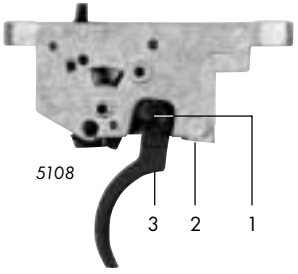
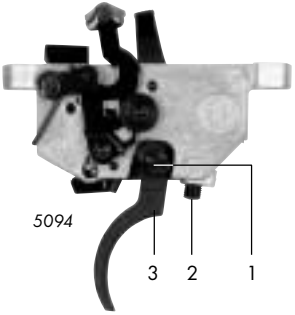
Two and single stage triggers





1. Trigger weight

Adjust the trigger weight with set screw No. 2:

- if you turn it to the right (clockwise): trigger weight is increased (+)
- if you turn it to the left (counter-clockwise): trigger weight is decreased (-)

Trigger weight and first stage weight depend on each other with regard to the mechanic mechanism. If one of them is changed there will always be a corresponding change of the other as well.

2. Sear engagement

The sear engagement is the distance between the second stage and the release of the trigger.

Important note:

To protect your precise trigger and to guarantee perfect operation you should always close the action carefully. If the sear engagement of single stage triggers is too small and the trigger weight is too low or if the first stage of two-stage triggers is too short, the trigger might release inadvertently by a sudden impact or too powerful closing of the action if the gun is loaded and not in the "safe" position.

Adjustment of the sear engagement for assembled **two-stage triggers** with set screw No. 1:

- if you turn it to the left (counter-clockwise): sear engagement is shortened
- if you turn it to the right (clockwise): sear engagement is extended

Adjustment of an optimum sear engagement: Make sure your rifle is not loaded. Cock your rifle and release the trigger. Check if the trigger releases as desired.

The sear engagement is too long:
There is a small distance between the second stage and the release of the trigger.

- Turn set screw No. 1 counter-clockwise after cocking and releasing (approxi-

mately $^1/_8$ turn each).
- Repeat this process until you do not feel the second stage anymore. Then turn $^1/_4$ turn back to the right. Thus the optimum sear engagement is adjusted.

The sear engagement is too short:
There is no second stage. The trigger releases un-defined without second stage.

- Turn set screw No. 1 clockwise for at least $^1/_4$ turn after cocking. Then release the trigger and check if there is a second stage. If not, repeat this procedure until you feel a second stage.
- As soon as you feel a second stage proceed according to the points of the paragraph „The sear engagement is too long" to obtain an optimum sear engagement.

Adjustment of the optimum sear engagement for assembled **single stage triggers** with set screw No. 1:
- Cock the rifle.
- Turn set screw No. 1 (first stage) as long to the right until the trigger releases.
- Turn set screw No. 1 from this position approx. $^1/_4$ turn to the left.

Warning:

Single stage triggers are very sensitive and must be operated with special care.

The sear engagement of $^5/_{100}$ mm is obtained after the action is closed. In combination with a minimum trigger weight there might be a malfunction and an **increased risk (independent shot release).**

3. Malfunctions of the trigger due to wrong adjustment procedure

If the trigger is not adjusted correctly malfunctions may occur, tampering with the trigger adjustments will not result in any success. Therefore proceed as follows:
After every change the function of the trigger must be checked. When the malfunction is removed check the desired trigger values and adjust them again if necessary.

The trigger catches the cocking piston or firing pin, but the trigger does not release:

- Make sure that the safety of the trigger is released.

The trigger does not catch the cocking piston or firing pin:

- The first stage trigger is adjusted too tightly.
- Turn set screw No. 1 approx. 1-2 turns to the left. Procede according to par. 2.

4. Safety

There is a safety lever at the right side of the trigger. Please see chapter „Cocking, loading and safety operation".

5. Maintenance

Please see chapter „Cleaning, maintenance, care, oils".

