



INSTRUCTION MANUAL

RX.HELIX

MERKEL

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1 General

Waidmannsheil!

Thank you for choosing one of our products.





Owning the repeating gun RX.HELIX you are in possession of an innovative and precise hunting rifle.

1.1 How to use this Manual

1.1.1 General

Read the following instructions before using the weapon. Only use this weapon when you have fully understood these instructions.

1.1.2 Signs and Symbols

Symbol	Meaning
 DANGER	Imminent danger! Non-compliance leads to death or most severe injuries.
 WARNING	Possible imminent danger! Non-compliance may lead to death or severe injuries.
 CAUTION	Dangerous situation! Non-compliance may lead to injuries.
ATTENTION	Non-compliance may lead to property damages.
	Additional information about the weapon, its handling or the use of this manual.

1.2 Disclaimer

We assume no liability and provide no warranty for improper use and negligence.

- 1) criminal or negligent use,
- 2) improper or careless handling (forceful use),
- 3) any modifications of the weapon,
- 4) wrong, damaged, improper, self-loaded or reused ammunition,
- 5) insufficient maintenance and cleaning,
- 6) other influences beyond our direct or immediate control,
- 7) gun efficiency of the weapon, if the scope mount was not done appropriately,
- 8) optics/sights provided by the customer himself, etc.

Under no circumstances can we assume liability for accidental or consequential damages like property damages, business loss, loss of income or profit.

For warranty claims the weapon should be returned to the manufacturer or send to an authorized service centre for further proceeding.

1.3 Safety Instructions

The following safety instructions are of **utmost importance** and **must be followed unconditionally**.

1.3.1 Safety guidelines for the use of firearms

If you are aware of the dangers connected with the use of firearms and will follow the safety instructions in this manual, complete safety is ensured when using the weapon.

Noncompliance, even with only one of these regulations can lead to severe harm, not only for your own person but also for others, and may cause serious damages to the weapon and / or other objects.

10 safety rules for firearms

- 1.) ALWAYS treat a weapon as if it was loaded.
- 2.) ALWAYS make sure that the barrel is not clogged.
- 3.) Before shooting, ALWAYS make sure that a backstop exists and what lies behind it. The safety of other people and your own person always comes first.
- 4.) ALWAYS use clean, dry and factory-manufactured original ammunition of the right sort and appropriate caliber.
- 5.) Protect eyes and ears (see below).
- 6.) ALWAYS carry the weapon in such a way that you are in control of the direction in which the muzzle points in case you stumble or fall.
- 7.) ALWAYS make sure that the weapon is put on safe until you actually intend to shoot.
- 8.) Make sure that a loaded weapon is NEVER unattended. Weapons and ammunition are to be kept locked up separately so that children and unauthorized people have no access to them.
- 9.) Never allow an unauthorized person and persons who have not read these safety rules to use your weapon.
- 10.) NEVER point a loaded or unloaded weapon at objects you do not intend to shoot at.

Protect your eyes and ears

Always wear suitable shooting glasses as well as ear plugs or earmuffs when shooting. Always make sure that people in your close vicinity are protected in the same way. Unprotected eyes can be injured by powder gas and powder smoke, lubricants, metal particles, etc. which are occasionally emitted by weapons during normal use. Without hearing protection, persons frequently exposed to shooting noises may suffer a gradual decline or loss of hearing.

1.3.2 Safety mechanism (manual cocking)

- 1.) Your weapon is equipped with an efficient and well-constructed safety mechanism (manual cocking).



DANGER

NEVER RELY ENTIRELY ON A SAFETY MECHANISM!

NO safety mechanism is a substitute for cautious, safe handling of the weapon. NO safety mechanism – as well constructed as it may be – can be trusted completely.

Like ANY mechanic device, a safety mechanism can break or fail or be negatively affected by misuse, dirt, corrosion, abrasion, inappropriate assembly, improper adjustment and repair or lack of care. A safety mechanism which is truly “child-proof” or can prevent unintentional discharge due to improper manipulation, carelessness or fooling around does NOT exist. The best safety mechanism is your common sense. USE IT! Always handle your weapon as if you expected the safety mechanism not to work!

- 2.) Never point your weapon at a part of your own or anybody else’s body. If you keep this rule in mind, no injury can be caused in case of an unintentional discharge.
- 3.) Leave the weapon “on safe” until you are ready to shoot and the weapon is aimed at the target.
- 4.) Always take your finger off the trigger and point the muzzle in a safe direction when you activate or deactivate the safety mechanism.
- 5.) When you activate the safety mechanism, make sure that it engages completely.
- 6.) Never carry a weapon around unsecured when a cartridge is in the chamber.

1.3.3 Ammunition

- 1.) Use only, high-quality, original factory-made ammunition. DO NOT use cartridges which are dirty, wet, corroded, dented or damaged.
Never spray aerosol-type lubricants, oils, preserving or cleaning agents directly onto cartridges or onto parts of the weapon from which surplus spray can run off onto cartridges. Lubricants or other foreign agents on cartridges can, under certain circumstances, cause dangerous malfunction of the cartridge.
- 2.) Use only ammunition of the appropriate caliber for your weapon. The right caliber is engraved on the barrel. Never attempt to use ammunition of a different caliber.
- 3.) The use of reloaded, "modified", "remodeled", self-reloaded or any other kind of non-standard ammunition results in the termination of all warranty claims.
Reloading is a science in itself and improperly loaded ammunition can be extremely dangerous. Always use ammunition which corresponds to industrial standards.
- 4.) Due to excessive pressures which can occur inside the barrel when shooting, the weapon can be heavily damaged and the shooter (or other people nearby) can be severely hurt. Excessive pressure can arise due to blockage of the barrel, too great a propellant load, or the use of wrong or incorrectly loaded cartridges etc. Apart from that, when you are using dirty, corroded or damaged cartridges the cartridge housing can explode, the weapon can be damaged or people can get hurt due to sudden release of high-pressure propellant gas.
- 5.) Shooting must be stopped immediately and the barrel must be checked for potential clogging if:
 - you have difficulties inserting a cartridge into the chamber or you feel an unusual resistance,
 - a cartridge misfires (the bullet does not leave the barrel),
 - the bolt mechanism does not extract and eject an empty casing,
 - unburned grains of propellant are found dispersed in the bolt mechanism, or
 - a shot sounds weak or abnormal.In those cases, the bullet could be stuck somewhere in the barrel. Firing off another round into the blocked barrel can destroy the weapon and cause severe injuries to the shooter or other people nearby.
- 6.) Bullets can get stuck in the barrel if:
 - the cartridge has been improperly loaded; without powder or if the powder does not ignite, (while ignition of the primer will merely propel the bullet out of the cartridge casing it usually does not produce enough energy to propel the bullet completely out of the barrel),
 - the bullet has not been fixed tightly and correctly in the casing. If such a round is removed from the chamber without being fired, the bullet may remain in the barrel at the point where the rifling begins. Chambering another round can push the first bullet even farther into the barrel.

