

## Installation of JP High Grade Modular Hand Guard for AR-15 or AR-10 type rifles JPHG-1, JPHG-2 or JPHG-3

First Generation

## CAUTION: REMOVE MAGAZINE AND VISUALLY CHECK CHAMBER TO VERIFY THAT WEAPON IS CLEAR.

A properly installed hand guard floating forearm may be the single biggest improvement in accuracy for your rifle. The high grade modular hand guard consists of a barrel nut and separate tubular section separated by a rubber compression ring for easier installation. To install the hand guard, you will need several specialized tools: a Bosse armorer's wrench and upper receiver vice block. Without these tools, you may damage your upper receiver and other costly parts. We have these tools available if you need them. If you only intend to do one installation, it probably makes more sense to just have us do it for you rather than buy the costly tools.

For installation on a pre-assembled rifle, first separate the upper and lower assemblies. Lock the exposed portion of the barrel in a padded vice or barrel vice block and remove the flash suppressor or muzzle brake if present. Next remove the tapered pins which secure the front sight/gas manifold to the barrel. Make sure you are driving the small end of these pins. The barrel must be very well supported in the vice. Any flex in the vice or work bench will make it difficult to start these pins. After removing the pins, remove the upper assembly from the vice and re-secure in the vice using the upper receiver vice block and anti-crush insert to protect the receiver from damage. Tip: if you have a flat top upper (A-3), remove the hinge pin from the vice block to allow it to close over the receiver. Now, with a plastic mallet or piece of wood, tap the rear of the front sight to release it from the barrel and slide it all the way off. Next, pull down on the spring loaded forearm support ring to release the two halves of the forearm from the upper assembly. With the armorer's wrench, compress the spring and loosen the barrel nut. Unscrew it and slide it off over the barrel. Apply an anti-seize agent to the threads on the barrel collar of the receiver and on the front face of the extension piece flange. If you do not have a real anti-seize agent, use a heavy grease or Rydol sear prep. Plain oil is not adequate. If you put the nut on without an anti-seize agent and it freezes up on the barrel collar, you have probably ruined a good receiver and barrel nut. Now, take the barrel nut supplied with the free float tube and slide it over the barrel and screw it in place. Using the spanner feature on the Bosse wrench, tighten the nut to the receiver while observing the alignment of the gas tube holes.

The nut should be secured with at least 50 ft. lbs. minimum to a maximum of 80-85 ft lbs. of torque. (As most of you will not have a "torque wrench" available, that translates into a pretty good pull on a Bosse wrench by an average guy.) An improperly tensioned barrel nut will allow the barrel to shift relative to the receiver and accuracy will be compromised. However, it may not tension up at a point that allows proper alignment of the gas tube holes.

If your nut does not align at the appropriate tension, there are two methods to solve this problem. If you are very close, within a quarter of hole diameter, loosen and re-tighten the nut several times to crush the shoulder of the nut to the barrel until alignment is achieved.

If alignment is further out the crush fit method will not work. Remove the nut from the barrel. Now, with a broad medium flat file, being careful to square the file to the end of the barrel collar, make a couple of light passes on the end of the collar. This will remove one or two thousandths and allow you to get a couple of extra degrees of rotation

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on the nut to achieve alignment of the gas tube holes at the appropriate torque. If your nut still doesn't align, repeat the process.

**FOR JPHG-1 STANDARD HAND GUARD:** When you have achieved proper installation of the barrel nut, make sure that the rubber compression ring is in place on the nut and slide the tube over the barrel and attach it to the nut until it tightens down with the long slots at 6 and 12:00 with the sling/bi-pod adapter in the bottom slot. Now, install the gas system and muzzle brake or flash suppressor if any.

**FOR JPHG-2 or 3 EXTRA LONG HAND GUARD:** When you have achieved proper installation of the barrel nut, slide the gas manifold and tube over the barrel, through the holes in the nut and receiver and re-secure in place. Then attach the tube section and tension against the compression ring with the long slots at 6 and 12:00. Install the sling/bipod adapter at 12:00. Finally, replace the flash suppressor or muzzle brake.

Our hand guards come in two versions. One is standard 2" OD and ends just short of the gas block on a standard 20" barrel. The other is 2.25" OD and extends over the gas block. You may also cut off a standard front sight to make a gas manifold that will fit under either tube.

**JPHG-3 AR10 HAND GUARD:** AR10 tubes only come in the larger version. When installing on an Armalite AR10 with the plastic forends, use the longer dust cover hinge pin (supplied with tube) to properly retain the dust cover. AR10T models with the original factory free float tube already come assembled with the long hinge pin.

**Note**: For a tactical carry over the shoulder sling set up, you may order another one of our sliding studs for a 9 or 10:00 position on the tube allowing for over the shoulder carry. Call or send \$9.95 (plus \$ 2.00 postage) for a JP forend adapter. Two studs are also handy in the forward and rear 6:00 position which allows for placing the bipod at the end of the tube for maximum stability or close to the receiver for fastest index between widely spaced targets.

**JP Tactical Rail accessory:** Our new tactical rail allows for use of any Picatiny rail type accessory such as tactical lighting or secondary reflex sights to be applied on the forend.

CAUTION!: DO NOT TOUCH THE EXPOSED PORTION OF THE GAS TUBE AFTER CONTINUED SHOOTING AS IT IS VERY HOT.

THANKS FOR YOUR BUSINESS!!