

REVOLUTION ™

*"Veloci-Speed"
Synthetic Systems*

*Shown with optional
accessories*

*Extreme Velocity
345
fps
foot
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 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.

Manual Contents

Specifications	3
Parts Checklist	3
Safety Guidelines	4
Crossbow Breakdown	5
Parts Picture	5
Assembly	
Custom Fitting	6-8
Crossbow Operation	8-11
Troubleshooting	12-13
Care and Maintenance	14
Warranty	15
Warranty Registration	Back Cover

Specifications

Feet per Second	345
Power Stroke	15.5"
Draw Weight	150 lbs
Physical Weight	7.7 lbs
Width	27"
Length	37.5"
String Length	39 5/8"
Number of Strands	24
String Stock Number	16200

Parts List

Before beginning to assemble 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 1-800-237-4507.

- 1*** Front Sight Bracket
- 2*** Brass Sight Pints w/ Nut, Washer & Barrel
- 2*** Front Sight Bracket Screws
- 1*** Rear Peep Sight
- 1** Hex Keys 5/32, 3/16, 3/32
- 1** Lubewax

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

Safety Guidelines

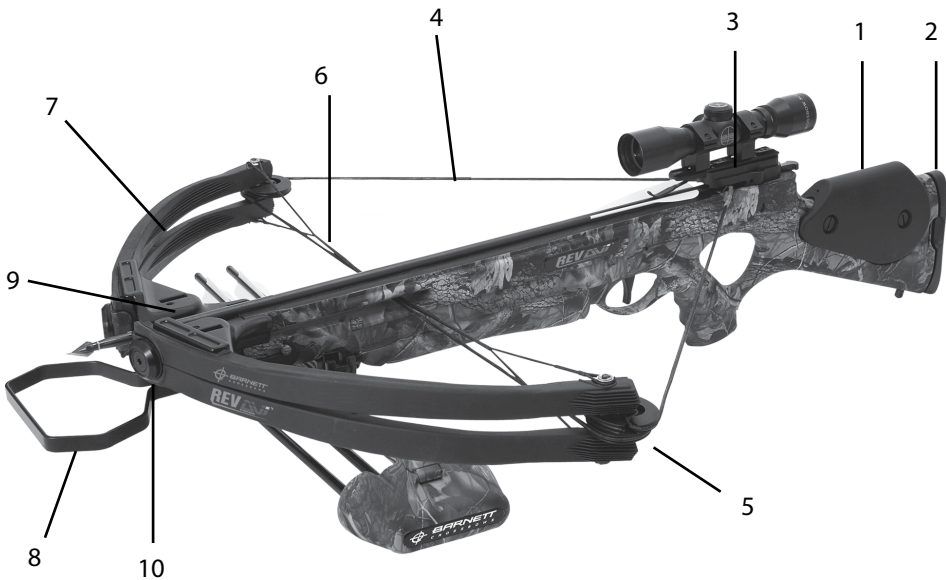
The **Revolution AVi** is equipped with an automatic, ambidextrous safety, which engages every time the crossbow is cocked. The safety must be released before each shot. This, as with any other mechanical device, does not guarantee total safety, as no safety device is a substitute for common sense and 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 (shooting without an arrow or too light of an arrow). ***Dry firing will void the warranty*** and can result in damage to the limb 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 22" Carbon Arrows with half moon nocks made by BARNETT for the **Revolution AVi**. 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.

Crossbow Breakdown



1. Adjustable Cheek Piece
2. Adjustable Rear Stock
3. Scope Mount
4. String
5. Cams
6. Cables
7. AVi Limbs
8. Foot Stirrup
9. AVi Limb Retainer, Bezel, and Limb Bolt
10. Limb Button
11. Front Sight Bracket with hardware (**Not Shown**. Not included if package with scope is purchased.)
12. Peep Sight (**Not Shown**. Not included if package with scope is purchased.)

Assembly Guide

Attaching Prod Housing to Stock

- Place bowstring on top of the flight track . Place cables under front edge of flight track and push prod until it seats securely over pins. *See Figure 1 (See warnig below)*
- Turn bow over and engage prod, locking hooks over locking pin on the side of the flight track.
- The latch unlock switch will click into place over the foot stirrup crossbar and prevent the foot stirrup from unlatching. *See Figure 2*



Fig 1

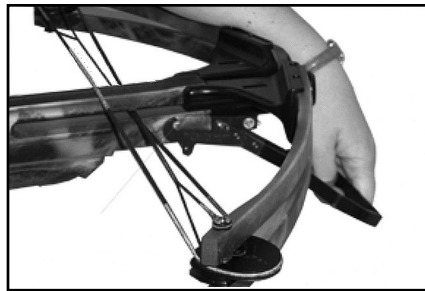


Fig 2

NOTE: This procedure should require some strength to ensure the prod housing locks onto the flight track firmly. If the latch mechanism feels loose or too easy to latch **STOP and call the service department immediately.** 800-237-4507.

