

TenPoint Crossbow Technologies™

OWNER'S GENERAL INSTRUCTION MANUAL

To prevent injury to yourself or others, or damage to your crossbow, read this manual along with all other operating and safety instructions included in your crossbow package before assembling, loading or using the crossbow.



THIS MANUAL COVERS:

Safety Instructions.....	1-3
Cocking & Loading.....	3-4
Unloading Your Crossbow.....	4
Using the Correct Arrow.....	5-6
Sighting Your Crossbow.....	6-9
Crossbow Maintenance & Care.....	9-10
Crossbow Troubleshooting.....	10-12
Returning Your Crossbow for Service.....	12
String & Cable Adjustment Chart.....	13
String & Cable Specifications.....	14
Notes.....	14
Limited Operational Warranty.....	15



TENPOINT

CROSSBOW TECHNOLOGIES

TenPoint Crossbow Technologies®

1325 Waterloo Road
Mogadore, OH 44260-9608

330.628.9245

www.tenpointcrossbows.com

WARNING: (READ FIRST)

To prevent injury to yourself or others, or damage to your crossbow, read this manual along with all other operating and safety instructions included in your crossbow package before assembling, loading or using the crossbow.

SAFETY INSTRUCTIONS

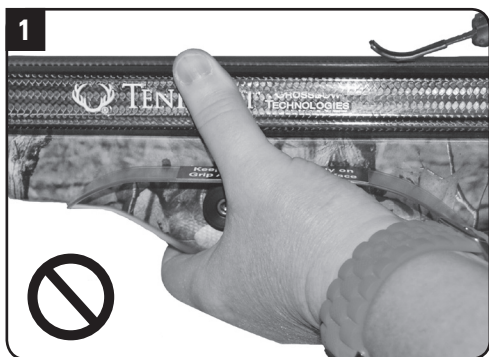
Follow these strict and absolute safety rules when cocking, loading, pointing, and shooting your crossbow.

- Install the GripGuard on thumbhole-style stocks prior to sighting-in or shooting your crossbow (not applicable on the Vapor or Stealth SS).

⚠ DANGER

Note: If you have misplaced or lost the GripGuard, contact TenPoint at www.tenpointcrossbows.com or by calling 330-628-9245 immediately for a replacement.

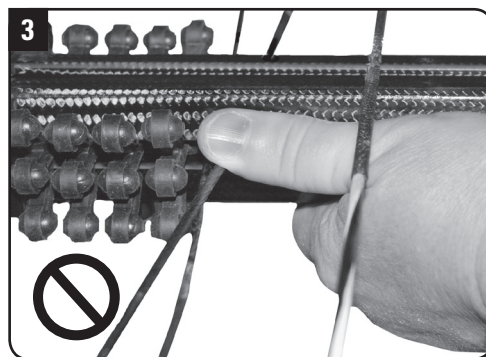
- Never allow your fore-grip hand's fingers or thumb to move above the barrel's flight deck or into the bowstring or cables' release path (photos 1, 2 & 3). If you do, you will injure yourself severely when you fire your crossbow.



IMPROPER. With your fore-grip hand positioned as shown above, you will severely injure your thumb if you fire your crossbow.



IMPROPER. With your fore-grip hand positioned as shown above, you will severely injure your fingers if you fire your crossbow.

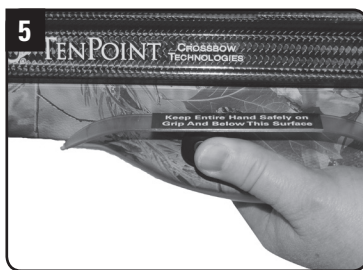


IMPROPER. With your fore-grip hand positioned near the crossbow cables as shown above, you will severely injure your fingers if you fire your crossbow.

- Regardless of the style of grip or safety features on your crossbow, you must keep your hand and fingers in a safe position every time you shoot the crossbow (photos 4, 5, 6, & 7).



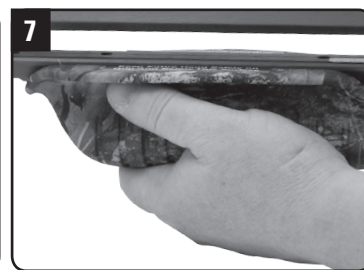
PROPER HAND POSITION. Proper way to hold the fore-grip on thumbhole crossbows without a GripSafety. Note: Each GripGuard contains the following instructions: "Keep Entire Hand Safely on Grip And Below This Surface".



PROPER HAND POSITION. Proper way to hold the fore-grip on crossbows equipped with a GripSafety. For more detailed information see the "GripSafety" section in the corresponding bow model Assembly Instructions. Note: Each GripGuard contains the following instructions: "Keep Entire Hand Safely on Grip And Below This Surface".



PROPER HAND POSITION. Proper way to hold the fore-grip on crossbows equipped with rubber grip guard wings. For more detailed information see the corresponding bow model Assembly Instructions.



PROPER HAND POSITION. Proper way to hold the fore-grip on crossbows formerly known as 6 Point Series. Note: Each fore-grip contains the following instructions: "Keep Entire Hand Safely on Grip And Below This Surface".

SAFETY INSTRUCTIONS (Cont.)

