

GP M4 & GP M4M USER MANUAL

Basic Description

The GRAND POWER M4 / M4M is a modern semiautomatic rifle chambered in .5.56 NATO caliber. Being an M4 design, it is fully compatible with standard AR-15/ M4 parts and accessories. The rifles are available in both a Direct Impingement configuration (M4) as well as a short-stroke gas piston version (M4M). The piston version features an adjustable gas system.

The barrels of both versions are nitride/QPQ treated for excellent accuracy, longevity, and corrosion resistance. The muzzles are threaded 1/2x28 and allow the user to equip muzzle devices of their choice. As standard the rifles are equipped with a muzzle brake.

The rifles ship without iron sights allowing the user to mount their choice of optical sights.

The GRAND POWER M4 & M4M are select fire versions intended for military and law enforcement use. As standard the piston M4M versions feature a QD handguard for easy cleaning and access to the piston.

Main features:

Modular design.

Free float handguard.

Modern layout of controls

Available in Direct Impingement and Short-stroke piston versions.

Basic controls:

The basic controls on a M4 consist of the charging handle, safety selector, trigger, magazine release, bolt stop / bolt release, and forward assist.

Some models of the M4 / M4M come equipped with ambidextrous controls. These include an ambidextrous magazine release, and an ambidextrous bolt release. The bolt release lever can be activated with the index finger of a right-handed shooter. It is activated by pressing inward (towards the receiver) and only serves as a bolt release and not as a bolt stop.

Safety selector

The safety selector is located above the pistol grip and is designed to be actuated with the thumb of the firing hand. The positions of the selector are SAFE, SEMI and AUTO (only for GP M4 and M4M). The weapon can only be put on SAFE when the hammer is in the cocked position. The positions are marked on the receiver and the tip of the safety will point to the corresponding position. With the selector in the horizontal position the weapon is on SAFE while in the vertical position it is on SEMI.

BASIC SAFETY RULES

ALWAYS FOLLOW THESE SAFETY INSTRUCTIONS FOR YOUR SAFETY AND THE SAFETY OF OTHERS!

1. Always treat your firearm as if it were loaded.
2. Never place your finger on the trigger unless you are ready to fire.
3. Never point your firearm at anything you do not intend to shoot.
4. Always know your target and what is behind it, keeping in mind that a bullet may pass through your target.
5. Never take anyone's word that a firearm is unloaded.
6. Always ensure that your firearm is unloaded before setting it down or handing it to another person.
7. Store the firearm unloaded with the hammer down.
8. Never use the firearm for any purpose other than shooting.
9. Do not leave your firearm unattended. Pay extra care when the firearm is loaded and ready to fire.
10. Prior to loading the firearm, ensure that the bore, chamber, and bolt carrier group are clean and free from any obstructions. Clean all residue from previous shooting as soon as possible.
11. Always use clean, dry, and originally manufactured ammunition of high quality, in good condition, matching the caliber of your firearm.
12. Never drink alcoholic beverages or use drugs before and/or during shooting. Check all of medications you are taking for possible side effects which could impair your cognitive abilities, motor functions, coordination, etc.
13. Wear ear and eye protection when shooting.
14. When the weapon is loaded keep the safety selector on SAFE until you are ready to fire. Always keep your weapon pointed in a safe direction and consider what is behind your target.
15. Do not block the ejection port and make sure there is no obstacle or person standing in the way of ejected cases.
16. Never put your finger into the trigger guard or pull the trigger until you are aimed at your target and ready to fire.
17. Before pulling the trigger, be sure to do an additional check of your target, and the area behind it, keeping in mind that a projectile can travel hundreds or thousands of meters.
18. While handling firearms, never engage in "horseplay".
19. Do not fire the weapon in close proximity to animals unless they are specifically trained to accept the noise.
20. Failure to fire. In case a round fails to fire, keep the firearm pointed at the target (or in a safe direction) and wait at least 30 seconds. In case of a delayed ignition, the round should detonate within 30 seconds. If the round still does not go off, remove the magazine and eject the round by pulling the charging handle rearward. Check the primer of the ejected round. If the primer strike is weak, not in the center of the primer or there is no strike, get your firearm assessed by a qualified gunsmith. If pulling the charging handle (repeatedly if necessary) fails to eject the round, take your firearm to a qualified gunsmith, bearing in mind that the firearm is always loaded!
21. Before cleaning, storage or transport of the firearm always make sure that the gun is not loaded.
22. Store your firearm separately from your ammunition. Keep your firearm and ammunition safely locked, out of the reach of children and unauthorized persons.

23. Do not alter any part of your firearm as this could seriously impair the firearm's proper operation and/or safety.
24. Remember that corrosion, use of damaged ammunition, dropping the firearm on a hard surface or other rough treatment may cause damage that may not be visible at first sight. In case of such an event have your gun inspected by a qualified specialist.

INSTRUCTIONS FOR USE

Ammunition

Only use high quality, originally manufactured ammunition, in good condition, which matches the caliber of your firearm, in accordance with CIP or SAAMI specifications. Using non-standard ammunition can cause damage to the firearm and/or injury to the shooter. Using anything other than factory ammunition also voids the warranty.

Removing the magazine

The magazine release button is located on the right-hand side of the lower receiver. Some models have an ambidextrous magazine button located on the left side of the receiver. The button is placed to be naturally activated by the index finger of the firing hand (for a right-handed shooter). The magazine will release from the firearm when the magazine release button is pressed. Please note that the magazine may drop free when the release button is pressed.