Double set hunting trigger

The models of the series 1700 ST are equipped with a double set hunting trigger. The purpose of this trigger is to fire the shot with a minimum of trigger pressure (hair trigger). The double set trigger is operated as follows:

- Pull the rear trigger towards you until it engages with an audible click. The trigger is now cocked. CAUTION: If the release pressure of the double-set trigger is adjusted too low, the shot could go off by vibration. The release pressure is adjusted with the set screw (see picture). Turn counter-clockwise for higher pressure, clockwise for lower pressure. The double set trigger must only be adjusted by an authorized gunsmith.
- Once the trigger has been cocked the round can be fired by merely touching the front trigger (first trigger). Do not touch this trigger unless you really do wish to fire.

⚠ **Attention:**

Do not shake the rifle or expose it to vibrations once the trigger has been cocked. Stay at the place you wish to fire from because otherwise the round could be fired inadvertently. If you do not fire, uncock the trigger immediately. Never walk about with the trigger cocked. Before you load the rifle check that the trigger really does operate properly.

You should be able to fire a round in these following three ways:

- Pull the front trigger until the rifle fires.
- Push the rear trigger forwards towards the muzzle until the rifle fires.
- Normal way as described before under the description of the operation of the double set trigger.

Unclocking the double-set trigger when the rifle is loaded:

Extreme care must be exercised on uncocking the double-set trigger.

- Set the safety by pressing down the wing of the wing safety being located at the end of the bolt.
- Press it down until it comes to a stop. The graduated line must be straight in line with „S" (safe). Hold the rifle in such a position that no damage or injury is caused if a round is fired inadvertently.
- Unclock the double-set trigger by pulling the front trigger.

There is a further, silent method of uncocking the double-set trigger. Here, too, the safety lever must be set to prevent the rifle from firing.

- Pull the rear (second) trigger towards you with your middle finger to the stop and keep the trigger in this position.
- Now pull the front (first) trigger towards

you with your index finger to the stop and hold it there until you have slowly released the rear trigger and it has returned to its normal position.
- Afterwards slowly release the front trigger in the same manner.

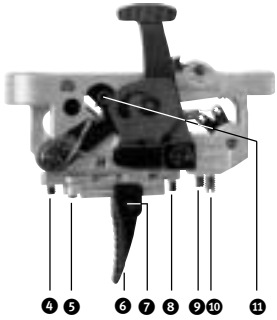
Note:

In both cases the bolt remains cocked. The trigger can be cocked again if desired.

⚠ **Attention:**

Exercise the greatest care when performing the foregoing actions. Practise several times with an unloaded rifle until you have thoroughly mastered the procedure and always ensure that the rifle is pointed in a safe direction at any time.

After firing, the empty case is ejected by opening the bolt. A new cartridge is loaded into the chamber by closing the bolt. Your rifle is now ready to fire the next round.



Match trigger

1. Trigger weight

Adjust the trigger weight with set screw No. 10 (silver screw):

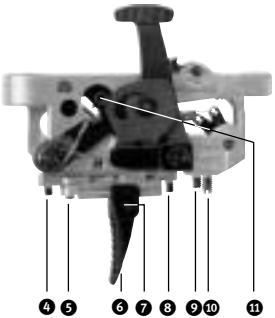
- if you turn it to the right (clockwise): trigger weight is increased (+)
- if you turn it to the left (counter-clockwise): trigger weight is decreased (-)

Trigger weight and first stage weight depend on each other with regard to the mechanic mechanism. If one of them is changed there will always be a corresponding change of the other as well.

To move trigger cam No. 11:

- lowest position of the trigger cam: lowest trigger weight
- highest position of the trigger cam: highest trigger weight

If the trigger weight is to be more than 200 g, the trigger cam No. 11 must be adjusted to



the highest position (turn it by 180° and fix it then). To do this you need a 2 mm hex key and perhaps tweezers.

- if you turn it to the left (counter-clockwise): You release the screw
- if you turn it to the right (clockwise): You tighten the screw

⚠ Attention:

Please ensure the trigger cam is positioned correctly. Be very careful tightening the small cam screw as it is easily broken!

