



PREMIER

THE FIRST NAME IN QUALITY COUPLINGS

580 Coupling



580RK SERVICE GUIDELINES

For coupling models: 580 & 580J

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: 1 1/4" & 15/16" sockets, flathead screwdriver, adjustable wrench, & soft-faced hammer.
- ▶ Safety glasses are required for all of the following procedures.
- ▶ **Note:** Use caution when removing and replacing springs. They can eject from the coupling with force.
- ▶ See attached Image Reference Section(s) with photos and/or drawings to identify various parts.
- ▶ See Image #1 for labeled part numbers.
- ▶ Prior to disassembly, familiarize yourself with the location of all the various parts in the coupling. This will assist in the assembly process.

DISASSEMBLY

- 1) The 580 Coupling should be positioned upright with the latch in the closed position (see Image #2 in the Image Reference Section.)
- 2) Locate the 584 Bolt and remove the 387 Locknut from the right side. Slide the 584 Bolt out from the left side.
- 3) Remove the 582 Latch and the 582A Spring.
- 4) Locate the 581A Handle and remove the 375A Locknut and 581BB Clip & Cable, from the left side.

- 5) Using a soft-faced hammer, tap the 581A Handle squarely on the end to dislodge it from the 583 Pawl and remove it. **Note:** The 581A Handle can become lodged onto the 583 Pawl and may require penetrating lubricant to be applied, before it will loosen (see Image #3).
- 6) Position the coupling upside-down so you can reach into the bottom body hole of the coupling and remove the 266 Spring (see Image #4).
- 7) With the coupling upside-down, position it so that the backside/mounting base is facing you.
- 8) Using a flathead screwdriver, release the straight leg of the 585 Spring from the internal body ledge (see Image #5). This will reduce the spring tension.
- 9) Now refer to Image #6 to grab the 583 Pawl and pull it out of the bottom body hole.
- 10) 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.
- ▶ 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) 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.**
- 2) Place the 580 Coupling Body upside-down, with the backside/mounting base facing you.
- 3) Hold the 583 Pawl vertical, with the nipple at the top, and place the 585 Spring onto the 583 Pawl as shown in Image #7.
- 4) Holding these in position, with the nipple facing away from you, insert and slide the 583 Pawl and 585 Spring in through the bottom of the coupling body (see Image #8). Push in until the holes align.
- 5) The straight leg of the 585 Spring should slide into position behind the internal body ledge. If not, use a flathead screwdriver to position the straight leg (see Image #9).
- 6) Slide the 581A Handle into the coupling from the right side, making certain the two tapered handle flats are engaged fully with the 583 Pawl.
- 7) Rotate the coupling body onto its mounting base and verify that the handle is in the position shown in Image #10.
- 8) Insert the 581C Bushing onto the left side of the 581A Handle and into the coupling body hole (see Image #10). **Note:** Make certain the groove in the bushing is towards the outside of the coupling.
- 9) Place the washer portion of the 581BB Clip & Cable onto the 581A Handle and then secure the handle with the 375A Locknut (see Image #11). Torque to 30 ft-lbs.
- 10) Take the 266 Spring and insert it through the bottom body hole. Place one end of the spring into the concave portion of the pintle horn base, then slightly compress the spring, placing the other end over the nipple of the 583 Pawl.
- 11) Reposition the coupling body to the upright sitting position, with the backside/mounting base facing you.
- 12) Hold the 582A Spring by the hooked leg, in the vertical position, with the straight leg pointing toward you. Insert it through the backside of the coupling, on the right side of the 583 Pawl. Position 582A Spring with hole in body wall (see Image #12).
- 13) Slide the 584 Bolt partially through the bolt hole, from right side – Just far enough to hold the 585 Spring in place (see Image #13).
- 14) Slide the 582 Latch into the front of the coupling body while looking through the backside, and use a flathead screwdriver to lift the hooked leg of the 582A Spring over the protuberance/knob of the 582 Latch (see Images #14, #15 & #16).
- 15) Now, simultaneously, use your right hand to push the 584 Bolt to the left and at the same time push down on the top of the coupling with left hand, so that the 581A Handle engages with the counter, causing it to rotate some.
- 16) This will allow the 582 Latch to fully engage, allowing the 584 Bolt to pass through the latch.
- 17) Secure the 584 Bolt with the 387 Locknut. Torque to 60 ft-lbs.
- 18) Once the coupling is assembled it should be opened and closed several times, testing for smooth and correct operation.
- 19) Place the 581BB Clip onto the groove of the 581C Bushing. Now attempt to open the coupling. If the coupling is assembled properly, the clip will stop against the body sidewall and thus not allow the 581 Handle to rotate into the open position.
- 20) **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.

