

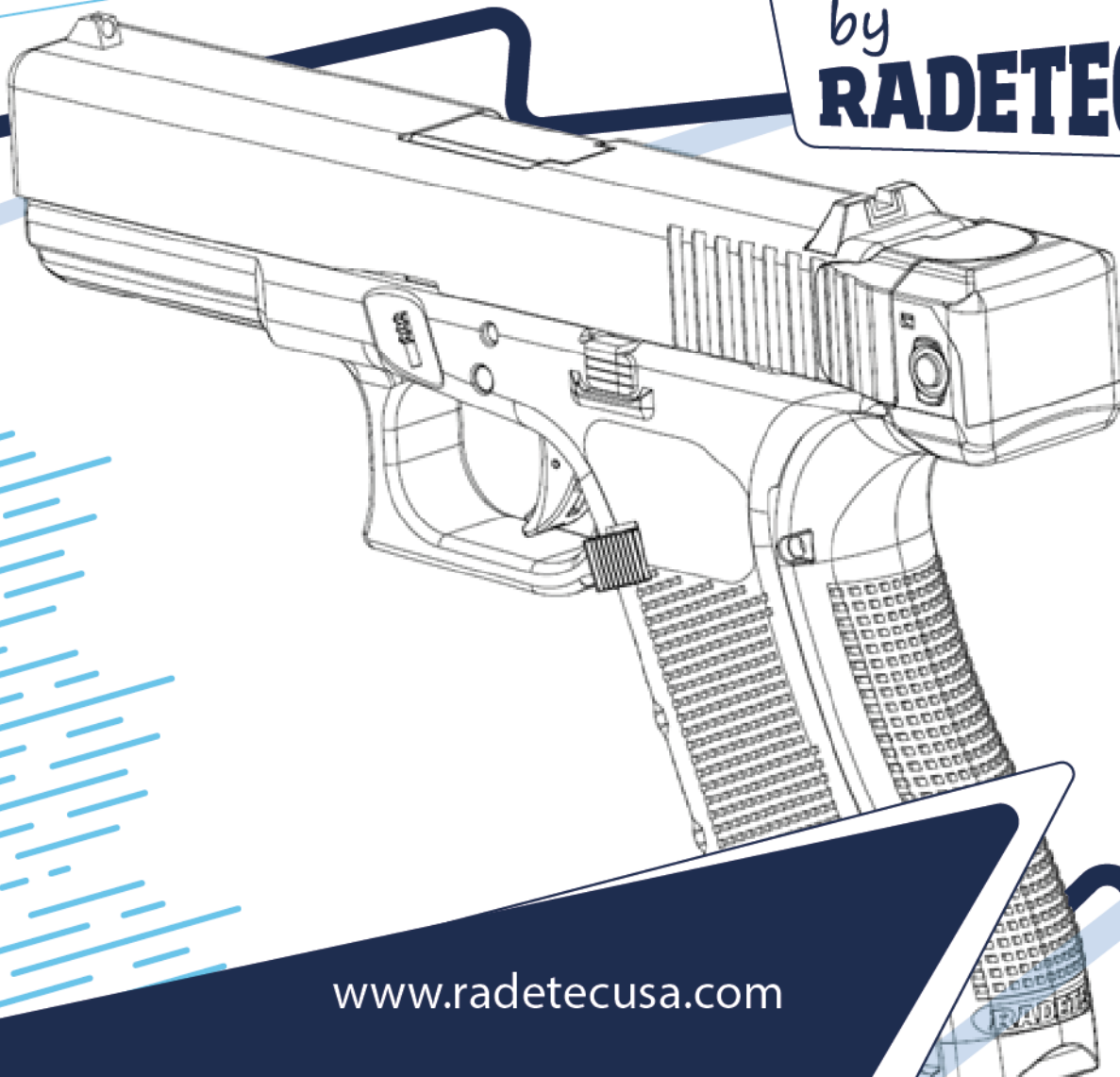
RADETEC 

RISC^{pro}

INSTALLATION AND USER MANUAL

**SMART MAGAZINE, SHOT COUNTER,
AND ROUND IN CHAMBER DETECTOR**

by
RADETEC



www.radetecusa.com



CARDINAL RULES OF SAFETY

ALWAYS TREAT ALL FIREARMS AS IF THEY WERE LOADED!
 NEVER ALLOW THE MUZZLE OF ANY FIREARM TO POINT AT ANYTHING YOU ARE NOT
 WILLING TO DESTROY.
 KEEP YOUR FINGER OFF THE TRIGGER UNTIL YOU ARE READY TO FIRE. DO NOT DEPEND
 ON ANY MECHANICAL OR ELECTRONIC DEVICE FOR YOUR SAFETY!
 ALWAYS MAKE SURE OF YOUR TARGET AND WHAT'S BEYOND IT.
 NEVER LEAVE A FIREARM UNATTENDED AROUND CHILDREN OR OTHER UNAUTHORIZED
 USERS.



READ THE INSTRUCTIONS AND WARNINGS IN THIS USER'S GUIDE CAREFULLY AND UNDERSTAND THEM BEFORE USING THIS DEVICE. IF THERE IS ANYTHING YOU DO NOT UNDERSTAND, CONTACT US AT contact@radetecusa.com.

WARNING: RISCpro is designed to function properly in its original condition. Do not alter or disassemble the device. Do not replace any parts unless you are factory-trained to do so and then use only original factory parts from RADE TECHNOLOGY CORP.

WARNING: Recognize the safety characteristics of the shooting facilities and the weapon you are using, RADETEC® devices do not replace in any case the procedures of safe handling of the weapon and the safety procedures of the shooting facilities.

WARNING: Any liability arising from incorrect installation, negligence, physical or material damages due to any use of the RISCpro not specified in this document will exclusively relate to owners and users of firearms.

This shooter's Guide is available at www.radetecusa.com/product/risc-pro/#manual.

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1. Introduction

RISCpro, made by RADETEC®, is an accessory for Glock Pistols that includes several unique advanced technologies to improve security and enhance usage of the firearm. (Figure 1)

- Round in chamber detection.
- Rounds in magazine counter.
- Shot Counter.
- Non-magazine detection.
- Color screen that shows information in real time.

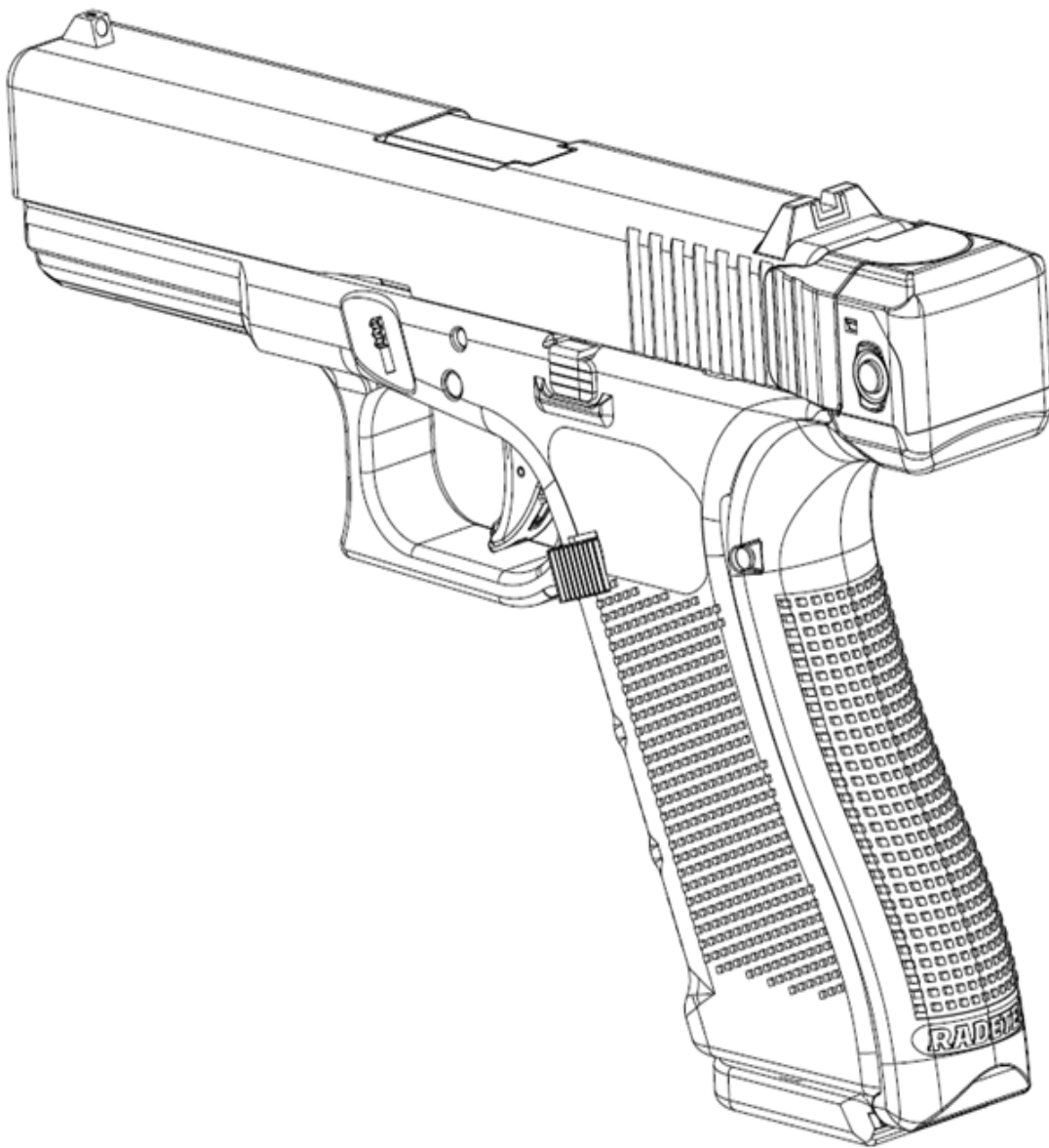


Figure 1: Glock pistol with RISCpro installed

2. Tech Specs

RISCpro is designed to be installed and used with selected Glock pistol models (see “3 Installation Requirements”).

Size and Weight

The original size and weight of the pistols are barely modified when installing the RISCpro.

Glock 17 Gen4. (Figure 2)

- G17 weight (w/o magazine): 22.5 oz (637 gr)
- G17 + RISCpro (w/o magazine): 25.3 oz (716 gr)

Glock 19 Gen4. (Figure 3)

- G19 weight (w/o magazine): 21.6 oz (600 gr)
- G19 + RISCpro (w/o magazine): 24.4 oz (680 gr)

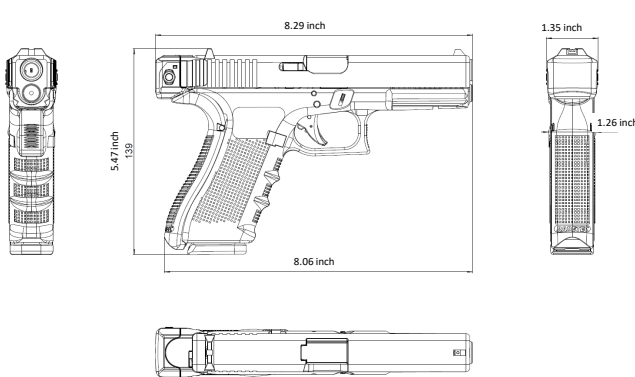


Figure 2: Size Glock 17 with RISCpro installed.

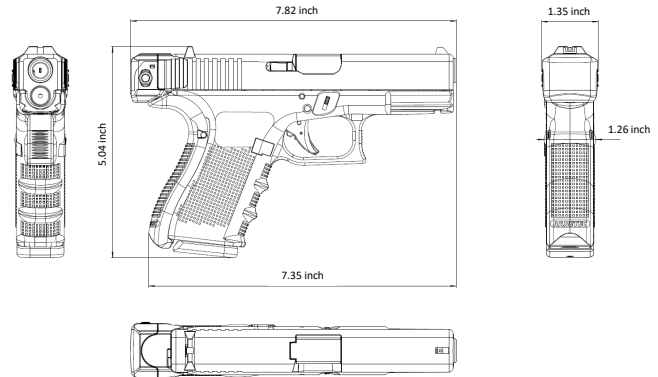


Figure 3: Size Glock 19 with RISCpro installed.

General Specs

- Non-removable rechargeable LiPO battery, 180mAh 3.7VDC
- Charging Voltage is 5VDC through a microUSB connector
- OLED Display: 0.95", 96 x 64 píxeles.
- Controls: 2 pushbuttons on both sides of the RISC Display
- Battery status LED indicator
- IP40
- Battery Life: 60 minutes with a screen time continuously on at maximum brightness. During normal use, the device can operate for several hours.
- Maximum number of shots RISCpro can count is 999,999.

2.1. RISCpro - Out of the Box

RISCpro comes in a case with all components arranged as shown below: (Table 1 / Figure 4)

A	Follower (x2).
B	RISC Display.
C	Magazine Insert (x2).
D	Extractor Plunger Assembly.
E	RISCpro Backstrap for G17 or G19 versions.
F	Assembly Tool & metal pins.
G	RISCpro Backplate.
H	RCD Coil.
I	RISCpro Trigger Group.
	Micro-USB cable.

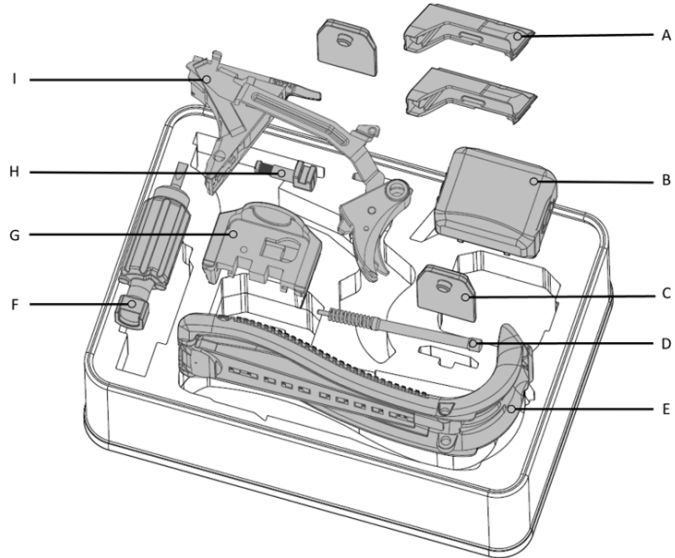


Table 1: RISCpro components.

Figure 4: RISCpro Box.

3. Installation Requirements

The RISCpro has been designed to work only with the **Glock pistols and their original magazines** listed below. (Table 2)

You can use the RISCpro box to store the original Glock parts that are going to be replaced. Installing the RISCpro does not require any modification to your pistol so you can always return your pistol to its original state by re-installing the original parts.

Modelo	Generation	Magazines
Glock 17 & 17 MOS	Gen4	17 rds. Magazine
Glock 19 & 19 MOS	Gen4	15 rds. Magazine

Table 2: List of compatible pistol models, generations and magazines

WARNING!

DO NOT USE THE RISCpro IN ANY PISTOL AND MAGAZINES OTHER THAN THE ONES FOUND IN TABLE 2!

DO NOT USE COMPONENTS OR PARTS FROM OTHER MANUFACTURERS, EVEN IF THEY ARE COMPATIBLE WITH YOUR GLOCK PISTOL.

DO NOT USE THE RISCpro UNLESS ALL COMPONENTS ARE PROPERLY INSTALLED ON THE PISTOL.

3.1. Ammunition

Use only factory 9mm Luger ammo in your pistol with the RISCpro installed.

WARNING!!

Use of dummy rounds can result in the RISCpro not detecting the Round in Chamber.

4. Important Safety Information

BEFORE USING THE RISCpro

READ THE INSTRUCTIONS AND WARNINGS IN THIS USER'S GUIDE CAREFULLY AND UNDERSTAND THEM BEFORE USING THIS DEVICE. IF THERE IS ANYTHING YOU DO NOT UNDERSTAND, CONTACT US AT contact@radetecusa.com.

4.1. General Safety Guidelines

SAFETY WARNING!

ALWAYS TREAT ALL FIREARMS AS IF THEY WERE LOADED!

NEVER ALLOW THE MUZZLE OF ANY FIREARM TO POINT AT ANYTHING YOU ARE NOT WILLING TO DESTROY.

KEEP YOUR FINGER OFF THE TRIGGER UNTIL YOU ARE READY TO FIRE. DO NOT DEPEND ON ANY MECHANICAL OR ELECTRONIC DEVICE FOR YOUR SAFETY!

RECOGNIZE THE SAFETY CHARACTERISTICS OF THE SHOOTING FACILITIES AND THE WEAPON YOU ARE USING, RADETEC® DEVICES DO NOT REPLACE IN ANY CASE THE PROCEDURES OF SAFE HANDLING OF THE WEAPON AND THE SAFETY PROCEDURES OF THE SHOOTING FACILITIES.

ALWAYS BE SURE OF YOUR TARGET AND WHAT'S AROUND AND BEYOND IT!

NEVER LEAVE A FIREARM UNATTENDED AROUND CHILDREN OR OTHER UNAUTHORIZED USERS.

FOLLOW THE SAFETY INSTRUCTIONS PROVIDED BY THE FIREARM MANUFACTURER

ALWAYS WEAR PROTECTIVE GLASSES

ALWAYS MAKE SURE THE PISTOL IS UNLOADED! RACK THE SLIDE A COUPLE TIMES TO EXTRACT ANY ROUND IN CHAMBER.

CONFIRM VISUALLY, AND WITH YOUR FINGER, THE CHAMBER IS EMPTY!

MAKE SURE PISTOL IS UNLOADED EVEN IF THE ROUND IN CHAMBER DETECTOR TELLS YOU THE CHAMBER IS EMPTY!

ALWAYS WEAR SAFETY GOGGLES WHEN WORKING WITH FIREARMS.

DO NOT USE THE RISCpro WITHOUT FIRST CALIBRATING THE CHAMBER.

IF ANY ERROR WARNING IS DETECTED, DO NOT USE THE RISCpro UNTIL THE ISSUE IS RESOLVED.

DANGER!

THE RISCpro DOES NOT NOTIFY IF THE CALIBRATION HAS FAILED. PAY EXTREME ATTENTION TO THIS CHAPTER TO ENSURE THE CHAMBER SENSOR IS PROPERLY CALIBRATED. FAILING TO DO SO MAY PUT YOU OR OTHERS IN DANGER.

WARNING!

DO NOT USE THE RISCpro IN ANY PISTOL OTHER THAN GLOCK 17 OR GLOCK 19, BOTH GEN4.

DO NOT USE THE RISCpro IN ANY MAGAZINE OTHER THAN GLOCK 17 OR GLOCK 19 ORIGINAL MAGAZINES IN GOOD CONDITION.

DO NOT USE COMPONENTS OR PARTS FROM OTHER MANUFACTURERS, EVEN IF THEY ARE COMPATIBLE WITH YOUR GLOCK PISTOL.

DO NOT USE THE RISCpro UNLESS ALL COMPONENTS ARE PROPERLY INSTALLED ON THE PISTOL.

USE OF DUMMY ROUNDS CAN RESULT IN THE RISCpro NOT DETECTING THE ROUND IN CHAMBER.

BEFORE PULLING THE TRIGGER, ENSURE PROPER CONTACT BETWEEN THE RISC DISPLAY AND THE BACKSTRAP CONTACTS. SLIDE MUST BE FULLY RELEASED AND THE RISC DISPLAY'S SCREEN SHOULD NOT SHOW "SLIDE IS OPEN".

BATTERY AND CHARGING WARNING!

ENSURE THAT THE RISC DISPLAY BATTERY LEVEL IS ABOVE 25% CHARGE.

ALWAYS USE PREMIUM QUALITY CABLES, POWERBANKS AND WALL CHARGERS.

USE ALWAYS 5VDC POWER BANKS AND WALL CHARGERS, WITH AN OUTPUT OF AT LEAST 500mA.

THE RISC DISPLAY CONTAINS A LITHIUM-ION BATTERY. TO PREVENT THE POSSIBILITY OF PERSONAL INJURY, PRODUCT DAMAGE, OR OTHER PROPERTY DAMAGE, AVOID EXPOSURE TO EXTREME HEAT, AND STORE THE DEVICE OUT OF DIRECT SUNLIGHT IN AN DRY PLACE.

TO AVOID DECREASING THE BATTERY LIFE CYCLE, DO NOT STORE THE RISC DISPLAY MOUNTED ON THE CLOSED SLIDE. REMOVE THE RISC DISPLAY FROM THE SLIDE AND POWER IT OFF.

CALIBRATE THE CHAMBER EVERYTIME THE RISC DISPLAY IS MOUNTED TO THE SLIDE, OR IF THE BATTERY DIES (LET THE BATTERY DIE IS NOT ADVISABLE).

DURING LONG PERIOD STORAGE, KEEP THE BATTERY AT 50% CHARGE TO AVOID BATTERY LIFE AND LIFE CYCLE DEGRADATION.

NEVER STORE A LOADED FIREARM!

RISCpro IS DESIGNED TO FUNCTION PROPERLY IN ITS ORIGINAL CONDITION. DO NOT ALTER OR DISASSEMBLE THE DEVICE. DO NOT REPLACE ANY RISCpro PARTS UNLESS YOU ARE FACTORY-TRAINED TO DO SO AND THEN USE ONLY ORIGINAL FACTORY PARTS FROM RADE TECHNOLOGY CORP.

ANY LIABILITY ARISING FROM NEGLIGENCE, PHYSICAL OR MATERIAL DAMAGES DUE TO ANY USE OF THE RISCpro NOT SPECIFIED IN THIS DOCUMENT WILL EXCLUSIVELY RELATE TO OWNERS AND USERS OF FIREARMS.

ENVIROMENT WARNING!

IF MOISTURE IS PRESENT, TO PREVENT CORROSION OR DAMAGE, THOROUGHLY DRY THE USB PORT OF THE BACKSTRAP AND THE SURROUNDING AREA BEFORE CHARGING.

RISCpro IS NOT WATERPROOF, AVOID WET ENVIROMENTS, RAINY WEATHER, WATER SPLASHES, AND ANY TYPE OF MOISTURE THAT COULD GET INSIDE THE DEVICE. NOT FOLLOWING THIS WARNING MAY DAMAGE THE RISCpro

MAINTENANCE WARNING!

FOLLOW BASIC FIREARM SAFETY GUIDELINES BEFORE PERFORMING ANY MAINTENANCE OR CLEANING.

BEFORE PERFORMING ANY MAINTENANCE OR CLEANING UNLOAD THE FIREARM, REMOVE THE MAGAZINE, VISUALLY VERIFY THERE IS NO AMMUNITION LEFT IN THE CHAMBER. ENSURE THERE IS NO AMMUNITION IN THE PISTOL OR THE IMMEDIATE AREA.

IT IS RECOMMENDED TO USE PROTECTIVE GLASSES WHEN PERFORMING ANY MAINTENANCE OR CLEANING.

IN CASE YOU DETECT ANY DAMAGED CONTACT, OR DAMAGE IN THE BACKSTRAP'S COMMUNICATION STRIP, DO NOT USE THE DEVICE.

WHEN CLEANING OR PERFORMING MAINTENANCE, ENSURE THERE IS NO AMMUNITION IN THE PISTOL OR THE IMMEDIATE AREA.

DO NOT LUBRICATE OR LEAVE OIL RESIDUE INSIDE THE FIRING PIN HOUSING OR THE MAGAZINE WELL. THESE AREAS, ALONG WITH THE CHAMBER INNER BACK SIDE, SHOULD BE ALL DRY BEFORE USING THE PISTOL AGAIN.

4.2. Glock Schematic

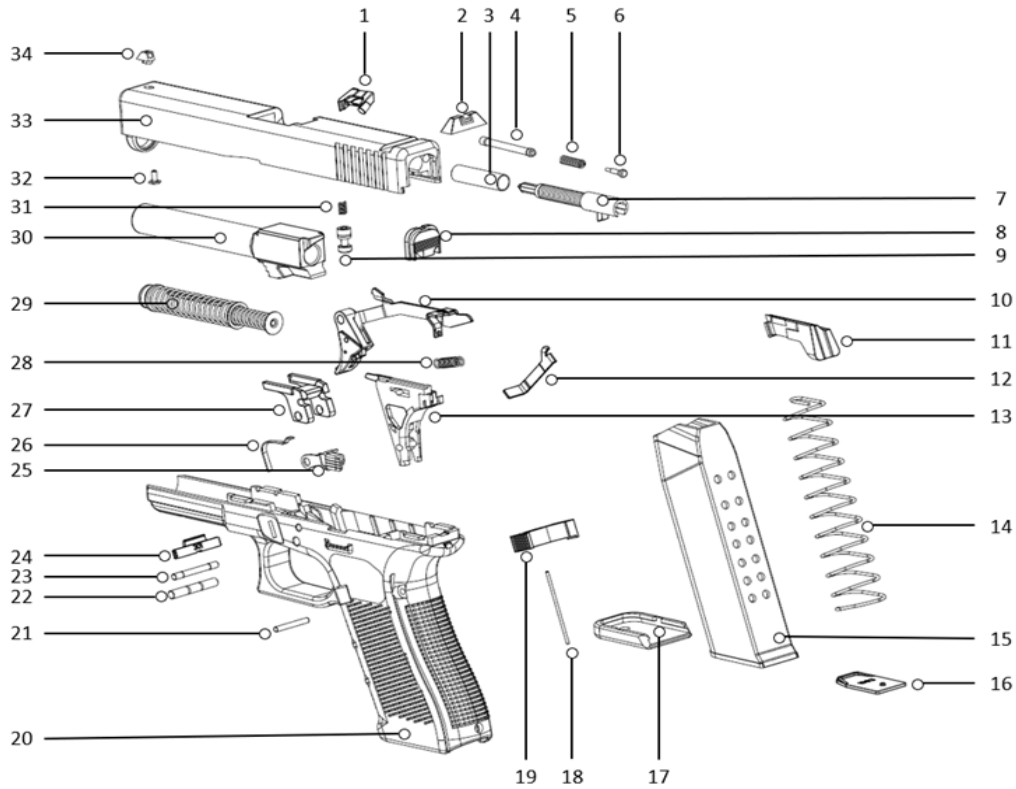


Figure 5: Glock pistol schematic.

