

Franklin Armory®

Binary Firing System®III for Bushmaster™ ACR®

Installation and Operation Manual



For a downloadable copy of this manual as well as links to installation videos, please go to our website: www.franklinarmory.com

If you have a suggestion on how to improve this installation procedure or if you have any questions, please contact us at the following:

Address:

Franklin Armory®
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Minden, NV 89423

Email:

info@franklinarmory.com

Phone:

775-783-4313

Thank you for purchasing your new

Binary Firing System®III for ACR®.

We want to do everything we can to help you be safe with your new trigger. Franklin Armory® has partnered with LMS Defense to provide high-quality training specifically addressing operational skills with the BFSIII®. Both LMS Defense and Franklin Armory® believe in *safety first*. As such, LMS Defense is offering incentivized BFSIII® training to all buyers of the BFSIII®. Take as much as \$100 off on a two-day class! To sweeten the deal, Franklin Armory® will further incentivize BFSIII® buyers to take the training by offering a 25% discount code to all BFSIII® owners that pass an LMS Defense class covering BFSIII® curricula.

To register, go to www.lmsdefense.com/schedule and use “**Franklin BFS**” as the discount code to get \$50 off a one day class or \$100 off a two day class.



Offer void where prohibited by law. Offer subject to change.

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FRANKLIN ARMORY® BINARY FIRING SYSTEM®III WAIVER AND RELEASE

Patent #9,952,012 , 9,952,013, 10,107,580, 10,393,461, 10,480,881, 10,480,882, 11,085,724, & 11,226,165.

1. STATEMENT OF OPEN AND OBVIOUS DANGER REGARDING THE BINARY FIRING SYSTEM®:

Firearms, by their very nature, can be lethal. The Franklin Armory® Binary Firing System®III (BFSIII®) may inadvertently cause **INJURY** or even **DEATH** if improperly installed or misused. The BFSIII® is a unique multi-mode trigger system that requires proper installation and user training for safe operation. Improper use, misuse, or untrained use of the BFSIII® may lead to the unintentional discharge of the firearm which may cause the following:

PROPERTY DAMAGE
PERSONAL INJURY TO SELF OR OTHERS, OR
DEATH!

It is imperative that the BFSIII® only be installed, adjusted, and/or repaired by a certified Franklin Armory® armorer. Failure to use a Franklin Armory® armorer to install your trigger may expose you to serious liability including **PROPERTY DAMAGE, PERSONAL INJURY TO YOUR SELF OR OTHERS, AND/OR DEATH!** Improper installation, use, or tampering with the BFSIII® will void the warranty and **MAY LEAD TO UNINTENTIONAL DISCHARGE OF THE FIREARM THAT MAY LEAD TO INJURY OR EVEN DEATH. NEVER ALTER ANY COMPONENT OF THE BFSIII®, AND NEVER OPERATE THE BFSIII® IF ANY OF THE COMPONENTS ARE MISSING, DAMAGED, OR WORN.** **AFTER THE BFSIII® HAS BEEN PROPERLY INSTALLED, IT IS IMPERATIVE THAT ALL USERS SEEK QUALIFIED TRAINING ON HOW TO USE THESE PRODUCTS.** Please see the coupon on the back side of this waiver for an offer for high quality subsidized training with LMS Defense.

WARNING!

THE FRANKLIN ARMORY® BFSIII® HAS THE ABILITY TO FIRE UPON THE PULL AND THE RELEASE OF THE TRIGGER. Please refer to the BFSIII® manual for further operational instructions.

WARNING!

FRANKLIN ARMORY® RECOMMENDS THAT ALL USERS ATTEND A TRAINING CLASS OFFERED BY LMS DEFENSE PRIOR TO OPERATING A BFSIII® EQUIPPED FIREARM. IMPROPER UNDERSTANDING OF HOW THE TRIGGER OPERATES MAY LEAD TO UNINTENTIONAL DISCHARGE OF THE FIREARM AND MAY LEAD TO INJURY OR EVEN DEATH.