- 7.) If you have reason to assume that the bullet is stuck in the barrel, the weapon must be unloaded immediately and the barrel must be inspected visually. A mere glance into the chamber of the barrel does not suffice. The bullet can be stuck somewhere in the barrel where you may not easily see it. If it is possible to remove the bullet with the aid of a cleaning rod; then the bore, chamber and bolt mechanism must be cleaned from unburned powder grains before shooting the weapon again. However, if the bullet cannot be removed like that, the weapon must be sent to an authorized, specialized dealer or back to our company.
- 8.) Dirt, corrosion, or other alien substances on the cartridges may prevent their proper insertion into the chamber which may result in the explosion of the casing when trying to shoot. The same holds true for damaged or dented cartridges.
- 9.) Cartridges must not be oiled. In any case, clean the chamber of the barrel of any oil or preservative substances before shooting. Oil has a negative effect on the friction between cartridge casing and chamber wall which is essential for the safe functioning and produces a strain on the weapon that is similar to the one caused by excessive pressure.
- 10.) Lubricants are to be used sparingly on the movable parts of your weapon. Refrain from excessive use of aerosol products, especially where they can come into contact with ammunition. All kinds of lubricants – especially aerosol products – can penetrate the priming compound of the round and thereby cause misfires. A few types of easily penetrating lubricants may even reach inside the casing and ruin the propellant; this can cause the propellant not to ignite, with the possible result that the bullet gets stuck in the barrel.

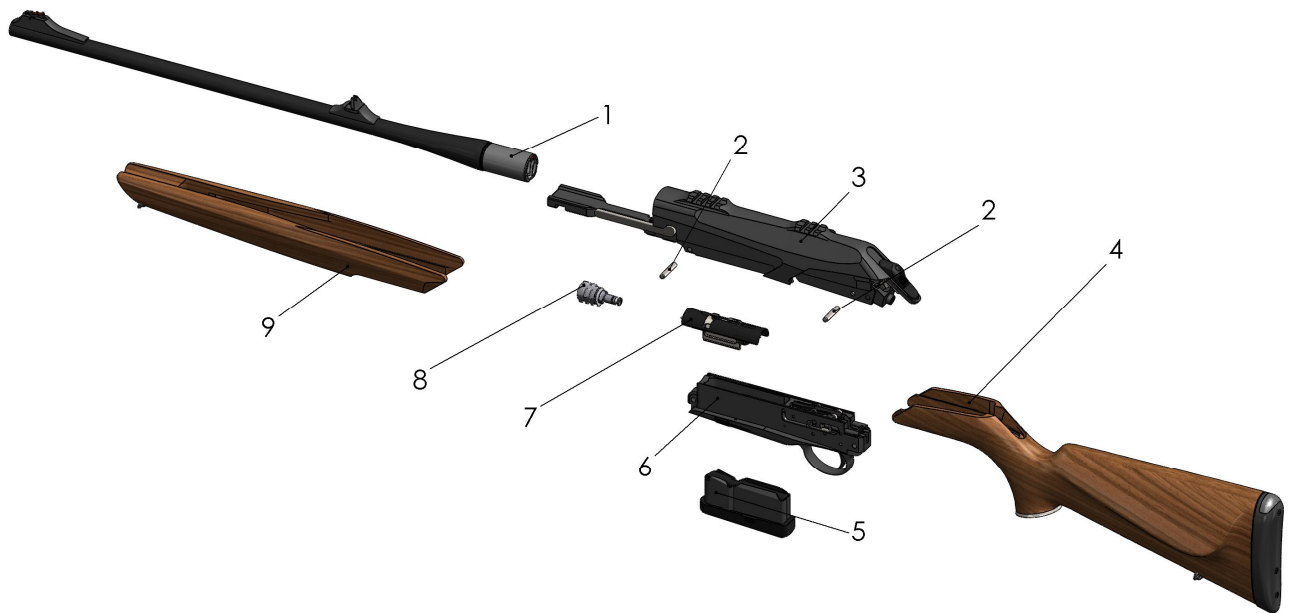
2 Weapon Description and Handling

2.1 Short Description / Specific Features

- straight-pull repeater
- take-down system
- massive bolt action with 6 lugs
- manual cocking mechanism
- adjustable direct trigger
- removable magazine
- driven hunt sights
- universal mount basis (WEAVER)

2.2 Components

1. Barrel
2. Connecting pin
3. Upper system part
4. Buttstock
5. Magazine
6. Lower system part
7. Bolt carrier
8. Bolt head
9. Forearm



2.3 Cocking / Uncocking the Weapon



DANGER

NEVER RELY COMPLETELY ON A SAFETY MECHANISM! (see section 1.3.2)



DANGER

WHILE COCKING THE WEAPON MAKE SURE THAT YOUR FINGER IS NOWHERE NEAR THE TRIGGER SINCE THIS MAY CAUSE AN UNINTENTIONAL DISCHARGE!

2.3.1 Cocking

Press the cocking slide all the way forward until stop. (Figure 1).



Figure 1



To reduce the noise during the cocking procedure it is recommended to place the thumb on the cocking slide in such a way that the tip of the thumb covers the button halfway.

The red dot on the system housing signalizes that the weapon is ready to fire. (Figure 2).



Figure 2



DANGER

IN THIS STATE THE WEAPON IS COCKED AND THE SAFETY IS DISENGAGED. ONLY COCK THE WEAPON DIRECTLY BEFORE FIRING A SHOT.



DANGER

FOLLOW THE SAFETY INSTRUCTIONS IN SECTION 1.3.2.



The weapon remains cocked until you manually uncock it (see section 2.3.2).

2.3.2 Uncocking

A: Hammer system not activated

Press the push button of the cocking slide with the tip of your thumb and keep it in position with your thumb. After that you can let the cocking slide return into its rearmost position. Now, the firing system is uncocked. (Figure 3).



Figure 3

B: Hammer system activated (hammer spring uncocked)

For releasing the cocking slide, press the push button of the cocking slide and pull the cocking slide back with your thumb into its rearmost, original position. (Figure 3)



The red dot on the system housing is completely covered by the cocking slide. The weapon is now uncocked. (Figure 3)

2.3.3 Bolt lock

In order to carry the weapon around securely in its non-cocked state and avoid any unintentional opening of the bolt, the weapon is equipped with a bolt lock. The bolt lock mechanism is only activated when the bolt is closed (bolt handle in foremost position) and the system is uncocked (cocking slide in rearmost position). To deactivate it, press the cocking slide slightly forward (approx. 1 cm) while pulling the bolt backward with the bolt-handle at the same time.

2.4 Caliber Change

There are three caliber groups (see section 2.4.1).

When changing the caliber within the same caliber group, merely the barrel and if necessary the magazine must be changed. (see section 2.4.2).

When changing the caliber from one caliber group to another, the bolt head, the barrel and the magazine must be changed. (see section 2.4.3).



