T-94

T-94 SD

SUBMACHINE GUN

USER MANUAL

Figure-1 T-94 SD Submachine Gun

"T-94 SD Silenced Submachine Gun" is an small arm, produced in accordance with the most advanced technology, designed by MKE A.Ş Kırıkkale Silah Fabrikası.

Technical Specifications	
Caliber	9 x 19 mm
Operating Principle	Roller-Lock Delayed Blowback Action
Muzzle Velocity	788 fps
Trigger Force	7.5-9 lbf
Magazine Capacity	15/30
Weight	7.49 lbs
Length	25.98" / 31.49"
Effective Range	100 yd
Barrel Length	5.74"
Fire Mode	Semi-Auto
Buttstock	Retractable
Groove	6
Feed	Magazine
Finish	Black

Figure-2 Main Components of the T-94 SD Submachine Gun

MAIN COMPONENTS OF THE SILENCED SUBMACHINE GUN (T-94 SD)

The main parts of the T-94 SD are as follows and shown in Figure 1.

1. Receiver With Barrel

2. Bolt Assembly

3. Grip

4. Silencer

5. Buttstock

6. Handguard

7. Magazine

8. Carrying Sling

DESCRIPTION OF MAIN COMPONENTS

1. Receiver with Barrel

The receiver connects the barrel, cocking mechanism and sights,

In addition, all assemblies are either contained in the receiver or attached to it. The barrel is press-fitted into the barrel extension and fixed in place by means of pin.

Cocking lever housing is located above the barrel and it is welded to the silencer housing.

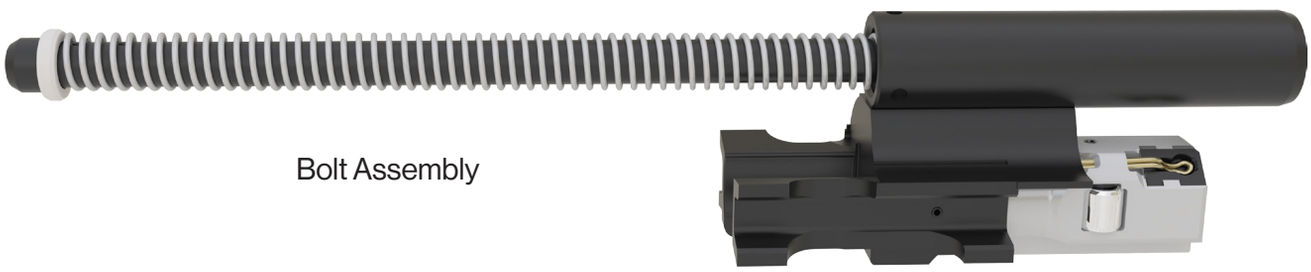
It is employed for manually cocking and loading the weapon and for securing the bolt in its rearmost position.

The sights consist of the front sight and rotary rear sight. The rear sight has four aperture positions; the apertures which differ in diameter, all correspond to a uniform sight setting (sighting shot) for firing at ranges of 25, 50,75 and 100 m. Being able to select a particular aperture diameter, permits perfect individual aiming by means of the rear sight aperture, front sight and the outer circumference of the front sight cover. The rotary rearsight can be adjusted for elevation and windage.

Figure-3 Receiver with Barrel

2. Bolt Assembly

The bolt carrier slides into the receiver and mates with the recoil spring. The bolt carrier slides forward to chamber the next round, engages the rollers to lock the bolt, releases the firing pin to fire the weapon and then moves rearward to eject the spent casing and re-cock the firing pin.



Bolt Assembly

Bold Carrier

Recoil Spring

Bold Head

Locking Piece

Firing Pin Spring

Firing Pin

Figure-4 Bolt Assembly Parts

3. Grip with Trigger Mechanism

The grip is hinged to the receiver and can be swung down and removed from it contains the trigger housing with components of the trigger and safety mechanism.

The safety axle connects the trigger housing to the pistol grip.

1- Grip With Selector Lever

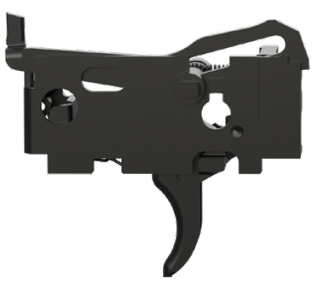
2- Trigger Housing with Trigger Mechanism and Safety Components

3- Selector Lever

Figure-5 Grip with Trigger Mechanism

Grip with Selector Lever

Trigger Pack



Axle and Safety Indicator

Figure-6 Grip with Trigger Mechanism Parts

4. Silencer Complete

Silencer Complete

Silencer, Welded

Silencer Body and Silencer Bottom Cover

Figure-7 Silencer Parts

5. Buttstock

The two guide rails on either side of the buttstock are guided in grooves receiver. They are secured by a locking catch in both the retracted and extended positions as sling holder is attached to the backplate.

Figure-8 Buttstock

6. Handguard

The detachable handguard encircles the silencer housing. It is attached to the pin on the silencer housing by spring force of handguard.

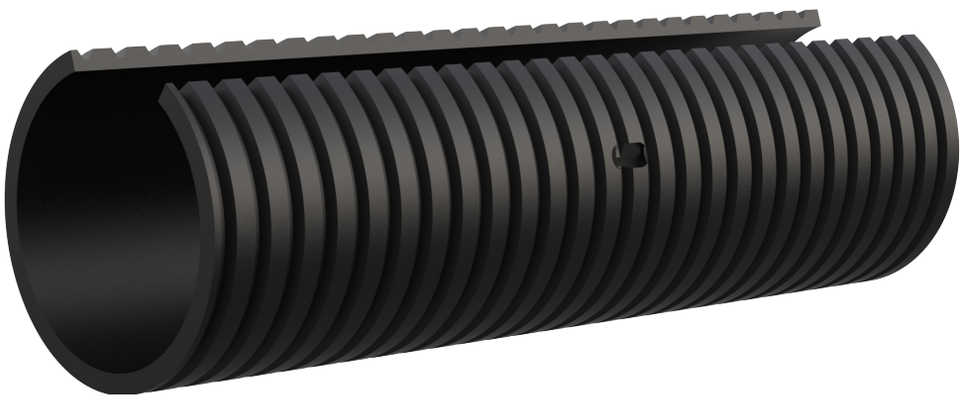


Figure-9 Handguard

7. Magazine Assembly

The magazine receives the cartridges and assures the cartridge feed. It is a straight box-type magazine and has a capacityof 30 cartridges.

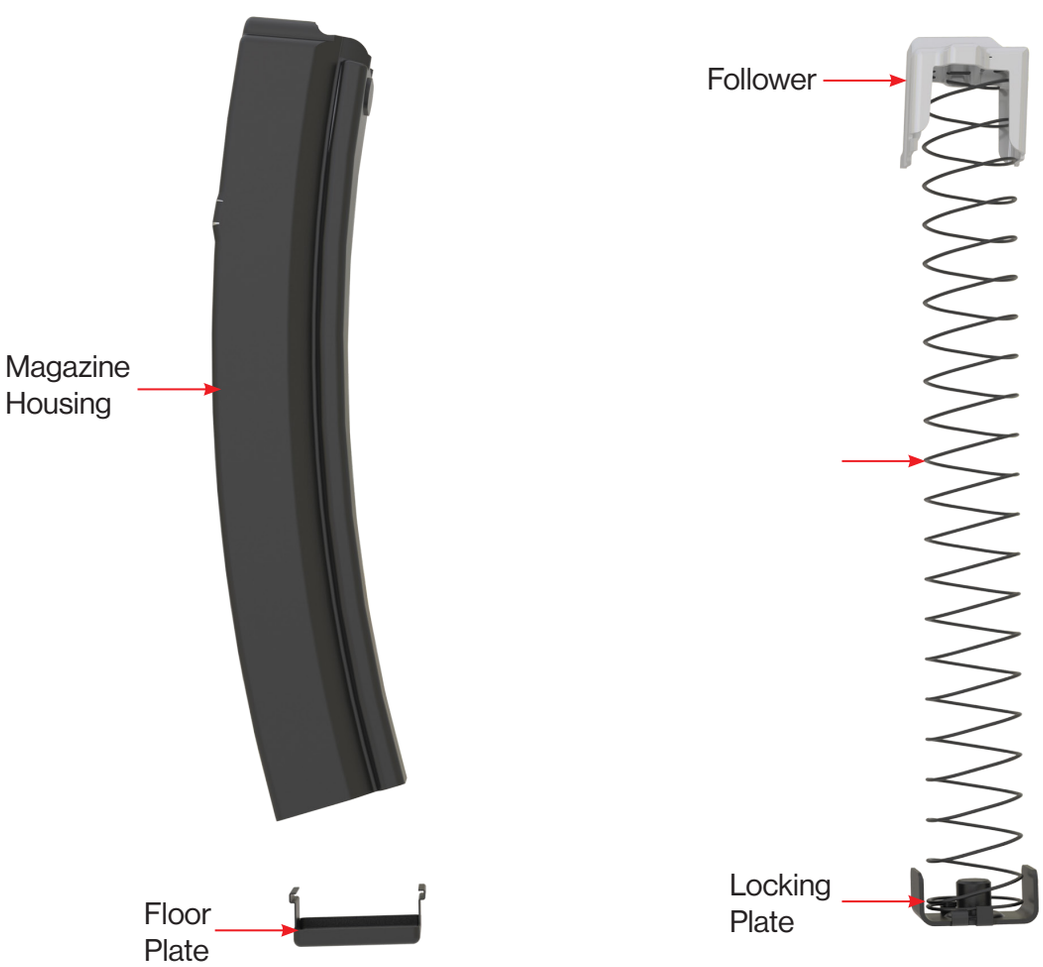


Figure-10 Magazine Assembly

8. Carrying Sling

The carrying sling is employed for carrying the submachine gun while permitting the shooter to fire immediately from all positions.

