



BBC .22 LR SUPPRESSOR

CLEANING & MAINTENANCE MANUAL

IMPORTANT SAFETY NOTICE

⚠ READ THIS MANUAL COMPLETELY BEFORE CLEANING

Failure to properly clean and maintain your suppressor can result in:

- Reduced performance
- Component seizure
- Unsafe operating conditions

Always follow firearm safety rules and applicable laws.

1. GENERAL INFORMATION

The Royal Arms BBC22 is a .22 LR rimfire suppressor designed for reliability and sound reduction. Due to the nature of rimfire ammunition, regular cleaning is required to prevent excessive carbon and lead fouling.

This manual provides safe, general guidance for cleaning and routine maintenance.

2. SAFETY PRECAUTIONS

⚠ WARNING

- Ensure the firearm is **unloaded and cleared**
- Allow suppressor to cool completely
- Remove suppressor from host firearm before cleaning
- Wear **eye protection** and **nitrile gloves**
- Lead exposure is hazardous — wash hands thoroughly after handling

⚠ LEGAL NOTICE

This suppressor is a regulated device. Do not modify, alter, or permanently change any component. Cleaning must not affect structural integrity or dimensions.



3. CLEANING INTERVALS

Due to heavy fouling common to .22 LR ammunition:

Usage Type	Recommended Cleaning
Standard velocity ammo	Every 300–500 rounds
Bulk / dirty ammo	Every 200–300 rounds
Declined performance	Immediate cleaning

4. REQUIRED TOOLS & SUPPLIES

- Nitrile gloves
- Eye protection
- Nylon or brass brush
- Soft cloths or shop towels & Cotton swabs
- Plastic or wooden scraper
- Nylon or brass brushes (avoid steel brushes on aluminum)
- Aluminum-safe cleaners (Forsaken Industries Carbon Cleaner, mild soap+warm water or dedicated gun cleaners that are aluminum safe)
- Optional
 - Plastic soaking tub
 - Light oil or anti-seize (threads only)

⚠ Do NOT use steel tools or abrasive media

5. DISASSEMBLY GUIDANCE

The BBC22 is user-serviceable:

- Disassemble only as intended when cooled and removed.
- Remove both end caps, using either a 5/8” socket (on the gear) or 1-1/8” Wrench on the flats
- Using a 1” wooden dowel push the spacer and baffle stack out.
- Keep components in original order and orientation
- Do not force seized components

If resistance is encountered, apply solvent and allow time to soak. If disassembly remains difficult, discontinue and contact Royal Arms.



6. CLEANING PROCEDURE

6.1 Outer Tube

- Wipe with solvent-dampened cloth
- Dry completely
- Lightly oil exterior and threads only

6.2 Internal Components (Baffles & Blast Spacer)

- Remove loose fouling using nylon or brass brush
- Allow solvent to soften carbon and lead deposits
- Gently scrape buildup without altering surfaces
- Do not polish, grind, or reshape components

⚠ NOT APPROVED

✗ Do Not use or do the following

- Ultrasonic cleaners (unless authorized)
- Acidic or corrosive chemicals
- Steel brushes or picks
- Grind, polish, or modify components
- Use corrosive or acidic chemicals
- NEVER USE – CLR, VINEGAR, AMMONIA, OR FLAMMABLE SOLVENTS
- Store the suppressor while dirty

7. DRYING & REASSEMBLY

- Ensure all parts are fully dry
- Apply minimal oil or anti-seize to threads only
- Reassemble carefully
- Hand-tighten only - torque spec of
- 35 in-lbs (inch-pounds)



8. FUNCTION CHECK

After cleaning and reassembly:

- Verify End Caps a flush and no threads are exposed.
 - Ensure no internal rattling
 - Verify secure attachment and alignment
 - Conduct a brief test fire before extended use
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9. STORAGE

- Store in a cool, dry environment
 - Do not store while dirty
 - Avoid long-term storage while mounted to a firearm
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10. SERVICE & SUPPORT

If you observe:

- Excessive lead buildup
- Seized components
- Physical damage or abnormal wear

Discontinue use and contact **Royal Arms** for service support.