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## **GENERAL INSTRUCTIONS**

## INTRODUCTION

Today's modern crossbows, like firearms and other lethal weapons, are dangerous if you use them improperly or unsafely. We want you to enjoy shooting your crossbow, but to do so safely.

Whether you are an experienced crossbow shooter or have never handled one before, **CAREFULLY READ THE ENTIRE MANUAL** and its warnings before assembling, cocking, loading, or using your crossbow. It explains your crossbow's operation and handling and warns of the potential danger, including property damage, death, or serious personal injury that can result from using it unsafely.

Your safety and the safety of others requires that you always remain aware of the danger inherent in handling a lethal weapon and that you embrace the responsibility to yourself and others to focus on the rules of safe operation every time you handle your crossbow.

Format Note: As you read the manual from cover-to-cover, you will notice that we repeat some of the safety instructions multiple times. The hand safety instructions, for example, apply when you cock, load, unload, carry, and shoot your crossbow, so we restate them again where we think it is important to do so - even at the expense of being repetitious.

In addition, generally we list safety instructions before we present operational instructions in all sections of the manual to emphasize their importance.

## **ANSI STANDARDS**

This manual contains safety instructions preceded by the following American National Standards Institute approved signal words (ANSI Standards):

▲ DANGER ▲ WARNING ▲ CAUTION NOTICE

These signal words alert you to specific levels of hazard:

The **DANGER** signal word indicates a hazardous situation which, if not avoided, will, without doubt, result in death or serious personal injury.

The **WARNING** signal word indicates a hazardous situation which, if not avoided, may result in death or serious personal injury.

The **CAUTION** signal word indicates a hazardous situation, which, if not avoided, may result in moderate or minor personal injury.

The **NOTICE** signal word addresses safety practices unrelated to personal injury.

## SHOOTING & TRIGGER SAFETY WARNING

### **NEVER PRELOAD YOUR TRIGGER**

The bowstring engages or sets the trigger Safety when cocking Horton crossbows. This is visually apparent by watching the safety knob move from FIRE, the Red position, to SAFE, the White position.

Never pull (preload) your trigger when the Safety is engaged to test your Safety. Preloading the trigger is a dangerous practice that has the potential to alter the alignment of internal trigger parts.

Instead, test your Safety by pushing the safety knob as far as you can in the SAFE or White direction. It should move approximately  $V_{16}$  of an inch and then bounce back or spring back the same distance. This "bounce back" means the safety is engaged. If there is no "bounce back", the safety is not engaged and you must re-engage it by forcefully pulling the bowstring as if you were cocking the crossbow. The bowstring corrects possible misalignment and properly sets or engages the Safety.

## SHOOTING AND TRIGGER SAFETY PROTOCOL

**AWARNING** To avoid accidental discharge and possible serious injury or loss of life, never put your

finger on the trigger until you are ready to take your shot.

To avoid an accidental discharge and possible serious injury or loss of life, never move the Safety to the FIRE, or Red, position until you are ready to take your shot.

To avoid the potential for accidental discharge and possible serious injury or loss of life never pull (preload) the trigger for any reason, including testing your trigger Safety, while the Safety is engaged or in the SAFE/White position.

Be certain of your intended target and what is beyond it before pulling your trigger. An arrow can cause serious injury or loss of life even beyond its effective hunting range.

This manual illustrates numerous ways you might handle your crossbow carelessly or improperly.

Careless or improper handling could cause it to discharge unintentionally, which could result in serious injury or loss of life. Carefully read all of the safety advice contained throughout this Owner's Manual.

## **GENERAL SAFETY**

Before shooting your crossbow, also read *Hand & Finger Safety and Shooting Safety and Guarding Against Accidental Discharge* in the Shooting section beginning on page 6.

Always keep your manuals with your crossbow and always make certain you include them if you sell or loan your crossbow to another person.

NOTICE Before hunting with your crossbow, make sure you are qualified and understand all of the risks involved. Take a hunter's education and safety course. In fact, most states require that you complete such a course prior to obtaining your hunting license.

NOTICE Check your local, state, or provincial regulations regarding transporting a crossbow.

Some jurisdictions require that a crossbow be encased

Failure to follow the safety advice and instructions in this manual could result in property damage and/or serious personal injury or death.

during transport.

Always seek a doctor's advice if you are taking medication to be sure that you are able to shoot and handle a crossbow safely. Do not consume drugs or alcohol before or while using the crossbow. Your vision and judgment could be seriously impaired, making your handling of the crossbow unsafe.

WARNING Wear safety glasses when assembling, cocking, loading, or shooting your crossbow to protect your eyes from being injured if the limbs, bowstring, cables, or cocking device cords were to break.

