



USER MANUAL

Over & Under Shotgun

303E

Over & Under Combination Gun

313E

Over & Under Double Rifle

323E

Over & Under Shotguns

2000C / 2001C / 2002C / 2003C

Over & Under Combination Guns

2010D / 2011D / 2012D

Over & Under Double Rifles

2020D / 2021D / 2022D

MERKEL

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Merkel Warranty Card

1 General

Waidmannsheil!

Thank you for choosing one of our products.





Owning a Merkel over and under rifle, you have chosen a precise hunting weapon, which combines tradition and innovation in one.

1.1 How to use this manual

1.1.1 General

Read this manual thoroughly before using the weapon.
Any instructions and explanations in this manual are to be followed exactly.

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 in case of improper use or 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) scopes 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 must be returned to the manufacturer or send to an authorized service centre for further proceedings.

1.3 Safety regulations

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

1.3.1 Safety instructions 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.

Non-compliance, 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 can have 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 Securing

- 1.) Your weapon is equipped with an effective and well constructed safety mechanism.



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 breech mechanism does not extract and eject an empty casing,
- unburned grains of propellant are found dispersed in the breech 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 breech 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

Over and under rifles have the highest utility value among hunting weapons because they offer a variability concerning their construction which accounts for many requirements.

The Suhler product range contains:

- over and under rifles for small game hunts
- over and under rifles for sport shooting (trap, skeet shooting and parcours)
- rifle shotguns for mixed hunts (small and big game)
- over and under shotguns for big game hunts
- combination weapons (1 rifle with one or more interchangeable barrels)

This weapon type offers advantages concerning the handling which turn the over and under guns into the preferred version of hunting weapons.

3 main criteria prove this:

1. The high and narrow shaft allows for excellent directing of the weapon and protects the lead hand from touching the barrels (hot from shooting or cold).
2. As a result of the vertical arrangement of the barrels the weapon has a narrow build, which allows for a great field of vision while only one barrel is used to take aim.
3. Jumps are very few because the vibrations of the muzzle during firing are only on the vertical level.

Due to these advantages over and under shotguns are generally used in international clay pigeon shooting competitions (except for some self-loading shotguns, which are used for skeet shooting).

Since more and more hunters check their shooting skills (hunting practice shooting) at the clay pigeon shooting range, the over and under guns as hunting sports universal version are the right weapon for actual hunting requirements. If it is even equipped with over and under shotgun interchangeable barrel or rifle shotgun interchangeable barrel it will be the ideal equipment of the passionate hunter.



The following information for o&u 2000C also refer to o&u 2001C and o&u 2002C. Similarly, information for shotgun 2010D refers also to shotgun 2011D, shotgun 2012; and information about o&u 2020D refers also to o&u 2021D, o&u 2022D. O&u 303E and 2003C as well as shotgun 313E and o&u 323E will be described separately.

Version	Barrels						
	Basic Caliber	Caliber	Barrel length (mm)	Choke	Ejector	Sights	Prep. sight mount
o&u 303E	12;20	12/70; 12/76 16/70; 20/76 28/70	710 (12 u. 16) 680 (20 u. 28)	combination acc. delivery program (steel shot optional)	separate striker piece ejectors	bead sight	
o&u comb. gun 313E		12/76; 20/76 rifle caliber acc. delivery program	600	1/2; 1/1 (1/2 only with steel shot)		foldable front sight	
o&u 323E		acc. delivery program				fixed sight	
o&u 2000C	12;20	12/76 16/70; 20/76 28/70; 36/76	710 (12; 16; 36) 680 (20 u. 28)	combination acc. delivery program (steel shot optional)	separate coil spring ejectors	bead sight	
o&u 2001C							
o&u 2002C							
o&u 2003C		12/76					
o&u comb. gun 2010D	12;20	12/76; 20/76 rifle caliber acc. delivery program	600	1/2; 1/1 (1/2 only with steel shot)	separate coil spring ejectors	foldable front sight	
o&u comb. gun 2011D							
o&u comb. gun 2012D							
o&u 2020D	20	acc. delivery program	600		separate coil spring ejectors	fixed sight	
o&u 2021D							
o&u 2022D							
o&u 2021 Safari		.375 H&H Mag.				express-sight with 3 flaps	foldable mount
o&u 2022 Safari		.470 N.E.					

	System				
Version	Bolt	Lock	Cocking	Trigger	Securing
o&u 303E	Kersten cross bolt system with double barrel lug locking	removable side locks	auto-cocking by clamping lever	double trigger with joint on front trigger	manual or automatic trigger safety and sear rods
o&u comb. gun 313E				double trigger with set trigger in front trigger	
o&u 323E					
o&u 2000C	Kersten cross bolt	modified Anson-Deeley locks	auto-cocking by pushing rods	length adjustable, selective single trigger	manual/automatic trigger safety and catches
o&u 2001C		and side plates			
o&u 2002C		removable side locks		double trigger	manual/automatic trigger safety and sear rods
o&u 2003C					
o&u comb. gun 2010D	Kersten cross bolt	modified Anson-Deeley locks	double cocking (auto and manual cocking)	length adjustable, selective single trigger with set trigger	manual trigger safety and catches
o&u comb. gun 2011D		and side plates			
o&u comb. gun 2012D					
o&u 2020D	Kersten cross bolt	modified Anson-Deeley locks	double cocking (auto and manual cocking)	length adjustable, non-selective single trigger without set trigger	manual trigger safety and catches
o&u 2021D		and side plates			
o&u 2022D		modified Anson-Deeley locks	auto-cocking by pushing rods	double trigger with joint in front trigger	
o&u 2021 Safari		and side plates			
o&u 2022 Safari					

