AMS Models

GLOCK
Safety Appreciation

SAFE ACTION® PISTOLS

PERFECTION

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I Introduction

Safety Design Appreciation

Objective: To assess and report on the design characteristics of mechanical and applied safety incorporated into the test weapon. This must be in the form of a design appreciation rather than a normal test.

Reference: Section 2.10.2 of AC/225(LG/3-SG/I)D/I4 “Evaluation procedures for future NATO Small Arms Weapon Systems”

Note:
Operation, assembly and safety features of GLOCK pistols are the same regardless of model and generation. Photos and drawings used in this document showing G17 Gen4 or any other firearm, also apply to the GLOCK 22 Gen5 AMS and only serve illustration purposes.

II General description of the weapon

a. Drawing with part numbers

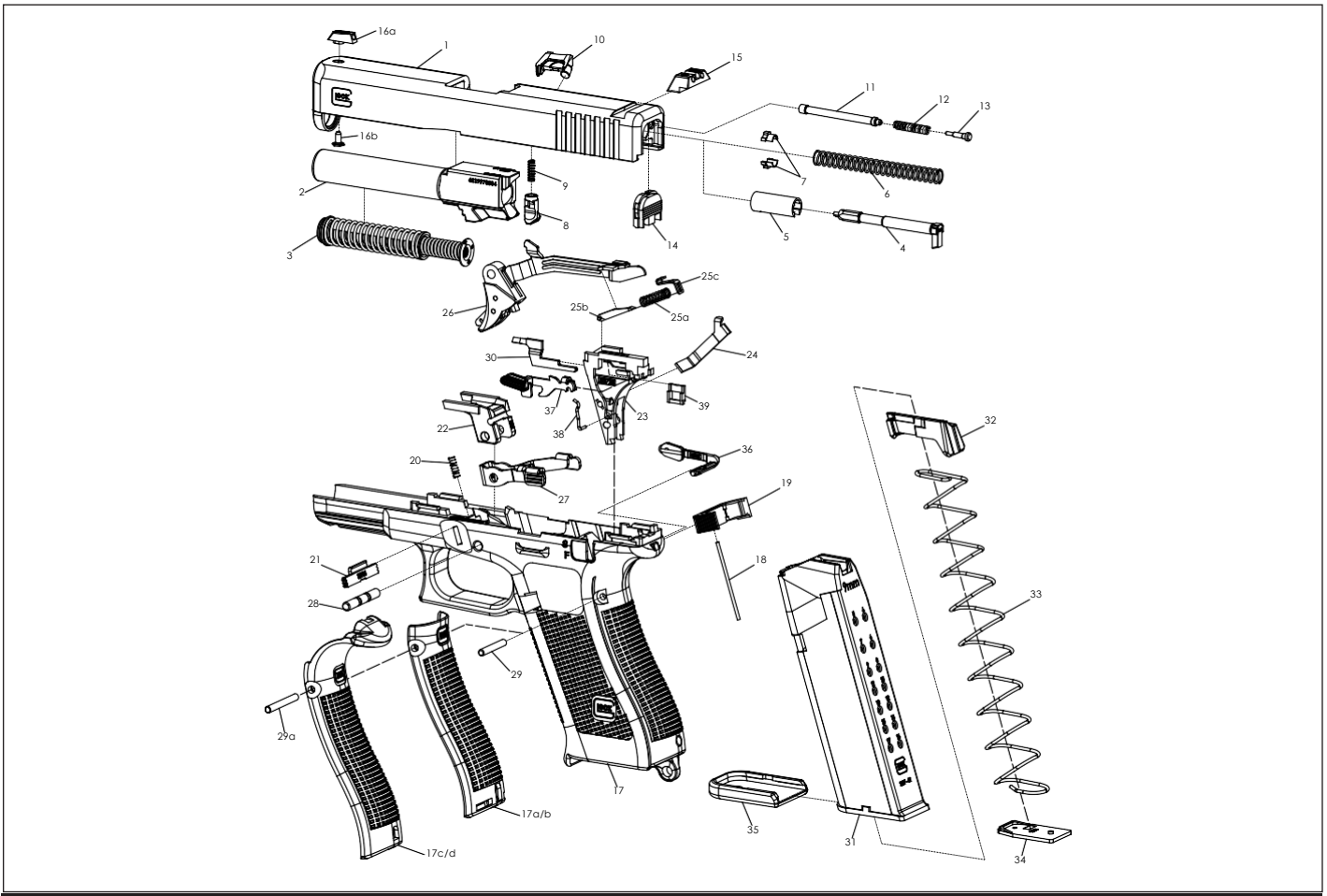


Fig. 1

1	Slide	16b	Front sight screw	26	Trigger with trigger bar
2	Barrel	17	Frame	27	Ambidextrous slide stop lever
3	Recoil spring assembly	17a	Backstrap medium	28	Trigger pin
4	Firing pin	17b	Backstrap large	29	Trigger housing pin (short)
5	Spacer sleeve	17c	Beavertail backstrap medium	29a	Trigger housing pin (long)
6	Firing pin spring	17d	Beavertail backstrap large	30	Ejector
7	Spring cups	18	Magazine catch spring	31	Magazine tube
8	Firing pin safety	19	Reversible magazine catch	32	Follower
9	Firing pin safety spring	20	Slide lock spring	33	Magazine spring
10	Extractor	21	Slide lock	34	Magazine insert
11	Extractor depressor plunger	22	Locking block	35	Magazine floor plate
12	Extractor depressor plunger spring	23	Trigger mechanism housing	36	Ambidextrous manual safety lever right
13	Spring-loaded bearing	24	Connector	37	Ambidextrous manual safety lever left
14	Slide cover plate	25a	Trigger spring	38	Manual safety lever spring
15	Selfluminescent tritium rear sight	25b	Trigger spring rod	39	Manual safety frame
16a	Selfluminescent tritium front sight	25c	Trigger spring bearing		

b. Explanation of the working principle

GLOCK pistols use a semi-automatic short recoil, locked-breech system.
Operation relies on the energy of the recoil and force of the recoil spring to cycle the action.
The barrel is locked into the ejection port of the slide.(Fig. 2 - [1])
That connection between slide and barrel will only disengage after the bullet leaves the barrel and chamber pressure drops to a safe level.

Working principles step by step:

1. Switching Manual Safety Lever into Fire position (only applies to AMS pistols)
2. Pulling the trigger
3. Three internal safety mechanics disengaging (refer to Section IV.)
4. Firing
5. Bullet leaves the barrel, pressure drops to safe level
6. Slide and barrel starts moving to the rear against the recoil spring
7. Barrel tilts down by hitting the taper of the locking block(Fig 2 - [2]), disconnecting the barrel from the slide
8. Slide continues its rearward movement, extracting and ejecting the empty casing
9. Recoil spring forces the slide to move forward
10. Feeding ramp(Fig 2 – [3]) of the slide will drive the next cartridge from the magazine into the chamber
11. Barrel locks into the ejection port and the action goes fully into battery
12. Trigger must be released to reengage the trigger system (semi-auto)
13. Three internal safety mechanics reengaging
14. Pistol ready to fire

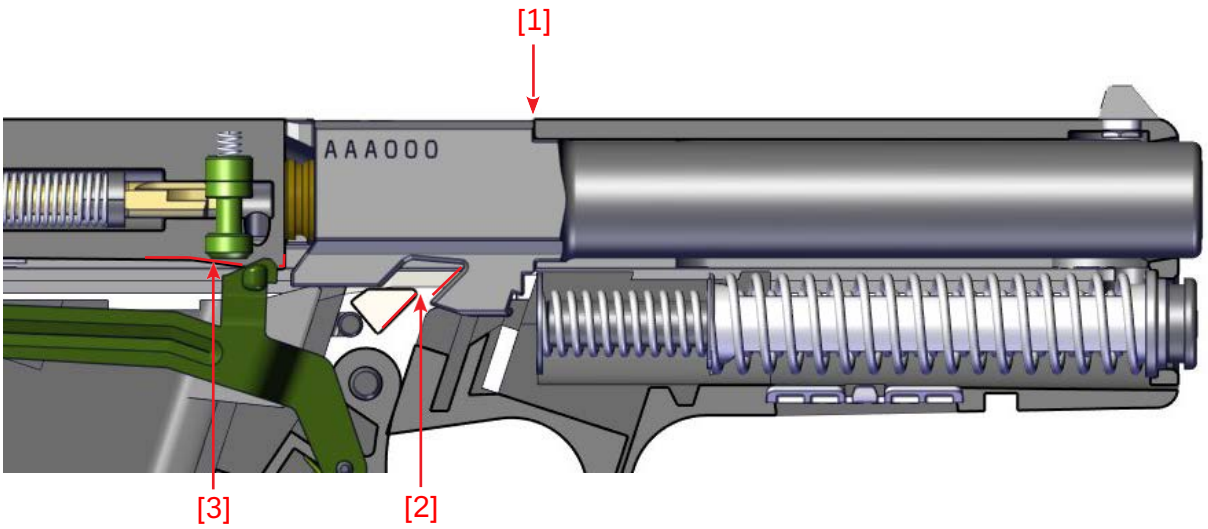


Fig. 2

c. Risk Assessment

Reference [1]: AC/225 (LG/3-SG/1)D/14, Section 2.3.2.
The overall goal of this risk assessment is to support the approach that the design of the GLOCK 22 Gen5 AMS weapon is free of any hazards or risk are reduced to an acceptable level.
The current version of the GLOCK 22 Gen5 AMS weapon is the result of a continuous process of improving the performance and reliability of the weapon and fulfilling the upcoming needs of current and future customer. To assess the risks it is needed to assess the *HAZARD SEVERITY CATEGORIE'* and the *' HAZARD* PROBABILTY'.

i. Hazard Severity

Hazard severity categories, see Ref [1], section 2.3.2, are defined to provide a qualitative measurement of the worst credible mishap resulting from personnel error, environmental conditions, design inadequacies, procedural deficiencies, system or sub-system component failure or malfunction. Hazards severity can be categorized as stated in Table 2.1 of Ref [1].
For this risk assessment the table is modified for the GLOCK 22 Gen5 AMS:

Table 1 Hazard Severity Categories

HAZARD SEVERITY CATEGORIES		
DESCRIPTION	CATEGORY	MISHAP DEFINITION
CATASTROPHIC	I	Death or weapon can not be used for firings.
CRITICAL	II	Severe injury, severe occupational illness or weapon needs major repair by Glock company.
MARGINAL	III	Minor injury, minor occupational illness or weapon needs minor repair by Weapon Technician that has follwed the Glock maintenace course.
NEGLIGIBLE	IV	Less than minor injury, occupational illness or weapon mallfunction.

ii. Hazard Probability

The probability, see Ref [1], section 2.3.3, that a hazard will be created during the planned life expectancy of the system can be described in potential occurrences per unit of time, events, population, items or activity. Assigning a quantitative hazard probability to a potential design or procedural hazard is generally not possible early in the design process. A qualitative hazard probability may be derived from research, analysis and evaluation of historical safety data from similar systems.

Table 2 Hazard Probability

HAZARD PROBABILITY		
DESCRIPTION	LEVEL	SPECIFIC INDIVIDUAL ITEM
FREQUENT	A	Likely to occur frequently
PROBABLE	B	Will occur several times in the life
OCCASIONAL	C	Likely to occur sometime in the life
REMOTE	D	Unlikely, but possible to occur in life of an item
IMPROBABLE	E	So unlikely it can be assumed that the occurrence may not be experienced

iii. Risk Assessment

When the hazard severity category and the hazard probability are combined a hazard risk assessment matrix as shown in table 3 below.

Table 3 Hazard Probability

	HAZARD CATEGORI ES			
FREQUENCY OF OCCURRENCE	CATASTROPHIC (I)	CRITICAL (II)	MARGINAL (III)	NEGLIGIBLE (IV)
(A) FREQUENT	1A	2A	3A	4A
(B) PROBABLE	1B	2B	3B	4B
(C) OCCASIONAL	1C	2C	3C	4C
(D) REMOTE	1D	2D	3D	4D
(E) IMPROBABLE	1E	2E	3E	4E

Unacceptable
Undesirable (Glock R&D decision required)
Acceptable with review by Glock R&D
Acceptable without review

The risk assessment, see Ref [1] section 2.3.4, of the GLOCK 22 Gen5 AMS is based on the following facts:

- The GLOCK 22 Gen5 AMS is an *ongoing development* of earlier models;
- Earlier models and the GLOCK 22 Gen5 AMS had *no design failures* that occur in unsafe situations for the user or loss of the weapon (components);
- Earlier models and the GLOCK 22 Gen5 AMS had *no failures during normal use* that occur in unsafe situations for the user or loss of the weapon (components);
- The GLOCK 22 Gen5 AMS has fulfilled successful the test program as required by the PMESP. The main tests of this test plan are:
    - Endurance: 10,000 rounds without any maintenance;
    - Interchangeability;
    - Extreme weather conditions (cold temperature, high temperature, temperature and humidity, icing);
    - Sand, mud, brackish mist, water spray;
    - Salt water immersion;
    - Handling;
    - Drop;
    - Barrel obstruction.

Taken also in account that GLOCK requires that the user has

- To use the GLOCK 22 Gen5 AMS as stated in the user's manual;
- To maintain the GLOCK 22 Gen5 AMS as stated in the maintenance manual;
- To provide his/her GLOCK 22 Gen5 AMS to a qualified weapon technician (trained at the GLOCK company) in case of any incident with his/her weapon;
- Only use factory produced ammunition according to C.I.P., SAAMI and NATO standards.

Based on a decennia long experience in designing and producing of weapons

- the hazard probability can be categorized as *OCCASIONAL to* IMPROBABLE (C to E). See table 2.
- the hazard severity can be categorized as *NEGLIGIBLE* (IV). See table 1.

iv. Debris in Barrel

1. Test Description

A 2,5m wide and 5m long surface of the shooting range floor was covered with clean, white colored paper sheets. Air ventilation of the shooting range was switched off during the whole process.
100 rounds have been fired with the muzzle being at a height of 50cm and the shooter sitting legs crossed on the edge of the paper sheets.
After waiting 15 minutes for the floating particles to settle on the paper sheets, the unburned propellant was carefully gathered in a container suitable for a precise weight measurement.

Ammunition used: Sellier&Bellot 180gr FMJ. LotNr 665/16

2. Evaluation

Step1: The propellant gathered from the shooting range floor was measured on an RCBS reloading scale with a precision of 0,01g (one hundredth grams).
Step2: The propellant left in the barrel was not enough to be able to measure. For that reason, instead of a weight value, photos were taken with an endoscope showing the amount of particles in the barrel bore.
Step3: Disassembling 10 cartridges from the same LotNr and measuring avg. weight of propellant.

3. Results

Amount of propellant left on the floor: **7,70g**
Avg. propellant weight of 100 rounds: **42,3g**
The user of the firearm has to consider that result when deciding the frequency of cleaning the shooting range.

