

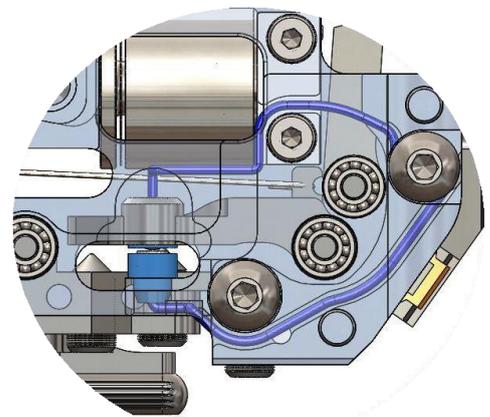
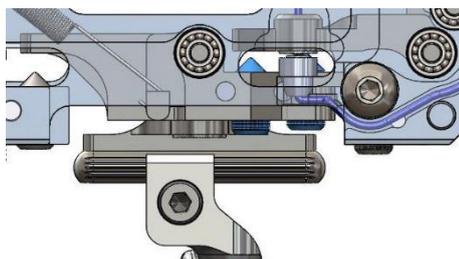
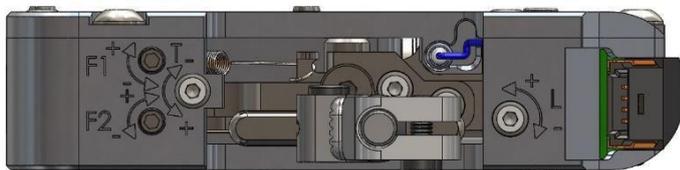
R3 acer

SMALL BORE RIFLE .22 l.r.



PROFESSIONAL MANUAL

E-Trigger adjustment



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Dear target shooter

We congratulate you on purchase of your sport rifle. The decision certainly not difficult for you, because our sport rifle is successfully used worldwide. A well-engineered design and excellent processing are special signs of our products.

Please consider the following points, before you use your sports device:

1. Look at a gun always as loaded, before you have convinced yourselves of the opposite. Carry the gun only with open bolt, so that each can see that it is not ready to shoot.
2. Hold the muzzle of your sport rifle always in shoot direction!
3. Please control before shooting always whether you have the suitable ammunition to the caliber of the weapon.
4. Please control before shooting always that the barrel is not blocked by dirt, cleansing material or other foreign bodies.
5. The safety lever has to be always in the right position, either in the position securely or ready to fire **F**. Never in between!
6. Protect your sport rifle up to the immediate shot. Make sure that the shot direction is free, before you operate the protection. If you don't like to shoot or operate the safety, always finger away from the trigger! (Finger stretched!)
7. Apart from the normal rifle support, the disassembling of the rifle should occur only through an authorised expert.
8. The e-Trigger and the matching components may not be changed in any form, be repaired or be taken apart. **This is not covered by the guarantee.**
9. **Avoid direct contact with oil and water in the plug openings.**
10. **While opening the boards cover the guarantee on the device goes out.**

General Functions

Turning on	Press the « Power » button during 2 seconds (The LED in the tracer blinks four times)
Turning off	Press the « Power » button during 3 seconds (The LED in the tracer blinks three times)
Device is switched on	The continuous flash, all 5 seconds of the green LED in the « Power » button
Batterie state check	Short press on the « Power » button
Battery legend	
Battery completely	 
Battery half-completely	 
Battery minimum	 
Battery empty	 
Malfunction message	
Failure on system (fast red flashing) Please follow the instructions in Chapter 6	  

Trainings-Modus

Activate training mode	With the electronics switched off , plug the training dummy into the socket provided on the underside of the shaft and then switch the system on with the « Power » button
Deactivate training mode	Switch off the system with the « Power » button and remove the training dummy
Training functions	Activating the training mode starts a random function which randomly generates the trigger

Battery change

To change the battery you must first remove the butt plate- and cheekrest mechanism. After loosening the adjusting wheels, first pull out the cheekrest and then the butt plate support.



