

# G36 Armorer's Manual



**Heckler & Koch, Inc. USA**

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## Gene ration **DISCLAIMER**

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The G36 can be disassembled to the extent necessary for cleaning and preservation without the use of tools.

Exhaustively tested and currently fielded with the German and Spanish Armed Forces (including NATO Rapid Reaction Force), the G36 is now available to U.S. law enforcement and military.

## General Information

A new development for HK, the G36 is a true modular weapon system in caliber 5.56x45mm NATO (.223 Remington). It is a short gas operated, box-fed, select-fire weapon using a rotating bolt. Constructed almost entirely of a tough, carbon fiber reinforced polymer material and using a simple, self-regulating gas system, the G36 provides the user with a lightweight weapon that delivers high performance with extremely low maintenance. The barrel of the G36 can be exchanged by the unit armorers to create a rifle, carbine, or light support variant using the same common receiver.

The receiver, the pistol grip, the folding buttstock and the handguard consist of composite materials. The magazine consists of semi-transparent colored polymer and has a capacity of 10 or 30 cartridges. A 100-round drum magazine is optional. The selector lever, bolt catch, magazine release and the cocking lever are ambidextrous. The cocking handle also serves as an ambidextrous forward assist for the bolt.

The optical sight is integrated into the carrying handle. The carrying handle is dovetailed into the receiver and then fixed with three screws. The sighting system may have a 1.5x or 3x optic with "iron sights" on top of the carrying handle. An optional electronic "red dot" sight or add-on night vision module may be added above the optic. Additionally, the carrying handle may be removed and a rail attached in its place to accommodate adjustable "iron sights" or various other optics including night vision equipment.

The G36 may be fitted with a variety of accessories including a 3-point sling, bayonet, add-on grenade launcher bipod, blank firing adapter, safety blank firing adapter, tactical light and more.

The G36 can be disassembled to the extent necessary for cleaning and preservation without the use of tools.

Exhaustively tested and currently fielded with the German and Spanish - <sup>booth</sup> <sub>HK</sub> Armed Forces (including NATO Rapid Reaction Force), the G36 is now available to U.S. law enforcement and military.

	Caliber	Cyclic Rate	Mag size	Mode of fire	Sights	Width (in.)	Height (in.)	Weight (lb.)	Barrel length	Overall length (in.)
<b>G36E</b>	.223	750 rpm	30/10 0	S,F	O,DS	2.44	9.72	7.28	18.90	29.84/39.29
<b>G36K</b>	.223	750 rpm	30/10 0	S,F	O,DS	2.44	9.72	6.62	12.52	24.21/33.78

Trigger pull on the G36 is approximately 7 – 10 lbs. (The trigger will hold 3.5 kilos and discharge with 4 kilos)

The G36 may be fitted with a variety of accessories including a 3-point sling, bayonet, add-on grenade launcher piped, blank firing adapter, empty blank firing adapter, tactical light and more.

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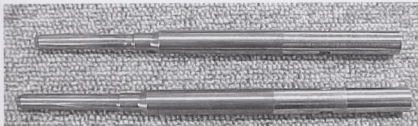
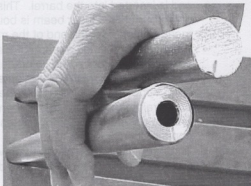


## **The Making of a G36 Barrel**

Heckler & Koch selects the finest French steel for its barrels. The steel is subjected to a multi-procedural process to provide the safest and most reliable barrels in the world. While over-pressure may fracture a barrel, H&K barrels do not fragment.

### **The Barrel process:**

- Stock steel is mounted in a horizontal drill press and is deep drilled to chamber diameter with the barrel rotating in one direction and the drill bit rotating in the opposite direction.
- The drilled stock is then reamed
- The reamed barrel is then diamond honed to a mirror finish
- A "land and grooved" or polygonal mandrel is then



inserted into the barrel stock and moved to the hammer-forging machine.

- The large diameter side of the mandrel is chamber size. The narrower side forms the cartridge shoulder configuration of the chamber and finally the lands and grooves. (1 turn in 7 inches/178mm)

The hammer is configured with four individual hammers in a circle. Each hammer will apply 140 tons per beat, beating at a rate of 1,000 beats per minute. The four hammers beat the steel stock simultaneously

- The steel stock for a G36K is 26cm (10.24 inches) long at this point and will be hammered to a length of 40cm (15.75 inches). (154% of its original size)
- As the hammering occurs, the steel is stretched over the mandrel forming the chamber and the land and groove configuration of the barrel. Total time – 4 minutes.
- This barrel is then heated to 600 degrees for hardening and straightened
- A laser process accomplishes straightening. A mandrel with a mirrored end is inserted into the barrel. This mandrel is moved along the length of the barrel as a laser beam is bounced off the mirror taking height measurements off the end of the mandrel.
- A computer provides a graph of the barrel's bore axis. If it is out of acceptable tolerance, the computer will lift "straightening bars" under the barrel at points, which will straighten the barrel. These "straightening bars" appear horizontally under the barrel like brass piano keys
- The straightened barrel is then sent to the milling machines, which will drill the gas port, mill the over-pressure flutes and other outside barrel configurations
- The barrel is chrome plated to prevent rust and reduce chamber friction
- Flutes are not needed in the G36 due to the ridged locking action of the bolt

### **Barrel Notes:**

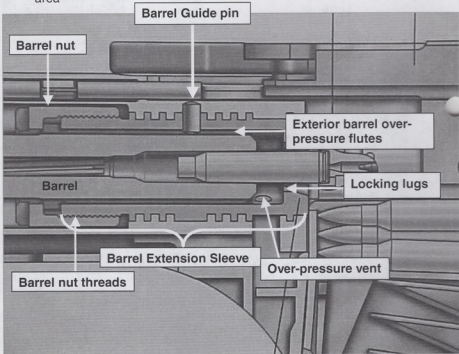
- The following are indicators that a barrel may be worn:
  - The projectiles are "key holing" the target (going through sideways)
  - Velocity has decreased by 5 to 10%
  - Groups have opened by 5%
  - Barrel is bulged
  - Note: barrel bulges will effect the accuracy of the projectile only if the bulge is within 4mm of the muzzle. Generally, with a bulge in the center of the barrel, the projectile will slip past the bulge and then re-stabilize in the lands and grooves
  - Notwithstanding this technical information, a bulged barrel should be replaced
- Lands and grooves stabilize smaller caliber projectiles better than a polygonal configuration.



## **Metal parts of the Receiver**

### **1. Barrel Extension Sleeve & Guide Pin**

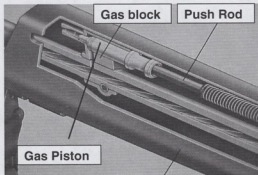
- Barrel seats and is secured by the **barrel nut**
- The **Guide Pin** is on top of the barrel extension and will seat the barrel properly by sliding between two of the **exterior barrel flutes** assuring the front sights are up and the barrel is properly oriented to the receiver
- The rear of the barrel extension provides the **locking lugs** for the bolt head
- Two over-pressure vents are located at the bottom of the locking lug area

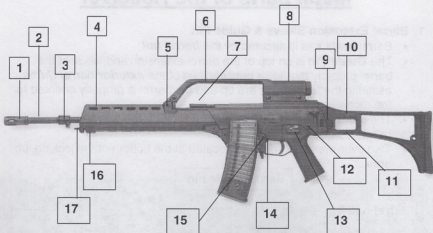


## **External Nomenclature**

- Flash Suppressor
- Barrel (Crown)
- Rifle grenade guide with bayonet mount
- Handguard (front take down pin)
  - Front sling mount (removable)
  - Front sling mount leaf spring
- Carrying handle ("iron sights") (three torque screws)
  - Red dot optic with light shutter (optional)
  - 1.5X or 3X optic
  - Both optics adjustable for windage & elevation
- Cocking lever (ambidextrous, forward bolt assist)
- Folding stock and lock (w/take down pin storage)
  - Rear take down pin
- Ejection port (right side of receiver)
- Case deflector (engages stock when stock is folded) (behind ejection port)
- Trigger group
  - Bolt catch
  - Center take down pin
- Magazine release
- Magazine well (removable)
- Gas port
- Gas cylinder
- Gas piston
- Push rod assembly

All are located under the handguard, on top of the barrel

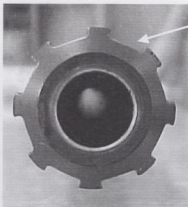




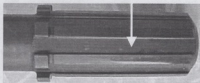
- |                                    |                             |
|------------------------------------|-----------------------------|
| 1. Flash suppresser                | 10. Folding stock           |
| 2. Barrel                          | 11. Take down pin storage   |
| 3. Bayonet lug and grenade guide   | 12. Rear take down pin      |
| 4. Handguard                       | 13. Selector switch/lever   |
| 5. Front take down pin             | 14. Bolt catch              |
| 6. Carrying handle w/"iron" sights | 15. Center take down pin    |
| 7. Cocking lever                   | 16. Sling mount leaf spring |
| 8. 1.5x or 3x optic                | 17. Front sling mount pin   |
| 9. Folding stock lock              |                             |



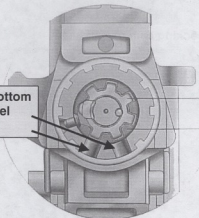
- **Barrel over-pressure Flutes & over-pressure vents**



**Barrel Guide pin of Barrel Extension will ride between flutes for proper barrel/receiver orientation**



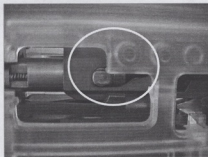
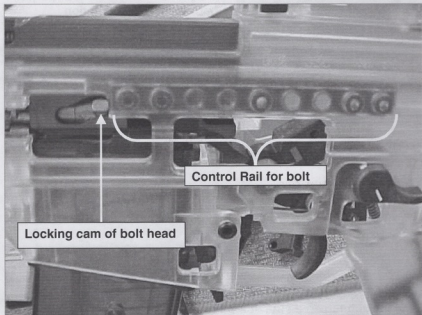
**Two over-pressure vents at the bottom of the locking lug area of the barrel extension sleeve**



- Should a cartridge case rupture due to extreme over pressure, the gas pressure can escape through the barrel flutes then forward towards the muzzle. Also if the over-pressure is very extreme, one or two of the polymer plugs at the bottom of the barrel extension may blow out. Should this occur, the missing plug/s have no effect on the continual operation of the rifle.

