

MERKEL

MANUAL

OVER AND UNDER GUNS

BDF 2000E/2001E/2002E

BBF 2010/2011/2012/2010D/2011D/2012D

BDB 2020/2021/2022/2020D/2021D/2022D

Erst lesen, dann handeln!
Read before going ahead!
D'abord lire -
puis agir!

Over and under guns have the highest practical value amongst hunting guns because they can be set up in a number of variations that makes it possible to meet a range of requirements. The Suhler range comprises:

- over and under side-by-side shotguns for small game hunting
- over and under side-by-side shotguns for sports shooting (Trap, Skeet and Parcours)
- over and under rifle/shotgun combinations for mixed hunting (small and big game)
- over and under side-by-side rifles for big game hunting
- Combined guns (1 gun with one or more replacement barrels)

In terms of handling, this gun type offers advantages which make the over and under gun the preferred version amongst hunting weapons

Three main factors are the proof of this:

1. The high, narrow front stock enables excellent aiming of the gun and protects the leading hand from touching hot and cold barrels.
2. The vertical arrangement of the barrels creates a narrow structure of the gun, making a large field of view available while taking aim only requires one barrel.
3. Wasted shots are minimal because muzzle deflection only occurs in the vertical plane.

Thanks to these advantages international clay pigeon competitions are only held using over and under side-by-side shotguns (with the exception of individual self-loading shotguns used in skeet shooting).

As hunters are increasingly testing their shooting prowess at clay pigeon shoots (hunting practice shoots), the over and under side-by-side shotgun in sports hunting universal version is the gun that meets real needs. And if it is equipped with a rifle/shotgun combination or over and under side-by-side rifle-replacement barrel, this version is considered to be the ideal equipment for the passionate huntsman.

TECHNICAL DATA

1

Barrels

- Caliber: see weapon passport
For over and under side-by-side shotgun or over and under side-by-sideshotguns-replacement barrels caliber 12/70, 12/76, 16/70, 28/70, 20/76, 36/76, (.410).
For rifle/shotgun combination or rifle/shotgun-replacement barrel caliber 12/70, 12/76 or 20/76 combined with rifle-caliber according to product range.
For over and under side-by-side rifles or over and under side-by-side-rifle-replacement rifle-caliber according to product range.
- Choke bore depending on choice of customer (see gun passport)
- Shell removal:
by separate coil spring ejectors, disengageable on request, shell release with models without ejectors.

System

- Model: 2000E/2010/2020/
2010D/2020D
2001E/2011/2021/
2011D/2021D
- compact breech block with inset bolt plate
 - Kersten breech with side bar lock (release)
 - modified Anson lock with safety catches, top sear levers
 - self-cocking by means of push rods
 - Trigger system in standard version: Single non-selective trigger without converter, single selective trigger or double trigger available on request
 - separate firing pins
 - manually operated safety; shot cannot be fired with breech open.
- Model: 2002E/2012/2022/
2012D/2022D
- side plate inserts on both sides of breech block

Stock

- selected walnut according to model
- Stock shape according to model or according to choice of customer; tailor made stocks available.
- one-piece, narrow front stock or split stock with brackets on the barrel
- Clip lock
- non-slip grain pattern on stock and front stock
- elegantly scalloped stock and large surface for side-plates
- stock adjustment from behind by means of puller screw
- plastic gunstock pad and butt cover

ASSEMBLY

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The over and under gun comprises the following major parts (Fig. 1):

- Barrel(1)
- Front stock(2)
- Breech block with stock (3)