DANGER

THE WEAPON (INCLUDING MAGAZINE) MUST BE UNLOADED BEFORE CHANGING THE CALIBER. CHECK WHETHER THE BARREL AND CARTRIDGE CHAMBER ARE EMPTY.



DANGER

THE CALIBER GROUP WHICH IS ENGRAVED ON THE BARREL AND THE BOLT HEAD (ABBREVIATION ACCORDING TO TABLE IN SECTION 2.4.1) MUST MATCH THE CALIBER YOU ARE USING.



DANGER

MAKE SURE THAT THE WEAPON IS UNCOCKED PRIOR TO EVERY BARREL AND/OR CALIBER CHANGE (COCKING SLIDE IN REARMOST POSITION).

ATTENTION

ON THE SIDES OF THE MAGAZINE THE CALIBERS WHICH CAN BE USED FOR THE RESPECTIVE MAGAZINE ARE ENGRAVED. THE CALIBER ENGRAVED ON THE BARREL MUST ALSO BE ENGRAVED ON THE MAGAZINE YOU ARE USING.

ATTENTION

ALWAYS HANDLE THE WEAPON WITH CARE WHEN DISASSEMBLING IT BECAUSE THE TOLERANCES AND FITTINGS ARE VERY NARROW.

2.4.1 Caliber groups

Mini (S)	Standard (ST)	Magnum (M)
.222 Rem.	6,5x55	7mm Rem. Mag.
.223 Rem.	.270 Win.	.300 Win. Mag.
	7x64	
	.308 Win.	
	.30-06	
	8x57 IS	
	9,3x62	

2.4.2 Caliber change within the same caliber group (without changing bolt head)

(1) Remove magazine from system case by pressing both magazine catches (Figure 4).

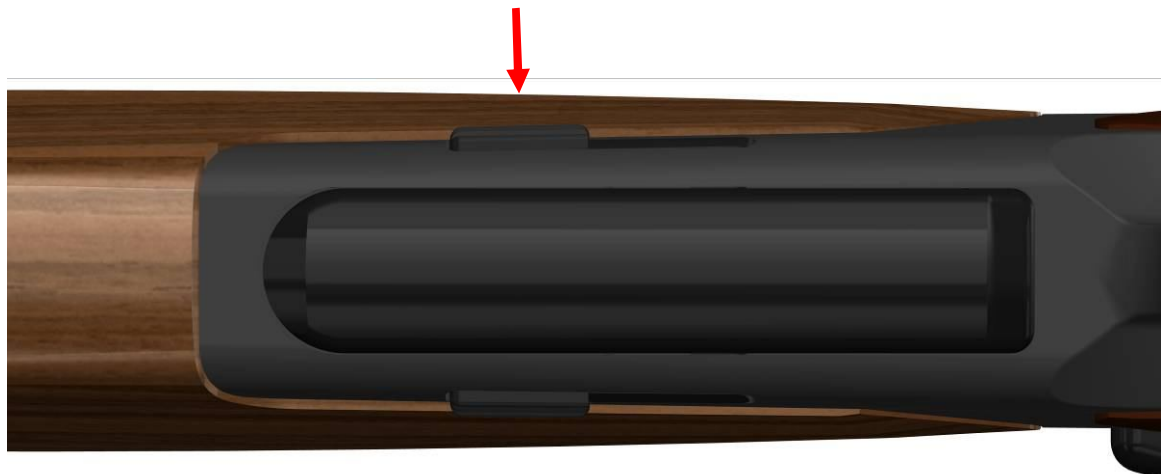


Figure 4

(2) Press button (1) at the forearm and simultaneously pull off forearm to the front (Figure 5).



Figure 5

1

(3) Pull bolt all the way back using the bolt handle (if necessary see section 2.3.3)

(4) Release barrel fastening by using clamping lever. (Figure 6)



Figure 6

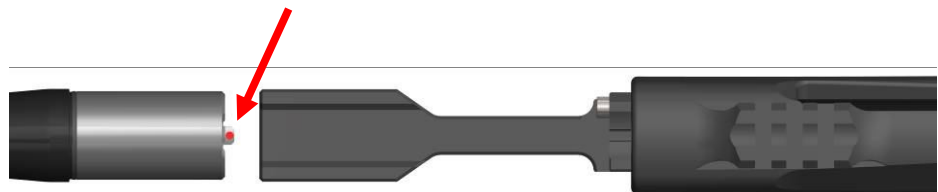
(5) Take off barrel to the front (bolt head remains in system). (Figure 7)



Figure 7

(6) Insert interchangeable barrel without bolt head (within the same caliber group); pay attention to positioning of the barrel. (Figure 8) Red dot on stud must point upward.

Figure 8



(7) Lock barrel fastening. (Figure 9)

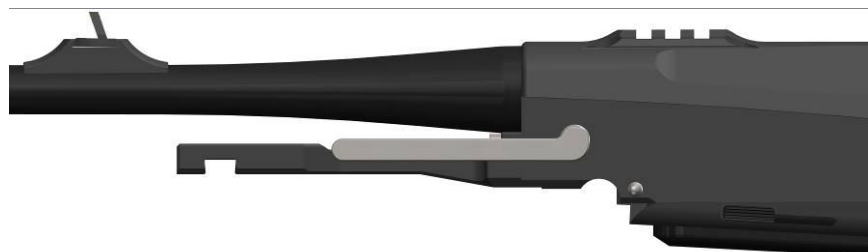


Figure 9



It is recommended to repeat the locking procedure of the barrel fastening several times (2 – 3 times) in order to reach an optimal barrel centering in the system case.

ATTENTION

THE CLAMPING LEVER MUST BE HORIZONTAL TO THE AXIS OF THE BORE (FIGURE 9).

- (8) Place forearm back onto barrel from front, the button must completely click into position. (Figure 10)



Figure 10

- (9) Push magazine back in until magazine catches click into place on both sides.

2.4.3 Caliber change with bolt head change



DANGER

MAKE SURE THAT THE WEAPON IS UNCOCKED PRIOR TO EVERY BARREL AND/OR CALIBER CHANGE (COCKING SLIDE IN REARMOST POSITION).

