

Left: VZ-58 trigger at rest.

Right: VZ-58 trigger pulled.

The disconnecting function is also built into this trigger assembly. When the bolt carrier moves rearward it impacts the disconnector arm which is connected directly to the semi-auto trigger arm. This action moves the trigger arm downward to disengage the sear which then returns to its original position under power of the sear spring. This functions in much the same way the safety does, to lower the trigger arm so it cannot engage the sear, but only temporarily.



Image: disconnector protrusion on semi-auto trigger arm.

Unlike other aspects of the VZ-58 and the AK-47, the fire control group cannot be directly compared to eachother because of the radical differences in design. The only similarity they share is that the device is cocked with the rearward movement of the bolt group.

# IV. Construction

Construction differers in several key aspects, most notable is the receiver. The VZ-58 is milled from steel and the barrel presses directly into it which is then retained by a barrel pin either pressed in a hole drilled fully through or blind pinned. The AK-47, at least the AKM of post-1959 manufacture covered here, is stamped 1mm 4130 steel with front and rear trunions riveted in which the barrel presses into. Like the VZ-58, the AK-47 barrel is retained by a pin driven through the front trunion. Headspace on the VZ is determined by how far the barrel is pressed into the receiver in relation to the bolt face, while the AK-47 headspace is determined how far the barrel is pressed into the trunion in relation to the bolt face that locks directly into the trunion. In both the VZ-58 and the AK-47, the fire control groups are retained by crosspins.

#### Receiver:





Right: Top view of AK-47 bent receiver.

Left: Top view of VZ-58 milled receiver.

#### **Ejector:**





Left: VZ-58 ejector is a seperate piece pushed into the receiver and retained by detent.

#### **Barrel Pin:**

**IMG** 

Left: VZ-58 barrel pin in lower of receiver.

#### **Stock attachment:**

Right: AK-58 barrel pin in upper of front trunion.



Left: VZ-58 receiver with threaded hole in rear to accept either side-folding stock or fixed.

Right: AK-47 rear trunion with tang that end of stock slides into and through which screws are inserted.

### Magazine well:

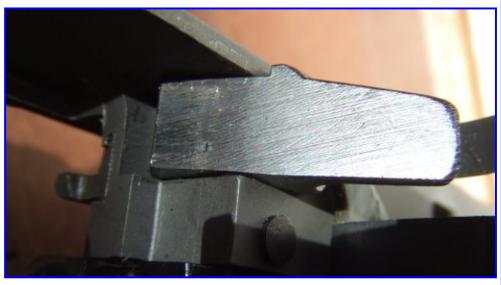


Left: VZ-58 magazine well milled into receiver.



Right: AK-47 magazine well with stamping in receiver to constrict it and hold the magazine tightly

## **Magazine Latch:**





Right: AK-47 paddle type magazine latch centered.

Left: VZ-58 paddle type magazine latch positioned to one side.

#### **Receiver Cover:**



Left: VZ-58 receiver cover, with bolt and striker springs, retained by push out pin with detent stops in the receiver.



Right: AK-47 receiver cover retained by protrusion on protion of the recoil spring assembly that slides into the rear trunion.

## **Bolt Spring:**

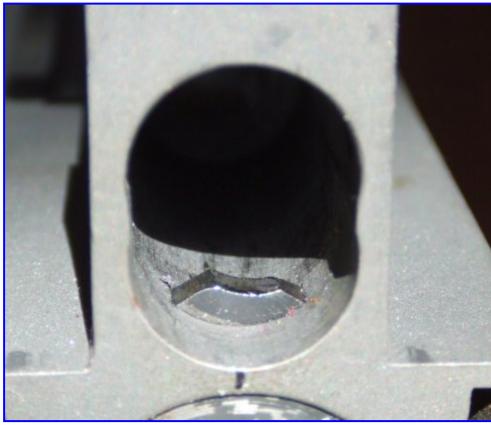




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VZ-58 bolt spring attached to the top of the receiver cover.

