

SONS OF LIBERTY GUN WORKS



M89 Handguard Installation Guide

Ensure all firearms are unloaded and no ammunition is present in the area while working on your firearm.

Contents: M89 Handguard, steel barrel nut, barrel nut wrench, (3) cross bolts and matching nuts, anti-rotation pin, MLOK QD socket accessory

Tools Required: ½" drive torque wrench, Aeroshell 64 grease, upper receiver vise block/ fixture, 5/32" hex key or bit driver



Step 1: With a bare barrel inserted into your upper receiver assembly, secure your upper receiver in an appropriate fixture so that sufficient torque can be applied without damage.

Step 2: Apply Aeroshell 64 grease to the threads of the upper receiver, as well as the exposed face of the barrel extension where the barrel nut will contact it



Step 3: Insert your 1/2" drive torque wrench into the supplied barrel nut wrench and set wrench (if required) to 60 ft/lbs.

Step 4: Snug the barrel nut down firmly but not yet to full torque, then loosen it. Repeat this step again so that you have begun to tighten then loosen twice.

Step 5: On the third cycle, apply 60 ft/lbs of torque to install the barrel nut to its final installed torque. There is no need to "time" this barrel nut, it is finished when 60 ft/lbs is reached.



Step 6: Complete the assembly of your gas system, properly installing your gas block and gas tube. It may be easier to install your muzzle device at this point, rather than after your handguard has been added.

Step 7: With the barrel nut properly installed, install the anti-rotation pin to the handguard at the rear (if your upper receiver supports the use of such a pin). Simply tap it into position with a lightweight hammer. (DIAGRAM BELOW) Remove the cross bolts from the handguard and slide the handguard over the barrel and barrel nut.



Step 8: Confirm the alignment of the top 1913 picatinny rail with your upper receiver. Insert the cross bolts (there is a steel sleeve that the bolt head will sit within) and start the matching nut on the other side of the handguard. The slots for the nut are keyed for the flat recess on the nut to seat up against.

Secure the cross bolts starting with the middle bolt first, then the front and back bolts. As you tighten all three bolts, you will feel a rather sudden “hard stop” where the resistance immediately increases. Torque all three fasteners until they firmly stop. Thread locker is not required on these fasteners, however low strength thread lockers like Vibratite VC3 are acceptable.