## 2. Control Rail for the Bolt

- Located on the left inside of the receiver
- Controls the **locking cam** of the **bolt head** for locking and unlocking



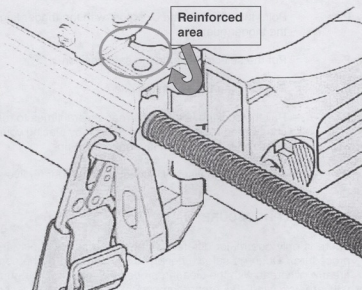
Cam contacts bottom of rail during unlocking



### 3. Back Plate reinforcement

- Located at the upper, inside rear of the receiver where lug of *the back plate* (holds the recoil spring & guide) engages into the receiver
- Allows the rifle to be fired when the bolt is not locked. This may occur if the *bolt cam pin* was left out during re-assembly

**Note:** The serial number for early U.S. G36s will appear on this reinforcement



## **SAFETY CHECK**

A safety check must be performed when the condition of the gun is unknown, when you first pick the gun up and before you do anything to the gun that will result in the trigger being pulled with the slide forward. **NO ONE CAN DO THIS FOR YOU!!!**

### **NO GUN IS SAFE UNTIL YOU HAVE CHECKED IT YOURSELF!!!!**

- P - Point the rifle in a safe direction, with the trigger finger outside the trigger guard.**
- P - Put the selector lever in the safe position**
- P - Pull the magazine from the rifle**
- P - Pull the cocking lever to the rear several times to remove any chambered rounds, then lock it back by placing your trigger finger on the bolt catch lever and push up**
- P - Physically and visually inspect the chamber for live ammunition**

### **CLEARING PROCEDURE**

There is only one major difference between a safety check and a clearing procedure. During a safety check you are unaware of the condition of the firearm, whereas with the clearing procedure you know the gun is loaded. If you are following the proper procedure, both the safety check and the clearing check are performed in the same manner

One important factor to consider in the clearing procedure is the disposition of the round as it is ejected. It is not recommended to cover the ejection port as the round is being ejected as unintentional discharges can occur. By the same token, be careful as to where the ejected round falls, since the primer doesn't know if it is being hit by a firing pin, a rock or a projection of metal on the gun.

## Markings

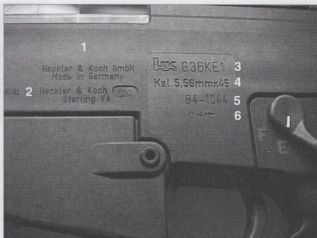
All markings on the G36 are on the left side of the rifle above the magazine well and trigger.

1. Manufacturer & Country
2. Importer & place of importation
3. HK logo & model
4. Caliber
5. Serial number \*
6. Proof marks

\* Serial #s on early U.S.

G36s appear on the polymer and the inner reinforcement plate at the rear of the upper receiver. (see drawing p. 11)

Later models will have the serial # on a metal plate molded into the upper receiver.



## Proof Marks

**Quality Control Stamp =**  
Eagle with a "N" under it for



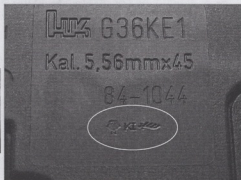
"Nitro" cellulose

**Date code:**

A = 0	F = 5
B = 1	G = 6
C = 2	H = 7
D = 3	I = 8
E = 4	K = 9



J is reserved for Proof house use and on HK parts not required to be proof tested such as magazine housing



**Proof Mark = Six proof houses in Germany. ULM is utilized by HK**



ULM



Berlin



Kiel



Hannover



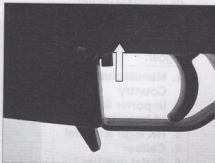
Munich



Köln

## **Loading and Firing**

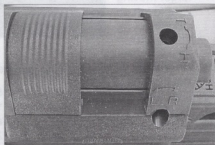
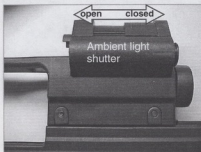
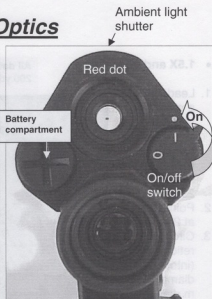
1. Point the rifle in a safe direction
2. Perform a safety check
3. Ensure the selector lever is on "safe"
4. If the bolt is forward, bring the cocking handle to the rear and with your trigger finger, push the bolt catch upwards
5. Insert a loaded magazine into the magazine well and then give the magazine a tug down
6. Bring the cocking handle to the rear slightly and release. The bolt will go forward and chamber the first cartridge. If the bolt does not lock, bring the cocking handle to the side and push in to lock it. It may now be used as a forward assist
7. Put the selector lever on the desired mode of fire
8. Shoulder the rifle, pull the trigger to fire the rifle
9. After firing perform a clearing check
10. Once the clearing procedure is complete, the rifle is ready for cleaning.
11. Field strip the rifle, then clean



## The Optics

### • Dual sights/Red dot

- The dual sight configuration has a electronic red dot sight mounted on top of the 1.5X or 3X optic
- The red dot is powered either by a battery, with the on/off switch on the right side or by the ambient light shutter located on the top
- If the shutter is opened by sliding it to the front the red dot will appear

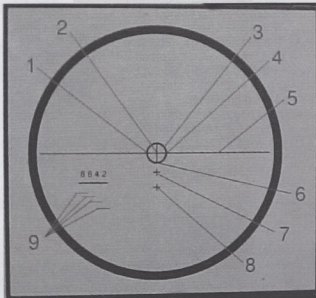


- The red dot is adjustable for elevation and windage
- A 2.5mm hex wrench is used for the adjustment
- Follow the directional arrows on the sight

# • **1.5X and 3x optic**

All data and markings assume a  
200 yds/meter sight-in

1. Lead mark for a moving target moving left to right at a speed of approx. 10 mph @ 200yds
2. Point of aim at 200 yards
3. Circular retical (interior diameter 1.75 m man size at 200 meters)
4. Lead mark for a moving target moving right to left at a speed of approx. 10 mph @ 200yds

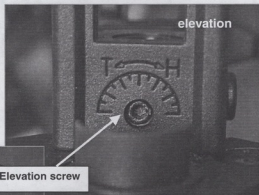
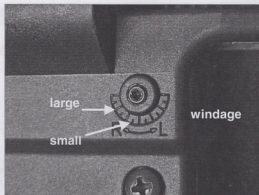


5. Horizontal line to determine whether the weapon is canted
6. Point of aim @ 400 yds.
7. Point of aim @ 600 yds.
8. Point of aim @ 800 yds.
9. Man size of 1.75 m at range x

**Sighted-in at 200yds/meters a  
100 yd/meter shot would be  
approx. 1.5 inches high, a  
25yd/m shot would be approx.  
1.75 inches low of the point of  
aim**

## • Adjustments

- A 2.5mm hex wrench is necessary for sight adjustment changes
- The movement of the screw by one large mark will change the point of impact approximately 1 inch at 100 yards/windage or elevation
- The windage screw is located on the right side of the optic
- Since the optic will be adjusted in the front, the adjustment must be made in the opposite direction you want the impact to move. The directional markings are set for this adjustment. Move the screw in the direction you want the impact to move.



Cut-away of front of optic

Elevation screw

Windage screw

Tension spring

## Field Stripping

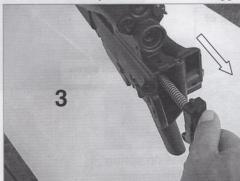
- Point the weapon in a safe direction and perform a safety check

### *The receiver*

- Allow the bolt to go forward into battery by slightly pulling the cocking handle to the rear and releasing it
- Push the *lock button* on the *stock* and fold the stock to the right side of the receiver (1)



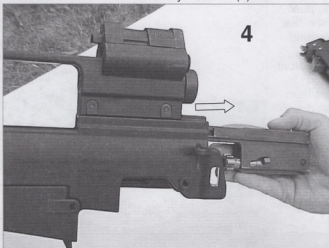
- Remove the *rear take down pin* (place all take down pins into the holes provided on the bottom of the buttstock) (2)
- Remove the *center take down pin* and remove the *trigger group*



- From the rear of the receiver remove the *back plate, recoil spring and guide assembly* (all one piece) (3)

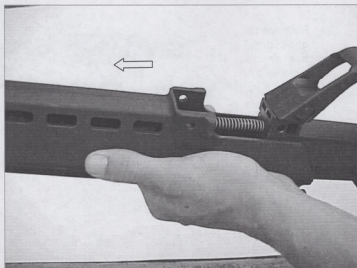


- Tilt the back of the receiver downward and allow the *bolt assembly* to slide out the rear of the receiver into your hand (4)

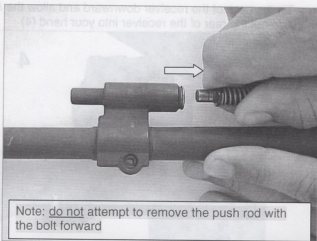


#### Gas system stuff

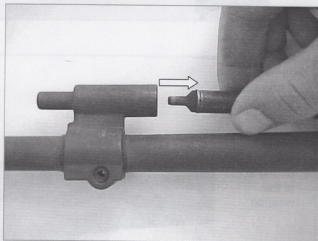
- Remove the *front take down pin* and slide the *handguard* off the front of the weapon



- Pull the *push rod* to the rear compressing the spring. When the front of the rod appears from the *gas piston*, tilt the rod to the left or right and allow it to move forward. Remove the rod pulling it towards the muzzle.

