

EN

HK243 Semi-Automatic Rifle

.223 Rem. Calibre

HK243 S SAR

HK243 S TAR



Operator's Manual



HK243 Semi-Automatic Rifle

.223 Rem. Calibre

HK243 S SAR

HK243 S TAR

DANGER

Risk of death from gunshot wounds!

Accidental discharge of weapon may occur when loaded weapon is handled.

- › Do not use the weapon until you have read and understood this manual completely.
- › Follow the safety instructions when handling the weapon.
- › Carry out a safety check before working on the weapon.



Functional elements - left side view



The illustrations on the front and back fold-out pages show the functional elements of the weapon from the left and right sides. The text refers frequently to these illustrations. Opening the fold-out pages while reading will make it easier to understand the text.

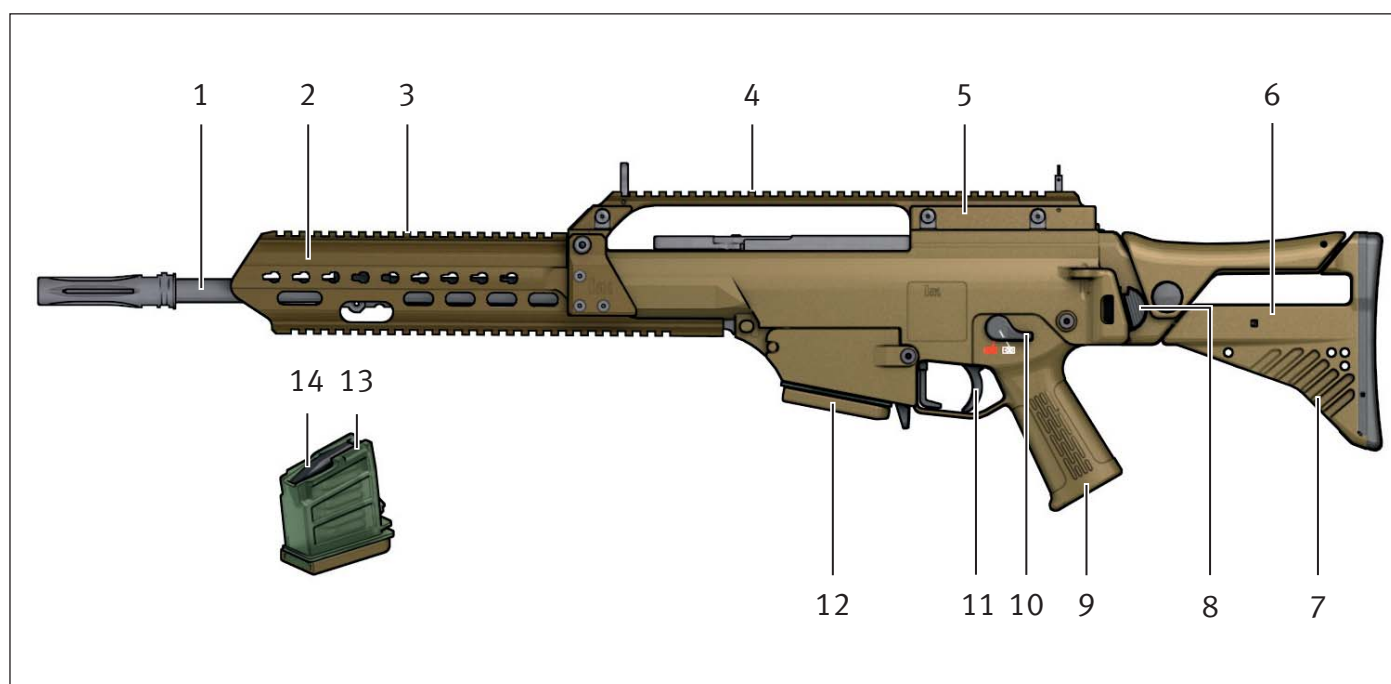


Fig. 1a: HK243 S TAR, left side view

- | | | | |
|---|-----------------------------|----|--------------------------------|
| 1 | Barrel | 8 | Unlocking button for buttstock |
| 2 | Handguard | 9 | Pistol grip |
| 3 | Picatinny rail | 10 | Safety lever, ambidextrous |
| 4 | Picatinny rail | 11 | Trigger |
| 5 | Sight rail | 12 | Magazine, 10 cartridges |
| 6 | Buttstock, adjustable | 13 | Magazine lips |
| 7 | Release lever for buttstock | 14 | Follower |

Functional elements - right side view



The illustrations on the front and back fold-out pages show the functional elements of the weapon from the left and right sides. The text refers frequently to these illustrations. Opening the fold-out pages while reading will make it easier to understand the text.

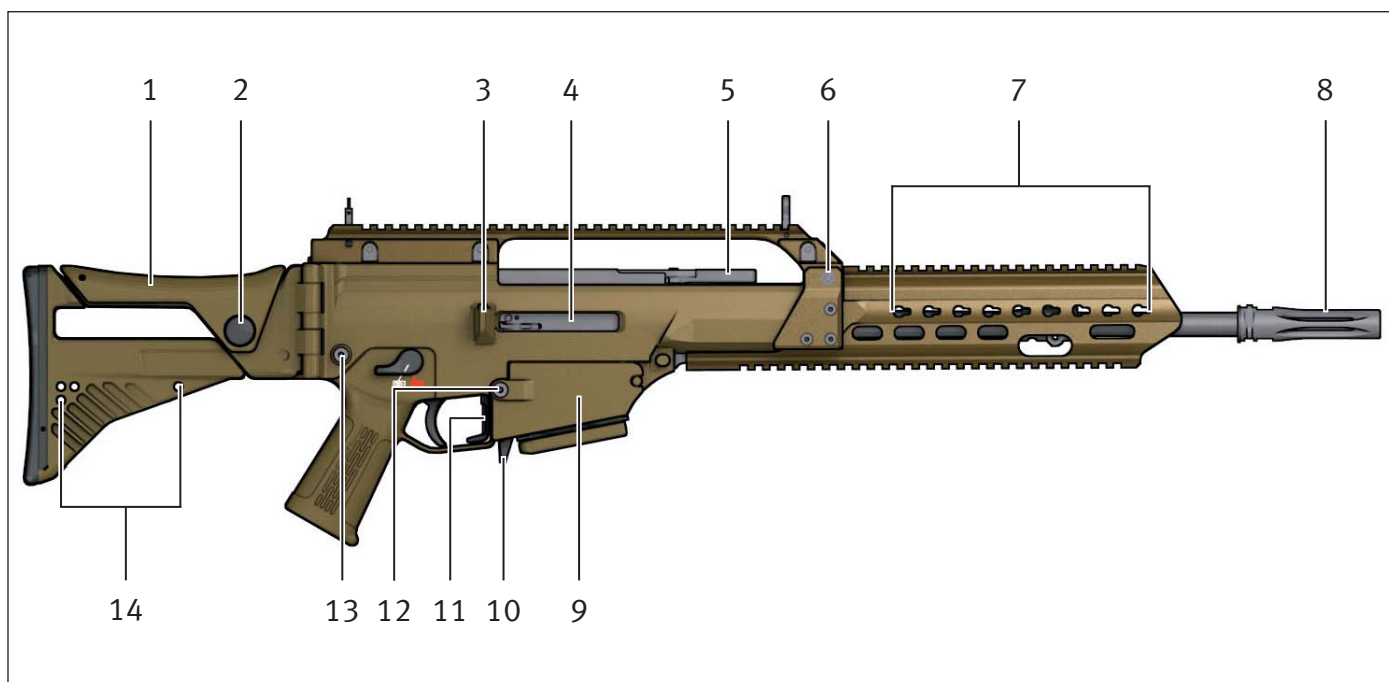


Fig. IIa: HK243 S TAR, right side view

- | | | | |
|---|---|----|-------------------------------|
| 1 | Cheek rest | 8 | Flash hider |
| 2 | Release lever for cheek rest | 9 | Magazine well |
| 3 | Cartridge case deflector | 10 | Magazine catch |
| 4 | Ejection port | 11 | Bolt catch |
| 5 | Charging handle | 12 | Locking pin for magazine well |
| 6 | Locking screw for handguard | 13 | Locking pin for pistol grip |
| 7 | Mounting points for Picatinny rails, ambidextrous | 14 | Locking pin receptacle (4x) |

Table of contents

Part I Description

1	Using this manual	3
1.1	Purpose of this manual	3
1.2	Target audience for this manual	3
1.3	Warnings, notes and information	3
2	Fundamental safety instructions	7
2.1	The operator's manual as an integral component of the safety concept	7
2.2	Safety instructions for handling the weapon	7
2.3	Safety instructions for firing	9
2.4	Exclusion of liability and warranty	9
3	Description of the weapon	10
3.1	Designation	10
3.2	Intended use	10
3.3	Scope of supply	10
3.4	Overview of variants	11
3.5	Assembly groups	14
4	Technical description	15
4.1	Safety features	15
4.2	Functional elements	16
5	Cleaning kit and auxiliary materials	17
5.1	Cleaning kit	17
5.2	Auxiliary materials	18

Part II Handling

6	Checks	21
6.1	Carrying out a safety check	21
6.2	Carrying out a function check	22
7	Preparations	24
7.1	Using the buttstock	24
7.2	Adjusting the sights	26
7.3	Filling the magazine	28
7.4	Preparing the weapon for firing	29
7.5	Additional preparations in unusual climatic conditions	29
8	Operation	30
8.1	Inserting the magazine	30
8.2	Chambering a round	30
8.3	Firing position and aiming	31
8.4	Firing	33
8.5	Removing the magazine	33
8.6	Reloading the weapon	34
8.7	Unloading the weapon	34
8.8	Emptying the magazine	35
9	Cleaning	36
9.1	General instructions for cleaning	36
9.2	Disassembling the weapon	36
9.3	Cleaning the weapon	41
9.4	Assembling the weapon	44
10	Faults: Causes and remedies	48

11	Protection, packaging and storage	52
11.1	Protecting the weapon	52
11.2	Packaging the weapon	53
11.3	Storing the weapon	53
12	Transport and shipping	54
12.1	Preparing the weapon for transport	54
12.2	Transporting the weapon	54
12.3	Shipping the weapon	54
13	Destruction and disposal	55
13.1	Destroying the weapon	55
13.2	Disposing of the weapon	55

Part I

Description

1 Using this manual

1.1 Purpose of this manual

The first part of this manual (“Description”) describes the design and function of the weapon, and the second part (“Handling”) describes the handling of the weapon.

1.2 Target audience for this manual


This manual is intended for persons who are authorised to use this weapon. This manual does not assume extensive technical or weapons-specific knowledge.

1.3 Warnings, notes and information




To ensure the greatest possible safety during handling, important information and technical notes are specially highlighted.

1.3.1 Warnings and warning levels


Warnings are depicted as follows (example):

 DANGER
<p>Risk of death from gunshot wounds!</p> <p>Accidental discharge of weapon may occur when loaded weapon is handled.</p> <ul style="list-style-type: none"> › Do not use the weapon until you have read and understood this manual completely. › Follow the safety instructions when handling the weapon. › Carry out a safety check before working on the weapon.

The colours and signal words below are used in the warnings to indicate various warning levels:

Colour / signal word	Meaning
 DANGER	<p>Direct, imminent danger!</p> <p>Non-compliance will lead to death or extremely serious injury.</p>
 WARNING	<p>Possible imminent danger!</p> <p>Non-compliance could lead to death or serious injury.</p>
 CAUTION	<p>Dangerous situation!</p> <p>Non-compliance could lead to minor injuries.</p>
NOTICE	<p>Non-compliance could lead to material damage.</p>

1.3.2 Symbols used

Symbol	Meaning
	Additional information on the weapon, practical handling of the weapon or using this manual.
1.	Call to perform an action in a sequence of actions: Here you have to do something!
>	Stand-alone step or call to perform an action in a warning: Here you have to do something!
>>	The sequence of actions is not complete, and is continued on the next page: please turn the page!
•	Bullet point

1.3.3 Conventions for illustrations



Illustrations and drawings can vary from your weapon, depending on the model.

The information “right”, “left”, “front” and “rear” apply to the position of the weapon as seen in the direction of fire.

Illustrations and their constituent elements support the descriptions in this manual, and are identified as follows:

- The name of an illustration comprises the current page number and a consecutive lower-case letter starting from “a” on each page, e.g. 6a.
- Calls to perform an action are indicated by upper-case letters enclosed in circles.
- Components relevant to the action are highlighted in blue. Where necessary the components are marked with numbers and identified in a legend.
- Motions are indicated by orange-coloured arrows.

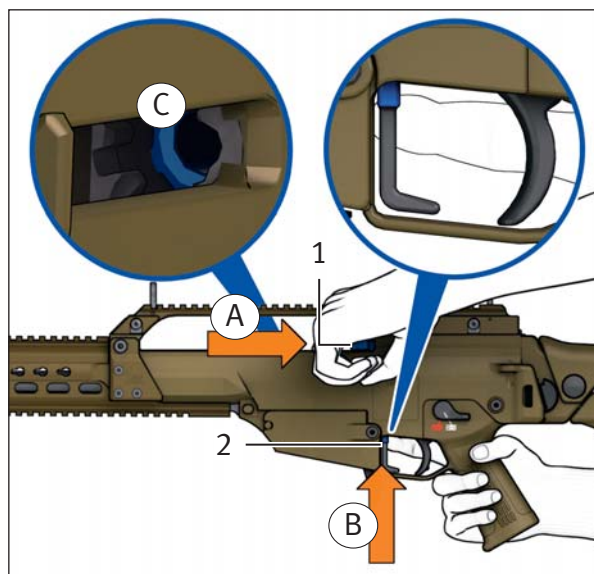


Fig. 6a: Example of an illustration

- 1 Charging handle
- 2 Bolt catch

1.3.4 Conventions for cross references

Cross references represent relationships between the text and an illustration or specific section. Cross references are in *italics* and enclosed in (brackets).