Loading the magazine

Hold the magazine with the feed lips facing up. Place a round on top of the magazine follower and press down with your thumb. Place another round onto the previous one and press down. Make sure each round of ammunition is seated all the way to the rear of the magazine so that the bullets do not scrape the front of the magazine body. Do not try to exceed the magazine capacity as this may cause a malfunction.

Loading the firearm

WHEN LOADING THE FIREARM ALWAYS POINT THE MUZZLE IN A SAFE DIRECTION! The firearm can be loaded in two ways – with the bolt fully forward or held on the bolt catch.

When the bolt is forward, first insert a loaded magazine into the magazine well. Ensure that the magazine is fully locked in. You can tap the floorplate of the magazine with your palm to fully seat the magazine. Afterwards lightly pull on the magazine to make sure that it is held in securely. Pull the charging handle to the rearmost position, visually check the ejection port and the chamber area for any obstructions, and then fully release the charging handle. Do not impede the return of the charging handle. If the bolt does not go fully into battery, push on the forward assist (several times, if necessary) until the bolt fully locks. Your firearm is now loaded.

To load the firearm with the bolt locked to the rear. You can lock the bolt to the rear by pulling the charging to the rear and pressing in the bottom part of the bolt catch. This will lock the bolt in the rear. Now push the charging handle forward until it clicks into place. Visually inspect the face of the bolt, chamber, and magazine well. Insert a loaded magazine into the magazine well and ensure that it is locked in by pulling downward on the magazine. Press the bolt catch paddle to release the bolt. If the bolt does not go fully into battery, push in on the forward assist (several times if necessary) until the bolt fully locks. Your firearm is now loaded.

Reloading during shooting

When you fire the last round in your magazine the bolt will stay locked back. Eject the empty magazine and put in a loaded one. It is recommended to ensure that the magazine is fully locked in by lightly pulling downward on the magazine. Press the bolt release paddle or pull the charging handle to the rear to drop the bolt and load a new round. The firearm is now loaded and ready to fire again.

Unloading the firearm

If possible, put the weapon on SAFE and always point it in a safe direction. Please note that the safety can only be engaged when the hammer is in the cocked position. Remove the magazine by pressing the magazine release button. Pull the charging handle back to eject any rounds in the chamber. After ejecting any rounds from the chamber lock the bolt to the rear by pulling on the charging handle and engaging the bolt catch by pushing on the bottom part of the bolt catch. Now push the charging handle forward until it clicks and locks into the notch in the upper receiver. Visually inspect the bolt-face, chamber area, and magazine well to ensure there is no ammunition present and the weapon is in fact unloaded. Now release the bolt with the bolt catch paddle and close the ejection port cover.

MAINTENANCE INSTRUCTIONS

Disassembly

1. Remove the magazine
2. Verify that there is no round in the chamber or the magazine well
3. Push out the rear takedown pin from left to right. Keep in mind that the pin is captive. The upper and lower receivers will swing apart. Push out the pivot pin and the upper and lower receivers will come apart.
4. The lower receiver can now be inspected and cleaned as necessary but no further disassembly is required.
5. On the upper receiver pull the charging handle and pull out the bolt carrier group. The charging handle can then be removed by pulling back and lifting it out of the cut outs in the charging handle track in the receiver.
6. The bolt is removed by pulling out the firing pin retaining pin (it can be started by using the tip of a bullet or a pin punch). Now the firing pin can be removed from the bolt carrier (if the firing pin does not drop out, you can lightly tap the bottom of the bolt carrier and the firing pin will drop out. With the firing pin out, you can now rotate and lift out the cam pin out of its track. The bolt can now be pulled out of the front of the carrier.
7. The firearm is now disassembled for maintenance.

Reassembly

1. Reassembly is the reverse of disassembly.
2. First reinsert the bolt into the bolt carrier. Reinsert and rotate the cam pin so that you can insert the firing pin. Reinstall the firing pin retaining pin.
3. Insert the charging handle into the upper receiver. Leave the charging handle partially out so that you can insert the bolt carrier group.
4. Make sure that the bolt is fully forward, otherwise you will not be able to insert it into the upper receiver.

5. Push the bolt carrier group all the way forward until the charging handle latch locks into the notch in the receiver.
6. Line up the holes on the upper and lower receivers and push the pivot pin into place. now reinstall the takedown pin.
7. Perform a functions check by pulling the charging handle to the rear and after visually making sure through the ejection port that no ammunition is present in the chamber or magazine well, dry fire the weapon, making sure that the muzzle is always pointing in a safe direction.

Cleaning of the firearm and inspection

Bolt – take out the extractor by pushing out the extractor pin. You can use the firing pin to push out the pin. With the extractor removed check the rubber O-ring. It should not be damaged. Check and clean the extractor claw groove which holds the rim of the cartridge. Clean any fouling in the extractor groove and visually inspect for cracks or other damage.

Clean the bolt face and the locking lugs. Visually inspect the locking lugs for cracks or other damage.

The gas rings on the bolt must not be aligned in such a way that the gaps in the rings would create a single gap as this could cause cycling problems.

Unburned powder residue on the tail of the bolt do not present a problem for the correct function of the firearm. It is not necessary to clean this area particularly thoroughly. Attempts to scrape this residue can generally cause more problems than it solves. If you still insist on cleaning this, use a plastic scraper rather than a metal one.

Clean and inspect the cam pin. Normal wear is to be expected but inspect for any cracks. If cracks are present, replace the cam pin. Inspect the cam pin hole on the bolt and make sure that there are no cracks present. If you see cracks, replace the bolt.