DANGER

- To prevent accidental discharge, **do not** move the trigger's safety knob to the **FIRE (red dot)** position until you are ready to shoot.
- **Do not** depress (deactivate) the GripSafety, on crossbow equipped with it, until you are ready to squeeze the trigger. Please refer to the "**GripSafety**" section in the corresponding bow model Assembly Instructions.
- **Do not** put your finger on the trigger until you have made the decision to fire. You could unintentionally fire the crossbow and cause serious or fatal injury.
- **Do not** remove or deactivate your crossbow's safety features or accessories, potentially rendering the crossbow dangerous to you or others.
- **Always** point your crossbow in a safe direction. It is a deadly weapon. Never point it at or toward another person or never at or toward anything you do not intend to shoot.
- **Be certain** of your intended target and what is beyond it before shooting. Don't shoot just because you see movement. An arrow can travel relatively far and you could injure another hunter or hiker in the woods.
- Never stalk, walk, or hike, with an arrow loaded in your crossbow. There are documented reports of fatal injuries, which have occurred when hunters have tripped or slipped carrying a loaded crossbow. While it is acceptable to carry a cocked but unloaded crossbow, make sure the safety is activated and be careful not to place any part of your body in the path of the bow string.
- **Do not** transport or store your crossbow while it is cocked or loaded. An accidental discharge could cause serious or fatal injury.
- **Always** wear a safety belt or harness when hunting from a treestand – a fall could be fatal or permanently disabling.
- **Do not** fire your crossbow if branches or other obstructions block its limbs' release path. Doing so could cause the limbs, string or cables to break and possibly result in serious injury.
- Make sure broadheads are safely protected by a quiver when storing or transporting arrows. Mishandling broadheads can result in serious injury.

WARNING

- Wear safety glasses when cocking, loading, and shooting any crossbow. A serious injury could occur if the crossbow's string, cables, or cocking unit cords were to break.
- Watch out for hunters in camouflage clothing. They may not know you are in the vicinity.
- Your crossbow was designed for hunting and target shooting only. **Do not** use it for any other purpose. It is a dangerous and deadly weapon.
- **Do not** consume drugs or alcohol before or while using the crossbow because doing so will impair your judgment.
- **Do not** modify your crossbow or accessories, potentially rendering them dangerous to you or others.
- **Do not** carry your crossbow while climbing up or down a tree. Hoist and lower it unloaded, with a rope or heavy cord because you could lose your balance or the bow could catch on the tree/stand and cause you to fall.
- When target shooting, set up in a safe, open area with a proper target and backstop.
Always be able to identify your target and what is beyond to prevent accident or injury.
- Keep the crossbow out of the reach of children when not in use.
- Use proper lifting techniques when manually cocking the crossbow to avoid injury to your back.
- **Make certain** others are well behind you when you are shooting. People standing beside you are vulnerable to injury if, among other things, a string, cable, or limb were to break.

SAFETY INSTRUCTIONS (Cont.)

- When cocking your crossbow, hold the bowstring firmly with all four fingers of both hands and **do not** allow it to slip free. If the bowstring slips out of your hands, you could severely injure your fingers or hands.
- Carefully examine your crossbow and arrows for worn, loose, damaged, or missing parts every time you use it. A damaged crossbow, or one in need of maintenance or repair, could be dangerous to you or others.
- **Do not** use your crossbow if it is not in top working condition because equipment failure could cause injury to you or bystanders.

⚠ WARNING

- **Do not** attempt to adjust your crossbow's draw weight or to change its cables, limbs, or string without proper tools and instruction. Have a qualified TenPoint professional perform these tasks. Improper installation or adjustments may result in injury.
- **Do not** use arrows that do not meet TenPoint Crossbow Technologies' specifications (see the "Use the Correct Arrow" section). In particular, do not use excessively light or small diameter arrows. TenPoint requires the use of Omni-Nocks only, particularly on crossbows with narrow bow assemblies (i.e. CLS, PLT, and XLT). **Do not** use arrows equipped with capture nocks. Using an incorrect arrow may cause injury to you or bystanders.

⚠ CAUTION

COCKING AND LOADING

Manually Cocking Your Crossbow

⚠ WARNING

Note: Models that contain CLS, XLT, and PLT bow assemblies are too narrow to cock manually. You will pinch and potentially injure your fingers if you attempt to do so.

Practicing the following procedures until they become second nature will ensure that you cock your crossbow safely and accurately every time.

Note: Caution should be used when manually cocking your crossbow. Possible back, shoulder or finger injuries may occur when drawing the string into the trigger box especially if the draw weight is too much for you to handle or if the string gets away from you for any reason. (The ACUdraw, ACUdraw 50, ACUrope, or traditional rope-cocking mechanisms are available if the draw weight is too much for you to cock the crossbow manually.)

When cocking your crossbow, hold the bowstring firmly with all four fingers of both hands and **do not** allow it to slip free. If the bowstring slips out of your hands, a dry-fire can occur. A dry-fire is dangerous and can severely damage the bow and/or cause injury.

1. Before cocking your crossbow, the safety knob must be in the **FIRE (red dot)** position. Otherwise, the string latch will not engage or hold the bowstring. If you try to cock your crossbow with the safety in the **SAFE (white dot)** position, the DFI™ (Dry Fire Inhibitor) will catch and hold the string, making the crossbow appear to be cocked. However, when the DFI™ - instead of the string latch – holds the bow string, you cannot fire the crossbow. When cocked correctly, the bowstring will automatically set the safety and the string latch will grasp and hold the string (see photos 1, 2 & 3).



Make sure the trigger's safety is in the forward, **FIRE (red dot)** position **before** cocking your crossbow.



If you try to cock the crossbow while the safety is in the rear, **SAFE (white dot)** position, the bow-string will be held by the DFI™ and only appear to be cocked.



When you cock your crossbow correctly, the safety will automatically move to the rear, **SAFE (white dot)** position, and the string latch will engage the string.

COCKING AND LOADING (Cont.)

Remember, if you try to cock the crossbow with the safety knob in the **SAFE (white dot)** position, you will pull the string past the DFI™, which will hold the string in a position that appears as if it were cocked (photo 2); however the bow will not be cocked, and it will not fire an arrow. To finish cocking the bow, move the safety to the **FIRE (red dot)** position and firmly finish the cocking motion. You will see the string latch and the safety engage as the safety knob moves into the **SAFE (white dot)** position.

