

# ACUDRAW INSTALLATION INSTRUCTIONS

(HCA-001-AD)

**NOTICE:** For installation on a pre-2018 Wicked Ridge crossbow, including all model year Rangers, you must first refer to pages 13 - 14 for template and stock plate instructions prior to installing the ACUdraw unit.

## Lay Out Contents of Package (Photos 1a & 1b)

- A. (1) ACUdraw assembly w/attached mounting plate
- B. Claw w/Cord
- C. (4) 8-32 x 1-1/4 Phillips-head Machined Screws
- D. (4) 8-32 x 1/4" Button-head Cap Screws
- E. (2) 1/8" x .157 Low-head Socket Shoulder Bolts
- F. (1) Crank handle
- G. (1) Wicked Ridge ACUdraw template (pre-2018 Wicked Ridge crossbows & Rangers)\*
- H. (1) Wicked Ridge ACUdraw stock plate (pre-2018 Wicked Ridge crossbows & Rangers)\*
- I. (2) 1/4-20 x 1/2" Button-head Cap Screws\*
- J. (2) Nyloc Nuts\*
- K. (1) 2018 Wicked Ridge ACUdraw stock plate (2018 stock style)\*

\*Items required for Wicked Ridge crossbows only – order at: [www.tenpointcrossbows.com](http://www.tenpointcrossbows.com) or call 330-628-9245. See pages 13 - 14 for stock plate installation instructions.

*Additional items needed:* Phillips-head screwdriver, and 1/16", 8/32", 1/8", 9/64" Allen wrenches, and string wax.

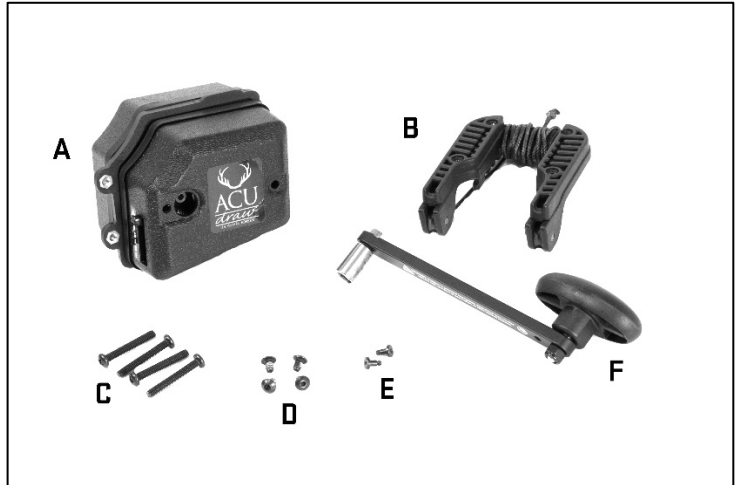


Photo 1a

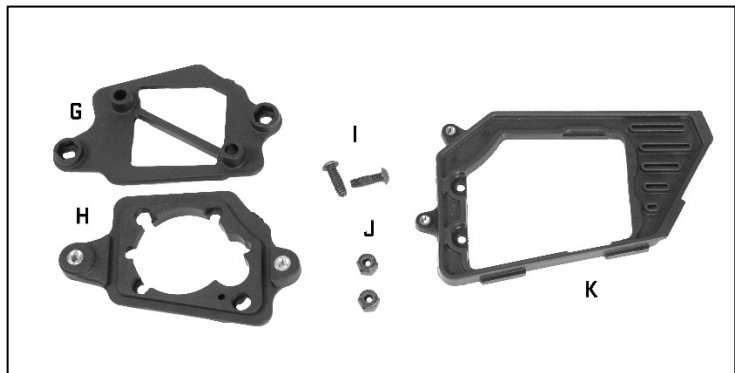


Photo 1b

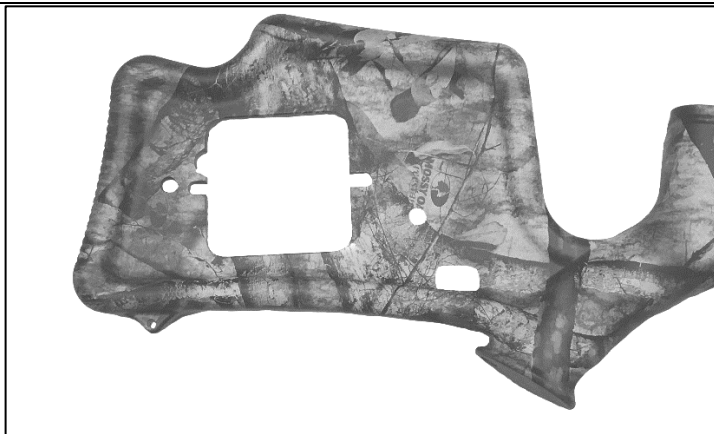
## Determine Your Stock Style (Photos 2 - 5)

**a. Pre-2018 TenPoint or Horton stock** (including wooden Venom Xtra) follow steps 1 - 3 on page 3, steps 2 - 11 on pages 4 – 6, and steps 1 – 18 on pages 6 - 11. Claw holder instructions, if applicable are on pages 11 - 12 (Photo 2).



