



SG 553

Assault Rifle

Caliber 5.56 mm (.223)

Manual

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1 Safety warnings

Assault Rifle SG 553

1.1 Handling

The safety warnings in this booklet are important. By understanding the dangers inherent in the use of any firearm, and by taking the precautions described herein, you can enjoy complete safety in the use of your Rifle. Failure to heed any of these warnings may result in serious injury to you or others, as well as severe damage to the firearm or other property.

1.1.1 Dangerous Weapons

PISTOLS, REVOLVERS, SHOTGUNS and RIFLES are classified as FIREARMS or DANGEROUS WEAPONS and are sold by us with the specific understanding that we are not responsible in any manner whatsoever for their safe handling or resale under local laws and regulations. SAN Swiss Arms AG shall not be responsible in any manner whatsoever for malfunctioning of the firearm, for physical injury or for property damage resulting in whole or in part from (1) criminal or negligent discharge, (2) improper or careless handling, (3) unauthorized modifications, (4) defective, improper, hand-loaded, or reloaded ammunition, (5) corrosion, (6) neglect, or (7) other influences beyond our direct and immediate control.

This limitation applies regardless of whether liability is asserted on the basis of contract, negligence or strict liability (including any failure to warn). Under no circumstance shall SAN Swiss Arms AG be liable for incidental or consequential damages, such as loss of use of property, commercial loss and loss of earnings or profits.

1.1.2 15 commandments of firearms safety

1. ALWAYS carry the rifle loaded with the safety lever in the “S” (SAFE) position.
2. Keep the safety lever on “S” (SAFE) unless actually firing.
3. ALWAYS treat every gun as if it were loaded.
4. ALWAYS be sure the barrel is clear of any obstruction.
5. ALWAYS be sure of your backstop, what lies beyond and the safety of bystanders before you shoot.
6. ALWAYS use clean, dry, original factory-made ammunition of the proper type and caliber for your gun.
7. ALWAYS wear ear protection and safety glasses when shooting.
8. ALWAYS carry your gun so that you can control the direction of the muzzle if you fall or stumble.
9. NEVER shoot at a flat surface or water.
10. DO NOT leave an unattended gun loaded. Guns and ammunition should be stored separately, locked if possible, beyond the reach of children and careless adults.
11. NEVER allow your firearm to be used by anyone who has not read and understood this instruction and safety manual.
12. DO NOT point any gun, loaded or unloaded, at any undesired target.
13. NEVER fire your rifle near an animal unless it is trained to accept the noise: an animal’s startled reaction could injure it or cause an accident.
14. NEVER drink alcoholic beverages or take drugs before or during shooting, as your vision and judgment could be seriously impaired making your gun handling unsafe.
15. ALWAYS seek a doctor’s advice if you are taking medication, to be sure you are fit to shoot and handle your rifle safely.

1.1.3 Protect your eyes and ears

Always wear adequate safety glasses and ear plugs or « earmuff » type protectors whenever you are shooting. Always make certain that persons close to you are similarly protected. Unprotected eyes may be injured by powder gas, carbon residue, lubricant, metallic particles or similar debris which may emanate occasionally from any firearm in normal use. Without ear protection, repeated exposure to shooting noise may lead to cumulative, permanent hearing loss.

1.1.4 Ammunition

1. Use only high quality, original factory- manufactured ammunition. Do not use cartridges that are dirty, wet, corroded, bent, or damaged. Do not oil cartridges. Do not spray aerosol-type lubricants, preservatives, or cleaners directly onto cartridges or where excess spray may flow into contact with cartridges. Lubricant or other foreign matter on cartridges can cause potentially dangerous ammunition malfunctions. Use only ammunition of the caliber for which your firearm is chambered. The proper caliber is permanently engraved on your firearm; never attempt to use ammunition of any other caliber.
2. The use of reloaded, «remanufactured», hand-loaded, or other non-standard ammunition voids all warranties. Reloading is a science and improperly loaded ammunition can be extremely dangerous. Severe damage to the firearm and serious injury to the shooter or to others may result.

Always use ammunition that complies with the industry performance standards established by the Sporting Arms and Ammunition Manufacturers' Institute, Inc. of the United States (SAAMI).

3. Firearms may be severely damaged and serious injury to the shooter or to others may result from any condition causing excessive pressure inside the chamber or barrel during firing. Excessive pressure can be caused by obstructions in the barrel, propellant powder overloads, or by the use of incorrect cartridges or defectively assembled cartridges. In addition, the use of a dirty, corroded, or damaged cartridge can lead to a burst cartridge case and consequent damage to the firearm and personal injury from the sudden escape of high-pressure propellant gas within the firearm's mechanism.
4. Immediately stop shooting and check the barrel for a possible obstruction whenever:
 - you have difficulty in, or feel unusual resistance in, chambering a cartridge, or;
 - a cartridge misfires (does not go off), or;
 - the mechanism fails to extract a fired cartridge case, or;
 - unburned grains of propellant powder are discovered spilled in the mechanism, or;
 - a shot sounds weak or abnormal.

In such cases it is possible that a bullet is lodged part way down the barrel. Firing a subsequent bullet into the obstructed barrel can wreck the firearm and cause serious injury to the shooter or to bystanders.

5. Bullets can become lodged in the barrel:
 - if the cartridge has been improperly loaded without propellant powder, or if the powder fails to ignite, (ignition of the cartridge primer alone will push the bullet out of the cartridge case, but usually does not generate sufficient energy to expel the bullet completely from the barrel), or;
 - if the bullet is not properly seated tightly in the cartridge case. When such a cartridge is extracted from the chamber without being fired, the bullet may be left behind in the bore at the point where the rifling begins. Subsequent chambering of another cartridge may push the first bullet further into the bore.
6. If there is any reason to suspect that a bullet is obstructing the barrel, immediately unload the firearm and look through the bore. It is not sufficient to merely look in the chamber. A bullet may be lodged some distance down the barrel where it cannot easily be seen.

IF A BULLET IS IN THE BORE, DO NOT ATTEMPT TO SHOOT IT OUT BY USING ANOTHER CARTRIDGE, OR BY BLOWING IT OUT WITH A BLANK OR ONE FROM WHICH THE BULLET HAS BEEN REMOVED: SUCH TECHNIQUES CAN GENERATE EXCESSIVE PRESSURE, WRECK THE FIREARM AND CAUSE SERIOUS PERSONAL INJURY.

If the bullet can be removed with a cleaning rod, clean any unburned powder grains from the bore, chamber, and mechanism before resuming shooting. If the bullet cannot be dislodged by tapping it with a cleaning rod, take the firearm to a gunsmith.

7. Dirt, corrosion, or other foreign matter on a cartridge can impede complete chambering and may cause the cartridge case to burst upon firing. The same is true of cartridges which are damaged or deformed.
8. Do not oil cartridges, and be sure to wipe the chamber clean of any oil or preservative before starting to shoot. Oil interferes with the friction between cartridge case and chamber wall that is necessary for safe functioning, and subjects the firearm to stress similar to that imposed by excessive pressure.
9. Use lubricants sparingly on the moving parts of your firearm. Avoid excessive spraying of any aerosol gun care product, especially where it may get on ammunition. All lubricants and aerosol spray lubricants in particular can penetrate cartridge primers and cause misfires. Some highly penetrative lubricants can also migrate inside cartridge cases and cause deterioration of the propellant powder; on firing, the powder may not ignite. If only the primer ignites, there is danger that the bullet may become lodged in the barrel.

1.1.5 NEVER completely trust any safety

1. Your firearm comes equipped with an effective, well-designed safety device:

HOWEVER, NEVER RELY COMPLETELY ON ANY SAFETY MECHANISM.

It is NOT a substitute for cautious gun handling. NO safety, however positive or well-designed, should be totally trusted. Like all mechanical devices, the safety is subject to breakage or malfunction and can be adversely affected by wear, abuse, dirt, corrosion, incorrect assembly, improper adjustment or repair, or lack of maintenance. Moreover, there is no such thing as a safety which is «child-proof» or which can completely prevent accidental discharge from improper usage, carelessness, or «horseplay».

The best safety mechanism is your own good sense; USE IT! Always handle your firearm as though you expect the safety NOT to work!

2. While handling any firearm, do not allow it to point at any part of your body or at another person. No harm will result if you obey this rule, even if an accidental discharge occurs.
3. Never carry this rifle with a cartridge in the chamber and the trigger cocked.
4. Always keep your finger off the trigger and point the muzzle in a safe direction when operating the gun.

1.1.6 Loading

1. Always make sure the muzzle is pointed in a safe direction!
2. Never attempt to load or unload any firearm inside a vehicle, building or other confined space (except a properly constructed shooting range). Enclosed areas frequently offer no completely safe direction to point the firearm; if an accidental discharge occurs, there is great risk of injury or property damage.
3. Before loading, always clean all grease and oil from the bore and chamber, and check to be certain that no obstruction is in the barrel. Any foreign matter in the barrel could result in a bulged or burst barrel or other damage to the firearm, and could cause serious injury to the shooter or to others.

1.1.7 Firing

1. Keep the muzzle pointed in a safe direction and your finger away from the trigger when cocking any firearm.
2. Never carry about or leave unattended any firearm which is cocked and ready to fire! When cocked, it will fire from slight pressure on the trigger. An accidental discharge could easily result if you fall or drop the firearm, or if the firearm is struck or disturbed by someone or something.

Never fire any firearm with your finger, hand, face, or other part of your body over or adjacent to the ejection port, or in any position where you may be struck by reciprocating movement of the breech. Both the ejection of empty cartridge cases and the movement of the breech are part of the normal operating cycle of firearms, and pose no safety hazard to the shooter if the firearm is held in a normal grip and fired at arm's length.

3. Never allow other persons to stand beside you where they might be struck by an ejected cartridge case. The case is hot, and may be ejected with sufficient force to cause a burn or cut or injure an unprotected eye. Make certain there is a clear, unobstructed path for safe ejection of the fired case. Remember, the case may bounce off a hard object nearby and strike you or someone else.

If, while shooting, your firearm develops a mechanical malfunction or binding, or «spits» powder gas, or if a cartridge primer is punctured or a cartridge case is bulged or ruptured, or if the report on firing does not sound quite right, STOP SHOOTING IMMEDIATELY! It may be dangerous to continue. UNLOAD THE FIREARM – do NOT try «one more shot». Take the firearm and the ammunition to a gunsmith for examination.

4. While shooting any firearm, an unfired cartridge or fired cartridge case may occasionally become jammed between the slide and the barrel.

Clear the jam as follows, WHILE KEEPING THE MUZZLE POINTED IN A SAFE DIRECTION: Remove the magazine, then pull back the slide and lock it to the rear by pushing up the slide release. The jammed cartridge or case now can be removed by shaking it out or by picking it out with the fingers.

1.1.8 Unloading

1. Always make sure the muzzle is pointed in a safe direction!
2. Remember to clear the chamber after the magazine has been removed.
3. Never assume that any gun is unloaded until you have personally checked it!
4. After every shooting practice, make a final check to be certain the firearm is unloaded before leaving the range.

1.2 Transport and storage

When transporting your firearm to and from shooting activities, keep it unloaded for your safety and for the safety of others.

When storing your firearm, keep it separated from ammunition, under lock and key if possible, and out of the reach of children and other inexperienced or unauthorized persons.

1.3 Maintenance

All firearms require periodic maintenance and inspection which may reveal a need for adjustment or repair. Have your firearm checked by a competent gunsmith annually even if it seems to be working well, since breakage, improper functioning or corrosion of some components may not be apparent from external examination.

If you notice any mechanical malfunction, do NOT continue to use the firearm.

UNLOAD the firearm and take it to a competent gunsmith immediately for a thorough examination. Similarly, if water, sand, or other foreign matter enters the internal mechanism, immediately dismantle the firearm for a complete and thorough cleaning.

Failure to keep your firearm clean and in proper working order can lead to a potentially dangerous condition and an accident causing serious bodily injury or property damage may result.

1.4 Care and cleaning

1. Your firearm is delivered factory packaged and preserved with a light coating of protective grease and oils. Before loading make certain that all packing grease and oil has been cleaned from the bore and exposed mechanism.
2. Before you begin to disassemble your firearm for cleaning, always double-check to make sure it is unloaded!
3. After cleaning always check to be sure that no cleaning patch or other obstruction remains in the bore or chamber!

1.5 Parts

Our Service Department maintains a full complement of replacement parts. Even though most gunsmiths have the knowledge, training and ability to make the necessary repairs to your firearm, the skill and workmanship of any particular gunsmith is totally beyond our control.

Should your firearm ever require service, we strongly recommend that you return it to SAN Swiss Arms AG. Follow the instructions outlined below. Remember, unauthorized adjustments of parts replacement can void your warranty.

A firearm is a precision instrument and some replacement parts will require individual fitting to ensure correct operation. A wrong part, improper fitting or incorrect mechanical adjustment may result in an unsafe condition or dangerous malfunction, damage to the firearm, or possible serious injury to the shooter or to others.

IF ANY PART IS ORDERED WITHOUT RETURNING THE FIREARM TO SAN SWISS ARMS AG, the customer bears full responsibility for ensuring that the part supplied is correct for his particular firearm and is properly installed and fitted by a qualified gunsmith.

SAN SWISS ARMS AG CANNOT BE RESPONSIBLE FOR THE FUNCTIONING OF ANY FIREARM IN WHICH REPLACEMENT PARTS ARE INSTALLED BY OTHERS.

1.6 SAN SWISS ARMS AG service policy

Before shipment your firearm was carefully inspected and test fired in order to ensure that it conformed to our specifications and standards.

Should your firearm require adjustment, repair or refinishing, we strongly recommend that you return it to SAN Swiss Arms AG for factory service.

If there is any question regarding the performance of your firearm, please write to SAN Swiss Arms AG Service Department, fully describing all circumstances and conditions involved. If our Service Department makes the determination that your firearm requires factory service, you will be so advised and will be given instructions for the most expeditious handling of your shipment.

Our Service Department will give your firearm a complete inspection, and evaluate the problem(s) specified in your letter.

If the work required is not covered under the terms of our «Limited Warranty» (a copy is enclosed with your firearm), you will receive an actual cost quotation, not an estimate. Any repair work must be authorized by you, and no work will be done without your express approval.

To return any firearm to us for adjustment, repair or refinishing, please follow these suggestions to expedite service:

1. Only federally licensed dealers may ship handguns via mail. Handguns mailed by individuals are confiscated by the Post Office.
2. Federal law permits you to return your firearm to the manufacturer for service via common carriers or, if your firearm is a rifle or shotgun, by mail. However, state and local firearms laws vary greatly; you should consult your local prosecuting attorney regarding any restrictive laws in your jurisdiction regarding your shipment or receipt of firearms. With the above in mind, it is strongly recommended that any firearm sent to us for repair be sent through a federally licensed dealer.

3. All firearms must be shipped to us prepaid.
WE WILL NOT ACCEPT COLLECT SHIPMENTS.
4. Firearms returned for repair should be addressed to:

SAN Swiss Arms AG
Industrieplatz
8212 Neuhausen am Rheinflall
Switzerland

5. Be sure to enclose a letter stating serial number, caliber and barrel length of your firearm. Also state nature of trouble experienced or work required. Merely stating «defective» or «repair as necessary» is inadequate information. Be specific and enclose copies of any previous correspondence.
6. FIREARMS MUST BE SHIPPED UNLOADED. Double-check the chamber of your firearm before shipping. If firearms are sent to SAN Swiss Arms AG in a loaded condition, we are required by law to notify the Federal Authorities.
7. DO NOT include telescopic sights, custom stocks, slings, or other accessories with any firearm shipped to us.

2 Weapon theory

2.1 Weapon description

2.1.1 General

The SG 553 is a gas operated weapon with rotary bolt mechanism.



Figure 1: SG 553 SB Standard version with picatinny rail and flip up front and rear sight and adjustable butt stock (optional)



Figure 2: SG 553 SB Standard version with diopter sight



Figure 3: SG 53 LB Long barrel version with picatinny rail and flip up front and rear sight and adjustable butt stock (optional)



Figure 4: SG 53 LB Long barrel version with diopter sight

Field of application

SG 553 SB (short barrel)

- at distances of up to 300 m / 328 yds.
 - in semi automatic fire
 - in rapid semi automatic fire
 - in three-round bursts
 - in full auto operation
- at distances of up to 400 m / 437 yds., when fitted with telescopic sights
- the SG 553 can be fired with the butt stock in the normal position or folded back.

SG 553 LB (long barrel)

- at distances of up to 300 m / 328 yds.
 - in semi automatic fire
 - in rapid semi automatic fire
 - in three-round bursts
 - in full auto operation
- at distances of up to 400 m / 437 yds., when fitted with telescopic sights
- with the bayonet attached, as a cut and thrust weapon (SG 553 LB only)
- as a grenade launcher (SG 553 LB only)
- the SG 553 can be fired with the butt stock in the normal position or folded back.