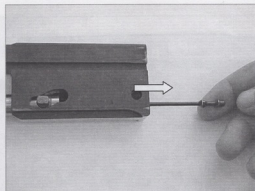


- Remove the gas piston from the gas cylinder by pulling it to the rear



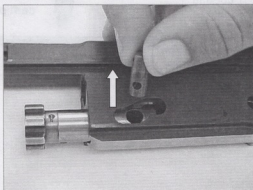
# The bolt assembly

Using the front tip of the gas piston, push out *firing pin retaining pin*

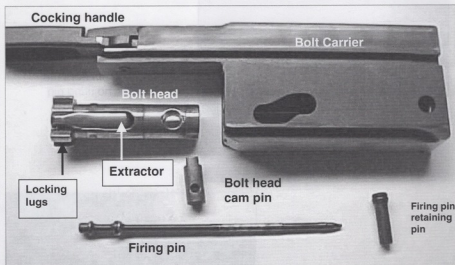
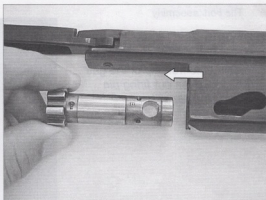


Remove *firing pin* from the rear. There is no firing pin spring

- Remove *bolt head cam pin*



- Remove *bolt head*



## **OPERATOR MAINTENANCE**

### **CLEANING**

The G36 will function in extremely adverse conditions and will operate while quite dirty. However, this is not the recommended method of operation. This firearm is **NOT** self-cleaning just as it is not self-shooting.

It should therefore be cleaned **after every time it is fired**. However, because of the G36's rigid lock-up system, it can fire 15,000 – 20,000 rounds before it needs to be cleaned.

**CLEAN IS CLEAN.** This is your standard!

### **SOLVENTS**

Mineral spirits, dry cleaning solvents such as **Varsol, Safety Clean #105, MPro7. NEVER GASOLINE!** These are for general cleaning throughout the gun. Some Biodegradable solvents can leave a gummy residue. Keep solvents away from the painted areas (firing mode symbols)

### **BORE CLEANERS**

**Hoppe's Nitro Solvent, Shooter's Choice,** etc. Any commercial bore cleaner.

### **BORE BRUSHES**

Bronze bristle, copper, and brass is recommended. Nylon is OK. **Never ever use stainless steel.**

### **PATCHES**

Soft and absorbent. We recommend knitted patches as woven patches may leave strings. **Southern Bloomers** is excellent.

### **LUBRICANTS**

**Break-free, Eze-ox, Slick 50 1-lube,** etc.

### **PRESERVATIVES**

**Break-free, Ballistol, Rig,** etc.

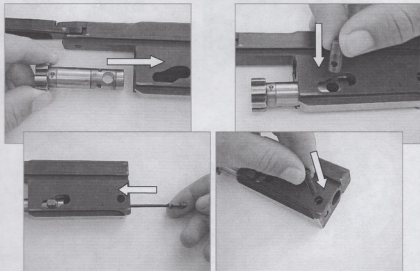
## CARE AND CLEANING

- BARREL, GAS PISTON & GAS CYLINDER** - Clean from the chamber end always!!!  
Push the brush or the patch through in one stroke.  
Brush with solvent. Wash brush!!!  
Patch dry until clean, repeat brushing if necessary.  
Lube barrel inside and out to prevent rust.  
Fouling shots are fouling!
- BOLT** - Clean with mineral spirit solvents and brush to remove large deposits of carbon and dirt. Generally Lube throughout.
- RECEIVER, HANDGUARD & BUTTSTOCK** - Clean with soap and water and brush to remove large deposits of carbon and dirt.
- TRIGGER GROUP** - Use pouring solvent or warm water and bush clean. Blow or air-dry. Lube the polymer sear, catch and hammer area with a dry-lube.
- MAGAZINE** - Wipe off the outside and the follower then lube very lightly. *THIS IS ONLY FOR METAL MAGS i.e.MPS*
- VISUAL CHECKS** - The operator should know their gun well enough to know if there is something wrong with it. They should perform a visual inspection of the gun as they are cleaning it.
- REPORTING** - Encourage your people to report problems not fearing retribution.

## Assembly of the G36

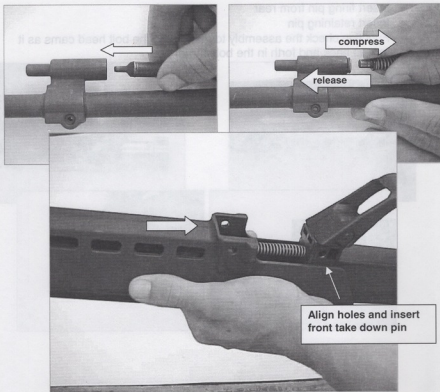
### The bolt assembly

- Assemble the bolt assembly
  - Insert bolt head into the bolt carrier with the extractor on the right and ejector on the left
  - Insert cam pin through the bolt carrier into the bolt head aligning the firing pin hole from front to rear (the firing pin is threaded through the cam pin)
  - Push bolt head back into carrier
  - Insert firing pin from rear
  - Insert retaining pin
  - Function check the assembly to make sure the bolt head cams as it moves back and forth in the bolt carrier



### The gas system stuff

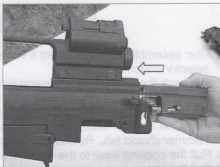
- Insert the gas piston into the gas cylinder
- Place the non-spring end of the push rod into the receiver under the front part of the carrier handle
- Push the rod to the rear compressing the spring and insert the front tip of the rod into the gas piston and release
- Thread the handguard over the muzzle and bring it back to engage on the front of the receiver
- Insert front take down pin





*Receiver*

- Insert the bolt assembly from the rear of the receiver with the cocking lever forward and up.
- Tilt the rifle muzzle down slightly and allow the bolt assembly to slide forward into battery



- Insert the recoil guide assembly into the receiver with the front of the guide entering the rear of the bolt carrier
- Guide the upper lug of the back plate into the hole in the upper rear of the receiver.



- Place the trigger group on the receiver and insert center take down pin. Note: the hammer must be "cocked" for assembly
- Unfold the stock and lock it into the shooting position
- Insert rear take down pin



## **Function Check**

1. After assembling the rifle, point it in a safe direction and place the *selector switch* on "safe"
2. Pull back the *cocking lever* several times to assure the bolt is free
3. Allow the bolt to go forward under the tension of the recoil spring
4. Pull the *trigger*, the *hammer* should not fall
5. Place the *selector switch* on "semi-auto" and pull the *trigger*. The *hammer* should fall. Release the *trigger*.
6. Pull the *cocking lever* to the rear and allow it to snap forward into battery
7. Pull the *trigger* to the rear and hold it there. The *hammer* should fall
8. With the *trigger* to the rear, re-cock the rifle
9. Release the *trigger* and listen for a "click". This is the resetting of the *sear*.
10. Place the *selector switch* on "full auto"
11. Re-cock the rifle
12. Pull the *trigger* to the rear and hold it there. The *hammer* should fall
13. With the *trigger* to the rear, re-cock the rifle and ride the *cocking lever* forward. As the bolt goes into battery, you should hear the *hammer* fall
14. Continue the "auto" cycle several times, then release the *trigger*
15. Place the *selector switch* on "safe"
16. Pull the *cocking lever* to the rear and lock it by pushing up on the *bolt catch* with your trigger finger

### **2nd burst group**

1. Cock the UMP and allow the bolt to go forward into battery
2. Place the *selector switch* on 2nd burst
3. Pull the trigger and hold it to the rear
4. Re-cock the UMP and ride the cocking handle forward into battery, you should hear the hammer fall
5. Re-cock the UMP and ride the cocking handle forward, the hammer should not fall
6. Release the trigger
7. Place the *selector switch* on "safe"
8. Lock back the cocking lever

## OPERATING PRINCIPLE

There are three commonly accepted operating principles used to operate an auto-loading firearm. They all utilize the kinetic energy released as the round is fired. The powder in a modern cartridge is converted in a half dozen milliseconds from a dry powder to expanding gases 900 to 1000 times the volume of the powder. Additionally the pressure of this expanding gas can average 38,000-psi with a peak of over 43,000-psi in a 9mm x 19 cartridge.

3 types  
1- Gas  
2- Recoil  
3- Blowback

This firing causes many things to happen. First, as the gases expand the bullet moves from the case into the barrel and the force required to move the bullet causes an exact force to be exerted in the opposite direction. This will become recoil energy and is the power behind two of the operating principles. Secondly, as the gases continue to expand, they push the bullet down the bore where the lands and grooves/polygonal configuration imparts spin to the bullet. These grooves/surfaces are in the shape of a spiral, which makes the bullet turn as it travels down the barrel. It can achieve a rate of spin of almost 80,000 rpm in a 9mm. The expanding gases if vented and applied to pistons or rods can be made to power the mechanism of the auto loader. This is the gas-operated principle.

The G36, M1, M-14, M-16, Remington 1100, M-60 machine gun, and Desert Eagle are just a few of the gas-operated weapons used. One of the features of the gas-operated gun is that the barrel is stationary and the gas is vented from the barrel forward of the mid-point of the barrel. This creates a delay, which enables the bullet to leave the muzzle and the pressure to drop to a safe level prior to the action opening.

A **recoil** operated firearm functions through the transmission of recoil energy. The equal and opposite reaction to the bullet traveling down the bore provides more than enough energy to function the gun. In the recoil operated system the barrel and breech, barrel and bolt, barrel and slide remain locked while the mechanism is in recoil until the bullet leaves the bore and the pressure drops to a safe level. This is done through timing, but the barrel in a recoil system moves. Examples are numerous, as all Browning design pistols are recoil operated. The Browning HiPower, M1911 A1, Beretta, Smith autos, Glock, Sig and many more including our own USP.

Another method of utilizing the recoil energy is called **Blowback** and broken into two types, simple and delayed. Delayed blowback, however, instead of using the mass of the bolt incorporates a mechanical disadvantage, which must be overcome to unlock the bolt and open the action. This style of bolt system enables the bolt to be light. If the G3 used the simple blowback, the bolt would weight 36 lbs.

The simple blowback system uses the mass of the bolt to cause the delay necessary for the bullet to leave the muzzle. Uzis, Sterling, Sten, M3 Grease gun, Mac 10, and most small .22 semi pistols are simple blowback. The UMP is a simple blowback operated weapon.

