

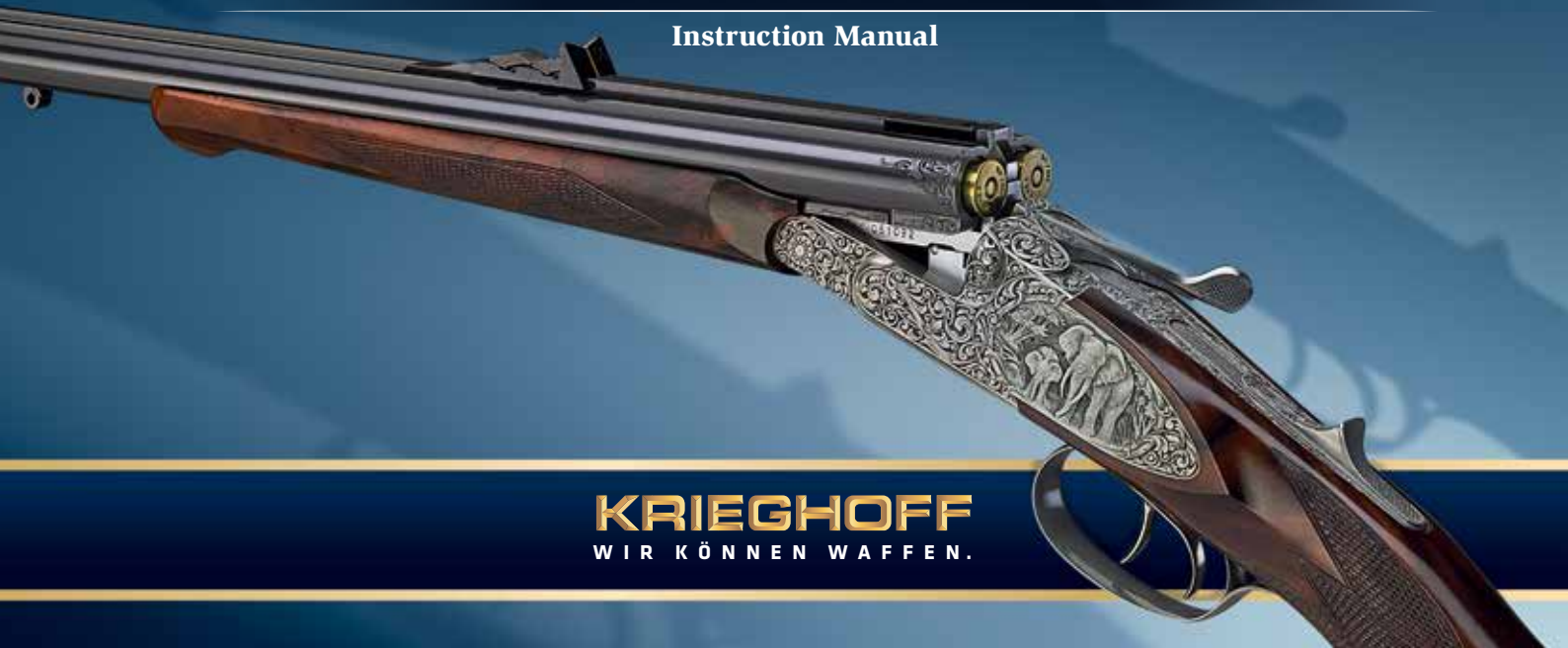
KRIEGHOFF OPTIMA, ULTRA, CLASSIC

TWIN-HAMMER-MODELS

KRIEGHOFF HUBERTUS

SINGLE BARREL RIFLE

Instruction Manual



KRIEGHOFF

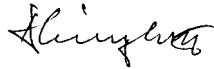
WIR KÖNNEN WAFFEN.

THE KRIEGHOFF MODEL GROUP 1 INSTRUCTION MANUAL

Dear Krieghoff Customer,

with the purchase of this Krieghoff product, you have chosen a firearm which clearly reflects our concept of “The Universal Hunting Gun”. Innovative technology in combination with a wide range of options set the standard for practical use and safety. Please read the following instructions and descriptions carefully to familiarize yourself with your gun and its many features. Knowledge and familiarity are the basics of safe gun handling. Safe gun handling is the first and foremost element in the enjoyment of fine firearms.

