# Field Stripping &Armorers Maintenance Manual
# Heckler & Koch Universal Self-Loading Pistol (USP)

Picture © remtec.com

**Introduction:** This manual describes the Field Stripping and Armorer Maintenance procedures for the Heckler and Koch USP 45 "Full Size" handgun. The USP family of firearms includes the USP 9mm X 19mm, .40 S&W, .45 ACP, Tactical, Expert, Elite, and Compact Variants. All models of the USP family of handguns are **SIMILAR** in the processes described here.

**Disclaimer:** The purpose of this manual is to facilitate the expansion of knowledge pertaining to the Heckler & Koch USP 45. It is geared towards the new gun hobbyist, and in particular to the owners of Heckler & Koch USP 45 Full-Size handguns who have little or no armorer experience. It is **NOT** a promotion of, or a procedural guide to, the tasks normally conducted by a certified armorer. **YOU** are responsible for what you do with this information, and I fully recommend you return your weapon to H&K, or to a certified H&K armorer, for your service needs. Failure to do so could void your warranty, or worse.

**Credits:** The major portions of this manual derive from Dr. Killjoy's procedure and the JBM procedure. Although nothing was wrong with the original procedures, I have reformatted them and added additional information and detail, in order to create an expanded learning tool. Most of the additional information derives from H&K's Manuals and source material, as well as my own and others' gunsmith and usage experience. Comments and Suggestions are always welcome. Please forward any you may have to: Email

**NO WARRANTEE, GUARANTEE, OR PROMISE, IS EXPRESSED OR IMPLIED!**

*I take no responsibility for you, your safety, your actions, anyone else's safety, your property, your weapon, or your H&K Warranty in any way, shape, or form.*

**Download the original "HK USP Operators Manual" Here**



***Pictures and original text by:*** *Dr. Killjoy, JBM, H&K, and Me*

***Revised:*** ***NOT YET RELEASED***

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**Link to PDF Download of this Manual** **(Arriving Soon, No expected date at this time)**

## ii. Clearing Your Weapon

***** Warning *** Warning *** Warning *** Warning *****

**STOP ! Before attempting to proceed, CLEAR YOUR WEAPON !**

**Clearing your weapon;**

1. Make sure your fingers are outside the TRIGGER GUARD and insure the weapon is pointed in a safe direction at all times.
2. Place the Control Lever in the "SAFE" position, press the SAFETY LEVER in the upwards direction so that the "S" aligns with the REFERENCE LINE.
3. Remove the MAGAZINE - Depress the MAGAZINE RELEASE downward and catch magazine as it is released.
4. Lock the slide to the rear, OPEN position - Move the SLIDE to the rear while moving the SLIDE LOCK upwards.
5. Visually inspect the MAGAZINE WELL and BREACH areas of your weapon to insure no rounds or brass exist in these locations. Remove any, if present, before proceeding.

**Your Weapon is now considered "CLEAR"**

# iii. Heckler & Koch Firearms Safety

**A firearm has the capability of taking your life or the life of someone else! Be extremely careful with your firearm. An accident can occur at anytime and is almost always the result of not following basic safety rules.**

1. Never point a firearm at anyone, or in any direction other than a SAFE direction, i.e. downrange.
2. Treat all firearms as if they are always loaded.
3. Keep your finger off the trigger and outside of the trigger guard until your sights are aligned on the target and you are ready to fire.
4. Keep your finger off the trigger and outside of the trigger guard while loading or unloading the firearm.
5. Keep your finger off the trigger and outside of the trigger guard while pulling the firearm out of the holster or while returning it to the holster.
6. Be sure of your target and the backstop beyond.
7. Never give a firearm to or take a firearm from anyone unless the action is open and the magazine and/or chamber are free of any ammunition or brass.
8. Be sure that the ammunition you are using is factory loaded, is of the correct caliber for the firearm in which it is to be used, and that it is not damaged in any way.
9. Before firing, remove the magazine from the firearm, lock the action open, make sure the chamber is clear of any ammunition or brass, and check the barrel of the unloaded firearm for any possible obstructions.
10. Before firing any firearm that is unfamiliar to you, make sure that you understand exactly how it functions. A lack of familiarity with the firearm can result in serious accidents. Attend a certified training course on any firearm that you intend to use or with which you are not sufficiently familiar.
11. Always wear hearing and eye protection when using your firearm.
12. Keep all body parts, especially the hands and fingers, away from the muzzle to avoid injury or burns.
13. Be sure that no part of either hand touches or interferes with the slide. The slide is moved backwards by the recoil force of the pistol during firing and may cause serious injury.
14. Firearms should be stored separately from ammunition and beyond the reach of children, and/or any untrained individuals.
15. Avoid the use of any alcoholic beverages or drugs before and during the use of any firearm.
16. Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to lead, a substance known to be associated with birth defects, reproductive harm, and other serious injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure.
17. Most firearms will fire if the trigger is pulled, even if a loaded or empty magazine is being removed or inserted. A cartridge in the chamber will discharge when the trigger is pulled with the magazine inserted or removed from the firearm. Never leave a firearm unattended, even if the magazine is removed. Exercise extreme caution after removing the magazine and personally verify that the chamber is also empty before field stripping the firearm for cleaning or any other reason.

# iii. History of the H&K USP *(History © REMTEK 1996-2005)*

When Heckler & Koch introduced the USP in 1993, it marked the first time H&K chose to incorporate many traditional handgun design elements in one of its pistols. Previous design elements like the HK P7 with its unique cocking mechanism and gas system, the precise roller locked bolt of the P9S, and even the simple, double-action only VP70Z all qualify as innovative, on-the-edge, design. So when HK crossed into the mainstream with the USP, two principles guided its development - the first being the use of advanced materials and engineering technology, the second being the creation of a "pistol paradigm", that is a pistol better than all those existing now or in the past.

So it should come as no surprise that Heckler & Koch should look to a number of the successful pistols of the past and the present for inspiration in developing the HK USP. John Browning's design for the Government Model is one of the most successful pistols ever produced. Its advantages are well known - reliability, accuracy, dependable stopping power. Many pistols claim these virtues but few combine them as well as the Model 1911. American input during the design phase of the USP was considerable. The controls and many of the pistol's features were directly influenced by American favorites like the Model 1911. And like the Model 1911, the USP can be safely carried "cocked and locked".

The USP control lever, a combination safety and de-cocking lever, is frame mounted and quickly accessible unlike the slide mounted safeties common on many pistols. The control lever has positive stops and returns to the "fire" position after de-cocking. The control lever functions can be modified by a certified HK armorer; making one pistol easily "convertible" into any of the nine different USP variants.

Using a modified Browning-type action with a special patented HK recoil reduction system, the USP is built to take the punishment of the most powerful +P loads. The HK USP is currently available in three calibers: .40 Smith & Wesson, 9mm Parabellum, and most recently added, .45 ACP.

The USP .45 was developed in the shadow of HK's work on the Special Operations Pistol (known officially as the MK 23, MOD 0), the.45 ACP handgun designed by Heckler & Koch for the US Special Operations Command. The frame and slide of the USP .45 are slightly larger than those found on the USP40 and USP9, demonstrating its close kinship to the special operations gun.

The polymer frame of the USP was designed using technical experience gained by HK engineers in the development of the world's first composite material pistols. An almost identical high-strength/corrosion-free material is used in the .45 ACP Special Operations Pistol. Both the USP and the Special Operations Pistol make extensive use of high-strength polymers and both pistols evolved out of the same design philosophy - to create a technologically superior handgun. It is worth noting that work on the USP began well before the US Government issued its requirement for the Special Operations Pistol. Nevertheless, design, engineering, and testing overlapped and both programs continue to influence each other.

Major metal components on both the USP and Special Operations Pistol are also corrosion resistant. Outside metal surfaces like the one-piece machined steel slide are protected by an extremely hard, nitro-gas carburized black oxide finish. Internal metal parts, including springs, are coated with a special Dow Corning anticorrosion process (Molykote®) that reduces friction and wear.

### Choice of Nine Different Control Arrangements

By using a modular approach to the internal components, the control functions of the HK USP can be switched from the left to the right side of the pistol for left handed shooters. The USP can also be converted from one type of trigger/firing mode to another. This includes combination double-action and single-action (DA/SA) modes and double action only modes. This gives a shooter the widest choice of control arrangements. The USP can be modified into virtually any firing mode imaginable. Currently, the USP is available in nine different trigger/firing mode configurations.

Variants I and 2 allow the user to carry the pistol in a single-action mode (cocked and locked) with the manual

safety engaged. This same pistol, without modification, can be carried in double-action mode, with or without the manual safety engaged. Variants 3 and 4 provide the user with a frame-mounted de-cocking lever that does not have the "safe" position. This combination only allows the hammer to be lowered from SA position to DA position. It does not provide the "safe" position to prevent the pistol from firing when the trigger is pulled. For the double action only user, variants 5, 6, and 7 of the USP operate as double action only pistols with a bobbed hammer always returning to the DA position (forward) after each shot is fired. To fire each shot, the trigger must be pulled through the smooth DA trigger pull. Variants 5 and 6 have a manual safety lever. No control lever is provided on variant 7. Variants 9 and 10 allow the shooter to carry the pistol in a single-action mode (cocked and locked) with the manual safety engaged. This same pistol, without modification, can be carried in double-action mode (hammer down), with or without the manual safety engaged. The single action mode offers a second strike/double action capability in case of a misfire. The control lever has no de-cocking function on variants 9 and 10.

In addition to a wide selection of trigger/firing modes, the USP has an ambidextrous magazine release lever that is shielded by the trigger guard from inadvertent actuation. The rear of the USP grip is stepped, and combined with the tapered magazine well, makes magazine changes fast and precise. Finger recesses in the grip frame also aid in magazine removal. On 9mm and.40 caliber USP's, magazines are constructed of an extremely tough stainless steel reinforced polymer. Magazines on the USP.45 are all metal. All USP magazines will drop free of the pistol frame when the magazine release is actuated. Also, the HK USP does not have a magazine lockout feature. You can still fire a chambered round even with the magazine removed. An extended slide release lever is positioned to allow easy operation without changing the grip of the shooting hand.

## Less Felt Recoil with the USP Recoil Reduction System

One of the most important unique design features of the HK USP is the mechanical recoil reduction system. This system is incorporated into the recoil/buffer spring assembly located below the barrel. Designed primarily to buffer the slide and barrel and reduce recoil effects on the pistol components, the system also lowers the recoil forces felt by the shooter. The USP recoil reduction system is insensitive to ammunition types and requires no special adjustment or maintenance. It functions effectively in all USP models. Using this same recoil reduction system, one of the HK.45 ACP Special Operations Pistols fired more than 30,000 +P cartridges and 6,000 proof loads without damage to any major components.

Abuse and function testing of USP's have seen more than 24,000 rounds fired without a component failure. In fact, this design testing and production evaluation mania of Heckler & Koch engineers is legendary. The HK USP is one of the most thoroughly tested and perfected pistols ever introduced by Heckler & Koch. When the initial design process began more than six years ago, HK engineers already had a large reserve of technical knowledge to draw from.

## HK Has Wide Experience with Polymers

Heckler & Koch pioneered the use of high strength polymers with the P9S and the VP70Z, two pistols designed in the late 1960s. These designs, as well as extensive use of synthetics on HK military rifles and submachine guns, demonstrated the "promise of plastics" in durability and cost-effective manufacturing. And while all-steel P7 series pistols were the principle handgun product of Heckler & Koch throughout the 1980s, HK's continued interest in polymer technology was evident in several prototype firearms developed during this period.

When development work on the USP began in 1990, HK experimented with several polymer compounds. But only one, an advanced injection molded polyamide, met the standards of the HK design team. Injection molded polyamides are super industrial-strength plastics known for their resistance to high temperatures, wear, chemicals, and radiation. They are lighter than steel, corrosion resistant, and have a higher tensile strength than aluminum. Reinforced with microscopic glass fibers, the USP polyamide is dimensionally more stable than many polymers used by other manufacturers. Dimensional stability is an important factor to ensure pins and other critical parts

are held securely. The frame of the USP is also steel reinforced to provide additional strength and aid in giving the pistol a proper weight and balance.

## Tough Military Standards Used in USP Tests

The testing process of the USP, already extreme, exceeded strict NATO AC-225 Military Specification Standards and in many ways mirrors the regimen the HK Special Operations Pistol was subjected to by US Government testers. The barrel of the USP is cold-hammer forged from high-grade chromium steel, the same type of steel used in cannon barrels. For increased velocity and longer barrel life, all USP barrels now have a polygonal profile. During testing, a bullet was deliberately lodged in a USP barrel. Another cartridge was then fired into the obstructing bullet. The second bullet cleared the barrel, resulting in a barely noticeable bulge. The pistol was then fired for accuracy and the resulting group measured less than 2 1/2 inches at 25 meters.

Other less destructive tests reveal much about USP reliability and durability. Function testing a wide selection of ammunition types, one test gun fired more than 10,000 rounds without a single malfunction. That means no stovepipes, no failures to feed or eject; no jams! Endurance firing of test samples has passed 24,000 rounds of high performance .40 S&W ammunition without any parts failures. Severe temperature tests required the USP be frozen at -44°F (-42°C) and then fired, frozen again, quickly heated to 153 F° (67°C), and then fired again. These temperature spectrum tests were continually repeated with no adverse effects on the USP.

Demanding NATO Mil-Spec mud and rain tests were conducted, again with the USP passing without difficulty. Water immersion and salt spray also presented no problems to the USP. Outside metal surfaces of the USP are covered with an extremely hard nitro-gas carburized and black oxidized finish. Internal metal parts are coated with a special Dow-Corning© process that reduces friction and wear. Both the intimae and external finishes have proved to be especially corrosion resistant. For more than two years, German Navy combat divers have used the same process on weapons parts without any signs of rust or corrosion.

Safety testing exceeded the ANSI/SAAMI requirements adopted in May 1990. These included dropping a USP with a primed cartridge and de-cocked hammer on a variety of hard surfaces without discharging. The USP easily surpassed these commercial requirements, as well as tough German Army and police tests including repeated drop tests from six feet, hammer first, onto steel backed concrete slab. Proof round firing resulted in no cracks, deformations, or increase in head space. Attempts to fire the USP pistol with an unlocked breech proved impossible.

HK firearms are known worldwide for their accuracy. Testing with a variety of ammunition proved the USP meets these high standards. The HK patented recoil reduction system, a mechanical dual spring buffering device, is another feature common to the USP and the HK Special Operations Pistol. During the USP testing phase, HK engineers discovered this innovative unit reduces the peak force acting on the USP grip to less than 300 Newton (66 pounds). Peak force shock on competing .40 caliber polymer and metal framed pistols climbed to more than 5000 Newton (1,102 pounds). The primary benefit of low peak shock is a decrease in wear and tear on pistol components, a great concern with the powerful +P cartridge in 9mm, 40 S&W. and.45 ACP. Reduction of peak shock forces also contributes to softer recoil for the shooter, although these "felt recoil" values are much more subjective.

Even after the commercial introduction of the USP in 1993, testing and product improvement have continued. USP test pistols have already fired more than 24,000 rounds of.40 caliber ammunition without any component failures. Heckler & Koch engineers are set to surpass the standard set by the HK Special Operations Pistol of 30,000 rounds. The USP project demonstrates a simple, guiding principle of Heckler & Koch engineering; form follows function. All HK pistols are designed and manufactured to meet the operational requirements of the most demanding users.

