



270 Coupling

270PK SERVICE GUIDELINES

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. Premier has Wear Gages to determine wear on our Couplings and Drawbar Eyes.
- Examine the entire coupling body for excessive wear or any damage. If any exists, do Not continue, coupling needs to be replaced.
- ► Tools required: snap ring pliers; 1 1/16" socket; 3/16" Allen wrench.
- ► 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.
- ➤ See attached Image Reference Section(s) with photos and/or drawings to identify various parts.
- ▶ Prior to disassembly, familiarize yourself with the location of all the various parts in the coupling. This will assist in the assembly process.

DISASSEMBLY

 The 270 Coupling should be positioned upright with the latch in the closed position (see Image #2 in the Image Reference Section.)

- 2) Locate the 274 Bolt, which resides within the 272 Latch, and remove the 274A Locknut from the right side. Slide the 274 Bolt out from the left side. Remove the 272 Latch.
- 3) Slide the 273 Pawl to the left and rotate it to the open position.
- 4) Remove the 273C Set Screw located on the underside of the 273 Pawl (see Image #5.)
- 5) Remove the 275-50 Snap Ring from the right side of the 275 Pin.
- 6) Slide the 275 Pin out from the left side and then remove the 273 Pawl and 273A Spring.
- 7) **IF** you are replacing the 279 Shoe and its components, then follow the instructions below: **Otherwise, continue on to #8**.
 - A) Locate the 274 Bolt, which resides within the 279 Shoe at the bottom of the coupling and remove the 274A Locknut from the right side. Slide the 274 Bolt out from the left side and remove the 279 Shoe and 266 Spring.
- 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. 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

- IF you are replacing the 279 Shoe and its components, then follow the instructions below: Otherwise continue on to #2.
 - A) Place the 266 Spring over the nipple on the 279 Shoe. Insert as assembled through the opening at the top of the coupling and into the cavity at the bottom. The 266 Spring should seat into the concave cavity, which resides below the pintle base. The 266 Spring must be slightly compressed to align the 279 Shoe hole with the bottom body hole. From the left side of the body, insert the 274 Bolt (left to right) into the bottom coupling body hole and secure on the right side with 274A Locknut. Rotate the 279 Shoe to verify proper spring tension (see Image #5.)
- 2) Using snap ring pliers, install one 275-50 Snap Ring into one groove on the 275 Pin. Verify that the snap ring is fully seated into its groove.
- 3) Take the 273A Spring and hold it so that the straight leg is on the left side pointing downward and the hooked leg is on top pointing to the right.
- 4) Holding this position, insert the spring into the top left side interior body, aligning it with the 275 Pin body hole. The straight leg of the spring aligns along the interior body sidewall (see Image #3.)
- 5) Note the "flat" area on the 275 Pin. Insert the 275 Pin from the left side into the body until the 273A Spring rests on it.
- 6) Insert the 273 Pawl into the top of the coupling, keeping the hooked leg of the spring on the bottom catch ledge of the pawl.
- 7) Align the pawl hole with the 275 Pin. Slide the 275 Pin through the pawl and out the other side of the coupling body (see Image #4.)

- 8) If the spring is installed correctly, smooth increasing spring resistance should be felt when rotated to the open position. If no resistance or binding is felt, the spring and/or parts are not installed correctly. Reassemble correctly.
- 9) Slide the 273 Pawl to the left and rotate it to the open position, to locate the set screw hole on the underside of the 273 Pawl (see Image #5.)
- 10) Rotate the 275 Pin until the "flat" aligns with the set screw hole, then insert the 273C Set Screw and tighten.
- 11) Use caution and allow the spring loaded 273 Pawl to return to the closed position.
- 12) Using snap ring pliers, install the second 275-50 Snap Ring, on the right side, into the groove on the 275 Pin. Verify that the snap ring is fully seated into its groove.
- 13) Slide the 273 Pawl to the left and rotate it to the open position. While holding the pawl in the open position, locate the 274 Bolt and partially insert it through the left side body hole.
- 14) Insert the 272 Latch into the body, until the latch hole aligns with the 274 Bolt and slide the bolt through until the bolt head is flush against the body. Secure the bolt on right side with the 274A Locknut.
- 15) Once the coupling is assembled it 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.