Figure 1: Delivery status



Figure 2: Remove both adjusting wheels



Figure 3: Remove the butt plate and cheekrest support



Figure 4: Solve both screws of the cover

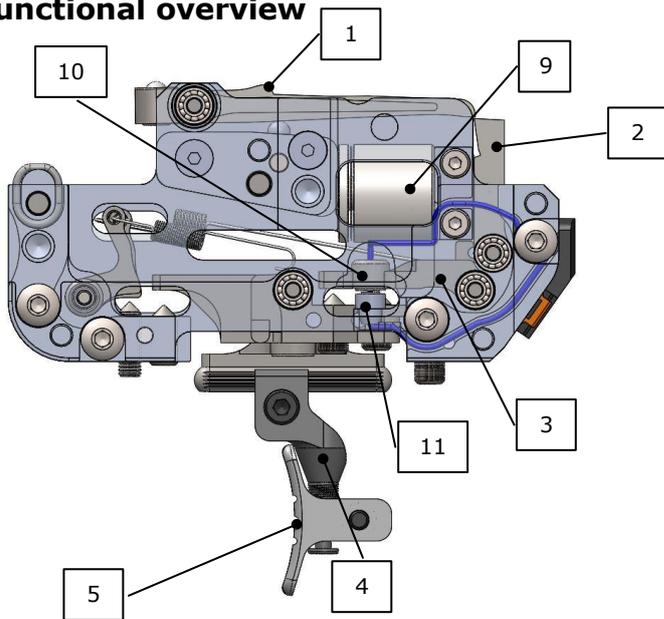


Figure 5: Use an Allen wrench to push the battery through the hole in the holder

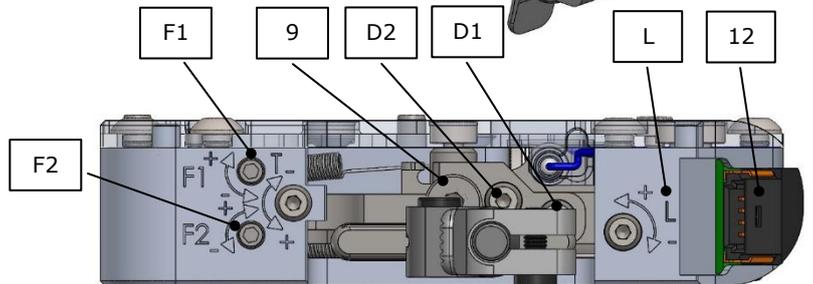
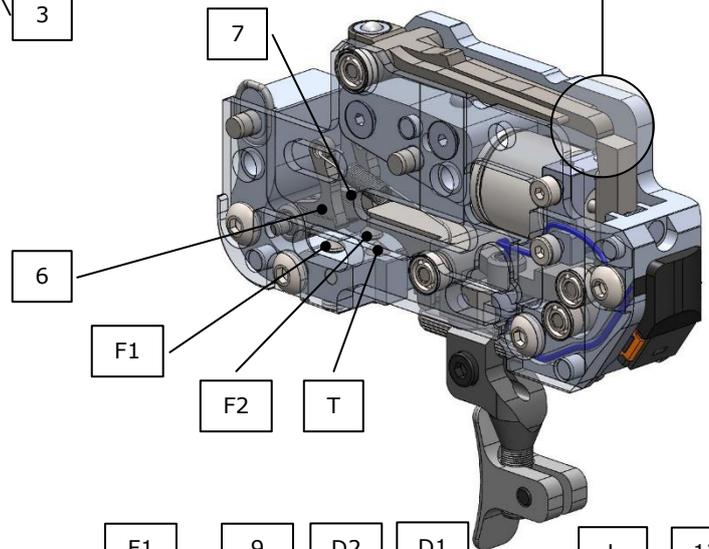
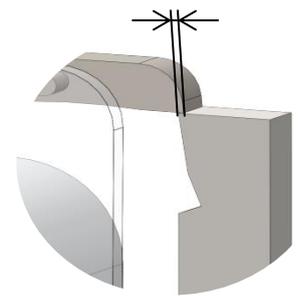


Figure 6: The battery can then be replaced and the system completed again

Functional overview



pawl overlap is fixed by default

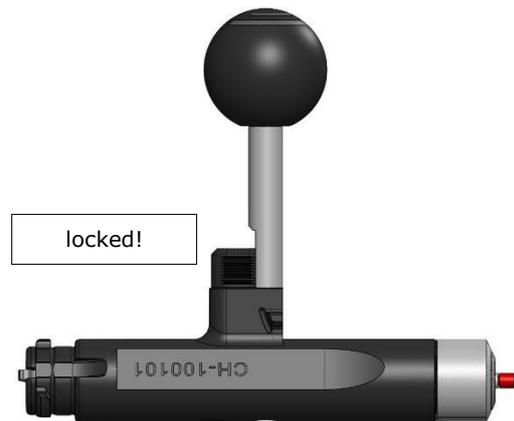
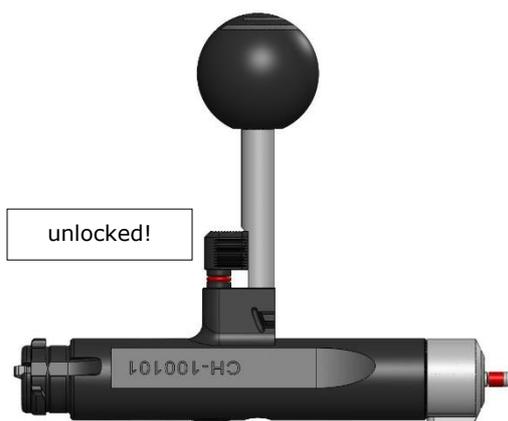


1	Catch
2	Lever catch top
3	Lever catch bottom
4	Trigger lever
5	Trigger blade
6	First stage weight lever
7	Trigger weight lever
8	Trigger lever fastening screw
9	Stroke magnet
10	Electronic contact K1
11	Electronic contact K2
12	Electronic interface
F1	First stage weight adjusting screw
F2	Trigger weight adjusting screw
T	Triggerstop screw
D1	First stage (harder)
D2	First stage (softer)
L	First stage way adjusting screw



Attention!

Always **unload** the sportsrifle before making any adjustments. Observe the general safety instructions when handling the rifle and especially when shooting. When adjusting the rifle, it is advantageous to lock the safety catch on the breech to the "locked" position!



Factory setting

The trigger is delivered with the following presetting:

First stage trigger with approx. 100g set trigger weight. The first stage screw D1 (harder) is active. The first stage screw D2 (softer) has an air gap. The first stage way is approx. 2mm.

Your setting are as follows:

F1	First stage weight adjusting screw
F2	Trigger weight adjusting screw
T	Triggerstop
D1	First stage (harder)
D2	First stage (softer)
L	First stage way adjusting screw

Read the operating instructions carefully.

Do not adjust too much at once!

