## 2A ARMAMENT COMMITMENT



Congratulations on the purchase of your new rifle. At 2A Armament we are committed to exceptional craftsmanship and quality in the firearms we produce. Our growing in house manufacturing has evolved into one with state of the art equipment and process controls. Maximizing that technology coupled with hand finishing of every part, result in unsurpassed fit and finish. We take pride in differentiating ourselves by creating innovative features in our products and providing exceptional service. We are confident that you will feel the same pride in ownership as we have in crafting this rifle. We encourage you to take the time to fill out the product registration sheet at the end of this manual to help us serve you.

Should you have any questions or feedback please email support@Za-arms.com

The 2A Armament Team

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## 2A ARMAMENT RIFLE INFORMATION



Model:			_ Serial Number:					
Date of Purchase:	_/	_/	Purchased From:					
Description/Accessories/N	lotes:							
			***************************************					

Make a copy of this page. Attach your receipt/proof of purchase to this and maintain in a safe place. This information will be necessary for insurance purposes in the event your rifle is damaged, stolen, or returned for warranty or factory service.

This manual is intended for all 2A Armament ARIS and ARIO based platforms. Your rifle may differ slightly from the illustrations provided here, however they will be very similar and still apply. All illustrations shown are of our BLR 16 (Balios Lite) rifle.

For warranty, factory service, or questions please email support@2a-arms.com

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### ADVISORIES & WARNINGS



- This is a firearm and must be treated with appropriate caution. This product is potentially lethal, and is classified
  as a firearm by the Bureau of Alcohol, Tobacco, Firearms and Explosives (BATFE).
- Improper handling of this firearm can result in unintentional discharge and cause personal injury, death or damage to property.
- Please read all the instructions and warnings contained in this operating manual before attempting to handle, load or utilize this firearm.
- 2A Armament recommends that you carefully read and fully understand this operating manual in its entirety before operating this firearm. We also strongly recommend that you receive proper training from a certified firearms instructor in the safe use and handling of all firearms prior to use.
- This Operating Manual should always accompany this rifle as a reference guide to the safe handling of this firearm.
- Only use high quality domestically produced commercial ammunition (SAMMI specifications) or high quality surplus NATO specification ammunition that is clean and in good condition.
- The use of re-loaded, hand loaded, remanufactured or other non-standard ammunition voids any factory warranty of this rifle.
- All firearms are always considered loaded until you establish they are not. While keeping the rifle pointed in a safe direction, ensure that the selector switch is on safe, remove the source of ammunition from the firearm, lock the bolt to the rear using the bolt catch, visually and physically check to make sure that there is no ammunition in the chamber and then check a second time.
- Never let the muzzle cover anything you are not willing to destroy.
- Keep your finger off the trigger until your sights are on the target and you are ready to shoot.
- Be sure of your target. Know what is in front of it and what is behind it.
- Always make sure that the bore, muzzle, chamber and action are clear of any obstructions.
- Always use eye and hearing protection when shooting.
- Never leave a loaded firearm unattended.
- Before setting the firearm down or handing over to another person, ensure that the safety is on and the firearm is unloaded.
- Children are naturally curious about firearms; take extra precautions with firearms that could have the possibility to be around children, including the use of a locking device.

### ALTERATION & MODIFICATION

This 2A Armament product is a precision tool with many complex parts that must relate and function correctly with other parts in order for proper and safe operation. As such, this product was manufactured to perform properly with the original parts as designed. Any alteration or modification is your responsibility to make. It is your responsibility to ensure that any parts you add to this rifle are compatible, installed correctly, and that neither the originals nor the replacements are altered or changed. Putting a rifle together improperly or with incorrect or modified parts can result in a damaged rifle, serious personal injury, or death to you and others through malfunction. Always have a qualified armorer or gunsmith work on your firearms.

**Governing Law**: Any claim relating to 2A Armament products shall be governed by the laws of the State of Idaho without regard to its conflict of law provisions.