Your crossbow is a dangerous and deadly weapon that is designed for hunting and target shooting only. Do not use it for any other purpose.

Do not modify your crossbow or remove or deactivate its safety features because doing so could cause the crossbow to malfunction and could create a dangerous situation.

NOTICE Modifying your crossbow will also automatically void your warranty.

WARNING When carrying a cocked (always unloaded) crossbow, make sure the safety is in the SAFE position (rearward, toward the white dot) and to avoid serious injury, be careful not to place any part of your body in the release path of the bowstring in case of an unintentional discharge.

When handling your crossbow in the treestand or while carrying it when it is cocked, do not

grab or hold it by the barrel and fore-stock, thereby putting your hand into the release path of the bowstring. If the bow were to accidentally fire, the string will severely injure your hand or possibly amputate one or more fingers.

**AWARNING** Do not transport your crossbow while loaded and do not store it while it is cocked. An unintentional

discharge of a loaded crossbow could cause death or serious personal injury. Storing a cocked crossbow can weaken it and possibly break its limbs, string, and/or cables.

## COCKING & UNCOCKING YOUR CROSSBOW

## **COCKING SAFETY**

of them.

WARNING

Wear safety glasses when cocking your crossbow to protect your eyes from being injured if the limbs, bowstring, cables, or cocking unit cords were to break.

**AWARNING** When manually cocking your crossbow, grip the bowstring securely with all four fingers of

both hands and do not relax your grip until the string passes the Dry-Fire-Inhibitor (DFI) and engages the string latch. Otherwise, you could severely injure your fingers or hands as you release the string, and/or you could dry-fire the bow, potentially breaking the limbs and causing severe injury or other property damage.

Be careful to use proper lifting techniques when manually cocking your crossbow because you could injure your back or shoulders if the draw weight is too much for you to handle. **Note:** If the draw weight is too heavy for you to cock your crossbow manually, various cocking aids are available to make it easier, including the ACUdraw, ACUdraw 50, and Rope-Cocker. These cocking devices have their own manual or instructions. Read the manuals/instructions before using one

**WARNING**When cocking your crossbow with an ACUdraw automated cocking unit do not over-crank it.

Stop cranking as soon as you see and hear the trigger-safety-knob slide from FIRE to SAFE and you hear the string latch engage the string. If you continue to crank it beyond this point, you can lift the trigger box out of alignment, damaging the bow; and/or you can break the draw cords, sending the mechanism's string-claw flying, which may cause serious injury and/or property damage. (See the ACUdraw Instruction Manual for complete operating instructions.)

WARNING
When cocking your crossbow with an ACUdraw automated cocking unit, do not forget to return the string-claw to its storage position prior to loading an arrow. Otherwise you will "shoot the claw" when you pull the trigger, which may cause serious personal injury and/or damage to your bow from flying debris. (See the ACUdraw Instruction Manual for complete operating instructions.)

Do not place your foot in the foot stirrup when cocking your crossbow with an ACUdraw cocking mechanism. In the unlikely event that the string-claw was to break away from the draw cords, it could injure or possibly break

break away from the draw cords, it could injure or possibly break your foot. (See the ACUdraw Instruction Manual for complete operating instructions.)

Do not attempt to manually cock the Storm RDX crossbow. It is too narrow to cock manually, and you will pinch and possibly injure your fingers if you attempt to do so.

Once the crossbow is cocked, do not grab, hold, or carry it by the barrel or fore-stock, thereby putting your hand into the release path of the bowstring. If the bow were to accidentally fire, the string will severely injure your hand or possibly amputate one or more fingers.

WARNING When carrying a cocked but unloaded crossbow, make sure the safety is in the SAFE position (the rearward position, toward the white dot) to prevent against an accidental discharge and possible serious injury.

ACUTION

If your crossbow comes with an ACUdraw,
ACUdraw 50, Rope-Cocker, or Dedd Sled cocking
mechanism, refer to the appropriate manual/instructions for
specific safety recommendations, operation, and instructions
before cocking it.

## MANUAL COCKING INSTRUCTION (FORWARD DRAW CROSSBOWS ONLY)

Cocking your crossbow inaccurately is the most frequent cause of inaccurate shooting. With any crossbow, if the bowstring is not centered on the string latch when cocked, the crossbow will not shoot straight.