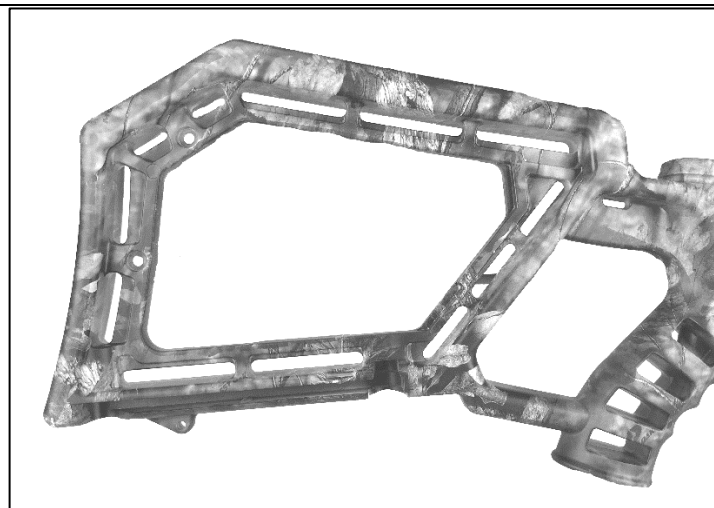
Photo 2

**b. Pre-2018 Wicked Ridge stock**, start with step 1 on page 3, steps 1 - 5 on pages 13 - 14, then follow steps 1 -18 on pages 6 - 11. Claw holder instructions are on page 11 (Photo 3).



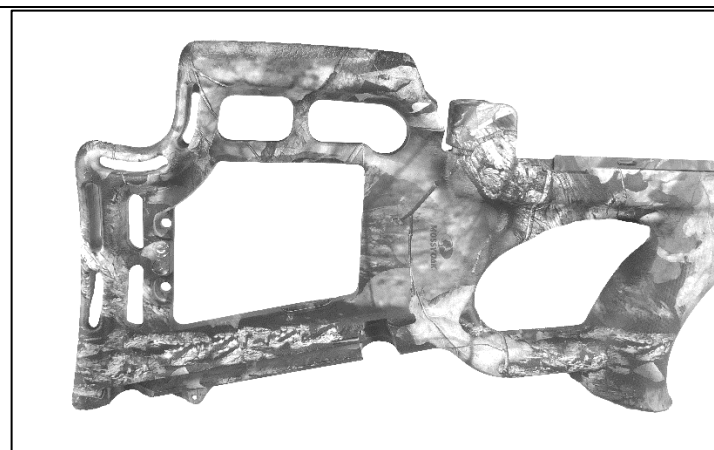
**Photo 3**

**c. 2018 Wicked Ridge quick-install stock**, follow steps 1 - 5 on pages 14 – 16, steps 1 -18 on pages 6 – 11, and claw holder instructions on page 12 (Photo 4).



**Photo 4**

**d. 2018 TenPoint or Horton quick-install stock** follow steps 3 - 5 on pages 15 – 16, steps 1 -18 on pages 6 – 11, and claw holder instructions on page 12 (Photo 5).



**Photo 5**

### Getting Ready (Photo 6)

1. Remove ACUdraw covers and set them aside.
2. Remove the two 6-32 x 3/8" Button-head Cap Screws from the hub cover plate on the right side of the unit, using a 5/64" Allen wrench (Photo 6).

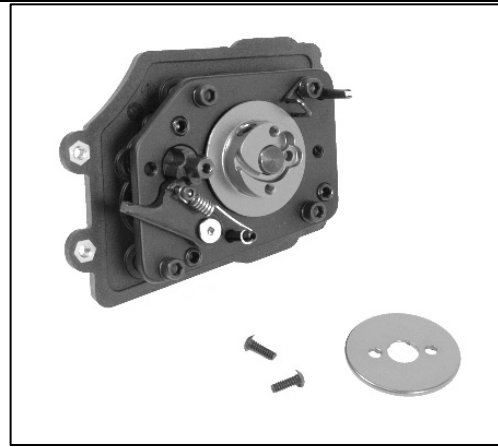


Photo 6

3. Remove the black Allen screw inside the hub on the right side of the unit using a 9/64" Allen wrench (Photo 7).

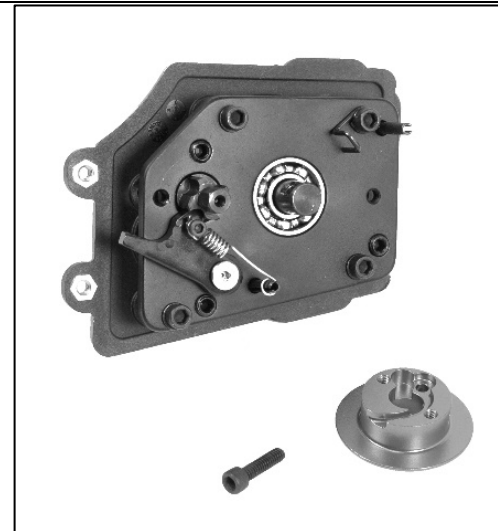


Photo 7

**\*2018 TenPoint quick-install stock installation –** skip to steps 3 - 5 on pages 15 – 16.

**\*2018 Wicked Ridge quick-install stock installation -** refer to steps 1 - 5 on pages 14 – 16 for ACUdraw unit installation instructions.

