

Champion Bow Company

CHAMPION
BOW COMPANY

Technical Service and
Warranty Manual

*T*hank you for selecting a Champion Bow. We feel confident you will be pleased with the performance and durability we build into each and every bow we manufacture.

Here at Champion Bow we strive for excellence in producing the best possible product, however your comments about our products are always welcome. We also would like to hear about your success stories using our bows, any photos or information that you would like to share is also welcome.

Good Luck & Good Hunting



Technical Service and Warranty Manual

Read the instructions and warning in this manual carefully before using this Champion Bow.

This manual should always accompany this bow be transferred with it upon change of ownership or when this bow is loaned to another person.

A copy of the instruction manual is always available from the factory upon request. This manual contains important safety warnings which must be understood before using any Champion Bow.



Champion Bow Company

359 Johnson Avenue, Winnipeg, MB, Canada R2L 0J2

Unlimited Warranty

Champion Bow Co. believes it builds one of the finest made compound bows on the market today, and to back this up Champion offers the best warranty in the industry.

Every Champion Bow is warranted unconditionally for the life of the original owner. In simple terms, you break it we fix it, except for willful damage. The first year after purchase is covered 100% at no cost for repair or replacement at the manufacturer's discretion. After the first year a \$25.00 service fee will be charged for each warranty claim.

Warranty cards must be completed and returned to Champion Bow Co. in order to activate this warranty.

Transportation and insurance charges for the return of the bow to Champion Bow Co. are not covered. Ground return charges for the repaired or replacement bow will be paid by Champion Bow Co.

Willful damage or unauthorized modification will nullify warranty. Bow strings, cables, cable slides, wooden grips and cosmetic appearance such as scratches, chips and dents are not covered under this warranty.

All warranty bows are to be sent to the Champion Bow Co. factory at, 359 Johnson Avenue, Winnipeg, MB, Canada R2L 0J2

Remove all accessory parts from the bow before returning it to the factory. Prior to returning your bow for warranty, call the factory for an authorized return number. This will allow for a speedy return of your bow.

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Safety Rules for the Archer

Prior to using new equipment, read the manufacturer's instruction or obtain instructions from a qualified dealer.

- The use of any archery equipment by a minor should be closely supervised by a responsible adult.
- Prior to each hunt, competition or practice session, inspect your equipment for signs of wear or damage.
- Consult the owner's manual when making adjustment and changes to equipment. Any change or adjustment not covered in the owner's manual should be referred to a qualified dealer.
- Do not shoot arrows straight up into the air.
- Do not point or aim a bow at another person.
- Do not take "*sound*" shots. Be sure of what you are shooting before arrow release.
- Do not shoot at a target until you are sure it is capable of stopping your arrow.
- Always be sure the area behind your target is clear.

Preventing Bow Damage

Do not pull back and release a bowstring without an arrow attached. This is called “*Dry Firing*”. Each time a bow is dry fired significantly reduces the life expectancy of your bow and may cause immediate damage to both the bow and yourself.

- Do not use an arrow lighter than recommended by the “AMO” arrow chart contained in this owner’s manual.
- Inspect your bow frequently for frayed string or cables and replace accordingly.
- Do not shoot a bow with a damaged arrow rest or frayed bow string.
- Whenever your bow is being put in a bowpress, the weight should set down from maximum by 4 turns of the limb bolt.
- Never allow your bow to be put into a center-pulling bow press as twisting of your bow handle may result.
- Do not use a arrow that is too short to remain on the arrow rest when the bow is at full draw.

- Do not back out the limb bolts more than the recommended number of turns, doing so could damage the limbs and limb sockets.
- Do not expose your bow to extreme heat like in your vehicle in hot weather for extended periods of time.
- Do not draw your bow when the draw length module has been removed.
- Do not touch or place fingers near cams while bow is in use.
- Do not modify your bow in any way to increase draw weight or length over its designed limits.



Draw Weight Adjustment

Your Champion Bow has a 15lb. adjustable weight range. This adjustment is made by using a 3/16 Allen wrench inserted into the limb bolts and turned clockwise to increase weight, counter clockwise to decrease weight.

