



THIS IS NOT A TOY! MISUSE MAY CAUSE SERIOUS INJURY OR DEATH. EYE, FACE, AND EAR PROTECTION DESIGNED SPECIFICALLY FOR THE SPORT OF PAINTBALL MUST BE WARNING:

WARNIN WHEN USING THIS PRODUCT. READ THE OWNER'S MANUAL BEFORE USING.

# MILSIG TECHNICAL MANUAL



M-SERIES PARADIGM PRO

### Your MILSIG M-SERIES PARADIGM PRO Marker Includes:

M-SERIES PARADIGM PRO Marker 2.5mm & 3.0mm Allen Tool Barrel Sleeve Hopper Feed Adaptor Set 20 Round Paintball Magazine 10 Round FIRST STRIKE Magazine

#### WARNINGS

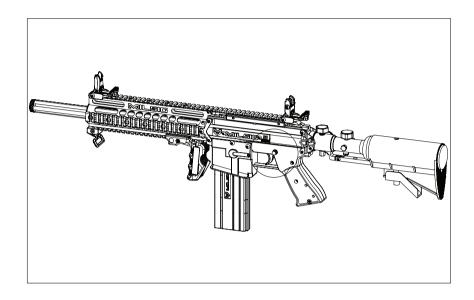
- Do not load or fire this marker until you have completely read this manual and are familiar with its safety features, mechanical operation, and handling characteristics.
- Handle this and any marker as if it were loaded at all times.
- Keep your finger off the trigger until ready to shoot.
- Do not look down the barrel of a paintball marker. Accidental discharge into the eyes may cause permanent injury or death.
- Keep the marker on safe until ready to shoot.
- Keep the barrel sleeve installed on marker when not shooting.
- Never point the marker at anything you do not intend to shoot.
- Never fire your marker at anything you do not intend to shoot because there may be balls or foreign debris lodged in the chamber, barrel, and / or marker valve.
- Do not shoot at fragile objects such as windows.
- Never fire your marker at personal property of others; the paintball can stain the paint of automobiles and houses.
- Always keep the muzzle pointed in a safe direction, even if you stumble or fall.
- Eye, face, and ear protection designed specifically to stop paintballs in the form of approved goggles, and full face mask should be worn by the user and any person within range.
- Never shoot at a person who is not protected by eye, face, and ear protection designed for paintball.
- Pressurize and load the marker only when the marker will be immediately used.
- Before storing or disassembling be sure to remove your marker in a safe direction, fire several times to be sure there are no balls lodged in the chamber and / or barrel or air left in the marker. Install barrel sleeve
- Store the marker unloaded and degassed in a secured place.
- Familiarize yourself with any warnings and instructions listed on the air supply cylinder.
- Contact the air supply cylinder manufacturer with any questions.
- Do not field strip or otherwise disassemble this marker while it is pressurized with air supply.
- Dress appropriately when playing the game of paintball. Avoid exposing any skin when playing the game of paintball.
- Even a light layer will absorb some of the impact and protect you from the paintballs.
- Keep exposed skin away from escaping gas when installing or removing air supply cylinder or if the marker or air supply is leaking. Compressed air, CO2, and nitrogen gasses are very cold and can cause frostbite under certain conditions.
- Use only 68 caliber paintballs, never load or fire any foreign objects.
- Avoid alcoholic beverages before and during the use of this marker. Handling markers while under the influence of drugs or alcohol is a criminal disregard for public safety.
- Avoid shooting an opponent at pointblank, 2 Meters or less.
- Familiarize yourself with instructions listed on air supply cylinder or adaptor. Contact the air supply cylinder or adaptor manufacturer with any questions.
- Always measure your marker's velocity before playing paintball, and never shoot at velocities in excess of 300 feet per second.

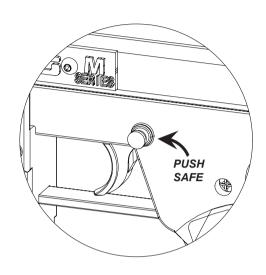
#### WARRANTY

MILSIG warrants that this product is found free from defects in materials and workmanship for a period of 1 year from the original date of purchase by the original owner. Unauthorized modifications, alterations, neglect or abuse of this product voids this warranty. The warranty only covers the parts and labor required to repair the product to proper working order. MILSIG is dedicated to providing you with the best product and excellent support for your ultimate paintball experience.