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

580RK Parts Kit Includes:

- | | |
|---------------------|-----------------------|
| 266: Spring | 583: Pawl |
| 375A: Locknut | 584: Bolt |
| 387: Locknut | 585: Spring |
| 581A: Handle | *581: Handle Assembly |
| 581BB: Clip & Cable | |
| 581C: Bushing | |
| 582: Latch | |
| 582A: Spring | |

*Available individually.

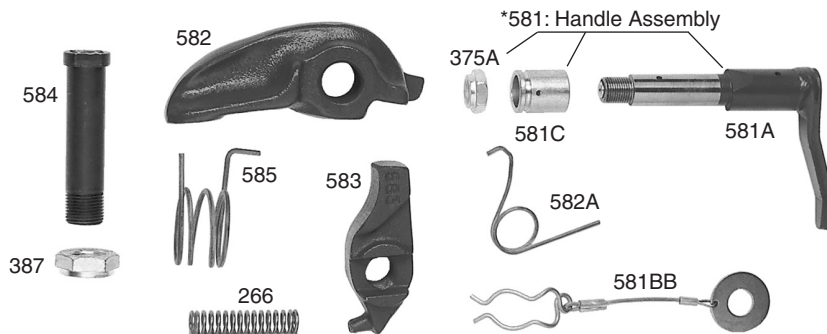


IMAGE #2

TOPSIDE

584 BOLT AND 387 LOCKNUT

582 LATCH

583 PAWL
(INTERNAL)

585 SPRING
(INTERNAL)

FRONTSIDE

BACKSIDE MOUNTING BASE

581A HANDLE
ASSEMBLY

266 SPRING
(INTERNAL)

BOTTOMSIDE

IMAGE #3

Backside/mounting base
of 580 Coupling

TOPSIDE

- 583 Pawl
- 581A Handle
- Apply lube if needed to loosen.