Amount of propellant left in the barrel:

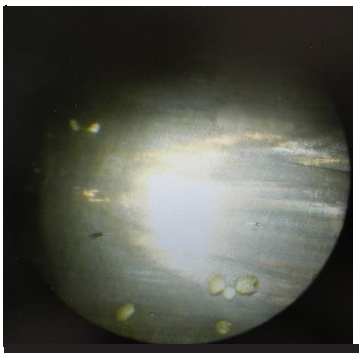
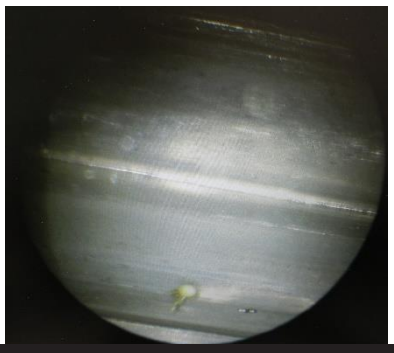
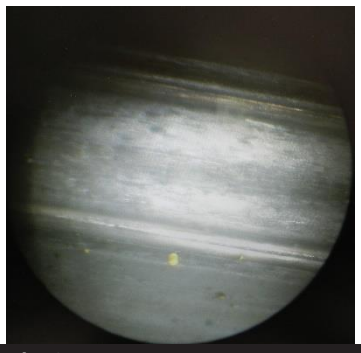
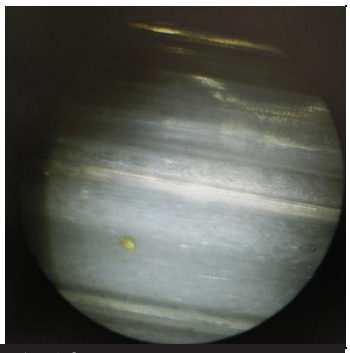


Fig. 3a


. 3b


ig. 3c


g. 3d

A small amount of propellant can be seen on the beginning of the rifling (Fig. 3a). There is only an insignificant amount scattered on the rest of the barrel length (Fig. 3b – 3d).

Note

The ammunition used has more influence on these results then the firearm itself. Therefore, these values can significantly change when using other brands or type of ammunition.

v . Conclusion

The hazard categories for use of the GLOCK Gen5 AMS with remarks as stated above is OCCASIONAL to IMPROBABLE (4C, 4D and 4E). This is qualified as acceptable.

HAZARD CATEGORI ES				
FREQUENCY OF OCCURRENCE	CATASTROPHIC (I)	CRITICAL (II)	MARGINAL (III)	NEGLIGIBLE (IV)
(A) FREQUENT	1A	2A	3A	4A
(B) PROBABLE	1B	2B	3B	4B
(C) OCCASIONAL	1C	2C	3C	4C
(D) REMOTE	1D	2D	3D	4D
(E) IMPROBABLE	1E	2E	3E	4E

Unacceptable
Undesirable (Glock R&D decision required)
Acceptable with review by Glock R&D
Acceptable without review

III General Handling, Assembly and Maintenance

a. Loading

Before loading a GLOCK pistol, always make sure you have the correct ammunition. Use only the proper caliber and ensure that the ammunition is in good condition. GLOCK pistols should only be fired with factory loaded, jacketed ammunition in accordance with CIP/SAAMI and/or NATO pressure standards.


Fig. 4

Load the magazine, press each cartridge into the magazine from the front - with the cartridge bottom first - against the force of the magazine spring (Fig. 4-5).


Fig. 5

Insert the magazine into the magazine well until the magazine catch locks into place (Fig. 6).


Fig. 6

If the slide is in the forward position, hold your GLOCK pistol with your firing hand and, while keeping your finger off of the trigger and outside of the trigger guard, grasp the rear of the slide at the serrations with your other hand and pull the slide fully back (Fig. 7) and then release it, allowing it to return to the fully forward position (Fig. 8).

or

If the slide is locked in the rearward position, either press the slide stop lever down to release the slide and return it to the fully forward position or grasp the rear of the slide at the serrations with your other hand and pull the slide fully back and then release it, allowing it to return to the fully forward position.
The pistol is now loaded and ready to be fired by pulling the trigger.


Fig. 7


Fig. 8

b. Unloading & Safety Check

- Point the pistol in a safe direction
- With fingers outside the trigger guard, press inward on the reversible magazine catch and remove the magazine. (Fig. 9)

Fig. 9

- Using the overhand method, pull the slide to the rear ejecting any chambered ammunition. (Fig. 10)

Caution!

For safety reasons you may repeat this step several times.

Fig. 10

- While pulling the slide to the rear, push upwards on the ambidextrous slide stop lever to lock the slide to the rear. (Fig. 11)

Fig. 11

- Visually check both the chamber and magazine well to ensure all ammunition has been removed from the pistol. (Fig. 12)

Fig. 12

Caution!

When physically inspecting the chamber and magazine areas with your finger, press the ambidextrous slide stop lever upwards with your thumb to ensure the slide remains locked to the rear and doesn't inadvertently close, possibly injuring your finger. (Fig. 13)

Fig. 13

- Physically (with your finger) check both the chamber and magazine well to ensure all ammunition has been removed from the pistol. (Fig. 14/15)

Fig. 14

- Release the slide to return it to the forward position.
- With the ambidextrous manual safety lever in the fully downward Fire (F) position point the muzzle of the pistol in a safe direction.
- Pull the trigger to release the engagement between the firing pin and the trigger bar. (Fig. 16)

Fig. 15

Fig. 16

c. Field Stripping

i. Slide Removal

- Verify again that the pistol is NOT LOADED. (Conduct safety check)
- The trigger should then be in the rearward position, the ambidextrous manual safety lever in the fully downward Fire (F) position and the engagement between the firing pin and the trigger bar will have been released. (Fig. 17)

Fig. 17

ii. Disassembly Grip

- Hold the pistol with your firing hand on top of the slide as shown. (Fig. 18)
- Using the fingers of your shooting hand retract the slide about 3mm (1/8in.). This will allow the slide lock to disengage from the barrel. Using your fingers of the other hand pull the slide lock down evenly on both sides while keeping the slide retracted about 3mm (1/8in.) (Fig. 19)
- While holding the slide lock down, push the slide forward and off of the frame.

Fig. 18

Fig. 19

Caution!

If you move the slide further than 3mm (1/8in.) to the rear, you may cause the action to re-set and the trigger to move forward again. This will not allow the slide to be removed from the frame. If this happens pull the trigger again while keeping the muzzle of your GLOCK pistol pointed in a safe direction. (Fig. 20)

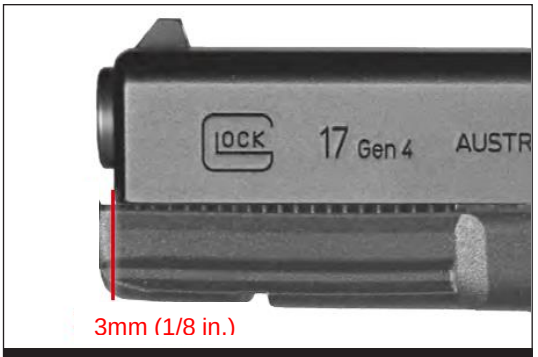


Fig. 20

iii. Recoil Spring/Rod Removal

- Using the thumb and index finger of your firing hand, grasp the recoil spring assembly near the end that is against the barrel lug. The spring is “captured” on the rod and slightly compressing the spring will allow it to be removed from the slide. (Fig. 21/22)

Fig. 21

Fig. 22

iv. Barrel Removal

- Grasp the barrel by the bottom lug, lift it, push it toward the front of the slide and remove it by lifting it up and out of the slide. (Fig. 23)

Fig. 23

Caution!

When field stripping, guard against dropping the slide assembly and damaging the guide ring or the rear of the slide rails. Check for cracks and/or bent rails in case of an incident. (Fig. 24a/24b)

Fig. 24a **Fig. 24b**

d. Detailed Disassembly and Reassembly

Caution!

Every maintenance task required from the user can be carried out just by field stripping the GLOCK pistol (refer to Section III.c).
Further, detailed disassembly and reassembly is only allowed for weapon technicians with a valid Glock Armorer Certificate.
Such a Certificate can be obtained by successfully participating in a Glock Armorer's Course conducted by an Instructor from GLOCK.

i. Tools

Complete detail disassembly and reassembly of the GLOCK pistol can be accomplished with only 3 tools.

1. A straight pin punch of 2,5mm (3/32in.).

2. A screwdriver with a 3mm (1/8in.) blade 75mm (3 in.) long (or more)
3. Needle nose pliers (any common type long nose pliers)
   (Only for removal/replacement of magazine catch spring)

ii. Slide Disassembly

1. Firing Pin Assembly Removal

- To aid in the removal of the slide cover plate, place the muzzle end of the slide on a smooth, flat surface such as a table.

- Insert the pin punch under the firing pin lug and on top of the firing pin spacer sleeve (black polymer visible just under the firing pin lug). (Fig. 25)

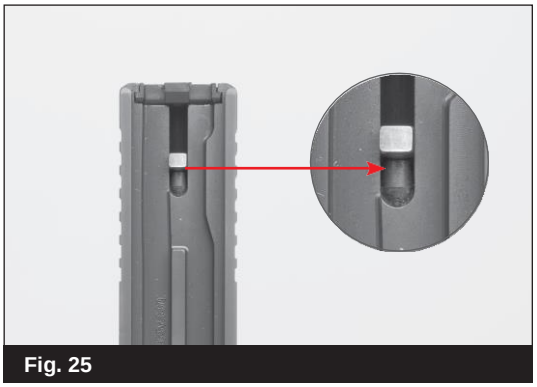


Fig. 25

Caution!

Spacer sleeve is under spring tension.

- Place your thumb over the slide cover plate as you push downwards (toward the muzzle end) on the spacer sleeve. (Fig. 26)

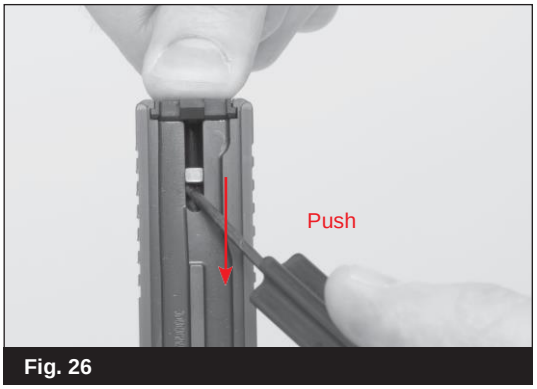


Fig. 26

Caution!

Parts located under the slide cover plate are under spring tension and can escape if your thumb is not over the plate.

- While pressing downward (toward muzzle) on the firing pin spacer sleeve, slide the cover plate down and off. (Fig. 27)

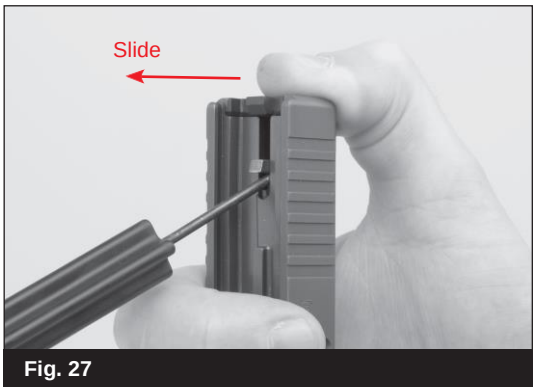


Fig. 27

Note:
It is possible that the slide cover plate may require some additional force during removal.

Caution!

Always wear safety glasses.

- Remove the firing pin assembly by lifting upwards on the spacer sleeve or firing pin lug using the pin punch. (Fig. 28/29)

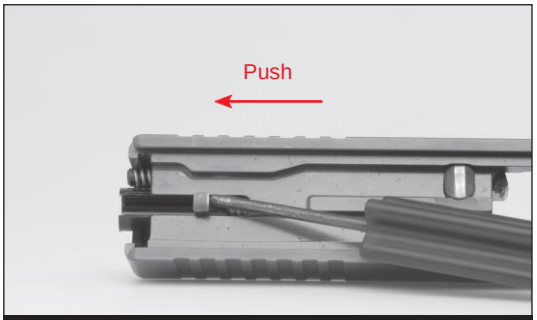


Fig. 28


Fig. 29

2. Extractor Depressor Plunger Assembly Removal

- Remove the extractor depressor plunger assembly by lifting it upwards. This assembly is made up of three parts: the extractor depressor plunger, extractor depressor spring and spring loaded bearing. (Fig. 30/31)


Fig. 30


Fig. 31

3. Extractor Removal

- Orient the slide so that the extractor is facing downwards. Then, pressing inwards on the firing pin safety with your finger or punch should release the extractor. You may need to push on the extractor if it doesn't fall freely. (Fig. 32)

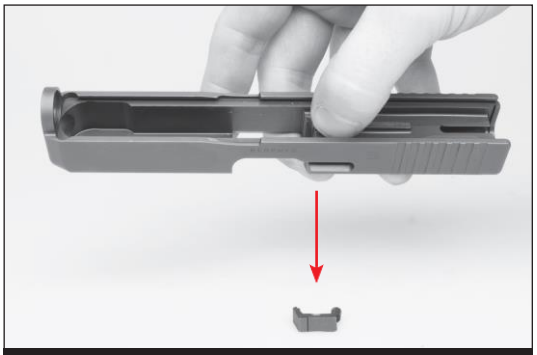


Fig. 32

4. Firing Pin Safety Removal

- If it does not drop out of the slide, the slide can be tapped on a non-metallic surface to free the firing pin safety. If the firing pin safety is dirty and it does not fall out easily, use the pin punch or a pair of pliers to remove it. (Fig. 33)

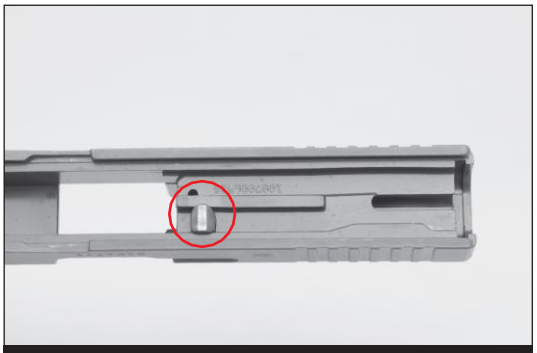


Fig. 33

5. Firing Pin Safety with Spring

- If the spring should become separated from the safety, merely press either end back into its receptacle in the bottom of the safety. Compress the spring fully and turn it ¼ turn counter clockwise. When the spring is released, it should be reattached to the safety. If the spring is not firmly attached, it may fall into the recess and not provide proper spring tension to the safety. (Fig. 34/35)

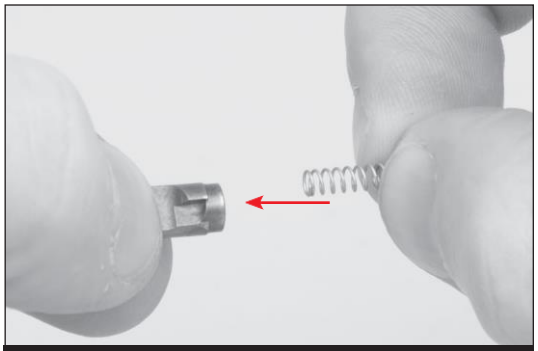


Fig. 34

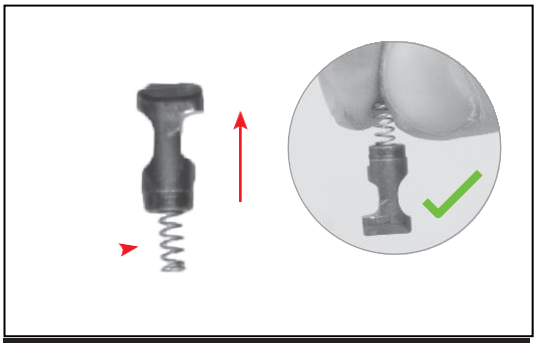


Fig. 35

6. Firing Pin Disassembly

- Use the slide to assist you in disassembling the firing pin assembly. Install the firing pin assembly upside down into the firing pin channel cut and turn the lug to one side. This will secure the assembly and assist you in removing the spring cups and firing pin spring. (Fig. 36)

Caution!