- 1. Before cocking your crossbow, move the safety knob into the FIRE position (forward, toward the red dot). If you try to cock your crossbow with the safety in the SAFE position (rearward, toward the white dot), the string latch will not engage the string. Instead, the DFI (Dry-Fire-Inhibitor) will catch and hold the string, making it appear that the crossbow is cocked when it is not. When the DFI instead of the string latch engages the bowstring, 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 (photos 1, 2, & 3).
- With the underside of the crossbow facing you, place your foot far enough into the foot stirrup that it will not slip out when you draw the bowstring.
- 3. Grab the bowstring on both sides of the barrel using all four fingers of both hands.



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



If you try to cock the crossbow while the safety is in the SAFE position (rearward, toward the white dot), the DFI will hold the bowstring and the bow will only appear to be cocked.



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

- 4. Slide your hands together so that your index fingers are flush against the sides of the barrel (photo 4). **Note:** The ACRA-ANGLE barrel allows you to slide your index fingers along the barrel without pinching them.
- 5. Using the sides of the barrel as a guide, and with a secure grip, pull the bowstring toward the trigger assembly and into its string slot until you hear the string latch and see and hear the safety knob automatically move from FIRE to SAFE (rearward, toward the white dot). **Note:** If you attempt to cock the crossbow with the safety in the SAFE position (rearward, toward the white dot), the string-latch will not engage the string. To correct this problem, move the safety knob forward to the FIRE position (toward the red dot) and firmly pull the bowstring to engage the string latch and the safety.
- 6. Take a quick glance inside the string slot to make sure the string-latch is holding the string. The more firmly 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 crossbow quite easy.

**Reminder:** All Horton crossbow models are equipped with a DFI, which prevents the crossbow from dry-firing if an arrow is not loaded (photo 5).

7. Check the safety knob to make sure it is in the SAFE position (rearward, toward the white dot).



Slide your index fingers along the barrel.



DFI (Dry-Fire-Inhibitor).

## **UNCOCKING SAFETY**

When uncocking (shooting) your crossbow, do not allow your thumb or fingers to move above the crossbow barrel's flight deck or anywhere into the bowstring's release path because the string will severely injure or amputate a finger or thumb when you pull the trigger.

WARNING Wear safety glasses when uncocking (shooting) your crossbow to protect your eyes from being injured if the limbs, bowstring, or cables were to break.

Do not attempt to uncock your crossbow by hand or by using an ACUdraw, ACUdraw 50, Dedd Sled, Rope-Cocker, or other mechanism because doing

Dedd Sled, Rope-Cocker, or other mechanism because doing so could cause you to lose control of the bowstring, possibly resulting in serious personal injury.

## **UNCOCKING INSTRUCTIONS**

The safest way to uncock your crossbow is to shoot it using a practice arrow or an unloading bolt such as the TenPoint Crossbow Unloading Bolt (CUB). The CUB is a single-use, two-piece biodegradable unloading shaft, which decomposes in or on the ground over time.

Do not dry-fire the bow. You need the weight of an arrow to absorb the bow's energy and to prevent damage to the bow.

If your state allows you to carry an arrow equipped with a practice point while hunting, carry an old one in your quiver to use when uncocking your crossbow. You can shoot it into soft, rock-free ground or into a special-purpose unloading target that you keep in your vehicle.

If shooting into the ground, aim at a point roughly three feet in front of you. If you aim further out, you could bury your arrow and not recover it.

## LOADING AND UNLOADING YOUR CROSSBOW

#### **ARROW LOADING & UNLOADING SAFETY**

AWARNING

Do not load an arrow in your crossbow until you are situated where you intend to remain stationary until shooting it. Never carry your crossbow with an arrow loaded in it. Death or serious personal injury could result if you were to slip or fall while carrying a loaded crossbow.

WARNING

Wear safety glasses when loading, shooting, or unloading your crossbow to protect your eyes from being injured if the limbs, bowstring, cables, or cocking mechanism cords were to break.

**AWARNING** Broadheads are razor sharp. Do not handle them with your bare hands to avoid serious personal injury. When transporting or storing field- or broadhead-tipped arrows, keep them safely protected inside a quiver.

WARNING
When loading or unloading (removing) an arrow, do not allow any part of either hand to move into the release path of the bowstring because if the bow were to accidentally fire, the string would severely injure your hand or possibly amputate one or more fingers in its path. Carefully hold the arrow with your index and middle fingers and your thumb, just behind the broadhead or point, as you slide it into or out of position.

After your hunt, remove your arrow and secure it in your quiver.

## ARROW LOADING INSTRUCTIONS

When the crossbow is cocked and the safety is in the SAFE position (rearward, toward the white dot), follow these steps to load your arrow:

1. While keeping your crossbow pointed in a safe direction, your finger off the trigger, and no part of either hand in the release path of the cocked bowstring, place a Horton recommended crossbow arrow on top of the barrel, with one of the vanes or feathers slipped down into the barrel's arrow-flight-groove. **Note:** When loading the arrow, hold it between your index and middle fingers and your thumb, just behind the point or broadhead (photo 1).