Clean the inside of the bolt carrier – you can use a cleaning patch on a cleaning rod.

Clean the upper receiver with an oily rag, take out the charging handle and clean it. Wipe the gas tube which protrudes into the upper receiver.

The inside of the gas tube itself does not need cleaning. Do not attempt to insert cleaning products or tools into the gas tube.

Now clean the barrel extension and the chamber – use an AR15/M4 chamber brush. Next clean and inspect the barrel. You can use a bore snake or a cleaning rod with a patch.

Clean the lower receiver. Use compressed air to clean out fouling and use a rag to clean the rest. If necessary, take out the buffer and spring. Depress the buffer retainer and remove the buffer assembly. You can wipe the buffer spring with a rag and subsequently apply a thin coat of oil.

Lubrication

Two passes with an oily patch or a bore snake are sufficient to clean and lubricate the bore. Since the barrel has a nitrided finish, the bore does not need to be kept especially wet. Before shooting make sure to wipe the chamber and bore dry.

Upper receiver – lubricate the charging handle and reinsert it to the charging handle track. Lubricate all of the contact surfaces – everywhere where it comes into contact with the moving bolt carrier.

Bolt carrier and bolt. Lubricate the surface of the bolt, especially on surfaces which show normal wear. Lubricate the bolt lugs and the entire surface of the bolt. Liberally lubricate the cam pin and the cam pin hole.

Adjustment of the gas system of the M4M

Rifles equipped with the piston system feature an adjustable gas regulator with three settings.

To adjust the gas system of the GP M4M it is necessary to first remove the handguard. In order to remove the handguard, depress the detent plunger and rotate the handguard lever by 180 degrees anti-clockwise. You can now slide the handguard forward towards the muzzle and remove it completely.

The gas settings are marked by notches in the gas regulator. For the purposes of adjustment, the setting at the 12 o'clock is the one currently selected. The positions are as follows:

Position II (marked by two notches in the gas regulator) is the standard setting for normal operation without a suppressor.

Setting I (one notch in the gas regulator) is the suppressed setting – the smallest gas port for use with a suppressor.

Setting III (three notches on the gas regulator) is the adverse setting – such as when using underpowered ammunition or using an excessively fouled firearm in need of cleaning.

The gas regulator has a hole which will fit the tip of a bullet and allows the user to adjust gas settings when the gas block and/ or gas regulator are too hot to the touch.

Position not marked by a notch only serves as a disassembly position. It is only intended for the removal of the gas plug/ regulator, and not as a standalone gas setting. Firing of the weapon with the gas regulator in this position will result in the gas regulator being ejected forward and possibly lost.

The settings of the gas regulator are retained and the gas regulator is prevented from rotating via the handguard. The handguard fixes the regulator in place.

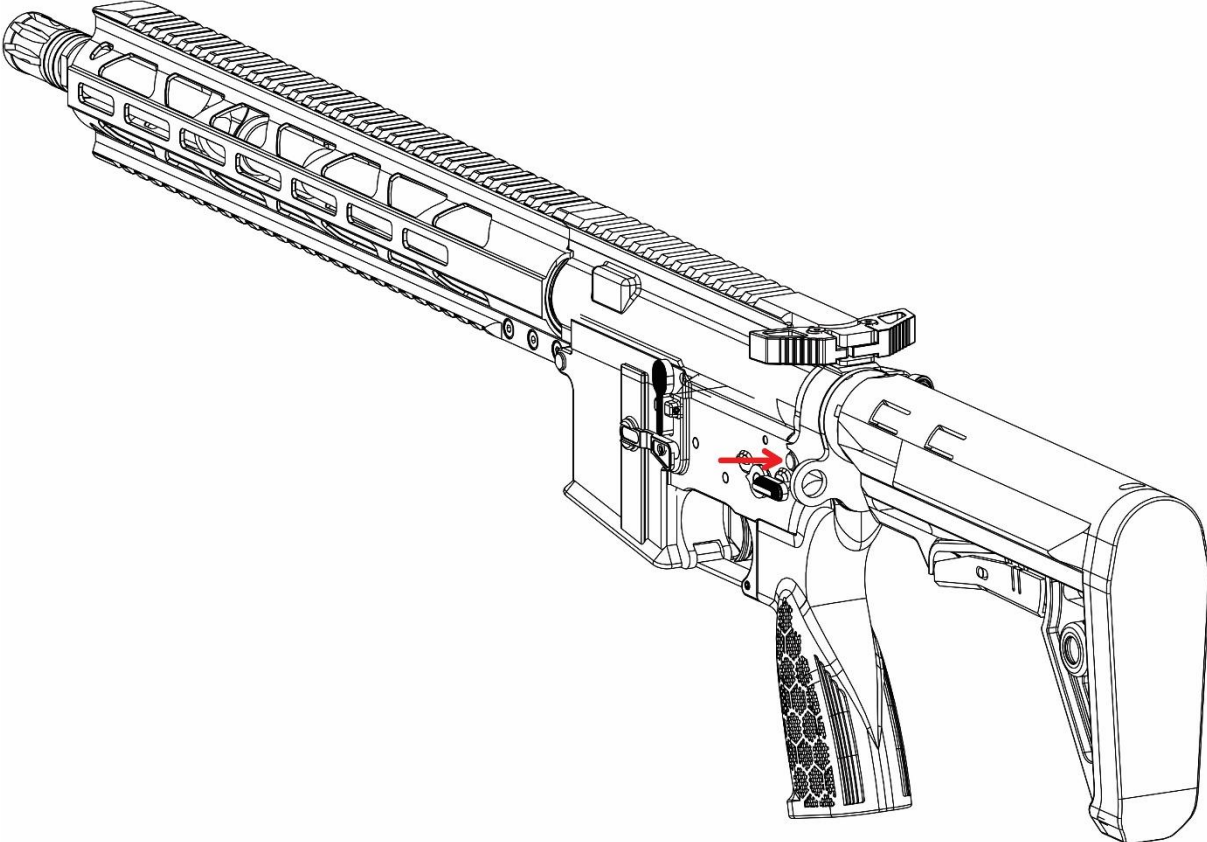
After you have made the desired adjustments to the gas regulator, reinstall the handguard to fix the gas regulator in place. Slide the handguard back into place and rotate the handguard locking lever clockwise until it clicks and engages with the detent plunger.

