

# XRS

## (Crossover Rifle Stock)

V1.0 Dec 2019



### XRS Chassis System

Thank you for choosing the MDT XRS Crossover Rifle Stock.

The XRS Crossover Rifle Stock has been designed and developed to incorporate modern chassis features with the ergonomic features present in a traditional stock. These features include:

- Rigid aluminum skeleton crafted from 6061 aluminum - eliminating warping and distortion.
- Action specific V-shaped bedding area.
- Recoil lug mating surface area ensures the best accuracy and repeatability.
- AICS machined magwell - no need to purchase bottom metal.
- 12 Forend M-lok slots with 3 per side and 6 on the bottom.
- Included Swing swivel studs installed at the front and rear of the chassis.
- M-lok ARCA Compatible forend.
- Soft overmolded pistol grip with vertical and angled options available.
- Tool-less Adjustable Cheekriser (1 5/8" total vertical adjustment).
- Spacer Adjustable LOP with Overmolded Buttpad (1 1/4" total LOP adjustment with included hardware).
- Two QD attachment points on buttstock (one per side) - Must be purchased separately.
- Bottom attachment points for either Picatinny rail or swing swivel studs on Buttstock.
- Captured action screws - no losing action screws!

**CAUTION:** AVOID RESTING OR HITTING THE BARREL AGAINST ANY SURFACE WHILE HANDLING THE ACTION, STOCK, AND CHASSIS.

#### TOOLS REQUIRED

- 3/16" Allen Wrench (Remington 700/783, Savage SA/Axis Action Screws)
- 5mm Allen Wrench (Tikka SA, Howa SA Action Screws)
- 4mm Allen Wrench (CZ 457 Action Screws)
- 5/32" Allen wrench (Buttpad Length-of-Pull Adjustment)
- 3/32" Allen wrench (Grip Swap)
- Inch-lb torque wrench (optional)

## REMOVING THE ACTION

1. Ensure that the firearm is unloaded.
2. Place safety lever on 'safe'.
3. Remove the magazine (if inserted) and bolt.
4. Using the appropriate Allen wrench for your firearm, release and remove the two screws holding the stock to the action.
5. Remove the barrelled action from the stock.

## INSTALLING THE ACTION

**HOWA ONLY** - If you have purchased the Howa 1500 SA Version of the XRS, the grip will need to be removed in order to access the rear action screw. This is due to the rear action screw being too far rearward to properly access through the trigger guard/grip. Please refer to the "Grip Change" section below - and return to this section when noted.

1. Place your barreled action into the XRS stock
2. Push the action backwards to ensure the recoil lug makes contact with the recoil surface
3. Tighten down the captured action screws using the appropriate allen wrench. Torque the screws down to 60 in/lbs.

**CAUTION:** RE-TIGHTEN ALL SCREWS AND FASTENERS AFTER INITIAL USE (APPROX. 100 ROUNDS)

## ADJUSTMENT

### Grip Change

1. To change your grip, begin by removing the four 8-32 button head cap screws and washers in the pistol grip using a 3/32" allen wrench.
2. Remove the installed pistol grip by sliding it downward.

**HOWA ONLY** - If you are installing the XRS onto a Howa SA at this point you should be able to access your rear action screw. Return to the installation instructions above, then once those are completed, return to this section to re-install your grip.

3. Place your preferred grip onto the chassis by sliding it upwards, and tightly backwards.
4. Re-insert the screws and washers. Torque down hand tight. Do not over torque the screws or you risk damaging your grip.