Figure-11 Carrying Sling

T-94 SD SUBMACHINE GUN OPERATION

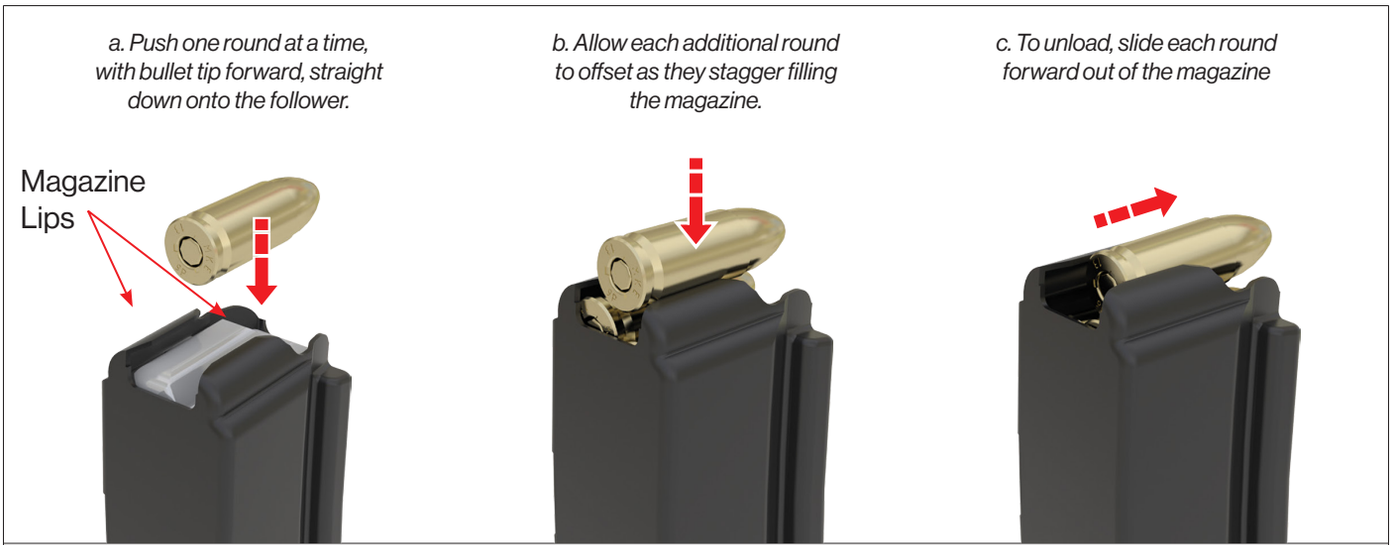


Figure-12 Loading And Unloading The Magazine

1. Loading the Magazine

Firmly grasp the magazine in the weak hand while using the thumb of the strong hand to push the first round between the lips of the magazine onto the follower. Use your thumb to push each additional round straight down, allowing the rounds to stagger as it fills. Ensure the rounds face forward toward the front of the magazine. Do not overload the magazine's capacity.

2. Unloading the Magazine

Firmly grasp the magazine in the weak hand while using the thumb of the strong hand to push the first round forward out from under the lips of the magazine. Continue to use your thumb to push each additional round straight out. Do not attempt to pull the rounds straight up to remove them.

Warning: Never use damaged or incompatible ammunition.

Warning: Never use any item that may inadvertently strike the primer when unloading cartridges from the magazine.

3. Selecting the Firearm to Safe

To place the firearm on safe, flip the safety lever, located on to place the firearm on safe, flip the safety lever, located on the left side of the trigger housing, up to “0”. This will lock the trigger and the firearm cannot be fired.

4. Selecting the Firearm to Fire

To place the firearm in the fire position, flip the safety lever, located on the left side of the trigger housing, down to “1” (1 round). This will select semi-auto fire mode, where one pull of the trigger will fire one round and reload the next round.

a. Safety lever in “0” position

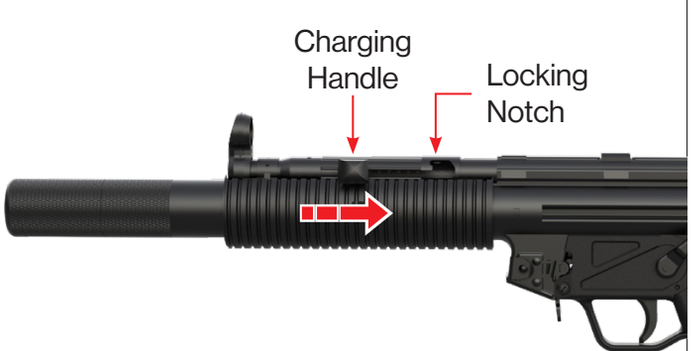
a. Safety lever in “1” position

Figure-13 Safety and Semi-Auto Mode

5. Loading the Firearm

Ensure the firearm safety “S” is engaged. While holding the pistol grip in the strong hand, use the weak hand palm to pull the charging (cocking) handle rearward (see image a). While still holding the cocking handle, pull up and engage into the locking notch (see image b). Using your weak hand insert a loaded magazine into the magazine well, tugging on it to ensure it is locked (see image c). While holding the firearm in your strong hand, use the weak hand palm to strike the charging handle downward, disengaging it and allowing it to move freely forward (see image d). The firearm is now loaded and ready to fire. Moving the selector switch to fire will enable semi-auto fire.

a. Ensure the firearm is selected to safe “0”. Pull the charging (cocking) handle rearward.



b. Engage charging handle into locking notch.

c. Insert the magazine into the magazine well until it locks in place.

d. While holding the firearm in your strong hand, use the weak hand palm to strike the charging handle downward, disengaging it and allowing it to fly forward.

Figure-14 Loading the Firearm

Caution: When releasing the charging handle, be sure to avoid pinching hazards as it is under pressure from the recoil spring.

FIREARM OPERATING SYSTEM

The weapon is loaded and cocked, and ready to fire.

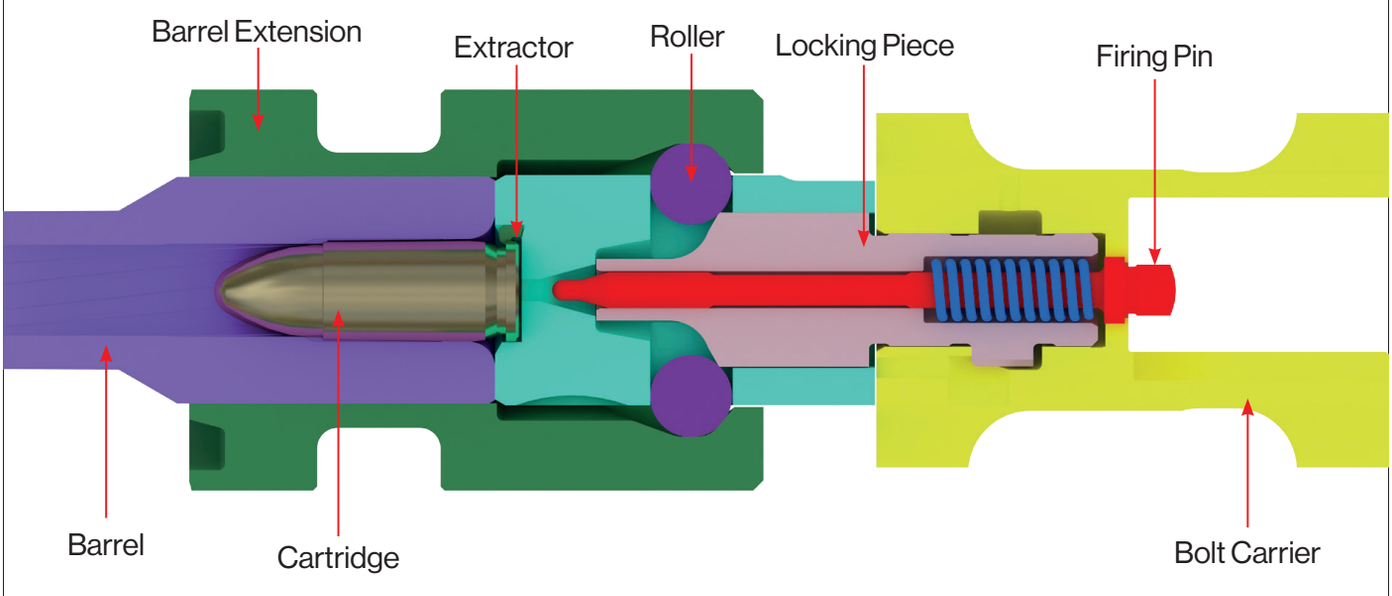


Figure-15 Firearm Operating System-1

By pulling the trigger the cocked hammer is released and strikes the firing pin which fires the cartridge with its point. The powder gas drives the pojectile down the barrel. At the same time powder gasses are forced against the cartridge case. The cartridge case transmits a part of the gas pressure to the bolt head and there by the backward movement is initiated.