1	Extractor.	18	Magazine Catch Spring.
2	Rear Sight.	19	Magazine Catch.
3	Firing Pin Channel Liner.	20	Pistol Frame.
4	Extractor Depressor Plu.	21	Trigger Housing Pin.
5	Extractor Depressor Plunger Spring.	22	Trigger Pin.
6	Spring Loaded Bearing.	23	Locking Block Pin.
7	Firing Pin Assembly.	24	Slide Lock.
8	Slide Plate Cover.	25	Slide Stop Lever.
9	Firing Pin Safety.	26	Slide Lock Spring.
10	Trigger w/ Trigger Bar.	27	Locking Block.
11	Follower.	28	Trigger Spring.
12	Connector.	29	Recoil Spring Assembly.
13	Trigger Housing w/ Ejector.	30	Barrel.
14	Magazine Spring.	31	Firing Pin Safety Spring.
15	Magazine Body.	32	Front Sight Screw.
16	Magazine Insert.	33	Slide.
17	Magazine Floor Plate.	34	Front Sight.

Table 3: Names of all parts of a Glock pistol.

5. RISCpro Components

The RISCpro is formed by 3 main assemblies: (Figure 6)

- Assembly 1 → Round in Chamber Detector (RCD)
- Assembly 2 → Smart Magazine (Formed by 3 subassemblies)
 - 2a Trigger Group Subassembly.
 - 2b Backstrap Subassembly.
 - 2c Magazine Assembly
- Assembly 3 → RISC Display.

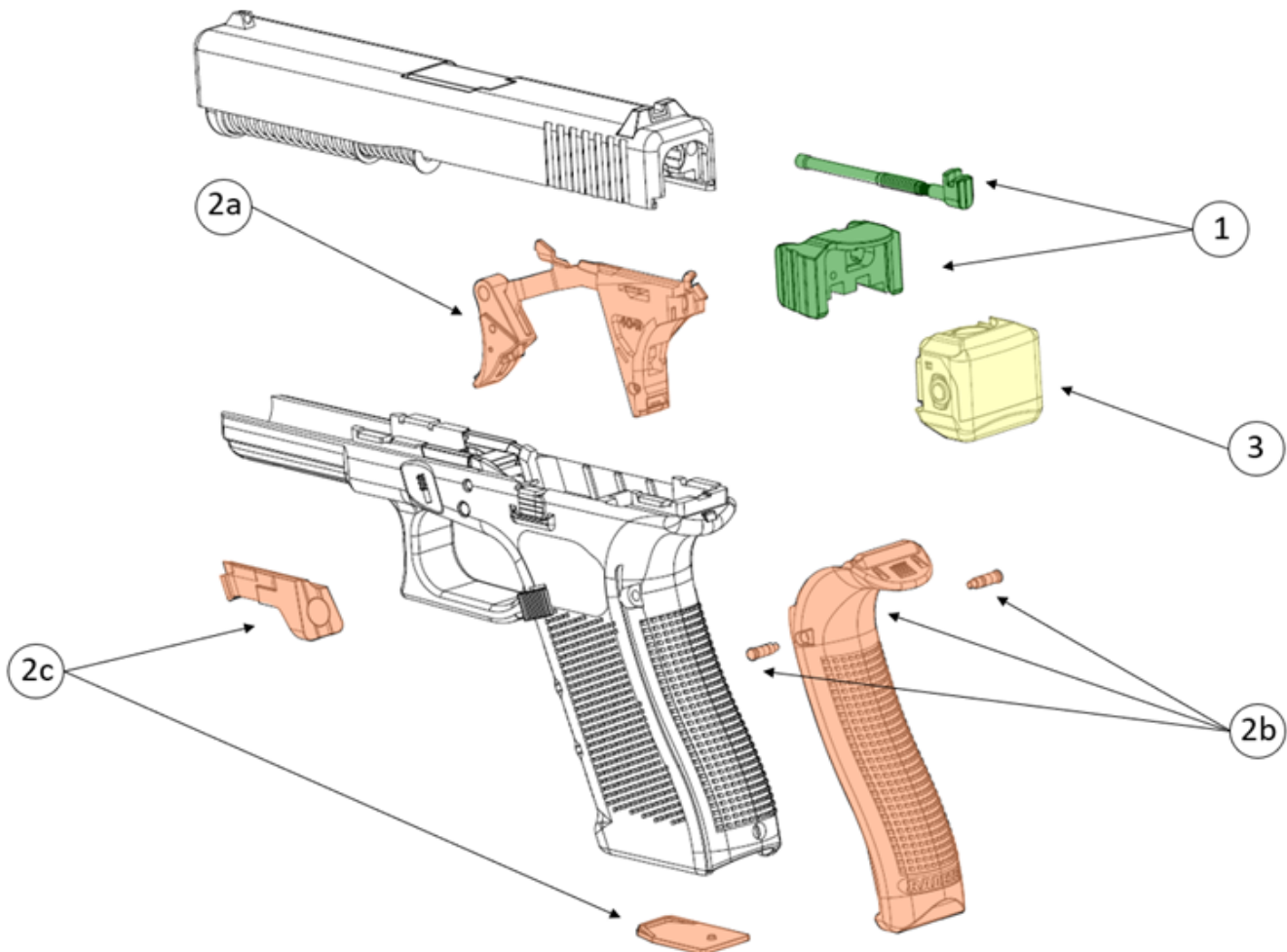


Figure 6: Assemblies and Subassemblies of the RISCpro.

5.1. Round in Chamber Detector (RCD)

This assembly is installed inside the slide (Figure 7), it allows detection of rounds inside the chamber when the slide is released. It consists of 4 parts: (Figure 8 / Table 4)



Figure 7: Location of the RCD inside the pistol slide.

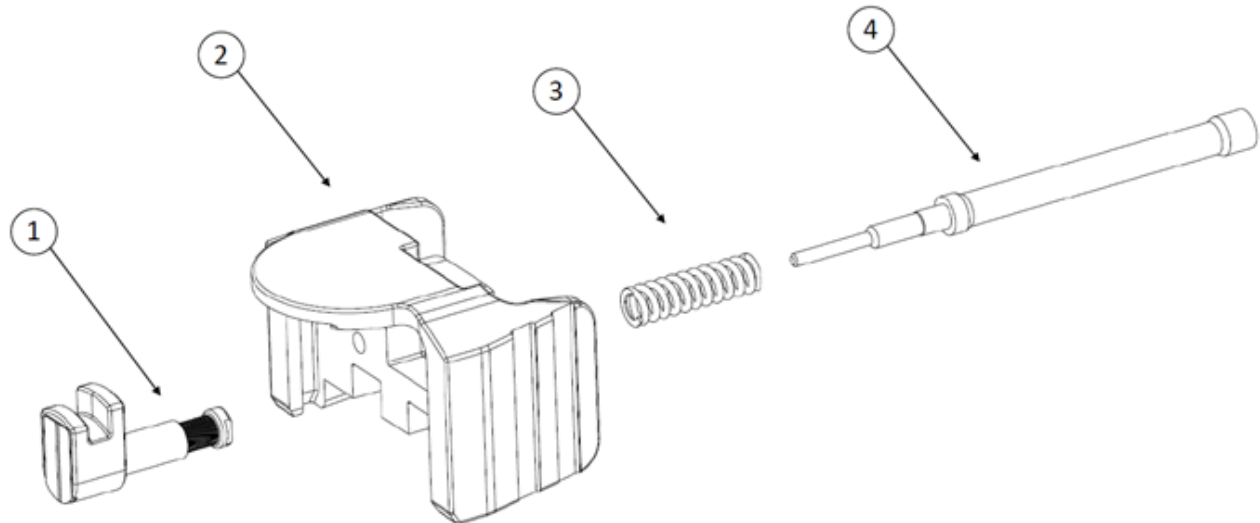


Figure 8: RCD parts schematic.

1	RCD Coil.
2	RISCpro Backplate.
3	Extractor Depressor Plunger Spring.
4	RISCpro Extractor Depressor Plunger.

Table 4: List of RCD parts.

5.2. Smart Magazine

This assembly monitors the ammunition available in the magazine in real time, it consists of 3 parts: (Figure 9)



Figure 9: Location of the Smart Magazine inside the pistol frame.

2a. Trigger Group subassembly

This subassembly completely replaces the original Glock Trigger Group. (Figure 10)

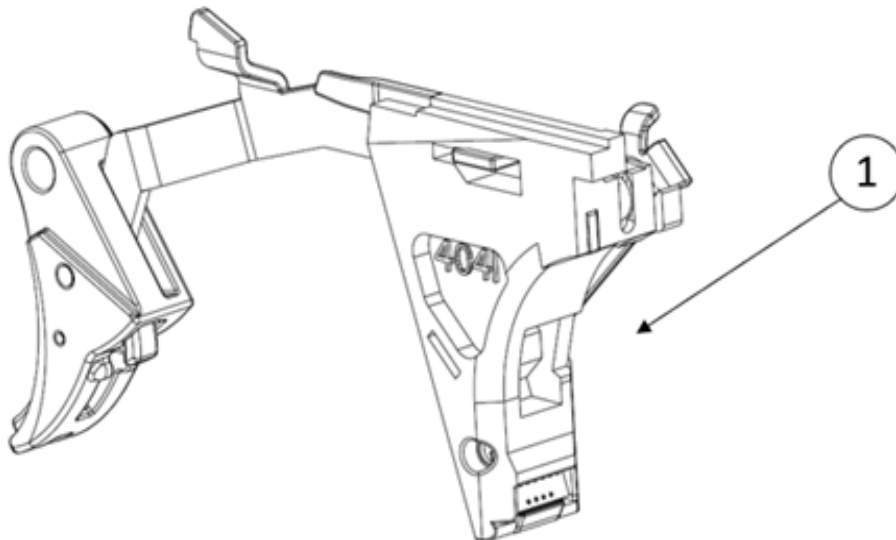
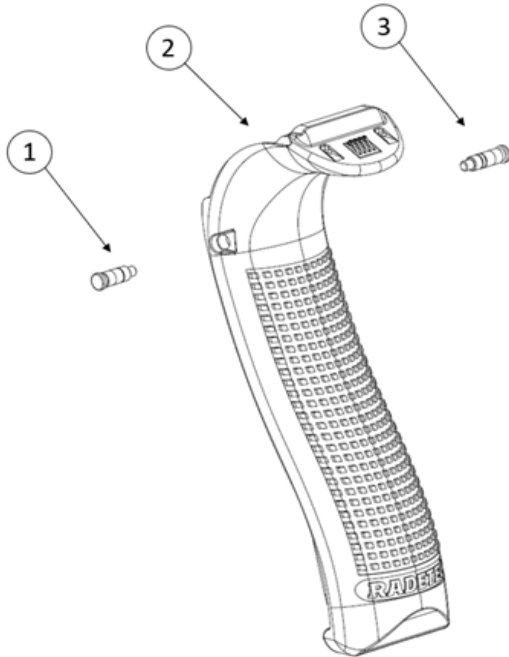


Figure 10: RISC Pro Trigger Group Subassembly.

2b. Backstrap Subassembly

This subassembly is equivalent to a medium-sized Glock backstrap. To secure it to the frame it comes with 2 metal pins. (Figure 11 / Table 5). You can find the Metal Pins in the Assembly Tool.



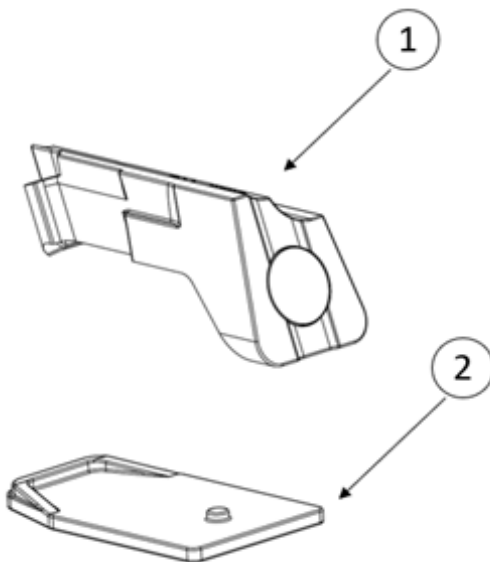
1	One Notch Pin.
2	RISCpro Backstrap.
3	Two Notch Pin.

Figure 11: RISC Pro Backstrap Subassembly schematic.

Table 5: List of Bakstrap Subassembly parts.

2c. Magazine Assembly

This subassembly includes a RISCpro follower to replace the original magazine’s follower as well as a red colored magazine insert to replace the original insert and allow for an easy differentiation. (Figure 12 / Tabla 6)



1	RISCpro Follower.
2	RISCpro insert (Red Colored)

Figure 12: Magazine parts.

Table 6: List of Magazine Assembly parts.

5.3. RISC Display

This component serves as the RISCpro's information interface. It houses the battery and the microcontroller, where all data is processed, displayed and stored. The recorded information cannot be sent out anywhere, as the device does not have any communication module. The RISC Display is secured to the back of the slide using the backplate (Figure 13 / Figure 14).



Figure 13: Location of the RISC Display in the pistol.

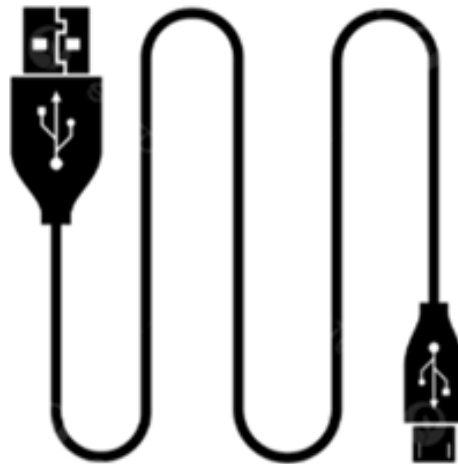


Figure 14: RISC Display.

5.4. Charging the Device

The RISCpro has a non-removable rechargeable battery inside the RISC module. The battery is recharged through a micro-USB cable, included in the box (Figure 15).

USB-A Connector, Only connect to 5VDC Power Supply.



micro-USB cable, connector to backstrap female connector.

Figure 15: Provided microUSB cable.

WARNING!

**ALWAYS USE PREMIUM QUALITY CABLES, POWERBANKS AND WALL CHARGERS.
USE ALWAYS 5VDC POWER BANKS AND WALL CHARGERS, WITH AN OUTPUT OF AT LEAST
500mA.**

**THE RISC DISPLAY CONTAINS A LITHIUM-ION BATTERY. TO PREVENT THE POSSIBILITY OF
PERSONAL INJURY, PRODUCT DAMAGE, OR OTHER PROPERTY DAMAGE, AVOID EXPOSURE TO
EXTREME HEAT, AND STORE THE DEVICE OUT OF DIRECT SUNLIGHT IN AN DRY PLACE.
IF MOISTURE IS PRESENT, TO PREVENT CORROSION OR DAMAGE, THOROUGHLY DRY THE USB
PORT AND THE SURROUNDING AREA BEFORE CHARGING.**

**RISCpro IS NOT WATERPROOF, AVOID WET ENVIROMENTS, RAINY WEATHER, WATER
SPLASHES, AND ANY TYPE OF MOISTURE THAT COULD GET INSIDE THE DEVICE. NOT
FOLLOWING THIS WARNING MAY DAMAGE THE RISCpro.**

Charging Secuence

1. Take out the magazine. Close the Slide and connect the provided cable to a 5VDC power source (Wall charger, PowerBank).

WARNING!

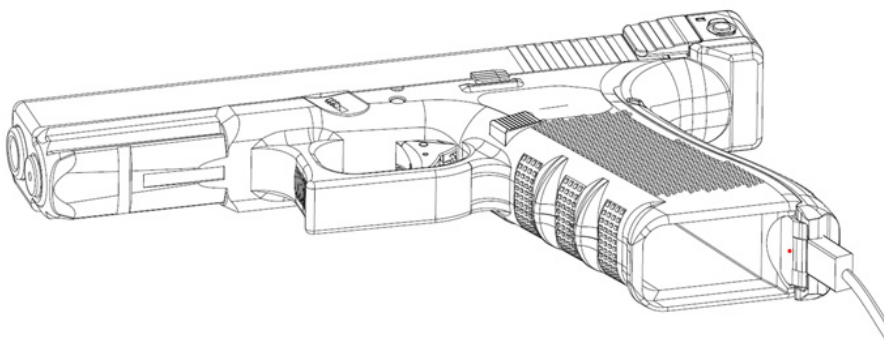
**MAKE SURE PISTOL IS UNLOADED! RACK THE SLIDE A COUPLE TIMES TO EXTRACT ANY ROUND
IN CHAMBER.**

CONFIRM VISUALLY, AND WITH YOUR FINGER, THE CHAMBER IS EMPTY!

2. Connect the microUSB connector of the cable to the Backstrap terminal.

3. Check inside the magazine well to confirm the charger's LED is solid red (Figure 16 / Figure 17).

NOTE: *Ensure proper contact between the RISC Display and the Backstrap contacts. Slide must be fully released.*



MicroUSB plugged in, RISC
Display mounted, Slide fully
released.



Figure 16: Charging the RISCpro.

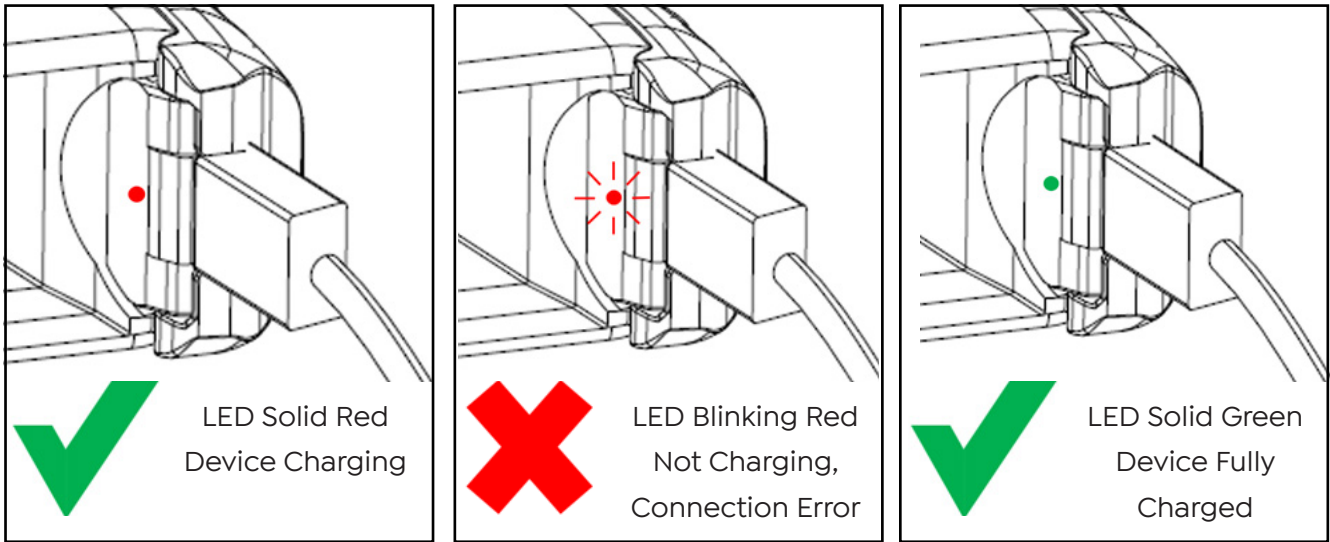


Figure 17: Different LED charging status.

4. When the LED status turns green the device is fully charged, you may unplug the cable.

WARNING!

TO AVOID DECREASING THE BATTERY LIFE CYCLE, DO NOT STORE THE RISC DISPLAY MOUNTED ON THE CLOSED SLIDE. REMOVE THE RISC DISPLAY FROM THE SLIDE AND POWER IT OFF. (SEE “7.4 POWER ON/OFF”).

NOTE: Battery life cycle refers to the amount of charges and discharges a battery can perform over its usable lifespan.

RISC Display Battery Status

The battery status icon is located in the upper right corner of the screen. (Figure 18 / Table 7).

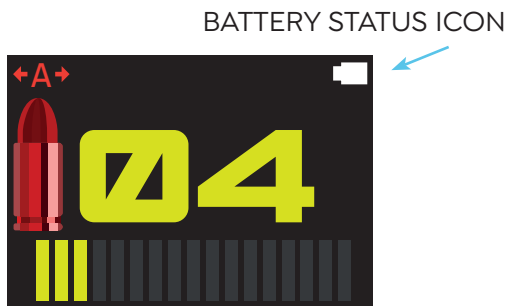


Figure 18: Location of the battery status icon

	Battery fully charged.
	Battery 75% charged.
	Battery 50% charged.
	Battery 25% charged.
	Critical battery level. Immediate charging is advised to avoid damaging the battery and shortening its battery life.

Table 7: Different battery status icons.

6. RISCpro Installation

6.1. Round in Chamber Detector (RCD) Assembly

WARNING!

MAKE SURE PISTOL IS UNLOADED! RACK THE SLIDE A COUPLE TIMES TO EXTRACT ANY ROUND IN CHAMBER.

CONFIRM VISUALLY, AND WITH YOUR FINGER, THE CHAMBER IS EMPTY!

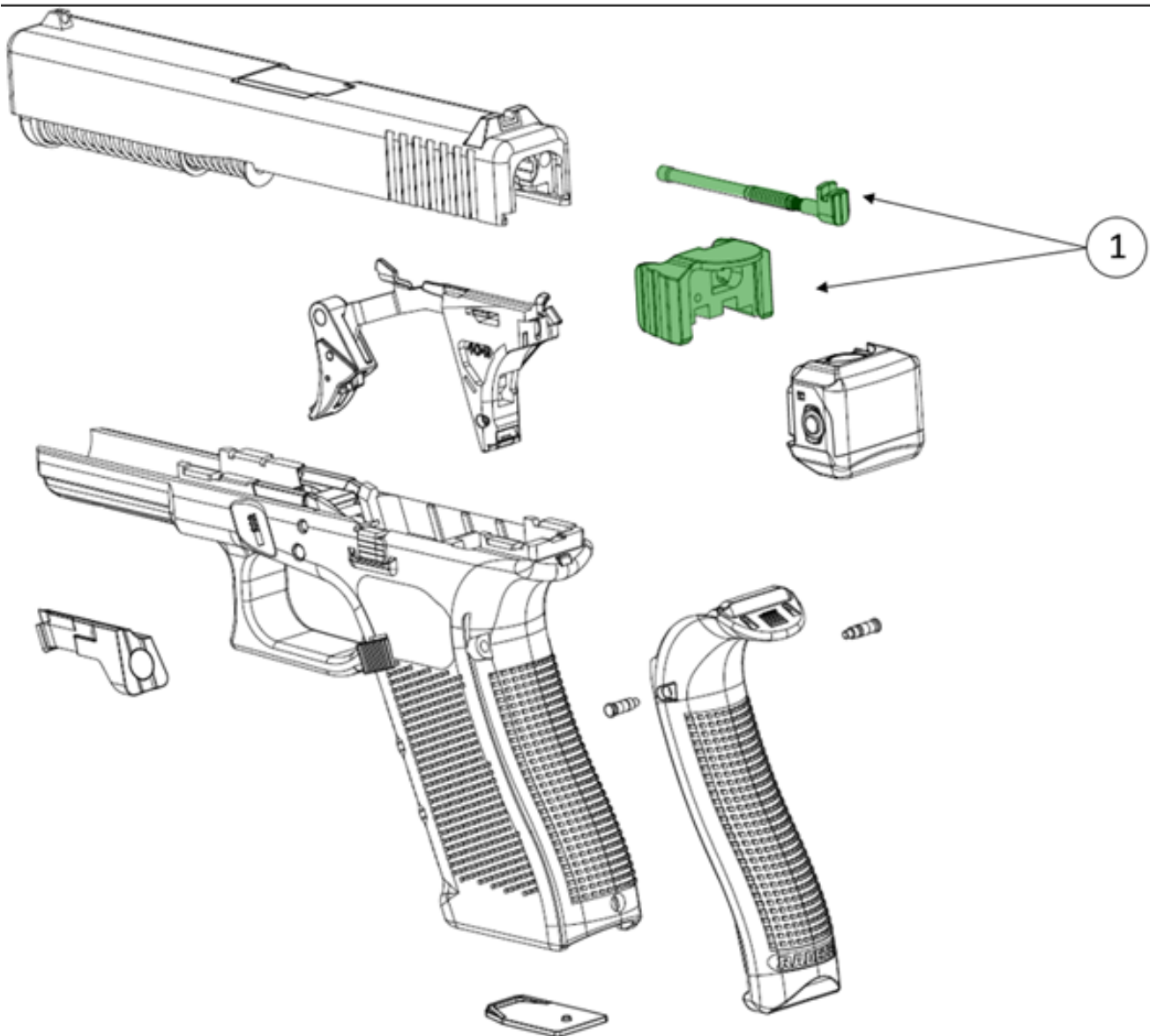


Figure 19: RCD Assembly schematic.