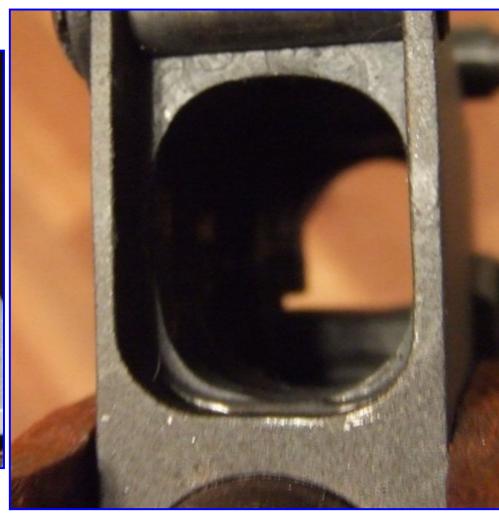
#### **Gas Piston Hole:**



Left: VZ-58 gas piston hole, notice piston stop at the front to retain piston and spring.

## Handguards:

Right: AK-47 bolt spring that slides into rear trunion.



Right: AK-47 gas piston hole through upper portion of front trunion.



Left: VZ-58 top handguard retained by detent secured pin at its rear.



Right: AK-47 top handguard retained by lever at its rear.

## Handguards, continued:



Left: VZ-58 top handguard removed, exposing piston.



Right: AK-47 top handguard removed, showing piston tube attached.

# **Rear Sight:**





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Left: VZ-58 rear sight secured by lugs that fit into recesses in receiver and held fixed by a leaf spring.

Right: AK-47 rear sight secured by lugs that fit into recesses in trunion and held fixed by a leaf spring.

#### **Muzzle Device:**



IMG

Left: Flash hider on VZ-58 with 14x1 right-hand threading, secured by detent pin.

Right: AK-47 traditional slant brake with 14x1 left-handthreading, secured with detent pin.

#### **Bayonet Lug:**



IMG

Left: VZ-58 bayonet lug, operates indepentant of muzzle.

Right: AK-47 bayonet lug, bayonet must lock over muzzle for rigidity.

In contrast to the AK-47, the VZ-58 bolt hold that can be manually actuated, or triggered by an empty magazine. The AK-47 lacks anything comparable.

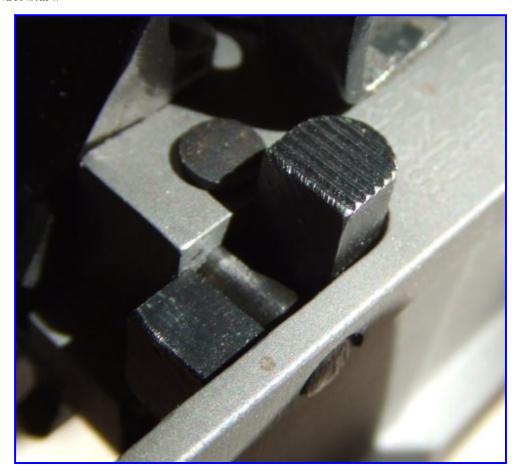


Image: VZ-58 bolt release situated next to mag release

# V. Accouterments

Magazine:





Right: Side view of AK-47 magazine.

Left: Side view of VZ-58 magazine.

### Magazine, continued:



Left: End view of VZ-58 magazine, notice exposed floorplate on rear edge that engages the bolt holdopen.



Right: End view of AK-47 magazine.

#### **Cleaning Rod:**

**IMG** 

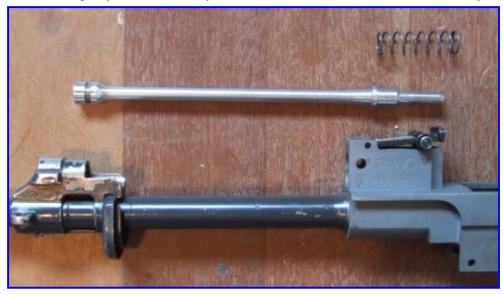
Image: AK-47 cleaning rod secured by lower handguard and gas block. The VZ-58 has no comparable part.