Please check the sear engagement according to paragraph No. 3 when you have finished this process. It might have to be adjusted as well. The precise adjustments of the trigger weight and first stage weight are carried out with the set screws No. 10 (trigger weight) and No.9 (first stage weight).

2. First stage weight (only for two-stage triggers)

Adjust first stage weight with set screw No. 9 (black screw):

- if you turn it to the right (clockwise): first stage weight is increased (+)
- if you turn it to the left (counter-clockwise): first stage weight is decreased (-)

Trigger weight and first stage weight depend on each other with regard to the mechanic mechanism. If one of them is changed there will always be a corresponding change of the other as well.

⚠ Attention:

Do not reduce either trigger weight screw to zero or lower as the trigger pull may become erratic.

3. Sear engagement

The sear engagement is the distance between the second stage and the release of the trigger.

Important note:

To protect your precise trigger and to guarantee perfect operation you should always close the action carefully. If the sear engagement of single stage triggers is too small and the trigger weight is too low or if the first stage of two-stage triggers is too short, the trigger might release inadvertently by a sudden impact or too powerful closing of the action if the rifle is loaded and not in the "safe" position.

Adjustment of the sear engagement for **two-stage triggers** with set screw No. 5:

- if you turn it to the right (clockwise): sear engagement is shortened
- if you turn it to the left (counter-clockwise): sear engagement is extended

Adjustment of an optimum sear engagement: Make sure your rifle is not loaded. Cock your rifle and release the trigger. Check if the trigger releases as desired.

The sear engagement is too long:
There is a small distance between the second stage and the release of the trigger.

- Turn set screw No. 5 clockwise after cocking and releasing (approximately $^1/_8$ turn each).
- Repeat this process until you do not feel the second stage anymore. Then turn $^1/_5$ turn back to the left (counterclockwise). Thus the optimum sear engagement is adjusted.

The sear engagement is too short:
There is no second stage. The trigger releases un-defined without second stage.

- Turn set screw No. 5 counter-clockwise for at least $^1/_4$ turn after cocking. Then release the trigger and check if there is a second stage. If not, repeat this procedure until you feel a second stage.
- As soon as you feel a second stage proceed according to the points of the paragraph „The sear engagement is too long" to obtain an optimum sear engagement.

For the adjustment of the sear engagement for **single stage triggers** with set screw No. 5 see point *7*:

4. First stage (only for two-stage triggers):

The single stage is the distance between the trigger blade from zero position to the second stage.
Adjustment of first stage with set screw No. 4:

- if you turn it to the right (clockwise): first stage is shortened
- if you turn it to the left (counter-clockwise): first stage is extended

Caution:

Set screw No. 4 (first stage) can be turned past the second stage function. In this case the trigger does not work anymore. **Danger!** Do not under no circumstances remove the first stage completely in order to change the two-stage trigger into a single stage trigger.

5. Trigger stop:

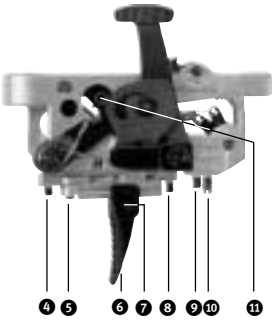
The trigger stop is the distance from the second stage to the stop of the trigger blade.

Adjustment of the trigger stop with set screw No. 8:

- if you turn it to the right (clockwise): overtravel is shortened
- if you turn it to the left (counter-clockwise): overtravel is extended

⚠ Attention:

The trigger stop set screw No. 8 can be turned over the second stage or first stage function. Malfunction (the trigger does not release)!



6. Adjustment of the trigger blade

- Loosen hex screw No. 7
- Trigger blade No. 6 can be moved in the longitudinal guide and can be tilted laterally.