1. Remove the pistol's slide following the manufacturer's instructions. Once removed, take out the recoil spring assembly and barrel (Figure 20).

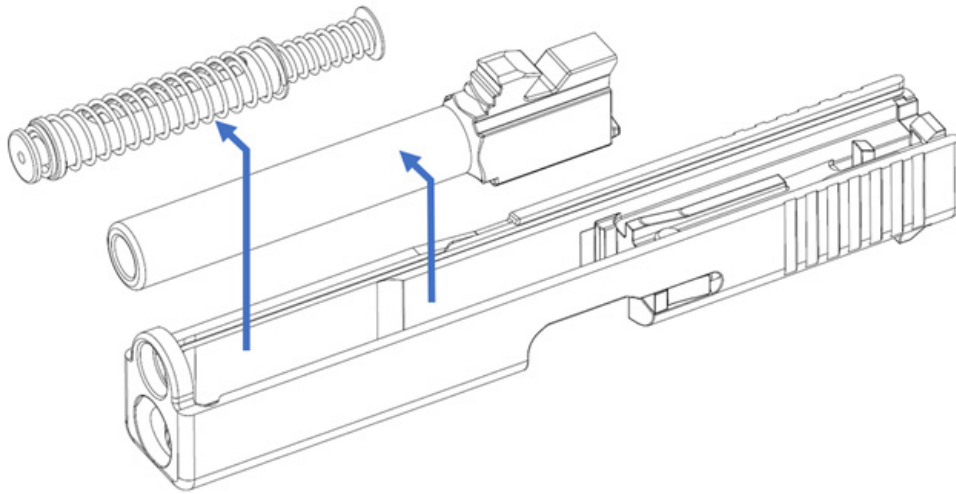


Figure 20: Recoil Spring Assembly and Barrel.

2. Remove Glock Slide Plate Cover.

NOTE: It is recommended to use the Glock Punch Tool supplied with the Beavertail backstraps (Figure 21). You can find it inside your Glock pistol case.

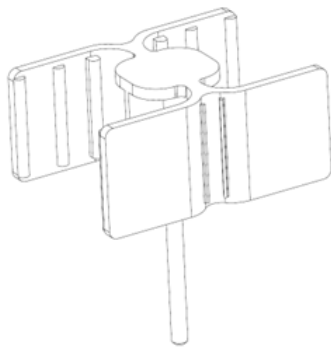


Figure 21: Glock Punch Tool.

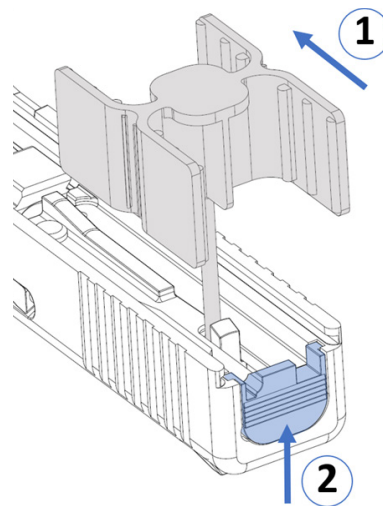


Figure 22: Step sequence for removing the Slide Plate Cover.

Press the Glock Punch Tool as shown in (Figure 22, Step 1) to release the tension of the Firing Pin Assembly. Press until the black portion of the Firing Pin Spacer Sleeve is not visible anymore.

While holding the Glock Punch Tool, remove the Slide Plate Cover from its housing (Figure 22, Step 2)

NOTE: Release the Firing Pin Assembly tension slowly, to avoid ejecting the piece.

3. Remove all parts inside the extractor housing: the Extractor Depressor Plunger, the Extractor Depressor Plunger Spring and the Spring Loaded Bearing (Figure 23).

NOTE: Store those Glock parts to be able to restore the firearm to its original condition in the future.

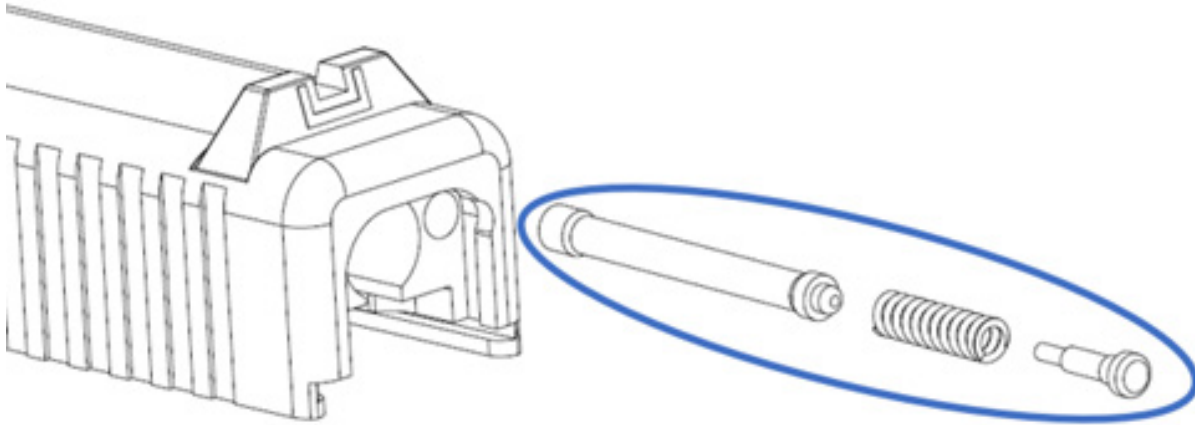


Figure 23: Extractor Depressor Plunger, Extractor Depressor Plunger Spring, and Spring Loaded Bearing.

NOTE: Ensure the Extractor is still in place, as it may shift when the tension is released.

4. With the Firing Pin Spacer Sleeve uncompressed (Figure 24), slightly insert the RISCpro Backplate into the Slide Plate Cover housing (Figure 25).

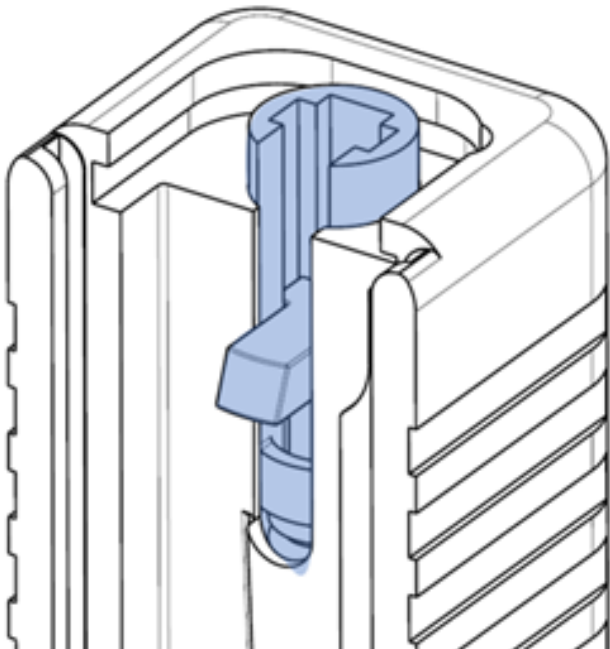


Figure 24: Firing Pin Assembly with its uncompressed Firing Pin Spacer Sleeve standing out of the Slide.

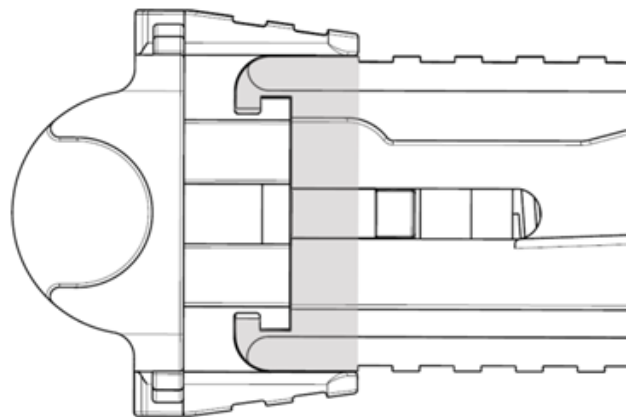


Figure 25: RISCpro backplate mounting slots.

Once the RISCpro Backplate is half way inserted, push back the Firing Pin Assembly with the Glock Punch Tool (Figure 26, Step 1). Press until the black portion of the Firing Pin Spacer Sleeve is not visible anymore. Now, insert the RISCpro Backplate all the way into the Slide Plate Cover housing (Figure 26, Step 2).

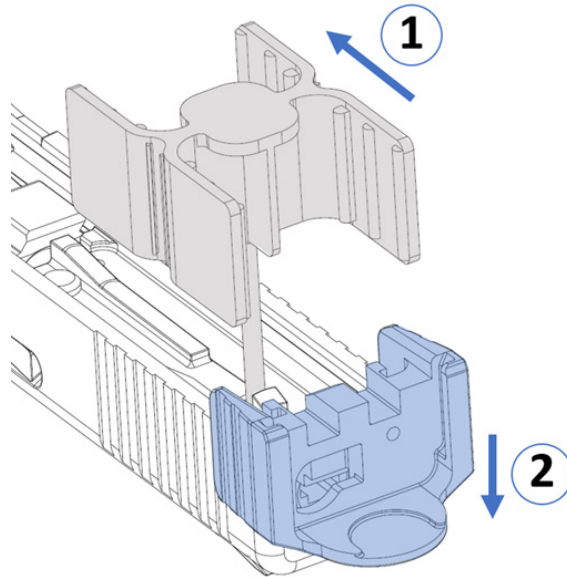


Figure 26: Pushing back the Firing Pin Assembly allows the Backplate to settle into the slide, when the tension is released the Firing Pin Spacer Sleeve will help to hold the Backplate in place.

Once fully inserted, check if the RISCpro Backplate is fixed and secured (Figure 27).

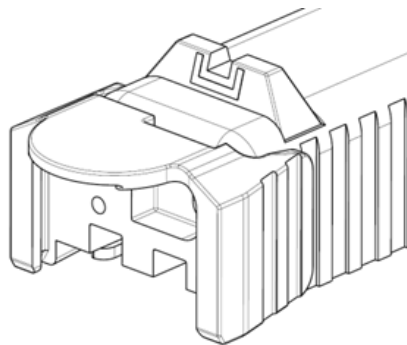


Figure 27: RISC Pro Backplate in place.

NOTE: Make sure, when you insert the Backplate, that the Firing Pin Spacer Sleeve is resting in the circular groove of the Backplate.

WARNING!

Apply force to the RISCpro Backplate in the disassembly direction and verify that it cannot be removed from the slide.

5. Insert the RISCpro Extractor Plunger Assembly into the Extractor housing (Figure 28).

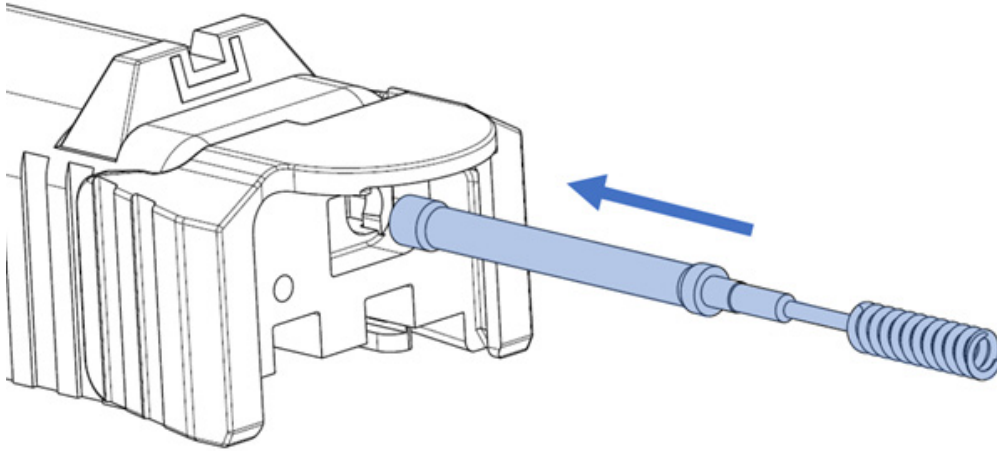


Figure 28: Direction to follow to insert the RISCpro Extractor Plunger Assembly.

NOTE: Ensure the Extractor is still in place, as it may shift when the tension is applied (Figure 29).

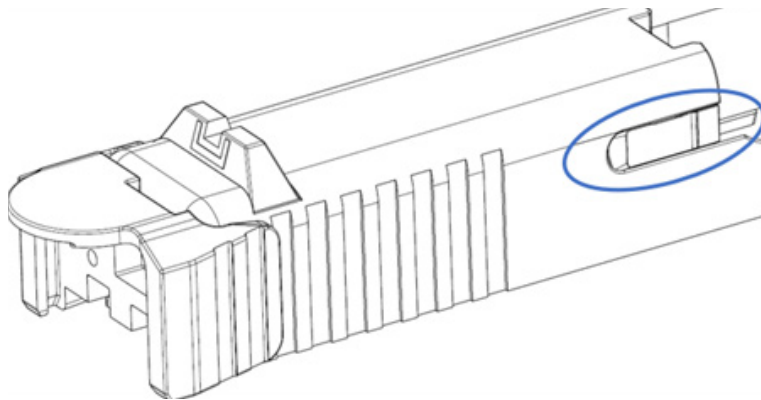


Figure 29: Correct position of the Extractor.

6. Once the RISCpro Extractor plunger Assembly is in the Extractor housing, insert the RCD Coil into the extractor housing (Figure 30).

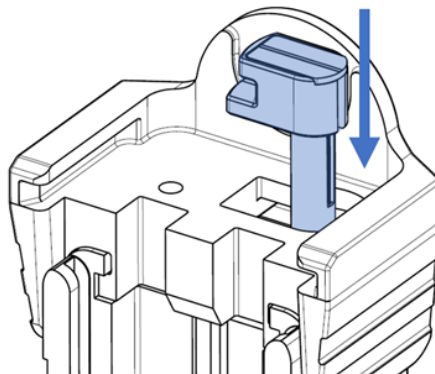


Figure 30: Correct RDC Coil assembly direction.

7. Use the provided RISCpro Assembly Tool to push the RDC Coil into the housing, pay attention to the position of the Assembly Tool before push it in (see Figure 31).

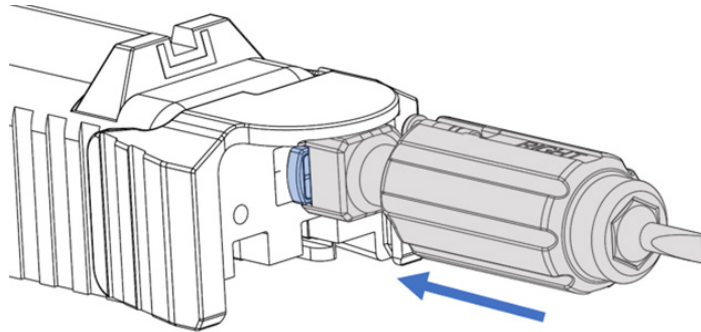


Figure 31: Positioning and direction of the Assembly Tool for RDC coil assembly.

NOTE: Make sure the RCD Coil is fully inserted before locking it.

When pressing the Assembly Tool, rotate the RDC Coil 90° clockwise (Figure 32).

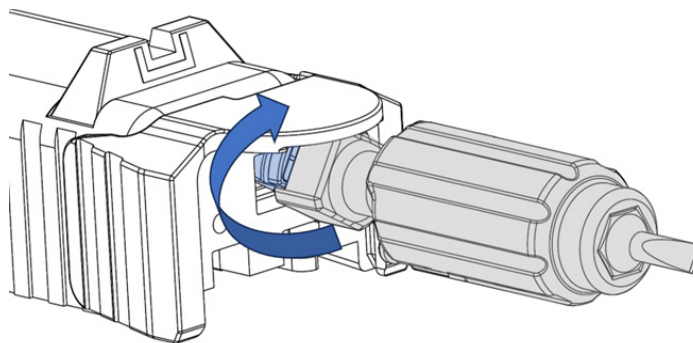


Figure 32: Press the Tool and rotate it 90° clockwise to secure the RDC Coil into position.

NOTE: Verify that the RDC Coil is correctly placed into the RISCpro Backplate (see Figure 33).

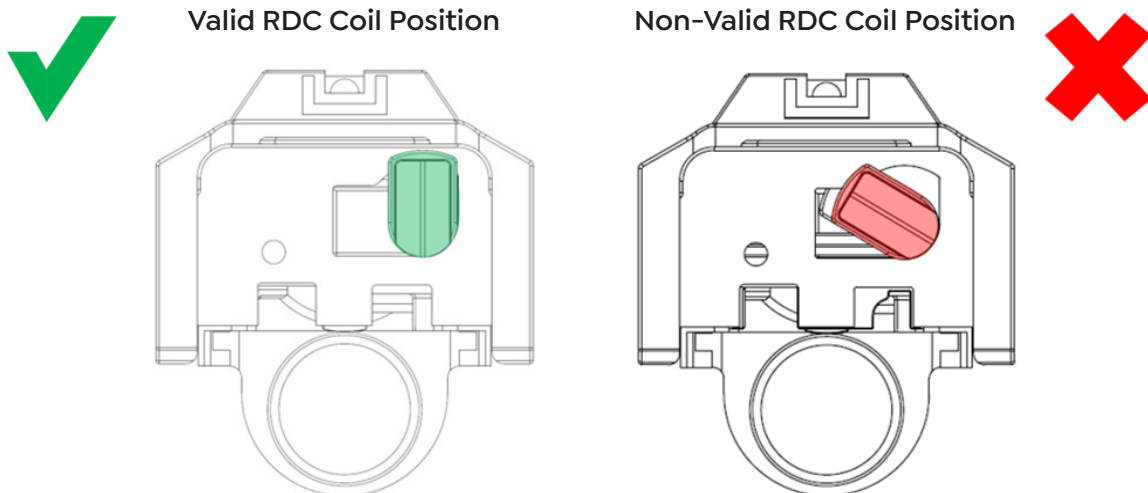


Figure 33: Valid and Non-Valid positions of the RDC Coil inside the Backplate.

8. Insert the Recoil Spring Assembly and Barrel into position to complete the RDC Assembly (Figure 34).

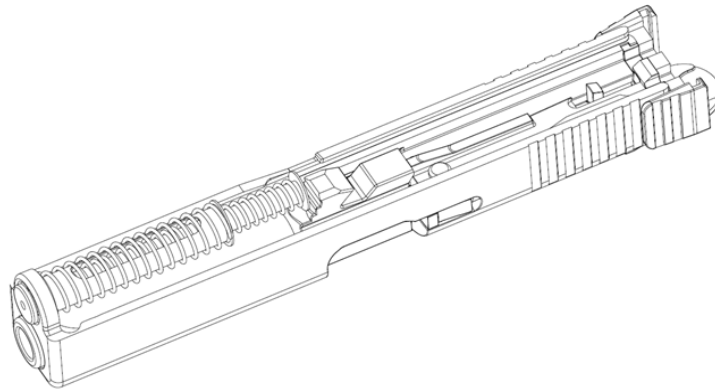


Figure 34: RDC Assembly into the Slide completed.

9. CORRECT ASSEMBLY VERIFICATIONS

Verify that, when pushed down as shown in Figure 35 the Backplate cannot be removed from the Slide.

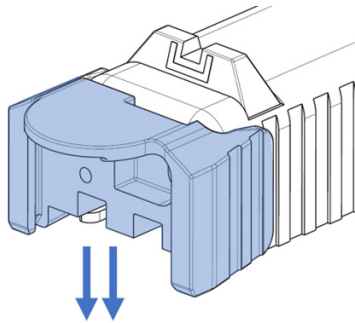


Figure 35: Direction to apply force to verify the Backplate is properly seated.

Verify that, when pressing the Firing Pin Safety, the Firing Pin can be moved slightly (Figure 36).

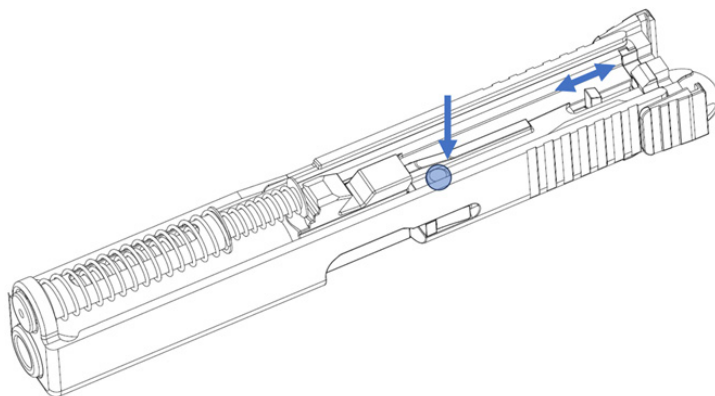


Figure 36: While pressing the Firing Pin Safety the Firing Pin has to be able to move freely for a short length.

Verify the Extractor is indeed in place (Figure 37).

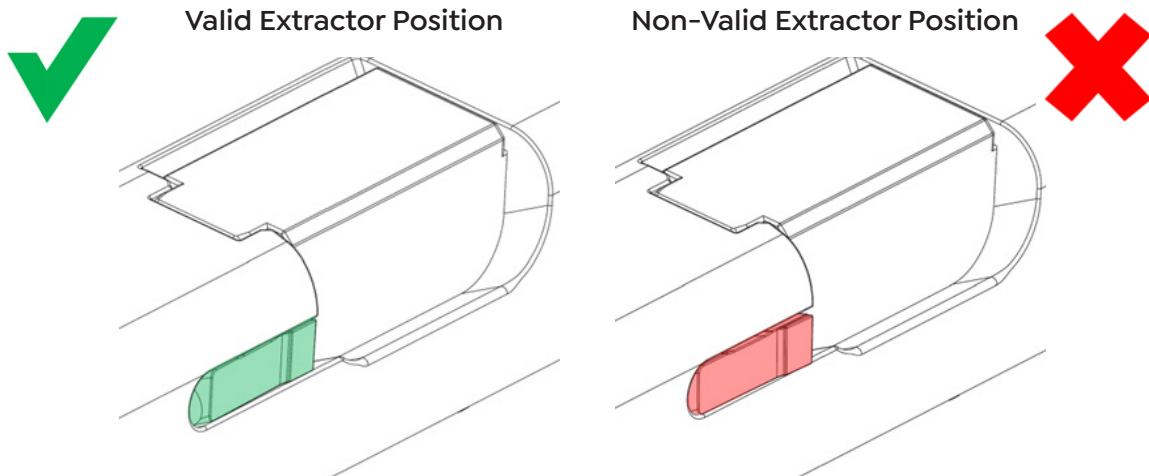


Figure 37: Valid and Non-Valid positions for the Extractor.

6.2. Smart Magazine Assembly

The Smart Magazine Assembly requires of 6 parts being installed into the pistol frame and into the magazine body (Figure 38).

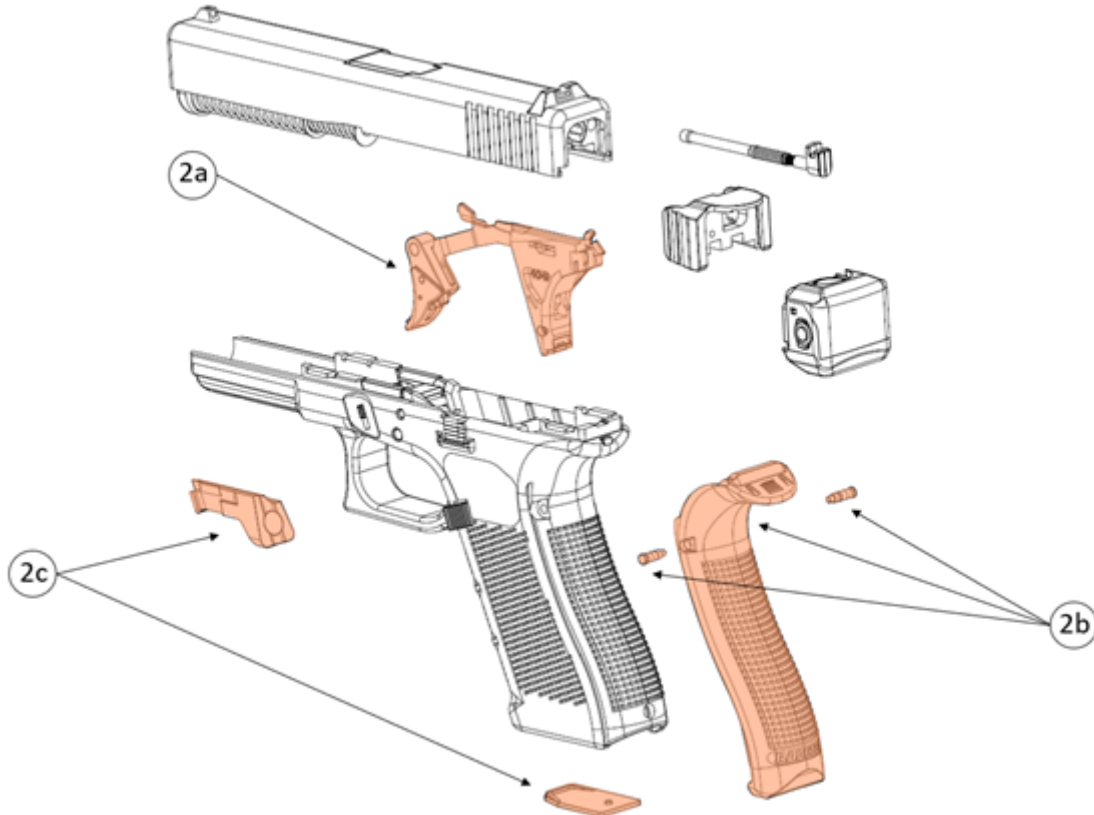


Figure 38: Smart Magazine Assembly parts.