# I. Weapon Familiarization

**NOTES:**

a. ***WARNING: Forcefully inserting a loaded magazine into the USP may cause the pistol slide to close, chambering a cartridge, and making the USP ready to fire. When inserting a magazine, always be certain that the pistol is pointing in a safe direction and your finger is off the Trigger and outside the Trigger Guard. Failure to do so could cause you to unintentionally fire the pistol, resulting in serious injury or death.***

b. *H&K recommends your weapon be Field Stripped and a "Normal Cleaning" be performed after each firing session, or 12 months, whichever come first.*

c. ***Magazines** should be Field Stripped and cleaned every 500 rounds (500 rounds shot from that magazine)*

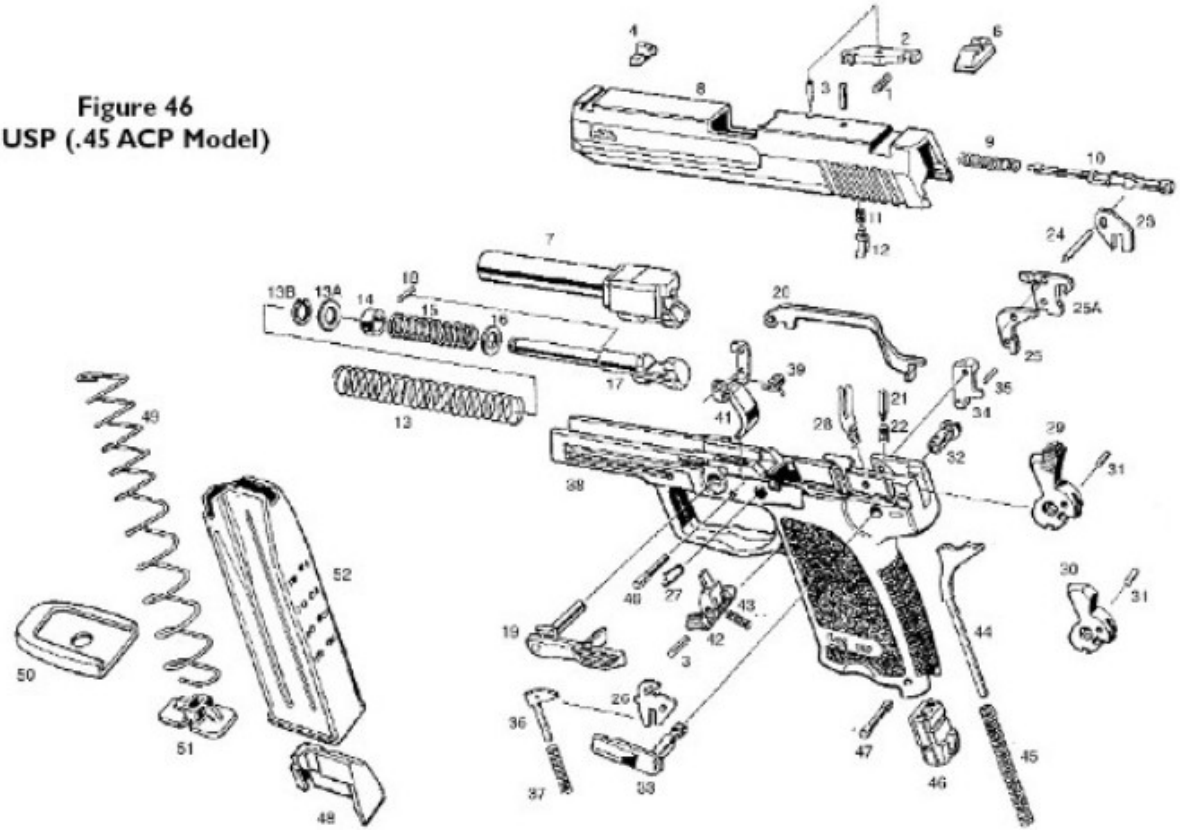
d. *H&K further recommends a "Detailed Cleaning" be performed after your weapon has fired 500 rounds. Or, if the weapon has been exposed to, or laden throughout with, sand, dust, water, or any visible contaminants.*

e. *A "Detailed Cleaning" consists of a "Normal Cleaning", plus fully cleaning the interior of the Frame and all internal components. A "Detailed Cleaning" can be accomplished using foaming gun cleaners, sonic baths (only using chemicals safe to put your hands into), or having a certified H&K armorer perform a **Full Disassembly Cleaning**.*

## A. Right and Left Side Views of the USP with Part Nomenclature

# B. Exploded-View Diagram of the USP 45 and Parts List

Figure 46
USP (.45 ACP Model)



## USP .45 Parts List

*(Parts exclusive to the USP45 shown in italics)*

| Item | Description | Identification No. |
|---|---|---|
| 1 | **Extractor spring** | 214188 |
| 2 | *Extractor* | *214828* |
| 3 | **Roll pin,** ISO 8748 - 3 X 14 mm(3x) (extractor, firing pin, mag. release) | 980838 |
| 4 | **Front sight*** (6.4 mm) | 214220 |
| | **Front sight*** (6.6 mm) | 214221 |
| | **Front sight*** (6.8 mm) standard | 214222 |
| | **Front sight*** (7.0 mm) | 214223 |
| | **Front sight*** (7.2 mm) | 214224 |
| | **Front sight*** (7.4 mm) | 214225 |
| 6 | **Rear sight** | 214194 |
| 7 | *Barrel* | *214815* |
| 8 | *Slide, incomplete* | *214827* |
| | *Slide, complete* | *214826* |
| 9 | **Firing pin spring** | 214190 |
| 10 | **Firing pin** | 214189 |
| 11 | **Firing pin block spring** | 214192 |
| 12 | **Firing pin block** | 214191 |
| 13 | *Recoil spring* | *214843* |
| 13A | **Front recoil spring retainer** | 214721 |
| 13B | **Snap ring** | 929191 |
| 14 | **Buffer spring retainer** | 214208 |
| 15 | *Buffer spring* | *214822* |
| 16 | **Rear recoil spring retainer** | 214206 |
| 17 | *Guide rod, incomplete* | *214830* |
| 17 | *Recoil buffer spring assembly complete* | *214829* |
| 18 | **Roll pin,** ISO 8748 - 3.5 X 10mm (buffer spring retainer) | 929908 |
| 19 | **Slide release** | 214181 |
| 20 | **Trigger bar,** complete | 214176 |
| 21 | **Trigger bar detent** | 214165 |
| 22 | **Trigger bar detent spring** | 214166 |
| 23 | *Disconnector* | *214840* |
| 24 | **Sear axle** | 214101 |
| 25 | *Catch* | *214773* |
| 25A | *Control latch* | *214817* |
| 26 | **Detent plate** (variant 1 & 2) | 214099 |
| | **Detent plate**** (variant 3 & 4) | 214254 |
| | **Detent plate**** (v. 5, 6, 9, & 10) | 214255 |
| 27 | **Shaped spring** (slide release) | 214171 |
| 28 | **Flat spring** | 214167 |
| 29 | *Hammer, complete (variant 1-4, 9 & 10)* | *214825* |
| 30 | **Hammer,** bobbed (v.5, 6, 7)** | 214256 |
| | **Hammer, bobbed complete**** (v.5, 6, 7) | *214744* |
| 31 | **Cyl. pin,** ISO 6325 2.5x8mm (hammer strut pin) | 971598 |
| 32 | **Hammer axle** (v.1-6, 9,10) | 214774 |
| | **Hammer axle**** (variant 7) | 214258 |
| 33 | **Control lever** (variant 1, 5, 9) | 214184 |
| | **Control lever** (variant 2, 6, 10) | 214309 |
| | **Control lever** (variant 3) | 214352 |
| | **Control lever** (variant 4) | 214253 |
| 34 | **Sear** (variant 1-4, 9, 10) | 214180 |
| | **Sear, complete**** | 214179 |
| 34A | **Tube** (variant 5, 6, 7)** | 214413 |
| 35 | **Roll pin,** ISO 8748 - 2 X 10mm (sear, variant 1, 2, 3, 4, 9, 10) | 982785 |
| 36 | **Detent slide** (variant 1-6, 9, 10) | 214105 |
| 37 | **Compression spring,** (detent slide) variant 1-6, 9, 10 | 214104 |
| 38 | *Frame, complete* | *214816* |
| | *Frame, incomplete* | *214675* |
| 39 | **Trigger rebound spring** | 214164 |
| 40 | **Trigger axle** | 214154 |
| 41 | *Trigger* | *214841* |
| 42 | *Magazine release* | *214818* |
| 43 | **Magazine release spring** | 214170 |
| 44 | *Hammer strut* | *214819* |
| 45 | **Hammer spring** | 214300 |
| 46 | *Lanyard loop insert* | *214836* |
| 47 | **Lanyard loop insert pin** | 214314 |
| 48 | *Magazine Follower* | *214832* |
| 49 | *Magazine spring (12-rd)* | *214833* |
| | *Magazine spring (10-rd)* ** | *214850* |
| 50 | *Magazine floorplate (12-rd)* | *214834* |
| | *Magazine floorplate (10 rd)* | *214852* |
| 51 | *Locking plate (12-rd)* | *214835* |
| | *Locking insert (10-rd)* ** | *214853* |
| 52 | *Magazine housing (12-rd)* | *214869* |
| | *Magazine housing (10-rd)* ** | *214851* |
| | *Magazine complete (10-rd)* ** | *214868* |
| | *Magazine complete (12-rd)* ** | *214862* |
| | *Mag. extended floorplate (10-rd)* ** | *215954* |
| | *Mag. extended floorplate (12-rd)* ** | *217710* |

**Not pictured in diagram

# C. This should happen every time after your last shot.

1. When you fire the last round in a magazine, the Slide should lock in the open position.
2. If the slide does not lock automatically after the last shot, the magazine is the usual culprit. Try the weapon with another magazine, and visually check the suspected bad magazine against a known good one for obvious problems.


**Slide in "Racked" (open) Position**

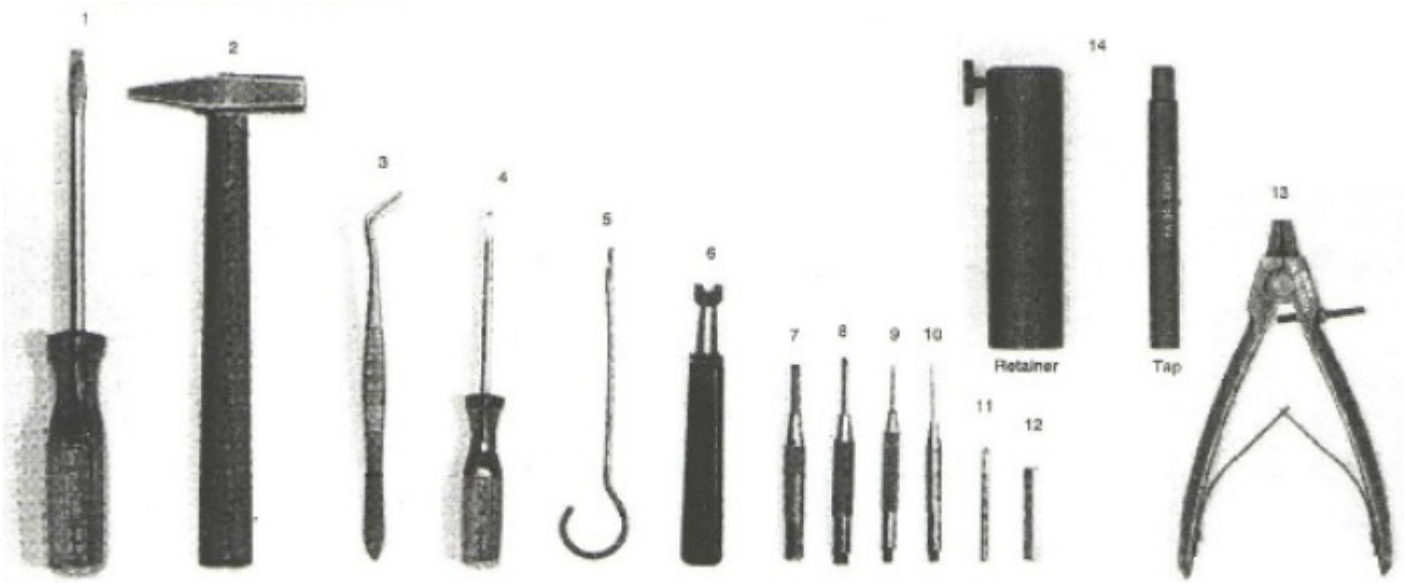
# II. Field Stripping Procedure

**GENERAL NOTES:**

a. *Read through all procedures before starting any maintenance on your weapon. Do not proceed until all information is completely understood.*
b. *As you disassemble and reassemble the weapon, inspect all of the components for the following defects; 1) excessive wear; 2) cracks; 3) burrs, dents or bends; 4) absence of protective finish. Correct any issues prior to proceeding.*
c. *After assembly of a part or series of parts, check for appropriate function of that assembly such as; 1) proper rotation or free movement; 2) no movement; 3) presence of spring tension; 4) proper position or alignment; 5) all components are present; 6) all c-clips, axles, roll pins, screws and other fasteners are present and securely attached.*
d. *Always conduct a **Weapon Functional/Safety Procedure** check per **Section II.I** after any maintenance is performed on your weapon.*

**Recommended tools**

1. Bore cleaning rod with handle and patch holder
2. Nylon toothbrush
3. Brass, Bronze, Copper, or Nylon bristle bore brush (in correct caliber for your weapon). Brass preferred, **NEVER** use steel bore brush.
4. Bore Cleaning patches (preferably knit)
5. Cotton swabs (Q-tips)
6. Lint-free wiping Rags
7. Cleaning Solvent/Lubricant
8. Gun Lubricant
9. Gun Grease (if desired)
10. 1/8" Wooden Stick (chop-stick)
11. Tweezers
12. Flat Head Screw Drive, 6mm
13. 8 oz. Hammer
14. Various Punches; 1/8", 7/64", 1/16", 3/64"
15. Slave Pin; 7/64"
16. Brass Punch
17. C-Clip Removal Pliers
18. C-Clip Installer Tool



# A. Slide Removal

1. **Clear Your Weapon** and depress the Slide Release and allow the Slide to move forward, and remove Magazine if installed.
2. Position the slide rearward by hand until the Slide Release Axle is aligned with the recess on the Slide as shown at right, you must hold it in this position to perform the next step.


**Correct Positioning of Slide for Slide Release Lever removal**

3. Hold the weapon in this position and push the Slide Release Lever Axle from the right side of the Frame toward the left side of the Frame.

**NOTES:**

*The H&K USP Owners Manual instructs you to hold the rear of the weapon while removing the slide release lever, it may be easier holding the front as shown at right.*

**Holding the Slide/Frame Assy. prior to Slide Release removal**

4. Grasp the Slide Release Lever on the left side of the Frame, pull outwards away from the weapon, removing it completely.

**Top and Right (Inside) views of Slide Release Lever**

5. Ease the Slide forward to neutral position and de-cock the Hammer by pressing down on the Control Lever (de-cock position) if available.

**Slide in forward Position and Hammer De-Cocked**

6. Continue moving the Slide Assembly forward until it clears the front Locking Inserts, and is disconnected from the Frame.

**Slide moved forward beyond Forward Locking Inserts**

7. Your weapon now looks like this.

**Slide removed from Frame Assembly**

# B. Recoil/Buffer Spring Assembly and Barrel Removal

1. Push the breach end (rear) of the Recoil/Buffer Spring Assembly forward 1/8 inch (against spring tension), tilt it upwards and away from the barrel, ease it rearward and out until the Recoil/Buffer Spring Assembly disengages from the front of the slide.