- (1) Remove magazine from system case by pressing both magazine catches (Figure 4).
- (2) Press push button at forearm and simultaneously take off forearm to the front. (Figure 5).
- (3) Push bolt all the way forward using the bolt handle.
- (4) Release barrel fastening using the clamping lever. (Figure 6)
- (5) Take off barrel with bolt head to the front. (Figure 11)

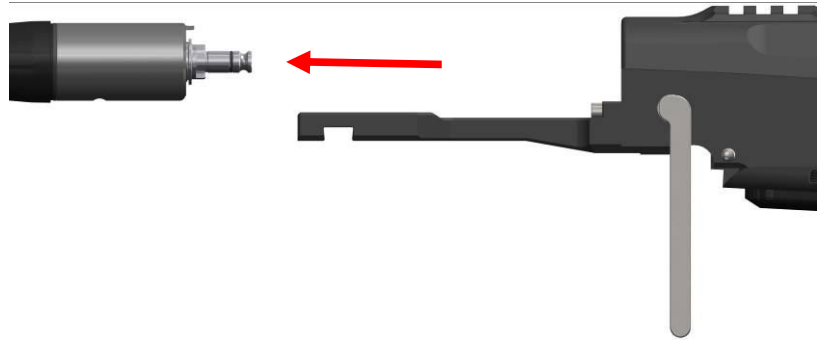


Figure 11

- (6) Insert bolt head into new barrel (pay attention to respective caliber group)
(Figure 12)
Bolt head is inserted correctly when the red marking of the bolt head is opposite of
the red marking of the barrel. (Figure 13)

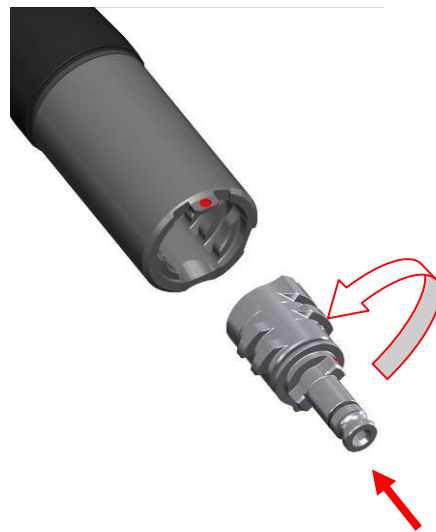


Figure 12



Figure 13

- (7) Insert new barrel with bolt head into casing. (Figure 14) Red dot on stud must
point upward.

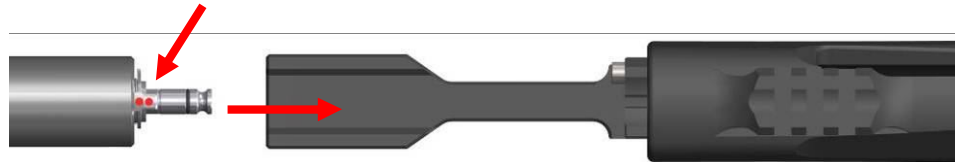


Figure 14

(8) Close barrel fastening. (Figure 9)



It is recommended to repeat the locking procedure of the barrel fastening several times (2 – 3 times) in order to reach an optimal barrel centering in the system case.

ATTENTION

THE CLAMPING LEVER MUST STAND HORIZONTAL TO THE AXIS OF THE BORE (Figure 9).

- (9) Place forearm on the barrel from the front; the button must completely click into place. (Figure 10)
(10) Insert magazine until magazine catches click into place on both sides.



If there is no bolt head in the system the bolt cannot be opened!



After changing the bolt head it is recommended to push the bolt handle shortly in the direction of the muzzle before opening the fastening for the first time.

2.5 Filling and Emptying of Magazine



DANGER

THE CORRECT CALIBER IS ENGRAVED ON THE BARREL.

ATTENTION

USE THE CORRECT MAGAZINE. THE CALIBER IS ENGRAVED ON THE MAGAZINE.

- In order to fill the magazine, the cartridges must be inserted individually, one after the other, from the front. The cartridge bottoms must touch the rear magazine wall.

- It is recommended to softly press the magazine follower downward at the back and to push the cartridges from the front under the magazine lips. (Figure 15)

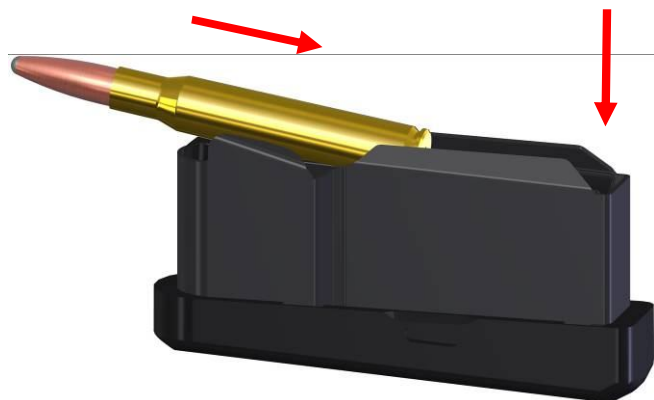


Figure 15

ATTENTION

MAKE SURE THAT THE LAST CARTRIDGE OF THE FILLED MAGAZINE BONDS ENTIRELY TO THE MAGAZINE LIPS.

- In order to empty the magazine, push out the cartridges individually toward the front of the magazine.



Magazine Capacity

Caliber group Mini: 4 cartridges
Caliber group Standard: 3 cartridges
Caliber group Magnum: 3 cartridges

Multiple Shots Magazine

5 cartridges

2.6 Loading the Weapon

**DANGER**

FOLLOW SAFETY INSTRUCTIONS IN SECTION 1.3.

**DANGER**

- MAKE SURE THAT THE MUZZLE IS ALWAYS POINTED IN A SAFE DIRECTION!
- NEVER ATTEMPT TO LOAD OR UNLOAD A WEAPON INSIDE OF VEHICLES, BUILDINGS, OFFICES OR OTHER CLOSED SPACES (WITH THE EXCEPTION OF PROPERLY ESTABLISHED SHOOTING RANGES). CLOSED SPACES HARDLY OFFER A SAFE DIRECTION IN WHICH TO POINT A WEAPON; AN UNINTENTIONAL DISCHARGE CAN ALWAYS RESULT IN SERIOUS INJURIES OR DAMAGES.
- BEFORE SHOOTING, MAKE SURE THAT THERE ARE NO ALIEN SUBSTANCES INSIDE OF THE BARREL.

**CAUTION**

BEFORE USING THE WEAPON, REMOVE OIL AND GREASE RESIDUES FROM THE CARTRIDGE CHAMBER AND THE BARREL.

**WARNING**

A LOADED WEAPON IS ALWAYS A POTENTIAL SOURCE OF DANGER. ONLY LOAD A WEAPON DIRECTLY BEFORE SHOOTING AND UNLOAD IT IMMEDIATELY AFTERWARDS.

- (1) Uncock the weapon as described in section 2.3.2.
- (2) Insert full magazine into the magazine well until both magazine catches click into place.



If the bolt is not pulled all the way to the back, the cartridge cannot set itself in front of the bolt head and cannot be inserted into the cartridge chamber.

- (3) Release the bolt lock as described in section 2.3.3 and open the bolt with the bolt handle and pull it back entirely until stop.
- (4) Push the bolt swiftly to the front until stop by using the bolt handle.



If the bolt is not pushed forward until it stops (i.e. the bolt is not fully locked), the firing system may be activated, however, the cartridge cannot ignite due to the MERKEL-Safe-Bolt-System.



The weapon is now loaded, locked and uncocked!

