

## THANK YOU

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**Congratulations on your recent purchase!** We at BowTech know that you have a choice when it comes to your archery equipment, and we want to thank you for choosing us as your hunting partner. Your feedback is important to us, as it is our desire to provide you with the absolute finest products and customer service in the industry. Please take the time to go online and register your new BowTech bow. It is equally important to read through this owner's manual as there are valuable tips to help keep your BowTech trouble free for many seasons.

We encourage you to contact and utilize your local dealer as they can assist you with purchases, services and accessories. To locate the dealer nearest you, visit [BowTechArchery.com/dealers](http://BowTechArchery.com/dealers). Frequently asked questions and additional contact information can also be found at [BowTechArchery.com](http://BowTechArchery.com).

**BEFORE USING YOUR NEW BOWTECH BOW, 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.**

**DISCLAIMER OF LIABILITY:** By accepting a BowTech product, the 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.

## QUALITY

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Every BowTech bow has undergone a comprehensive quality control process and is built from the highest quality components available. Most have been

individually shot, tested and measured to ensure compliance with our strict performance standards.



REFUSE TO FOLLOW

90554 Highway 99 North • Eugene, OR 97402  
[BowTechArchery.com](http://BowTechArchery.com)

## LIFETIME WARRANTY

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All BowTech bows not sold over the Internet come with a non-transferable lifetime warranty to the registered original owner. This warranty protects against any failures of the product due to defects in material or workmanship and does not include any damage due to abuse, misuse or modification to the bow's design. The following exclusions apply.

### EXCLUSIONS

Cables and strings, bearings, paint and/or hydrographic film transferred finishes, accessories to include: sights, arrow rests, string silencers, quivers, or any other components included as part of an accessory package.

Damage caused by abuse, mishandling, dry-firing, alteration or modification to original product. Other excluded damages are those resulting from either loose mod screws or shooting arrows less than five grains per pound of draw weight. Damage caused by altered or damaged arrows and/or string dampening material, including original and aftermarket parts, is also excluded.

**For the warranty to be enforceable the original purchaser must complete and submit the online registration form within 30 days of purchase.**

### AUTHORIZED DEALER

The BowTech Warranty covers product purchased from Authorized BowTech Dealers. BowTech products purchased through the Internet are not warranted. Contact BowTech to confirm that your purchase is through an Authorized Dealer.

### WARRANTY SERVICE

Our goal with all warranty returns is to have the bow shipped out the door and on its way back to your dealer within 3 business days of receiving it at our facilities in Eugene, Oregon. You are our greatest asset, and we will give you the highest quality and most efficient service possible.

All products requiring warranty service must be returned to an Authorized Dealer for inspection and diagnosis of any problem. Your BowTech dealer can determine whether factory service is required, or if the service needed can be performed at the dealer's facility. In the event that a bow must be returned for factory service, a Return Authorization (RA) number must first be obtained by your dealer. Bows returned to the factory without an RA number will not be accepted.

The bow owner is responsible for the return prepaid freight to BowTech. No COD shipments will be accepted. BowTech will perform the warranty service required and return the product to the dealer prepaid.

– All methods of shipping by UPS or FED-EX only. Sender should insure all shipments.

## LIFETIME WARRANTY CONT.

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- If your bow cannot be repaired, we reserve the right to replace your bow with a newer model of equal or greater value.
- BowTech reserves the right to substitute any parts required for warranty coverage at its sole discretion and for any reason.

## TUNING AND PROPER FIT

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### ADJUSTING THE DRAW LENGTH

It is very important that it is adjusted to fit you properly. Assistance in achieving proper fit should be provided by your Authorized BowTech Dealer.

The draw length of all current BowTech bows can be adjusted without draw length specific modules. The Rotating Mod System makes this feature possible. By simply rotating the module clockwise or counterclockwise, your draw length can be adjusted in 1/2 inch increments.

### OVERDRIVE BINARY CAM SYSTEM MODELS (Insanity CPX, Insanity CPXL, Invasion CPX, Specialist)

Refer to Figure 1 and Chart 1

1. You will need to press your bow in order to adjust the draw length on bows with the OverDrive Binary Cam System. BowTech recommends that you take your bow to your Authorized BowTech Dealer for adjustment of your bow's draw length.