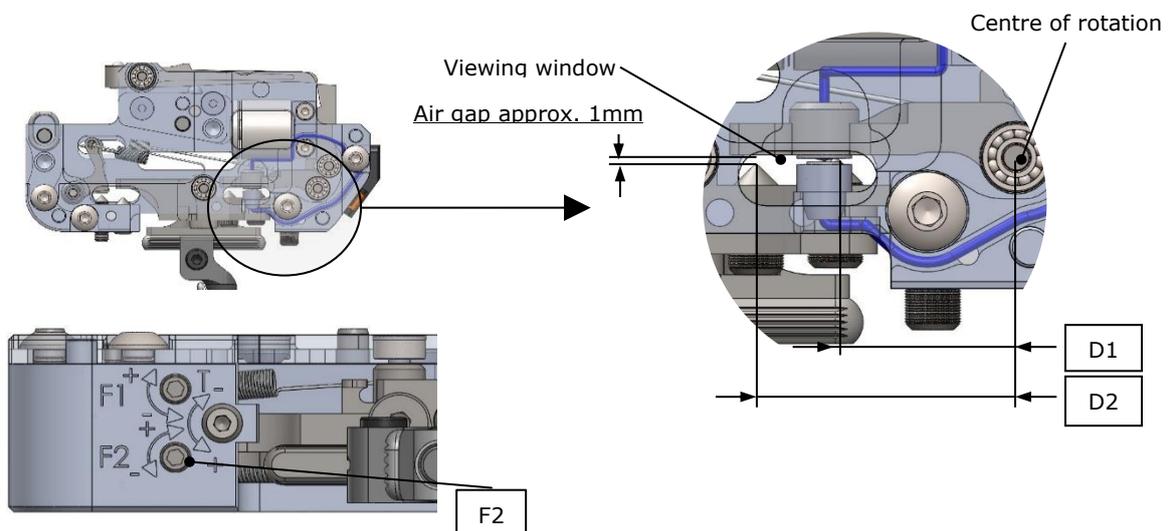
Trigger weight

You have 2 options to adjust the first stage:

Trigger weight 60-150 Gramm with first stage adjusting screw **D1**.

Trigger weight 45-90 Gramm with first stage adjusting screw **D2**.

Important: If you have decided on **D1**, turn first stage adjusting screw **D2** back. If **D2** is your choice, turn **D1** back. An air gap of approx. 1mm is ideal in each case. **Never work with both first stage adjusting screws (D1+D2) at the same time!** The air gap is clearly visible through the viewing window.



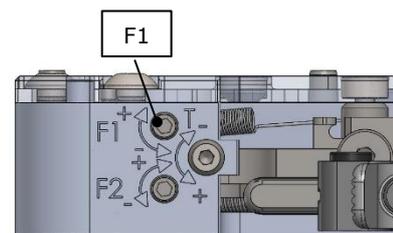
After turning the first stage adjusting screw D1 or D2, you can adjust the trigger weight with the F2 adjusting screw.

- Turn to the right (clockwise): The trigger weight **is increased (+)**
- Turn to the left (counterclockwise): Trigger weight **is reduced (-)**

First stage weight

The adjustment of the preferred weight is carried out by means of the adjusting screw **F1**.

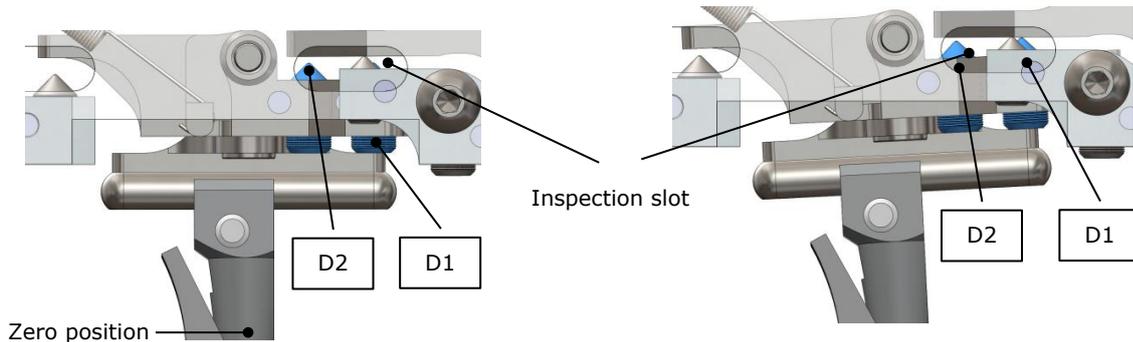
- clockwise (clockwise): Preferred weight **is increased (+)**
- to the left (counterclockwise): Preference weight **is reduced (-)**



The trigger weight and the preferred weight are mechanically interdependent. Each adjustment always results in a change of the trigger weight and the first stage weight.

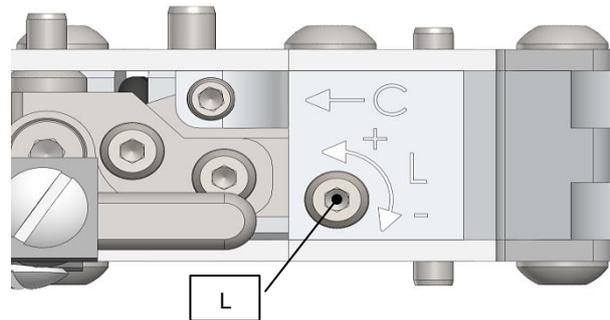
First stage way

The first stage way means the distance the trigger blade travels from the zero position to the pressure point. (Trigger slack screw **D1** or **D2**).