**NOTES:**

*If your gun has a new style Recoil/Buffer Spring Assembly it will come out in one piece. If it is the old style; the Recoil Spring will slide off the end of the Recoil/Buffer Assembly Shaft.*

**Recoil/Buffer Spring Assembly prior to removal**

**NOTES (cont.):**

a. *There are two variants of the Recoil/Buffer Spring Assembly. Newer "Captured" models have a "Snap-Ring" at the front end of the guide rod to hold the Recoil/Buffer Spring Assembly together.*

b. *H&K **DOES NOT** recommend complete disassembly of the "Captured" style Recoil/Buffer Spring Assembly.*

c. *When removing the Recoil/Buffer Spring Assembly from an older model weapon, the Recoil Spring is under tension and will slide off the Guide Rod when removed from the Slide. Take care not to release parts under spring tension.*

**Detail of Guide Rod end, Spring, Retainer, and Snap-**
**Ring on "captured" Recoil/Buffer Spring Assembly**

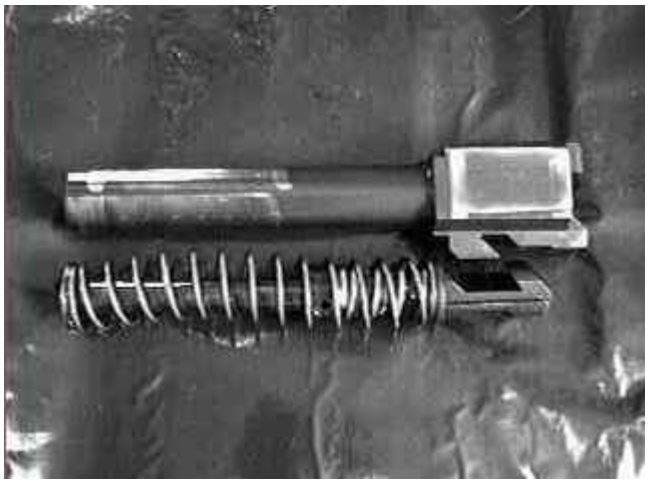
2. Remove the Barrel by sliding forward slightly, lifting the rear of the barrel (Barrel Locking Block) upwards, and removing on an angle rearwards until it clears the front of the Slide.

**Barrel during removal**

3. You now have the Barrel and Recoil/Buffer Spring Assembly removed and it looks like the figure at right. (newer "Captured" style Recoil/Buffer Spring Assembly shown).

**NOTES:**

*Note the orientation of the Recoil/Buffer Spring Assembly to the barrel, you will need to reposition them in this relationship during reinstallation.*



**Correct Barrel to Recoil/Buffer Spring Assembly Orientation**

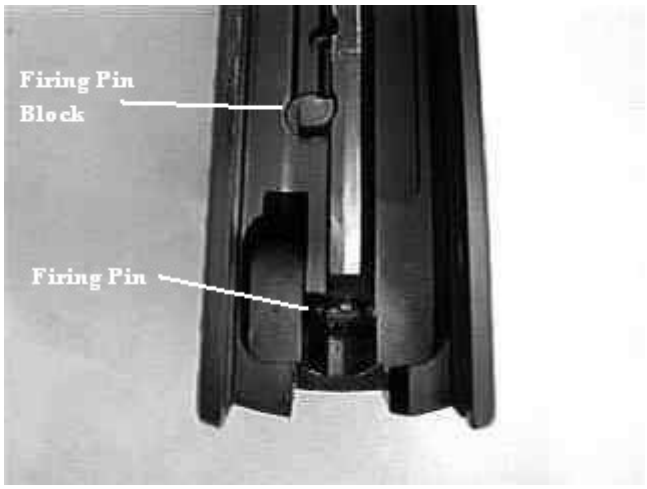
4. Your Weapons now looks like this.

**NOTES:**

*H&K **DOES NOT** recommend further disassembly of the weapon beyond this point unless you are a certified H&K armorer. By doing so you may void your warranty, or worse.*

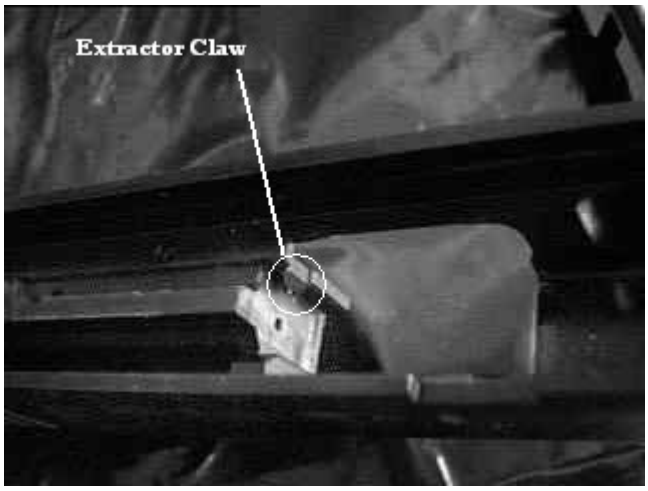
# C. Slide Cleaning & Inspection

1. Thoroughly clean the entire Slide inside and outside with a solvent soaked nylon brush and cotton swabs.
2. Pay particular attention to the rear of the Firing Pin and the Firing Pin Block while cleaning.
3. Thoroughly brush under the Extractor Claw. Remove all residue under the claw, and from the Breech Face.
4. Dry all surfaces with a rag, swabs, and/or compressed air.
5. Inspect the Firing Pin Block. It should move freely, both down and back up again, when pushed with a small tool. Insure the Firing Pin Block quickly returns to the full out position when released.




**Rear view of Firing Pin Block (top) and Firing Pin (bottom)**

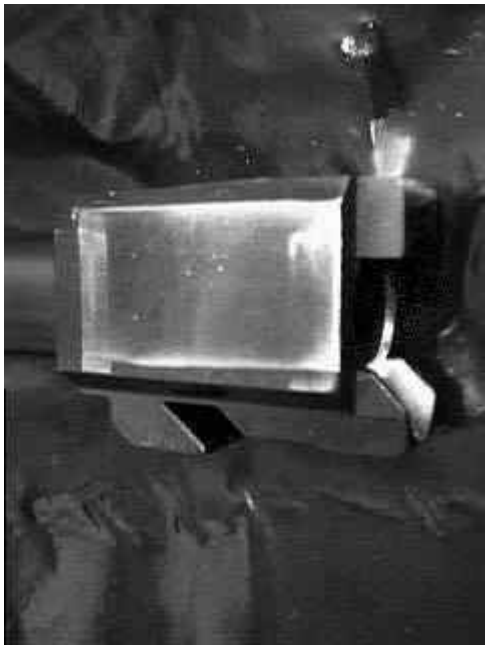
6. Inspect the Firing Pin tip. Press and hold the Firing Pin Block in, press the rear of the Firing Pin inward, verify ~1/16" of Firing Pin protrudes from the Breach Face when fully depressing the Firing Pin inward from the rear.
7. Inspect the Firing Pin tip and insure the tip is not cracked, bent, broken, or less than 1/16" protrudes. The Firing Pin should quickly return to the retracted position when released, and the tip should not be visible at the Breach Face when retracted.
8. Inspect the Extractor Claw and Breach Face for signs of wear, cracks, burrs, or debris. When pulled from the outside of the Frame, the Extractor Claw should move out and back in freely (it is stiffly spring loaded), and the claw should quickly move fully in (toward firing pin hole) when released.




**Detail of Extractor Claw and Firing Pin Hole area**

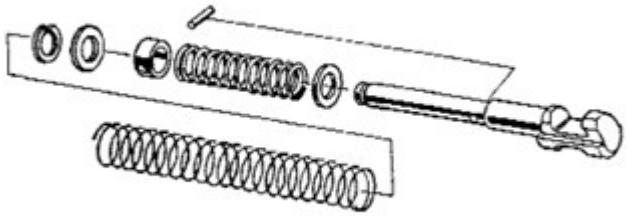
# D. Barrel and Recoil/Buffer Spring Assembly Cleaning & Inspection

1. Run a solvent soaked bronze brush (use correct caliber size for your weapon, and **ALWAYS clean from the Chamber End**) down the Barrel 6 or more times to loosen fouling and any metal deposits that may exist. Also scrub the Feed Ramp area to remove any lead deposits, if hollow point (HP) rounds have been used. Do not dry Barrel interior, allow solvent to remain in barrel for the following steps to facilitate dissolving lead and powder residues.
2. Using a solvent soaked toothbrush, scrub the outside surfaces of the Barrel to remove fouling. Pay particular attention to the Feed Ramp, Breach, and around the Muzzle areas of the Barrel.
3. Run a solvent soaked patch down inside of the Barrel a few times, repeat process with additional dry patches until patch comes out clean.
4. Dry outside using rags, swabs, and/or compressed air.
5. Visually check the full length of the Barrel, and the Breach, Muzzle, Chamber, and Feed Ramp areas for cracks, bulges, and/or damage.



**Detail of Barrel Locking Block/Feed Ramp area**

6. Scrub the Recoil/Buffer Spring Assembly and dry with rags, swabs, and/or compressed air.
7. Visually inspect the Snap-Ring, Springs, and Retainers (washers) for signs of deformation, cracks, or excessive wear. Inspect Guide Rod shaft for excessive wear.
8. You are now finished with the cleaning procedure, continue to the Lubrication procedure.



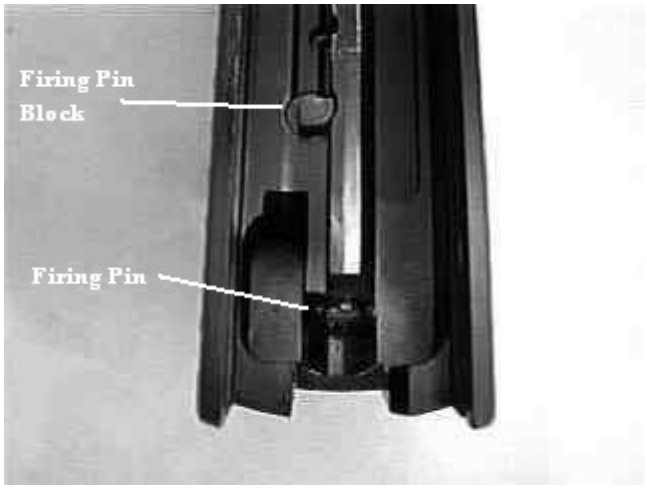
**Exploded View of the Recoil/Buffer Spring Assembly**

# E. Slide Lubrication and Functional Check

**NOTES:**

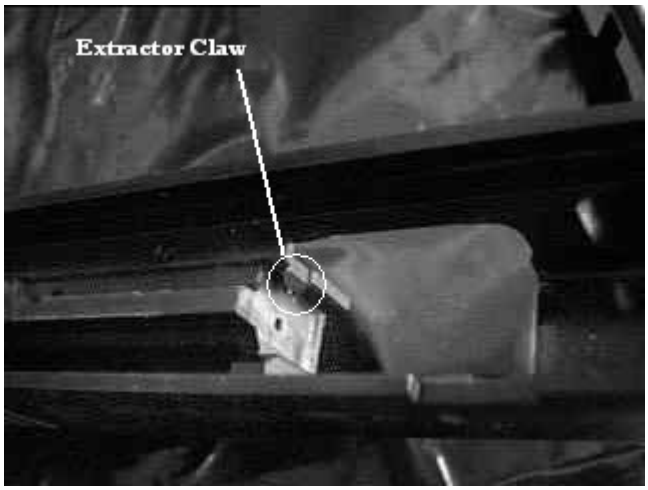
a. **The following Gun Oil-Lubrication Definitions apply!**
b. **No Lubrication;** (self explanatory, no oil lubrication on any plastic parts)
c. **Light Lubrication**; (a finger run across yields little or no oil); Bore, Chamber, exterior of Barrel, all internal metal parts, all internal parts in Slide and Frame, Magazine Spring, Recoil/Buffer Spring Assembly, Sights, **METAL** Magazine Housings (not plastic ones).
d. **Medium Lubrication** (a finger run across yields some oil, but does not run down surface when held vertically); Barrel Locking Block, Slide Rails and Grooves, all Operating Controls, Detent Plate and Detent Slide, Locking Insert and Guiding Parts in Frame, and the Extractor.
e. **Heavy Lubrication** (oil runs down surface when it is held vertically); **NO PARTS** of the H&K USP **require** "Heavy Lube". Light gun grease may be used on moving/sliding parts, if desired.

1. Press the Firing Pin Block in, place two drops of gun oil in the hole, and distribute oil by cycling the Block in and out multiple times.
2. Stand the Slide vertically with the bore end (front) down. While holding the Firing Pin Block in with your thumb, press the Firing Pin inwards using a small wooden stick, release the Firing Pin Block, and place 2 drops of gun oil on the rear end of Firing Pin.
3. While holding the Firing Pin Block in again, cycle the Firing Pin in and out several times using the small wooden stick to distribute the oil.




**Rear view of Firing Pin Block (top) and Firing Pin (bottom)**

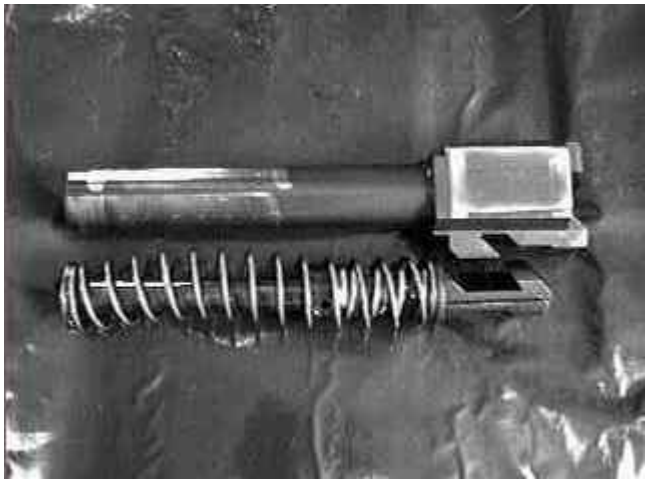
4. Using gun oil, lightly lube the entire Slide Assembly.
5. Place a thin film of Gun Grease on the following four surfaces; 1) the Hammer Rail (milled, shiny surface on the inside of the Slide, toward the rear); 2) 1.5" area forward of the ejection port (on the inside, top surface of the Slide); 3) the 1/4" area on the left and right sides, inside the Slide forward of the Ejection Port; 4) the inside surfaces of the Guide Rod Hole and Barrel Hole at the front of the Slide.
6. Lay the Slide on the bench with the right side of the Slide facing down, depress the rear of the Extractor with a non-scratching tool. Place two drops of light gun oil inside the gap created, and tilt the rear of the Slide to allow the oil to flow forward. Distribute lubrication by actuating Extractor several times.
7. Remove any excess lubricant from the exterior of the Slide and set parts aside.




**Extractor Claw and Firing Pin Hole area**

# F. Barrel & Recoil/Buffer Spring Assembly Lube and Functional Check

1. Run a gun oil soaked patch down the Barrel several times. Run a dry patch down the Barrel one time to remove excess lubrication.
2. Lightly lube the exterior surfaces of the Barrel. Wipe down.
3. Put a light film of Gun Grease on the front 2.25" of the outside of the Barrel, the two small, rearward facing surfaces that mate with the Recoil/Buffer Spring Assembly, and the front 3/4" of the Locking Blok top surface.
4. Compress the Recoil Buffer Spring as far as it will go and place 2 drops of oil on the Guide Rod, cycle the spring up and down to distribute the oil over the shaft.
5. Place a light film of weapon grease on the Recoil/Buffer Spring Assembly's two surfaces that mate with the Barrel (two angled surfaces facing rearward, on the rear of the Recoil/Buffer Spring Assembly).
6. Set parts aside.
7. Proceed to **Step G.1**.