2. Once the bow is in the press and the tension in the string and cables has been relieved, use a 9/64 inch hex wrench to remove the module screws

that attach the modules to the cams.

3. Notice the indexing post on the module and the numbered slots in the cam. All bows are factory preset to a 29 inch draw length, with the indexing post positioned in the corresponding numbered slot. The lowest numbered slot corresponds to the longest draw length setting.

4. To lengthen the draw length, rotate the module so that the indexing post is placed in a lower numbered slot. For example, if an Invasion CPX was shipped with the indexing post in the #3 slot at 29 inches of draw length, you would place it in the #1 slot for a 30 inch draw length.

5. To shorten the draw length, rotate the module so that the indexing post is placed in a higher numbered slot. For example, if an Invasion CPX was shipped with the indexing post in the #3 slot at 29 inches of draw length, you would place it in the #5 slot for a 28 inch draw length.

6. Replace both module screws on each cam and retighten. **We recommend applying blue Loctite 242 to the threads before replacing them at your desired setting.** This will prevent the screws

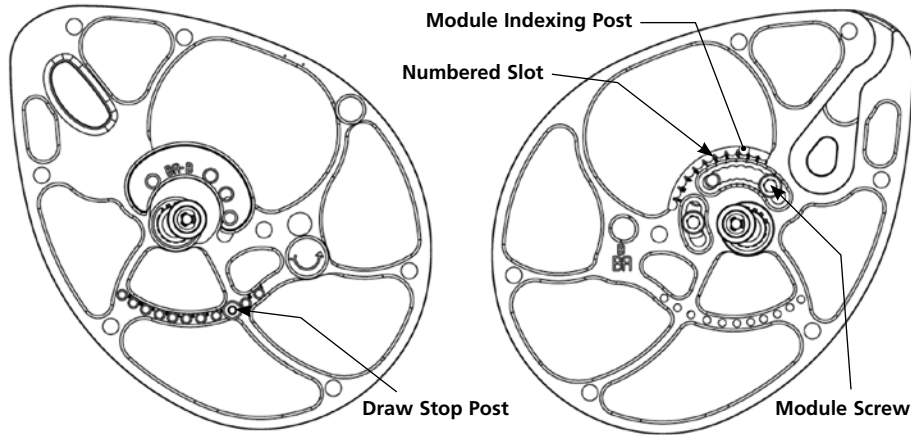


Figure 1: OverDrive Binary Draw Length Adjustment

from loosening during normal use of the bow.

7. Ensure all strings and cables are in their appropriate grooves and remove the bow from the press.

8. After repositioning the module, you will need to reposition the draw stop posts. To do this, use a 5/64 inch hex

wrench to remove the post from its current position.

9. Replace the post in the position that matches the numbered slot that you placed the module indexing post in. For example, if the module was placed in the #5 position, the draw stop post should also be placed in the #5 position.

Chart 1: OverDrive Binary Module & Post Settings

Module Position	Insanity CPX		Insanity CPXL		Invasion CPX		Specialist	
	Draw Length	Post Setting	Draw Length	Post Setting	Draw Length	Post Setting	Draw Length	Post Setting
1	30	1	32	1	30	1	30.5	1
2	29.5	2	31.5	2	29.5	2	30	2
3	29	3	31	3	29	3	29.5	3
4	28.5	4	30.5	4	28.5	4	29	4
5	28	5	30	5	28	5	28.5	5
6	27.5	6	29.5	6	27.5	6	28	6
7	27	7	29	7	27	7	27.5	7
8	26.5	8	28.5	8	26.5	8	27	8
9	26	9	28	9	26	9	26.5	9
10	25.5	10	27.5	10	NA	NA	26	10