Champion recommends you tighten clockwise both limb bolts just to be snug, then back both off equally to achieve desired shooting weight. Never more than 5 turns. Each complete turn should lower the draw weight approximately 3 to 4 pounds.

Draw Length Adjustments

Interchangeable draw length modules are found on most of Champion's bow models. All models are made to provide a one inch draw length adjustment from one size to the next.

Each modular is stamped with (3) letters. The first letter indicates the type of cam, the second letter represents the actual draw length size. The third letter is either (H) for high let-off or (L) for low let-off.

To change the draw length, remove the two mounting screws (*some modules only have one screw*) and replace with the correct mod for your draw length. Then tighten down both screws being careful not to over tighten. This could cause them to strip.

A bow press is not required to change any modular, however you may pull slightly on the cables or string to rotate the cam should the screws be located in a difficult-to-reach position.

Do not draw your bow to full draw without the draw length modules installed.

Changing Strings & Cables

Change your bow string and cables at the first sign of loose strands or excessive wear. The only way to safely change the string and cables is through the use of a bow press. ***(Do not use a center pull press)***

- First decrease the weight of the bow making it near the minimum recommended shooting weight.
- Then using a bow press relieve the tension on the string and cables. Be sure to only put the minimum tension on the bow as necessary to relieve the tension. This will make it easy to remove the old string and cables and replace with new ones.
- Be sure to check that all string and cable ends are completely looped over their posts, and ensure that they run in the grooves of the cam. Only then should you slowly remove the bow from the bow press.

Timing Your Bow

Every Champion Bow is timed at the factory during the manufacturing process. However your own shooting style might necessitate some fine adjustments.

Having your bow timed so that during the drawing stage of your bow both cams rotate in a synchronized fashion will improve the bow's performance.

At full draw check to see if one cam is rotated further (faster) than the other. If so put the bow in a bow press removing the tension just enough to enable you to remove the cable from the post on the cam that was slower, twist this cable in the direction that tightens it in effect making the cable shorter.

Replace the cable on the post and recheck the timing. This process may need to be repeated several times to achieve the desired effect.

Note: Small adjustments of one to three turns usually works best.

Cable Guard Adjustment

Rotate the cable guard rod to offset the cables, only what is necessary to gain fletching clearance for your arrows, then tighten both cable guard set screws to prevent any further turning of the cable guard rod.

Note: Having excessive offset of the cable guard could damage cables and reduce bow performance.

Nock Setting

Your arrow should be positioned on the bowstring approximately 1/4" to 3/8" above a line that is 90 degrees from the top of the arrow rest.

One single nock set, positioned above the arrows nock, is the most common acceptable system. Do not place a second nock set tight up under the arrows rock as this will put pressure on the arrow when your bow is at full draw.

Tiller Setting

The tiller is controlled by the relative stiffness of your upper and lower limbs. Every Champion Bow limb is measured for its exact deflection weight to ensure each bow gets an exact matched pair.

The bow's tiller is measured from where each limb meets the riser to the bow string. Your bow will shoot best when the tiller measurement for the upper and lower limbs are the same, or especially in the case of a finger shooter the lower measurement can be 1/16" to 1/8" less.

Your bow's tiller can be adjusted by tightening or loosening either one of the limb bolts. Be aware that this will change your bow weight and that, after you achieve the desired tiller setting, you may need to recheck your draw weight.

Fine Tuning your Bow

The most accepted method of fine tuning your bow is known as “paper tuning”. Tuning can also be accomplished using only a loose (soft) back stop, but paper tuning is recognized as a more preferred method.

Make sure all your accessories are mounted on your bow, since they will influence arrow flight.

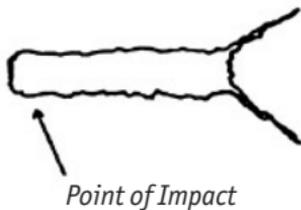
Tightly tape a large sheet of paper over a frame, standing 8 to 10 feet away shoot your arrow through the paper into a target but making sure the arrow has completely passed through the paper. The tear pattern in the paper made by the arrow will provide information on the flight of your arrow which will enable you to make the adjustments necessary to tune your bow.

Note: A perfect tear hole, where the arrow point and fletching enter the exact same hole is desirable, but not always possible. Minor tears are acceptable and in some cases better groups have been reported with slight tears.