- Example of a cross reference between text and illustration: (6a-2)
The cross reference refers to numeral 2 in the illustration numbered 6a on page 6, the bolt catch.



The text frequently refers to the front and back fold-out pages, which are identified by the Roman numerals I (front) and II (back).

- Example of a cross reference between sections: (Section 1.3.3)
The cross reference refers to Section 1.3.3, conventions for illustrations.

2 Fundamental safety instructions



The weapon has been designed and manufactured according to latest technical knowledge and the recognised safety rules. Nevertheless, use of the weapon may result in injury or death of the user and third parties, or damage to the weapon and other material property.

- › Follow all of the instructions in this operator's manual. Non-compliance may result in injury or death.
- › Do not handle the weapon if you are tired, feel unwell, or have consumed alcohol, drugs or medicines.
- › Follow the applicable regulations for the handling of weapons.

2.1 The operator's manual as an integral component of the safety concept



The operator's manual is an integral component of the weapon.

- › Do not use the weapon until you have read and understood this operator's manual completely.
- › Keep the operator's manual for the entire service life of the weapon.
- › If you receive any supplements or amendments, be sure to add them to the operator's manual.
- › Pass the operator's manual on to any subsequent operator or owner.
- › Do not entrust the weapon to anyone who has not read and understood this operator's manual completely.

2.2 Safety instructions for handling the weapon

- › Special care must be taken when handling firearms, because the position and direction of the weapon can be changed very easily.
- › Use the weapon only if it is in perfect technical condition.

- › Treat the weapon as if there were a round in the chamber and the safety released until you have carried out a safety check.
- › Make sure that the weapon is always unloaded when it is handled for purposes other than loading or firing.
- › Use the weapon only for its intended purpose. Do not use the weapon as a club, hammer, pry bar, etc. Using the weapon for other than its intended purpose may result in accidental discharge of weapon or damage to the weapon.
- › Do not play with the weapon.
- › Never point the weapon at people when handling or practising with it.
- › Do not touch the trigger when loading, unloading, aiming or handling the weapon in any other way. Always place your trigger finger on the outside of the trigger guard.
- › Do not use excessive force when handling, disassembling, cleaning and assembling the weapon.
- › Avoid dry firing of the hammer. Dry firing of the hammer can lead to premature wear.
- › Store weapon and ammunition separately. Be sure to prevent access to the weapon and ammunition by unauthorised persons, especially children.
- › Never give or take the weapon unless it is unloaded and the bolt group is in the open position.
- › Do not entrust the weapon to anyone who is not entitled to possess the weapon. Observe applicable regulations.
- › Immediately rectify any faults that compromise safety.
- › Exposure to exceptional stresses such as when the weapon is banged or dropped can have a negative effect on safety. After excessive stresses, have the weapon inspected by the manufacturer or trained firearms personnel.
- › Do not rely on safety features. Safety features are no substitute for careful, correct handling of the weapon.
- › When using accessories and ammunition, follow the instructions provided by their respective manufacturers.
- › The weapon has been designed for a specific calibre. Use only ammunition that meets C.I.P. (Commission Internationale Permanente) specifications and corresponds to the calibre of the weapon. The correct designation of the ammunition suitable for the weapon is indicated on the weapon. Especially when using reloaded ammunition, make sure that the gas pressure does not exceed the level permitted according to the standard. Excessive gas pressure can damage the weapon or cause it to explode. Ammunition whose muzzle velocity and gas pressure are higher than the muzzle velocity and gas pressure for which the weapon was designed subject the weapon to additional stresses, cause excessive wear, and can lead to serious damage to the weapon.

2.3 Safety instructions for firing

- › Wear hearing protection when firing.
- › Wear safety goggles when firing.
- › Keep your hands out of the path of the bolt group when firing.
- › Keep the muzzle area clear when firing.
- › Do not shoot at doors, panes of glass, walls, concrete, stone, or smooth surfaces (including water). A bullet can penetrate these objects or be deflected in an unsafe direction.
- › Pull the trigger only if the weapon is pointing at the target and the area behind the target is not endangered.
- › Use only properly loaded, undamaged cartridges of the correct calibre.
- › Wear protective gloves when touching the barrel, flash hider or the blank firing attachment after firing. The barrel, flash hider and blank firing attachment heat up during firing.

2.4 Exclusion of liability and warranty

Heckler & Koch GmbH accepts no liability and provides no warranty for incidents arising from:

- non-compliance with this manual,
- incorrect handling of the weapon,
- negligence,
- improper use,
- modifications, attachments to or conversion of the weapon without the express written consent of Heckler & Koch GmbH, or
- use of accessories or spare parts from other manufacturers without the express written consent of Heckler & Koch GmbH.

3 Description of the weapon

The HK243 rifle (.223 Rem. calibre) is a semi-automatic gas-operated weapon with a rotating bolt head. The polymer magazine (*la-12*) is available in different sizes.

3.1 Designation

HK243 semi-automatic rifle

3.2 Intended use

The HK243 rifle is a firearm for sport shooting at a range of:

- 300 m with mechanical sights,
- 500 m with optical sights.

3.3 Scope of supply



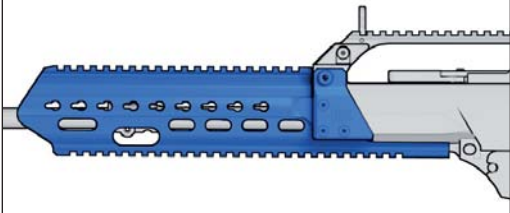
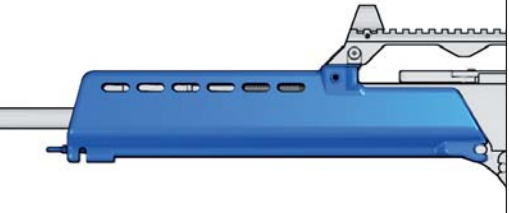
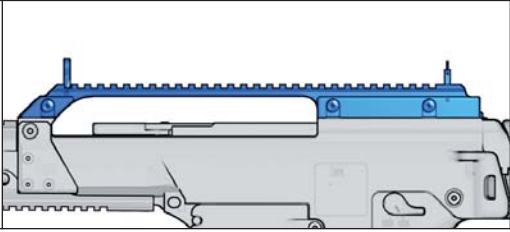
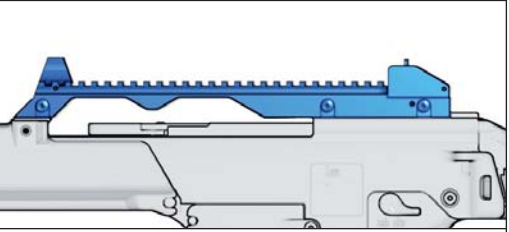

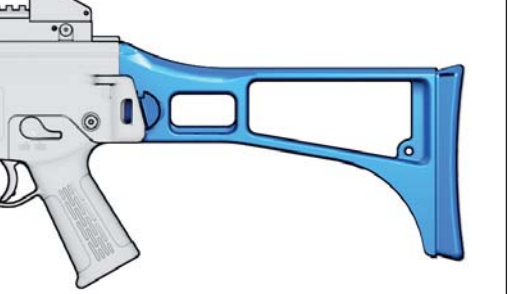
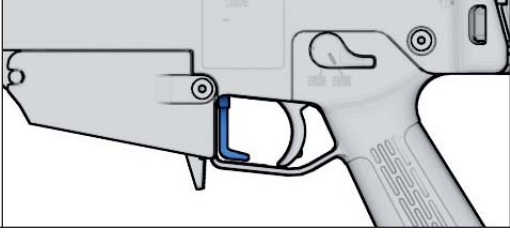
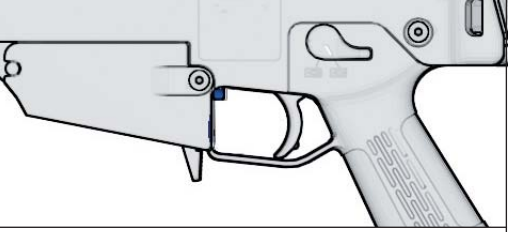
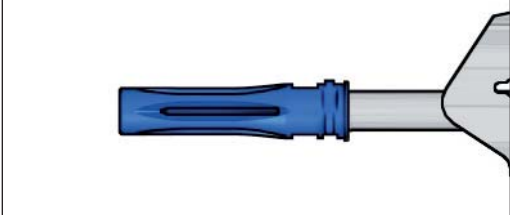
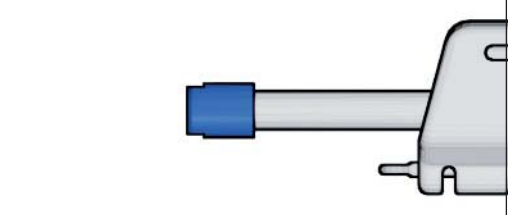
Fig. 10a: Scope of supply

- 1 Weapon
2 Magazine

- 3 Operator's Manual

3.4 Overview of variants

3.4.1 Equipment of variants

Feature	HK243 S TAR “Sporter Tactical Automatic Rifle”	HK243 S SAR “Sporter Semi Automatic Rifle”
Handguard		
Sight rail		
Buttstock		
Bolt catch		
Flash hider		

3.4.2 HK243 S TAR



Fig. 12a: HK243 S TAR “RAL8000 - green brown”

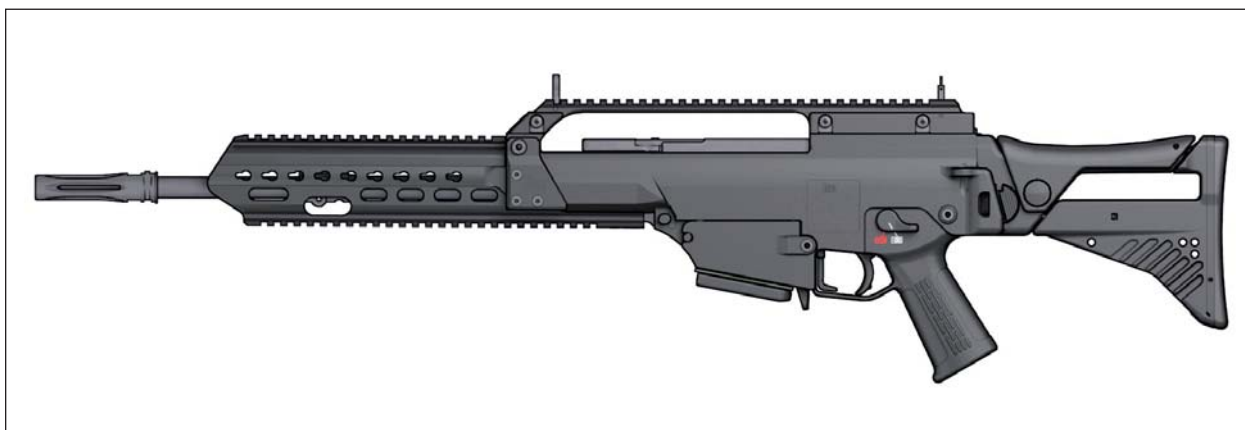


Fig. 12b: HK243 S TAR “black”

3.4.3 HK243 S SAR



Fig. 13a: HK243 S SAR “RAL8000 - green brown”



Fig. 13b: HK243 S SAR “black”

3.5 Assembly groups



Fig. 14a: Assembly groups

- | | |
|---|-------------|
| 1 Bolt group with back plate | 4 Magazine |
| 2 Receiver with barrel and add-on parts | 5 Handguard |
| 3 Pistol grip | |

4 Technical description

4.1 Safety features

4.1.1 Safety lever



The safety lever (1a-10) can always be clicked to the “Safe” position.

The safety lever prevents accidental actuation of the trigger (1a-11). In the “Safe” position the safety roller blocks the trigger. Only when the safety lever is clicked to the “Single fire” position will the safety roller release the trigger.

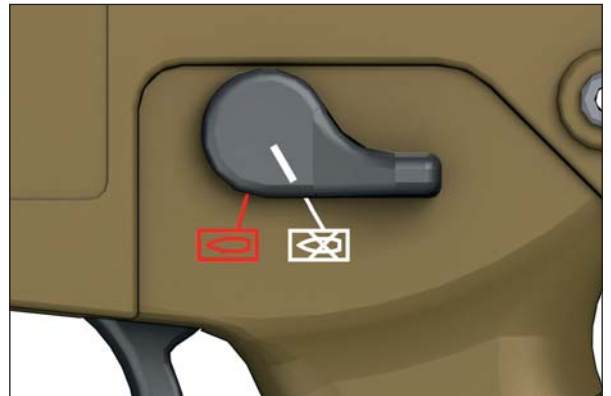


Fig. 15a: “Safe” position

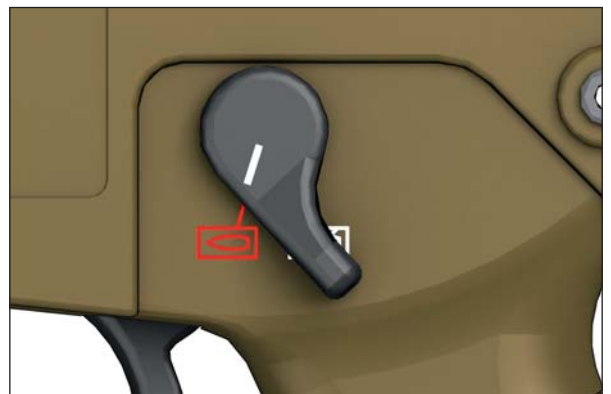


Fig. 15b: “Single fire” position

4.2 Functional elements

The safety lever (*Ia-10*) is used to make the weapon safe and to select the mode of fire. The safety lever is ambidextrous.

