

FOLDAR

OPERATOR'S MANUAL FOR UPPERS & COMPLETE FIREARMS



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MECHANICAL FEATURES UNIQUE TO THE FOLDAR PRODUCT LINEUP AND THEIR OPERATION

FoldAR is the only product available that allows an AR-style firearm to be folded at the barrel connection interface, resulting in a highly stowable/concealable full-sized firearm rivalled by no other product offering. While the FoldAR firearm generally functions just like any other standard AR-style firearm, the FoldAR utilizes its own patented features that allow a secure, repeatable, and safe folding barrel interface connection. Components comprising FoldAR's unique application are the Locking Hook and Lever, Pivoting Upper Receiver, Pivoting Forearm, Tapered Barrel Extension, Flared Gastubes, and Female/Male Snaps which are described as follows:

Barrel Interface Connection:



This refers to the group of components proprietary to the FoldAR system. The self-releasing taper design of the barrel extension allows the barrel to be pivoted into the upper receiver, and easily released when folded. The male cone of the barrel extension and the corresponding female cone of the upper receiver are designed and machined to perfectly match up the components when assembled. This ensures rigid and reliable barrel alignment with the upper receiver when connected. It's important to keep these areas clean and free of debris.

Pivoting Upper Receiver & Forearm:



The upper receiver and the forearm components of the FoldAR firearm are specially designed to allow either a folding or fixed barrel connection. If a fixed barrel configuration is desired, simply remove the locking lever/hook assembly and pivot pin with an arbor press, and install four 10-32 x 1.25" socket head cap screws to join the forearm and barrel to the upper receiver.

Locking Lever and Hook:



The locking lever and hook are also precision machined to ensure the right amount of tension is applied to the connection and that the lever cannot inadvertently disengage. It has been independently tested and verified that failing to engage the locking hook and firing the firearm poses no critical safety concern, however we do caution and require that the locking hook and lever must be properly and fully engaged before attempting to operate the firearm.

Male & Female Snap:



The snap feature exists to secure the folded portions of the firearm for transport or stowage. These are simply engaged and disengaged by hand-force.

Flared Gastubes:



Unlike a traditional AR15, the FoldAR firearm must be able to disconnect the gas tube at the folding interface. To accomplish this, FoldAR uses two separate gastubes, one attached to a standard gasblock and one press-fit into the upper receiver. When connected, the gastubes press together on their corresponding male and female flared ends, thereby forming a gas seal and allowing the firearm to function just as a standard AR15 would.

UNFOLDING & CONNECTING THE BARREL INTERFACE

Ensure the chamber is cleared. It is advised to perform the following techniques without a magazine loaded into the lower receiver, until a time in which the operator has become proficient with the below process.



1) Prep the locking lever and hook by completely opening the lever then closing back the lever approximately half way. This will set the hook into an ideal position for engagement during the following steps.

2) Disengage the male and female snap by pulling apart the barrel and the buttstock.





3) Pull the charging handle rearward at least an inch.



4) Bring the barrel and forearm assembly all the way over into alignment with the upper receiver.



5) Release the charging handle, and this will allow the bolt to seat into the barrel extension.



6) Rotate the hook onto the clasp pin and simultaneously press the lever towards the forearm until its snaps into place.



Now the barrel interface is fully connected and the firearm is ready to function just as any standard AR-style firearm.

Always treat the firearm as if it were loaded and never point in the direction of anyone, no matter how near or far.

DISCONNECTING & FOLDING THE BARREL INTERFACE

Ensure the firearm is unloaded and chamber cleared. It is advised to perform the following techniques without a magazine loaded into the lower receiver until a time in which the operator has become proficient with the below process.



1) Using the rim of a live cartridge or a fired brass casing, apply lifting leverage to the end of the lever, using the forearm as a fulcrum. This will bring the lever “over-center” and allow the hook to be disengaged from the clasp pin. We specifically designed this to require a brass casing for disengagement for three reasons: A) using any other hard material may scratch up the forearm B) you will always have either a live or spent brass casing available when you intend to operate your firearm and C) to avoid the possibility of accidental disengagement of the lever. This is why the lever is not designed to be easily disengaged by hand without the use of a brass casing or by any foreign obstruction.



2) Bring the lever all the way out.



3) Bring the lever all the way back in. This will automatically remove the hook from the clasp pin.



4) Pull the charging handle rearward at least an inch.



5) Fold the barrel and forearm assembly all the way over and engage the female and male snaps together, while slowly releasing the charging handle forward.



Now the barrel interface is folded and the firearm is ready for stowage, concealment, and/or transport.