2. Slide the arrow along the arrow-flight-groove under the arrow retention brush, and into the trigger box's string slot until its nock sits firmly against the cocked bowstring.



PROPER POSITION. Hold the arrow with your index and middle finger and your thumb just behind the broadhead.

## ARROW UNLOADING (REMOVAL) INSTRUCTIONS

When the crossbow is cocked and loaded, and the safety is in the SAFE position (rearward, toward the white dot), follow these steps to unload your arrow:

- While keeping your crossbow pointed in a safe direction, your finger off the trigger, and no part of either hand in the release path of the cocked bowstring, remove the arrow. Note: When unloading the arrow, hold it between your index and middle fingers and your thumb, just behind the point or broadhead (photo 1).
- 2. Secure the arrow in your quiver.

## SHOOTING YOUR CROSSBOW

## **HAND & FINGER SAFETY**

Also refer to *Cocking Safety* in the *Cocking & Uncocking Your Crossbow* section beginning on page 4.

A DANGER Do not allow your thumb or fingers to move above the crossbow barrel's flight deck or anywhere into the bowstring's release path (photos 1, 2, & 3) because the string will severely injure or amputate a finger and/or thumb in its path when you fire the crossbow.

You must keep your hand and fingers safely positioned every time you shoot the crossbow (photo 4).

A DANGER Your fore-grip hand is particularly vulnerable when shooting from a bench rest. Make sure you do not allow the fore-grip hand to rotate to the side of the grip or to slide in front of the grip, thereby allowing your thumb to move above the flight deck and into the release path of the bowstring. Again, if you fire the crossbow with your thumb in the release path of the bowstring, you will seriously injure it and possibly amputate it. A safe way to position the fore-grip hand is to place it flat on the bench rest with your fingers pointing toward your target. Spread the thumb away from the fingers to form a "V". Position the fore-grip flat on the bench rest in front of your hand and slide the back end of the grip into the "V" (photo 5).

NOTICE

All Horton crossbows come with integrated safety wings & fore-grip.

**AWARNING** When loading an arrow in your crossbow, do not allow any part of either hand to move into

the release path of the bowstring because if the bow were to accidentally fire, the string will severely injure your hand or possibly amputate one or more fingers in its path. Carefully hold the arrow with your index and middle finger and your thumb just behind the broadhead or point as you slide it into position (photo 6).

**WARNING** While handling or carrying your crossbow after it is cocked, do not grab or hold it by the barrel

and fore-stock, thereby putting your hand into the release path of the bowstring. If the bow were to accidentally fire, the string will severely injure your hand or possibly amputate one or more fingers (photo 7).



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



IMPROPER. With your fore-grip hand positioned as shown above, you will severely injure or amputate your finger(s) if you fire your crossbow.



IMPROPER. With your fore-grip hand positioned as shown above, you will severely injure or amputate your finger(s) if you fire your crossbow.



PROPER HAND POSITION. Proper way for a right-handed shooter to hold the fore-grip on Horton crossbows.



PROPER POSITION. With your fore-grip hand flat on the bench rest you can position the grip in the "V" between your fingers and thumb.



PROPER POSITION. Hold the arrow with your index and middle finger and your thumb just behind the broadhead.



Do not grab or hold it by the barrel and fore-stock.

## SHOOTING SAFETY & GUARDING AGAINST **ACCIDENTAL DISCHARGE**

**A DANGER** TO AVOID POSSIBLE AMPUTATION OF FINGERS OR A THUMB, FOLLOW THIS HAND AND

FINGER SAFETY ADVICE WHEN SHOOTING YOUR CROSSBOW.

**AWARNING** To avoid accidental discharge and possible serious injury or loss of life, never put your finger on the trigger until you are ready to take your shot.

**AWARNING** To avoid an accidental discharge and possible serious injury or loss of life, never move the Safety to the FIRE, or Red, position until you are ready to take your shot.

**AWARNING** To avoid the potential for accidental discharge and possible serious injury or loss of life never pull (preload) the trigger for any reason, including testing your trigger Safety, while the Safety is engaged or in the SAFE/White position.

Be certain of your intended target and what is **AWARNING** beyond it before pulling your trigger. An arrow can cause serious injury or loss of life even beyond its effective hunting range.

Wear safety glasses when shooting your **AWARNING** crossbow to protect your eyes from being injured if the limbs, bowstring, cables, or cocking device cords were to break.