The magazine catch (*Ila-10*) allows the quick changing of magazines.

The bolt catch (*Ila-11*) serves to hold the bolt group (*14a-1*).

The handguard (*Ia-2*) is fastened to the receiver with a locking screw (*Ila-6*). The handguard is not attached to the barrel (*Ia-1*), this helps ensure the accuracy of the weapon.

The aluminium handguard is equipped with Picatinny rails at the 6 and 12 o'clock positions and with mounting points for Picatinny rails (*Ila-7*) at the 3 and 9 o'clock positions.

The sight rail (*Ia-5*) is equipped with a mechanical front sight and rear sight and a Picatinny rail (*Ia-4*).

The Picatinny rails can be used to attach various mechanical and optical sights and other accessories.

The adjustable buttstock with cheek rest (*Ia-6*) can be locked in 4 positions over an adjustment travel of 40 mm. The Cheek rest (*Ila-1*) can be locked in 3 positions.

The buttstock (*Ila-1*) can be folded onto the right side of the receiver. When folded, the buttstock engages in the cartridge case deflector (*Ila-2*).

The charging handle (*Ila-5*) can be used to open the bolt group and to chamber a round or unload the weapon.



Optionally a flash hider or a muzzle thread protector can be mounted on the weapon. The use of a flash hider can compromise the accuracy of the weapon.

5 Cleaning kit and auxiliary materials

5.1 Cleaning kit



The cleaning kit is not included in the standard scope of supply for the weapon. The cleaning kit can be ordered from Heckler & Koch using the Ident.-No. shown.

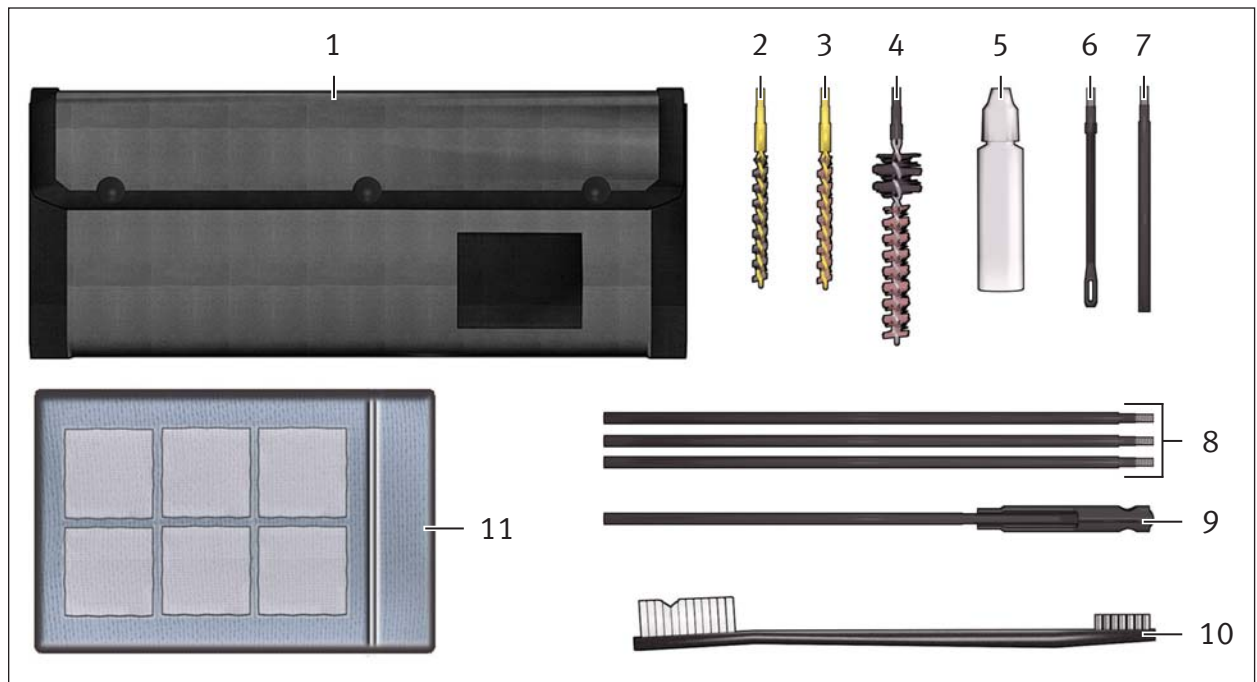


Fig. 17a: Cleaning kit

Item	Designation	Ident.-No.
--	Cleaning kit (Item 1 - 11)	210 544
1	Case for cleaning kit	299 172
2	Oil brush	985 525
3	Barrel cleaning brush	985 523
4	Chamber cleaning brush	985 524
5	Oil bottle	299 175
--	Cleaning rod (Item 6 - 9)	985 522
6	Pull-through holder	--
7	Adapter piece	--
8	Extension rods (3x)	--
9	Handle rod	--
10	Cleaning brush	988 168
11	Cleaning cloths (50x)	985 527

5.2 Auxiliary materials



Auxiliary materials are available from specialist dealers.

Required auxiliary materials are listed at the beginning of each section.

The following auxiliary materials are required in this manual:

- 2 mm Allen key (Ident.-No. 957426)
- 4 mm Allen key (Ident.-No. 957429)
- 7 x 150 mm screwdriver
- Pointed object (e.g. pin punch)
- Grease
- Low-temperature oil (MIL-L-14107), e.g. O-157
- Oil (MIL-L-46000), e.g. S-761, OX24
- Oil paper
- Cleaning rag
- Cleaning pull-throughs

Part II

Handling

6 Checks

6.1 Carrying out a safety check



Successful completion of a safety check verifies that there is no ammunition in the weapon. The safety check is especially important when giving or taking a weapon and when you are unsure whether or not a weapon is loaded.

1. Remove magazine (*Section 8.5*).
2. Hold charging handle and pull bolt group all the way back and hold it (21a-A).
3. Press the bolt catch upwards (21a-B). Bolt group is held in rear position.
4. Look into the chamber. There must not be any cartridge in the chamber (21a-C). If there is a cartridge in the chamber, then a fault is present (*Section 10*).

CAUTION

Risk of injury when the bolt group snaps forwards!

The bolt catch is released when the charging handle is pulled back. The bolt group snaps forwards when the charging handle is released.

› Do not reach into the path of the bolt group.

5. Hold charging handle and pull bolt group to the rear and hold it.
6. Release charging handle. The bolt group (14a-1) snaps forwards.
7. Click safety lever (1a-10) to the “Single fire” position.
8. Pull trigger (1a-11). The hammer is released.
9. Click safety lever to the “Safe” position.

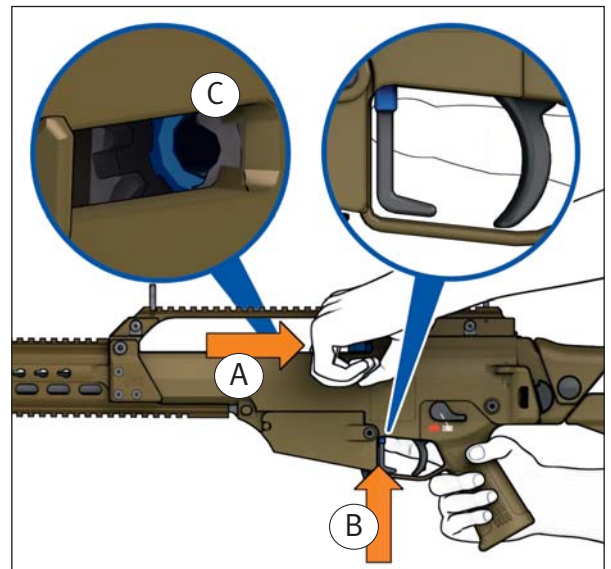


Fig. 21a: Carrying out a safety check

6.2 Carrying out a function check



Successful completion of a function check verifies that the weapon is functional. The function check is especially important after assembly of the weapon and after rectification of faults.

1. Carrying out safety check (*Section 6.1*).
2. Hold charging handle (*I/a-5*) and move bolt group (*14a-1*) all the way backwards and forwards several times.

⚠ CAUTION

Risk of injury when the bolt group snaps forwards!

The bolt group snaps forwards when the charging handle is released.

› Do not reach into the path of the bolt group.

3. Hold charging handle and pull bolt group all the way back and hold it.
4. Release charging handle. The bolt group snaps forwards.
5. Click safety lever (*I/a-10*) to the “Safe” position.
6. Pull trigger (*I/a-11*). The hammer is not released.
7. Click safety lever to the “Single fire” position.
8. Pull trigger and hold it. The hammer is released.
9. Hold charging handle and move bolt group all the way backwards and forwards.
10. Release trigger. The sear release catch releases the hammer.
11. Pull trigger. The hammer is released.
12. Insert empty magazine (*I/a-12*) into the weapon until the magazine catch (*I/a-10*) engages.
13. Verify that the magazine is firmly seated.
14. Hold charging handle and pull bolt group all the way back. Bolt group is held in rear position. »

15. Remove magazine (*Section 8.5*).

⚠ CAUTION

Risk of injury when the bolt group snaps forwards!

The bolt catch is released when the charging handle is pulled back. The bolt group snaps forwards when the charging handle is released.

› Do not reach into the path of the bolt group.

16. Hold charging handle and pull bolt group to the rear and hold it.
17. Release charging handle. The bolt group snaps forwards.
18. Pull trigger. The hammer is released.
19. Click safety lever to the “Safe” position.

7 Preparations

7.1 Using the buttstock

7.1.1 Adjusting the buttstock



The buttstock can be locked in 4 positions.

1. Press release lever for buttstock and hold it (24a-A).
2. Slide buttstock to the desired position (24a-B).
3. Release the release lever for buttstock (1a-7).
4. Slide buttstock (1a-6) until it locks in the desired position.

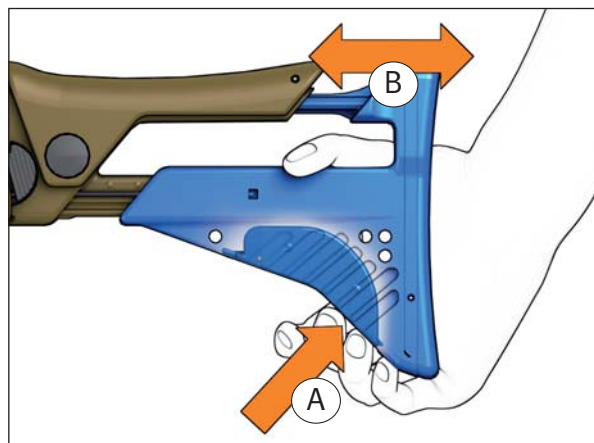


Fig. 24a: Adjusting the buttstock

7.1.2 Folding the buttstock



The buttstock can only be engaged to the receiver when the buttstock is adjusted to position 3 or 4.

1. Adjust the buttstock (Section 7.1.1).
2. Press in and hold unlocking button for buttstock (24b-A).
3. Fold buttstock against receiver until the cartridge case deflector engages into the buttstock (24b-B).

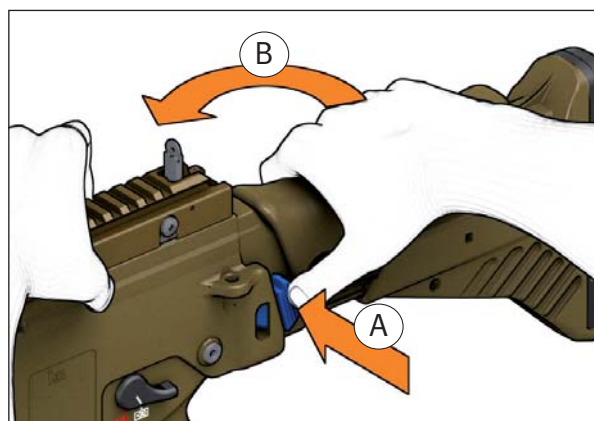


Fig. 24b: Folding the buttstock

7.1.3 Unfolding the buttstock

- Unfold buttstock until the unlocking button for buttstock engages into the receiver (25a).



Fig. 25a: Unfolding the buttstock

7.1.4 Adjusting the cheek rest



The cheek rest can be locked in 3 positions.

1. Press release lever for cheek rest and hold it (25b-A).
2. Slide cheek rest to the desired position (25b-B).
3. Release the release lever for cheek rest (IIa-2).
4. Slide cheek rest (IIa-1) until it locks in the desired position.