2.1.2 Barrel with receiver and gas system (SB, picatinny version)

The barrel is screwed into the receiver. The muzzle is fitted with a screwed on or integrated flash suppressor. The front sight mount, which is fixed to the barrel, contains the gas port, accepts the front sight and gas system and also serves as a support for the handguard.

The receiver guides the bolt and houses the locking system. The rear sight mount with diopter drum or integrated Picatinny rail with flip up rear sight are also mounted on top of the receiver.

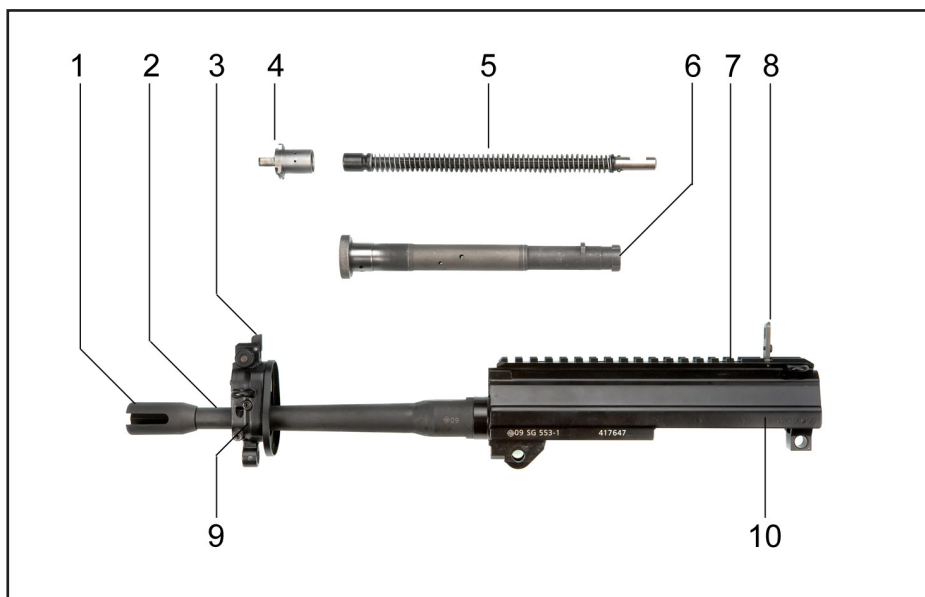


Figure 5: Barrel (SB), receiver with picatinny rail and flip up sight, gas system

- | | |
|----------------------|-----------------------|
| (1) Flash suppressor | (6) Gas tube |
| (2) Barrel SB | (7) Picatinny rail |
| (3) Front sight | (8) Rear sight |
| (4) Gas valve | (9) Front sight mount |
| (5) Gas piston | (10) Receiver casing |

2.1.3 Barrel with receiver and gas system (SB, diopter version)

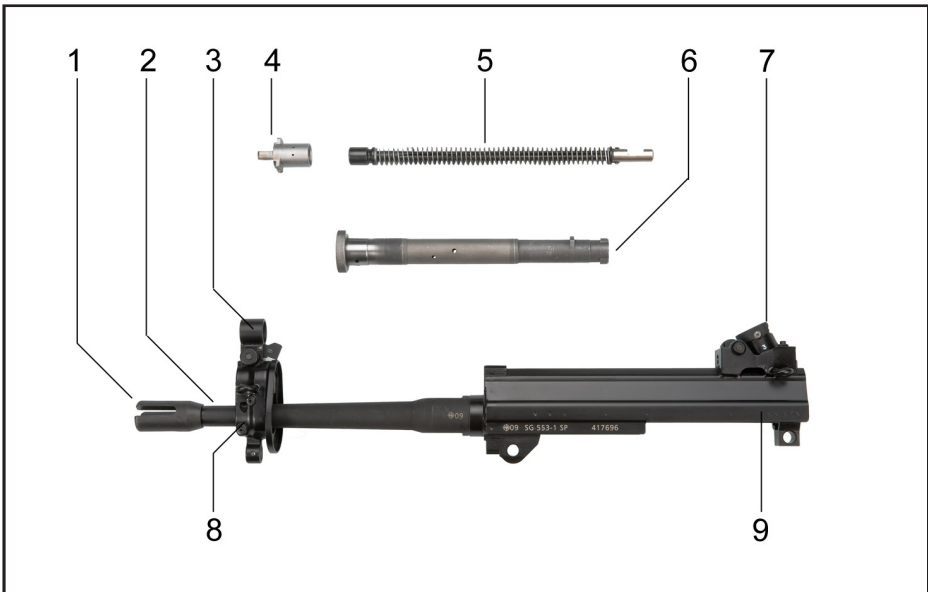


Figure 6: Barrel (SB), receiver with diopter sight, gas system

- | | |
|----------------------|-----------------------|
| (1) Flash suppressor | (6) Gas tube |
| (2) Barrel SB | (7) Rear sight |
| (3) Front sight | (8) Front sight mount |
| (4) Gas valve | (9) Receiver casing |
| (5) Gas piston | |

2.1.4 Barrel with receiver and gas system (LB, picatinny version)

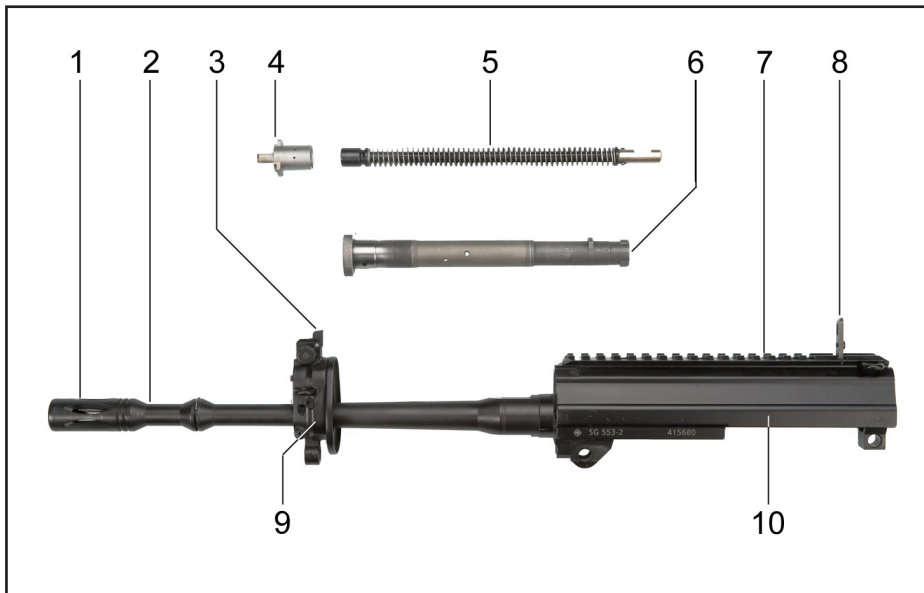


Figure 7: Barrel (LB), receiver with picatinny rail and flip up sight, gas system

- | | |
|----------------------|-----------------------|
| (1) Flash suppressor | (6) Gas tube |
| (2) Barrel SB | (7) Picatinny rail |
| (3) Front sight | (8) Rear sight |
| (4) Gas valve | (9) Front sight mount |
| (5) Gas piston | (10) Receiver casing |

2.1.5 Barrel with receiver and gas system (LB, diopter version)

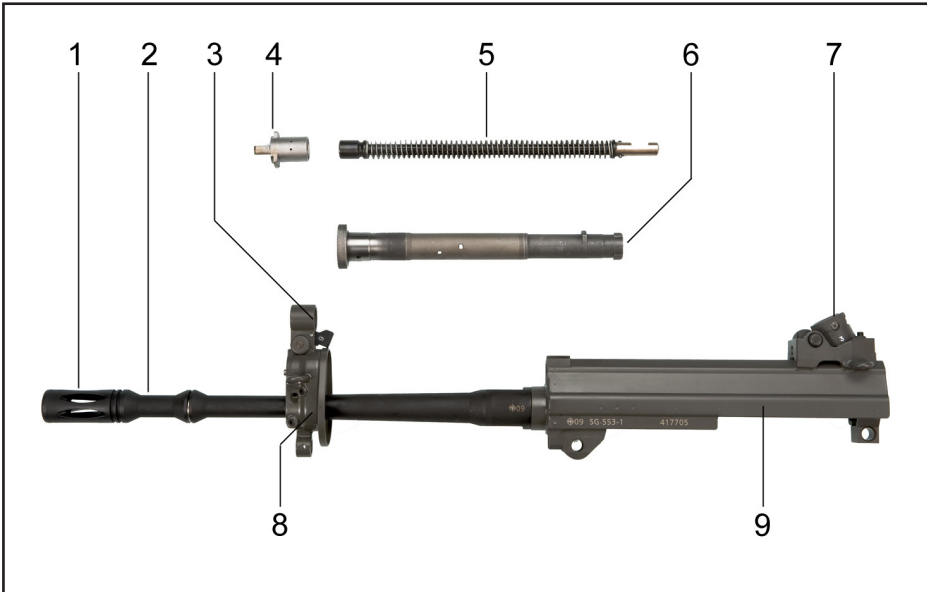


Figure 8: Barrel (LB), receiver with diopter sight, gas system

- | | |
|----------------------|-----------------------|
| (1) Flash suppressor | (6) Gas tube |
| (2) Barrel SB | (7) Rear sight |
| (3) Front sight | (8) Front sight mount |
| (4) Gas valve | (9) Receiver casing |
| (5) Gas piston | |

2.1.6 Bolt

The bolt consists of two main parts:

- Bolt head
- Bolt carrier

Bolt head

The bolt head locks the bolt assembly, houses the firing pin and the extractor and feeds the cartridges to the chamber.

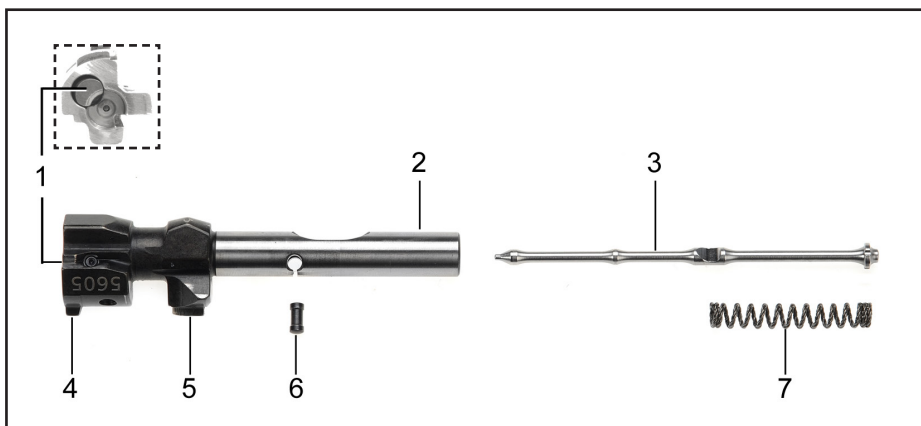
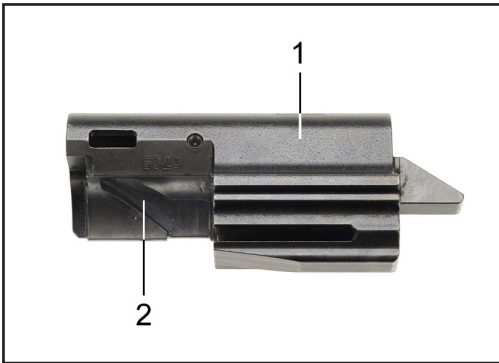


Figure 9: Bolt head

- | | |
|-----------------|-----------------------|
| (1) Extractor | (5) Control cam |
| (2) Bolt head | (6) Firing pin stud |
| (3) Firing pin | (7) Firing pin spring |
| (4) Locking lug | |

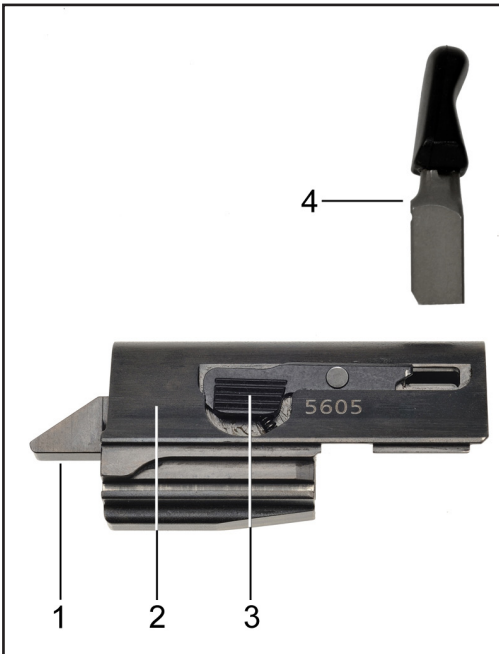
Bolt carrier

The bolt carrier guides the bolt head, controls the locking and unlocking by means of the control cam, holds the gas piston and cocks the hammer.



- (1) Bolt carrier
- (2) Control cam

Figure 10: Bolt carrier from left



- (1) Cocking lug
- (2) Bolt carrier
- (3) Charging handle catch
- (4) Charging handle

Figure 11: Bolt carrier from right

2.1.7 Handguard

The handguard protects the barrel and the gas system from damage and provides protection from burning.

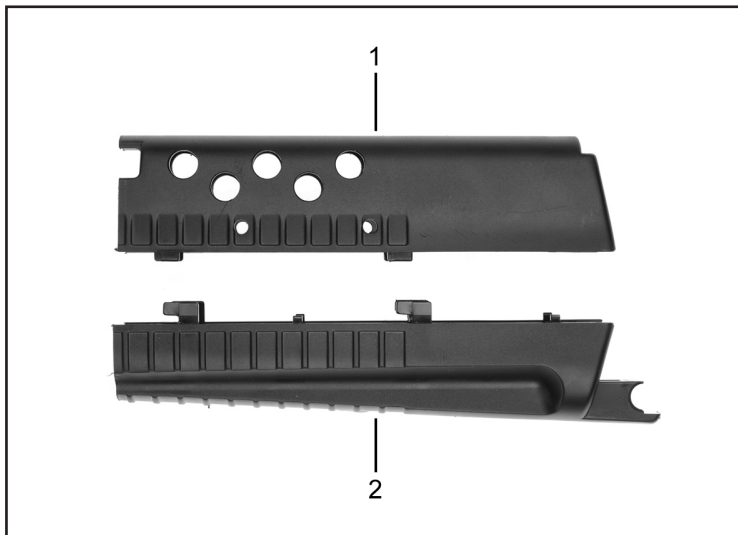


Figure 12: Handguard

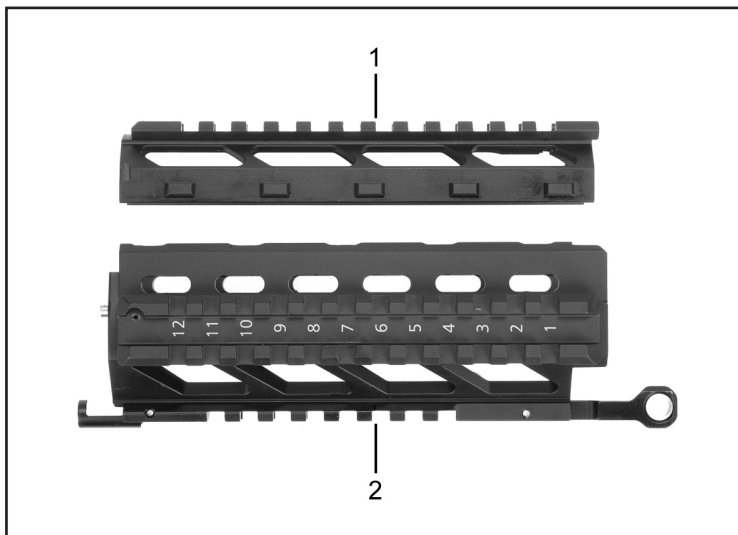


Figure 13: 4-Rail-Handguard

- (1) Handguard, upper part
- (2) Handguard, lower part

2.1.8 Magazine

The magazine is transparent and has a capacity of 5, 10, 20 and 30 rounds.

On either side of the connectable casing there are connectors which allow several magazines to be connected if required.

