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TECHNICAL NOTE 83: INSTALLATION OF ARMALITE'S® FREE FLOAT HANDGUARD RAIL KITS

“NOTE: Please read these instructions thoroughly to determine if you are comfortable with the installation tasks. If you would like our Service Department to install this kit into your firearm, please contact our sales department at sales@armalite.com. Kit installation by our Service Department typically requires less than one hour of labor.”

I. KITS AND KIT COMPONENTS

These instructions apply to the following ArmaLite® Free Float Handguard Rail Kits:

HANDGUARD RAIL KIT, 5” (P/N 10703615)
HANDGUARD RAIL KIT, 3” (P/N 10703613)
HANDGUARD RAIL KIT, 5” BOTTOM (P/N 10703611)

The ARMALITE® Handguard 5” and 3” Rail Kits include the following components:

ALLEN WRENCH, 1/8” (P/N EX7015)
FLAT HEAD SOCKET CAP SCREW (2 IN 3” KIT. 3 IN 5” KIT) (P/N 10703451)
T-NUT (2 IN 3” KIT. 3 IN 5” KIT) (P/N 10703450)

And ONE of the below-listed Rails:

HANDGUARD RAIL, 5” (P/N 10703465)
HANDGUARD RAIL, 3” (P/N 10703463)

The ARMALITE® Handguard 5” Bottom Rail Kit includes the following components:

ALLEN WRENCH, 1/8” (P/N EX7015)
SOCKET HEAD CAP SCREW (4 INCLUDED) (P/N 10703452)
HANDGUARD RAIL, 5” (P/N 10703466)

Make certain that your kit contains all of these components.

II. APPLICABILITY OF THE FREE FLOAT HANDGUARD KITS

ArmaLite® Rail Kits can be used on any AR-10® or M-15 Rifle or Carbine that has a round aluminum free-float handguard. The 3” rails are intended to fit in the short slots located at 1:30, 4:30, 7:30, and 10:30 on the handguard. (However, obviously you can install a 3” rail in a 5” slot if you choose to do so.) The 5” rails fit in the long slots located at 12:00, 3: 00, and 9:00. The bottom 5” rail fits against the threaded holes at 6:00.

If the eye relief of your optics so dictates, a 5” rail can be installed in the REAR 12 o’clock slot, or installed so that it straddles the two long 12 o’clock slots. However, you may need to remove the handguard in order to install a rail in the rear slot or straddling the two slots.

NOTE: Each of the free float handguards has seven radial locations for rails. HOWEVER, seven rails cannot be installed simultaneously. At most, five can be installed simultaneously --- by installing a bottom rail at 6 o’clock and four 3” rails at 1:30, 4:30, 7:30, and 10:30. Another popular configuration is a bottom rail at 6 o’clock and 5” rails at 12, 3, and 9 o’clock. Just remember that rails cannot be installed in slots that are adjacent to each other.

III. TOOLS REQUIRED (NOT IN KIT)

NONE

IV. KIT INSTALLATION PROCEDURE

This procedure assumes that you will be adding one or more Rail Kits to an AR-10® or M-15™ that has a round, aluminum free-float handguard.

V. REMOVAL OF ORIGINAL AR-10® OR M-15™ COMPONENTS



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. Place the safety selector on “SAFE”.

NOTE: If the firearm is not cocked, the lever cannot be pointed toward “SAFE”. If that is the case, pull the charging handle to the rear to cock the hammer. Then release the charging handle allowing the bolt carrier to go forward.

2. Remove the magazine by pressing the magazine catch button and pulling the magazine down and out of the receiver.



CAUTION: THE MAGAZINE WILL 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.

3. Extract the cartridge (if any) from the chamber. To extract a cartridge pull the bolt carrier assembly fully to the rear. If there is a cartridge in the chamber, it should be extracted and ejected from the firearm.
4. 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.

5. Remove any remaining cartridges from your magazines.



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.

6. No disassembly of the firearm is required. However, you may find it more convenient to manipulate the firearm if you remove the upper receiver and barrel assembly from the lower receiver assembly. If so, you may remove the upper receiver assembly from the lower receiver assembly as directed in your owner's manual. Then remove the bolt carrier assembly and charging handle from the upper receiver assembly.

VI. INSTALLATION OF 3" OR 5" HANDGUARD RAIL KIT

NOTE: It is easier to install the rail kit before you install the handguard. However, if you are installing the rail kit onto a completed firearm, this a handy process.

1. Degrease the screws and their holes in the T-nuts.
2. Rotate the handguard so that the slot you want to install the rail in is down. (Let gravity help you.) Slide a t-nut into the handguard so that it drops into the slot in the handguard. Reach in through an adjacent slot and hold the t-nut in place with a small screwdriver or allen wrench. Turn the handguard over. Place the rail and a screw over the t-nut and tighten loosely. Slide the rail toward the breech until you can slide in another t-nut, hold it in place, and install another screw loosely. Repeat until you have all the screws installed loosely. Then tighten all screws securely. As you tighten the screws, make certain that the t-nuts are rotated so that they remain in the handguard's slot. If necessary, reach into the handguard with your allen wrench or screwdriver to rotate the t-nuts to engage the slot. Then lightly pull up on the rail as you tighten the screws, drawing the rail back down to the handguard. Properly tightened into their slots,

ArmaLite rail kits resist recoil forces very well. However, if you are concerned about recoil, you can slide the rail to the forward end of its slot before you tighten the screws.

VII. INSTALLATION OF 5" BOTTOM HANDGUARD RAIL KIT

1. Merely degrease the four screws and their threaded holes in the handguard. Then install the screws securely.

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