In order to use the full loading capacity, proceed according to the following steps:

- Uncock the weapon as described in section 2.3.2.
- Release the bolt lock as described in section 2.3.3 and open the bolt with the bolt handle und pull it back until stop.
- Insert a cartridge into the cartridge chamber manually.
- Close the bolt with the bolt handle and push it to the front until stop.
- Insert the filled magazine into the magazine well until both magazine catches click into place.



The weapon is now loaded, locked and uncocked!

2.7 Shooting

2.7.1 Preparing the rifle for firing



WARNING

BEFORE LOADING AND SHOOTING THE BARREL MUST BE DE-OILED WITH A DRY CLEANING WICK. FURTHER, IT MUST BE CHECKED WHETHER THE BARREL IS FREE FROM ANY ALIEN SUBSTANCES.

2.7.1.1 Functional checks

ATTENTION

PRIOR TO EACH SHOOTING YOU SHOULD MAKE THE FOLLOWING FUNCTIONAL CHECKS IN ORDER TO ENSURE FULL RELIABILITY DURING SHOOTING.

(1) Check bolt for mobility and function with loading procedure.

- Uncock weapon as described in section 2.3.2
- Push both magazine catches and remove magazine and load it with a dummy cartridge
- Insert magazine back into magazine well until both magazine catches click into place
- Cock the weapon as described in section 2.3.1
- Pull bolt back until stop by using the bolt handle
- Push bolt all the way forward until stop by using the bolt handle

The dummy cartridge must be fed into the barrel without any problems and the bolt must lock perfectly.

- Pull bolt all the way back until stop by using the bolt handle

The dummy cartridge must be extracted and ejected without any problems.

(2) Trigger and cocking function

- Uncock the weapon as described in section 2.3.2
- Remove magazine from system by pushing both magazine catches
- Cock the weapon as described in section 2.3.1
- Pull bolt all the way back until stop by using the bolt handle
- Push bolt forward until stop by using the bolt handle
- Uncock the weapon as described in section 2.3.2

The cocking slide must easily be moved into its locking positions.

- Pull trigger

The firing system must NOT be activated.

- Cock the weapon as described in section 2.3.1

The firing system must NOT be activated.

- Pull trigger

The firing system must be activated now.

- Uncock weapon as described in section 2.3.2

(3) Magazine

- It must be possible to manually move the follower downward in the magazine case. It must come back up freely by the follower spring.
- The magazine must not be stuck in the magazine well. It must sit securely in the system housing and it must be possible to release the magazine with the magazine catches.

(4) Trigger

- The adjustable fine direct trigger is pre-adjusted by the company for approx. 1000g. We recommend that corrections of the trigger adjustments should only be done by an authorized person.
- Check the functionality of the trigger regularly.
Dirt can lead to dysfunction.

2.7.2 Shooting



DANGER

FOLLOW THE SAFETY INSTRUCTIONS IN SECTION 1.3.



DANGER

- Always point the muzzle in a safe direction and take your finger off the trigger when cocking a weapon.
- Never carry around a loaded, unsecured weapon; nor leave it unattended. As soon as a weapon is unsecured, some light pressure onto the trigger suffices to cause a discharge. An unintentional discharge can happen when you stumble or fall, when you drop the weapon, or if the weapon is hit by something or set off by somebody else.
- Never fire a weapon as soon as a finger, hand, face or another part of the body is close to the ejection port or when one could be hit by the reverse movement of the bolt action.
- Make sure that nobody is standing on that side where they could be hit by ejected cartridge casings. The casing is hot and can be ejected at a speed which suffices to produce a burn or cut, or injure the unprotected eye. Consequently, make sure that there is sufficient room for the safe ejection of cartridge casings. Do not forget that the casing can bounce off any object nearby and hit you or another person.
- As soon as ANY mechanical failure or jamming of the weapon occurs while shooting, if it "spits out" powder gas, if the cartridge casings are dented or cracked, or if the muzzle blast does not appear to be right, STOP SHOOTING AT ONCE! Further shooting can be dangerous. UNLOAD THE WEAPON and DO NOT attempt to fire off another shot.
Have the weapon and the ammunition checked by an authorized gunsmith or by our company.

- Incidents in which the barrel swells near the muzzle or bursts are surprisingly frequent. In practically all cases this is the result of careless handling, when soil, snow or plant remains get into the muzzle and clog up the bore. As soon as the muzzle of your weapon comes into contact with soil or when you have reason to believe that foreign substances are in the muzzle, you must unload the weapon and look into the barrel from the rear. It is not enough to glance into the muzzle, because dirt, snow, etc. may have gotten farther into the barrel where it is not easy to determine.

As soon as there is anything inside the barrel that could potentially cause malfunction, it must be thoroughly cleaned before trying to shoot. Never attempt to shoot such foreign substances out! Shooting a weapon with a clogged bore can cause the barrel to explode and severely hurt you or other persons nearby.

Load the weapon according to the instructions in section 2.6.



The weapon is now loaded, locked and uncocked.



DANGER

AFTER YOU HAVE TAKEN AIM OF YOUR TARGET MAKE SURE THAT YOU ARE AWARE OF ITS SURROUNDING AND WHAT IS BEHIND IT. THIS WAY YOU CAN PREVENT DANGERS OF ANY KIND.

After taking aim of your target you can cock the weapon as described in section 2.3.1.

By pulling the trigger you can fire a controlled, precise shot.



WARNING

THE WEAPON'S RECOIL CAN CAUSE SERIOUS INJURIES:

- PULL THE WEAPON FIRMLY AGAINST YOUR SHOULDER WHEN FIRING.
- KEEP YOUR EYES AT LEAST 6 CM AWAY FROM THE SCOPE WHEN FIRING.

Pull the bolt all the way back until stop by using the bolt handle.



The fired cartridge case will be ejected now.

Push the bolt all the way forward until stop by using the bolt handle.



The weapon is now loaded, locked and cocked.

Now, you may take aim again and fire another shot.



DANGER

WITH EVERY REPEATING PROCEDURE THE FIRING SYSTEM IS AUTOMATICALLY COCKED AGAIN. THEREFORE, THE WEAPON IS READY FOR SHOOTING DIRECTLY AFTER EACH REPEATING PROCEDURE. THE WEAPON MUST BE UNCOCKED DIRECTLY AFTER SHOOTING.

2.8 Unloading the Weapon



DANGER

MAKE SURE THAT THE MUZZLE IS ALWAYS POINTED INTO A SAFE DIRECTION! NEVER ASSUME THAT YOUR RIFLE IS UNLOADED UNLESS YOU HAVE CONVINCED YOURSELF OF IT.

- Uncock the weapon as described in section 2.3.2
- Press magazine catches and remove magazine
- Release the bolt lock as described in section 2.3.3 and pull the bolt all the way back until stop by using the bolt handle
- Check whether the cartridge chamber is empty
- Push the bolt all the way forward until stop by using the bolt handle



DANGER

DO NOT FORGET TO CHECK THE CHAMBER WHETHER THE WEAPON IS INDEED UNLOADED.



The weapon is now uncocked and unloaded.