Good Shooting and Good Hunting!



Dieter Krieghoff
Manager



Phil Krieghoff
Manager



Peter Braß
Manager

CONTENTS

I. General Gun Safety	4
II. Specific handling and safety features	5
III. Instructions for use:	
1. Assembly and Disassembly	8
2. Cocking and Decocking	10
3. Set Trigger	12
IV. Krieghoff Model Group 1 – gun specific instructions for each of the models	
1. Krieghoff Optima Drilling	14
2. Krieghoff Ultra Over & Under Rifle/Shotgun Combination	15
3. Krieghoff Classic Side-by-Side Rifle, Side-by-Side Shotgun, Side-by-Side Rifle/Shotgun Combination.....	15
4. Krieghoff Hubertus Single Barrel Rifle	17
V. Maintenance	18
VI. Sighting-in and Accuracy	22
VII. Steel Shot	26
VIII. Data Sheets	27

I. GENERAL GUN SAFETY

GUN SAFETY IS YOUR RESPONSIBILITY! THINK GUN SAFETY! READ AND UNDERSTAND THE ENTIRE MANUAL BEFORE ASSEMBLING AND FIRING!

- ➔ Your Krieghoff hunting gun is a mechanical piece of equipment. Its flawless and safe functioning depends on regular care and maintenance. We highly recommend a periodic (bi-annual) check-up service by a competent Krieghoff dealer or by the Krieghoff Factory.
- ➔ Always handle any gun as if it is loaded and ready to fire. Every gun could be a loaded gun.

- ➔ Never point any firearm at yourself or anyone else. Always point a firearm in a safe direction.
- ➔ Before loading a firearm, inspect the barrel, make sure, that it is perfectly clean and free from any obstructions. The barrels and chambers must be dry and free from oil.
- ➔ Do not load a firearm until you are ready to use it. Do not touch the triggers until you safely aim at your target.
- ➔ Use premium factory loaded ammunition. Use only the correct and undamaged size/gauge/caliber ammunition designated for your firearm. Store firearms and ammuni-

tion separately in a safe, dry, ventilated and locked place, beyond the reach of children and otherwise unauthorized persons. Store all firearms unloaded. Be absolutely certain that the chambers are empty.

II. SPECIFIC HANDLING AND SAFETY FEATURES

➔ Manual cocking with cocking device “Kickspanner”

The Krieghoff Models Optima, Ultra, Classic and Hubertus have no conventional, separate safety. When the cocking device is moved forward (cocked) and the red dot is visible on the top tang, the gun is ready to fire. When cocking the gun, make sure that it points in a safe direction. Also make sure that the shooting direction is clear and that there is a natural or artificial bullet backstop.

NOTE:

Cocking device in forward position (towards muzzle) = gun is cocked (safety off) and ready to fire

Cocking device in backward position (towards buttstock/user) = gun is not cocked and is on safe

➔ Twin hammer manual cocking, featuring the models Optima, Ultra and Classic

Moving the cocking device forward, will always cock both hammers on the Optima, Ultra and Classic models. This means, that if just one shot is fired, the second hammer is still cocked and ready to fire. If the second shot is not needed, always uncock the gun immediately by releasing and moving the manual cocking device into its rear, safe position. The Hubertus single barrel rifle has only one hammer.

➔ Combi-Cocking Device

This became a standard feature with guns ordered after June 1999. Earlier guns may have it as optional feature.

NOTE:

If you leave the cocking device in its forward position after the gun has been fired, the hammers re-cock automatically when the gun is being opened. Upon reloading and closing, the gun is ready to fire again. If you move the cocking device to the rear position (towards you), the gun will be uncocked and be on safe.