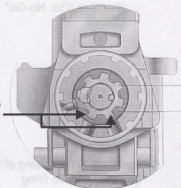
The G36, M16, M14, M1, M2, Remington 700, M-60 machine gun, and Desert Eagle are just a few of the gas-operated weapons used. One of the features of the gas-operated gun is that the barrel is stationary and the gas is vented from the barrel forward of the mid-point of the barrel. This creates a delay, which enables the bullet to leave the muzzle and the pressure to drop to a safe level prior to the action opening.

A recoil operated firearm functions through the transmission of recoil energy. The equal and opposite reaction to the bullet traveling down the bore provides more than enough energy to function the gun. In the recoil operated system the barrel and breech, barrel and bolt, barrel and slide remain locked while the mechanism is in recoil until the bullet leaves the bore and the pressure drops to a safe level. This is done through timing but the barrel in a recoil system moves. Examples are numerous, as all Browning design pistols are recoil operated. The Browning Hi-Power, M1911 A1, Beretta, Smith-Wesson, Glock, SIG and many more including our own USP.

## Cycle of Function

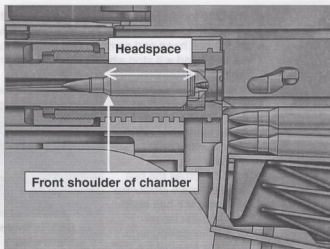
### 1. Feeding The stripping of a cartridge from the magazine

- As the bolt moves forward under the expanding recoil spring, the two bottom locking lugs of the bolt head act as feed pawls and strip the top cartridge from the magazine
- Since the magazine is "double stacked", the right or left locking lug will engage the top cartridge regardless of which side the cartridge surfaces



### 2. Chambering The seating of the cartridge into the chamber

- As the recoil spring continues to expand pushing the bolt forward, the cartridge stops when the shoulder of the cartridge rests against the front shoulder of the chamber
- The distance from the shoulder of the chamber back to the end of the cartridge case is called "Headspace"
- If there is not enough headspace, the chamber must be milled to enlarge the chamber length. (This is not an armorer function. It must be completed by the factory staff)

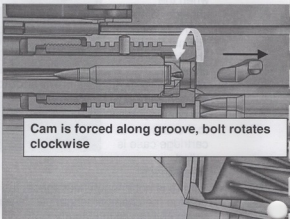


- If there is too much headspace, the chamber is worn and the barrel must be replaced
- Headspace can be measured with the G36 chamber "Go, No-Go" gauges



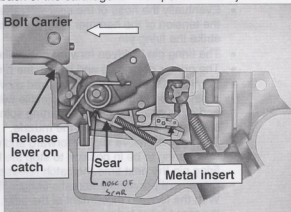
### 3. **Locking** The closing of the breech mechanism, which will provide the gas seal prior to firing

- The G36 locking system, which is similar to the M16's, is very rigid unlike the locking systems of a blowback or a recoil operated weapon
- As the bolt head and carrier move forward chambering the cartridge, the bolt head will stop when it meets the chamber face at the rear of the barrel extension.
- The bolt carrier continues to move forward forcing the cam-locking lug to slip from under the control rail and rotate along the cam groove in the bolt carrier. This cam rotation forces the bolt head to rotate clockwise engaging the bolt head lugs into the barrel extension locking lugs
- With the force of the bolt carrier continuing to move forward, the extractor cams out over the back of the cartridge



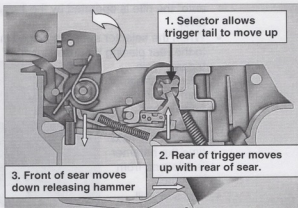
rim and then snaps back over the rim under the tension of the extractor spring. Note: the firing pin is too light to cause a "slam fire"

- At the same time the back of the cartridge rim compresses the ejector and ejector spring
- As the bolt carrier moves forward the bottom of the carrier contacts the releaser lever of the catch. The catch releases the hammer and the hammer begins to fall forward. The hammer is stopped as the bottom of the hammer engages the upper front nose of the sear. With the rearward pressure of the hammer, the metal insert in the rear of the sear slides over the rear of the trigger.
- The rifle is now ready to fire



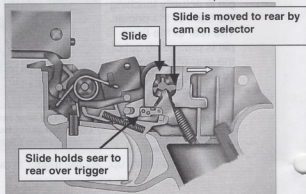
#### 4. Firing The igniting of the propellant powder

- The G36 has a "direct" firing pin system. After locking the firing pin is actually touching the back of the primer. The rear of the firing pin is protruding out of the rear of the bolt carrier.
- **Semi-automatic firing**
  - With the selector in semi-auto, the trigger tail will be allowed to move up. As the trigger is pulled, the rear of the trigger



is moved up. As the rear of the trigger moves up, it is in contact with the metal insert of the sear, which also moves up. As the rear moves up, the nose of the sear moves down.

- Eventually the nose of the sear will release the hammer. Under the tension of the hammer spring, the hammer will fall forward and strike the firing pin
- The firing pin is driven forward and strikes the primer
- The primer detonates and ignites the propellant powder
- Semi-automatic firing has occurred moving the projectile from the casing into the barrel. The projectile will inscribe itself on the lands and grooves of the barrel imparting spin to the projectile for stabilization after it leaves the muzzle.
- The sear will move slightly forward and up under the tension of the sear spring to be in position to stop the hammer from hitting the firing pin the next time the catch releases the hammer. This sear movement prevents automatic firing in the semi-automatic mode. With the forward movement of the sear, the metal insert slides off the rear trigger ledge.
- **Automatic Firing**
  - Whether the selector switch has been placed in "Semi-auto" or "Full-Automatic" the first shot is always a semi-auto shot, because the sear is manipulated by the shooter
  - Once the first shot has been fired, with the selector switch in "full-auto" the rifle is operated by the *bolt carrier* and the *catch/release lever*
  - When the selector switch is placed in "full-auto" the *slide* is moved to the rear placing the metal insert of the sear over the top of the trigger. This prevents the sear from moving forward and engaging the hammer the next time the hammer is released from the catch.
  - The sear will again engage and stop the

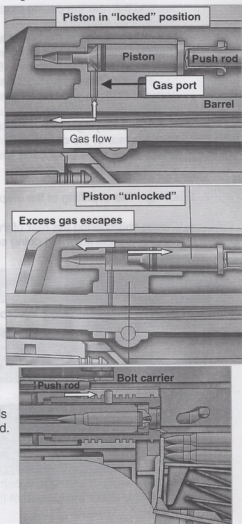




falling hammer only when the shooter allows the trigger to move forward allowing the front of the sear to move up into the path of the falling hammer.

## 5. Unlocking The removal of the locking mechanism from the breech

- As the projectile moves into the barrel it will pass over the *gas port*
- The escaping gases, following the projectile, will vent up into the gas port and push the *piston* to the rear
- The piston, attached to the *push rod*, moves the push rod to the rear. The push rod strikes the bolt carrier under the cocking handle forcing the bolt carrier to the rear.
- As the bolt carrier moves to the rear the cam pin in the bolt is forced along the cam slot in the carrier and rotates the bolt head counter-clockwise unlocking it from the locking lugs of the barrel extension
- The piston moves approximately one-third of an inch to the rear. During the rearward movement the tip of the gas piston will expose the forward gas escape vent. Gas not needed to operate the system will vent forward towards the muzzle under the handguard. Thus, the system is "self-regulating" and needs no adjustment.

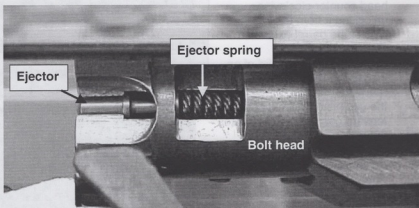


## 6. Extraction Removal of the empty case or cartridge from the chamber

- During "chambering" the extractor, located on the right side of the bolt head, snapped over the case rim. As the bolt head and bolt carrier move to the rear the casing or cartridge will be guided out of the chamber by the extractor.
- The chrome lining of the barrel and chamber reduces friction on the chamber walls. The gas pressure inside the barrel and casing push the casing out of the chamber. Because of the reduced friction and gas pressure the casing would extract even without the extractor.
- With the G36, as with the P7 pistol, the extractor is mainly a guide.
- Chamber flutes are not needed in the G36 as they are in the P7. The G36 has a very rigid lock-up system and there is no gas seepage from the rear of the chamber during unlocking. This system assures a very clean cycle of function leaving the chamber/receiver area extremely clean while shooting.

## 7. Ejecting The expelling of the empty case or cartridge from the rifle

- During chambering the rear of the casing was held to the bolt head face by the extractor. In doing so, the rear of the casing compressed the ejector & spring.

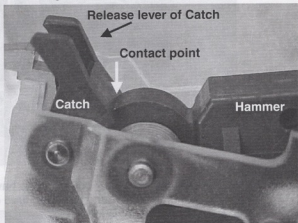


- As the casing or cartridge is being extracted, the ejector is attempting to expand under the tension of the compressed ejector spring.

- Once the casing or cartridge leaves the confines of the chamber, the ejector spring will expand and push the casing or cartridge out towards the ejection port expelling it from the rifle

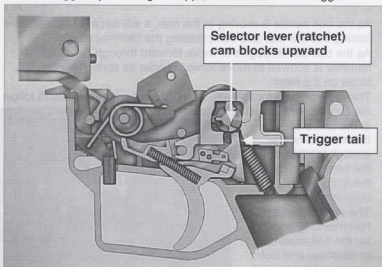
## 8. Cocking The resetting of the trigger mechanism for subsequent shots

- As the bolt carrier is moving to the rear, it will run over the hammer forcing it to the rear and compressing the hammer springs.
- As the bolt carrier begins to move forward through "feeding" the hammer is allowed to move forward under its spring tension, but stops on the catch.
- This is necessary for full-auto firing. If the hammer is able to follow the bolt carrier forward at the same speed, there would not be enough inertia from the hammer to cause the firing pin to detonate the primer.
- The catch stops the hammer long enough for the bolt assembly to chamber and lock and then be released from the catch with enough inertia to strike the firing pin and detonate the primer.
- When the shooter releases the trigger, the metal insert at the rear of the sear is reset on top of the trigger ledge.
- During the function check when releasing the trigger on a cocked rifle, a "click" is heard. This is the resetting of the sear onto the trigger.



