

Armalite Rifle 15 Bolt Carrier Group Lubrication

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Proper lubrication of an AR-15's bolt carrier group (BCG) is one of those small rituals that separates "runs fine" from "runs like a charm." This isn't arcane magic — it's basic care: clean the grime, protect moving metal, and use the right product in the right places. Do it carefully, and your rifle will thank you with quieter, smoother operation and fewer malfunctions. Do it sloppily, and you'll have a pessimistic-looking BCG and a pocket full of lint.

First, safety. Unload the rifle completely. Remove the magazine, lock the bolt open, and visually and physically check the chamber to confirm it's empty. Point the rifle in a safe direction while you work. If you're not comfortable field-stripping the rifle yourself, stop and ask someone experienced or consult the owner's manual.

Disassemble and clean. Remove the upper from the lower, tip the BCG out, and separate the bolt, cam pin, firing pin, gas key, and carrier. Wipe off carbon and crud with a solvent and a brush. Focus on removing heavy buildup around the bolt lugs, carrier face, and inside the carrier where the gas key vents. A clean surface lets lubricant adhere and do its job — think of it as prep work for a tune-up, not an invitation to dwell on microscopic debris.

Now the lubrication: less is usually more. Over-lubing attracts dirt and carbon; under-lubing invites galling and wear. Use a quality firearm lubricant or CLP (clean-lubricate-protect). For heavy use or harsh environments, a high-temperature grease in select spots is acceptable; for most shooters, CLP or a light gun oil is sufficient. Apply sparingly and wipe away excess.

Where to apply (quick tour):

- Bolt lugs and cam path: A thin film on the bolt lugs where they interface with the barrel extension reduces friction. Wipe a light coat — you want glide, not a greasy puddle.
- Bolt body and extractor area: A small amount on the bolt body and a tiny drop on the extractor spring/seat keeps the extractor functioning smoothly and eases spring tension.
- Carrier rails (where the carrier rides in the upper receiver): Apply a thin line of lubricant so the carrier slides smoothly. Don't glob it on; excess will fling or attract grit.
- Gas key and fasteners: Light oil around the base of the gas key is fine. Ensure gas key screws are staked properly and secure — lubrication is not a substitute for proper torque and staking.
- Cam pin: A thin coat helps the cam action rotate cleanly through the carrier during cycling.
- Firing pin: One or two drops on the shank, wiped smooth, are sufficient to prevent corrosion and keep the pin moving freely.

Reassemble carefully and function-check. Replace the firing pin, cam pin, and bolt. Reinstall the BCG into the upper, attach the upper to the lower, and perform a basic function check to ensure the bolt locks, releases, and cycles as expected. A quick live-fire session or a controlled function check with dummy rounds (if you have them) will confirm everything is operating correctly.

Maintenance cadence: Clean and lube after extended shooting sessions, especially high-round-count days, or any time you experience feeding/ejection issues. For storage, a light protective oil on metal surfaces helps prevent corrosion. Keep spare parts and tools handy, and inspect the gas rings, extractor, and springs periodically for wear.

In short: be safe, be thorough, and be judicious with lubricant. Proper care keeps your AR-15 running reliably and reduces the chance of surprises out on the range.