II. SPECIFIC HANDLING AND SAFETY FEATURES

➔ **Universal Trigger System, Combi Trigger/Set Trigger**

Beginning with order date July 1999, all Krieghoff models Optima, Ultra, Classic and Hubertus come in standard with the Universal Trigger System. In these cases, the single trigger or the front trigger of a double trigger system has the combi trigger/set trigger feature integrated. In other words, the trigger can be used like a conventional shotgun trigger or it can be set to become a hair (set) trigger. The trigger is set by pushing the trigger forward until it engages in the set/hair trigger position. Standard factory trigger pulls for the models Optima, Ultra, Classic and Hubertus are approximately 10–15 N (1000–1500 g, 2.5–3.5 lbs) and for the model Classic

“Big Five” approximately 18–20 N (1800–2000 g, 4–4.5 lbs). On special order, the rear trigger in a double trigger system can optionally also be ordered with the combi trigger/set trigger feature. The set trigger option is not available for the Classic “Big Five” model and will never be offered as a feature for this gun.

NOTE:

If a set trigger is set, the slightest touch on the trigger or disruption of the gun will fire the gun! Adjustment of the set trigger sensitivity must be such that there is enough safety margin to control the trigger even in adverse weather conditions. Do not attempt to go beyond such measure.

Always make sure that the trigger is NOT set before you cock the gun (unless the automatic set trigger release is installed). Should the trigger be in the set position, point the gun in a safe direction, uncock the gun first if the hammers are cocked and then unset the trigger from set position.

Only set the trigger right before you are ready to shoot. At that point, have the gun already cocked, ready to fire and pointed at the target. For safety reasons, use the hair or set trigger only under highly controlled circumstances when shooting from a solid rest.

Never use the hair or set trigger on driven game or when shooting at a moving target.

II. SPECIFIC HANDLING AND SAFETY FEATURES

Should an opportunity pass without firing the gun, then first uncock the gun immediately and then unset the trigger by first making sure the gun is pointed in a safe direction, then grasping the set trigger between your index finger and thumb and pulling it back towards you until it disengages.

ADDITIONAL HANDLING FEATURES

- ➔ An automatic hammer safety ensures that the Optima, Ultra, Classic and Hubertus will not fire unless fully closed.
- ➔ The receivers and triggers are hard nickel plated for durability and protection against corrosion.
- ➔ The buttstocks are bolted to the receivers from the rear. Spring plates on the stock bolt ensure a constant connection of the stock to the receiver. Easy stock removal with stock wrench.

➔ Optional, patented, automatic release for set trigger. The trigger can only be set when the gun is cocked. With the “release for set trigger” feature, the set trigger is being automatically released (unset) when the gun is being uncocked by moving the manual cocking device to the rear, uncocked position.

III. INSTRUCTIONS FOR USE

NOTE:

You must be absolutely certain, that any firearm is unloaded before attempting to assemble or disassemble it. The gun must be uncocked, before you assemble or disassemble it.

Always use snap caps when dry-firing the gun. Never dry-fire the gun with the top lever in its open position. This may cause damage to the automatic hammer safety.

1. ASSEMBLY AND DISASSEMBLY

1.1 Assembly

Putting the barrel on the receiver:

- ➔ Pull the extractor out as far as it goes to prevent the receiver from touching the extractor legs in order of not damaging them in the process of putting on the barrels.
- ➔ Grasp the barrels (see illus. 1) with the muzzle facing down and hold the receiver and buttstock in your other hand.
- ➔ Line up the barrels with the receiver (do not cant the barrels) and engage the cutout of the front barrel lug at an angle as shown (see illus. 1) onto the hinge pin of the action making sure it is fully seated.



1

III. INSTRUCTIONS FOR USE

- ➔ In the case of a tight fit, the seating of the action might be easier by bracing the muzzle of the barrels between your legs.
- ➔ Pivot the action and buttstock towards the barrels and at the same time keep the top lever fully pushed open.

Putting on the forearm:

Position the rear surface at a slight angle against the pivot of the action (see illus. 2 and 3). Then press the forearm firmly up into the latched position against the barrels. Make sure that the latch engages fully.



2



3

III. INSTRUCTIONS FOR USE

1.2 Disassembly

First remove the forearm by proceeding in the reverse order as described. Lift the forearm and push it off the barrels to disengage the forearm's latch.