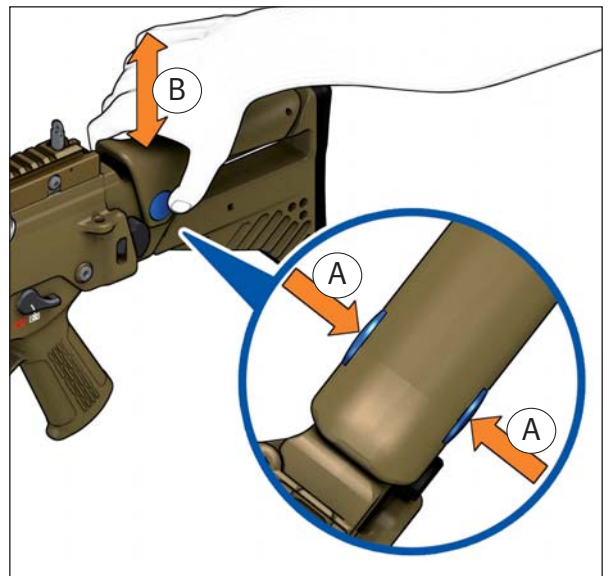


Fig. 25b: Adjusting the cheek rest

7.2 Adjusting the sights



The point of impact also depends on the ammunition. The use of different types of ammunition can change the elevation and windage of the point of impact. The rear sights can be adjusted to correct for the changed point of impact.

7.2.1 Adjusting the TAR sights

Required auxiliary materials:

- 7 x 150 mm screwdriver

Position of point of impact	Corrective measures	Information
	<ol style="list-style-type: none"> 1. Raise dioptré (26a-A). 2. Turn dioptré in direction “D” (Down) (26a-B). 	Turning the dioptré by a half turn changes the point of impact by approx. 6 cm at a range of 100 m.
	<ol style="list-style-type: none"> 1. Raise dioptré (26a-A). 2. Turn dioptré in direction “U” (Up) (26a-B). 	
	<ol style="list-style-type: none"> 1. Insert screwdriver into windage adjustment screw. 2. Turn windage adjustment screw anti-clockwise (26b). 	Turning the windage adjustment screw by a quarter-turn changes the point of impact by approx. 4 cm at a range of 100 m.
	<ol style="list-style-type: none"> 1. Insert screwdriver into windage adjustment screw. 2. Turn windage adjustment screw clockwise (26b). 	

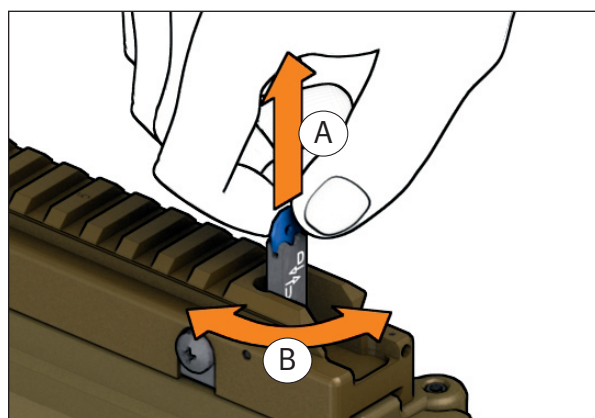


Fig. 26a: Turning the dioptré

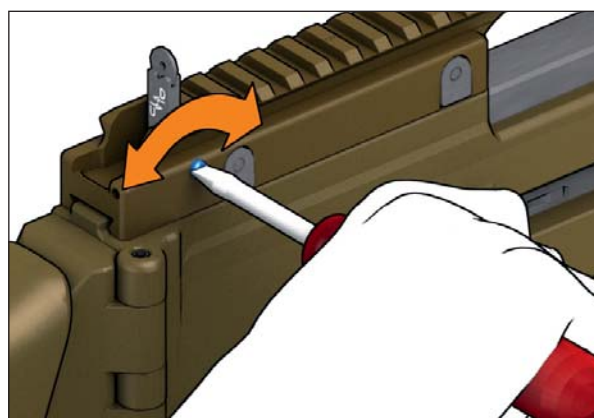


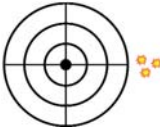
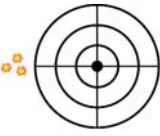


Fig. 26b: Turning the windage adjustment screw

7.2.2 Adjusting the SAR sights

Required auxiliary materials:

- 2 mm Allen key

Position of point of impact	Corrective measures	Information
	> Turn elevation adjustment screw clockwise using Allen key (27a).	Turning the elevation adjustment screw by a quarter-turn changes the point of impact by approx. 5.5 cm at a range of 100 m.
	> Turn elevation adjustment screw anti-clockwise using Allen key (27a).	
	> Turn windage adjustment screw clockwise using Allen key (27b).	Turning the windage adjustment screw by a quarter-turn changes the point of impact by approx. 4.5 cm at a range of 100 m.
	> Turn windage adjustment screw anti-clockwise using Allen key (27b).	

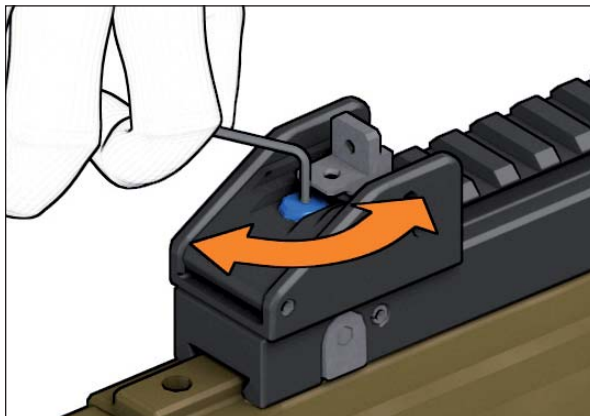


Fig. 27a: Turning the elevation adjustment screw

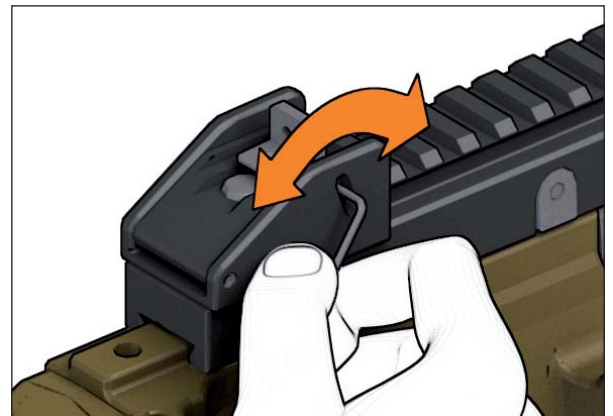


Fig. 27b: Turning the windage adjustment screw

7.3 Filling the magazine

NOTICE

Danger of material damage due to damaged or fouled cartridges!

Damaged or fouled cartridges can damage the weapon and cause malfunctions.

› Do not use damaged or fouled cartridges.

NOTICE

Danger of material damage from an overfilled magazine!

An overfilled magazine can lead to malfunctions.

› Do not fill the magazine with more than the number of cartridges indicated on the magazine.

NOTICE

Danger of material damage from keeping a magazine filled for long periods!

Keeping a magazine filled for long periods can result in damage to the magazine spring and cause malfunctions.

› Empty the magazine before placing the weapon and magazine in storage (Section 8.8).

1. Grasp magazine (1a-12).
2. Push cartridge under the magazine lips (28a-A).
3. Push cartridge to the rear as far as it will go (28a-B).
4. Repeat steps 2. - 3. until the magazine is full.

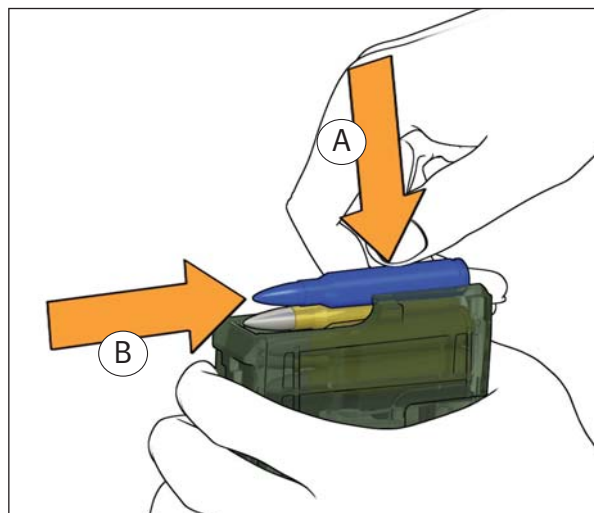


Fig. 28a: Filling the magazine

7.4 Preparing the weapon for firing

Required auxiliary materials:

- *Cleaning pull-throughs*
1. Disassemble the weapon (*Section 9.2*).
 2. Screw together handle rod (*17a-9*), extension rods (*17a-8*) and pull-through holder (*17a-6*).
 3. Place clean cleaning pull-through in pull-through holder.
 4. Pull clean cleaning pull-through through the barrel (*1a-1*) several times until the barrel is free of oil and foreign bodies.
 5. Visually check the weapon for damage.
 6. Assemble the weapon (*Section 9.4*).
 7. Carry out function check (*Section 6.2*).

7.5 Additional preparations in unusual climatic conditions



High air humidity and ambient temperatures between -25°C and $+63^{\circ}\text{C}$ do not require any special measures.



In cold conditions, freezing condensation can compromise the functional reliability of the weapon. To prevent the formation of condensation, do not bring the weapon from cold conditions into warm conditions and shortly thereafter again into cold conditions.

Required auxiliary materials:

- *Oil*
 - *Low-temperature oil*
- › When there are high concentrations of dust or temperatures above $+63^{\circ}\text{C}$, lubricate the lubrication points of the weapon (*41a*) more heavily.
 - › At temperatures below -25°C , lubricate all moving parts with low-temperature oil.

8 Operation

8.1 Inserting the magazine

1. Fill magazine (*Section 7.3*).
2. Click safety lever (*Ia-10*) to the “Safe” position.
3. Insert filled magazine into the weapon until the magazine catch (*Ila-10*) engages.

8.2 Chambering a round

WARNING

Risk of injury from accidental discharge of weapon!

A weapon with a round in the chamber is always a potential source of danger.

- › Chamber a round only immediately before firing.
- › Unload the weapon immediately after firing (*Section 8.7*).

1. Insert magazine into weapon (*Section 8.1*).
2. Hold charging handle (*Ila-5*) and pull bolt group (*14a-1*) all the way back and hold it.
3. Release charging handle and let bolt group snap forwards.
4. Click safety lever (*Ia-10*) to the “Safe” position. The weapon now has a round in the chamber and is set to “Safe”.

8.3 Firing position and aiming

8.3.1 Firing position



The supported shoulder firing position is the most stable and provides the best probability of hitting.

⚠ WARNING

Risk of injury from recoil!

The weapon's recoil can cause serious injury.

- › When firing, pull the weapon firmly into your shoulder.
 - › Keep your eye at least 6 cm away from the rear sight when firing.
 - › Keep your hands out of the path of the bolt group when firing.
-
- › Rest weapon on the handguard (la-2) or bipod.
 - › Do not rest weapon on the barrel (la-1) or magazine (la-12).

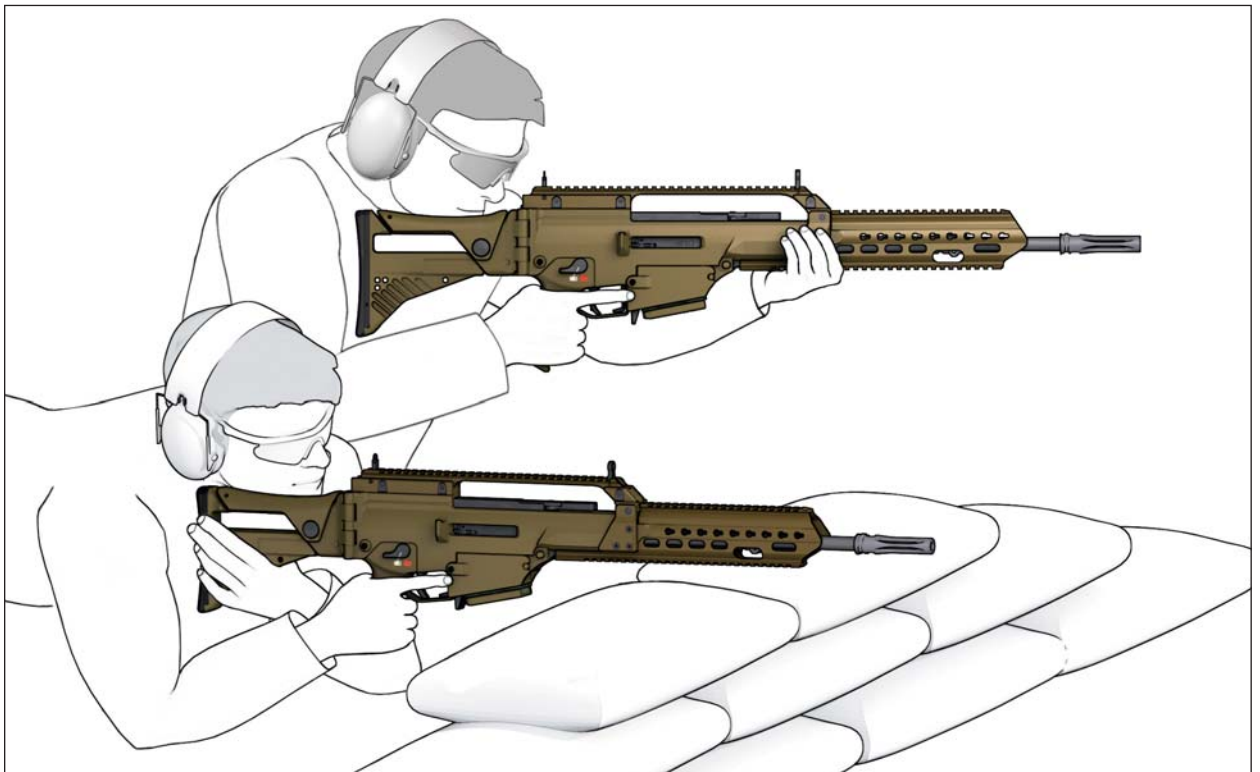
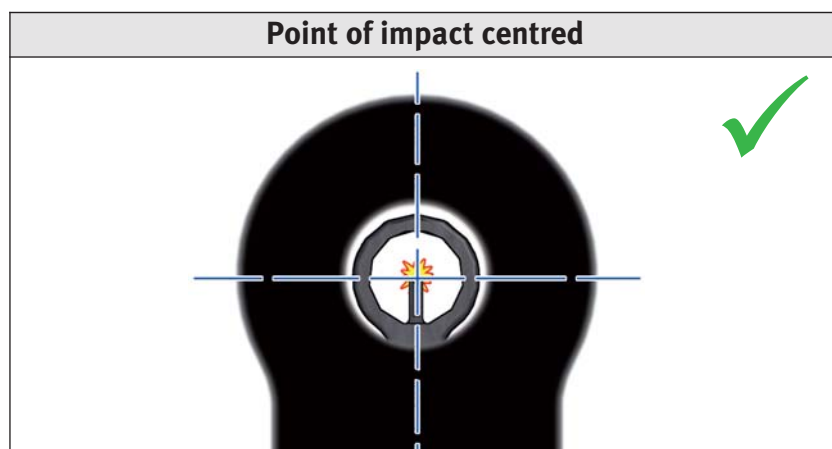


Fig. 31a: Firing position

8.3.2 Aiming

- Correct aiming



- Aiming errors



8.4 Firing



Follow safety instructions for firing (*Section 2.3*).