When hunting, never shoot just because you see **AWARNING** movement, because that movement could be a camouflaged hunter.

When target shooting, set up in a safe, open **AWARNING** area with a proper target and backstop.

**AWARNING** you always keep your loaded crossbow pointed toward the target. Accidentally pointing it in the direction of others is extremely dangerous and potentially life threatening.

When you are at a shooting range, make sure

Make certain others are well behind you when **AWARNING** you are shooting. If the limbs, bowstring, cables, or cocking unit cords were to break, you could seriously injure someone standing close to you.

**AWARNING** When carrying a cocked but unloaded crossbow, make sure the safety is in the SAFE position (rearward, toward the white dot) and do not grip the bow with your hand in the path of the bowstring to prevent certain serious injury in the event of an accidental discharge.

**AWARNING** Do not fire your crossbow if branches or other obstructions block its limbs' release path. Doing so could cause the limbs, bowstring or cables to break and possibly result in serious personal injury.

AWARNING If you handle your crossbow carelessly or improperly, you could cause it to discharge unintentionally, which could result in property damage and/or serious personal injury or death.

Do not use your crossbow if it is not in top **AWARNING** working condition. Carefully examine it and your arrows for worn, loose, damaged, or missing parts every time before you use them. A damaged crossbow, or one in need of maintenance or repair, could break during use and cause injury or death to you or bystanders. Contact Customer Service at www.hortoncrossbows.com or by calling 330-628-9245.

**AWARNING** To avoid an accidental discharge and potential serious injury or death, do not move the safety to the FIRE position (forward, toward the red dot) until you have made the decision to fire and are ready to squeeze the trigger.

To avoid accidental discharge, do not put your **▲WARNING** finger on the trigger until you have made the decision to fire.

To guard against accidental discharge, make **▲WARNING** sure your crossbow is unloaded before handing it to another person.

## SHOOTING INSTRUCTION & TECHNIQUE

**EXAMPLE 3** Before shooting your crossbow also read and follow the safety and operational instructions listed to avoid serious injury to you or others:

- The Cocking Your Crossbow and Arrow Loading & Unloading Safety sections of this manual.
- The ACUdraw, ACUdraw 50, Rope-Cocker, or Dedd Sled instructions if your crossbow comes with one of these devices.
- Your model-specific Assembly Instruction Manual.

As any experienced hunter will tell you, it is easy to make a bad shot. To shoot a crossbow accurately, you must practice proper shooting technique. Here are the steps to follow after you have cocked and loaded your crossbow:

- 1. If you are shooting from a standing position, your feet should be approximately shoulder-width apart and positioned either perpendicular to the target in a closed stance or quartering at a 45-degree angle toward the target in an open stance. Pick the stance that is most comfortable for you (photos 8 & 9).
- 2. Shoulder the crossbow keeping your fore-grip hand and fingers on the fore-grip and below the arrow flight deck.
- 3. Position your cheek in the middle of the stock cheek-piece or comb, and make sure you have a clear sight picture through the scope.
- 4. Position your trigger finger on the side of the stock above the actual trigger and pointing toward your intended target. Do not place it on the trigger (photo 10).
- 5. If standing, keep both elbows pulled close to your body to better support the crossbow (photo 11). Follow the same steps when shooting from a seated position, making certain your crossbow limbs will clear any obstacles.
- 6. If shooting from a bench rest, your fore-grip hand is particularly vulnerable to misplacement (photo 12). Be careful to keep your thumb and fingers below the flight deck and away from the cables to avoid injury.
- 7. When you are ready to take your shot, slide the trigger's safety knob from the SAFE position to the FIRE position.
- 8. Just before taking your shot take a breath; exhale about half of it and hold the remaining air. Place your trigger-finger on the trigger and begin to squeeze it slowly until the bow fires. This breath control and trigger squeezing process will keep you steady and improve your accuracy.
- 9. Follow the shot through your scope until your arrow hits its target rather than looking up immediately after pulling the trigger. This technique is called "follow-through" and it, too, will improve your accuracy.







Proper foot position.



Position finger on the side of the stock.



Keep elbows close to your body.



Keep your thumb and fingers below the flight deck and away from the cables to avoid injury.

## SIGHTING YOUR CROSSBOW

#### **SIGHTING SAFETY**

A DANGER TO AVOID POSSIBLE AMPUTATION OF FINGERS OR A THUMB, FOLLOW THE HAND AND FINGER

SAFETY ADVICE BEGINNING ON PAGE 6 WHEN SIGHTING YOUR CROSSBOW.

**AWARNING** Wear safety glasses when shooting your crossbow to protect your eyes from being

injured if the limbs, bowstring, cables, or cocking unit cords were to break.