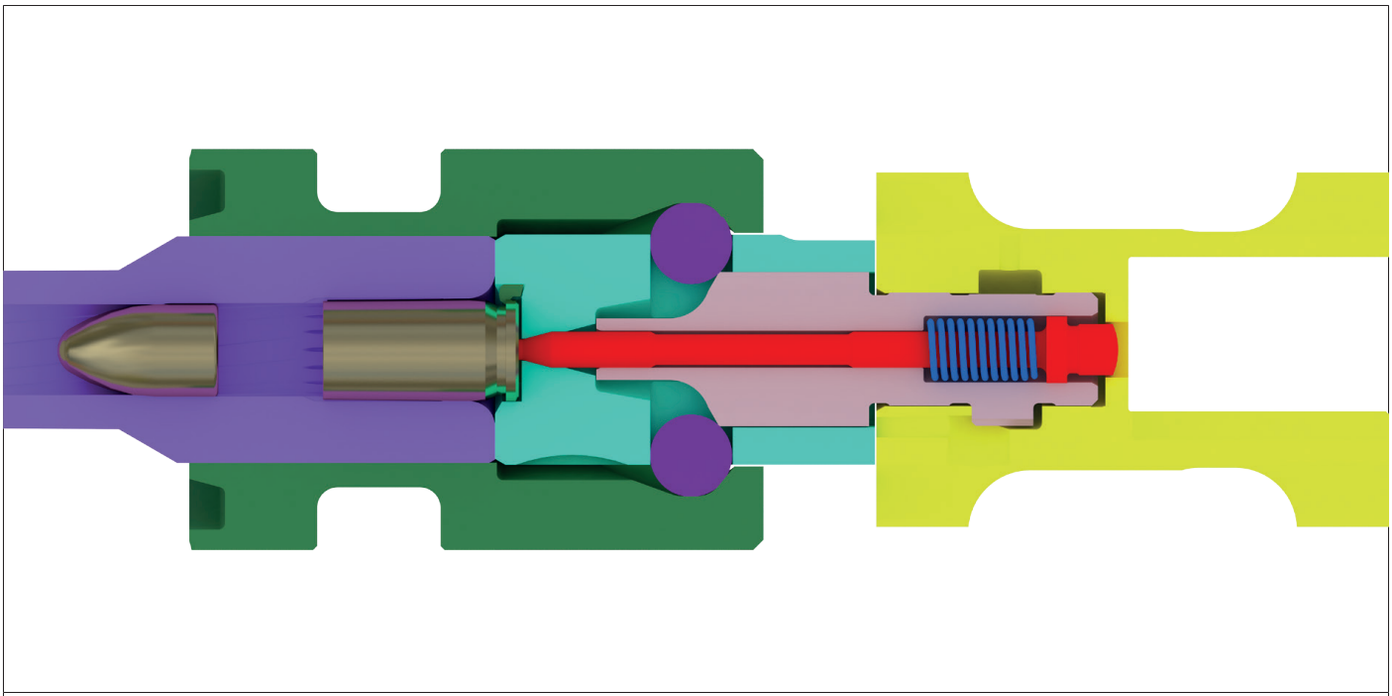


Figure-16 Firearm Operating System-2

Thus the bolt head carrier is activated by means of the locking rollers and the locking piece in the poroportion 1:4 on which occasion the locking rollers remain locked until the bullet has left the barrel. The locking rollers emerge from the recesses in the barrel extension and are pressing against the inclined faces of the locking piece. The locking piece slides back and the locking rollers slip into the bolt head as far as necessary to unlock the bolt.

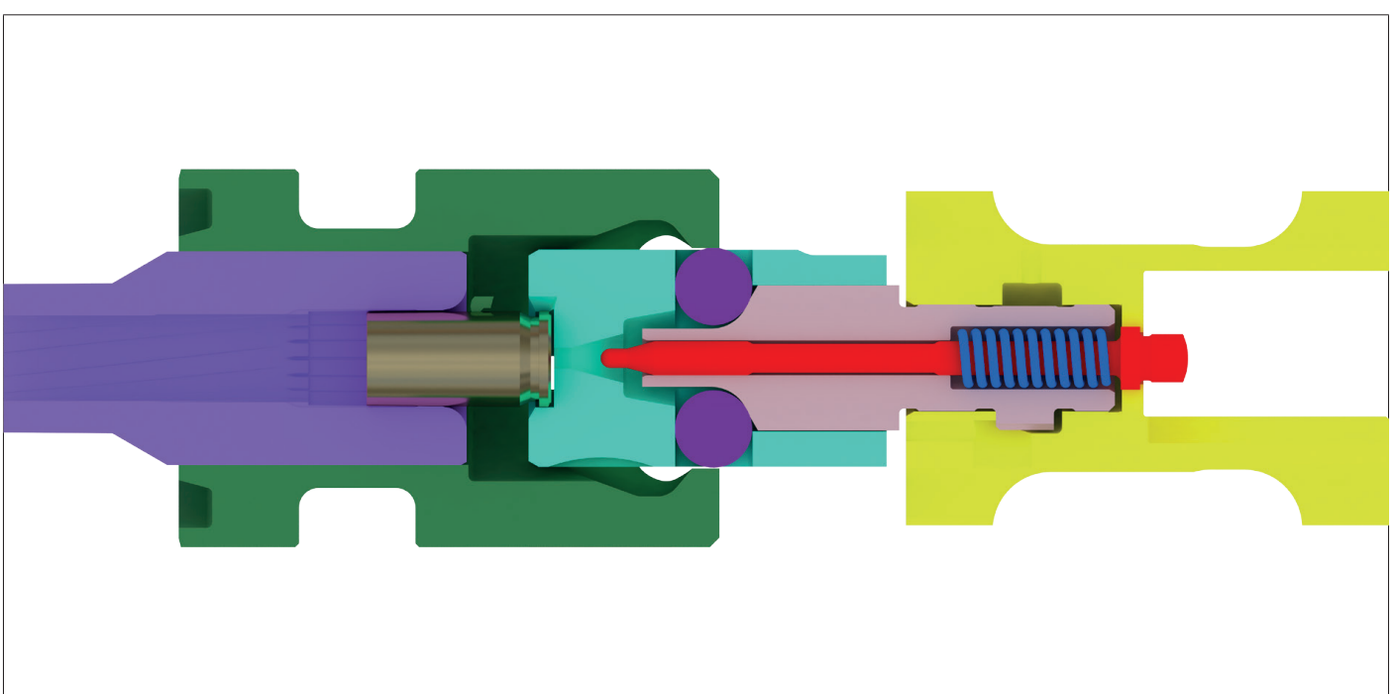


Figure-17 Firearm Operating System-3

While the bolt head is moving backwards the hammer is cocked, the recoil spring compressed, the cartridge case held by the extractor thus hits the ejector and is ejected. In its rearmost position the bolt hits the buffer and is stopped.