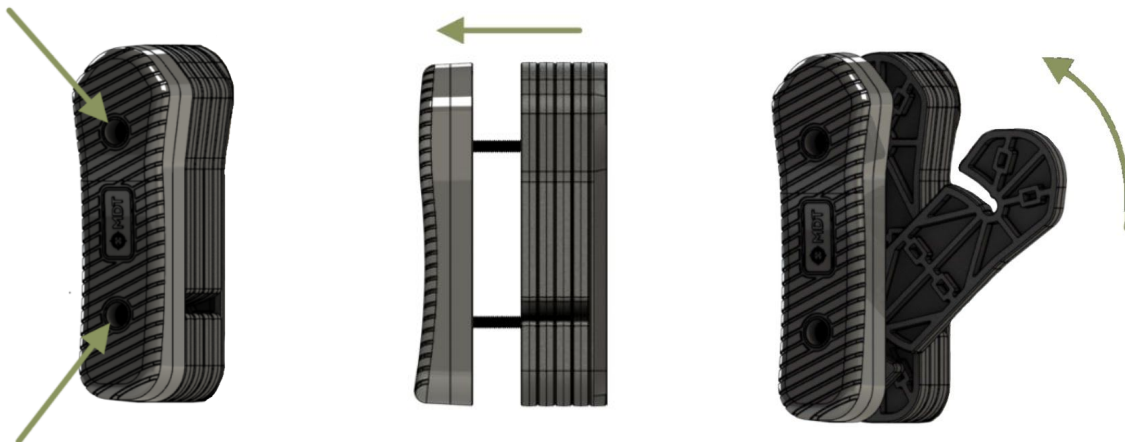
## Cheek Riser Height Adjustment

1. To adjust the cheek-riser height, loosen the two ¼-20 brass tipped thumb screws on the side of the buttstock by turning in a counter-clockwise direction.
2. Move the cheek-riser to the desired location.
3. Re-tighten the two 1/4-20 brass tipped thumb screws by turning in a clockwise direction and tightening firmly.



## Length-Of-Pull (LOP) Adjustment

4. To adjust the buttstock LOP, first loosen the two #10-32 screws holding the buttpad to the stock using a 5/32" allen wrench.
5. If removing spacers, loosen the screws at least 5 turns to create enough space for the tabs on the spacer being removed to clear the buttpad and other spacers.
  - a. Press on the side of the spacer near each slot to rotate the spacer away from the buttpad retention screws.
  - b. Once the desired number of spacers has been removed, retighten the buttpad retention screws.
6. If adding spacers, loosen the screws enough that a space is formed between the buttpad and the nearest spacer to add the desired number of spacers (see diagram below).
  - a. Position the spacer slot onto the bottom screw, with the alignment tabs facing forward. There will be a slight click as the screw goes into its required spot.
  - b. Pivot the spacer about the screw to engage the second screw, and click it into place.
  - c. Once the desired number of spacers has been added, retighten the buttpad retention screws.



## Accessory Attachment

The XRS accommodates the attachment of a number of accessories to allow the user to customize their rifle as they would like. A summary of these attachment points are shown below.

Underside of Buttstock:



There are two #10-32 weld-nuts (spaced 1.6" apart) captured inside of the buttstock panels that facilitate attachment of various attachments, such as:

- a) Sling Swivel Stud (1 of these ships standard with the XRS)
- b) 2.5" Bolt-On Rail (available from MDT)
- c) Any other bolt-on accessory with a 1.6" attachment hole spacing

Forend:



There are 3 M-Lok slots in the polymer on each side of the forend, and 6 slots on the underside in the metal skeleton. Depending on the accessory used, the sling swivel stud installed near the tip of the forend may need to be removed in order to utilize the slot closest to the forend tip.

## MAINTENANCE INFORMATION

**NOTICE: THIS MANUAL COMPLEMENTS YOUR RIFLE MANUFACTURER'S MANUAL. FOLLOW ITS LUBRICATION AND MAINTENANCE INSTRUCTIONS.**

### **When should I clean and lubricate my new MDT chassis?**

- Before and after long-term storage;
- Soon after being subject to adverse conditions such as rain, snow, mud, sleet, or saltwater;
- Soon after operating in rough conditions such as lying on the ground outdoors or dropped in mud.

### **How should I clean and lubricate my MDT chassis?**

- Use a damp (not wet) clean cloth to remove dirt and other stains from the surfaces.
- Use a dry clean cloth to dry and finish the cleaning;
- Do not apply oil on the chassis surfaces;
- After cleaning, place a drop of gun oil in the sling swivel stud, magazine lock pin, action screw, and pistol grip screw.

**NOTE: AFTER USE UNDER EXTREME CONDITIONS, IT MAY BE NECESSARY TO DISASSEMBLE THE CHASSIS FOR PROPER CLEANING.**

### **Is the MDT chassis corrosion-proof?**

- Yes. the MDT chassis coating provides superior corrosion protection using Cerakote®.
- However, only proper care can keep your firearm and chassis system in good operating condition, and maintain its appearance.
- If after extensive use the protective coating on plated parts shows signs of reduced corrosion protection, recoat or replace the parts to ensure the integrity of the chassis.

## WARRANTY

### **What warranty does MDT provide?**

- MDT offers a 100% satisfaction guarantee on all products. If you receive any of MDT product, but you are not completely satisfied, return it to MDT's central office within 30 days for a 100% refund.
- All our products come with lifetime support against defects.
- Performing modifications/alterations to the product voids all warranties, expressed or implied.

### **How do I claim warranty on a MDT product?**

- If you experience a problem with your MDT Rifle Chassis system, call us or initiate a service ticket through the MDT website.

