Assembly Instructions for the Franklin Armory®
F17-V4™ Upper Receiver Kit

Contents: (1) Complete F17-V4™ Upper Receiver
(1) F17™ Magazine
(1) F17™ Buffer

Warning: It is highly recommended that a knowledgeable and skilled gunsmith perform this assembly.

Warning: Franklin Armory® will not be responsible for any damages due to improper assembly of this kit.

Warranty Notice: The Franklin Armory® F17-V4™ Upper Receiver Kit is designed to work with MILSPEC AR15 Lower Receivers. Due to the vast array of AR15 products on the market, Franklin Armory® cannot guarantee that this Upper Receiver Kit will function with every Lower Receiver in existence. Franklin Armory® will not be responsible for warranty claims made due to malfunctions caused by the use of parts made by other manufacturers.

In order for the upper receiver to function correctly, it does require that the supplied Franklin Armory® F17-VS4™ Buffer be installed into the customer’s A2 Lower Receiver Extension. (A.K.A. Buffer Tube.) Because of slight manufacturing variances in Receiver Extensions, the stroke length of the buffer may require adjustment. This can be accomplished by shimming the assembly with a common U.S. Quarter (not supplied) or by removing material from the Buffer Stopper. (A.K.A. The rear portion of the F17™ Buffer made of Delrin.)

To correctly adjust the F17-VS4™ Buffer for accurate stroke length, please do the following:

1. Remove any existing Buffer and Buffer Spring from the existing A2 Receiver Extension. Removal of the Buffer is accomplished by depressing the Buffer Detent with a small tool such as a screwdriver or punch until the Buffer is allowed to slip past the Buffer Detent. See Figure A.

Caution: The Buffer is under constant spring tension. Consequently, it is advisable to wear safety glasses.

2. With the Receiver Extension vacated, insert the F17™ Buffer (plastic stopper end first) without a Buffer Spring and slide it all the way to the back of the Receiver Extension.

3. Using calipers or a measuring tape, measure the depth from the forward exterior edge of the A2 Receiver Extension to the face of the F17-VS4™ Buffer. The ideal depth is 2-17/32”. (2.531”) See Figure B.
4. If the depth is $+1/32'' (.025'')$ from 2-17/32'', then skip to Step 6 below.
5. If the depth is shorter than 2-17/32'', then remove the F17™ Buffer from the A2 Receiver Extension and file off a small amount of material from the Buffer Stopper. If the depth is longer than 2-17/32'', then you will need to place one or more shims in the A2 Receiver Extension. See Figure C. A common U.S. Quarter (not supplied) coincidentally works as a perfect shim.

**FIGURE C:**

**FIGURE D:**

**Warning:** Do not attempt to cycle the action of the F17-VS4™ if your Buffer is seated deeper than 2-37/64'' (or 2.578''). The Carrier may cycle far enough rearward that it will get caught on the Hammer, preventing it from traveling forward. See Figure D.

If this should occur, additional shims will be required. To release the Carrier when it is locked up in such a manner, push out both the Pivot Pin and the Takedown Pin on the Lower Receiver so that the Upper Receiver and Lower Receiver can be separated as far as the condition will allow. Then, using a small tool such as a screwdriver or punch, push the Hammer downward until the top edge of it clears the Carrier and the Carrier is allowed to travel forward. See Figure E.

**FIGURE E:**

Be careful to not pull the Upper and Lower apart so tightly that it binds the Carrier in between the two as this may prevent the Carrier from moving forward even if the Hammer is appropriately clear of the Carrier. In addition, be careful not to mar the finish of the Upper or Lower Receiver.

6. Whence the correct depth is achieved, remove the F17™ Buffer.
7. While still retaining any shims as necessary, install the Buffer Spring and F17™ Buffer into the A2 Receiver Extension. Push the Buffer all the way in until it is secured by the Buffer Detent.
8. You are now ready to install the F17-VS4™ Complete Upper Receiver and the F17™ Magazine.