# GEISSELE® AUTOMATICS



# SUPER DUTY 556 CARBINE

# OPERATION & MAINTENANCE MANUAL

# **GEISSELE AUTOMATICS**

# **READ THIS FIRST**

Firearm safety is YOUR responsibility. You must memorize and put into practice the 4 Rules of Firearm Safety:

- 1. ASSUME EVERY WEAPON IS LOADED.
- 2. KEEP YOUR FINGER OFF THE TRIGGER UNTIL YOU ARE READY TO SHOOT.
- 3. DO NOT LET THE MUZZLE POINT AT ANYTHING YOU ARE NOT WILLING TO DESTROY.
- 4. KNOW YOUR TARGET AND WHAT IS BEYOND IT.

# **TABLE OF CONTENTS**

1	FUNCTION	5
	1.1 ACCESSORIES	5
	1.1.1 Geissele Sights	
	1.1.1.1 Geissele Folding Sights Operation	
	1.1.1.2 Geissele Iron Sight Zeroing Adjustments	
	1.1.2 Adjustable Buttstock	
	1.1.4 M-LOK Attachment Sections	
	1.1.5 Picatinny M1913 Rail	
	1.2 SAFTEY SELECTOR, TRIGGERS FUNCTION CHECK	
	1.2.1 Safety Selector	
	1.2.3 Function Check	
	1.3 AMMUNITION	
	1.3.1 Always Use Proper Ammunition For Your Firearm	
	1.4 LOADING / UNLOADING	
	1.4.1 Loading A Magazine	
	1.4.3 Chamber A Round	
	1.4.3.1 With A Closed Bolt	
	1.4.3.2 With The Bolt Locked To The Rear And Open	8
	1.4.4 Forward Assist	
	1.4.5 Unloading The Firearm	
	1.5 FIRING	9
	1.6 TROUBLESHOOTING	10
	MAINTENANCE	
	2.1 DISASSEMBLY	
	2.1.1 Separate Upper From Lower Receiver	
	2.1.2 Remove Bolt Carrier Group And Charging Handle From Upper Receiver	
	2.1.3 Bolt Carrier Group Dis-Assembly	
	2.1.5 Remove Buffer Spring Assembly	
	2.2 REASSEMBLY	
	2.2.1 Install Buffer Spring Assembly	
	2.2.2 Install Handguard	
	2.2.3 Bcg Re-Assembly	
	2.2.4 Install Bolt Carrier Group And Charging Handle In The Upper Receiver	
	2.2.5 Attach The Upper And Lower Receivers	
	2.3 CLEANING AND LUBRICATION	14
	2.3.1 Recommended Parts Replacement And Lubrication Schedules	
	2.3.1.1 Recommended Firearm Lubrication Schedule	
	2.3.1.2 Recommended Parts Replacement Schedule	
	2.3.2 Cleaning Solvents And Lubricants	
	2.3.3.1 Cleaning The Bore Of The Barrel	
	2.3.3.2 Lubrication And Cleaning Of Upper Receiver	
	2.3.3.3 Lubrication And Cleaning Of Charging Handle	16
	2.3.3.4 Lubrication And Cleaning Of Bolt Carrier Assembly	
	2.3.4 Lower Receiver Assembly Lubrication / Cleaning	
	2.3.4.2 Lubrication And Cleaning Of Buffer And Spring	
	2.3.4.3 Lubrication And Cleaning Of The Lower Receiver	
	2.4 STORAGE	17
	WARRANTY / SERVICE INFO	
	3.1 Warranty	
	•	
	3.2 Customer Service / Technical Support	
Į.	PATENTS & TRADEMARKS	. 18

# WARNING! READ BEFORE FIRING WEAPON

It is important that you read and understand this manual prior to loading and using this firearm. Failure to read this manual and to follow the instructions may result in serious injury or death to you or to others.

Follow all safety precautions and instructions, including all universal safety rules for firearms. Be sure you understand all instructions and hazards associated with firearms before using this firearm.

### **UNIVERSAL RULES FOR SAFE GUN HANDLING:**

- Treat every firearm as if it were loaded.
- 2. Always keep the firearm pointed in a safe direction.
- 3. Do not load the weapon until ready to use.
- 4. Keep your finger off the trigger until ready to shoot.

If this firearm is carelessly or improperly handled, unintentional discharge may result and could cause injury, death, or damage to property.

Use only high quality, commercial ammunition that has been kept clean and dry, and is in good condition. We do not recommend the use of remanufactured or hand-loaded ammunition due to risk of improper loading which can damage the rifle and injure you or others. Use of improper ammunition will void your warranty.