1. Prepare weapon for firing (*Section 7.4*).
2. Chamber a round (*Section 8.2*).
3. Aim (*Section 8.3.2*).
4. Click safety lever (*Ia-10*) to the “Single fire” position.

WARNING

Risk of injury from recoil!

The weapon’s recoil can cause serious injury.

- › When firing, pull the weapon firmly into your shoulder.
- › Keep your eye at least 6 cm away from the rear sight when firing.
- › Keep your hands out of the path of the bolt group when firing.

5. Pull trigger (*Ia-11*). A cartridge is fired.
6. After firing, or to reload, click safety lever to the “Safe” position.

8.5 Removing the magazine

1. Grasp magazine (*Ia-12*).

NOTICE

Risk of material damage from dropping the magazine!

Dropping the magazine can damage the magazine lips (*Ia-13*) and cause malfunctions.

- › Remove the magazine by hand.
- › Avoid impacts on the magazine lips.

2. Press magazine catch (*IIa-10*).
3. Remove magazine.

8.6 Reloading the weapon

WARNING

Risk of injury from accidental discharge of weapon!

A weapon with a round in the chamber is always a potential source of danger.

- › Chamber a round only immediately before firing.
- › Unload the weapon immediately after firing (*Section 8.7*).



After the last cartridge in the magazine (*1a-12*) is fired, the bolt catch (*11a-11*) holds the bolt group (*14a-1*) in the open position.

1. Remove magazine (*Section 8.5*).
2. Insert magazine into weapon (*Section 8.1*).
3. Hold charging handle (*11a-5*) and pull bolt group all the way back and hold it.

CAUTION

Risk of injury when the bolt group snaps forwards!

The bolt catch is released when the charging handle is pulled back. The bolt group snaps forwards when the charging handle is released.

- › Do not reach into the path of the bolt group.

4. Release charging handle. The bolt group snaps forwards.
5. Click safety lever (*1a-10*) to the “Safe” position. The weapon now has a round in the chamber and is set to “Safe”.

8.7 Unloading the weapon

1. Remove magazine (*Section 8.5*).
2. Hold charging handle (*11a-5*) and pull bolt group (*14a-1*) all the way back and hold it. A cartridge is ejected. »

3. Look into the chamber (21a-C). There must not be any cartridge in the chamber. If there is a cartridge in the chamber, then a fault is present (*Section 10*).

⚠ CAUTION

Risk of injury when the bolt group snaps forwards!

The bolt group snaps forwards when the charging handle is released.

- › Do not reach into the path of the bolt group.

4. Release charging handle. The bolt group snaps forwards.
5. Click safety lever (1a-10) to the “Single fire” position.
6. Pull trigger (1a-11). The hammer is released.
7. Click safety lever to the “Safe” position.

8.8 Emptying the magazine

⚠ WARNING

Risk of injury from igniting the cartridges!

Impacts to the primer can ignite the cartridge.

- › Push the cartridges into your hand when you empty the magazine.
 - › Prevent any impacts to the primer.
 - › Prevent cartridges from falling.
-
- › Push cartridges forwards out of the magazine (1a-12).

9 Cleaning

9.1 General instructions for cleaning



Regular cleaning and care of the weapon and accessories

- maintain functional reliability,
- increase service life,
- prevent accidents, and
- save repair costs and time.

- › Clean weapon each time it is fired and at intervals of 1000 rounds.

NOTICE

Risk of material damage from the use of excessive force!

The use of excessive force during disassembly, cleaning and assembly can damage the weapon.

- › Do not use excessive force when disassembling, cleaning and assembling the weapon.

9.2 Disassembling the weapon

⚠ WARNING

Risk of injury from improperly assembled weapon!

Improper assembly can compromise the safety and functioning of the weapon.

- › Only disassemble the weapon to the extent described in this manual.

9.2.1 Disassembling the weapon into assembly groups

Required auxiliary materials:

- 4 mm Allen key

1. Carry out safety check (*Section 6.1*).
2. Push in locking pin for pistol grip (*Ila-13*) and pull it out.
3. Push in locking pin for magazine well (*Ila-9*) and pull it out.
4. Insert removed locking pins in locking pin receptacle (*Ila-14*).
5. Remove pistol grip downwards.
6. Folding the buttstock (*Section 7.1.1*).
7. Push back plate downwards and hold (*37a-A*).
8. Remove bolt group with back plate from receiver (*37a-B*).>>

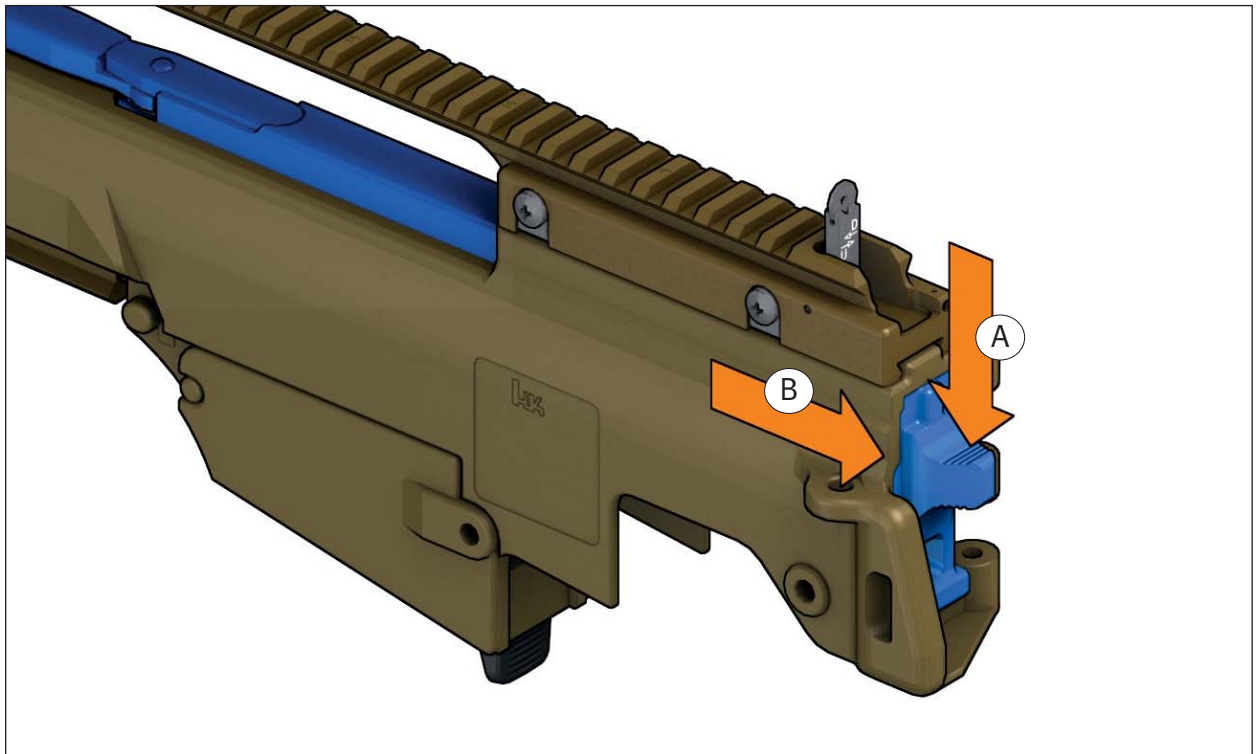


Fig. 37a: Removing back plate

For the HK243 S TAR variant (step 9.) and HK243 S SAR (step 10.)

9. Unscrew locking screw for handguard anti-clockwise with Allen key and pull out (38a).
10. Push in locking pin for handguard (IIa-13) and pull it out.
11. Pull handguard (IIa-2) forwards off barrel (IIa-1).
12. Push magazine catch (IIa-10) forwards and hold it.
13. Swivel magazine well (IIa-9) downwards and remove.

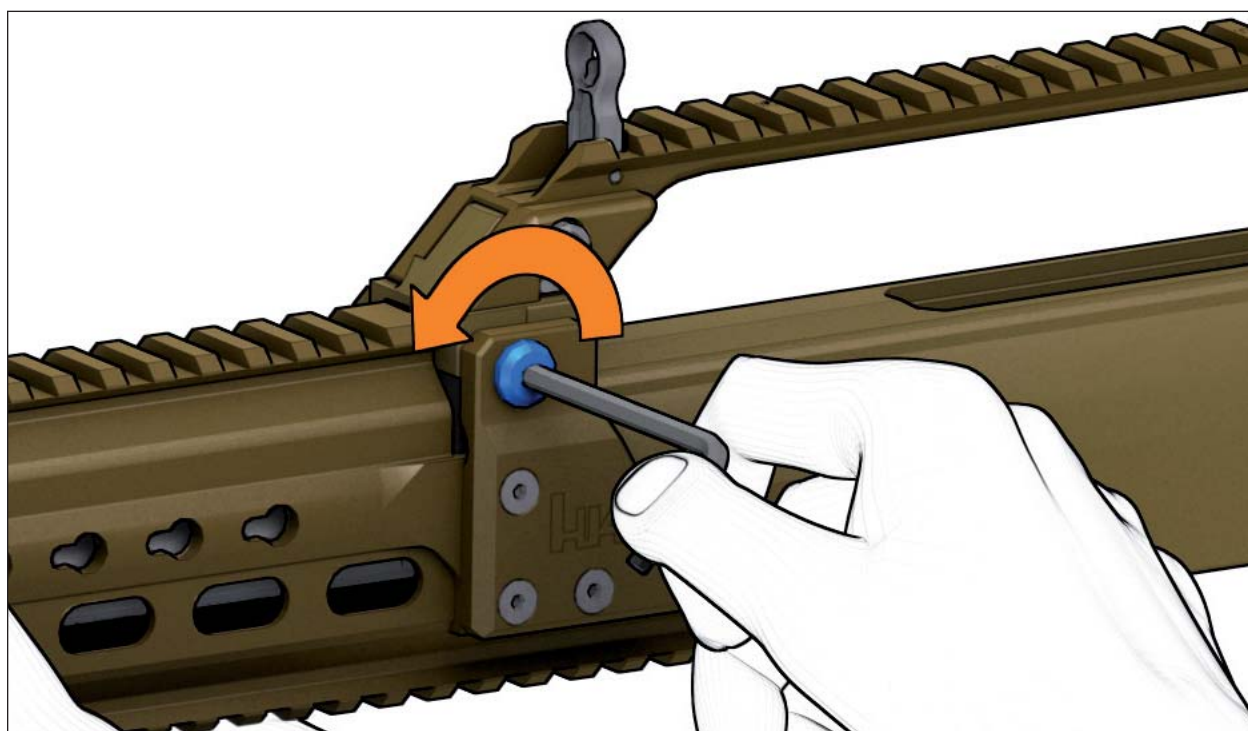


Fig. 38a: Unscrew locking screw for handguard

9.2.2 Removing rod and gas piston

1. Disassemble the weapon into assembly groups (*Section 9.2.1*).
2. Pull rod against spring force to the rear and hold it (*39a-A*).
3. Pull rod upwards (*39a-B*) and remove it forwards out of receiver (*39a-C*).
4. Remove gas piston (*39a-2*) from gas block (*39a-1*).