Always wear safety glasses.

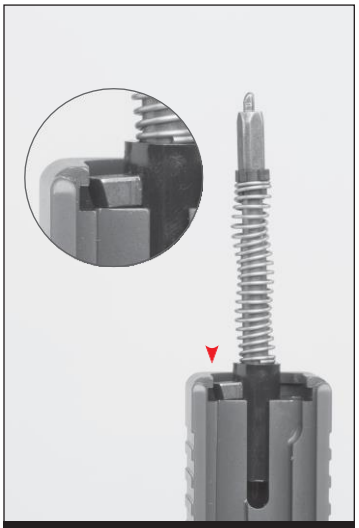


Fig. 36

- With the firing pin assembly reversed and installed in the firing pin channel cut and with the lug turned to one side, grasp the firing pin spring just below the spring cups. Using your thumb and forefinger, pull downwards on the spring as far as possible to allow the spring cups to fall clear. If they do not release, pull them away with your other hand. (Fig. 37)

Caution!

Be sure to keep control of the firing pin spring. Do not allow it to release prematurely as that can cause the spring and/ or spring cups to fly off causing injury or loss of parts.

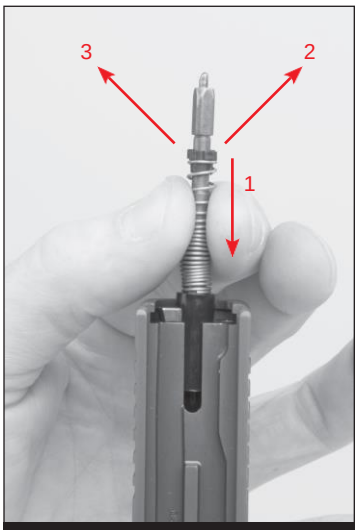


Fig. 37

- Gradually release tension on the firing pin spring.
- Take the spring off the firing pin. (Fig. 38)
- Remove the firing pin spacer sleeve.

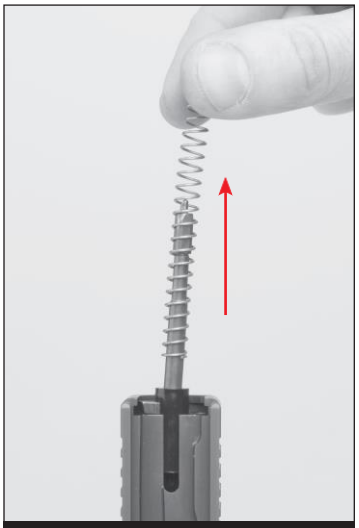


Fig. 38

iii. Slide Reassembly

1. Firing Pin Reassembly

- Use the slide to assist you in reassembling the firing pin assembly. Install the firing pin assembly upside down into the firing pin channel cut and turn the lug to one side. This will secure the assembly and assist you in replacing the spring cups and firing pin spring. (Fig. 39)

Caution!

Always wear safety glasses.

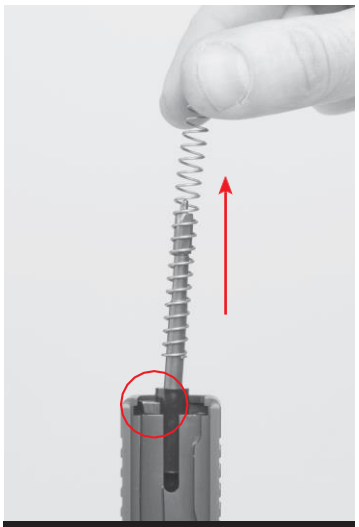


Fig. 39

- While continuing to hold the firing pin spring down, install the spring cups by placing them on either side of the round part of the firing pin so that they form a circle with the wide part at the top, and then release your grip on the firing pin spring allowing it to move upward and hold the spring cups in place. (Fig. 40)

Caution!

Be sure to keep control of the firing pin spring. Do not allow it to release prematurely as that can cause the spring and/ or spring cups to fly off causing injury or loss of parts.

Fig. 40

- Make sure the spring cups and spring are replaced correctly (Fig. 41a) and that the end of the spring coil is not in the gap between the spring cups (Fig. 41b). If necessary turn the spring to allow correct closure of the spring cups.

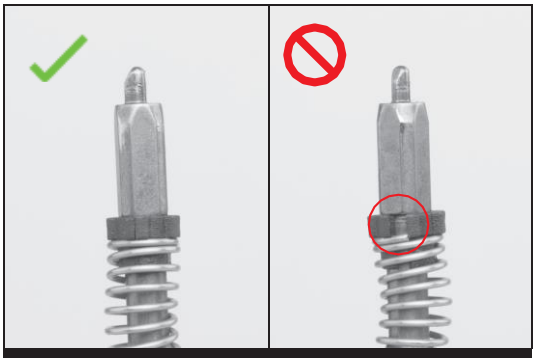


Fig. 41a Fig. 41b

2. Firing Pin Safety Replacement

- Ensure the firing pin safety and spring are connected and replace the safety (spring down) into its receptacle. Press down on the safety to check proper spring function. Firing pin safety must be under tension. (Fig. 42)

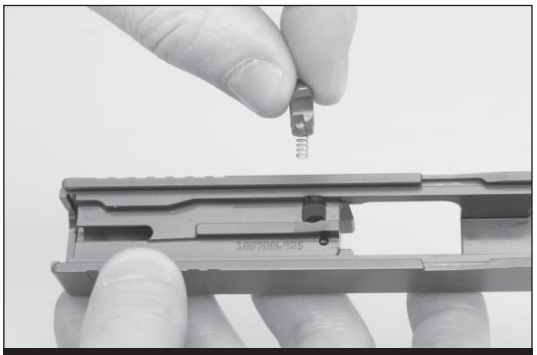


Fig. 42

- Please ensure the firing pin safety is oriented as shown with the straight side parallel with the slide and the oval/rounded side next to the stripper/feed rail. (Fig. 43a/43b)

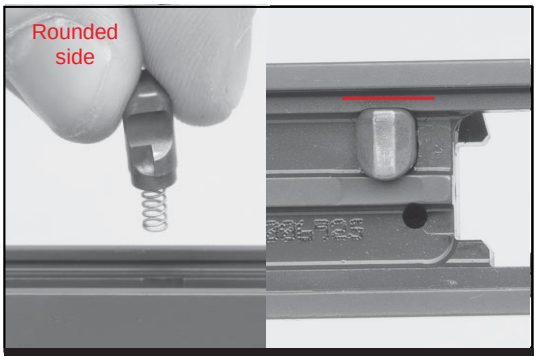


Fig. 43a Fig. 43b

3. Extractor Replacement

- Insert the extractor into the extractor cut and simultaneously press down on the firing pin safety. This will allow both parts to fit together properly. When released, both parts should remain in the slide. (Fig. 44/45)

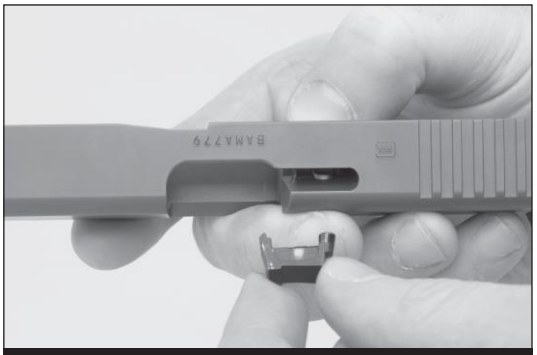


Fig. 44

Fig. 45

4. Extractor Depressor Plunger Replacement

- Insert the extractor depressor plunger assembly into the slide. The metal rod end always goes in first to mate with the metal extractor. This leaves the polymer spring loaded bearing to mate with the polymer slide cover plate. (Fig. 46)

Note:
Metal on metal – polymer on polymer. (Fig. 47)

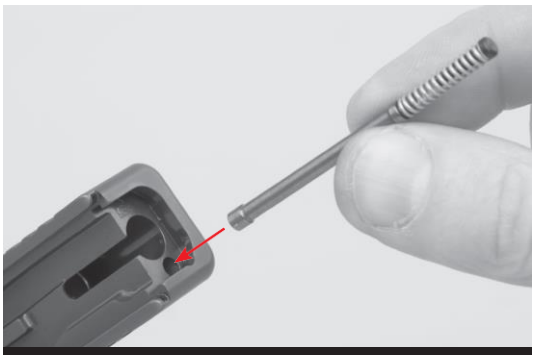


Fig. 46

Fig. 47

5. Firing Pin Assembly Replacement

- Insert the firing pin assembly into the firing pin channel. (Fig. 48)

Fig. 48

6. Slide Cover Plate Replacement

- When replacing the slide cover plate, hold it partially in its place and press down on the spacer sleeve with a finger or pin punch. This will allow the cover plate to move inwards. Then press down on the spring loaded bearing while continuing to press the slide cover plate inwards. This will let the slide cover plate move all the way up and snap into position. (Fig. 49)

Note:
The slide cover plate will not go on properly unless the firing pin spacer sleeve and spring loaded bearing are depressed while keeping tension on the cover plate.

Caution!

Prematurely releasing tension on the firing pin and/or spring loaded bearing before the slide cover plate is fully seated may cause either part to be launched from the slide.

Fig. 49

7. Slide Function Check

a. Firing Pin Free Movement (no obstructions) (Fig. 50)

- Press on the firing pin safety – the firing pin should now move freely forwards and the tip should protrude through the hole in the breech face.
- With the firing pin safety depressed, shake the slide forwards and backwards. You should be able to hear the firing pin moving freely. This check verifies that the firing pin channel is unobstructed and the firing pin may move forwards freely when the safety is depressed.

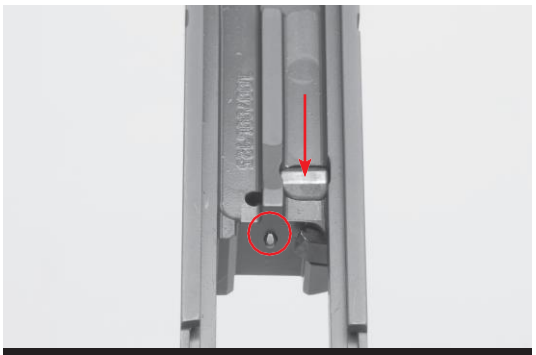


Fig. 50

b. Firing Pin/Firing Pin Safety Engagement (Fig. 51/52a/52b)

- With the slide off the frame, use your finger to pull back on the firing pin lug. Ease the lug forward again and it will rest against the firing pin safety. The firing pin safety should block any forward movement of the firing pin. Press forward on the back of the firing pin lug and attempt to force the firing pin forward. There should be no forward movement of the firing pin unless the safety is depressed.

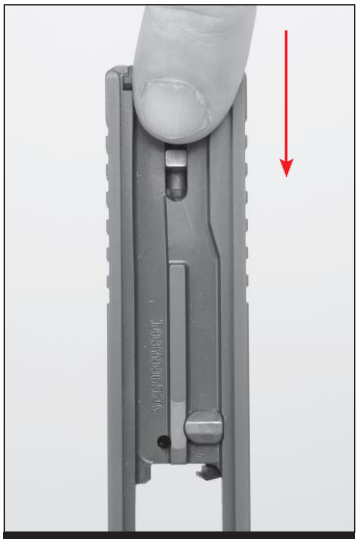


Fig. 51

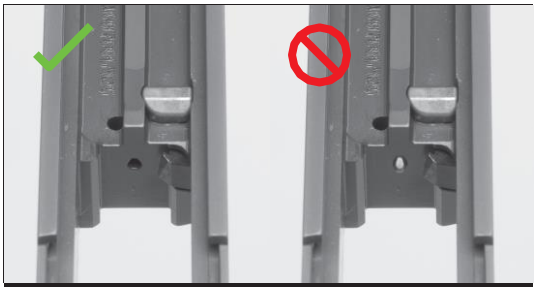


Fig. 52a Fig. 52b

c. Extractor Depressor Plunger Calibration

- If a new extractor depressor plunger is installed, it should be calibrated by pushing against the extractor with the pin punch. This will optimize the position of the spring-loaded bearing of the extractor depressor plunger with respect to the extractor to allow maximum caliber width. (Fig. 53)

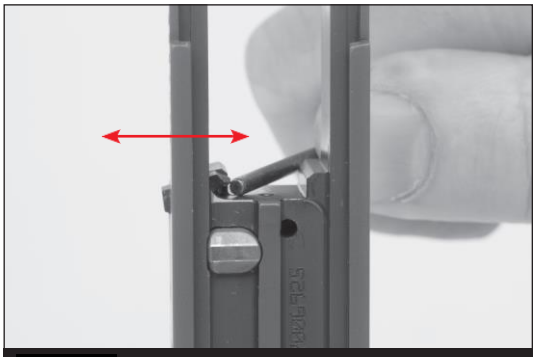


Fig. 53

8. Barrel Replacement

- Grasp the barrel by the bottom lug and place it back into the slide. (Fig. 54)

Fig. 54

9. Recoil Spring Replacement

- Pick up the recoil spring/guide rod assembly and install it back into the proper position with the polymer part to the front into the recoil spring guide ring.
- The metal rim of the back of the rod seats into a semi-circular “half-moon” cut on the barrel lug. (Fig. 55)

Fig. 55

Caution!

Make certain the rod rim seats fully into the cut.
The rod should be centered and parallel
with the barrel. (Fig. 56)

Fig. 56

iv. Frame Disassembly

1. Trigger Pin Removal

- Push down on the inside of the lever near the trigger pin to allow enough clearance to push the trigger pin out of the frame from either side by using the pin punch, since the trigger pin has two grooves in which the ambidextrous slide stop lever engages. (Fig. 57/58)

It is not necessary to use excessive force to remove this pin! New weapons need more pressure.