6.2.1. Trigger Group Subassembly

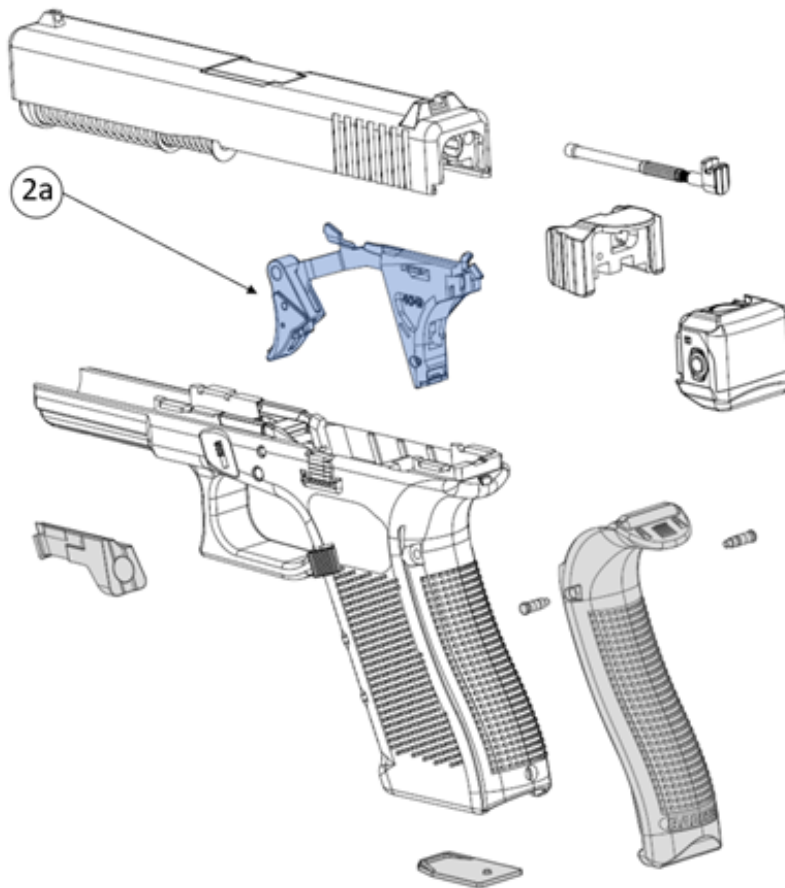


Figure 39: Trigger Group Subassembly parts.

1. Take out the original Glock trigger, bar and housing from the frame.

NOTE: Remove both pins, the Trigger Pin and the Locking Block Pin, from left to right and reinstall them from right to left. This will ease the process.

a) Punch out, from left to right, the Locking Block Pin using the Glock Punch Tool (Figure 40).

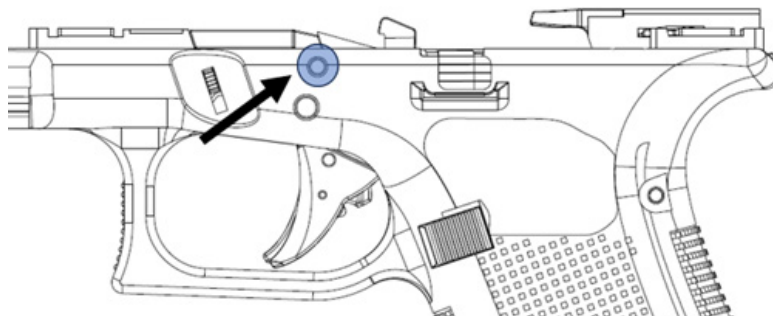


Figure 40: Locking Block Pin location.

b) Punch out, from left to right, the Trigger Pin using the Glock Punch Tool (Figure 41).

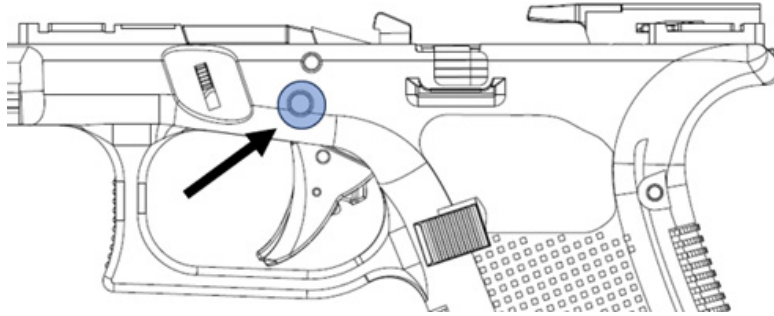


Figure 41: Trigger Pin location.

In case of difficulty taking the Trigger pin out, wiggle the Slide Stop Lever (Figure 42).

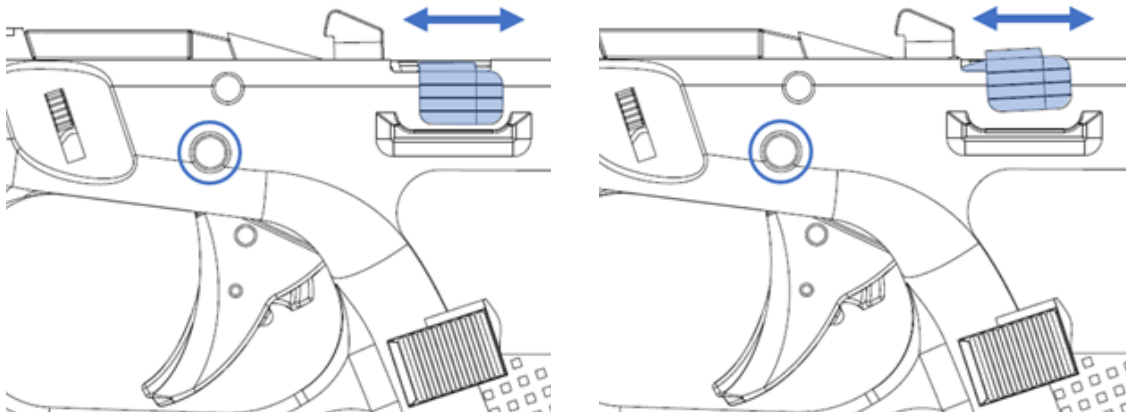


Figure 42: Slide Stop Lever.

c) Remove the Slide Stop Lever from the Frame (Figure 43).

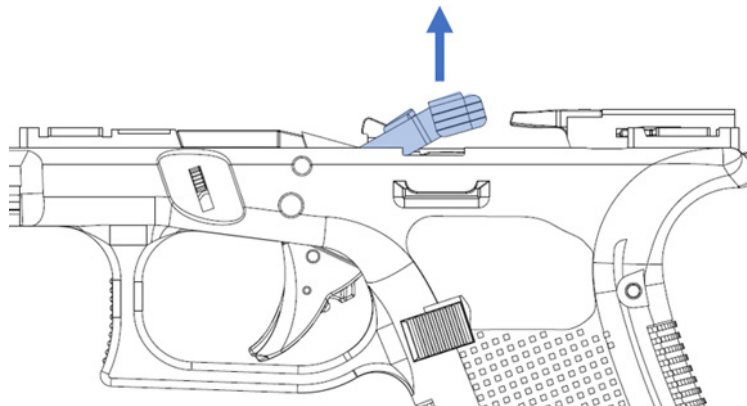


Figure 43: Slide Stop Lever extraction.

d) Punch out the Trigger Housing Pin. Press the Trigger Housing Pin from the left and remove it from the right using the Glock Punch Tool (Figure 44).

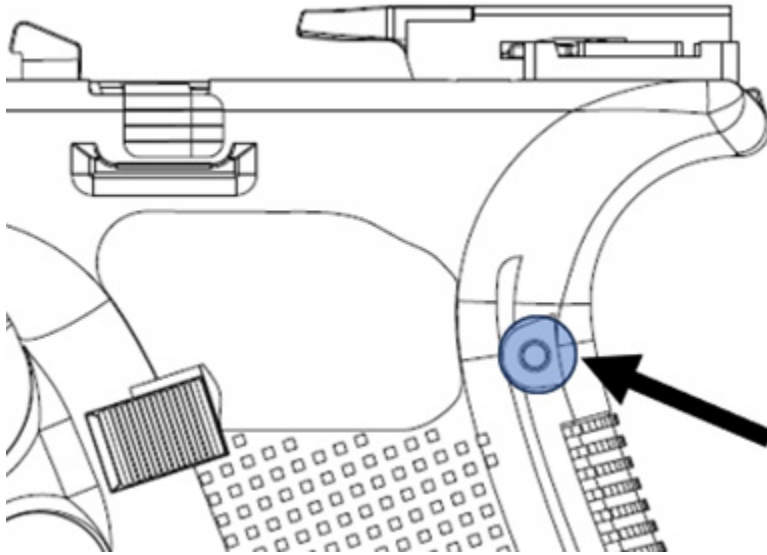


Figure 44: Location of the Trigger Housing Pin.

If a Glock Beavertail backstrap is already attached, remove it from the frame.

e) Remove the Glock Trigger Group from the frame (see Figure 45). If removing the Trigger Group gets complicated, lift the Locking Block slightly.

NOTE: Store the Glock Trigger Group to be able to restore the firearm to its original condition in the future.

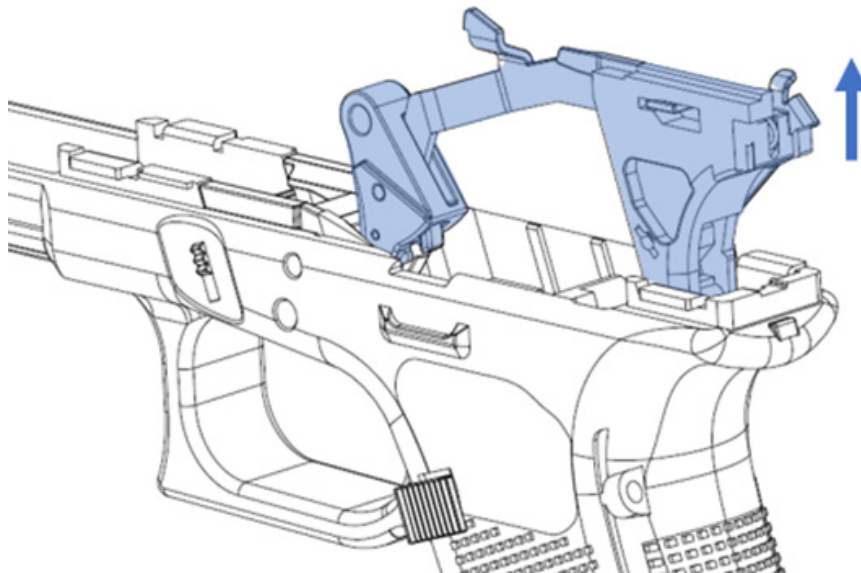


Figure 45: Trigger Group removal direction.

2. Install the RISCpro Trigger Group Subassembly into the frame.

a) Remove the Locking Block from the frame (Figure 46).

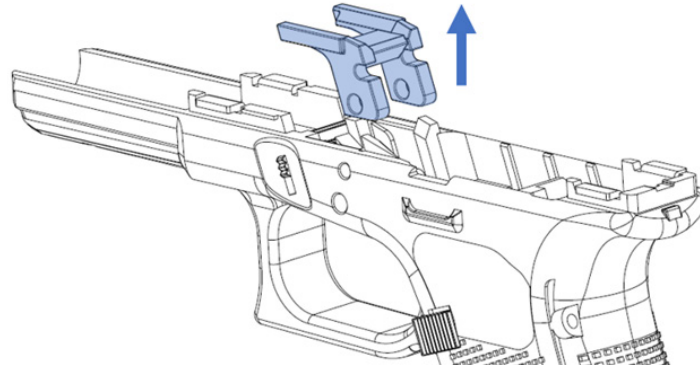


Figure 46: Locking Block removal direction.

b) Install the Trigger Group Subassembly into the frame, inserting the Trigger first. Then insert the Trigger Housing into the cavity and press down firmly (Figure 47).

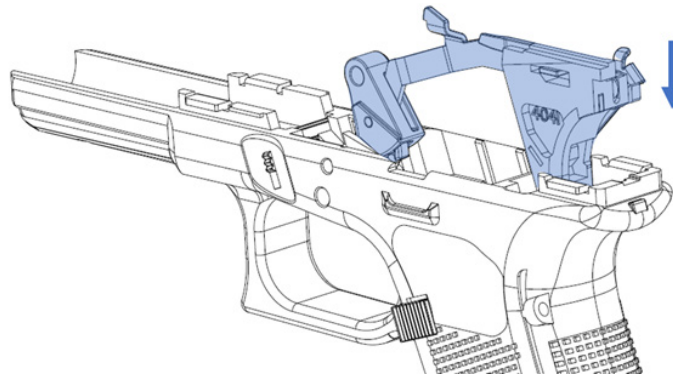


Figure 47: Trigger Group Subassembly installation direction.

c) Insert the Locking Block and ensure it is fully inserted into the frame (Figure 48).

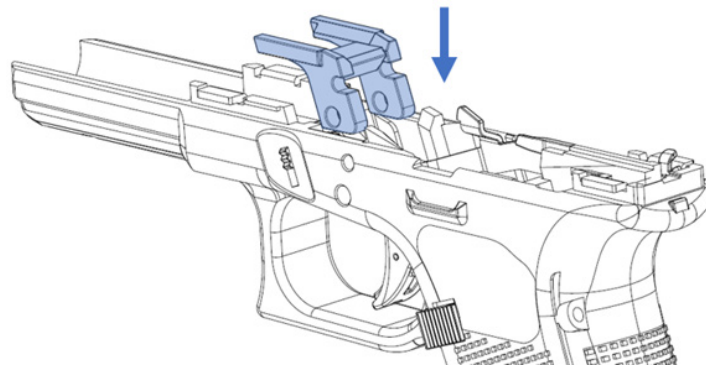


Figure 48: Locking Block installation direction.

WARNING!**PAY ATTENTION TO REINSTALL EACH PIN IN THE CORRECT PLACE.****NOTE:** *The Locking Block Pin should be the first pin to be installed.*

d) Insert the Locking Block Pin from right to left (Figure 49).

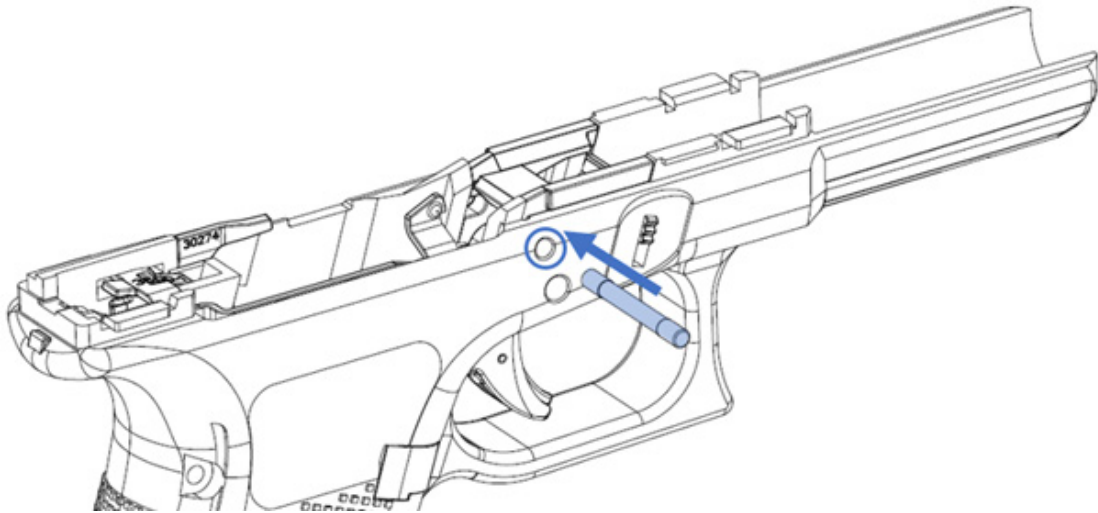


Figure 49: Locking Block Pin assembly direction.

e) Insert the Slide Stop Lever with its spring facing upward and forward (Figure 50).

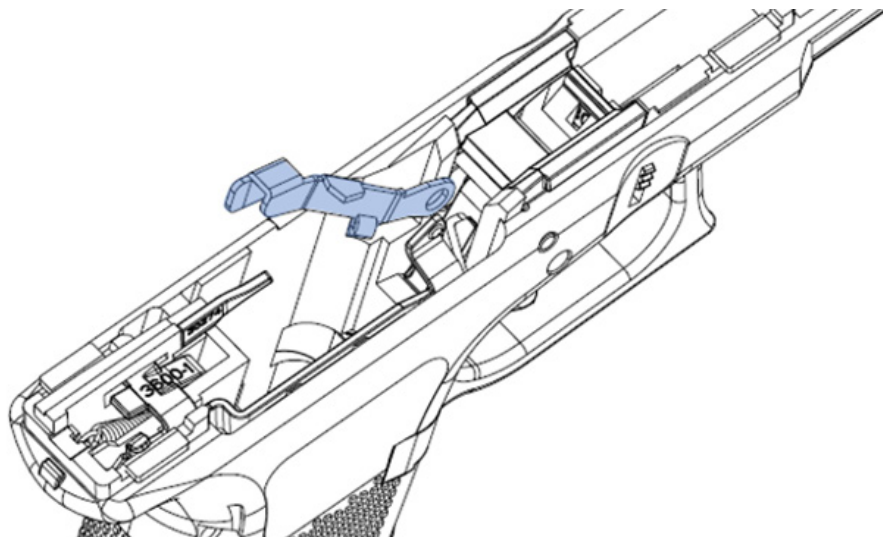
NOTE: *Install the Locking Block Pin before inserting the Slide Stop Lever. Ensure the Slide Stop Lever Spring is positioned in the notch of the Locking Block Pin.*

Figure 50: Slide Stop Lever assembly.

f) Hold the Slide Stop Lever and insert the Trigger Pin from right to left (Figure 51).

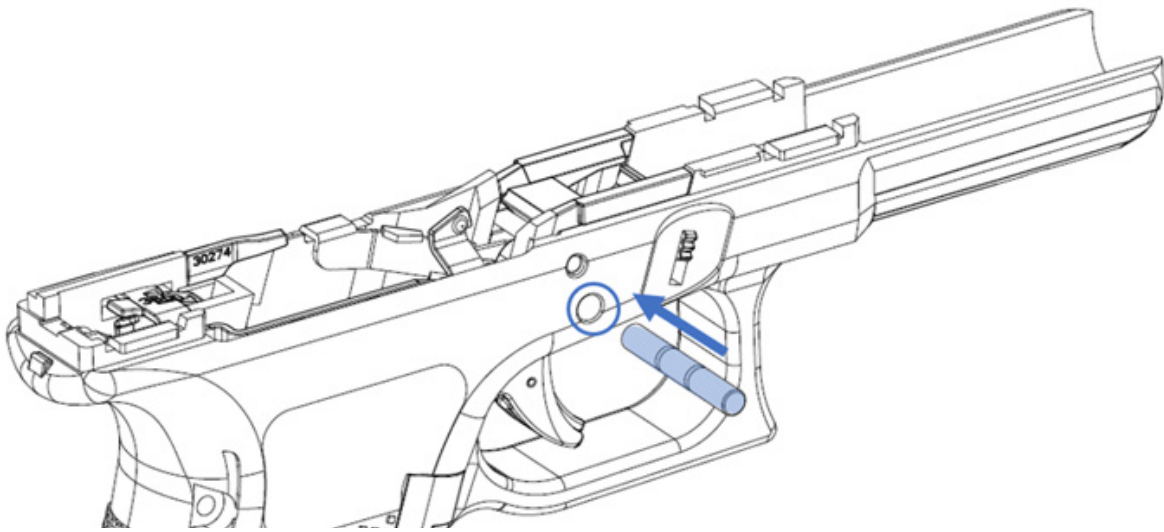


Figure 51 Trigger Pin assembly.

6.2.2. Backstrap Subassembly

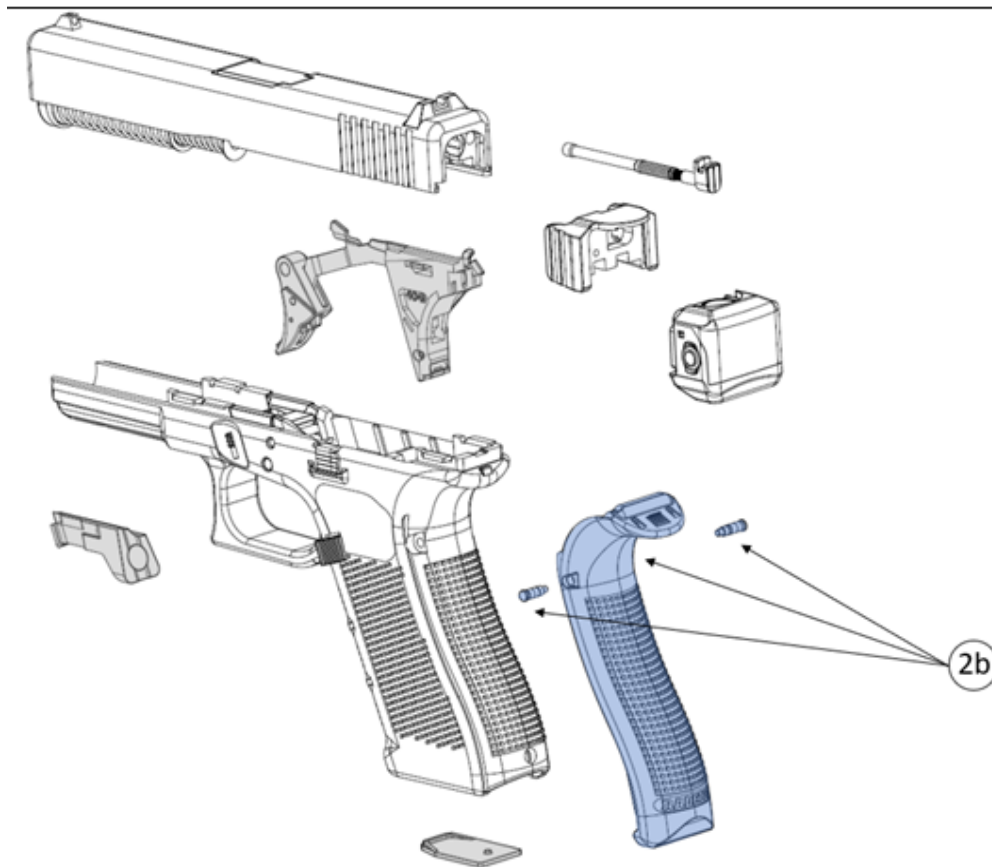


Figure 52: Backstrap Subassembly schematic.

1. Press the trigger housing against the frame. At the same time, insert the movable part of the backstrap into the cavity of the frame. This cavity is located next to the magazine well (Figure 53).

WARNING!

The RISCpro trigger group must be installed beforehand. Installing the trigger group after installing the backstrap can cause damage on both parts. (See “7.2.1 Trigger Group Subassembly”)

When you fully insert the movable part of the backstrap into the cavity, the electrical pads of the movable part should connect to the bottom of the trigger housing without effort. If you find resistance pushing it up through the cavity, remove it and repeat the process. Make sure the trigger housing is correctly placed and settled on the frame before inserting the Backstrap again.

Not following this warning could damage the electrical pads.

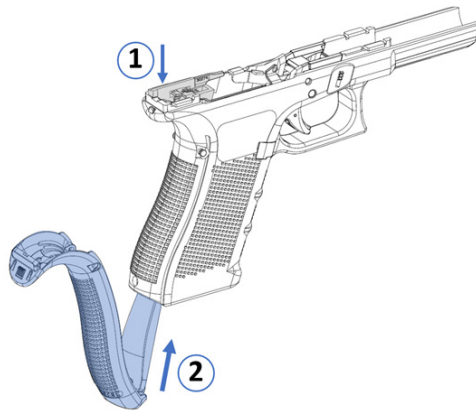


Figure 53: Backstrap mounting steps and direction.

2. Ensure the movable part of the backstrap is fully inserted and press the backstrap in against the frame. (Figure 54).

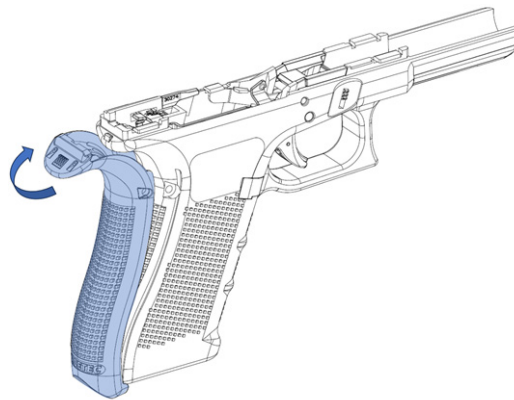


Figure 54: Push-in direction for mounting the backstrap onto the frame.

3. Press the backstrap onto the frame until side holes in backstrap align with the holes in the pistol's grip, make sure the upper tip is in place (Figure 55).