# EXCEPT WHEN MARKER IS IN USE, ALWAYS MAKE SURE THAT THE BARREL SLEEVE IS INSTALLED AND THE TRIGGER SAFETY IS IN SAFE MODE, WHICH DISABLES THE TRIGGER.

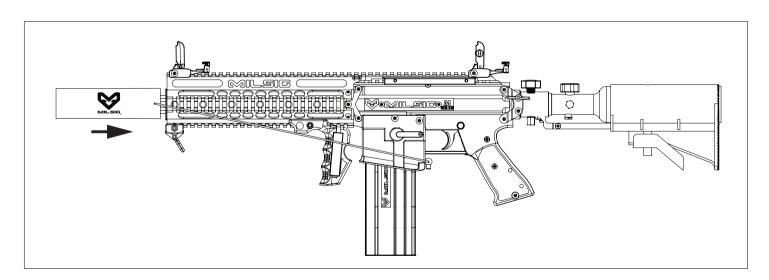
#### SAFETY





To turn ON the Safety (SAFE MODE): Push the Safety IN as shown above. To turn OFF the Safety (FIRE MODE): Push the same button on opposite side of Receiver

### BARREL SLEEVE



- 1. Slide barrel into sleeve and hoop under the magazine well as shown.
- 2. Pinch cord length adjustor button and hold to back of magazine well as you pull cord through it until adjustor is snug against the back of the magazine well, then release.
- 3. Check to be sure there is enough cord elasticity to pull cord / adjustor off of magazine well to remove barrel sleeve for firing
- 4. After the cord length is adjusted, lock cord length by tying a knot in the cord against the back of the adjustor.

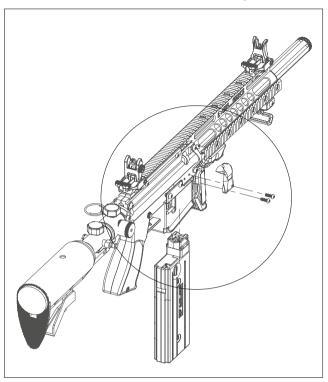
### QUICK REFERENCE - USING YOUR MARKER

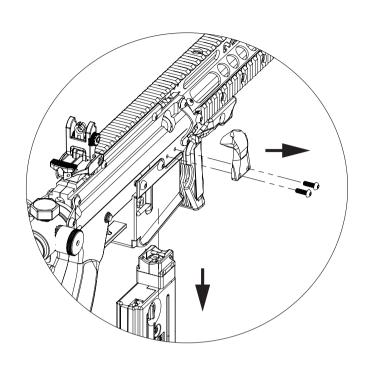
Before playing with your new PARADIGM PRO paintball marker there are a few important steps to take.

### STEP 1. FEED MODE SELECTION

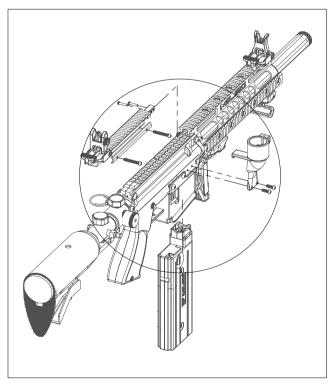
LOADER FEED SET UP

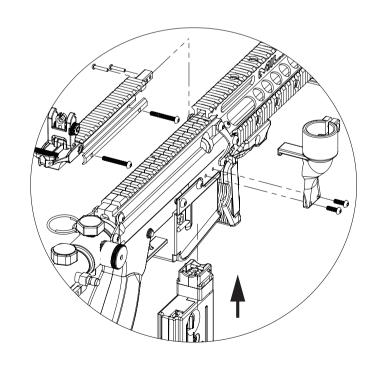
Your PARADIGM PRO marker is factory preset for magazine feed operation, if this is your desired feed mode, proceed to STEP 2.





- A. Remove Magazine and make sure that it is empty.
- B. Remove Side Feed Port Cover by turning Side Feed port Cover Bolts counterclockwise; Remove Top Rail by Removing 2 Foregrip Connecting Bolts and 2 Top Rail Mounting Bolts.
- C. Store Side Feed Port Cover and Side Feed Port Cover Bolts in a safe place for future use.