BOTTOMSIDE

IMAGE #4

266 Spring
583 Pawl

BOTTOMSIDE of 580 coupling



IMAGE REFERENCE SECTION

IMAGE #5

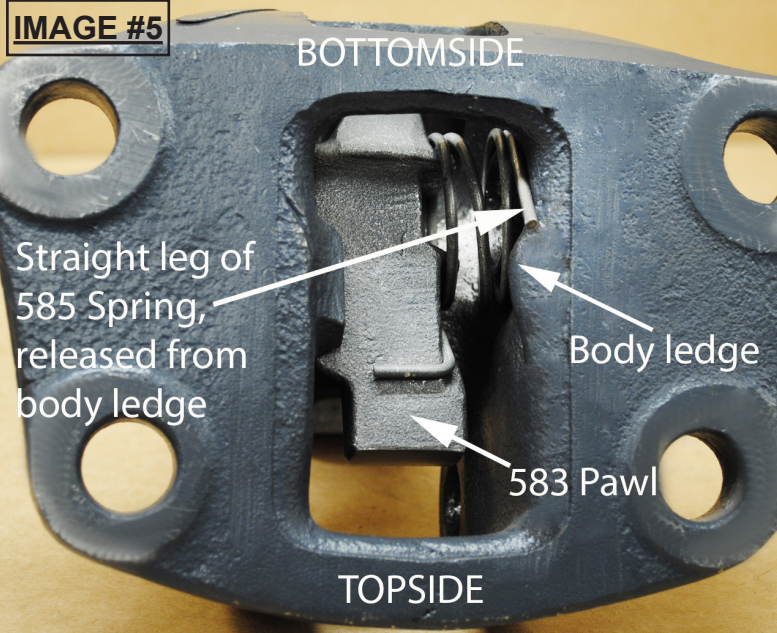


IMAGE #8

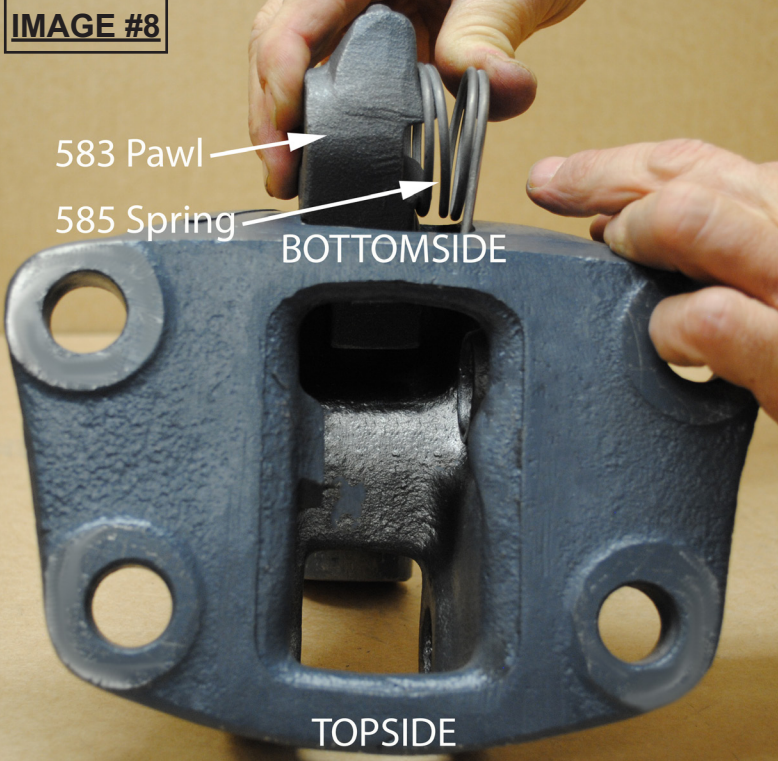


