

LY1 Clevis Pin Retainer**PURPOSE**

Replace forward dovetail hydraulic cylinder clevis pin retainer.

Safety Precautions

Before performing any repairs or modifications on a vehicle, make sure it is securely supported using lifting or support equipment rated for the vehicle's weight.

CAUTION

Never depend on the axles and jacks alone to support the vehicle when making repairs or modifications. A vehicle that is not adequately supported can fall and cause severe injuries or death.

CAUTION

Personal protective equipment must be worn when making vehicle repairs or modifications. This includes, but is not limited to, safety glasses, steel toe boots, and gloves.

Models Affected

LY1 – All Lengths

OVERVIEW

To maintain proper retention and reliable operation of the clevis pin in this assembly, customers are advised to use the recommended **hairpin clip** in place of a standard cotter pin. While cotter pins were used in some assemblies, they may not provide sufficient strength under vibration and load, which can allow the clevis pin to loosen over time.

For best results, we recommend inspecting affected assemblies and replacing any cotter pins found with hairpin clips. This proactive measure will help ensure secure engagement and long-term durability of the assembly.

Tools Required

- Pliers (needle-nose, combination, or slip-joint)

INSPECTION/CORRECTION

1. Lower hydraulic dovetail until it contacts the ground and supports itself. (See Figure 3)
2. Locate the clevis pin assembly. (See Figure 4)
The clevis pin assembly will be located under the hydraulic dovetail in the lifting mechanism at the end of the hydraulic cylinder clevis.
3. Inspect retaining clip type.
Examine the end of the clevis pin to determine the type of retaining clip installed.
 - If a cotter pin is present, it must be replaced. (See Figure 1 & 5)
 - If a hairpin clip is already installed, no action is required. (See Figure 2 & 9)

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INSPECTION/CORRECTION ~Continued from page 1~

4. Remove cotter pin (if present). (See Figure 6 & 7)
 - Using needle-nose pliers, straighten the bent cotter pin legs.
 - Secure the cotter pin head with pliers and carefully remove the pin.
 - Discard the cotter pin – it is not approved for reuse in this application.
5. Install hairpin clip. (See Figure 8 & 9)
 - Insert the specified hairpin clip fully through the hole in the clevis pin until it seats securely. Ensure the clip engages both sides of the pin and retains spring tension.
6. Verify retention.
 - Confirm that the hairpin clip is properly seated and cannot be pulled free by hand. The clip should resist vibration and axial movement.
7. Inspect opposing side.
 - If driver's side was inspected and replaced first, inspect and replace the passenger's side by following steps 2 through 6.
8. Document completion.
 - Record the inspection and replacement in the applicable service log or maintenance record, noting the use of the approved hairpin clip.

Components for clevis pin retainer replacement

- 2 – PJ PN 190420 (LY1 Hyd. Dovetail Forward Clovis Pin Hairpin Retainer)
0.148" wire diameter, 0.75" diam. end, 3.313" long
(McMaster-Carr PN 98335A085)