Removal of the barrels:

Hold the gun with both hands as described under assembly (see illus. 1) and open the top lever all the way to assure that the locking bolt disengages from the barrels. Then break the gun open until the barrels are free and can be taken off.

Releasing the top lever:

When the barrels are taken off, the top lever stays in the open position. To release it when storing the gun, open the top lever all the way while pressing down the tip of the top lever catch as shown in illus 4. Slowly release top lever.

2. COCKING AND UNCOCKING

The Krieghoff models Optima, Ultra Classic and Hubertus do not have a conventional safety. The patented “Kickspanner” which is a manual cocking device, located on the top tang, is being used to cock both hammers of the twin hammer models Optima, Ultra and Classic and the single hammer in the Hubertus.



III. INSTRUCTIONS FOR USE

The guns are off safety and ready to fire when the cocking device has been moved to its forward, cocked position.

NOTE:

Cocking device in forward position (towards target) = Hammers are cocked = Safety Off

Cocking device in rear position (towards gun holder) = Hammers are uncocked = Safety On

2.1 Cocking of the hammers:

Push the cocking device all the way forward until it engages.

2.2 Uncocking of the hammers:

From the cocked position, push the cocking device as far forward as it goes to release it. Then slide it back to the rear, uncocked position while maintaining slight pressure with your thumb against the device to prevent it from snapping back.

3. SET TRIGGER

Krieghoff models Optima, Ultra, Classic (except for the “Big Five” configuration) and Hubertus come standard with a combi feature front trigger. The trigger can be pulled like a normal trigger or it can be set to become a set trigger.



III. INSTRUCTIONS FOR USE

3.1 Setting the Set Trigger:

Push the trigger forward towards the muzzle until it engages.

3.2 Disengaging of the Set Trigger:

Before disengaging the set trigger, point the gun in a safe direction and uncock the gun. After you are sure that the gun is uncocked, put your thumb behind the trigger and keep slight pressure against it. Then place the index finger of the same hand against the front of the trigger while maintaining the thumb pressure from behind. Move the trigger slightly in the pull direction, keeping the trigger gripped firmly between the two fingers the entire time.

3.3 Adjustment of the Set Trigger weight and travel:

The set trigger weight and travel can be adjusted with the trigger screw. Always make sure that the gun is unloaded and uncocked and the set trigger is disengaged when adjusting it.

Turn trigger screw clockwise to lower the set trigger weight which automatically shortens the travel.

Turn trigger screw counterclockwise to increase the set trigger weight which automatically increases the travel.



III. INSTRUCTIONS FOR USE

To ensure handling safety in all weather conditions, never adjust the set trigger too light. The rule should be in this case: As light as needed and never as light as possible. We highly recommend that only a skilled gunsmith does any adjustments to the factory settings of the set trigger.

NOTE:

When using the set trigger you must pull the trigger straight back. Pulling sideways will cause the trigger to stick and will prevent the gun from firing.



9

IV. THE KRIEGHOFF MODEL GROUP 1 - DETAILED

1. OPTIMA DRILLING:

Hammers, Triggers and Selector

Twin hammers and two triggers for three barrels:

Rear trigger (without set trigger feature) = Left hammer = Left barrel

Front trigger (with set trigger combi feature) = Right hammer = Bottom barrel or right barrel selectively

Use the selector to select either the bottom or the right barrel for the front trigger:

Selector in the forward position = Towards target = Bottom barrel is selected

Selector in the backward position = Towards shooter = Right barrel is selected



10

NOTE:

➡ The right hammer selectively fires the bottom barrel or the right barrel. Therefore, you must manually recock the gun after each shot if the firing sequence is between the bottom barrel and the right barrel, regardless of the order of firing.

➡ The selector is locked in its position when the right hammer is down (fired). Moving the cocking device to its rear, uncocked position will free the selector from its locked position.

IV. THE KRIEGHOFF MODEL GROUP 1 - DETAILED

1-2 Trigger

The Optima can be optionally ordered with a mechanical 1-2 Trigger. The front trigger acts as a mechanical single trigger. The operation is the same as using single triggers, which is explained in more detail in each specific model section. The rear trigger only acts on the left barrel.