Assemble

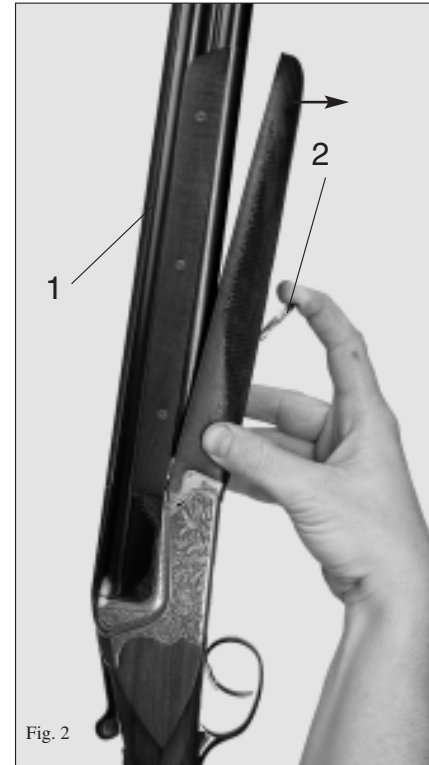
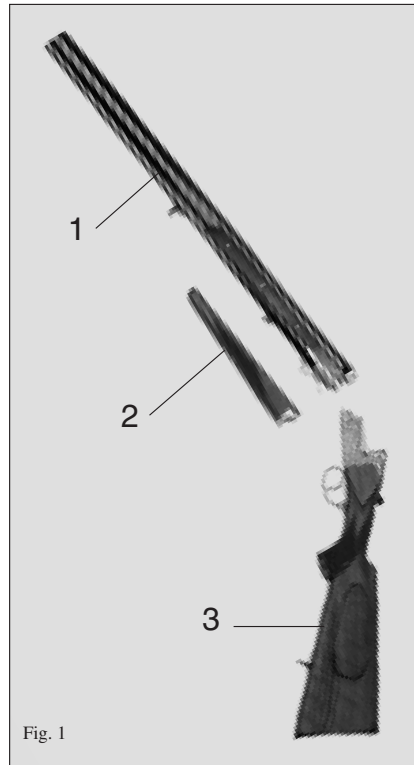
The over and under gun is dispatched by the manufacturer in separate parts:

- Barrel with front stock attached and
- Breech block and stock

The gun is assembled in the following order:

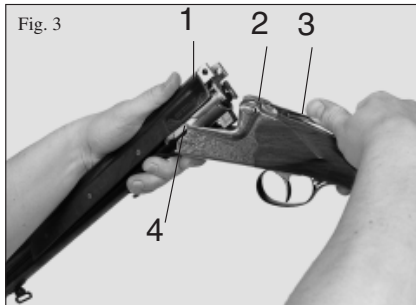
Remove the front stock from the barrel (Fig. 2)

- Take the barrel(1) in the left hand
 - Open the safety catch clip (2) with the index finger on the right hand and remove fore-
- arm with a



ASSEMBLY

Attaching the barrel to the breech block (Fig. 3)



The cartridge slide is pushed out by springs to its limit at from the chamber of the barrel. Hold the barrel (1) behind the hook with the left hand and connect to the breech block (2) with hinge hollow in the hinge pin. At the same time press the breech block against the barrel with the index finger of the left hand. Open the breech lever (3) with the thumb on the right hand until it reaches the bar lock (release). The breech block is pressed up to the barrel. Make sure that the cartridge slide nipples

(4) join up with the notches in the breech block and that the cartridge slides are pushed back. If the breech block swivels up to the barrel, the bar lock releases the breech lever which has to be in the middle of the breech block disc in the closed position: if necessary pressed home manually.

Switch the ejector off (special version)

- Remove front stock from barrel: Turn both switch bolts in the iron front stock by 90° .
- Lateral screw slot
Ejector releases.
- Transverse screw slot
Ejector switched off

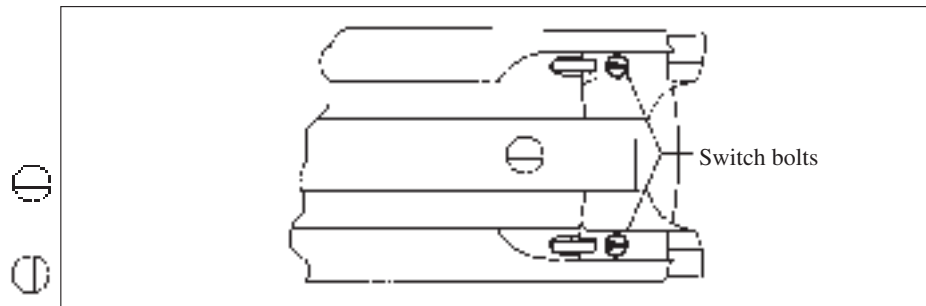




Fig. 4

Take the front stock (Fig. 4)

Hold the gun in the left hand and attach to the stock

The trigger guard points to the right, the muzzle upwards.