2. With the underside of your crossbow facing your body, place your foot far enough into the stirrup so that it will not slip out when you draw the string into the trigger box.
3. Inaccurate cocking is the most frequent cause of inaccurate shooting. With any crossbow, if the bowstring is not perfectly centered on the string latch when cocked, the bow will not shoot straight. To ensure a perfect draw, grab the string along the sides of the barrel with all four fingers of each hand. Slide the hands together so that the index fingers of both are clearly against the sides of the barrel (our ACRA-ANGLE barrel allows you to slide your index fingers along the barrel without getting pinched) (photo 4).

Note: Models that contain CLS, XLT, and PLT bow assemblies are too narrow to cock manually. You will pinch and potentially injure your fingers if you attempt to do so.

4. Using the sides of the barrel as your guide – and with a secure grip – pull the string toward the trigger assembly and into its string slot until you see the string latch and the safety engage. Make certain the latch is holding the string securely before you relax your grip. The more aggressively you draw the string back, the easier it is to cock the crossbow. Over time, you will develop a drawing technique that will make cocking the bow quite easy.

Reminder: All TenPoint Crossbow models are equipped with a patented DFI™ (photo 5), which prevents the bow from dry-firing if an arrow is not loaded.

5. Even though the safety automatically engages when you latch the string, **make certain** it is in the **SAFE** position before putting your finger on the trigger. You cannot be too careful. And, again, remember: **never** point a cocked crossbow at anything you do not intend to shoot, and **never** release the safety until you are ready to shoot.
6. Place a TenPoint recommended crossbow arrow in the flight groove on top of the barrel. Slip a vane or feather into the flight groove, and slide the arrow back under the arrow retention spring until it rests solidly against the string. You are now ready to aim, release the safety and shoot.



If you do not cock your crossbow exactly according to these instructions, chances are you will not group your arrows consistently.



TenPoint's patented DFI™ (Dry-Fire Inhibitor).

UNLOADING YOUR CROSSBOW

The recommended – and the safest – way to unload your crossbow is to fire an arrow into a suitable target or rock-free ground. If firing into the ground, shoot at a point approximately three feet in front of you. If firing the arrow further than three feet, you may not be able to locate it in the dirt.

⚠ WARNING

Do not attempt to “uncock” your crossbow by hand, with a cocking rope, an ACUdraw 50 mechanism, or an ACUdraw mechanism. Uncocking a crossbow by any means other than shooting it could cause personal injury to you (i.e. back or hand injuries). You should carry a practice arrow in your quiver while hunting and use it for unloading (only if your state or province permits you to carry a practice arrow – check your regulations first).

You may also use the CUB (Crossbow Unloading Bolt) to unload your crossbow. It is a single-use, two-piece biodegradable unloading shaft, which decomposes in or on the ground over time after you shoot it.

You may leave your crossbow cocked or loaded all day. Do not, however, leave it cocked or loaded overnight or while being transported.

USING THE CORRECT ARROW

Do not void your warranty – choose the correct arrow and field point/broadhead combination.



TenPoint Crossbow Technologies recommends using finished arrows weighing at least 420-grains on most of our crossbows manufactured prior to 2012. Using less than the recommended weight combinations can produce a dry-fire effect with your crossbow.

Warning: Using arrows that are too light on pre-2012 models may cause the limbs to break, resulting in possible injury.

Note: The minimum grain weight for TenPoint recurve crossbows is 350-grains (for recreational shooting only, not hunting).

TenPoint offers a collection of lightweight, standard, and heavyweight arrows, ranging from 370-grains to 545-grains, to suit individual hunting and shooting needs. Please visit our website at www.tenpointcrossbows.com to learn more about our comprehensive arrow ballistics program.

Inspecting your Arrows

TenPoint recommends checking each arrow prior to shooting your crossbow. **Never** use an arrow with a damaged nock, bent shaft, damaged fletching or missing insert or field point/broadhead.

Warning: Always inspect your arrows before firing them to insure that they are not bent or damaged. Damaged or bent arrows may cause the crossbow to operate incorrectly, the arrow to fly improperly, or may injure you or bystanders.

Aluminum Arrows

When shooting most TenPoint crossbows*, we recommend our 2219/XX75 aluminum 20-inch arrows equipped with Superbrite Omni-Nocks and vanes.

Note: Vapor™ crossbow owners must use a 22-inch arrow.

Carbon Arrows

TenPoint also recommends our Pro Elite 20-inch, 22/64ths carbon crossbow arrow* fletched with plastic vanes, brass inserts and Superbrite Omni-Nocks for most of the crossbow line-up. The weights of these carbon arrows, as described, are comparable to our 2219 aluminum arrows (approximately 425-grains each). Our Pro Lite arrow is not suitable for most pre-2012 TenPoint models.

* **Note:** The 22-inch Pro V22 carbon fiber arrow, fletched with Easton® BTV vanes, is recommended for the Vapor™ crossbow. The finished arrow is also equipped with brass inserts and Omni-Nocks.

Field Point/Broadhead Weight

For most of the TenPoint line-up, we recommend using field points and/or broadheads weighing a minimum of 100-grains. Increasing the field point/broadhead weight will not damage your crossbow. It will, in fact, increase kinetic energy without sacrificing much speed. The finished weight of standard TenPoint aluminum and carbon arrows with a 100-grain point will average between 420- and 435-grains. With a 125-grain point, they will average between 445- and 460-grains.

Broadheads

You may shoot high-quality mechanical or fixed blade broadheads with your crossbow. The advantage of using mechanical broadheads, however, is that they generally fly the same as your practice point arrows.