- Double check to see that the prod housing is securely seated on flight track and the foot stirrup is securely locked down by the latch unlock switch.

WARNING:

- When installing the *Revolution AVi* prod housing onto the gun body, the prod housing will angle upward as shown in *Figure 3*. You must push the prod housing downward so it sits flat on the nose of the gun body as shown in *Figure 4*.
- Do not engage the foot claw when the prod housing is at the

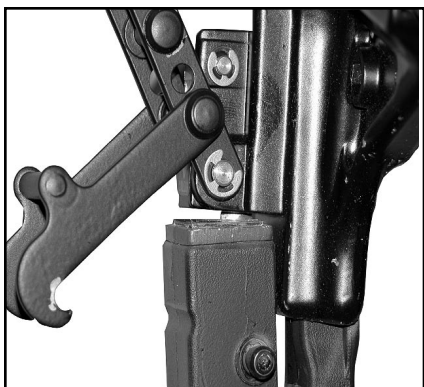


Fig 3

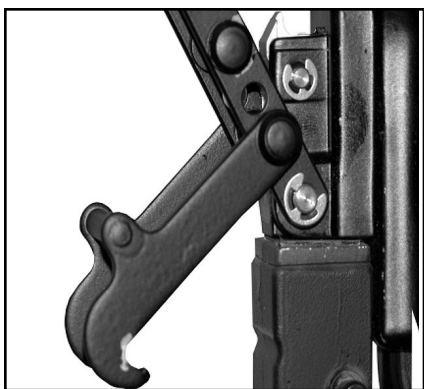


Fig 4

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 5***
- 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 6.***

angle in *Figure 3*, as this will cause damage to the gun body and the prod housing assembly.

- Please contact the service department at 1-800-237-4507 with any questions or concerns.

To detach prod housing from stock, reverse the assembly procedure. It will be necessary to pull down the latch unlock switch before disengaging the foot stirrup and unlatching prod locking hooks.



Fig 5

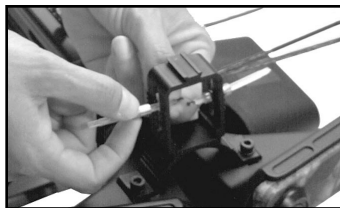


Fig 6

Mounting the Rear Peep Sight

- Slide onto the attached dovetail with the bell portion facing towards you and tighten. See *Figure 7*

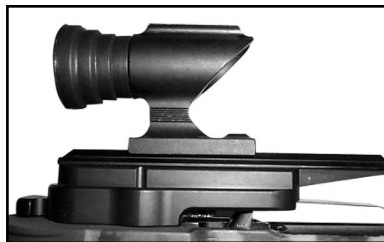


Fig 7

Installing an Optional Scope

The recommended crossbow scope is a Barnett 4x32 mm five-reticle scope.

- Remove peep sight from the scope rail.
- 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 rings with caution.

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

Attaching Optional Quiver

- With crossbow upside down, line up mounting bracket with pre-drilled hole on underside of stock body, install and tighten screw.
- Line up quick detach quiver bracket with holes on mounting bracket (make sure solid side is up), install and tighten the two detach bracket screws.
- Attach quiver by placing it on the quick detach bracket with plastic studs facing the mounting plate at a slight angle and twist to secure.

Custom Fitting

For a full custom fit, Barnett has developed the Adjustable Cheek Piece and Adjustable Rear Stock. The following procedures will aid you in setting up your **Revolution AVi** for comfort and accuracy. Once you have customized your adjustments you will shoulder your **Revolution AVi** in your natural shooting position.

Adjustable Rear Stock

Scopes require a minimum distance of 3" eye relief. Eye relief is the distance your eye requires from the rear of the scope to attain a clear field of view.

When making adjustment for use with rear peep these adjustments are based on personal comfort and eye characteristics, as eye relief is not a factor with a peep.

- Loosen set screws on right side of stock, located above and below the adjustment dial, enough to turn dial freely. ***See Figure 8***
- Turn adjustment dial (clockwise extends, counter clockwise to retract) to make adjustments for proper eye relief or comfort level. ***See Figure 9***
- Re-tighten set screws without over tightening to lock in your adjustment.