With the barrel folded, it is understandable to be hesitant as to which way to safely point the firearm. In this single and exclusive instance, you may point the barrel any direction you choose, as there is no possible way to accidentally discharge a round, even if a live cartridge is still in the chamber. However, we do not recommend storing a live cartridge or spent brass casing in the chamber while folded or unfolded.

UNLOADING THE FIREARM



1) First, press the magazine release button on the right side of the firearm, above the trigger.



2) Place buttstock of the firearm on a flat horizontal surface. With left thumb, press the bolt catch while simultaneously pulling the charging handle to the rear.

3) When the charging handle is pulled all the way back, remove pressure from the bolt catch then the charging handle. This technique will lock the bolt carrier group back and out of the chamber.



4) Visually inspect and confirm the magazine is removed and the chamber is clear of any fired brass casing, unfired live cartridge, or bore obstruction.

Regardless of accomplishing the above unloading procedure, always treat the firearm as if it were loaded and never point in the direction of anyone, no matter how near or far.

LOADING THE MAGAZINE

Only use ammunition for which your FoldAR firearm is chambered. You will find chamber details etched onto your barrel.



1) Place the cartridge with the bullet facing forward and firmly press into place. If loaded properly, the cartridge will seat inside the magazine feed lips and remain in place.



2) Repeat until you have the desired number of cartridges loaded into your magazine.

Take care of your magazines, maintaining them clean and dry. Do not use excessive force inserting the magazine into the firearm, as doing so can cause damage and undue wear.

LOADING THE FIREARM



1) Lock the bolt carrier group back per the unloading instructions above. Place the safety selector in SAFE position and verify that the chamber is cleared of any fired brass casing, unfired live cartridge, or bore obstruction.



2) Insert the loaded magazine into the firearm's magazine well with bullets pointing forward.



4) Verify that the magazine is securely locked into position by pulling the magazine downwards. Often, magazines may need to be bumped from the bottom in order to set them into place and fully lock onto the magazine release.



5) When the bolt catch button is pressed, the bolt carrier group will accelerate forward grabbing a cartridge from the magazine, and loading that cartridge into the chamber.

At this point, your firearm is loaded with a live round and additional care must be taken to ensure your safety and the safety of those around you.

Always treat the firearm as if it were loaded and never point in the direction of anyone, no matter how near or far.

OPERATING THE FIREARM



1) With the firearm now loaded and pointing in a safe direction appropriate for delivering live fire, place the buttstock firmly in your shoulder pocket.



2) Turn the safety selector to FIRE with your right thumb.



3) Only while aiming at a safe target, slowly squeeze through the trigger. Once a cartridge is fired the bolt carrier group extracts the fired brass casing from the chamber and loads a new unfired cartridge into the chamber. The firearm is automatically ready to fire another round.



4) Immediately place the safety selector in the SAFE position until ready to fire another round.

When the last round is fired from the magazine, the bolt carrier group will lock back on the bolt catch. This enables quick and easy removal of the empty magazine and loading of a new magazine. Once reloaded, press the bolt catch button, and new cartridge will be automatically chambered and now the firearm is ready for continued operation.



It should be noted that you should not rest the magazine on any surface when firing, as this could cause malfunction or undue wear to the magazine feed lips and/or to other firearm components.

Always treat the firearm as if it were loaded and never point in the direction of anyone, no matter how near or far.

DISSASSEMBLY/ASSEMBLY

Your FoldAR firearm is dependable and rugged, but like any machine, proper maintenance will ensure yours stays that way. In the following section you will be shown how to properly field strip your FoldAR firearm to prepare it for cleaning and maintenance.

1) Ensure your FoldAR firearm is unloaded per the unloading instructions.



2) Locate the takedown pivot pin and the rear takedown pin.



3) With the tip of a bullet, press the left side of the rear takedown pin.



4) Repeat for the takedown pivot pin. Both takedown pins are designed to remain attached to the lower receiver.



5) Pull takedown pins the remaining way from the right side with your fingers.



6) Pull back the charging handle a few inches, and remove the bolt carrier group.

7) Disassembly of bolt carrier group:



7.1) Remove the firing pin retainer located on the side of the carrier.



7.2) Now the firing pin will be able to drop out of the rear of the carrier.



7.3) Push the bolt rearward into the carrier and rotate the cam pin 90 degrees to remove.



7.4) Remove the bolt from the carrier.



7.5) With your thumb, place pressure on the extractor, while using the firing pin, push the extractor pin out until you are able to pull the extractor pin free from the bolt. Lift out the extractor from the bolt, using caution not to lose the extractor spring.



Now all the primary components have been disassembled in the bolt carrier group and are ready for cleaning, inspection, lubrication, and reassembly.