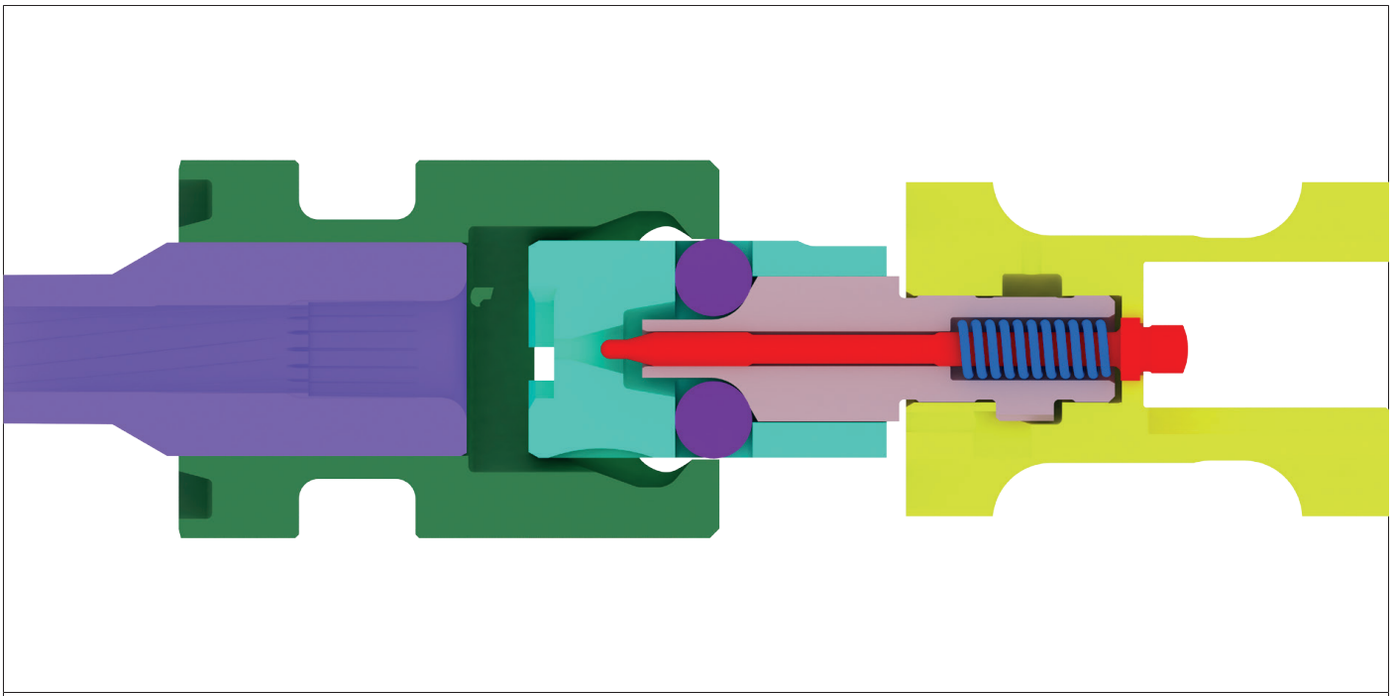


Figure-18 Firearm Operating System-4

At the forward movement the energy of the expanding recoil spring and the expanding buffer spring pushes the bolt forward. The cartridge on top in the magazine is inserted into the chamber by the front surface of the bolt head. The extractor hooks into the ring Groove of the base of the cartridge case. The locking piece with its declining faces pushes the locking rollers outwards until they support themselves in the barrel extension, which locks the weapon.

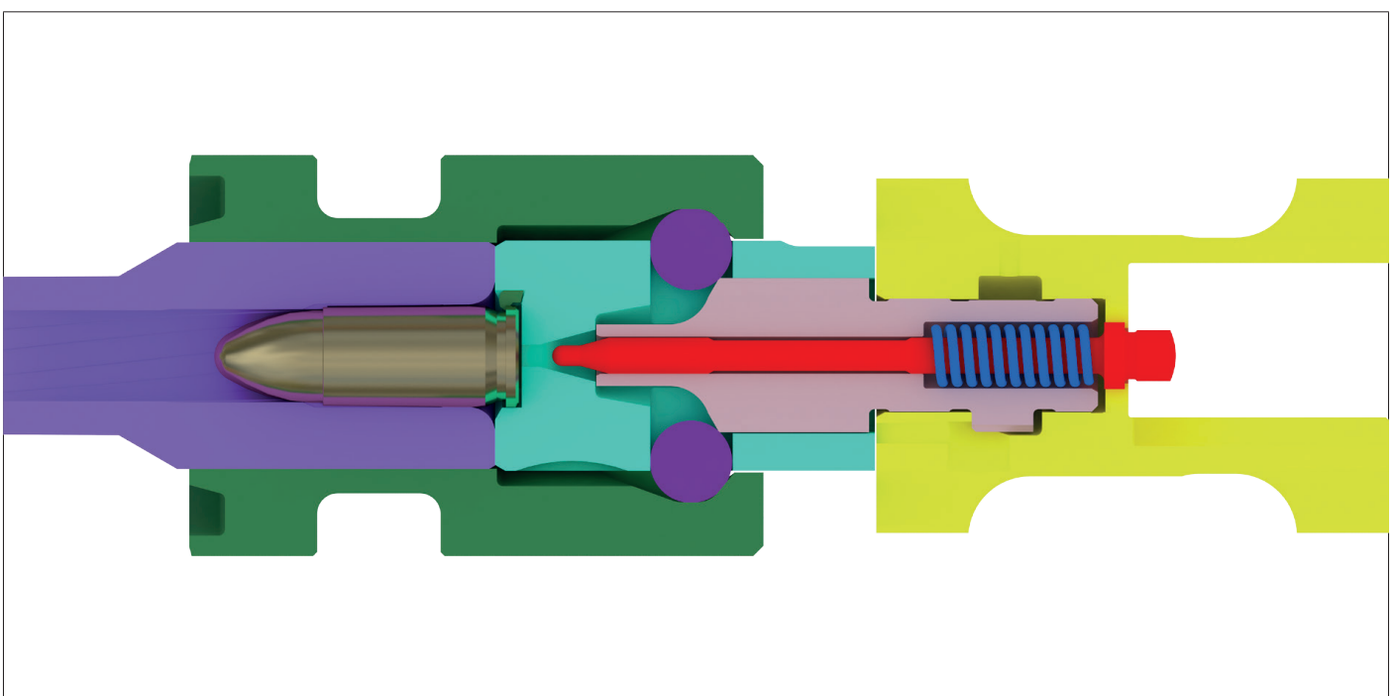


Figure-19 Firearm Operating System-5

TRIGGER OPERATING SYSTEM

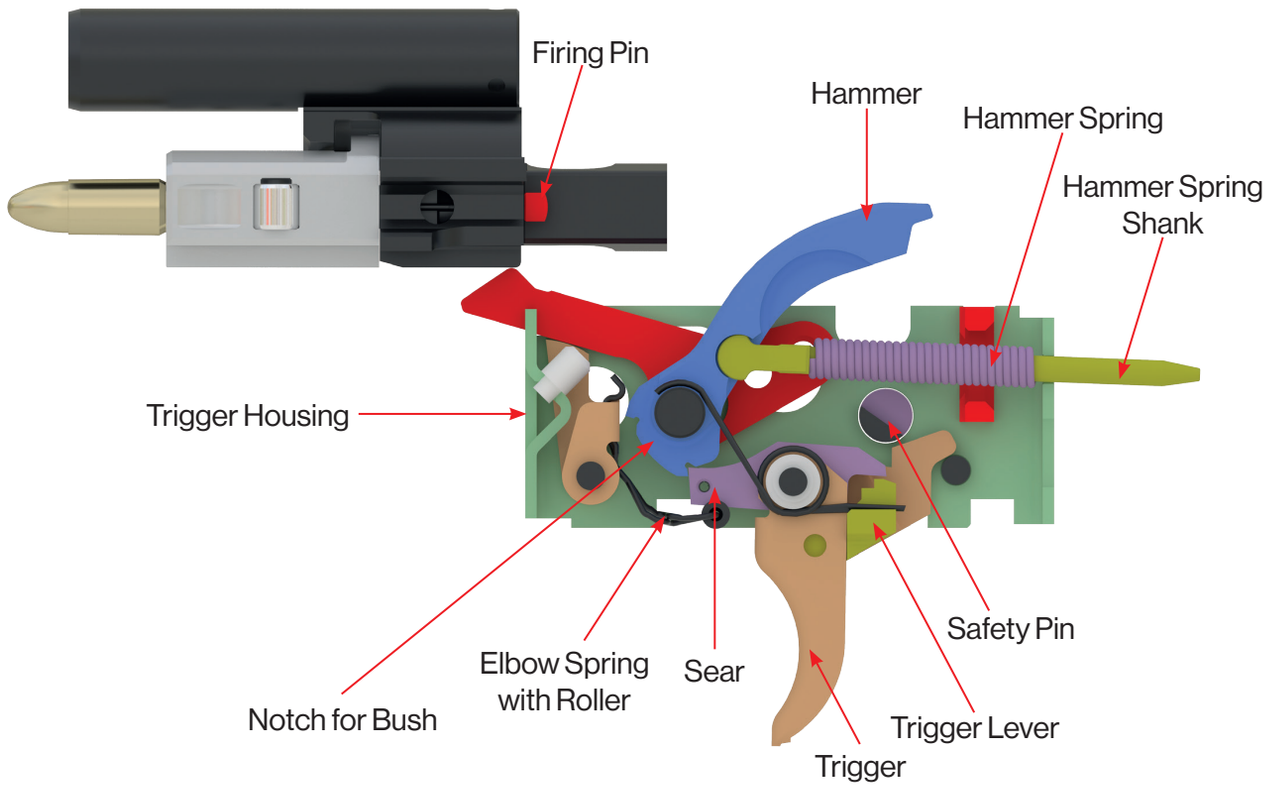


Figure-20 Trigger Operating System-1

Before Firing

The safety lever put on position “E” single fire. At single fire the trigger lever in connection with its oblong hole, the safety pin, the elbow spring with roller, the catch for single fire and the catch for trigger lever as disconnector comes into action.

