



RC-150

"Veloci-Speed" Synthetic Harness Systems



Shown with optional accessories.

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Manual Includes the Following:

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

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

Please follow all safety, assembly and trouble shooting instructions contained in the 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 service department at 800-237-4507. 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.

For the **RC-150** Barnett highly recommends using Barnett's 16" Aluminum arrow with moon nock and a 125-grain practice tip or broadhead. Depending on your state regulations, we recommend using mechanical broadheads, which result in a more consistent flight pattern.

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SPECIFICATIONS

"Veloci-Speed" System	RC-150
Feet per Second	260
Power Stroke	9.5
Draw Weight	150
String Length	35"
String Stock No.	16055

**For teardrop model built
prior to 2001 please
refer to the following:**

	RC-150
Feet per Second	240
Power Stroke	9.5
Draw Weight	150
String Length	16"
String Stock No.	16077

PARTS LIST

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

Quantity	Part Name
1	Lubewax
1 Each	5/16, 5/32 & 2mm Hex Keys
2	Sight Pins
1	Front Sight Bracket
2	Socket Cap Screws for Sight Bracket w/lock washers
1	Peep Sight w/Set Screw

If you are missing any of the above parts, contact the Barnett Service Department at 1-800-237-4507.

Safety Guidelines RC-150

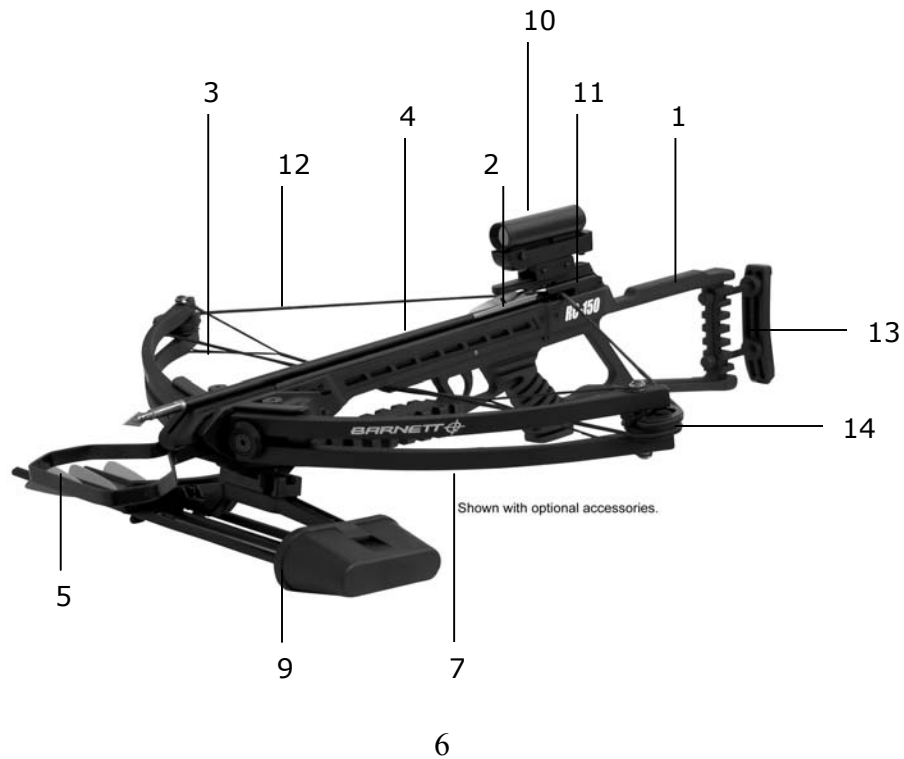
Barnett **RC-150** crossbows are equipped with an automatic safety, which engages every time the crossbow is cocked. The safety must be released before each shot. This, as with any other mechanical device, does not guarantee total safety, as no safety device is a substitute for common sense and safe 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. If the safety will not release, this happens when the trigger is pulled before the safety switch is released. To correct this, push the trigger pull forward, then release the safety catch.