- When setting up the one-piece front stock push it carefully over extractor ends onto the hinge.
- The ends of the push rods must enter the correct slots in the front stock.
- Press the front stock completely on the barrel if necessary by striking it lightly with the flat of your hand below the safety catch clip.
- The safety catch clip must completely fit into the depression of the front stock or be pressed home if necessary.

- Hold the pistol grip with the right hand, the left hand grips the front stock, the barrel is pointed forwards and slightly down and tipped slightly down.
- Open the breech with the right thumb by turning of the breech lever to the right.
- Breech block and stock are tipped with the right hand until there is a noticeable click.
- Load cartridges in the chamber of the slightly downward pointing barrel.
- Bring the breech block and shaft up to the barrel using the right hand.
- The breech lever must be in the starting position, if necessary closing it completely by hand.
- With models with manual cocking the cocking slide must be in the forward position so that the locks can be automatically cocked or
- the locks can be cocked just before fi-

ring by pushing the cocking slide into the forward position

Important! Make sure that the barrels are free of oil and all foreign bodies before loading! Do not slam the gun shut; do not use force! Only use approved ammunition - as per the information on the barrel.

The safety lock is on the pistol grip. The gun is locked manually (by pushing the safety lock back).

The gun is locked if the safety lock is in the in the back position and the “S” in front of the safety lock is clearly visible

The lock can be released manually by moving the safety lock forwards.

With models with manual cocking the gun is locked if the cocking slide is in the rear position.

If the breech is open (breech lever is kept open by a bar lock) the gun cannot be fired.

for over and under side-by-side shotgun:

- in the standard version with single non-selective trigger

Firing sequence: lower/upper barrel

- Available with selective single trigger or double trigger
- The selective single trigger is switchable via a cam switch behind the trigger.

Cam switch right:

firing sequence lower/upper barrel

cam switch left:

Firing sequence upper/lower barrel

- for double triggers
- front trigger lower barrel
- rear trigger upper barrel

for over and under combination rifle/shotguns

- in the standard edition single selective trigger with rear-set trigger firing sequence same as over and under side-by-side shotgun

- Available with double trigger with rear-set trigger on the front trigger for the rifle barrel

for over and under side-by-side rifles:

SIGHT ADJUSTMENT

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Every barrel has a specific sight setting:

With over and under side-by-side shotguns or over and under side-by-side-shotgunreplacement barrels a matt sight rail (closed or ventilated) is available with pearl front bead (some versions also have center bead).

Over and under rifle/shotgun combinations or over and under rifle/combo replacement barrels have a matt sight rail with a folding blade sight and a blade foresight bead pushed in from the front.

Over and under side-by-side rifles or over and under side-by-side riflereplacement barrels have a choice of sight mounts with backsights and foresight mount with a blade foresight inserted from the front or or continuous mount rail with backsight and a blade foresight inserted from the front.

If a telescopic sight is fitted, this completely replaces the sights mentioned above or can be used in conjunction with them.

UNCOCKING

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After firing a shot the gun is opened to expel shells or cartridges and then usually closed again. That means, in turn, the locking mechanisms are automatically cocked again. Uncocking is necessary to avoid damaging the trigger springs.

This is achieved as follows:
In models without manual cocking dummy cartridges are loaded in the chamber after removing the discharged shells or the removal of of unfired cartridges. The gun is then closed, unlocked and uncocked using the triggers.

In models with manual cocking, the locks are uncocked by pushing the cocking slide into the rear position.

DISASSEMBLY

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Cleaning the gun and packing (dispatch or transport) demands the disassembly of the gun into

- Barrel with front stock attached and
- Breech block and stock

The following procedure should be followed

- Uncocking (see point 7).
- Removing the front stock (as in Fig. 2)
- Always hold the gun firmly by the stock with the barrel in the left hand
- Open the safety catch clip with the index finger on the right hand and lift off the front stock with a gentle tug

Opening the barrel (Fig. 5)

- Hold the barrel with the left hand

DISASSEMBLY

between the connector and the breech block

- The muzzle should be pointed downwards; it is advisable to grip the barrel between the legs
- The right hand holds the stock and, after the thumb has opened the breech lever back to the stop, to the right, breech block with stock from the barrel hinge.
- To return the open breech lever to the center position, push in the bar lock on the breech block

