



# **PISTOL CALIBER CARBINE QUICK START GUIDE**

**READ THESE INSTRUCTIONS AND  
WARNINGS IN THIS GUIDE CAREFULLY  
BEFORE USING THIS PRODUCT**

FAILURE TO FOLLOW THESE GUIDELINES MAY  
RESULT IN DAMAGE TO YOUR PRODUCT AND  
VOID THE LIFETIME WARRANTY

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**[WWW.FM-PRODUCTS.COM](http://WWW.FM-PRODUCTS.COM)**

REV A 6/20

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**IF YOU ARE HAVING A PERSISTENT MALFUNCTION WITH YOUR FM PRODUCT PLEASE GO TO “TROUBLESHOOTING TIPS” ON PAGE 13 AND FOLLOW THOSE STEPS.**

# **WARRANTY STATEMENT**

Foxtrot Mike Products is known for our lifetime warranty on all our products.

In the event that you, our customer, ever has anything fail, FM Products will replace those parts at no cost to you.

Our lifetime warranty does not cover return shipping to us, however we will take care of shipping any warranty item back to you.

Our lifetime warranty does not cover use of unauthorized ammunition (page 4) or know faulty components (pages 9 to 11). Please consult those pages prior to completing and shooting your new firearm.

We appreciate you as a customer, and look forward to providing you a quality firearm that will last a lifetime.

# **THE RULES OF SAFE FIREARMS HANDLING**

1. Always wear eye and ear protection when shooting.
2. Learn the mechanics and handling characteristics of the firearm before use.
3. Always keep your firearm's muzzle pointed in a safe direction.
4. Keep your finger off the trigger until you are ready and intending to shoot.
5. Be sure of your target and what is beyond it.
6. Use only quality ammunition of the correct caliber in your firearm.
7. Be sure that your firearm and ammunition are in good working condition.
8. Your firearm should be unloaded and properly stored when not in use.

# AMMUNITION

**ALWAYS** use high-quality, full power ammunition loaded to a **MINIMUM OF 1100 FPS.\***

Use of ammo that is less than 1100FPS will result in feeding issues, as it will not be able to reliably cycle the mass required for a blowback firearm.

**\* FM Products supports the use of silencers, and STRONGLY recommends using subsonic ammunition (loads less than 1100 FPS) when shooting suppressed to reduce backpressure and bolt velocity.**

To reiterate, silencer use is the **ONLY** application where FM Products suggests using subsonic ammunition, and will not be able to troubleshoot, or warranty, any problems resulting from using subsonic ammunition in an unsuppressed firearm.

**Use of +P ammunition with a silencer may VOID the lifetime warranty of any FM Product.**

**ALWAYS** function test any new ammunition before using in competition, for personal defense, or buying in bulk for leisure shooting.

**ALWAYS** use ammunition that complies with the industry performance standards established by the Sporting Arms and Ammunition Manufacturers' Institute, Inc. of the United States (SAAMI) or ammunition manufactured to military specifications.

**NEVER** use cartridges that are dirty, wet, corroded, bent, or damaged.

**NEVER** oil cartridges.

# AMMUNITION, CONT'D

**NEVER** spray aerosol-type lubricants, preservative, or cleaners directly onto cartridges or where excess spray may flow into contact with cartridges.

Reloading is a science and improperly loaded ammunition can be extremely dangerous. FM Products specifically disclaims responsibility for any damage or injury whatsoever occurring in connection with, or as a result of, the use of faulty, nonstandard, “remanufactured” hand-loaded (reloaded) ammunition, or cartridges other than those for which the firearm was originally chambered.

FM Products does **NOT** recommend ammunition of the following types:\*\*

- Aluminum cased ammunition (Blazer Aluminum)
- Syntech PCC ammunition
- Frangible ammunition

For function testing and leisure shooting we recommend:

- Tula 115gr FMJ Steel Cased 9mm
- Wolf 115gr FMJ Steel Cased 9mm

For personal defense applications we recommend:

- Federal Premium LE 124gr HST HP

**\*\* In the event a customer uses ammunition that is not recommended with our products, FM Products may choose to charge customers to repair or replace any damaged parts that caused damage to the firearm or parts.**

# MAGAZINE SELECTION

**Use high quality magazines like genuine Glock or Magpul.**

Glock factory magazines have steel feed lips for long life, however they can vary in width up to .050" in width between generations and sizes.

Magpul magazines are our preferred magazine, they have much tighter tolerances, only varying .010" in width.

Many feeding issues are the result of inferior, imported magazines.