Arrow Fletching

TenPoint has found that arrows fletched with a right, straight offset or right helical fletching with a 1 ½ - 2-degree offset works the best with fixed broadheads.

USING THE CORRECT ARROW (Cont.)

Broadhead Tuning

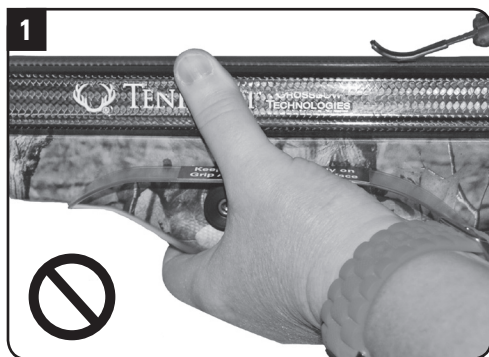
TenPoint recommends tuning each shaft/broadhead combination before hunting. Always start with a straight shaft on the arrow, screw on your broadhead and spin your arrow on its tip. Your arrow and broadhead need to spin without wobbling. The blades of the broadhead do not need to line up with the fletching – spinning without wobble is more important.

SIGHTING YOUR CROSSBOW

Most TenPoint Crossbows are designed to be used with a scope and come with a fixed $\frac{7}{8}$ -inch Weaver style dovetail scope mount. Regardless of the sighting system, all models are pre-sighted for 20-yards at the factory, meaning they are set accurately enough to hit a 7-inch pie tin at that distance. Most likely, you will want to fine-tune your sights at some point.

⚠ DANGER

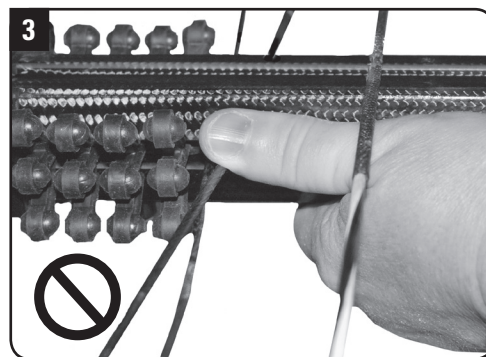
- When shooting your crossbow, never allow your fore-grip hand's fingers or thumb to move above the barrel's flight deck or into the bowstring or cables' release path (photos 1, 2 & 3). If you do, you will injure yourself severely when you fire your crossbow.



IMPROPER. With your fore-grip hand positioned as shown above, you will severely injure your thumb if you fire your crossbow.



IMPROPER. With your fore-grip hand positioned as shown above, you will severely injure your fingers if you fire your crossbow.



IMPROPER. With your fore-grip hand positioned near the crossbow cables as shown above, you will severely injure your fingers if you fire your crossbow.

- Regardless of the style of grip or safety features on your crossbow, you must keep your hand and fingers in a safe position every time you shoot the crossbow (photos 4, 5, 6, & 7).



PROPER HAND POSITION. Proper way to hold the fore-grip on thumbhole crossbows without a GripSafety. Note: Each GripGuard contains the following instructions: "Keep Entire Hand Safely on Grip And Below This Surface".



PROPER HAND POSITION. Proper way to hold the fore-grip on crossbows equipped with a GripSafety. For more detailed information see the "GripSafety" section in the corresponding bow model Assembly Instructions. Note: Each GripGuard contains the following instructions: "Keep Entire Hand Safely on Grip And Below This Surface".



PROPER HAND POSITION. Proper way to hold the fore-grip on crossbows equipped with rubber grip guard wings. For more detailed information see the corresponding bow model Assembly Instructions.



PROPER HAND POSITION. Proper way to hold the fore-grip on crossbows formerly known as 6 Point Series. Note: Each fore-grip contains the following instructions: "Keep Entire Hand Safely on Grip And Below This Surface".

SIGHTING YOUR CROSSBOW (Cont.)

1. SCOPES:

• FOCUSING

If the reticle is not in focus when you look through the scope, adjust the focus by rotating the non-locking knurled ring on the edge of the rear bell.

• SCOPE OPERATION

RangeMaster Pro and 3x Pro-View 2 scopes are equipped with three lines and four dots calibrated for 20, 30, 40, and 50-yards. The top dot/line is calibrated for 20-yards, the center for 30-yards and the bottom for 40-yards. The fourth free standing dot is calibrated for 50-yards. The dots can be viewed in black (when the dial is in the "R" or "G" off positions), red or green. The red and green dots (illuminated) in the scopes are intended for lower light conditions, while the black (non-illuminated) dots provide the best results in bright light conditions.

• ELEVATION AND WINDAGE ADJUSTMENTS

RangeMaster Pro Scope only: Before sighting in your crossbow, adjust the speed dial on the scope to match the advertised speed of your crossbow (275 to 365-feet per second crossbows). Sight the crossbow in at 20-yards using the top dot/line. If the impact point is different than the aiming point, make adjustments to the vertical (elevation) and/or horizontal (windage) adjustments. Unscrew the adjustment caps and turn the adjustment knob(s) in the direction needed to make your correction(s). Continue to shoot the crossbow and adjust the scope until your impact and aiming points coincide. Once sighted in at 20-yards, the top dot/line will be zeroed in at 20-yards, the bottom dot/line should be accurate at approximately 40-yards, and the free standing dot should be accurate at 50-yards. Fine-tune your scope settings at the 40-yard dot/line or 50-yard free standing dot using the scope's speed dial. If you are hitting high at the 40 or 50-yard distances, adjust the speed dial to a higher speed level. Or, if you are hitting low, adjust the dial to a lower speed level.