You, the owner, are the most important safety device when it comes to the use of your firearm. Under no circumstances will Geissele Automatics be responsible for any injury, death or property damage that results from:

- A disregard of the safety guidelines and warnings
- The criminal or negligent use of the firearm
- Improper or careless handling of the firearm
- Improper or negligent modifications or repairs to the firearm
- The use of non-standard, defective, improper, or reloaded ammunition

If you do not understand any part of this manual or you are unsure about the operation of your firearm, please contact Geissele Automatics before proceeding.

This manual must accompany this firearm and be transferred with it upon change of ownership or when presented to another person.

### **WARNINGS:**

- · To avoid accidental firing, BE SURE WEAPON IS CLEAR. Failure to do so could result in serious injury or death.
- Verify the barrel is clear of obstructions before loading and firing. Completely unload the firearm and check the barrel for any obstructions or debris. Never let water, snow, mud or other materials enter the barrel. Excess lubricants or grease can dangerously increase pressure and may cause barrel to burst when firing. If barrel is obstructed, remove ammunition and clean barrel immediately.
- Every firearm is designed to use a certain gauge or caliber of ammunition. Never use the wrong ammunition, or non-standard, or "hand loaded" ammunition which has not been subjected to internal ballistic pressure testing. Always read and follow the instructions on the ammunition box.
- Be sure of your target and the surrounding area. Never fire unless you know exactly where your shot is going, and what it will strike. Make sure the shot has a safe back stop, such as a hillside or sand. Bullets can ricochet on surfaces such as water. Do not fire into the sky.
- Safely store and secure your firearm and ammunition separately. Store your firearm and ammunition so that they are not accessible to children or unauthorized persons. Evaluate your personal situation to be sure children and unauthorized persons cannot access your firearm.
- You are responsible for your firearm at all times. You must protect yourself and others against injury or death from misuse of a firearm.
- Always wear appropriate eye and ear protection while shooting and cleaning a firearm. Be sure others in the vicinity have protection as well.
- Never use drugs or alcohol before or during use of firearm. Never use your firearm if you are taking any medication which impairs, even slightly, your mental or physical ability.
- Obey all laws regarding the storage, security, transportation, and carrying of firearms. You must be familiar with all local, state, and federal laws regarding the safe use, storage and/or transportation of your firearm. Your local police department can answer any questions you may have regarding the legal use, storing and/or transporting of your firearm.
- Discharging firearms in poorly ventilated areas, cleaning the firearm, and the handling of ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm, cancer, and other physical injury. Wash hands thoroughly after exposure. Read the warnings and labels on all ammunition and cleaning products carefully.
- If your firearm fails to fire when the trigger is pulled, handle with care. Keep the firearm pointed in a safe direction. Keeping your face away from the breach, put the safety on. Unload your firearm and dispose of the ammunition safely.
- Never alter or modify your firearm. Never disassemble your firearm beyond what is outlined in this manual. Improper manipulation of
  any internal components and/or improper disassembly or reassembly may be dangerous, and may lead to serious injury or death. Do
  not try to change your firearm's trigger pull, alterations might cause accidental firing. Only a qualified gunsmith should service, repair,
  or modify your firearm in any way.
- · Be sure all accessories are compatible with your firearm. Accessories must not interfere with the safe operation of your firearm.
- Never allow your firearm to be used by an individual who does not understand its safe operation or has not read these firearm safety guidelines.
- The safe use of your firearm is your personal responsibility. You, the owner, are the most important safety device when it comes to the use of your firearm.

# 1 FUNCTION

# 1.1 ACCESSORIES

# 1.1.1 GEISSELE SIGHTS

Your firearm may have come with Geissele folding or fixed sights (See Figure 1A). These robust, high quality sights will retain zero and are simple to service and use. They mount to the Picatinny rail section located at the top of the receiver and rail (See Figure 1B).



# 1.1.1.1 GEISSELE FOLDING SIGHTS OPERATION

The Geissele Folding sights are easy to use and have the ability to be folded down and out of the way while maintaining a very solid lock up once deployed.

• To deploy sights when folded, rotate them up until they lock into position (See Figure 2).



 To fold sights back down, you will need to press the section of the sight being moved to the side while simultaneously rotating it down into the stowed position (See Figure 3).

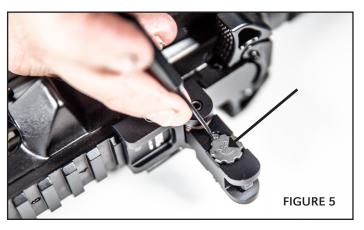


# 1.1.1.2 GEISSELE IRON SIGHT ZEROING ADJUSTMENTS

- 1. The Front sight is adjustable for elevation (vertical adjustment).
- 2. Use an AR15 front sight tool or the nose of a bullet to depress the front sight post detent lock in order to rotate the post to adjust for elevation. Turn counterclockwise to lower elevation, turn clockwise to raise elevation (See Figure 4).