Fig. 57

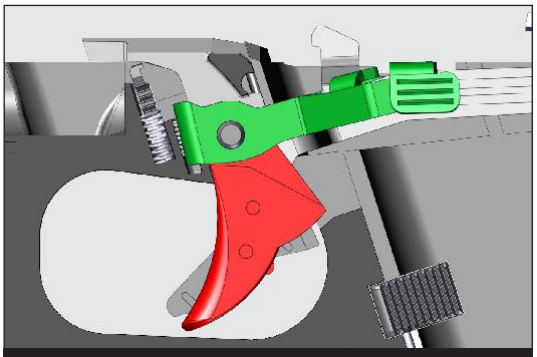


Fig. 58

2. Trigger Mechanism Housing Pin Removal

- Using the punch, press on the trigger mechanism housing pin from either side and remove it from the frame. (Fig. 59)

Fig. 59

3. Locking Block Removal

- Lay the shaft of the pin punch across the left or right side of the frame with the tip under the locking block. By pressing downward on the punch handle, the tip will pry up the back end of the locking block. (Fig. 60)

- Do not support tool on the vertical extension of the trigger bar.

Fig. 60

- Use fingers to remove the locking block. (Fig. 61)

Fig. 61

4. Ambidextrous Slide Stop Lever Removal

- Lift the ambidextrous slide stop lever out of the frame. (Fig. 62)

Fig. 62

5. Trigger Assembly Removal

- To remove the trigger mechanism housing assembly, first move the manual safety lever right upwards and downwards to loosen the tight fitting of these two parts, then grasp the ejector and the trigger mechanism housing and raise the assembly out of the receiver. (Fig. 63/64)

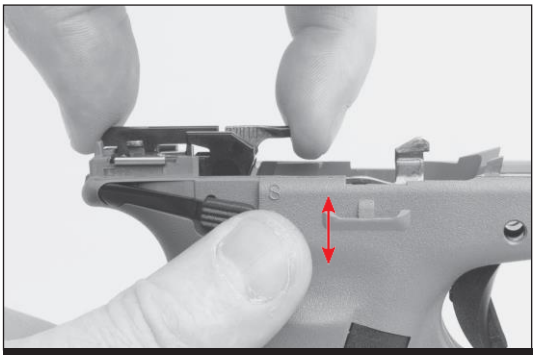


Fig. 63

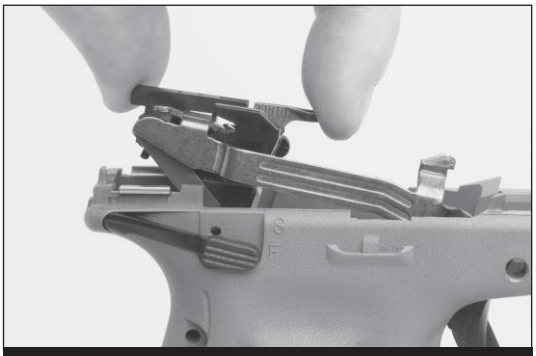


Fig. 64

6. Ambidextrous Manual Safety Lever Right Removal

- Remove the ambidextrous manual safety lever right by simply pulling it out of the receiver. (Fig. 65)

Fig. 65

7. Trigger Bar Removal

- Holding the trigger mechanism housing and trigger bar as shown (Fig. 66), carefully work the front arm of the cruciform out from under the front metal 'hook' on top of the trigger spring assembly by twisting it slightly counter clockwise. This will allow the left arm of the cruciform to move out from the slot in the housing and off the drop safety shelf where you can lift it upwards from the assembly. (Fig. 67)

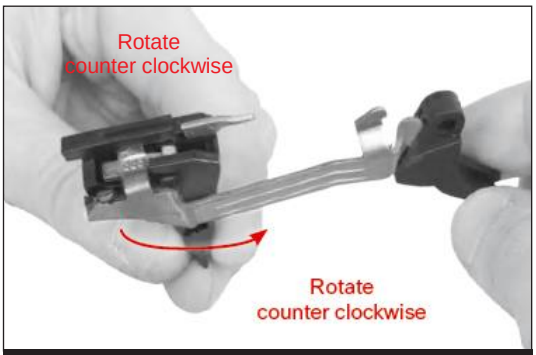


Fig. 66

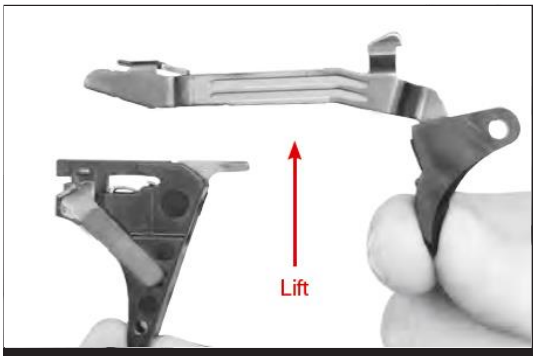


Fig. 67

8. Connector Removal

Caution!

The ejector is not shown on the following pictures for better visibility.

Do not remove the ejector from the trigger mechanism housing!

- Remove the connector by pushing the pin punch through the hole provided on the opposite side of the trigger mechanism housing. (Fig. 68/69)

Note:
Exercise caution when removing and installing the connector. Excessive disassembly may cause wear on the housing. When re-inserting the connector, make sure it is completely seated and fits snugly into place.

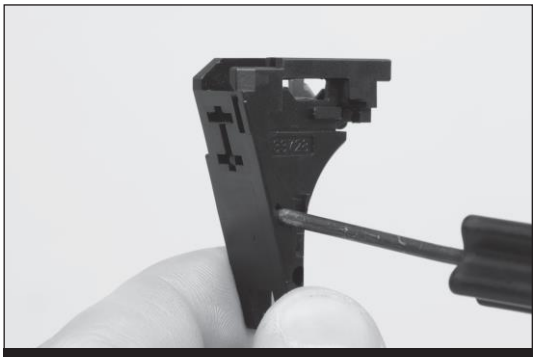


Fig. 68

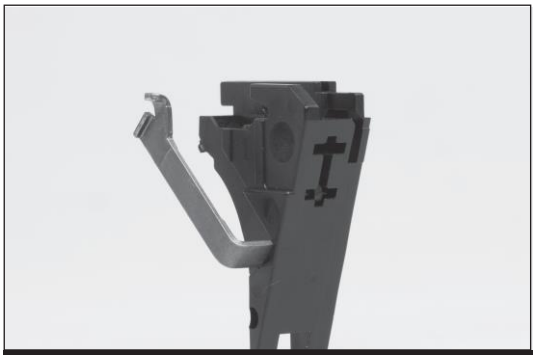


Fig. 69

9. Trigger Spring Assembly Removal

- Using the pin punch or a screw driver, press the trigger spring bearing down and slide it to the front until you can see the tip of the trigger spring rod protruding from the trigger mechanism housing. (Fig. 70)

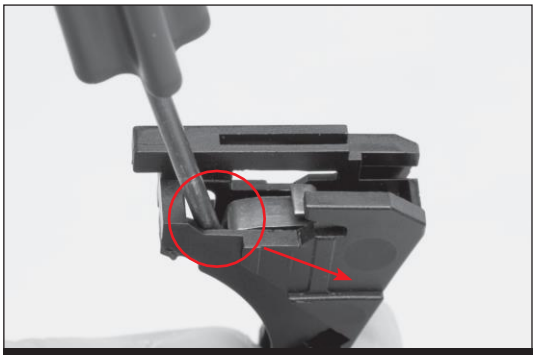


Fig. 70

- Then, slide the tip of the trigger spring rod upwards with your thumb until reaching the cruciform top slot in the front of the housing. (Fig. 71/72/73)

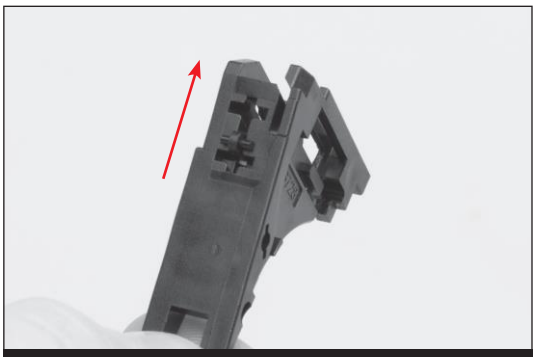


Fig. 71

Fig. 72

Fig. 73

Caution!

In general, disassembly of the trigger spring assembly is not recommended.

10. Trigger Spring Assembly Disassembly

- While holding the bearing as shown (Fig. 74), carefully twist the trigger spring assembly to align with the slot allowing the spring and the rod to be removed. (Fig. 75)

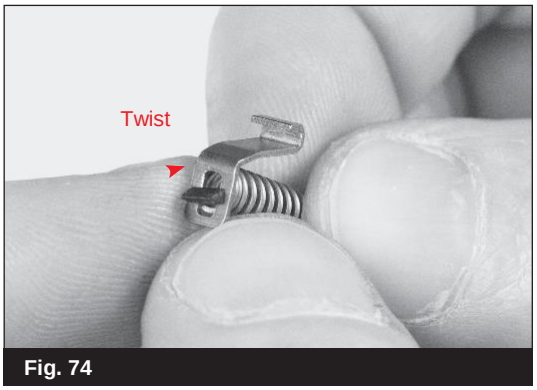


Fig. 74

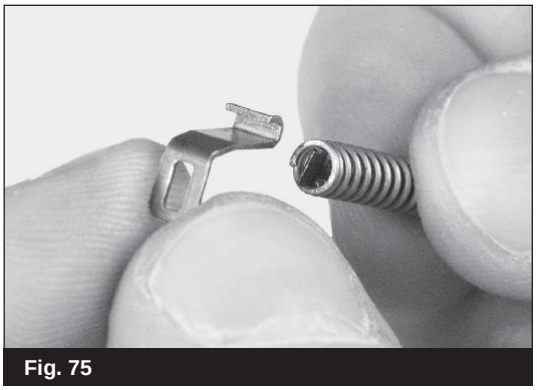


Fig. 75

- Slide the coil spring off the rod. (Fig. 76)

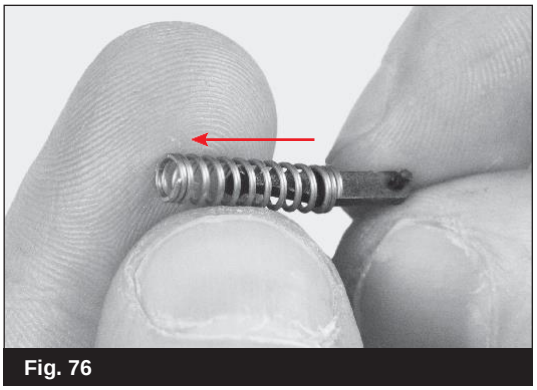


Fig. 76

The trigger spring assembly contains the trigger spring bearing, the trigger spring and the trigger spring rod. (Fig. 77)

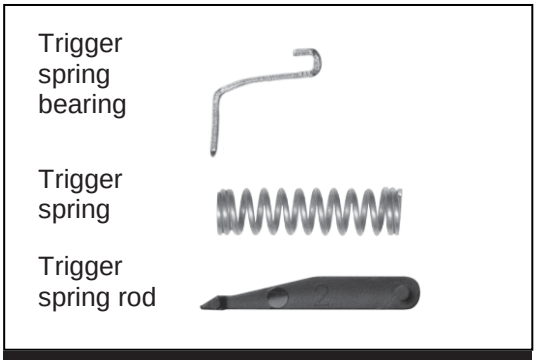


Fig. 77

11. Slide Lock Removal

- Press the slide lock down on one side with your finger. Push the slide lock to the side and out of the receiver while keeping your thumb over the spring. (Fig. 78/79)

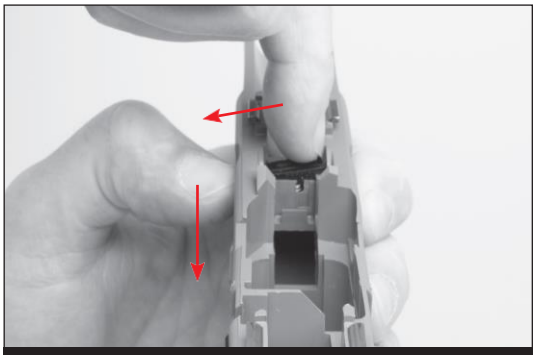


Fig. 78

Caution!

Be careful not to damage or allow the coil spring underneath the slide lock to jump out.

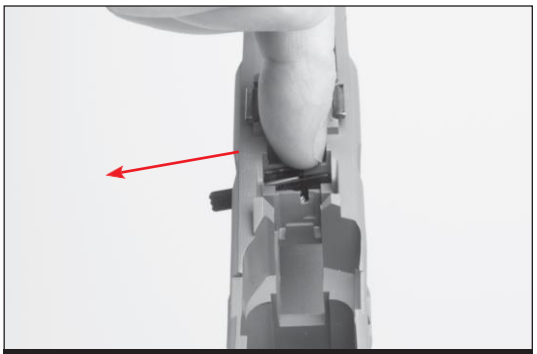


Fig. 79

- To remove the slide lock spring, position your hand over the slide lock spring area. Then turn the receiver upside down and catch the spring. (Fig. 80)

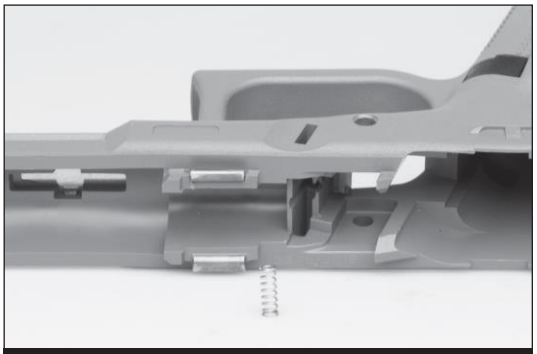


Fig. 80

12. Reversible Magazine Catch Removal

The magazine catch is reversible for right or left hand use by installing it from the left or from the right side.

- Hold the frame so that you can see into the magazine well.
- Prevent movement by pressing on both sides of the reversible magazine catch. (Fig. 81)

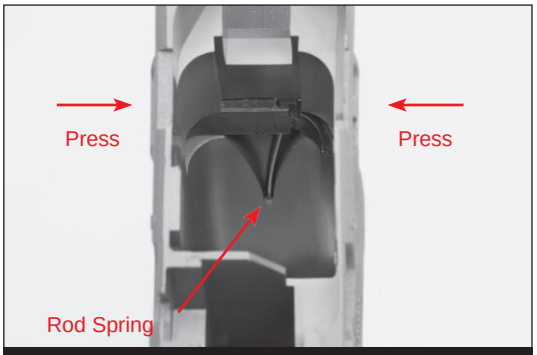


Fig. 81

- After releasing the spring tension by unhooking the magazine catch spring from the magazine catch body (Fig. 82), use pliers to pull the magazine catch spring upwards and out of the receiver (Fig. 83). This may make removing the magazine catch body easier.

