

Quick Hitch Grapple Installation Manual



THIS INSTALLATION GUIDE DESCRIBES THE METHOD FOR INSTALLING YOUR GRAPPLE TO THE QUICK HITCH.

1. The first step is to remove the angling cylinder. Angle the front part of the hitch to the right to get the angling cylinder fully extended. Next, you need to remove the cylinder. The hardest part of this is removing the cotter pin from the clevis pin marked (A). The other pin (B) is easier because the cotter pin is exposed on the bottom. Save these cotter pins for later use.



2. The next step is to install the mounting bracket for relocating the angling cylinder.

THERE ARE 2 METHODS DESCRIBED FOR HOW TO ATTACH THIS CYLINDER MOUNTING BRACKET:

- a) THE CARRIAGE BOLT METHOD (This is the most secure method and is recommended)**
- b) THE PIN(S) ONLY METHOD (Not for the 318, 322, 332, 420 or 430 style quick hitches)**

a) THE CARRIAGE BOLT METHOD

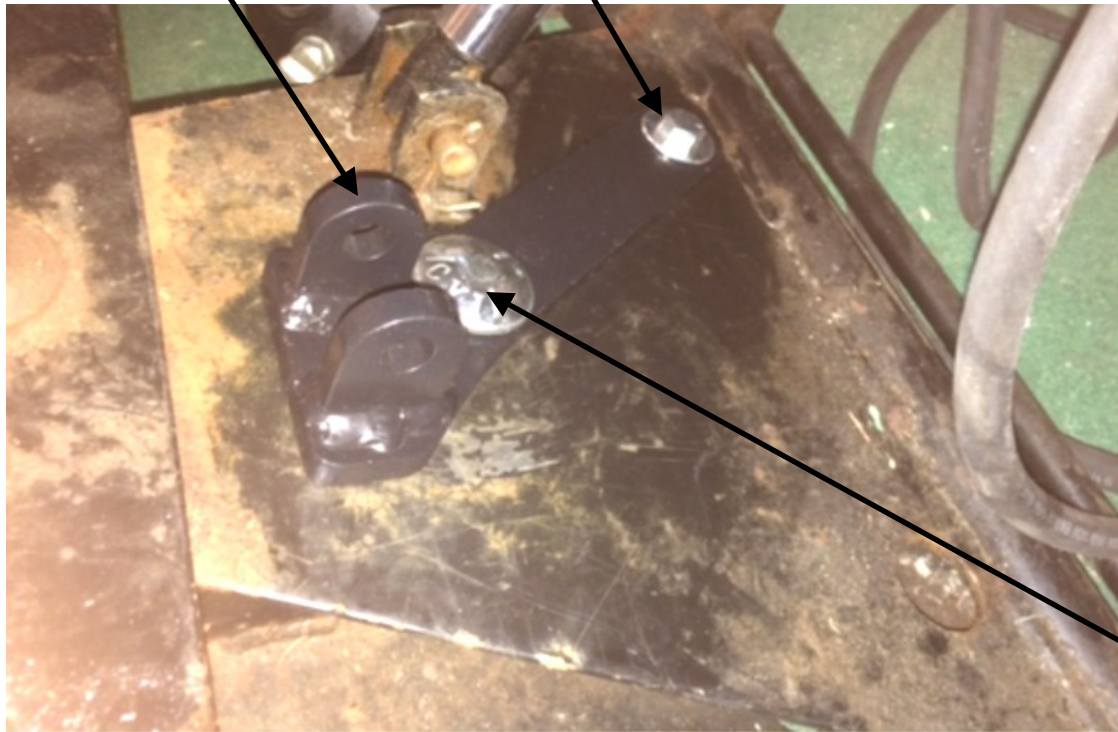
Place the bracket on the top face of the quick hitch as shown with the square hole lining up with the $\frac{3}{4}$ " hole on the hitch (C). If your mounting bracket has a bolt and nut assembly (marked A) already in place, do not remove it. The nut on the bottom should fit right inside the hole marked (B) on the quick hitch. This is used as an anti-rotation feature for the bracket. If your bracket has an empty hole at this location then insert the provided clevis pin which will serve as the anti-rotation feature. Next, insert the carriage bolt (D) through the bracket and through the quick hitch until it protrudes from the bottom and sits flush on the bracket at the top. See next slide....