**Correct Barrel to Recoil/Buffer Spring Assembly orientation**

# G. Frame Cleaning and Lubrication and Functional Check

**NOTES:**

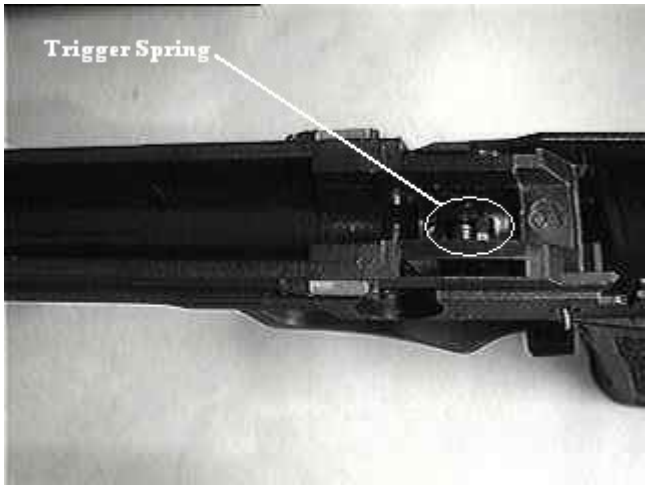
a. H&K recommends the Frame receive a "Normal Cleaning" after each firing session, and a thorough, or "Detailed Cleaning", after 500 rounds. Immersion (or "Sonic Bath") cleaning the frame is acceptable, but use only solvents safe to put your hands in.

b. Sonic baths may be used for "Detailed Cleaning", but may remove painted details from the weapon.

c. Thoroughly dry the assemblies using rags, swabs, and/or compressed air.

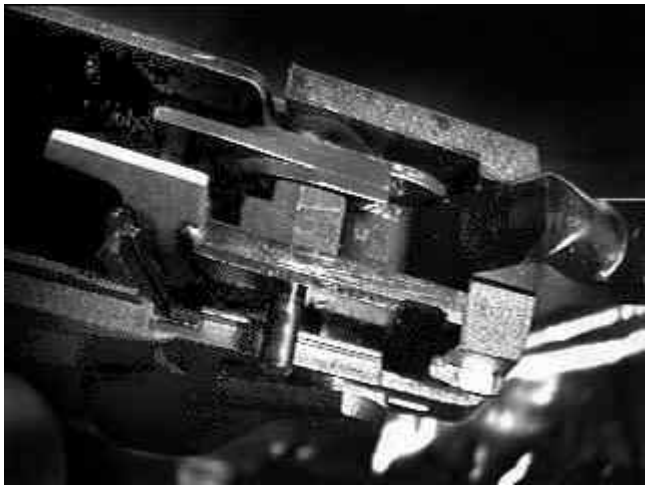
d. Thorough "Medium Lubrication" of moving components inside the Frame is ***required*** after any "Detailed Cleaning" is performed.

1. Scrub all of the Frame's internal surfaces using a solvent soaked nylon brush, swabs, and/or compressed air. Pay particular attention to all areas normally covered by the Slide; the Hammer Assembly area; the Trigger Assembly area; the area under the Recoil/Buffer Spring Assembly; and inside the Magazine Well.
2. Dry all interior surfaces using rags, swabs, and/or compressed air.
3. Scrub all surfaces of the exterior of the Frame (especially the area forward of the Trigger Guard), and completely dry the outside using rags, swabs, and/or compressed air.




**Detail of Frame and Trigger Spring area & area normally under the Slide**

4. Lightly lubricate (2 drops of gun oil) all operating controls, Trigger pivot points, Magazine Release pivot points, Hammer Axles, and movable parts surrounding the Hammer; Sear, Control Latch, Catch, Disconnector, and Trigger Bar pivot point and linkages. Distribute lubrication with a swab or compressed air.
5. Remove any excess lubrication using rags and swabs.



**Detail of Hammer Assembly area**

6. Apply two drops of weapon oil to the Detent Plate and the Detent Slide/Detent Slide Compression Spring ( forward of the Detent Plate, down inside the Frame).
7. Wipe entire Frame interior and exterior of any excess lubrication residue.
8. Proceed to **Step H.1**.

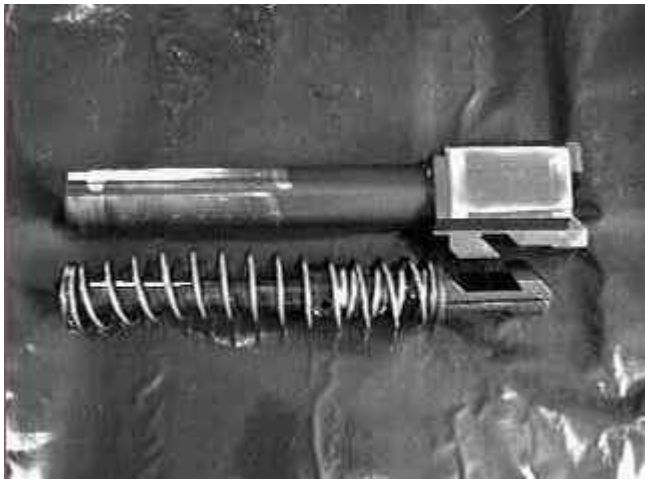

**Detail of Control Lever and Detent Plate and Sear Axle.**

# H. Weapon Reassembly

1. Insert the muzzle of the Barrel 1/2" into the Barrel Hole in the front of the Frame, lower the Locking Block into the Frame, then slide the Barrel rearwards till it seats at the Breech Face as shown.

**Detail of Barrel in assembled position**

2. Observe the alignment of the mating surface at the rear of the recoil spring assembly and the one under the barrel locking block



**Detail of Correct Barrel to Recoil/Buffer Spring Assembly Orientation**

3. Insert the front of the Recoil/Buffer Spring Assembly into the hole in the front of the Slide, push the recoil assembly forward against spring tension ~1/4", then down, then ease it back.

**Detail of installing the Recoil/Buffer Spring Assembly into the Slide**

4. The Retainer (washer) at the rear of the Recoil/Buffer Spring Assembly should engage the front shoulder of the Locking Block, and retain the assembly in place.

**Recoil/Buffer Spring Assembly engaged with Locking Block (final position)**

5. Position the Slide over the Frame as shown, insuring the Slide Grooves in the Slide properly engage the Slide Inserts on the Frame.
6. Continue to move the Slide rearward until the Slide engages both the front and rear sets of inserts on the Frame.

**NOTES:**

*During assembly the Sear Axle may no longer be positioned correctly on the Frame. This may cause the Slide not to engage the rear Frame's rear Slide Inserts. Insure the Sear Axle's left end is flush with the left face of the Detent Plate before installing the Slide onto the Frame.*

**Detail of the Slide just prior to engaging first Slide Inserts (note the Slide Release Shaped Spring just to the rear of the Slide Release Lever axle hole)**

7. Position the slide rearward by hand until the Slide Release Axle hole is aligned with the recess on the Slide as shown at right.

**Detail of Slide being help in "aligned" position**

8. Hold the weapon in that position and fully insert the Slide Release Lever.
9. Depress the Slide Release and allow the Slide to return to forward (neutral) position.

**NOTES:**

*Verify the Slide Release Shaped Spring is functioning correctly by holding the Slide rearward (as of you were going to lock the Slide open) and pushing up on the Slide Release Lever. The Slide Release Lever should quickly return to the down position when the Slide Release Lever is released (see Step 6 photo for location of Shaped Spring).*

**Detail of Slide Notch aligned and Slide Release partially inserted.**

10. Cycle the Slide several times to verify correct operation. Be sure the slide moves freely while pointing in a safe direction, insure all controls function.
11. Verify operation of all that apply: Single Action mode, Double Action mode, De-Cock function, and the Safety.
12. Insert a clean, empty magazine, and cycle the Slide to insure it remains in the open position. Verify Magazine release function with the Slide open. Depress the Slide Release Lever allowing the Slide to close, verify Magazine release function with Slide closed.
13. Open the Slide and Place the Safety switch in Safe.
14. You are now finished Field Stripping and Cleaning Procedure, proceed to **Step I.1**.

**Re-Assembled Weapon**

# I. Weapon Functional/Safety Check

1. Start with the Slide open, and Magazine removed. Visually "Clear" the Barrel of any bullets and/or Brass.
2. Close the Slide by pressing the Slide Release Lever downward. Slide should move completely forward (rear of Slide should be even or slightly forward of the rear of the Frame), hammer should be cocked.
3. De-cock by pressing the Control Lever downward beyond Fire position, insure the Hammer stops at the de-cocked position (NOT touching the Firing Pin).
4. Pull the Trigger in double-action mode and insure the Hammer fires.
5. Place the Safety on by aligning the "S" with the indicator mark on the left Frame side.
6. Work the Slide with the safety on. Hammer should cock and remain cocked when slide is release.
7. Check the safety by attempting to fire, gun should not fire.
8. Take the safety off by aligning the "F" with the indicator mark on the left Frame side.
9. Pull the Trigger in single-action mode, gun should fire.
10. Hold the Trigger to the rear.
11. Work the Slide while still holding the Trigger to the rear, Hammer should stay cocked.
12. Release the Trigger (when released, Trigger should reset with an audible click) and pull through single-action mode (when pulled, gun should fire).
13. Insert the Magazine.
14. Pull the Slide to the rear, it should lock back automatically.
15. Remove the Magazine, and place the Control Lever to Safe.

**If all of the above tests have passed; the gun is considered safe to use.**

**If any test has failed, do not use the gun until the problem is repaired by a certified H&H Armorer.**

# III. Magazine Maintenance

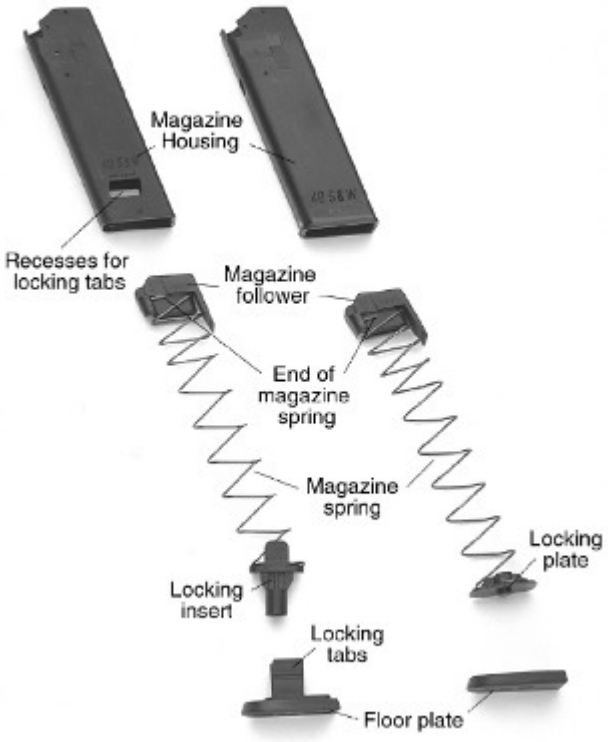
## A. Magazine Disassembly and Cleaning

**NOTES:**

a. ***WARNING:*** *Forcefully inserting a loaded magazine into the USP may cause the pistol slide to close, chambering a cartridge, and making the USP ready to fire. When inserting a magazine, always be certain that the pistol is pointing in a safe direction and your finger is off the Trigger and outside the Trigger Guard. Failure to do so could cause you to unintentionally fire the pistol, resulting in serious injury or death.*

b. *H&K recommends that you disassemble and clean the magazines at 500 round (Rounds through the magazine in question) intervals.*

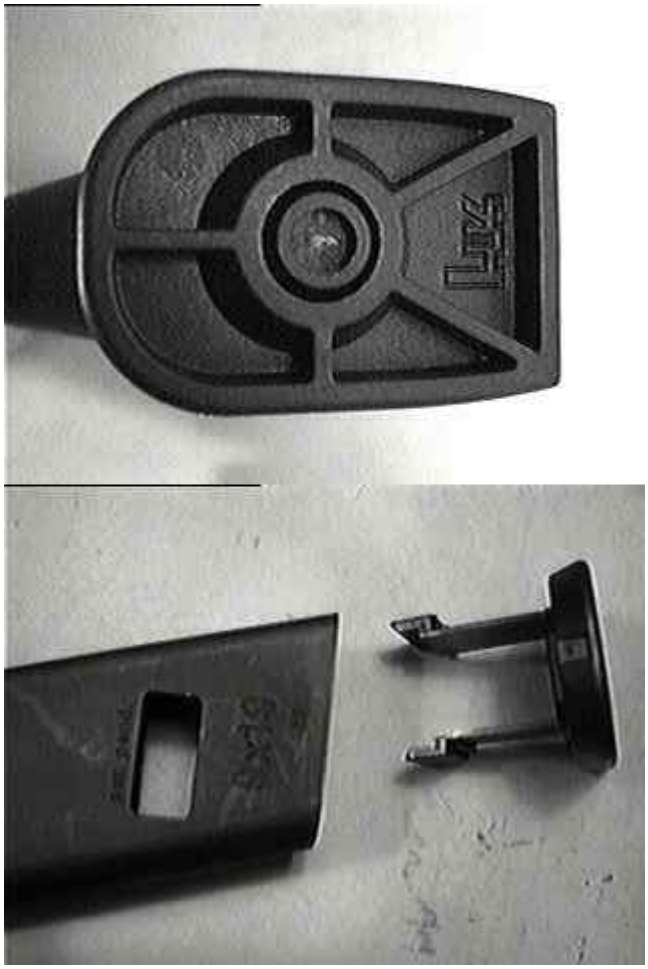
c. *Two types of Magazines are readily available (As of this writing, March 2005), Law Enforcement/Military or "LEM" 12 round Magazines (pre-October 1994 and LEM models included) and post-1994 US Civilian Use Magazines (limited to 10 rounds). Slightly different field stripping methods apply.*



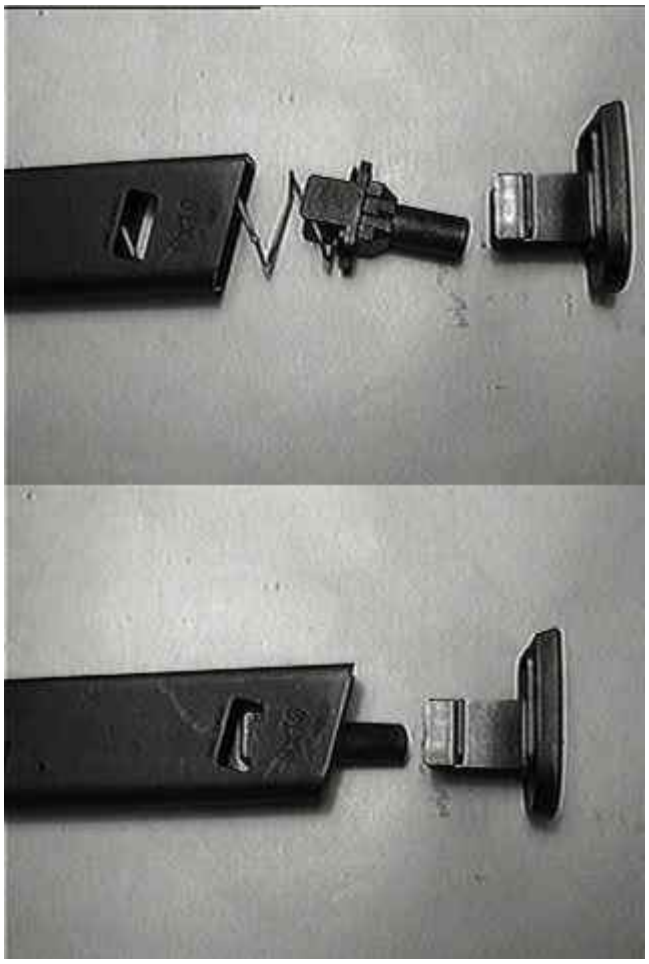

**Detail of Exploded View of Magazines (note .40 caliber's shown for reference)**

# B. Magazine Reassembly and Functional Check

1. Using a blunt tool (Chop-Stick), push the Locking Detent in the center of the Floor Plate in about 1/4" and hold it there.
2. Place a portion of your hand over the Floor Plate to hold spring tension, and squeeze both of the locking tabs at the lower portion of the Magazine.
3. Slowly ease the plate, end plug, spring, and the follower, out of the Magazine body.
4. Scrub all components inside and out using a gun solvent soaker nylon bristle brush.
5. Thoroughly dry all components using a rag, swabs, and/or compressed air.