These instructions are limited to disassembly techniques recommended to be limited to the average operator. To explore more advanced disassembly techniques, please refer to your local certified gunsmith or contact FoldAR directly. To reassemble your FoldAR firearm, follow the above instructions in reverse order.

Always treat the firearm as if it were loaded and never point in the direction of anyone, no matter how near or far.

DEAD FOOT ARMS MCS FOLDING STOCK

8) For Double FoldAR products with a Dead Foot Arms Modified Cycle System folding stock adapter installed, the following instructions will describe disassembly and assembly procedures unique to the product.



8.1) To release the stock and fold over, press the lockbar release button as shown above.

Always treat the firearm as if it were loaded and never point in the direction of anyone, no matter how near or far.



8.2) The above picture shows how the lockbar engages/disengages by pressing the bottom release button.



8.3) Unscrew the plug, ensure to firmly grip. Once the last thread is disengaged, the assembly is still spring loaded and will try to pop out.

Always treat the firearm as if it were loaded and never point in the direction of anyone, no matter how near or far.

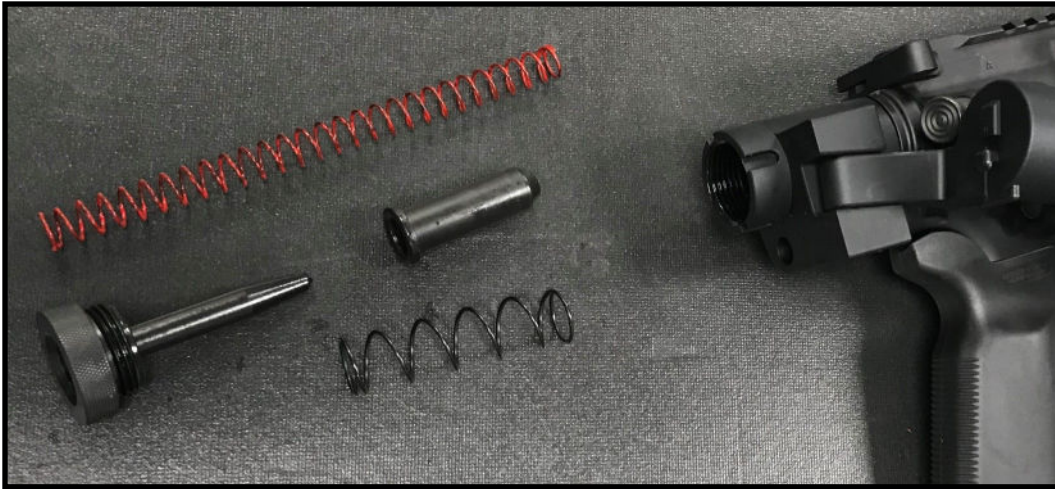


8.4) Pull out the recoil components, including the plug, long spring, short spring, and plunger.



8.5) Removed recoil components of the Dead Foot Arms Modified Cycle System still assembled.

Always treat the firearm as if it were loaded and never point in the direction of anyone, no matter how near or far.



8.3) Recoil components of the Dead Foot Arms Modified Cycle System



Action and recoil components of the Dead Foot Arms Modified Cycle System.

Always treat the firearm as if it were loaded and never point in the direction of anyone, no matter how near or far.

MAINTENANCE



- 1) Using a nylon brush for aluminum or steel parts or a brass brush for steel only parts, scrub and clean all accessible parts of the firearm with any light gun oil.
- 2) Once parts have been thoroughly scrubbed, use a product like Gun Scrubber to remove the loosened carbon buildup and oil from the parts.
- 3) Once parts are dry, lightly spray the parts with a thin layer of gun oil. We generally recommend RemOil Spray, however some other specialty oils will hold up better in particular areas.

4) Barrel bore cleaning:

- 4.1) Using a bore cleaning rod and brass or copper brush and patch, scrub the bore back and forth with application of a copper and carbon removing solvent.**
- 4.2) Repeat this process until no carbon residue is visible on your patches.**
- 4.3) Run a dry patch through the bore if you are about to start a shooting session.**
- 4.4) Run a patch saturated with gun oil if you are about to stow the firearm for more than a week.**
- 4.5) Run a dry patch or properly sized bore snake through the bore before starting a shooting session. Shooting a firearm with excess oil in the bore can cause hydraulic deformation of the bore walls and excessive accuracy and fouling issues.**