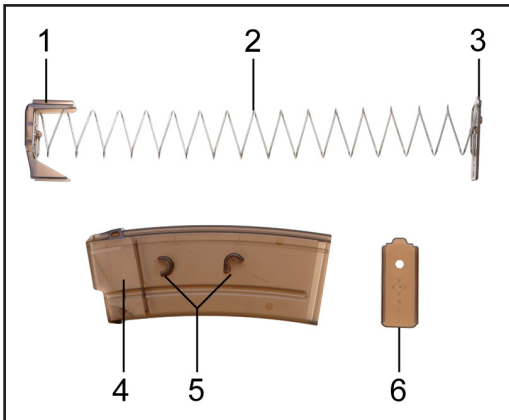


Figure 14: Magazine 30 rounds, connectable

- (1) Feeder
- (2) Magazine spring
- (3) Magazine floorplate catch
- (4) Magazine casing
- (5) Magazine coupling lugs
- (6) Magazine floorplate

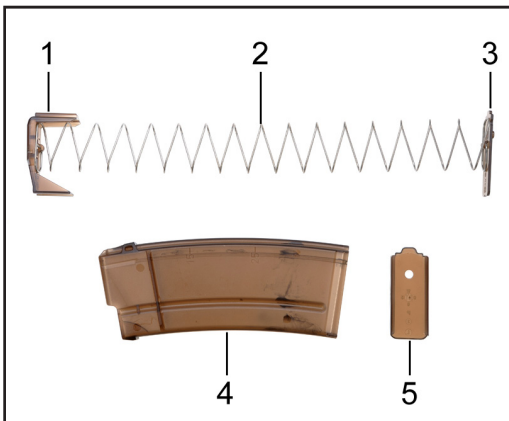


Figure 15: Magazine 30 rounds, not connectable

- (1) Feeder
- (2) Magazine spring
- (3) Magazine floorplate catch
- (4) Magazine casing
- (5) Magazine floorplate

2.1.9 Trigger assembly and butt stock

The trigger assembly comprises all the parts required for firing a shot. The safety lever on both sides can be set to four positions:

Position «S» = The trigger is locked, the weapon is in safe position.

Position «1» = The weapon will fire semi auto.

Position «3» = The weapon fires 3-round burst.

After each burst, the trigger must be released and then pulled again.

Position «20» = The weapon fires in the full auto mode.

By pivoting the trigger guard to the right or left side the trigger becomes accessible for shooting with mittens.

For safety reasons the trigger guard must not be shifted until just before firing the weapon, and after firing it should be immediately replaced in the normal position.

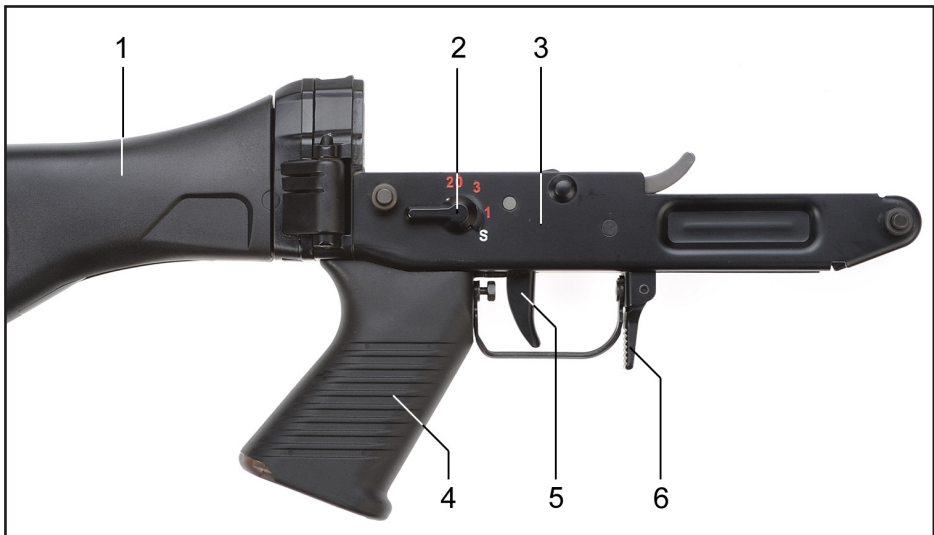


Figure 16: Trigger assembly and butt stock from right

- | | |
|--------------------|--------------------|
| (1) Butt stock | (4) Pistol grip |
| (2) Safety lever | (5) Trigger |
| (3) Trigger casing | (6) Magazine catch |

The firing mode is affected by the automatic firing lock (4):

- If the automatic firing lock is activated (white dot visible), shooting in semi automatic fire and rapid semi automatic fire is possible.
- If the automatic firing lock is deactivated (white dot covered), shooting in all firing modes is possible.

The positioning of the firing lock usually is predetermined by the rules of engagement.



Figure 17: Trigger assembly and butt stock from left

- | | |
|---------------------------|----------------------|
| (1) Trigger casing | (6) Magazine catch |
| (2) Bolt catch | (7) Trigger guard |
| (3) Safety lever | (8) Pistol grip |
| (4) Automatic firing lock | (9) Butt stock catch |
| (5) Butt stock | |

2.2 Sights mechanism

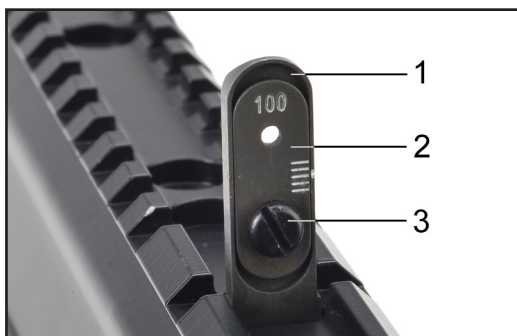
The sights mechanism comprises either flip up sights or diopter sights.

2.2.1 Flip up sight mechanism

The flip up sight mechanism consists of the rear and front flip up sight.

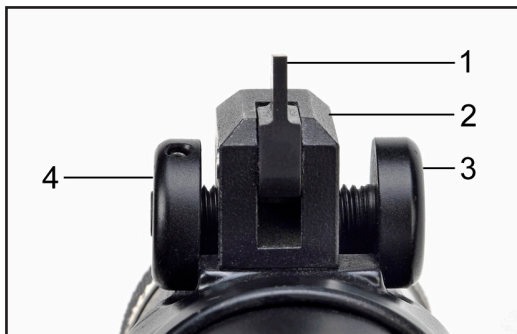
The rear sight is marked with «100», corresponding to firing range 100 m / 109 yds.

The front sight is fixed to its mount with the front sight screw. The folding front sights are mounted on the lower part of the front sight.



- (1) Rear sight holder
- (2) Rear sight plate
- (3) Flat head screw

Figure 18: Flip up rear sight



- (1) Front sight
- (2) Front sight holder
- (3) Front sight screw
- (4) Front sight disc

Figure 19: Flip up front sight

2.2.2 Diopter sights mechanism

The diopter sights mechanism consists of the rear sight and front sight.

The diopter drum can be set to positions «1», «2» and «3», corresponding to firing ranges 100 m (109 yds.), 200 m (218 yds.) and 300 m (328 yds.). The positions marked in white correspond to aiming point = point of impact.

Sighting position «1» is designed for immediate firing, and two luminous dots are fitted laterally for aiming at night.

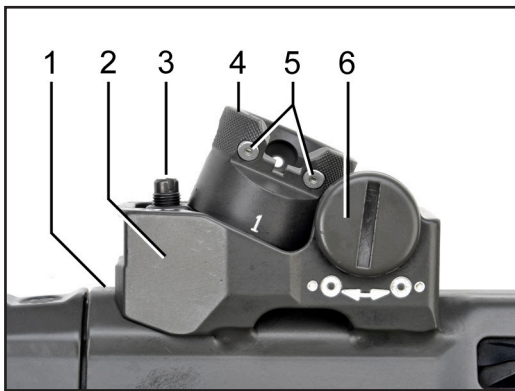


Figure 20: Diopter Sight

- (1) Receiver casing
- (2) Rear sight mount
- (3) Elevation correction screw
- (4) Rear sight drum
- (5) Night sights
- (6) Windage correction screw

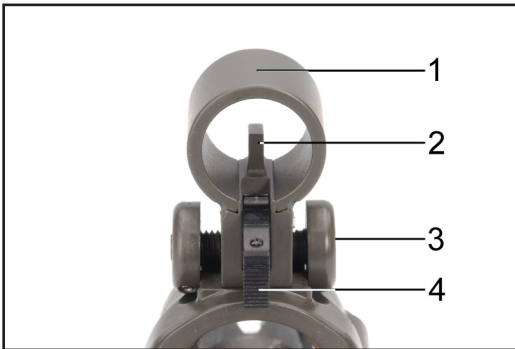


Figure 21: Front sight with night front sight

- (1) Front sight tunnel
- (2) Front sight
- (3) Front sight screw
- (4) Night front sight

2.3 Technical specifications

2.3.1 SG 553 SB Picatinny version

Caliber	mm	5.56
Total length	mm	733
Length with butt stock folded	mm	503
Barrel		
Barrel length	mm	258
Number of grooves		6
Rifling		
SG 553-1	inches	10
SG 553-2	inches	7
Sights		
Type		Flip up
Sight base	mm	340
Range adjustment	m	100
Trigger pull weight	N	35
Rate of fire approx.	Rd./min ..	700-850
Muzzle velocity V_0 approx.	m/s	780
Muzzle energy E_0 approx.	J	1240
Weight		
Weapon incl. empty magazine	g	3200
Empty twenty-round magazine	g	95
Empty thirty-round magazine	g	110
Loaded twenty-round magazine	g	340
Loaded thirty-round magazine	g	475

Subject to change without notice.

2.3.2 SG 553 SB Diopter version

Caliber	mm	5.56
Total length	mm	733
Length with butt stock folded	mm	503
Barrel		
Barrel length	mm	258
Number of grooves		6
Rifling		
SG 553-1	inches	10
SG 553-2	inches	7
Sights		
Type		Diopter
Sight base	mm	340
Range adjustment	m	100-300
Trigger pull weight	N	35
Rate of fire approx.	Rd./min ..	700-850
Muzzle velocity V_0 approx.	m/s	780
Muzzle energy E_0 approx.	J	1240
Weight		
Weapon incl. empty magazine	g	3180
Empty twenty-round magazine	g	95
Empty thirty-round magazine	g	110
Loaded twenty-round magazine	g	340
Loaded thirty-round magazine	g	475

Subject to change without notice.

2.3.3 SG 553 LB Picatinny version

Caliber	mm	5.56
Total length	mm	822
Length with butt stock folded	mm	592
Barrel		
Barrel length	mm	347
Number of grooves		6
Rifling		
SG 553-1	inches	10
SG 553-2	inches	7
Sights		
Type		Flip up
Sight base	mm	360
Range adjustment	m	100
Trigger pull weight	N	35
Rate of fire approx.	Rd./min ..	700-850
Muzzle velocity V_0 approx.	m/s	850
Muzzle energy E_0 approx.	J	1480
Weight		
Weapon incl. empty magazine	g	3390
Empty twenty-round magazine	g	95
Empty thirty-round magazine	g	110
Loaded twenty-round magazine	g	340
Loaded thirty-round magazine	g	475

Subject to change without notice.

2.3.4 SG 553 LB Diopter version

Caliber	mm	5.56
Total length	mm	822
Length with butt stock folded	mm	592
Barrel		
Barrel length	mm	347
Number of grooves		6
Rifling		
SG 553-1	inches	10
SG 553-2	inches	7
Sights		
Type		Diopter
Sight base	mm	360
Range adjustment	m	100-300
Trigger pull weight	N	35
Rate of fire approx.	Rd./min ..	700-850
Muzzle velocity V_0 approx.	m/s	850
Muzzle energy E_0 approx.	J	1480
Weight		
Weapon incl. empty magazine	g	3310
Empty twenty-round magazine	g	95
Empty thirty-round magazine	g	110
Loaded twenty-round magazine	g	340
Loaded thirty-round magazine	g	475

Subject to change without notice.

2.4 Accessories

Every SG 553 has the following accessories

- carrying sling
- loading tool
- cleaning kit

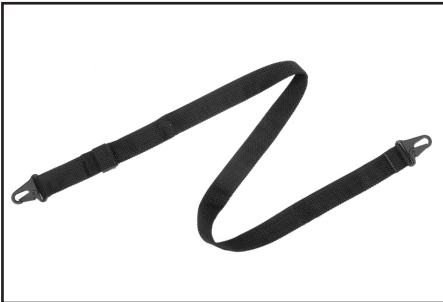


Figure 22: Carrying sling



Figure 23: Loading tool NATO

Carrying sling in woven nylon with two hooks, an adjustment clip and a buckle



Figure 24: Cleaning kit NATO

- | | |
|---------------------------------------|---------------------------------------|
| (1) Weapon oil | (8) Cleaning cord for barrel cleaning |
| (2) Cloth | (9) Cleaning jag |
| (3) Weapon grease | (10) Barrel brush |
| (4) Case | (11) Grease brush |
| (5) Cleaning brush | (12) Chamber cleaning tool |
| (6) Cleaning rod sections
(3 pcs.) | (13) Gas tube brush |
| (7) Cleaning rod handle | |

3 Handling

3.1 Important instructions

1. The assault rifle is to be considered as loaded until the user is convinced of the contrary on the basis of his personal safety check.
2. If the rifleman is holding the assault rifle in his hand the barrel must never be aimed at anything that he does not want to hit.
3. The trigger finger is to rest outstretched against the trigger casing while the sights mechanism is not aiming at a target.
4. Every rifleman is responsible for the use of his assault rifle. He also immediately discontinues firing against a command to the contrary if he is convinced that he discerns a danger to humans and animals or damage to material.
5. A barrel check must be performed prior to firing practice. Each shooter is responsible for the barrel check himself.
6. An unloading check is to be performed at the end of every firing practice. Each shooter performs the unloading check himself.
7. The barrel must point in a safe direction while handling.
8. Only manipulation ammunition may be used for training in weapons handling.

9. Before entering the firing range:
 - a. The weapon is unloaded and the magazine kept separate from it;
 - b. The automatic firing lock is activated (white point visible);
 - c. The barrel check is performed;
 - d. The bolt is opened and locked in place with the bolt catch.
10. At the firing range:
 - a. The assault rifle is to be left alone with bolt open, without magazine and secured in the gun rack;
 - b. The assault rifle may only be loaded in the shooting position; the assault rifle must be unloaded before leaving the shooting position; the bolt remains open;
 - c. All handling in the shooting position is to be carried out with the weapon in the firing position;
 - d. The unloading check is to be performed after shooting at the range.
11. Upon leaving the firing range the automatic firing lock has to be set relative to use (OPTIONAL).
12. Resting the assault rifle on a human body while firing is prohibited.

13. Hearing is to be protected with a hearing protector when shooting.
14. The assault rifle may be loaded under cover, but the safety catch may only be released in the shooting position. It can be reset upon leaving the shooting position.
15. When firing while in motion the various firing positions are considered to be the shooting position.
16. The contact position parallels the shooting position.
17. When repositioning the safety lever the trigger must not be pulled at the same time.
18. Single, semi-auto burst or full-auto fire while in motion may only be shot when walking.
19. Single, semi-auto burst or full-auto fire may be shot while in motion as long as the assault rifle is rested against the shoulder and is not overshot or shot wide.
20. Shooting off more than six magazines in succession is prohibited, no matter which type of fire and ammunition is selected. The assault rifle may only be reloaded when it has cooled off sufficiently so that the barrel can be gripped with bare hands. Whenever possible submerge the weapon in water for cooling. In cold weather or snow, however, it must not be dipped in the snow or submerged in water.

If this instruction is not followed, autoignition or serious damage due to the assault rifle overheating can occur.
21. The weapon - bullet trap distance must be at least 50 m, provided that the bullet trap is available in soft material visibly free of stones (in permanent firing ranges particular rules apply with respect to the composition of the bullet trap).

22. If these conditions are met, there is no limit to the weapon - troop distance when shooting at wood, cardboard, plastic and roller discs, as well as discs with sackcloth covering.

3.2 Loading the weapon

1. Set the safety lever to «S».
2. Swing the trigger guard into the vertical position.
3. Insert the magazine and check that it is properly seated by pressing forward.
4. Carry out a loading cycle (pull the charging handle fully back and let it run forward).