Version	Stocks		
	Buttstock	Front stock	Wood class from
o&u 303E	pistol grip with German cheek piece	three-part	7
o&u comb. gun 313E	pistol grip with German cheek piece and hog's back comb		
o&u 323E			
o&u 2000C	pistol grip with German cheek piece	one-piece	2
o&u 2001C			4
o&u 2002C		three-part	5
o&u 2003C			6
o&u comb. gun 2010D	pistol grip with German cheek piece and hog's back comb	one-piece	2
o&u comb. gun 2011D			4
o&u comb. gun 2012D		three-part	5
o&u 2020D	pistol grip with German cheek piece and hog's back comb	one-piece	2
o&u 2021D			4
o&u 2022D		three-part	5
o&u 2021 Safari	pistol grip with German cheek piece	one-piece	4
o&u 2022 Safari		three-part	5

2.1.1 Main parts (Figure 1)

1. Barrel
2. Forearm
3. System with buttstock

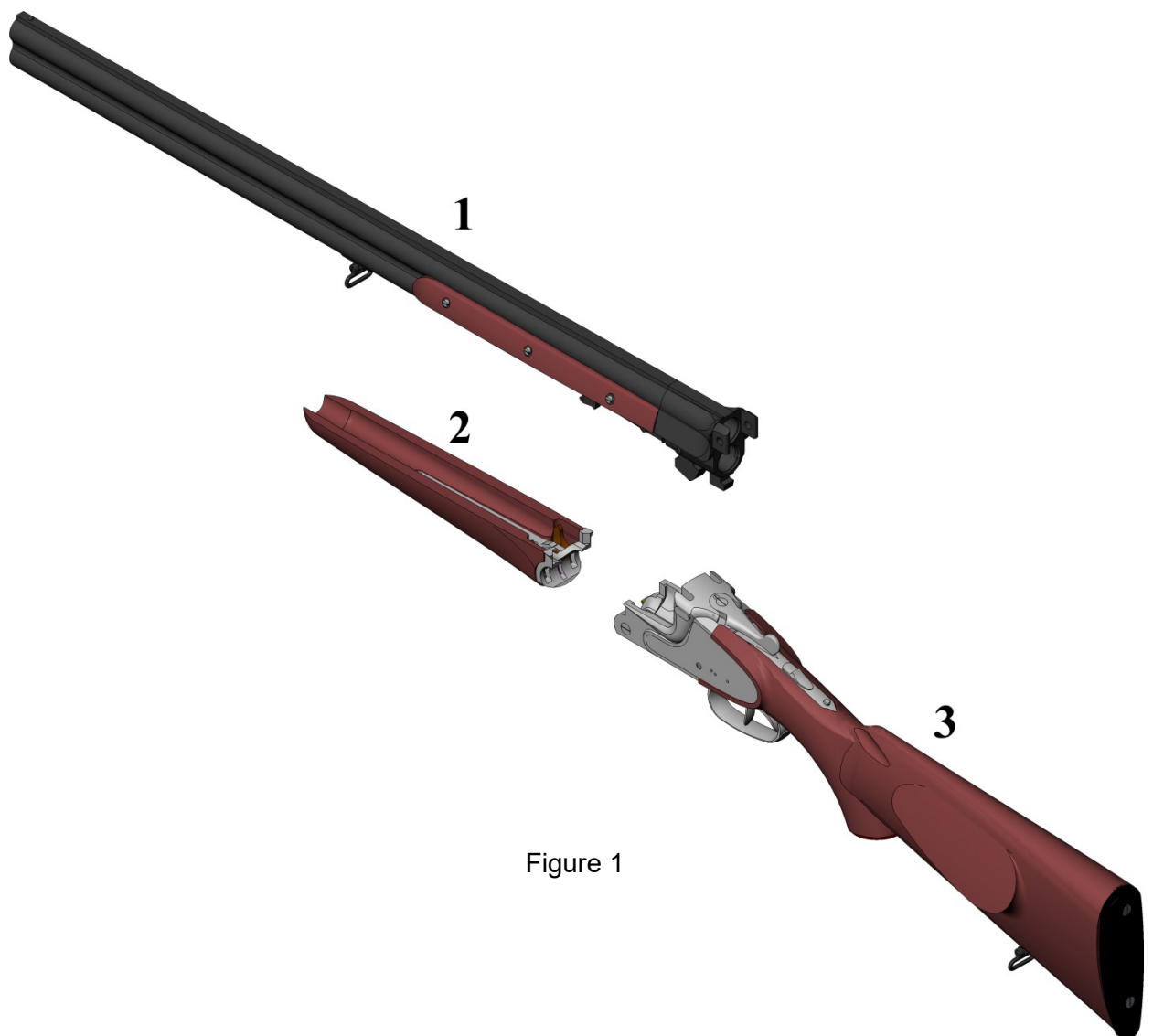


Figure 1

2.2 Assembly

The manufacturer will always send the weapons in disassembled condition as follows:

- Barrel with attached forearm
- Receiver with buttstock

Assembly of the weapon is done in the following order:

2.2.1 Removing forearm from barrel (Figure 2)

In order to remove the forearm, take the barrel (1) into your left hand. Then open the snapper (2) with the index finger of your right hand to take off the forearm with a light pull.

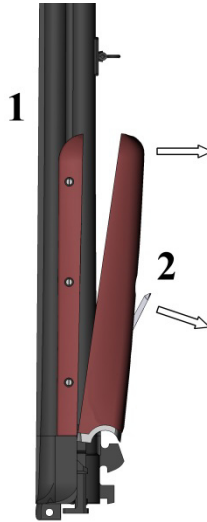


Figure 2

2.2.2 Inserting barrel into receiver (Figure 3)

If you possess a version with coil spring ejectors, the cartridge slides are pushed out of the recoil plate of the barrel to their limits by spring pressure.

If you possess a version with hammer ejectors, the cartridge slides must be pushed out by hand (Figure 4)

Hold the barrel (1) behind the hook piece with your left hand and mount it by placing the hinge roundings onto the hinge pin in the receiver (2). While doing so, press the receiver against the barrel with the index finger of your left hand. Open the locking lever (3) with the thump of your right hand until the lever is stopped by the locking device.

Push the receiver against the barrel until contact. Make sure that the cartridge slides lugs (4) are set in the notches of the receiver and that the cartridge slides are pushed forward. As soon as the receiver is set against the barrel completely, the locking device releases the locking lever, which must be positioned in the center of the receiver plate to be in firing position; if necessary push by hand.