1-2 Special Trigger

The Optima can be optionally ordered with a mechanical 1-2 Special Trigger. A drilling featuring this option, will not have a selector device. The front trigger acts as a combination trigger, which is non selective and the firing sequence is always right barrel first. The front (single trigger) will select mechanically, independent of recoil.

2. ULTRA OVER & UNDERS

Hammers and Triggers:

Twin hammers and two triggers for two barrels:

Rear trigger (without set trigger feature) = Left hammer = Top barrel

Front trigger (with set trigger combination feature) = Right hammer = Bottom barrel

Single Trigger

The Ultra 20 Over & Under Rifle can be ordered with an optional, mechanical single trigger.

This single trigger comes standard with the set trigger combi feature. This means that it can be pulled for either the first or second shot like a regular trigger or it can be set to become a set trigger for either shot, selectively. The single trigger will select mechanically, independent of recoil. This allows for firing the second shot, should a misfire occur on the first shot. The single trigger for the Ultra 20 Over & Under Rifle is non-selective and the firing sequence is always bottom barrel first.

IV. THE KRIEGHOFF MODEL GROUP 1 - DETAILED

1-2 Trigger

The model Ultra 20 can optionally be ordered with a mechanical 1-2 Trigger. The front trigger acts as a mechanical single trigger. The operation is the same as using single triggers and is explained in the Single Trigger chapter. The rear trigger only acts on the top barrel.

3. CLASSIC SIDE-BY-SIDE RIFLE, DOUBLE SHOTGUN, RIFLE/SHOTGUN COMBINATION:

Hammers and Triggers:

Twin hammers and two triggers for two barrels:

Rear trigger (without set trigger feature) = Left hammer = Left barrel

Front trigger (with standard set trigger combi feature*) = Right hammer = Right barrel

*The Krieghoff Classic “Big Five” is not equipped with a set trigger.

Single Trigger

European models of the Classic Side-by-Side Rifle up to caliber .375 and the Classic Side-by-Side shotgun can be ordered with an optional, mechanical single trigger. This single trigger comes standard with the set trigger combi feature. This means that it can be pulled for either the first or second shot like a regular trigger or it can be set to become a set trigger for either shot, selectively. The single trigger will select mechanically, independent of recoil. This allows firing the second shot, should a misfire occur on the first shot. The single trigger for the Classic Side-by-Side is non-selective and the firing sequence is always right barrel first.

IV. THE KRIEGHOFF MODEL GROUP 1 - DETAILED

1-2 Trigger

The Classic up to caliber .375 can optionally be ordered with a mechanical 1-2 Trigger.

The front trigger acts as a mechanical single trigger. The operation is the same as using single triggers and is explained in the Single Trigger chapter. The rear trigger only acts on the left barrel.

4. HUBERTUS SINGLE BARREL RIFLE

Hammers and Triggers:

One hammer and one trigger for one barrel.

The trigger comes standard with the set trigger combi feature.

V. MAINTENANCE

Your Krieghoff hunting gun is a mechanical product which will provide many years of reliable service when properly used and maintained. We highly recommend periodic (bi-annual) check-ups and service by a skilled and competent gunsmith or by the Krieghoff Factory.

1. STOCK AND FOREARM

The Krieghoff Optima, Ultra, Classic and Hubertus come standard with oil finished wood. We thoroughly treat and finish the wood with special gunstock oil. Although this careful treatment of oil finished wood on new guns is not waterproof. Continued treatment after purchase with high quality gunstock oil is needed to make the stock

and forearm more waterproof over time. Especially after use in foul weather, the wood should be treated with oil.

NOTE:

Do not use the gun until newly applied gunstock oil has completely penetrated the wood and the surface is dry.

Spots will develop if the wood gets wet while the gunstock oil is being absorbed and dried.

2. INTERNAL MECHANISM

Use only special gun oil for the internal mechanism which is non-gumming, acid free and has a wide temperature range, including very low temperatures.