- 3. The rear sight is adjustable for windage (horizontal adjustment).
- 4. Use the appropriate tool or the nose of a bullet to depress the rear sight dial detent lock to rotate the dial to adjust for windage, according to marking on the dial (See Figure 5).



# 1.1.2 ADJUSTABLE BUTTSTOCK

Your firearm may come with an adjustable buttstock. This feature will allow you to extend or shorten the length of pull by the use of a lever located on the stock.

# 1.1.3 SLING MOUNT LOCATIONS

Your firearm may contain Quick Detach sling mounts for use with QD sling swivels.

# 1.1.4 MLOK ATTACHMENT SECTIONS

Your handguard may feature Magpul's M-LOK modular locking accessory mounting system. This allows the user to easily add or remove accessories based on mission requirements (See Figure 6).



Be sure to read the instructions below carefully. Improper installation may cause permanent damage to your rail that is not covered by the Geissele warranty.

- To install make sure the nut is started onto the bolt with at least one full thread showing out the back of the nut. If one full thread is not showing, there is a chance that the M-LOK nut will not cam into the M-LOK slot properly. If this occurs and the screw is tightened, the M-LOK nut can pull through the rail leaving a gash in the rail and causing a burr in the slot.
- 2. Align the nut with the recoil lugs so they pass through the M-LOK slots.
- 3. Begin to tighten the bolt one full turn with the hex key. The cammed nut will rotate, tighten, and eventually lock into place retaining the accessory on the handguard. Additional torque can be applied to hold the accessory in place but be careful not to over torque.
- 4. Removing the accessory requires 1 turn counterclockwise. The cammed nut will align with the recoil lugs on the accessory allowing the accessory to come off the rail. Care should be taken to not

remove the nut from the bolt or M-LOK accessory. Loosening the screw further than 1 turn may result in permanent damage to the rail due to the issues described in Step 1.

# 1.1.5 PICATINNY M1913 RAIL

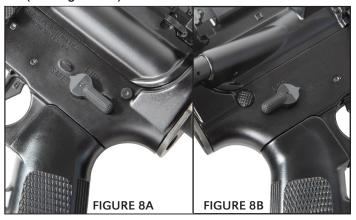
Picatinny M1913 rail is a long-standing very common attachment system that can host a wide variety of accessories (See Figure 7).



# 1.2 SAFTEY SELECTOR, TRIGGERS FUNCTION CHECK

# 1.2.1 SAFETY SELECTOR

The safety selector (See Figure 8A) is located on the left side of the lower receiver (non-ejection port side) and has positions for safe and fire. If your firearm has an ambidextrous safety installed you will have levers to actuate the safety on both sides of the receiver (See Figure 8B).



Always ensure that the firearm's selector is set to safe when not ready to fire the weapon. When set to safe the selector prevents movement of your trigger preventing the hammer from releasing.

NOTE: When the hammer is un-cocked, the safety will typically not move. To switch the selector over to the safe position the hammer should be first cocked.

In the "fire" position, the firearm will fire a single shot with each trigger pull.

### 1.2.2 TRIGGERS

# TWO STAGE AND SINGLE STAGE TRIGGERS

Two stage and single stage triggers both offer a unique style of use over a broad spectrum of shooting needs, from competition to tactical use. Choice is largely based on shooter specific preference.

# TWO STAGE TRIGGER

A two-stage trigger allows precise and accurate trigger control by being able to "stage up" for the break by moving through the first stage towards the "wall". When pulling the trigger, move it slowly until you feel a bit of pressure, then stop. This slight pressure that is felt is giving the shooter tactile feedback to know exactly where to expect the shot to break. This also allows a shorter lighter break profile than would typically be available with a single stage trigger while maintaining safety and reliability. A two-stage trigger can also be pulled through easily for quick follow up shots with a smooth clean pull.

# SINGLE STAGE TRIGGER

A single stage trigger may have little to no take up that leads straight to the break. There will typically be less overall travel than with a 2-stage trigger because of this. The reset is short yet still distinct, giving excellent feedback to the shooter during target engagement. Single stage triggers tend to be favored for competition use and close quarters work.

# 1.2.3 FUNCTION CHECK

WARNING: Ensure that the weapon is on safe with NO magazine inserted and that the chamber is clear and the firearm is completely unloaded. The function check is a mechanical test that is meant to be done without ammunition in order to manually test the cycle of operations prior to live fire.

WARNING: Failure to familiarize yourself with the firearm by understanding the function check prior to loading live ammunition can potentially result in injury, damage, or death.

 First charge the firearm by pulling the charging handle fully to the rear and then releasing it to go into battery (See Figure 9A). Afterwards, place the safety selector on safe. Pull the trigger. The trigger should not release the hammer (See Figure 9B).