Figure 3

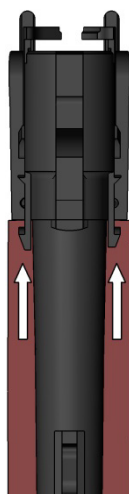


Figure 4

2.2.3 Attaching forearm (Figure 6)

In order to attach the forearm take the rifle into your left hand and place it, shaft first, carefully onto a smooth surface that will not cause scratches. The trigger guard is pointing to the right, muzzle upward.

When attaching the one-piece forearm, be careful to move it over the cartridge slides endings against the hinge (versions 2000C, 2010D, 2020D). (Figure 5).

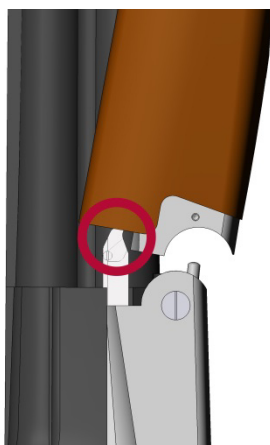


Figure 5

In general, pay attention that the endings of the pushing rods and clamping lever respectively must be inserted into the designated slots of the forearm.

Then push the forearm onto the barrel completely; if necessary give a light hit with the base of your thumb below the snapper for full contact (1).

Make sure that the snapper is sunk completely into the deepening of the snapper housing, if necessary push in (2).

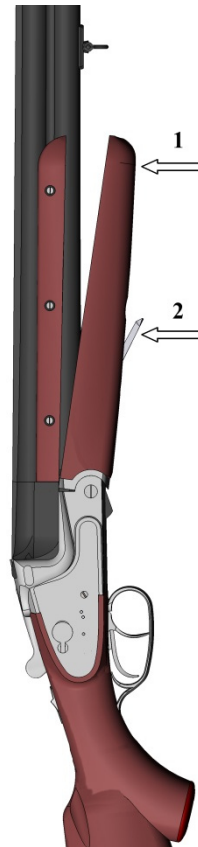


Figure 6

2.3 Cocking and loading the weapon



DANGER

FOLLOW THE 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 (EXCEPT FOR PROPERLY ESTABLISHED SHOOTING RANGES). CLOSED SPACES HARDLY OFFER A SAFE DIRECTION IN WHICH THE WEAPON CAN BE AIMED; AN UNINTENTIONAL DISCHARGE CAN ALWAYS RESULT IN SEVERE INJURIES OR DAMAGES.
- MAKE SURE BEFORE SHOOTING THAT THERE ARE NO ALIEN SUBSTANCES INSIDE THE BARREL.



CAUTION

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



WARNING

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



DANGER

NEVER RELY ENTIRELY 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!

For cocking the locks, the rifle must be opened. Take hold of the piston neck with your right hand and take the forearm into your left. The muzzle is pointing forward and slightly down.

Your right thumb opens the receiver by turning the locking lever to the right.

Tilt the receiver with shaft downward with your right hand until noticeable stop. Insert the cartridges into the cartridge chamber of the slightly downward tilted barrel. Then move the receiver with shaft back until full contact with barrel.

The locking lever must be in initial position, if necessary close by hand completely.

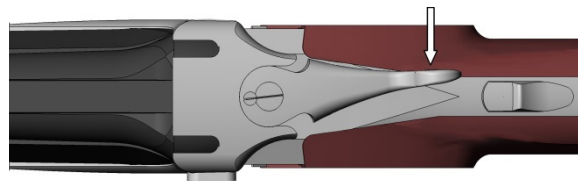


Figure 7

If you own a version with a hand-cocking system, the locks are cocked immediately before firing a shot by pushing the cocking lever (1) into front position until the locking button (2) stands out of cocking lever and holds the latter in its position (Figure 8).

For automatic cocking of the locks on a version with hand-cocking system the cocking lever must be in front position when opening the weapon.

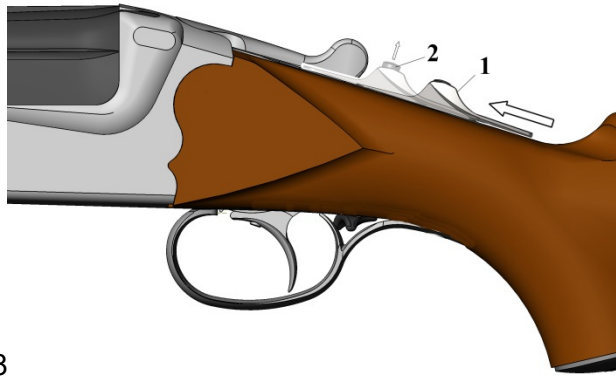


Figure 8



The weapon is now loaded and cocked.



DANGER

BEFORE LOADING THE WEAPON MAKE SURE THAT THE BARRELS ARE FREE FROM OIL OR ANY ALIEN SUBSTANCES! DO NOT SLAM SHUT THE WEAPON, DO NOT USE FORCE! ONLY USE APPROPRIATE AMMUNITION APPROVED FOR THE WEAPON AS STATED ON ITS BARREL!

2.4 Safety mechanism



DANGER

FOLLOW THE SAFETY INSTRUCTIONS IN SECTION 1.3.2.

The safety slide is on top of the piston neck. Securing the weapon is done by hand: by pushing back the safety slide. When the safety slide is in the rearmost position and the "S" in front of the safety slide is visible: now the weapon is "safe". (Figure 9)
If you own a version with an automatic safety mechanism, the system is secured by opening the receiver.

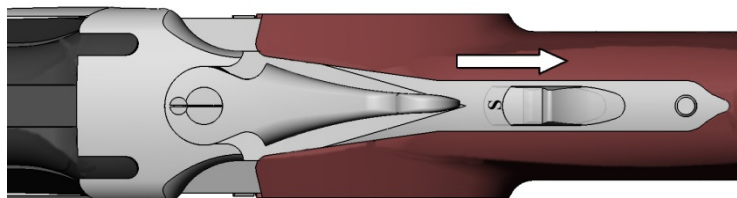


Figure 9

For releasing the safety mechanism, you must push the safety slide to the front by hand.