7. Change of two-stage trigger into single stage trigger

Adjusting process:

- Turn first stage weight screw No. 4 counter-clockwise until you have reached the maximum first stage.
- Cock the rifle.
- Turn set screw No. 5 (first stage) counter-clockwise until the trigger releases.
- Turn set screw No. 5 from this position approx. $^1/_4$ turn clockwise.

The trigger is now adjusted to single stage operation, there is no more first stage.

Warning:

Single stage triggers are very sensitive and must be operated with special care.

The sear engagement of $^5/_{100}$ mm is obtained after the action is closed. In combination with a minimum trigger weight there might be a malfunction and an **increased risk (inadvertent shot release).**

8. Change of single stage trigger into two-stage trigger

- Turn trigger stop set screw No. 8 approx. 2 $^1/_2$ turns to the left (counter-clockwise) (adjust max. trigger stop longer).
- Release the safety of the trigger and cock the rifle.
- Turn set screw No. 5 approx. 2 $^1/_2$ turns clockwise.
- You should now feel a second stage
- To adjust the optimum sear engagement proceed according to paragraph 3.
- Perhaps you have to adjust the first stage according to paragraph 4, the trigger stop according to paragraph 5, the trigger weight according to paragraph 1 and the first stage weight according to paragraph 2 to the desired values.

9. Malfunctions of the trigger due to wrong adjustment procedure

If the trigger is not adjusted correctly malfunctions may occur. Tampering with the trigger adjustments will not result in any success. Therefore proceed as follows:
After every change the function of the trigger must be checked. When the malfunction is removed check the desired trigger values and adjust them again if necessary.

The trigger catches the firing pin, but the trigger does not release:

- Make sure that the safety of the trigger is released.
- Check if there is a trigger cam and that it is attached correctly.
- The trigger stop set screw No. 8 is screwed in too much. Turn it a few turns to the left (counter-clockwise) until the cocking piston or firing pin will release again.

The trigger does not catch the cocking piston or firing pin:

- Set screw No. 4 (first stage) is screwed in too much.
- Check to see if the spring is correctly attached and not defective.

The first stage trigger is adjusted too tightly:

- Turn set screw No. 5 stepwise $^1/_4$ turn to the right (clockwise) until the firing pin is caught.

Catch rebound spring is too weak or defective:

- Send your trigger to the factory or your service center for inspection.

10. Safety

On the left side of the trigger there is a safety lever. Please see chapter „Cocking, loading and safety operation".

11. Maintenance

Please see chapter „Cleaning, maintenance, care, lubrication".

Item number	Model	Two stage trigger	Single stage trigger	Double set trigger	Adjusted to	Right hand version	Left hand version	For models
003793	5001			•	100 g	•		1416 ST, 1516 ST
003799	5004			•	100 g	•		1710 ST, 1730 ST, 1740 ST
003136	5007			•	100 g	•		1432 E ST, 1740 E ST
003886	5067/2		•		1.360 g	•		1451 D
700.6565	5073	•			200 g	•		1432 E, 1740 E
003988	5092	•			800 g	•		1416, 1417, 1516, 64 MPR, 64 P, 64 R
003989	5092 L	•			800 g		•	64 L MPR, 64 L P, 17 L P, 1416 L, 1417 L
003992	5094		•		1.200 g	•		1416 D, 1516 D, 1502 D, 1517 D, 1518 D
003996	5094 L		•		1.200 g		•	1416 L D, 1517 L D
003998	5095		•		1.300 g	•		1740 D
004007	5096 D		•		1.200 g	•		1710 D, 1712 D, 1717 D, 1720 D, 1730 D, 1702 D
002144	5103	•			1.500 g	•		64 MSR, 64 R Biathlon
002145	5103 L	•			1.500 g		•	64 L MSR, 64 L R Biathlon
007540	5106	•			700 g	•		1517 MPR, 1502 MPR
007679	5108	•			1.000 g	•		1710
007692	5109	•			1.000 g	•		1712
002800	5165		•		2.000 g	•		1365
002771	5175		•		1.500 g	•		525