



Knight's Armament Company

701 Columbia Blvd.

Titusville, FL 32780

Phone (321) 607-9900 * Fax (321) 383-2143

Cage Code: 1S002, DUNS No.05-403-8183, TIN: 59-1230657

ISO 9001 CERTIFIED ORGANIZATION

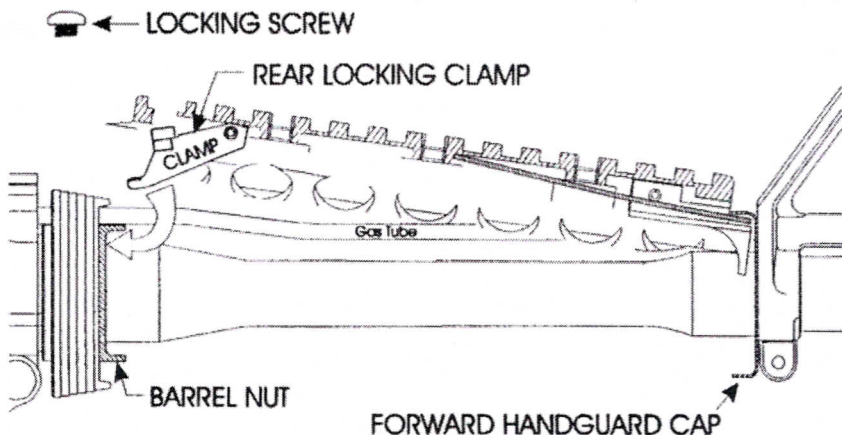


Certificate No. 13261

*When your life is on the line
...only the finest will do.*

Rail Adapter System (RAS) Installation Instructions (for M4 Carbine and M5 Rifle RAS: May 1999)

1. Confirm the Rifle or Carbine is unloaded and remove the standard handguards. Note the new Upper RAS has three rail sections.
2. With a 1/8-inch hex wrench, remove the upper RAS's rear locking bracket screw. Orient the upper RAS so the rear locking bracket is hanging down as shown below. Insert the front end of the upper RAS leaf spring under the forward handguard cap lip as shown.

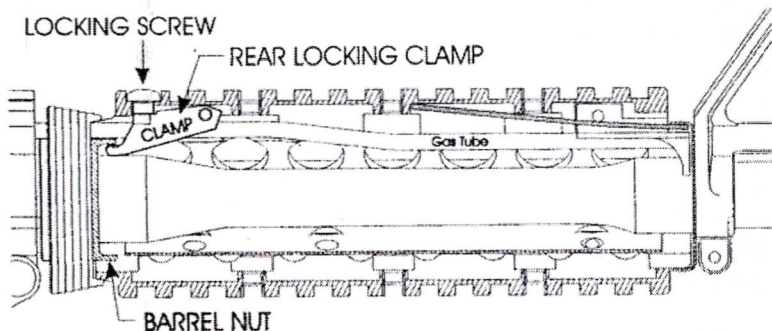


3. Continue installing the Upper RAS assembly in the same manner as a standard handguard by compressing the rear handguard slip ring and pivoting the rear of the upper RAS assembly down around the barrel nut. Ensure that the rear clamp's gas tube slot is straddling the gas tube and that the rear legs of the clamp slip under the barrel nut flange as the clamp makes contact with the barrel.

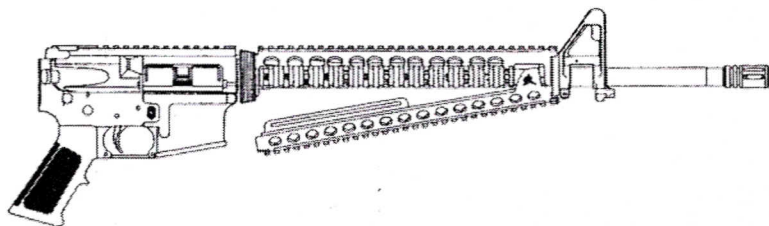
4. Release the rear handguard slip ring and confirm that it springs forward evenly around the rear flange of the upper RAS assembly. (Two RAS alignment pins automatically interface with cut-outs in the barrel nut's 10 and 2 o'clock positions to remove rotational play. This helps to retain the zero of accessories mounted on the rails.)