Mounting
Bracket

A

C

B

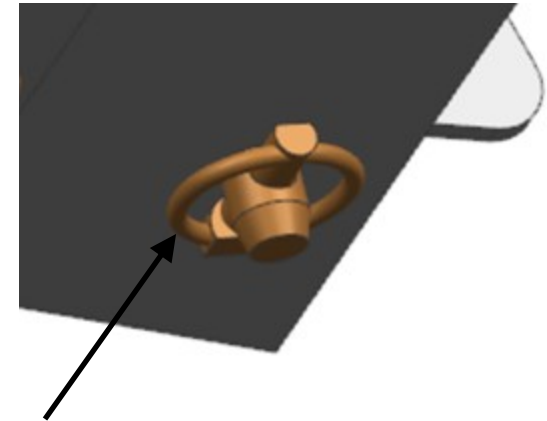


D

This carriage bolt is going through the hole that is used to pin the front of the hitch to keep it from rotating. You must have the front half squared up and facing forward to get the holes to line up so the bolt will slide all the way through. Once through, place the flat washer, lock washer and the nut onto the end of the bolt. Tighten the nut with a wrench until the lock washer is flat and the nut is snug. The carriage bolt is square on the bracket side which makes this a single tool no hassle installation. Note: The nut is not tightened in this picture.



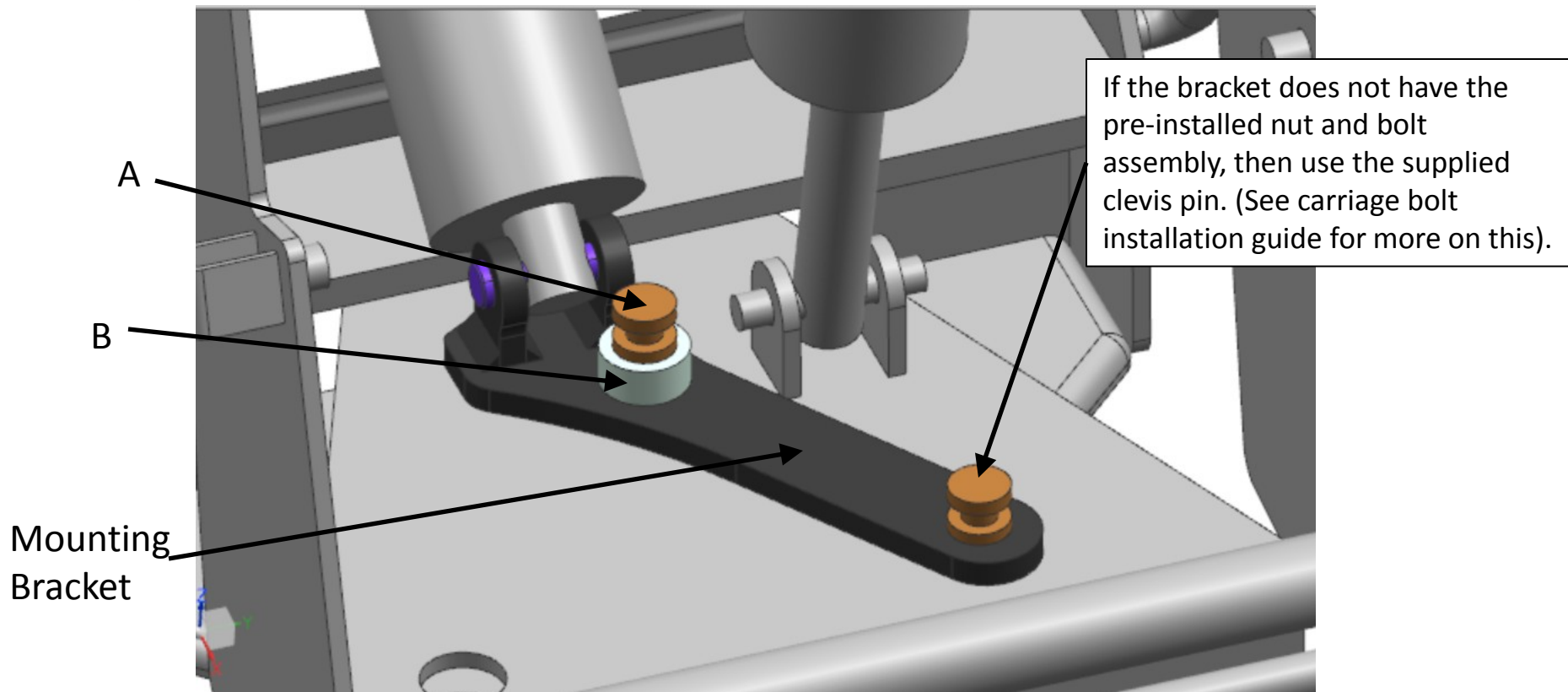
Flat washer (1st)
Lock washer (2nd)
Nut (last)