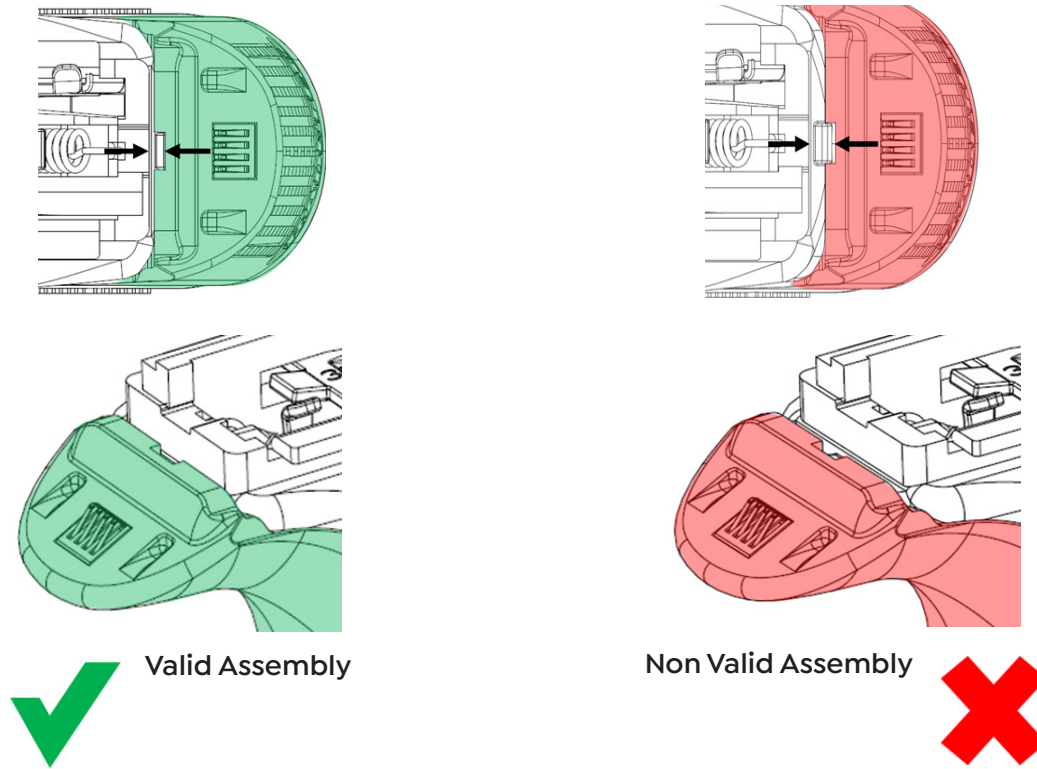


Figure 55: Valid and Non Valid assemblies of the upper backstrap tip onto the frame.

4. Insert the RISCpro backstrap's metal pins to secure the backstrap and trigger housing onto the frame. Insert the one-notch pin on the left side hole and the two-notch pin on the right side hole. (Figure 56). You can find the Metal Pins in the Assembly Tool.

WARNING!

BACKSTRAP PINS ARE DIFFERENT. PIN WITH ONE NOTCH GOES ON THE LEFT SIDE AND PIN WITH TWO NOTCHES GOES ON THE RIGHT SIDE.

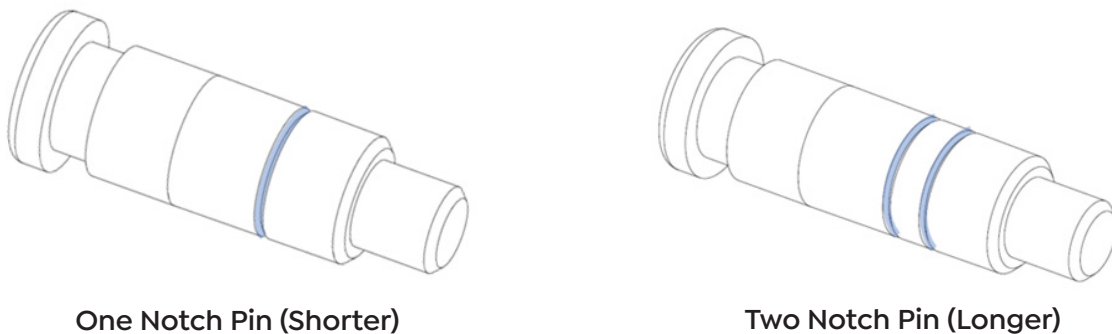


Figure 56: Differences between both RISCpro metal pins.

WARNING!

INCORRECT PIN PLACEMENT CAN CAUSE DAMAGE IN THE TRIGGER HOUSING AND/OR BACKSTRAP.

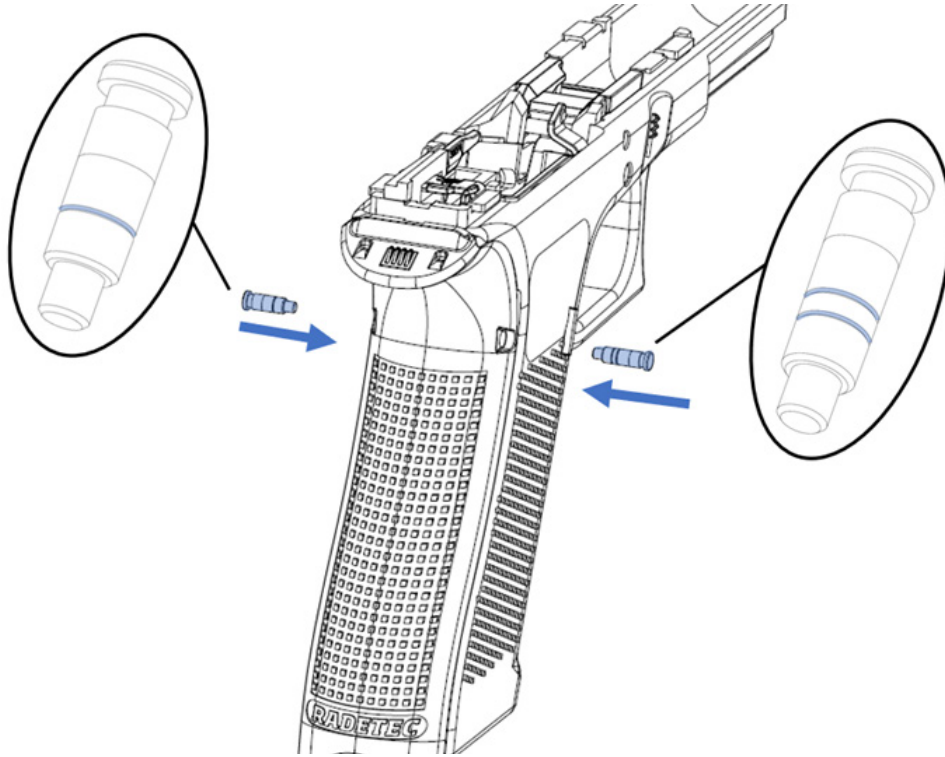


Figure 57: Detailed instruction on how to insert both metal pins.

5. Fully insert both pins. They should not protrude from the backstrap housing (Figure 58).

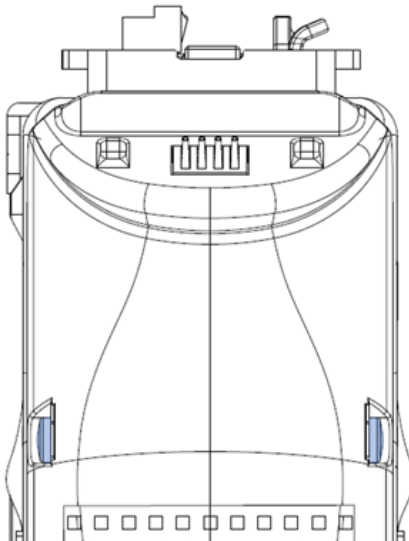


Figure 58: Correct depth of both inserted metal pins. They must not stick out.

6. CORRECT ASSEMBLY VERIFICATION

Check if connector moves freely. Connector should be able to move sideways about 1/64" and return to its initial position by itself (Figure 59).

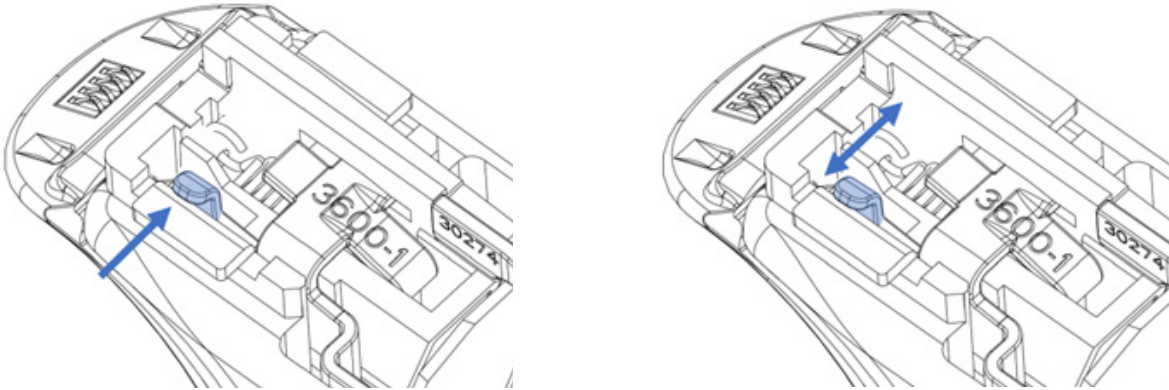


Figure 59: If connector moves freely Trigger Group Subassembly installation is correct.

If this verification fails, disassemble and reassemble again the trigger group and backstrap subassemblies. (Refer to “7.2.1 Trigger Group Subassembly” and “7.2.2 Backstrap Subassembly”)

6.2.3. Magazine Assembly

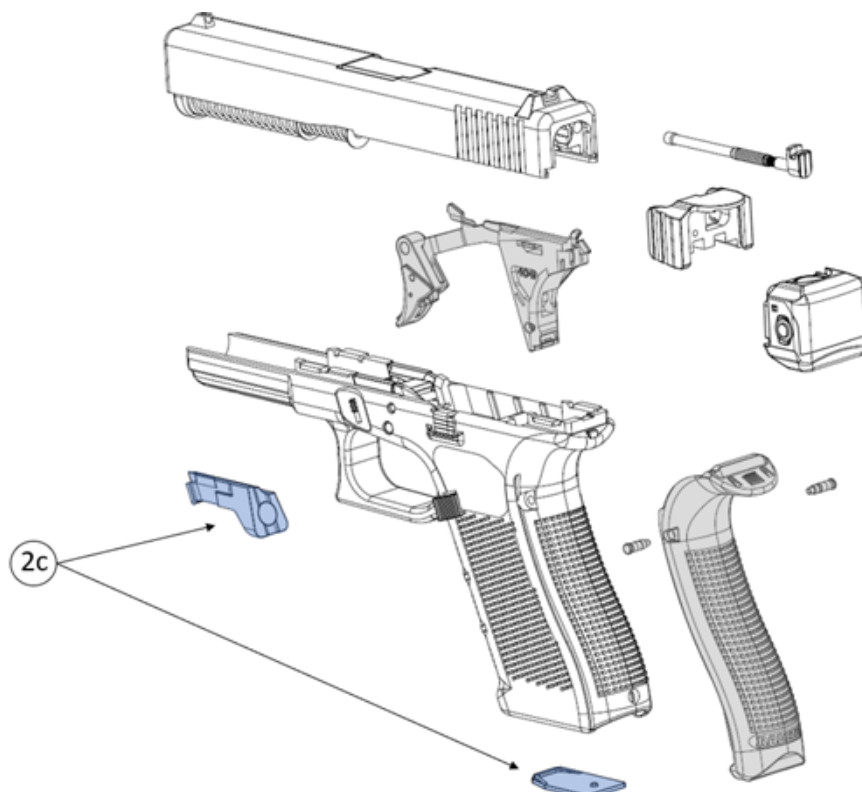


Figure 60: Magazine subassembly schematic.

1. Ensure the magazine is unloaded and contains no ammunition.

WARNING!

The magazine spring, follower and floor plate are under tension, so controlled release of the spring is required. Always use safety glasses.

USE ONLY ORIGINAL GLOCK MAGAZINES IN GOOD CONDITION

NOTE: *The following instructions apply to standard magazines (see “3.1 Compatible Pistols and magazines”).*

2. Inspect the magazine to verify that no parts are broken and/or damaged.
3. The magazine’s insert includes a retention pin to secure in place the floor plate. Firmly hold the magazine with one hand. With the other hand, press the retention pin of the magazine’s insert inward using the Glock tool/punch (Figure 61 / Figure 62).

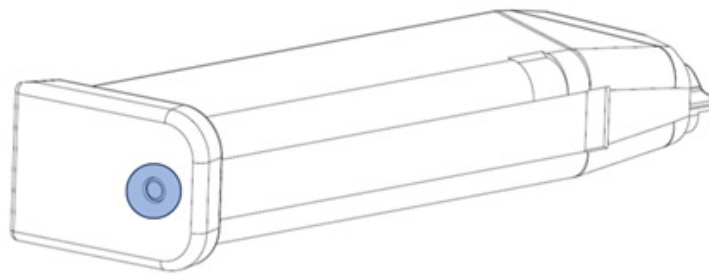


Figure 61: Retention pin indicator on the magazine’s insert.

4. With the tool/punch inserted, pull the magazine’s floor plate in the direction shown in Figure 63. You should feel the side clips that secure the magazine floor plate release.

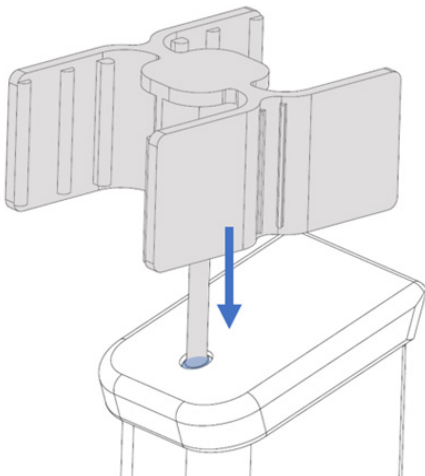


Figure 62: Positioning of the tool/punch to insert the retention pin of the magazine’s insert.

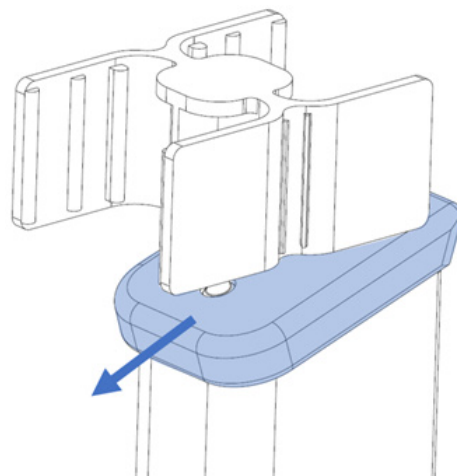


Figure 63 Direction to release the floor plate’ clip.

5. Remove the Glock's tool/punch from the hole and slowly slide the floor plate off the magazine. Carefully remove the insert and spring with the follower (Figure 64 / Figure 65).

WARNING!

THE MAGAZINE SPRING, THE MAGAZINE BASE AND THE FOLLOWER ARE ALL UNDER TENSION, BE VERY CAREFUL WHILE SLIDING OUT THE MAGAZINE'S FLOORPLATE! ALWAYS WEAR SAFETY GOGGLES WHEN WORKING WITH FIREARMS.

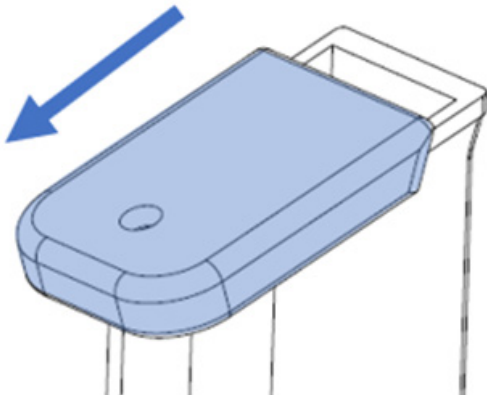


Figure 64: Direction to remove the magazine's floor plate.

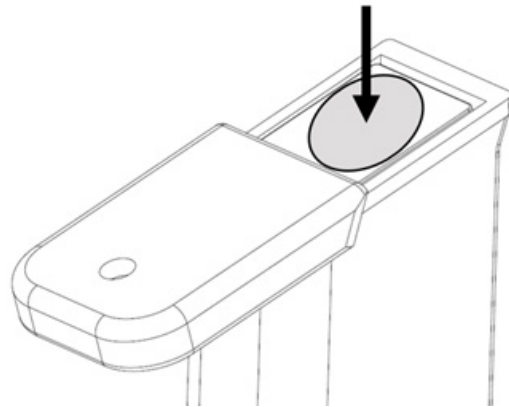


Figure 65: Hold with your thumb the spring to avoid uncontrolled release of tension, as this could cause injury.

6. Remove the original follower from the magazine spring, releasing the spring from the follower's side clips (Figure 66).

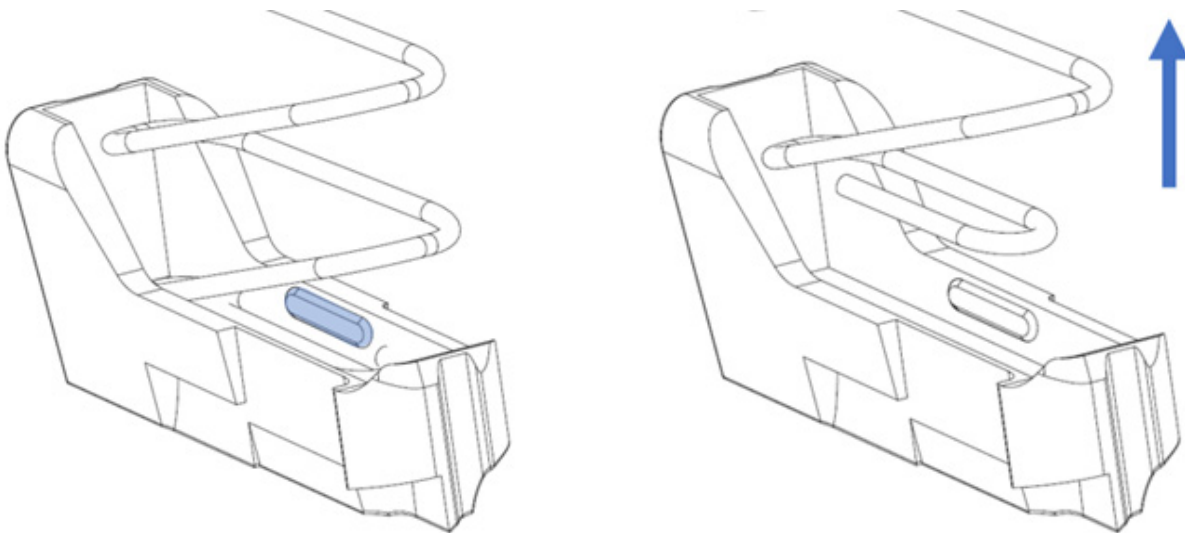


Figure 66: a) Follower's clips position. b) Spring removal direction.

7. Attach the RISCpro follower on the magazine spring. (Figure 67)

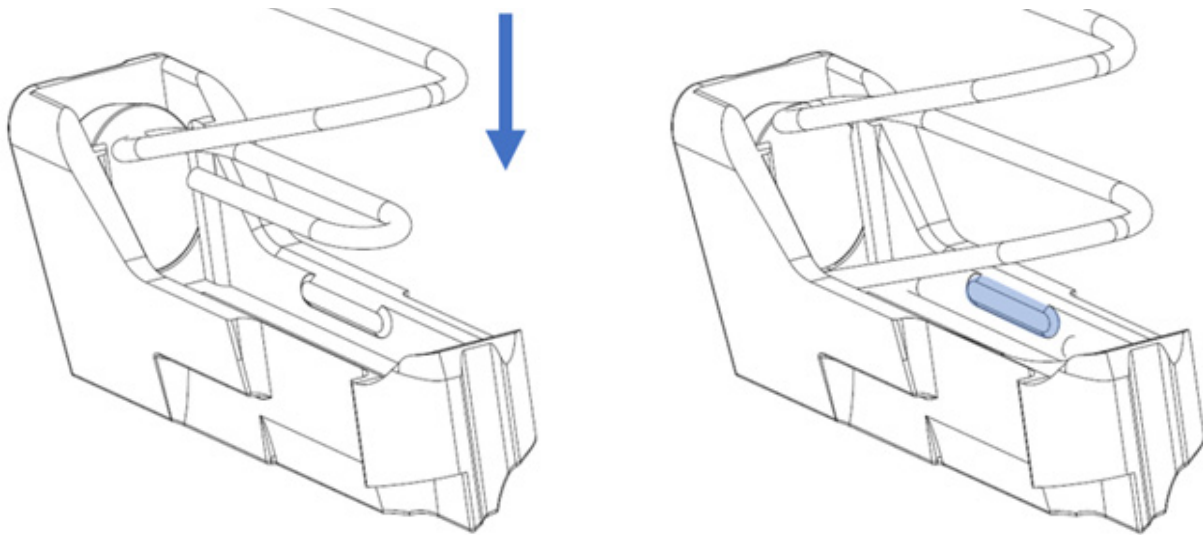


Figure 67: a) Direction to insert the follower spring. b) Then secure the spring to the follower's clips.

8. Insert the follower and magazine spring into the magazine body (Figure 68).

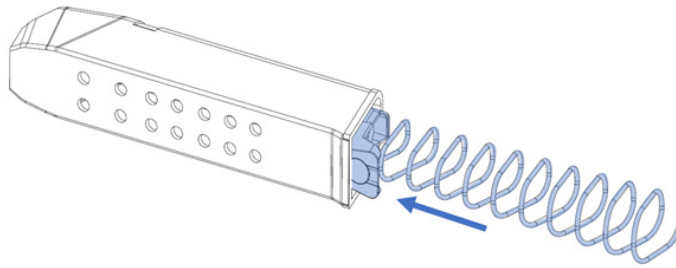


Figure 68: Direction to insert the follower with the spring.

9. Place the red RISCpro insert in the position shown below. The red plate allows the shooter to distinguish between RISCpro- adapted magazines and standard magazines (Figure 69).

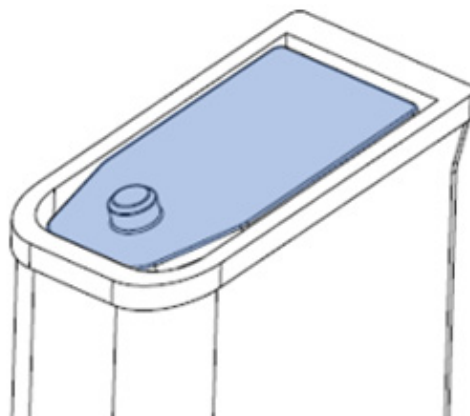


Figure 69: Magazine's insert positioning.

10. While holding the magazine insert in place, slide-in the magazine floorplate (Figure 70 a) until the retention pin snaps into place (Figure 70 b).

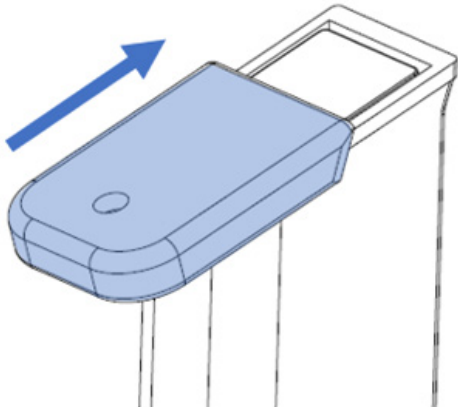


Figure 70: a) Direction for mounting the magazine floor plate.

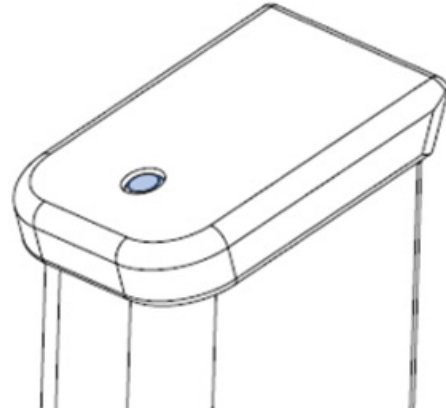


Figure 70: b) Retention pin of the RISCpro insert in position.

6.3. RISC Display Assembly

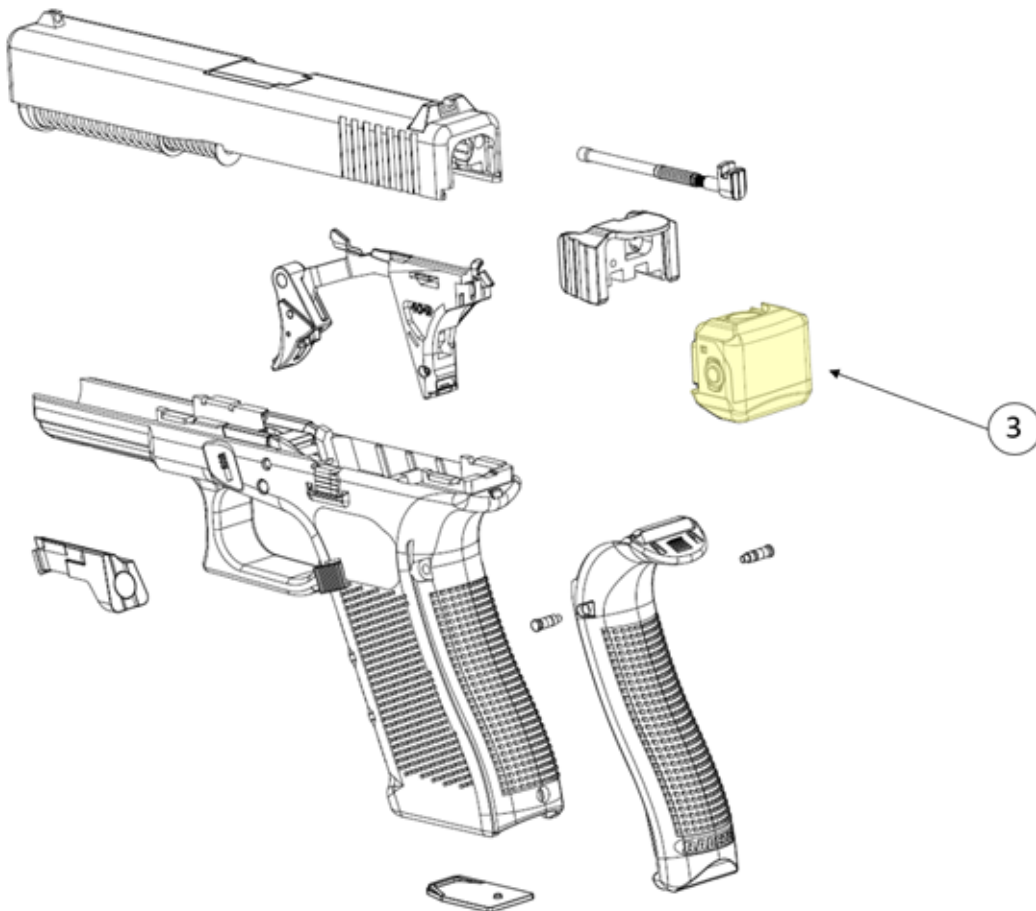


Figure 71: RISC display schematic.