If you own a version with hand-cocking system the weapon is secured when the cocking lever is in rear position. Uncocking is described in section 2.10.

2.5 Preparation for shooting

2.5.1 Preparing the firearm for shooting



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.

2.5.2 Functional Checks

ATTENTION

PRIOR TO EACH LOADING AND FIRING, YOU SHOULD RUN THE FOLLOWING FUNCTIONAL CHECKS IN ORDER TO ENSURE FULL FUNCTIONAL RELIABILITY DURING SHOOTING.

(1) Check breech for mobility and functionality using loading procedure.

- open weapon
- insert snap caps into weapon
- close weapon

The weapon must close without any difficulties.

(2) Trigger and cocking function.

- pull the trigger when weapon is in secured ("safe") state (versions with hand-cocking system: cocking lever in rear position)

When pulling the triggers, the firing pin must not be activated.

- disengage the safety (versions with hand-cocking system: cocking lever in front position)

It must be possible to activate the safety slide and cocking lever. The firing pin must not be activated while doing so.

- pull the trigger

This must activate the firing pin.



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 breech action (or the bolt).
- 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 hurt you or other persons nearby.

2.6 Trigger systems

2.6.1 Over and under shotgun

2.6.1.1 Over and under shotgun 2000C

The standard version is equipped with a single trigger without selector. The order of shots is lower/upper barrel.

Optional possibility for selective single trigger or double trigger.

The selective single trigger can be operated by a selector switch behind the trigger. The order of shots is lower/upper barrel if the selector switch is positioned to the right. (Figure 10)

If the selector switch is positioned to the left, the order of shots is upper/lower barrel. (Figure 11)

With the optional double trigger, the front trigger activates the lower barrel and the back trigger activates the upper barrel.

Figure 10

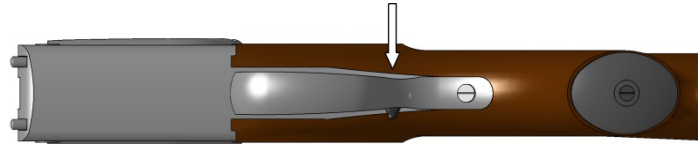
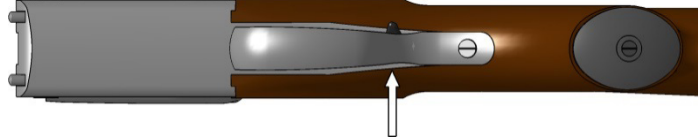


Figure 11



2.6.1.2 Over and under shotgun 2003C

The 2003C is generally equipped with a double trigger. The front trigger activates the lower barrel and the back trigger activates the upper barrel.

2.6.1.3 Over and under shotgun 303E

The 303E as standard version is equipped with a double trigger with hinge at the front trigger. The front trigger activates the lower barrel and the back trigger activates the upper barrel. The hinged trigger prevents the front trigger from hitting the index finger when using the back trigger to fire a shot.

On request, the weapon can be equipped with a single trigger (Figure 12) with or without selector. For the non-selective single trigger, the order of shots is lower/upper barrel.

The selective single trigger can be switched by using the selector slide next to the trigger. Order of shots is lower/upper barrel if selector slide is in front position. If selector slide is in rear position, the order of shots is upper/lower barrel.

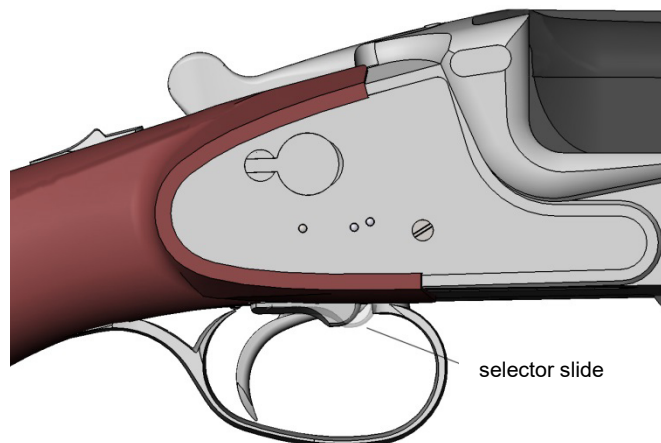


Figure 12

2.6.2 Over and under combination shotguns

2.6.2.1 Over and under combination gun 2010D

The standard version is equipped with a single trigger, which is adjustable in length, with selector and rear set trigger (Figure 13). The order of shots can be chosen as with the over and under shotgun 2000C (selector same as 2.6.1.1.).

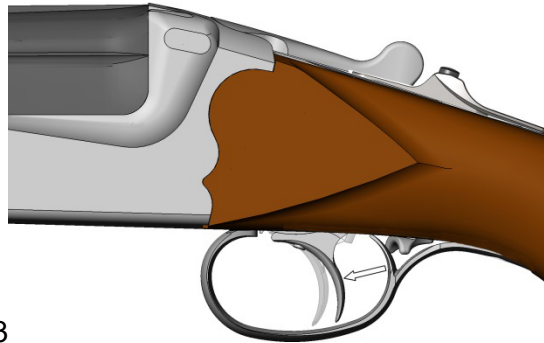


Figure 13

The position of the trigger handle can be changed in order to adjust the optimal length of the handle. Three positions are available. For adjustment, unscrew the screw with an allen key (SW1.5), change the position of the trigger handle and screw the screw back into the corresponding drilled hole. (Figure 14)

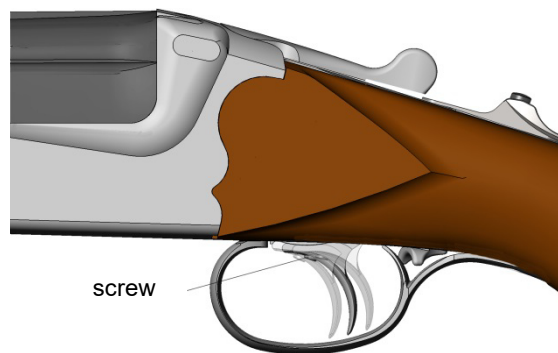


Figure 14

On request, a double trigger with rear set trigger on front trigger (Figure 15) for the rifle barrel is possible. The function of the set trigger is explained in section 2.8.