Make sure your crossbow is uncocked and unloaded when making the windage and elevation adjustments on your scope.

NOTICE

Keep the scope away from acid, alkaline and other corrosives to avoid damaging it.

## **SIGHTING THE 4x 32 SCOPE**

Horton crossbows are equipped with a  $4x\ 32$  scope and fixed  $\frac{7}{8}$ -inch Weaver style dovetail scope mount. Each crossbow is 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.

#### **Scope Focus Adjustment:**

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

### **Elevation and Windage Adjustments:**

The 4x 32 Multi-Line Scope is equipped with four lines calibrated for 20, 30, 40, and 50-yards. The top line is calibrated for 20-yards, the center for 30-yards and the bottom for 40-yards. The fourth partial line is calibrated for 50-yards.

**Note:** Exact yardages for your scope may vary based on the speed of the crossbow.

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 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 indicated by the arrow 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 line should be accurate at 20-yards, the bottom line should be accurate at 50-yards, and the fourth partial line should be accurate at 50-yards. **Note:** At 30-yards it takes approximately four to five clicks to move your point of impact ½-inch.

## TREESTAND SAFETY

Treestand accidents are usually the most dangerous, debilitating, and deadly types of Bowhunting accidents. Make certain you use a Treestand Manufacturer's Association approved treestand, and make sure you watch the Treestand Safety DVD included with your purchase.

Always wear a safety belt or harness when hunting from a treestand because a fall could result in death or serious personal injury. Check it to make certain it is in good condition and securely fastened.

To further guard against a life-threatening fall, buy and install an approved climber's lifeline with each treestand you purchase, and always keep your harness safety-strap attached to your lifeline while in your stand and while ascending and descending from your stand. As you climb, make sure you anchor both hands securely with each step you take.

Cock, but do not load, your crossbow when you arrive at your treestand. It is too dangerous to cock a crossbow from a standing position in your stand. If your crossbow is equipped with an ACUdraw cocking mechanism, you may cock it from a seated position in a stand. It is not safe to manually cock your crossbow or use an ACUdraw 50, Dedd Sled, or other rope-cocking mechanism in a treestand.

Do not carry your crossbow while climbing up or down a tree because you could lose your balance or the crossbow could catch on the tree/stand and cause you to fall. Attach your unloaded crossbow to a bow retrieval rope with the butt stock pointing up.

Once in your stand, fasten your safety harness to its tree-strap and check to make certain it is secure before sitting down. Then you are in a safe position to hoist your crossbow.

A DANGER When handling your crossbow in the treestand or while carrying it when it is cocked, do not

grab or hold it by the barrel and fore-stock, thereby putting your hand into the release path of the bowstring. If the bow were to accidentally fire, the string will severely injure your hand or possibly amputate one or more fingers. To keep your hand away from the release path of the bowstring while loading an arrow, carefully hold the arrow with your index and middle fingers and your thumb just behind the broadhead as you slide it into position.

**AWARNING** Before you load an arrow, check all of your shooting lanes to make sure there are no tree

limbs or branches in the way of your crossbow limbs. If your crossbow limbs were to hit a branch or tree limb during the shot, you could damage the bow, knock yourself off your stand, or otherwise seriously injure yourself. Finally, carefully load your arrow, and hang your crossbow on a bow hook or hold it securely in your lap while hunting.

**AWARNING** Following your hunt, remove your arrow and return and secure it in your quiver. Attach the unloaded crossbow to the bow rope and lower it to the ground. After you disconnect your safety harness from the tree strap, make sure you remain connected to your lifeline before you begin your descent.

## ARROW SAFETY & SELECTION

#### **ARROW & BROADHEAD SAFETY**

**AWARNING** Broadheads are razor sharp. Do not handle them with your bare hands to avoid serious personal

injury or death from bleeding. Make sure broadheads are safely protected by a quiver when storing or transporting arrows.

AWARNING Keep your crossbow and broadheads out of the reach of children.

**AWARNING** Inspect your arrows before shooting them to determine that they are not bent or damaged.

Never use an arrow with a bent shaft, damaged nock or fletching, or with a missing insert or field point/broadhead because it could cause the crossbow to operate improperly and/or the arrow to fly in an unintended direction, potentially seriously injuring you or a bystander.

**AWARNING** Use standard-weight arrows weighing at least 370-grains. Arrows heavier than 370-grains are acceptable as well. Using arrows lighter than what is specified by the manufacturer can cause a dry-fire effect and may cause the limbs to break resulting in serious personal injury.