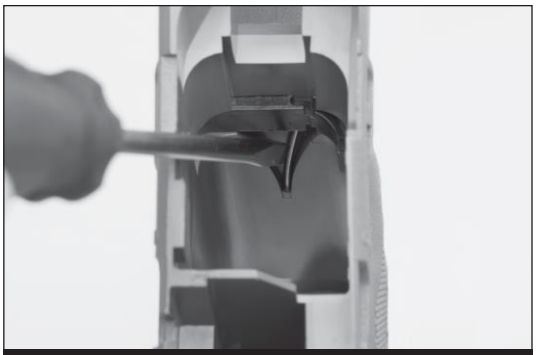


Fig. 82

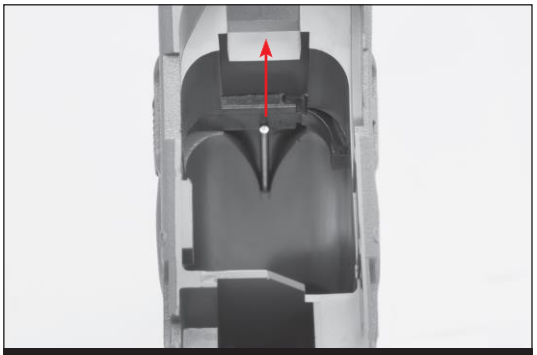


Fig. 83

- Remove the reversible magazine catch. (Fig. 84)

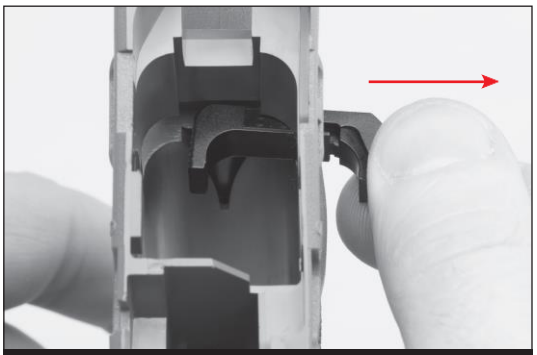


Fig. 84

v. Frame Reassembly

1. Reversible Magazine Catch Replacement

The magazine catch is reversible for right or left hand use by installing it from the left or from the right side.

Options:
Reversible magazine catch installed for (Fig. 85)

a. Left handed users
(magazine catch on the right side)

b. Right handed users
(magazine catch on the left side)

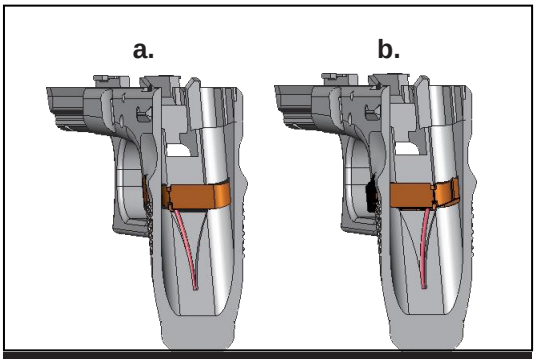


Fig. 85

- Insert the magazine catch body (Fig. 86) and then using the pliers insert the magazine catch spring in the provided hole and push this down with the tip of the screw driver. Make sure to seat it completely. (Fig. 87)

Caution!

Be careful not to damage the magazine catch spring. Do not use excessive force so that you do not bend it when pushing it down. Stop pushing the magazine catch spring down as soon as you feel resistance.

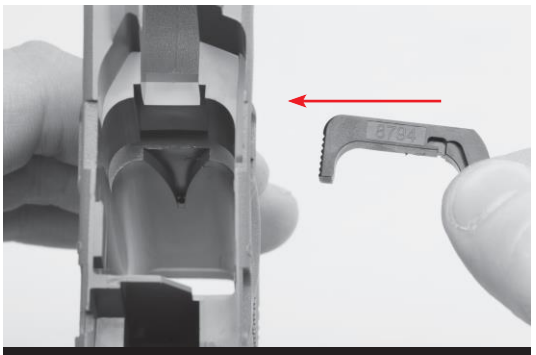


Fig. 86

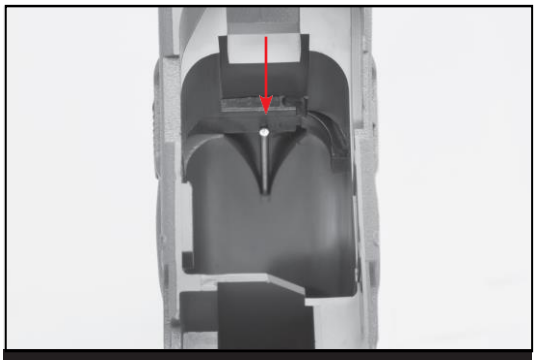


Fig. 87

- Then push the magazine catch spring back into the notch in the magazine catch body. (Fig. 88a/88b)

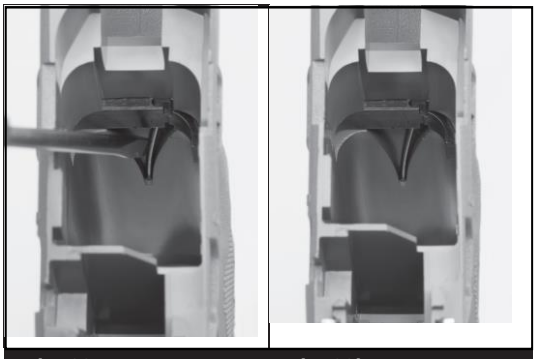


Fig. 88a Fig. 88b

2. Slide Lock Spring Replacement

- Insert the slide lock spring into its recess. (Fig. 89)

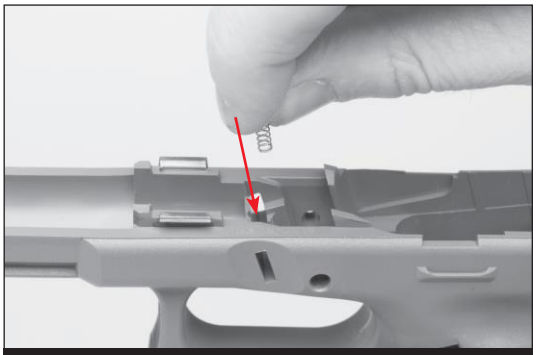


Fig. 89

3. Slide Lock Replacement

Caution!

The slide lock must always be installed so the groove is facing up and towards the rear. Improper installation may allow the slide to disengage from the frame when the trigger is pulled. (Fig. 90)

Fig. 90

- Insert the slide lock through the slot on either side of the receiver at the angle shown. Press the slide lock spring down with a flat screw driver so that the slide lock is able to go over the slide lock spring. Then slide the slide lock through the opposite receiver slot so the center of the lock will sit down properly on top of the coil spring. (Fig. 91)

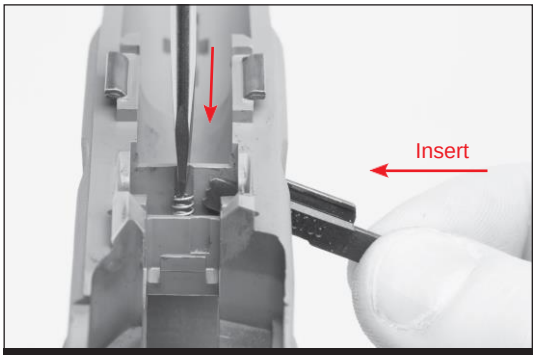


Fig. 91

Slide lock orientation

- If you can see the part number the slide lock is installed properly (Fig. 92)

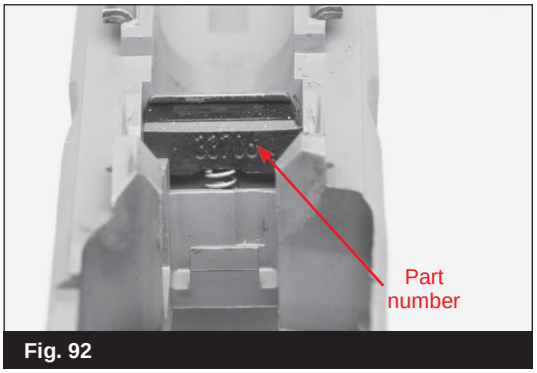


Fig. 92

Slide lock spring

- Press the slide lock down on both sides and release it. The spring is supposed to move it up again.

4. Trigger Spring Assembly Reassembly

- Slide the trigger spring down on the slotted end of the trigger spring rod. (Fig. 93)

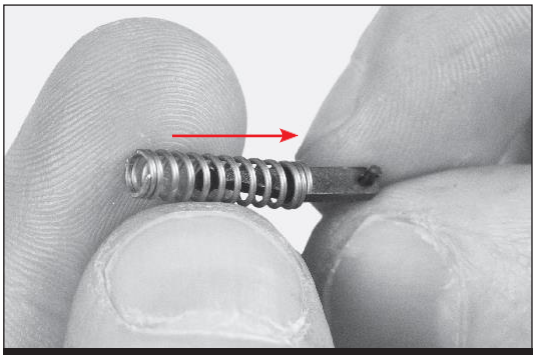


Fig. 93

- Align the slot on the trigger spring rod with the slot on the trigger spring bearing. (Fig. 94)

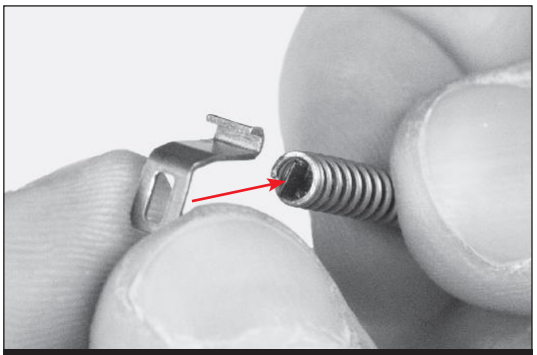


Fig. 94

- Install the trigger spring bearing by pushing it down against the trigger spring and then twist the trigger spring rod as shown to lock it in place. (Fig. 95)

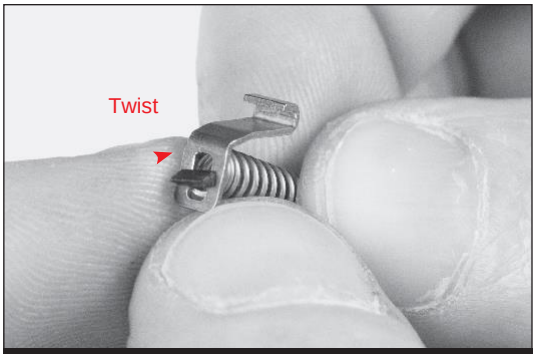


Fig. 95

Caution!

Pay attention to correct orientation of spring rod and bearing. (Fig. 96)

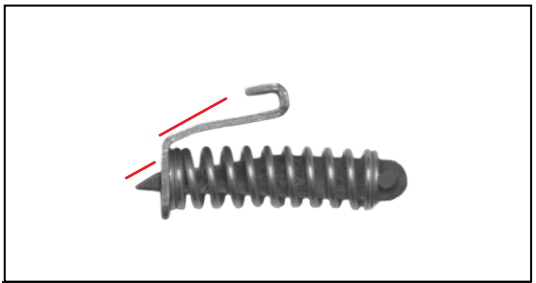


Fig. 96

5. Trigger Spring Assembly Replacement

- Align the trigger spring as shown in the picture with the upper cruciform slot (Fig. 97).

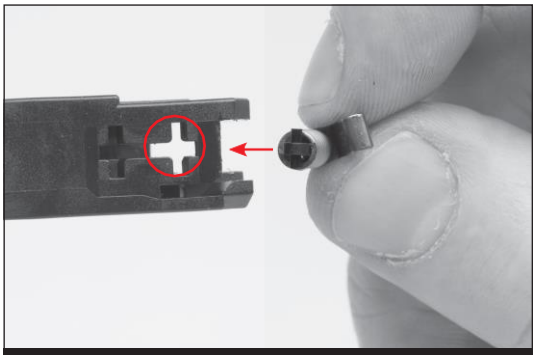


Fig. 97

- Using the pliers of the Multi-tool as shown push the front polymer end through the cruciform upper slot (Fig. 98).

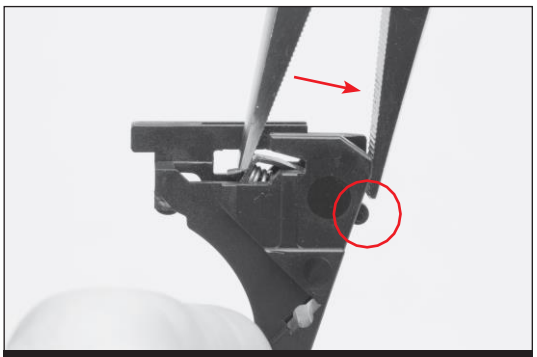


Fig. 98

- Then, slide the tip of the trigger spring rod downwards with your thumb until reaching the cruciform bottom slot in the front of the housing. There it will snap into place. (Fig. 99/100)

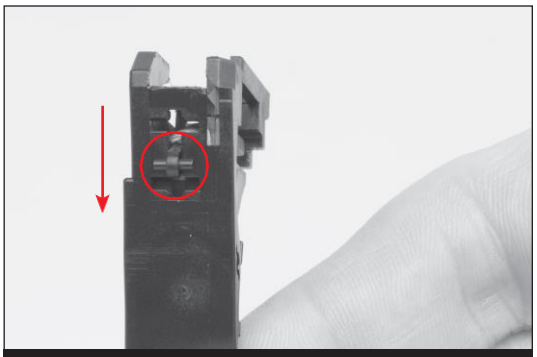


Fig. 99

Fig. 100

6. Connector Replacement

The connector, along with the trigger spring and the firing pin spring determines the trigger pull weight.

- Insert the short leg of the connector into its recess in the trigger mechanism housing (Fig. 101). Press the connector in by using your pin punch (or your screwdriver) as shown (Fig. 102). While doing this operation, be careful to locate your tool as near as possible to where the connector is inserted in the trigger mechanism housing. Otherwise you could damage the connector. This should be a snug fit. Always seat the connector fully and ensure that it is firmly in place.

Fig. 101

Fig. 102

- Use your thumb or index finger to slide the manual safety frame to the rear of the recess in the trigger mechanism housing. (Fig. 103)

7. Trigger Bar Replacement

Caution!

