# AMERICAN RIFLE COMPANY M4 BARLOC®

### Installation Procedure for use with barrel nut

## Warning:

Before working on any firearm, point the muzzle in a safe direction and visually and physically inspect its chamber to ensure that it is unloaded.

- 1. Ensure that the breech end of the barrel is machined in accordance with the illustration below.
- 2. Degrease and clean the barrel tenon, the receiver, and all parts of the Barloc.
- 3. Apply a thread lubricant (i.e. Anti-Seize) to the barrel tenon.
- 4. Loosen the screw within the Barloc split collar by about three turns.
- 5. Install the Barloc assembly over the barrel tenon as illustrated below.
- 6. Ensure the that conical faces of the washer and the barrel nut are directed towards the split collar as illustrated below.
- 7. Insert the proper GO head-space gage into the chamber of the barrel.
- 8. Ensure that the bolt is in the closed and locked position within the receiver.
- 9. Screw the barrel into the receiver until the head-space gage comes to bear again the bolt-face. Make sure the barrel nut is loose after completing this step.
- 10. If using a Barloc with integrated recoil lug, orient the lug as desired.
- 11. Use the spanner wrench to tighten the barrel nut until the gap in the split collar is large enough to accept the thickness of the spanner wrench.
- 12. Fully insert the 5/32" (4mm) hex key into the socket of the clamp screw and use the long end of the key as a lever to orient the split collar with the split at the 12 o'clock position.
- 13. Using a torque wrench, apply 90 lb<sub>f</sub>-in (10 Nm) of torque to tighten the clamp screw. If a torque wrench is not available, use the 5/32" (4mm) hex key to tighten the screw by turning it 1-1/4 turns beyond the point at which resistance to turning was first encountered.
- 14. Extract the GO-head space gage from the chamber and insert the NO-GO head spaced gage.
- 15. Attempt to close the bolt on the NO-GO head space gage. If the bolt does not close, extract the NO-GO gage to complete the installation process. If done correctly, the barrel should resist approximately  $100 \, \text{lb}_{\text{f}}$ -ft (135 Nm) of torque without loosening.
- 16. If the bolt closes with the NO-GO gage in the chamber, deliver the rifle to a qualified gunsmith for assistance.

## With Recoil Lug

# GO-Gage head space Min recommended useful thread length 1.267 nominal installed length barrel nut barrel split collar (toroidal wedge) conical washer with lug receiver face

### Without Recoil Lug

