

The logo features a red, three-dimensional, elliptical ring that appears to be floating or orbiting. It is positioned behind the text 'BOWTECH' and its reflection.

**BOWTECH<sup>®</sup>**

**2008**  
OWNER'S  
MANUAL

# THANK YOU

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Congratulations. You have just purchased the finest compound bow in the world. Your new BowTech is designed to be the smoothest, quietest, fastest bow of its kind, with patented and patent-pending technology that no other bow manufacturer can match. The performance of every bow is guaranteed and we are the only company that shoots every bow we sell. If it doesn't perform to our standards, it doesn't ship. We take great pride in our bows and we hope you will too.

As with any weapon, the safe operation of your bow should be the highest priority. Please use it carefully!

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R E F U S E T O F O L L O W

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# BIRTH CERTIFICATE

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Every BowTech bow has completed a comprehensive check and balance process. They have been hand shot, tested and measured to ensure compliance with our strict performance standards.

Performance testing is completed using a Custom Chrono, Heavy Duty ProShop Meter and digital scales. Speed ratings have been obtained with factory installed e-button, brass nock and Hush Kit\*. The use of these accessories decreases velocity by 6-14 fps.

Final factory test results are documented in writing and attached as a "Birth

Certificate" to every bow shipped.

IBO speed ratings are the industry standard and are calculated by shooting a 350-grain arrow using a 70# bow with a 30" draw. Speeds for the Equalizer are achieved using a 300-grain arrow shot at 60# with a 27 1/2" draw.

All models feature an adjustable let-off range up to 80% and draw length modules available in 1/2" increments. The 82nd Airborne, 101st Airborne, The General, Allegiance and TomKat have the option of either the speed or ultra-smooth module.

\* The Hush Kit is comprised of VibraBlocks™, String Silencers and cable muffler. Digital scales used for peak draw and arrow weights have a variance of +/- 1%. Mass bow weights are taken with Hush Kit and VibraBlocks™ installed.

# OWNER'S RECORD

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Date of Purchase: \_\_\_\_\_ Purchase Price: \_\_\_\_\_

Bow Model & Year: \_\_\_\_\_

Serial Number: \_\_\_\_\_ Brace Height: \_\_\_\_\_

Draw Length: \_\_\_\_\_ Draw Weight: \_\_\_\_\_

IBO Speed Rating: \_\_\_\_\_ String Length: \_\_\_\_\_ Cable Length: \_\_\_\_\_

Dealer Purchased From: \_\_\_\_\_

Dealer's Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone No: \_\_\_\_\_

Email Address: \_\_\_\_\_

Every effort has been made to ensure the accuracy of information and typographical content within our owner's manual. BowTech reserves the right to modify and/or discontinue products shown without notice and at its discretion. © 2008 BowTech. All rights reserved.

## BINARY CAM SETUP & TUNING

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The Binary Cams are modular adjusted, so when changing the draw length module, it is also necessary to readjust the post setting. Draw length modules are available in 1/2" increments on all Binary Cam models.

BowTech bows are factory tuned. Any alterations to the original factory setup could inhibit performance. You may need to reset your draw to the correct length. Use the module that best meets your individual draw length and readjust the post setting according to mod chosen, before attempting to fine tune your let-off. See your Authorized BowTech Dealer for proper draw length adjustment, new module installation, and post setting instructions.

### SETTING THE PEAK WEIGHT

Peak draw weights are adjustable approximately 10 pounds downward depending on the model. Consult your local authorized BowTech dealer for information regarding weight adjustment for your bow model. All bows perform best at peak weight. BowTech bows are standardized to fit most manufacturers' accessories and will perform best when shot with a mechanical release.

### DRAW STOP ADJUSTMENTS

The draw stop settings are designed to make minute changes in increments as small as 1/16" in draw (up or down)

from the draw-length originated by the module. Depending on bow model, draw stop may be adjusted via a slotted post, or a multi-hole eccentric module (e.g. The General or Commander).

For models equipped with a slotted post: move the draw post to customize the module for your individual draw length, stopping the cam rotation exactly where you want it. The post rotates until it comes into contact with the limb of the bow, resulting in the most solid wall on the market and the most precise anchor point available. **The post should not be adjusted more than 1/2 mark from factory mod specifications.**

Start by loosening the Allen screw on the post. Loosen just enough to allow movement either toward the 1 (short) or 10 (long) markings on the cam. **WARNING: NEVER ATTEMPT POST ADJUSTMENT WHILE DRAWING THE BOW.** When adjusting the post, very little movement is required to dramatically affect the settings. **DO NOT OVER OR UNDER ADJUST.** Setting the post too short results in a very low let-off, with almost zero valley. Setting the post too long causes the cables to contact the mod stop, making the Binary Cam System less efficient and also giving very high let-off. **Never move post more than 1/2**

mark from factory settings. Doing so will effect performance, let-off and draw length.