3 Disassembly / Assembly of the Weapon

3.1 Disassembly into Components



DANGER

BEFORE DISASSEMBLING THE WEAPON IT MUST BE UNLOADED. IT MUST BE CHECKED WHETHER THE BARREL AND THE CARTRIDGE CHAMBER ARE EMPTY.



CAUTION

ONLY DISASSEMBLE THE WEAPON TO THE EXTENT DESCRIBED IN THIS MANUAL.

Initial state:

- Weapon unloaded
- Bolt locked (bolt handle in foremost position)
- Weapon uncocked (cocking slide in rearmost position)

- (1) Remove magazine from system by pressing both magazine catches (Figure 4).
- (2) Press push button (Figure 5) and pull off forearm to the front.
- (3) Pull back bolt until stop by using the bolt handle (if necessary see description in section 2.3.3)
- (4) Release barrel fastening with clamping lever. (Figure 6) Take off barrel to the front.

ATTENTION

WHEN DISASSEMBLE THE WEAPON, ALWAYS ACT WITH CARE AND ACCURACY BECAUSE THE TOLERANCES AND FITTINGS ARE VERY NARROW.



We recommend that further disassembly works should be done by a gunsmith.

(5) Removing buttstock
Break through the butt plate with an allen key (SW5) and loosen the butt screw.
(Figure 16)



Figure 16

Pull off buttstock to the back. (Figure 17)



Figure 17

(6) Separating upper and lower system parts
Remove both cylindrical pins (Figure 18) from the system.

ATTENTION

MAKE SURE – BEFORE REMOVING THE CYLINDRICAL PINS – THAT THE BOLT IS LOCKED (BOLT HANDLE IN FOREMOST POSITION) AND THAT THE COCKING LEVER IS IN ITS REARMOST POSITION.

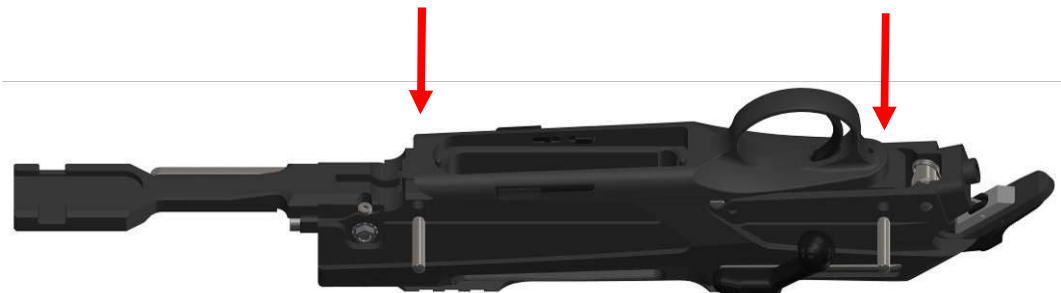


Figure 18

Separate the upper system part from the lower system part. (Figure 19)

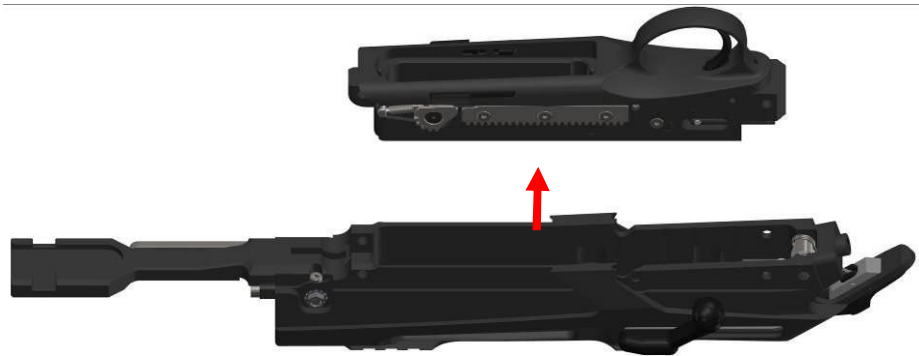


Figure 19

(7) Put bolt handle into rearmost position and manually push the bolt carrier (1) to the rear (Figure 20) until bolt head (2) lies open (Figure 21).

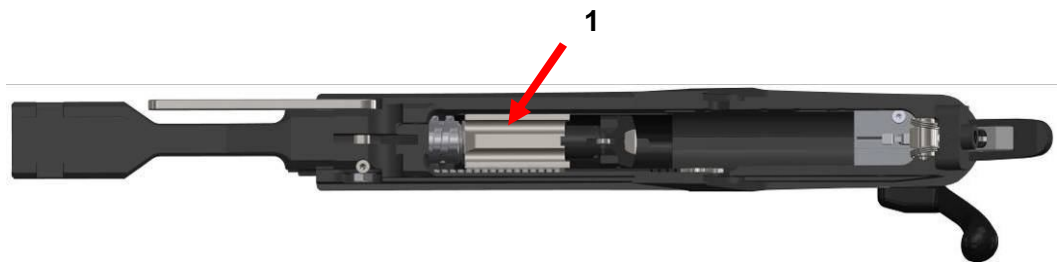


Figure 20

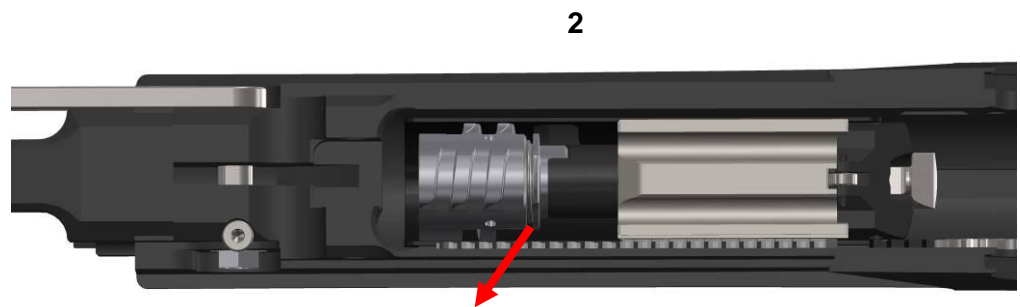


Figure 21

(8) Take bolt carrier with bolt head out of upper system part. (Figure 22)



Figure 22

3.2 Assembly of Components

The assembly of the components is done in reverse order than the disassembly (see section 3.1).