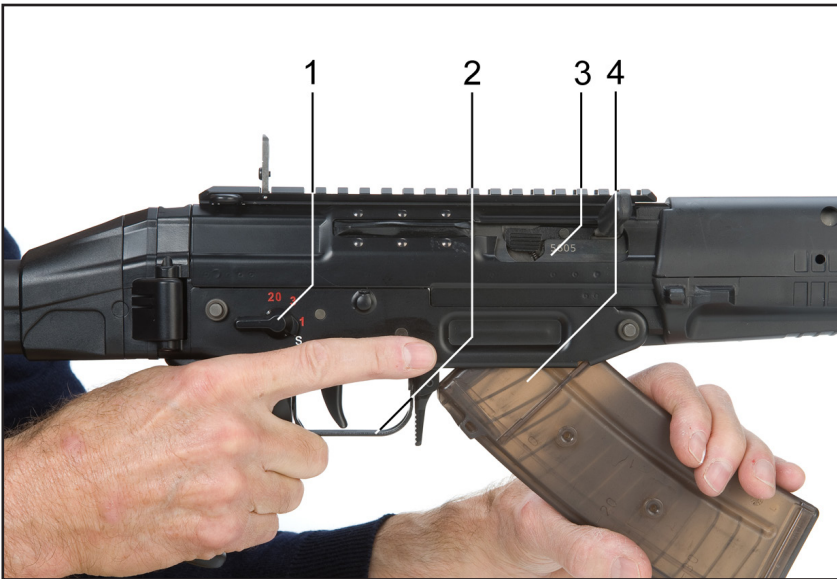
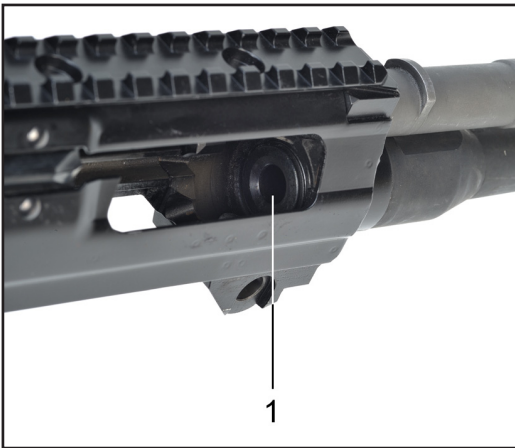


Figure 25: Inserting the magazine

- | | |
|-------------------|--------------|
| (1) Safety lever | (3) Bolt |
| (2) Trigger guard | (4) Magazine |

3.3 Unloading (Clearing)

1. Set the safety lever to «S».
2. Swing trigger guard into vertical position.
3. Remove magazine by pressing magazine catch.
4. Pull the bolt to the rear, and lock it with the bolt catch. Check the chamber, ensure that it is empty.
5. Point the weapon in a safe direction. Set the safety lever to «1». Pull the trigger.
6. Set the safety lever to «S».



(1) Chamber

Figure 26: Check the chamber

3.4 Changing the magazine

1. Set the safety lever to «S».
2. Swing the trigger guard into the vertical position.
3. Remove the magazine.
4. Insert a loaded magazine and ensure that it is properly seated by pushing it forward.

3.5 Reloading

1. Set the safety lever to «S».
2. Swing the trigger guard into the vertical position.
3. Remove the empty magazine by pressing the magazine catch.
4. Insert a loaded magazine and check that it is properly seated by pushing it forward.
5. Push the bolt catch up or pull back the charging handle slightly to allow the bolt to run forward.



Figure 27: Push the bolt catch up

3.6 Filling and coupling of magazines

3.6.1 Filling the magazine

1. Place the loading tool on the magazine.
2. Insert the ammunition clip and press the cartridges into the magazine.
3. Remove the loading tool.

3.6.2 Coupling of magazines

1. Hold the magazine vertically.
2. With the floorplate of the second or third magazine pointing to the rear, first connect the upper lugs, then rotate it forward and connect the lower lugs.

Coupling more than three magazines in sequence is not recommended.



Figure 28: Filling the magazine



Figure 29: Coupling of magazines

4 Aiming, firing, adjusting

4.1 Aiming, firing with flip up sight

To aim, align the eye, flip up rear sight, front sight and target.
At all ranges, the front sight should be aimed at the center of the target.
Firing or aiming is therefore «point of aim».

4.1.1 Adjusting

To correct the elevation, release the flat head screw of the flip up sight and shift the sight plate up- or downwards respectively, then lock the flat head screw.

Elevation

- High shots are corrected by shifting the sight plate down.
- Low shots are corrected by shifting the sight plate up.

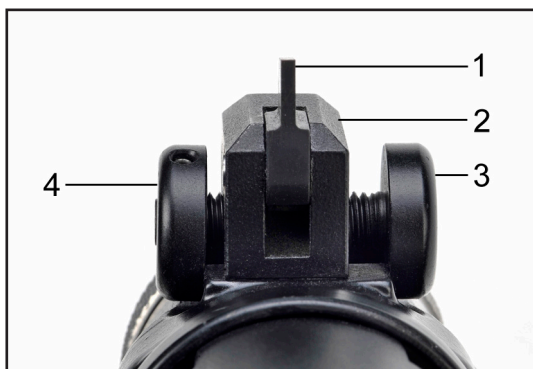


- (1) Rear sight holder
- (2) Rear sight plate
- (3) Flat head screw

Figure 30: Rear sight

Windage

- Shots to the right are corrected by turning the front sight screw to the right.
- Shots to the left are corrected by turning the front sight screw to the left.



- (1) Front sight
- (2) Front sight holder
- (3) Front sight screw
- (4) Front sight disc

Figure 31: Front sight

4.1.2 Point of impact correction SG 553 with flip up sight

Firing range	Average point of impact correction	
	Elevation: per one mark on the rear sight plate Windage: per one turn of the front sight screw	
SG 553	Windage	Elevation
100 m / 109 yds.	23.5 cm / 9.3 inch	22 cm / 8.7 inch
200 m / 218 yds.	47.0 cm / 18.5 inch	44 cm / 17.3 inch
300 m / 328 yds.	70.5 cm / 27.8 inch	66 cm / 26.0 inch

4.2 Aiming, firing with diopter sight

To aim, align the eye, diopter or battle sight, front sight and target. When using the diopter, ensure that the periphery of the front sight tunnel and the diopter aperture are concentric.

At all ranges, the front sight should be aimed at the center of the target. Firing or aiming is therefore «point of aim».

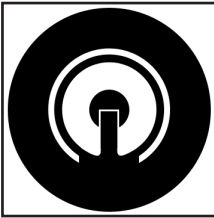


Figure 32: Sight picture point of aim

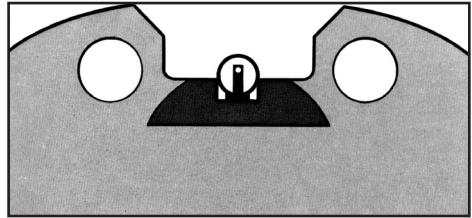


Figure 33: Sight picture night sight

4.2.1 Adjusting with diopter sight

To correct for elevation and windage, the corresponding correction screw is turned with a screwdriver.

By rotating the elevation correction screw and the windage correction screw by one click, the average point of impact in the vertical respectively the horizontal axis is displaced by approximately 0.15 ‰.

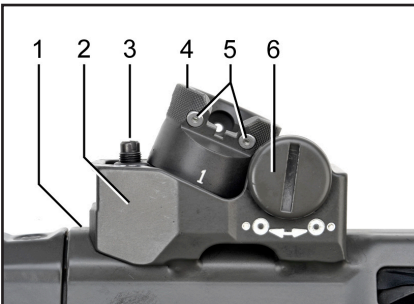
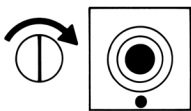
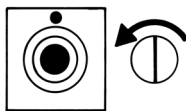


Figure 34: Diopter Sight

- (1) Receiver casing
- (2) Rear sight mount
- (3) Elevation correction screw
- (4) Rear sight drum
- (5) Night sights
- (6) Windage correction screw

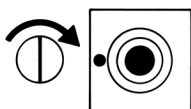
**Elevation:**

Low shots are corrected by turning the screw to the right.

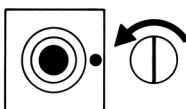


High shots are corrected by turning the elevation correction screw to the left.

Figure 35:
Correction symbol on rear sight (correction of elevation)

**Windage:**

Shots to the left are corrected by turning the screw to the right.



Shots to the right are corrected by turning the windage correction screw to the left.

Figure 36:
Correction symbol on rear sight (correction of windage)

4.2.2 Point of impact correction SG 553 with diopter sight

Firing range	Average point of impact correction per notch (diopter sight)	
	Windage	Elevation
SG 553		
100 m / 109 yds.	1.7 cm / 0.7 inch	2.4 cm / 0.9 inch
200 m / 218 yds.	3.4 cm / 1.3 inch	4.8 cm / 1.9 inch
300 m / 328 yds.	5.1 cm / 2.0 inch	7.2 cm / 2.8 inch

4.3 Gas valve position

With the SG 553, the gas volume required for the function of the weapon can be controlled by the gas valve.

4.3.1 Position I

(Rib of gas valve in vertical position)

Under normal conditions, firing is effected in this position.



Figure 37: Gas valve in position I

4.3.2 Position II

(Rib of gas valve in slanting position)

When cycling or ejection problems occur due to heavy fouling or icing-up, the gas valve is to be turned clockwise as far as the stop. In this position, a larger gas volume acts on the gas piston.



Figure 38: Gas valve in position II

The adjustment of the gas valve is effected manually, and, in case of a hot or heavily fouled weapon, by means of a cartridge or auxiliary aid.

Firing with gas valve in position II is an exception. As soon as the weapon works, the gas valve must be turned back to position I, otherwise the recoil is intensified and the weapon is unnecessarily stressed.

4.4 Foldable butt stock

Thumb in the butt stock catch and fold the butt stock so that it registers with the handguard under spring pressure.



Figure 39: Butt stock folded

- (1) Butt stock catch
- (2) Butt stock

4.5 Adjustable butt stock

The butt stock is adjustable in the length in 3 positions (position completely extracted, center position, slide in position).

To adjust the butt stock, depress the adjusting latch (3), move the butt stock (2) to the desired position, release the adjusting latch (3). The butt stock can only be fixed on the handguard in its extracted position.



Figure 40: Butt stock adjustable, folded

- (1) Butt catch
- (2) Butt stock adjustable
- (3) Adjusting latch

4.6 Firing with mittens

For firing with mittens the trigger guard can be pivoted to the left or right. For safety reasons the trigger guard must be placed in the vertical position before carrying out any manipulations.



Figure 41: Trigger guard folded

- (1) Trigger casing
- (2) Trigger guard

4.7 Rifle Grenades (Bullet trap type)

4.7.1 General

Rifle grenades can only be shot with the longbarrel (LB) version. The rifle grenades are intended to be launched in flat trajectory. Standard, live ammunition is used for launching, whereby the weapon cycles automatically (The bullet is caught in the bullet trap integrated in the grenade).

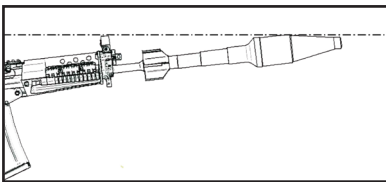
4.7.2 Handling

Acting on orders, or his own initiative in situations of danger, the trooper prepares his weapon for grenade launching. Loading procedure:

- Load the SG 553 LB rifle with standard, hardball ammunition.
- Set the safety lever to «S».
- Mount the rifle grenade: it must be possible to twist on the grenade up to the stop without encountering significant resistance.

4.7.3 Aiming

At a range of 75 m (82 yds.), aim over the upper edge of the rifle grenade and the upper rim of the front sight tunnel. At longer ranges, cover the target with the body of the grenade. Consequently, first obtain the height of the target by approaching it from the side. Then move the rifle sideways, without changing the inclination of the barrel, until the target is covered.



Range 75 m (82 yds.):

Point of aim = average point of impact

Figure 42: Aiming the rifle grenade

4.7.4 Launching positions

The grenade launching can be done from the standing, kneeling and prone positions. The rifle butt should be held as tightly as possible under the armpit of the firing arm; the other hand grasps the handguard firmly. Set the safety lever to position «1». Firing from the shoulder is also possible. **However, the trooper must take cover before the grenade detonates upon impact.**

4.8 Use of accessories

4.8.1 Carrying sling

One end of the sling hooks into the lug on the front sight mount; the other end is attached to the butt stock or the rear sight mount.

- To fix the taut sling, use the clip.
- To maintain a taut sling, slip the clip over the sling strap.



Figure 43: Sling hooked to front sight mount



Figure 45: Fix the taut sling



Figure 44: Sling hooked to rear sight mount



Figure 46: Sling attachment to the butt stock

4.9 Field stripping

1. Unload the weapon in accordance with section «3.3 Unloading» on page 47.
2. Unlock the carrying sling.
3. Press the rear trigger casing stud from both sides and withdraw it from the stud head side as far as the stop.
4. Lay the weapon on its left side and swing out the trigger assembly.
5. Withdraw the front trigger casing stud as described in point 3 and remove the trigger assembly.
6. Press down the charging handle catch and remove the charging handle.



Figure 47: Remove trigger assembly



Figure 48: Remove charging handle

7. Use the charging handle to draw the bolt to the rear, remove the bolt from the receiver.
8. Twist the bolt head to remove it from the bolt carrier.



Figure 49: Draw bolt to the rear using charging handle



Figure 50: Remove bolt head (rotate)



Figure 51: Remove bolt head (pull)

9. Pull the lower handguard to the rear and lift it off.
10. Lift the rear of the upper handguard and extract it from the front sight mount.



Figure 52: Lift off lower handguard

11. Press down the gas valve catch, remove the valve by simultaneously rotating it and pulling it out. (Figure 53).
12. Remove the gas piston by pushing it into the gas tube and pull it out from the front end. (Figure 54)
13. Press down the gas-valve catch and rotate the gas tube through 90° so that the notch flange notch lies on the barrel and pull out the gas tube from the front.



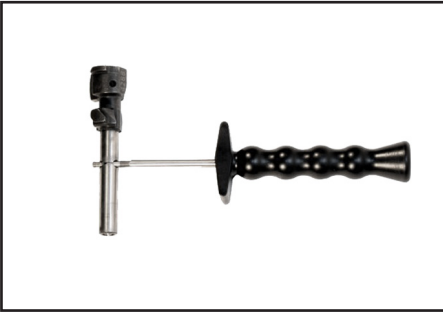
Figure 53: Remove gas valve



Figure 54: Remove gas piston

14. Remove firing pin:

- Hold the bolt against a firm surface so that the firing pin is completely pressed into the bolt head.
- Use the cleaning rod handle to remove the retention stud. Extract the firing pin complete with spring.

**Figure 55: Remove firing pin****15. Stripping the magazine:**

- Use the cleaning rod handle to press in the retention lug of the floorplate. Slide out the magazine floorplate to the rear.
- Pull out the floorplate catch together with magazine spring and feeder.

**Figure 56: Stripping the magazine**

16. If necessary, unmount the butt catch (not possible with some models).
 - Swing butt stock in folded position.
 - Press down the butt catch with the charging handle and turn it 90° counter-clockwise, take out the butt catch and the spring
17. If necessary, remove the floorplate of the pistolgrip (take out the loading tool).



Figure 57: SG 553 SB Picatinny version stripped

Additional dismantling may only be performed by a weapons and equipment mechanic.



Figure 58: SG 553 SB Diopter version stripped

Additional dismantling may only be performed by a weapons and equipment mechanic.



Figure 59: SG 553 LB Picatinny version stripped

Additional dismantling may only be performed by a weapons and equipment mechanic.



Figure 60: SG 553 LB Diopter version stripped

Additional dismantling may only be performed by a weapons and equipment mechanic.

4.10 Assembly

The weapon must always be assembled in the reverse order of stripping:

1. Mount the floorplate of the pistolgrip (previously insert the loading tool into the pistolgrip).
2. Insert the butt catch and spring into the butt stock, press down the butt catch with the charging handle and turn it 90° clockwise.
3. Assemble the magazine.
4. Install the firing pin:
 - Insert the firing pin and spring into the bolt head. Ensure that the notch is correctly located to accept retention stud.
 - Press the firing pin into the bolt head.
 - When the notch aligns with the stud hole, insert the stud.



Figure 61: Install firing pin

5. Install gas tube:

- Slip the gas tube (flange notch pointing downwards) through the bore of the front sight mount and insert the end into the corresponding opening in the receiver.
- Press the gas tube against the front sight mount and turn it through 90° to the right so that the retention stud of the gas valve registers in the flange.

6. Insert the gas piston with recoil spring:

- Slide the gas piston, with its retention notch facing against the barrel, into the gas tube.
- Check with the index finger that the gas piston moves freely in the tube.
(Figure 62)



Figure 62: Check gas piston position

7. Install gas valve:

- With the notch for the catch facing the barrel, insert the gas valve into the headpiece of the gas tube.
- Press in the gas valve catch and rotate the gas valve clockwise to setting «I» (vertical).
- Check if the gas valve has engaged.

8. Install the upper handguard.

9. Install the lower handguard.

10. Assemble the bolt head and carrier.

11. Insert the bolt assembly:

- Move the bolt head completely to the front by pressing the firing pin.
- Slide the bolt assembly into the receiver (Figure 64).