Attaching the front stock to the barrel (Fig. 6)

- Hold the barrel in the left hand and place on a firm surface (e.g. wood).
- Grip the front stock carefully push over the extractor ends and press down fully on the barrel.
- The safety catch clip must completely



Fig. 5

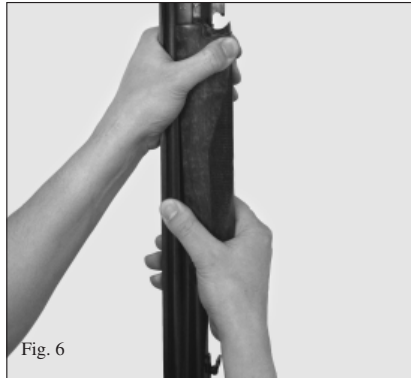


Fig. 6

MAINTENANCE AND CLEANING

Cleaning

The barrels should be thoroughly cleaned after use to remove all firing residues before you can properly work on the barrel. To this end you should use a cleaning rod made of wood, glass fiber, brass (not steel) with an lug which cleaning rags, textile materials or similar can be attached to. Make sure that a suitable special cleaning rod is available for use with a diameter matching the rifle caliber.

Make sure the material is not too thick as it is difficult to remove a cleaning rod that has been forced in and has become stuck. This may damage the interior of the barrel which could greatly reduce the firing performance of the gun, particularly with rifle barrels.

If residues cannot be removed with the cleaning rod (lead deposits) then a brass wire brush head should be attached to the rod.

Be careful when cleaning the rifle barrel with the brush!

MAINTENANCE AND CLEANING

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If you are unable to remove the deposits using this method you should take the barrel to a specialist.

The other (external) parts of the gun can be cleaned with a linen cloth (do not use cloths made of wool or synthetic materials). All surfaces should be thoroughly wiped down ensuring that all moisture has been removed.

Oil and grease residues should also be removed in a suitable manner.

Caution!

Sweat from your hands can often cause rust deposits.

You should take special care if you are susceptible to this.

The best method is to hold the gun by the stock after cleaning and wipe down all steel parts again.

Oiling or greasing can then be undertaken without touching the steel parts.

Preservation

The gun should be oiled after it has been thoroughly cleaned.

You should use a recognized gun oil that must be free of acid and resins. Vaseline can also be used.

First clean the interior of the barrel using textile material soaked in oil by pulling it through with a cleaning rod.

All external metal surfaces should be oiled with a soaked linen cloth. The metal can also be sprayed with a oil spray bottle if available. All metal parts should be permanently covered with a thin film of oil whereby special attention should be paid to the moving and hinged parts.

Stock and front stock should be treated with a special stock oil. It is advisable to clean the interior of the barrel again on the following day to prevent the possible build up of any remaining gunpowder deposits

Important!

- Never put a cocked gun down!
- Before firing ensure that the barrels are wiped dry.
- Make sure that the barrels are free of oil and all foreign bodies before firing.

- Do not forget that the inner mechanism of your gun needs to be carefully cleaned at set periods.

SAFETY REGULATIONS

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- Get to know how to handle your gun inside out!
- Always think of the gun as loaded and ready to fire!
- Only use ammunition from a specialist dealer; defective ammunition could damage your gun and you put yourself at risk too!
- Only use ammunition that is suitable for the caliber of the gun and which has been approved for use in the gun by C.I.P. !
The caliber description can be found on the barrel jacket in the area of the bottom bite.
- Point the gun at all times in a safe direction with a suitable ball trap – never at point it at people!
- Before loading check the barrel for foreign bodies!
- Always load the gun just before starting to hunt!

- Never transport a loaded gun!
- Only place your finger on the trigger when you have taken aim at the target and you want to shoot!
- Be aware of the area around your target!
- Never leave guns and ammunition unattended.
- Store guns and ammunition separately!
- Ensure that the gun does not come into the hands of unauthorized persons!
- Unload your gun:
before ascending and leaving a hide,
before getting into a vehicle,
before negotiating obstacles!
- If a cartridge fails to fire leave the gun for approx. 1 minute before opening.