### Installing the ACUdraw Assembly

1. **Pre-2018 Wicked Ridge stock installation only –** remove setscrews # 1, 2, and 3 from the left side of the ACUdraw unit (Photo 8).

Refer to pages 13 - 14 for template and stock plate instructions prior to attempting to install the ACUdraw unit in this style of stock.

**\*Pre-2018 TenPoint or Horton stocks** skip to step 2.

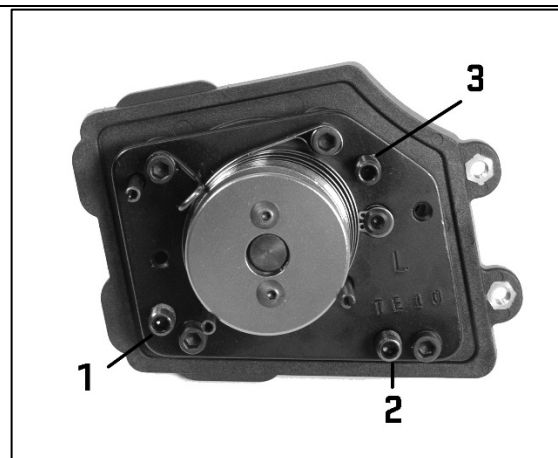
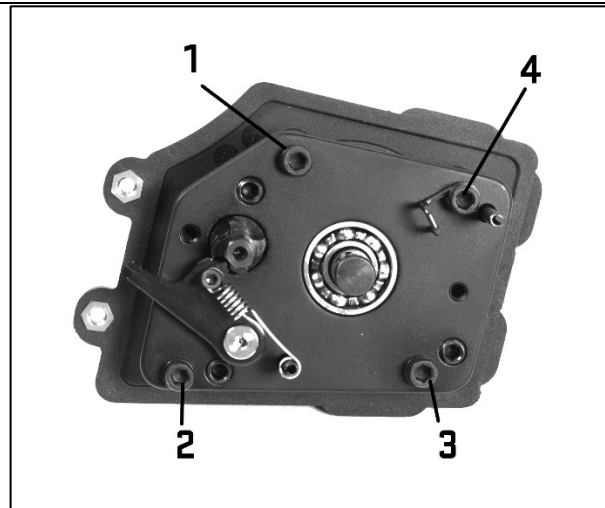


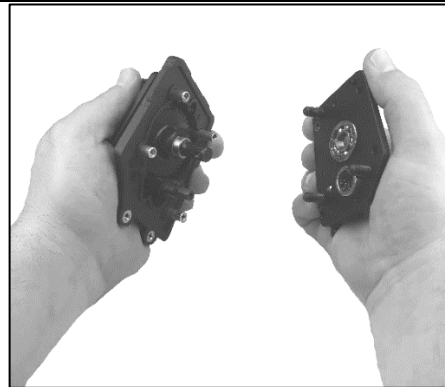
Photo 8

2. Remove right side-plate screws # 1, 2, and 3, making sure not to lose their lock washers. As you remove screw # 4 the wire string guide will also come off. Set the screw and string guide aside (photo 9).



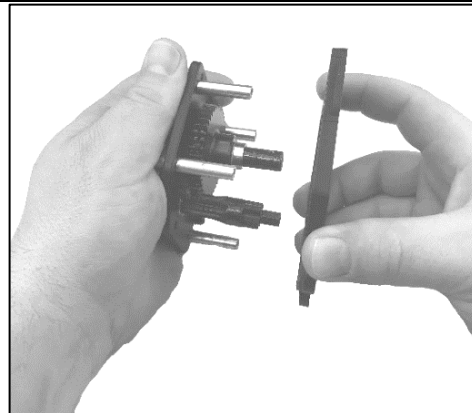
**Photo 9**

3. Hold the ACUdraw assembly in your left hand firmly. Disengage (lower) the safety pawl and carefully remove the right side-plate (Photo 10).



**Photo 10**

4. Remove the pre-installed mounting plate from the left side of the ACUdraw unit (Photo 11).



**Photo 11**

5. From the left side of the butt stock, line the mechanism's silver screw posts up with the holes in the stock (in the stock plate on Wicked Ridge models\*). Slide the unit into the holes until it butts up against the stock or stock plate (Photos 12, 13, & 14\*).