- (1) Insert the bolt into upper system part
Before inserting the bolt has to be unlocked (control bolt (1) and slot nut (2) have to point into same direction). (Figure 23)

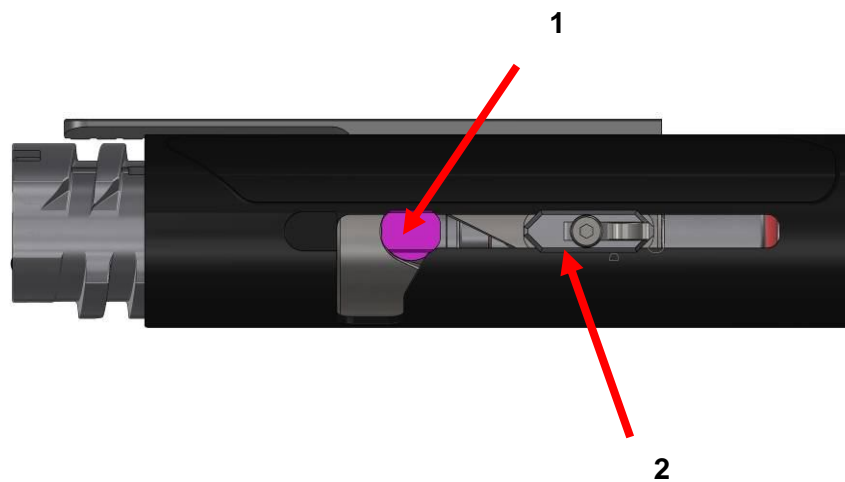


Figure 23

Before inserting the bolt, the bolt handle must be in its rearmost position.
(Figure 24)

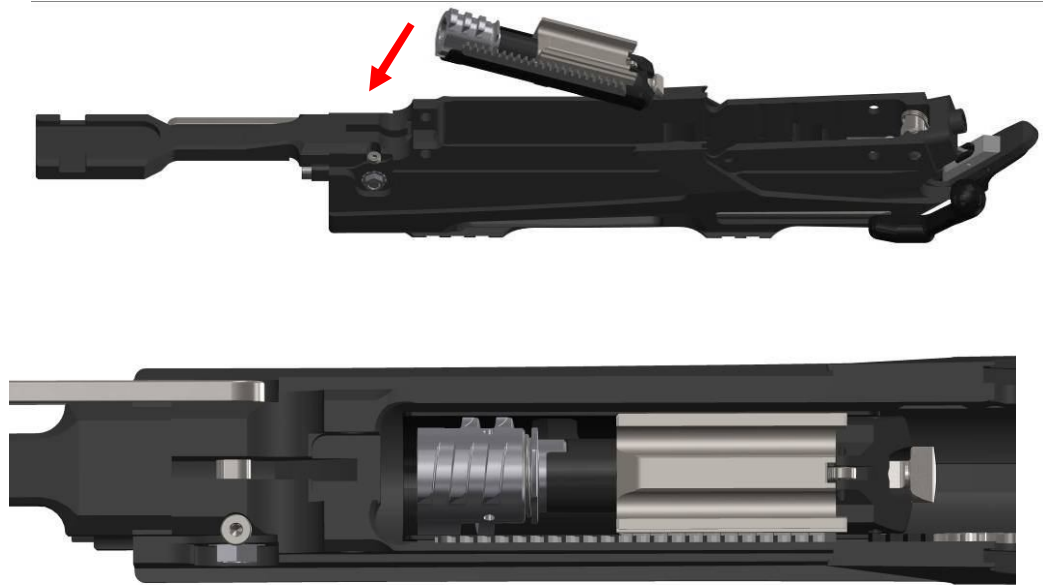


Figure 24

(4) Push the bolt into locked position. (Figure 25)

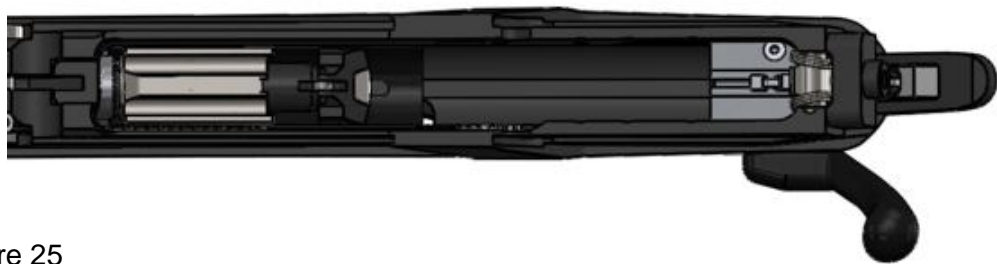


Figure 25

(5) Push the bolt handle into foremost position. (Figure 26)

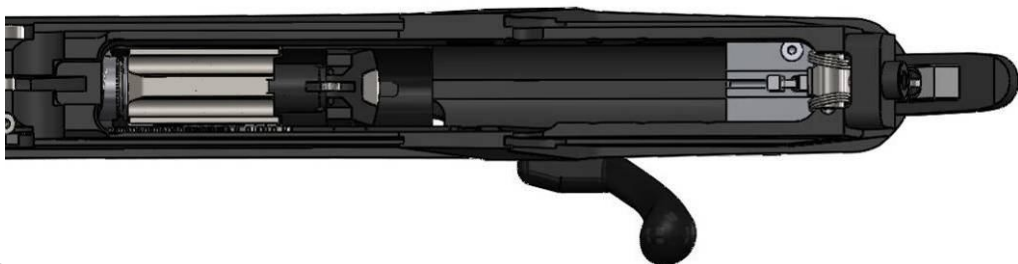


Figure 26

(6) Insert lower system part into upper system part. (Figure 27)

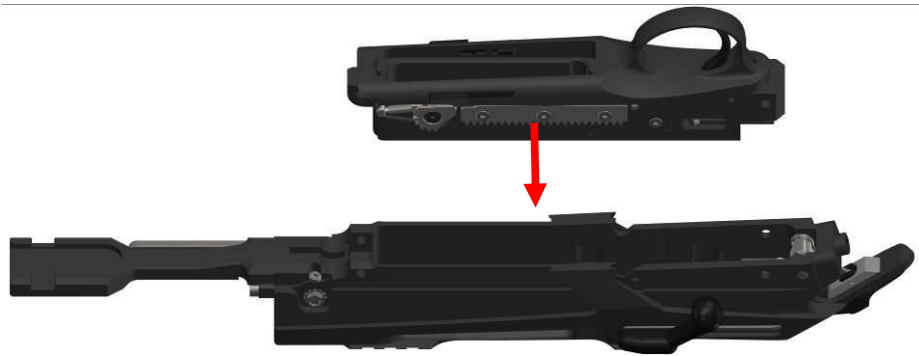


Figure 27

ATTENTION

DO NOT TRY TO INSERT THE LOWER SYSTEM PART INTO THE UPPER SYSTEM PART BY USING FORCE. THE DRILLED HOLES MUST BE CONGRUENT.