IMAGE #6

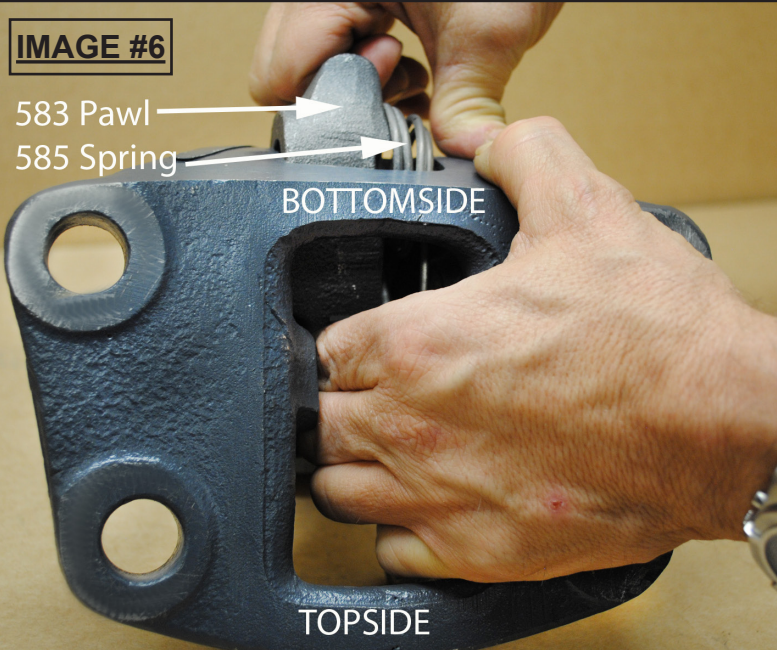


IMAGE #9

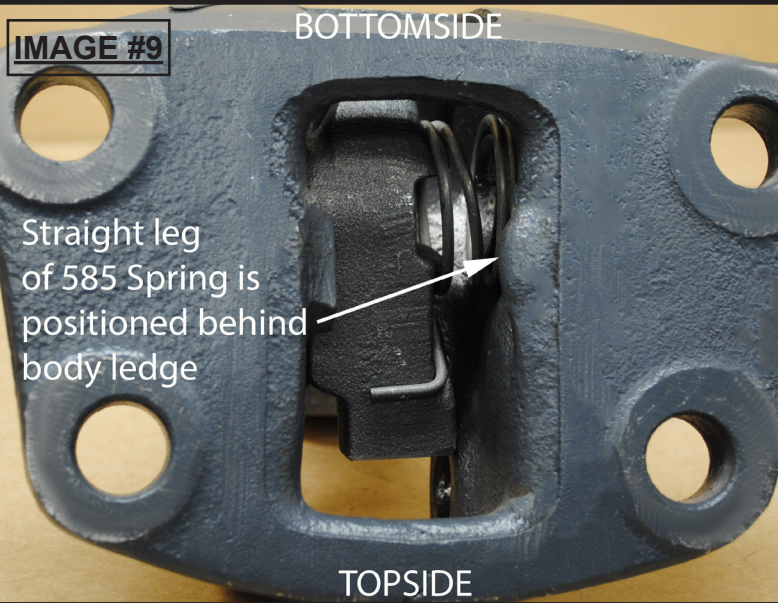


IMAGE #7

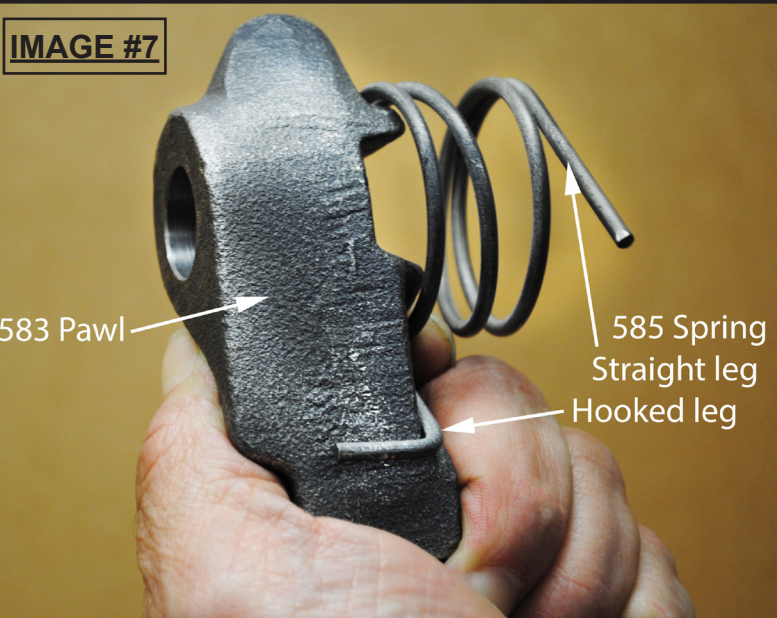
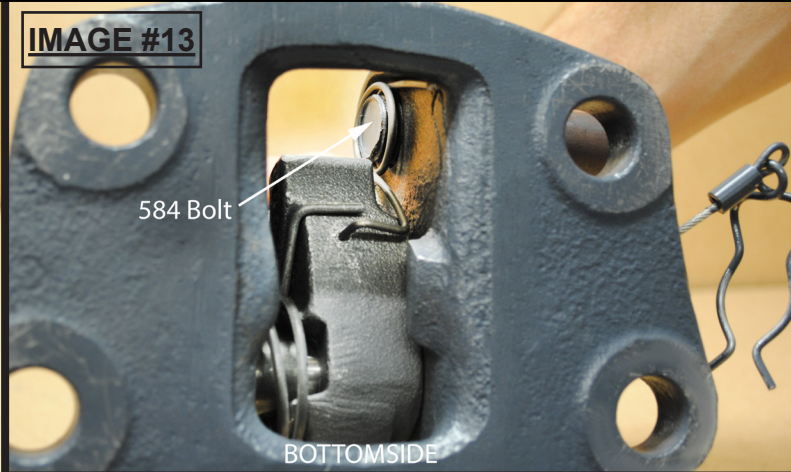