**Photo 12**

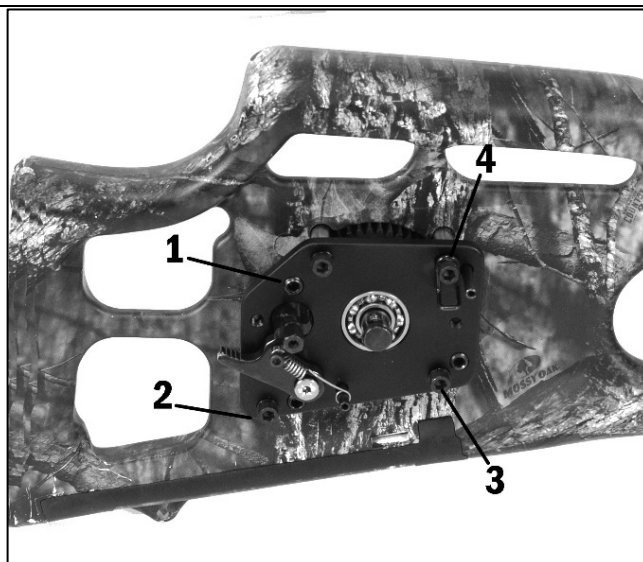


**Photo 13**



**Photo 14**

6. Replace the right side-plate, lining up the silver posts with the right side-plate screw holes.
7. Engage the safety pawl and replace screws # 1, 2, and 3. Loosely replace screw # 4 (Photo 15).



**Photo 15**

8. Tighten all three side-plate setscrews until only one thread is extended from the right side-plate (Photo 16).



**Photo 16**

9. Firmly press against the entire right side-plate to properly align the mechanism for the next step (Photo 17).



Photo 17

10. On the **left** side-plate, tighten setscrews # 1, 2, and 3, - **in that order** – securely in place (Photo 18).

**\*Skip this step for Pre-2018 Wicked Ridge installation.**

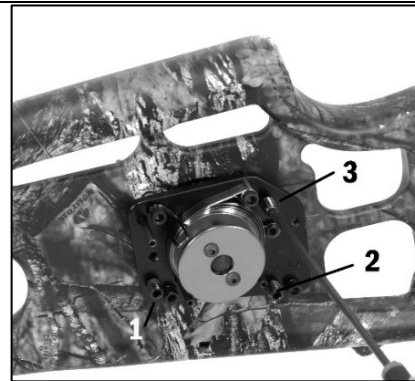


Photo 18

11. Place the right hub back on the axle. Both Allen screws for the hubs should face the same direction (up). Replace and tighten the right hub's Allen screw with a 9/64" Allen wrench (Photo 19).

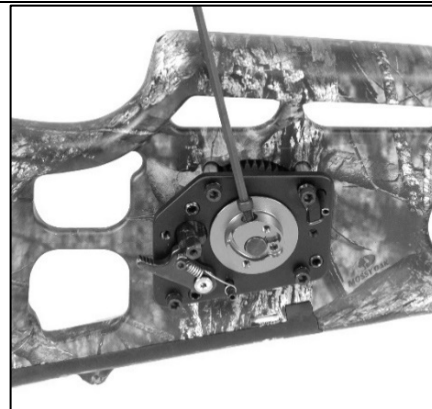


Photo 19

#### **Cord and Claw Installation** (all stock styles).

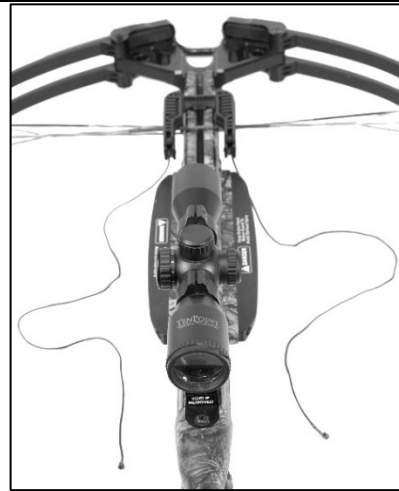
1. Wind the power spring. Start by lowering the engage/disengage lever on the right side of the bow. Then attach the crank handle (or ACUtorq handle) and begin winding the handle counter-clockwise until the spring feels tight (Photo 20). Then, remove some of the tension by cranking two full revolutions clockwise.

*Note:* Make sure the engage/disengage lever stays in the up position after putting tension on the power spring.