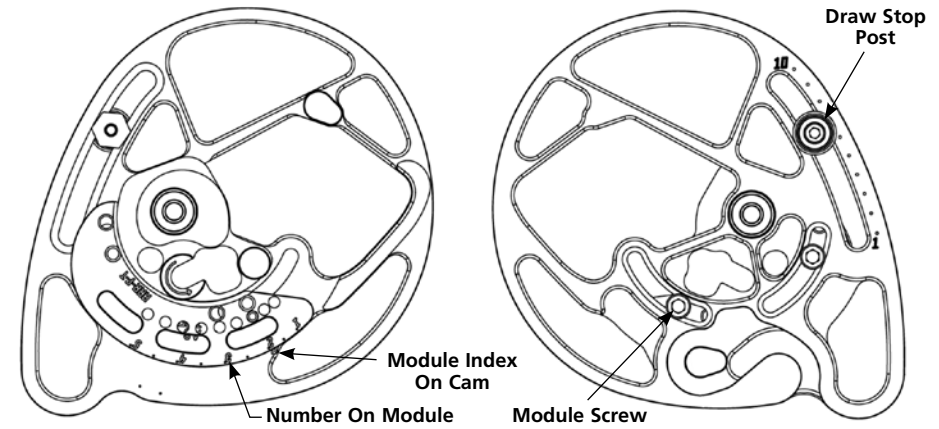


Figure 2: Conventional Binary Draw Length Adjustment

**STANDARD BINARY CAM SYSTEM MODELS**  
(Assassin, Assassin SD, HeartBreaker)

Refer to Figure 2 and Chart 2

1. Use a hex wrench to remove the module screws that attach the modules to the cams.

2. Notice the module index on the cam, and the numbers on the module. Repositioning the module so that a different number lines up with the index on the cam changes the bow's draw length. The lowest number corresponds to the longest draw length setting.

3. To lengthen the draw length, rotate the module so that the module index points to a lower number. For example, if an Assassin was shipped from the factory with the module index pointing at the #2 at 29 inches of draw length, it would point at the #1 for a 30 inch draw length.

4. To shorten the draw length, rotate the module so that the module index points to a higher number. For example, if an Assassin was shipped from the factory with the module index pointing at the #2 at 29 inches of draw length, it would point at the #3 for a 28 inch draw length.

5. Replace both module screws on each cam and retighten. We recommend applying blue Loctite 242 to the threads before replacing them at your desired setting. This will prevent the screws from loosening during normal use of the bow.

6. After repositioning the module, you will need to reposition the draw stop post. To do this, loosen the draw stop post screw and slide the post to the appropriate position, as indicated in Chart 2, and retighten the screw. Once set, small adjustments can be made to the post to fine tune draw length and let-off. Post setting adjustments

Chart 2: Conventional Binary Module & Post Settings

Module Position	Assassin		Assassin SD		HeartBreaker	
	Draw Length	Post Setting	Draw Length	Post Setting	Draw Length	Post Setting
1	30	8.5	27	9.6	27	9.6
1.5	29.5	7.6	NA	NA	NA	NA
2	29	6.8	26.5	8.3	26.5	8.3
2.5	28.5	5.9	NA	NA	NA	NA
3	28	5	26	7.2	26	7.2
3.5	27.5	4.3	NA	NA	NA	NA
4	27	3.7	25.5	6.3	25.5	6.3
4.5	26.5	3.1	NA	NA	NA	NA
5	26	2.6	25	5.5	25	5.5
5.5	NA	NA	NA	NA	NA	NA
6	NA	NA	24.5	4.7	24.5	4.7
6.5	NA	NA	NA	NA	NA	NA
7	NA	NA	24	4.0	24	4.0
7.5	NA	NA	NA	NA	NA	NA
8	NA	NA	23.5	3.3	23.5	3.3
8.5	NA	NA	NA	NA	NA	NA
9	NA	NA	23	2.6	23	2.6
9.5	NA	NA	NA	NA	NA	NA
10	NA	NA	22.5	1.9	22.5	1.9

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 and the use of a scale. See your Authorized BowTech Dealer for assistance.