- 2. Switch the weapon to fire and pull the trigger. The hammer should release.
- 3. Check reset by continuing to hold the trigger down, while simultaneously charging the weapon.
- 4. Slowly release the trigger until the hammer is let off the disconnector and caught by the trigger, fully resetting the fire control unit.
- 5. Place the firearm's selector on safe.
- 6. Charge the weapon again by pulling the charging handle all the way to the rear and releasing, allowing the bolt and carrier to come forward. This operation should look and feel smooth.
- 7. Check to ensure that the bolt has fully seated into the barrel extension. You can do this by pressing the forward assist. There should be no further movement of the BCG.
- 8. Insert an EMPTY magazine and charge the weapon, the bolt carrier group should remain locked to the rear.
- 9. Press the bolt catch paddle to release the bolt carrier, allowing the bolt carrier to return forward and seat into the barrel extension. Ensure that the bolt has fully seated into the barrel extension again.

### 1.3 AMMUNITION

# 1.3.1 ALWAYS USE PROPER AMMUNITION FOR YOUR FIREARM

- Always use high quality factory loaded ammunition from a reputable manufacturer.
- Always ensure that the ammo is clean, dry, and undamaged.
- Always ensure that the ammo is of the appropriate caliber and pressure rating for your firearm.

Using improper ammunition for your firearm could result in damage to the firearm and possibly severe injury or death.

# 1.4 LOADING / UNLOADING

# 1.4.1 LOADING A MAGAZINE

- Always make sure that you have the correct magazine for the proper ammunition the firearm is chambered in and that you are using the appropriate clean undamaged ammunition for the firearm.
- 2. Load appropriate ammo into the magazine uniformly according to the direction of the magazine being used. Place each round into the magazine between the feed lips until secured into place. Then place the next round on top of that one and repeat the process until the magazine is full. Ensure that each round is seated in the mag and not caught or tilting before loading the next round (See Figure 10).



NOTE: While loading the magazine only fill it to the designated capacity, even if possible to over fill.

### 1.4.2 INSERT MAGAZINE INTO FIREARM

3. Ensure that the bullets are pointing towards the muzzle of the weapon and then Insert the magazine into the mag well of the lower receiver firm enough to engage the mag catch (See Figure 11).



4. Give a firm tug on the magazine to ensure that it is seated correctly and positively engaged by the mag catch. If the magazine comes loose during this step, tap the magazine up into the magwell of the receiver and check again.

NOTE: Do not attempt to chamber a round unless you are sure the magazine is seated in the receiver properly

WARNING: When inserting a magazine into the firearm make sure to have the safety set to safe and the barrel pointed in a safe direction following all rules of firearms safety.

### 1.4.3 CHAMBER A ROUND

# 1.4.3.1 WITH A CLOSED BOLT

Pull the charging handle to the rear and then release it to load a round from the magazine (See Figure 12).



# 1.4.3.2 WITH THE BOLT LOCKED TO THE REAR AND OPEN

Once a loaded magazine is inserted into the rifle press the top paddle of the bolt release. This will send the captured BCG home into battery stripping and loading a round from the loaded magazine (See Figure 13).



# 1.4.4 FORWARD ASSIST

The forward assist is there to help in the extremely rare event that your bolt does not seat itself fully into battery (See Figure 14A). By pressing the assist, you manually move the bolt forward into battery (See Figure 14B).



NOTE: This is often due to heavy fouling/carbon build up

# 1.4.5 UNLOADING THE FIREARM

With the safety selector set on safe, press the magazine release button and remove the magazine. Pull the charging handle to the rear and visually inspect the chamber to ensure that it is empty (See Figure 15).



# 1.5 FIRING

- 1. Insert a loaded magazine into the rifle and then chamber a round.
- 2. Firmly hold the firearm, with one hand placed on the handguard and the other hand holding the pistol grip.
- 3. If your firearm is configured as a rifle, drive the stock into your shoulder to further stabilize the firearm.
- 4. Following the rules of firearms safety, acquire your sight picture using the sights on your weapon.
- 5. With the firearm pointed in a safe direction and certain of what you are going to shoot, place the safety selector to fire and then press the trigger fully to the rear, releasing the hammer and discharging a round.
- 6. Release the trigger and the FCG will reset. You are then ready to press the trigger again to fire another round or remove your finger from the trigger and place the firearm on safe.

# NOTE: After firing the last round in the magazine the bolt will lock back to the rear.

7. Place the firearm on safe and remove the magazine when done firing. Always make sure to clear the firearm when it is done being used.

