

Heavy Barrel, M2, Gun

The Browning Machine Gun, Caliber .50, HB, M2 is an air-cooled gun having a much heavier barrel than has the aircraft gun. Its general appearance may be noted in Figure 77.



Figure 77. Browning Machine Gun, Caliber .50, HB, M2

The gun is normally fired in short bursts or in rapid single shots, and when used in this manner firing may be continued for an appreciable length of time because the heavy barrel retards overheating.

GENERAL DATA (Approximate)

Weight of Gun.....	81 lbs.
Weight of Barrel.....	27.5 lbs.
Length of Barrel.....	45 inches
Number of Lands.....	8
Twist—Right Hand.....	1 turn in 15 inches
Overall Length of Gun.....	65.125 inches
Muzzle Velocity.....	2,935 ft. per sec. (2,000 mi. per hr.)
Rate of Fire.....	400 to 500 rounds per minute
Maximum Range.....	7,200 yards (4.1 miles)

In place of the barrel jacket assembly on the aircraft gun this gun uses a short, perforated barrel support. The trunnion adapter of the aircraft gun is not used. The heavy barrel is removed from the gun by unscrewing it from the barrel extension and withdrawing it toward the front. This permits removing a hot barrel and installing a cool one without disassembling the remaining mechanism of the gun. The handle assembly, shown just ahead of the barrel support, is used for carrying the gun or as a means of turning the barrel when assembling, disassembling or adjusting the headspace. It is moved to one side or down when the gun is being fired. **CAUTION:** Disengage handle before turning so that headspace adjustment will not be altered.

The firing mechanism is modified somewhat from that included with the aircraft gun. A bolt latch is provided to permit the gun to be fired semi-automatically. It also serves to hold the bolt to the rear in order to keep the cartridge out of the hot chamber when firing has been suspended.

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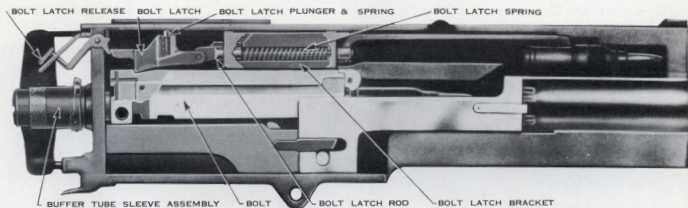


Figure 78. Bolt Latch Mechanism

The bolt latch is forced downward by the bolt latch spring. As the bolt reaches its rearward position, the bolt latch engages a notch on the upper rear surface of the bolt and holds the bolt to the rear, thus causing the gun to cease firing. The counter-recoil stroke is completed by pressing down on the bolt latch release which is pivoted in the back plate. This raises the bolt latch from the bolt notch and allows counter-recoil to take place. Providing a cartridge is in the chamber, firing will be resumed when trigger action is supplied. If the bolt latch release is held down manually, or if it is locked down by the lock on the buffer tube sleeve, the gun will fire automatically. However, if the bolt latch release is pressed down but not retained in that position, the gun will fire only once when trigger action is given.

The back plate spade grip assembly is similar to that used on the Aircraft Gun except for the addition of the buffer tube sleeve assembly and the bolt latch release and spring.

Since the recoiling portion is much heavier than in the aircraft gun, its rearward motion is not quite so rapid; therefore, it is unnecessary to have as much restriction in the oil buffer on the recoil stroke. Accordingly, the oil buffer piston valve assembly, the gland packing, gland washer, gland spring, oil and oil filler screws are omitted from the heavy barrel gun.

With these exceptions and a few changes in the accessories supplied, such as front and rear sights, the heavy barrel gun is identical with the aircraft gun.