3x Pro-View 2 Scope only: Shoot one to three shots at 20-yards to confirm you are at least close to the bull's-eye. Make any windage/elevation adjustments needed to get close to the bull's-eye. Make final adjustments on the scope at 30-yards using the center dot/line. If the impact point is different than the aiming point, make adjustments to the vertical (elevation) and/or horizontal (windage) adjustments. Unscrew the adjustment caps and turn the adjustment knob(s) in the direction needed to make your correction(s). Continue to shoot the crossbow and adjust the scope until your impact and aiming points coincide. Once sighted in at 30-yards, the top dot/line should be accurate at 20-yards, the bottom dot/line should be accurate at approximately 40-yards, and the free standing dot should be accurate at 50-yards.

Note: At 30-yards it takes approximately four to five clicks to move your point of impact $\frac{1}{4}$ -inch.

• LIGHT INTENSITY ADJUSTMENT

Adjust dot brightness by turning the intensity dial on the left side of the scope. The higher the intensity, the brighter the dots will appear (lines are not illuminated). Use the lowest intensity possible for your light conditions to achieve maximum performance. The intensity dial is also the "on" and "off" switch. To operate the scope, line up the intensity number/color desired with the index dot centered at the rear of the intensity dial. **THE DIAL SHOULD BE IN THE "R" OR "G" POSITION ON THE SCOPES WHEN NOT IN USE.**

Note: The scope may be left on for the duration of each day's hunt.

SIGHTING YOUR CROSSBOW (Cont.)

- **BATTERY**

The illuminated scopes require a lithium 2032 size battery. Lithium batteries have a shelf life of up to ten years. They are designed to operate in temperatures far below that of other power cells. The battery life is determined by the number of hours used and brightness intensity. Therefore, **YOU SHOULD ALWAYS CARRY A SPARE BATTERY IN THE FIELD TO BE SAFE.**

The battery is located under the intensity dial cover. Unscrew the intensity dial cap to access the battery.

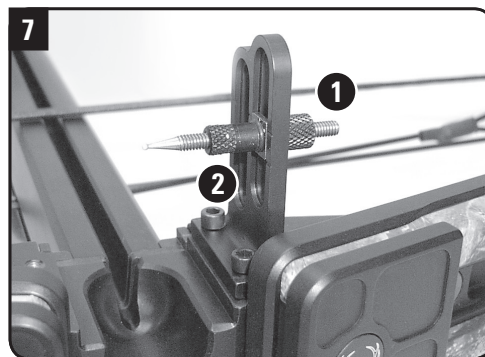
- **MAINTENANCE**

Keep the scope away from acid, alkaline and other corrosives. Remove dust and dirt on the surface of the scope with a soft cloth or soft tissue with a small amount of alcohol.

2. **PIN SIGHTS:**

For precision sighting, work from a bench rest starting at a distance of **10-yards** from your target.

- **NOTE:** Shooting from a bench rest makes your fore-grip hand particularly vulnerable to misplacement. Be careful to keep your fingers and thumb below the flight deck and away from the cables. See hand placement warning on page 1 or 6 (photos 4-7).
- Start at **10-yards** (Skip the **10-yard** step if you are fine-tuning your factory setting).
- Looking through your rear peep-sight, center the sight pin in the peep and then align the pin with your target. Shoot several arrows at the same spot to establish a grouping pattern. If your arrows are not grouped tightly, review your shooting technique as one option. It is possible there could be a flaw in your shooting technique.
- Loosen the elevation (up & down) lock-nut on your sight pin. Correct for elevation first since it is the easier of the two to correct (photo 7).
- To “zero” or correct your sight pin, one simple principle applies: always move the pin in the same direction as the error or impact point of your arrow grouping (i.e. follow the arrow). For example, if the impact point of your group is too low, lower the sight pin to correct the error. If you are shooting too high, raise the pin to correct the error. Once you make your correction, tighten the sight pin lock-nut securely.
- Repeat the same procedure to correct a windage (right or left) error. Again, correct the error by moving the pin in the direction of the error. That is, move the pin to the right if you are shooting too far to the right and vice-versa.
- Move back to **20-yards** or the yardage you want your pin set at – and repeat the procedure.



1. Elevation lock nut 2. Windage lock nut

3. **REAR PEEP SIGHT:**

On all current models, the rear (bolt-on style) peep sight (HCA-062) mounts in a fixed position, directly to the top of the trigger box (the scope mount must be removed first).

SIGHTING YOUR CROSSBOW (Cont.)

4. RETROFITTING TO A PEEP/PIN SET-UP

- **Crossbows with a fixed sight bridge:** (All current crossbows) - The rear (bolt-on style) peep-sight (HCA-062) and a front sight with one pin (HCA-041) are required. Optional front sight-pins, sold separately, (HCA-050) are also available. Or, a complete kit, with peep sight, front sight, and three pins is available (HCA-07110).
- **Crossbows with an adjustable sight bridge:** (Older models with the RangeMaster Cam or Fixed Position Accessory, i.e. Stealth X-2 or some Pro Elite models.) The Peep and Pin Conversion Kit (HCA-071) is required.

Note: Some models may not have the front sight holes pre-drilled in the riser. Reference marks have been provided on the riser as a guide. Tapped thread size should be 8/32 with a depth of .300.

CROSSBOW MAINTENANCE AND CARE

The best maintenance program begins by thoroughly checking for worn, loose, damaged or missing parts every time you use your crossbow.

1. Immediately replace frayed or worn strings and cables. Keep your strings and cables moist and extend their life with a high-quality string wax such as TenPoint's String Wax and Conditioner (HCA-11007). **Do not** apply string wax to the center serving, barrel or trigger – the wax will collect inside the trigger mechanism and eventually prevent the string from latching properly.

Note: TenPoint recommends changing both string and cables every other year under normal hunting/shooting conditions.