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.**
- **Never dry-fire the crossbow (shoot without an arrow). *Dry firing will void the warranty* and result in damage to the limb and cable assembly and possibly cause 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's 16" Aluminum crossbow arrows for the RC-150. Arrows of improper stiffness or mass weight may damage the limb and cable assembly, *voiding the warranty* and possibly cause personal injury.**
- **Always inspect the crossbow and arrows before firing. Bent or damaged arrows are not safe to fire and should be discarded or repaired.**

BREAKDOWN OF CROSSBOW PARTS

1. BODY
2. BOLT RETAINER
3. CABLES
4. FLIGHT TRACK
5. FOOT STIRRUP
6. FRONT SIGHT BRACKET- **ONLY INCLUDED IF BOW ONLY IS PURCHASED.**
7. LIMBS
8. PEEP SIGHT- **ONLY INCLUDED IF BOW ONLY IS PURCHASED.**
9. QUIVER- **ONLY INCLUDED IF THE KIT OR PACKAGE IS PURCHASED.**
10. RED DOT SIGHT- **ONLY INCLUDED IF PACKAGE IS PURCHASED.**
11. SCOPE MOUNT
12. STRING
13. STOCK EXTENDER
14. WHEELS



ASSEMBLY GUIDE

Mounting the Front Sight

- 1.) Attach the front sight bracket by attaching it to the bow limb housing using the two lock washers and socket head screws provided.
- 2.) Insert the sight pin into bracket by unscrewing the threaded lock nut from the pin and inserting it through the side of the front sight so that the point of the pin is in the center of the front sight.
- 3.) Replace threaded lock nut on sight pin and tighten. Install the second pin in the same manner facing first pin.

Mounting the Rear Peep Sight

- 1.) Slide the rear peep sight onto the attached dovetail with setscrew facing the front of bow.

See figure 1

- 2.) Tighten the setscrew when the peep is in the proper eye relief position with the hex key provided.



Fig. 1

Installing an Optional Scope

The recommended crossbow scope is a Barnett Red Dot Sight.

- 1.) Remove peep sight from the scope rail.
- 2.) 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 eye-piece when you are holding the crossbow in a shooting position.
- 3.) After scope installed you *may* remove the front sight bracket and pins.

Important: Be sure to tighten scope mount rings before shooting crossbow.

Stock Extension

The RC-150 model has a stock extension included. To make adjustments, loosen front nuts, pull extension back exposing rear nuts, adjust to desired position using back nuts. Then secure tightly with front nuts.

CROSSBOW OPERATION

Cocking your Crossbow

Be sure to apply Barnett lubewax to the center string serving, cables and the flight track area from the string to the trigger area.

- 1.) Place the foot stirrup on the ground with one foot in the stirrup and the stock resting against your mid section.

See figure 2

- 2.) Place both hands on the string at each side of the crossbow body no more than ½ inch from crossbow body.

- 3.) Using even pressure pull the string back until it locks into the trigger mechanism with an audible "click". Be sure to apply downward pressure against flight track.

- 4.) 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.



Fig. 2

Note: The serving on the string has had a line on each side of the flight surface marked at the factory. 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. When restringing your crossbow mark the serving of the string, on each side of the flight track at rest. Apply Barnett Lubewax to the string serving and track surface.

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 on the rear of the arrow to hold it in place. It should not lift the front of the arrow off the flight groove. At this point, the arrow should be lying directly parallel with the flight groove. We recommend the use of Barnett arrows manufactured specifically for your Barnett crossbow.

Loading your Crossbow

- 1.) Place the arrow forward under the front sight bracket and lay the arrow on the flight surface. When using arrows with moon nocks, be sure that the odd colored fletch is placed in the flight groove and that the concaved nock is parallel to the string.
- 2.) 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 position on the flight surface.*

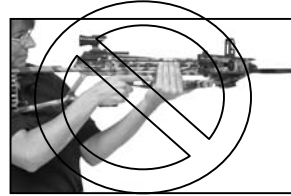
Firing your Crossbow

To fire the arrow from your crossbow:

- 1.) Point the crossbow in a safe direction.
- 2.) Slide 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.**



INCORRECT



INCORRECT



CORRECT



CORRECT

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

By far, the easiest way to un-cock a cocked 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

Using the rear peep sight and front sight pins:

- 1.) Place the first sight pin near the top of the front sight bracket.
- 2.) Shooting at a target from 10 yards, aim for the bullseye. If the first shot is above the bullseye, move the pin up (or down if the shot is below the bullseye).
- 3.) If the first shot is to the left of the bullseye, screw the pin to the left (or right if the shot is to the right)

TIP: Move the pin in the direction of the error, follow the arrow. Continue in this manner until you have three consecutive shots into the bulls eye. Repeat this procedure with the other pin, starting near the bottom of the sight bracket. It is recommended that the bottom pin be sighted in to the 30- to 35-yard range.

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's 16" Aluminum arrows are correctly "spined". **DRY FIRING WILL VOID THE WARRANTY.**

- Use Barnett's 16" Aluminum arrows with straight, offset or helical fletches with or Moon Nock.
- 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.
- Mechanical broadheads that simulate the flight of a field point may be used where legal.

IMPORTANT DISCLAIMER

Because of the power of the Barnett Crossbow and the inconsistent properties of wooden shafts, which have a tendency to warp, vary in spine stiffness; density; moisture absorption, all of which result in inaccuracy. Barnett International **does not recommend** their use under any circumstance.