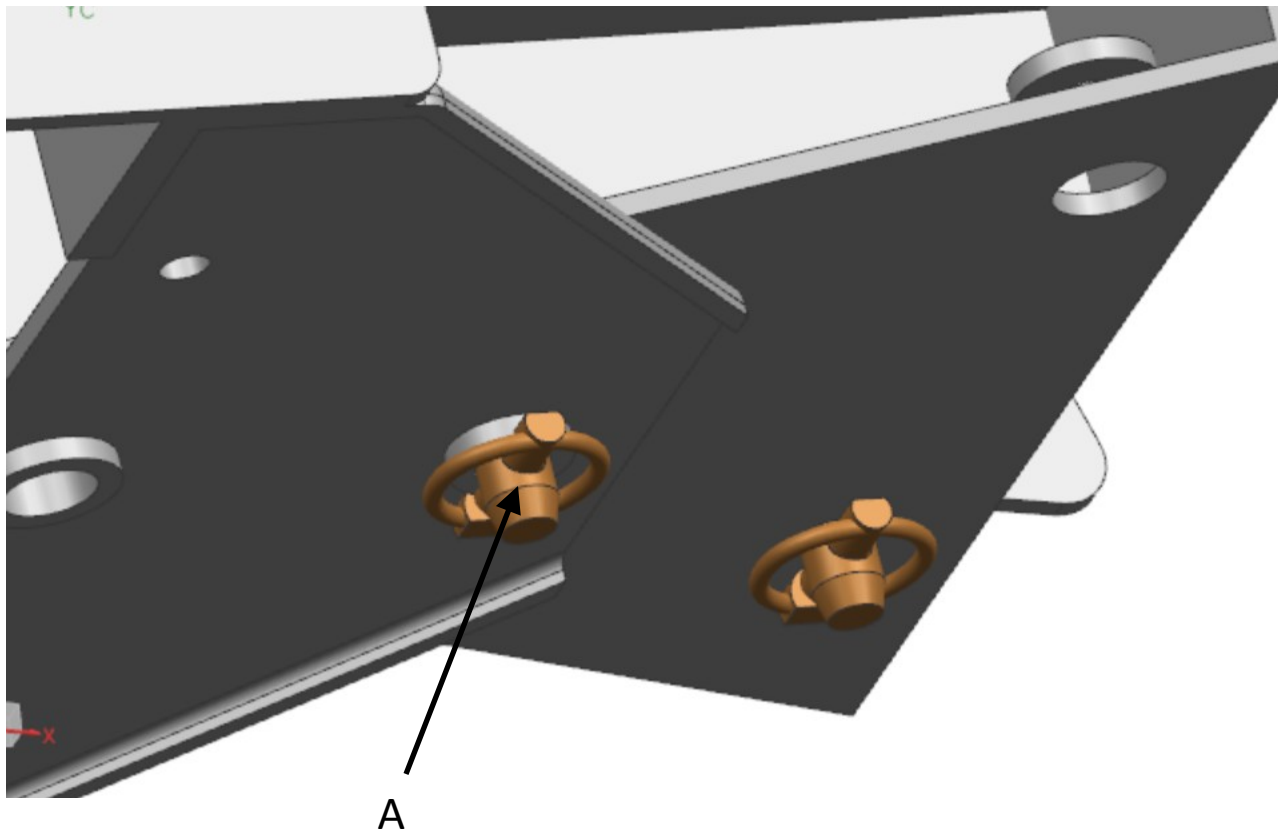
For brackets using the pin on the rearward most hole (for anti-rotation), install the supplied lynch pin on the bottom to secure it.

b) THE PIN(S) ONLY METHOD (Not for the 318, 322, 332, 420 or 430 style quick hitches)

Place the bracket on the top face of the quick hitch as shown with the square hole lining up with the $\frac{3}{4}$ " hole on the hitch (C). If your mounting bracket has a bolt and nut assembly (marked A) already in place, do not remove it. The nut on the bottom should fit right inside the hole marked (B) on the quick hitch. This is used as an anti-rotation feature for the bracket. If your bracket has an empty hole at this location then insert the provided clevis pin which will serve as the anti-rotation feature. Place the mounting bracket onto the quick hitch in the same manor as described in the carriage bolt installation method. The rear anti-rotation hole is dealt with in the same way as with the carriage bolt installation. The square hole no longer uses a carriage bolt, but the supplied clevis pin (A) with shaft collar (B)