# Similarities to other designs

# I. VZ-58:

#### **Gas System:**

The VZ-58's gas system more closely resembles that of the FN FAL without the ability to adjust bleed as on the FAL.





Left: VZ-58 short stroke gas system.

Right: FAL short stroke gas system, less receiver.

## **Locking System:**

The VZ-58's locking system is similar to that of the Walther P-38. The P-38 is not gas operated, but has a hinged block much like the VZ-58, however oriented upside-down. When the P-38 is fired, the recoil moves the barrel rearward until the pin impacts the receiver which pushes on the slope of the locking piece thereby pushing it downward and pulling the locking lugs out of the recesses in the slide allowing it to continue its rearward movement and cycle.





Left: VZ-58 bolt group removed, breech block in locked position.

Right: P-38 barrel assembly removed, lug in locked position.



Left: VZ-58 bolt group removed, breech block in unlocked position.



Right: P-38 barrel assembly removed, lug in unlocked position.





Left: VZ-58 breech block.

Right: P-38 breech block.

# II. AK-47

The AK-47 more closely resembles a Desert Eagle than it does a VZ-58 as shown by the following.

### Gas System:

The AK-47's gas system is a long-stroke, as with the Desert Eagle. On the Desert Eagle, the piston is attached directly to the slide and recoils fully with it.



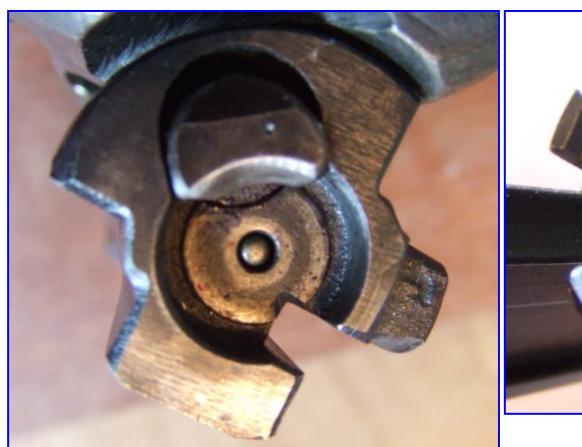


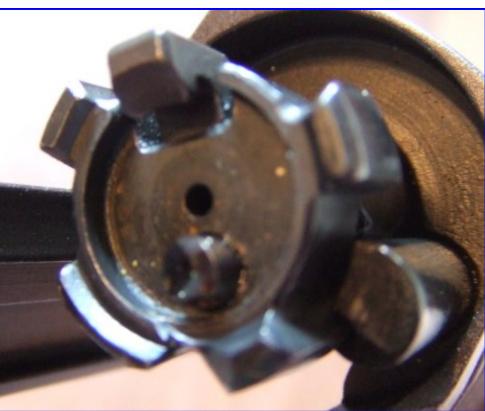
Right: Desert Eagle gas piston attached to slde.

Left: AK-47 gas piston attached to bolt carrier.

#### **Locking System:**

The AK-47's locking system consists of a rotating locking bolt connected to the bolt carrier, while the Desert Eagle's bolt is also rotates to lock inside lugs on the barrel and is attached to the slide.



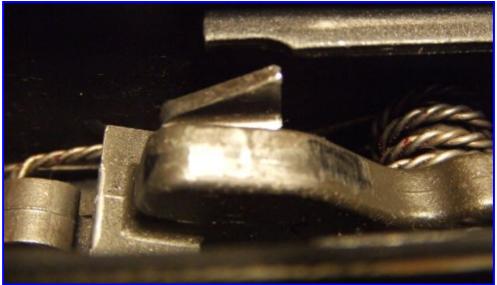


Left: AK-47 bolt showing locking lugs.

Right: Desert Eagle bolt showing locking lugs.

## FCG:

The AK-47's firing system also shares its basic design with the Desert Eagle as its hammer fired instead of striker fired like the VZ-58.





Right: Desert Eagle hammer cocked inside frame.

Left: AK-47 hammer cocked inside receiver.

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