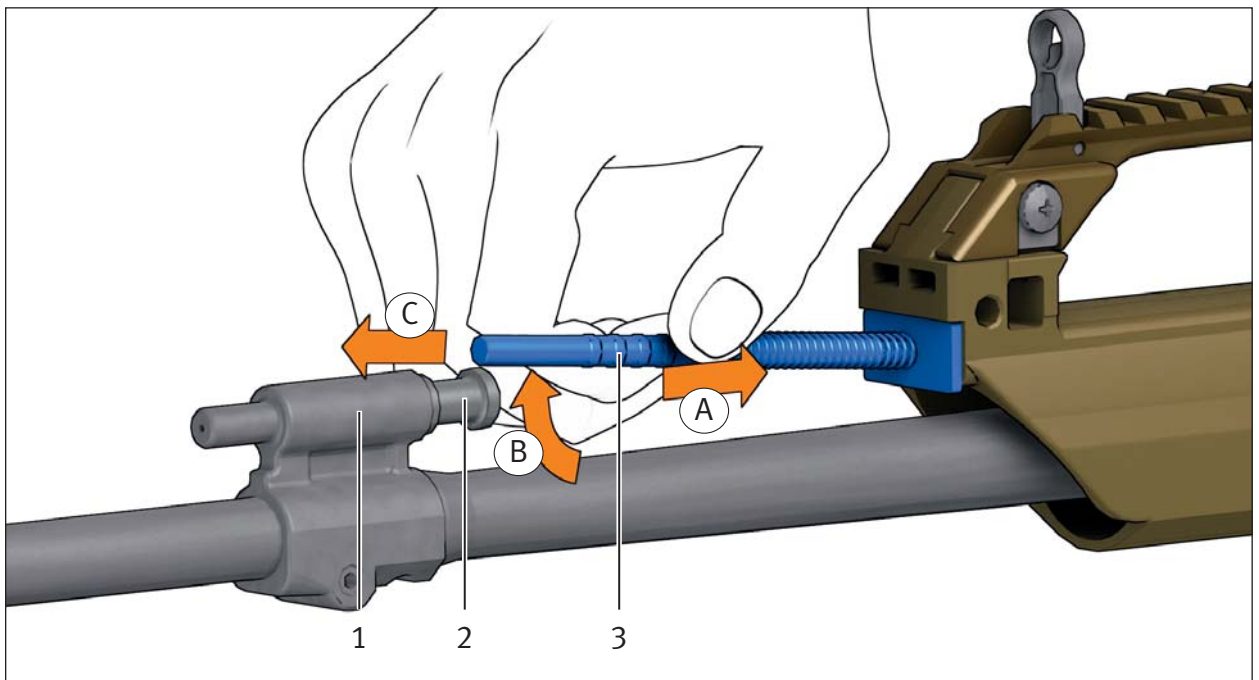


Fig. 39a: Removing the rod

- 1 Gas block
2 Gas piston

3 Rod

9.2.3 Disassembling the bolt group

Required auxiliary materials:

- *Pointed object (e.g. pin punch)*

1. Disassemble the weapon into assembly groups (*Section 9.2.1*).
2. With a pointed object, push retaining pin (40a-5) out of the bolt head carrier (40a-1).
3. Remove retaining pin.
4. Press firing pin safety (40a-2) to the side and hold it.
5. Remove firing pin (40a-3) and pressure spring for firing pin (40a-4) from bolt head carrier.
6. Remove control bolt (40a-6) from bolt head (40a-7).
7. Remove bolt head from bolt head carrier.

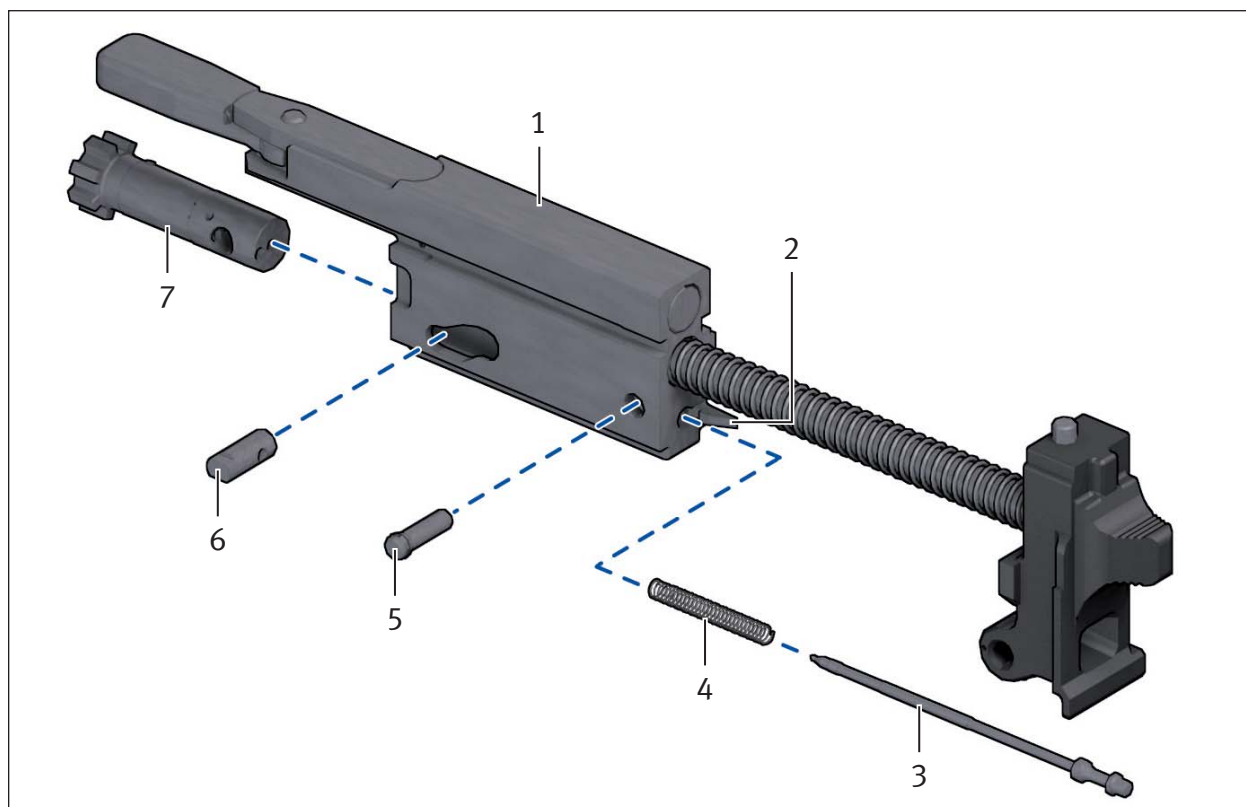


Fig. 40a: Components of the bolt group

- | | |
|----------------------------------|-----------------|
| 1 Bolt head carrier | 5 Retaining pin |
| 2 Firing pin safety | 6 Control bolt |
| 3 Firing pin | 7 Bolt head |
| 4 Pressure spring for firing pin | |

9.3 Cleaning the weapon

Required auxiliary materials:

- Oil
- Cleaning rag
- Cleaning pull-throughs



Clean the barrel from the chamber to the muzzle.

NOTICE

Danger of material damage from incorrect cleaning agents and care products!

Incorrect cleaning agents and care products can damage the weapon.

- › When cleaning the weapon, use the specified cleaning agents.
- › Do not use any metallic objects, plastics (nylon, etc.) or chemical cleaning agents (benzine, tetrachlorethylene, trichlor, etc.) to clean the weapon.
- › Do not clean the weapon in an ultrasonic bath.

1. Disassemble the weapon (*Section 9.2*).
2. Visually check the weapon for damage.
3. Clean fouled parts and surfaces using cleaning rag.
4. Lubricate cleaned metal parts thinly. »

5. Screw handle rod (17a-9) and chamber cleaning brush (17a-4) together.
6. Clean chamber and barrel extension using chamber cleaning brush.
7. Replace chamber cleaning brush with extension rods (17a-8) and barrel cleaning brush (17a-3).
8. Pull lubricated barrel cleaning brush through the barrel (1a-1) several times.
9. Replace barrel cleaning brush with pull-through holder (17a-6).
10. Place clean cleaning pull-through in pull-through holder.
11. Pull clean cleaning pull-through through the barrel several times until the barrel is free of oil and foreign bodies.
12. Replace pull-through holder with oil brush (17a-2).
13. Pull lubricated oil brush through the barrel.
14. Lubricate lubrication points of the weapon (42a). »

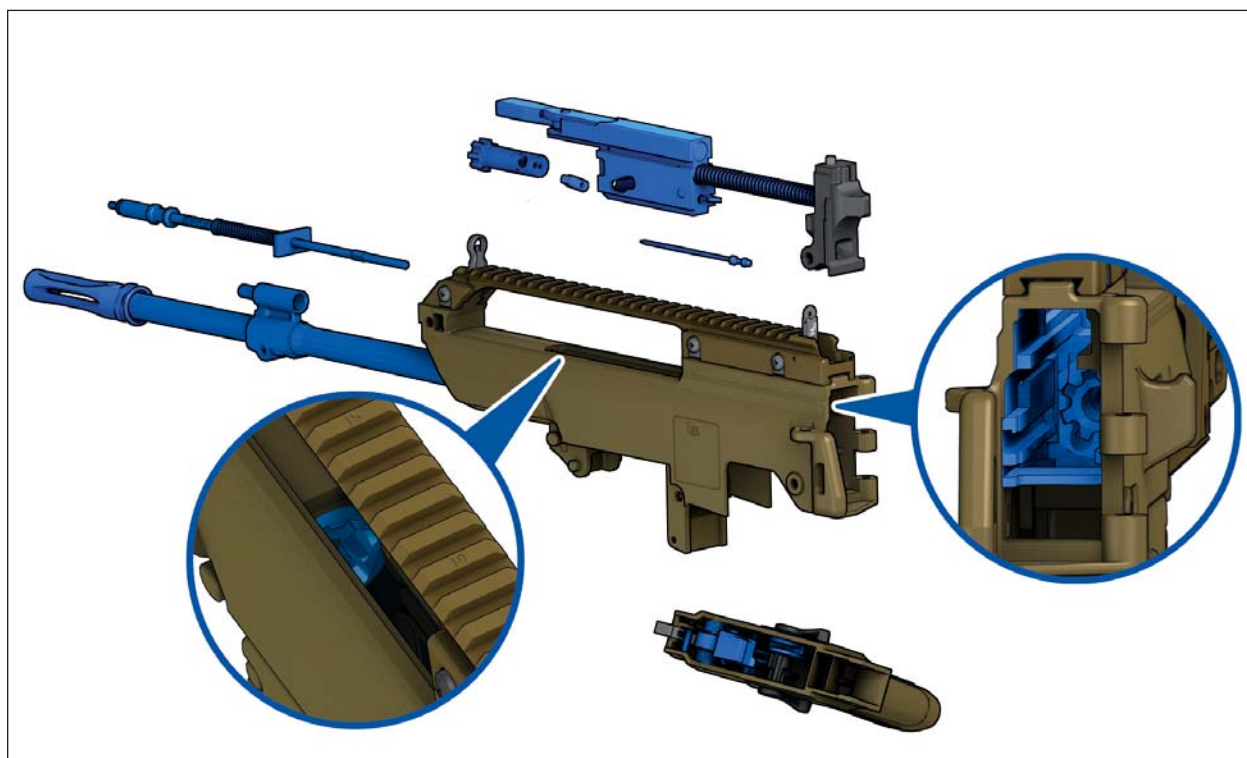


Fig. 42a: Lubrication points of the weapon

15. Clean magazine (*la-12*) and follower (*la-14*) using cleaning rags.

NOTICE

Danger of material damage from lubricated cartridges!

Lubricated cartridges result in increased loads on components and can damage the weapon.

› Do not lubricate the inside of the magazine.

16. Assemble the weapon (*Section 9.4*).

9.4 Assembling the weapon

9.4.1 Assembling the bolt group

1. Insert bolt head into the bolt head carrier with the extractor to the right (44b-A).
2. Insert control bolt into bolt head carrier with the bore in the longitudinal direction (44b-B).
3. Insert pressure spring for firing pin (44a-3) and firing pin (44a-2) into bolt head carrier (44a-1).
4. Push retaining pin (44a-3) into the bolt head carrier.

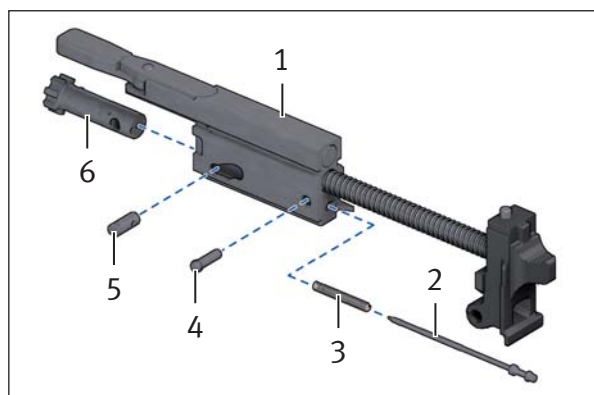


Fig. 44a: Components of the bolt group

- 1 Bolt head carrier
- 2 Firing pin
- 3 Pressure spring for firing pin
- 4 Retaining pin
- 5 Control bolt
- 6 Bolt head

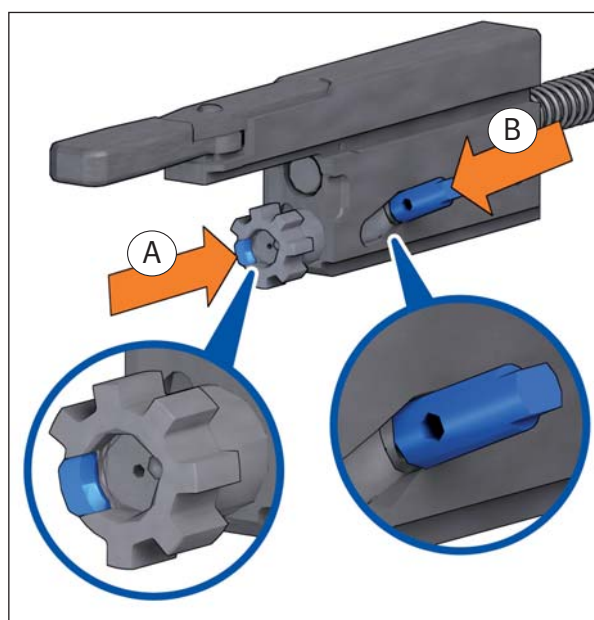


Fig. 44b: Inserting the bolt head

9.4.2 Assembling the gas piston and rod

1. Insert gas piston (45a-2) into the gas block (45a-1).
2. Insert rod into receiver in assembly position (45a).
3. Push rod against spring force to the rear and hold it (45a-A).
4. Press rod downwards (45a-B) and insert into gas piston (45a-C).