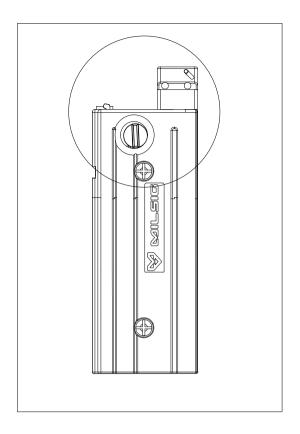


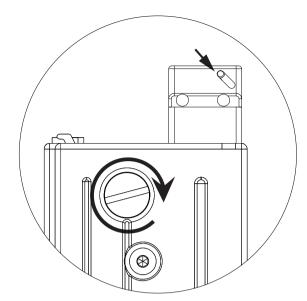


- D. Place Loader Feed Adaptor over the Side Feed Port located on the right side of the Receiver.
- E. Hook the prongs of the Loader Feed Adaptor over the left side of the Receiver.
- F. Give the Loader Feed Adaptor a firm tap to put it into place.
- G. Insert Empty Magazine to plug bottom port.
- H. Insert Securing Bolts, rotate clockwise to tighten. Do NOT overtighten.
- I. Insert Loader into the Loader Feed Adaptor and tighten Loader Locking Bolts.
- J. Re-Install top rail.

WARNING: U

#### STEP 2. FILL MAGAZINE

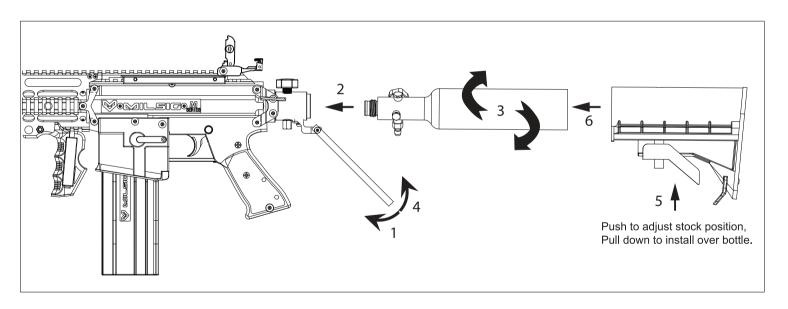




- A. Turn Magazine winder clockwise until tight. Do NOT overtighten.
- B. Hold down Ball Detent Bar and feed paintballs in one by one.
- C. Fill to capacity. Do NOT partially fill Magazine.

NOTE. The Magazine has 20 rounds capacity, we recommend the use of the Magazine Winding Tool (MWT-001 Purcahsed Separately) for easier magazine winding. (10Rd FIRST STRIKE Magazine shown)

#### STEP 3. ATTACHING AIR SOURCE



Your PARADIGM PRO marker is factory preset to accept air via a user supplied 13CI HPA (High Pressure Air) Bottle. Your vendor may bundle an air bottle as part of your PARADIGM PRO package.

- A. Ensure that the HPA regulator output pressure exceeds 400 PSI. (We suggest the use of an Air Bottle with a position adjustable regulator)
- B. Lower Stock Guide Rail and insert bottle into back of the marker, rotate clockwise to tighten.
- C Check the position of the fill nipple and pressure gauge to make sure that it does not get in the way of the Stock Guide Rail. If either the fill nipple or pressure gauge gets in the way of the Stock Guide Rail, remove the Air Bottle, and follow the Regulator Manufacturer's guide to repostition the regulator.
- D. With the Air Bottle properly positioned, fill the Air Bottle to the appropriate air pressure.
- E. Install stock over the bottle and adjust to the desired position.

## **MAINTENANCE**

#### These Additional Tools may be required for maintenance or marker take-down:

Non-Corrosive Lubricant (for best results use MILSIG SOS Lube) Small Phillips Head Screwdriver Small Flat Head Screwdriver Small Pick for removing O-Rings

#### WARNING:

Before conducting any marker maintenance, remove magazine / loader, point marker in a safe direction, and discharge until degassed.