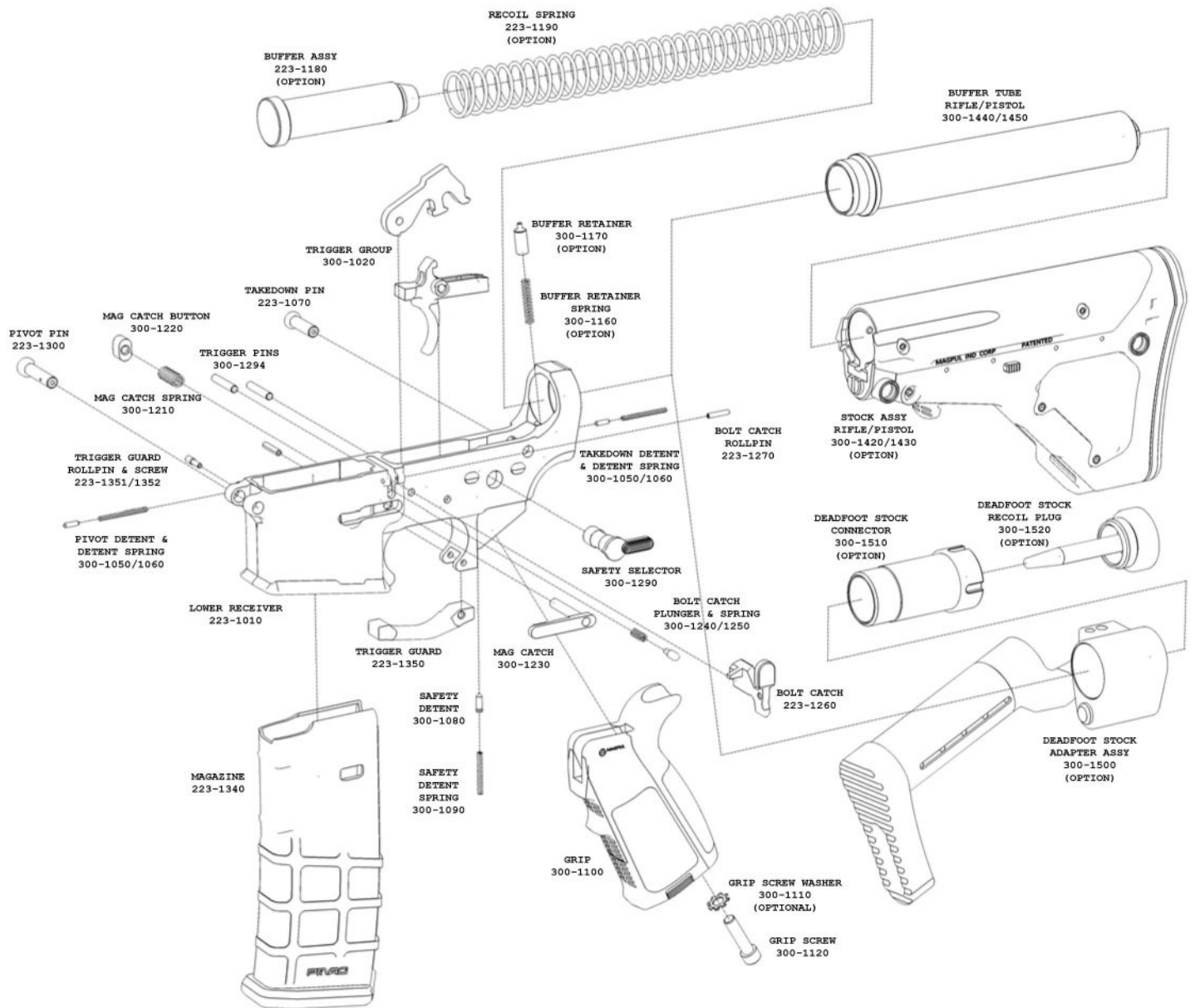
5) Reassemble your FoldAR firearm.

BARREL BREAK-IN

The steps under bore cleaning above are recommended before and after your first shooting session, and in between each 20 rounds of fire for the first 200 rounds of fire. Thereafter, perform this cleaning at least each time you clean the remainder of your firearm. A periodic cleaning schedule will vary depending on conditions, suppressor usage, ammo selection and a number of other variables, but as a general rule you should clean your firearm after every session of use.