6. Pre-assemble the follower, spring, and end plug and insert into the Magazine body.
7. Place the Floor Plate onto the End Plug and squeeze the locking tabs.
8. Slide the Floor Plate into the body of the magazine until the tabs engage the holes in the magazine body.
9. Using the Chop-Stick, verify the



# IV. Armorers Maintenance Tear-Down

## A. Frame Disassembly

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*** WARNING * WARNING * WARNING ***

Heckler & Koch recommends that only H&K Certified Armorers disassemble the weapon beyond "Field Stripping".

**To proceed may VOID your Warrantee! You could break your weapon, or worse.**

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**Tools Required:**

1. Tweezers
2. Plastic Allen Wrench Tool (tweaking stick) or wooden stick (i.e. Chop-stick)
3. Small screw driver.
4. 1/16" Drift Punch (ONLY required if replacing Firing Pin, Firing Pin Spring, Extractor, Extractor Spring, or Firing Pin Block Spring)
5. Small Ball-Peen Hammer (ONLY required if replacing Firing Pin, Firing Pin Spring, Extractor, Extractor Spring, or Firing Pin Block Spring)

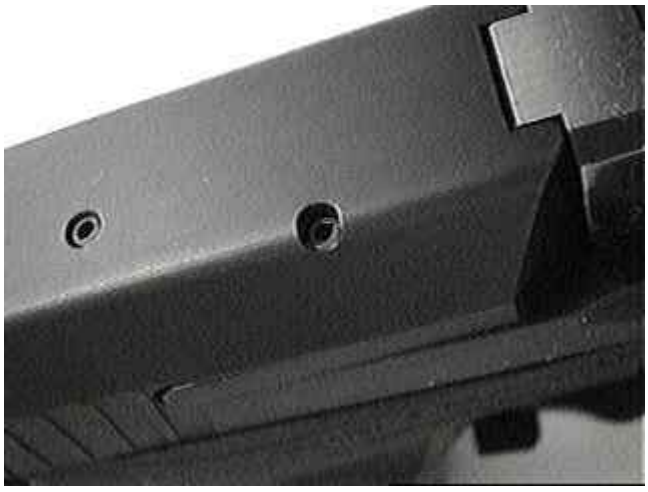
**Normally Required Tools**

**NOTES:**

a. ***DO NOT FORCE ANYTHING*** *during any portion of the following procedure. If it does not go in easily, you* ***do not*** *have it lined up correctly. Reposition and retry, but* ***don't force it****!*

b. *The 2 Roll-Pins shown at right hold the* ***Extractor*** *and* ***Firing Pin Assemblies*** *in position.* ***DO NOT REMOVE*** *these pins unless you are replacing one of the following components; the* ***Extractor, Extractor Spring, Firing Pin, Firing Pin Spring, Firing Pin Block****, or the* ***Firing Pin Block Spring****. If removal is necessary, only remove the necessary pin, not both.*

c. *See Section V.B for removal and Section V.C for reinstallation procedures.*



**Extractor and Firing Pin retainer Roll Pins**

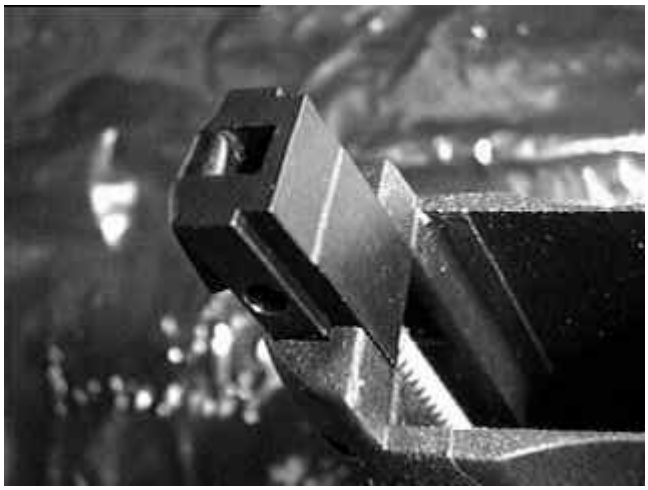
1. Field Strip weapon per steps II.A.1 through II.D.7. These steps include; disassembly, cleaning, and functional/operational checks of all the major subassemblies.


**Left side of frame, showing the control detent plate**

2. Remove the Lanyard Loop Insert by pressing it slightly into the grip, and push the Lanyard Loop Insert Pin out with a small punch.

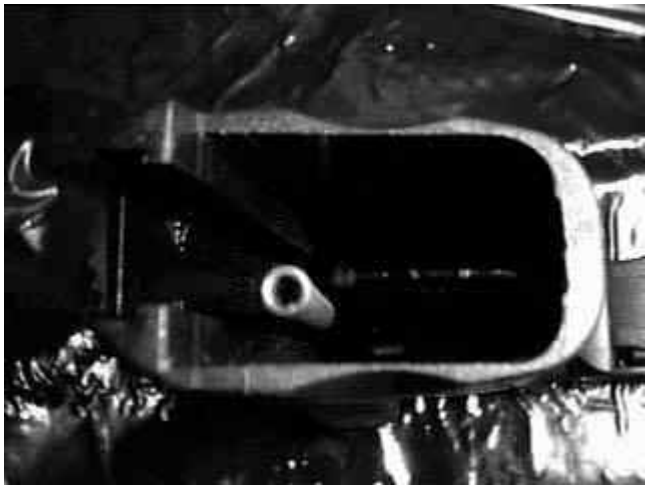
**Detail of Lanyard Loop Insert and Lanyard Loop Insert Pin**

3. Release the Lanyard Loop Insert slowly as it is under pressure by the Hammer Spring.



**Lanyard Loop Insert with Pin removed**

4. Once the Lanyard Loop Insert is removed, remove the Hammer Spring.



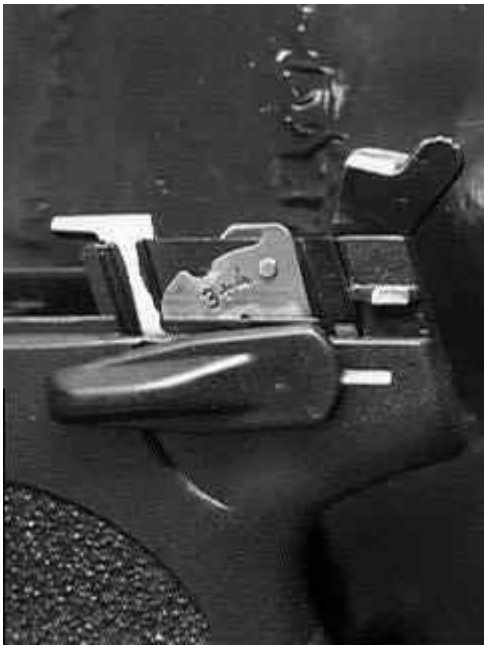
**Hammer Spring viewed in the Magazine Well**

5. Push the Sear Axle in so that the left end is flush with the left Frame wall.
6. Remove the Detent Plate, wiggling the Control Lever as needed.

**NOTES:**

*Depending on which Trigger variant your weapon has, the Detent Plate may look slightly different than depicted here. Refer to the* ***Trigger Variants Chart*** *for specific installation identification*

**View of Sear Axle, Detent Plate, and Control Lever**



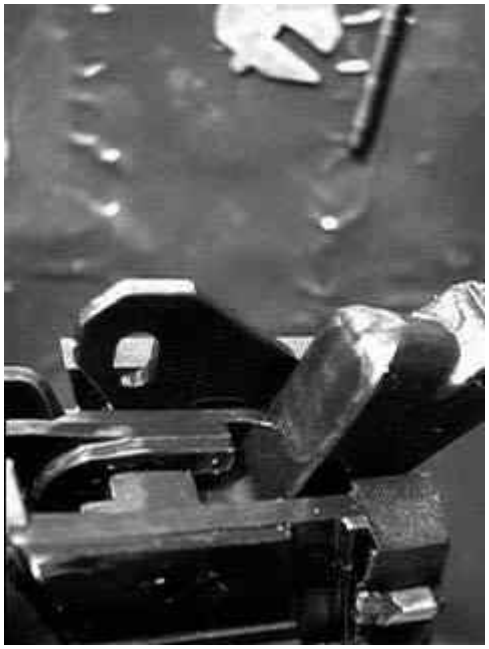
**Detent Plate partially removed**

**Detent Plate almost completely removed**

7. Push the Sear Axle completely out using a small punch and/or tweezers.

**Detail of Sear Axle partially removed**

8. Remove the Disconnector by pulling straight up.



**Detail of Disconnector during removal**

9. Remove the Catch and Control Latch (as a single unit) by pulling straight up. **DO NOT** deform the Flat Spring when removing these parts.

**NOTES:**

*The rear of the Control Latch hooks over the Hammer Axle and pressure is applied to the front of the Catch by the right leaf of the Flat Spring. A small amount of force may be required to pull it out from behind the Flat Spring. Take care not to deform the Flat Spring.*

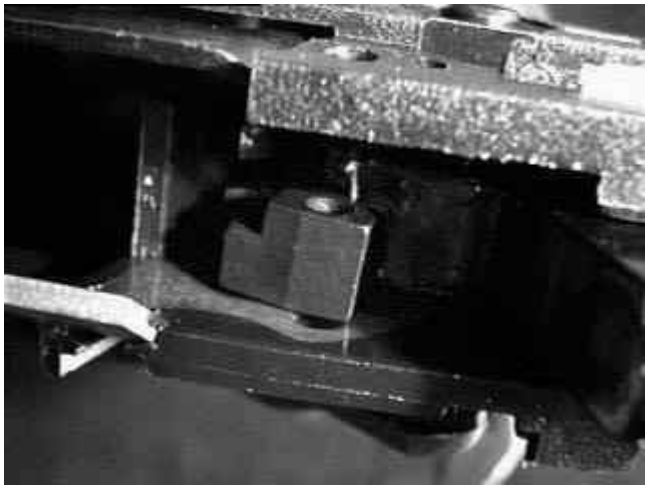
*Depending on which Trigger and Hammer variant your gun has, the Control Latch and Catch may look slightly different than depicted here.*

**Catch and Control Latch rotating up and back**

10. Remove the Sear by pulling straight up and out from behind the Flat Spring.

**NOTES:**

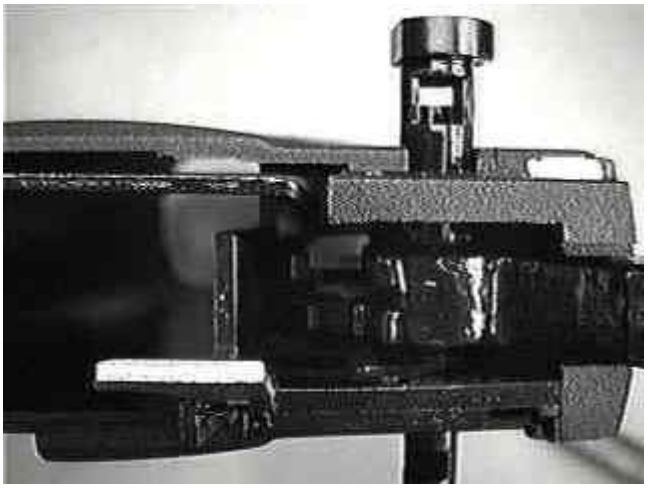
*The Sear, like the Catch, is held against the Hammer by the left leaf of the Flat Spring. A small amount of force may be required to pull it out from behind the Flat Spring.*



11. Rotate the Control Lever to 12 o'clock, press the Trigger Bar down slightly, then pull the Control Lever out to the left as far as it will go (you may hear a click). You do not need to remove the Control Lever at this time.

12. Press down slightly on the Trigger Bar and remove the Hammer Axle using a pair of tweezers.

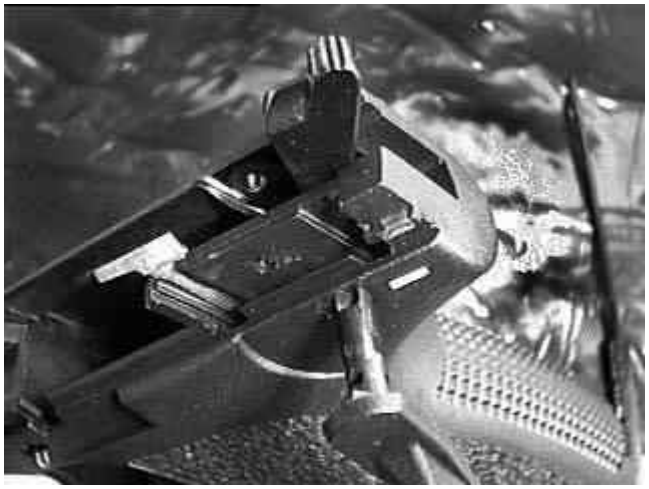
**Hammer Axle partially removed (note the flat is facing upwards)**



**Hammer Axle almost out**

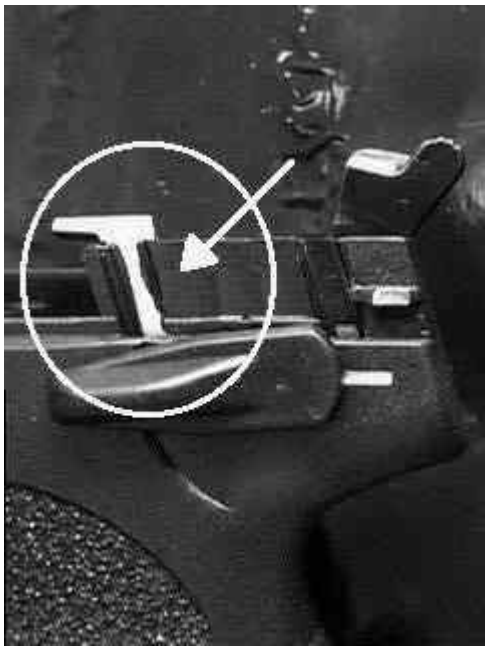
**Detail of Hammer Axle (flange end)**
**(note the flat on top and notch on the bottom)**

13. Rotate the Control Lever to the 6 o'clock position and pull it out until the tip clears the left side of the hammer, and remove the hammer.



**Detail of Control Lever pulled out**

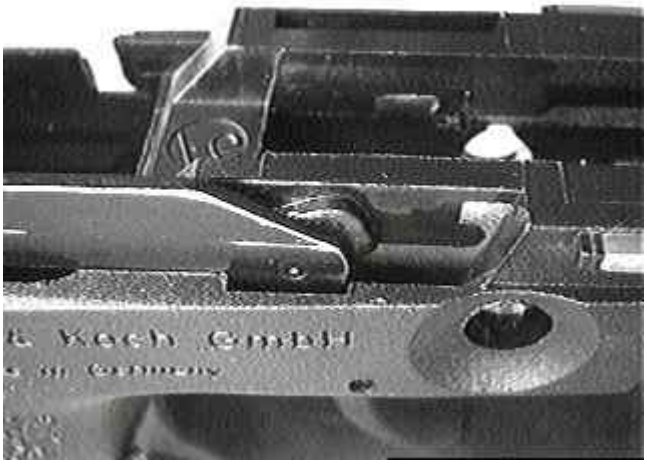
14. Insert a small punch or rod in to access hole next to the ejector, press down on the Detent Slide until it clears the Control Lever shaft, and remove the Control Lever.
15. Using tweezers, remove the Detent Slide and Detent Slide Compression Spring.



