

# QUAD 400™

*"Veloci-Speed"  
Synthetic Systems*



*Shown with optional  
accessories*

*Extreme Velocity  
345  
fps  
feet per second*

## OWNER'S MANUAL

**Safety Guidelines**  
**Assembly Guidelines**  
**Trouble Shooting**  
**General Information**  
**Warranty Information**  
**Care and Maintenance**



*...BUILT FOR THE HUNT.*



***Congratulations, you are the proud owner of the finest production crossbow in the world!***

Please follow all safety, assembly and troubleshooting instructions contained in this manual. It is extremely important to read and follow the instructions before attempting to use your crossbow. Serious injuries to yourself or others, damage to your crossbow or poor performance from your crossbow could result from failure to thoroughly read and understand these instructions. If any part of this manual is unclear to you, contact the Sales Department at (727) 234-4999. After assembly of your crossbow, please keep manual for future reference.

As with any other high-performance equipment, meticulous care and a regular maintenance schedule must be maintained.

## ***Manual Contents***

Specifications	3
Parts Checklist	3
Safety Guidelines	4
Crossbow Breakdown	5
Assembly Guide	6
Crossbow Operation	10
Troubleshooting	13
Care and Maintenance	15
Warranty	16
Warranty Registration	21

## ***Specifications***

Feet per Second	345
Power Stroke	15.5"
Draw Weight	150 lbs.
Physical Weight	9 lbs.
Width	26.75"
Length	37"
String Length	39 5/8"
Number of Strands	24
String Stock Number	16163
Cable Stock Number	16171

## ***Parts List***

Before assembling your crossbow, take a moment to organize these parts and ensure you have everything you need.

If you are missing any of the below parts, contact the Barnett Sales Department at (727) 234-4999.

- 1 Hex Keys
- 1 Lubewax
- 1 Nose Bolt
- 1\* Front Sight Bracket
- 2\* Brass Sight Pints w/ Nut, Washer & Barrel
- 2\* Front Sight Bracket Screws
- 1\* Rear Peep Sight

***\* ITEMS ARE NOT INCLUDED WHEN BOW IS PURCHASED AS A PACKAGE WITH SCOPE.***

## **Safety Guidelines**

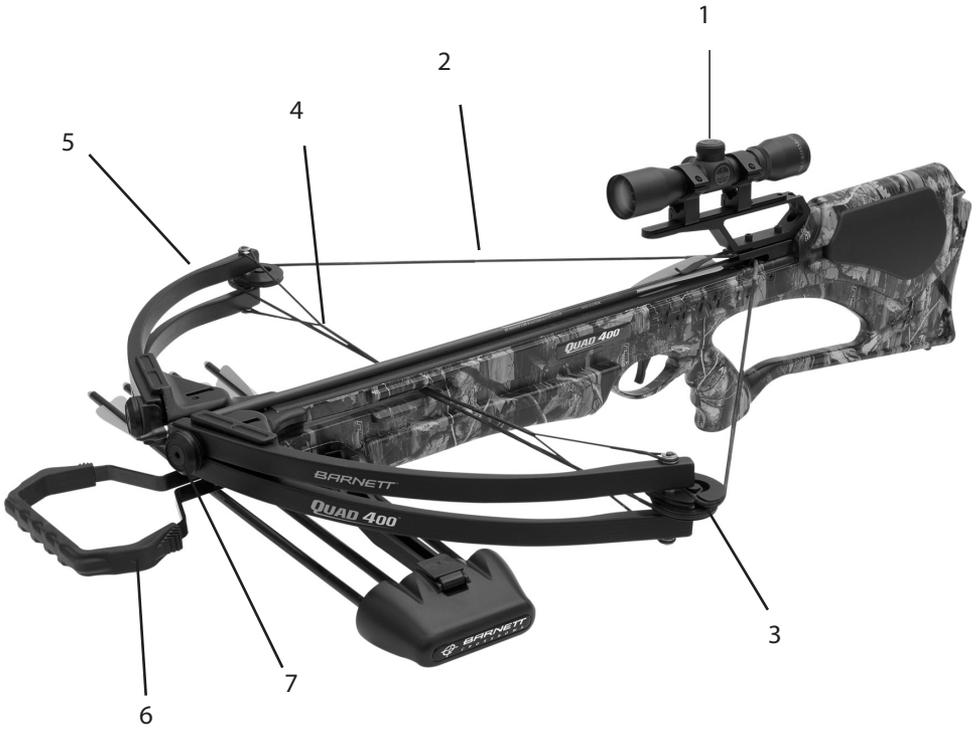
The **QUAD 400** is equipped with an automatic ambidextrous safety, which engages every time the crossbow is cocked. The safety must be released before each shot. This, as with any other mechanical device, does not guarantee total safety, as no safety device is a substitute for common sense and safe handling. The crossbow trigger is only to be pulled when the safety is in “fire” position and NEVER when it is in the “safe” position or anywhere between “safe” and “fire.” Do not attempt to alter or modify the safety or the trigger mechanism.