The first stage travel can be adjusted with screw **L**:

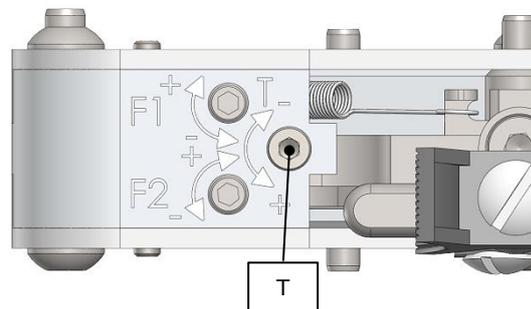
- turn right (clockwise):
first stage travel shortens (-)
- turn left (counterclockwise):
first stage travel extends (+)



Second stage pull

The second stage pull together with the trigger stop can be adjusted with screw **T**:

- turn right (clockwise):
second stage travel shortens (-)
- turn left (counterclockwise):
second stage travel extends (+)

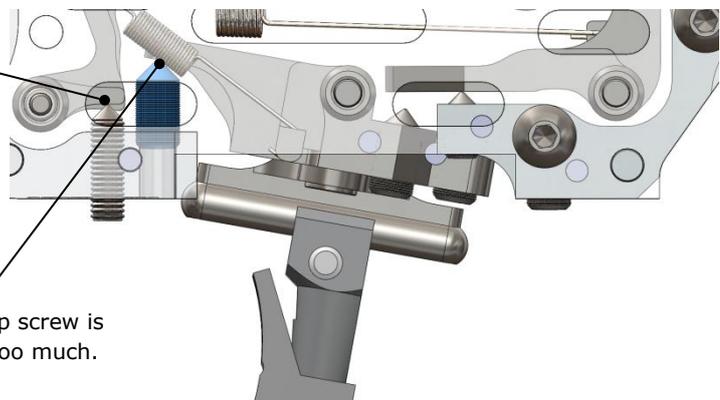


Watch out!

The trigger stop screw **T** can be over tightened. In this case the trigger will not release the firing pin!

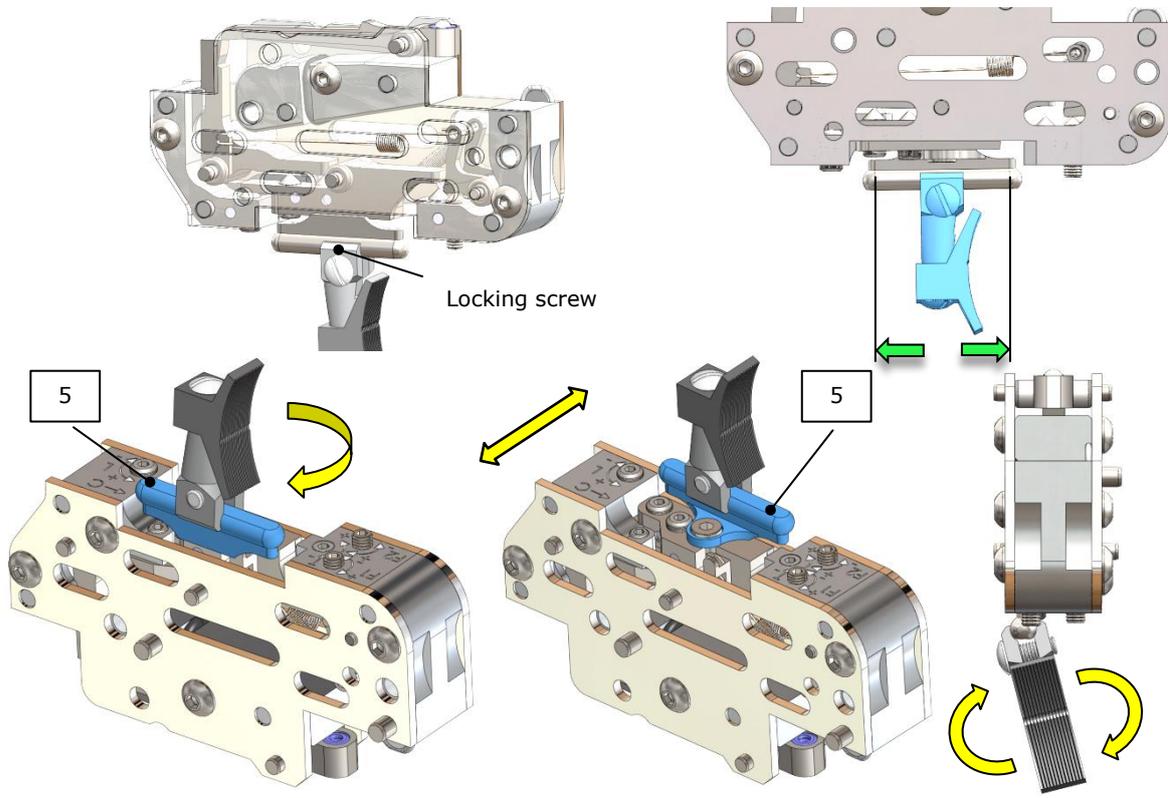
Inspection slot

Trigger stop screw is tightened too much.