# 1.6 TROUBLESHOOTING

MALFUNCTION	POTENTIAL ISSUE	POTENTIAL FIX
	BAD AMMO	try different ammo
	DAMAGED FIRING PIN	REPLACE FIRING PIN
EAULIDE TO FIRE	BCG PUT TOGETHER IMPROPERLY	reassemble correctly
FAILURE TO FIRE	OIL IN BOLT FIRING PIN LOCATION	remove excess oil
	TRIGGER / HAMMER SPRINGS MAY NEED REPLACEMENT	CERTIFIED GUNSMITH / ARMORER RECOMMENDED
	BOLT AND FIRING PIN EXCESSIVELY DIRTY	CLEAN OR REPLACE
	BAD AMMO	try different ammo
	CARBON AND EXCESSIVE FOULING IN CHAMBER OR BOLT	CLEAN
FAILURE TO EXTRACT	BROKEN EXTRACTOR	CERTIFIED GUNSMITH / ARMORER RECOMMENDED
	EXTRACTOR SPRING INSERT AND RING WORN AND MAY NEED REPLACING	CERTIFIED GUNSMITH / ARMORER RECOMMENDED
	broken ejector	CERTIFIED GUNSMITH / ARMORER RECOMMENDED
FAILURE TO EJECT	FOULED DIRTY EJECTOR	CLEAN OR REPLACE
	gas system short stroking	POSSIBLY UNDERPOWERED AMMUNITION OR CERTIFIED GUNSMITH / ARMORER RECOMMENDED
	bad ammo	TRY DIFFERENT AMMO
EAULIDE TO FFFD	magazine not seated fully	FIRMLY TAP MAG INTO RECEIVER
FAILURE TO FEED	DIRTY OR DEFECTIVE MAGAZINE	CLEAN OR REPLACE
	too many rounds in magazine	remove excess rounds

#### 2 **MAINTENANCE**

#### 2.1 **DISASSEMBLY**

# 2.1.1 SEPARATE UPPER FROM LOWER RECEIVER.

- 1. Make sure the bolt carrier group is forward and closed.
- 2. Push the take down pin out.
- 3. Angle the upper at 45 degrees and push the pivot pin out.
- 4. Separate the upper receiver from lower receiver.

# 2.1.2 REMOVE BOLT CARRIER GROUP AND CHARGING HANDLE FROM UPPER RECEIVER

With the upper receiver detached from the lower receiver, flip the assembly upside down and start to pull out the charging handle, which will allow you to remove the bolt carrier assembly (See Figure 16).



To remove the charging handle, align the side tabs to the circular cutout in the upper receiver and push up. No further disassembly of the charging handle is necessary (See Figure 17).



# 2.1.3 BOLT CARRIER GROUP DIS-ASSEMBLY

1. Remove the firing pin retaining pin by pushing it out with the tip of an object or punch (See Figure 18A). 2. Remove the firing pin from the bolt carrier assembly (See Figure 18B).



3. Make sure the bolt is to the rear to remove the cam pin and then rotate the cam pin to clear the gas key and lift out (See Figure 19).



NOTE: General cleaning of the bolt can be done at this point.

# 2.1.4 REMOVE HANDGUARD

It may be necessary to remove the handguard to clean debris that may have become lodged between the handguard and barrel or to apply external preservative oil. 1. Use a T30 torx key if a MK16 or a 5/32 hex key if MK4/8/13/14, to loosen the cross bolts located at the base of the handguard (See Figure 20).



2. Slide the handguard forward off the barrel nut (See Figure 21).



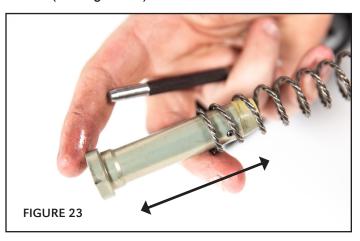
### 2.1.5 REMOVE BUFFER SPRING ASSEMBLY

1. Remove the buffer and buffer spring by pressing down on the buffer retainer pin with a small punch to free up the buffer and spring (See Figure 22).



NOTE: While holding the pin down, the buffer and spring will move under tension out of the receiver.

2. Once the assembly is taken out of the buffer tube, proceed to remove the buffer from the spring (See Figure 23).



# 2.2 REASSEMBLY

# 2.2.1 INSTALL BUFFER SPRING ASSEMBLY

- Insert the buffer into the spring until the spring clips over the shoulder of the buffer and has a feeling of positive retention.
- 2. Using a punch, depress the buffer retainer pin and then insert the buffer and spring assembly into the buffer tube until the buffer is past the buffer retainer pin.

# 2.2.2 INSTALL HANDGUARD

- Wipe the barrel nut clean and lightly apply a quality firearms lubricant such as ALG Go-Juice over the surface.
- 2. Slide the Handguard onto the barrel nut.
- 3. Reposition the bolt washers and bolts into the base of the handguard and tighten.
- 4. Use the T30 torx key or 5/32 hex key to tighten the bolts clockwise. Hand tighten using the short arm of the key to prevent over torqueing of the cross bolts.

NOTE: Before final tightening check that the M1913 pic rail at the top of the rail is in alignment with the section on the upper receiver if your Geissele handguard does not have a tab and a corresponding notch on the receiver.