WARNING:

NEVER USE THE BFSIII® WITH ANY ACCESSORY THAT MIGHT CREATE A SAFETY HAZZARD. SOME SLINGS, BUMP FIRE STOCKS, OR OTHER ACCESSORIES MAY NOT BE SAFE FOR USE WITH THIS PRODUCT.

WARNING:

NEVER RELY ON MECHANICAL FEATURES. IT IS YOUR RESPONSIBILITY TO ENSURE SAFE HANDLING OF ANY FIREARM INCLUDING THIS BFSIII® EQUIPPED FIREARM.

WARNING:

IT IS THE BUYER'S RESPONSIBILITY TO ENSURE THAT THEY ARE IN COMPLIANCE WITH ALL APPLICABLE LAWS AT ALL TIMES WHILE USING THIS PRODUCT. SOME STATES WILL NOT ALLOW CIVILIANS TO USE THE BFSIII®.

2. COMPREHENSION OF RISK:

The BFSIII® trigger has the ability to fire on the pull and the release of the trigger. By purchasing and/or using the Franklin Armory® BFSIII®, **YOU COMPREHEND THE INHERENT RISK**, including without limitation, of **LIABILITY, INJURY, LOSS, DAMAGE** or **DEATH** as a result of improper installation, use, misuse, tampering, and/or abuse of the BFSIII®.

3. ASSUMPTION OF RISK:

By purchasing and/or using the Franklin Armory® BFSIII®, **YOU ASSUME ALL INHERENT RISK AND PERSONAL RESPONSIBILITY**, including without limitation, of **LIABILITY, INJURY, LOSS, DAMAGE** or **DEATH** as a result of improper installation, use, misuse, and/or abuse of the BFSIII®.

4. WAIVER OF RIGHTS:

By purchasing and/or using the Franklin Armory® BFSIII®, you waive and release any claim for damages, indemnity, or reimbursement against Franklin Armory® for any claims, fines, or damages imposed upon you for use of the BFSIII®. In addition, you agree to release Franklin Armory® (including its independent contractors, affiliated entities, parent companies, subsidiaries, present and former employees, owners, officers, members, managers, partners, contractors, insurers, shareholders, and directors) from any and all claims, actions, damages, liabilities, losses, costs and expenses (including, without limitation, attorney fees) for death, injury, loss, or damage of property in any way arising out of the purchase and use of the Franklin Armory® BFSIII®. By purchasing and/or using the Franklin Armory® BFSIII®, you agree to limit liability to actual damages arising from gross negligence or willful misconduct of Franklin Armory®. In no event shall Franklin Armory® be liable for any special, incidental, punitive, or consequential damages or other indirect damages.

5. INDEMNIFICATION:

By purchasing or using the Franklin Armory® BFSIII®, you agree to accept responsibility for your use of the product and any consequence or fine imposed upon you by any government entity or third party and to indemnify and hold harmless Franklin Armory® for any claims made resulting from your use of the BFSIII®.

6. TRANSFER OF PRODUCT:

If you should sell, lease, let someone borrow or use, or in any way transfer the BFSIII® to any other individual, you agree, as a condition of acquiring this product, to accept the responsibility of ensuring that the transferee is fully aware and agrees to the conditions set forth herein. Failure to disclose these conditions to a third party without first providing acknowledgment and acceptance by the transferee of the conditions set herein will be grounds for liability on the part of the transferor.

7. BINDING EFFECT:

By purchasing the Franklin Armory® BFSIII®, you agree that this waiver shall be binding upon you as well as your next of kin, personal representatives, heirs, beneficiaries, and assigns and shall inure to the benefit of Franklin Armory® and successors and assigns of Franklin Armory®.

8. SEVERABILITY:

If any provision of this Waiver and Release is for any reason declared to be invalid or unenforceable, the validity and enforceability of the remaining provisions will not be affected. The invalid or unenforceable provision will be deemed modified to the extent necessary to render it valid and enforceable, and if no modification may render it valid and enforceable, this Waiver and Release will be construed as if not containing such provision and the rights and obligations of the parties will be construed and enforced accordingly.

9. GOVERNING LAW:

This Waiver and Release shall be governed in all respects by the laws of the state of Nevada without regard to conflict and law principles. Any action or claim shall be brought in Douglas County, Nevada.