ASSEMBLY IS COMPLETE

NOTE: Use only new Grade-8 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.



IMAGE REFERENCE SECTION

IMAGE #1

270PK Parts Kit Includes:

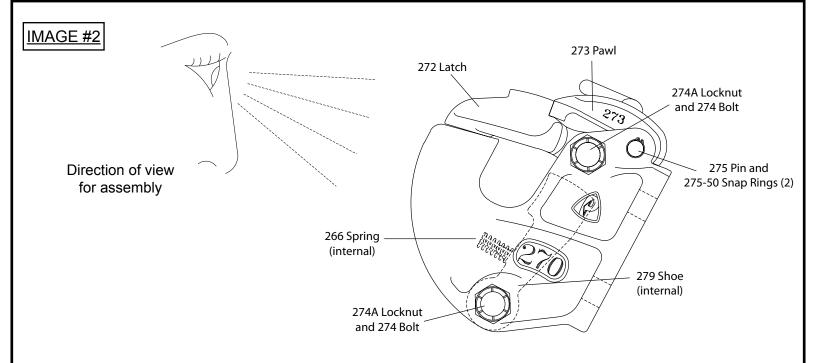
274A: Locknut 275: Pin

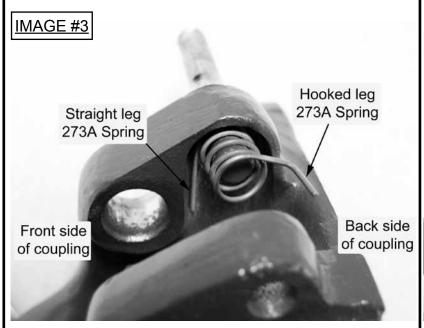
275-50: Snap Ring (2)

*Not included in parts kit, available individually









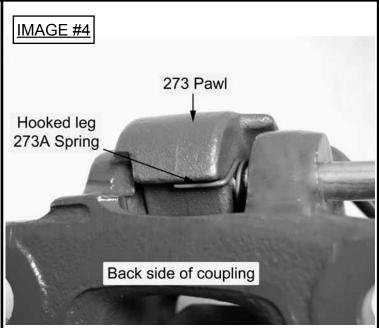
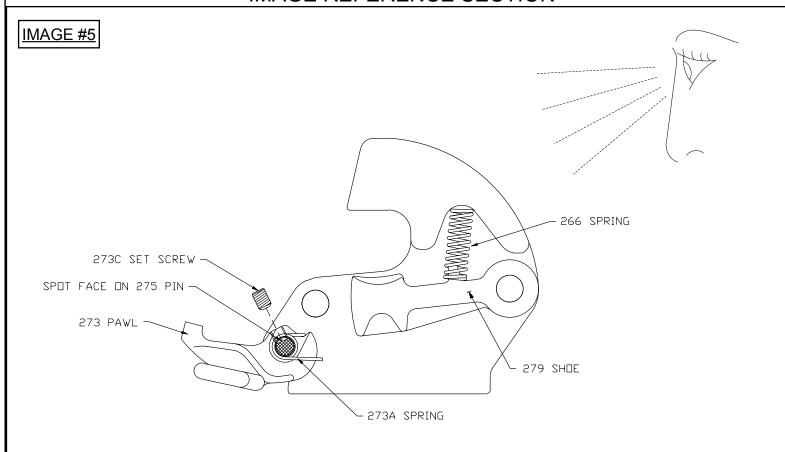


IMAGE REFERENCE SECTION



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



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



270PK Service Guidelines 01/2010

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.*

DISCLAIMER: Although great care has been taken to ensure accurate information throughout this document, Premier Manufacturing Company must reserve the right to alter any information contained within. These changes include but are not limited to: Dimensional changes, load capacity and availability of any part or assembly.

© 2010 Premier Manufacturing Company

All rights reserved. Any reproduction of the photographic images or any other portion of this document, including but not limited to the photocopying, or retention and/or storage in a retrieval system of any kind, is strictly prohibited without prior express written permission from Premier Manufacturing Company.