1. Mount the slide with the RCD assembly onto the frame which contains the Smart magazine assembly. Pull the trigger beforehand to facilitate mounting the slide. Slide it along the frame's rails until the slide is fully mounted (Figure 72).

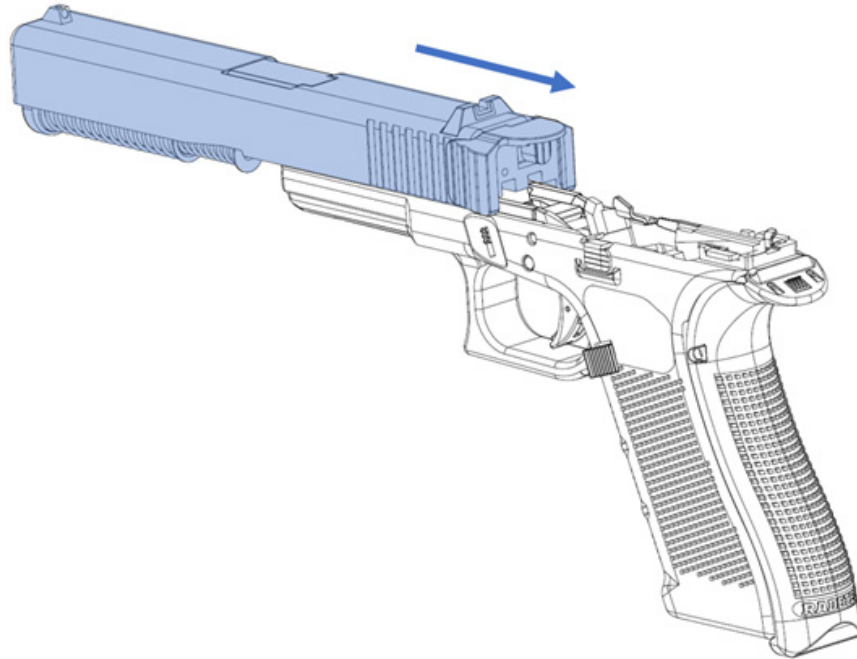


Figure 72: Mounting direction of the slide onto the frame.

2. Lock open the slide by pulling it back (Figure 73).

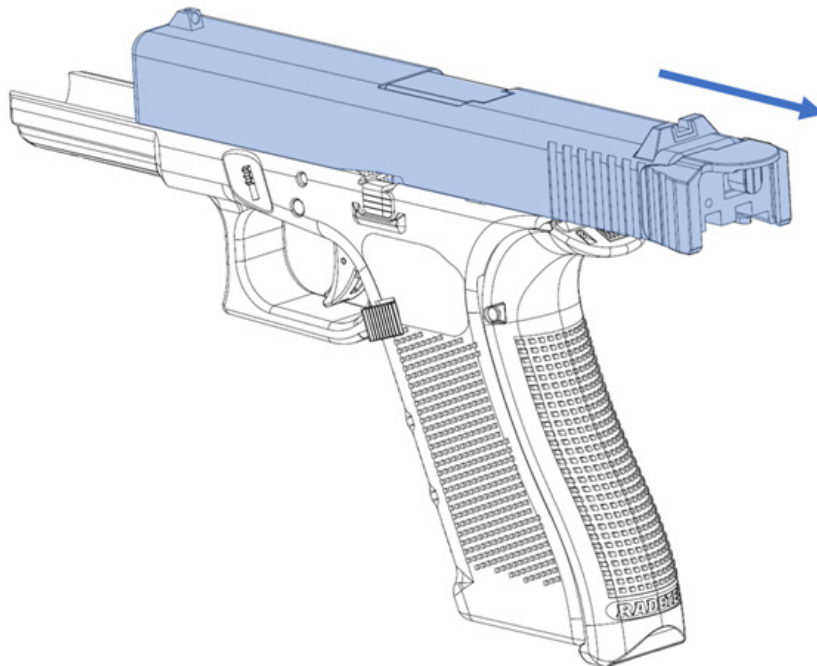


Figure 73: Slide in racked position.

3. Engaging the Slide Lock Lever and mount the RISC Display on the RISCpro slide plate guides (Figure 74).

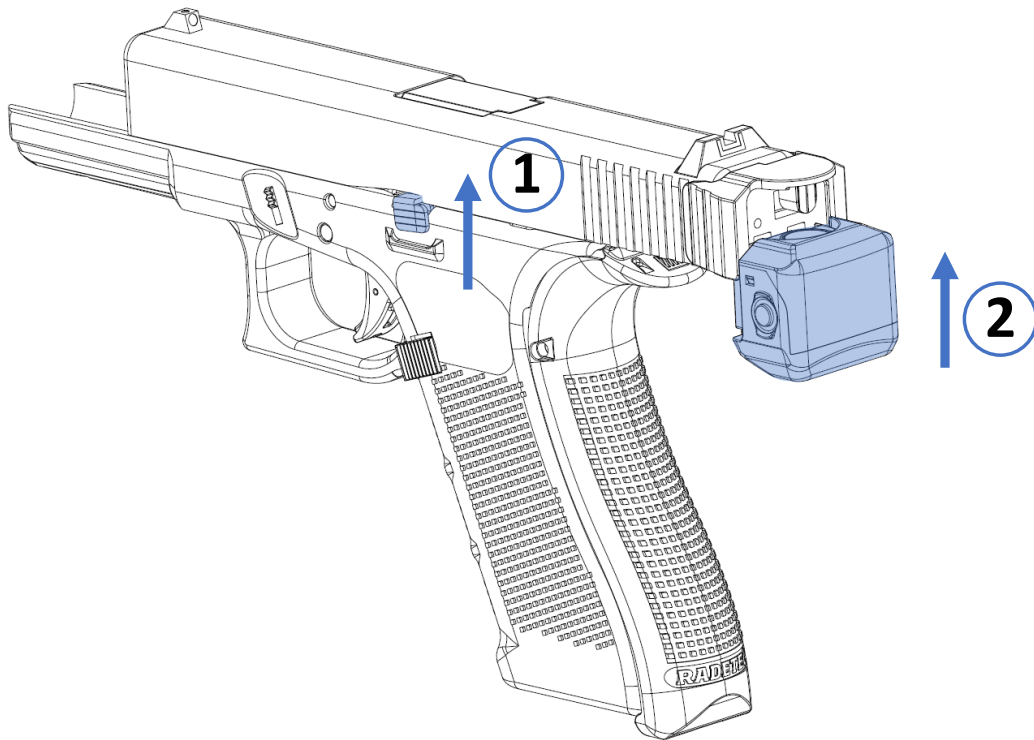


Figure 74: 1) Lifting direction of the slide stop lever.

2) Mounting direction of the RISC display on the RISCpro slide plate.

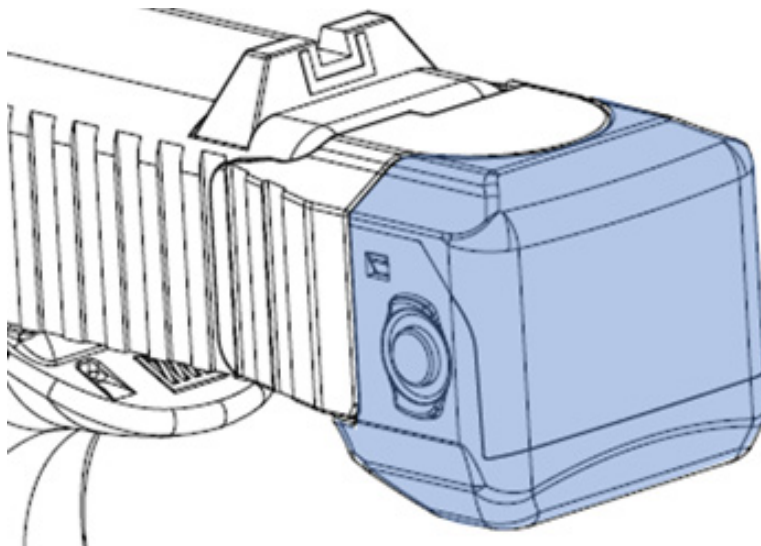


Figure 75: Final position of the RISC Display on the RISCpro slide plate.

IMPORTANT: Ensure that the RISC Display is slided properly into place (Figure 76).

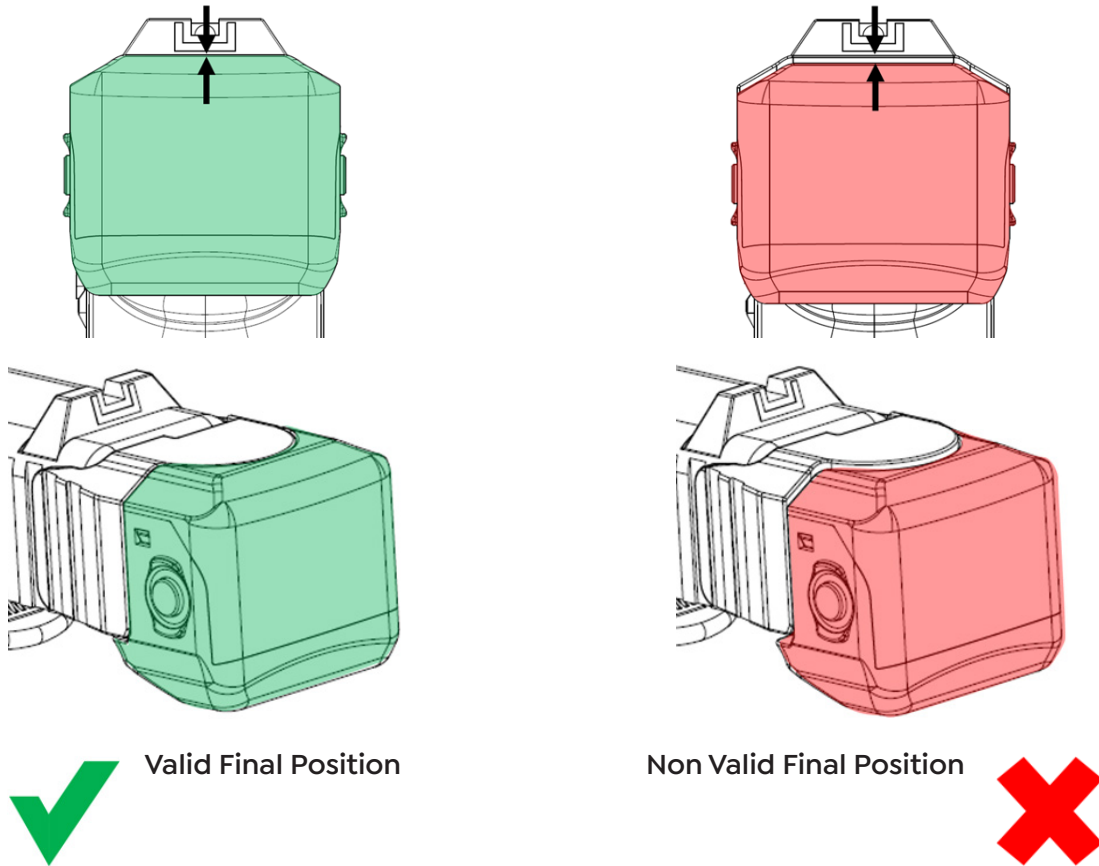


Figure 76: Valid / Non Valid positions of the RISC Display on the RISCpro slide plate.

WARNING!

Incorrect RISC Display installation can cause major damages to the device.

4. Close the slide either by lowering the slide stop lever or by pulling the slide back and releasing it (Figure 77).

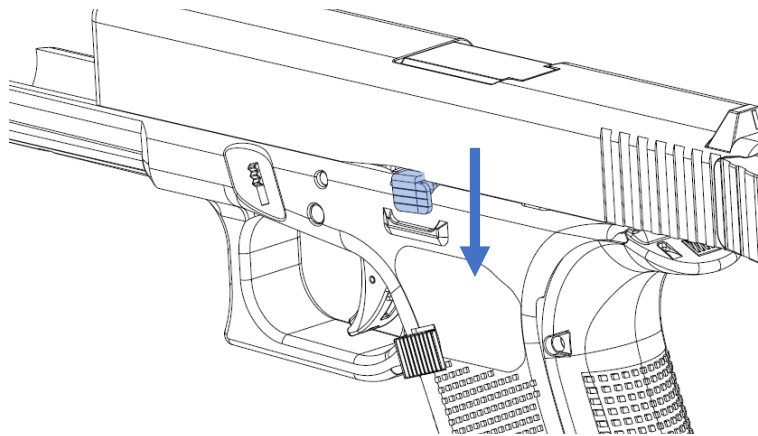


Figure 77: Push the slide stop lever down to release the slide.

Verify that the slide is fully released and that the RISC Display is in contact with the backstrap (Figure 78).



Figure 78: Complete assembly of the RISCpro System.

WARNING!

Ensure the RISC Display makes complete contact with the backstrap. The RISC Display's screen should NOT show "Slide Is Open" (Figure 79).

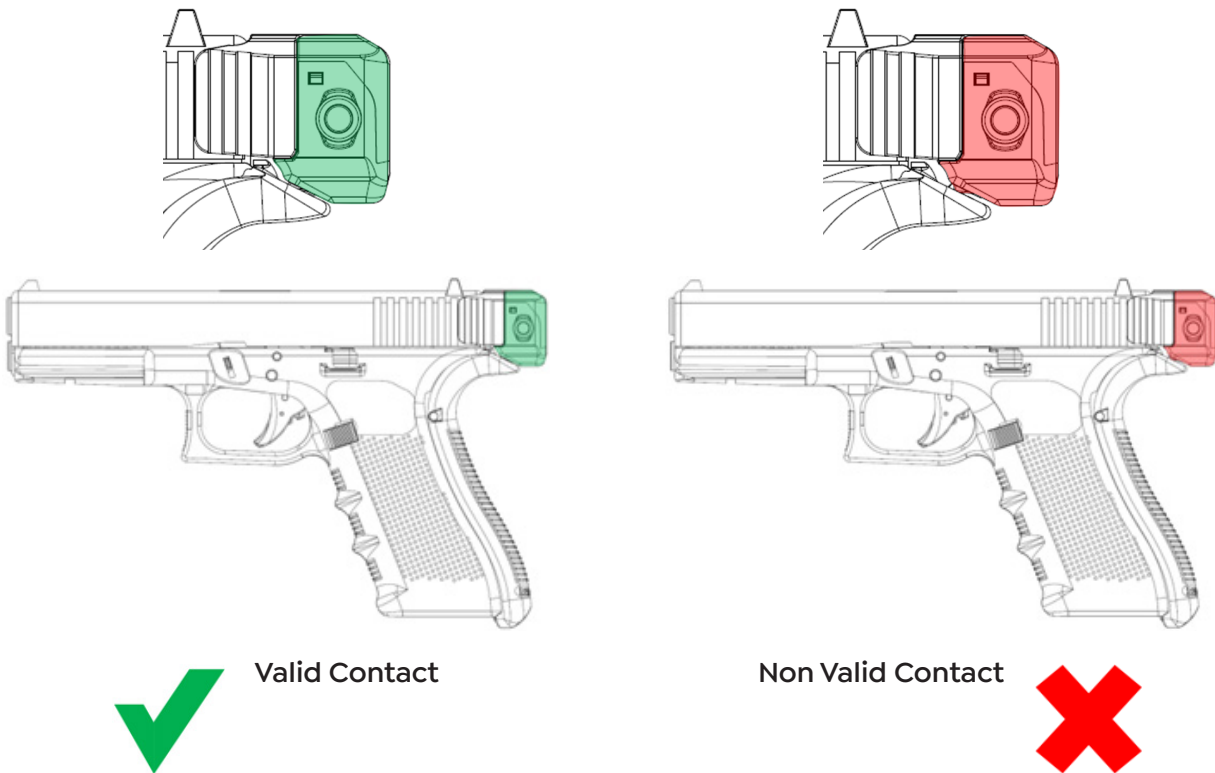


Figure 79: Valid / Non Valid contacts between the RISC Display (pistol slide) and Backstrap (pistol frame).

7. Modes & Settings

RISCpro has different operating modes and settings. There are 3 basic icons that appear on all menu screens, except in configuration/settings menus:

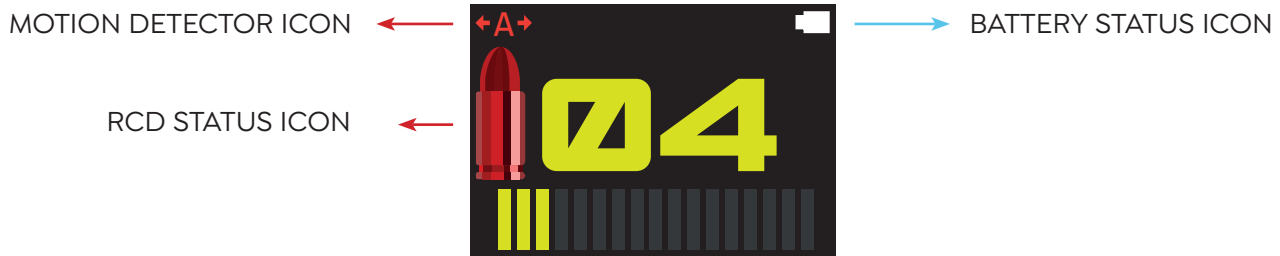









Figure 80: Operating menus basic info.

- Chamber Status:

No Icon	RISCpro is not detecting a round in the chamber. WARNING: Always treat all firearms as if they were loaded.
	Round Detected in the chamber.
	Detection System error. (Refer to 8.2.5 RCD Mode to fix the error) WARNING: CHECK ALL SAFETY PROCEDURES WHEN THIS HAPPENS.

- Battery Status:

	100% charged.
	75% charged.
	50% charged.
	25% charged.
	Critical battery level. Immediate charging is advised to avoid damaging the battery and shortening its lifespan.

- Motion Detector ¹:

No Icon	Motion detector is working properly.
+A+	Motion detector error detected. RISCpro will stay on low-power mode even when the pistol is being shaken or moved.
<<+A+>>	Motion detector initializing. The icon flashes for a few seconds.

¹ NOTE: The RISC Display is powered by a non-removable high-performance rechargeable battery, and the display has been designed to minimize power consumption. If no activity is detected after the preset display-on time (see “8.3.3 Display-On Time”), the device will turn itself into low-power mode, turning off the screen. To wake up the RISC Display just press one of the 2 pushbuttons, fire a shot, or shake/move the weapon.

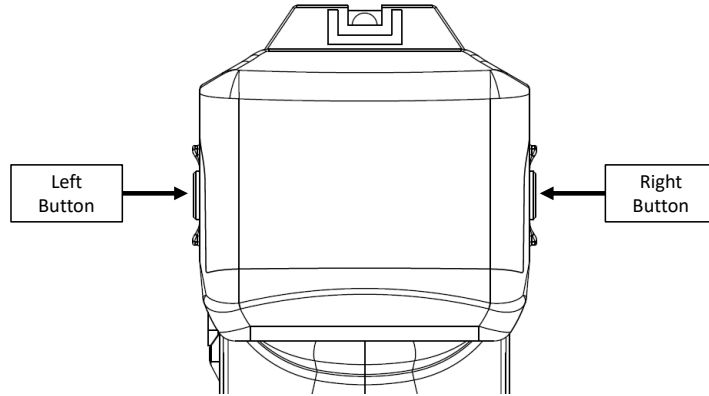


Figure 81: Buttons position.

7.1. Safety Tips

Do not use the RISCpro without first calibrating the Round-in-Chamber Detector.

Ensure that the RISC Display battery level is above 25% charge.

Ensure that the RISC Display is correctly mounted. (See “7.3 RISC Display Assembly”)

If any error warning is detected, do not use the RISCpro system until the issue is resolved.

7.2. Operating Modes

7.2.1. Count Up Mode

The Count Up mode increases the shot counter by 1 with each shot. The “Accumulator Value” has to be set in advance, its counting range goes from 1 to 999. When the preset value of the Accumulator is reached the present counter resets back to 0.

This mode has 4 additional information blocks, they are shown on screen as follows: (Figure 82)



Figure 82: Count Up mode screen.

- Accumulator Value: Sets the limit to restart the counter, when the value is reached the Present Counter resets to 0.
 - Present Counter / Shots Fired: This value shows the current count of the Count-Up counter. Every time the pistol fires the counter increases by one number.
 - Count Up Mode Icon: An upward-pointing arrow icon is shown to inform the shooter that the RISC Display is in Count-Up mode.
 - Smart Magazine Bar: Displays the current capacity of the magazine with a row of bars, each bar represents a round. Light-colored bars indicate actual rounds present in the magazine, while dark gray bars indicate depleted rounds from the magazine.
- When no magazine is detected in the pistol, the RISC Display will show “NO MAG” to indicate the absence of the magazine.

At any given time, if the slide is open, the RISC Display will show the message “SLIDE IS OPEN”.

WARNING!

ALWAYS TREAT ALL FIREARMS AS IF THEY WERE LOADED.

MAKE SURE PISTOL IS UNLOADED EVEN IF THE ROUND IN CHAMBER DETECTOR TELLS YOU THE CHAMBER IS EMPTY!

To preset the Accumulator Value ¹:

The initial value is factory-set to 17 for Glock 17 versions, and to 15 for Glock 19 versions. This value can be changed at any time by following these steps:

1. Press and hold both buttons (left + right) for 2 seconds.
2. Press the left button to decrease the value, press the right button to increase it. A long press on the button speeds up the changes.
3. Press and hold both buttons (left + right) for 2 seconds to save changes.

¹NOTE: *Entering this mode will reset the Present Counter to 0.*

7.2.2. Smart Magazine Mode

This menu shows the total ammo based on the detected rounds in the magazine and in the chamber. This mode has 2 additional information blocks, they are shown on screen as follows: (Figure 83)

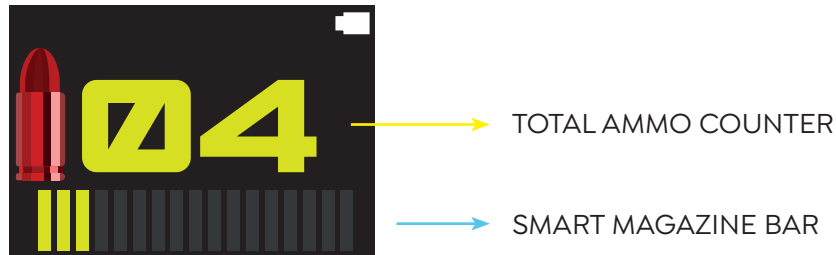


Figure 83: Smart Magazine mode screen.

- Total Ammo Counter: This counter shows the number of rounds detected between the magazine and chamber. When the total count is 5 rounds or less (1 in the chamber + 4 in the magazine), the color will change from white to yellow. The Smart Magazine Bar will also change to yellow.

IMPORTANT!

If there is a problem with the chamber sensor (Round in Chamber Detector), an additional round will be added to the Total Ammo Counter.

- Smart Magazine Bar: Displays the current capacity of the magazine with a row of bars, each bar represents a round. Light-colored bars indicate actual rounds present in the magazine, while dark gray bars indicate depleted rounds from the magazine. When no magazine is detected in the pistol, the RISC Display will show “NO MAG” to indicate the absence of the magazine.

At any given time, If the slide is open, the RISC Display will show the message “SLIDE IS OPEN”.

WARNING!

**ALWAYS TREAT ALL FIREARMS AS IF THEY WERE LOADED.
MAKE SURE PISTOL IS UNLOADED EVEN IF THE ROUND IN CHAMBER DETECTOR TELLS YOU THE
CHAMBER IS EMPTY!**

7.2.3. Count Down Mode

The Count Down mode decreases the shot counter by 1 with each shot. The accumulator value has to be set in advance, its counting range goes from 1 to 999. When the preset value of the accumulator is reached the present counter resets back to the value of the accumulator.

This mode has 4 additional information blocks, they are shown on screen as follows: (Figure 84)



Figure 84: Count Down mode screen.