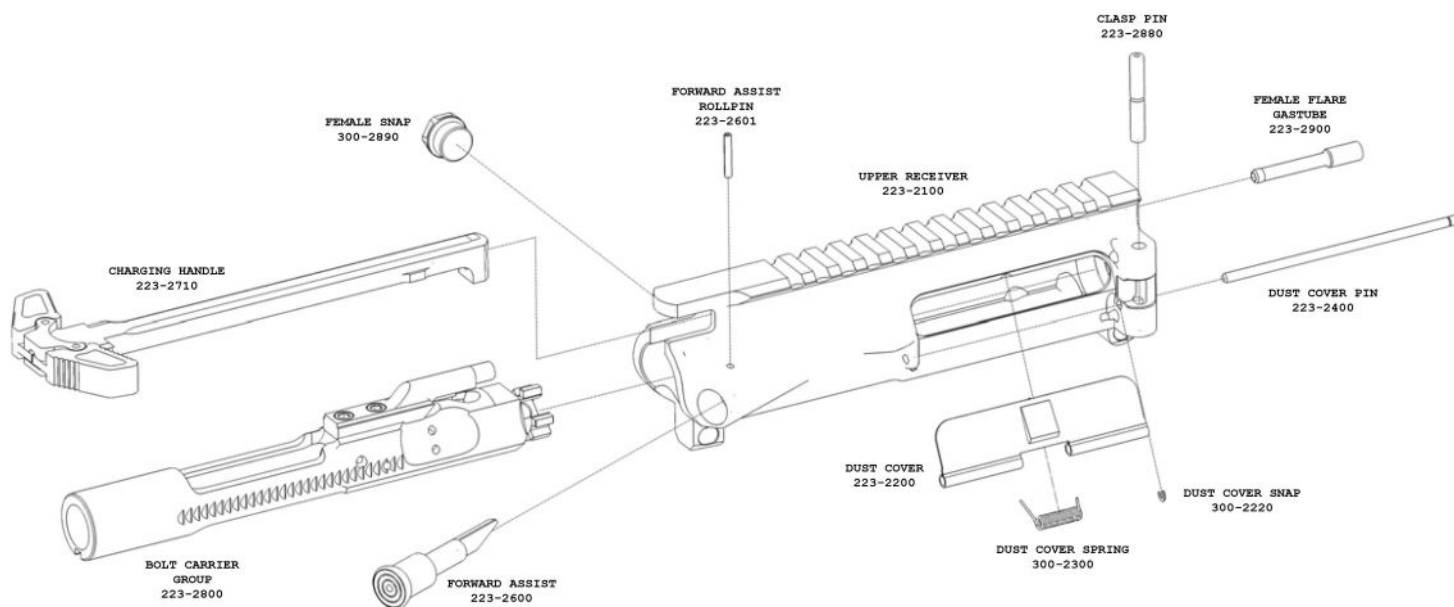
Always treat the firearm as if it were loaded and never point in the direction of anyone, no matter how near or far.