2. Use a high quality barrel or rail lubricant such as TenPoint Crossbow Technologies Flight Rail / Trigger Lube (HCA-111) or Microlon's® Precision Oiler (HCA-11106) to increase arrow speed, reduce friction and extend the life of your center serving. Its unique metal penetrating characteristics provide optimum lubrication without an oily or greasy film.

To lubricate your flight rail, apply a drop of lube on each side of the rail, then spread the lube the length of the barrel with your finger. Applying the flight rail lubricant approximately every **75 to 100** shots, or Microlon's® Precision Oiler every **150 to 200** shots, should be adequate (photo 1).

Note: Applying too much rail lube can break down your string serving (and the glue on the claw's felt pad if the crossbow has an ACUdraw unit).

Also regularly apply a drop of lube to your wheels/cams and axles.

Do not use heavy oil, grease or substances similar to petroleum jelly to lubricate your crossbow parts because they will attract dust and grit and will work their way into your trigger housing making it sluggish and perhaps inoperable in cold weather.

3. Keep your trigger dry and occasionally lubricate it:

- After using your crossbow in damp or wet conditions, dry its trigger parts by aiming a blow dryer through the various holes that lead to its interior parts. To avoid rusting, spray the interior of the trigger with WD-40 (or comparable material **to displace water/moisture only**) before you apply trigger lube or Microlon's® Precision Oiler.

Note: A crossbow with rusty trigger box parts will be extremely difficult to cock and will need to be sent back to the factory for cleaning and/or repair.

- Apply a drop of lube through the PowerTouch Trigger's safety knob window while it is in both the **SAFE (white dot)** and **FIRE (red dot)** positions (photo 2).

Also apply a drop inside the closed end of the trigger's string slot to lubricate the safety slide and string latch (photo 3).



Lubricate your flight rail approximately every 75 to 100 shots with flight rail lubricant or 150 to 200 shots with Microlon's Precision Oiler.

CROSSBOW MAINTENANCE AND CARE (Cont.)

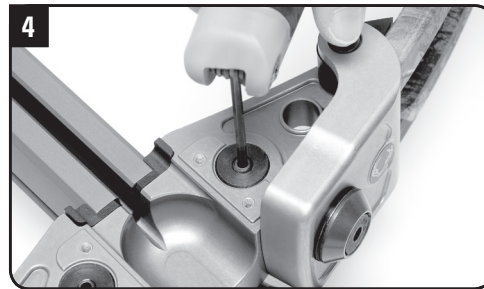
4. Do not expose your crossbow to excessive heat such as leaving it in an automobile trunk on a hot day, a hot attic or storing it next to a furnace. Store it in a cool, dry place. Storing your crossbow in an unheated garage or damp basement may cause some of its parts to rust. Again, if you get your crossbow wet, make certain you dry and lubricate it before storing it.
5. To avoid stripping your main assembly bolt and limb bolts, be certain to loosen their respective locking set screws (on models that employ them) before tightening or loosening them (photo 4).



Lubricate the PowerTouch Trigger through the safety slide window.



Apply a drop just inside the closed end of the trigger's string slot.



Loosen locking setscrews before turning the main assembly bolt or limb bolts (limb bolt locking setscrews only on certain crossbow models).

Note: TenPoint does not recommend loosening limb bolts to relieve string pressure in the off-season.

6. TenPoint Crossbow Technologies is the only repair facility for repairs/replacements on trigger boxes and limbs (with the exception of locations outside of the continental U.S.).

Note: Unauthorized repairs may void your warranty. If repairs are necessary, contact the **Customer Service Department at 330.628.9245 or email your request at www.tenpointcrossbows.com for a Return Authorization Number** and shipping and payment instructions.

CROSSBOW TROUBLESHOOTING

Not all issues associated with your crossbow will require service. This Troubleshooting section can help fix common problems with your crossbow. If, after reviewing this section, your problem still exists, contact the TenPoint Customer Service Department at 330.628.9245 or email your Return Authorization repair request at www.tenpointcrossbows.com.

My crossbow will not cock.

- Before cocking your crossbow, the safety knob must be in the **FIRE (red dot)** position. Otherwise, the string latch will not engage or hold the bowstring. If you try to cock your crossbow with the safety in the **SAFE (white dot)** position, the DFI™ (Dry Fire Inhibitor) will catch and hold the string, making the crossbow appear to be cocked. However, when the DFI™ - instead of the string latch – holds the bow string, you cannot fire the crossbow. When cocked correctly, the bowstring will automatically set the safety and the string latch will grasp and hold the string (see photos 1, 2 & 3 on page 11).

Note: If the DFI™ is holding the bowstring, move the safety to the FIRE (red dot) position and complete the cocking motion. You will see the string latch and the safety engage as the safety knob moves into the SAFE (white dot) position.

- The moving parts inside the trigger housing may be too dry or rusted. Add a small drop of light-weight oil or Micro-TenPoint's® Precision Oiler in front of and behind the safety slide on each side of the trigger box.

Note: Use WD-40 to displace water/moisture only – do not use it as a lubricant. Contact Customer Service if lubricating the trigger does not solve the problem.

- You may have used a heavy grease, wax or a petroleum jelly-type substance on the rail or in the trigger box. If so, send the crossbow back to the factory for cleaning.

CROSSBOW TROUBLESHOOTING (Cont.)



Make sure the trigger's safety is in the forward, **FIRE (red dot)** position **before** cocking your crossbow.



If you try to cock the crossbow while the safety is in the rear, **SAFE (white dot)** position, the bow-string will be held by the DFI™ and only appear to be cocked.



When you cock your crossbow correctly, the safety will automatically move to the rear, **SAFE (white dot)** position, and the string latch will engage the string.