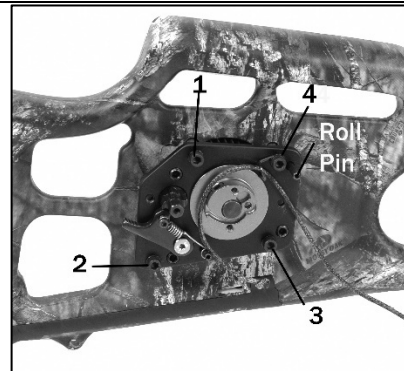
Photo 20

2. Center the claw on the bowstring and barrel (Photo 21).



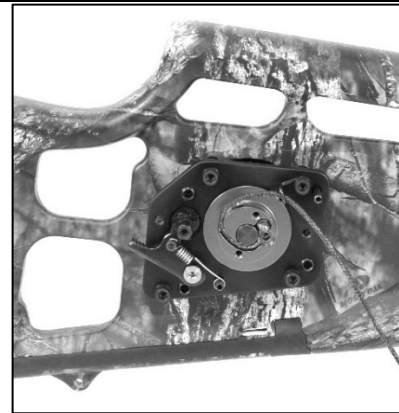
**Photo 21**

3. Loosen screw # 4 on the right side-plate and position the wire string-guide just above the hub. Then thread the ACUdraw cord under the roll pin and through the string guide (Photo 22).



**Photo 22**

4. Wedge the knot of the draw cord into the indentation on the side of the hub. Then wrap the cord clockwise into the groove against the axle (Photo 23).



**Photo 23**

5. Using a 1/8" Allen wrench, insert one of the Low-head Socket Shoulder Bolts into the hole next to the cord knot and over the cord (Photo 24).

*Note: Make sure to insert the shoulder bolt over top of the cord to anchor it securely into place.*



**Photo 24**

6. Using two 6-32 x 3/8" Button-head Cap Screws, reinstall the right-side hub cover plate making sure the oval indentation is positioned over the cord's knot (Photos 25a & 25b).

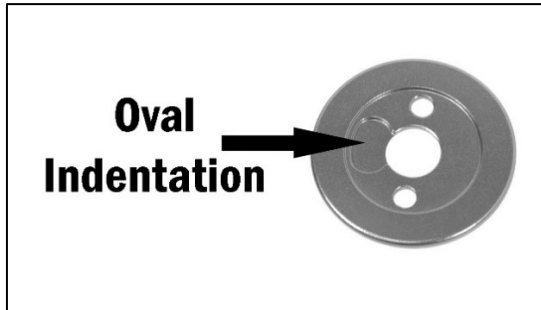


Photo 25a

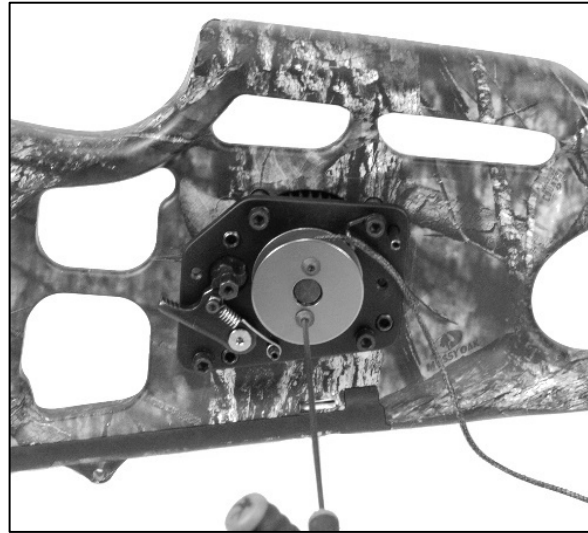


Photo 25b

7. Wrap the cord one or two times around the hub, clockwise. Position screw # 4 and the wire string-guide on the right side-plate just above the hub, keeping the ACUdraw cord centered inside the string-guide (Photo 26).
8. Retighten the #4 screw (check the left side's wire string-guide as a reference).



Photo 26

9. Remove the two 6-32 x 3/8" Button-head Cap Screws from the hub cover plate on the left side of the unit using a 5/64" Allen wrench (Photo 27).

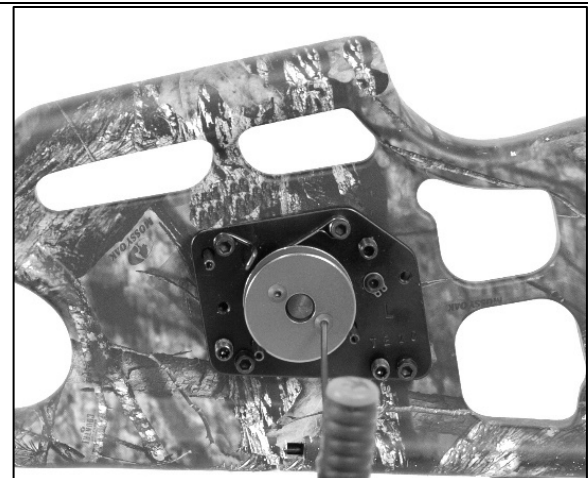
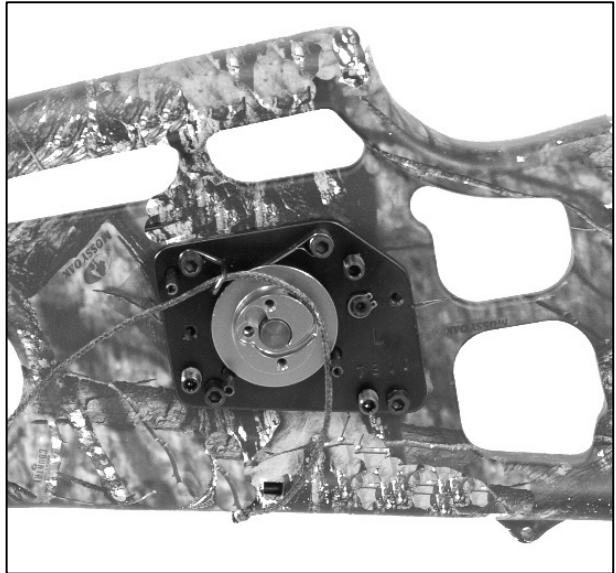