Before replacing the trigger bar make sure that the manual safety frame is in the fully rear position. (Fig. 103)

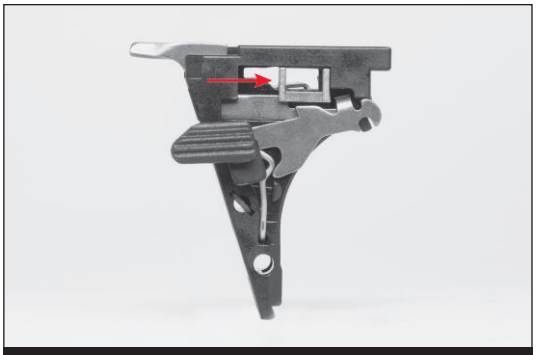


Fig. 103

- Reinstall the trigger bar by hooking the front part of the cruciform into the upper lip of the trigger spring bearing and sliding the left arm of the cruciform into the trigger mechanism housing on top of the safety ramp. (Fig. 104)

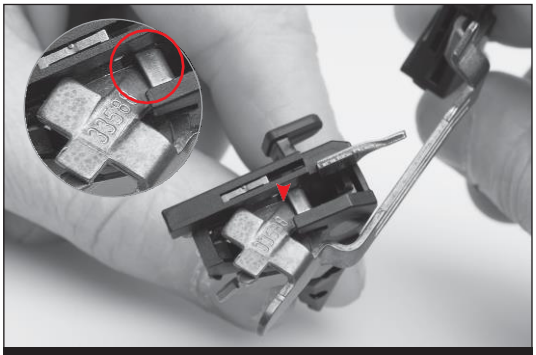


Fig. 104

Caution!

Be sure that the cruciform end of the trigger bar hooks properly into the recess of the manual safety frame. (Fig. 105)

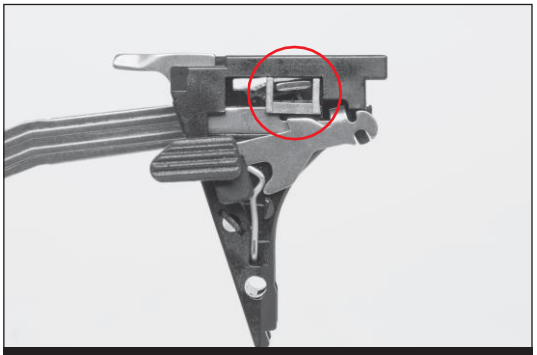


Fig. 105

8. Ambidextrous Manual Safety Lever Right Replacement

- Install the manual safety lever right into its recess in the frame. (Fig. 106)

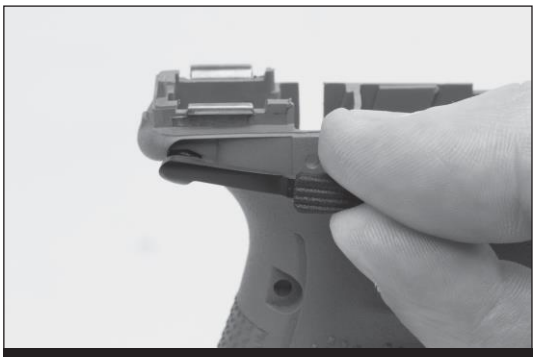


Fig. 106

9. Trigger Assembly Replacement

- Install the trigger assembly into the frame with the trigger bar first. (Fig. 107)

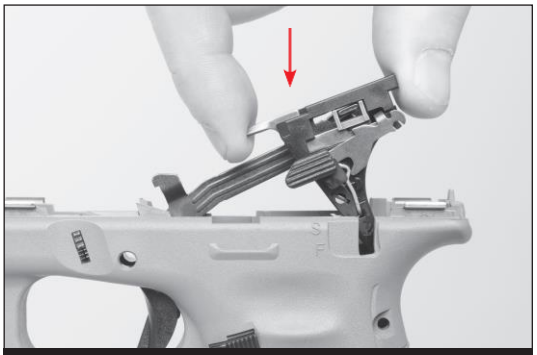


Fig. 107

- Ensure that the manual safety lever left is in the Fire (F) position and push down on the housing until it seats properly in the frame. (Fig. 108)

Fig. 108

10. Ambidextrous Slide Stop Lever Replacement

- Insert the ambidextrous slide stop lever horizontally into its recess in front of the trigger bar as shown. (Fig. 109/110)

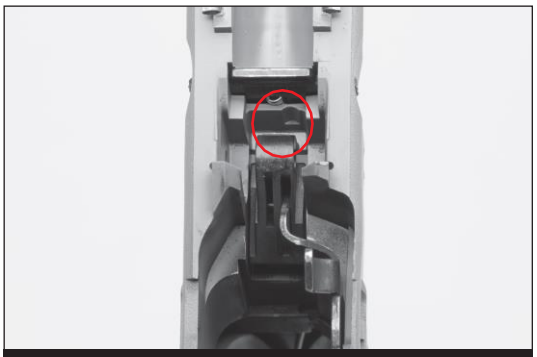


Fig. 109

Fig. 110

11. Locking Block Replacement

- Insert the locking block as shown and seat it into the frame. (Fig. 111)

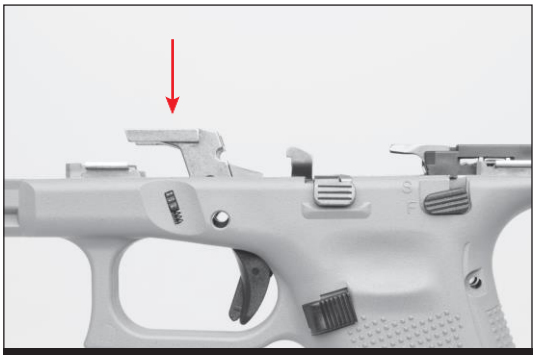


Fig. 111

12. Comparison of the Pins (Fig. 112)

1a. Trigger mechanism housing pin short (polymer)

1b. Trigger mechanism housing pin long (polymer)

2. Trigger pin (steel) – with 2 grooves

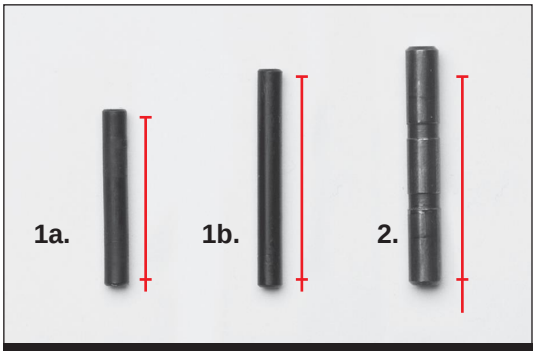


Fig. 112

13. Trigger Pin Replacement

- While pressing the ambidextrous slide stop lever down, insert the trigger pin from either side into the provided hole in the frame. (Fig. 113)

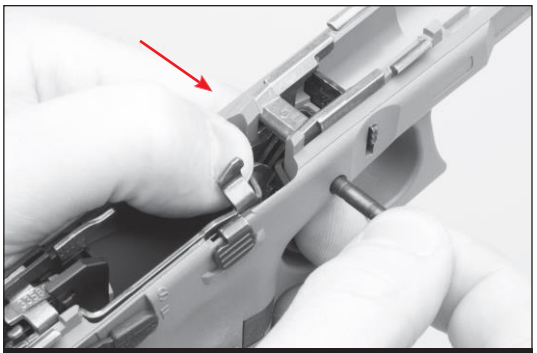


Fig. 113

- Center the pin with the handle of the pin punch. When centered, the grooves on this pin will keep the ambidextrous slide stop lever in its proper position. (Fig. 114)

Fig. 114

14. Trigger Mechanism Housing Pin Replacement

- While pressing downwards on the trigger mechanism housing insert the polymer trigger mechanism housing pin into the frame. (Fig. 115)

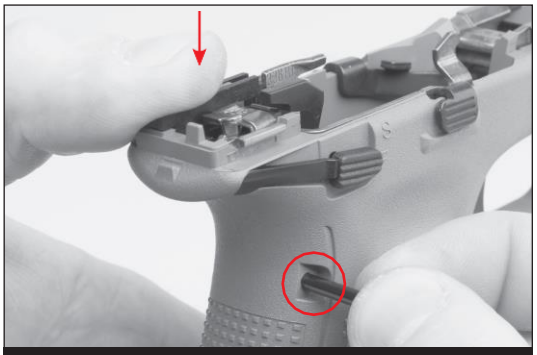


Fig. 115

15. Frame Function Test

a. Ambidextrous Slide Stop Lever Tension

When properly assembled, the ambidextrous slide stop lever should be under spring tension. With your fingers, pull the rear of the ambidextrous slide stop lever upwards and release. It should snap down with force. If the ambidextrous slide stop lever does not have sufficient downward force, it may engage the slide notch prematurely and lock the slide back even if ammunition remains in the magazine. This check ensures that the ambidextrous slide stop lever has sufficient downward spring pressure and will not lock the slide back prematurely. (Fig. 116)

Fig. 116

vi. Reassembly of the Complete Pistol

- Complete the reassembly by installing the fully assembled slide on the fully assembled frame. (Fig. 117/118)

Fig. 117

Fig. 118

e. Accessories

i. Backstrap/Beavertail Installation

Available Backstrap/Beavertail Options:	
Without backstraps	Short Frame (SF-Frame)
Medium backstrap with a beaver tail (BT)	Medium Frame (M) + 2mm
Medium backstrap without a beaver tail (BS)	
Large backstrap with a beaver tail (BT)	Large Frame (L) + 4mm
Large backstrap without a beaver tail (BS)	

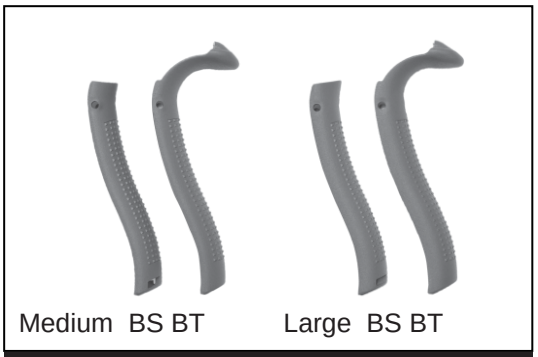


Fig. 119

- Remove the trigger housing pin with the multifunctional clip (Fig. 120) by pushing it from one side to the other and completely out of the frame. (Fig. 121)


Fig. 120


Fig. 121

- If a backstrap is already installed, remove it. (Fig. 122)

Fig. 122

- If you will be installing a backstrap, attach it to the frame by hooking the bottom of the backstrap to the bottom rear of the frame, then pivoting the top of the backstrap forward and onto the frame. (Fig. 123)

- If you are installing a beavertail backstrap press it to the frame, until it clicks onto the small nose of the modular backstrap (MBS) frame.

Fig. 123

- If you did not install a backstrap, install the short trigger housing pin by pushing it into the corresponding hole in the rear of the frame with the flat side of the multifunctional clip until it is completely centered in the frame. If you installed a backstrap, hold it in place against the frame while installing the long trigger housing pin (comes included in the multifunctional clip) by pushing it into the corresponding hole in the rear of the frame with the flat side of the multifunctional clip until it is completely centered in the frame. (Fig. 124)

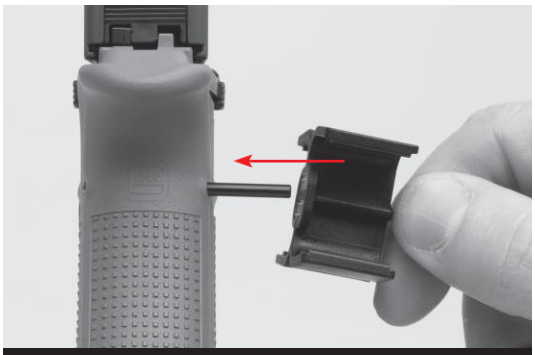


Fig. 124

- Inspect the pistol to confirm that you have installed the correct trigger housing pin by ensuring that it is flush with the frame. If you installed the long trigger housing pin without a backstrap, it will protrude outside of the frame and could cause discomfort while shooting. If you installed the short trigger housing pin with a backstrap, it will not fully extend to the sides of the frame and may allow the backstrap to come loose. (Fig. 125)


Fig. 125

ii. Lanyard Clip

1. Lanyard Clip Removal

Caution!

Make sure that your GLOCK pistol is unloaded (magazine removed and chamber empty) and that the GLOCK Backstrap/Beavertail is dismantled from your GLOCK pistol before installing/removing the GLOCK Lanyard Clip. The Backstrap/Beavertail may be reinstalled after having installed/removed the GLOCK Lanyard Clip.

Fig. 126

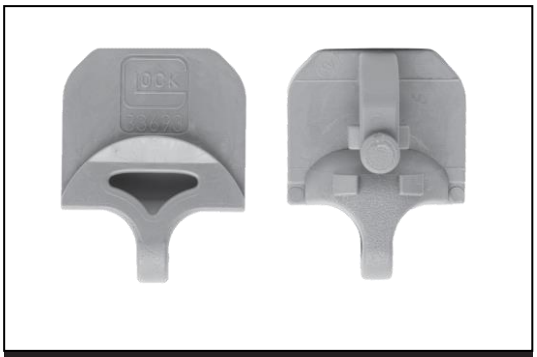


Fig. 127

- Remove the GLOCK Lanyard Clip with a 2,5mm (3/32 in.) Pin Punch by pressing on the end of the GLOCK Lanyard Clip through the hole in the frame. Then remove the GLOCK Lanyard Clip from the frame. (Fig. 128)

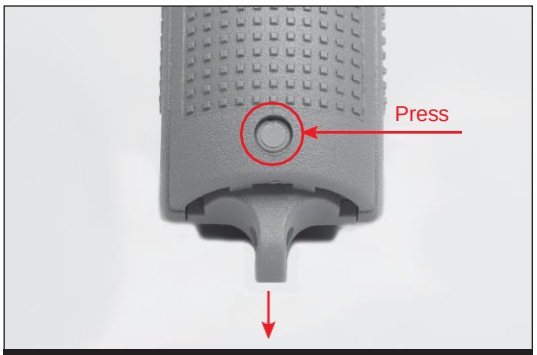


Fig. 128

2. Lanyard Clip Installation

- Place the GLOCK Lanyard Clip in the correct position and orientation. (Fig. 129) It may require some force to mount the GLOCK Lanyard Clip into the frame.

Note:
Pay attention to hear the click when it snaps into place.

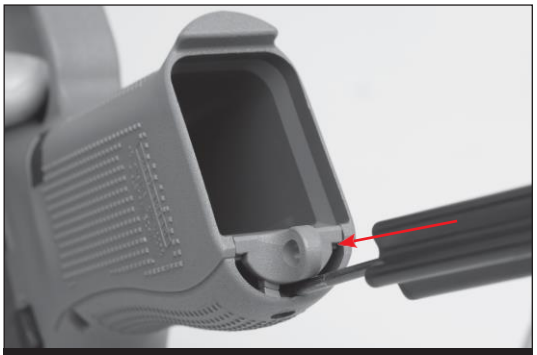


Fig. 129

iii. **Magazines** (Fig. 130)

Fig. 130

Magazines do not normally need to be disassembled for cleaning each time your GLOCK pistol is cleaned. Disassembling and cleaning magazines is not recommended unless they have been exposed to dirt, sand, liquids, or other substances and inspection indicates the need for cleaning, or when necessary to replace parts. Excessive magazine disassembly may lead to wear on the tabs at the bottom of the magazine body. (Fig. 131)

Caution!

Always wear safety glasses when disassembling your magazine to protect your eyes because the magazine spring, follower and magazine insert are under spring tension, and can cause eye or other injury if not controlled during removal. Be sure to keep downward pressure on the magazine spring with your thumb while disassembling the magazine.