FM Products does **NOT** recommend, and will not be able to troubleshoot, or warranty, any problems resulting from the following:

- Non-factory capacity magazines (i.e. drum magazines, 100rd magazines, etc.).
- Homemade or aftermarket magazine extensions, couplers, or other "competition" widgets.
- Magazines made from clear plastic.\*\*\*

Magazines are wear items that need to be replaced over time

- Number your magazines for troubleshooting to determine if a particular magazine is a consistent source of problems.
- Older magazine may benefit from replacing the magazine spring for reliable operation.
- Compare angle and height of the top round in old magazines to new magazines to see if the feed lips have worn out.

**FM Products will ALWAYS warranty issues when high quality Glock factory or Magpul magazines are used.**

\*\*\* Magazines made from clear plastic lack the feed lip durability of traditional glass filled polymers. The clear plastic also lacks the slickness of glass filled polymers which can feeding issues.

# MAGAZINE USAGE

**A fully loaded magazine is designed to be inserted on an open bolt, and have the first round stripped off as the bolt is “dropped” with the bolt release.**

To properly load your weapon:

1. If not already locked open on an empty magazine, lock the bolt rearward
2. Visually check that the last round has ejected and ensure the chamber is empty
3. Remove empty magazine, if needed, and insert loaded magazine
4. Press firmly on the bolt release paddle, allowing the bolt to drop at full speed, and charge the weapon

FM Products **STRONGLY** suggest that novice shooters not use the charging handle to drop the bolt when loading a new magazine. If the handle is released too soon, or if the shooter “rides” the handle, causing the bolt to slow, then there may be insufficient momentum to strip the round from the magazine and load it into the chamber.

**A bolt should NEVER be “dropped” at full speed on an empty magazine or empty chamber.**

To close the bolt on an empty chamber for storage:

1. If not already locked open on an empty magazine, lock the bolt rearward
2. Visually check that the last round has ejected and ensure the chamber is empty
3. Remove the magazine
4. Pull rearward on the charging handle, allowing the bolt stop to retract
5. Slowly allow the charging handle to move forward until the bolt comes to rest on the chamber

# MAGAZINE USAGE, CONT'D

**A fully loaded magazine should NEVER be inserted on a closed bolt.**

FM Products **STRONGLY** suggest that if you want to do “tactical reloads” or “topping off the gun”, where the shooter changes out a partially spent magazine on a closed bolt, that your magazines be downloaded by 2-3 rounds, depending on magazine size and spring strength.

A fully loaded magazine spring exerts a great deal of upward force, and can place a substantial amount of pressure on the bolt when inserted.

A fully loaded magazine may cause the sides of polymer magazine tubes to swell due to the double column design.

It is normal for a fully loaded magazine to not drop free because of this swelling.

It is a best practice to always retain magazines with ammunition during a “tactical reload”, in these cases the shooter would manually remove the magazine from the gun.

Empty magazines, by design, will drop free as they do not need to be retained.

When breaking in a new firearm with new high capacity magazines, we recommend loading the magazine 60% full until the firearm is properly broken in.

A best practice, told to us by our military & law enforcement consultants, is to download high capacity magazines by 2-3 rounds, to help reliability in dry & dirty, “extreme” conditions (example: 30 rounds in a Glock factory 33 round magazine).

# **BUILDING YOUR PCC**

**The simplest way to ensure reliable, trouble free operation is to use components from the same manufacturer,** however these guidelines will help those who would like to use a variety of manufacturer's parts.

## **BUFFER & RECOIL SPRING**

The correct buffer and recoil spring are **REQUIRED** to ensure reliable operation of a blowback design.

The buffer should be at least 6oz in weight and **MUST** be less than 3.8" long.

A buffer that is longer than 3.8" will not produce enough dwell time, to allow for reliable reset of the trigger.

The **ONLY** recoil spring we recommend is a .308 carbine spring.

FM Products will not be able to troubleshoot any problems that result from using improper buffers and recoil springs, and cannot warranty any damage that occurs.

The use of any "short stroke" recoil systems, plastic buffers, or other "competition" widgets can result in burst fire and may **VOID** the lifetime warranty of any FM Product.

## **RECEIVER EXTENSION (BUFFER TUBE)**

FM Products are designed to use a carbine length receiver extensions.

Use of a rifle length receiver extension **REQUIRES** a "Fixed Stock A2 Spacer" to prevent catastrophic damage to your firearm.

# **BUILDING YOUR PCC, CONT'D**

At FM Products we use LAW Folding Adapters. For other folding adapters please confirm with the manufacturer that their product functions with FM Products lower receivers.

The use of short pistol length tubes, or other non-standard receiver extensions may **VOID** the warranty of any FM Product.

## **CARRIER WEIGHT**

FM Products bolt carriers use a heavy slug in the rear of the carrier to achieve the mass required for proper blowback operation.

This heavy slug can be removed for use with a LAW Folding Adapter. The LAW Folding Adapter plug is sufficient to replace the mass removed.

Use of a carrier without a heavy slug or LAW plug may **VOID** the warranty of any FM Product.