NOTE: Recommended torque for the cross bolts is 5 ft-lb, do not exceed 8 ft-lb.

NOTE: If your handguard is a Geissele model that has anti rotation setscrews you will need to tighten them until they make contact with the receiver on both sides and then tighten them each an additional ½ turn using a 5/64th hex key. Make sure not to over tighten or they will catch on the barrel nut and may possibly scratch the barrel nut or receiver.

NOTE: If your handguard is a Geissele model that has a tab cut in the receiver and an alignment tab on the handguard you will simply need to mate them to each other when installing the handguard. NOTE: If your handguard is an ALG model, you will not have cross bolts and will have three sets of barrel nut screws that attach the handguard to the barrel nut. They can be installed with a short arm 1/8th" hex key. Using a short arm hex key will ensure the bolts are not over-torqued. Before final tightening check that the M1913 pic rail section at the top of the rail is in alignment with the section on the upper receiver.

NOTE: After re-installing your handguard, if you are using a sighting system mounted to it you will need to re-confirm zero.

### 2.2.3 BCG RE-ASSEMBLY

1. Insert the bolt into the bolt carrier. Make sure the extractor is set to approximately 11 o'clock for proper orientation (See Figure 24).



2. Insert the bolt cam pin. If it does not go through the bolt, rotate the bolt 180 degrees to the opposight side. Staking on the bolt hole allows the cam pin to be inserted in one direction only to prevent incorrect assembly. Once installed in the bolt, rotate the cam pin by one-quarter turn to allow the firing pin to go through and then insert the firing pin (See Figures 25A, 25B, and 25C).



3. Insert firing pin retaining pin. Angle the BCG with the bolt up to check that the firing pin does not fall out then give it a tug to ensure that the firing pin retaining pin is installed correctly, and the firing pin is now secured in the BCG (See Figure 26).



# 2.2.4 INSTALL BOLT CARRIER GROUP AND CHARGING HANDLE IN THE UPPER RECEIVER

1. Insert the charging handle into the upper receiver and align the side tabs to the circular cutout in the upper receiver. Once properly aligned, push down and forward to seat the CH (See Figure 27).



2. Pull the bolt into an extended position from the bolt carrier. This is to align the cam pin in the correct position to slide into the upper receiver (See Figure 28).



3. Slide the bolt carrier assembly into the charging handle groove with charging handle extended part way out of the upper receiver (See Figure 29).



4. Push both the charging handle and bolt carrier assembly fully forward into the receiver.

# 2.2.5 ATTACH THE UPPER AND LOWER RECEIVERS

1. Holding the upper receiver group at a 45-degree angle. Align the pivot pin of the upper receiver group to the pivot pin slot of the lower receiver group.

- 2. Press the pivot pin through the upper receiver group so that the pivot pin is fully seated against the side of the lower receiver group.
- 3. Collapse the upper receiver group so that the takedown pin is aligned with the takedown pin hole of the lower receiver group.
- 4. Press the takedown pin through the upper receiver group so that the takedown pin is fully seated against the side of the lower receiver group

# 2.3 CLEANING AND LUBRICATION

# 2.3.1 RECOMMENDED PARTS REPLACEMENT AND LUBRICATION SCHEDULES

# 2.3.1.1 RECOMMENDED FIREARM LUBRICATION SCHEDULE

SUPPRESSED	400 ROUNDS		
UNSUPPRESSED	600 rounds		

# 2.3.1.2 RECOMMENDED PARTS REPLACEMENT SCHEDULE

BOLT CARRIER GROUP			
EXTRACTOR SPRING	every 7k rounds		
EXTRACTOR SPRING INSERT	every 7K rounds		
EXTRACTOR O-RING	EVERY 7K ROUNDS		
EJECTOR SPRING	every 7K rounds		
GAS RINGS	every 7k rounds		
SPRING	SS		
SUPER 42 / MIL-SPEC CARBINE BUFFER SPRING	IF FREE LENGTH GOES BELOW 10.25"		
HAMMER SPRING	every 10k rounds		
TRIGGER SPRINGS	every 10k rounds		

# 2.3.2 CLEANING SOLVENTS AND LUBRICANTS

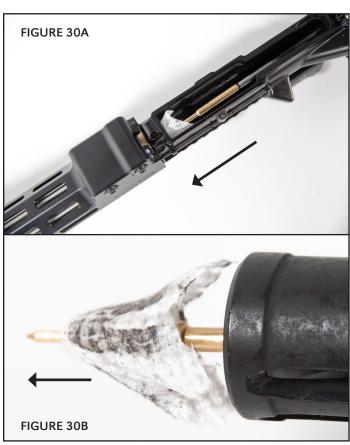
Always use a high quality firearms rated solvent and firearms lubricant. ALG Go-Juice and ALG Very thin Grease are a recommended gun oil / grease.