Post adjustment incorporates all the settings necessary for BowTech models using the Binary Cam. Improper adjustment results in performance inefficiencies and can be dangerous. When drawing the bow, make sure that the post stops the draw cycle. Correct any over-rotation by moving the post setting toward the 1 marking. In doing so, you will return to the correct let-off and valley. Your Authorized BowTech Dealer can assist you with proper post adjustment.

Models equipped with a multi-hole eccentric module draw stop are capable of an infinite range of adjustability. The module rotates with the cam until it comes into contact with the cables, providing an effective back wall. Adjusting this draw stop is as drastic as adjustments to slotted post draw stop. Use caution.

Contact your BowTech dealer for assistance making draw stop adjustments. Any changes made to the draw stop will directly affect let-off.

**NOTE:** To set a longer draw length, you may need to install a different module and reset the draw post setting in order to maintain maximum shooting efficiency.

### CENTER PIVOT BOWS

The Guardian and Commander Center Pivot Bows do not require the use of a bow press to replace string and cables or to adjust the bows draw weight.

To adjust draw weight, equally back-off both limb bolts counter-clockwise (1 full turn = approximately 2-5 lbs). In order to maintain optimum efficiency, it is recommended that you do not decrease the draw weight more than 10 Lbs.

To replace string, cables or install a peep sight, back the limb bolt out 5 turns on one end then alternate to the other end, repeating this process until the end of the limb bolt is just visible in the limb bolt viewing hole in the riser (Approx. 3 threads visible). String tension will be minimal allowing you to work on the bow as needed.

### CHANGING THE LET-OFF

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Changing the let-off is accomplished with ease. It may require a post setting and/or a module change. The draw stop affects the bow's let-off by stopping the rotation of the cam on the module track before it over rotates and before the cables contact the mod stop slot. Let-off can be adjusted up to 80%.

**NOTE:** Post setting adjustments allow fine tuning to achieve individual draw

length requirements, however adjusting the draw length will affect the let-off and valley at the same time. Achieving an exact let-off at a specific

draw length may require some trial and error of minor modifications and/or the use of a scale. See your Authorized BowTech Dealer for assistance.

## STRINGS, CABLES & TUNING

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Your BowTech custom bowstring is manufactured to provide long string life and absolute consistency, shot after shot. This results in greater accuracy, and less time spent re-tuning your equipment.

It is recommended that you cycle the bow 100-150 times to remove shrinkage from the string as a result of relaxation during packaging and shipping. Separate the bowstring and install your peep sight. To properly align the peep sight, simply twist the string from the bottom in 1/2-turn increments until the peep sight aligns. In rare cases, this procedure may need to be repeated after cycling an additional 200 shots.

**Wax the string often.** We recommend BCYML 6 synthetic string wax or an equivalent product. To wax the string, apply wax liberally to entire length of string. Rub briskly with fingers until the string appears slick. Remove all excess wax with a clean cloth. We recommend that you wax every other time you shoot your bow to lengthen the life of your string and cable sets.

The ShortStop is designed to silence the string and center it with every shot. When adjusting the position of the ShortStop, always keep the short-stop in its highest position. The ShortStop should be centered with the string and lightly touching the string when the bow is at rest.

For optimum performance and correct timing, your BowTech is factory preset with the correct distance between the module screw and the limb. Contact your dealer for specific timing gaps for each bow model.

There are factory installed speed nocks located on the string at various distances from the axle(s). These nocks enhance the speed and performance of the bow. Installing additional, removing, or changing the location of the factory installed speed nocks will reduce performance and speed.

**Contact your Authorized BowTech Dealer for adjustment assistance and to purchase authorized BowTech replacement parts. Installation of non-authorized BowTech components could void your warranty.**

## ABOUT SPEED

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If you are truly feeling the need for speed, only one bow company is prepared to meet the challenge, and we aren't afraid to back it up. BowTech produces the fastest bows in the world and every bow is individually lab-tested, and carries a lifetime warranty.

BowTech, with its patented, revolutionary technology, is determined to fulfill the number one demand among archers today: maximum speed to target with exceptional smoothness.

### HOW DO MANUFACTURERS RATE SPEED?

IBO Speed Ratings are an industry standard of measurement used by all manufacturers. Speed ratings are based on a bow produced with a draw weight of 70# and a draw length of 30" using a five (5) grain per pound arrow (350 grain). Any deviation from these settings causes a drop in arrow velocity. NOTE: The chart below is a general guide for the amount of speed lost when accessories are added to your string.