#### For optimum performance, perform the following monthly:

- 1. Place one dab of lubricant on the surface of the AIR CHAMBER BODY (refer to p.9 "HEAT CORE1")
- 2. Remove any excess lubricant with a soft cloth or paper towels. DO NOT over lubricate, over lubrication can lead to marker malfunctions.
- 3. Place one dab of lubricant on AC Main O-Ring (refer to p9. "HEAT CORE 1").
- 4.. Place one dab of lubricant on Safety O-Ring (refer to p.10 "GRIP").

#### STORAGE:

- 1. Remove magazine or loader and remove remaining paintballs. AVOID reusing old or deformed paintballs.
- 2. Discharge remaining gas in the Marker and remove the Air Source.
- 3. Put Marker on SAFE and install Barrel Sleeve.
- 4. Place Marker in a suitable storage device.

#### TAKE DOWN:

- 1. Follow steps 1 thru 3 as listed above under "Storage" to make marker safe.
- 2. Remove barrel by turning barrel counterclockwise.
- 3. Remove Top Rail (Part 8, P.8 under "Receiver 1")
- 4. Remove Hanguard (Part 5, P.8 under "Receiver 1")
- 5. Remove Rear Receiver Pins (Part 6, P.8 under "Receiver 2")
- 6. Remove the entire HEAT CORE Assembly
- 7. Remove Grip
- 8. Remove Trigger Guard
- 9. Remove Magazine Well
- 10. Remove Front and Rear sights if desired

After completing these 10 steps, the remaining internals are accessible by removing one side of the receiver body.

#### **BALL DETENT:**

The Ball Detent is located under the MILSIG Name Plate, access to the Ball Detent is gained by removing 2 Name Plate Bolts. (see P.8 "RECEIVER 2")

#### ADDITIONAL TECHNICAL INFORMATION:

For additional technical information such as How to Videos, FAQs, Performance / Upgrade Tips, and the latest product information, please refer to our website at www.milsig.com and follow us via the following social media platforms.







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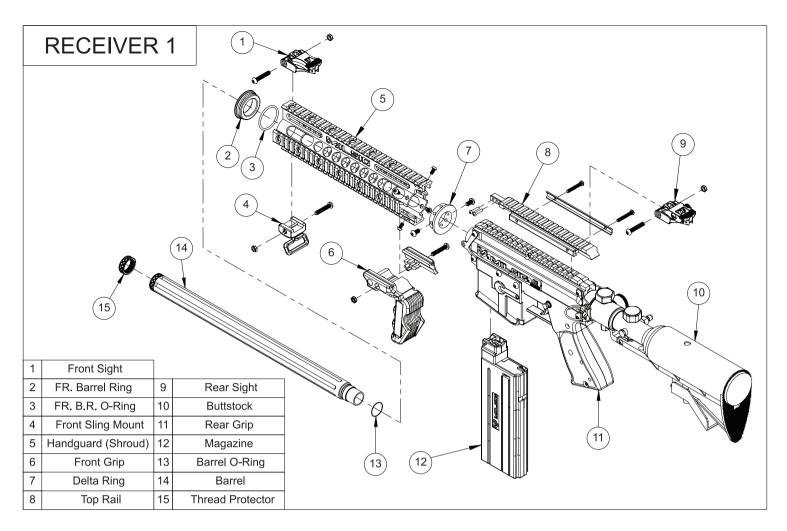
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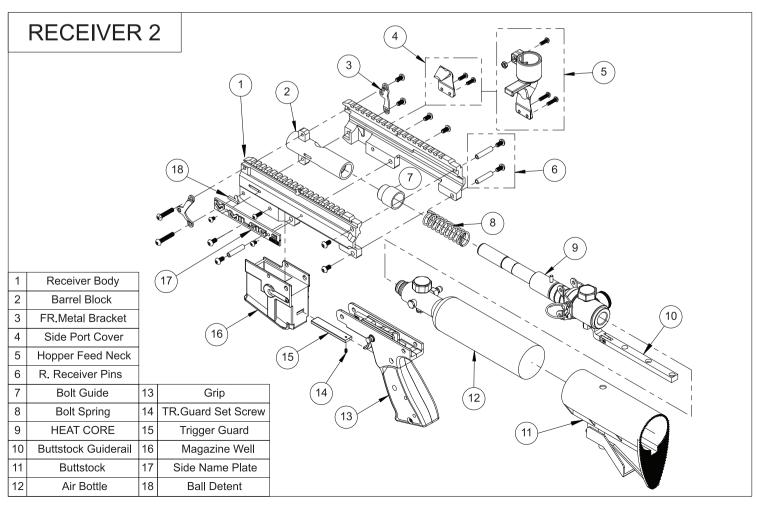
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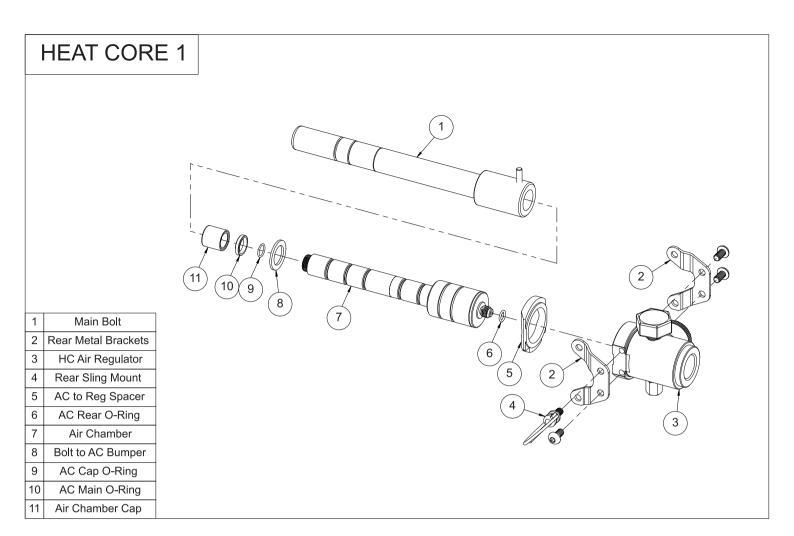