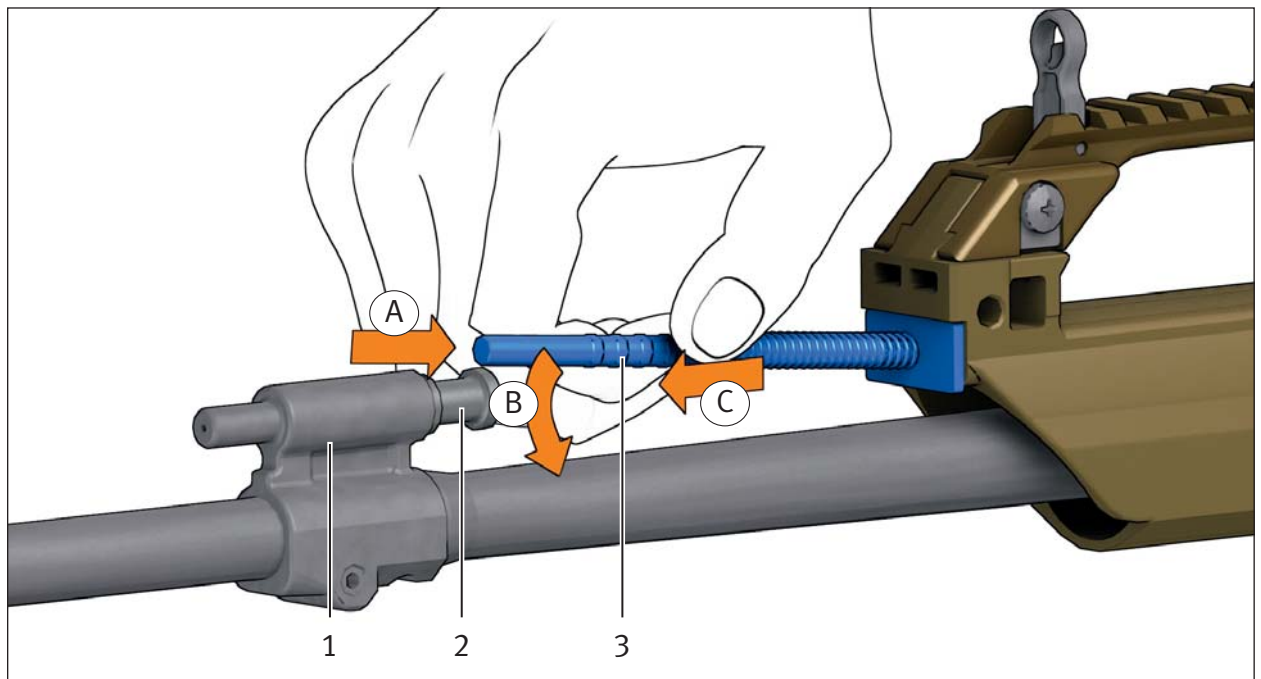


Fig. 45a: Inserting the rod

- 1 Gas block
2 Gas piston

- 3 Rod

9.4.3 Assembling the assembly groups

Required auxiliary materials:

- 4 mm Allen key
1. Assemble the bolt group (Section 9.4.1).
 2. Assemble the gas piston and rod (Section 9.4.2).
 3. Push handguard onto the barrel as far as it will go (46a).
- For the HK243 S TAR variant (steps 4. - 5.) and HK243 S SAR (step 6.)
4. Insert locking screw for handguard (IIa-6) into the handguard.
 5. Tighten locking screw for handguard clockwise with 4 mm Allen key (46b).
 6. Push locking pin for handguard.
 7. Insert magazine well into mounting lugs and swivel it upwards until the magazine catch engages (46c). >>

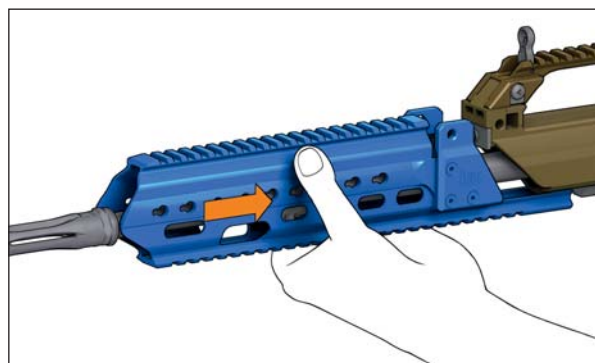


Fig. 46a: Pushing handguard onto barrel

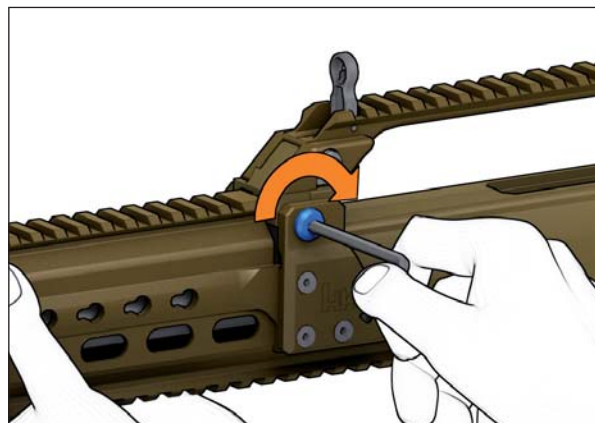


Fig. 46b: Tighten locking screw for handguard



Fig. 46c: Swivelling the magazine well upwards

8. Folding the buttstock (*Section 7.1.1*).
9. Insert bolt group with back plate into the receiver (*47a*).
10. Unfolding the buttstock (*Section 7.1.2*).

i

The hammer must be cocked during assembly.

11. Attach pistol grip (*Ia-9*) from below to the receiver.
12. Swivel pistol grip upwards and hold.
13. Push locking pin for pistol grip (*Ila-13*) and locking pin for magazine well (*Ila-12*) into receiver.
14. Carry out function check (*Section 6.2*).

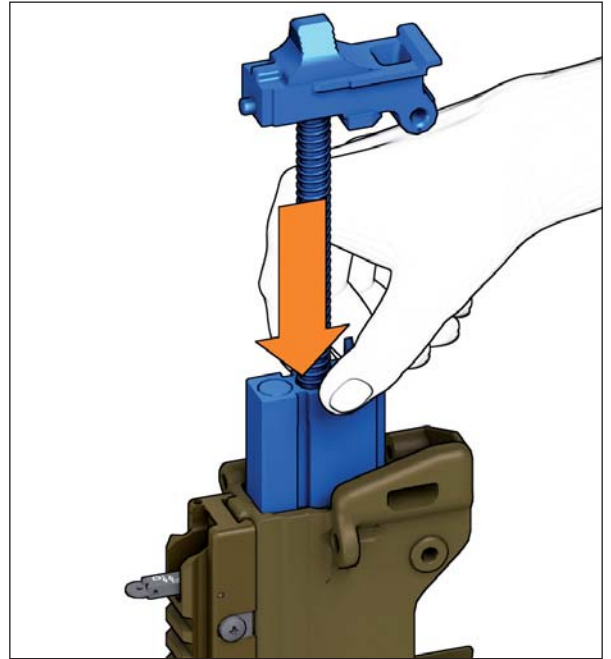


Fig. 47a: Inserting bolt group into receiver

10 Faults: Causes and remedies



Users are strictly prohibited from rectifying faults that go beyond the scope of this manual! Only authorised specialists may troubleshoot such faults in the weapon.

WARNING

Safety risk from not knowing whether or not the weapon is loaded!

In the event of a fault, the weapon may be loaded even if you expect that it is unloaded.

- › In the event of a fault, treat the weapon as if there were a round in the chamber.
- › In the event of a fault, verify whether the weapon is actually loaded.
- › Follow the fundamental safety instructions (*Section 2*) for rectifying faults.

The following items do not constitute a complete list of all possible faults. Causes other than those named here are also possible.

Fault	Cause	Remedy
Bullet is stuck in the barrel.	Defective ammunition.	Send weapon in for repair.
Cartridge has not fired.	Defective ammunition	Wait at least one minute. Unload weapon (<i>Section 8.7</i>). Do not re-use cartridges that have failed to fire.
	Firing pin sluggish, damaged or broken.	Send weapon in for repair.
	Hammer defective.	Send weapon in for repair.

Fault	Cause	Remedy
Bolt group does not open after firing.	Defective ammunition.	Unload weapon (<i>Section 8.7</i>). Clean weapon if necessary (<i>Section 9.3</i>). Send weapon in for repair if necessary.
	Gas drive fouled or defective.	Clean gas piston. Send weapon in for repair if necessary.
Cartridge or cartridge case is not ejected.	Cartridge rim ripped off.	Unload weapon (<i>Section 8.7</i>). Send weapon in for repair if necessary.
	Chamber is fouled.	Clean chamber.
	Rearward movement of bolt group too short.	Unload weapon (<i>Section 8.7</i>). Carry out function check (<i>Section 6.2</i>). Clean weapon if necessary (<i>Section 9.3</i>). Send weapon in for repair if necessary.
	Defective ammunition.	Use different ammunition.
	Extractor, pressure spring for extractor, ejector or pressure spring for ejector damaged.	Send weapon in for repair.
Cartridge is not loaded into the chamber.	Chamber is fouled.	Unload weapon (<i>Section 8.7</i>). Clean weapon (<i>Section 9.3</i>).
	Cartridge deformed.	Use different cartridge.
	Recoil spring defective.	Send weapon in for repair.

Fault	Cause	Remedy
Cartridge does not feed.	Magazine not correctly inserted.	Insert magazine correctly.
	Magazine spring defective.	Send magazine in for repair.
	Magazine or magazine lips damaged.	Use different magazine.
	Rearward movement of bolt group too short.	Unload weapon (<i>Section 8.7</i>). Carry out function check (<i>Section 6.2</i>). Clean weapon if necessary (<i>Section 9.3</i>). Send weapon in for repair if necessary.
Bolt group does not stay in open position after last round.	Magazine spring defective.	Send magazine in for repair.
	Rearward movement of bolt group too short.	Unload weapon (<i>Section 8.7</i>). Carry out function check (<i>Section 6.2</i>). Clean weapon if necessary (<i>Section 9.3</i>). Send weapon in for repair if necessary.
	Bolt catch damaged.	Send weapon in for repair.
	Defective ammunition.	Use different ammunition.

Fault	Cause	Remedy
Magazine sticks in magazine well.	Magazine damaged.	Exchange magazine. Send damaged magazine in for repair.
	Magazine catch defective.	Send weapon in for repair.
Windage or elevation of point of impact changed.	Sights misaligned.	Adjust sights (<i>Section 7.2</i>).
	Other type of ammunition.	Use another type of ammunition or adjust sights (<i>Section 7.2</i>).
	Sights damaged.	Send weapon in for repair.

11 Protection, packaging and storage



Protection guards the weapon against external influences and maintains its functional reliability even if it is not used for long periods. If the weapon is expected to be stored for more than 6 months, the weapon must be protected.

If the weapon is not expected to be stored for more than 6 months, then it is sufficient to clean the weapon (*Section 9.3*).

11.1 Protecting the weapon

Required auxiliary materials:

- Grease
 - Oil paper
1. Clean weapon (*Section 9.3*).
 2. Seal both ends of the barrel (*Ia-1*) with grease.
 3. Wrap weapon in oil paper.

11.2 Packaging the weapon

1. Unload weapon (*Section 8.7*).
2. Empty the magazine (*Section 8.8*).
3. Package the weapon in appropriate transport container.

11.3 Storing the weapon



Store the weapon and ammunition separately.

1. Follow applicable regulations for the storage of weapons and ammunition.
2. Whenever the weapon is expected to be stored for more than 6 months, protect the weapon (*Section 11.1*).
3. Whenever the weapon is not expected to be stored for more than 6 months, clean the weapon (*Section 9.3*).
4. Package the weapon (*Section 11.2*).
5. Store the weapon in an enclosed, weather resistant room.

WARNING

Risk of accidents caused by unauthorised persons!

Unauthorised persons who have no experience with weapons can cause accidents.

- › Be sure to prevent access to the weapon and ammunition by unauthorised persons, especially children.

6. Protect rooms where weapons are stored against break-in and fire.

Whenever the weapon is stored for more than 1 year:

7. Check the grease seal on the barrel (*Ia-1*) and the oil film on the metal parts annually.

12 Transport and shipping

12.1 Preparing the weapon for transport

1. Package the weapon (*Section 11.2*).
2. Secure the weapon in vehicle.

NOTICE

Danger of material damage from vibrations!

Vibrations during transport can damage the weapon.

- › During transport, secure the transport container against slipping and damage from outside influences.
- › Avoid impacts and vibration of the weapon.

12.2 Transporting the weapon



Transport weapon and ammunition separately.