Figure 63: Install gas valve

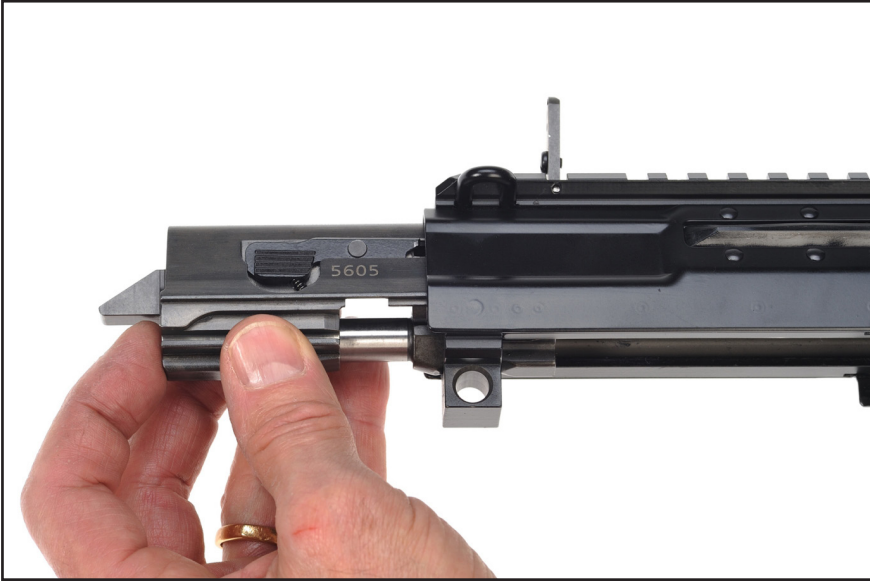


Figure 64: Insert bolt assembly

12. Insert the charging handle into its slot in the bolt carrier and check that it has registered with the catch.
13. Install trigger casing:
 - Ensure that the holes in the front trigger casing overlap.
 - Press the trigger casing stud through as far as the stop.
14. Tilt up the trigger casing and fix it with the rear trigger casing stud.
15. Carry out function check in accordance with section «4.11 Verification of Functions» on page 76.

4.11 Verification of Functions

Each time the weapon is stripped, verify its functions as follows.

Sequence of Procedure:

1. Unload in accordance with section «3.3 Unloading» on page 47.

2. Remove the magazine.

3. Check the serial numbers:

The last four digits of the serial number on the receiver casing have to match the number on the bolt carrier, bolt head and trigger casing.

4. Ensure that the cocking handle has registered in the correct position.

5. Check the functions (a to f):

a) With the safety lever on «S» execute a loading cycle, pull the trigger.

- *The hammer must not drop, the trigger must be blocked.*

b) With the safety lever on «1», pull the trigger and hold it back

- *The hammer must drop.*

With the trigger still held back, cycle the weapon once.

- *The hammer must not drop.*

Release the trigger and pull it again.

- *The hammer must drop.*

c) Execute a loading cycle.

d) Set the safety lever to «3», pull the trigger and hold it back.

- *The hammer must drop.*

With trigger held back, cycle the weapon
(allow bolt to slide forward slowly).

- *The hammer must drop immediately as the bolt locks up.*

Repeat the loading cycle.

- *On the third loading cycle, the hammer must not drop.*

Release the trigger.

e) With safety lever on «20», repeat procedure as under d)

- *Hammer must drop each time.*

f) Check the pressure point

Cycle the weapon:

- *Set the safety lever to «1», verify several times that the pressure point is discernible.*

6. Insert an empty magazine, check that it is located firmly.

7. Check the bolt catch

a) Execute a loading cycle.

- *The bolt must be caught in its rear position.*

b) Push the bolt catch upwards.

- *The bolt must immediately run forward.*

c) Pull the trigger, set the safety lever to «S».

8. Check that the folded butt stock has registered.

4.12 Procedure in case of malfunction

Whenever an SG 553 no longer works due to a malfunction, proceed as follows:

- Carry out a loading cycle.
- Continue firing.

If the weapon does not fire:

- Insert a fresh magazine and carry out a loading cycle.
- Continue firing.

If the weapon still does not fire:

- Set the safety lever to «S».
- Remove the magazine.
- Loading action, hold the bolt in rearmost position, check ejection of cases and, if necessary, remove any jammed cases or cartridges.
- Turn the gas valve on position II when the weapon is heavily fouled or iced up.
- Insert a fresh magazine and carry out a loading cycle.
- Set the safety lever to desired firing mode, continue firing.

If the weapon still will not fire:

- Set the safety lever to «S».
- Unload in accordance with section «3.3 Unloading (Clearing)» on page 47.
- Clean the weapon in accordance with section «5.1.2 Cleaning after firing» on page 81.
- Take up firing position.
- Insert a fresh magazine and carry out a loading cycle.
- Set the safety lever to desired firing mode, continue firing.

If the weapon cannot be unloaded or the fault rectified by the rifleman in accordance with the operating instructions, a trained expert must be consulted.

The following points must be borne in mind:

- If the weapon cannot be unloaded immediately and there is any danger of self-ignition due to a hot barrel (140° C / 284° F), wait at least 15 minutes.
- The weapon must remain in position as long as it is loaded.
- Spectators and other unnecessary persons must be sent away so that the problem can be tackled carefully without disturbance.
- As long as the weapon is loaded, only trained experts should be allowed to manipulate the weapon.

Malfunctions can largely be avoided by:

- Carrying out cleaning in accordance with section «5 Maintenance» on page 80.
- Cleaning the weapon in accordance with section «5.1.2 Cleaning after firing» on page 81 after each period of firing, at the latest just after setting the gas valve to position II.
- Inserting the magazine correctly.

5 Maintenance

5.1 Types of maintenance

There are the following types of maintenance:

- daily cleaning
- cleaning after firing
- cleaning after malfunctioning

5.1.1 Daily cleaning

Daily cleaning should be carried out if the weapon is dry and has not been fired.

Sequence of operations:

1. Unload the weapon
in accordance with section «3.3 Unloading» on page 47.
2. Clean the weapon externally
3. Lightly oil steel parts (to prevent rusting)
4. Carry out function check
in accordance with section «4.11 Verification of Functions» on page 76.

5.1.2 Cleaning after firing

Sequence of operations:

1. Unload the weapon
in accordance with section «3.3 Unloading» on page 47.
2. Field strip the weapon
in accordance with section «4.9 Field stripping» on page 62
3. Clean and lubricate the weapon
as described in section «5.2 Cleaning and greasing» on page 83
4. Assemble the weapon
5. Carry out function check
in accordance with section «4.11 Verification of Functions» on page 76.

5.1.3 Maintenance after malfunctioning

The SG 553 must be cleaned whenever the gas valve is switched to position II. After cleaning, all moving parts should be lubricated and a light coat of oil should be applied to all steel parts to prevent rusting.

Sequence of operations:

1. Set the safety lever to «S».
2. Unload the weapon in accordance with section «3.3 Unloading (Clearing)» on page 47.
3. Press the rear trigger casing stud from both sides and pull it out on the head side as far as the stop.
4. Tilt down the trigger casing, clean and check.
5. Remove the bolt assembly, clean and check.
6. Remove the gas valve, clean and check.
7. Remove the gas piston, clean and check for correct operation.
8. Clean the receiver casing.
9. Grease all parts in accordance with section «5.2.3 Post-shoot lubrication instructions» on page 84.
10. Assemble the weapon.
11. Carry out function check in accordance with section «4.11 Verification of Functions» on page 76.
12. Load the weapon and continue with assignment.

5.1.4 Actions to be taken in cold weather and snow

The weapon and ammunition are to be protected whenever possible from ice build-up and snowfall. They are not to be stored in warm spaces when outside temperatures are low because condensate could most often build, which in the open air would lead to ice build-up.

- Hot shot weapons must not be dipped in the snow or submerged in water because they can ice up once cooled down.
- At low temperatures the primed assault rifle is carried with the butt stock swung out.
- In case of iced-up diopter holes firing is carried out with the sight open (100 m) and the corresponding hold point modified.
- To prevent ejection failures at low temperatures (from approx. -10°C / 14°F) firing should be carried out right from the outset with the gas valve position on the slant.

5.2 Cleaning and greasing

5.2.1 Greasing and degreasing

Sequence of operations:

1. Unload the weapon
2. Remove the bolt
3. Clean the barrel from the chamber down

5.2.2 Daily cleaning

- During daily cleaning the weapon should be wiped with a dry cloth and the metal parts should be lightly lubricated.

5.2.3 Cleaning procedure

- Carry out the stripping procedure.
- Remove residual powder from the gas valve, gas tube and gas piston with weapon cleaning oil.
- Clean the receiver and barrel from the rear.
- Clean the trigger assembly and all remaining parts of the weapon.
- Clean the accessories.

5.2.4 Lubrication procedure

- Lubricate the bolt and the barrel from the chamber down using oil.
- Lightly oil the valve and gas tube internally and externally.
- Lightly oil the gas piston and recoil spring.
- Lightly oil the trigger casing.
- Wipe all remaining metal parts with an oil cloth.

6 Function

6.1 General weapon function of SG 553

6.1.1 Readiness to fire

At the moment of readiness to fire the bolt is closed and locked. The recoil spring (2) holds the bolt carrier (4) in the front final position, via the gas piston (1).

The bolt head (5) is rotated by the control cam (3) of the bolt carrier (4) in such a way that its locking lugs (8) engage in the corresponding recesses of the locking piece (9).

In this position the hammer (7) is cocked and the release bar (6) is depressed.

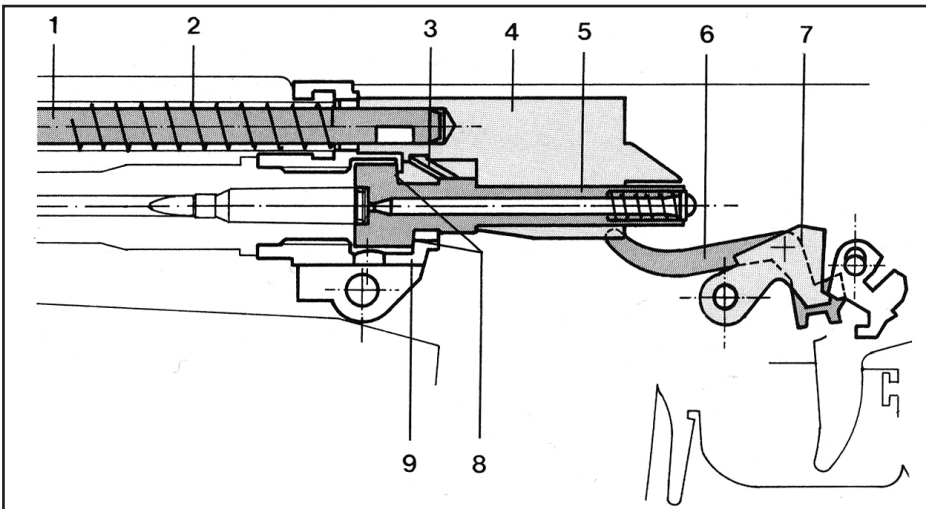


Figure F1: Weapon loaded

- | | |
|-------------------|-------------------|
| (1) Gas piston | (7) Hammer |
| (2) Recoil spring | (8) Locking lug |
| (3) Cam | (9) Locking piece |
| (4) Bolt carrier | |
| (5) Bolt head | |
| (6) Release bar | |

6.1.2 Discharging the shot

By pressing the trigger (5) the hammer (3) is released. The hammer is under pressure of the hammer spring (4) and strikes the firing pin (2) which, in turn, impacts against the cartridge primer of the cartridge (1) thus discharging the shot.

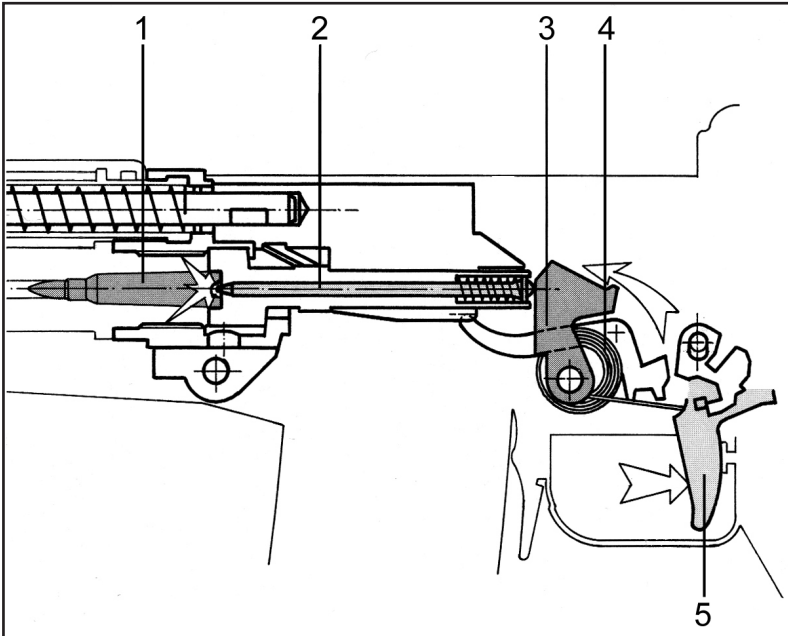


Figure F2: Discharging the shot

- | | |
|----------------|-------------------|
| (1) Cartridge | (4) Hammer spring |
| (2) Firing pin | (5) Trigger |
| (3) Hammer | |

6.1.3 Unlocking and recoil of bolt

The gas pressure, generated by the burning powder, drives the bullet through the barrel (4). As soon as the projectile passes the gas port (5), propellant gas flows through the adjustable gas valve (1). The gas pressure acts on the gas piston (2) which pushes the bolt carrier (3) to the rear.

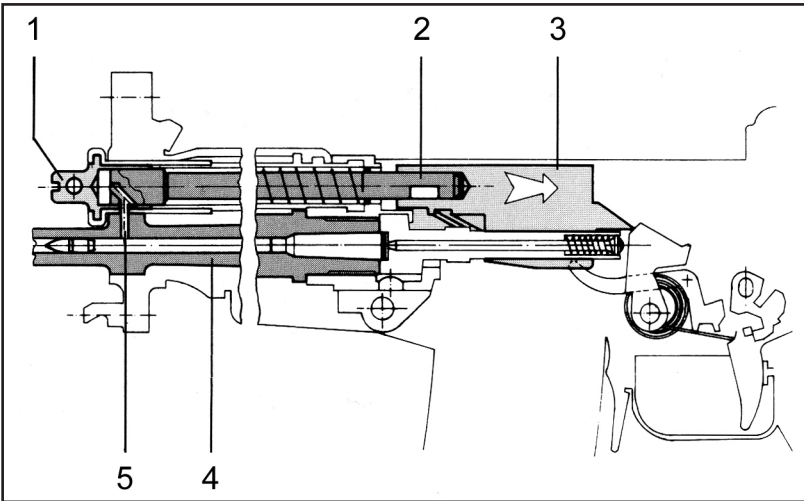


Figure F3: Unlocking and recoil of bolt

- | | |
|------------------|--------------|
| (1) Gas valve | (4) Barrel |
| (2) Gas piston | (5) Gas port |
| (3) Bolt carrier | |

During the rearward motion of the bolt carrier (3) the bolt head (2) is rotated by the control cam (1) so that the locking lugs (4) are disengaged. The bolt is now unlocked.

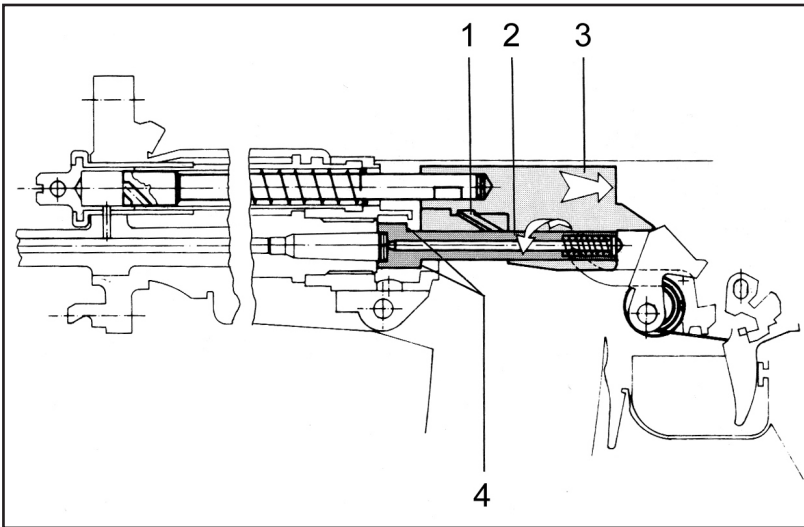


Figure F4: Unlocking begins

- | | |
|-----------------|------------------|
| (1) Control cam | (3) Bolt carrier |
| (2) Bolt head | (4) Locking lug |

The bolt assembly moves back along the rails in the receiver casing (2) as far as the stop (4) whereby:

- the recoil spring (1) is compressed.
- the hammer (3) is cocked.
- the extractor (5) extracts the case from the chamber.
- the ejector (6) ejects the case through the port in the receiver casing(2).