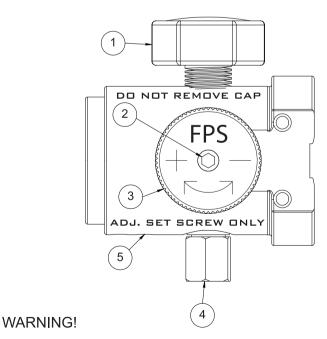






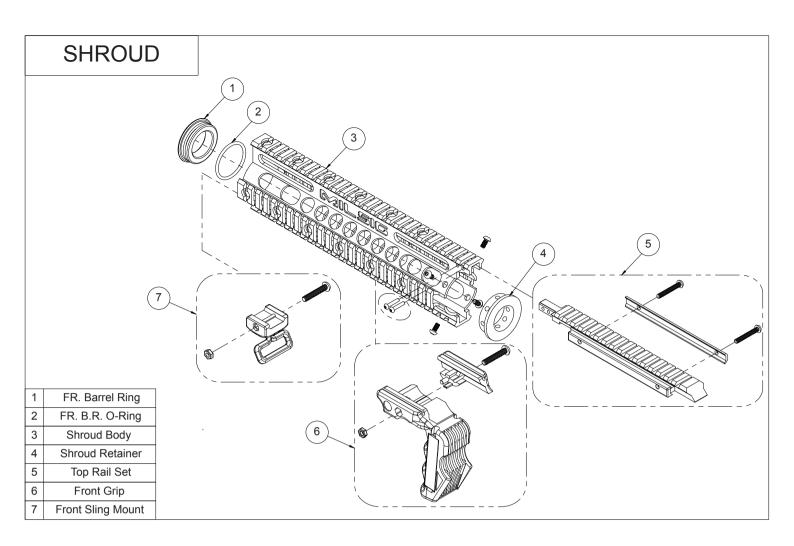
# **HEAT CORE 2**

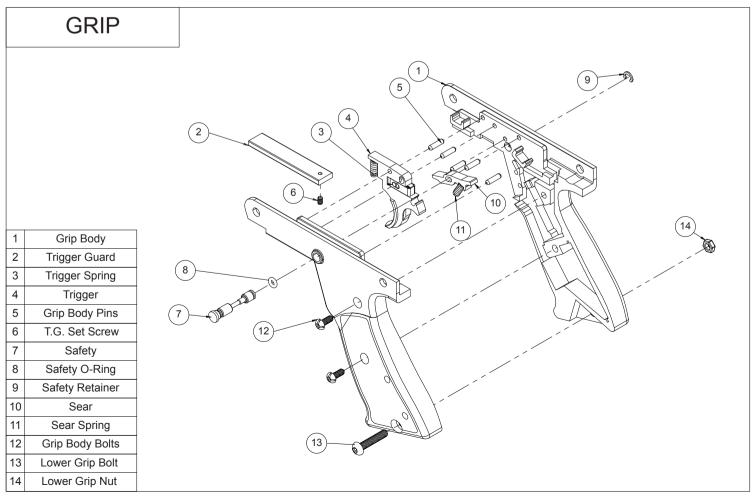
The built in air regulator of the HEAT CORE must be serviced by a certified MILSIG Technician; any unauthorized tampering of the air regulator may lead to marker malfunction, permanent marker damages, or even serious body injuries. Contact your authorized MILSIG service center for all HEAT CORE air regulator service inquiries.

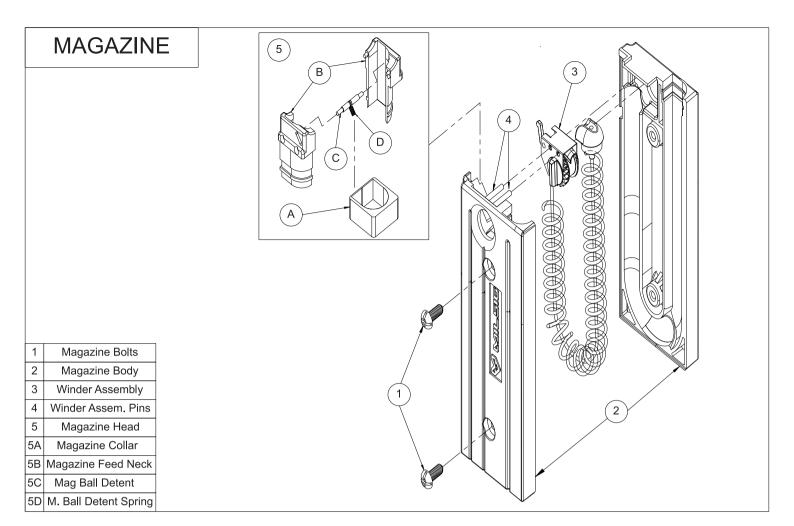


1	Input Pressure Gauge
2	Velocity. Adjustment Set Screw
3	Internals Access Cap
4	Pressure Release Valve
5	Regulator Housing

- 1. Do not exceed 400psi MAX. Marker Input Air Pressure on the marker regulator!
- 2. Do not remove part 3 "Internals Access Cap"
- 3. Do not tamper with part 4 "Pressure Release Valve"
- 4. Adjust marker muzzle velocity via part 2 "Velocity Adjustment Set Screw only".







# **TROUBLESHOOTING**

Symptom: Unable to attain desired velocity reading / unstable velocity during chronograph session

Remedy: Fire more shots between adjustments to allow air pressure inside the HEAT CORE system to stabilize.

Make sure to only turn velocity adjustment set screw 1/8 of a turn at a time for fine tuning.

Symptom: Marker chops paint or begins to leak with a rapid fire burst of air

Cause: HPA tank pressure has fallen below the minimum required to cycle and re-cock the HEAT CORE bolt

Remedy: Allow the HPA tank to continue to leak with rapid burst of air until empty. Remove HPA bottle, refill, and install

back on marker. YOU MUST completelty remove the HPA bottle to allow the HEAT CORE Bolt to re-set.

Trying to refill the HPA tank on the marker will result in continual leaking.

Symptom: Marker chops paint with use of loader

Remedy: Make sure to use electronic hopper only, the Paradigm PRO was NOT designed to be use with gravity fed

loaders.

Symptom: Velocity Spikes or unstable velocity

Remedy: This may occur under the following three conditions:

1.) Bad paint quality - Make sure to use fresh paintballs, avoid using old or deformed paintballs.

2.) Bad Air Bottle Regulator- Make sure to use a high quality Air Bottle Regulator with a high air flow and high reset rate.

3.) Over Lubrication- Too much grease / oil between the Main Bolt and Air Chamber surface will cause the bolt to stick and not cycle smoothly, remove any excess lubrication with a cloth or paper towel.