(7) Connect upper and lower system parts with cylindrical pins. (Figure 28)

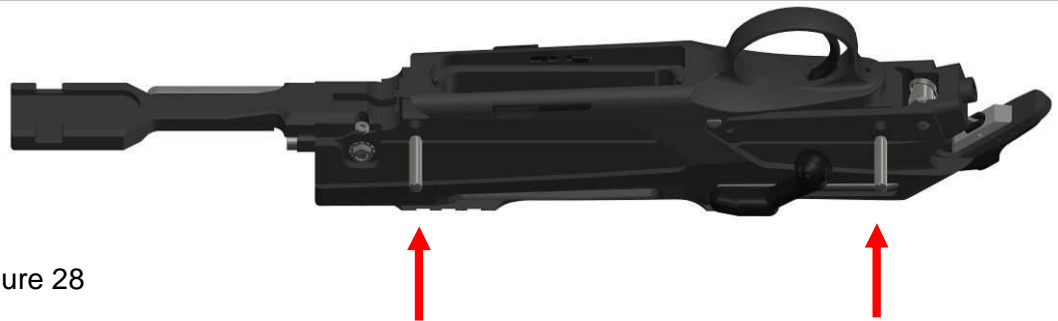


Figure 28

(8) Push buttstock onto the system and screw it tight with allen key (SW5). (Figure 29)



- (9) Insert magazine until it clicks into place.
- (10) Open the bolt (put bolt handle into rearmost position).
- (11) Insert barrel without bolt head; watch the correct positioning of the barrel.
Red dot on stud must point upwards. (Figure 30)

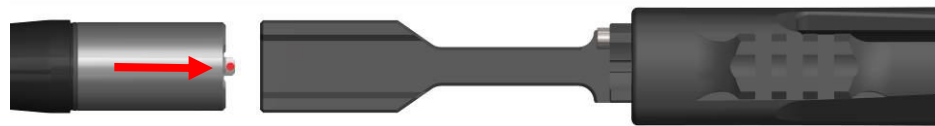


Figure 30

- (12) Close barrel fastening. (Figure 9)



It is recommended to repeat the locking procedure of the barrel fastening several times (2 – 3 times) in order to reach an optimal barrel centering in the system case.

ATTENTION

THE CLAMPING LEVER MUST STAND HORIZONTAL TO THE AXIS OF THE BARREL (FIGURE 9).

- (13) Mount forearm. (Figure 10)

4. Shooting Performance

We produce our barrels according to most modern manufacturing techniques using high-strength steel. But the accuracy depends on and may be influenced by a number of factors.

The most important influencing factor is the ammunition you use.



Principally, use the kind of ammunition given in the gun–passport for checking the accuracy of your weapon. In case this ammunition is not available, substantial differences concerning the shooting performance are possible. Also, ammunition of equal brand and equal filling can show a differing accuracy and point of impact from weapon to weapon.

Another important factor which has a strong influence on the accuracy of your weapon is the scope you choose. Therefore, you should have the same high demands on the quality of the scope and scope mount as on the quality of the weapon itself.



If a scope is mounted later on (not by the manufacturer) the weapon has to be newly adjusted and test fired again.

Only when you are using optimal ammunition, scope and a suitable scope mount we guarantee excellent shooting performance of our weapons.

Complaints concerning the accuracy of the weapon have to be sent in written form within 1 month after purchase. If a complaint turns out to be unwarranted, we reserve the right to charge you for any extra costs incurred.



Ask our customer service for a special firing and cooling rhythm which is necessary for certain kinds of our weapons.



Removing the barrel from the system may cause a minimal change in the weapon's point of impact.

5. Scope Mount

The receiver is prepared for the installation of a Picatinny-mount. This mount preparation guarantees highest accuracy and efficiency and absolute repeatability after removing and re-mounting of scopes.



The test fired scope must always be mounted in the same position.



When using a Weaver-mount it must be ensured that before clamping the mount, the mount is positioned in direction of firing when attached.

6. Maintenance and Cleaning



CAUTION

NEVER DISASSEMBLE THE WEAPON FURTHER THAN DESCRIBED IN THIS MANUAL.



DANGER

WEAPON MUST BE UNCOCKED AND UNLOADED BEFORE DISASSEMBLY.

ATTENTION

INAPPROPRIATE CLEANING AGENTS CAN DAMAGE THE WEAPON. THEREFORE, ONLY USE PRESERVATIVE AND CLEANING AGENTS WHICH ARE SUITABLE FOR WEAPONS. THESE ARE AVAILABLE IN SPECIALIZED SHOPS. DO NOT USE ANY METALLIC OBJECTS NOR ANY PLASTICS (NYLON, PERLON, ETC.) TO CLEAN THE WEAPON.

All weapons require regular maintenance, cleaning and inspection, which may lead to the necessity of readjustment or repair. Have the weapon inspected regularly by an

authorised dealer or the manufacturer even if it seems to be in best shape. Broken parts, insufficient function, excessive strain or corrosion of some parts are not necessarily obvious during an external check. In case of ANY mechanical failure do not use the weapon anymore. UNLOAD the weapon and send it to an authorised dealer or to the manufacturer immediately.

ATTENTION

IMMEDIATELY AFTER USING THE WEAPON THE BARRELS MUST BE CLEANED THOROUGHLY IN ORDER TO REMOVE ALL BURNING RESIDUES OF THE GUN POWDER.

AFTER THAT THE INSIDE OF THE BARREL SHOULD BE OILED LIGHTLY. ALL EXTERNAL STEEL PARTS HAVE TO BE DRIED AND OILED LIGHTLY. PARTICULAR ATTENTION HAS TO BE PAID TO ALL SLIDING PARTS.

6.1 Storing the Weapon



DANGER

FOLLOW THE NATIONAL REGULATIONS FOR THE STORAGE OF WEAPONS AND AMMUNITION.

ATTENTION

NEVER STORE YOUR WEAPON IN COCKED STATE.

7 Warranty

The MERKEL Jagd- und Sportwaffen GmbH meets the highest quality requirements. That is why we extend the warranty period for the first purchaser of the weapon to **3 years** from purchase date including the legal warranty period. After expiration of legal warranty we can further guarantee for all metal and plastic parts of the weapon which show deficiencies due to material or processing defects. This guarantee will only be fulfilled due to legal regulations for rectification works.

Conditions for acceptance of warranty claims are:

- report of defect within one month after its detection
- receipt of the warranty certificate which is attached to this manual **within 14 days after purchase**
- qualified assessment and decision by the manufacturer.

We reserve the right to charge for any ensuing costs should the warranty claim prove to be unjustified.

8 Packaging / Shipping

If you want or have to ship your weapon, use appropriate packaging. If required, the packaging is available in special retail shops or from the manufacturer.



WARNING

BEFORE SHIPPING THE WEAPON MAKE ABSOLUTELY SURE THAT THE WEAPON IS UNLOADED.



Always ship weapon and ammunition separately. Follow national regulations for the shipping of weapons and ammunition.

MERKEL Warranty Card

Model: Firearm no.: Caliber:

MERKEL Jagd- und Sportwaffen GmbH grants a 5-year warranty for this firearm from the date of purchase (see warranty conditions).
By signing this card, the owner confirms that he/she is familiar with the use of this firearm and that he/she has read and understood and accepts this instruction manual and all safety instructions stated herein.

Name of buyer: Date of purchase:

Vendor:

Date:

Signature:

Please return the completed and signed warranty card to us within 14 days after purchase.

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