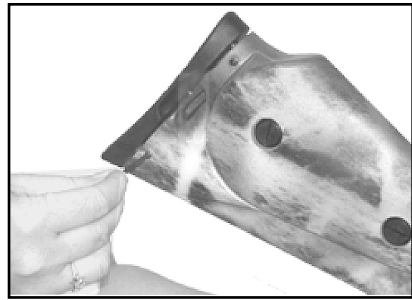


Fig 8

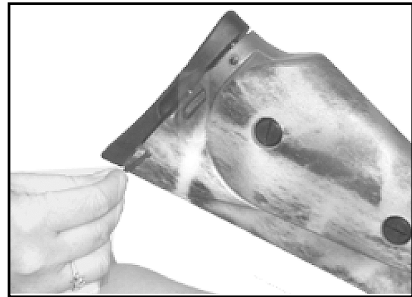


Fig 9

Adjustable Cheek Piece

- Loosen both retaining screws from one side of cheek piece one – two full turns. ***See Figure 9***
- Adjust the angle and or height so your eye aligns naturally and comfortably with your peep sight or scope. ***See Figure 10***
- Re-tighten retaining screws to lock in your adjustment.



Fig 9



Fig 10

Operation

Cocking your Crossbow

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

- Place the cocking stirrup (foot claw) on the ground with one foot in the stirrup and the stock end resting against your thigh. ***See Figure 11***
- Place both hands on the string no more than 1/2" 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.

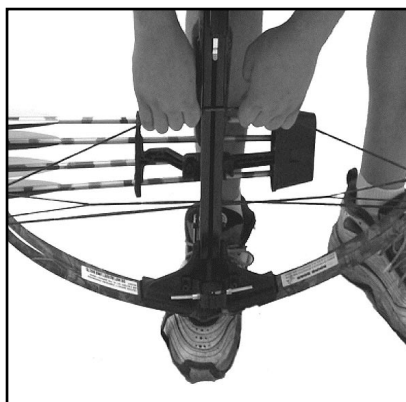


Fig 11

- 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.

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.

Loading your Crossbow

- 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.
- 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.

If arrows with moon nocks are used, be sure that the odd colored fletch is placed in the flight groove and that the concaved nock is parallel to the string.

Firing your Crossbow

To fire the arrow from your crossbow:

- Point the crossbow in a safe direction.
- 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

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:

- Place the first sight pin near the top of the front sight bracket.
- Shooting at a target from 10 yards, aim for the bulls eye. If the first shot is above the bulls eye, move the pin up (or down if the shot is below the bulls eye).
- If the first shot is to the left of the bulls eye, 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 35 to 40 yard range.

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.

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 22” Carbon arrows are correctly “spined”.

DRY FIRING WILL VOID THE WARRANTY.

- Use Barnett’s 22” Carbon arrows with straight, offset or helical

fletches with Half 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 ***Revolution AVi*** 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 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 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 a reasonable ranges (15-35 yards). Lighter arrows are much faster however hold less energy.

- If the string has been changed was 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 too tight or twisted? (Adjust arrow retainer with a pair of needle nose pliers – USE CAUTION)
- Does the arrow slide smoothly and evenly into the trigger mechanism?
- When cocking your crossbow, are you pulling equally on each side 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.
- When cocking your crossbow make a conscious effort to hold the string on the flight track so as not to lift over the arrowretainer.
- Are you putting one fletching down in the flight groove?
- When using broadheads, line up the blades with the fletches on the arrow (using o-ring).
- Have you checked the tiller to see if any adjustments should be made? 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 allen wrench and measuring tape as shown in the illustration. **See Figure 12.**

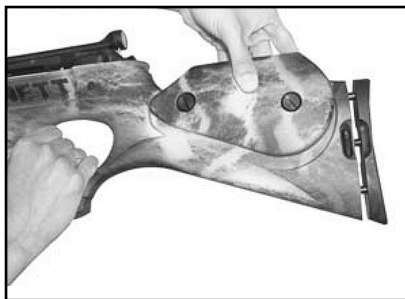


Fig 12

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 and arrow end caps.

Limbs Weak or Losing Power

- Has the crossbow been dry fired? (could cause limb to crack).
- Inspect the limbs for splits or cracks.
- Are you using 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. Lube wax 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.

Care of AVi Limbs

AVi is an Anti Vibration Isolation process that encapsulates standard bow limbs. If scratches or minor cuts appear in the limb caused by contact from outside objects, the bow limb is not affected and should not be returned for warranty. Use caution when placing in a bow press or when around sharp objects to avoid damage to the covering itself. Note: It is normal for AVi limb material to displace around the Limb/Prod Area.

PRIOR TO EVERY SHOOTING SESSION, IT IS RECOMMENDED THAT A COMPLETE CHECK OF 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. An authorized service center or the factory should replace Cables showing wear immediately.
- 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 one-year warranty. The AVi limbs are not covered for cosmetic wear and tear. 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: 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 Sales Dept through the toll free number: 1-800-237-4507.

How to reach us:

Barnett Outdoors, L.L.C., PO Box 934, Odessa, FL, 33556
Phone 813-920-2241 - Fax 813-920-5400
E-mail service@barnettcrossbows.com

Cut out and mail immediately to:
Barnett Outdoors, L.L.C.
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_____