***The following rules should be followed at all times:***

***EXTREME CAUTION SHOULD BE USED AT ALL TIMES WHEN HANDLING A CROSSBOW. FAILURE TO FOLLOW THESE RULES COULD RESULT IN SERIOUS INJURY OR DEATH.***

- Always keep your fingers below the flight track and out of the path of cables and strings when firing the crossbow. The velocity of the string striking your fingers as the string travels forward could cause severe personal injury.
- Never dry fire the crossbow (shoot without an arrow). ***Dry firing will void the warranty*** and can result in damage to the limbs, string, and cables, possibly causing personal injury.
- Never fire the crossbow until you are sure of your target.
- Always use an adequate target and backstop when target shooting.
- Always use suitable crossbow arrows, such as Barnett 22” carbon arrows with half-moon nocks. Arrows of improper stiffness or mass weight may damage the limbs, string, and cable assembly, *voiding the warranty*, and could possibly cause personal injury. Too light of an arrow can cause a dry fire/misfire.
- Always inspect the crossbow and arrows before firing. Bent or damaged arrows or nocks are not safe to fire and should be discarded or repaired.

# Crossbow Breakdown



1. Scope
2. String
3. Cams
4. Cables
5. Limbs
6. Foot Stirrup
7. Limb Retainer, Bezel washer, Limb Bolt and Limb Button

# Assembly Guide

## Installing Cable Slide

When viewing the cable slide from the side, with the concave surface facing up, notice that one of the two cable notches is positioned deeper into the cable slide than the other. **See Figure 1**



Fig. 1

**IMPORTANT: Cable slide must be installed prior to attaching the bow assembly.**

- Place the top cable into the deeper of the two notches and the bottom cable slide into the more shallow notch on the cable slide. This allows the cable slide to maintain a relatively level position on top of the two cables.
- Before sliding the cable slide into the stock's flight track (**See Figure 2**), apply Barnett lubewax to the top of the cable slide (the part that comes in contact with the underside of the flight track in the stock) and apply to the cables in that area also.

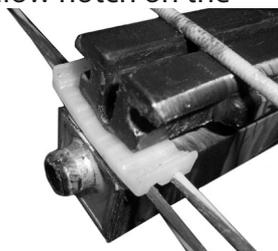


Fig. 2

## Attaching Optional Quiver

- Locate the Picatinny Rail on the underside of the stock (front of forearm).
- Line up the quick-detach quiver bracket with one of two optional quiver placement holes. Attach with the screw provided. **See Figure 3**
- Attach quiver by placing it on the quick-detach bracket with the plastic studs facing the mounting plate at a slight angle and twist to secure.



Fig. 3

**Please note: Quiver must be installed prior to attaching the prod housing.**

## ***Attaching Prod Housing to Stock***

- Place bowstring on top of the flight track . Place cables under front edge of flight track and push the riser assembly until it seats securely over pins. **See Figure 4**
- Turn bow over and engage prod by seating riser onto stock.
- Place lock washer on bolt, then insert bolt through bushing. **See Figure 5** (Insert bolt assembly through riser assembly into the stock and tighten with supplied hex key. DO NOT OVERTIGHTEN).



*Fig. 4*



*Fig. 5*

## ***Installing an Optional Scope or Red Dot Sight***

- Position your scope by moving it forward or backward until the proper eye relief is found. This is typically three to four inches from your eye to the eyepiece when you are holding the crossbow in a shooting position.
- Tighten the scope mounting side plates with caution.

**Important:** Be sure to tighten windage/elevation caps and scope mount rings before shooting crossbow.

## Attaching the Foot Stirrup Assembly

- Remove the 1/4-20 button-head cap screw, two 1/2" diameter nylon washers, lock washer and acorn nut from the second hole of the prod housing.