10. DISPUTE RESOLUTION: ARBITRATION

To the extent permitted by applicable law, any controversy or claim arising out of or relating to the product, its design, functionality, or materials, and this contract, or breach thereof, will be settled by binding arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association. Under this arbitration provision, you give up the right to resolve any controversy or claim arising out of or relating to the product, including its design, functionality, materials, or this contract by a judge and/or a jury. You also agree not to participate as a class representative or class member in any class action litigation, any class arbitration or any consolidation of individual arbitrations. The parties specifically agree to the binding nature of the arbitration.

11. VOLUNTARY ACTION:

While we sincerely value every Franklin Armory® customer, there is no necessity for anyone to own a Franklin Armory® BFSIII®. There are many other high-quality firearms and triggers that the consumer may purchase instead of our products. Please take your time in deciding whether to purchase the BFSIII® products. We intend to maintain supply, so please do not rush this important decision. Please contact the Franklin Armory® factory if you have any questions. However, if for any reason the conditions set forth in this agreement are unacceptable to you, **THEN DO NOT PURCHASE THIS PRODUCT.**

If you have already purchased a Franklin Armory® BFSIII®, and you do not agree to the terms set herein, then we encourage you to **IMMEDIATELY RETURN THE PRODUCT TO YOUR RETAILER** in an unused, new, condition. Refund terms will be set by each independent retailer.

THIS IS A WAIVER AND RELEASE OF LIABILITY. YOU AGREE TO THIS ENTIRE DOCUMENT. YOU AGREE TO ALL OF THE PROVISIONS HEREIN AND UNDERSTAND THAT YOU HAVE GIVEN UP SUBSTANTIAL RIGHTS BY AGREEING TO ALL OF THE PROVISIONS. BY PURCHASING, AND CONTINUING TO RETAIN THESE PRODUCTS, YOU ARE INDICATING YOUR VOLUNTARY AGREEMENT TO THE PROVISIONS OF THIS WAIVER AND RELEASE OF LIABILITY.

FRANKLIN ARMORY® BINARY FIRING SYSTEM®III OPERATION INSTRUCTIONS

Patented
WARNING! READ AND COMPREHEND THIS DOCUMENT ENTIRELY BEFORE USING THE BFSIII®
WARNING! THE FRANKLIN ARMORY® BFSIII® HAS THE ABILITY TO FIRE UPON THE PULL AND THE RELEASE OF THE TRIGGER. READ AND UNDERSTAND THE OPERATION OF THIS FIREARM BEFORE USING IT!

WARNING! THIS PRODUCT IS SOLELY DESIGNED FOR USE BY PROFESSIONAL LAW ENFORCEMENT AND HIGHLY TRAINED PERSONNEL.

WARNING! FRANKLIN ARMORY® RECOMMENDS THAT ALL USERS ATTEND A TRAINING CLASS OFFERED BY LMS DEFENSE PRIOR TO OPERATING A BFSIII® EQUIPPED FIREARM. IMPROPER UNDERSTANDING OF HOW THE TRIGGERS OPERATE MAY LEAD TO UNINTENTIONAL DISCHARGE OF THE FIREARM AND MAY LEAD TO INJURY OR EVEN DEATH.

WARNING: DO NOT LIVE FIRE TEST YOUR FIREARM UNTIL YOU HAVE COMPLETED AND PASSED THE BFSIII® DRY FIRE CHECKLIST
What to Expect When Live Fire Testing the BFSIII® for ACR®

WARNING: Keep your finger off the trigger until you are ready to shoot.

WARNING: Never point your firearm at anything that you do not intend to destroy.

WARNING: Be sure of your target and what is behind it.



BFSIII® Three-Position Safety Selector:

“SAFE” MODE:
As viewed from the left side of the firearm, Safe Mode is indicated by the Safety Selector pointing to the 9 o'clock position. The lever will point to the bullet with a slash through it. In order for the Safety Selector to be placed into this position, the Hammer must be cocked. With the Safety Selector in Safe Mode, the Trigger should not move, and the Hammer should not fall forward.