My string and/or cables are fuzzy, fraying or cut.

- Apply a thin coat of wax to the string (excluding the serving) and/or cables and burnish it in (rub the string/cables briskly between your fingers, creating heat and melting the wax) if they are getting fuzzy.
- **Do not** attempt to use your crossbow if the string and/or cables are fraying or cut. Contact Customer Service if the string and/or cables need replaced.

My string serving is separating or coming apart.

- If the crossbow string had been previously removed and/or replaced, it may have been installed incorrectly. See the section entitled "String & Cable Adjustment Charts".
- The rail (barrel) may have been over-oiled. Over-oiling will saturate the string serving and cause it to come off in chunks. Contact Customer Service. The string will either need to be replaced or re-served.

My trigger's safety is either too stiff or too sloppy.

If the tension is too light, your safety may slip into the **SAFE (white dot)** position after a shot, which is not desirable since you cannot successfully cock your crossbow from the **SAFE** position.

First, remove the scope. To adjust the tension in a PowerTouch trigger, insert an Allen wrench in the hole located on top of the dovetail scope mount, locate the adjustment screw and turn it slightly clock-wise to increase the tension or counter-clockwise to ease the tension. **Note:** Adjusting the safety will **NOT** lower the poundage on the trigger pull.

My shot groupings are erratic.

- Inaccurate cocking is the most frequent cause of inaccurate shooting. With any crossbow, if the bowstring is not perfectly centered on the string latch when cocked, the bow will not shoot straight. To ensure a perfect draw, grab the string along the sides of the barrel with all four fingers of each hand. Slide the hands together so that the index fingers of both are clearly against the sides of the barrel (our ACRA-ANGLE barrel allows you to slide your index fingers along the barrel without getting pinched).
- Make sure screws haven't worked their way loose through vibration. Check tightness of the foot stirrup setscrews, main assembly bolt and setscrew (loosen the setscrew before trying to tighten the main assembly bolt), stock screws, barrel screws, scope ring screws, etc.
- The scope may be defective. Contact Customer Service if the scope needs replaced.
- If your groupings are tight with field points but erratic when shooting broadheads, you probably need to "tune" your arrows. If your shaft wobbles when you spin it on the tip of its broadhead, that is a sure sign your arrow/broadhead combination needs tuned. A tuned arrow has a straight shaft with a broadhead point that is perfectly centered at the end of the shaft. If you do not have the equipment to straighten shafts and re-set inserts, have your pro shop tune your arrows.

CROSSBOW TROUBLESHOOTING (Cont.)

My camo is coming off of the crossbow.

- Your warranty does not cover normal wear and tear due to use, which is common to all products over time. If you believe the condition of your crossbow is due to a defect in materials or workmanship, contact our Customer Service Department.

RETURNING YOUR CROSSBOW FOR SERVICE

Before returning product to TenPoint Crossbow Technologies, you must email or call the Customer Service Department for a Return Authorization Number (RA Number). Email your request at www.tenpointcrossbows.com > Warranty > Return Authorization Form or call Customer Service at 330-628-9245 and select option #2. Missing or incorrect information will result in a delay when processing the RA number request.

To complete the return authorization request, you must provide a valid serial number, crossbow model name and owner's name, address and telephone number. The crossbow serial number is located on a 'Made in U.S.A.' sticker that is located on the left side of the crossbow barrel on thumbhole stock crossbows and between the top and bottom barrels on crossbows formerly known as 6 Point Series. The model name is located on the right side of the crossbow.

An RA Number is valid for 30 days. After 30 days you must call and request another number. All returns must have the RA Number boldly marked on the outside of each box, be properly packaged to prevent damage during shipment and be shipped "freight prepaid" (freight collect and COD returns will not be accepted).

Note: Remove the bow assembly from the stock assembly before shipping your crossbow back to TenPoint. Shipping an assembled crossbow is very expensive and TenPoint will not assume/reimburse freight charges to/from the Warranty Department regardless of warranty determination.

Ship all RA's to: **TenPoint Crossbow Technologies**
1325 Waterloo Road
Mogadore, Ohio 44260

Please include a description of the problem, your name, address and telephone number inside the box. The Customer Service Department will evaluate product returned under our warranty provisions. The department will determine if the product is covered under the warranty and will - at its sole discretion - determine whether to repair or replace it. All returns without an RA Number on the outside of the box will be refused. **Freight charges will not be refunded.**

The Customer Service Department will contact you if payment is required. We will return product when repairs are completed and payment, if required, is made.