- › Follow applicable regulations for the transport of weapons and ammunition.

12.3 Shipping the weapon



Ship weapon and ammunition separately.

- › Follow applicable regulations for the shipping of weapons and ammunition.

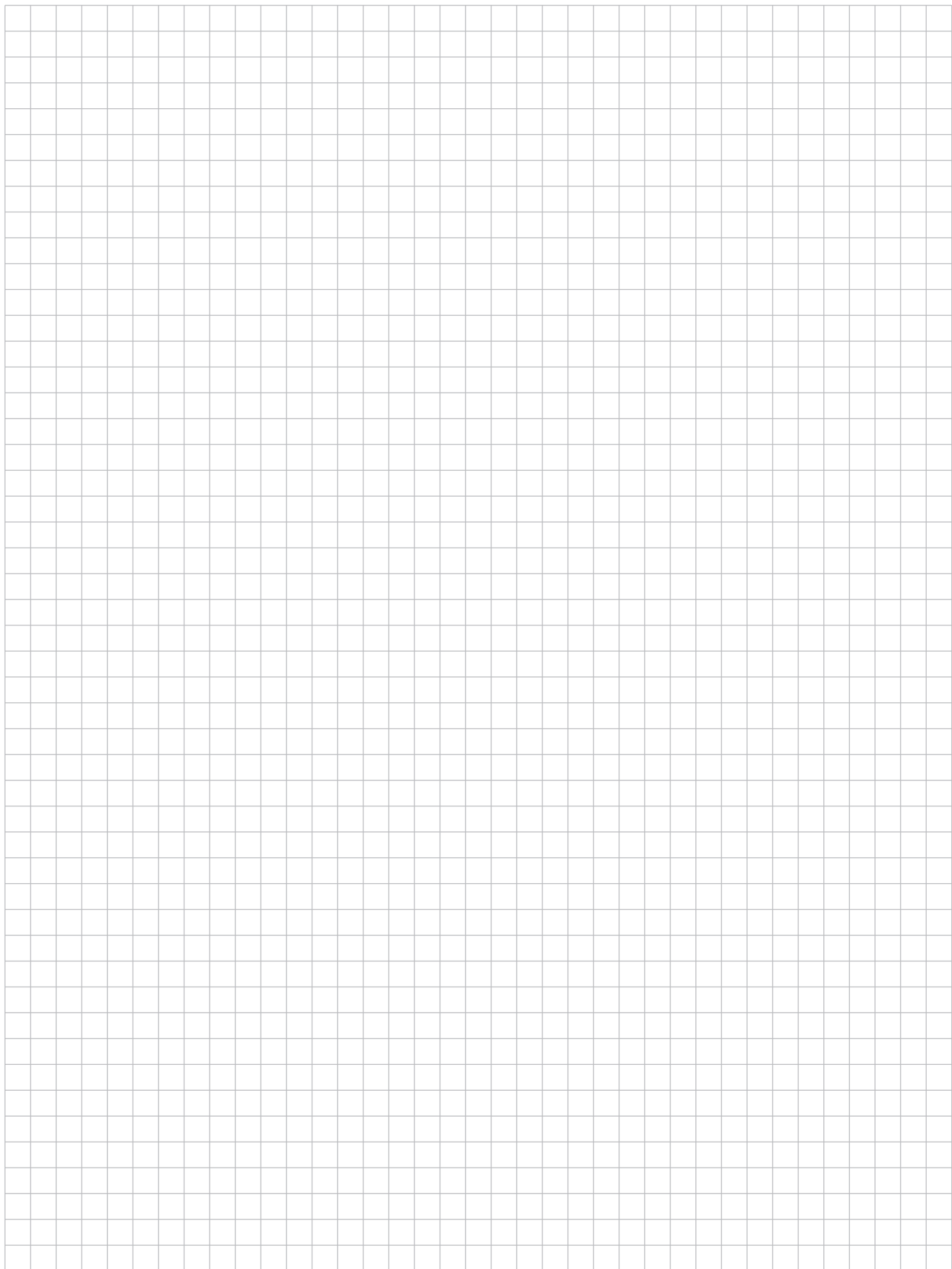
13 Destruction and disposal

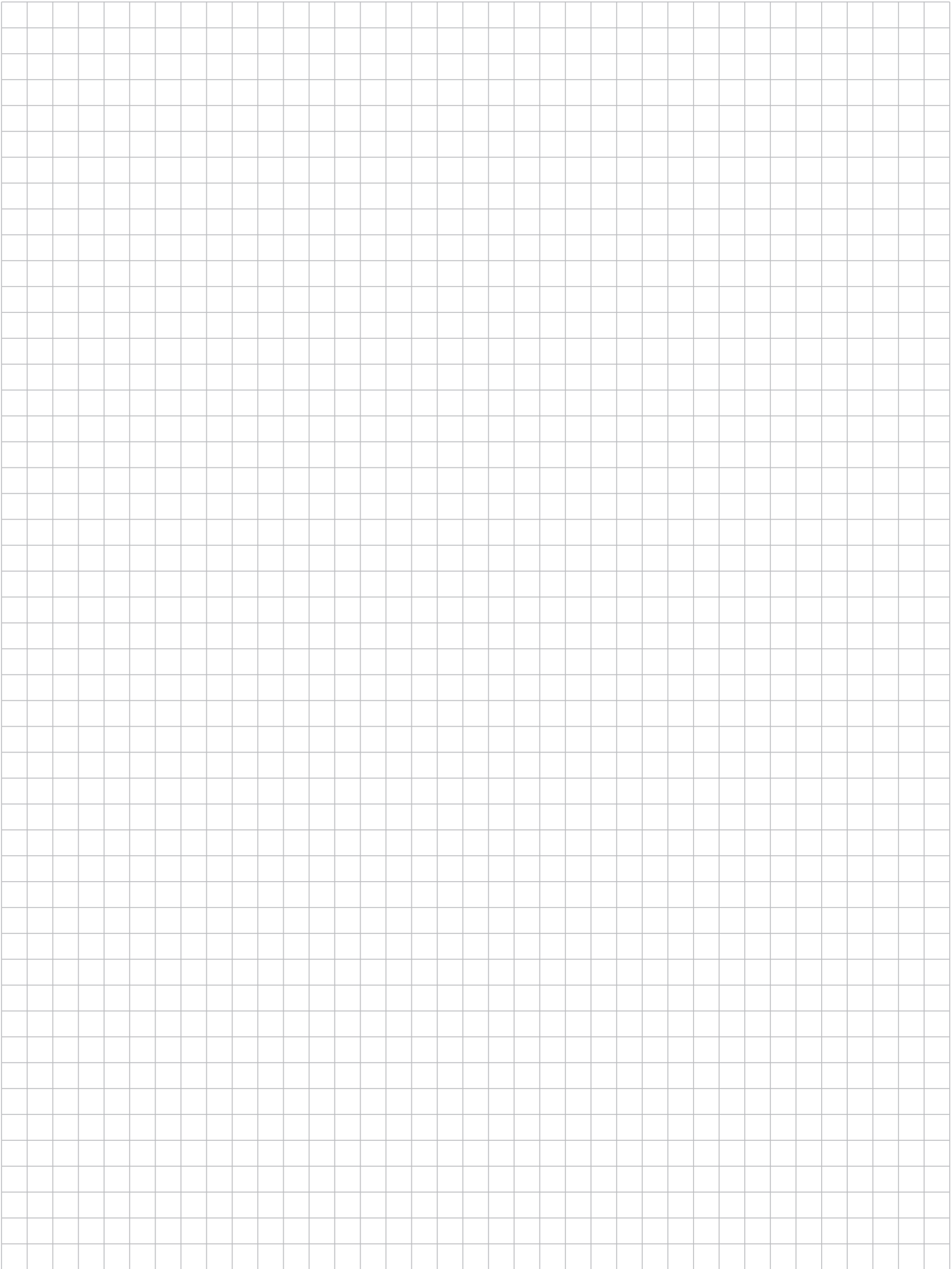
13.1 Destroying the weapon

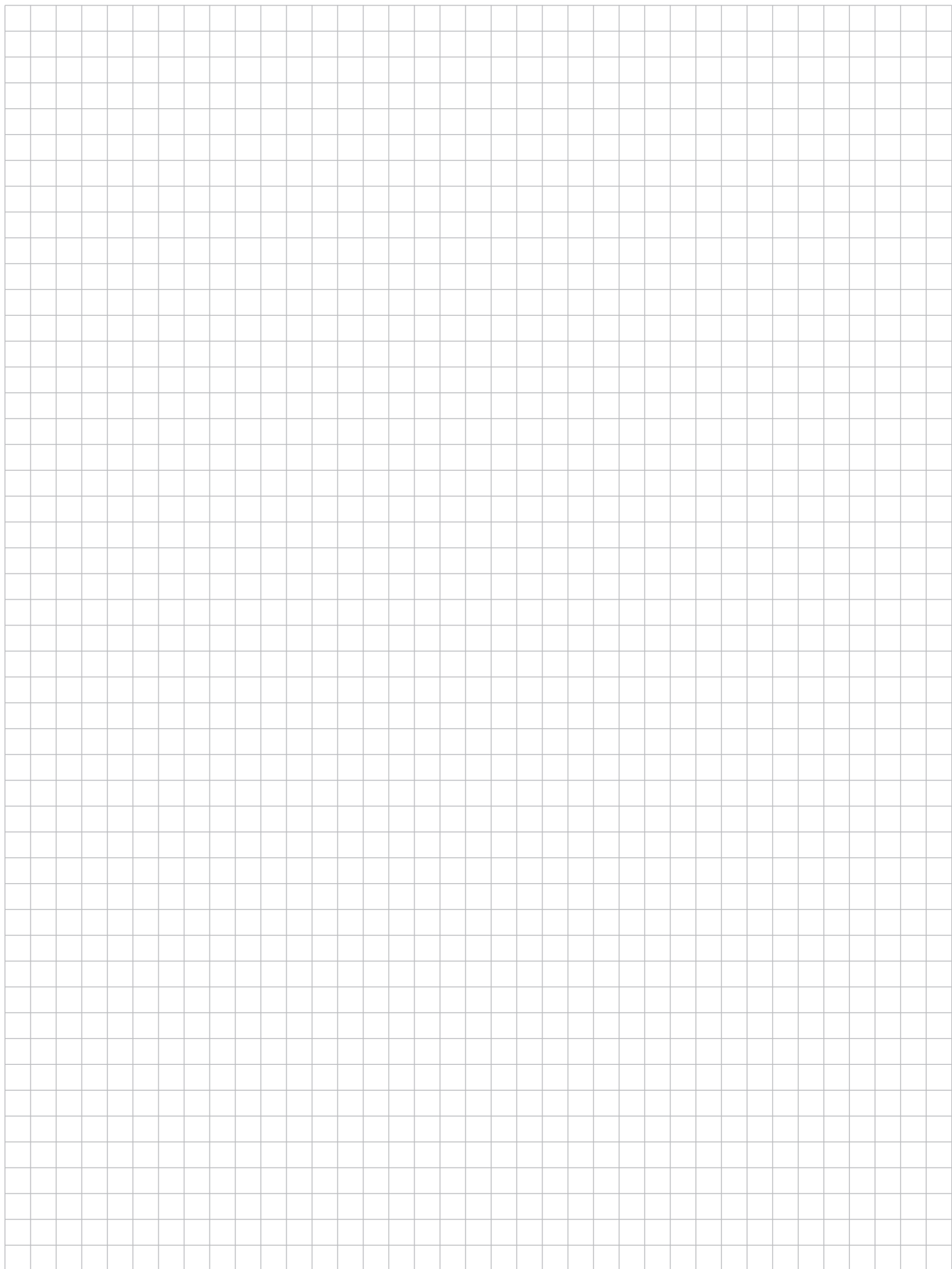
- › Follow applicable regulations for the destruction of weapons and ammunition.

13.2 Disposing of the weapon

- › Follow applicable regulations for the disposal of weapons and ammunition.







Rifle	HK243 S TAR	HK243 S SAR
Calibre	.223 Rem.	
Operating principle	Semi-automatic, gas-operated	
Bolt system	Locked rotating bolt head	
Cartridge feed	Magazine	
Cartridge case ejection	Right	
Modes of fire	Single fire	
Dimensions		
Length, max.	852 mm / 892 mm ₁	912 mm
Length, min.	681 mm	667 mm
Width	65 mm	
Height	215 mm	234 mm
Barrel length	421 mm ₂	
Sight radius	290 mm	267 mm
Weight		
Weapon without magazine	approx. 3620 g	approx. 3210 g
Magazine (full) ₃	approx. 195 g ₄	
Magazine (empty)	approx. 70 g ₄	
Other data		
Trigger pull	approx. 40 N	
Muzzle velocity -v ₀₋₃	approx. 890 m/s	
Muzzle energy -E ₀₋₃	approx. 1580 J	
Barrel profile / twist / conformity	6x groove/land profile, 178 mm right-hand twist / C.I.P.	

¹ extended buttstock

² without flash hider

³ SWISS P Target 69gr HPBT ammunition

⁴ magazine, 10 cartridges

Technical data



No Compromise

Quality . Innovation . Service . Safety



Heckler & Koch GmbH
Heckler & Koch-Str. 1
78727 Oberndorf/N.
Germany



+49 (0) 74 23 / 79-0
+49 (0) 74 23 / 79-23 50
TD@heckler-koch-de.com
www.heckler-koch.com

Copyright © 2015
Made in Germany
Version 006.0617

