and correctly on all attempts, it is ready to be mounted onto the vehicle and put into service.
- 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 Non-Air Couplings

- Do not weld on any coupling assembly
- Always use Grade-8 fasteners properly torqued
- Do not apply lubricants to the coupling hook
- 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

Model 890 Parts Available:

 891: Handle
 895: Latch

 891C: Bushing
 895A: Spring

 891P: Pin & Cable
 275-50: Snap Ring

 892: Hook
 895C: Set Screw

 893: Pawl
 896: Handle

 893A: Spring
 387: Locknut

 894: Pin
 16DS: Drive Screw

894Z-1: Snap Ring (3)

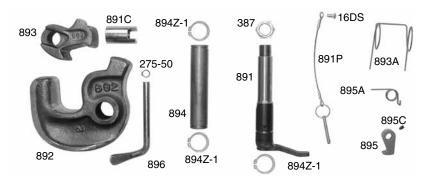
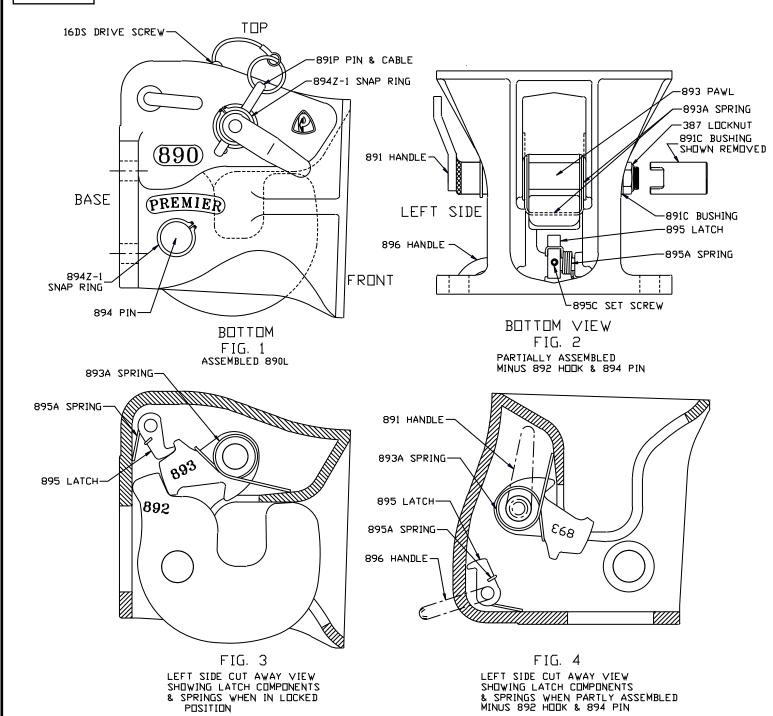


IMAGE #2



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.

- (1) VERIFY THAT BOTH COUPLING'S AND DRAWBAR EYE'S RATED CAPACITIES MEET YOUR APPLICATION(S) REQUIREMENTS.
- (2) DO NOT OVERLOAD COUPLING OR DRAWBAR EYE.
- (3) INSPECT COUPLING, LATCH AND DRAWBAR EYE FOR CRACKS, BENDING DAMAGE OR EXCESSIVE WEAR. **DO NOT USE IF ANY OF THESE CONDITIONS EXIST!**
- (4) CHECK FOR GAP BETWEEN CLOSED LATCH AND TOP OF HORN OR COUPLING BALL.

 DO NOT USE IF GAP IS 3/8 IN. OR MORE.
- (5) MAKE SURE COUPLING IS LATCHED AND THAT LATCH WILL NOT OPEN.
- (6) PRIOR TO USE, ALWAYS CONNECT SAFETY CHAINS OF ADEQUATE STRENGTH FOR LOAD(S) BEING TOWED.
- (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.

- (8) DO NOT APPLY LUBRICANTS TO THE COUPLING HOOK OR DRAWBAR EYE LOOP, AS THEY CAN COVER UP POSSIBLE DAMAGE AND ACCELERATE WEAR.
- (9) ALWAYS ABIDE BY ALL APPLICABLE STATE AND FEDERAL REGULATIONS GOVERNING SAFE AND PROPER TRANSPORTATION.
- (10) NEVER STRIKE ANY OF THESE COMPONENTS WITH A HAMMER OR ANY OTHER DEVICE.
- (11) ALWAYS VERIFY PROPER OPERATION
 OF LATCHING SYSTEM AND COUPLING
 COMPONENTS PRIOR TO DRIVE OFF.
- (12) NEVER USE A COUPLING THAT YOU DO NOT FULLY UNDERSTAND HOW TO PROPERLY OPERATE AND VERIFY SECURE LATCHING OF.
- (13) 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.

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 800-255-5387 (503) 234-9202



890L & 890CL Service Guidelines Revised: 10/2009

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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