Possible injury could result from shaft breakage, ect., we accept no responsibility or liability arising from the use of wooded shaft arrows.

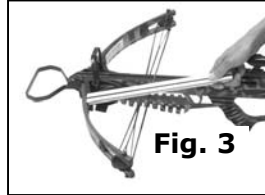
TROUBLESHOOTING

Arrow Flight

Possibly the greatest variable in accuracy are the arrows. These differ greatly and have totally different flight characteristics. Generally speaking, target arrows are more accurate than hunting arrows. Because of the surface area of the fixed bladed broadheads used in hunting there is a tendency for the arrow to "plane". To help overcome this we suggest that practice be made well in advance of the hunting season with the type of arrows you will be using to achieve consistent groupings. Consider the following when selecting arrows; heavy, stiff spined arrows with fletching hold more energy for humane harvesting at reasonable ranges (15-35 yards). Lighter arrows are much faster however hold less energy.

1. If the string has been changed was it a Barnett string?
2. Are the arrows straight and fletches (vanes) in good condition?
3. Does the arrow lie flat (true) on the flight groove? Is the arrow retainer too tight or twisted? (Adjust arrow retainer with a pair of needle nose pliers – USE CAUTION)
4. Does the arrow slide smoothly and evenly into the trigger mechanism?
5. When cocking your crossbow, are you pulling equally on each side of the string? (Mark your new strings on each side of the flight track as stated earlier) After cocking the crossbow, make sure the marks are showing evenly on each side of the trigger mechanism.

6. 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.
7. Are you putting one fletching down in the flight groove?
8. When using broadheads, line up the blades with the fletches on the arrow (using o-ring).
9. Have you checked the tiller to see if any adjustments should be made? **See Figure 3** Tiller is the measurement between the base of the limb and the bowstring. The tiller measurement tells you if both limbs are equally stressed. Your bow is in proper tiller when this measurement is the same for both limbs. Uneven tiller will cause erratic arrow flight. ***All crossbows are accurately tillered at the factory prior to shipping.*** To adjust the tiller, use an hex key wrench and measuring tape as shown in the illustration.



String Fraying

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

Limbs Weak or Losing Power

1. Has the crossbow been dry fired? (could cause limb to crack).
2. Inspect the limbs for splits or cracks.
3. Are you using a Barnett string (the proper length).

CARE AND MAINTENANCE

Care of String

The owners kit contains a tube of lube wax that should be applied to the center serving and flight track every 5 – 10 shots. Lubewax should also be applied anywhere the cables make contact with the Teflon tape or flight track every 20 – 30 shots. To extend the life of your cables it is important to apply ARCHERY STRING WAX to all areas of the cables and string every 30 - 50 shots or when white fuzz begins to appear. If the crossbow has been exposed to excessive moisture you may need to apply wax sooner.

PRIOR TO EVERY SHOOTING SESSION, IT IS RECOMMENDED THAT A COMPLETE CHECK OF STRING, CABLES, WHEELS, 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 cables and strings for signs of wear. Cables showing wear should be replaced immediately by an authorized service center or the factory.**
- **Periodically put a few drops of quality lightweight machine oil in the trigger mechanism.**
- **Periodically lubricate the eccentric wheel axels with lightweight machine oil.**
- **Keep the flight track and the string serving waxed, reducing friction.**
- **Your prod can be left strung indefinitely although 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 limited lifetime warranty. Our liability extends to parts, labor and return transportation to the consumer.

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 which vary from state to state.

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

To obtain service: Please call for a return authorization number prior to sending the unit and write the RA# on the outside of the package. Return the unit to an authorized Service Center **or** directly to the factory. For a listing of authorized service centers please call the factory at the toll free number listed below. Attach to the product your name, address, telephone number and a letter describing the problem. Carefully package and return product prepaid.

For further inquiries contact the Service Dept through the toll free number: 1-800-237-4507.

How to reach us:
Barnett International, Inc.
13447 Byrd Drive or
PO Box 934
Odessa, FL, 33556
Phone 813-920-2241
Fax 813-920-5400
E-mail barnett@barnettcrossbows.com

Cut out and mail immediately to:

Barnett International, Inc.
P.O. Box 934
Odessa, FL 33556

WARRANTY CARD

Name _____ Age _____
Address _____
City _____ State _____ Zip _____
Date of Purchase _____ Phone # _____
Place of Purchase _____ Price Paid _____
Purchase Address _____
City _____ State _____ Zip _____

Registration completed by: Dealer () Consumer ()

Sales Representatives Name:

Registration No.
