

STAATSBEDRIJF
ARTILLERIE-INRICHTINGEN

INSTRUCTION MANUAL

For operation of the ARMALITE Light Machine Gun

Caliber 7.62 mm NATO

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Regular equipment with each gun is as follows:

Spare parts

- 1 Extractor assembled with spring
- 1 Firing Pin
- 1 Firing Pin Retaining Pin
- 1 Ejector
- 1 Ejector Spring
- 1 Set Roll Pins
- 1 Cam Pin
- 1 Spare Barrel

Accessories

- 1 Gas Regulator Screw Driver
- 1 Drift Pin
- 1 Box for Spare Parts
- 400 Metallic Links
- 2 Magazines
- 1 Cleaning Rod

Description

The Armalite Light Machine Gun (cal. 7.62 NATO) is an air cooled, gas operated gun featuring a quick detachable barrel which may be used with a belt feed mechanism employing the disintegrating type metallic link belt or may be magazine fed from the standard AR-10 twenty round magazine. The change over from belt feed to magazine feed is made in a matter of seconds, requiring only the removal of the belt feeder.

The system of gas transfer is the same as that found in the Armalite AR-10 rifle. Many parts are interchangeable with those of the standard AR-10 Infantry Rifle. Provision is made to completely seal the weapon against dust and sand when the belt feeder is removed by means of metal dust covers yet the weapon can be instantly put into operation using the standard magazine, without need of removing these covers.

The ejection port dust cover is automatic in operation, opening when the first round is fired. Gun is Semi and Full auto.



fig. 1 Right Side



fig. 2 Left Side

General Data

Weight of Gun 6.6 kg (14,5 lbs)
 Weight of 100 Metallic Links 416 g (14 oz)
 Weight of 100 cartridges, belted 2850 g (6,3 lbs)
 Weight of Magazine, empty 116 g (4 oz)
 Weight of Magazine with 20 rounds 603 g (21 oz)



fig. 3 Sub Assemblies

Length of barrel with flash hider 583 mm (23 inch)
 Length of barrel without flash hider 505 mm (19,9 inch)
 Weight of barrel with flash hider 2,0 kg (4,4 lbs)
 Rate of fire 700 r.p.m. approx.
 Muzzle velocity 800 m.p.s.
 Length of gun over all 1075 mm (42,3 inch)
 Length packed for parachute 800 mm (31,5 inch)
 Type of feed: Disintegrating link belt and magazine
 Mounting: Bipod
 Type of fire: Full and semi auto.
 Sights: Fixed front, protected, adjustable rear. Weapon is
 supplied for meters or yards
 Butt stock: equipt with shoulder support for prone shooting

Principal of Operation

With the exception of the details listed below, the operation of the Light Machine Gun is identical to the AR-10 basic Infantry Rifle. When the belt feed mechanism is installed, a belt feed slide operated from a cam groove in the bolt carrier draws the belted ammunition into the gun on the recoil stroke and strips the cartridge from the link into the chamber on the counter-recoil stroke thus utilizing the powerful recoil stroke to pull or lift the belt. The cartridge is fired and the cycle is repeated at the same time that the fired case and the link are ejected from the individual ports on the right side of the gun.



fig. 4 Method of Installing Belt Feed Mechanism

Disturbance of sighting due to recoil is greatly reduced due to the recoil energy being used in pulling the belt.

Manipulation

With belt feeder in place, gun empty, place belt in feedway and press from left to right until belt holding pawl picks up first round. Pull charging handle to rear and release. Set fire control lever as desired and commence firing. To clear gun, set on safe, press belt holding pawl levers together with one hand and withdraw belt. Pull charging handle to rear to clear chamber.

To operate with magazine, set safety, insert magazine as in rifle, draw charging handle to rear and release. Set fire selector from safe to desired position (auto or semi) and commence firing.

To clear weapon, set safety, remove magazine, pull charging handle rear to clear chamber.

Sight adjustment is carried out in the same manner as with the Basic Infantry Rifle.

Correction of Stoppages:

The most common stoppage encountered in any machine gun, failure to extract, usually due to a fouled chamber is corrected by recharging if this does not correct the condition the gas port may be opened wider.

When barrel change becomes necessary the operation is carried out in a matter of seconds as follows:

1. Draw charging handle fully to rear and set bolt stop.
2. Using left hand, snap insulated handle on barrel into lowered position at the same time with right hand pull barrel release lock downward and strip barrel forward out of gun. Replacement barrel is then slid into the gun with one hand where it automatically locks into place.

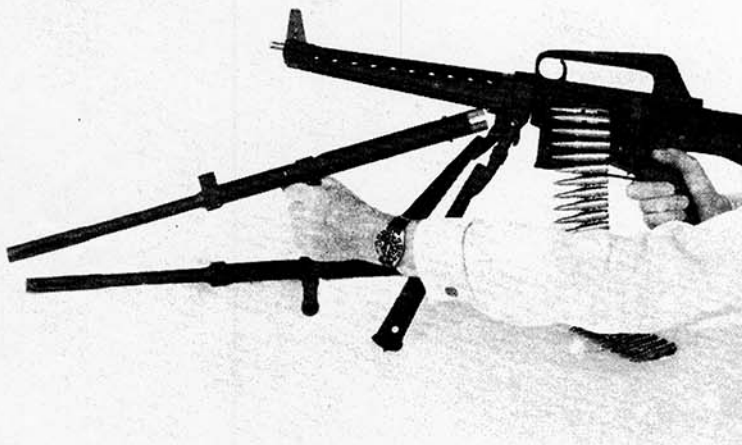


fig. 5 Method of Changing Barrel

Pull charging handle to rear and release allowing bolt to run forward into battery. It is unnecessary to remove either belt or magazine from weapon during this operation. This barrel change is carried out while operator is in the prone position thus making it unnecessary for him to expose himself while the gun remains ready for instant resumption of firing.

There is never any question of headspace adjustment with the Armalite Light Machine Gun as the barrel and barrel extension are assembled as a unit at the factory and cannot be separated in the field.

To change over from belt feed to magazine feed the weapon is simply opened, the belt feed mechanism removed, the weapon is then closed and a standard magazine inserted as in the Basic Infantry Rifle. This operation is also carried out in a matter of seconds.

General Instructions

To strip gun:

Clear belt and or magazine from weapon.

Clear chamber.

Press out rear lock pin.

Open gun.

Withdraw bolt and carrier assembly, catch feeder slide in hand.

Disassemble bolt from carrier as in rifle.

If belt fed, press magazine release and lift mechanism out.

A cartridge is all that is necessary for field stripping.

Care and Upkeep

The Armalite Light Machine, like the Armalite Basic Infantry Rifle needs less care and upkeep than any other machine weapon due to the use of Electro Filming of the Hard Anodized aluminium components and chrome plating of the bolt and carrier group.

Normal care of the barrel, occasional cleaning of bolt and carrier using a dry cloth followed by a drop of oil on the cam pin, trigger and sear bearing points is all that is necessary to keep the weapon in perfect operating condition. Excessive use of oil should be avoided as it is absolutely unnecessary and causes unwanted buildup of dirt in the weapon. The belt feed mechanism should be wiped dry from time to time, depending upon conditions and a drop of oil placed on the various bearing points

Hembrug-Zaandam, March 1959