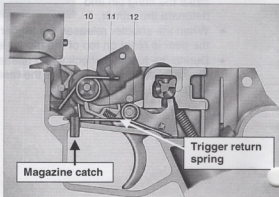
## 9. Selector switch on "safe"

- The selector switch when on "safe" restricts the rearward movement of the trigger by blocking the upward movement of the trigger tail

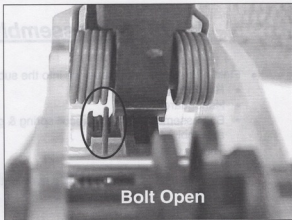


## 10. The G36 can be simply configured to have the bolt move into battery (closed) after the last round has been fired or locked open.

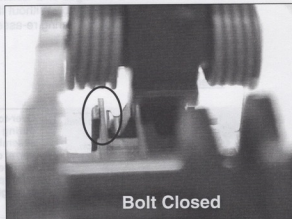
- Moving the leg of the left trigger spring in the trigger mechanism makes the adjustment.



- To keep the bolt open after the last round is fired, move the spring leg into the right seat



- To keep the bolt closed after the last round is fired, move the spring leg to the left



- The spring leg blocks the upward movement of the bolt catch. Therefore, if the bolt catch is disabled by the placement of the trigger spring, the bolt can not be locked to the rear either by the magazine follower after the last round or manually

## **Armorer Disassembly/Assembly**

- Field strip the rifle and separate into the subassemblies:
  - Receiver/Barrel
  - Handguard
  - Bolt assembly (including recoil spring & guide and back plate assembly)
  - Trigger group
  - Magazine
  - Gas piston and push rod (there is no further disassembly of these parts)

### 1. Receiver and Barrel

- Unless the barrel is damaged or a variant change is desired, the barrel should not be removed. Without the proper tools, over-tightening of the barrel nut during re-assembly can cause damage to the barrel and receiver.

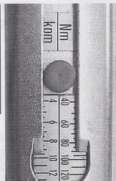
- **Special tools**

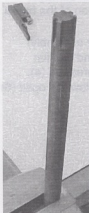


**Barrel nut socket.**  
Must fit onto  
torque wrench

Over-torquing during re-assembly of the barrel could change the headspace, thus damaging the barrel

**Torque wrench**  
set to 66 lbs.



**(Special tools continued)** Receiver/Barrel**Receiver/Chamber  
mandrel****Rifle on  
mandrel****Socket fits into  
barrel nut**

- **Barrel removal**

- Place the receiver/chamber mandrel into a vise, grooved end up
- Place the chamber onto the grooved end of the mount
- Place socket on torque wrench and slide the socket over the barrel onto barrel nut
- Loosen the barrel nut and pull barrel off the receiver.

- **Barrel assembly**

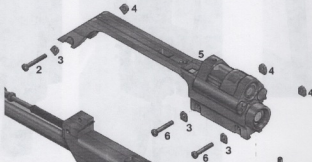
- Place the receiver/chamber mount into a vise, grooved end up
- Place the chamber onto the grooved end of the mandrel
- Insert barrel into barrel extension, aligning the front sight up. Barrel will align as the barrel pin of the barrel extension slides between the exterior barrel flutes

- Slide the socket over the barrel and engage the socket into the barrel nut.
- Set torque wrench for 66 lbs. And tighten barrel nut.

**WARNING:** over-tightening the barrel nut could cause barrel damage!

**Note:** Headspace is automatically set with proper installation of the barrel

- *Carrying handle disassembly*
  - **Special tools:** Torque phillips head screw driver (for assembly)
  - Unscrew the front screw (2) and remove the screw and two flat washers (3 & 4). Take note, one of the washers is threaded (4).
  - Unscrew the two screws in the carrying handle just below the optic (6)

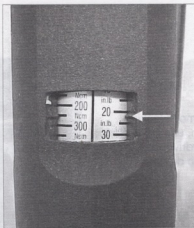


- Four flat washers will come off also(3 & 4). Notice that two of them (4) have threads and are what the screws tighten into.
- Tap the carrying handle (5) on the front towards the rear of the rifle. The carrying handle will come off the dovetailed seats of the receiver
- *Optic*
  - Should the optic become damaged in any way, remove the carrying handle and replace it with a new handle and optic
  - The optic should only be disassembled by factory repair personal
  - It is extremely critical that the seals in the optic do not get damaged
- *Carrying handle reassembly*
  - Slide the carrying handle over the dovetailed seats on the top of the receiver and tap forward



- Align the screw hole and tighten down the screws using a torque screwdriver set to 23 lbs

*1/4 inch*



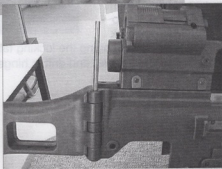
#### Magazine well disassembly

- The G36 has a removable magazine well
- To remove it, push forward on the magazine release lever and pull down on the rear part of the well
- Reverse procedure for assembly

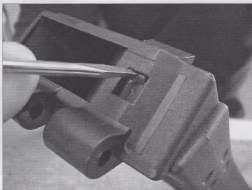


#### Folding stock disassembly

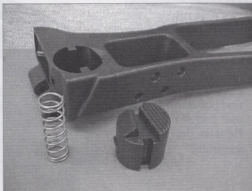
- To remove the folding stock, drift out the hinge pin in either direction



- To remove locking button, use a flat bladed screwdriver and press the tab down



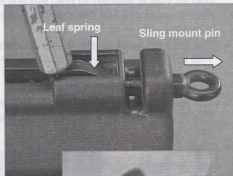
- Remove button and spring



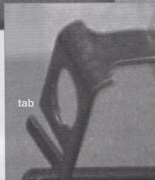
- To assemble, insert spring behind button.
- Insert assembly into button hole on stock and press down engaging the locking tab
- Place stock on receiver and drift in hinge pin

## 2. Handguard

- The handguard holds the front sling mount pin
- On the front bottom of the handguard is a leaf spring. This leaf spring has a hole in it which is holding the sling pin. This pin is also threaded through a hole in the polymer. These two holes are offset with the leaf spring hole always trying to move away from the handguard hole. This tension holds the pin in place
- Push down on the leaf spring and pull out the sling mount pin



- There is a tab on the bottom of the leaf spring



- To remove the leaf spring from the handguard, use a punch or flat bladed screwdriver and push the tab



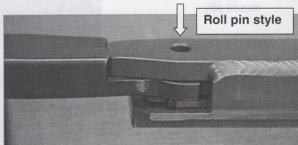
towards the muzzle end while lifting up on the spring

### 3. Bolt group disassembly

- Once the bolt group has been field stripped, there is very little left for the armorer
- The ejector is under extreme tension and should not be removed. A special vise is needed to hold the bolt head in place and a plunger is necessary to release the spring tension so a very small roll pin can be removed.
- The cocking lever on the first production run was held in by a roll pin. This roll pin has been replaced by a rivet. If the rifle has a rivet do not remove it unless the cocking lever has failed. If it is removed the rivet must be replaced with a new one.
- The roll pins are flush with the upper and under side of the bolt carrier. The rivet will be rounded on the top and protruding. It is pinned on the bottom.

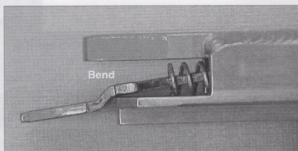
#### Disassemble cocking lever

- Punch out roll pin or rivet
- Remove the cocking lever to the front.
- Remove horseshoe support and spring.



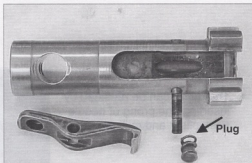
#### Cocking handle reassembly

- Thread spring onto horseshoe support and insert into bolt carrier. Assure that the bend is down
- Insert cocking lever, compress spring and insert roll pin or rivet



- *Disassemble extractor*

- Drift out axle
- Remove extractor, spring and plug
- Take care not to lose the spring plug

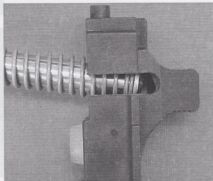


- *reassemble extractor*

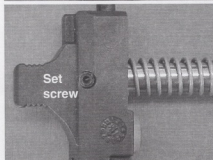
- Place plug into spring
- Place spring and plug into spring hole at the inside rear of the extractor
- Insert assembly into bolt head
- Drift in axle

- *Recoil spring guide, buffer*

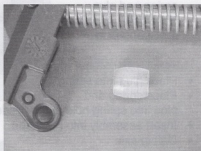
- The recoil spring and guide ends are fitted and hydraulically compressed. If the spring or guide fails, it must be replaced by a new one



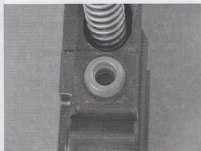
- The guide assembly may be removed from the back plate by unloosening the set screw with a 2mm hex wrench



- The buffer can be replaced by inserting one prong of needle nose pliers and pulling it out

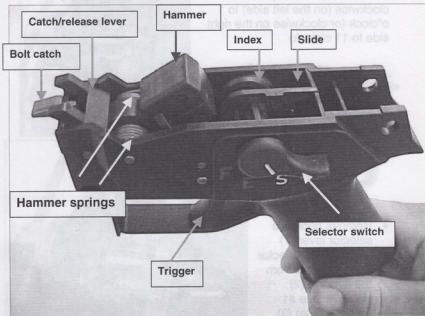


- Insert a new buffer and seat it by tapping it with a hammer

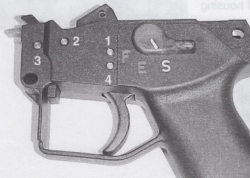


#### 4. Trigger mechanism

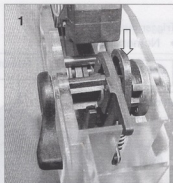
- Nomenclature



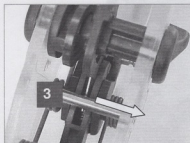
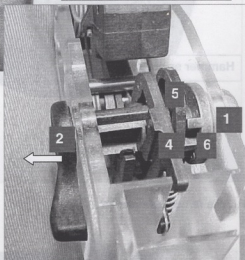
- Axle removal sequence