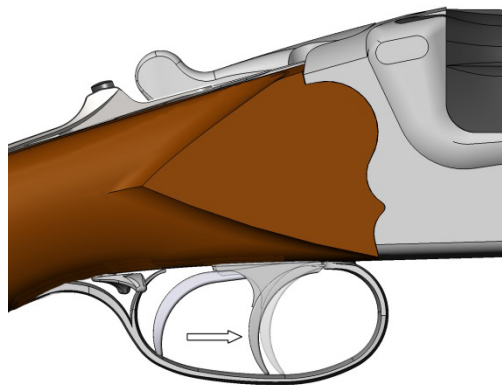


Figure 15

2.6.2.2 Over and under combination gun 313E

As standard version the over and under gun is equipped with a double trigger with rear set trigger on the front trigger (Figure 16). The function of the set trigger is explained in section 2.8.

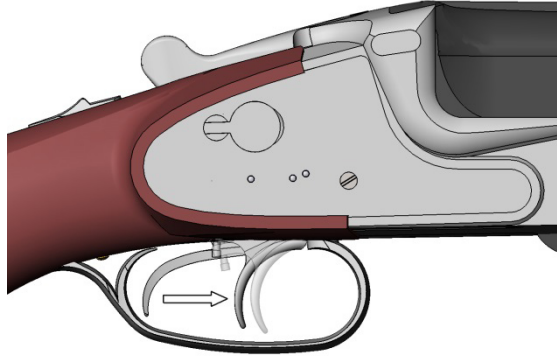


Figure 16

2.6.3 Over and under rifle

2.6.3.1 Over and under rifle 2020D

The standard version of this over and under double rifle is equipped with a nonselective single trigger with rear set trigger (Figure 17).

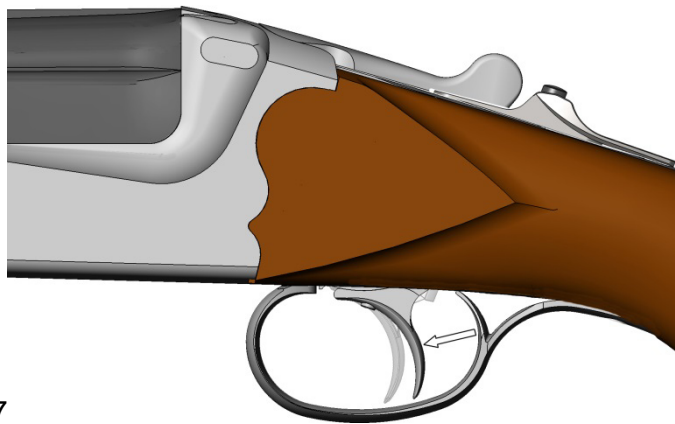


Figure 17

On request, the model can be equipped with a double trigger with rear set trigger on the front trigger (see Figure 15) for the lower barrel.

The BDB 2021 Safari is generally equipped with a double trigger, but with a hinged trigger on the front trigger.

2.6.3.2 Over and under rifle 323E

The over and under rifle is equipped with a double trigger with rear set trigger on the front trigger (Figure 16) for the lower barrel as standard version.

2.7 Firing

Load the weapon according to chapter 2.3.



The weapon is now loaded and secured!



DANGER

TAKE AIM OF YOUR TARGET AND MAKE SURE THAT YOU KNOW EXACTLY WHAT LIES AROUND AND BEHIND IT: THIS WAY YOU CAN AVOID DANGERS OF ANY KIND.

After having taken aim of your target, you can release the safety as described in section 2.4. or cock the weapon manually (section 2.3).

By pulling the trigger you may now fire a precise shot. Please pay attention to the functional differences of the respective triggers as shown in section 2.5.



WARNING

THE WEAPON'S RECOIL CAN CAUSE SERIOUS INJURIES:
- THEREFORE, PULL THE WEAPON FIRMLY INTO YOUR SHOULDER.
- KEEP YOUR EYE AT LEAST 6 CM AWAY FROM THE SCOPE WHEN FIRING.

2.8 Setting / Releasing set trigger

An accurate shot from a far distance requires – except for shooting skills of the shooter – weapon-technical prerequisites, which contribute to a high shooting performance. One of them is the set trigger system, which facilitates the firing of a shot.

For that purpose, the set trigger is pushed to the front (it is set) until it engages noticeably. Now, the trigger is under special spring pressure in sensitive position. Very little movement and energy of the trigger finger is enough now to activate the trigger, which is now completing the necessary trigger movement and releases the shot by itself.

This greatly helps to prevent “messing up” a shot.



DANGER

FIRST RELEASE SAFETY – THEN SET TRIGGER!

IF NO SHOT IS FIRED: FIRST SECURE WEAPON AGAIN. THEN TAKE THE TRIGGER BETWEEN THUMB AND INDEX FINGER AND SLOWLY, CAREFULLY “UNSET” THE TRIGGER (TAKE BACK SET TRIGGER).

ALWAYS POINT THE MUZZLE INTO A SAFE DIRECTION. THEN, WHEN WEAPON IS SECURED, OPEN THE WEAPON TO TAKE OUT THE CARTRIDGES.

2.9 Unloading the weapon



DANGER

- ALWAYS MAKE SURE THAT THE MUZZLE IS POINTED IN A SAFE DIRECTION!
- DO NOT FORGET TO CHECK THE CHAMBER WHETHER THE WEAPON IS INDEED UNLOADED!
- NEVER ASSUME THAT YOUR RIFLE IS UNLOADED UNLESS YOU HAVE CONVINCED YOURSELF OF IT!