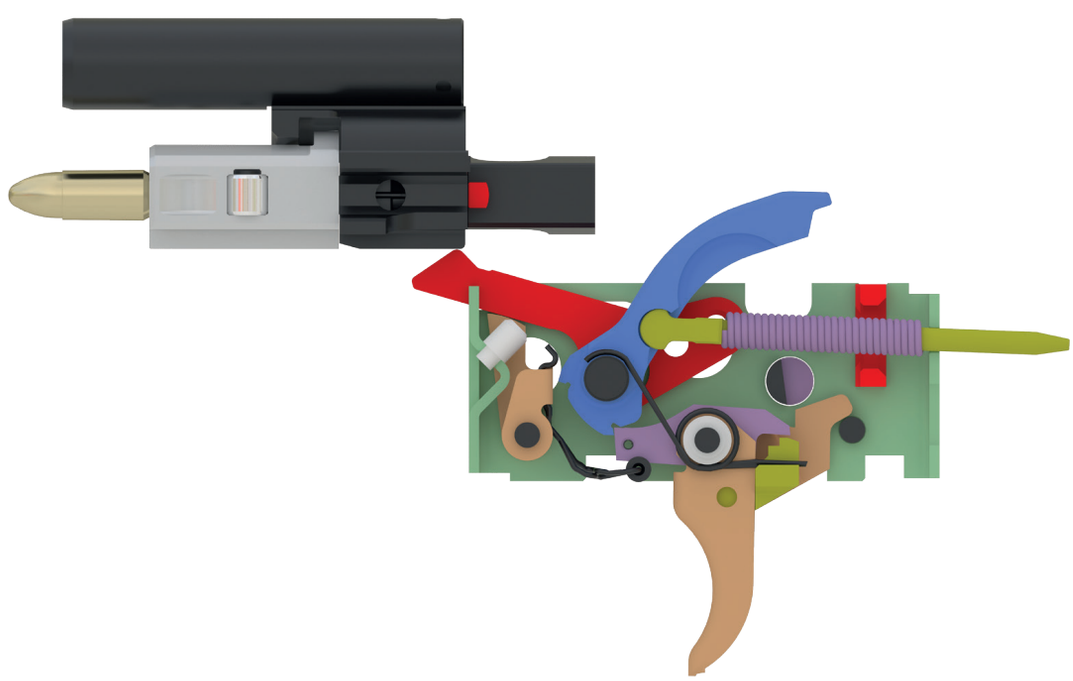


Figure-21 Trigger Operating System-2

The trigger lever with its oblong hole can be shifted about 1.5 mm in its longitudinal direction. In unoperated position, which means without pressure from the hammer, the trigger lever is steadily being pushed forward by means of its pressure bolt with spring. As soon as the hammer with its single fire notch comes in connection with the trigger lever, the latter is pushed backwards overcoming the power of the pressure bolt and its spring. This short longitudinal movement causes a single shot. The catch with its roller pushes at single fire the trigger lever steadily against the hammer notch

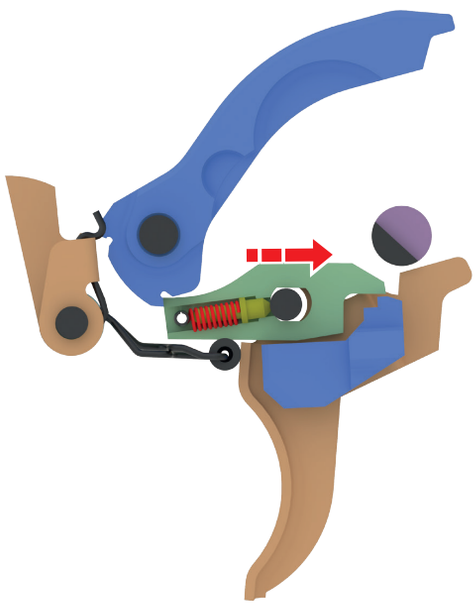


Figure-22 Trigger Operating System-3

Semi-Auto Fire

The bolt body presses the release lever and thus the sear catch forward the hammer is only retained by the trigger lever.

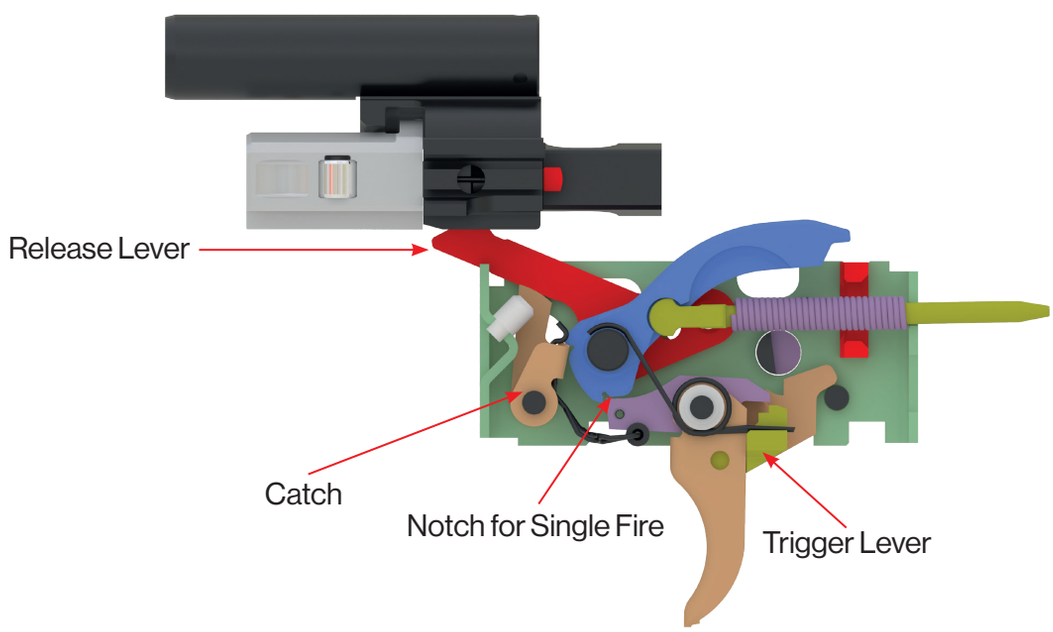


Figure-23 Trigger Operating System-4

When pulling the trigger its extending lever with its recess reaches into the Groove of the safety pin, limiting the movement of the trigger. At the same time the rear part of the trigger lever is being lifted, the front parts lowers and disengages from the single fire notch

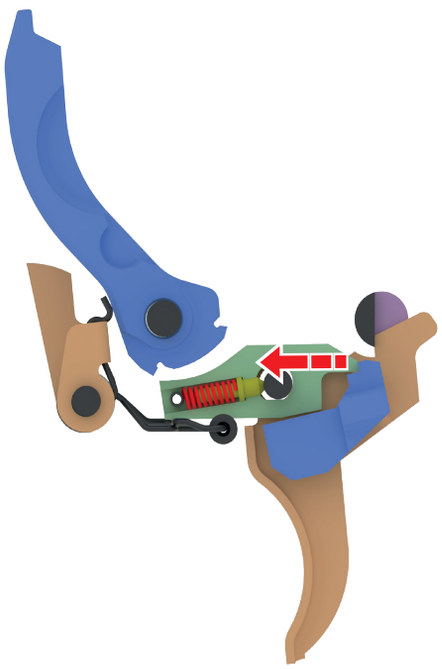


Figure-24 Trigger Operating System-5

The hammer is released, hits the firing pin and fires the cartridge. At this moment the pressure on the trigger lever coming from the hammer is being taken off and the trigger lever goes forward.

