

M1918A2 BAR (BROWNING AUTOMATIC RIFLE)



Origin: United States

Military Service: 1918 - 1970s

Wars: WWI, WWII, Korean War, Vietnam

Cartridge: .30-06 Springfield

Action: Fully-Automatic Piston Rising Bolt Lock

Magazine: 20 Round Detachable

The BAR was designed to be carried in WWI by advancing infantrymen, slung over the shoulder or fired from the hip, a concept called "walking fire" —thought to be necessary for the individual soldier during trench warfare. However, in practice, it was most often used as a light machine gun and fired from a bipod (introduced as the M1918a2).

The M1918a2 BAR saw extensive service as the United States standard issue light machine gun in WWII, Korea

- M1918 selector levers had 3 different positions: "S"— "safe", "F" – "Fire", "A" – "Automatic". M1918a2 BARs also had 3 positions, but semi-automatic fire was disabled. The user could choose between safe, and two different rates of fully automatic fire.

- The average combat lifespan of a World War II BAR gunner was 30 minutes.

M3A1 "GREASE GUN"



The M3's resemblance to the tool used to lubricate automobiles resulted in its nickname, the "Grease Gun." Many of those who do recognize the M3 may know it more by that title than its official designation. The M3 has been portrayed onscreen a few times, including the film "The Dirty Dozen" and in HBO's "Band of Brothers."

Specifications

US M3	Specification
Type	sub-machine gun
Caliber	.45 in or 9 mm
Length	30.0 in
Weight	8 lb 15 oz
Barrel	8.0 in long, 4 grooves, right-hand twist

Feed system	30-round detachable box magazine
System of operation	Blowback
Muzzle velocity	900 feet/sec
Rate of fire	450 rpm (M3A1: 400 rpm)

The nickname of "Grease Gun" was eventually given to the weapon American soldiers who likened its general appearance to that of a mechanic's grease gun.

Indeed the general appearance of the weapon was tubular and cast as large components to minimize parts needed.

The pistol grip sat at the rear of the receiver in the usual way and a wire stock could be slid out from the sides of the receiver to provide make-shift shoulder support. The trigger unit (solid trigger assembly) sat under the receiver and ahead of the pistol grip in the usual way. Very little in the way of ergonomics was afforded the shooter - the M3 was a utilitarian weapon to be sure. The magazine well sat ahead of the receiver and accepted straight, detachable box magazines and also served as the forward grip (as in the German MP38/40 submachine gun series). The barrel was a simple cylindrical assembly set ahead of the receiver. Sighting devices were fitted over the weapon for some semblance of accurized fire but the submachine gun was always a short-to-medium-ranged weapon at its core.

A variant of the M3 series became the "M3A1" and this was a further evolution of the design. It followed the original into service during December of 1944 and was essentially developed to further simplify the production process and practices in order to streamline the end-product and ship the weapon out in the quantities required in wartime. Additionally, this period of revision allowed for a second look into correcting some inherent deficiencies in the original. As such the M3A1 was given a redesigned bolt-retracting mechanism which forced the prominent hinged cover to be enlarged some, allowing the user to fit his finger into the recess and pull the bolt back as needed. In another effort to make the weapon more versatile and - in effect more "battlefield friendly" - a reservoir of oil for in-the-field lubrication of parts was also incorporated into the pistol grip and various parts of the operating system were re-engineered to double as tools when the weapon was stripped down to its bare components.

By all accounts, the M3A1 was not that much of an improvement over the original M3 to which neither system ever achieved any level of acceptability or likeness with soldiers - they instead

preferred their trusty M1 Carbines and M1 Thompsons for their sheer reliability and man-stopping power. Nevertheless, the M3 series went on to see extensive combat service through to the end of World War 2 and the series was in widespread circulation by the time of the Korean War (1950-1953).

Beyond that, production also occurred outside of the United States by foreign forces eager to take on a cheap, proven weapon that was nonetheless robust and fairly easy to operate.

The M3 model was produced by the Guide Lamp Division of General Motors in Detroit, Michigan, as well as the Ithaca Gun Company of Ithaca, New York. Some M3 models incorporated unusual-looking additions like muzzle-mounted flash hiders. Argentina designated their M3s as "PAM1" and "PAM2". The PAM1 was notable for its chambering of the 9x19 Parabellum German pistol cartridge while the PAM2 featured a grip-mounted safety. A suppressed model (detailed elsewhere on this site) was also noted which added an oversized assembly over the barrel to help reduce the telltale "crack" of the outgoing bullet for clandestine operations.