**Detail of area to access the Detent Slide and Detent Slide Compression Spring**

16. Rotate the Trigger Bar up 90 degree and disengage it from the Trigger pivot point.

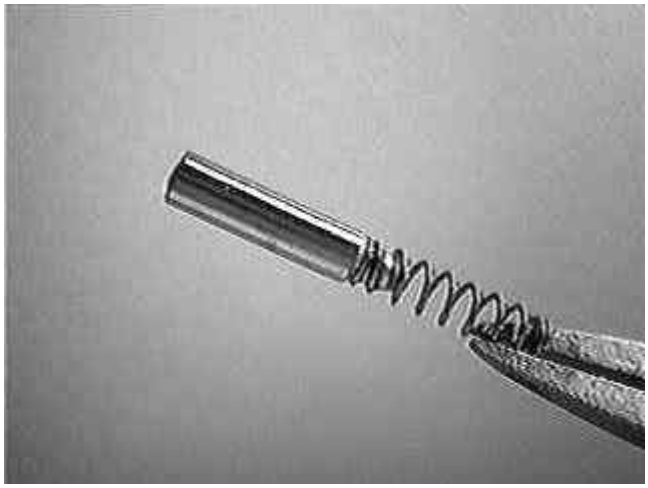
**Detail of Trigger Bar rotated to 90 degrees**



**Detail of Trigger to Trigger Bar pivot point**

**Detail of Trigger pivot point after Trigger Bar is removed**

17. Using tweezers, remove the Trigger Bar Detent and Trigger Bar Detent Spring as a single assembly. Insure you do not deform the spring during removal.



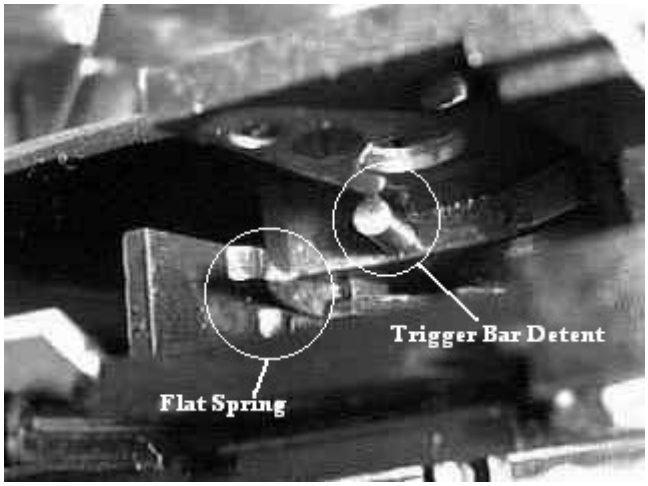
**Detail of the Trigger Bar Detent and Trigger Bar Detent Spring Assembly**

18. **DO NOT** remove the Flat Spring. Insure the leaves of the Flat Spring are not deformed per the notes below.

**NOTES:**

*The Flat Spring has two leaves which place pressure on the Sear and Catch respectively. Insure that the Flat Spring is not deformed, and the left leaf is sprung slight farther rearward than the right (i.e. the right is ~1/32" from the front wall, the left is ~1/16" from the front wall).*

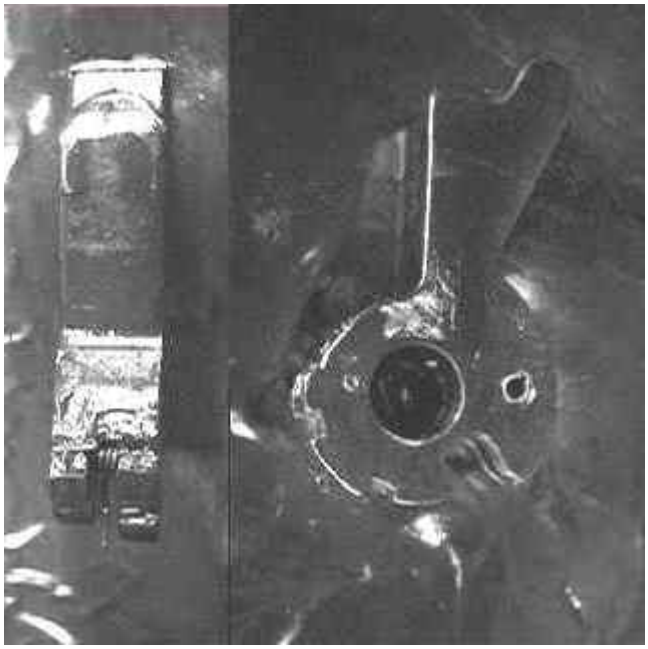
*Depending on which Trigger and Hammer configuration your gun has, the Hammer may look slightly different than depicted here.*




**Detail view of the Flat Spring (left) and the Trigger Bar Detent (right)**

**NOTES:**

*Note the spring at the bottom of the Hammer, take care not to break this spring during reassembly.*

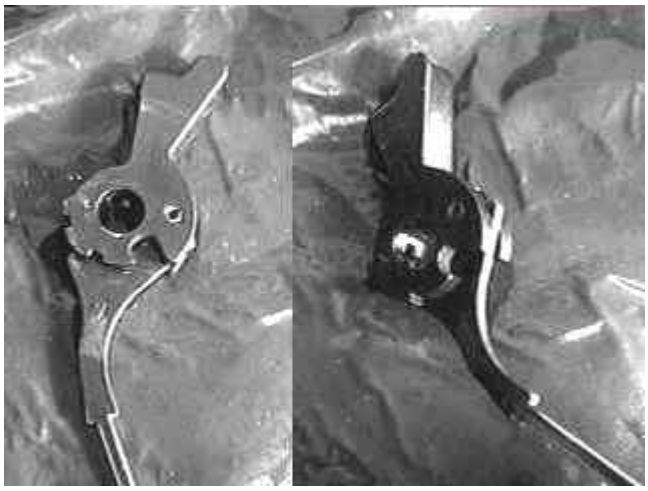


**Front and left side views of the Hammer**

19. Turn the Frame upside down, shake, and the Hammer Strut will fall out.

**NOTES:**

*The detail at right shows the Hammer and Hammer Strut relationship.*

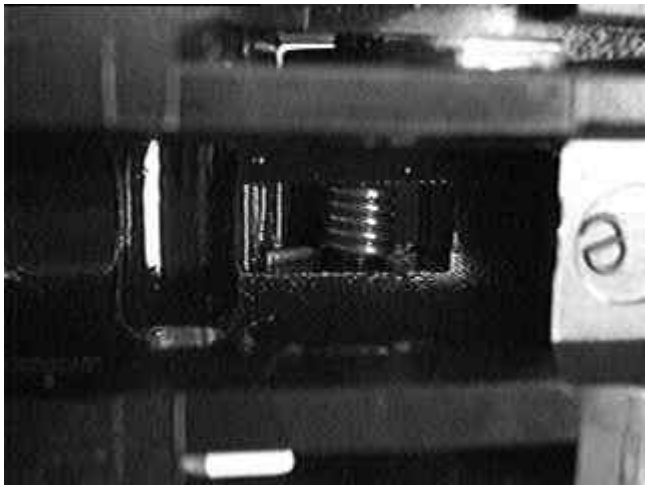


**Detail of Hammer to Hammer Strut relationship**

20. Push the Trigger Axle on the right side of the Frame toward the left. Remove the Trigger Axle completely.

**NOTES:**

*Note the orientation of the Trigger Spring where the coil is down, and the ends are up like a "V". The forward end rests on the front wall of the Frame, the rear rests on the back of the Trigger (see details at right and below), and the Trigger Axle is inserted through the coil.*



**Detail of Trigger Spring viewed from above (note forward spring end is on front wall of Frame)**

**Detail of Trigger, Spring, and Axle viewed from below (note rearward spring end is on back of Trigger)**

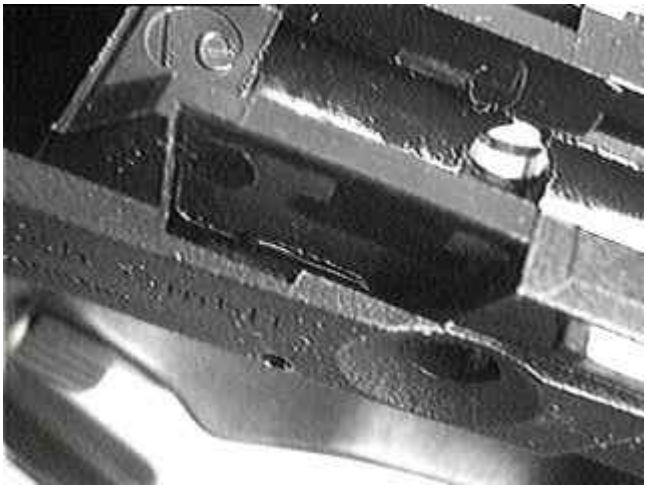
**Detail of Trigger rotated forward and partially removed**

21. Rotate the bottom of the Trigger forward and remove the Trigger.
22. Using tweezers, remove the Trigger Spring.

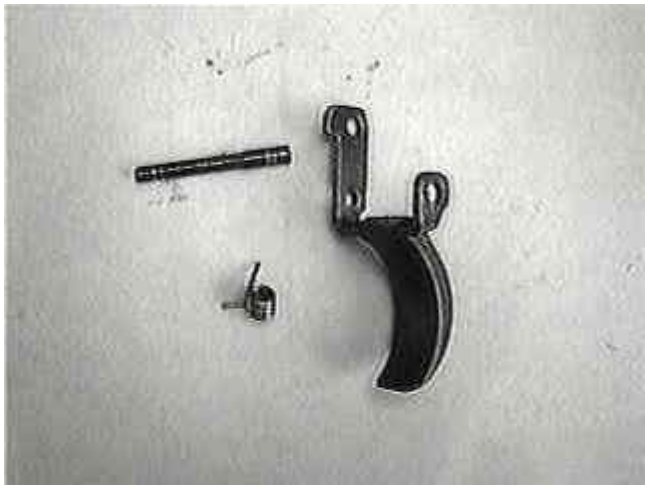
**NOTES:**

*Not the Trigger pivot area pictured at right (area where Trigger Bar is attached) has been* ***POLISHED*** *with 1200 wet/dry paper on both sides of the pivot point. Note that the high spots have been lightly smoothed,* ***NOT SANDED DOWN****. The same can be done to both sides of the Trigger Axle holes in order to make a smoother feeling Trigger pull.* ***DO NOT*** *sand any of the holes other than to remove surface burrs. See* ***Trigger Job*** *for further information.*

**Detail of the back side of the Trigger to Trigger Bar pivot point**



**Detail of the Trigger pivot point area of the Frame**



**Detail of the Trigger, Trigger Spring, and Trigger Axle removed**

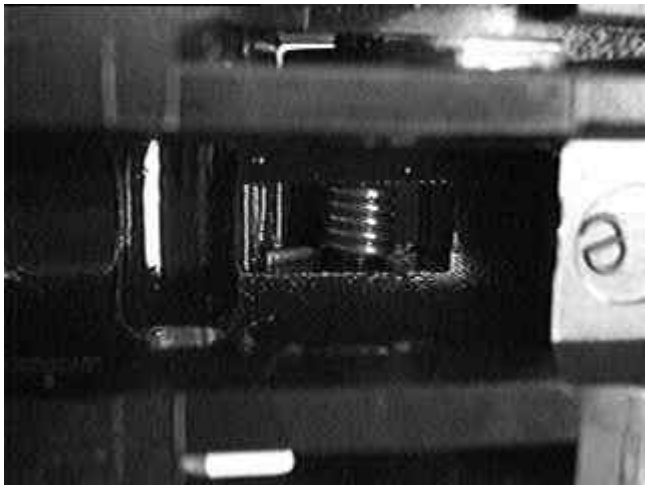
23. Clean all metal parts removed from the frame using gun cleaner solvent, a brush, swabs, and/or compressed air.
24. The parts removed from the Frame and cleaned now look like this.
25. Give all metal parts a light coating of gun oil.

# B. Frame Re-Assembly

1. Place a small amount of gun grease in the Axle and pivot holes, and insert the Trigger into its slots on the Frame.

**Detail of Trigger partially installed**

2. Partially insert the Trigger Axle into the left side of the Frame so that it engages ONLY the left side of the Frame and Trigger Assembly.
3. Using tweezers, insert the Trigger Spring oriented as shown at right and below, hold it in position with a small screw driver, and insert the Trigger Axle the rest of the way. **DO NOT FORCE ANYTHING**.
4. Insure that the Trigger Spring is as depicted before proceeding. Insure the trigger returns to position after being pulled, and there is no sloppy and/or scratchy feeling when the trigger is pulled.

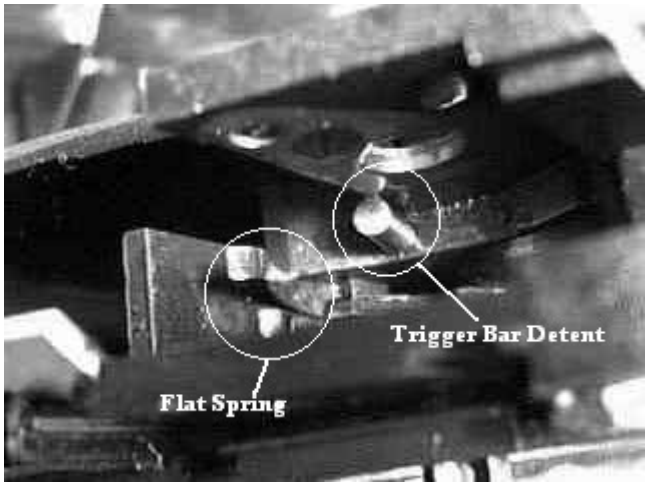


**Detail of Trigger Spring orientation**

**Detail of Trigger group when viewed from below (note rearward spring end is on back of Trigger)**

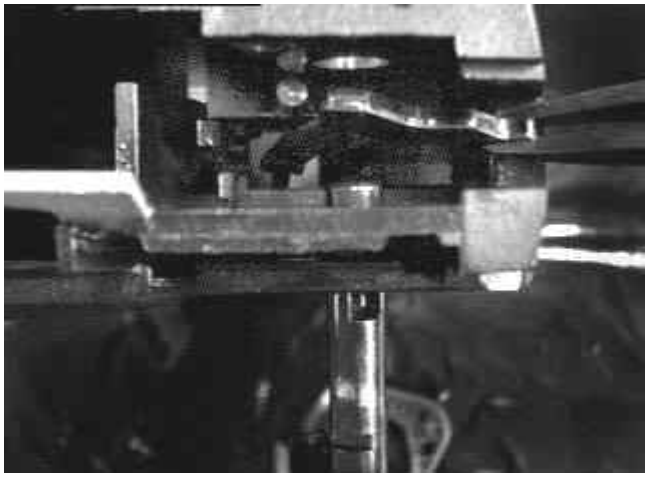
**Detail of Trigger installed and Trigger Axle partially inserted**

5. Using tweezers, insert the Trigger bar Detent.




**Detail view of the Flat Spring (left) and the Trigger Bar Detent (right)**

6. Install the Hammer Strut, and allow it to go to the bottom of the cavity.

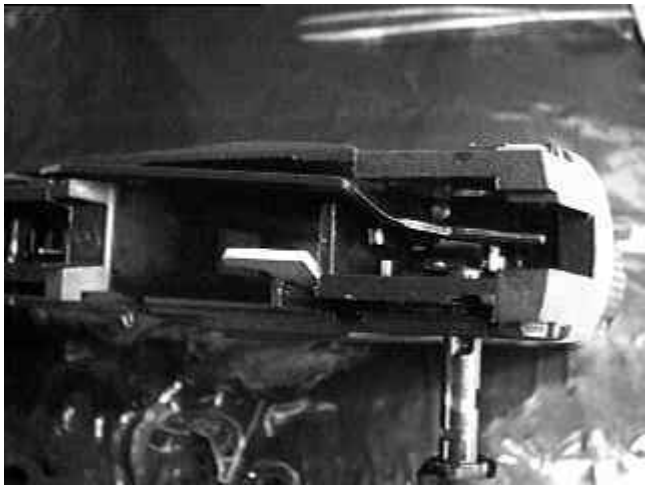


**Detail of Hammer Strut prior to being lowered to the bottom of the cavity**

7. Attach the Trigger Bar pivot axle to the Trigger pivot point while holding the Trigger Bar vertically, then lower into the Hammer area of the Frame.