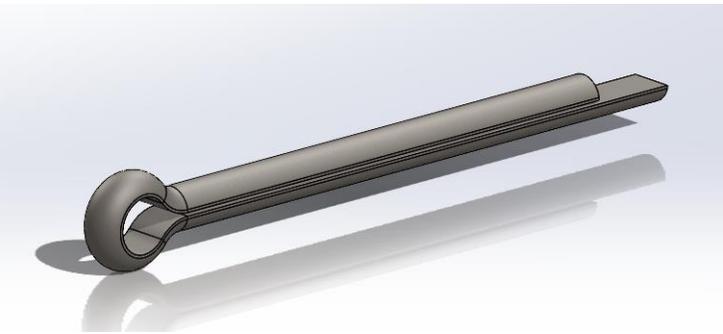


Figure 1. Cotter Pin

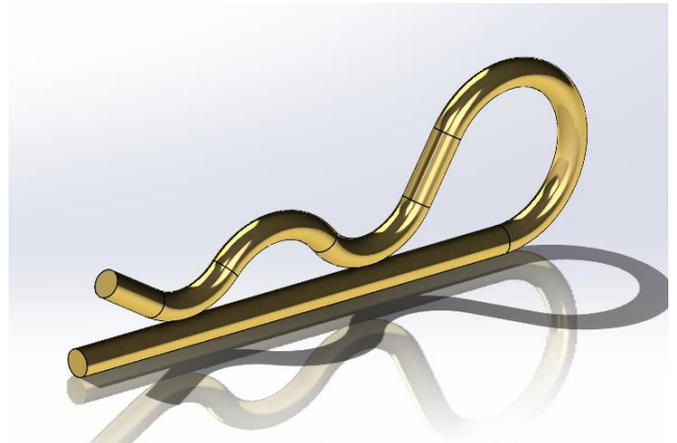


Figure 2. Hairpin Clip

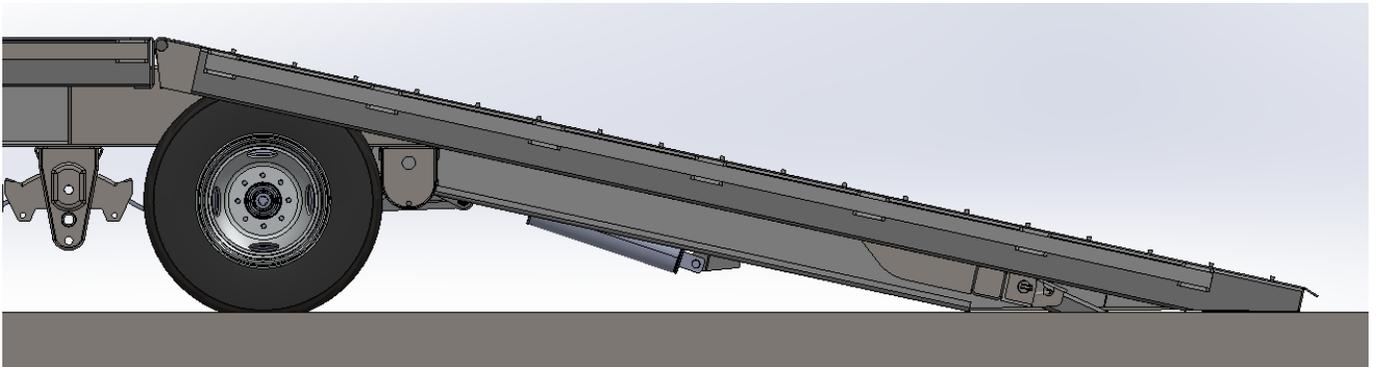
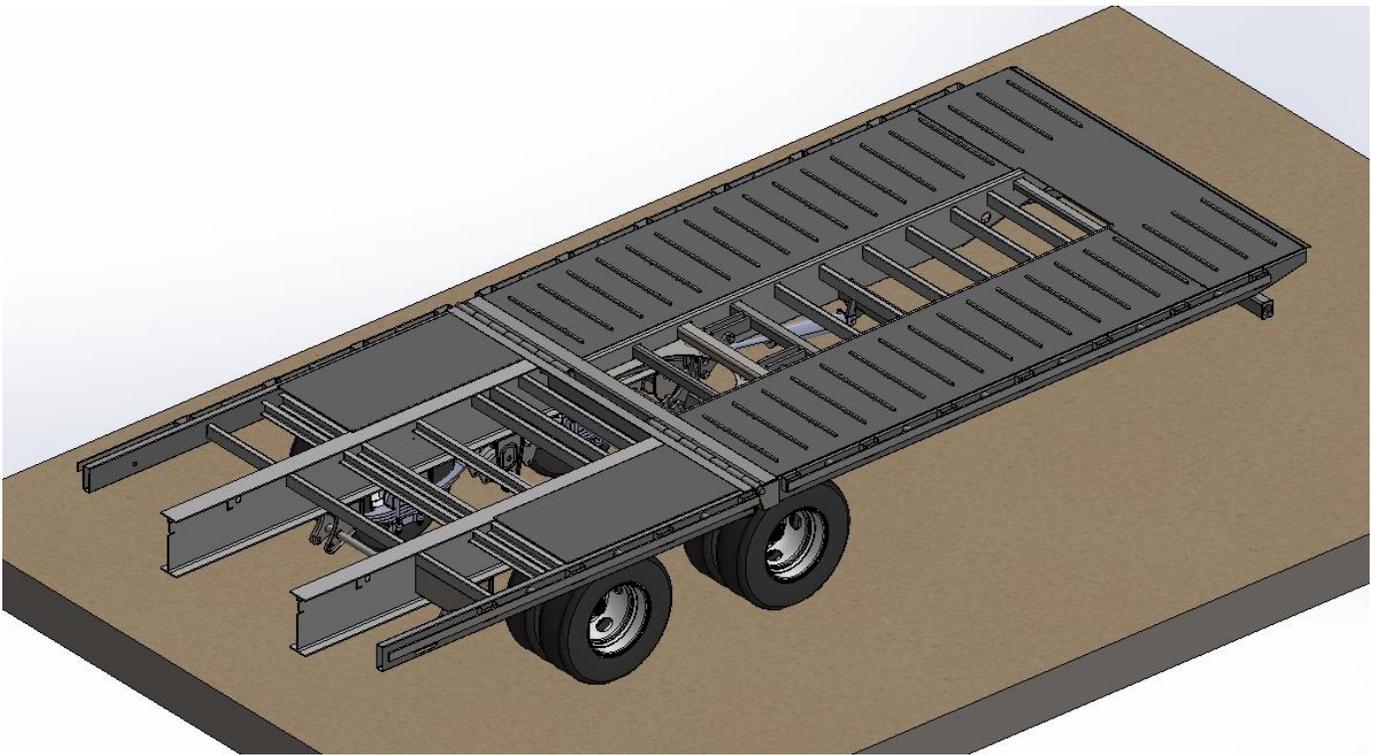