IMPORTANT:

Use only products labeled for gun use to ensure reliable performance from your gun.

We recommend Krieghoff “Gun Pro” oil for its cleaning, lubricating, corrosion protection and moisture displacing qualities. “Gun Pro” also penetrates to loosen rust, powder, lead and copper residues inside the barrel. Furthermore, it enhances the proper working of all moving parts and does not gum. “Gun Pro” is free of acid.

V. MAINTENANCE

3. BARRELS

Always check the bores for any dirt or debris. Keep them clean of residues from bullets, powder and plastic wads using cleaning rods and bore solvents. Do not use steel brushes or non-gun specific solvents to clean barrels.

Apply our “Gun Pro” after cleaning to keep barrels lubricated to prevent rusting. Rifle barrels need more frequent cleaning than shotgun barrels. Depending on the caliber and design of the bullet, cleaning may be required after as little as 50 rounds due to copper, lead and powder residues which collect in the rifling of the barrels.

NOTE:

Always start at the chamber when cleaning a barrel to prevent muzzle damage. Always store heavily oiled barrels with the muzzle pointing down to avoid oil penetrating the gun’s internal mechanism which will cause gun malfunctions. Always check barrels before loading the gun to ensure they are clear of any obstructions. Always check that barrels and especially chambers are dry and free of oil to guarantee accuracy and consistent groups. Tests by independent laboratories such as DEVA have concluded that oil and grease residues in bores and chambers negatively affect a rifle’s accuracy.

Models thermo stable with removable sideribs:

Every time the sideribs become moist or wet during field use, they should be removed and dried using a rag and then be slightly oiled.

Model Optima:

Loosen hex screw and remove the siderib.

Model Ultra:

The siderib is fastened to the three point adjustment device via hex screws located on the side.

V. MAINTENANCE

NOTE:

There are two hex screws, one behind the other, for countering reasons. Therefore, the first hex screw must be completely removed in order to reach the lockscrew for the sideribs. Loosen the lockscrew slightly and remove the sideribs. Be careful not to scratch the barrels.

For maintenance after normal use in case the gun did not get wet, it is sufficient to run a slightly oiled rag between the sideribs and rifle barrel.

4. BARREL RECESSES AND BARREL LUGS

Keep barrel recesses and barrel lugs clean and slightly greased.

5. SCREW-IN CHOKES

Nine different screw choke restrictions are available. Choke tubes are suitable for both lead and steel shot:

Cylinder (Cyl), Skeet (Sk), 1/4 (IC), 1/4-1/2 (LM), 1/2 (M), 3/4 (IM), 3/4-1/1 (LF), 1/1 (F), Super-1/1 (XF)

When using slugs, we strongly recommend using chokes ranging between Skeet (SK) and 3/4 (IM), even though technically most of them can be used with any chokes.

➔ Never shoot a choke tube barrel without a choke tube installed.



V. MAINTENANCE

- ➔ Use the choke tube wrench supplied when changing choke tubes. Make sure to position the wrench such that the wrench teeth are firmly inserted into the recesses of the choke tube. Tighten the choke tube until you feel a stop, but do not overtighten.
- ➔ Clean the barrels always with choke tubes fully installed to prevent particles from placing between the barrel bore and the choke tube. After the barrels have been cleaned, remove the choke tubes and clean them as well as the choke tube area inside the barrel. Pay special attention making sure that threads and ramp area where the choke tube bottoms out inside the barrel are free of any particles.

- ➔ Handle the choke tubes with care. Always keep them clean and slightly coated with oil. Use grease to lubricate the threaded area of the choke tube. This will ensure easy installation and removal of the choke tubes.
- ➔ Use of full length insert barrels such as the Krieghoff “KS” with barrels featuring choke tubes: To assure consistency and accuracy, the specific choke tube which was in the barrel when the insert barrel was originally fitted, must be installed when using the insert barrel. Pay attention to tighten the choke tube always to the same degree.

NOTE:

We highly recommend only skilled Krieghoff dealers or the Krieghoff factory to perform any adjustments concerning re-regulating the point of impact of the barrels using the 3-point Radial adjustment device, regarding the thermo stable models or using the adjustable muzzle wedge regarding the soldered siderib models.

