

PENETRATOR

*Shown with optional
accessories*



OWNER'S MANUAL

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

 **BARNETT**
CROSSBOWS

...BUILT FOR THE HUNT.

TM



Congratulations, you are the proud owner of one of the finest production crossbows in the world!

Please follow all safety, assembly and troubleshooting instructions contained in this manual. It is extremely important to read and follow these 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, please contact our service department at (727) 234-4999. After assembling your crossbow, please keep this manual for future reference.

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

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Specifications

Feet per Second	350
Power Stroke	12"
Draw Weight	175 lbs.
Physical Weight	8.6 lbs.
Width	24"
Length	37"
String Length	34"
Number of Strands	28
String Stock Number	16140
Cable Stock Number	16141

Parts List

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

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

- 1 Cable Slide
- 1 Hex Key
- 1 Nose Bolt
- 1 Lock Washer
- 1 Lubewax
- 1 Rope Cocking Device

Safety Guidelines

The **PENETRATOR** is equipped with an automatic **anti dry-fire** 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 inspect your crossbow and arrows before firing. Bent or damaged arrows/nocks are not safe to fire and should be discarded or repaired.
- **Always keep your fingers below the flight track and out of the path of the string and cables 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 string, cables, and limbs, 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 20” carbon arrows with half moon nocks. Arrows of improper stiffness or mass weight may damage the string, cables, and limbs, *voiding the warranty* and possibly causing personal injury. Too light of an arrow can cause a dry-fire/misfire.

Crossbow Breakdown



1. String
2. Cams
3. Cables
4. Limbs
5. Shoot Through Foot Stirrup
6. Arrow Retainer Spring
7. Cheek Piece

(Shown with optional accessories not listed above. i.e. scope, quiver and arrows.)

Assembly Guide

Attaching Optional Quiver

IMPORTANT: Quiver must be installed prior to attaching the bow assembly.

- Locate the picatinny rail on the underside of the stock (in front of forearm).
- Slide the quick detach quiver bracket on the rail. Line up the quick detach quiver bracket with one of two optional quiver placement holes. (**See Figure 1**) Attach with the screw provided.
- 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.

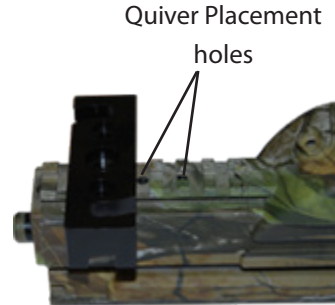


Fig. 1

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 2.**

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

- 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).
- Place the top cable into the deeper of the two notches and the bottom cable 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. **See Figure 3.**



End View of Cable Slide
Fig. 2

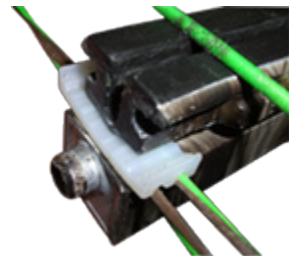


Fig. 3

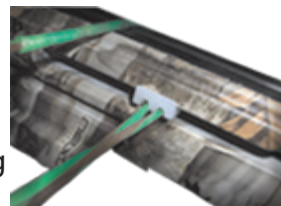


Fig. 4

*If you have any questions or need any assistance during this step, please call us at (727)234-4999

Attaching Bow Assembly to Stock

- Place the cables (with cable slide installed. *See Figure 4 on previous page*) under front edge of the flight track -- this should cause the string to rest on top of the flight track. Push bow assembly until it seats securely over the nose plug. *See Figure 5.*
- Turn bow over and engage prod by seating the bow assembly onto stock.
- Place lock washer on bolt, then insert bolt through bushing. *See Figure 6.*
- Insert bolt through bow assembly into stock and tighten with supplied hex key until the lock washer has compressed. (DO NOT OVERTIGHTEN)



Fig. 5



Fig. 6

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 your crossbow.

Operation

Cocking your Crossbow

There are three different methods to cock your crossbow. By hand (which is illustrated below), by optional rope cocking device (RCD) or crank cocking device (CCD). Please refer to the individual instructions included with the optional accessories for further instructions.



Fig 7

IMPORTANT: Before cocking your crossbow, mark the serving on each side of the flight track at rest with a black marker. This will assist in consistency when cocking your bow. Unevenly cocked crossbows will have erratic arrow flight.

Prior to cocking your crossbow, be sure to apply Barnett lubewax to your string, cables and flight track.

NOTE: Proper footwear must be worn when operating your crossbow. Barefeet, flip flops, house shoes, socks/stockings or open-toed shoes are not recommended.

- Place the shoot through foot stirrup on the ground with one foot in the stirrup (using the ball of your foot to offset the draw weight of the crossbow) and the stock end resting against your thigh. **See Figure 7.**
- Place both hands on the string no more than ½" on each side of the crossbow stock. 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 the 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 secure in the trigger mechanism. The crossbow is now cocked with the safety on.

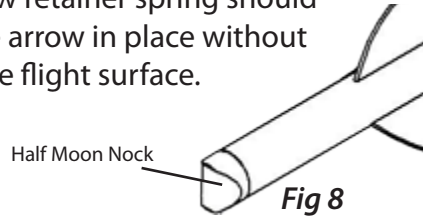
Loading your Crossbow

- **IMPORTANT** : Barnett recommends only using arrows with half moon nocks. See *Figure 8*.
- When loading arrows onto the flight rail, be sure that the odd colored fletch is placed in the flight groove and that the concaved portion of the nock is parallel to the string.
- Slide the arrow under the arrow retainer spring and **fully** into the trigger mechanism. **Note**: The arrow retainer spring should only exert enough pressure to hold the arrow in place without lifting the arrow from its position on the flight surface.