**TIMING THE BOWTECH CAMS**

There are small indentations or “timing dots” on the module-side of the cam near its perimeter. When viewing the bow directly from the module side of the cam, the cable should be approximately centered in between

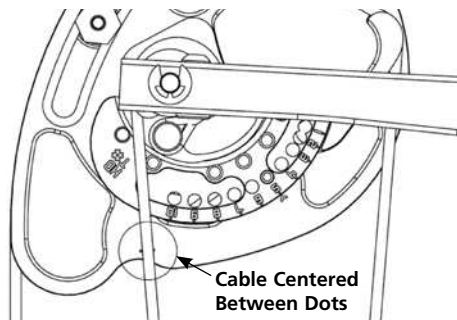


Figure 3: Cam Timing

the timing dots as shown in Figure 3. Adjusting the timing requires that the bow be put in a press, and as such, your Authorized BowTech Dealer should perform all timing adjustments.

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.

Draw weight can be adjusted by using a hex wrench to either tighten or loosen the limb bolt. The specific method for adjusting draw length varies by model as described below.

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

**SPECIALIST**

Draw weight on this model can be adjusted 10 pounds down from the bow’s peak draw weight. For example, if the bow is shipped as a 60 pound model, the draw weight can be adjusted down to 50 pounds. The procedure is as follows (see figure 4):

1. Using a 5/32 inch hex wrench, loosen the four pocket locking screws. The screws do not need to be completely removed, only loosened.
2. Using a 1/4” hex wrench, tighten or loosen the limb bolts to increase or decrease draw weight. One full

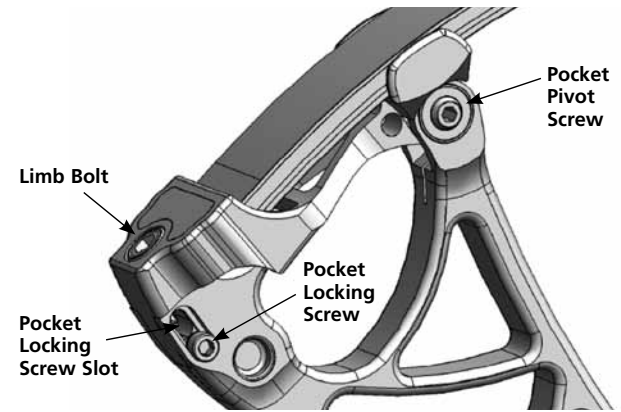


Figure 4: Draw Weight Adjustment (Specialist)

turn equals approximately 2 pounds of draw weight. DO NOT back out the limb bolt any more than 6 turns. When the bow is backed out six turns, the pocket locking screws will be near the end of their slot. The top and bottom limb bolts should be tightened and loosened equally.

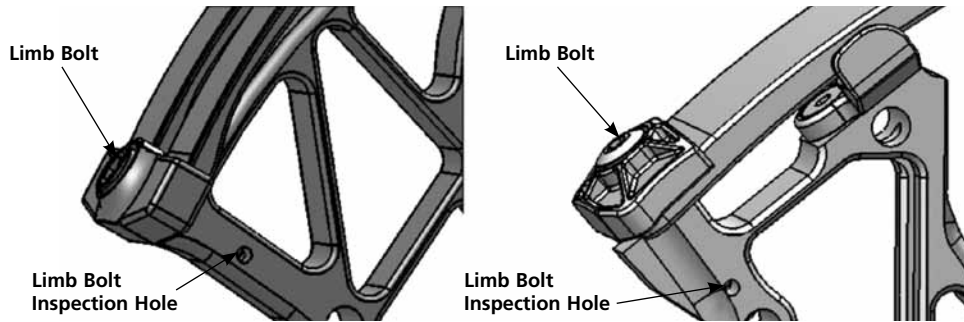
3. Once the bow has been set as desired and the limb bolts are adjusted equally, retighten the pocket locking screws.

4. It is possible that adjusting the limb bolts may have caused the pocket pivot screw to loosen. For this reason, use a 5/32 inch hex wrench to ensure that the pocket pivot screw is tight.