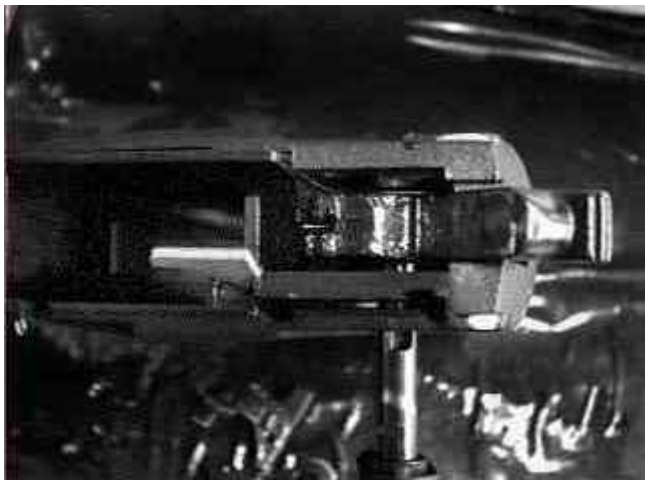
**Detail of the Trigger Bar after it is installed onto the Trigger pivot point**

8. Position the Trigger Bar (tail end) onto the Trigger Detent Spring.



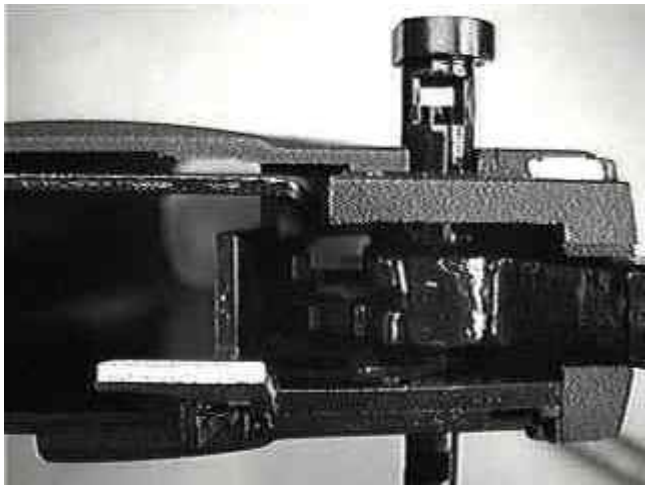
**Trigger Bar in final position (note the Trigger Bar is not yet on top of the Trigger Bar Detent)**

9. Insert the Hammer in its proper location.



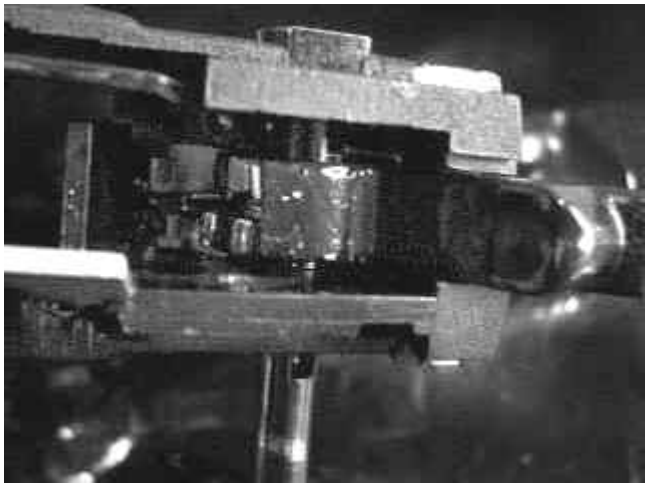
**Detail of Hammer in installed location**

10. Insure the Trigger Bar is on the Trigger Bar Detent, depress the Trigger Bar while holding it against the right wall of the Frame, and partially install the Hammer Axle from the right side. Only push it in so far as it engages the Trigger Bar.



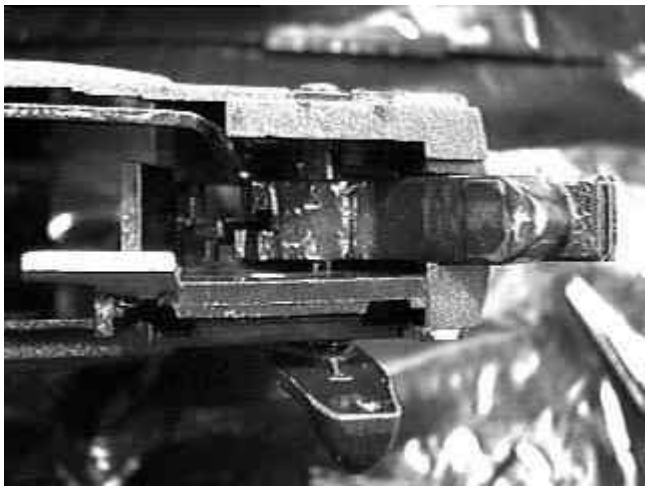
**Detail of the Hammer Axle being installed**

11. Align the Hammer and continue inserting the Hammer Axle.
12. Rotate the Hammer Axle so that the flat on the flange is up and the notch is down.
13. Install the Hammer Axle fully.



**Detail of Hammer with Hammer Axle partially installed (Control Lever not yet fully inserted)**

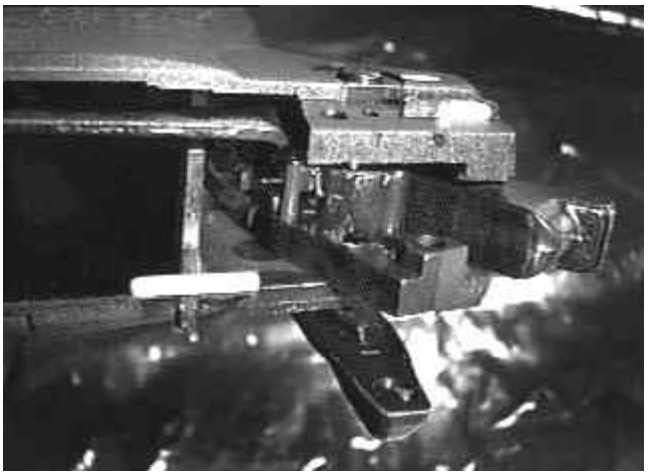
14. Rotate the Control Lever to 12 o'clock, depress the Trigger Bar Slightly, and insert the Control Lever all the way in.
15. Rotate the Control Lever back to 9 o'clock position.



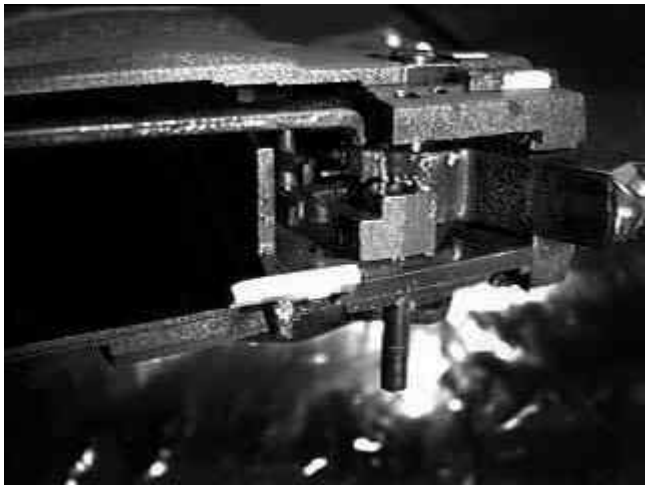
**Detail of Control Lever rotated to 12 o'clock**

16. Install the Sear (carefully so as not to deform the Flat Spring) with the flat side against the left wall of the Frame, pinned end down between the Flat Spring and the Hammer.
17. As you press the Sear into position it should seat with an audible click.
18. Using tweezers, align the Sear and install the Sear Axle from left to right only as far as to engage the left wall of the Frame and the Sear.

**Detail of the Sear (the pin end is inserted downward between the Flat Spring and the Hammer)**

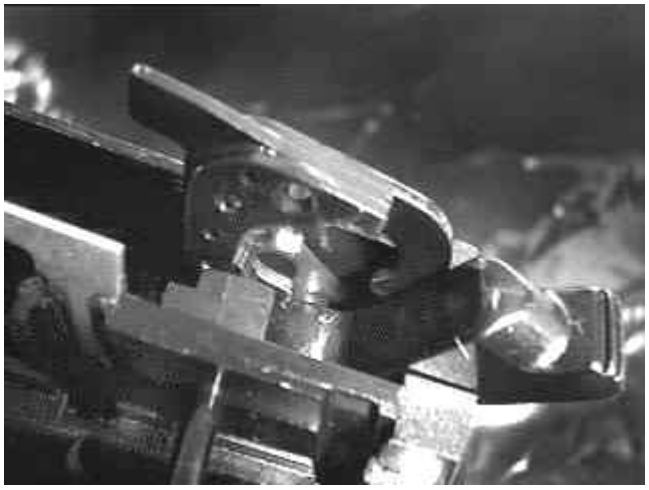


**Detail of the Sear being installed between the left leaf of the Flat Spring and the Hammer**

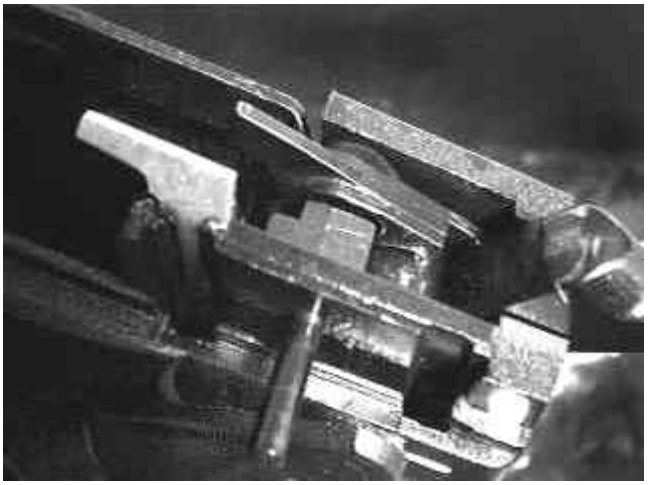


**Detail of the Sear in installed position (the Sear Axle is installed just far enough to engage the left wall of the Frame and the Sear only)**

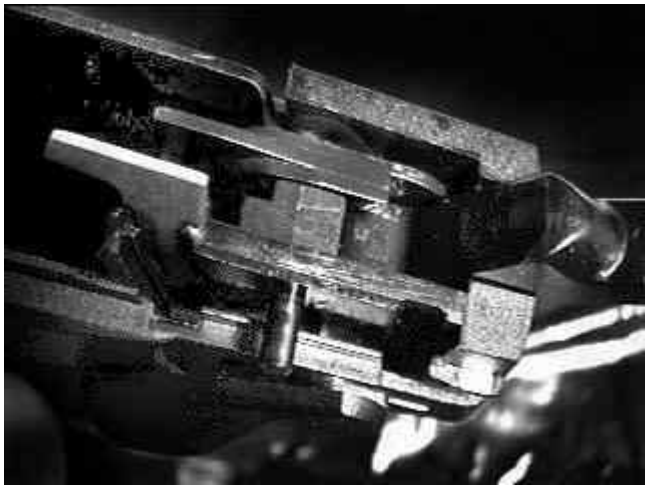
19. Assemble the Catch and Control Latch as shown at right.
20. Hook the rear of the Control Latch catch over the Hammer Axle and the bottom of the Catch is inserted between the right leaf of the Flat Spring and the Hammer. Insure you DO NOT deform the Flat Spring leaf.
21. Press the assembly downward until a faint click is heard.
22. Press the Sear Axle in only so far as to engage the right side of the Control Latch.



**Detail of the Catch (left) and Control Latch (right) Assembly before final installation**

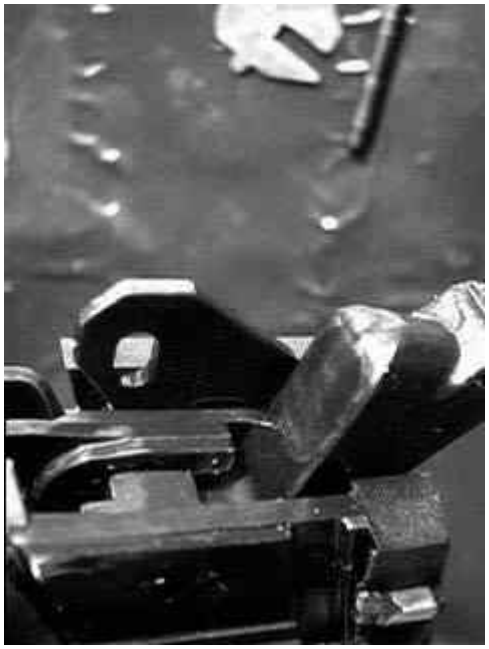


**Detail of the Control Latch/Catch in final position, with Sear Axle yet to be inserted**



**Detail of Control Latch/Catch with Sear Axle inserted to engage up to the right side of Control Latch**

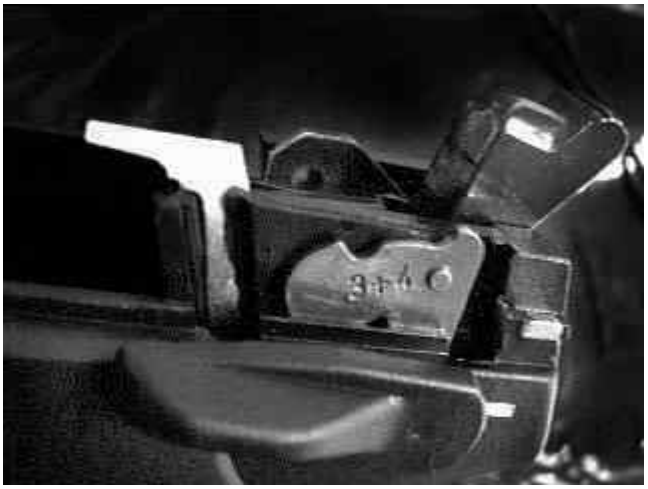
23. Insert the slot on the Disconnector so that it engages the Hammer Axle as shown at right, press down slightly to align the large axle hole with the Sear Axle.
24. Push the Sear Axle into final position through the Disconnector axle hole and into the right wall of the Frame so that the Sear Axle left end is flush with the left wall of the Frame.



**Detail if the Disconnector being installed**

25. Rotate the control lever up slightly (~10 o'clock) to align it with the slot in the Detent Plate, insert slot onto the Control Lever Axle.
26. Then press down on the Detent Plate (against spring tension from the Detent Slide/Compression Spring) so that the top of the Detent Plate is below the Sear Axle.