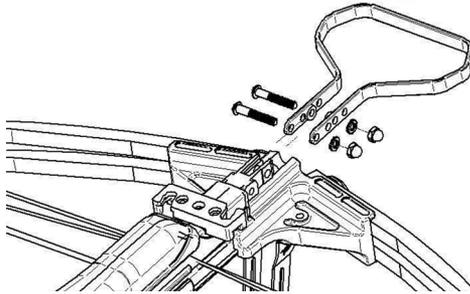


Fig. 6

- Flip the foot stirrup forward and in place on the prod.
- Reinsert the 1/4-20 button-head cap screw through the third hole of the foot stirrup and through one 1/2" nylon washer, then through the second hole of the prod housing, and through the second 1/2" nylon washer.
- Attach lock washer and acorn nut. Tighten with 5/32" hex key. Make sure not to overtighten the bolt as this may cause damage to the riser. **See Figure 6**

**\*\*Please note: Front sight is not included when a crossbow package with scope is purchased.**

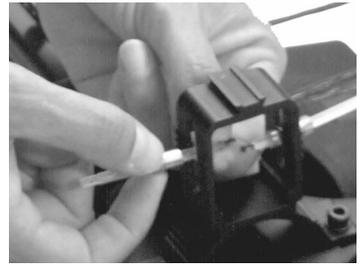
## Mounting the Front Sight

- Align the holes of the front sight bracket with the holes on the prod housing and attach firmly using the screws and washers given in the hardware kit. **See Figure 7**



Fig. 7

- Insert the first sight pin through the bracket with the slotted screw flush inside the bracket and tighten down the barrel and washer on the outside of the bracket.
- Install the second pin in the same manner facing first pin. **See Figure 8**



*Fig. 8*

**\*\*Please note: Peep sight is not included when a crossbow package with scope is purchased.**

### ***Mounting the Rear Peep Sight***

- Slide the rear peep sight onto the attached dovetail with setscrew facing the front of the bow.
- Tighten setscrew when the peep is in the proper eye relief position with the hex key provided. **See Figure 9**



*Fig. 9*

### ***Installing an Optional Crank Cocking Device***

Remove cheekpieces from the rear stock by gently lifting a corner to access plate for removal.

Now proceed with installation following the directions included with crank.

# Crossbow Operation

## Cocking your Crossbow

Be sure to apply Barnett lubewax to the flight track before cocking.

- Place the shoot-through foot stirrup on the ground with one foot in the stirrup and the stock end resting against your thigh. **See Figure 10**
- Place both hands on the string no more than ½" on each side of the crossbow body. With even pressure on each side, pull the string back until it locks into the trigger mechanism with an audible "click". Be sure to apply downward pressure against flight track. **Do not pull or lift the string away from the stock.**
- Slowly release hand pressure on the string until you are sure it is locked securely into the trigger mechanism. The crossbow is now cocked with the safety on. **Make sure that the string is seated at the bottom of the tumbler.** The tumbler is the part of the trigger that the string is resting on when cocked. If it is resting at the top of the tumbler, use both thumbs and gently push string down until it is seated at the bottom of the tumbler to ensure proper arrow flight.



Fig.10

**Note:** Mark the serving on each side of the flight track at rest. After cocking the crossbow, make sure that the marks on the string are showing equally on each side of the trigger mechanism. Unevenly cocked crossbows will have erratic arrow flight. Be sure to apply Barnett lubewax to the string serving and track surface, then again after every 5-10 shots.

## ***Loading your Crossbow***

**IMPORTANT:** Barnett recommends only using arrows with half-moon nocks.

- When loading arrows onto the flight rail, be sure that the odd-colored fletch is placed in the flight groove and that the concaved nock is parallel to the string.
- Slide the arrow back under the arrow retaining spring and **fully** into the trigger mechanism.

**Note:** The arrow retaining spring should only exert enough pressure to hold the arrow in place without lifting it from its

## ***Firing your Crossbow***

To fire the arrow from your crossbow:

- Point the crossbow in a safe direction.
- Make sure the arrow retainer spring has maintained the arrow's fully loaded position into the trigger mechanism.
- Push the safety forward to the "off" position. The crossbow will now fire when the trigger is pulled. The safety **MUST** be disengaged in this manner prior to every shot.

**BE SURE TO KEEP YOUR FINGERS BELOW THE STOCK FORE END (FLIGHT TRACK) WHILE SHOOTING. Note photos below.**



**CORRECT**



**INCORRECT**



**CORRECT**



**INCORRECT**

**This will prevent your hands from being struck by the string as it travels forward. The velocity of the string hitting your fingers will cause severe injury.**

### ***Unloading your Crossbow***

The safest way to uncock your crossbow is to fire an arrow into a target or into the ground away from debris, loose rocks or other people.

### ***Sighting In the Crossbow***

Please refer to the instructions included with your scope package.