# 2.3.3 UPPER RECEIVER ASSEMBLY LUBRICATION / CLEANING

# 2.3.3.1 CLEANING THE BORE OF THE BARREL

# NOTE: Only pull clean patches through the barrel.

- 1. Using a traditional cleaning rod attach a patch soaked with quality firearms solvent or rifle bore cleaner.
- 2. Pull the patch through the bore of the barrel in the same direction that the bullet travels (See Figure 30).



3. Remove the patch and attach the bore brush (See Figure 31).



4. Insert the rod into the barrel. (See Figure 32).



5. Attach the handle at the end of the rod sticking out from the muzzle and pull completely through in one motion (See Figure 33).



- 6. Detach the bore brush and attach a soaked patch to run down the bore.
- 7. Alternate between using the brush and patch. If the patch is picking up noticeably less debris, then no further cleaning of the bore is needed.

# 2.3.3.2 LUBRICATION AND CLEANING OF UPPER RECEIVER

- 1. Attach a bore brush to the cleaning rod. Generously apply firearms solvent to the brush and brush out the insides of the upper receiver and wipe clean.
- 2. Clean the locking lugs by pushing and twisting the chamber brush inside (See Figure 34).



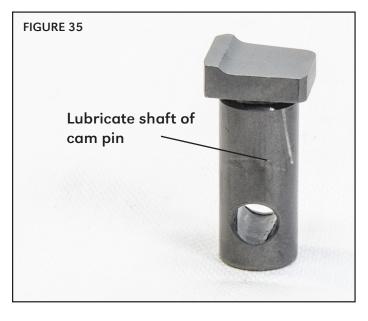
- 3. Apply a few drops of firearms lubricant such as ALG Go-Juice to a patch, then swab or rag to lube the inside surface of the upper receiver.
- 4. Apply a small amount of lubrication to the ejection port door and spring.

# 2.3.3.3 LUBRICATION AND CLEANING OF CHARGING HANDLE

Wipe the contact surfaces of the charging handle using swabs or patches (using solvent as needed) until clean and then apply a light film of gun oil.

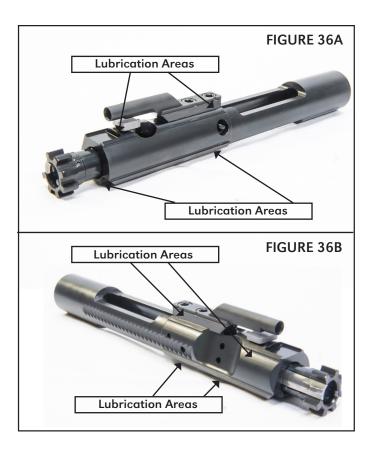
# 2.3.3.4 LUBRICATION AND CLEANING OF BOLT CARRIER ASSEMBLY

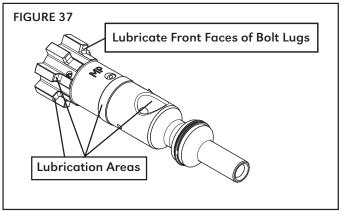
- 1. Wipe down all surfaces of BCG with firearms solvent and fresh patches until clean.
- 2. Lightly lubricate the outside of the firing pin shaft.
- 3. Lubricate the shaft of the cam pin (See Figure 35).



- 4. Generously lubricate the outside of the bolt carrier assembly (See Figure 36A and 36B).
- 5. Lubricate the locking lugs of the bolt and very lightly lubricate the extractor (See Figure 37).

NOTE: Do not over lubricate the face of the bolt or get lubrication into the firing pin channel.





# 2.3.4 LOWER RECEIVER ASSEMBLY LUBRICATION / CLEANING

# 2.3.4.1 TRIGGER LUBRICATION AND CLEANING

Maintenance of the trigger consists of occasionally placing a drop of lubricant on the locations shown below.

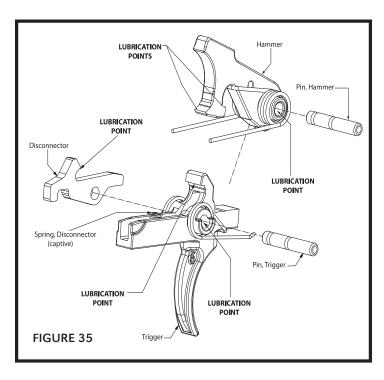
Recommended lubricant is a high quality gun oil such as ALG Go-Juice or equivalent; alternatively, a high quality grease may be used on the trigger/hammer sears and disconnector contact surfaces.

When the trigger and lower receiver well become very dirty (such as when firing with a suppressor), it is not always necessary to remove the trigger group for cleaning.

1. Spray down the trigger group with electrical contact

cleaner to remove residual oil and dirt. Next, use compressed air to blow off the trigger group and then flush liberally with a lubricant such as ALG Go-Juice or equivalent.