Photo 27



10. Thread the ACUdraw cord under the roll pin and through the left string guide (Photo 28).



**Photo 28**

11. Wedge the knot of the draw cord into the indentation on the side of the hub. Then wrap the cord counter-clockwise into the groove against the axle (Photo 29).



**Photo 29**

12. Using a 1/8" Allen wrench, insert the 2nd Low-head Socket Shoulder Bolt into the hole next to the cord knot and over the cord (Photo 30).

*Note: Make sure to insert the shoulder bolt over top of the cord to anchor it securely into place.*



**Photo 30**

13. Using two 6-32 x 3/8" Button-head Cap Screws, reinstall the left-side hub cover plate making sure the oval indentation is positioned over the cord's knot (Photos 31a & 31b).

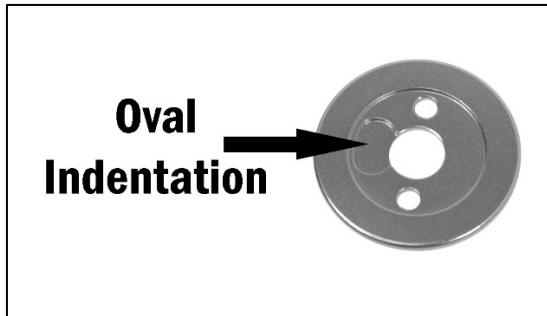


Photo 31a



Photo 31b

14. Wrap the cord around the hub one or two times, counter-clockwise (Photo 32).

Note: Make sure both sides of the draw cord are centered inside their respective wire string-guides and under the black roll pins at the front of each side of the mechanism.

15. Completely wax and burnish the ACUdraw cord before use (also wax the cord approximately every 75 - 100-shots as part of a normal maintenance program).



Photo 32

16. Place the left cover over the left side-plate (Photo 33). The ACUdraw cord must fit completely inside the slot cut in the front of the cover – do not let the cord become caught underneath the gasket. Insert the cover screws and tighten **just until** the covers are snug. **Do not over-tighten!** Over-tightening the cover screws may crack the ACUdraw cover or make the unit sluggish when trying to retract the ACUdraw claw.



Photo 33

17. Place the right cover over the right side-plate – slide the back of the cover on first to allow the pawl lever to fit through the slot. Insert the cover screws and tighten just until the cover is snug (Photo 34).

18. Disengage the pawl lever and pull the claw back and forth to make sure the system is running smoothly.



Photo 34

**FST (Functionally Superior Thumbhole)\*, Fusion Lite, Fusion UltraLite, Pre-2018 Wicked Ridge stocks, and crossbows formerly known as 6 Point - Claw Holder Installation** – If your crossbow has this style of stock, please purchase a Claw Holder at [www.tenpointcrossbows.com](http://www.tenpointcrossbows.com) or call the Sales Department at 330-628-9245 to order one (installation requires a Phillips-head screw driver).

\*If installing on one of the older Titan models (or other model containing a plunger safety), push the safety all the way in (Fire position) prior to installation. Or, if installing on a model with an adjustable dovetail mount, adjust the RangeMaster system all the way down.

1. Remove the screw from behind the trigger box.
2. Place the claw holder over the existing hole. Reinsert the screw and tighten firmly (Photo 35).



Photo 35

3. Place the front of the claw into the claw holder (Photo 36). Insert the hand crank and turn clock-wise until snug. **Do not over-tighten!**

*Note:* Most ACUdraw units require no more than 1 – 3 **clicks** to sufficiently tighten the claw in the holder.



Photo 36

**FSB (Functionally Superior Bullpup) stocks without a vertical claw slot – Claw Clip Installation** - If your crossbow has this style of stock, please purchase a Claw Holder at [www.tenpointcrossbows.com](http://www.tenpointcrossbows.com) or call the Sales Department at 330-628-9245 to order one (installation requires a Phillips-head screw driver).

1. Remove the screw from behind the trigger box.
2. Place the claw clip over the existing hole. Reinsert the screw and tighten firmly (Photo 37).



**Photo 37**

3. Insert the claw into its storage position by rotating the claw until it is vertical, then slide the claw assembly into the stock until the claw retaining clip snaps over the claw guide-post (Photo 38).