STRING AND CABLE ADJUSTMENT CHART

Crossbow Model	Strings	String Twists	Cables	Cable Twists
Huntsman 1994-1997	HCA-117	13	Upgrade Required	13 (after upgrade)
Huntsman 1998	HCA-117	13	HCA-126	Steel (no twists)
HuntMaster (w/out yokes) 1994-1995	HCA-115	13	Upgrade Required	13 (after upgrade)
HuntMaster (w/yokes) 1995-1997	HCA-115	13	HCA-124	13
HuntMaster TL-4 1998	HCA-115	13	HCA-124	13
458 Magnum 1996-1997	HCA-119	13	HCA-124	13
458 Magnum TL-4 1998-1999	HCA-115	13	HCA-124	13
Woodsman, Woodsman Plus & Woodsman SE	HCA-117	13	HCA-126	Steel (no twists)
Slider, Titan TL-7, Titan TL-4, Titan, Titan II & Titan SE	HCA-117	13	HCA-126	Steel (no twists)
Turbo Extreme & Magnum Extreme	HCA-115	13	HCA-124	13
Elite, Magnum, Stealth & Turbo X-2	HCA-115	13	HCA-124	13
Hybrid Lite & Elite Lite	HCA-115	13	HCA-124	13
Pro Fusion, Pro Slider, Titan TL-9 & Titan HLX	HCA-115	13	HCA-124	13
Titan Xtreme	HCA-11712	13	HCA-12612	13
Elite, Pro Elite, Elite QX-4 & QX-4	HCA-115	13	HCA-124	13
Pro Elite HP, Blazer HP, Lazer HP & Maverick HP	HCA-115	13	HCA-124	13
Turbo XLT & Stealth XLT	HCA-12110	16-18	HCA-12710	5
Turbo XLT II, Carbon Elite XLT, Tactical XLT & Stealth SS	HCA-12112	14-16	HCA-12912	9-11
Carbon & Phantom Xtra CLS, Carbon Fusion, Phantom, Shadow & Defender CLS	HCA-11607	18-20	HCA-12307	7
Vapor	HCA-11813	Pre-twisted	HCA-12813	Pre-twisted
GT Curve, GT Flex & GT Mag	HCA-12008	16-20	N/A	N/A
Warrior & Warrior HL	WRA182 or HCA-115	13	WRA162 or HCA-124	13
Invader & Invader HP	WRA182 or HCA-115	13	WRA162 or HCA-124	13
Raider CLS	WRA183	16-19	WRA163	11-14

Note: When installing most cables, twist the bottom yoke (located at the end of each cable) four times and the top yoke one time. Twisting the cable yokes will eliminate limb twist when cocking your crossbow.

* Final tiller measurement for GT Flex, GT Mag, & GT Curve should be 4 $\frac{3}{8}$ -inches to 4 $\frac{1}{2}$ -inches.

** Twist the Vapor top yokes two full twists and the bottom yokes three full twists – the string & cables are pre-twisted, and do not require additional twists.

STRING AND CABLE SPECIFICATIONS

Part Number (Strings)	Length	Materials
HCA-115	37.5"	D-75 - 28 strands
HCA-117	37.5"	B-50 - 22 strands
HCA-119	36.625"	Fast Flight - 30 strands
HCA-11607	34.5"	D-75 - 30 strands
HCA-11712	33.875"	D-75 - 28 strands
HCA-12008	35.625" incl. 2" loops	452X – 40 strands
HCA-12110	30.75"	D-75 – 30 strands
HCA-12112	32"	D-75 - 30 strands
HCA-11813	37.125"	8190G - 44 strands
WRA182	37.5"	D-75 - 28 strands
WRA183	34.5"	D-75 - 30 strands

(Cables)

HCA-124	21.5", 12" yoke	D-75 - 28 strands
HCA-126	21.5", 12" yoke	3/32 steel cable w/barrel end, B-50 yoke
HCA-12307	16.625", 12" yoke	D-75 - 28 strands
HCA-12612	16.875", 12" yoke	D-75 - 28 strands
HCA-12710	13.75", 12" yoke	D-75 - 28 strands
HCA-12912	13.625", 12" yoke	D-75 - 28 strands
HCA-12813	19.8125", 11" yoke	8190G - 40 strands
WRA162	21.5", 12" yoke	D-75 - 28 strands
WRA163	16.625", 12" yoke	D-75 - 28 strands

NOTES

LIMITED OPERATIONAL WARRANTY

Subject to the terms, conditions and limitations outlined below, TenPoint Crossbow Technologies, guarantees its crossbows against defects in materials and workmanship that adversely affect the operation of the crossbow for the lifetime of the original owner, except for the bow limbs and scope, which are warranted for five (5) years from the date of purchase, and strings and cables, which are not covered by this warranty.

This warranty only becomes effective if activated by the purchaser within 30 days of the purchase date by completing the warranty card included with the crossbow and mailing it to TenPoint Crossbow Technologies. TenPoint Crossbow Technologies reserves the right, at its sole discretion, to accept proof of purchase in lieu of a completed warranty card.

All warranty/repair returns are to be coordinated directly between the consumer and TenPoint Crossbow Technologies. To make a claim under this warranty, call our Customer Service Department at 330.628.9245 for a Return Authorization Number. TenPoint Crossbow Technologies will not accept returned merchandise without a Return Authorization Number displayed on the outside of the shipping container. Include your name, address, daytime phone number, and a brief description of the claim inside the package. Insure your shipment and send it prepaid via the U.S. Postal Service, FedEx or UPS.

LIMITATIONS OF WARRANTY

The warranty will be void if any of the following occur:

- (1) the instructions in the owner's manual are not followed;**
- (2) the crossbow or any of its parts or accessories are altered from their original state;**
- (3) the GripSafety is disabled;**
- (4) damage is caused by abuse or neglect;**
- (5) damage is caused by dry-firing or by using underweight arrows (lighter than recommended in the Owners Manual); or**
- (6) the crossbow is rented or loaned for use by others by a retailer, wholesaler, or shooting range operator, or other commercial business organization, whether or not a fee is charged for its use.**

There are no warranties which extend beyond the description on the face hereof.

The sole and exclusive remedy pursuant to this warranty is the repair or replacement of the defective part(s) at the sole discretion of TenPoint Crossbow Technologies. Parts determined to be unsafe will not be returned with the repaired crossbow.

The implied warranties of merchantability and fitness for a particular purpose are expressly disclaimed.

All disclaimers and limitations of liability shall still apply even if the limited remedy of repair and replacement fails of its essential purpose.

In states where permitted, we assume no liability for incidental or consequential damage or for incidental expenses.

Any action against TenPoint Crossbow Technologies based on an alleged breach of this warranty must be brought within one (1) year of the claimed breach.

TenPoint Crossbow Technologies' liability for breach of warranty shall be limited to repair or replacement of the product at the option of TenPoint Crossbow Technologies.