“SEMI” MODE:
When the Safety Selector is pointing to the right at 12 o'clock, the firearm is in Semiautomatic Mode. For ease of reading, one bullet is used to equate to Semiautomatic Mode. In this position, the firearm will fire one round with every pull of the Trigger. It is not designed to fire upon release of the Trigger while in this mode. The BFSIII® Safety Selector is designed to lock out the option of rotating from Semi Mode to Binary® Mode while the Trigger is held back. Do not attempt to force the Safety Selector further during this instance.

“BINARY” MODE:
As viewed from the left side of the firearm, Binary® Mode is indicated by the Safety Selector pointing to the position at 3 o'clock. In this position, the firearm will fire one round with every *pull* of the Trigger, and one round with every *release* of the Trigger. By releasing the Trigger slightly more, an audible reset should be perceived. Please note that if the operator should pull the Trigger back prior to reset, the Hammer will not be released when the Trigger is pulled. However, when the Trigger is subsequently released, the Hammer will be allowed to fall to the Firing Pin. Consequently, it is recommended that BFSIII® operators use a “pull through, release through” technique.

WARNING: Always point the muzzle in a safe direction when modulating the Safety Selector.

If the operator, after pulling the Trigger while in Binary® Mode, should decide to negate the option of firing a round with the release function of the Trigger, he or she may keep the Trigger held back while using the offhand to modulate the Safety Selector back to Semi Mode. After fully modulating the Safety Selector back to Semi Mode, the operator can then release the Trigger and allow it to reset on the sear.



- BFSIII® for ACR® Assembly Instructions**
- Step 1: Make sure that the firearm is unloaded per the manufacturer's directions.
- Step 2: Remove the existing lower receiver of the ACR® from the firearm per the manufacturer's directions.
- Step 3: Remove the existing ACR® safety selector from the lower receiver per the manufacturer's directions.
- Step 4: Remove the existing ACR® trigger housing (and trigger group) from the existing lower receiver per the manufacturer's directions.
- Step 5: Install the red, left and right, Safety Selector Stickers around the Safety Selector holes on the ACR® lower receiver per figure 1.
- Step 6: Place the Franklin Armory® BFSIII® for ACR® Trigger Pack Into the existing ACR® lower receiver. Make sure the BFSIII® is fully seated into the existing lower receiver.
- Step 7: Make sure that the hammer is cocked and fully depressed before attempting to install the BFSIII® for ACR® Safety Selector Shaft.
- Step 8: Line up the Safety Selector Shaft hole for the existing ACR® lower receiver and the Safety Selector Shaft hole on the BFSIII® for ACR® Trigger Pack.
- Step 9: With the Safety Selector Shaft holes aligned, start installing the BFSIII® for ACR® Safety Selector from the left side to the right as shown in figure 2.
- Step 10: Before completing the installation of the BFSIII® for ACR® Safety Selector Shaft, the Detent Card will need to be manually pulled up slightly so that the BFSIII® for ACR® Safety Selector can be fully seated through both sides of the ACR® lower receiver. See figure 3.
- Step 11: Install the Short Safety Selector Paddle on the right side of the ACR® lower using the factory supplied 4-40 x 5/16" screw as shown in figure 4. We recommend using blue Loctite to secure the screw in place. Note: For left-handed users, it might be best to install the Short Safety Selector Paddle on the left side and the Long Safety Selector Paddle on the right side.
- Step 12: Move the Selector lever through the various modes: Safe, Semi, and Binary®. The detent should lock in at each location.
- Step 13: Reassemble the lower receiver to the firearm per the manufacturer's directions.
- Step 14: Perform the “Dry Fire Function Test” on the following page before testing with live ammunition.



Figure 1. BFSIII® Dry Fire Function Check List

WARNING: Always ensure that your firearm is completely unloaded before performing a dry fire test. Remove the ammunition magazine, and ensure that there is not a loaded round in the chamber.

WARNING: Even though you believe your firearm is unloaded, it is always important to point your muzzle in a safe direction while performing the following tasks.