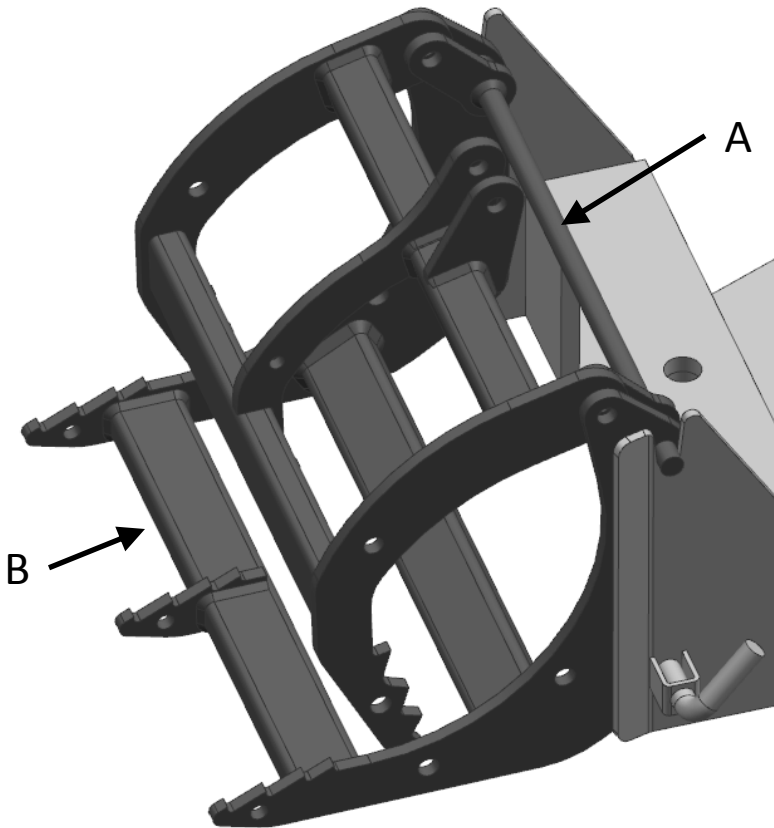


Each pin gets a quick attach lynch pin placed on the bottom to secure them. The shaft collar on the other side of pin (A) acts as a space eater so that the lynch pin is tight to the hitch. There are 2 different sized lynch pins provided, so use the largest pin that you can get through the hole on the bottom of the clevis pin. It helps to push up on the bottom of the hitch to bring the 2 surfaces into contact with each other. The goal is to secure the bracket as tight to the hitch as possible.



3. ATTACHING THE GRAPPLE TO THE QUICK HITCH

The grapple attaches to the quick hitch in the same manor as the other implements. The protruding bars on the grapple drop into the slots on the upper portion of the hitch. The holes at the bottom will accept the spring pins on the lower portion of the hitch. Be sure the pins are retracted and locked before attaching the grapple. Once the grapple is in place and the holes are lined up with the pins, unlock the pins and wiggle the grapple until the pins fully engage the holes in the grapple.



When placing the grapple on the hitch, place one hand on the bar marked (A) and the other hand on the lower cross brace marked (B). The upper jaw of the grapple shall remain in the fully closed position and is **NEVER** to be used as means to handle the grapple. Also, avoid placing your hands on the teeth of the grapple as they are sharp and could cause injury.

4. ATTACHING THE RELOCATED ANGLING CYLINDER TO THE GRAPPLE

The last step is to attach the grapple to the quick hitch and connect the cylinder. First, attach the cylinder to the bracket on the quick hitch. Use the same pin that you removed from this side of the cylinder when it was in the angling position. Next, hold the shaft of the cylinder with one hand while you use the other hand to raise the upper jaw of the grapple until the cylinder shaft hole lines up with the holes in the upper jaw. Once they are inline, hold both the upper jaw and the cylinder with one hand and slide the pin through with the other. Again, use the same pin that held this end when in the angling position. Be very careful not to place any part of your body within the grapple jaws. If you let go of the upper jaw before securing the pin, it will swing down quickly and could cause injury. Also, be careful of pinch points on the side where the upper and lower pivot. As stated earlier, the cylinder is supposed to be fully extended when removed. This will allow the upper jaw to be attached while in the closed position with only a slight lifting of the jaw being needed to assemble.



Use the original (or supplied) cotter pins to secure these pins to the grapple.



Your grapple installation is now complete. Please read the Operator's Manual fully before use.