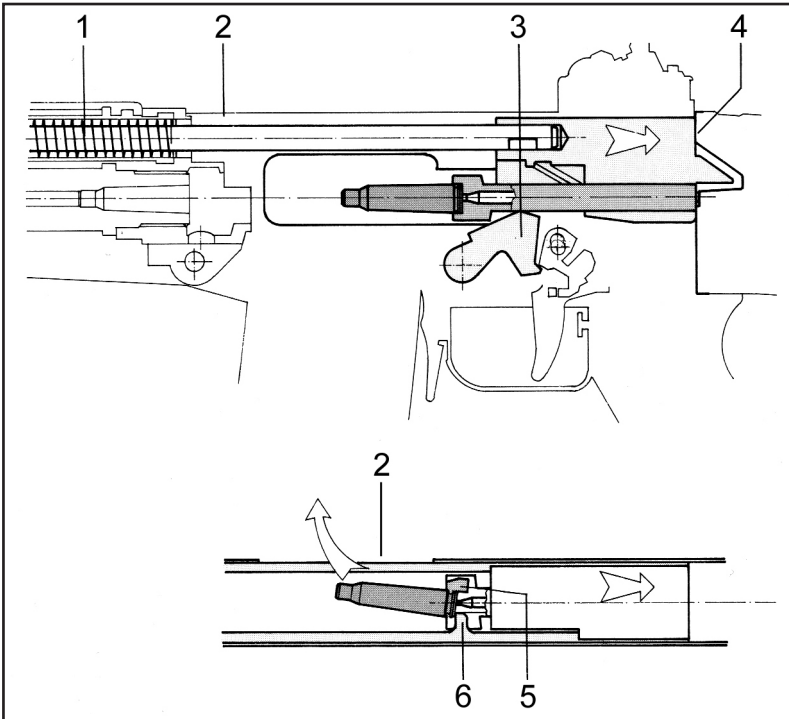


Figure F5: Case ejection

- | | |
|---------------------|---------------|
| (1) Recoil spring | (4) Stop |
| (2) Receiver casing | (5) Extractor |
| (3) Hammer | (6) Ejector |

6.1.4 Bolt advance

The force of the compressed recoil spring (1) thrusts the bolt forward. The bolt head (2) feeds the next round from the magazine (3) into the chamber.

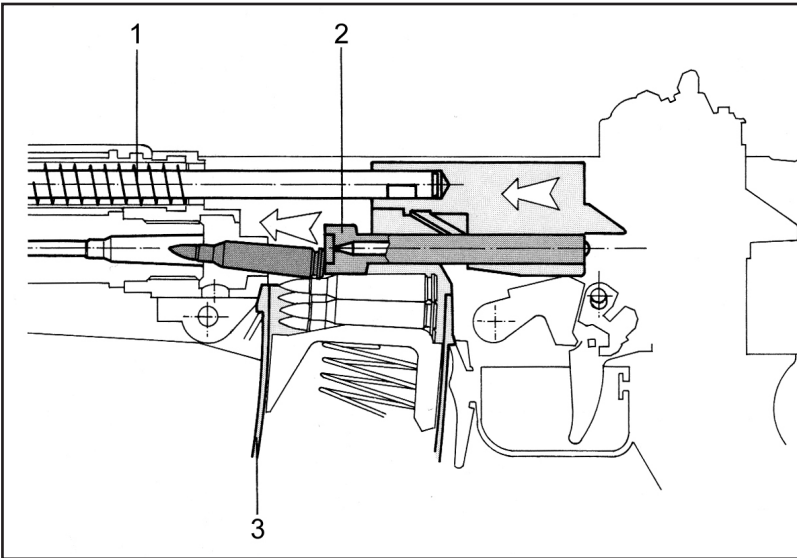


Figure F6: Bolt advance

- (1) Recoil spring
- (2) Bolt head
- (3) Magazine

In the final stage of the advance, the bolt head (1) locks up and the release bar (2) is depressed.

The weapon is ready to be fired.

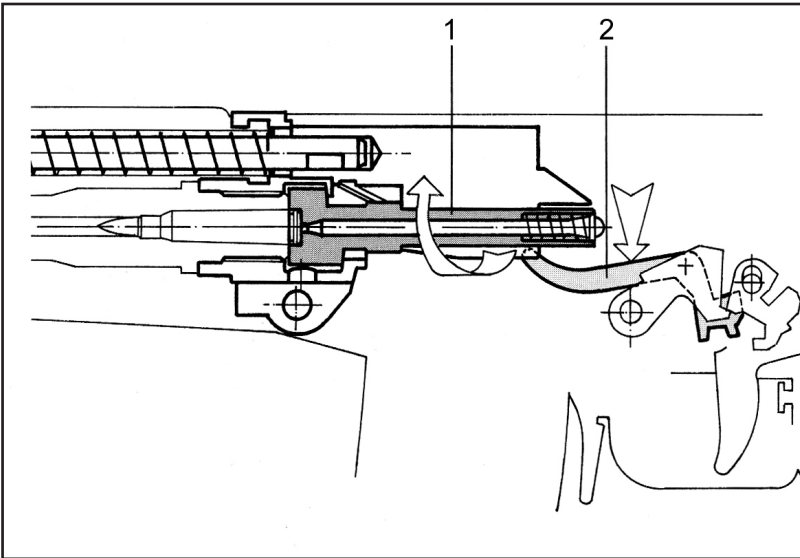


Figure F7: Locking

(1) Bolt head

(2) Release bar

6.2 Trigger functions

6.2.1 General

Home position for describing the trigger functions:

- the hammer (3) is held by the trigger rod (4)
- the release bar (2) is depressed by the bolt carrier (1)
- the sear (5) is not engaged

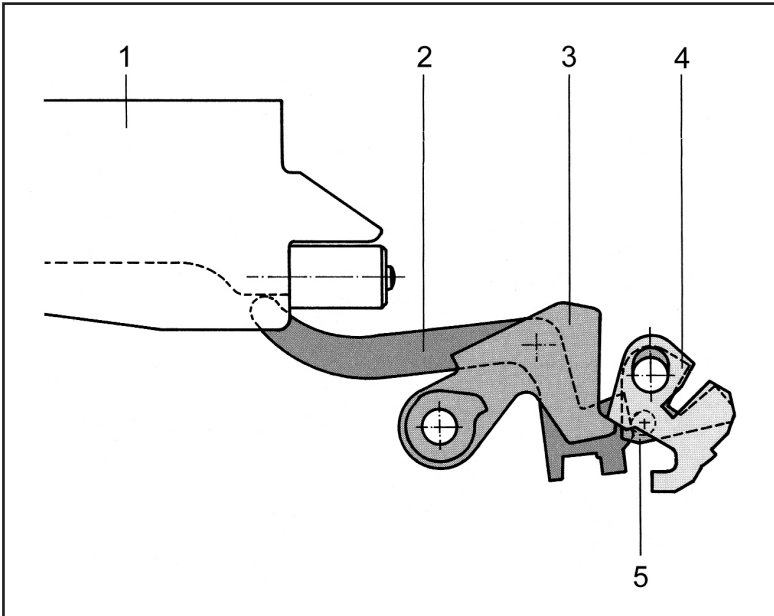


Figure F8: Trigger mechanism in cocked position

- | | |
|------------------|-----------------|
| (1) Bolt carrier | (4) Trigger rod |
| (2) Release bar | (5) Sear |
| (3) Hammer | |

6.2.2 Trigger in safe position «S»

- The safety lever (6) is set to «S»
- The safety shaft (7) locks the trigger (8)

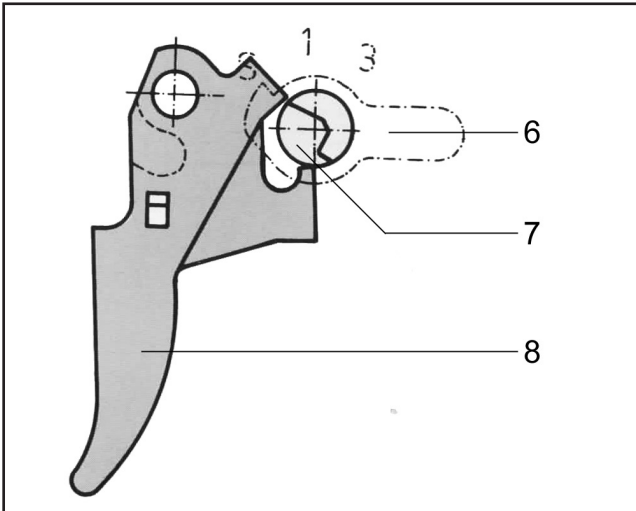


Figure F9: Trigger in safe position «S»

- (6) Safety lever (8) Trigger
(7) Safety shaft

6.2.3 Semi-automatic fire

The safety lever (6) is set to «1» and the hammer (3) is held by the trigger rod (4).

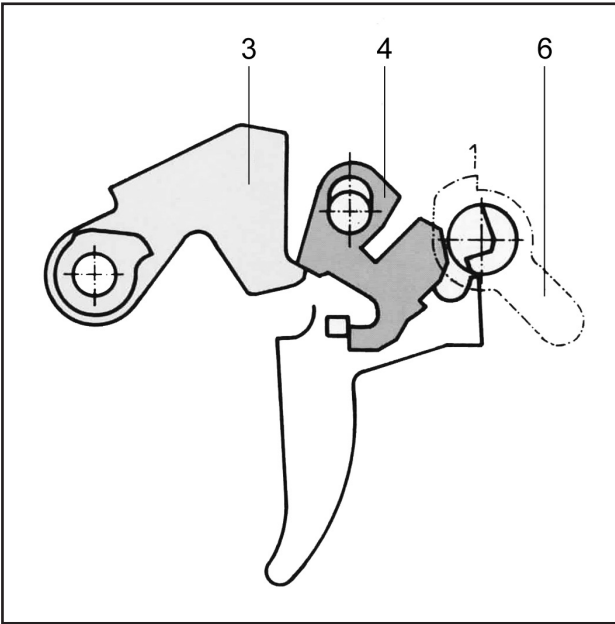


Figure F10: Trigger mechanism before firing

- (3) Hammer
- (4) Trigger rod
- (6) Safety lever

By pulling the trigger (8) and after having overcome the pressure point, the trigger rod (4) releases the hammer (3) which strikes the firing pin (9). The trigger rod (4) falls downwards.

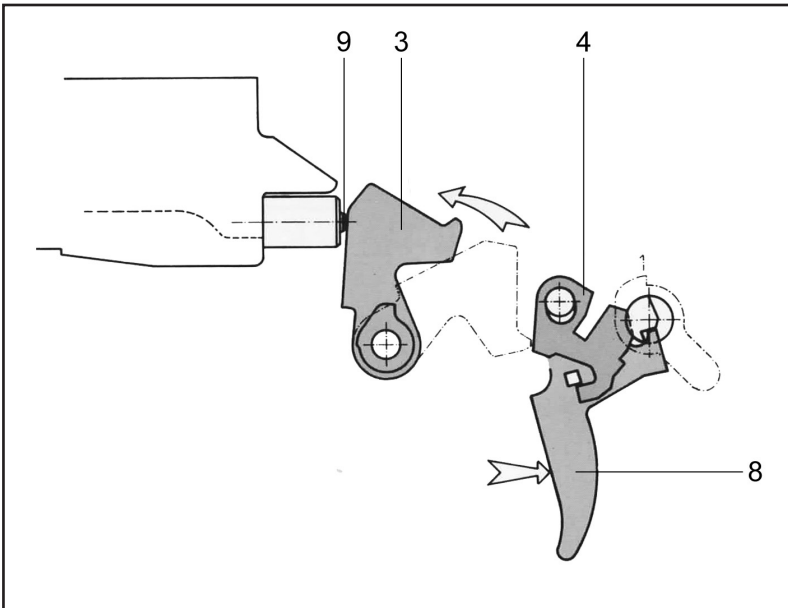


Figure F11: Striking the firing pin

- | | |
|-----------------|----------------|
| (3) Hammer | (8) Trigger |
| (4) Trigger rod | (9) Firing pin |

The recoiling bolt presses the hammer (3) down and releases the sear (5) via the release bar (2). The sear (5) catches the hammer (3).

During the bolt advance, the bolt presses down the release bar (2). The sear (5) is thereby moved to the rear and releases the hammer (3) to the trigger rod (4).

When the trigger is released, the trigger rod (4) moves to its upper end position (refer to fig. F8).

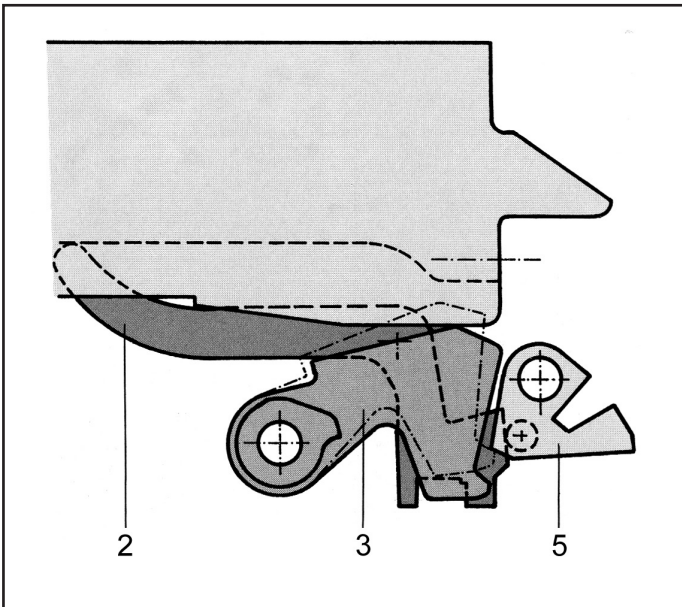


Figure F12: Trigger mechanism during bolt recoil

- | | |
|-----------------|----------|
| (2) Release bar | (5) Sear |
| (3) Hammer | |

6.2.4 3-round burst control system

- The safety lever (6) is set to «3».
- The automatic fire pawl (11) lies in the groove of the safety shaft (7).
- The segment (10) is controlled by the safety shaft (7) and moved upward.

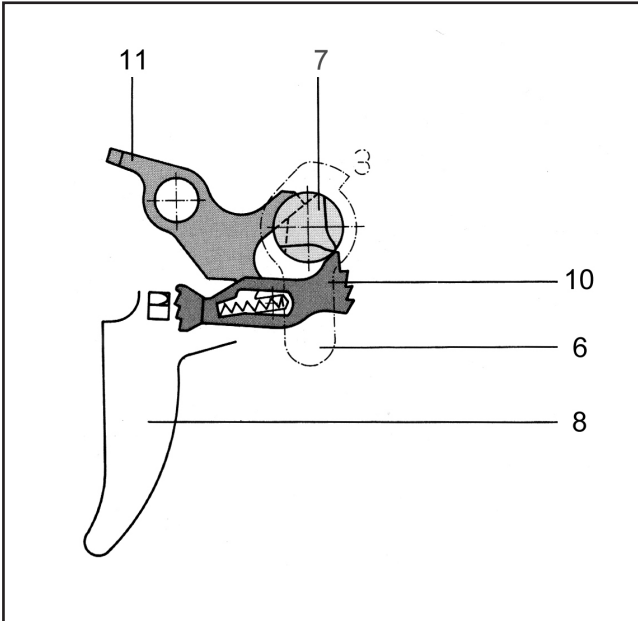


Figure F13: Home position, 3-round burst control system

- | | |
|------------------|--------------------------|
| (6) Safety lever | (10) Segment |
| (7) Safety shaft | (11) Automatic fire pawl |
| (8) Trigger | |

By pulling the trigger (8), the trigger rod (4) is withdrawn and simultaneously retained by the automatic fire pawl (11).

The segment (10) is pressed to the rear by the driving cam (12) in the trigger (8) so that the pawl (13) is allowed to register.

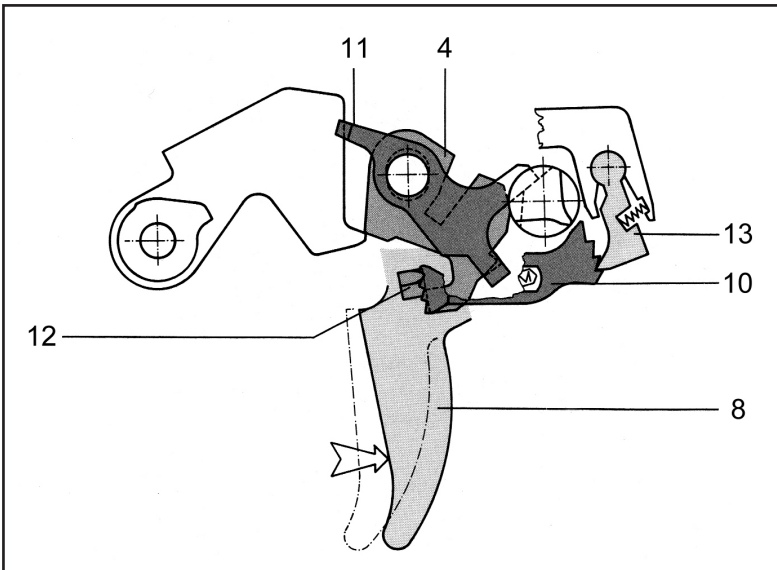


Figure F14: Trigger mechanism, immediately prior to firing

- | | |
|-----------------|--------------------------|
| (4) Trigger rod | (11) Automatic fire pawl |
| (8) Trigger | (12) Driving cam |
| (10) Segment | (13) Pawl |

- When the hammer (3) is thrust forward, the chargeover (14) presses the pawl (13) via its excentric (15) on the segment (10). The segment (10) jumps up by one notch.
- The recoiling bolt cocks the hammer (3) which is retained by the sear (5) (refer to fig. F12).