IMAGE REFERENCE SECTION

IMAGE #10

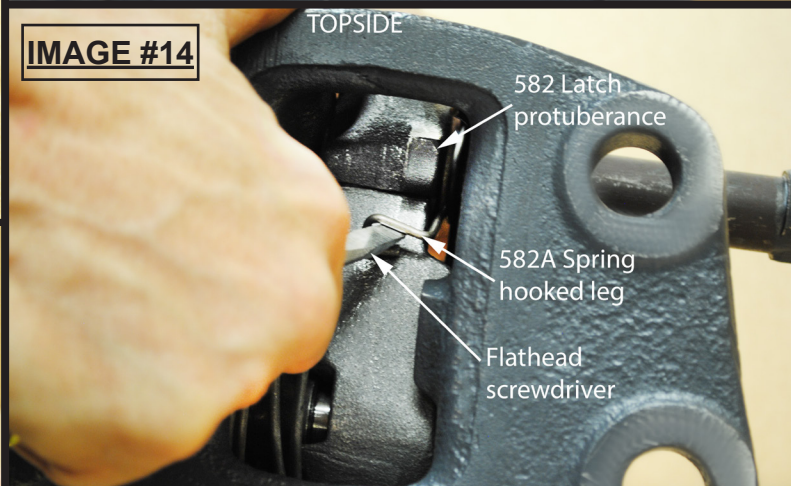


IMAGE #13



BOTTOMSIDE

IMAGE #14



TOPSIDE

IMAGE #11

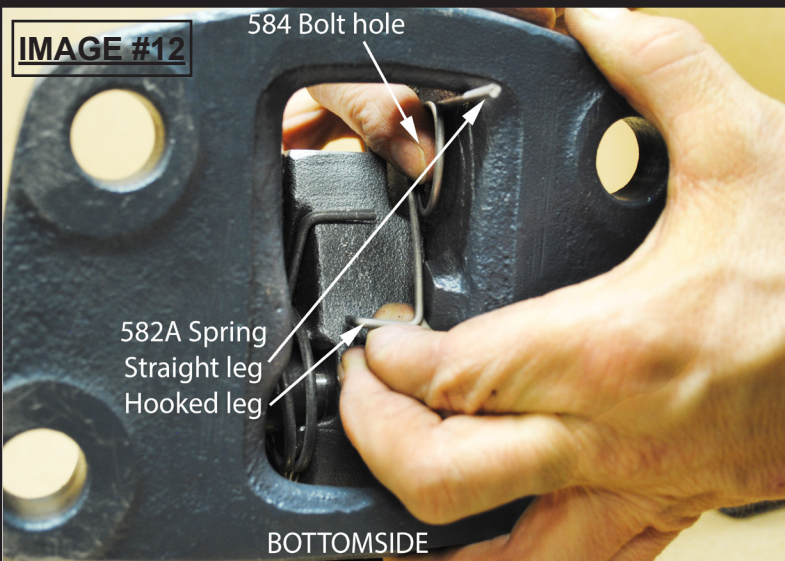


IMAGE #15



TOPSIDE

IMAGE #12



BOTTOMSIDE

IMAGE #16



CONTINUE TO NEXT PAGE FOR
IMPORTANT INFORMATION.



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
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580RK Service Guidelines
01/2013

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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