### FIREARM SAFETY RULES

- Use only the correct ammunition for your firearm. Your firearm is only designed to utilize a specific ammunition. This information is stamped on the barrel. Ammunition is labeled on the container that it comes in as to what the caliber is along with additional information. Only use high quality commercially produced ammunition or high quality surplus NATO specification ammunition that is clean and in good condition. Do not use re-loaded, hand loaded, remanufactured or other non-standard ammunition. This voids any factory warranty of this Firearm.
- Always use eye and hearing protection. Firearms are loud and emit hot gases and debris. Always use eye and hearing
  protection when using firearms to prevent hearing loss or damage to your vision.
- Never use alcohol, over-the-counter, prescription, or other drugs before or while shooting. Alcohol, as well as any
  other substance likely to impair normal mental or physical bodily functions, must not be used before, while handling, or while
  shooting firearms.
- Store and keep your firearms so they are not accessible to unauthorized persons. There are dozens of commercially
  available firearm locking devices including cable mechanisms and safes. Please use/utilize one to prevent unauthorized
  use by children or anyone else that is prohibited from firearm usage. Prevent a tragedy by using good safety practices.
- Cleaning. Preventive maintenance inspections and cleaning should be done prior to and after shooting. Taking proper care
  of your firearm will give you greater accuracy, extend the life of the firearm and maintain its value. During periods of heavy
  use, ensure proper lubrication to maintain the efficiency of your firearms.

### DANGEROUS PROCEDURES



- Be sure the Cam Pin and Firing Pin Retaining Pin are installed in the Bolt Carrier Group correctly. If they are not, your rifle can still fire but it could possibly explode, causing you or others personal injury or harm.
- DO NOT exchange or switch Bolt assemblies from one rifle to another. This action could cause personal injury to you
  and others and could damage your rifle.
- If your firearm fails to fire after the hammer falls onto the firing pin when pulling the trigger, hold the trigger and keep it pointed towards the target and wait 30 seconds. If a hang fire has occurred, the round will fire within 30 seconds. If the round does not fire, remove magazine, eject the unfired round and examine the primer. If firing pin indent is light, misaligned or non-existent, have your firearm examined by a competent gunsmith. If firing pin indent on primer appears normal (in comparison to previously fired rounds) assume faulty ammunition; appropriately dispose of misfired round from other live ammunition; reload and resume firing.

### THE 2A DIFFERENCE

2A Armament strives to differentiate our products from other manufacturers through innovation in design and aesthetics to provide a very light weight, high quality and reliable firearm. Some unique proprietary and standard characteristics that make up the 2A Difference are listed here:

- 7075 billet aluminum matched receiver sets machined for ultra-light weight including:
   Flared magazine well | Integrally machined ergonomic trigger guard | Captive detent screws | Threaded bolt catch screw
   Rear tensioning screw | Retained port door rod
- Handguard features:
- 2A proprietary attachment, no timing, solid lock up and recessed set screws for smooth finish and feel | Machined T markings
- \* Some of the lightest barrels on the market
- Extensive use of titanium parts throughout: Through drilled Ti take down pins | Light weight Ti gas block | Ti handguard barrel nut | Ti muzzle device
- Bolt Carrier Group: heat treated, QPQ and black nitride finished. Every bolt is magnetic particle inspected.
- Self-aligning 8 position receiver extension with chamfered edges for smooth operation and feel.









FUNCTIONS CHECK

"SAFE": Rifle will not fire. The safety selector lever cannot be on safe unless rifle is charged. Always place on "Safe" when loading and unloading. (figure 1)

"FIRE": Rifle will fire one round each time the trigger is pulled with the safety selector on "Fire". (figure 2)

## FUNCTIONS CHECK - CHARGING AND DRY FIRE

Remove the magazine from the rifle and ensure that there is ND ammunition in the chamber

Ensure that there is no ammunition in the chamber. Point the rifle in a safe direction. Pull the charging handle to the rear and release (figure 3). Move the safety selector switch to "Safe". Pull the trigger. The hammer should not fall.

Ensure that there is no ammunition in the chamber. Point the rifle in a safe direction. Move the selector switch to "Fire". Pull the trigger on an empty chamber to "dry fire" the rifle. The hammer should fall (figure 4).