LOWER ASSEMBLY ILLUSTRATED PARTS BREAKDOWN



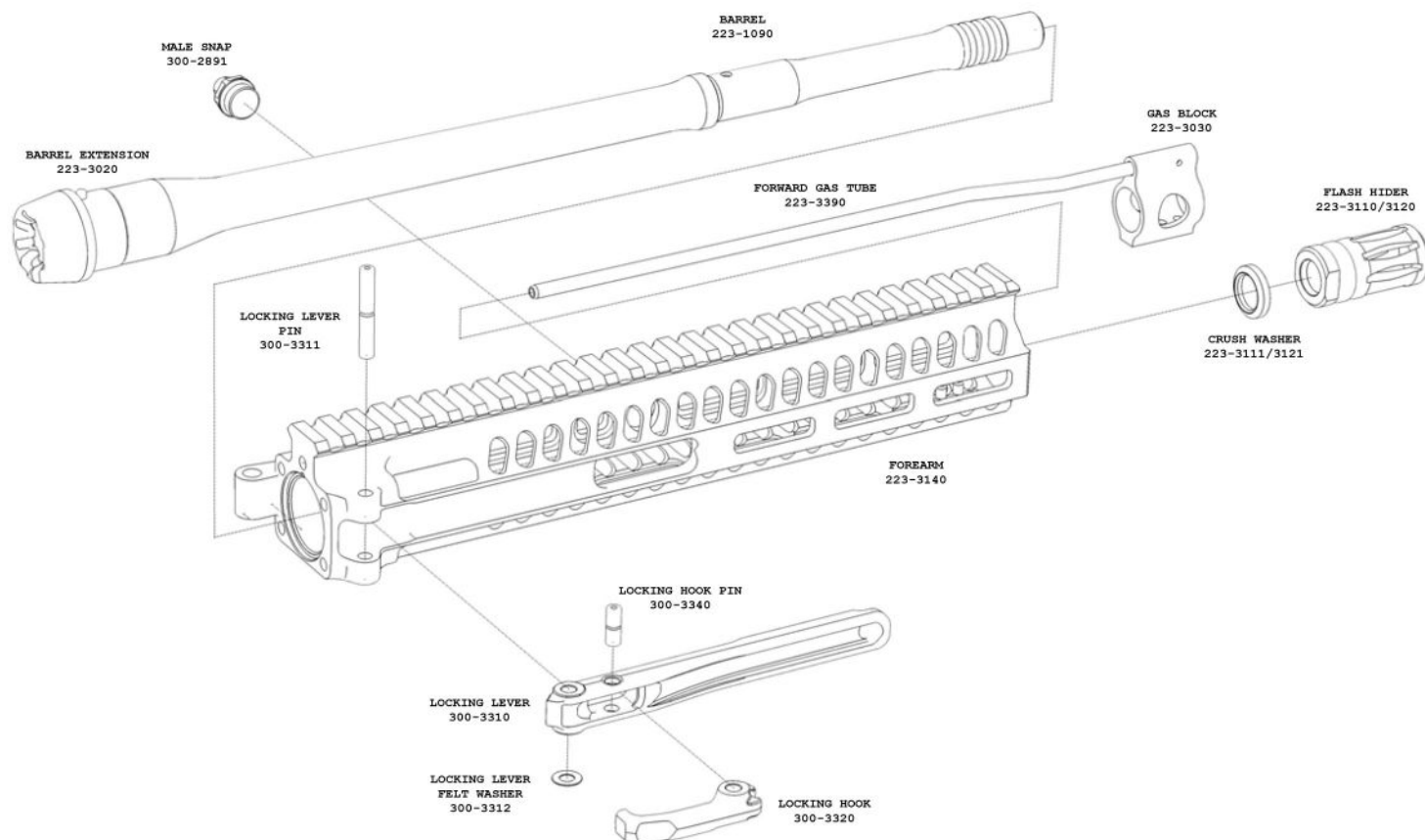
FOLDNR

UPPER ASSEMBLY ILLUSTRATED PARTS BREAKDOWN



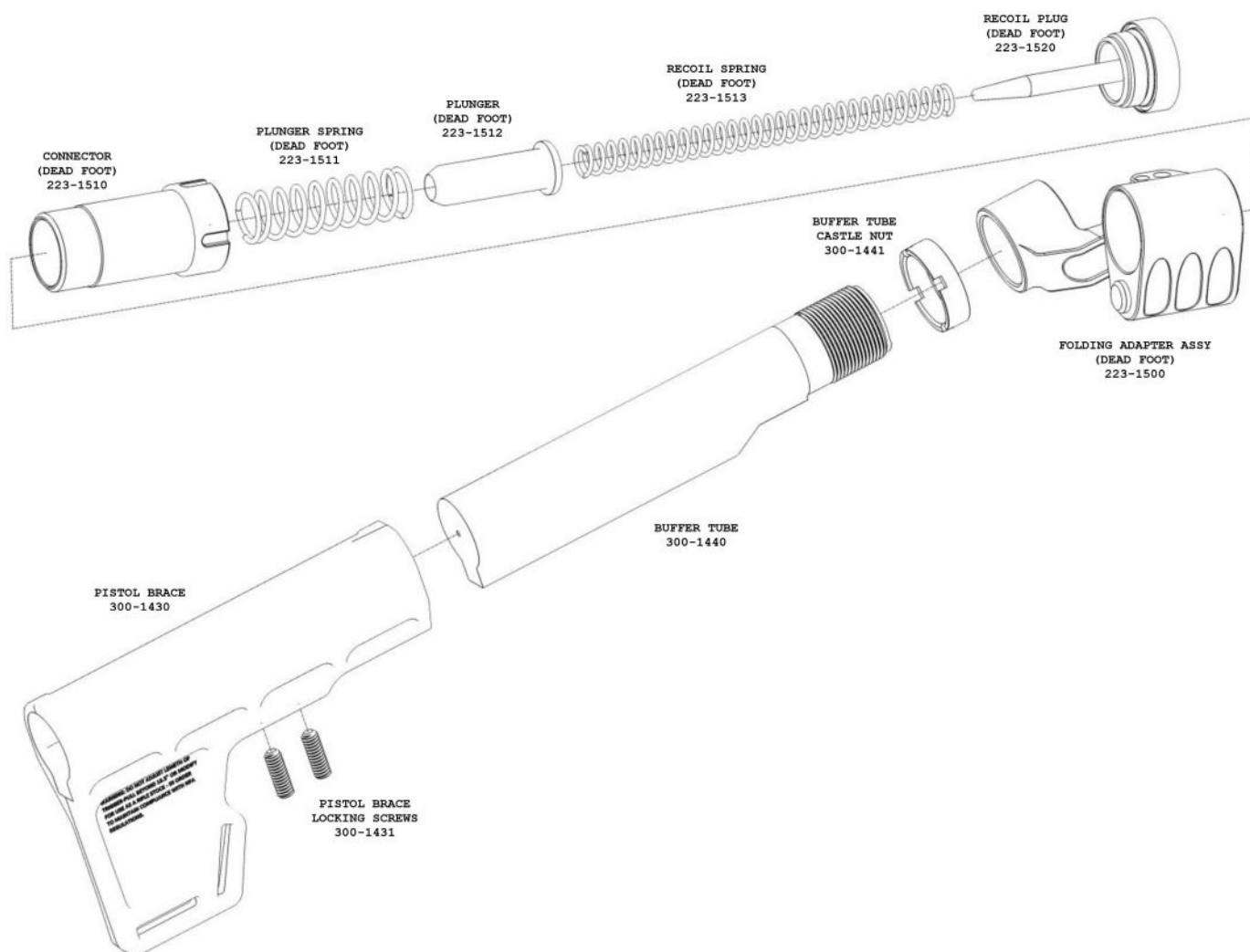
FOLDNR

UPPER ASSEMBLY ILLUSTRATED PARTS BREAKDOWN

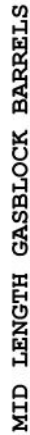


FOLDNR

UPPER ASSEMBLY ILLUSTRATED PARTS BREAKDOWN




FOLDNR



13/16"-16 UNF-2A
TO .08 OF SHOULDER
NO THREAD RELIEF

East Texas Machining
102 East Main St
Henderson, Tx. 75652
903-484-6387

DO NOT SCALE PRINT		DESCRIPTION: FISTOL & MID LENGTH BARRELS Pistol Critical Dimensions			
TOLERANCES UNLESS OTHERWISE SPECIFIED XXX .00 XXX .01 XXX .05 ANGLE .5°		DRAWN BY C-HALL	PART NUMBER: 223-3010 - (MSD/LIGHT) - (JRM/BER) - (CALIBER)	REV -	DATE: 10/26/2018
SIZE: B		CHECKED BY C-HALL	SCALE: 2:3 SHEET 1 OF 1		

THIRD ANGLE PROJECTION	
QUANTITY:	
MATERIAL:	OPTIONAL
FINISH:	OPTIONAL

2018 EAST TEXAS MACHINING ("ETM")
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IN ANY WAY DETRIMENTAL TO ETM'S
INTEREST.

- GENERAL NOTES:
1. CUSTOM BARREL-MAKER MUST INSTALL FOLDAR'S TAPERED BARREL EXTENSION, PART NUMBER 223-3010.
 2. ETM IS NOT LIABLE FOR THE PERFORMANCE OF OR DAMAGE RESULTING FROM CUSTOM-MADE BARRELS.
 3. ALL UNSPECIFIED DIMENSIONS AND GD&T ARE THE RESPONSIBILITY OF BARREL-MAKER.
 4. ALL SPECIFIED DIMENSIONS ARE THOSE CRITICAL TO FUNCTION CORRECTLY WITH FOLDAR PRODUCTS.

GENERAL SPECIFICATIONS

<u>Calibers:</u>	- .223 Wylde (1/2" -28 Muzzle Threads, 1:7 twist) - .300 Blackout (5/8" -24 Muzzle Threads, 1:7 twist) - .224 Valkyrie (5/8" -24 Muzzle Threads, 1:7 twist) - 6.8mm SPC (5/8" -24 Muzzle Threads, 1:10 twist) - 6.5 Grendel (5/8" -24 Muzzle Threads, 1:8 twist)