VI. SIGHTING-IN AND ACCURACY

1. GUARANTEED ACCURACY OF INDIVIDUAL RIFLE BARRELS

The accuracy of any rifle barrel highly depends on the quality of the ammunition used. Shooting the barrel cold for each shot, we guarantee for new guns a maximum group which is within twenty percent on top of what the ammunition manufacturer specifies. With premium ammunition and in standard calibers up to 9.3x74R, this translates into a maximum group of 4 cm (about 1.5") for each 3-shot group at 100 m (110 yd), shooting the barrel cold for each shot. In caliber .375 using premium ammunition, we guarantee a maximum group of 6 cm (about 2") and for calibers .416 up to .500 we guarantee a maximum group of

8 cm (2.5"), in each case for a 3-shot group at 100 m (110 yd), shooting the barrel cold for each shot.

2. GUARANTEED ACCURACY OF RIFLE BARRELS IN A MULTI-BARREL ASSEMBLY

When you shoot two or more rounds in succession through the same barrel in a multi-barrel gun with soldered sideribs, the group will spread. This is a thermo-physical rule.

Caused by the heat-up of the barrel, the single barrel has the tendency to expand, but is restricted through the soldered connection with the other barrels. The result is tension,

which adversely affects grouping. This tension diminishes and disappears as the barrel cools down which brings the grouping back to the original regulation.

NOTE:

If at all possible, avoid firing a rapid succession of several rounds (> 6) through the same barrel in a multi-barrel gun with soldered sideribs. Otherwise, it is possible that the soft-soldered connections of the barrels may turn so hot that a permanent change of the barrel regulation may occur. As a consequence the grouping would not go back to the original regulation, even after the barrels cooled completely down.

VI. SIGHTING-IN AND ACCURACY

2.a. Multi-barreled hunting guns with soldered sideribs and two rifle barrels in different calibers (Ultra 20 Bergstutzen)

The Bergstutzen configuration is an Over & Under Rifle with a small caliber bottom barrel and a large caliber top barrel – two rifles of different calibers in one gun. As such, the Ultra 20 Bergstutzen is not suitable for shooting both rifle barrels in rapid succession with exception of the freefloated barrel configuration thermo stable. Therefore, the Ultra 20 Bergstutzen is sighted-in by shooting each barrel separately and cold.

NOTE:

➡ Rapid succession of firing bottom barrel first followed by top barrel: The top barrel will shoot high.

➡ Rapid succession of firing top barrel first followed by the bottom barrel: The bottom barrel will shoot low.

We guarantee for the Ultra 20 Bergstutzen a maximum group for both barrels of 6 cm (about 2") at 100 m (110 yd) for three shots from each barrel, shot cold each time, using premium ammunition.

2.b. Multi-barrel hunting rifles with soldered sideribs and two rifle barrels in the same calibers Optima Double Rifle Drilling, Ultra 20 Over & Under Rifle, Classic Side-by-Side Rifle

These models are designed for firing both barrels in succession. The barrels are regulated to shoot together when the second barrel is fired quickly after the first barrel, even though the barrel heat-up produces tension in the barrel assembly. The degree of tension correlates to the degree of barrel heat-up. In order to achieve that both barrels shoot together when firing them in succession, the regulation is carried out such that the firing of the second barrel will always follow the firing of the first barrel with

VI. SIGHTING-IN AND ACCURACY

the same time delay. This time span is 5–10 seconds with Krieghoff hunting rifles and is based on experience from practical field use.

NOTE:

- ➔ The first barrel (right on side-by-side and bottom on over & unders) shot cold is always right on point as regulated.
- ➔ The second barrel shoots to the same point of impact as the first barrel, if the time delay from first to second shot was within the recommended 5–10 seconds.

The sequence when shooting both barrels in succession must be observed with these rifles.