FUNCTIONS CHECK - TRIGGER RESET

While holding the trigger to the rear on an empty chamber and while the safety selector is still on "Fire", pull back on the charging handle and release (figure 5). Slowly release the trigger until you feel and hear an audible "click". This is your trigger resetting from the disconnector to the hammer. This is all the forward movement necessary to reset the trigger for your next shot.

(figure 6)

While still pointing the rifle in a safe direction, slowly pull the trigger to the rear for the hammer to fall again (on an empty chamber) to dry fire (figure 6, shown with upper receiver removed for clarity).

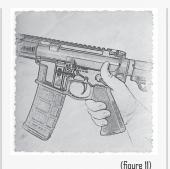
## **GENERAL OPERATION - LOADING**

While keeping the rifle pointed in a safe direction, pull back on the charging handle while pushing on the bottom portion of the bolt catch located on the left side of the rifle (figure 7). This will lock the bolt to the rear. Place safety selector switch on "safe".

Note: Push the charging handle forward and lock in the front position. A latch on the charging handle will engage on the upper receiver (figure 8).









**GENERAL OPERATION - LOADING** 

Ensure that the safety selector switch is on "safe". With the bullets pointed forward and keeping the rifle pointed in a safe direction, place the magazine in magazine well and push upwards until the magazine is held in place by the magazine catch (figure 9). Give a slight tug to the magazine to ensure that your magazine catch holds it firmly in place.

Press the top portion of the "bolt catch" to release the bolt forward (figure 10). Your rifle is now loaded and ready to fire. You may close the ejection port cover. It will open automatically when you fire your rifle.

### GENERAL OPERATION - FIRING

After properly loading the rifle (with the safety selector on "Safe") line up your sights onto the target. Rotate the safety selector from "Safe" to "Fire". Pull back on the trigger and the rifle will fire one round (figure 11). Each and every time you pull back on the trigger the rifle will fire one round until the rifle expends all the ammunition in the magazine or you decide to stop firing.

Once you are no longer firing the rifle, remove your finger off the trigger and rotate the safety selector to "Safe" (figure 12). If you expended all the ammunition from the magazine your bolt catch should have locked the bolt carrier to the rear on its own. If you decided to stop firing, there will be a live round still in the chamber. Remember to treat all firearms as if they are loaded.











10)

## GENERAL OPERATION - UNLOADING

While keeping the rifle pointed in a safe direction and the safety selector remaining on "Safe", remove the magazine from the rifle by depressing the magazine release button and removing the magazine from the rifle ((figure 13)). Pull back on the charging handle fully to the rear three (3) times. This will ensure that any ammunition is extracted from the chamber.

While holding the charging handle to the rear, push in the bottom portion of the bolt catch located on the left side of the rifle locking the bolt to the rear. Visually and physically inspect the chamber to insure the rifle is clear of any ammunition (figure 14).

## FIELD STRIPPING - RECEIVERS

With your unloaded rifle, pull back on the charging handle and check that the chamber is clear of any ammunition. There should be none. Release the charging handle and slide the bolt to the forward position. Release the charging handle to move the bolt to the forward position. See section above, "Unloading."

Push the rear take down pin from the left to the right and pull until the pin comes to a positive stop (figure 15). The upper and lower receiver assemblies will now pivot on the front take down pin (figure 16).









# FIELD STRIPPING - RECEIVERS (CONTINUED)

The front take down pin may also be pushed from the left to the right and pulled until the pin comes to a positive stop to separate the upper and lower receiver assemblies (figure 17).

Put down the lower receiver assembly. Hold the upper receiver assembly in an upside down angled position as shown. Pull back on the charging handle about 1-2 inches (figure 18).

## FIELD STRIPPING - BOLT CARRIER

Grasp onto the bolt carrier group and remove from the upper receiver (figure 19).

Remove the firing pin retaining pin from the side of the bolt carrier. Push with punch and then pull from opposite side (figure 20).