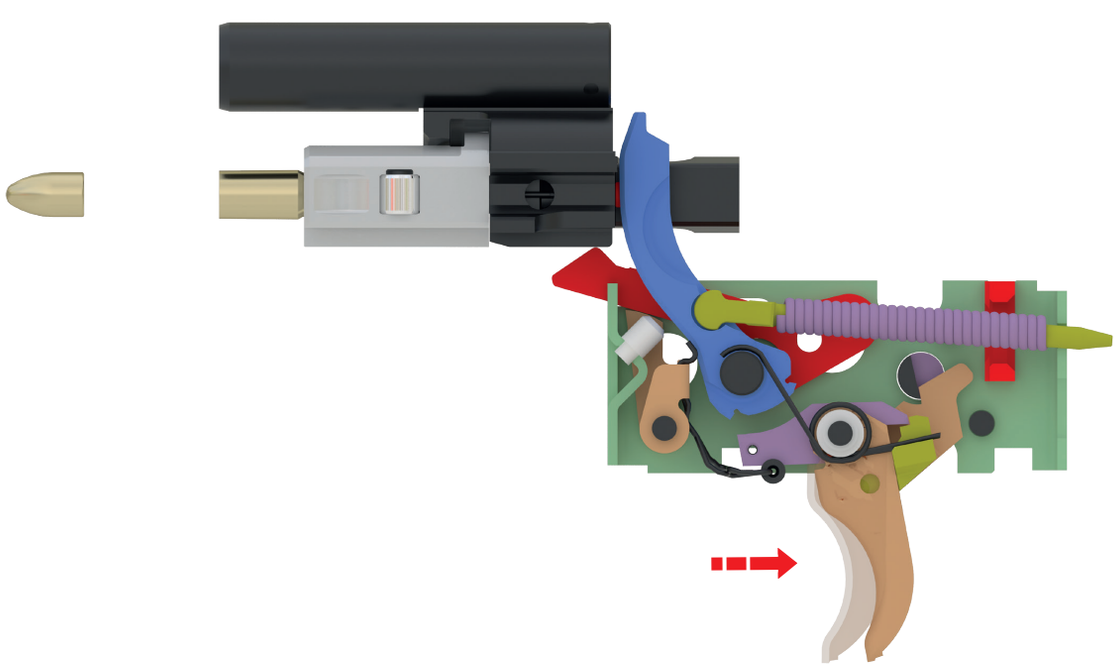


Figure-25 Trigger Operating System-6

Backward Movement

After the cartridge has left the barrel, the bolt goes back and the bolt head carrier pushes the hammer backwards. First the hammer engages in the notch for single fire, shortly thereafter the sear catch engages in the notch for burst. At the first engagement the trigger lever moves backwards, at the second engagemen it comes forward again.

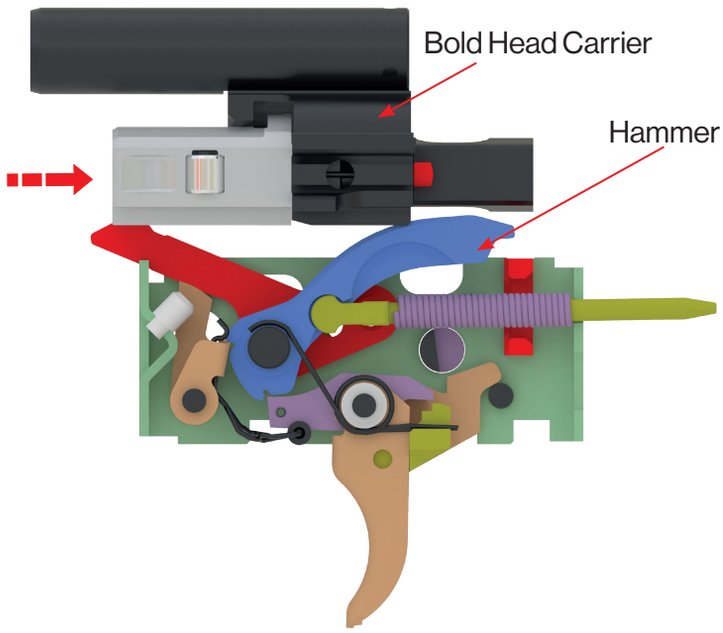


Figure-26 Trigger Operating System-7

Forward Movement

The bouncing off from the buffer and the pressure of the releasing recoil make the bolt head carrier move forward. The climbing ramp of the bolt head carirer presses the release lever downwards which releases the catch.

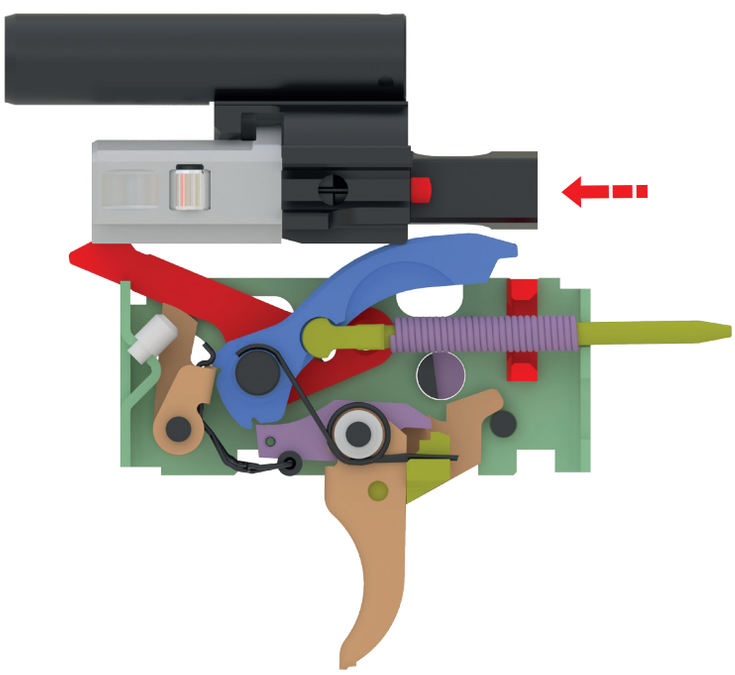


Figure-27 Trigger Operating System-8

The hammer cannot strike but is caught on the trigger lever. The trigger lever is jammed between the notch for single fire and the trigger lever notch

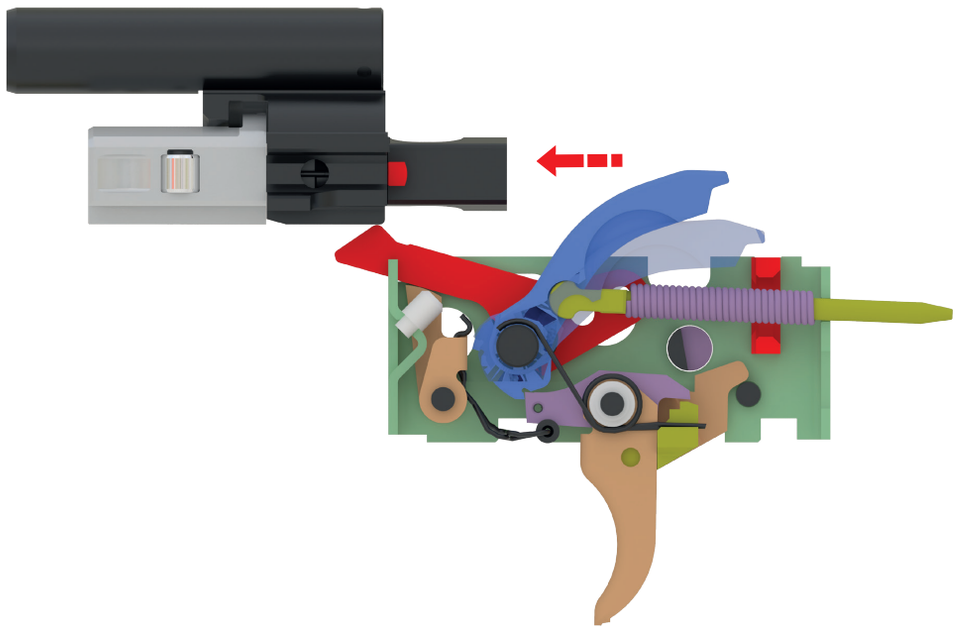


Figure-28 Trigger Operating System-9

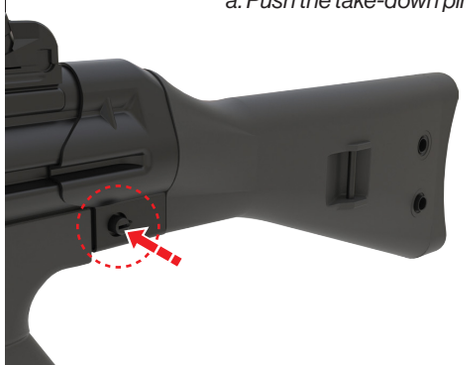
In this position the sequence is interrupted. To fire another shot, the trigger must be released. After the trigger is released, the trigger lever comes down and releases the rear part of the trigger lever. Due to the pressure from the hammer the trigger lever is pushed back, as far as the longitudinal hole makes it possible and rests over the pull-off surface, the condition for the next shot is given. Should another shot be fired the trigger is pulled until the pull-of. Further pull of the trigger lifts the rear part of the trigger lever, while the front part disengages from the notch for sinle fire. The cartridge is fired and all functions repeat themselves.