## **MUZZLE DEVICE**

Care must be taken when installing a muzzle device. Use a torque wrench set to 15 to 20 ft./lbs. of torque. Using too much torque can overcome the barrel nut, which is tightened to 35 to 45 ft./lbs. of torque.

## **FIRE CONTROL (TRIGGER SYSTEM)**

FM Products **STRONGLY** recommend using fire controls specifically designed for blowback pistol caliber carbines due to the increased bolt velocity compared to other designs

Use of a standard 5.56 drop-in AR triggers can result in burst fire due to the shortened dwell time, not allowing the

# **BUILDING YOUR PCC, CONT'D**

disconnecter to rotate forward and catch the hammer.

FM Products can **NOT** provide technical support or troubleshoot binary triggers. Customers should contact the binary trigger manufacturer for support.

Use of an Anderson trigger will may **VOID** the lifetime warranty of any FM Product.

## **LOWER RECEIVER**

FM Products **STRONGLY** recommend using a lower receiver that was specifically designed as a pistol caliber carbine.

FM Products can **NOT** provide technical support or troubleshoot the use of 80% lower receivers with our products.

FM Products can **NOT** provide technical support or troubleshoot the use of magazine adapters in 5.56 lower receivers.

Use of a Stern magazine adapter may **VOID** the lifetime warranty of any FM Product.

Customer feedback suggests that Sylvan magazine adapters function without modifications.

FM Products does **NOT** recommend the use of Spikes Tactical pistol caliber lowers. Customers must remove the last round bolt hold open from a Spikes Tactical pistol caliber lower for use with an FM Products upper.

**Failure to remove the last round bolt hold open from a Spikes Tactical pistol caliber lower will IMMEDIATELY VOID the lifetime warranty.**

# **BREAK-IN & MAINTENANCE**

## ***A BLOWBACK DESIGN LIKES TO RUN WET!***

FM Products recommends a 500 round “Break-In” period for any new firearm, where extra care should be given to ensure that adequate lubrication is used.

**FM Products are shipped coated in a corrosion inhibitor.  
THIS IS NOT LUBRICATION!**

For best results, we recommend you lubricate your weapon before every shooting session.

Liberally coat the carrier, buffer and interior of the upper receiver & buffer tube when lubricating until all surfaces appear “wet”.

During break-in we recommend loading high capacity magazines 60% full to reduce pressure on the bolt carrier and ensure reliable function.

Use a high quality, light gun oil when lubricating, like Rem Oil in the aerosol can, which can spray everything down quickly.

Do NOT use grease, which may cause issues with blowback designs.

**The key components of the gun must look “wet” from oil,  
prior to shooting.**

Perform a “quick clean” every 500 rounds.

Perform a “deep clean every 1000 rounds.

Replace all springs, extractor, and firing pin at 5000 rounds, or as needed.

Visit the FM Products YouTube Channel for cleaning videos.

# **TROUBLESHOOTING TIPS**

**Always troubleshoot any malfunctions in this order:**

## **1. CLEAN & LUBRICATE (Page 12)**

***A BLOWBACK DESIGN LIKES TO RUN WET!***

Improper lubrication is the number one cause of malfunctions. Perform routine maintenance per the schedule outlined, and check for damaged components, replacing as needed.

## **2. AMMUNITION (Page 7)**

Use approved ammo loaded to 1100 FPS when shooting unsuppressed. Test a different type of ammunition to ensure you don't have a bad batch. Ammunition can have a wide range of tolerance.

## **3. MAGAZINES (Page 4)**

Use approved magazines. Test multiple magazines to see if the problem is linked to a particular magazine. Magazine do wear out over time and need to be replaced.

## **4. CONTACT CUSTOMER SUPPORT**

If the malfunction continues to persist please contact us at **info@FM-Products.com**

**NOTE: FM Products cannot provide technical support or troubleshoot components that we do not manufacture or have not approved. Please see pages 9 thru 11 for more details on supported components.**

# **A NOTE FOR COMPETITIVE SHOOTERS**

At FM Products we appreciate that competitive shooting sports is a vital part of the gun culture and a way for average citizens to exercise their second amendment right, however in their quest to gain a competitive edge many shooters take a firearm, or magazine, that is designed to perform to military standards and modify it in ways that decrease reliability.

We firmly believe that you cannot “buy your way to success” and that proper training and practice is the only path to competency. Our goal is to provide consumers a high quality product at a great price, so they can spend more on ammunition and trigger time.

We support every customer’s choice to customize and accessorize their personal firearm as they see fit, however no manufacturer, FM Products included, can support, troubleshoot, or be held responsible for products and accessories that they did not manufacture.

Please contact the accessory manufacturer, or the gunsmith who installed it, when problems arise using aftermarket components we don’t formally recommend or support.

In case you missed it:

***A BLOWBACK DESIGN LIKES TO RUN WET!***

***GO LUBE YOUR GUN!***