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 arrows fully loaded position into the trigger mechanism
- Push the safety forward to the off position. **NOTE: The ANTI-DRY FIRE Trigger mechanism will not allow the safety to release without an arrow fully loaded into the trigger mechanism.**
- 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

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 un-cock your crossbow is to fire an arrow into a target or into the ground away from debris, loose rocks or other people. **Note:** Take caution not to target any solid object as the arrow may ricochet, potentially causing harm to you or others.

Sighting-In the Crossbow

Please refer to the instructions included with your scope package.

Arrow Retainer Spring

When loaded, the arrow should lie flat in the flight groove. The arrow retainer spring should not be twisted to the side and should only exert enough pressure to hold the arrow in place. When the crossbow is pointed at the ground, the arrow should remain in place and not slide forward. It should not lift the front of the arrow off the flight groove, and the arrow should be parallel with the flight groove.

- To adjust the *over-molded* style retainer spring, use a pair of needle nose pliers and bend to increase/decrease pressure on the arrow. USE CAUTION! (**See Figure 9**)
- To adjust the *composite* style retainer spring turn the set screw clockwise to tighten pressure on the arrow and counterclockwise to loosen pressure on the arrow. (**See Figure 10**)

NOTE: The arrow retainer spring's tension is set for Barnett arrow height. Therefore, after-market arrows may require adjustments.

If you have any questions, please give our customer service department a call, prior to adjusting.

USE NEEDLE NOSE PLIERS
IN THIS AREA

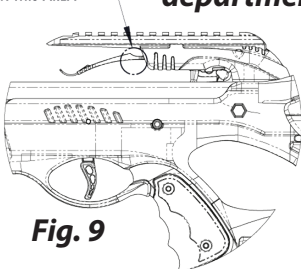


Fig. 9

ARROW RETAINER SPRING
ADJUSTMENT SCREW

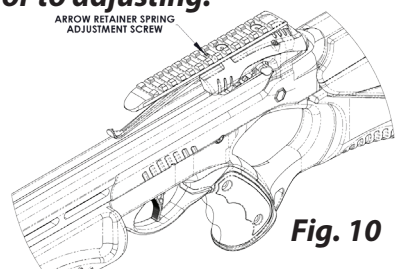


Fig. 10

Arrow Selection and Proper Flight

Due to the unique design of your Barnett crossbow, it is **imperative** that only the specified arrows are used. These arrows are correctly spined and weighted to absorb the high energy generated by the compound design. Lighter arrows simulate a “dry-fire” condition and will result in damage to the crossbow **VOIDING** the warranty.

Understanding Arrow Weights and Speeds

The crossbow industry does not have set standards for calculating advertised speeds. Manufacturers use various arrow weights to depict their marketed speeds, anywhere from a 380 grain arrow to a 425 grain arrow. There are a lot of different factors to consider when choosing an arrow: speed, kinetic energy, down range penetration, accuracy and potential wear that the arrow weight puts on the bow.

With over 50 years of experience, Barnett has found that the best performing arrows in all of these categories combined vary from bow to bow. Included with your bow purchase is the arrow that we feel is weighted for the best performance for your hunting experience. The arrow speeds in the chart below are provided to give you the power of your new Barnett bow in comparison to the other bows on the market.

380 grain arrow	400 grain arrow	425 grain arrow
360 feet per second	353 feet per second	347 feet per second

A DRY-FIRE WILL VOID THE WARRANTY.

- Use Barnett 20” 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”.

IMPORTANT DISCLAIMER

Due to the power of the **PENETRATOR** 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 circumstances. Possible injury could result from shaft breakage, etc. **We accept no responsibility or liability arising from the use of wood-shaft arrows.**

Care and Maintenance

Care of String

The owners 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 non-served area of the cables. Apply Barnett lubewax every 30 - 50 shots to the non-served 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 heat, such as closed, hot vehicles or near heat sources.
- Inspect string and cables for signs of wear. An authorized service center or the factory should replace cables showing wear immediately.
- Keep the flight track and the string serving waxed to reduce 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.

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 tend to cause the arrow to “plane” due to their large surface area. 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.

- 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 on the flight groove? Is the arrow retainer spring too tight or twisted? (*refer to adjustment instructions on page 10*).
- 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. Remember to 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 to prevent it from lifting over the arrow retainer spring.
- Is the odd colored fletch placed down in the flight groove?
- 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 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)?

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 service 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 pre-paid, to the factory.

Collect shipments **will not** be accepted.

Notes

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

How to reach us:

Barnett Outdoors, L.L.C.

955 Live Oak St.

Tarpon Springs, FL 34689

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

E-mail service@barnettcrossbows.com

Cut out and mail immediately to:

Barnett Outdoors, L.L.C.

PO Box 1209

Tarpon Springs, FL 34688

WARRANTY CARD

Name _____ Age _____

Address _____

City _____ State _____ Zip _____

Email: _____

Date of Purchase _____ Phone # _____

Place of Purchase _____ Price Paid _____

Purchase Address _____

City _____ State _____ Zip _____

Registration completed by: Dealer () Consumer ()

Sales Representatives Name:

Registration No. _____