### ***Arrow Retainer***

When loaded, the arrow should lie “flat” in the flight groove. The arrow retaining spring should not be twisted to the left or right and should exert only enough pressure to hold the arrow in place. It should not lift the front of the arrow off the flight groove, and the arrow should be parallel with the flight groove.

### ***Arrow Selection and Proper Flight***

Due to the unique design of your Barnett crossbow, it is ***imperative*** that only specified arrows are used. These arrows are correctly weighted to absorb the high energy generated by the compound design. Lighter arrows simulate a “dryfire” condition and will result in damage to the crossbow VOIDING the warranty. Barnett 22” carbon arrows are correctly “spined”. The minimum arrow weight for a **QUAD 400** bow is 400 grains, which includes a 125-grain field point/broadhead. (We recommend the use of Barnett arrows manufactured specifically for your Barnett crossbow.)

- Use Barnett 22" carbon arrows with straight fletches and a half-moon nock.
- Mechanical broadheads that simulate the flight of a field point may be used where legal.
- The recommended fixed-blade broadheads can be any three-blade low-profile broadhead with a cutting diameter no larger than 1-3/16".
- When using fixed-blade broadheads, the blades must be aligned with the fletches of the arrow. This can be done by placing a rubber O-ring between the broadhead and the arrow front insert. All broadheads are suggested to be 125 grains.

## **IMPORTANT DISCLAIMER**

Due to the power of the **QUAD 400** and the inconsistent properties of wooden shafts (which have a tendency to warp, vary in spine stiffness, density, and moisture absorption—all of which could result in inaccuracy), Barnett Outdoors does not recommend their use under any circumstance. Possible injury could result from shaft breakage, etc. **We accept no responsibility or liability arising from the use of wooden-shaft arrows.**

## **Troubleshooting**

### ***Arrow Flight***

The greatest variable in accuracy are arrows, as they differ greatly and have totally different flight characteristics. Generally speaking, when practicing with field points, target arrows are more accurate than hunting arrows. Fixed blade broadheads used in hunting, due to their large surface area, tend to cause the arrow to "plane". To help overcome this, we suggest practicing well in advance of hunting season with the type of arrows that will be used to achieve consistent groupings. Consider the following when selecting arrows: Heavier arrows hold more energy for humane harvesting at reasonable ranges (15-35 yards). Lighter arrows are much faster but hold less energy. ***Never use less than 400-grain arrows (this includes a 125-grain field point/broadhead).***

- If the string has been changed, is it a Barnett string?
- Are the arrows straight and fletches (vanes) in good condition?
- Does the arrow lie flat (true) on the flight groove? Is the arrow retainer spring too tight or twisted?
- Does the arrow slide smoothly and evenly into the trigger mechanism?
- When cocking your crossbow, are you pulling equally on each side of the string? After cocking the crossbow, make sure the marks are shown evenly on each side of the trigger mechanism. (Mark new strings on each side of the flight track as stated earlier.)
- When cocking your crossbow, make a conscious effort to hold the string on the flight track so as not to lift over the arrow retainer spring.
- Are you putting the odd-colored fletch down in the flight groove?
- When using broadheads, line up the blades with the fletches on the arrow (using O-ring).
- Are the nocks damaged?

### ***String Fraying***

- Are you using Barnett lubewax on the center string serving and flight track every 5-10 shots and on the cables when needed?
- Keep the trigger mechanism and flight surface free of obstruction.
- Check for metal burrs on the flight track.

### ***Limbs Weak or Losing Power***

- Has the crossbow been dry fired (could cause limb to crack)?
- Are you using Barnett string (the proper length)?

# Care and Maintenance

## *Care of String*

The owner's kit contains a tube of Barnett lubewax that should be applied to the center serving and flight track every 5 -10 shots.

To extend the life of your cables, it is important to apply Barnett lubewax to all of the nonserved area of the cables. Apply Barnett lubewax every 30-50 shots to the nonserved area of the string, or when white fuzz begins to appear. If the crossbow has been exposed to excessive moisture, you may need to apply the lubewax more often.

**PRIOR TO EVERY SHOOTING SESSION, IT IS RECOMMENDED THAT A COMPLETE CHECK OF STRING, CABLES, CAMS, SCREWS AND ARROWS BE MADE.**

- Always store your crossbow in a safe, dry place.
- Do not expose your crossbow to extreme moisture or heat, such as closed, hot vehicles or near heat sources.
- Inspect cables and string for signs of wear. An authorized service center or the factory should replace cables showing wear immediately.
- Periodically lubricate the cams with lightweight machine oil.
- Keep the flight track and the string serving waxed, reducing friction.
- We do not recommend that the bow be left in the cocked position for periods longer than four hours.