<u>Unfolded Length:</u>	- 16" barrel rifles - 32 7/8" - 14.5" barrel rifles - 31 3/8" - 9" barrel pistols - 25 3/4" - 9" barrel double folding pistols - 29 3/8"
<u>Gas Length/Port:</u>	- .223 Wylde 16" - Mid Length / .078" - .223 Wylde 14.5" - Mid Length / .083" - .223 Wylde 9" - Pistol Length / .065" - .300 Blackout 16" - Pistol Length / .065" - .300 Blackout 14.5" - Pistol Length / .065" - .300 Blackout 9" - Pistol Length / .105" - .224 Valkyrie 18" - Mid Length / .093" - 6.8mm SPC 16" - Mid Length / .082" - 6.8mm SPC 9" - Pistol Length / .065" - 6.5 Grendel 18" - Mid Length / .096"
<u>Folded Length:</u>	- 16" barrel rifles - 17 5/8" - 14.5" barrel rifles - 16 1/8" - 9" barrel pistols - 15 3/4" - 9" barrel double folding pistols - 10 3/4"
<u>Weight:</u>	- 16" barrel rifles - 6.2 pounds - 14.5" barrel rifles - 6.1 pounds - 9" barrel pistols - 5.9 pounds - 9" barrel double folding pistols - 6.2 pounds
<u>Max Range:</u>	- .223 Wylde 16" - 700 yards - .223 Wylde 14.5" - 600 yards - .223 Wylde 9" - 200 yards - .300 Blackout 16" - 600 yards - .300 Blackout 14.5" - 500 yards - .300 Blackout 9" - 300 yards - .224 Valkyrie 18" - 1000 yards - 6.8mm SPC 16" - 600 yards - 6.8mm SPC 9" - 300 yards - 6.5 Grendel 18" - 800 yards
<u>Rail Style:</u>	Magpul M-Lok

WARRANTY

FoldAR guarantees and warrants that the enclosed firearm was manufactured free of defects in material, workmanship, and mechanical function. This warranty agreement confers the right to have the subject firearm or its parts repaired, adjusted, or replaced as FoldAR determines is necessary and to pay transportation and insurance charges for return of the warranted firearm to the owner.