- Secure your weapon according to section 2.4.
- Open receiver and remove the cartridges.
- Check whether the cartridge chamber is empty.
- Close receiver and lock it.



The weapon is now cocked, secured and not loaded. Weapons with hand-cocking system uncocked.

2.10 Uncocking

After shooting, open the weapon to remove the cartridges or cartridge cases. Afterwards the weapon is closed again usually. This means that the locks are cocked (unless it is a model with hand-cocking system where the cocking slide is in rear position). In order not to strain the main spring unnecessarily, the weapon must be uncocked. This is done the following way:

If you own a weapon without hand-cocking system, insert snap caps into the cartridge chamber after removing fired cartridge cases or not fired cartridges. Close the weapon afterwards, release the safety and uncock it by activating the triggers.

If you own a weapon with hand-cocking system, the locks are uncocked by sliding the cocking slide into rear position. In order to do so, push the locking button (1) so that the cocking slide can be moved into rear position. (Figure 18)



Figure 18



When uncocking the manual cocking system make sure to hold on to the cocking slide with your thumb and release it slowly into rear position. Due to the cocked main springs, the force on the cocking slide is quite considerable.

2.11 Automatic ejectors

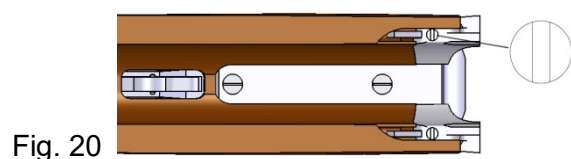
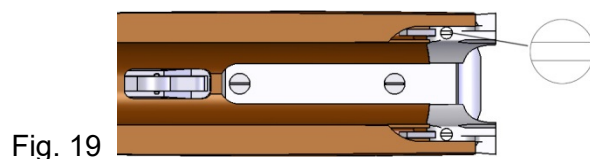
The rifles are equipped with automatic ejectors.

This means that a fired cartridge is ejected when the weapon is opened, whereas a not fired cartridge is merely extracted to facilitate its removal.

2.11.1 Deactivation of ejector - rifles 2000C / 2003C / 2010D / 2020D

After removing the forearm from the barrel you can turn the two switch pins inside the iron forearm in the desired direction. Use a screwdriver with 3 mm width.

- screw slots in longitudinal axis → ejector ejects (Figure 19)
- screw slot crossways to longitudinal axis → ejector deactivated; cartridge cases are merely lifted when the weapon is opened to facilitate their removal from the barrel (Figure 20)



2.12 Exchanging or removing screw-in chokes

The over and under shotgun 2000C/2003C is equipped with the “MERKEL“-choke-system. The weapon is delivered together with the following screw-in chokes:

FULL	1/1
IMPROVED MODIFIED	3/4
MODIFIED	1/2
LIGHT MODIFIED	1/4
IMPROVED CYLINDER	VBZ
SKEET	Skeet



DANGER

WEAPON MUST BE SECURED AND UNLOADED BEFORE EXCHANGING OR REMOVING THE SCREW-IN CHOKES!

ATTENTION

ONLY USE THE PROVIDED CHOKE-KEY FOR EXCHANGING OR REMOVING THE SCREW-IN CHOKES.

1. Insert the provided choke-key into the muzzle of the weapon.
2. Turn the key counterclockwise to screw out and remove the choke-insert.
3. Now, choose your screw-in choke and place it into the muzzle with the thread facing upward.
4. Use the choke-key to screw it tight clockwise. Make sure that the choke is securely screwed in.



DANGER

NEVER USE THE WEAPON WITHOUT A CHOKE-INSERT IN THE BARREL! REGULARLY CHECK THE SECURE POSITION OF THE CHOKE-INSERTS WHEN BREECH IS OPEN AND CARTRIDGE CHAMBER IS EMPTY.

ATTENTION

DO NOT SCREW IN THE CHOKE-INSERT TOO TIGHTLY BECAUSE THIS CAN DAMAGE THE THREAD (BARREL AND CHOKE-INSERT).



If necessary, some lubricating grease on the threaded surfaces facilitates the exchange of choke-inserts.

3 Disassembly



DANGER

BEFORE DISASSEMBLING, THE WEAPON MUST BE UNLOADED. MAKE SURE THAT THE BARREL AND CARTRIDGE CHAMBER ARE EMPTY.



CAUTION

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

ATTENTION

DISASSEMBLY OF THE WEAPON MUST BE DONE VERY CAREFULLY AND ACCURATELY DUE TO VERY CLOSE TOLERANCES AND FITTINGS.

For cleaning/maintenance or transportation (packaging) purposes the weapon must be disassembled into

- barrel with attached forearm and
- receiver with shaft

This is done in the following order: first uncock the weapon (see section 2.2.1) and afterwards remove the forearm (Figure 2).



Always place rifle with stock securely on surface; hold barrel in left hand. Open the snapper with the index finger of your right hand and remove forearm with a light pull.

3.1 Removing barrel (Figure 21)

In order to take the barrel (1) out of the receiver (2), take hold of the barrel between forearm hook and receiver with your left hand. The muzzle of the barrel is pointing downward. It may be helpful to hold the barrel between your thighs.

Your right hand holds the stock neck. After you have pushed the locking lever (3) all the way to the right with your right thumb, you can lift the receiver with stock out of the hinge of the barrel.



Figure 21

After lifting out the barrel, the receiver remains open because of the locking device. In order to return the opened locking lever into center position, the locking device must be pushed in at the receiver. (Figure 22)

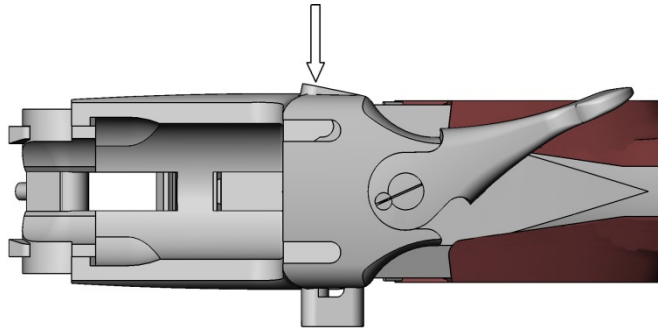


Figure 22



CAUTION

HOLD ON TIGHTLY TO THE LOCKING LEVER AND LET IT GLIDE SLOWLY INTO CENTER POSITION! LOCKING LEVER UNDER SPRING PRESSURE!