Figure 3. Lower the hydraulic dovetail until the end is resting on the ground.

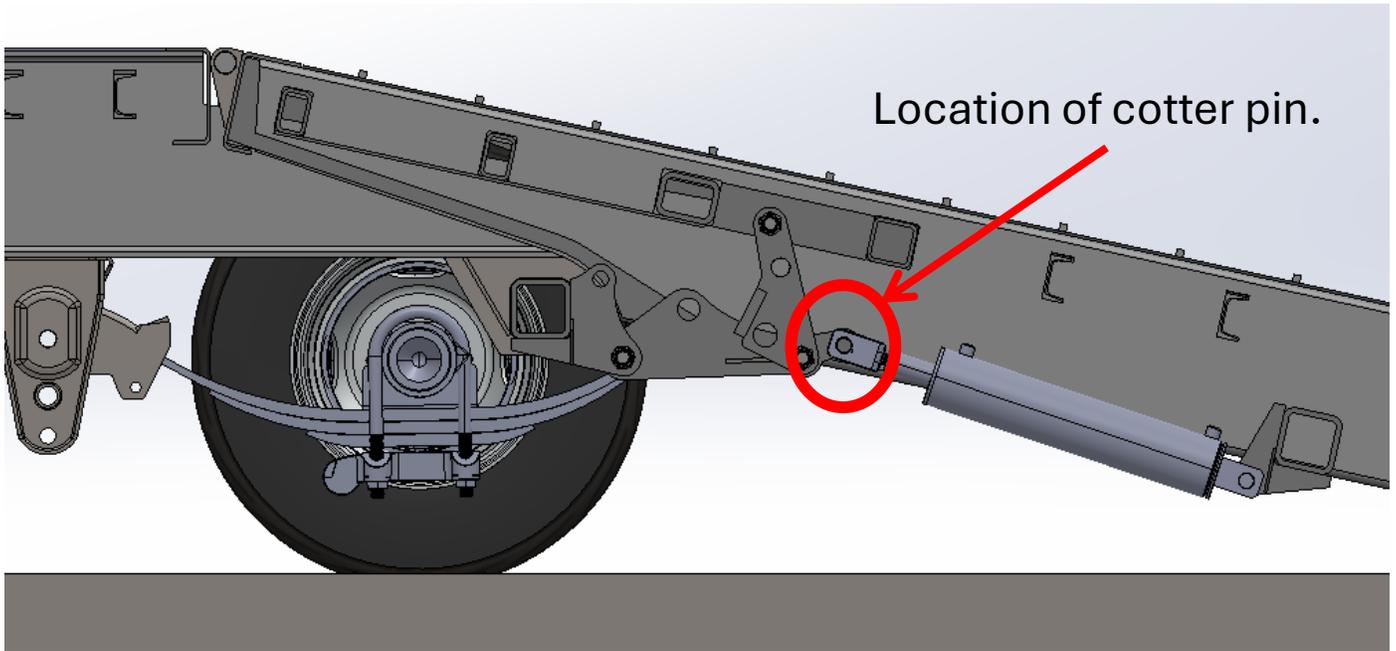


Figure 4. Components hidden for clarity.