<b>STRING ACCESSORY</b>	<b>SPEED LOSS</b>
<b>Brass Nock</b>	<b>2 - 4 fps</b>
<b>Peep Sight</b>	<b>3 - 6 fps</b>
<b>String Silencers</b>	<b>2 - 6 fps</b>
<b>E-Buttons</b>	<b>2 fps each</b>
<b>Rubber Peep Tube</b>	<b>6 - 10 fps</b>
<b>String Loop</b>	<b>1 - 3 fps (without brass nocks)</b>
<b>VibraBlocks</b>	<b>0 - 2 fps</b>

Speeds vary depending on placement and manufacturer of string added accessories. Speed loss of arrows over the IBO standard of five (5) grains per pound (350 grains @ 70# draw weight):

**BINARYCAM:** Every 3 grains of added arrow weight results in approximately 1 fps speed loss.

## BOW MAINTENANCE & TROUBLE SHOOTING

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Replace the string and cables once a year or every 2,500 shots, whichever comes first, to maintain optimum performance.

Examine your bow for wear and tear before you shoot (mod screws, axles, bushings, cables, cable slide, e-clips, and string). If any one of these items shows excessive wear, contact your Authorized BowTech Dealer to have them install new BowTech replacement parts. This keeps your bow shooting consistently without voiding your warranty.

When adjusting the bow's draw weight on Binary Cam bows, always keep the bow at even tiller. Tiller is the distance between the string and the point where the back of the limb joins the pocket. The tiller at both the top and bottom should be equal (for example: 8" tiller at the top and 8" tiller at the bottom). If the top or bottom tiller is off by as little as 1/8", the bow's performance may be affected.

When adjusting the bow's draw weight, please first consult your local BowTech dealer for information regarding weight adjustment ratios and maximum limb bolt adjustment. A full revolution of the limb bolt achieves varying draw weight adjustment results, depending on bow model. Adjusting the weight of the bow may adversely affect the bow's performance.

For bow models using limb pocket systems, do not adjust limb bolts without first loosening the limb pocket lock down screw.

**WARNING: DO NOT TURN THE LIMB BOLTS OUT MORE THAN THE RECOMMENDED AMOUNT. Doing so could damage the bow, cause the limbs to break out of their pockets and result in bodily injury.**

Proper lubrication of the axles and limb pockets limits wear and tear. Add enough lubricant to these areas to create a barrier between each working part and to optimize the performance of the bow.

**NOTE:** Only industry standard lubricants should be used. **DO NOT USE WD-40.**

All BowTech bows use AMO standards for measuring draw lengths, (measured from the pivot point, or throat, of the grip to the bottom of the valley) plus 1-3/4".

Always use a properly spined arrow for this bow with a minimum weight of five (5) grains per pound (IBO standard). An arrow with legal IBO weight is not necessarily properly spined. The bow must be able to transfer its energy to the arrow without any loss. Likewise, the arrow spine must be able to absorb the bow's energy. If the arrow is not properly spined, it will kick out, lose speed, and have poor

## BOW MAINTENANCE & TROUBLE SHOOTING CONT.

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flight. If the arrow is properly spined, it achieves true, straight flight with maximum speed. Use an arrow chart to determine what shaft is needed to fit the specifications of your bow.

Make sure the weight of the arrow tip is matched to the arrow's shaft strength. If the weight of the tip is too light or too heavy, poor arrow flight occurs. Use an arrow chart to find out what tip weight is needed to match the arrow shaft. Try to maintain 7% to 10% forward weight for your tip selection.

The arrow nock should be 3/16" to 3/8" above the center of the T-square, depending on the shaft diameter. This is a good starting point to achieve proper arrow flight.

Any accessories added to the bowstring cause the bow to lose speed. All speed tests are done only with factory specs.

If you need assistance with setting up, tuning, or solving an arrow flight problem, contact your Authorized BowTech Dealer.

## LIFETIME WARRANTY

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All BowTech bows are backed with a Lifetime Warranty to the original owner. The following exclusions apply.

### EXCLUSIONS

#### **Original Owner.**

Warranty applies to the original owner only, is non-transferable and does not apply to internet sales.

#### **Components Not Covered.**

Cables, strings, bearings, paint and/or film dipped finishes are not included in warranty.

#### **Mod Screws.**

It is important to make sure module screws are properly installed with Loc-Tite. Warranty DOES NOT cover module screws that loosen and cause limb damage.

#### **Damage Not Covered.**

Damage caused by abuse, mishandling, dry-firing, alteration or modification to original product, or shooting of arrows less than five grains per pound of draw weight will render the warranty void.

#### **Warranty Card.**

For the Warranty to be in effect, the Warranty card must be completed and properly returned to BowTech, with a copy of the purchase receipt, within 30 days of purchase.

#### **Authorized Dealer.**

The BowTech Warranty covers only bows bought from Authorized BowTech Dealers and not from Internet sales.

## LIFETIME WARRANTY CONT.

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Contact BowTech to confirm that the person you are buying from is an authorized dealer.