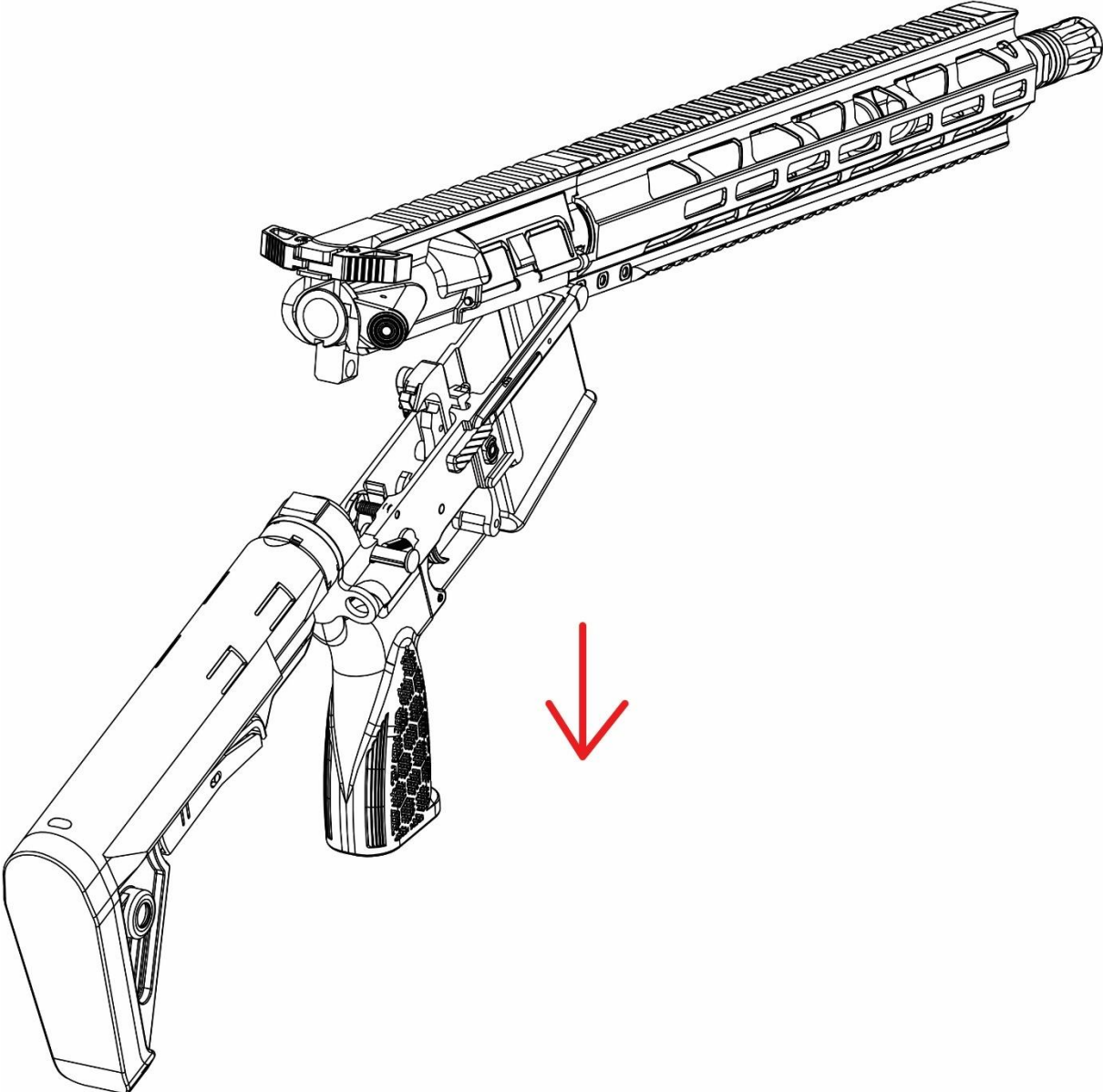
Disassembly of the piston assembly

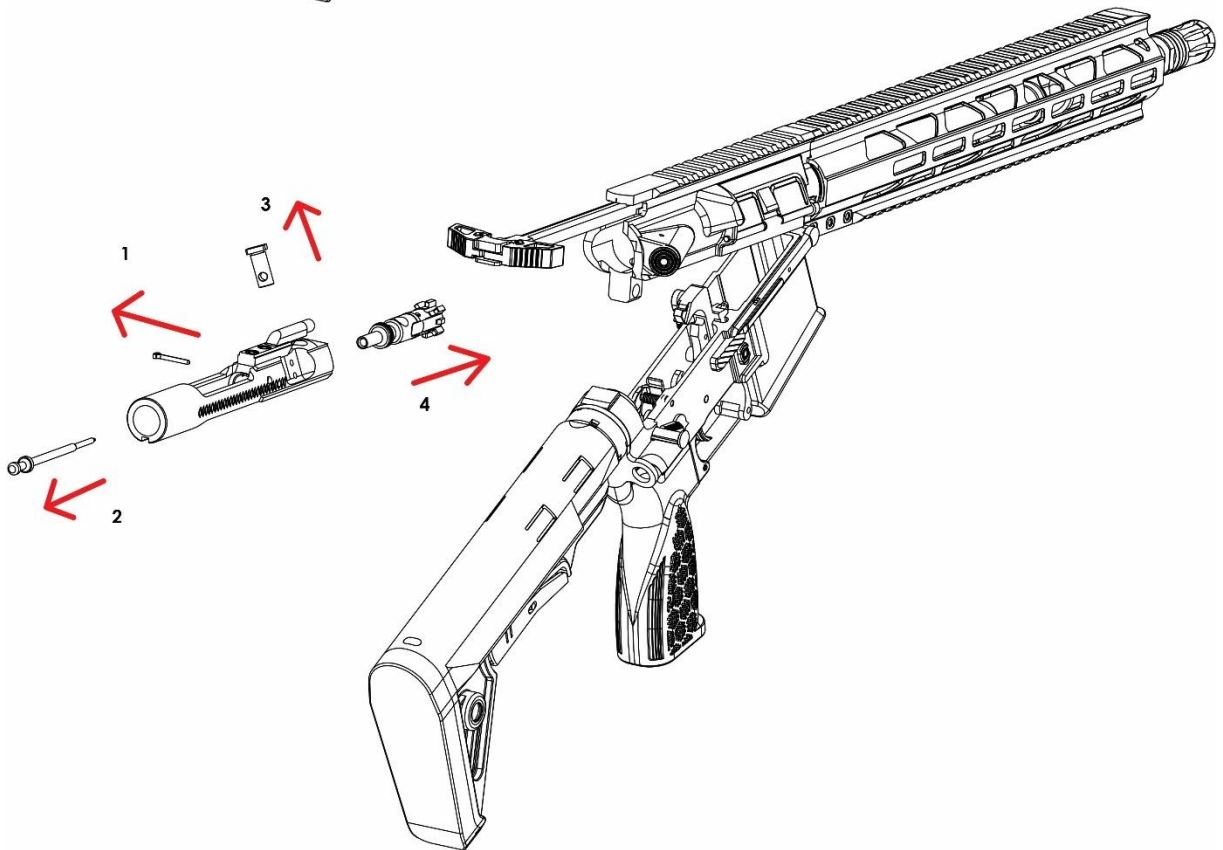
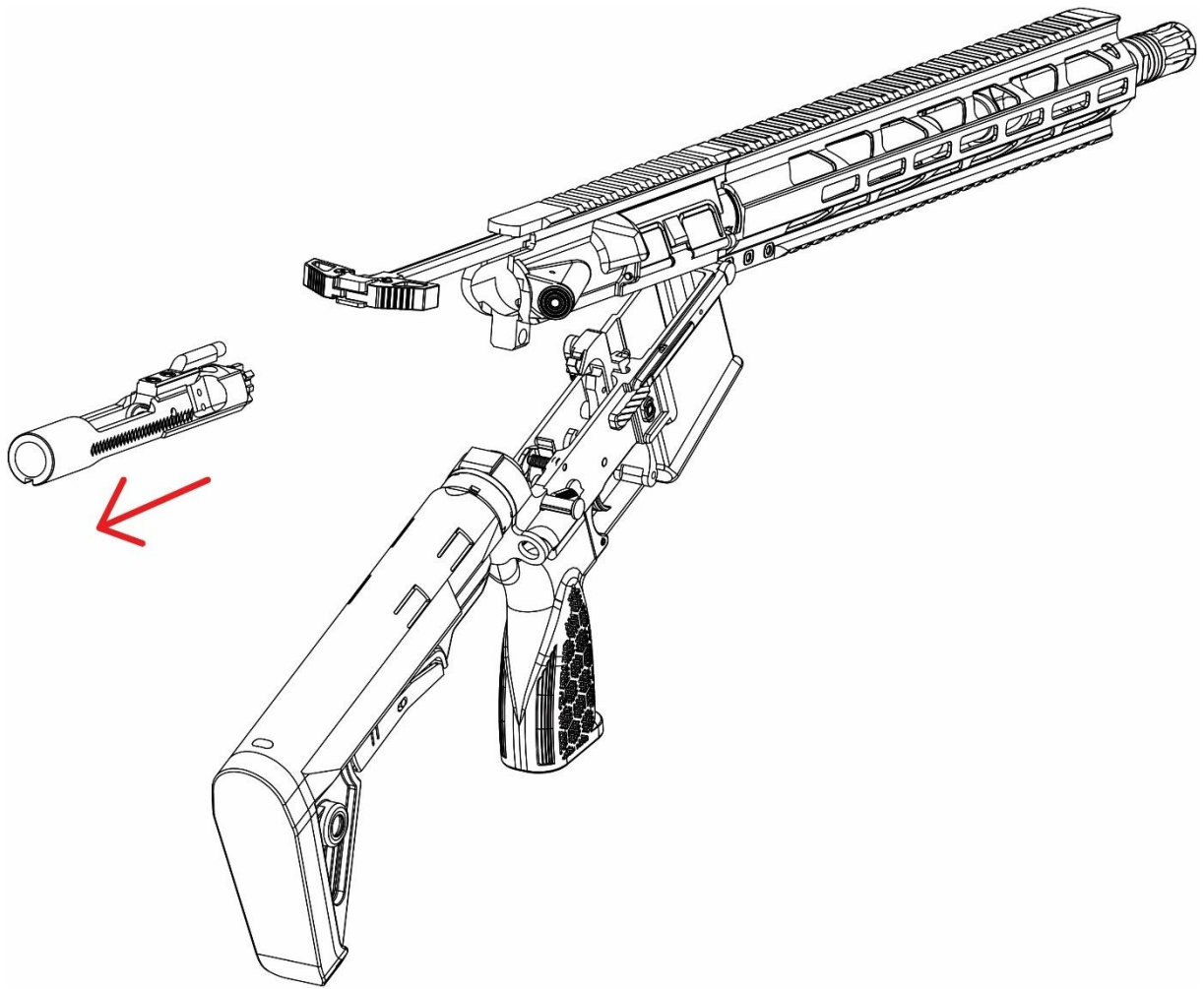
The piston assembly can be disassembled for cleaning. To remove the piston assembly, after checking that the firearm is unloaded, start by removing the handguard. Next, either lock the bolt carrier to the rear by using the bolt catch or remove it completely from the upper receiver.