**Detail of the Detent Plate during installation (note the Sear Axle end is flush with the left wall of the Frame)**



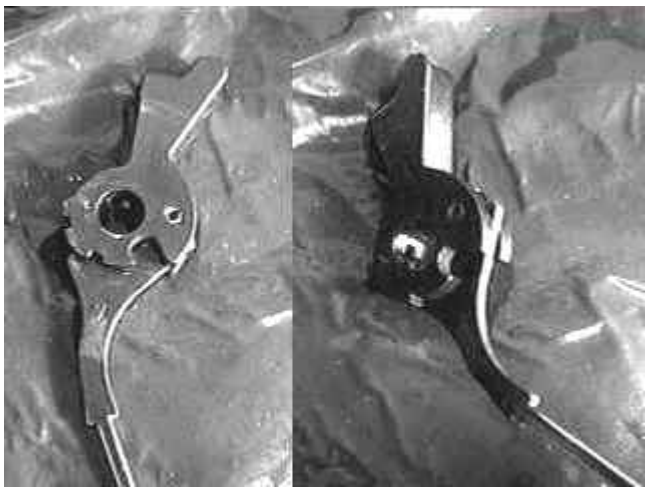
**Detail of detent Plate after engagement with Control Lever Axle (prior to pressing down against Detent Slide/Compression Spring)**


**Detail of Detent Plate and Sear Axle in final position**

27. Press the Sear Axle from right to left so that the right end of the Sear Axle is flush with the right wall of the Frame (as shown at right), and holds the Detent Plate down.

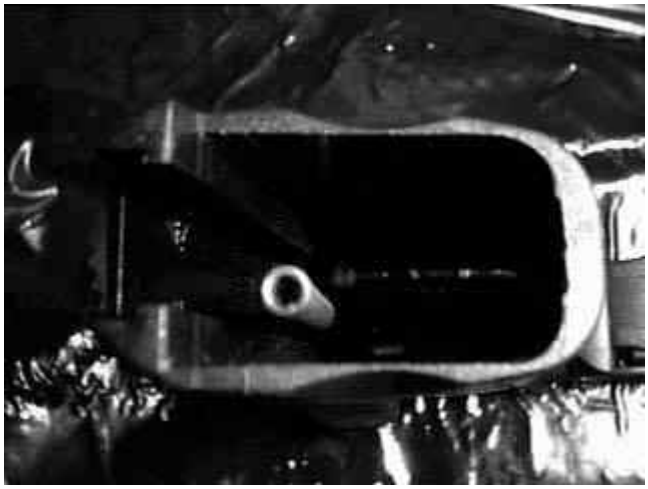
**Detail of right side of Frame showing Sear Axle in final position**

28. Turn the gun over position the Hammer Strut into the Hammer as shown in the detail at right.

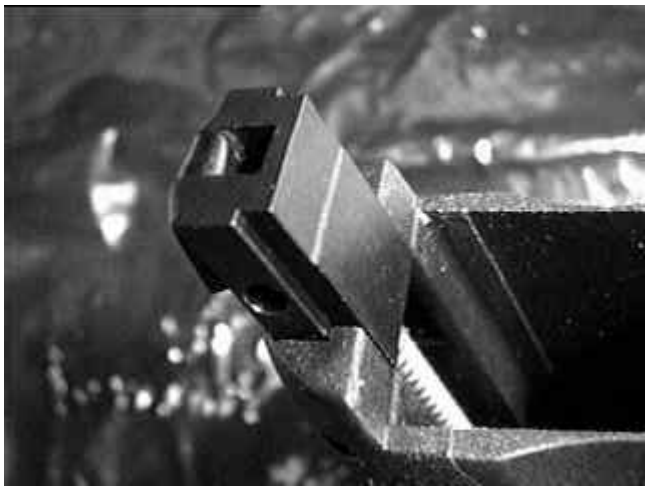


**Detail of Hammer to Hammer Strut relationship**

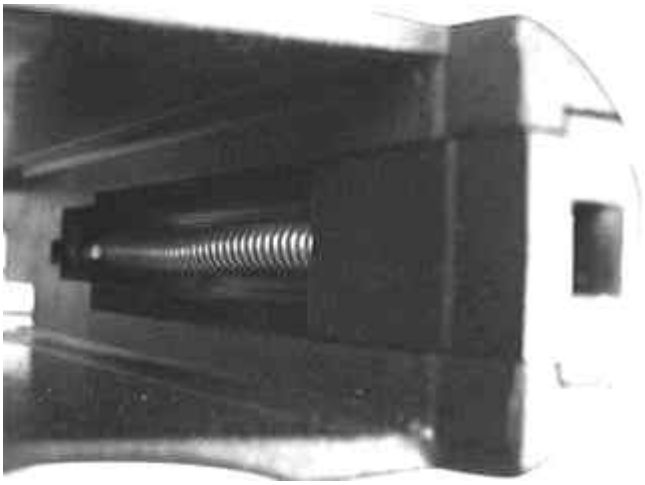
29. Install the Hammer Spring onto the Hammer Strut as shown.



30. Align the Hammer Spring with the hole in the top of the Lanyard Loop Insert, and insert the Lanyard Loop Insert into the grip as shown at right.
31. Press down slightly on the Lanyard Loop Insert and cock the Hammer. **DO NOT FORCE** the hammer. If it binds, the Hammer Strut is not lined up correctly with the Hammer. Try aligning the Hammer Strut again and retry.
32. Once the Hammer has cocked successfully, press the Lanyard Loop Insert all the way in and install the Lanyard Loop Insert Pin (it should just slip in place with almost no force applied).



**Lanyard Loop Insert prior to Pin reinstallation**



**Detail viewed inside Magazine Well showing Hammer Spring correctly aligned with the Lanyard Loop Insert**

**Detail of Lanyard Loop Insert and Pin installed (note pin is centered on the Grip)**

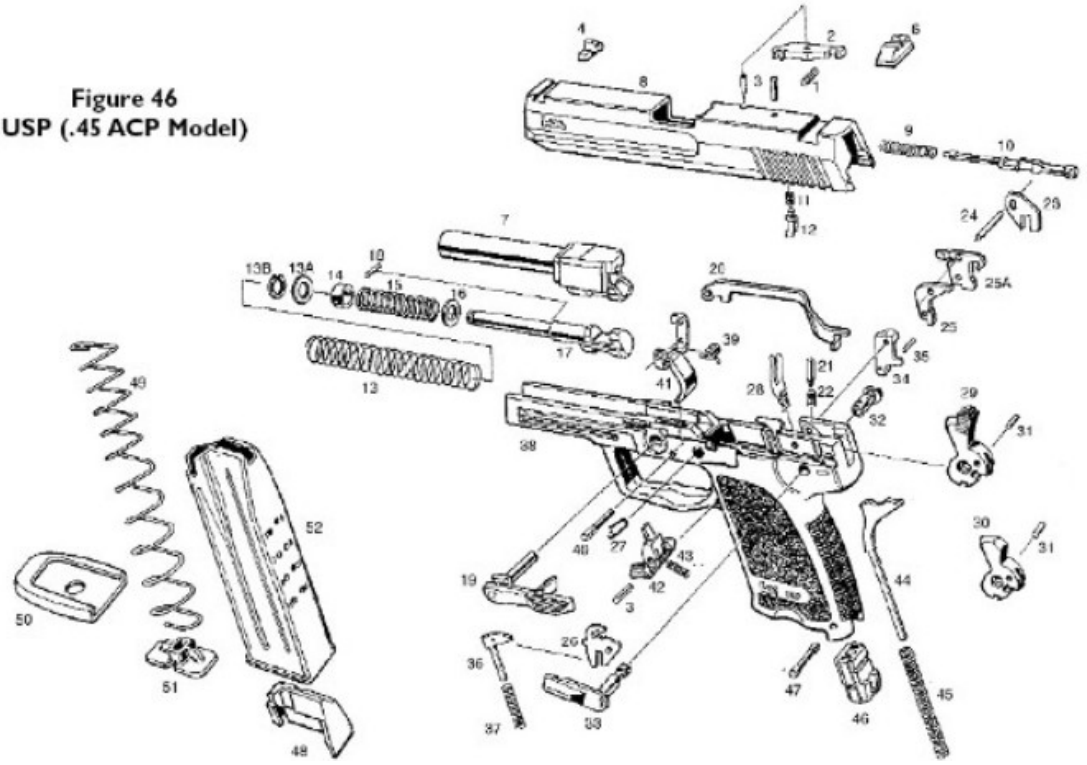
33. Verify operation of all that apply: Single Action mode, Double Action mode, De-Cock function, and the Safety.
34. Insert a clean, empty magazine. Verify Magazine release function.

| | |
|---|---|
| 35. Dry fire a few times (no it won't damage the weapon), insuring that all functions correctly.<br>36. Reassemble weapon per **Section II.E.1 to II.I.15** to complete Armorers Teardown Maintenance | |

# VI. Addendum

## A. USP .45 Parts List

Figure 46
USP (.45 ACP Model)



### USP .45 Parts List

*(Parts exclusive to the USP45 shown in italics)*

| Item | Description | Identification No. |
|---|---|---|
| 1 | **Extractor spring** | 214188 |
| 2 | *Extractor* | *214828* |
| 3 | **Roll pin,** ISO 8748 - 3 X 14 mm(3x) (extractor, firing pin, mag. release) | 980838 |
| 4 | **Front sight*** (6.4 mm) | 214220 |
| | **Front sight*** (6.6 mm) | 214221 |
| | **Front sight*** (6.8 mm) standard | 214222 |
| | **Front sight*** (7.0 mm) | 214223 |
| | **Front sight*** (7.2 mm) | 214224 |
| | **Front sight*** (7.4 mm) | 214225 |
| 6 | **Rear sight** | 214194 |
| 7 | *Barrel* | *214815* |
| 8 | *Slide, incomplete* | *214827* |
| | *Slide, complete* | *214826* |
| 9 | **Firing pin spring** | 214190 |
| 10 | **Firing pin** | 214189 |
| 11 | **Firing pin block spring** | 214192 |
| 12 | **Firing pin block** | 214191 |
| 13 | *Recoil spring* | *214843* |
| 13A | **Front recoil spring retainer** | 214721 |
| 13B | **Snap ring** | 929191 |
| 14 | **Buffer spring retainer** | 214208 |
| 15 | *Buffer spring* | *214822* |
| 16 | **Rear recoil spring retainer** | 214206 |
| 17 | *Guide rod, incomplete* | *214830* |
| 17 | *Recoil buffer spring assembly complete* | *214829* |
| 18 | **Roll pin,** ISO 8748 - 3.5 X 10mm (buffer spring retainer) | 929908 |
| 19 | **Slide release** | 214181 |
| 20 | **Trigger bar,** complete | 214176 |
| 21 | **Trigger bar detent** | 214165 |
| 22 | **Trigger bar detent spring** | 214166 |
| 23 | *Disconnector* | *214840* |
| 24 | **Sear axle** | 214101 |
| 25 | *Catch* | *214773* |
| 25A | *Control latch* | *214817* |
| 26 | **Detent plate** (variant 1 & 2) | 214099 |
| | **Detent plate**** (variant 3 & 4) | 214254 |
| | **Detent plate**** (v. 5, 6, 9, & 10) | 214255 |
| 27 | **Shaped spring** (slide release) | 214171 |
| 28 | **Flat spring** | 214167 |
| 29 | *Hammer, complete (variant 1-4, 9 & 10)* | *214825* |
| 30 | **Hammer,** bobbed (v.5, 6, 7)** | 214256 |
| | **Hammer, bobbed complete**** (v.5, 6, 7) | *214744* |
| 31 | **Cyl. pin,** ISO 6325 2.5x8mm (hammer strut pin) | 971598 |
| 32 | **Hammer axle** (v.1-6, 9,10) | 214774 |
| | **Hammer axle**** (variant 7) | 214258 |
| 33 | **Control lever** (variant 1, 5, 9) | 214184 |
| | **Control lever** (variant 2, 6, 10) | 214309 |
| | **Control lever** (variant 3) | 214352 |
| | **Control lever** (variant 4) | 214253 |
| 34 | **Sear** (variant 1-4, 9, 10) | 214180 |
| | **Sear, complete**** | 214179 |
| 34A | **Tube** (variant 5, 6, 7)** | 214413 |
| 35 | **Roll pin,** ISO 8748 - 2 X 10mm (sear, variant 1, 2, 3, 4, 9, 10) | 982785 |
| 36 | **Detent slide** (variant 1-6, 9, 10) | 214105 |
| 37 | **Compression spring,** (detent slide) variant 1-6, 9, 10 | 214104 |
| 38 | *Frame, complete* | *214816* |
| | *Frame, incomplete* | *214675* |
| 39 | **Trigger rebound spring** | 214164 |
| 40 | **Trigger axle** | 214154 |
| 41 | *Trigger* | *214841* |
| 42 | *Magazine release* | *214818* |
| 43 | **Magazine release spring** | 214170 |
| 44 | *Hammer strut* | *214819* |
| 45 | **Hammer spring** | 214300 |
| 46 | *Lanyard loop insert* | *214836* |
| 47 | **Lanyard loop insert pin** | 214314 |
| 48 | *Magazine Follower* | *214832* |
| 49 | *Magazine spring (12-rd)* | *214833* |
| | *Magazine spring (10-rd)* ** | *214850* |
| 50 | *Magazine floorplate (12-rd)* | *214834* |
| | *Magazine floorplate (10 rd)* | *214852* |
| 51 | *Locking plate (12-rd)* | *214835* |
| | *Locking insert (10-rd)* ** | *214853* |
| 52 | *Magazine housing (12-rd)* | *214869* |
| | *Magazine housing (10-rd)* ** | *214851* |
| *Magazine complete (10-rd)* ** | | *214868* |
| *Magazine complete (12-rd)* ** | | *214862* |
| *Mag. extended floorplate (10-rd)* ** | | *215954* |
| *Mag. extended floorplate (12-rd)* ** | | *217710* |

**Not pictured in diagram

# B. Trigger Variants

**USP**
**FIRE MODES & CONTROL FUNCTIONS**
***(conversion by HK certified armorer only)***

| | Double Action | Single Action | Double Action Only | Control Lever (Left Side) | Control Lever (Right Side) | Control Lever (Manual Safety) | Control Lever (Decocking) | Control Lever (No Decocking) | Caliber Availability |
|---|---|---|---|---|---|---|---|---|---|
| Variant 1 | ● | ● | | ● | | ● | ● | | .45 / .40 / 9mm |
| Variant 2 | ● | ● | | | ● | ● | ● | | .45 / .40 / 9mm |
| Variant 3 | ● | ● | | ● | | | ● | | .45 / .40 / 9mm |
| Variant 4 | ● | ● | | | ● | | ● | | .45 / .40 / 9mm |
| Variant 5 | | | ● | ● | | ● | | ● | .45 / .40 / 9mm |
| Variant 6 | | | ● | | ● | ● | | ● | .45 / .40 / 9mm |
| Variant 7 | | | ● | | | | | | .45 / .40 / 9mm |
| Variant 9 | ● | ● | | ● | | ● | | ● | .45 / .40 / 9mm |
| Variant 10 | ● | ● | | | ● | ● | | ● | .45 / .40 / 9mm |

**Variant 1**
Double Action/Single Action **with "safe"** position and control lever (manual safety/decocking lever) on **left** side of frame.

**Variant 2**
Double Action/Single Action **with "safe"** position and control lever (manual safety/decocking lever) on **right** side of frame.

**Variant 3**
Double Action/Single Action **without "safe"** position with control lever (decocking) on the **left** side of frame

**Variant 4**
Double Action/Single Action **without "safe"** position with control lever (decocking) on the **right** side of frame.

**Variant 5**
Double Action Only **with "safe"** position and control lever (manual safety) on the **left** side of frame.

**Variant 6**
Double Action Only **with "safe"** position and control lever (manual safety) on the **right** side of frame

**Variant 7**
Double Action Only **without control lever** (no safety/decocking lever).

**Variant 9**
DA/SA **with "safe"** position and control lever (manual safety/no decocking function) on the **left** side of frame

**Variant 10**
DA/SA **with "safe"** position and control lever (manual safety/no decocking function) on the **right** side of frame

# C. Performing a Trigger Job (Coming Soon)

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**NOTES**