

REVOARMS RA15 SEMI-AUTOMATIC CARBINE PLATFORM

OPERATIONS & MAINTENANCE MANUAL

Calibers: .223 Remington / 5.56x45mm NATO & .300 AAC Blackout (.300 BLK)

OFFICIAL TECHNICAL USER MANUAL • MADE IN ITALY • REVISION 1-2026

1. INTRODUCTION AND FUNDAMENTAL SAFETY

This manual provides instructions for the safe operation, field stripping, maintenance, and handling of the AR-15 platform operating in .223 Remington / 5.56x45mm NATO and .300 AAC Blackout (7.62x35mm) calibers. Because these calibers share most mechanical components (including the bolt carrier group and magazines), strict attention must be given to preventing accidental ammunition cross-loading.

❑ CRITICAL HAZARD WARNING - INCORRECT CHAMBERING

NEVER CHAMBER A .300 BLACKOUT CARTRIDGE INTO A BARREL CHAMBERED IN .223 REMINGTON / 5.56 NATO!

A .300 BLK cartridge can chamber in a .223/5.56 firearm. If the trigger is pulled, the 7.62mm projectile will be forced through the 5.56mm barrel, causing a CATASTROPHIC EXPLOSION of the firearm, severe physical injury, or death.

- ALWAYS identify and mark magazines and ammunition using color-coded bands or clear labels.
- Visually verify the headstamp on the cartridge case before loading.

2. OPERATING AND LOADING INSTRUCTIONS

2.1 Magazine Loading and Charging

Insert the .223 Rem or .300 BLK cartridges (VERIFY WHICH AMMUNITION THE FIREARM IS SPECIFICALLY CHAMBERED FOR) into the magazine by pushing the rim down and sliding it backward under the magazine lips. Insert the loaded magazine into the magazine well until a firm, audible 'click' is heard.

2.2 Cocking / Chambering

- Ensure the safety selector is in the **SAFE** position.
- Insert the loaded magazine into the magwell until the magazine catch locks securely.
- Firmly pull the side charging handle fully to the rear until it stops.
- Release the charging handle completely. **DO NOT ride or accompany the handle forward** to prevent failure to feed or out-of-battery issues.

2.3 Firing

- Rotate the selector lever from **SAFE** to **FIRE**.
- Maintain a firm, proper shooting stance and grip on the firearm.
- Align the sights on the intended target.
- Apply smooth, steady pressure to the trigger until the hammer releases.

3. SAFETY CLEARING AND INSPECTION PROCEDURE

Follow this mandatory safety procedure before handling, inspecting, or performing maintenance on the firearm:

- 1. Orientation:** Point the firearm in a safe direction at all times.
- 2. Magazine Release:** Press the magazine release button and remove the magazine.
- 3. Lock Bolt Open:** Pull the charging handle fully to the rear and engage the Bolt Catch lever to lock the bolt back.
- 4. Visual & Tactile Inspection:** Inspect the chamber, bolt face, and magazine well to verify that no live round or casing remains.
- 5. Barrel Caliber Check:** Verify the caliber marking engraved on the barrel (*5.56 NATO* or *.300 BLK*) to confirm the active barrel configuration.
- 6. Safety Engagement:** Gently release the bolt forward and set the manual safety selector to the SAFE position.

4. FIELD STRIPPING

Field stripping is performed without special tools for routine cleaning and inspection.

- 1. Takedown Pin Removal:** After ensuring the firearm is completely clear, push the rear takedown pin from left to right until it reaches its stop in the lower receiver.
- 2. Pivot Upper Receiver:** Pivot the upper receiver downward away from the lower receiver.
- 3. Bolt Carrier Group (BCG) Disassembly:** Pull the charging handle slightly back and withdraw the BCG from the rear of the upper receiver. Remove the firing pin retaining pin, slide out the firing pin, rotate the cam pin 90 degrees, and pull the bolt out from the bolt carrier.
- 4. Buffer and Spring Removal:** Depress the buffer retainer pin inside the buffer tube and carefully extract the buffer and recoil spring.
- 5. Front Pivot Pin (Optional):** Push the front pivot pin from left to right to completely detach the Upper Receiver from the Lower Receiver if necessary.

5. ROUTINE CLEANING AND LUBRICATION

5.1 Cleaning Procedure

- **Barrel & Chamber:** Pass a bronze bore brush soaked in solvent (powder/copper remover) from the chamber toward the muzzle. Follow with clean, dry patches until clear.
- **Bolt Carrier Group (BCG):** Remove carbon deposits from the bolt face and extractor using a nylon brush and solvent. Wipe external surfaces clean. Every 1,000 rounds, remove and clean the firing pin thoroughly. Clean around the firing pin hole using a small brush or patch wrapped around a 3mm rod, then blow clear with compressed air.
- **Receivers & Trigger Group:** Clean the magazine well, fire control group, and buffer tube interior with a clean microfiber cloth.
- **Gas Operating System:** Carbon fouls the tail of the bolt and inside the carrier expansion chamber. Use a dedicated carbon scraper and solvent to remove buildup from the cam pin, firing pin, and expansion chamber.

5.2 Key Lubrication Points

The AR-15 platform requires generous lubrication on sliding surfaces to ensure maximum reliability:

- External sliding surfaces of the Bolt Carrier Group (BCG).
- Cam Pin and the curved cam track slot.
- Bolt gas rings (stagger gaps to prevent gas leakage).
- Bolt locking lugs and barrel extension recess.
- Light protective coat on the exterior barrel surface if exposed to moisture.

6. TROUBLESHOOTING GUIDE

Malfunction	Probable Cause	Corrective Action
Failure to Feed (FTF)	• Improperly seated magazine • Damaged or dirty magazine lips • Weak grip / limp wristing	• Remove and re-seat magazine firmly • Clean or replace magazine • Maintain firm stance and grip during firing
Failure to Extract (FTE)	• Dirty/fouled chamber • Damaged or dirty extractor / spring	• Thoroughly clean chamber & barrel extension • Inspect extractor claw and spring; replace if worn
Failure to Fire	• Hard primer or defective round • Carbon buildup in firing pin channel	• Wait 30 seconds pointing in a safe direction, then cycle bolt • Disassemble BCG and clean firing pin

channel		
Bolt Fails to Lock Back on Last Round	• Damaged/incompatible magazine • Dirty or sticking Hold Open mechanism	• Test with original factory magazines • Clean and lubricate bolt catch mechanism
Failure to Cycle / Under-gassed	• Gas block or gas tube loose/obstructed • Subsonic .300 BLK without suppressor • Buffer too heavy (e.g., H2/H3)	• Inspect gas block and tube for alignment/leaks • Use lighter buffer (CAR/H1) with subsonic ammo • Adjust gas block if adjustable model