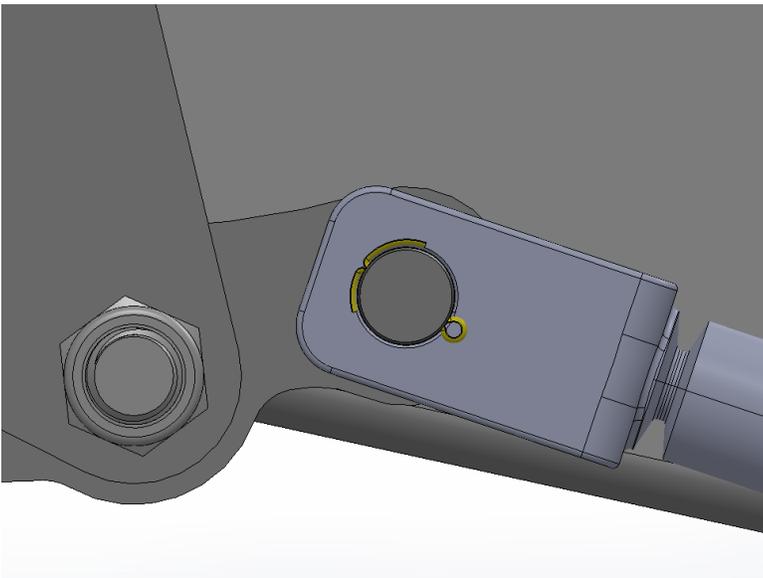


Figure 5. Installed cotter pin

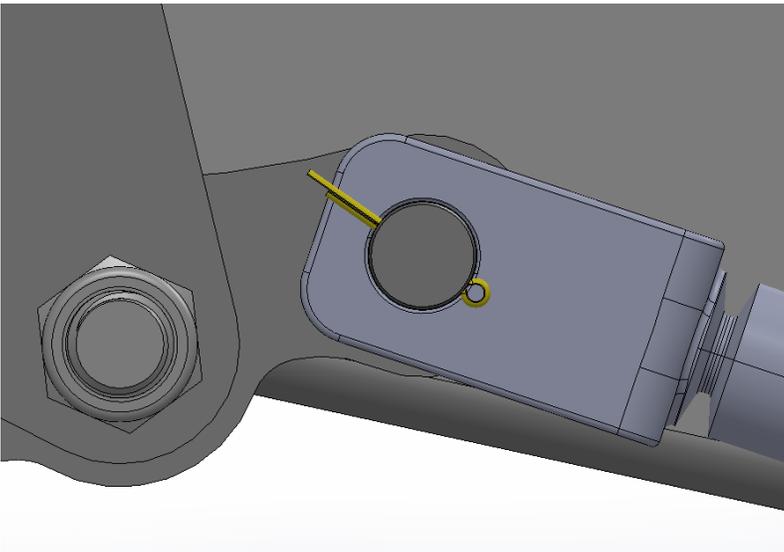


Figure 6. Straighten cotter pin legs

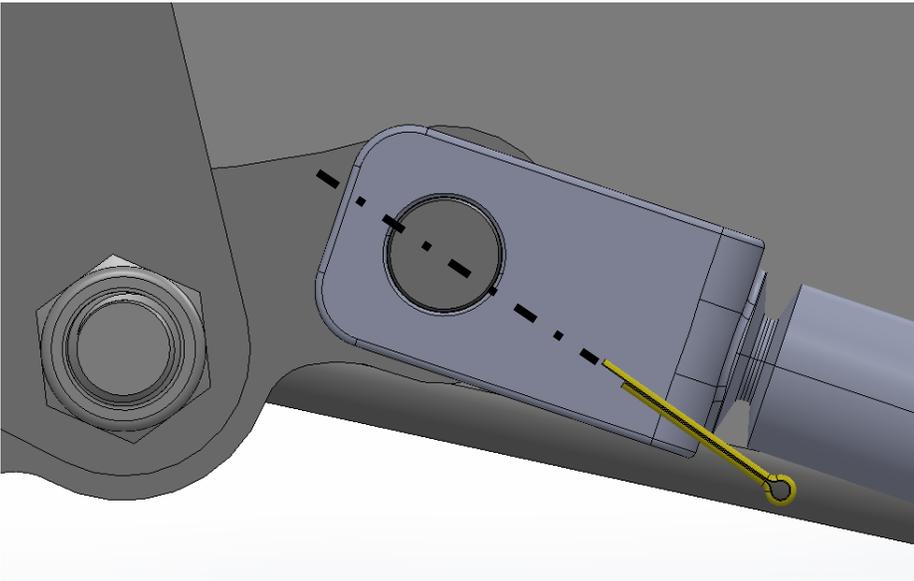