STRIPPING THE SUBMACHINE GUN

1. Buttstock Removal

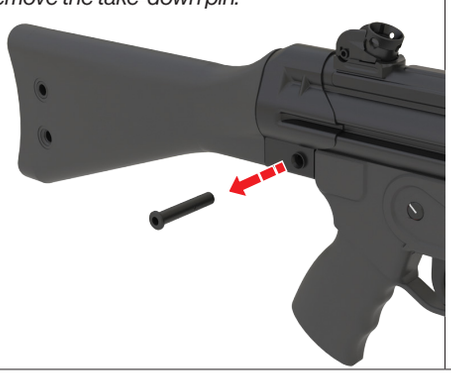
Push the pin inward (see image a). On the other side of the firearm, Remove the take-down pin (see image b and c). Slide buttstock rearward until separated (see image d).

a. Push the take-down pin.



b. Pull the take-down pin.

c. Remove the take-down pin.



d. Slide buttstock assembly.

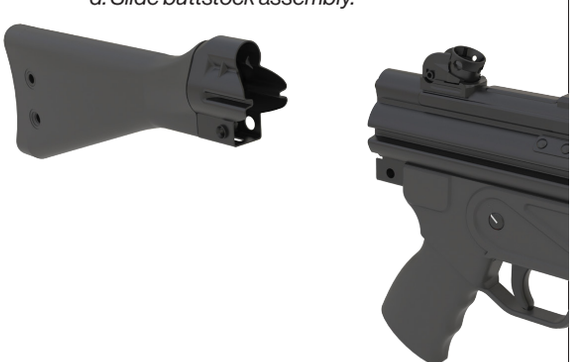


Figure-29 Buttstock Removal

2. Bolt Carrier Assembly Removal

After the removal of the butt cap, the bolt carrier assembly is loose inside the receiver. To remove the bolt carrier assembly gently pull back the charging handle until the recoil spring is projecting from the receiver (see image a). Pull the recoil spring to remove the bolt carrier assembly (see image b).

NOTE: It is not necessary to separate the recoil spring from the bolt carrier assembly for cleaning.

a. Remove the recoil spring.

b. Remove the bolt carrier.

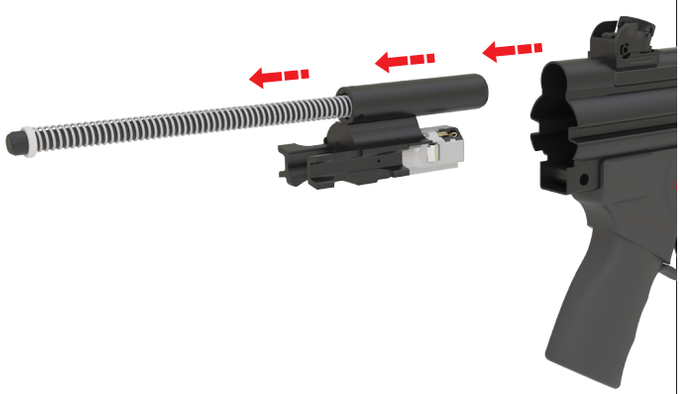


Figure-30 Bolt Carrier Assembly Removal

3. Trigger Housing Assembly Removal

Push the pin inward (see image a). On the other side of the firearm, remove the pin (see image b and c). Slide the trigger housing assembly downward and rearward until separated (see image d).

a. Push the take-down pin.

b. Pull the take-down pin.

c. Remove the take-down pin.

d. Slide the trigger housing downward and rearward.

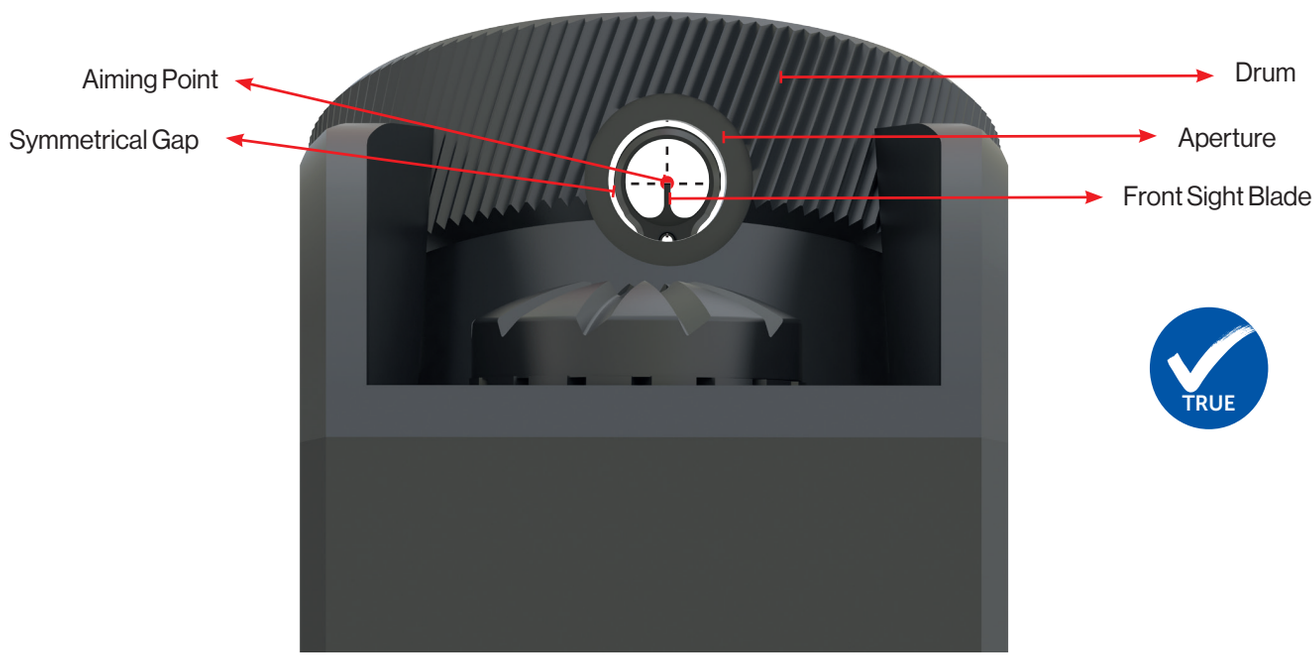
Figure-31 Trigger Housing Assembly Removal

T-94 SD SUBMACHINE GUN

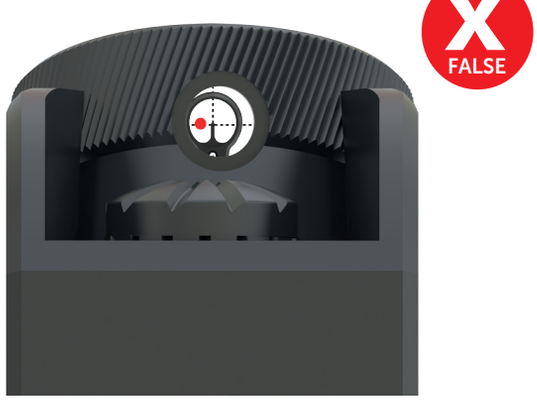
Using The Sights

The rear sight has four apertures to allow a wider or deeper rear sight picture to allow varying preselected aiming points.

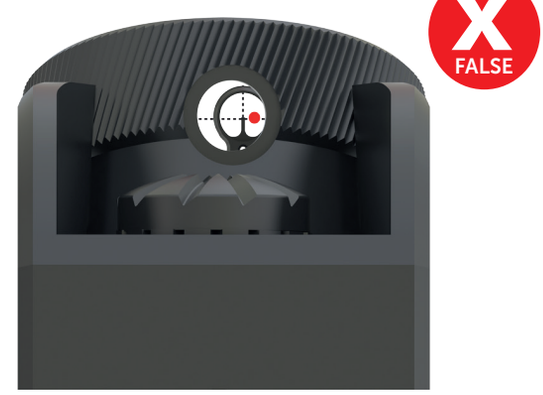
Point of Impact Centered



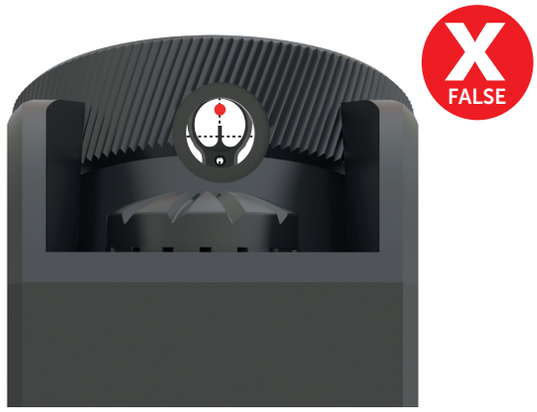
Shooting Left



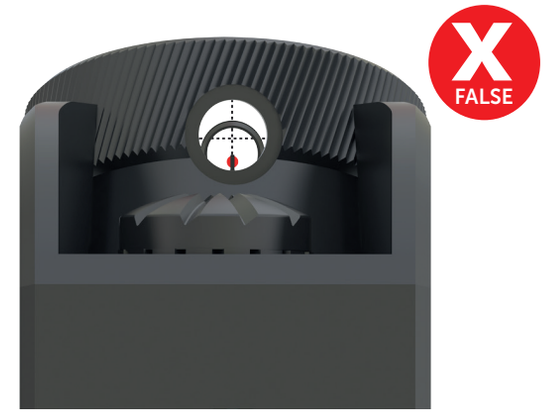
Shooting Right



Shooting High



Shooting Low



Rear Sight Adjustments

T94 SD Submachine Guns are zeroed after production. If the sight requires adjustment for elevation or windage, this is done in the following manner.

