



March 13, 2013 Rev 0

TECHNICAL NOTE 114: INSTALLATION OF ARMALITE'S® AR-30, AR-30A1, and AR-50A1 MUZZLE BRAKE KITS

NOTE: Please read these instructions thoroughly to determine if you are comfortable with the installation tasks. If you would like our Premier Services Division to install this kit into your firearm, please contact our sales department at PSD@armalite.com or 800-336-0184 x126. Kit installation by our Premier Services Division typically requires less than one hour of labor.

⚠ CAUTION: NEVER FIRE AN AR-30, AR-30A1, OR AR-50A1 WITHOUT ITS MUZZLE BRAKE INSTALLED. BOTH RIFLES, PARTICULARLY THE AR-50A1, GENERATE SIGNIFICANT RECOIL. FIRING THEM WITHOUT A MUZZLE BRAKE CAN CAUSE SERIOUS INJURY.

I. KITS AND KIT COMPONENTS

The instructions in this Technical Note apply to the following ArmaLite® Muzzle Brake Kits:

AR-30A1 MUZZLE BRAKE KIT for 300 Win Mag cal (30108120KIT)
AR-30A1 MUZZLE BRAKE KIT for 338 Lapua cal (30108121KIT)
AR-30 MUZZLE BRAKE KIT (P/N 30108122KIT)
AR-50A1 MUZZLE BRAKE KIT (P/N AR50000-1)

Each of our Muzzle Brake Kits contains a cast one-piece Muzzle Brake, an associated Muzzle Brake Nut, and a copy of this Technical Note. Make certain that your kit contains all of these components.

NOTE: Earlier versions of the AR-30 Muzzle Brake were comprised of an assembly of many components. Our current AR-30 Muzzle Brakes are much more robust one-piece castings similar to those on our AR-30A1s.

II. APPLICABILITY OF THE MUZZLE BRAKE KITS

ArmaLite offers Muzzle Brake Kits for our AR-30, AR-30A1, and AR-50A1 rifles. Four separate kits are offered to support this entire lineup of rifles.

Some customers of our bolt rifles desire to quiet them with sound suppressors. So, ArmaLite has standardized the muzzle threads on our current AR-30A1 and AR-50A1 rifles to be consistent with many sound suppressors currently on the market.

All current variants of the AR-50A1 (the AR-50A1, the AR-50A1 National Match, and the AR-50A1 in .416 Barrett) utilize a common muzzle brake. All of these rifles feature the same 1-14 muzzle thread.

AR-30A1s in 338 Lapua have 3/4 -24 muzzle threads.


AR-30A1s in 300 Win Mag have 5/8-24 muzzle threads.

AR-30s (which have been replaced in ArmaLite's lineup by AR-30A1s) have 5/8-18 muzzle threads.

III. TOOLS REQUIRED (NOT IN KIT)

SPANNER WRENCH
LOCTITE 272

IV. SAFETY INSPECTION PROCEDURE

 **WARNING: ALWAYS ASSUME ALL FIREARMS ARE LOADED. ANYTIME YOU HANDLE A FIREARM, YOU SHOULD IMMEDIATELY INSPECT IT TO ASSURE THAT IT IS COMPLETELY UNLOADED.**

 **WARNING: IF YOU KNOW NOTHING ELSE ABOUT YOUR ARMALITE® FIREARM, YOU MUST KNOW HOW TO UNLOAD IT AND CLEAR IT TO MAKE IT SAFE.**

1. Remove the magazine by pressing the magazine catch button and pulling the magazine down and out of the receiver. (For AR-30 and AR-30A1s only.)

NOTICE: THE MAGAZINE MAY FALL FREE WHEN THE MAGAZINE CATCH IS PRESSED. DON'T ALLOW THE MAGAZINE TO FALL ONTO A HARD SURFACE. DOING SO MAY DAMAGE THE MAGAZINE.

2. Extract the cartridge (if any) from the chamber. To extract a cartridge pull the bolt assembly fully to the rear. If there is a cartridge in the chamber, it should be extracted and ejected from the firearm.

3. Look into the chamber to assure that it does not contain a cartridge.

 **WARNING: NEVER ASSUME THAT THE CHAMBER IS EMPTY UNTIL YOU HAVE VISUALLY EXAMINED IT AND SEE THAT IT IS EMPTY.**

4. Remove any remaining cartridges from your magazines. (For AR-30 and AR-30A1s only.)



WARNING: THE STEPS IN UNLOADING YOUR FIREARM MUST BE FOLLOWED IN THE EXACT ORDER GIVEN. THE MAGAZINE MUST BE REMOVED BEFORE THE CHAMBER IS INSPECTED. IF YOU CLEAR THE CHAMBER BEFORE REMOVING THE MAGAZINE, YOU MAY REMOVE ONE CARTRIDGE FROM THE CHAMBER AND THEN, UPON CLOSING THE BOLT, CHAMBER ANOTHER CARTRIDGE FROM THE MAGAZINE. THE FIREARM WILL STILL BE LOADED. REMEMBER THAT A CARTRIDGE IN THE CHAMBER CAN STILL BE FIRED EVEN AFTER THE MAGAZINE IS REMOVED. (For AR-30 and AR-30A1s only.)

V. MUZZLE BRAKE KIT INSTALLATION PROCEDURE

1. Degrease the barrel's muzzle threads and the threads inside the muzzle brake.
2. Thread the muzzle brake nut completely onto the barrel.
3. Following the manufacturer's instructions, put Loctite 272 on the muzzle threads where the muzzle brake will sit.
4. Level your rifle's receiver left to right.
5. Thread the muzzle brake completely onto the barrel. Then back it off until its top surface is level.
6. Spin the muzzle brake nut forward until it contacts the muzzle brake. Check your receiver and muzzle brake with a level to make sure that they are both horizontal. Then, using a spanner wrench, snug the muzzle brake nut firmly against the muzzle brake. Allow the Loctite to cure according to the manufacturer's instructions.

P/N: #TECH NOTE 114

© 2013 ArmaLite, Inc. All rights reserved.

DNGR