- Accumulator Value: It's the starting point for the counter, when the present counter reaches 0 it resets to the accumulator value.
- Present Counter / Shots Fired: This value shows the current count of the Count-Down counter. Every time the pistol fires the counter decreases by one number.
- Count Down Mode Icon: A downward-pointing arrow icon is shown to inform the shooter that the RISC Display is in Count-Down mode.
- Smart Magazine Bar: Displays the current capacity of the magazine with a row of bars, each bar represents a round. Light-colored bars indicate actual rounds present in the magazine, while dark gray bars indicate depleted rounds from the magazine. When no magazine is detected in the pistol, the RISC Display will show "NO MAG" to indicate the absence of the magazine.

At any given time, If the slide is open, the RISC Display will show the message "SLIDE IS OPEN".

WARNING!

ALWAYS TREAT ALL FIREARMS AS IF THEY WERE LOADED.

MAKE SURE PISTOL IS UNLOADED EVEN IF THE ROUND IN CHAMBER DETECTOR TELLS YOU THE CHAMBER IS EMPTY!

To preset the Accumulator Value ¹:

The initial value is factory-set to 17 for Glock 17 versions, and to 15 for Glock 19 versions. This value can be changed at any time by following these steps:

1. Press and hold both buttons (left + right) for 2 seconds.
2. Press the left button to decrease the value, press the right button to increase it. A long press on the button speeds up the changes.
3. Press and hold both buttons (left + right) for 2 seconds to save changes.

¹NOTE: *Entering this mode will reset the Present Counter to 0.*

7.2.4. Total Shots Mode

This mode records all shots fired since the RISCpro was installed, and all shots fired since the last reset of the Partial Counter.

This mode has 2 additional information blocks, they are shown on screen as follows: (Figure 85)

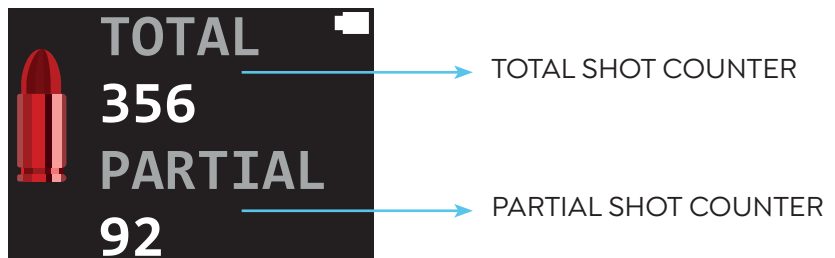


Figure 85: Total Shot Counter mode screen.

WARNING!

ALWAYS TREAT ALL FIREARMS AS IF THEY WERE LOADED.

MAKE SURE PISTOL IS UNLOADED EVEN IF THE ROUND IN CHAMBER DETECTOR TELLS YOU THE CHAMBER IS EMPTY!

To reset the Partial Counter:

The Partial Counter will count any shot fired since the last reset. This value can be reset to 0 at any time by following these steps:

1. Press and hold both buttons (left + right) for 2 seconds.

7.2.5. Round in Chamber Detector Mode (DCR Mode)

This mode displays the chamber condition, if the sensor detects a round in the chamber will show “Danger”, if the sensor does not detect a round in the chamber will show “Safe” (Figure 86 / Figure 87).



Figure 86: DCR mode screen showing there is a round detected in the chamber.



Figure 87: DCR mode screen showing there is no round detected in the chamber.

WARNING!

After installing the RISCpro for the first time, or after mounting the RISC Display onto the slide, or after powering off and powering on the RISCpro, calibration of the Round in Chamber Detector must be done.

ALWAYS TREAT ALL FIREARMS AS IF THEY WERE LOADED.

MAKE SURE PISTOL IS UNLOADED EVEN IF THE ROUND IN CHAMBER DETECTOR TELLS YOU THE CHAMBER IS EMPTY!

If the RCD detects an issue, one of the following messages will appear:

- “DANGER! SENSOR NOT DETECTED”. The RCD Coil is not detected. Make sure the backplate is properly installed. (Refer to “6.1 Round in Chamber Detector (RCD) Assembly”).
- “DANGER! SENSOR NOT CALIBRATED”. The RCD needs to be calibrated. (Refer to “7.3.1 Chamber Calibration Settings” to calibrate the RCD).
- “DANGER! MODULE ERROR”. An error has been detected, preventing proper round in chamber detection.

7.3. Settings Menus

By pressing both buttons (Left + Right) for 2 seconds, you access the Settings Menu (Figure 88).

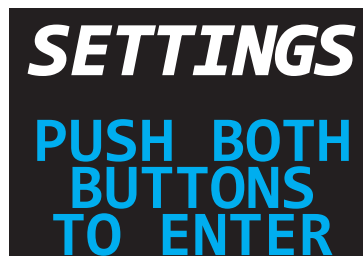


Figure 88: Settings Menu screen.

The chamber calibration, screen brightness, display time, and the Total and Partial Counters can be configured and reset here. Additionally, the RISCpro firmware version, its serial number and the status of the sensors. To navigate through the menu screens, press the right or left buttons to switch between them.

7.3.1. Chamber Calibration Settings

WARNING!

BEFORE PERFORMING THE ROUND-IN-CHAMBER DETECTOR, ENSURE THAT THE CHAMBER IS EMPTY

CALIBRATE THE ROUND-IN-CHAMBER EVERYWHERE EVERYTIME THE RISC DISPLAY IS MOUNTED TO THE SLIDE, OR IF THE BATTERY DIES (LETTING THE BATTERY DIE MAY DAMAGE IT).

DANGER!

THE RISCpro SYSTEM DOES NOT NOTIFY IF THE CALIBRATION HAS FAILED. PAY EXTREME ATTENTION TO THIS CHAPTER TO ENSURE THE CHAMBER SENSOR IS PROPERLY CALIBRATED. FAILING TO DO SO MAY PUT YOU OR OTHERS IN DANGER.

To start the calibration, press both buttons at the same time for 2 seconds (Figure 89).

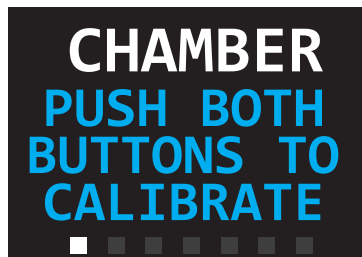


Figura 89: Chamber Calibration screen.

Once the calibration is complete, the following screen will be shown (see Figure 90).

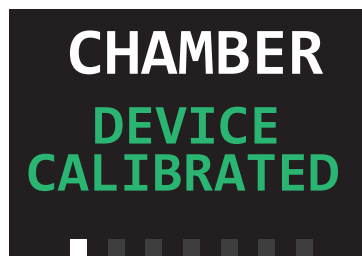


Figura 90: Chamber Calibration complete.

7.3.2. Brightness Settings

This menu allows the shooter to adjust the screen to 5 different levels: 0%, 25%, 50%, 75% y 100% (Figure 91 / Figure 92).

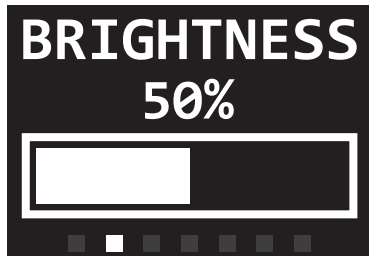


Figure 91: Screen showing the current brightness.

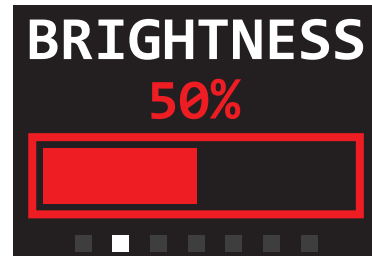


Figure 92: Screen brightness configuration levels.

To select the desired brightness:

1. Press both buttons for 2 seconds.
2. The brightness adjustment bar will start blinking red.
3. Press the Left button to decrease the intensity, and the Right button to increase it.
4. Once the desired value has been selected, press both buttons for 2 seconds to confirm the changes.

NOTE: *Keep in mind, higher brightness levels will reduce the battery life.*

7.3.3. Display-On Time Settings

This menu allows the shooter to adjust the screen timeout to 5 different preset times: 10, 15, 20, 25, and 30 seconds. (Figure 93 / Figure 94)



Figure 93: Screen indicating the current timeout setting.



Figure 94: Screen with timeout level configuration.

To select the desired screen timeout:

1. Press both buttons for 2 seconds.
2. The timeout adjustment bar will start blinking red.
3. Press the Left button to decrease the time, and the Right button to increase it.
4. Once the desired value has been selected, press both buttons for 2 seconds to confirm the changes.

NOTE: *Keep in mind, longer timeouts will reduce the battery life.*

7.3.4. Reset Counters Settings

On this screen you can reset both the Total Counter and the Partial Counter. To do so, press both buttons for 2 seconds to reset them to 0. Reset will be confirmed on the screen right after. (Figure 95)

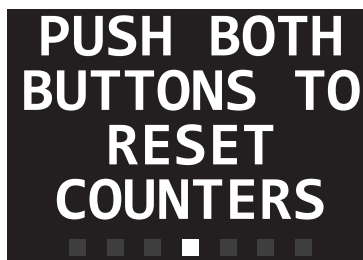


Figure 95: Counters' Reset screen.

NOTE: *Both counters will be reset at the same time. Cannot reset just one.*

7.3.5. Device Info Screen

This screen shows information about the model of pistol required, and the software version (Figure 96).

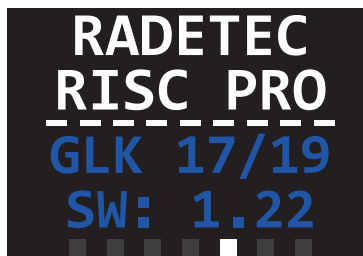


Figure 96: Model and SW screen.

7.3.6. S/N Info Screen

This screen shows the RISCpro's Serial Number and the main sensors' status (Figure 97).

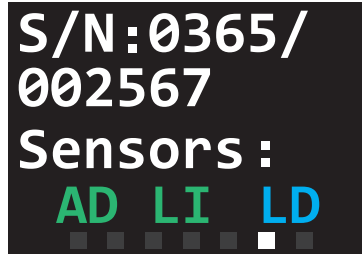


Figure 97: Device's S/N and sensor status screen.

S/N: Device's serial

LI: Shot Counter sensor.

AD: movement sensor.

LD: Round in Chamber Detector sensor.

Green LED: All Ok

Blue/Red LED: Issue present.

7.3.7. Exit Settings

This screen allows you to exit the Settings menu. To exit, press both buttons (Left + Right) at the same time for 2 seconds (see Figure 98).

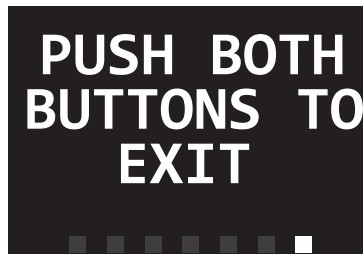


Figure 98: To exit Settings Menu.

7.4. Power On/Off

POWER ON: To power on the RISCpro, press both buttons (Left + Right) for more than 3 seconds, until the display turns on with the RADETEC® logo.

POWER OFF: To power off the RISCpro, from any menu, press both buttons (Left + Right) for 1 second, followed by a long press of both buttons for 5 seconds. The message "Power Off" will be shown on the screen.

7.5. Mode and Settings Flowcharts

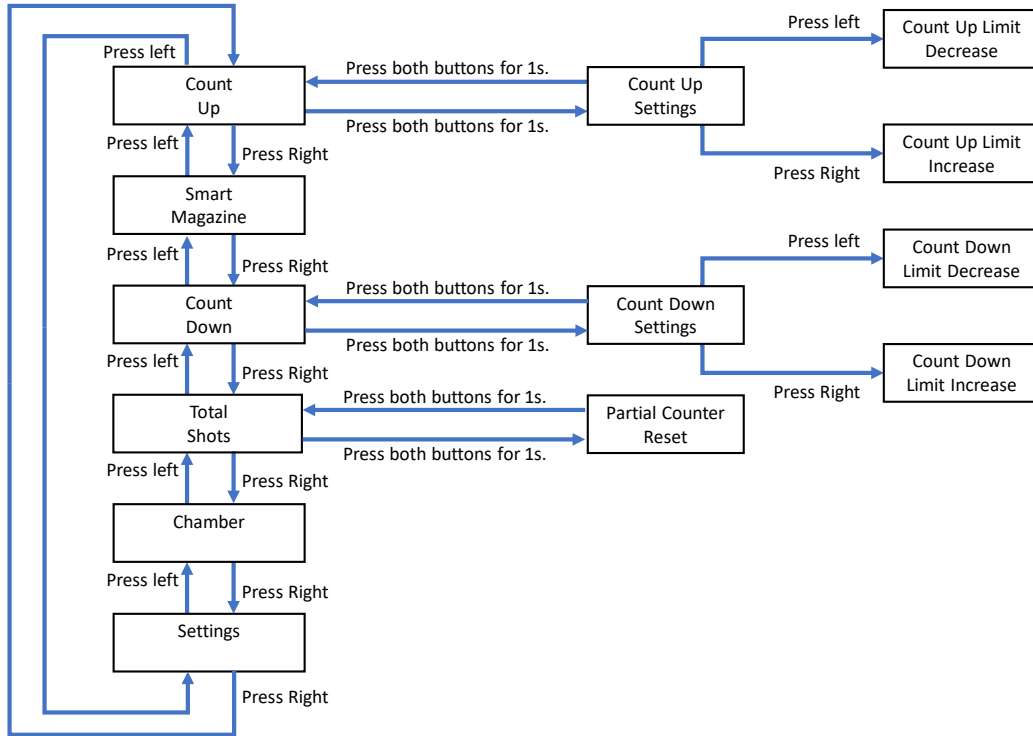


Figure 99: Operating modes sequence.

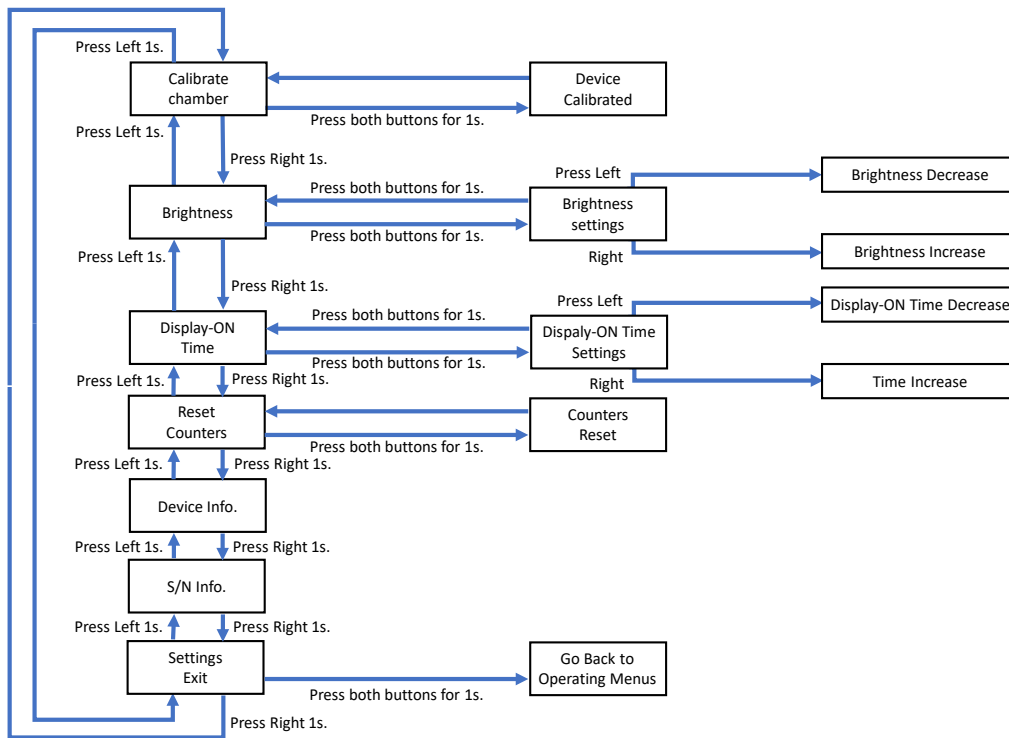


Figure 100: Settings' menus sequence.

8. Maintenance and Cleaning

The RISCpro must be properly maintained to ensure reliable operation and long service life.

Regular maintenance should be performed to properly clean and remove dirt that could affect the action and performance of the device.

The RISCpro components should be taken care of the following way:

1. Inspect the pistol and assemblies, especially if any part is broken, there is suspicion of damage, or when there is a malfunction.
2. Clean the firearm based on its use, appearance and exposure to external conditions. Do not store the RISCpro on a pistol that has not being cleaned properly.
3. Do not let the RISC Display battery go to critical battery levels, charge the device when battery level goes below 25%. When in storage, power it off and keep the battery level at 50% to preserve the battery life cycle.
4. Perform preventative maintenance at least every 500 shots, or once every 3 months.

WARNING!

FOLLOW BASIC FIREARM SAFETY GUIDELINES BEFORE PERFORMING ANY MAINTENANCE OR CLEANING.

BEFORE PERFORMING ANY MAINTENANCE OR CLEANING: UNLOAD THE FIREARM, REMOVE THE MAGAZINE, VISUALLY VERIFY THERE IS NO AMMUNITION LEFT IN THE CHAMBER. ENSURE THERE IS NO AMMUNITION IN THE PISTOL OR THE IMMEDIATE AREA.

IT IS RECOMMENDED TO USE PROTECTIVE GLASSES WHEN PERFORMING ANY MAINTENANCE OR CLEANING

Use solvents and lubricants meant for cleaning firearms only, any other product could damage the RISCpro.

WARNING!

THE RISCpro SYSTEM IS NOT WEATHERPROOF. AVOID ANY ACTIVITY IN HIGH HUMIDITY ENVIRONMENTS, OR SCENARIOS IN WHICH THE DEVICE COULD GET WET.

8.1. RISCpro Maintenance and Inspection

- Inspect the contacts of all of the assemblies. Ensure they are in good condition and that the flex connectors are not bended – see Backstrap and back of the RISC Display. If dirty, carefully clean them with a clean dry cloth.

RISC Display Connectors (Figure 101).

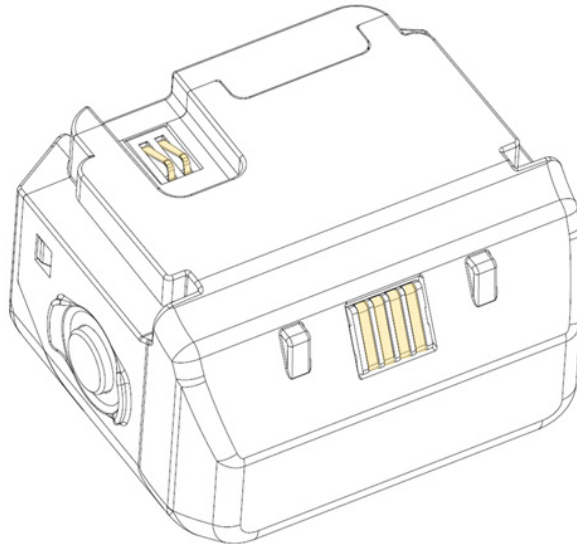


Figure 101: RISC Display connectors location.

Backstrap Connectors (Figure 102).

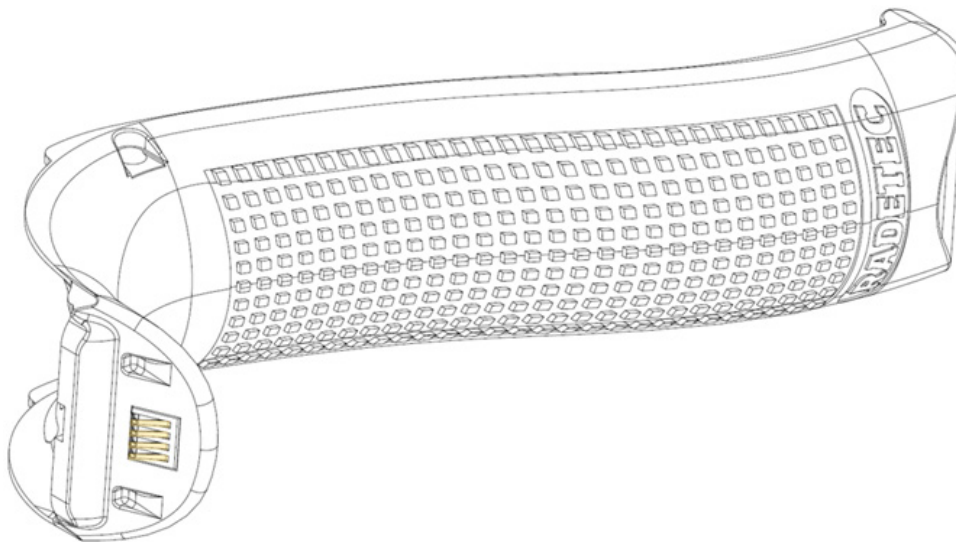


Figure 102: Backstrap connectors location.

RCD Coil connectors (Figure 103).

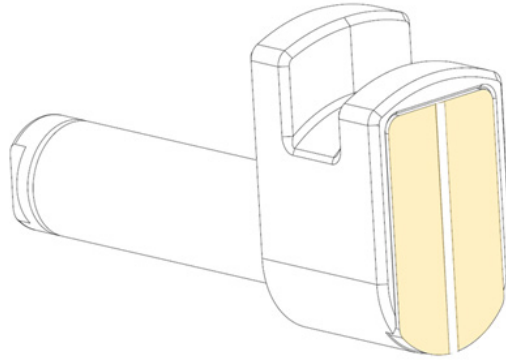


Figure 103: RCD Coil connector pads.

- Check there are no defects in the Backstrap's internal communications strip (Figure 104).

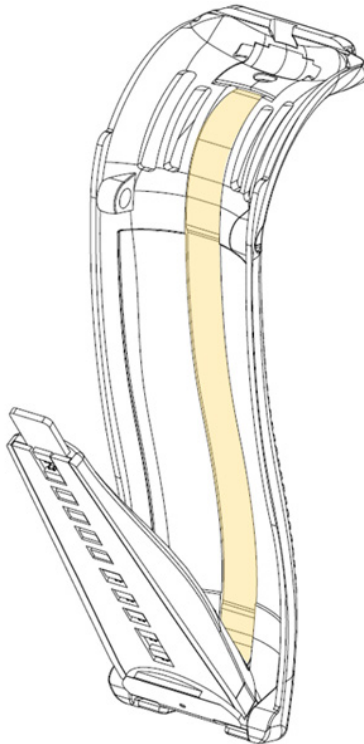


Figure 104: Backstrap's communications strip.

- Clean the exterior of all parts listed above with a clean cloth.

WARNING!

IN CASE YOU DETECT ANY DAMAGED CONTACT, OR DAMAGE IN THE BACKSTRAP'S COMMUNICATION STRIP, DO NOT USE THE DEVICE.

8.2. RISCpro Disassembly

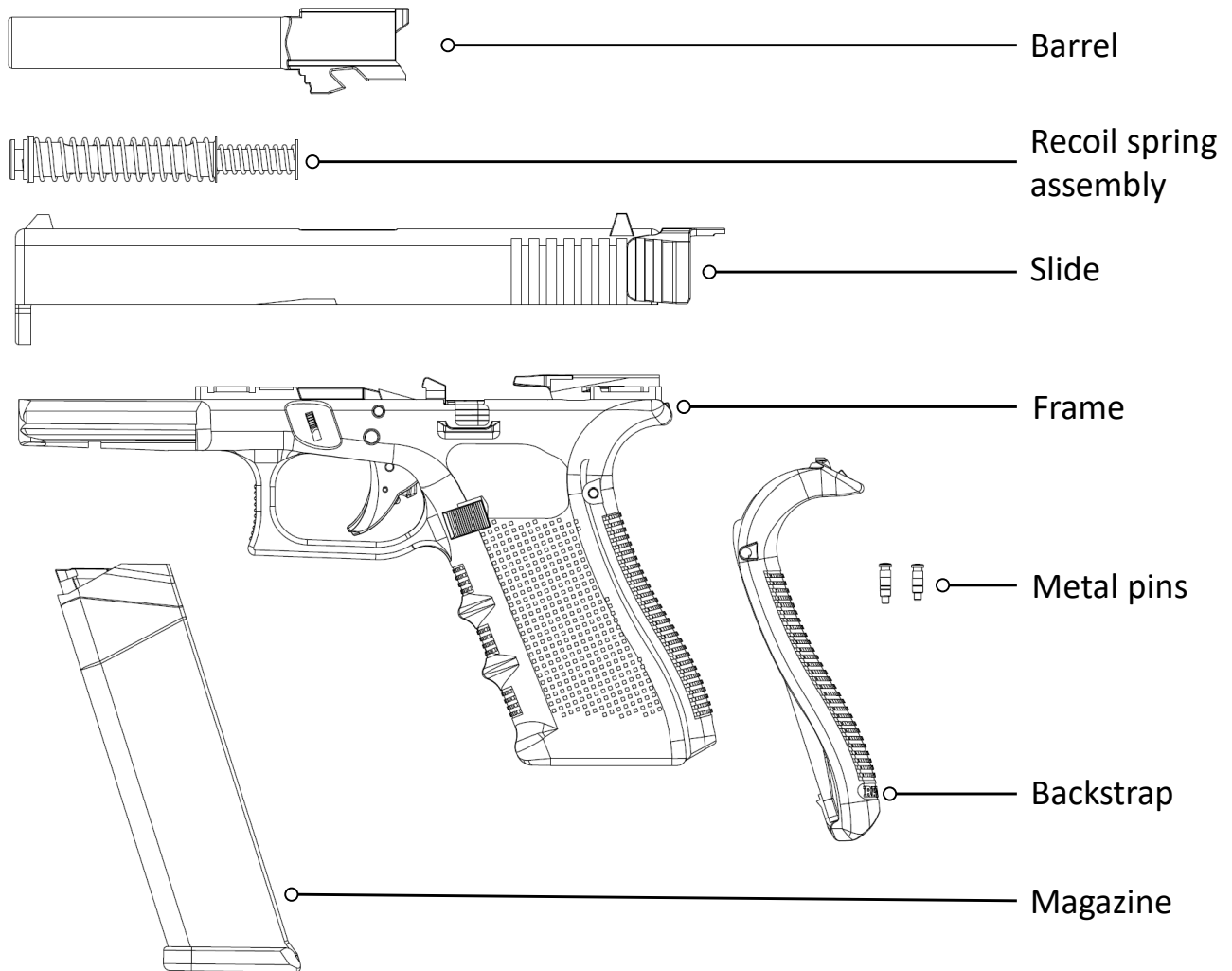


Figure 105: Required parts to be disassembled to clean the RISCpro.