To disassemble the piston assembly, start by grabbing the piston rod detent and pulling downward until you can separate the piston rod from the tappet. Move the piston rod sideways and lift it out of the receiver. Now pull out the tappet from the rear of the gas block and rotate the gas regulator to the disassembly position and then pull it out of the front of the gas block. The gas system can now be cleaned as necessary.

After cleaning, reassemble the piston system in the reverse order of disassembly. Reinsert the tappet into the gas block. Next, insert the piston rod into the upper receiver and pull down on the piston rod detent until it can be reinserted into the tappet. Reinsert the gas regulator and reinstall the handguard.







TTD

Weight w/o magazine (11"/14,5"/16" respectively): 2850/3050/3150g M4 / 2950/3100/3200g M4M

Effective range: 600m

Cadency (*dependent on ammunition): 750 RPM

Shooting modes: semi/full auto

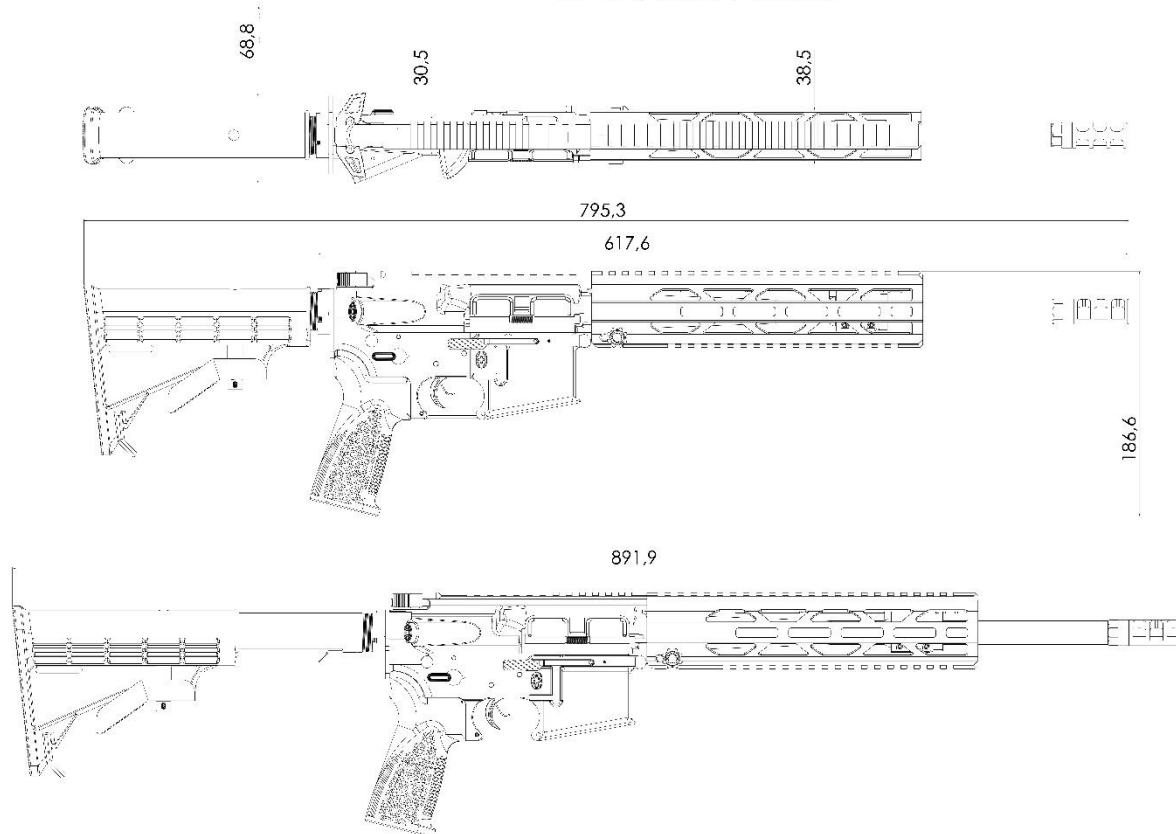
Caliber: 5,56x45mm NATO (STANAG 4172)