5. Install and tighten the rear clamp's locking screw to **only 20-INCH Pounds**. **DO NOT OVER-TIGHTEN THE SCREW**. If using an Allen Wrench, do not use its long arm for tightening, but insert the long arm into the screw hex and use the short arm for finger tightening. If you use the long arm, the extra torque will damage the RAS.

CAUTION: Tighten Locking Screw to only 20-Inch Pounds

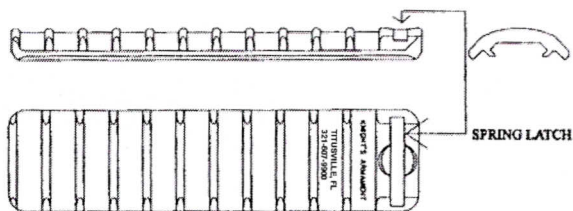


6. Install the lower RAS assembly in the same manner as a standard lower handguard by inserting its front edges into the forward handguard cap at the angle shown below. Orient the lower RAS assembly by confirming that the arrow on its inner surface points towards the muzzle of the weapon, and compressing the rear handguard slip ring while pivoting the lower RAS assembly up and into its final position.

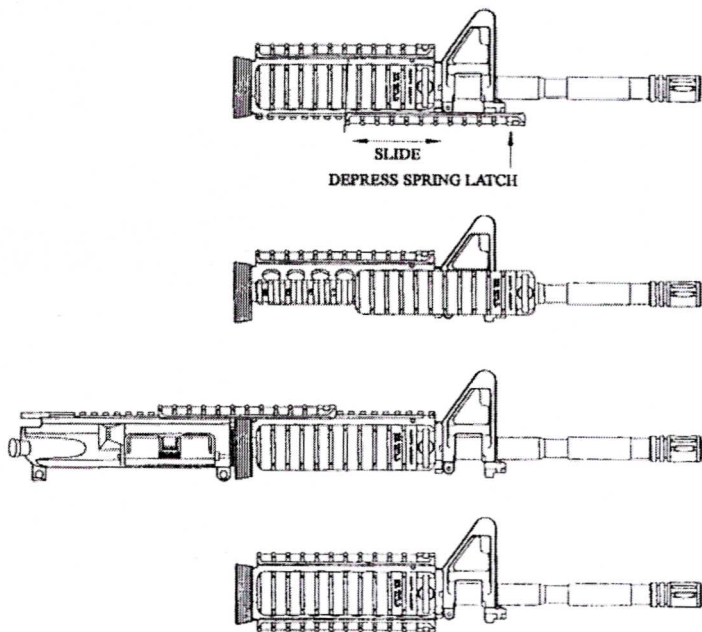


RAS HANDGUARD PANELS

Handguard panels are quickly attached and detached from the RAS. A spring latch at one end of each handguard panel automatically engages cutouts positioned at either end of the rail sections. To slide a handguard panel beyond a cutout, or to remove it, apply thumb pressure to its spring latch and slide it in the desired direction.



To cover the side and bottom quadrants, install the handguard panels from the muzzle end of the RAS.



To cover the top rail quadrant, install the handguard panels from the rear of the upper receiver group.

As the spring latch meets its cutouts at either end of the RAS rails, it will engage the cutouts. **Shorter handguard panels used on rails partially occupied by accessories should be oriented with their spring latches away from the accessories.**

To cover the side and bottom quadrants, install the handguard panels from the muzzle end of the RAS. To cover the top quadrant, install the handguard panels from the rear of the upper receiver group with the carrying handle or sighting system removed.

Several different lengths of handguard panels are available. For ease of reference, they should be referred to by the number of ribs along their outer surfaces, i.e., 11-rib, 9-rib, 6-Rib, 5-rib, 4-rib, and 2-rib. For example, the 6-rib panel is usually used with the KAC Forward Pistol Grip, Part Number 97098A, on the bottom rail.

Note: All handguard panels are interchangeable between the M5 Rifle and M4 Carbine RAS.

NOTE

The handguard panels perform two primary functions. (1) They are configured to protect the shooter's hands from direct skin contact with the metal parts of the RAS, and (2) they also protect the rail surfaces from excess wear and damage. For these reasons, handguard panels should cover the unused sections of each rail of the RAS at all times.