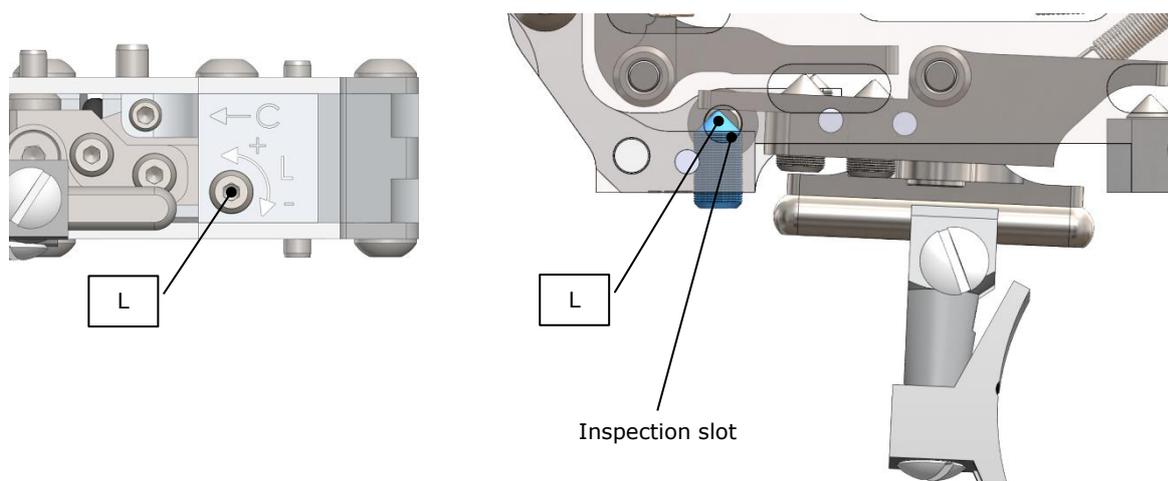
Adjusting the trigger blade

Loosen the locking screw. The trigger blade can be pivoted sideways or moved back and forth. The asymmetrical trigger rail **5** can be flipped 180 degrees, to gives you an additional option for adjusting the trigger blade sideways.



Conversion from double stage trigger to direct trigger

When the bolt is cocked turn set screw **L** clockwise until the trigger releases. Then turn bolt set screw **L** counter clockwise half a turn.

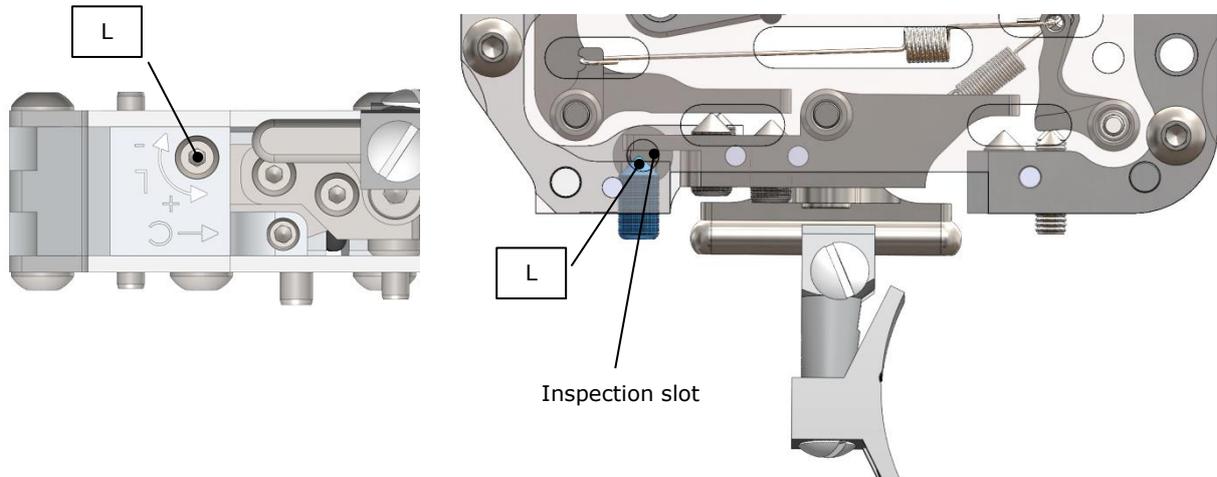


Watch out!

Set triggers are very delicate and should be handled with extreme precaution. When the trigger pull is set very lightly, malfunctions may occur. Also there is a higher risk that a shot may go off accidentally. After having performed adjustments to your trigger, always test the proper function by using the dry fire mode.

Conversion from direct trigger to double stage trigger

Turn the set screw **L** counterclockwise until the desired first stage travel is achieved.



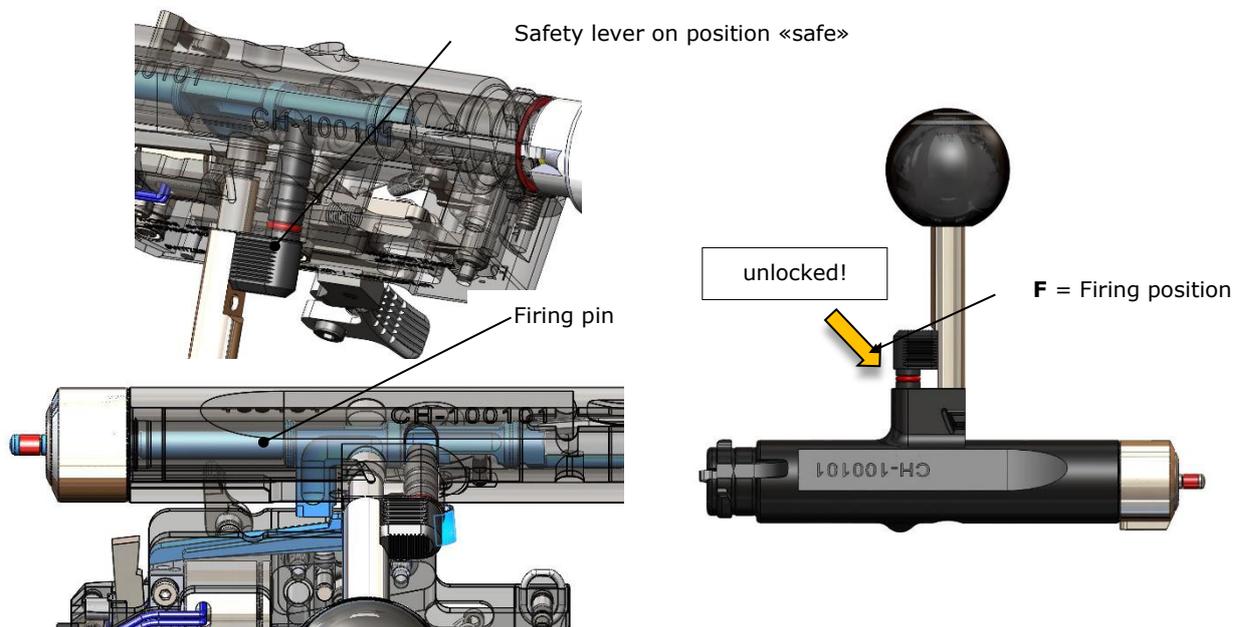
Malfunction of the trigger due to incorrect adjustments

If you experience trigger malfunctions due to improper adjustment use the following method to correct.