Left Tear Holes

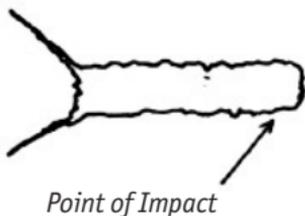
Arrow spin is too weak (left hand shooter will have an opposite pattern). Correct by turning one or more of the following.

- Change to a stiffer spined arrow.
- Decrease draw weight on bow.
- Use lighter weighted arrow points.
- Move arrow rest out from bow.



Fletching Clearance

Check fletching clearance if paper tuning results appear inconsistent. This is accomplished by sprinkling talcum powder or spray foot powder on the arrow rest and sight window and then shooting your bow. You may then check for any marks in the powder on your rest or sight window where the fletches could come in contact. Adjust arrow rest in or out or try a different type of rest to prevent the fletches from hitting and thus maximize fletching clearance. You may also rotate your nocks on the arrow to improve clearance.



High or Low Tear Holes

Nocking point adjustments needed.

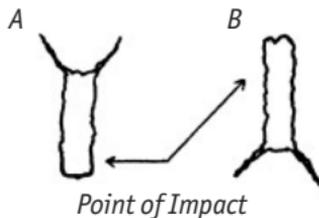
- Nock high tear needs to lower nocking point or raise adjustable rest.
- Nock low tear needs to raise nocking point or lower adjustable rest.



Right Tear Holes

Arrow spin is too stiff (left archers will have the opposite pattern) correct by trying one or more of the following.

- Change to a weaker spined arrow.
- Increase draw weight on bow.
- Use heavier weight arrow point.
- Move arrow rest in towards bow.



Bow Tuning

In order for your bow to perform efficiently and accurately, you will need to achieve straight and true arrow flight.

You must first select the correct spine arrow for your draw length and bow weight. You can refer to your arrow manufacturer's chart to select an arrow with the correct spine.

PEAK BOW WEIGHT (LBS.)				AMO RECOMMENDED MINIMUM ARROW WEIGHTS (grains) USING THE MINIMUM RECOMMENDED ARROW WEIGHT CHART								
RECURVE	ROUND WHEEL	ENERGY WHEEL	SPEED CAM	AMO DRAW LENGTH								
SE/PDF = .85 ESE = 62 BH = 9.5	SE/PDF = 1.04 ESE = 65.6 BH = 9.0	SE/PDF = 1.20 ESE = 71.3 BH = 8.0	SE/PDF = 1.3+ ESE = 75.1 BH = 7.0	25"	26"	27"	28"	29"	30"	31"	32"	33"
33	32	29	27	150	150	150	150	150	150	150	150	150
34-41	33-38	30-35	28-32	150	150	150	150	150	150	150	151	165
42-46	39-43	36-39	33-36	150	150	150	150	150	163	179	195	211
47-52	44-49	40-44	37-41	150	150	150	167	185	203	222	240	258
53-58	50-54	45-49	42-46	150	163	183	203	224	244	264	285	305
59-63	55-60	50-54	47-50	172	195	217	240	262	284	307	329	352
64-69	61-64	55-59	51-55	202	227	251	276	300	325	350	374	399
70-75	65-71	60-64	56-60	232	259	286	312	339	365	392	419	445
76-81	72-76	65-70	61-65	262	291	320	348	377	406	435	463	492
82-86	77-81	71-74	66-69	292	323	354	385	416	446	477	508	539
87-92	82-87	75-79	70-74	322	355	388	421	454	487	520	553	586
93-99	88-94	80-85	75-80	352	387	422	457	492	532	581	629	676

● SE = Stored Energy ● ESE = Energy Storage Efficiency ● BH = Brace Height ● PDF = Peak Draw Force

- Select the column that describes the type of bow you shoot.
- Move down that column to locate your "Peak Bow Weight".
- Move horizontally across that row to your "AMO Draw Length" column.
- The box at that location contains the minimum total arrow weight recommended for your equipment. Arrow weight includes all arrow components: shaft, insert, point, fletching and nock.
- Based on: ● 360 Grain Arrow ● 30" Draw Length ● 60# Peak Weight ● Speed Cam

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