- *disassembly of the trigger mechanism*
- Press down on the index
- Turn selector lever up counter-clockwise (on the left side) to 1 o'clock (or clockwise on the right side to 11 o'clock)



- Remove right side selector lever (1)
- Remove the selector lever and axle from the left side (2)
- Remove axle #1 (support axle) (3)
- Remove slide (4)
- Remove index (5)
- Remove ratchet from right side of housing (6)

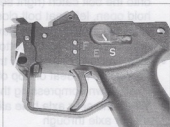




- Drift out hammer axle
- Remove hammer and springs



- Drift out catch axle (this axle is shorter than the other three)
- Remove catch



- Drift out trigger axle
- Remove sear, sear spring, trigger and trigger return springs
- The trigger return spring is on the right side and is thicker
- The left side spring is a lighter, thinner spring and is the bolt catch spring
- Lift out bolt catch

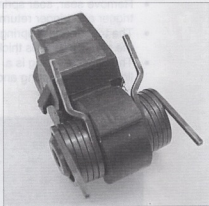


**Sear and sear spring**

- Reassemble trigger mechanism
  - Insert bolt catch

#### Trigger & sear

- Place trigger return spring (thicker one) on the right side of the trigger axle bushing, setting the active leg on the spring axle
- Place the bolt catch spring on the left axle bushing, long leg forward and onto the bolt catch (right seat bolt hold open, left seat bolt closed)
- Start trigger axle in and slave trigger, leaving room for the sear
- Insert sear spring into bottom of sear (a little grease may help here)
- Insert assembly on top of trigger inserting the bottom of the sear spring into its seat on top of the trigger
- Push down compressing the sear spring
- When the sear axle hole aligns with the trigger axle hole, continue the trigger axle through
- (alternative method) Assemble the sear and trigger together outside the housing by using the bolt catch axle (the short axle)
- Insert the trigger/sear assembly into the housing setting the springs as mentioned above
- Insert trigger axle into housing and drive through. This will drive out the "slave axle"



#### Hammer

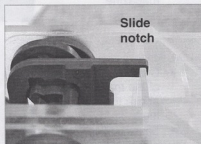
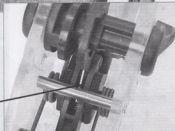
- Place the hammer springs on the hammer straight legs down, dog legs up
- Do not engage the dog legs to the hammer just yet
- Insert hammer and springs into housing straight legs down
- Insert hammer axle flush with both sides
- Engage the right side active leg (dog leg) of the hammer

### Catch

- Insert catch and slave one side of the catch
- The left side dead leg of the hammer spring must be under the left side of the catch
- Continue axle through
- Engage the left side active hammer spring to the hammer

### The remainder of the mechanism

- Insert the *ratchet* into the right side of the housing from inside
- Align the keyholes in the housing and ratchet
- Insert the right side *selector lever* to maintain the alignment
- Thread the *index spring* onto the *index*
- Insert the bottom of the *index* in the hole at the bottom of the housing with the index arrow towards the *ratchet*
- Compress the *index* and engage it on the *ratchet*
- Insert the horeshoe end of the slide through the top center of the sear engaging it onto the trigger axle
- Allow the rear of the slide to fall into its notch in the housing
- Insert selector lever from left side
- Compress the index and rotate the selector levers to "safe"



## Parts Box



Slide



Ratchet



Index

Arrow

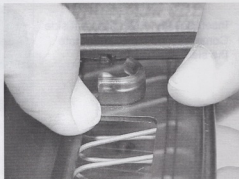
### 5. The magazine

- The magazine is made of a clear tinted polymer
- Each magazine has male and female fittings for "stacking"
- *disassembly*
  - Locate the locking lug on bottom of the magazine



Locking  
lug

- Compress the side of the magazine just above the locking lug
- Slide the floor plate off the magazine
- Remove the spring, and follower



## **Troubleshooting**

<b>Stoppage</b>	<b>Cause</b>	<b>Remedy</b>
Cartridge is not ignited	Bad ammo Tip of firing pin damaged or broken Hammer spring damaged or broken	Recock weapon Replace firing pin Replace hammer spring
Bolt does not unlock	Cartridge case stuck in chamber due to deformed or dirty chamber Gas system fouled or defective	Unload: retract bolt to eject casing, clean chamber if fouled Clean gas piston & cylinder
Cartridge case not extracted or ejected	Chamber dirty Extractor or ejector spring broken or missing Insufficient bolt recoil	Clean chamber Replace spring/s Manually extract cartridge, replace ammo or clean chamber
No cartridge fed by bolt	Magazine not properly inserted Follower spring lame Magazine lips damaged Magazine well damaged	Re-insert magazine properly Replace magazine spring Replace magazine Repair magazine well
Bolt not closed completely	Chamber dirty Barrel extension dirty Bad ammo Recoil spring lame Incomplete cocking movement	Clean Clean Replace Replace Recock; do not ride cocking handle forward
Bolt does not stay open after last shot	Bad ammo Magazine follower spring lame Bolt catch spring not set correctly	Replace ammo Replace follower spring Move bolt catch spring in trigger mechanism to the right side position (see p. 39)
Trigger can not be pulled with hammer cocked	Sear broken or compression spring lame	Replace either or both parts
Firing with markedly increased rate of fire	Gas piston broken	Replace
Red dot in dual sight will not illuminate when switched on	Battery expended Sight is defective	Replace battery (3.6 volt lithium) available from HK ID# 986444 Return to HK for repair

Stoppage	Cause	Remedy
Reticle appears slanted in optical sight	Reticle detached in sight Optic loose in carrying handle	Replace optic sight Remove and reinstall the optical sight in the carrying handle
Bolt group can not be removed from receiver	Cocking lever axle out of position	Reposition or replace axle
Magazine stuck in magazine well	Magazine damaged Magazine release defective	Replace Repair
Unloaded round does not eject	Chamber case stuck in chamber due to deformed or dirty chamber or dirty chamber	Bolt does not unlock
Clear gas piston backfires	Gas system fouled or defective	
Chamber dirty	Chamber dirty	
Extractor or ejector spring broken or missing	Extractor or ejector spring broken or missing	Chamber case not extracted or ejected
Insufficient bolt recoil	Insufficient bolt recoil	
Magazine not properly inserted	Magazine not properly inserted	
Follow-up spring lame	Follow-up spring lame	No cartridge fed by bolt
Magazine too damaged	Magazine too damaged	
Magazine well damaged	Magazine well damaged	
Chamber dirty	Chamber dirty	
Bolt extension dirty	Bolt extension dirty	Bolt not closed completely
Bad ammo	Bad ammo	
Recoil spring lame	Recoil spring lame	
Recoil not returning	Recoil not returning	
Gas not locked	Gas not locked	
Head plate missing	Head plate missing	
Head plate return spring	Head plate return spring	
Move bolt catch spring in proper position to the right side chamber well	Move bolt catch spring in proper position to the right side chamber well	Bolt does not stay closed after last shot
Replace other critical parts	Replace other critical parts	
Proprietary	Proprietary	Trigger can not be pulled with hammer motion
Proprietary	Proprietary	Trigger will mechanically increased rate of fire
Proprietary	Proprietary	Head dot in dust sight will not illuminate when switched on
Proprietary	Proprietary	

## **INSPECTION**

### **LTI (Limited Technical Inspection)**

Armorer's are called upon to perform equipment inspections as one of their functions. These inspections are generally referred to as LTI'S. They are limited in the sense that they do not require full examination of each technical facet of the equipment, but have as their purpose a lesser objective. LTIs are directed at determining the effectiveness of a maintenance program, or determining weapon safety for firing range use. LTIs are required when determining budget and ordering requirements for parts and supplies.

#### **Procedure:**

This is an example of how the inspection of the rifle can be conducted:

**PRIOR TO THE LTI THE RIFLE MUST FIRST BE GIVEN A SAFETY CHECK AND THEN FIELD STRIPPED.**

**Once the serial number is accurately recorded, inspect:**

- 1. Muzzle** - Observe for dents burrs, bulges.
- 2. Barrel** - Same as above plus finish and bends. Flash suppresser is tight
- 3. Optics** - Complete, tight, dirty. Fresh battery in red dot sight
- 4. Receiver** - Cracks, dents, bulges, excessive wear.
- 5. Trigger** - Return spring, cracks, wear.
- 6. Trigger mechanism** - Excessive wear - axle holes -
- 7. Magazine release mechanism** - Function, complete, wear.
- 8. Magazine** - Lips bent, split, broken, housing dented, dirty.

Assemble the weapon and do a function check

**Uses for the LTI are many, here are some examples:**

**Pre-range fire inspection** - can be as detailed as the inspector wants but should at the very least include a check of the safeties and rod the bore.

**Post shooting inspection** - a must after a shooting. Have your paperwork in order for this one, since this will probably end up in court.

**Scheduled periodic inspection** - this type of inspection is where the minor problems caused by wear are noticed and repaired before they become major problems. Should be performed at least annually, but can be as often as necessary depending on user need.



## **RECORD KEEPING**

### **1. ACCOUNTABILITY RECORDS**

Used to keep track of weapons. If a gun leaves your armory it must be signed for. Never get rid of the record of that transfer. In the armory, a serialized inventory should be kept and verified at least annually. Weapons in the armory should be stored by make and model, and in serial number sequence. A cross reference alpha file should also be maintained.

### **2. ROUND COUNT**

Need to keep as accurate a round count as possible. Helps at budget time.

### **3. MAINTENANCE RECORDS**

Each serial number should have a maintenance record. Everything done to the gun as well as the date and the armorer performing the maintenance should be noted. These records should also include the date(s) of LTIs.