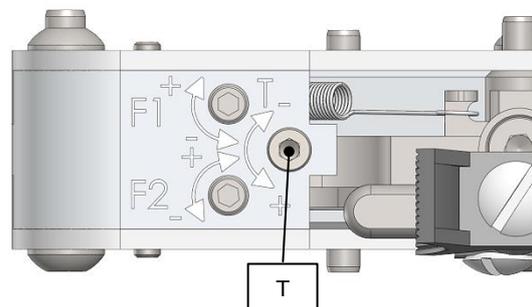
Problem: The firing pin does not strike the cartridge.

The safety lever of the bolt may catch the firing pin:

- Make sure the safety lever is in position **F** (Fire!).

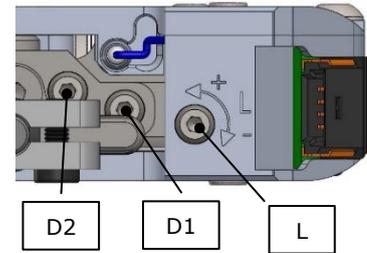


- Trigger stop screw **T** may be tightened too much. Turn screw **T** slowly clockwise until the trigger releases the firing pin again.

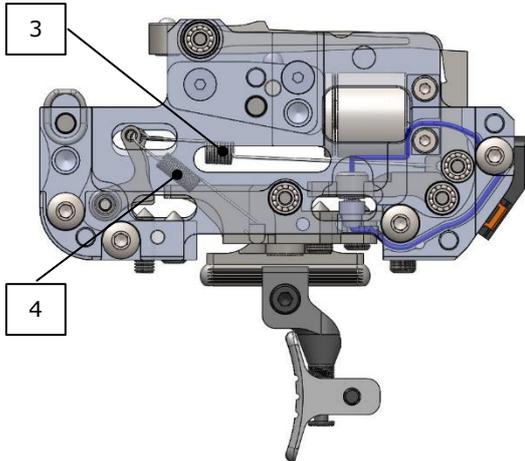


Problem: When closing the bolt the trigger does not catch the firing pin

- The screw **L** (first stage travel) is tightened too much.
Turn screw **L** counterclockwise until the trigger catches the firing pin again.
You may also achieve the same effect by adjusting the screws **D1** and **D2**. Turn the set screws **D1** or **D2** slowly to left (counterclockwise) until the trigger catches the firing pin again.



- Make sure the trigger spring **3** and first stage spring **4** are not damaged and correctly positioned.

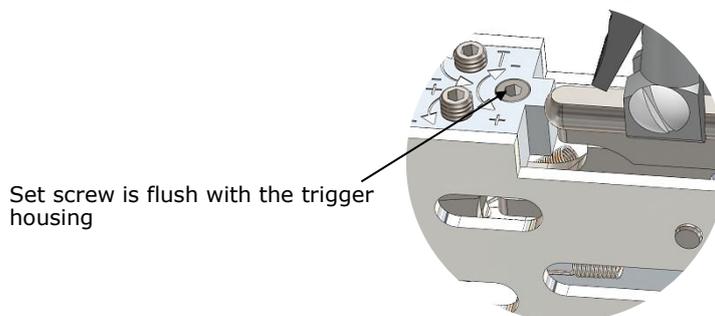


Safety Hint: After having made adjustments to your trigger always perform a function test in dryfire mode. If the malfunction is corrected you may restore the desired settings to your trigger.

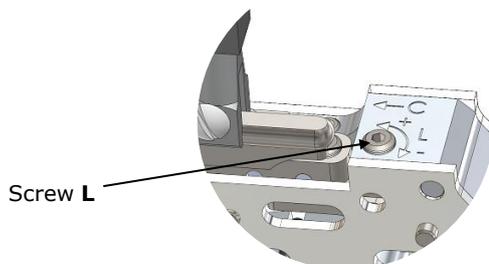
Basic trigger settings

If you want to restore the basic trigger settings do the following:

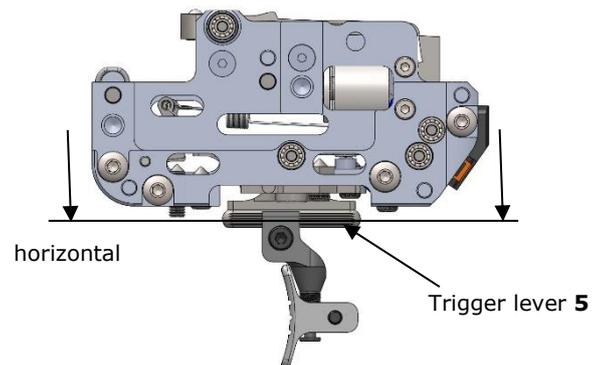
- Separate the barreled action from the stock.
- Turn screw **T** until the head of the screw is flush with the trigger housing.