RAS ACCESSORY MOUNTING PROCEDURES

1. Every other recoil groove of the RAS is sequentially numbered. The numbers of the top rail have a "T" prefix while those of the bottom rail have a "B" prefix. Additionally, the numbers of the rail to the shooter's left have an "L" prefix while those of the rail to the shooter's right have an "R" prefix. The prefixes and numbers, e.g., B-14 or L-13, are provided to assist in remounting an accessory in the same position (memory aid) and to provide an "address" for every accessory position on the system.
2. Each RAS rail contains holes threaded $\frac{1}{4}$ "-20 TPI (standard camera adapter size) within recoil grooves along its length. These are provided for the attachment of standard camera/video accessories if required.



When your life is on the line
...only the finest will do.

Upper Adapter Rail System Install:

June 2008
INST-00072



Applies to:
P/N: 25418(+5) & 25442(+5),
96179, 96178, 20034, 98064, &
98065.

1. Rotate Screw Counter-Clockwise to free Clamp (clamp must hang down as shown below). Do not detach Screw from Retainer Clip or Retainer Clip from Rail.

2. Clamp must hang down freely and allow Gas Tube to pass through it.

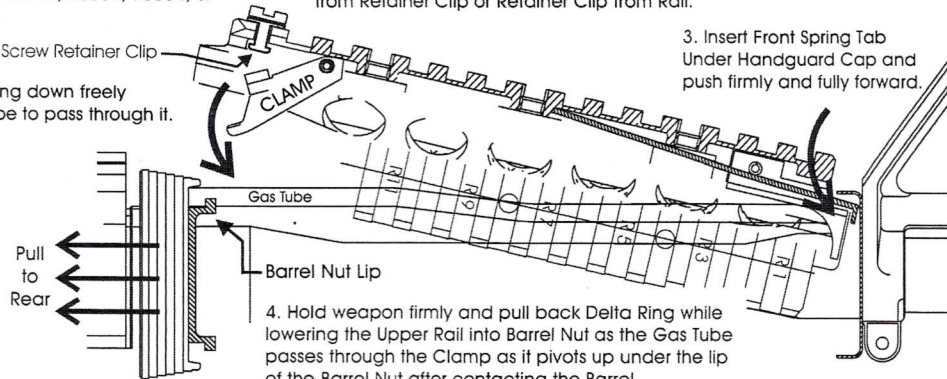
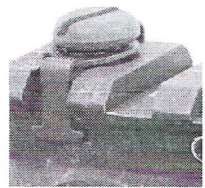
3. Insert Front Spring Tab Under Handguard Cap and push firmly and fully forward.

Screw & Screw Retainer Clip should remain assembled together as a unit.



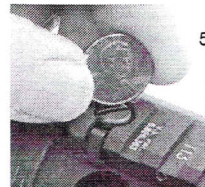
Screw & Screw Retainer Clip Assembly is P/N: 13011435 or KAC P/N: 25443

NOTE:
Do not detach the Screw & Retainer from rail after loosening or when removing Upper Rail for cleaning.

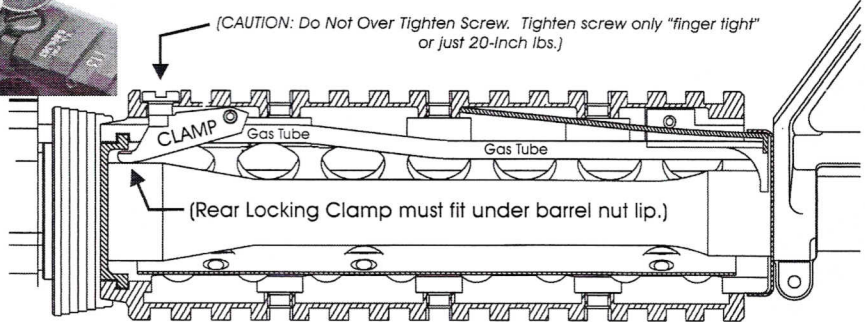


4. Hold weapon firmly and pull back Delta Ring while lowering the Upper Rail into Barrel Nut as the Gas Tube passes through the Clamp as it pivots up under the lip of the Barrel Nut after contacting the Barrel.

5. Hand-Tighten Locking Screw.



(CAUTION: Do Not Over Tighten Screw. Tighten screw only "finger tight" or just 20-Inch lbs.)



6. Lower Rail installs in a similar manner. First, front end under Handguard Cap, then the rear under the Delta Ring.