**Note: DO NOT** attempt to crank, or tighten, the ACUdraw with the claw in its resting position.



**Photo 38**

**ABX (Adjustable Bullpup Crossbow), ACX (Adjustable Comfort Crossbow), Fusion S, C3 Carbon, Fusion RDX, FRX (Fusion Reverse Draw Crossbow) and 2018-style Wicked Ridge stocks:**

Secure the string-claw vertically (or horizontally on the 2018-style Wicked Ridge stock) in a slot without a clip. Do not try to tighten the draw cords to help secure the claw on these models, otherwise you will damage the stock (Photo 39).



**Photo 39**



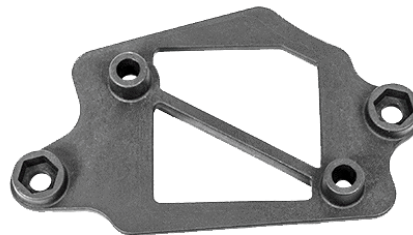
## Wicked Ridge Template and Stock Plate

### Wicked Ridge Template Instructions:

Most pre-2017 Wicked Ridge stocks require two holes to be drilled in the stock prior to installing the stock plate (Photo 40).

*Additional items needed:* Drill, 9/32" drill bit & Phillips-head screwdriver.

Template



Stock Plate

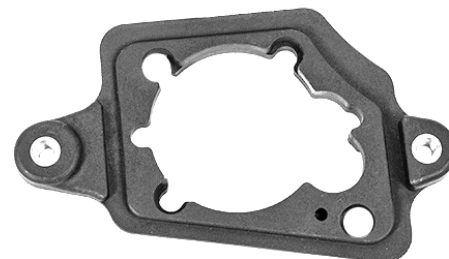


Photo 40

### Using the Template:

1. Remove the ACU-52 or the stock insert.
2. Position the template in the left side of the stock hole, with the longest edge close to the bottom edge of the stock (Photo 41).



Photo 41

3. Insert a Nyloc nut into a hex-head shaped hole, then screw a ¼ - 20 x ½" Button-head Cap Screw into the corresponding hole on the right side of the stock (Photo 42).



Photo 42

4. Using a 9/32" drill bit, drill completely through the two empty holes in the template (Photo 43). **Note:** A small portion of the template hole will be drilled into also.



Photo 43

**Inserting the Pre-2018 Wicked Ridge Stock Plate:**

1. Insert the stock plate into the left side of the stock. From the right side of the stock, secure the stock plate with the two ¼-20 x ½" Button-head Cap Screws (Photo 44).
2. Follow the standard ACUdraw installation procedures beginning on page 1 of these instructions to complete the installation process.



Photo 44

**Installation instructions for 2018-style Wicked Ridge, TenPoint and Horton quick-install stocks**

(TenPoint and Horton quick-install stock start at step 3.)

1. Insert the stock plate into the left side of the stock (Photo 45).

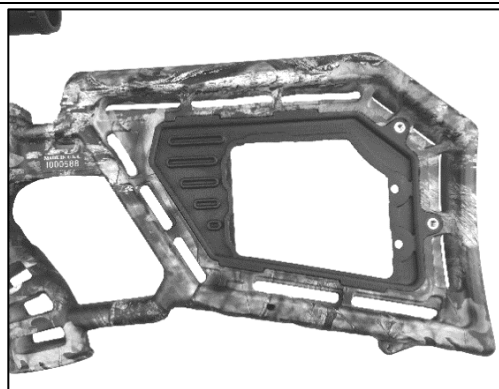


Photo 45

2. From the right side of the stock, secure the stock plate with two 8-32 x 1/4" Button-head Cap Screws (Photo 46).

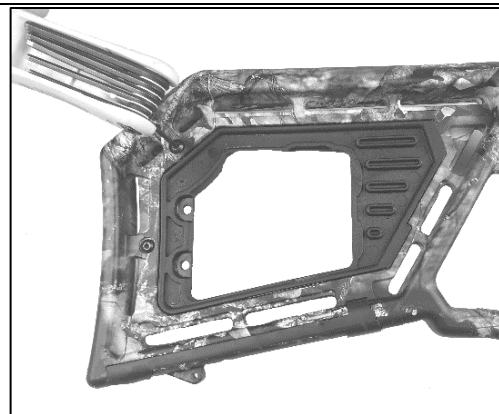
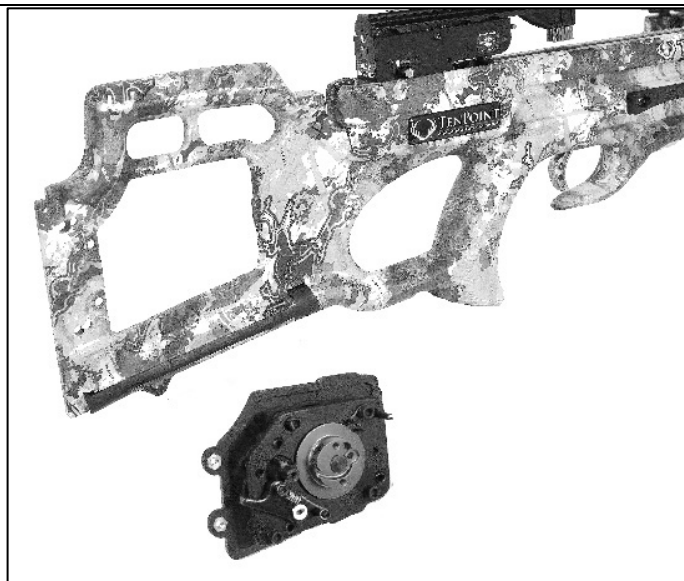