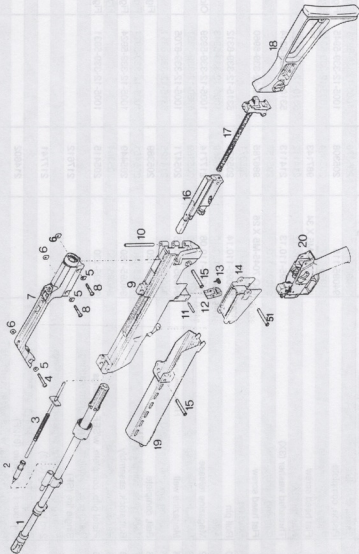
## G36 Parts List



G36

Assembly groups

Figure 1



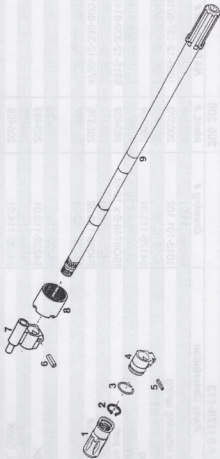
## G36 Rifle Assembly Groups

Drawing # 94178-110		205 207		NATO Stock #		Figure #1	
Item	Parts Description	Drawing #	Ident. #			Remarks	
1	Barrel, complete	94095-113	205376	1005-12339-5938		Figure 2	
2	Piston, complete	94095-115	205308	1005-12-339-5945		Figure 3	
3	Piston rod, complete	94095-117	205384	1005-12-339-5946		Figure 4	
4	Flat head screw	ISO 7045-M5 X 34	987143				
5	Washer (3X)	94095-110.12	214112	5310-12-339-6315			
6	Threaded washer (3X)	94095-110.13	214113	5310-12-339-6314			
7	Carrying handle, complete	94095-170	205457			Figure 5	
8	Flat head screw	ISO 7045-M5 X 26	986785	5305-12-339-6960			
9	Housing	94095-111	205371				
10	Roll pin	94095-110.14	205370	5315-12-339-6312			
11	Axle	94095-130.10	205469	1005-12-339-5943			
12	Magazine release	94095-110.08	217714	1005-12-339-5939		Old # 205368	
13	Magazine release spring	94095-110.09	205369	5380-12-339-6831			
14	Magazine well	94095-110.05	205471	1005-12-339-6705			
15	Locking pin, complete (3X)	94095-180	214125	5315-12-339-6311		Figure 6	
16	Bolt, complete	94095-120	205389			Figure 7	
17	Back plate, complete	94095-140	205451	1005-12-339-5924			
18	Butt stock, assembly	94095-160	205449	1005-12-339-5924		Figure 8	
19	Handguard, complete	94095-150	205364			Figure 9	
20	Pistol grip, complete, w/SEF markings	94095-130	205415	1005-12-339-5931		Figure 10	
*	Pistol grip, complete, w/pictogram markings						
	Single fire (SF)		217612				
*	Pistol grip, complete, w/pictogram markings						
	2-rd burst only (012)		217741				
*	Pistol grip, complete, w/pictogram markings						
	2-rd burst w/full auto (012F)		214602				
*	Pistol grip, complete, w/pictogram markings						
	Navy (01F)		217751				
	* = not shown in drawing						

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## Barrel, complete

## Figure 2



## G36 Rifle Barrel Complete

## Drawing # 94178-113

Item	Parts Description	Drawing #	205 208		NATO Stock #	Figure #2
			Ident. #	Remarks		
1	Flash hider	94095-114.01	205398			
2	Flash hider retaining spring	1013-101.102	200370		1005-12-137-6018	
3	Retaining ring, rifle grenade	1013-01.48	200407		5365-12-130-6645	
4	Bayonet lug	94178-113.04	205209			
5	Roll Pin, bayonet lug	ISO8748-4 x 16	928946		5315-12-339-6144	
6	Roll pin, gas port	ISO8748-6 x 18-St	983409		5315-12-339-6142	
7	Gas block	94095-113.03	205379		1005-12-339-5947	
8	Barrel retaining nut	94095-113.02	205378		4730-12-339-6031	
9	Barrel	94095-113.01	205377		1005-12-339-5937	
*	Barrel, complete, G36K	94232-113	205432			
*	Barrel, G36K	94232-113.01	205433			
*	Flash hider, complete, G36K	94232-114	205455			
*	Flash hider, G36K	94232-114.01	205456			
*	Barrel, complete, MG36	94201-113	214663		1005-12-339-8551	
*	Barrel, MG36	94201-113.01	214664		1005-12-339-8552	

## Piston, complete

### Figure 3

## G36 Rifle Barrel Piston, complete

Drawing # 94095-115		205 381		Figure #3	
Item	Parts Description	Drawing #	Ident. #	NATO Stock #	Remarks
1	Piston ring (3X)	94095-115.02	205383		
2	Piston	94095-115.01	205382		
	G36K E Rifle corresponds to G36 E, except for the following:				
*	Piston, complete G36K	94220-115	215865		
*	Piston, G36K	94220-115.01	215866		
*	Piston rod, complete, G36K	94220-117	215867		
*	Piston rod, G36K	94220-117.01	215868		





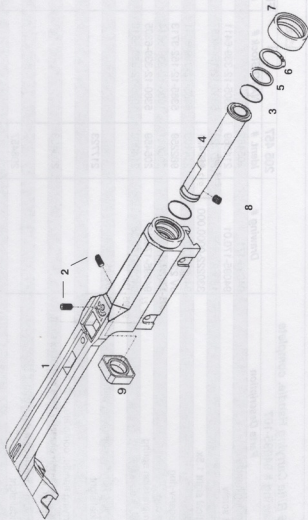
### G36 Rifle Piston rod, complete

Drawing # 94095-117		205 384		NATO Stock #	Figure #4 Remarks
Item	Parts Description	Drawing #	Ident. #		
1	Piston rod	94095-117.01	205385		
2	Disk	94095-117.02	205386		
3	Piston rod spring	94095-117.03	205387		
4	Plate	94095-117.4	205388		
5	Roll pin	DIN 7346 - 5 X 10	983407		

G36

Carrying handle, complete

Figure 5



**G36 Rifle Carrying Handle, complete**

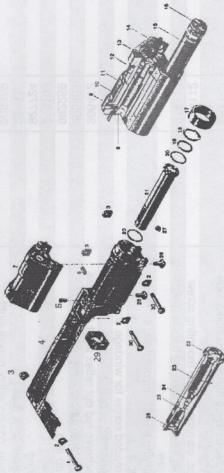
<b>Drawing # 94095-107</b>		<b>205 457</b>		<b>Figure #5</b>
<b>Item</b>	<b>Parts Description</b>	<b>Drawing #</b>	<b>Ident. #</b>	
1	Carrying handle	94095-171	205462	<b>Remarks</b>
2	Set screw	94095-170.01	214569	
3	O-ring	18 x 2	927724	5305-12-339-6411
4	Optical sight 1.5x	330222-0000.000	987411	5330-12-154-4087
5	Disk	94095-170.02	214109	
6	Seeger-v-ring	JV 22	982259	5365-12-339-6041
7	Eye cap	94095-170.10	205461	5365-12-152-3713
8	Compression spring	94095-170.05	205459	1005-12-339-6814
9	Rubber cover	94095-170.06	214860	5360-12-339-6305
				1005-12-339-6813
	Carrying handle, complete, with 3.0x optical sight		217723	
	Carrying handle, complete, with 3.0' x optical sight and electronic red dot reflex sight		205458	
	Carrying handle, complete, with 1.5x optical sight		205457	
	Carrying handle, complete, with 1.5x optical sight and electronic red dot reflex sight		219546	

G36

Carrying handle, compl. Ident-No. 205458

Figure 5A

Dual sighting system with 3.5X optical sight  
and electronic red dot reflex sight



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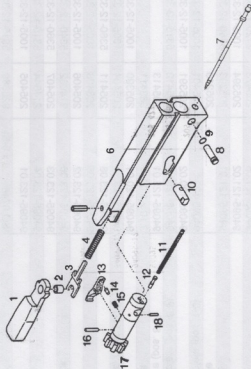
**G36 Rifle Carrying Handle, complete, dual sighting system w/red dot**

Drawing # 94095-107				205 458		Figure #5A
Item	Parts Description	Drawing #	Ident. #	NATO Stock #	Remarks	
1	Screw, carrying handle mounting, long (34mm)		987143		1 per weapon	
2	Disc, carrying handle mounting screw		214112		3 per weapon	
3	Disc, threaded, carrying handle mounting		214113		3 per weapon	
	Screw					
4	Carrying handle, incomplete, for dual sights		205463			
5	Threaded screw for windage and elevation adjustment of optical sight		214569		2 per weapon	
6	Electronic red dot reflex sight complete		986412			
17	Eye piece, rubber, rear		205461			
18	Snap ring		982259			
19	Disc		214109			
20	O-ring		927724		2 per weapon	
21	Optical sight, 3.5x		986413			
27	Spring, compression, optical sight adjusting		205459			
28	Screw, red dot sight mounting		214110		1 per weapon	
29	Cover, rubber, front of optical sight		214860			
30	Screw, carrying handle mounting, short (26mm)		986785		2 per weapon	

## G36

## Bolt, complete

Figure 6



## G36 Rifle Bolt, complete

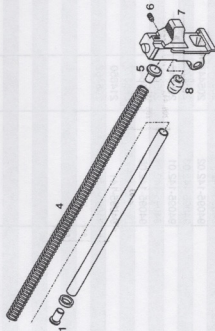
Drawing # 94095-120		205 389		Figure #6	
Item	Parts Description	Drawing #	Ident. #	NATO Stock #	Remarks
	Bolt head carrier complete (pos. 1-6)	94095-121	205392	1005-12-339-5940	
1	Cocking handle	94095-121.03	205395	1005-12-339-6701	
2	Bushing	94095-121.05	205473	3120-12-339-6968	
3	Fork	94095-121.02	205394	1005-12-339-6817	
4	Cocking handle spring	94095-121.01	205393	5360-12-339-6830	
5	Axle for cocking handle		205210		Old # 929158
6	Bolt head carrier complete (pos. 1-6)	94095-122	205401	1005-12-339-5941	(Roll pin)
7	Firing pin	94095-120.02	205391	1005-12-339-5935	
	Firing pin bolt complete (pos. 8-9)	94095-125	205412	5315-12-339-6313	
8	Firing pin bolt complete (pos. 8-9)	94095-125.01	205413		
9	O-ring for firing pin bolt	3.10 x 1.60	983411		
10	Locking bolt	94095-120.01	205390	1005-12-339-5936	
	Bolt head, complete, (pos. 11-18)	94095-123	205404	1005-12-339-5933	
11	Ejector spring	94095-123.08	205411	5360-12-339-6827	
12	Ejector spring	94095-123.05	205408	1005-12-339-6818	
13	Extractor	94095-123.02	205406	1005-12-339-5932	
14	Rubber pin for extractor	94095-123.06	214662	5340-12-339-6524	
15	Extractor spring	94095-123.03	205407	5360-12-339-6829	
16	Extractor axle	94095-123.04	214644	5315-12-339-6145	
17	Bolt head	94095-123.01	205405	1005-12-339-5934	
18	Roll pin	ISO 8748 - 1.5 x 8-St	928389	5315-12-339-6141	