Windage Adjustment

To adjust the windage to the left, loosen the locking screw and gently turn the adjustment counter-clockwise. To adjust the windage to the right, loosen the locking screw and gently turn the adjustment clockwise. One quarter turn (one click) equals approximately 0.5 inches change in elvevation or windage at 25 yards.

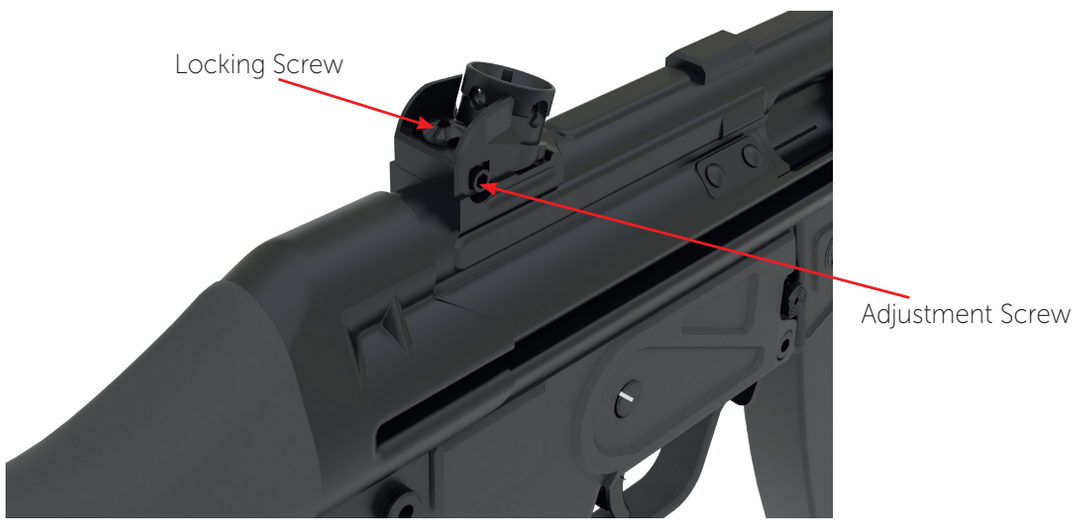


Figure-32 Windage Adjustment

Elevation Adjustment

Elevation adjustment is made by use of an elevation adjustment tool. The elevation adjustment tool engages in the notches on the inside of the drum sight. All adjustments should be made with the rear drum placed on the #1. Turning the drum clockwise will lower the bullets point of impact. Turning the drum counter-clockwise will raise the bullet's point of impact. One quarter turn (one click) equals approximately 0.5 inches change in elvevation or windage at 25 yards.

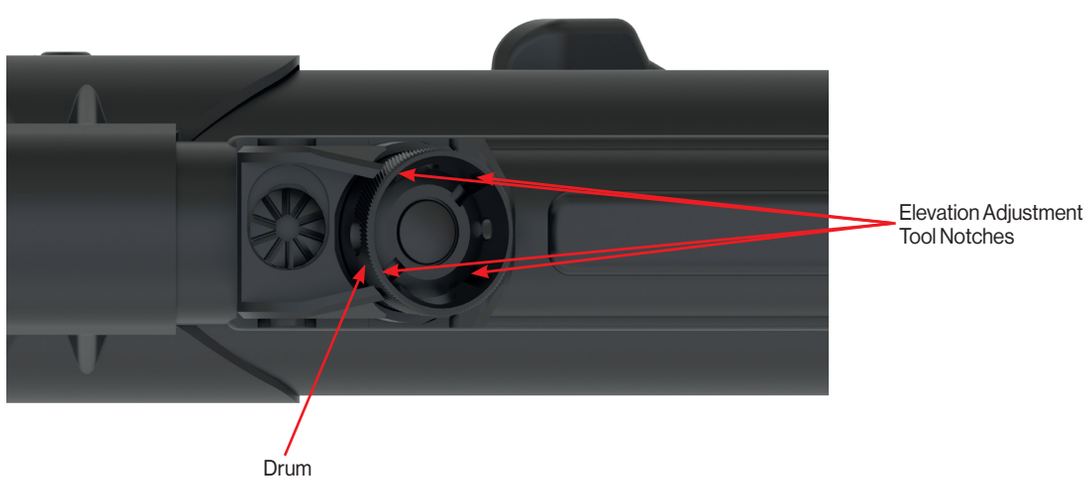


Figure-33 Elevation Adjustment

FIREARM MAINTENANCE

Regular Maintenance

Always be aware of the overall operation of your firearm. Ensure the charging handle, safety selector, magazine insertion, etc. are in proper operating condition. If any strong resistance or odd tolerances are noted, investigate. In general keep your firearm clean and lubricated. When your firearm is disassembled, inspect for rust, corrosion, and build up of any residues that will affect operation. A function check should be performed. This entails ensuring the safety does not allow the trigger to be pulled.

Prior to Use

Perform a regular maintenance and function check prior to use. Pay special attention to ensure there are no obstructions or mechanical situations that need to be addressed.

After Each Use

After each firing session, the firearm should be unloaded, checked for clear, and field stripped. The firearm should then be cleaned, re-lubricated, and subjacted a function check prior to storing.

EXTREME CLIMATE MAINTENANCE

High Heat and Humid/Wet Conditions

In climates with high heat and humidity the firearm, and especially its internal components, can rust more quickly. Inspect your firearm more often and never leave components without lubrication. If any rust or corrosion is located, clean it off and re-lubricate immediately.

High Heat and/or Low Humidity/Dry Conditions

In climates with high heat and/or low humidity, firearms are less likely to rust, however, lubrication can evaporate and dirt,sand, and other contaminants can find their way into the operation. This will cause faster wear and abrasion of the internal components. Use a thinner oil and wipe all excess oil after cleaning, as excess oil will attract and hold dirt.

Extreme Cold Conditions

In climates with extreme cold and/or low humidity, the lubricating oils used should be selected specifically for this environment. Sudden temperature changes can cause moisture build-up inside the firearm leading to corrosion. For this reason attention must be paid for condensation both inside and out. Care must be taken to not place a hot, recently fired firearm in snow or ice as it could damage or deform metal surfaces. And upon transitioning from a cold environment to a warm environment condensation will occur and must be addressed with drying and lubrication.

TROUBLESHOOTING

NO.	ISSUE	PROBABLE CAUSE	CORRECTIVE ACTION
1	Failure to fire	Firing pin broken Firing pin tip worn Firing pin spring broken Faulty ammunition Bolt carrier not in battery Damage/obstruction in trigger pack	Replace firing pin Replace firing pin Replace firing pin spring Replace ammunition Recharge firearm Repair trigger pack
2	Failure to extract	Extractor broken Extractor spring broken Bolt face has obstruction	Replace extractor Replace extractor spring Clean bolt face
3	Failure to eject	Ejector broken	Replace ejector
4	Failure to feed	Magazine not fully seated Magazine catch not engaged Magazine lips deformed Obstruction of charging handle movement Faulty ammunition	Fully insert magazine until it locks Inspect magazine latch button and paddle Replace magazine Ensure charging handle moves freely Replace ammunition.
5	Failure to chamber	Obstruction in trunnion/chamber Faulty ammunition Damaged bolt assembly Bolt face has obstruction Weak recoil spring	Clean bolt face Clean trunnion/chamber Replace ammunition Replace recoil spring
6	Failure to go into battery	Obstruction in trunnion/chamber Faulty ammunition Damaged bolt assembly Bolt face has obstruction Weak recoil spring	Clean trunnion/chamber Replace ammunition Repair bolt assembly Clean bolt face Replace recoil spring

CAUTION: IF ABOVE CORRECTIVE ACTIONS DO NOT REMEDY ISSUE, PLEASE SEEK ASSISTANCE FROM QUALIFIED GUNSMITH OR ARMORER BEFORE CONTACTING MECHANICAL AND CHEMICAL INDUSTRIES CORPORATION.

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