Fig. 131

1. Magazine Disassembly

Caution!

When disassembling and reassembling the magazines only use 100% identical GLOCK magazine parts for reassembly.

All standard current production magazines have removable floor plates and magazine inserts. To disassemble the unloaded magazine, proceed as follows:

- Insert the pin punch fully into the opening in the floor plate and push the magazine insert down into the magazine tube to unlock the magazine floor plate (Fig. 132).
- With the pin punch still in place, pull the floor plate towards the front of the magazine with the handle of the pin punch (Fig. 133).
- When the floor plate has moved about 3mm (1/8 in.), withdraw the pin punch and reposition your hand so that your thumb is over the magazine spring, pressing it down into the magazine.
- While continuing to press the magazine spring down into the magazine, slide the floor plate forward and fully off of the base of the magazine (Fig. 134).
- Carefully release the pressure on the magazine spring with your thumb until all of the tension has been released from the magazine spring (Fig. 135).
- Pull the magazine insert, magazine spring and follower out of the magazine tube (Fig. 136).
- Separate the follower from the magazine spring by pulling the end of the spring out of the hole on the bottom of the follower (Fig. 137)

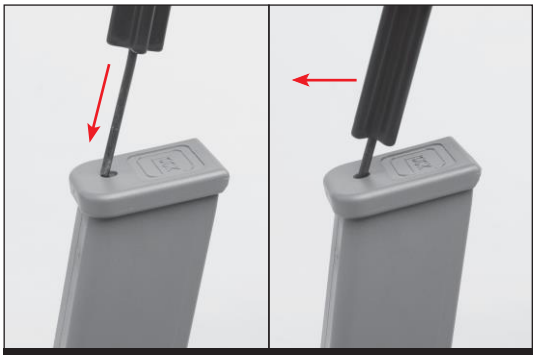


Fig. 132 Fig. 133

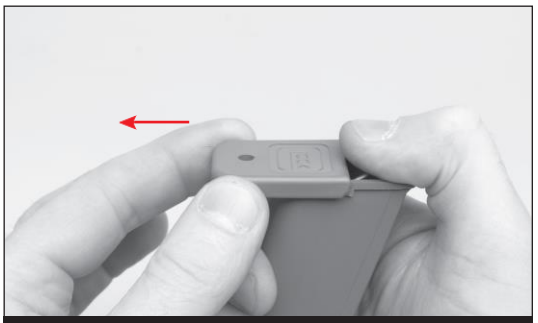


Fig. 134

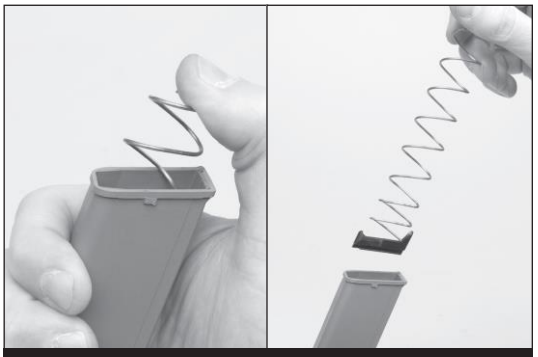


Fig. 135 Fig. 136

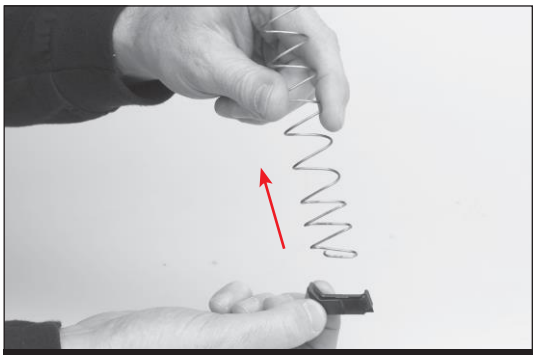


Fig. 137

2. Magazine Reassembly

To reassemble the magazine, proceed as follows:

- Attach the follower to the magazine spring by inserting the end of the narrow end of the spring into the hole in the bottom of the follower until you hear a click (Fig. 138).
- Insert the follower and magazine spring into the magazine tube with the end of the follower with the two prongs on the bottom towards the back of the magazine (Fig. 139).
- Press the magazine spring all the way into the magazine tube with your thumb and hold it in this position. Put the magazine insert on the top of the magazine spring (Fig. 140/141).

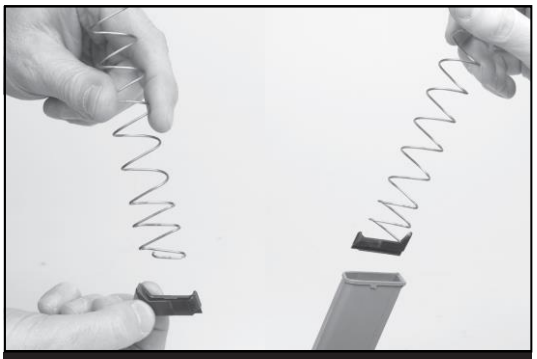


Fig. 138 Fig. 139

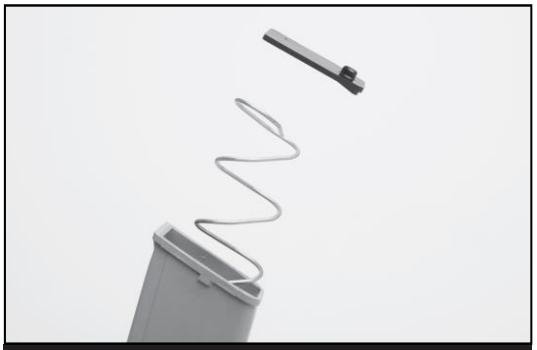


Fig. 140

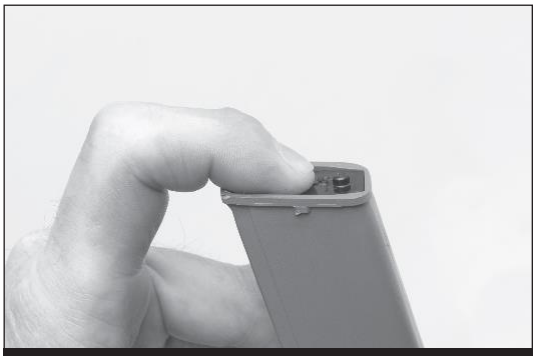


Fig. 141

With your other hand, slide the floor plate onto the base of the magazine from front to back until it locks in position (Fig. 142/143)

Fig. 142 Fig. 143

f. Maintenance

Caution!

Prior to any maintenance and field stripping unload the pistol and do the safety check as per procedure in chapter VII.

i. Field Stripping

Using the disassembly grip, retract the slide approximately 3mm (1/8 in.) while pulling down on both sides of the slide lock. While holding the slide lock in the downward position, move the slide forward. Remove the recoil spring/guide rod assembly by grasping the end nearest the barrel lug and pulling it straight up. Lift up on the barrel lug and remove the barrel. You should have the following: slide, barrel, recoil spring assembly, frame and magazine(s).

ii. Cleaning Supplies and Lubricants

Use only solvents and lubricants designed for use on firearms. Any product that is advertised and/or marketed for use on guns may be used on GLOCK pistols. When using solvents, make sure all solvent is removed before lubrication, use or storage of the firearm. Under some circumstances, a “dry” (no solvent) cleaning may be appropriate. After cleaning, GLOCK pistols require a minimum of lubrication.

iii. Cleaning

The GLOCK Pistol set contains a basic cleaning kit including a rod with patch holder and a nylon brush.
That is sufficient to maintain the firearm on the user level.
The choice of solvents, lubricants (refer to section III.f.ii.) and additional cleaning tools is left to the customer.

1. Barrel (Fig. 144)

- Wet a bristled cleaning brush with cleaner-lubricant-preservative and run it back and forth in the barrel, from the chamber end, using a cleaning rod to remove any fouling and unburned powder.
- Before firing your GLOCK pistol, run a clean patch through the barrel, from the chamber end, using the cleaning rod. Repeat this procedure until the patch comes out of the barrel with no gun oil or cleaner-lubricant-preservative on it.
- Wipe the outside of the barrel dry with a clean patch and examine it. If it is not clean, wipe again until the patch remains clean.

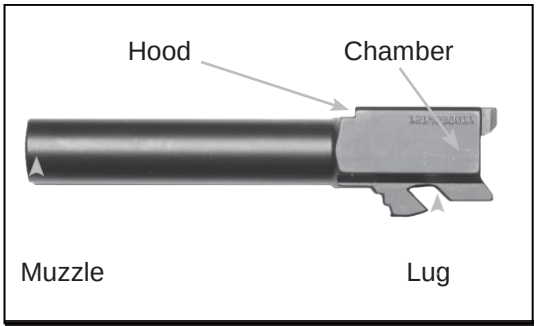


Fig. 144

2. Slide (Fig. 145)

- Wet a nylon bristle brush with cleaner-lubricant-preservative and thoroughly brush the rail cuts in the slide where it meets the slide rails on the frame.
- Wet a nylon bristle brush with cleaner-lubricant-preservative and, while holding the slide with the muzzle end facing down, brush the breech face and the area under the extractor claw.
- Check all other exposed areas of the slide for cleanliness. If any dirt or debris is found, remove it with cleaner-lubricant-preservative using a nylon bristle brush, patch, or a clean, soft cloth.
- Wipe the exposed areas of the slide that you have cleaned with a clean patch and examine it. If it is not clean, repeat cleaning until the patch remains clean.

Note:
The copper colored substance on the cam area of the interior of the slide is a high-temperature, factory applied lubricant for new pistols. It should be allowed to remain until it naturally wears away to assure long-term lubrication of this area.

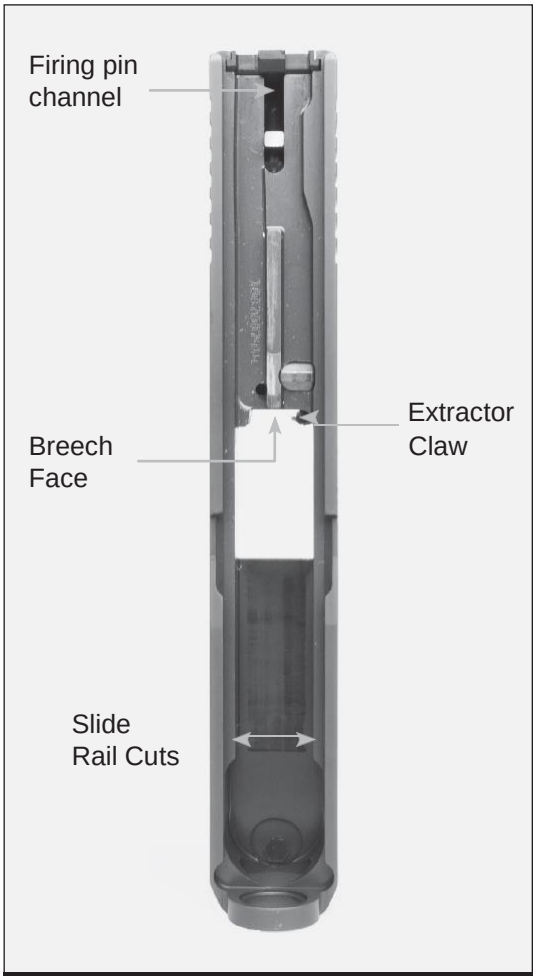


Fig. 145

3. Frame

Use the brush to clean the rails and brush down all other surfaces as necessary. Be certain all solvent and residue has been removed before you attempt to reassemble the pistol.

4. Magazine

When necessary, clean the disassembled magazine as follows: Brush out the inside of the magazine tube with a dry brush. Wipe off the magazine spring, follower and magazine insert, with a soft, clean cloth.

Caution!

If it is necessary to use a gun cleaning solvent or a cleaner-lubricant-preservative to clean the magazine, be sure that all parts of the magazine are completely dried before reassembling it. Cleaning solvents can affect the primer and powder in ammunition and cause it to malfunction. This could result in a bullet being pushed into the barrel of your GLOCK pistol and getting stuck. Firing another round with a bullet stuck in the barrel could cause the barrel to burst and result in death or serious personal injury, in addition to damaging the pistol.

iv. Lubrication

After a thorough cleaning, remove any remaining solvent from the pistol.

Caution!

Large quantities of oil or grease may collect unburned powder, grit, dust or other residue that could interfere with proper functioning of any firearm. Extreme climate (cold or hot weather) could affect large amounts of lubricant.

1. Barrel

- Slightly dampen a clean patch with gun oil or cleaner-lubricant-preservative and wipe the outside of the barrel, including the barrel hood and lugs and the inside top of the slide in front of the ejection port where the barrel hood rubs against the slide. (Fig. 146)

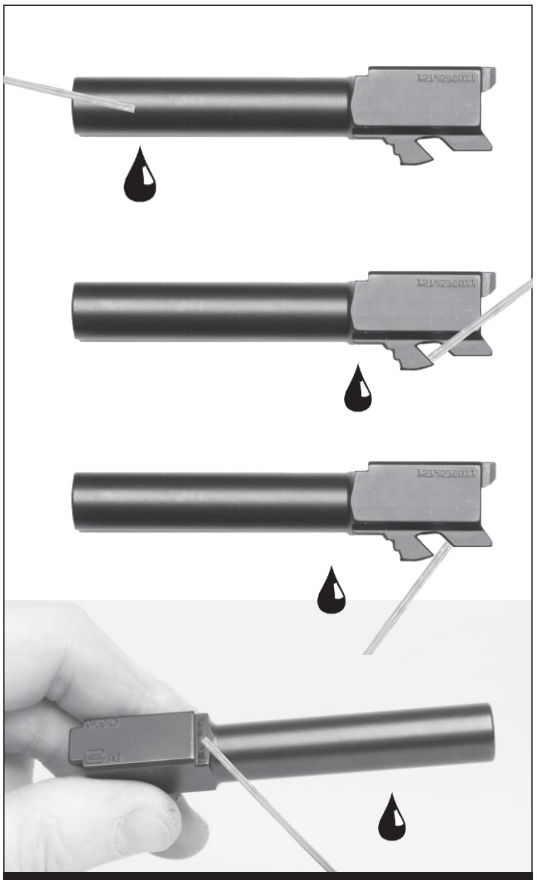


Fig. 146

2. Slide

- Spread one drop of gun oil or cleaner-lubricant-preservative along the entire length of each slide rail cut. (Fig. 147)

Fig. 147

- Slightly dampen a clean patch with gun oil or cleaner-lubricant-preservative and wipe the exterior surfaces of the slide. (Fig. 148)

Caution!

Never leave any solvent or put any lubricant inside the firing pin channel or magazine tube. Along with the breech face and barrel chamber, these areas should be wiped dry before reassembly or use. Leaving solvent or lubricant in any of these areas may cause contamination of primers or powder and possible failure to fire.