Photo 46

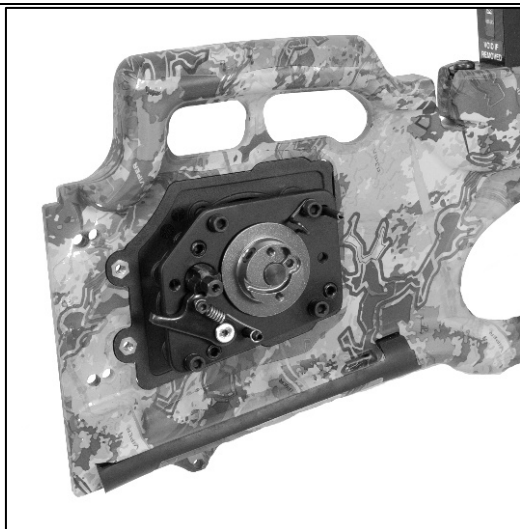
3. Position the unit to the right side of the stock/stock plate for installation (Photo 47).

*Note: You may need to remove the rubber butt plate from certain models before proceeding to Step 4.*

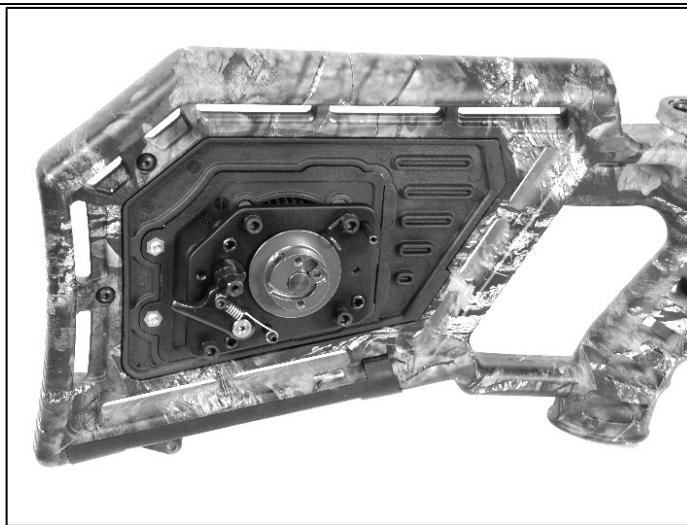


**Photo 47**

4. To position the ACUdraw unit in the stock (TenPoint or Horton) or in the stock plate (Wicked Ridge), angle the ACUdraw toward the front of the crossbow and seat it into the cutouts (Photos 48a & 48b).



**Photo 48a**



**Photo 48b**

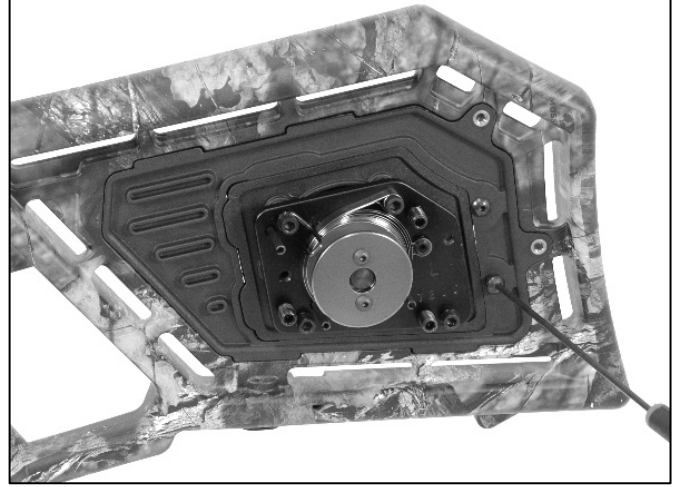
5. Insert two 8-32 x 1/4" Button-head Cap Screws through the side plate holes in the left side of the stock (TenPoint or Horton) or in the stock plate (Wicked Ridge) (Photos 49a & 49b).

*Note: Reinstall the rubber butt plate if you removed it in Step 3.*



**Photo 50a**

6. Follow **Cord and Claw Installation** instructions on pages 6 - 11 and securing the claw on page 12.



**Photo 50b**