G36

Backplate, complete

Figure 7

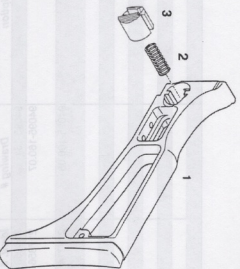




G36

Buttstock, assembled

Figure 8



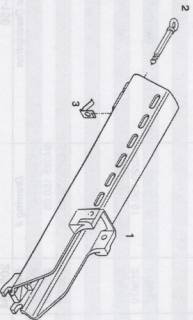
### G36 Rifle Buttstock Assembly

[illegible]

G36

## Handguard, complete

Figure 9



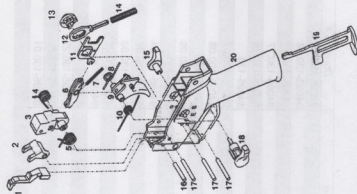
**G36 Rifle Handguard, complete**

<b>Drawing # 94095-150</b>		<b>205 364</b>		<b>Figure #9</b>	
<b>Item</b>	<b>Parts Description</b>	<b>Drawing #</b>	<b>Ident. #</b>	<b>NATO Stock #</b>	<b>Remarks</b>
1	Handguard	94095-150.01	205468	1005-12-339-5925	
2	Eye bolt	94095-150.05	205362	5315-12-339-6414	
3	Eye bolt spring	94095-150.03	205363	5360-12-339-6832	
*	Handguard, complete, G36K	94022-150	215869		
*	Handguard, G36K	940220-150.01	215870		
*	Handguard, G36 w/heatshield		219641		

G36

Pistol grip, compl.

Figure 10

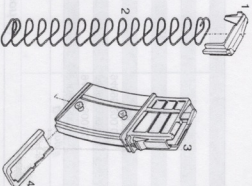


# **G36 Rifle Pistol grip, complete**

## **Drawing # 94095-130**

<b>Item</b>	<b>Parts Description</b>	<b>Drawing #</b>	<b>Ident. #</b>	<b>NATO Stock #</b>	<b>Figure #10</b>	<b>Remarks</b>
1	Bolt catch	94095-132	214879	1005-12-339-6815		
2	Catch	94095-130.18	205430	1005-12-339-5926		
3	Hammer	94095-134	205443	1005-12-339-5930		
4	Hammer spring, right	94095-130.17	205429	5360-12-339-6823		
5	Hammer spring left	94095-130.16	205428	5360-12-339-6304		
6	Sear, complete	94095-135	205439	1005-12-339-5929		
7	Sear spring	94095-130.07	205421	5360-12-339-6824		
8	Trigger spring	94095-130.08	205422	5360-12-339-6825		
9	Trigger, complete	94095-137	205420	1005-12-339-5928		
10	Bolt catch spring	94095-130.06	205466	5360-12-339-6826		
11	Slide, complete	94095-131	205434	1005-12-339-6956		
12	Index plate	94095-130.04	205419	1005-12-339-5942		
13	Notched disk	94095-130.02	205417	1005-12-339-6708		
14	Compression spring	94095-130.03	205418	5360-12-339-6828		
15	Safety lever, right	94095-130.28	205437	1005-12-339-6703		
16	Catch axle	94095-130.11	205424	1005-12-339-5944		
17	Axle (3x)	94095-130.10	205469	1005-12-339-5943		
18	Safety lever, left	94095-130.27	205436	1005-12-339-6704		
19	Pistol grip cover	94095-130.32	205438	1005-12-339-6957		
20	Pistol grip	94095-130.01	205416	1005-12-339-5927		





### G36 Rifle Magazine (Accessories)

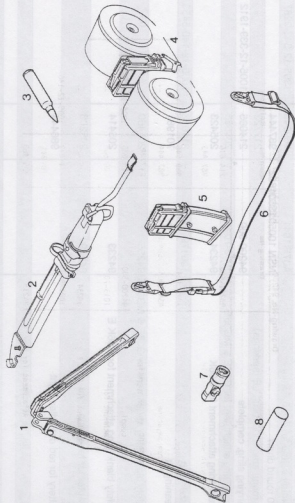
**Drawing # 94095-300**

[illegible]

G36

Accessories

Figure 12



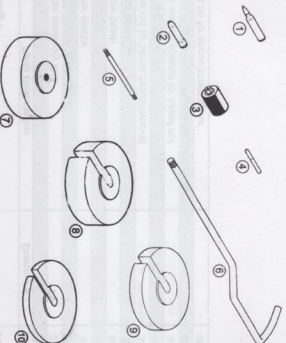
G36 Rifle Accessories

Drawing # 94200-300				215 098		NATO Stock #	Figure #12
Item	Parts Description	Drawing #	Ident. #				
1	Bipod	94201-400	214636				Remarks
2	Bayonet with scabbard, AK47 style		987443				
3	Dummy cartridge, cal. 5.56mm	A07F 1041	969546			1305-12-342-0287	Not for G36 rifle
4	100 round drum	NSN 1005013604862	987444				
5	30 round magazine (with LE markings)		217722				Figure 11
6	Carrying sling, complete	94200-500	214085			1005-12-339-1912	
7	Blank firing attachment for G36E & MG36E	1013-70	200568				
*	Blank firing attachment for G36K	94234	205423				Not in drawing
8	Muzzle cap	100179	211013			1005-12-140-5450	
*	Cleaning kit		701981				Not in drawing
*	Safety blank firing attachment for G36E & MG36E	94235	205460				Not in drawing
*	Safety blank firing attachment for G36K E	94233	205414				Not in drawing
*	Adapter for telescope sight	94239	205203				Not in drawing
*	Battery for red dot reflex sight		986444				Not in drawing

Figure 15

## Measuring and testing units

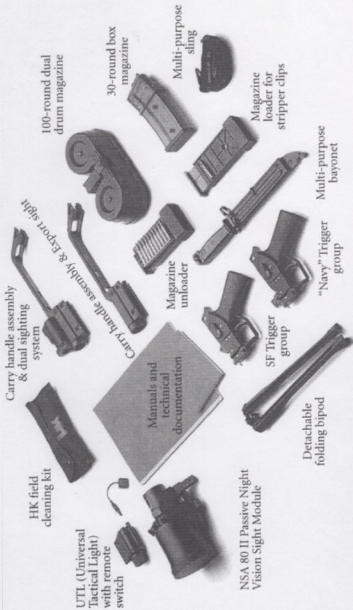
### Figure 13



**G36 Rifle Special tools**

G36 Rifle Special tools					
Drawing #			000 000		Figure #13
Item	Parts Description	Drawing #	Ident. #	NATO Stock #	Remarks
1	Tool kit		327284		
2	Extractor assembly tool		344720		
3	Clamping sleeve removal tool		346041		
4	Insert for ejector		346052		
5	Cleaning rod		346053		
6	Chamber brush		346050		
7	Cleaning brush (2)		322620		
*	Mandrel rod for barrel install/removal		344967		
*	Barrel torque wrench		986461		
*	Torque wrench adapter for barrel nut		346044		
*	Torque screw driver for carrying handle screws		987613		
*	Phillips bit for above screw driver		987614		

## G36 Accessories



## MANUFACTURERS LIST

OMAI/ITT Nightvision	(301) 937-7717
AIM POINT	(309) 944-1702
AL MAR	(503) 670-9080
ASP	(800) 236-6243
BLACKHAWK INDUSTRIES	(800) 694-5263
B-SAFE	(914) 723-2553
CREST ULTRA SONIC CLEANER	(877) 823-5410
C-MORE	(703) 361-2663
DEF-TEC	(800) 654-9943
DELTA TARGET	(800) 708-0673
DICK KRAMER STUDIOS	(703) 443-0422
DISCOUNT AUDIO	(800) 323-0092
EAGLE	(314) 343-7547
FEDERAL CARTRIDGE CO	(540) 898-7809
HARLEY DAVIDSON, INC	(414) 343-4530
LASER PRODUCTS (SUREFIRE)	(714) 545-9444
LE TARGETS	(800) 779-0182
LEUPOLD	(503) 526-1477
MACHO (REDMAN)	(800) 865-7840
METAL MASTERS	(517) 278-7475
MK BALLISTICS	(800) 345-1504
OAKLEY	(800) 733-6255
PELICAN PRODUCTS	(800) 473-5422
PORTA TARGET	(407) 725-9911
PROPTTS	(800) 962-9478
RBR ARMOR, INC.	(800) 672-7667
REALISTIC TARGET	(800) 445-1381
ROYAL ARMS, INTERNATIONAL	(818) 704-5110
ROYAL ROBBINS	(540) 720-8211
RRI RANGE SYSTEMS	(507) 387-7512
SAFARILAND	(909) 923-7300
SIMUNITIONS	(800) 465-8255
SPECIALIZED TARGET SYSTEM	(914) 452-2283
SPEEDWELL	(800) 243-8274
S.T. ACTION PRO	(407) 632-4111
TACTICAL & SURVIVAL SPECIALITIES	(540) 434-8974
TREK BICYCLES	(800) 879-2438
UNCLE MIKES	(503) 255-6680