Width at widest point: 68,8 mm

Overall length w/ extended stock: 802/891/942mm

Overall length w/ collapsed stock: 719/809/859mm

GP M4/M4M 14,5inch



GP M4, M4M Parts list

GP M4M MORENA

- 1 – Pistol grip
- 1.1 – Pistol grip screw
- 1.2 - Grip screw locking washer
- 2 – Lower receiver
- 2.1 – Trigger guard
- 2.3 - Trigger guard roll pin
- 3.1 - Bolt carrier
- 3.2 - Bolt
- 3.3 - Firing pin
- 3.4 - Cam pin
- 3.5 - Extractor
- 3.8 - Firing pin retaining pin
- 3.9 - Extractor spring
- 3.11 - Extractor pin
- 3.12 - Ejector
- 3.13 - Ejector spring
- 3.14 - Ejector roll pin
- 3.15 - Bolt carrier spring
- 4 - Barrel
- 4.1 - Barrel extension
- 4.2 - Barrel indexing pin
- 5 - Upper receiver
- 5.1 - Insert
- 5.3 - Ejection port cover
- 5.3A - Ejection port cover detent housing
- 5.3B - Ejection port cover detent spring
- 5.3C - Ejection port cover detent
- 5.3D - Ejection port cover detent pin
- 5.3E - Ejection port cover pin
- 5.3F - Ejection port cover spring
- 5.3G - Ejection port cover pin retaining clip
- 5.4 - Forward assist plunger
- 5.4A - Forward assist pawl
- 5.4B - Forward assist spring
- 5.4C - Forward assist detent pin
- 5.4D - Forward assist pawl pin
- 5.4E - Forward assist pawl detent
- 5.4F - Forward assist pawl spring
- 6 - Trigger
- 6.1 - Trigger spring
- 7 - Hammer
- 7.1 - Hammer spring
- 7.3 - J-hook pin
- 7.5 - Auto sear
- 7.5A - Auto sear pin
- 7.5B - Auto sear axis pin
- 7.5C - Auto sear spring
- 8 - Bolt catch

- 8A - Bolt catch spring
- 8.1 - Bolt catch pin
- 8.4 - Bolt catch plunger
- 8.5 - Right hand bolt release
- 8.6 - Right hand bolt release pin
- 8.7 - Right hand bolt release spring
- 9 - Disconnecter
- 9.1 - Disconnecter spring
- 18 - Pivot pin
- 19 - Takedown pin
- 19.1 - Takedown pin detent
- 19.2 - Takedown pin spring
- 20 - Magazine catch
- 20.1 - Magazine catch spring
- 20.2 - Left hand magazine catch spring
- 20.4 - Left hand magazine catch pin
- 21 - Magazine release button
- 21.2 - Magazine release insert
- 21.3 - Magazine release axis pin
- 22 - Safety selector
- 23 - Safety selector lever
- 23.1 - Safety selector lever detent spring
- 23.2 - Safety selector lever detent pin
- 23.3 - Safety selector screw
- 24 - Barrel nut
- 25.1 - Gas block
- 25.2 - Gas tappet
- 25.4 - Gas piston guide
- 25.5 - Piston rod
- 25.6 - Piston spring
- 25.7 - Gas regulator plug
- 25.9 - Piston buffer
- 25.10 - Piston rod detent
- 25.11 - Gas block pins
- 25.12 - Gas block set screw
- 26 - Charging handle
- 26.1 - Left charging handle latch
- 26.2 - Right charging handle latch
- 26.3 - Charging handle latch spring
- 26.4 - Charging handle latch screw
- 27 - Receiver extension
- 27.1 - Receiver extension nut
- 27.2 - Receiver end plate
- 28 - Buffer retainer
- 28.1 - Buffer retainer spring
- 36 - Buffer spring
- 39 - Buttstock
- 42 - Buffer body
- 42A - Buffer weight spacer
- 42B - Buffer weight
- 42.1 - Buffer end cap
- 42.2 - Buffer roll pin