- Function check the Safety.**
 - Ensure that the Hammer is cocked on the sear.
 - Move the Safety Selector to “Safe” Mode.
 - Pull the Trigger.
 - The Trigger should not move.
 - Release the trigger and move the Safety Selector back to “Semi” Mode.
 - The Hammer should not fall forward.
- Function check the transition from “Semi” to “Safe.”**
 - Ensure that the Hammer is cocked on the sear.
 - Move the Safety Selector to “Semi” Mode.
 - Pull the Trigger and keep it held back.
 - The Hammer should fall forward and impact the Firing Pin.
 - With the Trigger still held back, re-cock the Hammer on the Disconnecter.
 - While turning the selector back to “Safe” Mode, the Hammer should not move.
 - Release the Trigger.
 - The Hammer should fall to the sear.
- Function check Semi Mode.**
 - Ensure that the Hammer is cocked on the sear.
 - Pull the Trigger and keep it held back.
 - The Hammer should fall forward and impact the Firing Pin.
 - With the Trigger still held back, re-cock the Hammer.
 - It should now be held back by the Disconnecter.
 - Release the Trigger.
 - The Hammer should now fall to the sear and not to the Firing Pin.
- Function check Binary® Mode, Scenario I**
 - Ensure that the Hammer is cocked on the sear.
 - Move the Safety Selector to “Binary” Mode.
 - Pull the Trigger and keep it held back.
 - The Hammer should fall forward and impact the Firing Pin.
 - Re-cock the Hammer on the Disconnecter.
 - Slowly release the Trigger until the Hammer falls to the Firing Pin.
 - Keep your finger held at the point that the Hammer fell forward
 - Re-cock the Hammer on the Disconnecter.
 - Release the Trigger and the Hammer should reset to the Sear.
- Function check Binary® Mode, Scenario II**
 - Ensure that the Hammer is cocked on the sear.
 - Move the Safety Selector to “Binary” Mode.
 - Pull the Trigger and keep it held back.
 - The Hammer should fall forward and impact the Firing Pin.
 - Re-cock the Hammer on the Disconnecter.
 - Continue to hold the Trigger back
 - Rotate the Safety Selector from “Binary” Mode to “Semi” Mode.
 - Release the Trigger.
 - The Hammer should fall off the Disconnecter and rest on the Sear.
- Function check Intermodal travel from Binary® Mode to Semi Mode.**
 - Ensure that the Hammer is cocked on the sear.
 - Ensure that the Safety Selector is in “Binary” Mode.
 - Pull the Trigger and keep it held back.
 - The Hammer should fall forward and impact the Firing Pin.
 - Re-cock the Hammer on the Disconnecter.
 - Continue to hold the Trigger back
 - Rotate the Safety Selector from “Binary” Mode to “Semi” Mode.
 - Release the Trigger.
 - The Hammer should fall off the Disconnecter and rest on the Sear.
- Function check the transition from “Semi” to “Binary,” Scenario I**
 - Move the Selector to “Semi” Mode.
 - Ensure that the Hammer is cocked.
 - Pull the trigger and keep it held back.
 - The Hammer should fall forward and impact the Firing Pin.
 - With the Trigger still held back, re-cock the Hammer on the Disconnecter.
 - Hold the Trigger back while turning the Safety Selector to Binary® Mode.
 - The Selector should not be able to turn to Binary® Mode.
 - The Hammer should not have fallen while manipulating the selector.
 - Now release the Trigger.
 - The Hammer should fall off the Disconnecter & catch on the sear.
- Function check the transition from “Semi” to “Binary,” Scenario II**
 - Move the Selector to “Semi” Mode.
 - Ensure that the Hammer is cocked.
 - Pull the trigger and keep it held back.
 - The Hammer should fall forward and impact the Firing Pin.
 - With the Trigger still held back, re-cock the Hammer on the Disconnecter.
 - Hold the Trigger back while turning the Safety Selector to Binary® Mode.
 - The Selector should not be able to fully turn to Binary® Mode.
 - Continue to maintain pressure on the Selector.
 - Release the Trigger while continuing to maintain pressure on the Selector.
 - The Hammer should not move.
 - Now release pressure on the Selector.
 - The Hammer should fall off of the Disconnecter and be caught by the Sear.