8.2.1. Slide Disassembly

WARNING!

MAKE SURE PISTOL IS UNLOADED! RACK THE SLIDE A COUPLE TIMES TO EXTRACT ANY ROUND IN CHAMBER.

CONFIRM VISUALLY, AND WITH YOUR FINGER, THE CHAMBER IS EMPTY!

THE SLIDE CANNOT BE DISASSEMBLED WITHOUT FIRST REMOVING THE RISC DISPLAY.

1. Take out the RISC Display from the Backplate (Figure 106).

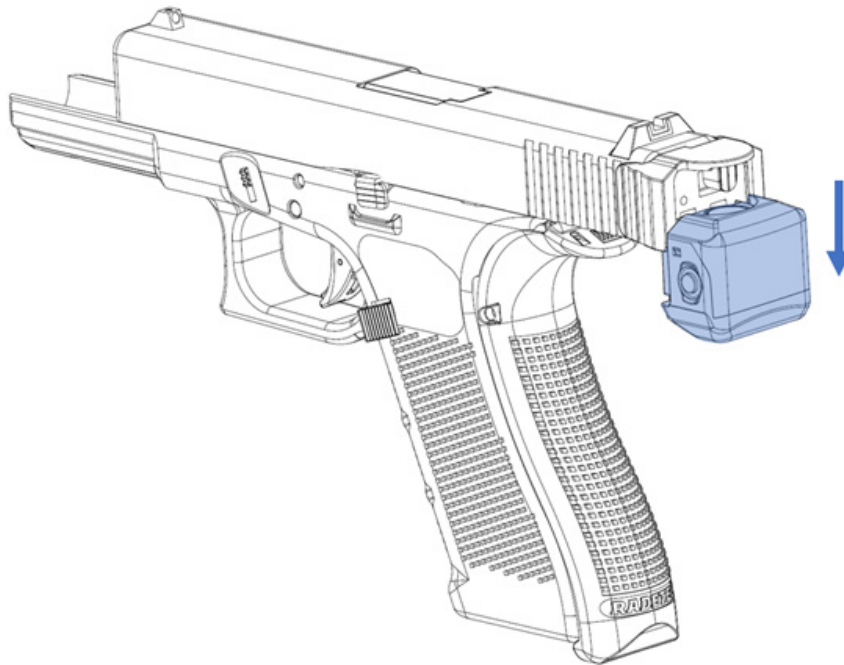


Figure 106: RISC Display dismount direction.

2. The Trigger must be in the rearward position (Figure 107).

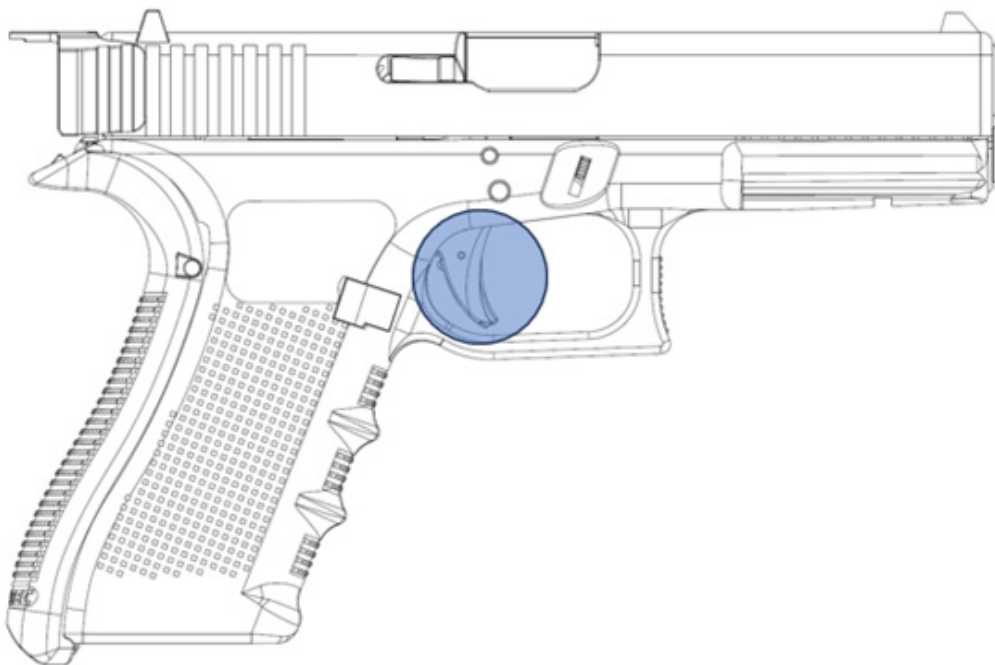


Figure 107: Trigger position to disassemble the Slide.

3. Grip the pistol and pull the Slide slightly back until the Barrel disengages from the Slide.
4. Press both sides of the Slide Lock downward while the Slide is slightly retracted. At that point, push the Slide assembly forward and remove it from the Frame (Figure 108).

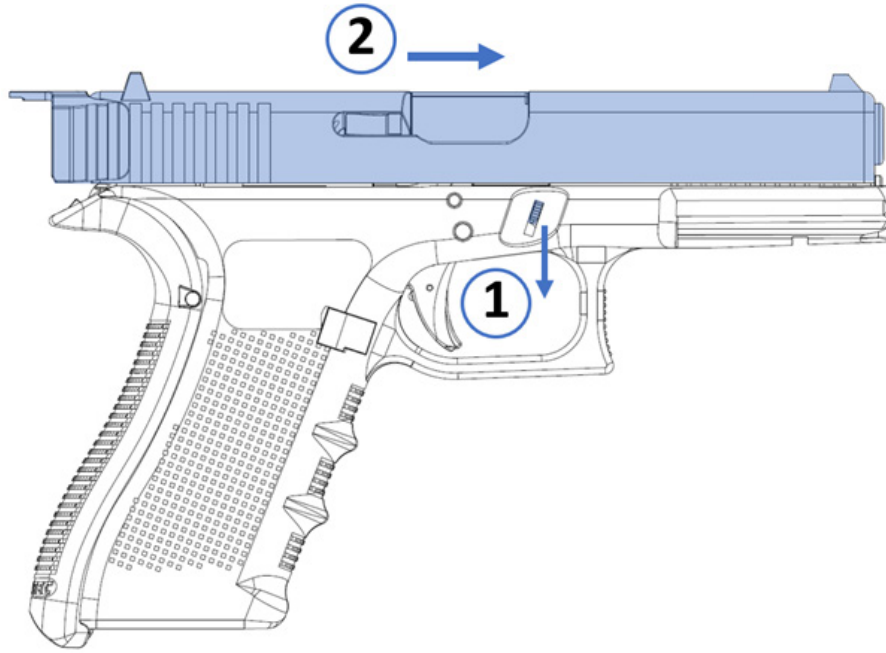


Figure 108: Slide disassembly, steps and direction.

5. Remove the Recoil Spring and the Barrel from the Slide.

8.2.2. Backstrap Disassembly

WARNING!

ENSURE THERE IS NO AMMUNITION IN THE PISTOL OR THE IMMEDIATE AREA.

NOTE: *Its recommended to use protective glasses during disassembly.*

1. Insert the screwdriver tip of the Assembly Tool between the two-notch pinhead and the RISCpro Backstrap. Push the Metal Pin out until it can be removed. Store the Metal Pin in the Assembly Tool body for later reassembly (Figure 109).

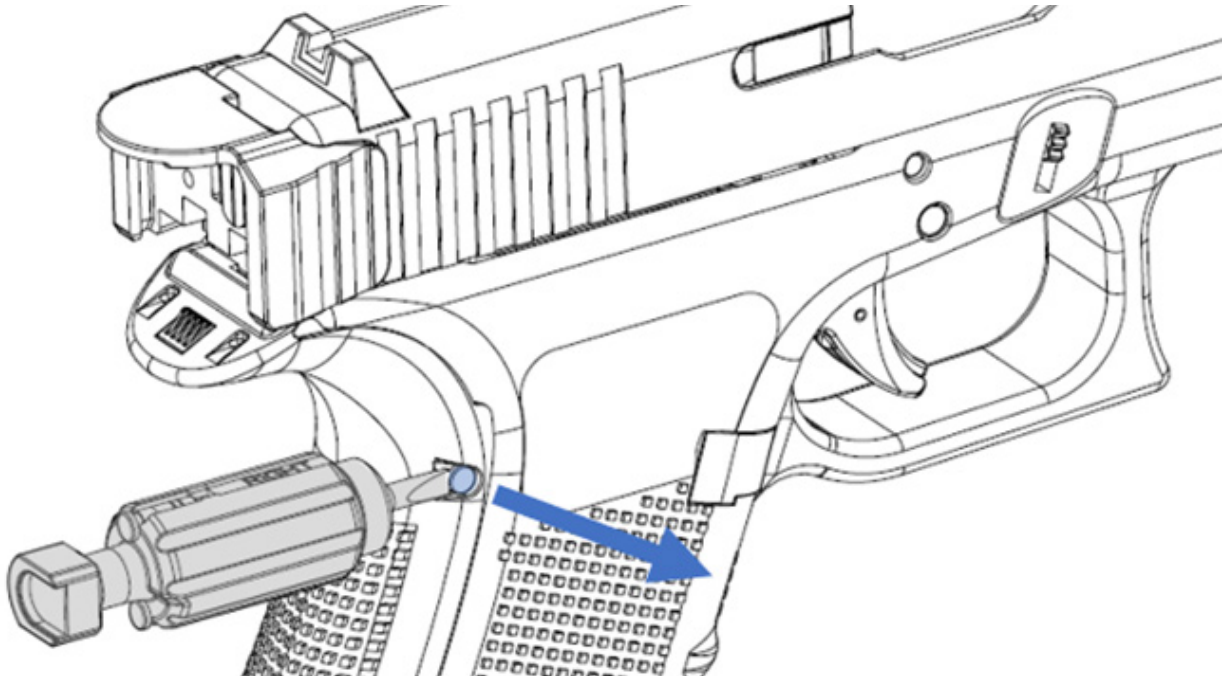


Figure 109: Two Notch Metal Pin disassembly procedure.

2. Insert the screwdriver tip of the Assembly Tool between the one-notch pinhead and the RISCpro Backstrap. Push the Metal Pin out until it can be removed. Store the Metal Pin in the Assembly Tool body for later reassembly (Figure 110).

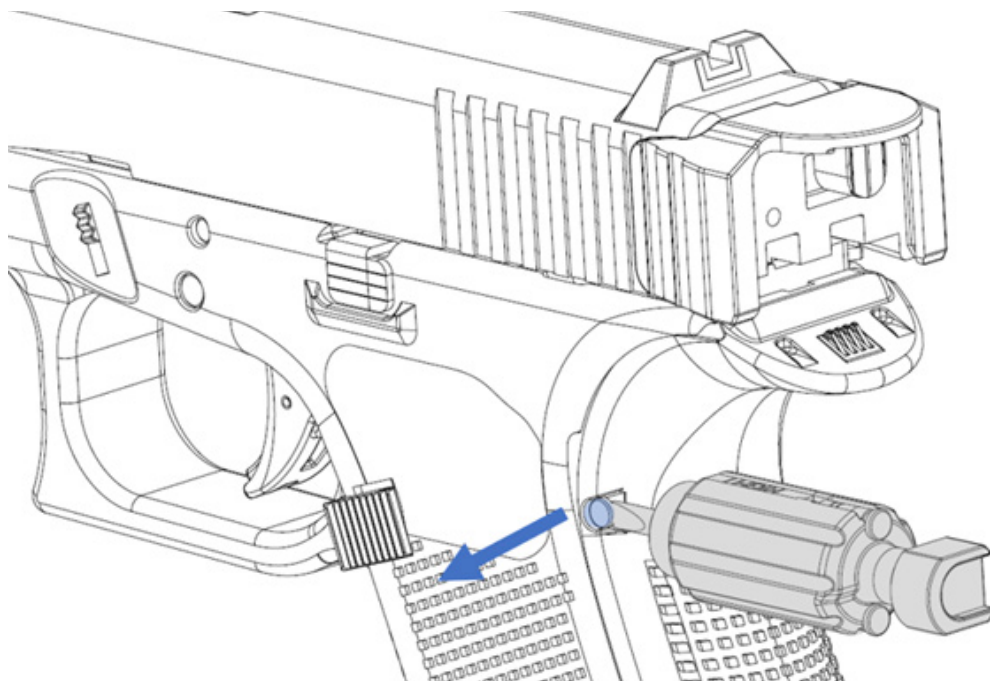


Figure 110: One Notch Metal Pin disassembly procedure.

3. Grip the Backstrap tail and push it down carefully (Figure 111).

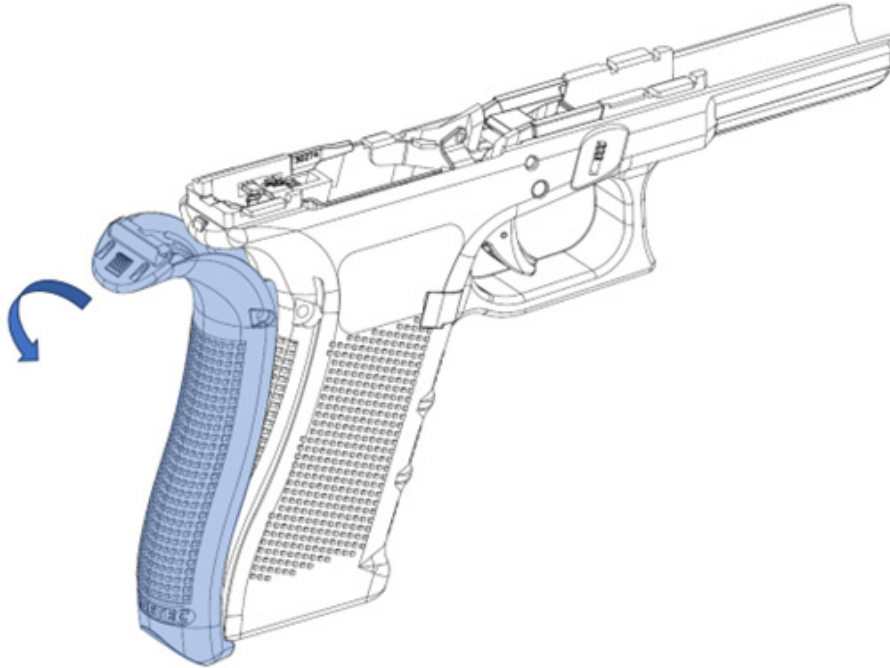


Figure 111: Backstrap disassembly procedure.

4. Slide the Backstrap down until its fully removed from the Frame. Store the Backstrap for later reassembly (Figure 112).

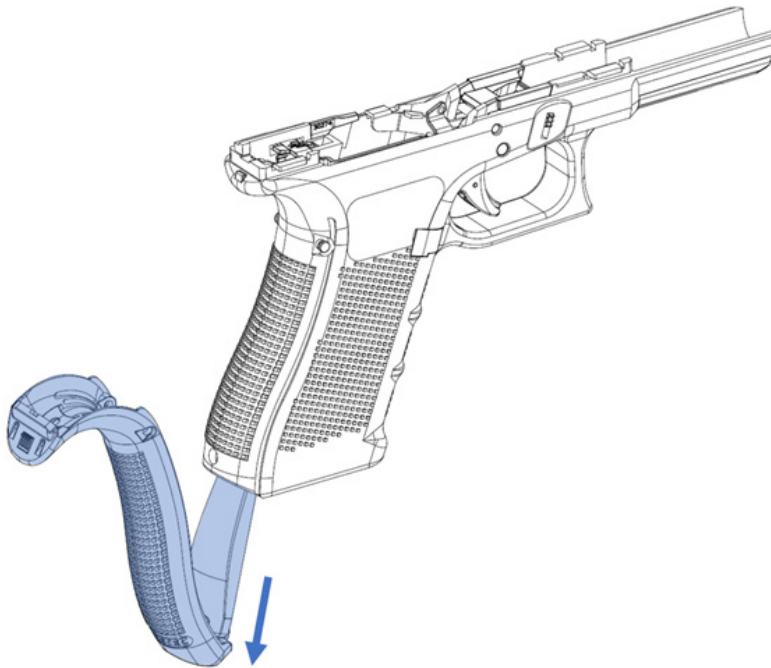


Figure 112: Extract direction from the Frame.

8.3. Cleaning and Lubricating

NOTE: *Clean and lubricate the pistol according to the manufacturer's instructions.*

WARNING!

DO NOT LUBRICATE OR LEAVE OIL RESIDUE INSIDE THE FIRING PIN HOUSING OR THE MAGAZINE WELL. THESE AREAS, ALONG WITH THE CHAMBER INNER BACK SIDE, SHOULD BE ALL DRY BEFORE USING THE PISTOL AGAIN.

LEAVE SOLVENTS, OILS, OR LUBRICANTS IN ANY OF THOSE AREAS CAN ACCUMULATE DIRTY AND LEAD TO POTENTIAL MALFUNCTIONS WITH LIVE FIRE.

Barrel

Clean following the manufacturer's instructions.

Slide

Clean following the manufacturer's instructions.

Frame

Clean following the manufacturer's instructions.

Magazine

Disassembly is not necessary.

Clean the surface with a brush or clean cloth.

8.4. RISCpro Reassembly

WARNING!

ENSURE THERE IS NO AMMUNITION IN THE PISTOL OR IMMEDIATE AREA.

ALWAYS USE PROTECTIVE GLASSES WHILE REASSEMBLING THE DEVICE.

8.4.1. Preliminary Checks

See Chapter 6 Installation, all subchapters, Notes and Warnings.

8.4.2. Reassembly

1. Place the Barrel and Recoil Spring Assembly back into position.
2. Follow the steps described in this User's Guide (see "6.2.2 Backstrap Subassembly")

9. Storage and Transport

It is not necessary to disassemble the RISCpro for storage and/or transport. Consider the following recommendations:

- Turn off the RISC Display.
- Store the pistol with the RISC Display removed from the Slide (Figure 113).

WARNING!

DURING LONG PERIOD STORAGE, KEEP THE BATTERY AT 50% CHARGE TO AVOID BATTERY LIFE AND LIFE CYCLE DEGRADATION.

WARNING!

NEVER STORE A LOADED FIREARM!

MAKE SURE IS NOT CONNECTED TO A POWER SUPPLY WHEN YOU STORE IT

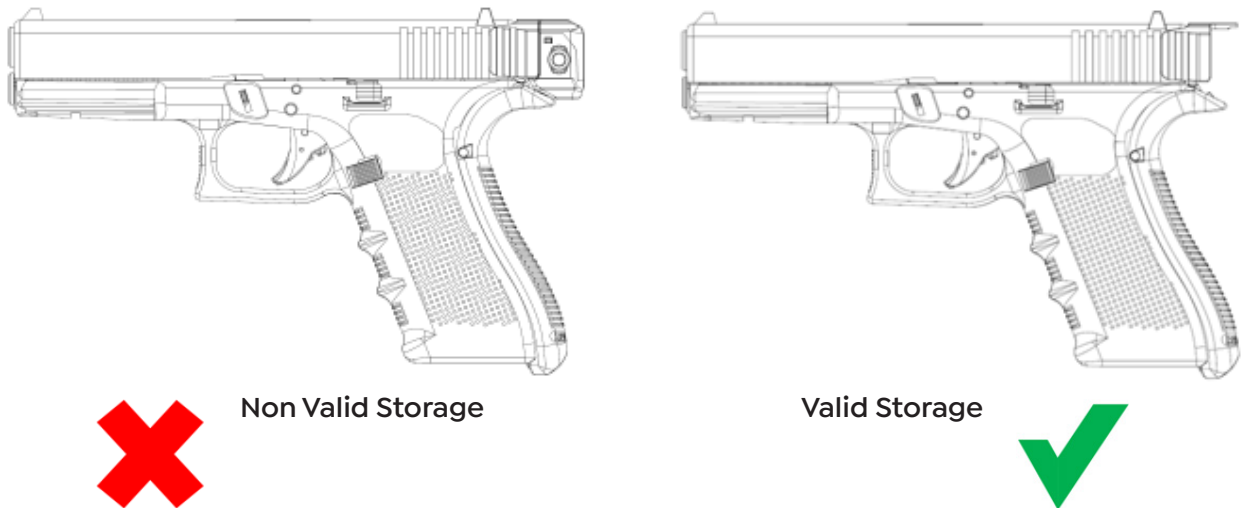


Figure 113: Valid and Non Valid storage options.

10. Troubleshooting

ISSUE	POSSIBLE CAUSE	ACTION
«Slide is open» message on screen while the slide is closed.	Slide not completely closed.	No round in Chamber. Pull the slide all the way back and release it. Ensure the slide is fully closed.
	Backstrap and RISC Display are not connected.	Ensure the backstrap is correctly mounted in its position (see section 6.2.2. Backstrap Subassembly).
	Backstrap to RISC Display contacts are dirty.	Clean the contacts (see section 8. Maintenance and Cleaning).
	Backstrap to RISC Display contacts are bent or in poor condition.	Contact your distributor or RADETEC® at contact@radetecusa.com
RISC Display does not detect round in chamber.	Calibration error.	Calibrate the RCD (see section 7.3.1 Chamber Calibration Settings).
	RCD Coil to RISC Display contacts are dirty.	Clean the contacts (see section 8. Maintenance and Cleaning).
	RDC Coil to RISC Display contacts are bent or in poor condition.	Contact your distributor or RADETEC® at contact@radetecusa.com
Screen Message: DANGER! SENSOR NOT DETECTED.	The RCD Coil is not detected.	Ensure the RDC Coil is correctly mounted, it's in place (see section 6.1 RDC Assembly) and all contacts are clean and in good condition.
Screen Message: DANGER! SENSOR NOT DETECTED.	The DCR module is not calibrated.	Calibrate the RCD (see section 7.3.1 Chamber Calibration Settings).
Screen Message: DANGER! SENSOR NOT DETECTED.	Error preventing proper round in chamber detection.	Verify on the device's info screen that the «LD» sensor color is green (see section 7.3.6 S/N Info Screen). If «LD» is red or blue, contact your distributor or RADETEC® at contact@radetecusa.com
RISC Display does not wake up by movement.	Motion detector error.	Verify on the device's info screen that the «AD» sensor color is green (see section 7.3.6 S/N Info Screen). If «AD» is red or blue, contact your distributor or RADETEC® at contact@radetecusa.com
Does not count shots	Ammunition used is other than that specified by the manufacturer.	Use the ammunition specified by the manufacturer: 9 mm Luger.
	Shot Counter sensor error.	Verify on the device's info screen that the «LI» sensor color is green (see section 7.3.6 S/N Info Screen). If «LI» is red or blue, contact your distributor or RADETEC® at contact@radetecusa.com

ISSUE	POSSIBLE CAUSE	ACTION
Does not count rounds in the Total Ammo Counter of the Smart Magazine mode.	RADETEC® follower is not installed in the magazine.	Ensure the magazine used has the RADETEC® follower inside.
The slide stays closed after the last shot.	Worn out follower.	Replace the follower with a new RADETEC® follower.
The slide stays open after the last shot.	The Slide Stop Lever Spring may not be resting in the notch of the Locking Block Pin.	Ensure the Slide Stop Lever is correctly installed in its position (see section 6.2.1. Trigger Group Subassembly).
RISC Display battery is not charging.	No electrical contact.	Ensure the slide is correctly closed and verify that the charging LED is solid red. Follow the charging process (see section 5.4 Charging the Device).
RISC Display keeps rebooting.	Critical battery level or battery issue.	Fully charge the device and try several times that, when racking the Slide, the device does no longer reboot.
	Internal error.	Fully charge the device and try several times that, when racking the Slide, the device does no longer reboot. If the RISC Display keeps rebooting, contact your distributor or RADETEC® at contact@radetecusa.com
Screen brightness is dimmed.	RISC Display is overheated.	Power off the RISC Display and take it to a cool indoor location Immediately. Wait until its surface temperature matches the room and power it on again.
	Internal Error.	Contact your distributor or RADETEC® at contact@radetecusa.com
Push-buttons are irresponsive.	Internal error.	Contact your distributor or RADETEC® at contact@radetecusa.com
Screen remains on continuously.	RISCpro is being shaken vigorously, or shooter is firing the pistol.	If the RISCpro motion sensor detects the gun is firing a shot, or senses the shooter is moving the pistol, the screen will turn on for the amount of time you have had preset the screen timeout (see section 7.3.3 Display-On Time Settings).
	Internal error.	Contact your distributor or RADETEC® at contact@radetecusa.com

11. WARRANTY

Product warranty access:

<https://www.radetecusa.com/warranty/>

Contact

For more information about our products, visit www.radetecusa.com

Note: The images and figures in this User's Guide are illustrative and may differ from the actual product.

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