**AWARNING** Do not use small diameter arrows (less than 22/64ths) or arrows with flat, moon, or capture nocks because they may cause the crossbow to malfunction and may seriously injure you or others.

**AWARNING** Inspect carbon arrow shafts for hairline fractures or cracks. Firing a damaged carbon shaft can cause it to shatter, scattering fragments, which could seriously injure you or others.

#### ARROW SELECTION

Horton Crossbow Innovations recommends the Horton 20-inch Carbon Arrow, made by Victory® Archery, with its crossbows. This arrow is standard-weight at 400-grains with a 100-grain field point/broadhead. The 20-inch carbon arrows deliver an optimum blend of speed and kinetic energy, making them ideal all-purpose hunting arrows. Their weight allows them to absorb a higher percentage of a crossbow's energy than lighter arrows, thereby reducing vibration, stress, noise, and the likelihood of bow damage. Their weight makes them generate more kinetic energy than lightweight arrows for improved accuracy and power down range. The advantage of this arrow is that the blend of speed and power makes them effective and suitable for nearly all hunting and shooting circumstances.

## **Horton 20-Inch Carbon Arrow Specifications**

400-grains (with 100-grain field point or broadhead) 22/64ths carbon .300 shaft I.D. 8.7 grains-per-inch Fusion 3-inch Shield cut Q21 vane 87-grain brass insert

NOTICE

All Horton arrows are fabricated with Omni-Nocks.

The Omni-Nock design features six micro-grooves that form three string alignment channels. These channels eliminate the indexing problem associated with moon and capture nocks. On today's narrower crossbows with acute string angles, the Omni-Nock also keeps the bowstring from shooting over or under an arrow. Even if you slightly misalign your vane when you load an arrow, the Omni-Nock will self-correct the alignment as acceleration begins.

## PREVENTIVE MAINTENANCE & CARE OF YOUR CROSSBOW

## **MAINTENANCE WARNINGS**

**AWARNING** Wear safety glasses when servicing or maintaining your crossbow to protect your eyes from being injured if the limbs were to shatter and/or the bowstring, cables, or cocking unit cords were to break.

**▲WARNING** 

Your crossbow must be uncocked and unloaded before conducting any maintenance on it.

**AWARNING** Do not modify your crossbow or remove or deactivate its safety features because this could

cause it to malfunction and create a dangerous situation.

**AWARNING** Do not attempt to adjust your crossbow's draw weight or to change its cables, limbs, or string

because improper installation or adjustments could cause it to malfunction and create a dangerous situation. Have a qualified professional with the proper training and tools perform these tasks.

AWARNING Carefully examine your crossbow for worn, loose, damaged, or missing parts every time before you use it. A damaged crossbow, or one in need of maintenance or

**AWARNING** Do not use your crossbow if it is not in top working condition because equipment failure could cause injury to you or bystanders. Contact Customer Service.

repair, could be dangerous to you or others.

Do not apply string wax to the center serving, **NOTICE** barrel or trigger because the wax will collect inside the trigger mechanism and eventually prevent the string from latching properly.

Do not use heavy oil, grease, or substances NOTICE similar to petroleum jelly because they will attract dust and grit that will work their way into the trigger housing, making it sluggish and possibly inoperable in cold weather.

**AWARNING** Do not cock your crossbow if the bowstring or cables are worn or frayed because they could break resulting in serious personal injury.

## MAINTENANCE PROCEDURES

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 Horton's String Wax & Conditioner (HCA-11015-H). 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: Horton recommends changing both string and cables every other year under normal hunting/ shooting conditions.

## 2. General Lubrication:

- Use a high quality barrel or rail lubricant such as Horton's Flight Rail and Trigger Lube (HCA-111-H) 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 should be adequate (photo 1). Note: Applying too much rail lube can break down your string serving.
- 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.
- · Periodically oil the Storm RDX cam bearings, especially after getting the crossbow wet.

## 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. **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 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).

#### 4. Storage:

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. Screws and Bolts:

To avoid stripping your main assembly bolt be certain to loosen its locking set screw before tightening or loosening it (photo 4). **Note:** Horton does not recommend loosening limb bolts to relieve string pressure in the off-season.

6. Horton Crossbow Innovations 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.hortoncrossbows.com for a Return Authorization Number and shipping and payment instructions.



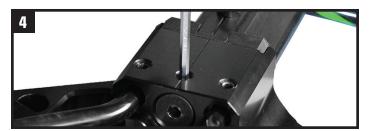
Lubricate your flight rail approximately every 75 to 100 shots with flight rail lubricant.



Lubricate the trigger through the safety slide window.



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



Loosen locking setscrew before turning the main assembly bolt.