- Use the screw **L** to align the **trigger bar 5** horizontally. (see picture below on the right)



- Cock the action.
- Use the screws to adjust the trigger according to your wishes.

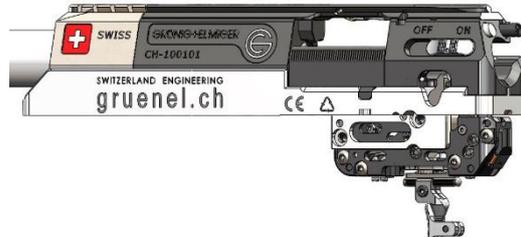


Removing the trigger housing

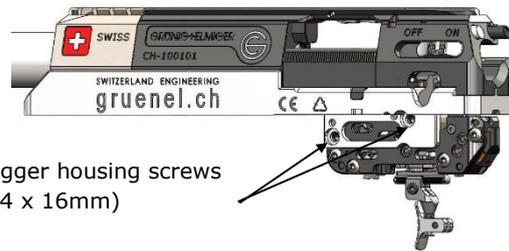
Separate the barreled action from the stock.



Remove the bolt.

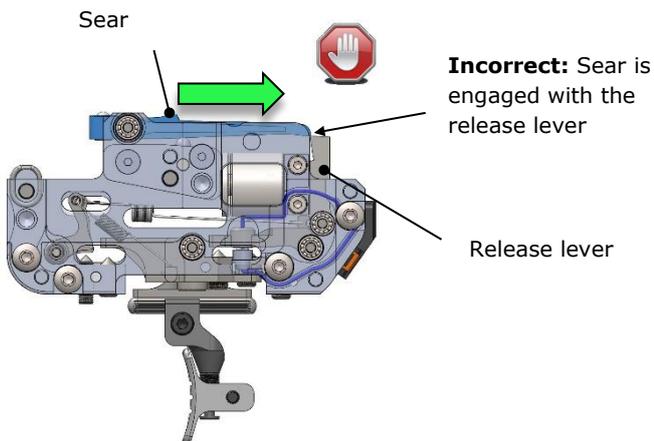


Remove the two trigger housing screws.

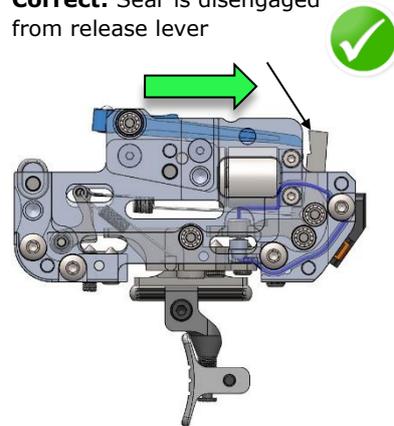


Watch out!

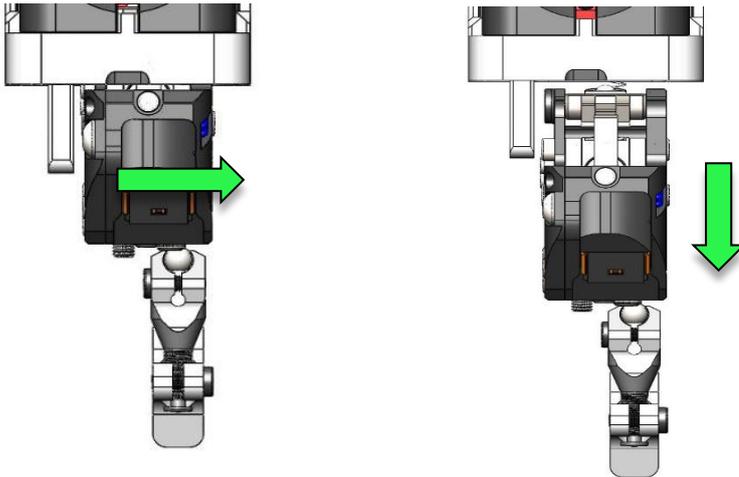
When you want to remove the trigger housing you need to pull the trigger blade backwards to disengage the sear from the release lever. Only when the sear is completely disengaged from the release lever will you be able to separate the trigger housing from the action.



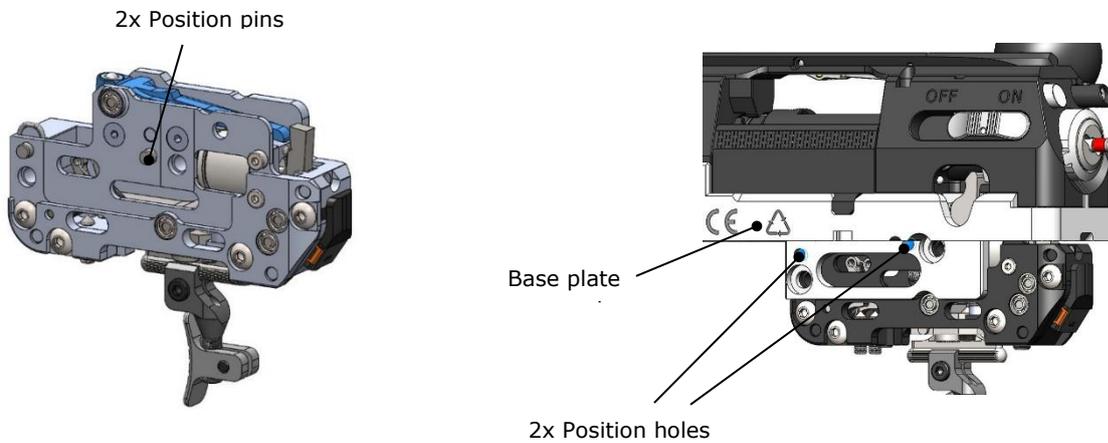
Correct: Sear is disengaged from release lever



Carefully wiggle the trigger housing out of the positioning holes.