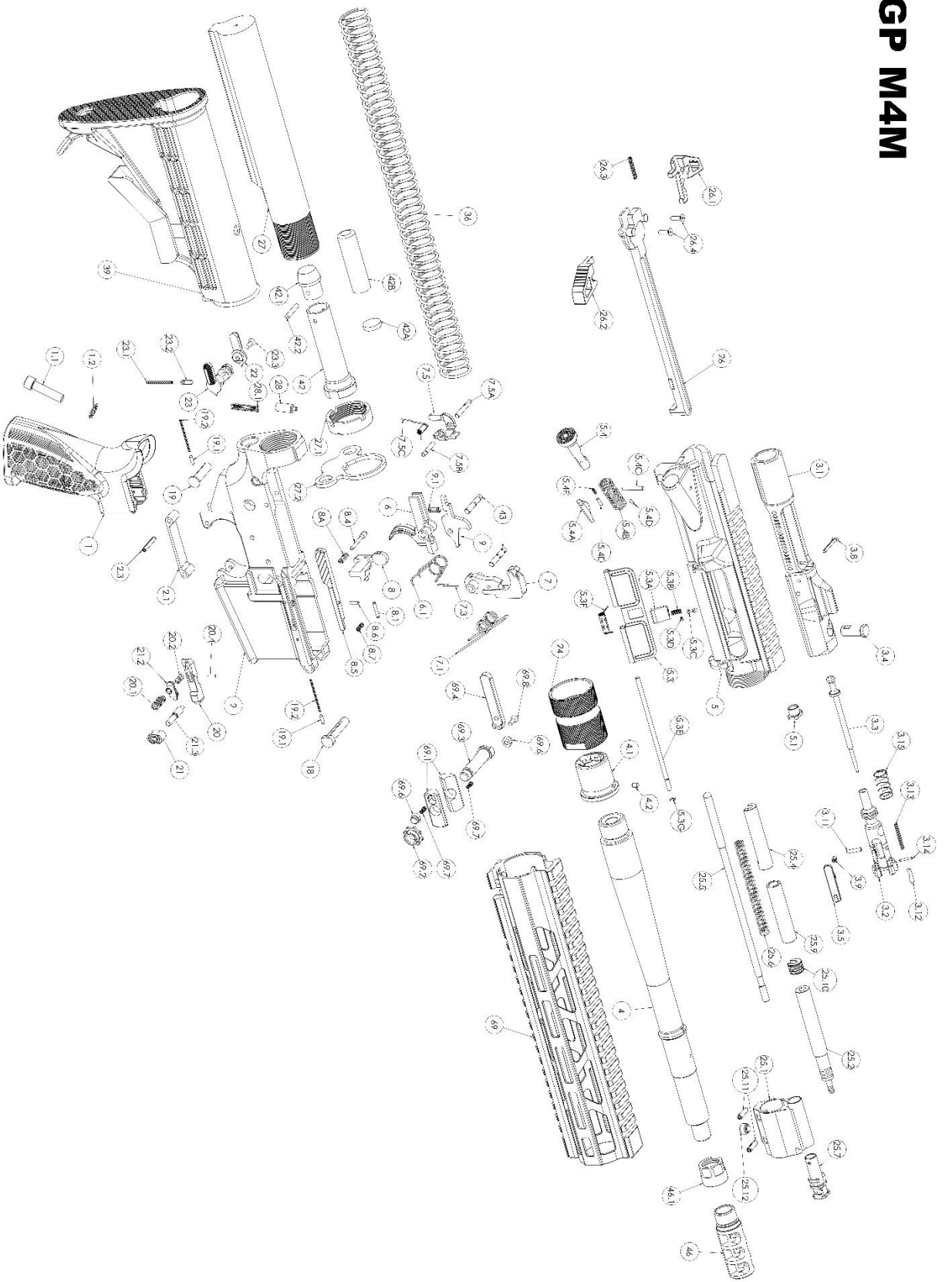
- 43 - Trigger and Hammer pins
- 46 - Muzzle brake
- 46.1 - Muzzle brake locking nut
- 69 - Handguard
- 69.1 - Handguard mounting mechanism clamp
- 69.2 - Handguard mounting mechanism nut
- 69.3 - Handguard mounting axis pin
- 69.4 - Handguard lever
- 69.6 - Handguard lever detent
- 69.7 - Handguard lever detent spring
- 69.8 - Handguard lever screw

GP M4

- 1 - Pistol grip
- 1.1 - Pistol grip screw
- 1.2 - Grip screw locking washer
- 2 - Lower receiver
- 2.1 - Trigger guard
- 2.3 - Trigger guard roll pin
- 3.1 - Bolt carrier
- 3.2 - Bolt
- 3.3 - Firing pin
- 3.4 - Cam pin
- 3.5 - Extractor
- 3.6 - Gas key
- 3.7 - Gas key screws
- 3.8 - Firing pin retaining pin
- 3.9 - Extractor spring
- 3.11 - Extractor pin
- 3.12 - Ejector
- 3.13 - Ejector spring
- 3.14 - Ejector roll pin
- 3.16 - Bolt gas rings
- 4 - Barrel
- 4.1 - Barrel extension
- 4.2 - Barrel indexing pin
- 5 - Upper receiver
- 5.3 - Ejection port cover
- 5.3E - Ejection port cover pin
- 5.3F - Ejection port cover spring
- 5.3G - Ejection port cover pin retaining clip
- 5.4 - Forward assist assembly
- 5.4B - Forward assist spring
- 5.4C - Forward assist roll pin
- 6 - Trigger
- 6.1 - Trigger spring
- 7 - Hammer
- 7.1 - Hammer spring
- 7.3 - Hammer J-hook spring

- 8 - Bolt catch
- 8A - Bolt catch spring
- 8.1 - Bolt catch roll pin
- 8.4 - Bolt catch plunger
- 9 - Disconnecter
- 9.1 - Disconnecter spring
- 18 - Pivot pin
- 19 - Takedown pin
- 19.1 - Takedown pin detent
- 19.2 - Takedown pin detent spring
- 20 - Magazine catch
- 20.1 - Magazine catch spring
- 21 - Magazine release button
- 23 - Safety selector
- 23.1 - Safety selector detent spring
- 23.2 - Safety selector detent
- 24 - Barrel nut
- 25.1 - Gas block
- 25.12 - Gas block set screw
- 26 - Charging handle
- 27 - Receiver extension
- 27.1 - Receiver extension nut
- 27.2 - Receiver end plate
- 28 - Buffer retainer
- 28.1 - Buffer retainer spring
- 36 - Buffer spring
- 39 - Buttstock
- 42 - Buffer
- 43 - Trigger and Hammer springs
- 46 - Muzzle brake
- 46.1 - Muzzle brake locking nut
- 50 - Gas tube
- 51 - Gas tube roll pin
- 69 - Handguard
- 69.7 - Handguard screw nut
- 69.8 - Handguard screw

GP M4M



GP M4M