**Double Rifle Drillings:
Always right barrel first.**

**Over & Under Rifles:
Always bottom barrel first.**

**Side-by-Side Rifles:
Always Right barrel first.**

- ➔ Provided, timing and sequence of the shots are being observed, several 2-shot rounds can be fired in succession without negative effect on the grouping and suitable for practical use. The use of the full gun (both barrels) neutralizes the tension produced by barrel heat-up which occurs when only one barrel is fired.

- ➔ When only one shot has been fired and the rifle can cool down, re-loading is of course recommendable to ensure under hunting conditions that the full gun is again available.

We guarantee for this type of guns – a maximum group for both barrels of 8 cm* (about 3") at 100 m (110 yd) for three shots from each barrel, shot cold each time, using premium ammunition.

*12 cm (4 ¾") for Classic "Big Five" in caliber .375 and 14 cm (5 ½") for Classic "Big Five" in calibers .416 to .500. US model Classic "Big Fives" are sighted in at 50 m (55 yd) and produce a 2" group or better at that distance.

VI. SIGHTING-IN AND ACCURACY

3. MULTI-BARREL HUNTING GUNS IN THERMO STABLE CONFIGURATIONS

The described problem of barrel heat-up and its adverse influence on grouping is nearly eliminated with our thermo stable models. We guarantee for these guns for each barrel a maximum 3-shot group of 4 cm (about 1.5") at 100 m (110 yd) when fired in succession, if premium ammunition is used.

4. SIGHTING-IN OF SHOTGUN BARRELS/RIFLED SLUGS USED IN SHOTGUN BARRELS

The shotgun barrels of the Krieghoff Ultra combination gun are patterned over open sights unless other instructions were received.

If the gun order explicitly specifies sighting-in of the shotgun barrels (one or two) with slugs according to the "Langenhagener Norm", we guarantee with the ammunition we used for sighting-in a maximum group between rifle barrel and shotgun barrel of 10 cm (4") with over & under rifle/shotgun combinations and drillings (one shotgun barrel sighted-in only) with 3 shots from

each barrel at 35 m (38 yd), and 15 cm (about 6") with drillings and both shotgun barrels sighted-in with rifled slugs.

5. USE OF THE INSERT BARREL KRIEGHOFF "KS"

If the rifle barrel of a Krieghoff combination gun was sighted-in with a "KS" insert barrel installed in the shotgun barrel, the point of impact of the rifle barrel may change when the insert barrel is removed. In such case, the rifle barrel point of impact should be tested on the range before used in the field. If you wish to install a "KS" insert barrel in your existing gun, please consult Krieghoff to determine if your barrel is suitable for accepting the desired insert barrel caliber.

VII. STEEL SHOT

It is not allowed to use steel shot ammunition greater than 3.2 mm (0.13") pellet size, in combination with no steel shot proof (no "Lily" marking) in caliber 12, because the hard steel can damage the choke ramp and ruin the barrel. Steel shot shells produce an ideal pattern in combination with steel shot chokes. Because of the smaller density of steel compared to lead, there are more pellets inside a steel shell than in lead ammo, talking about the same load and shot size.

Because of the difference in density, a minimal loss in bullet energy need to be taken. To achieve the same bullet energy on steel shot, the shooting distance need to be chosen closer.

Even for steel shot proofed barrels, if a maximum shot size of greater or equal 4 mm (0,16") is used, modified choke (0.5 mm/0.02") or less is mandatory.

VIII. DATA SHEET

Model: _____ Caliber/Gauge: _____

Barrel Length: _____ cm Serial Number.: _____

Ammunition sighted-in with (Maker/bullet): _____

Sighting-in at: _____ m on target 100 m (110 yd) with _____ cm high

Ammunition sighted-in with (Maker/bullet): _____

Sighting-in at: _____ m on target 100 m (110 yd) with _____ cm high

Ammunition sighted-in with (Maker/bullet): _____

Sighting-in at: _____ m on target

H. Krieghoff GmbH · Hunting and Sporting Guns

Boschstrasse 22 · 89079 Ulm · Postfach 2610 · 89016 Ulm · Germany · Telefon +49 731 / 401 82-0 · Fax +49 731 / 401 82-70 · www.krieghoff.de

KRIEGHOFF

WIR KÖNNEN WAFFEN.