

ESS CHASSIS SYSTEM

V1.0 May 2018



ESS CHASSIS : ELITE SNIPER SYSTEM

Thank you for purchasing the ESS Chassis System.

This chassis has been developed by MDT to provide consistency in form which results in increased accuracy.

- The chassis is designed to adjust to your specific body requirements and shooting preferences.
- The MDT ESS chassis design is crafted in 6061 aluminum - eliminating warping and distortion.
- The rifle receiver only makes contact with the V-Block bedding system - floating the entire barrel.
- The recoil lug mating surface area ensures the best accuracy and repeatability.

The chassis allows the shooter to add tactical components leading to better accuracy and functionality:

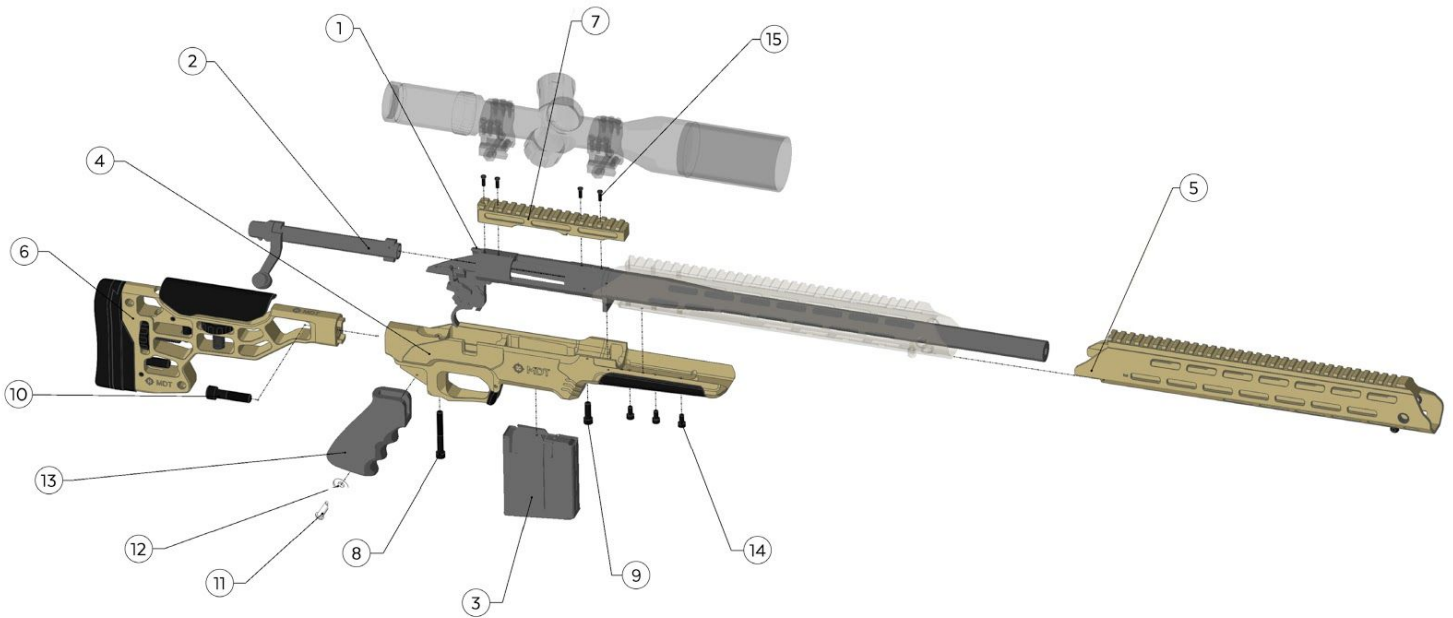
- It accepts standard collapsible AR-15 butt-stocks or fixed interface butt-stocks and pistol grips perfectly.
- The ESS chassis supports the installation of M-Lok accessories along the forend.

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

TOOLS REQUIRED

- 5/16" Allen wrench
- 5mm Allen wrench (Metric Threaded Actions)
- 3/16" Allen wrench (SAE Threaded Actions)
- 5/32" Allen wrench
- 1/8" Allen wrench

NOTE: SOME RIFLE MODELS REQUIRE SPECIAL INSTALLATION - PLEASE CHECK THE COMPATIBILITY LIST FOR ANY ADDITIONAL INSTRUCTIONS.



| ITEM | DESCRIPTION | ITEM | DESCRIPTION |
|------|--------------------------------|------|---------------------|
| 1 | Barreled Action (not included) | 8 | Rear Action Screw |
| 2 | Bolt (not included) | 9 | Front Action Screw |
| 3 | Magazine (not included) | 10 | Buttstock bolt |
| 4 | ESS Chassis Base | 11 | Grip screw |
| 5 | ESS Forend | 12 | Grip washer |
| 6 | ESS Buttstock | 13 | Grip (not included) |
| 7 | ESS scope rail (not included) | 14 | ESS Foregrip bolts |

Items may vary depending on model and style.

REMOVING THE ACTION

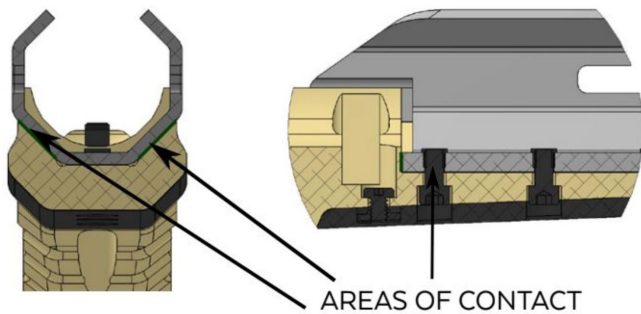
1. Ensure that the firearm is unloaded.
2. Remove the magazine (if inserted) and bolt.
3. Using the appropriate Allen wrench for your firearm, release and remove the two screws holding the stock to the action.
4. Set these screws aside as they are no longer needed.
5. Remove the barreled action from the stock.