- 2. Blow off excess lubricant with compressed air and lubricate as noted above.
- 3. Apply a small amount of lubricant in the following locations (See Figure 35):
- 4. Each side of the disconnector above the trigger pin.
- 5. Hammer and trigger sears.
- 6. Face of the disconnector.
- 7. Hammer tail where it contacts the disconnector.
- 8. Top of each side of the hammer spring where the spring contacts the receiver wall.



# 2.3.4.2 LUBRICATION AND CLEANING OF BUFFER AND SPRING

- 1. Separate the spring from the buffer
- Use firearms lubricant such as ALG Go-Juice soaked swabs or patches to wipe away carbon, dirt and debris from the outside surfaces of the spring and buffer.
- 3. Apply a few drops of gun oil to a patch, swab or rag to lube the outside surface of the buffer and spring.

# 2.3.4.3 LUBRICATION AND CLEANING OF THE LOWER RECEIVER

- 1. Apply gun solvent to a patch, wipe down the inside surface of the mag well, trigger well and buffer tube of the lower receiver to clean.
- 2. Once clean, apply gun oil to a patch, swab or rag to lube the inside surface of the mag well, trigger well and buffer tube of the lower receiver.
- 3. Apply a drop of firearms lubricant such as ALG Go-Juice on the magazine button, magazine catch, and bolt catch.

# 2.4 STORAGE

Storage of firearms and ammunition should be done in a secure locked location, out of access to children, pets, or irresponsible persons.

The firearm should be unloaded as well as properly cleaned and lubricated prior to storage.

NOTE: Use of a quality, fireproof, humidity controlled gun safe is ideal.

WARNING: Storing your firearm in a humid environment will lead to rust. Additionally please note that nylon gun bags, while handy to transport firearms to a range, can hold on to moisture and lead to corrosion when used for storage.

# 3 WARRANTY / SERVICE INFO

# 3.1 WARRANTY

# LIMITED LIFETIME WARRANTY

Geissele Automatics warrants its firearms, components, and tools against defects in materials and workmanship during the lifetime of the product. Geissele Automatics does not warrant against normal wear and tear, items consumed or expended by their normal use (including springs, pins, etc.), product misuse (including criminal misuse, negligence or use under the influence of drugs or alcohol), accidental damage, or damage caused by improper handling, unapproved modifications to the product, defective or improper ammunition, or corrosion. Defective accessories (e.g., scopes, suppressors, flash hiders, sights, slings, parts with glass or electronic components, etc.) may be warranted by their original manufacturers but are not covered by this warranty.

UNLESS OTHERWISE REQUIRED BY LAW, IN NO EVENT SHALL GEISSELE AUTOMATICS BE LIABLE FOR PERSONAL INJURY, OR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, LOSS OF DATA, BUSINESS INTERRUPTION OR ANY OTHER COMMERCIAL DAMAGES OR LOSSES, ARISING OUT OF OR RELATED TO YOUR USE OR INABILITY TO USE GEISSELE AUTOMATICS' PRODUCTS, HOWEVER CAUSED, REGARDLESS OF THE THEORY OF LIABILITY (CONTRACT, TORT OR OTHERWISE) AND EVEN IF GEISSELE AUTOMATICS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

If you submit a valid claim under this Limited Lifetime Warranty, Geissele Automatics will authorize your return of the product and, at its sole discretion, will (i) repair the product, including replacement of defective parts with new or refurbished parts, or (ii) replace the product with a product of equal or greater value. If Geissele Automatics decides to replace a product under this warranty, Geissele will keep the product being replaced.

You must satisfy all terms and restrictions set forth in this Limited Lifetime Warranty and obtain a Return Material Authorization before shipping any product to Geissele Automatics. Before shipping any product to Geissele Automatics, please ensure that the following: (1) the product has not been modified, is clean and any accessories have been removed (unless otherwise instructed by a Geissele Automatics technical support agent); (2) there is no ammunition in any product or packaging; (3) the completed Return Material Authorization form has been placed inside the packaging; and (4) the Return Material Authorization number has been clearly written on the

outside of the packaging. Any failure to follow these instructions could result in your package being refused and returned to you without repairs at your expense.

To obtain service, contact Geissele Automatics at sales@ geissele.com or 610-272-2060.

This warranty gives you specific legal rights, and you may also have other legal rights which vary from State to State.

Rev. 09/19

# 3.2 CUSTOMER SERVICE / TECHNICAL SUPPORT

Please feel free to contact us via email, the support link on our web store or phone, Mon-Fri 9am to 5pm EST and we will be more than happy to assist you with any questions or concerns.

# Phone number:

(610) 272 - 2060

### Email:

Sales@Geissele.com

### **CONTACT TECHNICAL SUPPORT:**

https://geissele.com/support

# 4 PATENTS & TRADEMARKS

Patents@Geissele.com