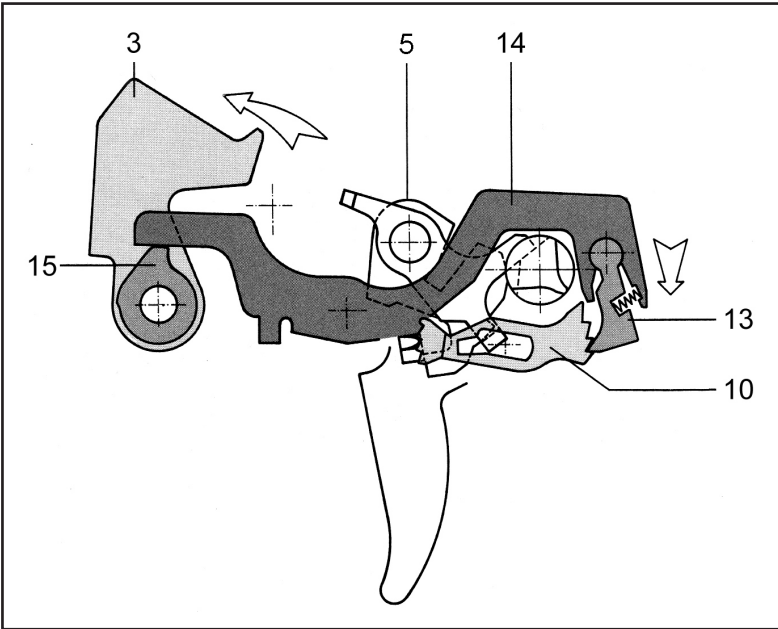


Figure F15: Trigger mechanism after firing (first round)

- | | |
|--------------|-----------------|
| (3) Hammer | (13) Pawl |
| (5) Sear | (14) Chargeover |
| (10) Segment | (15) Excentric |

- The advancing bolt presses the sear (5) via the release bar (2) to the rear thus releasing the hammer (3).
- The segment (10) moves up another notch.

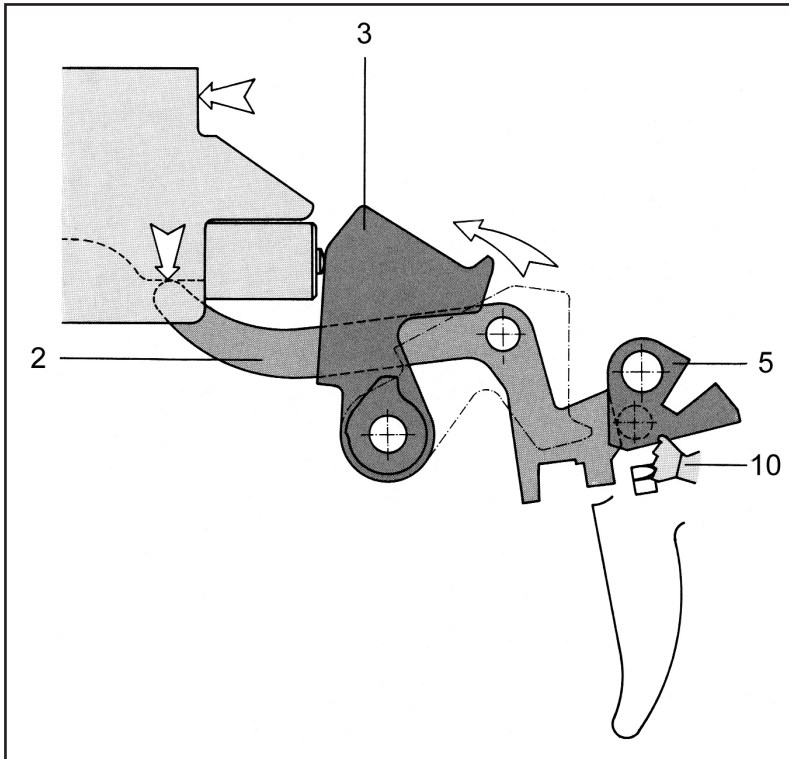


Figure F16: Trigger system during firing (second round)

- | | |
|-----------------|--------------|
| (2) Release bar | (5) Sear |
| (3) Hammer | (10) Segment |

When the third round is fired – just like the second round – via the release bar, the segment (10), pressed by the chargeover (14) jumps on the driving cam (12) of the trigger (8) and interrupts the support of the trigger rod (4) by the automatic fire pawl (11).

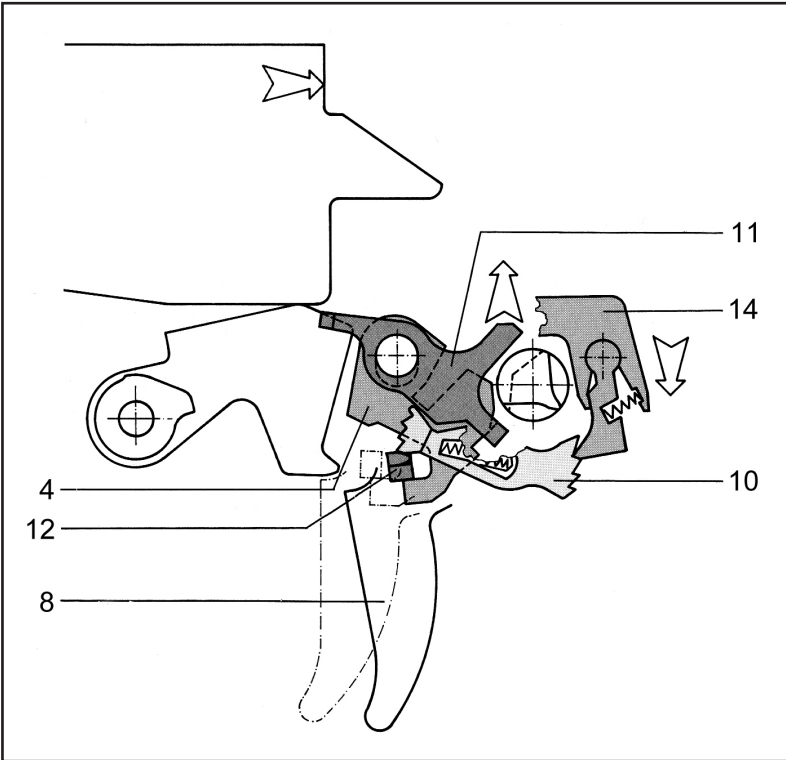


Figure F17: Trigger mechanism after the third round

- | | |
|------------------|--------------------------|
| (4) Trigger rod | (11) Automatic fire pawl |
| (12) Driving cam | (14) Chargeover |
| (8) Trigger | (10) Segment |

- The sear (5) catches the hammer (3) (refer to fig. F12).
- The advancing bolt drives the release bar (2) downward. The release bar (2) presses the sear (5) to the rear and releases the hammer (3) (refer to fig. F16).
- The hammer is retained by the trigger rod. When the trigger (8) is released the segment (10) moves back to its home position (refer to fig. F13).

IMPORTANT:

In order to ensure proper function of the 3-round burst control system, pay attention to the following articles:

- During the complete 3-round burst, the trigger has to be fully retained in its rearmost position.
- For each following 3-round burst, the trigger has to be released in its foremost position and has to be pulled again.

6.2.5 Full auto fire

The safety lever (6) is set on «20».

The automatic fire pawl (11) which supports the trigger rod (4) lies in the groove of the safety shaft (7).

By pulling the trigger (8) the trigger rod (4) is drawn to the rear and supported by the automatic fire pawl (11).

The hammer (3) is released and strikes forward (refer to fig. F2). The recoiling bolt cocks the hammer (3) which is retained by the sear (5) (refer to fig. F12).

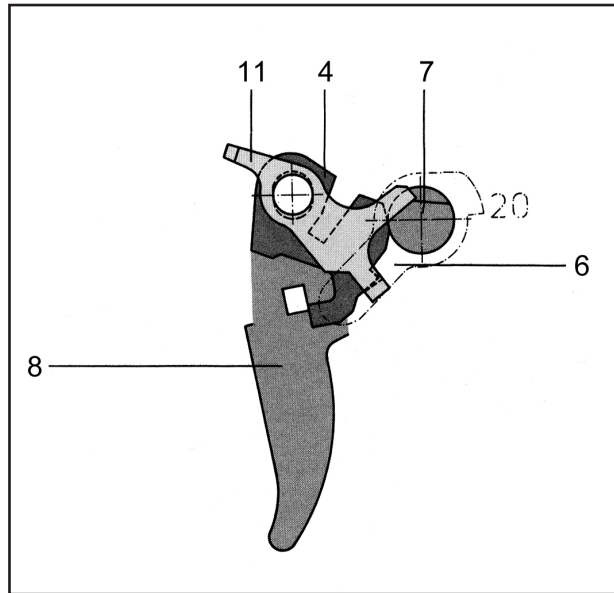


Figure F18: Trigger mechanism during full auto fire

- | | |
|------------------|--------------------------|
| (4) Trigger rod | (8) Trigger |
| (6) Safety lever | (11) Automatic fire pawl |
| (7) Safety shaft | |

The advancing bolt presses on the release bar (2) which pushes the sear (5) to the rear thus releasing the hammer (3) (refer to fig. F16).

- This trigger function is only interrupted when the trigger (8) is released. In doing so the link between the automatic fire pawl (11) and the trigger rod (4) is disconnected.
- The trigger rod (4) moves downward and catches the hammer (3).

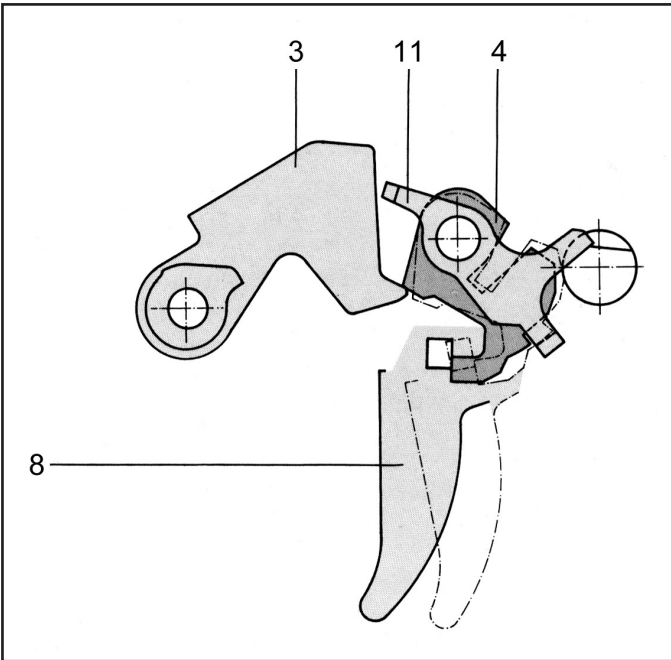


Figure F19: Interruption of fully automatic fire

- | | |
|-----------------|--------------------------|
| (3) Hammer | (8) Trigger |
| (4) Trigger rod | (11) Automatic fire pawl |

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7.2 List of parts

7.2.1 Picatinny version, short barrel

100 Receiver Group

111-A	Receiver casing
141	Bolt cover (2x)
142	Bolt cover rivet (6x)
171-A	Rear sight holder
172-A	Rear sight plate
173-A	Flat head screw
174-A	Pressure plate
175-A	Cup spring
176	Pin

200 Barrel/gas system (picatinny version)

211-A	Barrel SB (short barrel)
212	Front sight mount *
213	Roll pin
214	Flash suppressor
223	Stop pin
224	Compression spring
225	Spring pin
231-A	flip up front sight lower part
232-A	flip up front sight
233	Positioning bolt
234	Night front sight spring
235	Spring pin
236	Front sight screw *
237	Front sight disc *
238	Spring pin
241	Gas valve
251	Gas tube
261	Gas piston
262	Recoil spring
263	Spring pin
268	Support washer
269	Gas piston bushing
271	Collar

300 Handguard

311	Upper handguard
321	Lower handguard
330	Picatinny rail **
331	Screw for Picatinny rail *
332	Washer for Picatinny rail *
333	Nut for Picatinny rail *

400 Bolt

411	Bolt head
412	Firing pin
413	Firing pin stud
414	Firing pin spring
415	Extractor
416	Extractor spring
417	Pin
421	Bolt carrier
422	Charging handle catch
423	Axle of charging handle catch
424	Spring of charging handle catch
425	Charging handle

500 Trigger assembly

501	Trigger casing
510	3-round burst facility
511	Template
512	Chargeover
513	Pawl spring
514	Pawl spring
515	Bush
516	Segment
517	Segment axle
518	Segment spring
519	Locking washer
520	Compression spring
521	Magazine catch
522	Magazine catch spring
523	Magazine catch pin
524	Bush
531	Release bar
532	Circlip
541	Pistol grip
542	Floorplate
543	Allen screw
544	Stop nut
545	Nameplate

551	Pressure point screw
552	Stop nut
553	Pressure point spring
554	Trigger guard
555	Trigger guard bearing
561	Hammer
562	Hammer axle
563	Main spring
564	Bolt catch
565	Bolt catch spring
566	Spring bolt
571	Safety lever
572	Safety shaft
573	Locking spring
575	Automatic firing lock axle
576	Spring pin
578	Stop ring
579	Automatic firing lock
581	Trigger
582	Trigger spring
583	Trigger rod
584	Pivot, trigger
585	Trigger bush
586	Trigger rod spring
587	Sear
588	Automatic firing pawl
589	Automatic firing pawl spring
591	Trigger casing stud
592	Spring-pressure pin
593	Spring for trigger casing stud
594	Spring pin
595	Pin
596	Cup spring
597	Baffle plate
598	Sear bolt
599	Sear roller

600 Butt Stock Group

611	Butt stock
612	Butt catch
613	Butt catch spring
614	Clip
615	Spring pin
616	Butt plate *

**600-A Butt Stock Group
(Butt stock adjustable) ****

611-A	Butt stock
612	Butt catch
613	Butt catch spring
614	Clip
615	Spring pin
616	Butt plate *
617	Hinge
618	Detent insert
619	Spring pin detent insert
620	Cover
621	Locking pin
623	Axle of locking pin
624	Axle of adjusting latch
625	Circlip
626	Adjusting latch
627	Adjusting latch pressure spring
628	Slider
629	Slider bolt
630	Slider compression spring

700 Magazine

711	Magazine casing
712	Magazine floorplate
713	Floorplate catch
714	Feeder
715	Magazine spring

* Cannot be ordered
as individual parts

** Optional

7.2.2 Diopter version, short barrel

100 Receiver Group

111	Receiver casing
141	Bolt cover
142	Bolt cover rivet (6x)
151	Rear sight drum
152	Drum spring
153	Drum stud
154	Luminous ampules *
155	Insert
156	Rubber disc
161	Pivot
162	Drum axle
163	Spring washer
164	Safety washer
165	Leaf spring
171	Windage correction screw
172	Click stud
173	Rear sight spring
174	Limitation ring
175	Spring pin
181	Elevation correction screw

200 Barrel/gas system (diopter version)

211-C	Barrel SB (short barrel)
212	Front sight mount *
213	Roll pin
214	Flash suppressor
223	Stop pin
224	Compression spring
225	Spring pin
231	Front sight
232	Night front sight
233	Positioning bolt
234	Night front sight spring
235	Spring pin
236	Front sight screw *
237	Front sight disc *
238	Spring pin
241	Gas valve
251	Gas tube
261	Gas piston

262	Recoil spring
263	Spring pin
268	Support washer
269	Gas piston bushing
271	Collar

300 Handguard

311	Upper handguard
321	Lower handguard
330	Picatinny rail **
331	Screw for Picatinny rail *
332	Washer for Picatinny rail *
333	Nut for Picatinny rail *

400 Bolt

411	Bolt head
412	Firing pin
413	Firing pin stud
414	Firing pin spring
415	Extractor
416	Extractor spring
417	Pin
421	Bolt carrier
422	Charging handle catch
423	Axle of charging handle catch
424	Spring of charging handle catch
425	Charging handle

500 Trigger assembly

501	Trigger casing
510	3-round burst facility
511	Template
512	Chargeover
513	Pawl spring
514	Pawl spring
515	Bush
516	Segment
517	Segment axle
518	Segment spring
519	Locking washer
520	Compression spring
521	Magazine catch
522	Magazine catch spring
523	Magazine catch pin
524	Bush
531	Release bar