3.2 Attaching forearm to barrel (for shipment) (Figure 23)

For attaching forearm to barrel, take the latter into your left hand and place it on a solid surface (e.g. wood). Then take the forearm into your right hand and push it carefully over the ends of the extractors and then press the forearm completely onto barrel (1).

Finally push the snapper completely into the depression of the snapper housing.

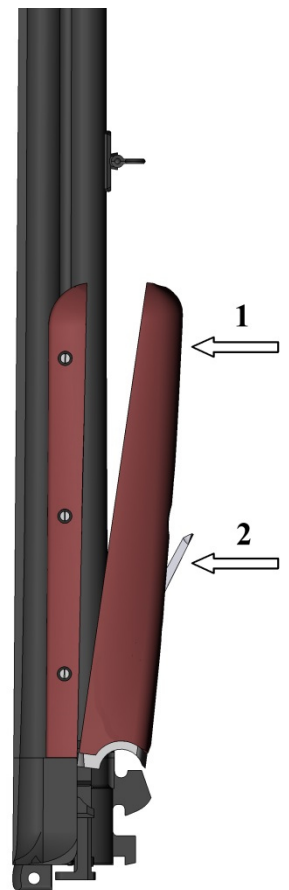


Figure 23

3.3 Removing side locks

For cleaning/ maintenance purposes the side locks of models 303E (313E, 323E) 2003C can be removed from the system.

In order to do so, cock the locks by tilting the barrels downward and then close the rifle again. Then take off the forearm and lift out the barrel (see sections 2.2.1 and 3.1).

3.3.1 Removing side locks – models 303E / 313E / 323E

With these models, the side locks can be removed after the sunken flap in the right side lock plate is turned up (Figure 24) and the flap screw is screwed out.

Now you can tilt out one of the side locks (Figure 25) but make sure, while doing so, to hold on to the other so it cannot fall out unintentionally. In Figure 26, you can see the parts after the removal of the side lock on the right hand side.



Fig. 24

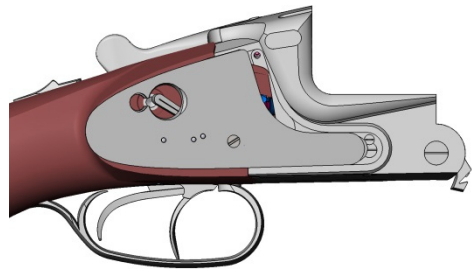


Fig. 25

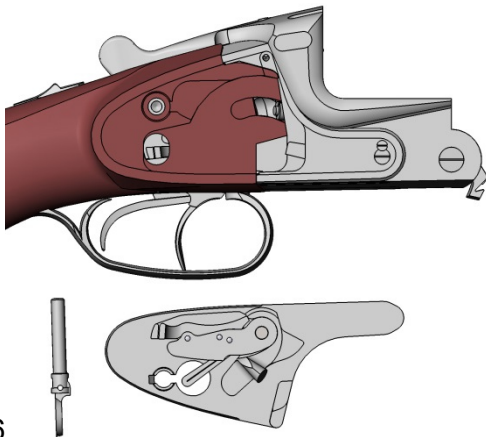


Fig. 26



Fig. 27



CAUTION

AFTER THE REMOVAL OF THE SIDE LOCKS DO NOT UNCOCK OR DISASSEMBLE THE SIDE LOCKS ANY FURTHER!

When reinserting the side locks, make sure that the respective cocking lever is lifted so it can come to rest under the hammer. (Fig. 27)

Replace the side locks into the forearm without force until they are not protruding anymore.

Then screw the flap screw back in and tighten with light pressure until the flap is in the right position to be tilted back into the side lock plate.

Carefully push it back in until it lies flatly and evenly against the side lock plate.

3.3.2 Removing side locks – model 2003C

Before you can remove the side locks of this model, you must turn the crank handle all the way to the left until it can be taken out. (Figure 28)

Now you can tilt out the side locks and take them off. Make sure that you hold on to the second lock when taking off the first!

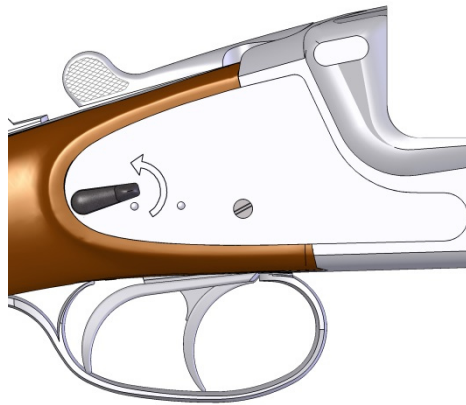


Abb.28



CAUTION

AFTER THE REMOVAL OF THE SIDE LOCKS DO NOT UNCOCK OR DISASSEMBLE THE SIDE LOCKS ANY FURTHER!

When reinserting the locks make sure that the cocking pieces (1) lie closely against the cocking rods (2) and that they are pushed into the receiver as far as possible before you insert the locks. (Figure 29)

Insert the side locks into the receiver without much effort until the locks do not protrude from the forearm anymore.

Now you can insert the crank handle again and tighten it carefully until the crank handle clicks into place on the locating peg.