Figure 7. Remove cotter pin

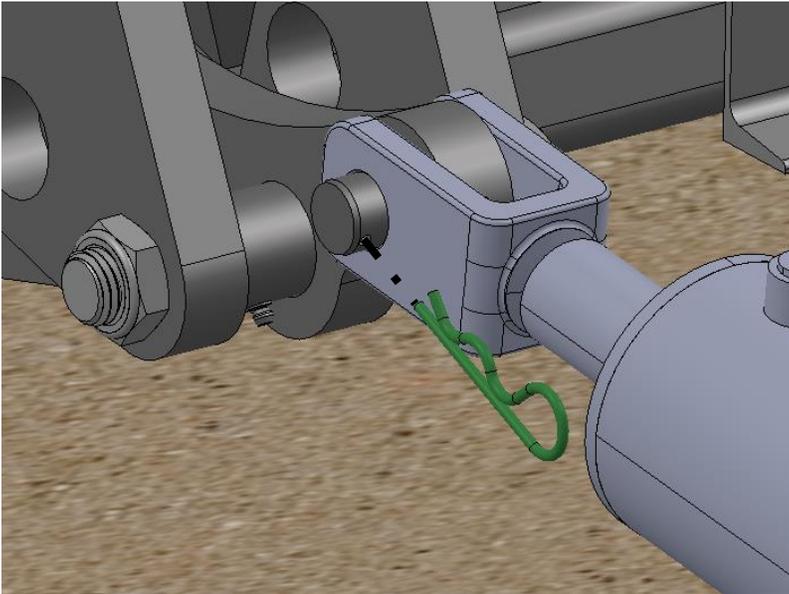


Figure 8. Align hairpin clip to clevis pin end hole

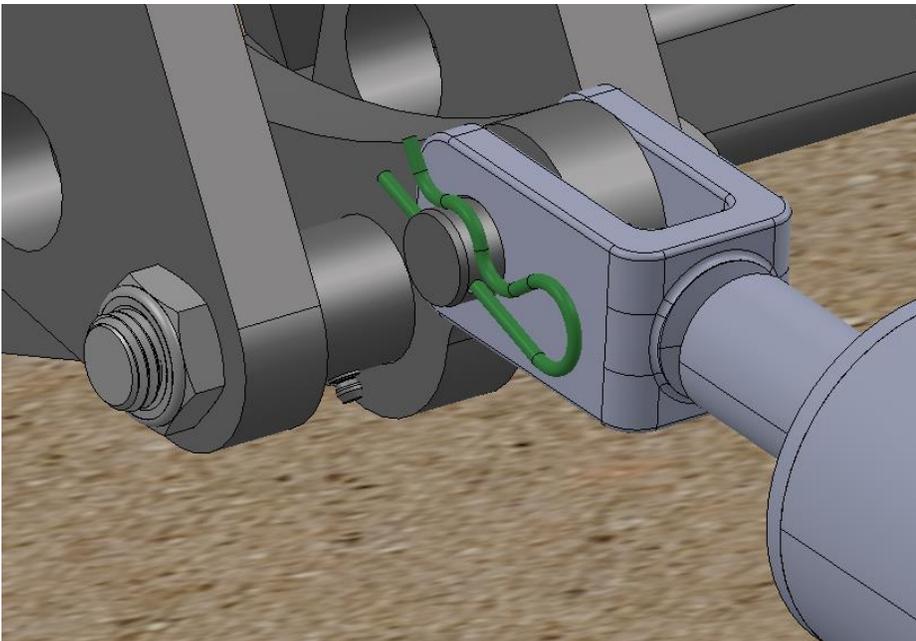


Figure 9. Insert hairpin clip into clevis pin end hole