532 Circlip
 541 Pistol grip
 542 Floorplate
 543 Allen screw
 544 Stop nut
 545 Nameplate
 551 Pressure point screw
 552 Stop nut
 553 Pressure point spring
 554 Trigger guard
 555 Trigger guard bearing
 561 Hammer
 562 Hammer axle
 563 Main spring
 564 Bolt catch
 565 Bolt catch spring
 566 Spring bolt
 571 Safety lever
 572 Safety shaft
 573 Locking spring
 575 Automatic firing lock axle
 576 Spring pin
 578 Stop ring
 579 Automatic firing lock
 581 Trigger
 582 Trigger spring
 583 Trigger rod
 584 Pivot, trigger
 585 Trigger bush
 586 Trigger rod spring
 587 Sear
 588 Automatic firing pawl
 589 Automatic firing pawl spring
 591 Trigger casing stud
 592 Spring-pressure pin
 593 Spring for trigger casing stud
 594 Spring pin
 595 Pin
 596 Cup spring
 597 Baffle plate
 598 Sear bolt
 599 Sear roller

600 Butt Stock Group

611 Butt stock
 612 Butt catch
 613 Butt catch spring
 614 Clip
 615 Spring pin
 616 Butt plate *

**600-A Butt Stock Group
(Butt stock adjustable) ****

611-A Butt stock
 612 Butt catch
 613 Butt catch spring
 614 Clip
 615 Spring pin
 616 Butt plate *
 617 Hinge
 618 Detent insert
 619 Spring pin detent insert
 620 Cover
 621 Locking pin
 623 Axle of locking pin
 624 Axle of adjusting latch
 625 Circlip
 626 Adjusting latch
 627 Adjusting latch pressure
 spring
 628 Slider
 629 Slider bolt
 630 Slider compression spring

700 Magazine

711 Magazine casing
 712 Magazine floorplate
 713 Floorplate catch
 714 Feeder
 715 Magazine spring

* Cannot be ordered
as individual parts

** Optional

7.2.3 Picatinny version, long barrel

100 Receiver Group

- 111-A Receiver casing
- 141 Bolt cover (2x)
- 142 Bolt cover rivet (6x)
- 171-A Rear sight holder
- 172-A Rear sight plate
- 173-A Flat head screw
- 174-A Pressure plate
- 175-A Cup spring
- 176 Pin

200 Barrel/gas system (picatinny version)

- 211-B Barrel LB (long barrel,
flash suppressor integrated)
- 212 Front sight mount *
- 213 Roll pin
- 223 Stop pin
- 224 Compression spring
- 225 Spring pin
- 231-A flip up front sight lower part
- 232-A flip up front sight
- 233 Positioning bolt
- 234 Night front sight spring
- 235 Spring pin
- 236 Front sight screw *
- 237 Front sight disc *
- 238 Spring pin
- 241 Gas valve
- 251 Gas tube
- 261 Gas piston
- 262 Recoil spring
- 263 Spring pin
- 268 Support washer
- 269 Gas piston bushing
- 271 Collar

300 Handguard

- 311 Upper handguard
- 321 Lower handguard
- 330 Picatinny rail **
- 331 Screw for Picatinny rail *
- 332 Washer for Picatinny rail *
- 333 Nut for Picatinny rail *

400 Bolt

- 411 Bolt head
- 412 Firing pin
- 413 Firing pin stud
- 414 Firing pin spring
- 415 Extractor
- 416 Extractor spring
- 417 Pin
- 421 Bolt carrier
- 422 Charging handle catch
- 423 Axle of charging handle catch
- 424 Spring of charging handle
catch
- 425 Charging handle

500 Trigger assembly

- 501 Trigger casing
- 510 3-round burst facility
- 511 Template
- 512 Chargeover
- 513 Pawl spring
- 514 Pawl spring
- 515 Bush
- 516 Segment
- 517 Segment axle
- 518 Segment spring
- 519 Locking washer
- 520 Compression spring
- 521 Magazine catch
- 522 Magazine catch spring
- 523 Magazine catch pin
- 524 Bush
- 531 Release bar
- 532 Circlip
- 541 Pistol grip
- 542 Floorplate
- 543 Allen screw
- 544 Stop nut
- 545 Nameplate

551	Pressure point screw
552	Stop nut
553	Pressure point spring
554	Trigger guard
555	Trigger guard bearing
561	Hammer
562	Hammer axle
563	Main spring
564	Bolt catch
565	Bolt catch spring
566	Spring bolt
571	Safety lever
572	Safety shaft
573	Locking spring
575	Automatic firing lock axle
576	Spring pin
578	Stop ring
579	Automatic firing lock
581	Trigger
582	Trigger spring
583	Trigger rod
584	Pivot, trigger
585	Trigger bush
586	Trigger rod spring
587	Sear
588	Automatic firing pawl
589	Automatic firing pawl spring
591	Trigger casing stud
592	Spring-pressure pin
593	Spring for trigger casing stud
594	Spring pin
595	Pin
596	Cup spring
597	Baffle plate
598	Sear bolt
599	Sear roller

600 Butt Stock Group

611	Butt stock
612	Butt catch
613	Butt catch spring
614	Clip
615	Spring pin
616	Butt plate *

**600-A Butt Stock Group
(Butt stock adjustable) ****

611-A	Butt stock
612	Butt catch
613	Butt catch spring
614	Clip
615	Spring pin
616	Butt plate *
617	Hinge
618	Detent insert
619	Spring pin detent insert
620	Cover
621	Locking pin
623	Axle of locking pin
624	Axle of adjusting latch
625	Circlip
626	Adjusting latch
627	Adjusting latch pressure spring
628	Slider
629	Slider bolt
630	Slider compression spring

700 Magazine

711	Magazine casing
712	Magazine floorplate
713	Floorplate catch
714	Feeder
715	Magazine spring

* Cannot be ordered
as individual parts

** Optional

7.2.4 Diopter version, long barrel

100 Receiver Group

111	Receiver casing
141	Bolt cover
142	Bolt cover rivet (6x)
151	Rear sight drum
152	Drum spring
153	Drum stud
154	Luminous ampules *
155	Insert
156	Rubber disc
161	Pivot
162	Drum axle
163	Spring washer
164	Safety washer
165	Leaf spring
171	Windage correction screw
172	Click stud
173	Rear sight spring
174	Limitation ring
175	Spring pin
181	Elevation correction screw

200 Barrel/gas system (diopter version)

211-D	Barrel LB (long barrel, flash suppressor integrated)
212	Front sight mount *
213	Roll pin
223	Stop pin
224	Compression spring
225	Spring pin
231	Front sight
232	Night front sight
233	Positioning bolt
234	Night front sight spring
235	Spring pin
236	Front sight screw *
237	Front sight disc *
238	Spring pin
241	Gas valve
251	Gas tube
261	Gas piston
262	Recoil spring
263	Spring pin

268	Support washer
269	Gas piston bushing
271	Collar

300 Handguard

311	Upper handguard
321	Lower handguard
330	Picatinny rail **
331	Screw for Picatinny rail *
332	Washer for Picatinny rail *
333	Nut for Picatinny rail *

400 Bolt

411	Bolt head
412	Firing pin
413	Firing pin stud
414	Firing pin spring
415	Extractor
416	Extractor spring
417	Pin
421	Bolt carrier
422	Charging handle catch
423	Axle of charging handle catch
424	Spring of charging handle catch
425	Charging handle

500 Trigger assembly

501	Trigger casing
510	3-round burst facility
511	Template
512	Chargeover
513	Pawl spring
514	Pawl spring
515	Bush
516	Segment
517	Segment axle
518	Segment spring
519	Locking washer
520	Compression spring
521	Magazine catch
522	Magazine catch spring
523	Magazine catch pin
524	Bush
531	Release bar
532	Circlip
541	Pistol grip

542 Floorplate
 543 Allen screw
 544 Stop nut
 545 Nameplate
 551 Pressure point screw
 552 Stop nut
 553 Pressure point spring
 554 Trigger guard
 555 Trigger guard bearing
 561 Hammer
 562 Hammer axle
 563 Main spring
 564 Bolt catch
 565 Bolt catch spring
 566 Spring bolt
 571 Safety lever
 572 Safety shaft
 573 Locking spring
 575 Automatic firing lock axle
 576 Spring pin
 578 Stop ring
 579 Automatic firing lock
 581 Trigger
 582 Trigger spring
 583 Trigger rod
 584 Pivot, trigger
 585 Trigger bush
 586 Trigger rod spring
 587 Sear
 588 Automatic firing pawl
 589 Automatic firing pawl spring
 591 Trigger casing stud
 592 Spring-pressure pin
 593 Spring for trigger casing stud
 594 Spring pin
 595 Pin
 596 Cup spring
 597 Baffle plate
 598 Sear bolt
 599 Sear roller

600 Butt Stock Group

611 Butt stock
 612 Butt catch
 613 Butt catch spring
 614 Clip
 615 Spring pin
 616 Butt plate *

600-A Butt Stock Group **(Butt stock adjustable) ****

611-A Butt stock
 612 Butt catch
 613 Butt catch spring
 614 Clip
 615 Spring pin
 616 Butt plate *
 617 Hinge
 618 Detent insert
 619 Spring pin detent insert
 620 Cover
 621 Locking pin
 623 Axle of locking pin
 624 Axle of adjusting latch
 625 Circlip
 626 Adjusting latch
 627 Adjusting latch pressure
 spring
 628 Slider
 629 Slider bolt
 630 Slider compression spring

700 Magazine

711 Magazine casing
 712 Magazine floorplate
 713 Floorplate catch
 714 Feeder
 715 Magazine spring

* Cannot be ordered
as individual parts

** Optional

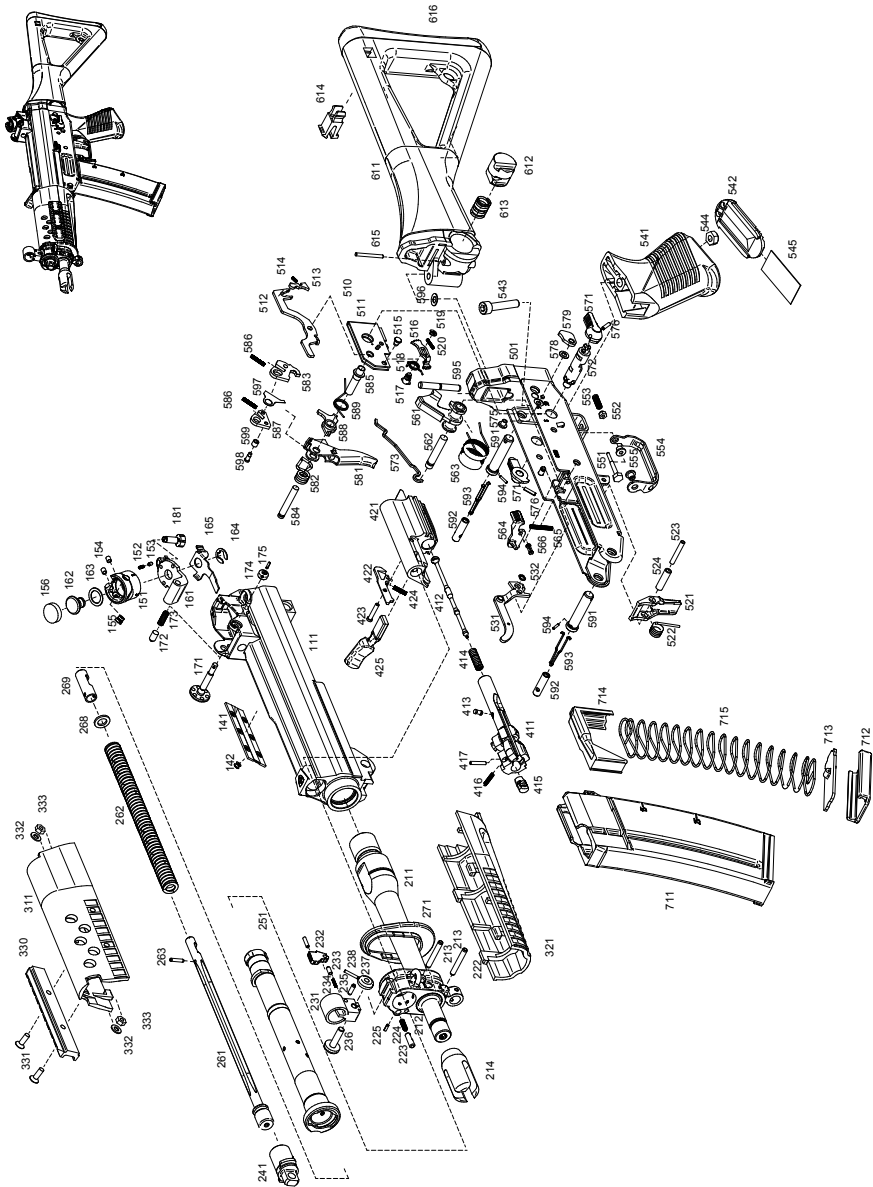
7.3 Exploded drawings

Information to be supplied when ordering spare parts:

- Type of weapon
- Serial Number
- Caliber
- Item number
- Parts designation

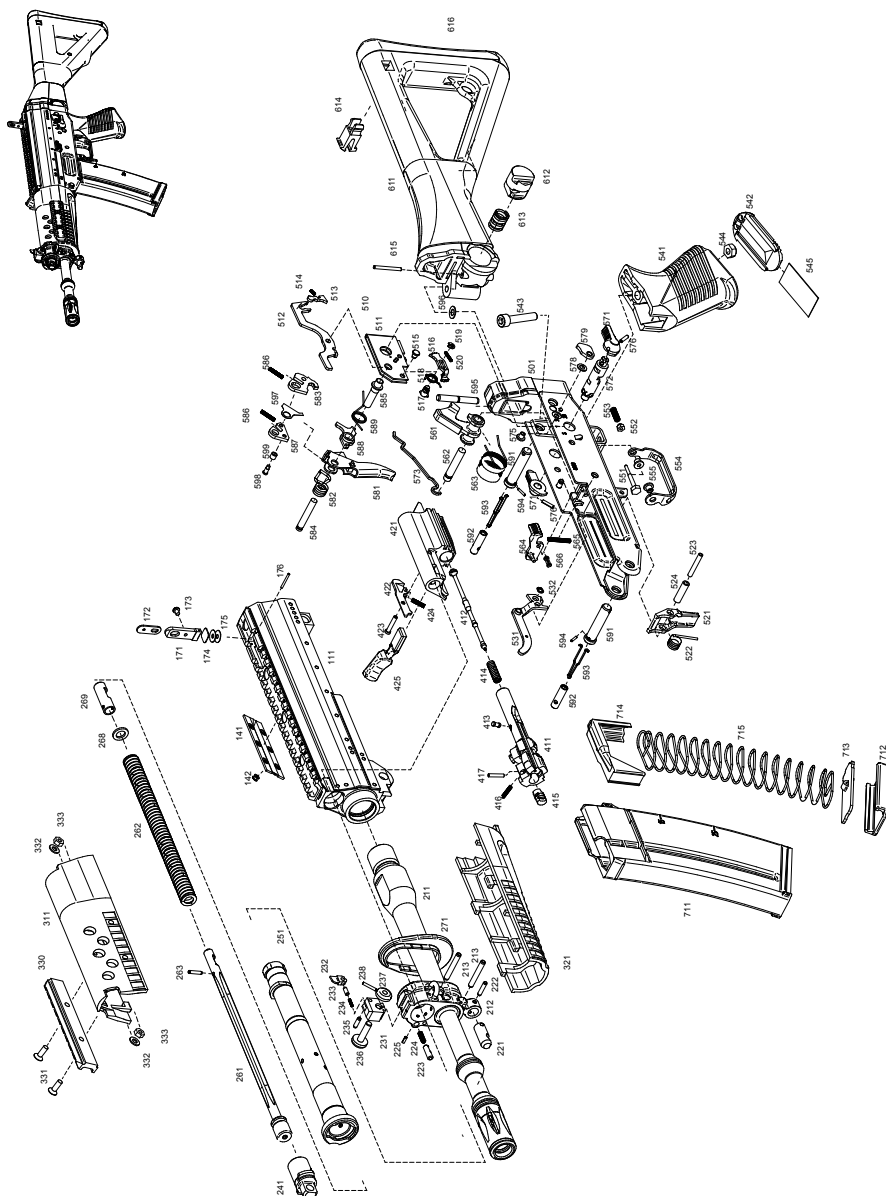
7.3.1 Exploded drawing / SG 553 SB

SG 553 SB Standard version with picatinny rail and diopter sight



7.3.2 Exploded drawing / SG 553 LB

SG 553 LB Standard version with picatinny rail and flip up front and rear sight



7.3.3 Exploded drawing / Butt stock adjustable