The positioning pins are on the side of the trigger housing.



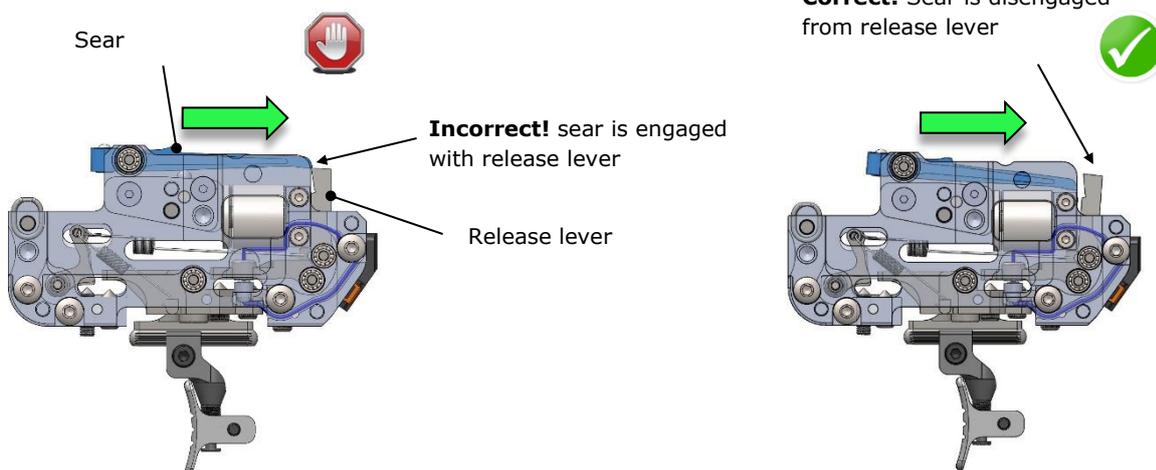
Attaching the trigger housing

To attach the trigger housing perform the above sequence in reverse.



Watch out!

When you want to attach the trigger housing you need to pull the trigger blade backwards to disengage the sear with from the release lever. Only if the sear is completely disengaged from the release lever are you able to attach the trigger housing.



Pos-Nr.	Abmass	Ident. No.	Bezeichnung	Bestell-No.	Anz.
1	ø2xø4x2.30	450-02-009	Rillenkugellager	Morini	8
2	M2x3	450-02-010	Zylinderschraube	BN7	5
3	M2.5x8	450-02-051	Innensechskantschraube	BN20	2
4	M3x6	420-02-004	Linsenschraube	BN19	4
5	ø3x10	420-02-025	Zylindersstift	BN857	2
6		450-02-007	Deckel elektr.		1
7		420-02-009	Vorzug- Abzughebel		2
8		420-02-010	Stützbolzen		1
9	16.86/16.37x2.8 5x0.28	420-02-012	Vorzugfeder	42002012.01	1
10	ø2x7.91 mm	450-02-008	Lagerbolzen (Nadellager)	Morini	8
11		450-02-032	Fanghebelklinke unten		1
12		450-02-043	Halter Hubmagnet		1
13	42.3 / 4.2 x 3.50 x 0.40	420-02-011	Abzugfeder		1
14		450-02-006	Abzughebel		1
15	M4x0.2x8	420-02-006	Gewindestift mit Spitz	3504049	4
16	ø5x1	420-02-028	O-Ring Nitril NBR 70 Shore	0101-00368	1
17	ø2x8	420-02-020	Nylonsicherung		1
18	ø2x5	420-02-021	Nylonsicherung		1
19	ø1.95 / ø2.50	450-02-045	Schaltkontakt flach	Morini	1
20	4	420-02-029	Druckstück	BN13376	1
21		420-02-002	Fanghebel		1
22		450-02-030	Abzugsgehäuse elektr.		1
23		420-02-013	Abzugszängelhalter		1
24	M3x5.50	420-02-017	Senkschraube	3555963	1
25	M3x10	450-02-011	Gewindestift mit Spitz	BN29	2

Pos-Nr.	Abmass	Ident. No.	Bezeichnung	Bestell-No.	Anz.
26	ø3.0	820-09-013	Kugel aus PP ø3.0mm	342731	1
27	ø2x11	420-02-022	Nylonsicherung		2
28	ø1.95 / ø2.50	450-02-046	Schaltkontakt spitz	Morini	1
29	ø2.50x12	222-04-005	Zylindersstift	BN857	1
31		450-02-031	Fanghebelklinke oben		1
32	ø13.20	450-02-043	Hubmagnet	Morini	1
33	M2x4	450-02-011	Innensechskant Schraube	BN24	1
34	1.50x10	450-02-012	Spiral Spannstift	BN874	2
35	ø2x4.0	420-02-027	Nylonsicherung		1
36	5.9x2.2x0.2	450-02-053	Druckfeder	30460	1
37		450-02-052	Federhülse	Morini	1
39		450-02-054	Kontakt-Isolierhülse	Morini	2
43		450-02-059	Steckerplatine	Devising SA	1

POS	Menge	Einf- heit	DIN-Nr.
And.			05.08.14
Gezeichnet		Daniel Grüfing	
Geprüft			
Normalgeprüft			
Freigegeben			
Auftrags-Nr.			
Ursprung		Anz. Blatt	
Ersatz für		2	
Sach-Nr.		Blatt Nr.	
		2	
		Zeichnungs-Nr.	
		450-02	

Abzug KK
Abzug elektr.