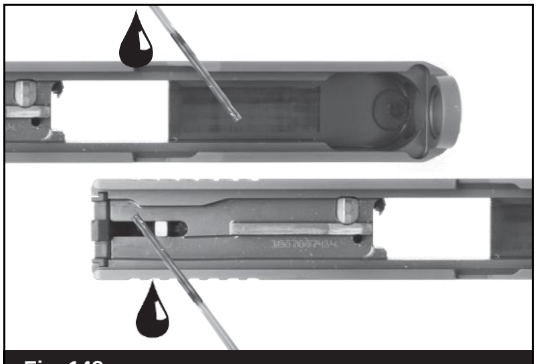


Fig. 148

3. Frame

- Place a drop of gun oil or cleaner-lubricant-preservative where the rear end of the trigger bar touches the connector at the right rear corner of the frame. (Fig. 149)

Fig. 149

g. Interchangeability of Parts

All parts are interchangeable between pistols of the same model and generation.
Strict quality assurance and modern manufacturing methods make it possible to produce parts with very tight tolerances. That results in parts that are interchangeable with any other part of the same article number that is delivered to the customer.

h. Type of Ammunition to be used

Before loading the GLOCK pistol, always make sure that you have the correct ammunition. Use only the correct caliber and be sure the ammunition is in good condition. GLOCK pistols should only be used with quality factory ammunition that contains jacketed projectiles and is loaded to CIP/SAAMI/NATO standard pressures.

Caution!
DO NOT USE HANDLOADS OR RELOADED AMMUNITION!

Use of non-factory loaded ammunition or ammunition loaded with non-jacketed (lead) bullets will void the warranty and may lead to an increase of risks.

Caution!
ANY AMMUNITION THAT APPEARS TO BE IN POOR CONDITION, DAMAGED, KNOWN TO HAVE BEEN STORED IMPROPERLY OR OBVIOUSLY SHORTER IN OVERALL LENGTH THAN USUAL SHOULD NOT BE FIRED IN ANY FIREARM.

“Set Back”
Cartridges sometimes may be damaged or altered in some way and this can cause an unsafe condition. An example is a cartridge that has had the projectile (bullet) pushed back deeper than normal into the casing. This can change the combustion space characteristics and powder burn rate boosting pressures to unacceptable levels. Repeated loading and unloading of the same cartridge can cause a condition known as “set back.” The projectile has been pushed deeper into the case and the overall length of the round is noticeably shorter than others of the same bullet weight, make or style.

Caution!
DO NOT CHAMBER AND EJECT THE SAME ROUND REPEATEDLY!

IV Safety Principles

a. Safe Action System

GLOCK pistols are equipped with the revolutionary, fully automatic safety system consisting of three passive, independent, mechanical safety devices that collectively form the Safe Action® system. (Fig. 150)

i. Trigger Safety

The trigger safety is incorporated into the trigger in the form of a lever and when in the forward position, blocks the trigger from moving rearward. To fire the pistol, the trigger safety and the trigger itself, must be deliberately depressed at the same time. If the trigger safety is not depressed, the trigger will not move rearwards and allow the pistol to fire. The trigger safety is designed to prevent unintentional firing when the pistol is dropped, falls or is subjected to forces such as inertia or lateral pressures. (Fig. 151)

ii. Firing Pin Safety

The spring-loaded firing pin safety projects into the firing pin channel and mechanically blocks the firing pin from moving forward. When the trigger is being moved rearwards, a vertical extension of the trigger bar pushes the firing pin safety upwards, clearing the firing pin channel. During the slide cycling process, the firing pin safety automatically engages with an assist from the firing pin safety spring. The firing pin safety was designed to avoid unintentional firing due to inertia or should extreme forces cause a separation of slide and frame. (Fig. 152)

iii. Drop Safety

The rear part of the trigger bar, which has a cruciform shape, rests with both arms on the drop safety shelf located in the trigger mechanism housing. When the trigger is pulled to the rear, the trigger bar begins to move off the safety shelf as the trigger bar is forced downwards and rearwards by the connector until finally separating from the firing pin lug. During the slide cycling process, the connector is pushed inward by a cam in the slide releasing the trigger bar which is then lifted with help from the trigger spring and caught by the firing pin lug. The trigger bar is engaged by the firing pin lug and both arms are pushed onto the drop safety shelf again. (Fig. 153)

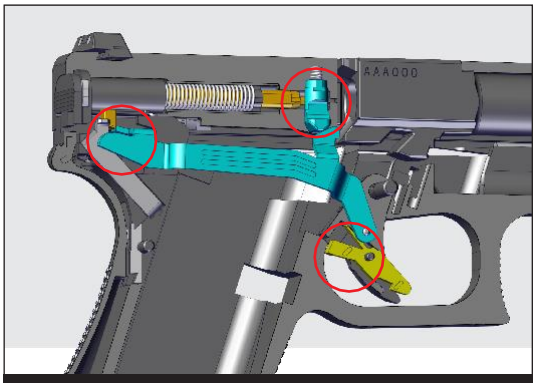


Fig. 150 Engaged

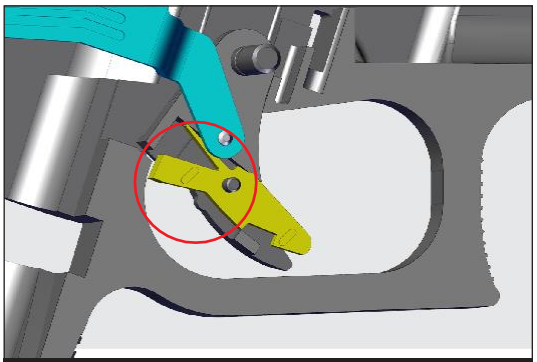


Fig. 151 Engaged

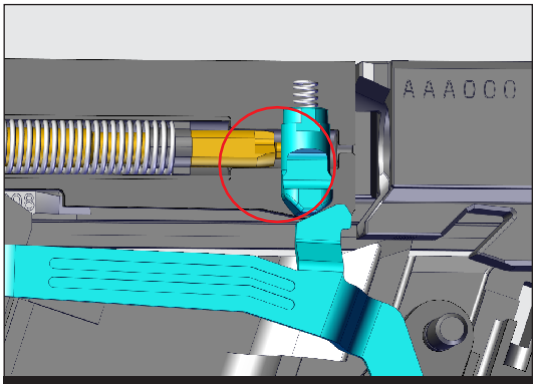


Fig. 152 Engaged

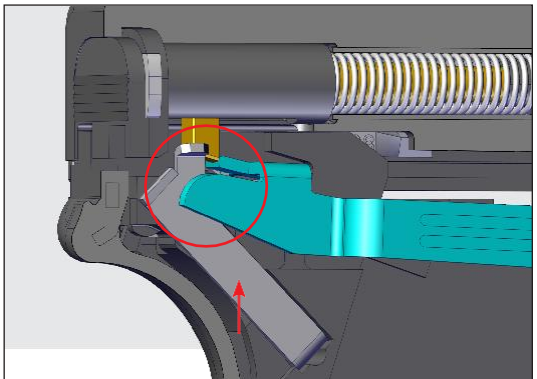


Fig. 153 Engaged

b. Ambidextrous Manual Safety Lever (Safe / Fire)

In addition to the GLOCK Safe Action® System, the GLOCK AMS Pistol is equipped with an ambidextrous manual safety lever consisting of the manual safety lever right and the manual safety lever left.

In order to be able to manipulate the ambidextrous manual safety lever cycle the slide to bring the trigger into forward position. If the trigger of your GLOCK pistol is in the rearward position the manual safety lever cannot be moved from Fire (F) to Safe (S). **The ambidextrous manual safety lever in the Safe (S) position blocks the trigger bar from moving rearward and releasing the firing pin.**

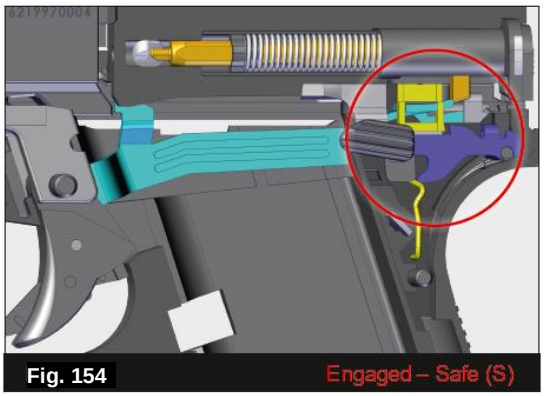


Fig. 154 Engaged – Safe (S)

- Push the ambidextrous manual safety lever fully upward with your thumb to put it in the Safe (S) position (Fig. 154/156).
- Push the ambidextrous manual safety lever fully downward with your thumb to put it in the Fire (F) position allowing the striker to be released when the trigger is pulled (Fig. 155/157).

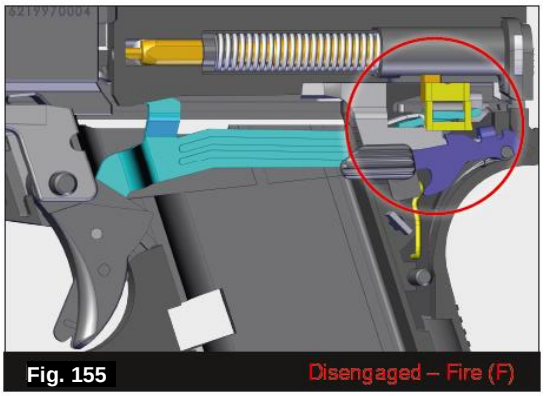


Fig. 155 Disengaged – Fire (F)

Your GLOCK pistol can be loaded or unloaded, the slide can be opened and closed, and the magazine can be inserted and removed with the manual safety lever in either the Fire (F) or Safe (S) position.

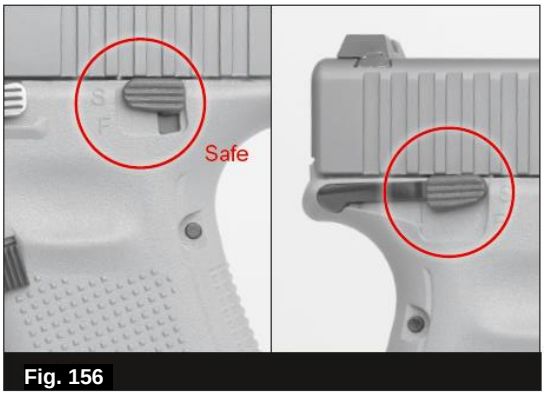


Fig. 156

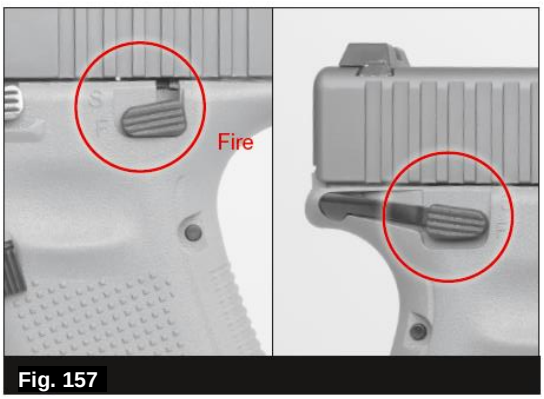


Fig. 157

c. Malfunctions

i. Double Feed (Fig. 158)

With a cartridge in the chamber, the next round won't be guided by the feeding ramp. The slide will drive the bullet straight into the edge of the chambered cartridge without touching the primer.

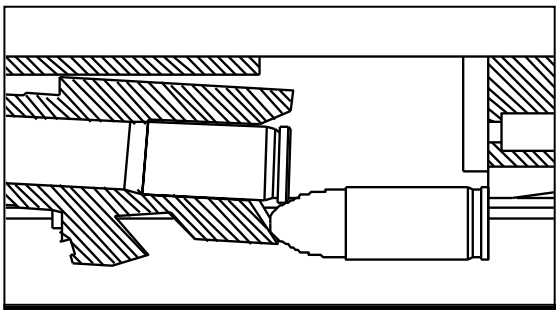


Fig. 158

Reaction
1. Keep finger away from the trigger to prevent an accidental discharge
2. Remove magazine by pressing on the Magazine catch
3. If the magazine cannot be removed, lock the slide back and try again, otherwise skip to step 3.
4. Rack slide several times to clear any remaining cartridges
5. Insert magazine
6. Tap on the bottom of the magazine
7. Rack the slide
8. Ready to fire

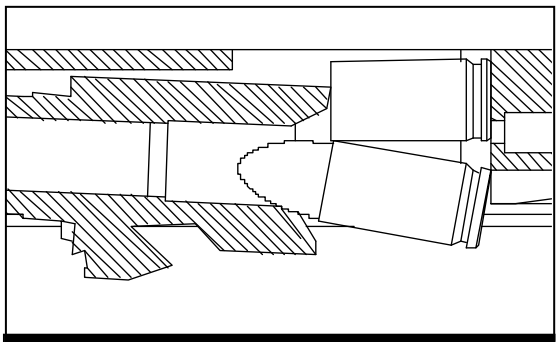


Fig. 159

ii. Failure to Eject, Failure to Feed, Failure to Fire, Failure to go into Battery

Failure to Eject (Fig. 159), Failure to Feed (Fig. 160), Failure to Fire (Fig. 161a) and Failure to go into Battery (Fig. 161b) can all be solved with the same method described below.

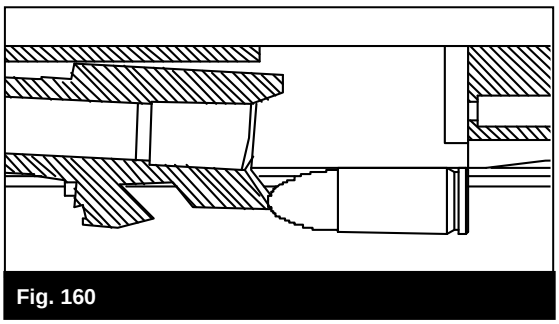


Fig. 160

Reaction
1. Keep finger away from the trigger to prevent an accidental discharge
2. Tap on the bottom of the magazine
3. Rack the slide, removing any casings or cartridges blocking the firearm
4. Ready to fire

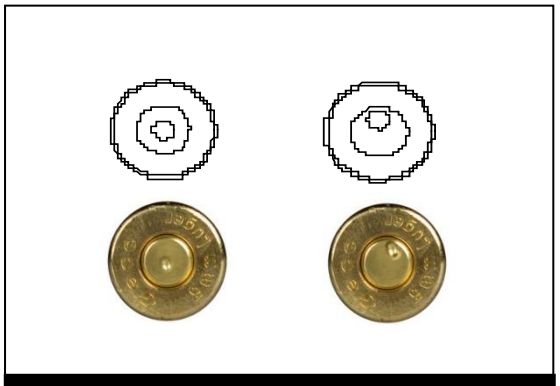


Fig. 161a Fig. 161b

v Conclusion

The GLOCK pistol implements multiple safety features that prevent unintended discharges even if subjected to unusual physical and environmental effects.
A non-modified, properly assembled and maintained pistol will not cause any material damage or personal injury when handled properly.