**INSANITY CPX, INSANITY CPXL, INVASION CPX, ASSASSIN, ASSASSIN SD AND HEARTBREAKER**

Draw weight on these models can be adjusted 10 pounds down from the bow’s peak draw weight. For example,





**Figure 5: Draw Weight Adjustment (Insanity CPX, Insanity CPXL, Invasion CPX, Assassin, Assassin SD and HeartBreaker)**

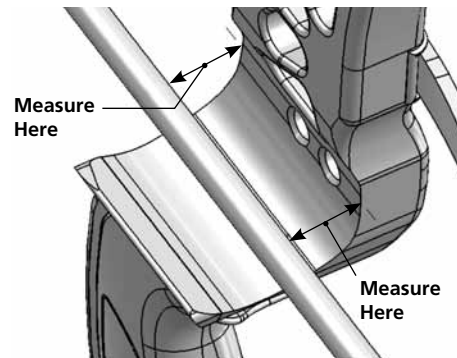
if the bow is shipped as a 60 pound model, the draw weight can be adjusted down to 50 pounds. The procedure is as follows:

Using a hex wrench, tighten or loosen the limb bolts to increase or decrease draw weight. For the Insanity CPX, Insanity CPXL, and Invasion CPX, one turn of the limb bolt equals approximately 1 pound. For the Assassin, one turn of the limb bolt equals approximately 3 pounds. For the Assassin SD and HeartBreaker, one turn of the limb bolt equals approximately 2.5 pounds. **DO NOT** back out the limb bolt past the limb bolt inspection hole in the riser. The limb bolt **MUST BE** visible in the limb bolt inspection hole (**Figure 5**). The top and bottom limb bolts should be tightened and loosened equally.

### CENTER SHOT

Center shot can be set by measuring from the back of the riser to the arrow and then from the front of the riser

to the arrow. Once this is equal, you are at the approximate center shot of your bow (**see Figure 6**). This is a good starting point when tuning your BowTech bow. Keep in mind, not all bows tune at exact center shot due to the variances in arrow spine, hand position, and your specific bow poundage. Adjust your arrow rest until the two measurements are equal.



**Figure 6: Determining Center Shot**

Your BowTech bow was made with the highest quality components to last for a lifetime of use in the field with proper maintenance. It is important that you **NEVER** draw and release a bow without an arrow on the string. This could not only hurt you, but can damage your bow. If the bow is dry fired at any time, take it to your local dealer for a complete inspection. Never leave your BowTech bow in an area of extreme temperatures. This

will cause your string and cables to stretch which effects timing.

Before shooting your bow, always inspect the string and cables and check the limbs for any visible damage. If damage is found, take the bow to your local BowTech dealer for inspection or repair.

Your BowTech bow comes equipped with sealed bearings in both cams. There is no need to lubricate cams.

## STRING & CABLES.

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 10-20 times to settle the string as a result of relaxation during packaging and shipping.

**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.

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

## GENERAL INFORMATION

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 creates an incredible source of energy that

must not be taken for granted. Please respect this power and use it properly.

BowTech bows are standardized to fit most manufacturers' accessories and will perform best when shot with a release.

ADULT SUPERVISION OF ALL CHILDREN UNDER THE AGE OF 18 IS REQUIRED  
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 and common sense when shooting any bow.

**WARNING:**  
NEVER DRY FIRE THE BOW  
NEVER draw a bow without an arrow nocked. Doing so could 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 yourself and/or others.

ALWAYS wear safety glasses when operating or adjusting your 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. With a low level of shooter accuracy, the backstop perim-

eter requirement must be increased appropriately.

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 and beyond the target when shooting.

ALWAYS check all arrow components prior to shooting, including nock, insert and tip. Loose components can cause unbalanced arrow flight and partial dry firing of the bow. If an arrow has been damaged, or if you believe it has been damaged, do not shoot it again, as it could break on release, and sharp arrow pieces could strike and injure you or someone nearby.

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 (see "Adjusting Draw Weight" section for more information). 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 cables or string that could create excessive wear or slice the string material. 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 the performance and shootability of your bow. Further, it may

cause extreme wear to the string, cable, and cable-slide/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.

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**OWNER'S RECORD**

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: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

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