### TURN AROUND TIME

Our goal at BowTech with all warranty returns is to have your bow repaired and shipped out of our doors within 72 hours, or three (3) business days of receiving it in our facility. You are our greatest asset and we will give you the highest quality, most efficient service in the industry.

### WARRANTY SERVICE

All products returned for warranty service need to be returned to the dealer first for inspection and determination of any problem. Authorized BowTech Dealers can help you determine if factory service is required or if your Pro Shop can repair the problem. The bow owner is responsible for the return freight to BowTech, and BowTech will in turn, pay for the return freight of the repaired product. In the event that a bow must be returned for factory service, a Return Authorization (RA) number must first be obtained through your dealer.

Bows returned to the factory without an RA number will be refused. All bows must include the following:

- A large, readable RA number on the outside of the box.
- A copy of the sales receipt, if previously sold.
- Must be sent freight prepaid. No COD shipments will be accepted.
- Do not include accessories unless otherwise instructed. BowTech will not be responsible for loss or damage to any accessory left on the bow when shipped.
- All methods of shipping by UPS or FED-EX only. Sender should insure all shipments.
- If your bow cannot be repaired, we reserve the right to replace your bow with a newer model.
- BowTech reserves the right to make parts substitutions on warranty coverage at BowTech's sole discretion and for any reason.

## SAFETY AND GENERAL INFORMATION

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**BEFORE USING YOUR NEW BOWTECH, READ AND UNDERSTAND THE FOLLOWING MATERIAL OUTLINED IN THIS MANUAL. FAILURE TO FOLLOW ANY OF THESE WARNINGS AND INSTRUCTIONS CAN DAMAGE THE BOW AND MAY CAUSE SERIOUS INJURY TO YOURSELF AND/OR OTHERS.**

Your new BowTech bow is a highly tuned, precise shooting machine. It requires special care and handling to achieve and maintain peak performance. The string, cables, and limbs are under extreme tension, which create an incredible source of energy that must not be taken for granted. Please respect this power and use it properly.

### **WARNING: NEVER DRY FIRE THE BOW**

NEVER draw a bow without an arrow nocked. Doing so may cause personal injury and/or damage the bow. When drawing a bow for inspection or demonstration, never release the string at full draw to let down. Hold onto the string and do not let it slip out of your hands. Without the resistance of a properly weighted arrow to absorb the energy, you may damage the bow and cause personal injury to you and/or others.

### **ADULT SUPERVISION REQUIRED**

**ADULT SUPERVISION OF ALL CHILDREN UNDER THE AGE OF 18 IS REQUIRED. A BOWTECH BOW IS NOT RECOMMENDED FOR CHILDREN UNDER SEVEN (7) YEARS OF AGE.**

BowTech has designed your bow to be a safe and fun product. However, as with any shooting style product, safety rules must be observed. It is HIGHLY recommended that these rules be read before using any bow.

Bows and arrows are NOT toys. For maximum safety and enjoyment, always exercise caution, common sense, and safety rules when shooting any bow.

ALWAYS use an appropriate backstop for maximum safety. An appropriate backstop must be constructed of a durable material and must extend beyond the perimeter of the target. The recommended backstop size is determined by the accuracy and ability of the shooter. The lower the level of accuracy, the larger the perimeter required.

NEVER aim or draw any bow in the direction of a person. Aim and draw ONLY in the direction of an appropriate target. ALWAYS have a full view of the path to the target and beyond when shooting.

## **SAFETY AND GENERAL INFORMATION CONT.**

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ALWAYS inspect arrow and fletching prior to shooting for imperfections such as cracks, splits, or splinters. Damaged arrows must not be used and should be destroyed. A flex-test is recommended by most carbon arrow manufacturers.

NEVER retrieve arrows or allow anyone else to do so until all arrows have been shot.

NEVER draw the bow without properly adjusted limb bolts (no more than 2-1/2 turns off peak weight). Make sure the string and cables are properly attached to the correct post and in the correct tracks in order to avoid possible injury.

**DO NOT** attach anything to the string or cables that could cause them to wear or become cut. This will void the warranty.

**DO NOT** cross cables in any configuration other than the configuration set by the factory. This will have an adverse effect on performance and shootability. This will also cause extreme wear to the string, cable and either cableslide or roller guard.

Any alteration from the factory specifications or the adjustments outlined herein will void the factory warranty. ALL maintenance must be performed at an Authorized BowTech Dealer.

### **DISCLAIMER OF LIABILITY**

By accepting a BowTech archery product, buyer agrees to hold harmless BowTech and all associated parties from liability for any damage to persons or property, which may result, for any reason, from the use of this product.

If you have any questions about the safety or use of any BowTech product, contact an Authorized BowTech Dealer or call BowTech direct at (877) 447-0293.



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