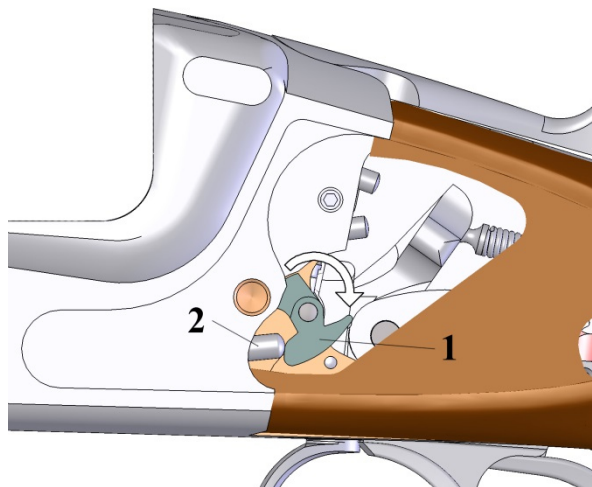


Abb. 29

4 Maintenance and care

4.1 Cleaning



CAUTION

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



DANGER

WEAPON MUST BE UNCOCKED AND UNLOADED BEFORE DISASSEMBLING.

ATTENTION

INAPPROPRIATE CLEANING AGENTS CAN DAMAGE THE WEAPON. THEREFORE, ONLY USE CLEANING AND PRESERVATIVE AGENTS, WHICH ARE SUITABLE FOR WEAPONS. THESE ARE AVAILABLE IN SPECIALIZED RETAIL SHOPS.
DO NOT USE ANY METALLIC OBJECTS NOR ANY PLASTICS (NYLON, etc.) FOR CLEANING 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 authorized 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 authorized 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. AFTERWARDS, OIL THE INSIDE OF THE BARRELS LIGHTLY. ALL EXTERIOR STEEL PARTS MUST BE DRIED AND OILED LIGHTLY. PAY SPECIAL ATTENTION TO ALL SLIDING PARTS.

Be careful when cleaning the barrels with the brush! If residues cannot be removed this way, take your weapon to an expert. Cleaning of all other parts (exterior cleaning) is done with a linen cloth (do not use any woolen or synthetic fabrics). All surfaces should be cleaned with this cloth and any moisture, oil or grease remains should be removed.

Note!

Hand sweat is often a cause for rust. If you notice this, take appropriate measures. The easiest method is to take hold of the shaft after cleaning and wipe all steel parts again. Oil the steel parts without further touching them again.

4.2 Preservation

After thorough cleaning, the weapon must be oiled. Only use recognized weapon oils, which are resin- and acid-free. Vaseline is also recommendable.

Firstly, oil the barrel insides with a piece of cloth soaked in oil and pull it through the barrel by using a cleaning rod.

All exterior steel surfaces must be oiled with a soaked linen cloth. It is also possible to spray the steel parts with a spray oilcan – if you have one. A thin oil film should coat all steel parts at all times. Pay special attention to all gliding and hinge parts.

Stock and forearm must be treated with a special stock oil.

It is reasonable to clean the inside of the barrel again on the following day in order to remove any possible remaining powder residues.

5 Shooting performance

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

The most important factor of influence is the type of ammunition that is used



To check the shooting performance, **always** use the type of ammunition given in the gun passport. In case this ammunition is not available, substantial deviations 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 influence on the shooting performance is the scope you use. Therefore, you should always choose a scope and scope mount of the same high-quality standards as your weapon itself.



Only when you are using optimal ammunition, scope and the appropriate scope mount we can 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.

1. Shotgun barrel

Your shotgun barrel (or both shotgun barrels respectively) are sighted in for 35m with shot cartridges (according to the details given in the weapon's pass) and we guarantee for optimal shot dispersion according to the existing choke.

Skeet versions are test fired for 20m.

2. Rifled barrel

For the cold single barrel we guarantee optimal shooting performance - shot with open sights for 50m or with telescope sight for 100m as long as you use the type and charge of ammunition as stated in the weapon's pass.

5.1 Rifle shotgun – model 2010D / 313E

When a rifle shotgun is sighted-in, the weapon is cooled down to ambient air temperature after every shot. A strict succession of shots is therefore not necessary. The changes in point of impact during rapid rate of fire is within limits regarding hunting requirements.

Furthermore, the rifled barrel can also be sighted-in with rifled slugs (Brennecke) according to the „Langenhagener Norm“ when proper ammunition as stated in the weapon's pass is used.

ATTENTION!

If your weapon is to be sighted-in with rifled slugs, it is necessary that you state the type of sights (open sights or telescope sight) as soon as you place the order!

5.2 Over and under rifle – model 2020D / 323E

The over and under rifle is designed for rapid double-shots of both barrels.

Firing several shots in immediate succession will cause a change in the point of impact in soldered barrel groups due to thermal-physical laws. The point of impact will return to its initial state after the rifle has cooled down.

Therefore, you will only reach optimal shooting performance of both barrels when firing shots in rapid succession if you strictly comply with the shooting frequency of 6-10 s between the first and second shot and the shooting order of under/upper barrel (front/rear trigger with double trigger).

If you adhere to these conditions and, provided that you are using the appropriate type and charge of ammunition as stated in the weapon's pass, we guarantee an optimal shooting performance of the double-shot.

If you do not stick to the recommended shooting frequency, there will be changes in the point of impact, which, however, are within reasonable limits concerning hunting requirements.

Over and under rifles with various calibers (e.g. Bergstutzen) are designed for quick double-shots and therefore are sighted-in with the single barrels in cold state. In this case, no exact shooting frequency is required.

6 Storing the weapon



DANGER

FOLLOW THE NATIONAL REGULATIONS FOR STORING WEAPONS AND AMMUNITION.

ATTENTION

NEVER STORE A COCKED WEAPON.

7 Warranty

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

Conditions for acceptance of warranty claims are:

- report of defect within one month after it has been discovered,
- warranty card has been sent to manufacturer within 20 days after purchase: warranty card is attached to this manual,
- professional assessment and decision by manufacturer.

We reserve the right to charge any ensuing costs in case the warranty claim proves to be unjustified.

8 Packaging / Shipping

If you want or have to ship your weapon, please use appropriate packaging. This is available from specialized retail shops or from the manufacturer, on request.



WARNING

BEFORE SENDING THE WEAPON, IT IS CRUCIAL TO CHECK WHETHER IT IS UNLOADED!



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