



Proper Firing Pin protrusion is essential to help avoid misfires and to ensure reliable functioning in the AR-15/M16 Rifles. The Brownells AR-15/M16 Firing Pin Protrusion Gauge is designed to enable the armorer or gunsmith to quickly and easily check these rifles on this critically important point.

Excessive Firing Pin protrusion can cause pierced primers, allowing gases to flow through the pierced primer and damage the firing pin and/or the face of the bolt. Insufficient protrusion may not detonate the primer, leading to misfires or handfires.



### WARNING



Never attempt to disassemble or reassemble a firearm unless you are absolutely certain that it is empty and unloaded. Visually inspect the chamber, the magazine and firing mechanism to be absolutely certain that no ammunition remains in the firearm. Disassembly and reassembly should follow the manufacturer's instructions. If such instructions are not immediately available, contact the manufacturer to see if they are available. If they are not available at all, then you should consult other reference sources such as reference books or persons with sufficient knowledge. If such alternative sources are not available and you have a need to disassemble or reassemble the firearm, you should proceed basing your procedures on common sense and experience with similarly constructed firearms.

With regard to the use of these tools, the advice of Brownells Incorporated is general. If there is any question as to a specific application it would be best to seek out specific advice from other sources and not solely rely on the general advice and warnings given.

### HOW TO USE

Begin by making absolutely sure the rifle is unloaded. Remove the magazine, lock the bolt carrier to the rear and check the chamber to ensure that it is clear. Following the manufacturer's instructions, disassemble the rifle and remove the bolt and firing pin from the bolt carrier.

The bolt and firing pin should be cleaned to remove carbon fouling or grease and grime that might interfere with protrusion measurement. Place the firing pin in the bolt and hold it in a forward position so its tip protrudes through the face of the bolt. Holding the firing pin firmly in the bolt, place the end of the Protrusion Gauge marked "max.", against the face of the bolt at exactly 90°. Move the notch in the end of the gauge slowly and carefully over the tip of the protruding firing pin. The bottom of the Protrusion Gauge notch should NOT touch the end of the firing pin. If it does not touch the firing pin, the firing pin does not exceed maximum acceptable length and you can proceed to the next step. If the firing pin DOES touch the bottom of the notch, it is *too long* and the tip must be carefully ground back to an acceptable length. When reshaping the tip of the firing pin, make SURE you contour the tip so you have an EVEN, SMOOTH, SPHERICAL SHAPE. There must be no flats or sharp edges which might lead to piercing or tearing of the primer.

Repeat the process using the end of the gauge marked "min.". When this end of the gauge is used, it SHOULD contact the tip of the firing pin. This would indicate that the firing pin is of minimal acceptable length. If the firing pin DOES NOT touch the bottom of the "min." notch, it is *too short* and must be replaced with a new firing pin.

Reassemble the firearm according to the manufacturer's instructions. Check for proper functioning using **ACTION PROVING DUMMIES**. Make sure **ALL SAFETY MECHANISMS** are fully functional as designed and approved by the manufacturer. If these tests prove satisfactory, test-fire the firearm with live ammunition in a **SAFE** and **APPROPRIATE** manner. **IMPORTANT!** Start the live ammunition tests by first loading an **ACTION PROVING DUMMY**, then a live round, into the magazine. Only after several tests have been conducted in this manner should additional rounds be placed in the magazine and fired.

# BROWNELLS®

## AR-15/M16

# FIRING PIN

# PROTRUSION

# GAUGE

#080-216-013



READ & FOLLOW THESE  
**INSTRUCTIONS**

## BROWNELLS®

SELECTION. SERVICE. SATISFACTION.®  
200 S. Front St. Montezuma, IA 50171  
800-741-0015 or 641-623-4000 • [www.brownells.com](http://www.brownells.com)  
World's Largest Supplier of  
Firearms Accessories and Gunsmithing Tools.™