- Warranty claims must show the product model, a contact email, a phone number, and a description of the problem.

#### **How MDT process warranty claims?**

- Upon receiving the item, MDT decides whether to accept the warranty claim, and whether to repair or replace the parts, at its discretion.
- MDT accepts no responsibility for loss or damage in transit.
- MDT pays for shipping and insurance charges for the return to the owner, ONLY after accepting the warranty claim.
- If non-warranty parts or services are required, MDT provides an estimate for approval prior to performing any service.

#### **What are the warranty limitations?**

- This warranty is exclusive and is in lieu of any and all other warranties, expressed or implied. No implied warranties of merchantability or fitness for a particular purpose are given and any and all liability for breach of any implied warranty or warranty created by law is disclaimed.
- Under no circumstances shall MDT be liable for incidental or consequential damages with respect to economic loss, injury, death or property damage, whether as a result of breach of this warranty, negligence or otherwise.

#### **Jurisdictional Exceptions:**

- Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.
- Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you completely or in part.
- This warranty gives you specific legal rights. You may also have other rights that vary from jurisdiction to jurisdiction.

## **SAFETY GUIDELINES**

### **1. ALWAYS KEEP THE MUZZLE POINTED IN A SAFE DIRECTION.**

UNLOAD ALL FIREARMS WHEN NOT IN USE. ALWAYS VERIFY. Never allow your firearm to point at anything you do not intend to shoot. Always handle any firearm as if it were loaded and ready to shoot. Load your firearm only when you are in the field or on the target range and ready to fire. Unload as soon as you finish shooting. Verify that the firearm is unloaded before storing.

### **2. DO NOT RELY ON ANY MECHANICAL SAFETY.**

Safety devices are not a substitute for safe handling procedures. Treat every firearm as if it can fire at any time, regardless of the safety position. Do not touch the trigger until you are ready to fire.

### **3. UNDERSTAND THE TARGET AND WHAT IS BEYOND THE TARGET.**

Do not fire unless you know exactly where your shot is going, and what is beyond the expected point of impact. Never fire at a sound, a movement, or a patch of color. If you cannot see clearly what is beyond the target, DO NOT SHOOT.

#### **4. NEVER SHOOT AT WATER OR AT A HARD SURFACE.**

Shooting at water, rocks, or other hard surface may result in bullet fragmentation with unpredictable flight paths.

#### **5. USE PROPER AMMUNITION.**

The use of wrong ammunition, mixed ammunition, or improperly reloaded ammunition may result in serious injuries or death, and catastrophic damage to your firearm. Check each round before loading. If in doubt, DO NOT SHOOT.

#### **6. IF THE FIREARM FAILS TO FIRE, DO NOT MOVE.**

If the ammunition does not fire when you pull the trigger, stop and keep the muzzle pointed in a safe direction. Wait 15 seconds before opening the chamber. Look away from the chamber while opening it and removing the round. In semi-automatic firearms, remove the magazine before manually cycling the round. Properly discard the round immediately. DO NOT try to fire it again.

#### **7. ALWAYS WEAR EYE AND EAR PROTECTION WHEN SHOOTING.**

Wear protective shooting glasses to guard against any combustion discharges, cartridges ejection, or debris resulting from firing your firearm or firearms around you. Also, wear eye protection when you are disassembling or cleaning a firearm to guard against tensioned parts and cleaning solvents. Always use ear protection.

#### **8. VERIFY THAT ACTION AND BARREL ARE CLEAR BEFORE SHOOTING.**

Before loading your gun, inspect the action and barrel to ensure there are no obstructions such as snow, mud, excess lubricant, cleaning patches, or any other foreign material.

#### **9. LEARN THE PARTICULAR CHARACTERISTICS OF EACH FIREARM.**

Not all firearms are alike. Become very familiar with the firearm before shooting. Learn safe handling procedures for loading, unloading, carrying, shooting and storing each firearm before firing the first round.

#### **10. SHOOT SOBER!**

NEVER handle any firearm while under the influence of alcohol, drugs, or any medication that may impair your senses in any form.

#### **DISCLAIMER**

MDT SHALL NOT BE RESPONSIBLE IN ANY MANNER WHATSOEVER FOR INJURY, DEATH, OR DAMAGE TO PROPERTY AS A RESULT OF THE INTENTIONAL OR ACCIDENTAL MISUSE OF THIS

PRODUCT, OR FROM ITS PROPER FUNCTION WHEN THE PRODUCT IS USED FOR PURPOSES FOR WHICH IT WAS NOT DESIGNED.