CHASSIS / FOREND INSTALLATION

If you are installing a Lithgow 102 SA or Tikka action begin by placing the included recoil lug in the recoil lug pocket.

1. Place the action into the ESS chassis body (4).
2. Using the screws provided (8, 9) and either the 3/16" or 5mm Allen Wrench (depending on your action) loosely secure the ESS Chassis to the action. Do not torque the screws tight.
3. Slide the ESS forend of your choice, over the barrel of your firearm and pull it tight against the ESS chassis body.
4. Using the three forend screws provided (14) and the 5/32" Allen Wrench, secure the ESS fore-end to the ESS chassis. Torque each screw to 30 in/lbs.
5. You can now torque down the screws holding your barreled action to the ESS chassis (8, 9) to a spec of 60 in/lbs.
6. Install the magazine (3) and bolt (2).
7. Check the operation by cycling the rifle.

NOTE: ENSURE THE FORE-END IS PULLED BACK TIGHT AGAINST THE CHASSIS AND THE FLAT 45 FACES SIT ON THE CHASSIS CLEANLY.

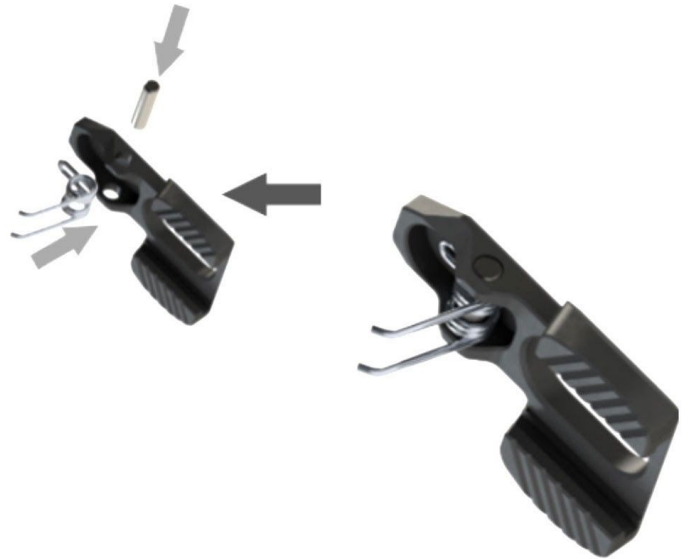


CAUTION: RE-TIGHTEN ALL SCREWS, FASTENERS AND CASTLE NUTS AFTER INITIAL USE (APPROX. 100 ROUNDS)

MAG LATCH INSTALLATION

If you are installing a Ruger American SA, Browning X-Bolt SA, Browning X-Bolt LA, or Winchester XPR SA you will need to install your mag latch.

1. Place the included spring inside the mag latch.
2. Slide the included slave pin through the hole on the side of the mag latch, through the spring, and out the other side (1).



3. Place all three of these parts inside the chassis. Line up the hole of the mag latch with the mag latch hole on the chassis.
4. Place the mag latch pin in the pinhole on the side of the chassis and gently tap it into the chassis(2).



- Using a punch, tap the mag pin further into the chassis – pushing the slave pin out of the chassis completely. The mag pin should be flush with the counterbore around the mag pin hole.

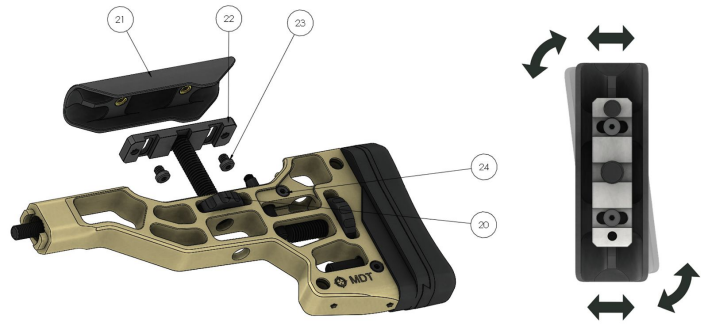


BUTTSTOCK INSTALLATION

- Press the ESS Buttstock mortise into the rear of the ESS chassis.
- Using the Buttstock Screw (10) and the 5/16" Allen Wrench, secure the ESS buttstock to the ESS chassis. We recommend using Loctite Threadlocker on this screw and hand tightening with a ball end tool as this will be much easier and faster.
- Using the 1/8" Allen Wrench, loosen the buttpad (16) by turning the buttpad set screw (17) one turn counter-clockwise.
- Slide the buttpad up to expose the buttpad adjustment screws (18).
- Loosen up the adjustment screws with the 1/8" Allen Wrench, the buttpad plate (19) will loosen. You can now set this to your preferred horizontal position.
- Re-tighten the screws to secure it in place.
- Slide the buttpad to your preferred vertical position and tighten the buttpad set screw to secure everything back into place.



8. Loosen off the cheek riser retaining screw (24) using a 3/16" Allen Wrench, then rotate the cheek riser thumb wheel (20) to lift the cheek riser;
9. The cheek riser plate screws (23) retain the position of the cheek riser plate (22). Loosen these screws up with a 1/8" Allen Wrench;
10. Adjust the horizontal position of the cheek riser to your preference, then tighten up the retaining screws. Adjust the vertical height of the
11. cheek riser to your preference using the cheek riser thumb wheel. Tighten the cheek riser retaining screw to secure the cheek riser;



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.

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. UNLOAD ALL FIREARMS WHEN NOT IN USE. ALWAYS VERIFY. 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 and ALWAYS when you pick it up.

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.