## **CROSSBOW TROUBLESHOOTING**

Not all issues associated with your crossbow will require service. This troubleshooting section addresses common problems with your crossbow. If, after reviewing this section, you have not solved your problem, contact the Horton Customer Service Department at 330-628-9245 option #2, or email your Return Authorization repair request at www.hortoncrossbows.com.

### My crossbow will not cock.

Before cocking your crossbow, the safety knob must be in the FIRE position (forward, toward the red dot).
 Otherwise, the string latch will not engage or hold the bowstring. If you try to cock your crossbow with the safety in the SAFE position (rearward, toward the white dot), 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 position (forward, toward the red dot) before cocking your crossbow.



If you try to cock the crossbow while the safety is in the rear, SAFE position (rearward toward the white dot), the bowstring 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 position (rearward, toward the white dot), and the string latch will engage the string.

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

- The moving parts inside the trigger housing may be too dry or rusted. Add a small drop of light-weight oil 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.
   Contact Customer Service.

### 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 (rub the string/cables briskly between your fingers, creating heat and melting the wax).
- Do not attempt to use your crossbow if the string and/or cables are frayed 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 & Specifications".

- 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.
- The main assembly bolt may not be tight enough. Refer to your model-specific Assembly Instructions.

## 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 (the ACRA-ANGLE barrel allows you to slide your index fingers along the barrel without getting pinched).
- Make sure screws have not vibrated loose. 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 your groupings are tight using field points but erratic using 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 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 local pro shop tune your arrows.

#### My camo is coming off the crossbow.

Some surfaces of the crossbow will show signs of wear and tear from normal use. If there is a question about wear and tear, Horton must determine whether it is excessive or normal. Contact Customer Service for assistance.

## STRING & CABLE SPECIFICATIONS

CROSSBOW MODEL	STRING PART #	STRING LENGTH	STRING MATERIAL
STORM RDX	HCA-12215	40.875"	D97, 28 strands (Pre-twisted)
LEGEND ULTRA LITE	HCA-11915	34.0625"	D97, 28 strands (Pre-twisted)

CROSSBOW MODEL	CABLE PART #	CABLE LENGTH	CABLE MATERIAL
STORM RDX	HCA-13115	15.1875"	D97, 28 strands (Pre-twisted)
LEGEND ULTRA LITE	HCA-13015	23.0625" (5" hard yokes)	D97, 28 strands (Pre-twisted)

## **RETURNING YOUR CROSSBOW FOR SERVICE**

Before returning product to Horton Crossbow Innovations, you must complete a Return Authorization request form at www.hortoncrossbows.com > Support > Return Authorization Form> or call the Customer Service Department for a Return Authorization Number (RA Number) 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.

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:** On forward draw crossbows, remove the bow assembly from the stock assembly before shipping your crossbow back to Horton Crossbow Innovations. Shipping an assembled crossbow is expensive and Horton Crossbow Innovations will not assume/reimburse freight charges to/from the Warranty Department regardless of warranty determination.

Please include a description of the problem, your name, address, and telephone number inside the box.

Ship to:

## **Horton Crossbow Innovations**

1325 Waterloo Road Mogadore, Ohio 44260

Horton Crossbow Innovations will not accept returns without an RA Number on the outside of the box or refund freight charges.

The Customer Service Department will evaluate the product under our warranty provisions. The Warranty Department will determine if the product is covered under the warranty and will - at its sole discretion - determine whether to repair or replace it.

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

NOTES		

# HORTON LIMITED LIFETIME OPERATIONAL WARRANTY

Subject to the terms, conditions and limitations outlined below, Horton Crossbow Innovations 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 Horton Crossbow Innovations. Horton Crossbow Innovations 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 Horton Crossbow Innovations. To make a claim under this warranty, call our Customer Service Department at 330-628-9245 for a Return Authorization Number. Horton Crossbow Innovations 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 their parts are altered from their original state;
- (3) damage is caused by abuse or neglect;
- (4) damage is caused by dry-firing or by using underweight arrows (lighter than recommended in the Owner's Manual); or
- (5) 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 Horton Crossbow Innovations. 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 Horton Crossbow Innovations based on an alleged breach of this warranty must be brought within one (1) year of the claimed breach. Horton Crossbow Innovations' liability for breach of warranty shall be limited to repair or replacement of the product at the option of Horton Crossbow Innovations.

These products are covered by one or more of the patents found at www.tenpointcrossbows.com/pages/patent-technologies/.



## HORTON CROSSBOW INNOVATIONS™

1325 Waterloo Road Mogadore, OH 44260-9608

330-628-9245 www.hortoncrossbows.com