Third-party Components: Defects in material and workmanship claims apply only to factory built components; third-party products are subject to that manufacturer's warranty and must be claimed through the original manufacturer.

Transferable: This warranty constitutes the exclusive remedies of any authorized customer, as well as its successors.

Lifetime: This warranty guarantee applies for the life of the product.

Exclusions: Except as otherwise provided, the buyer agrees that this warranty is voided and FoldAR is not liable -in any way- if the product has been damaged by: accident or neglect, careless handling, abuse or misuse, firing with an obstruction in the barrel, damage through failure to provide reasonable or necessary maintenance, or any use that may be determined as unreasonable by FoldAR. Unauthorized repair; adjustment; alteration or modification; the use of defective, foreign-made, hand-loaded, or otherwise improper use of ammunition permanently voids this warranty. The limited warranty does not apply to normal wear and tear of parts listed as such on the illustrated parts breakdown shown within this user manual.

Accuracy: Accuracy depends on various factors such as bullet weight, type, quality, powder load and type, operator technique and skill level, proper maintenance and break-in of action components and barrel, components and scopes, environmental conditions, buffer weight and recoil spring stiffness, and gassing conditions, among other variables; and therefore FoldAR does not guarantee or warrant the operator's ability to shoot a specific minimum group size or "MOA". However, if you are not satisfied with the accuracy of your FoldAR firearm, please simply return it with (accompanied by your paid receipt) and FoldAR will refund your purchase with the deduction of a 20% restocking fee.

Always treat the firearm as if it were loaded and never point in the direction of anyone, no matter how near or far.

SERVICE

FoldAR firearms are manufactured to perform properly with the original parts as designed. Your firearm is a complex, dynamic assembly with parts that must relate correctly to each other for proper and safe operation. Assembling a firearm incorrectly or with improper, modified or other manufacturers' parts can result in damage, personal injury or death. A certified gunsmith should work on your firearm only after receiving proper authorization from FoldAR. Failure to properly follow the instructions listed in this user manual will void the warranty partially or entirely, at the sole discretion of FoldAR. It is the customer's responsibility to acquire the latest version of this Operator's Manual from FoldAR's website (on the support page) and apply the manual's instructions accordingly.

For service or warranty authorization, please contact FoldAR at:

service@foldar.com or:

FoldAR
102 East Main St
Henderson, TX. 75652 or:

903-484-6587

Once you receive a repair authorization, follow the instructions provided in order to help us process your repairs efficiently. Thanks for choosing FoldAR!

RELEVANT ATF/NFA RULES

The FoldAR AR-15 platform itself is not regulated under the National Firearms Act (NFA). However, certain aspects of the law must be considered for certain configurations of the FoldAR product, as follows:

-Any barrel measuring less than 16" (excluding any removable muzzle device) must be configured with a "pistol stabilizing brace" in order to avoid being classified as a Short Barreled Rifle (SBR). Any barrel having a permanently attached muzzle device which allows the barrel to measure greater than 16" will avoid the SBR classification.

-For pistol configurations, if the overall length of the pistol is less than 26", you may not install any vertical foregrip device .

-You may not adjust any pistol stabilizing brace beyond 13.5" length of trigger pull. Length of trigger pull is measured between the point where the trigger is pulled by the operators finger to the end of the brace at its most extended position. If the brace can be extended without the use of tools, then the measurement is taken at the most extended position. Double FoldAR products are shipped with the brace locked in at the most collapsed position, which brings the length of trigger pull right under 13.5". Do not extend this position.

-You may not modify a pistol stabilizing brace in any way that would result in a more "comfortable" shouldering of the weapon. The braces are specifically designed to be used primarily as a one-handed operation. ATF has ruled that an operator may shoulder a pistol stabilizing brace if no modifications have been made for added shouldering comfort and the length of trigger pull is less than 13.5".

It is the operator's responsibility (not just the owner) to review all applicable state and federal laws and regulations regarding the use and configuration of firearms in possession. The above is not a complete description of laws and regulations and may come out of date from time to time.