FIELD STRIPPING -BOLT CARRIER (CONTINUED)

Hold the bolt carrier as shown; the firing pin should fall loose (figure 21).

Press the bolt into the bolt carrier to allow the cam pin to rotate clear of the gas key. Rotate the cam pin head ¼ turn and pull the cam pin out from the bolt (figure 22).

(figure 22)

## FIELD STRIPPING - BOLT

Remove the extractor pin from the bolt (Figure 23). A punch is recommended.

Extractor removal. If the extractor spring were to come free from the extractor, ensure the large end of the extractor spring is seated completely into the recessed pocket of the extractor (Figure 24). This is important for reliable cycling.









(figure 25)

(figure 26)

(figure 27)

#### .

## FIELD STRIPPING - BUFFER & BUFFER SPRING

Press in buffer; depress the buffer detent pin to release the buffer from the receiver extension (figure 25). Remove buffer and buffer spring.

The hammer should be in the down position to allow the buffer and buffer spring a clear path (figure 26).

## FIELD STRIPPING - COMPLETE

Your field stripping of the rifle is now complete (figure 27).

## FIELD ASSEMBLY - BUFFER

Insert the buffer spring and buffer into the receiver extension tube and compress until the buffer detent secures the buffer as shown (figure 28).









(figure 29)

(figure 30)

(figure 31)

## FIELD ASSEMBLY - BOLT & BOLT CARRIER

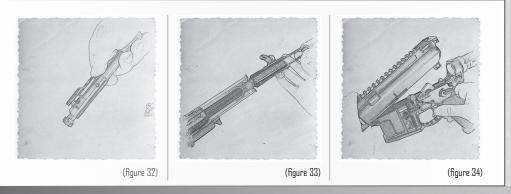
With the extractor spring well seated on the extractor, press the extractor onto the bolt, compressing the spring, and push in the extractor pin until flush (figure 29). A steel punch may be helpful.

Insert the bolt into the bolt carrier with a twisting motion. Insert the cam pin into the bolt carrier and rotate ½ turn (figure 30). This allows for firing pin to be installed. **Note**: if the cam pin will not go in, rotate the bolt 180 degrees (it only goes in one way).

### FIELD ASSEMBLY

Insert the Firing Pin through the bolt carrier slot and then into the bolt. Insert the firing pin retaining pin into the side of the bolt carrier to lock the firing pin in place (figure 31). Note: with the bolt carrier upside down, push down on the head of the retaining pin as it is being pushed in to insert completely (pliers may be helpful).

To verify correct assembly, push the bolt into the bolt carrier and hold upright. The firing pin should NOT fall free. If the firing pin falls free, check the seating of the firing pin retaining pin.



## FIELD ASSEMBLY (CONTINUED)

Then, holding firmly, flick the bolt carrier group downward with enough force so the bolt moves to the forward position (figure 32). The bolt should not fall free. If it does, check that the campin is installed.

Install the charging handle back into the upper receiver charging handle guide track. Extend the charging handle out about 2". With the bolt extended, place the bolt carrier group back into the upper receiver and push the bolt carrier group and charging handle forward until it locks into place (figure 33).

Reassemble the upper and lower receiver assemblies together and push in both the front and rear take down pins (figure 34).

Important: Now perform Function Check as shown in prior section

### CLEANING & INSPECTIONS



After firing your rifle, make sure to clean it as soon as possible. This will make it easier to clean and prevent the onset of corrosion. If your rifle is to be stored for any length of time, be sure to clean and lubricate it twice a year in temperate climates and monthly in humid climates. If the rifle were to get wet be sure to clean and lubricate it immediately to prevent the poset of cust and corrosion.

Using a "CLP" (Clean, Lubricate, Protect) type product, clean all rifle areas of powder fouling, corrosion, dirt or other debris inside and out. Note: Do not use a hard wire brush on the aluminum receivers or rails, it will cause damage.

Inspect your rifle and components for excessive wear, cracks, chips or pitting.