With reasonable care of your equipment and diligent practice, your crossbow will remain an accurate, highly efficient hunting weapon.

## Warranty Information

The stock, trigger mechanism and limbs are covered under a five-year limited warranty. Our liability extends to parts and labor.

**Not covered are:** strings, cables, arrows, transportation of product to our Service Center; damage caused by abuse, modification or failure to perform normal maintenance; or any other expense, consequential damages, coincidental damages, or incidental expenses including damage to property or person. There are no other warranties expressed or implied. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

**Warranty Registration Card must be mailed within 10 days of purchase to validate the warranty.**

**TO OBTAIN SERVICE:** You must call our Sales Department at (727) 234-4999 for a Return Authorization number (RA#) prior to sending the unit. Write the RA# on the outside of the package along with the words "Service Return". Attach a note to the product containing your name, address, telephone number and a description of the problem. Carefully package and return the product, transportation charges prepaid, to the factory.

**Important Note:** Collect shipments will **not** be accepted. Shipments without an RA# issued and listed on the outside of the shipping box will not be accepted.

### How to reach us:

Barnett Outdoors, L.L.C.

955 E. Live Oak St.

Tarpon Springs, FL 34689

Phone: (727) 234-4999 Fax: (727) 942-6100

E-mail [service@barnettcrossbows.com](mailto:service@barnettcrossbows.com)

## **AMERICAN CROSSBOW FEDERATION MEMBERSHIP APPLICATION**

### **Annual Benefits Include, but are not limited to:**

#### **Quarterly Issues of the Horizontal Bowhunter Magazine**

*As a member of the American Crossbow Federation, you will receive quarterly issues of the **Horizontal Bowhunter Magazine**. This unique and timely magazine keeps our membership up to date on the latest innovations and developments in the crossbow industry. More importantly, it gives our members an opportunity to share their personal experiences, hunting stories, photos and letters to the editor. It is important to realize and remember that the ACF and the HBM are dedicated to the promotion and preservation of ALL forms of hunting with ALL weapons, especially the crossbow.*

#### **Free Classified Ads in the HBM and Support for Your State Crossbow Organization**

*Your membership includes free classified ads in the HBM. If you have crossbow-related merchandise you would like to buy, sell, trade or hunts to swap, the Classified Ads are free for ACF members. Plus \$5 of your ACF membership will be donated back to your affiliated State organization in your name. If there is no affiliated state organization, the \$5 will be used to help bring the crossbow to states that do not have a crossbow season and are struggling to get one.*

#### **Membership Card and Member's ACF Bumper Sticker**

*Each member of the American Crossbow Federation will receive a membership package containing your first HBM, a membership card and an ACF Bumper Sticker to proudly display on their vehicle.*

#### **Trophy Entries into the American Crossbow Federation Big Game Register**

*As a member of the ACF, you are entitled to enter your trophy animals taken with horizontal and vertical bows in the official big game record book created for ALL archery hunters. **The ACF Big Game Crossbow Register** is a history of animals taken by ACF members with ANY archery equipment, including the crossbow from around the world. Qualified animals that have been taken all the way back to 1975 may be entered into the register. This compilation of crossbow hunting statistics covers ALL big game species from ALL continents with ALL archery equipment.*

**Rates:**  
**U.S. Membership**  
**\$30.00-1 yr./\$58.00-2 yr.**  
**Lifetime Membership U.S.**  
**\$700.00**  
**Lifetime Over 65 Membership U.S.**  
**\$450.00**  
**Corporate Membership**  
**\$250.00**  
**Canadian Membership (U.S Funds)**  
**\$35.00-1 yr./\$68.00-2 yr.**  
**Lifetime Canadian (U.S Funds)**  
**\$850.00**  
**Overseas Membership (U.S Funds)**  
**\$40.00-1 yr./78.00-2yr.**  
**Overseas Lifetime (U.S. Funds)**  
**\$1000.00**

-----  
(Remove the form below and return to receive your membership benefits)

**\*\*AMERICAN CROSSBOW FEDERATION  
MEMBERSHIP APPLICATION\*\***

NAME: \_\_\_\_\_  
TELEPHONE: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
E-MAIL ADDRESS: \_\_\_\_\_  
CITY: \_\_\_\_\_  
STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

Barnett Outdoors, LLC  
Mail your membership application to:  
American Crossbow Federation  
POB 251, 20 NE 9th Ave  
Glenwood, MN 56334

Or call our main desk at 320-634-3660 to use a credit card

# Notes

# Notes