Firing Pin - Replace if bent, cracked or if tip has sharp or too blunted edges

Cam Pin - Replace if cracked or chipped

Bolt - Replace if cracks or fractures around the cam pin hole or locking lugs

Firing Pin Retaining Pin - Replace if severely bent

Extractor - Replace if the extractor has chipped or broken edges on the lip that engages the cartridge rim

Make sure that spring and rubber insert is installed and seated

Barrel - Check for any obstructions

## LUBRICATING

Your rifle is extremely reliable when lubricated correctly. The benefits of proper lubrication include:

- Eases movement of surfaces that come into contact with one another by preventing friction
- Protects metal from environmental conditions
- Assists in the cleaning of the rifle and components

## LUBRICATING (CONTINUED)

Lubrication factors to consider are climate and frequency of use. Lubricating a rifle for use in a northern climate with winter will be considerably different than an arid desert summer climate. In either case, the main lubricating points are provided here.

Light coating barely visible to the eye should be applied:

- Inside the Bore and Chamber
- Firing pin

Charging handle

Trigger hammer pin

Buffer and buffer tube

Ejector

Take down pins

Iron sights (if applicable)

Bolt catch

Heavier coating (thick enough to be spread with a finger) should be applied on:

- Bolt
- Bolt carrier (inside and out)
- Cam pin

### **BARREL BREAK-IN**

Proper barrel break-in is essential for obtaining the best performance from your rifle. The below process is relatively easy to perform and will improve and maintain the accuracy longer for your rifle. All barrels have the slightest of imperfections that can only be mitigated with firing and then subsequent cleaning of the barrel. All break-in should be done in a cold bore. No more than one shot every 5 seconds for the procedure. Do not rapid fire rifle immediately upon receipt, wait until after break-in or an extended slow-fire session.

Items needed:

- 18 rounds of ammunition
- Copper solvent bore cleaner
- Cleaning rod, rod guide, and patches

## BARREL BREAK-IN (CONTINUED)



The following range procedure is recommended:

- 1. Load one round into magazine, Shoot once, place rifle on "safe"
- 2. Remove magazine, verify chamber is clear, and remove upper receiver assembly
- 3. Clean copper out with patches, copper solvent, rod and rod guide. Clean from the chamber end out.
- 4 Reassemble rifle and perform steps 1-3 two more times.
- 5. Load 5 rounds into magazine and shoot all five rounds (with minimum 5 seconds between shots). Place rifle on "safe"
- 6. Remove magazine, verify chamber is clear, and remove upper receiver assembly
- 7. Clean copper out with patches, copper solvent, rod and rod guide. Clean from the chamber end out.
- 8. Reassemble rifle and perform steps 5-7 with 10 rounds

## THE 2A ARMAMENT LIFETIME WARRANTY

2A Armament is committed to uncompromising quality to the point that we warrant all our products for life to the original owner. Should there be any defects in material or workmanship we will, at our option, repair or replace (with same or comparable product).

This warranty covers parts and labor. This warranty does not cover misuse, abuse, unauthorized repair or modification, alteration of the original product, normal wear or cosmetic damage that does not affect product performance.

As with all manufacturers we do not cover any damage from the use of high pressure/ high velocity, reloaded, remanufactured or other non-standard ammunition. For reliable performance and accuracy we recommend the use of SAMMI or NATO Spec, commercially manufactured ammunition.

At 2A Armament we understand our customers have choices, and we intend to satisfy our customers by standing behind our products

Please contact us at support@2a-arms.com for any warranty related questions or support.

### PRODUCT REGISTRATION

We believe now that you own a 2A rifle, you will be a customer for life. By registering your rifle with us, we can strengthen the relationship by learning more about what our customers want, provide them with tips to getting the best performance from their rifle, provide them information on new product releases, and offer periodic special promotions.

We encourage you to take the time to provide as much information as you would like and what your preferences are with items listed below. You can always change them later. You have our word; any information provided is for 2A Armament internal use only. We will never distribute or sell any customer information.

Name:								
Address:								
Email:								
Model Purchased:								
Do you wish to receive new product notifications, p	promotional	events	, 2A upd	ates?	Y/N			

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