As a matter of course, you should only shoot when you are certain

- you have clearly identified the target,
- there are no obstructions in the target area and other people cannot be hurt,
- that the area behind the field of fire is clear of living beings, buildings, streets etc.

If the conditions for a risk-free shot have been met, take aim at the target and push the safety lock to the front position (firing position). You can now fire using the appropriate trigger. If you do not fire a shot, immediately relock your gun by pulling back the safety lock.

When shooting with a set trigger/adjustable trigger, only set the trigger after unlocking the trigger!
Beware!

Never fire the shotgun trigger (rear trigger) first with a set trigger engaged! There is a risk that the gun could discharge both barrels.

The trigger resistance is reduced considerably with the set lock engaged.

Note: First cock and unlock the gun, then set the trigger. If you do not shoot, relock and then slowly pull back the trigger between your thumb and index finger - “unset trigger”.

We produce our own barrels manufactured in accordance with the most up-to-date production methods and using high tensile steel.

However, the firing accuracy of a gun is dependent on many other factors. The most important factor is the type of ammunition used.

If you want to check the firing accuracy of your gun, use the type of ammunition listed in the weapon passport. If this ammunition is unavailable this may lead to considerable variations in performance. Even ammunition from the same manufacturer can produce various firing accuracy and aiming point positions from batch to batch and from gun to gun. The telescopic sight used is another important factor influencing the firing accuracy of your gun. For this reason make sure that you set the same quality requirements in your choice of telescopic sights and installation as you would with your choice of gun. We can only guarantee the excellent accuracy of our guns given the optimal choice of ammunition, sights and installations.

Complaints about firing accuracy must be

submitted within 1 month of the purchase of the gun. If the complaint proves to be unjustified we retain the right to charge for any ensuing costs.

1. Shotgun barrel

Your shotgun barrel (or both shotgun barrels) are set at 35m with shotgun cartridges (in accordance with the weapon passport) and an optimal shot distribution and coverage is guaranteed in accordance with the available choke. Skeet versions shoot to a distance of 20m

2. Rifle barrels

We guarantee optimal firing accuracy for a cold barrel, fired with open sights at 50m or with telescopic sights at 100m if the ammunition listed in the weapon passport is used.

2.1. Over and under rifle/shotgun combination model
2010/2011/2012/2010D/2011D/2012D

When loading a side-by-side combination rifle/shotgun the gun is cooled down to ambient temperature as a matter of course.

There is no compulsory firing sequence. After rapid firing sequences changes in aiming points remain within practical limits for hunting.

In addition, the shotgun barrel can also be loaded with shotgun cartridges (Brennecke) in accordance with the "Langenhagen standard" when using the ammunition listed in the weapon passport.

BEWARE!

When loading shotgun cartridges, the type of sight (open sight or telescopic sights) must be preset for the method of loading!

2.2. Over and under side-by-side model
2020/2021/2022/2020D/2021D/2022D

Over and under side-by-side rifles are designed to be used for the rapid double firing of both barrels. The discharge of several shots in rapid succession produces a change in the aiming point position of the barrel caused by the thermo-physical laws

associated with soldered barrel combinations. After cooling down this returns to its original state.

The optimal firing of both barrels in rapid succession can only be achieved by absolutely adhering to a firing sequence of 6 - 10 seconds for the second shot and the firing sequence of right/left barrels (front/rear trigger for double triggers). We guarantee an optimal firing performance for double shots if these conditions are met and if the ammunition listed in the weapon passport is used.

If the time interval in the firing sequence is not adhered to this will produce changes in the aiming point position but when used in hunting will not exceed tolerable limits.

Over and under side-by-side rifles with varying calibers of bullet (e.g. Bergstutzen) are not designed for a rapid double shot and are therefore loaded cold into the individual barrels. There is no compulsory firing sequence.

WARRANTY CONDITIONS

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We have supplied hunting and sports guns that meet the highest quality requirements for decades under the trade names “MERKEL” and “SUHL”

. This is a good reason for us to extend the warranty period, taking into account statutory guarantee periods, for the initial purchaser of the gun to

5 years

from the date of purchase of the gun.

Once the statutory warranty period has expired we assume responsibility for the warranty for all metal and plastic parts of the gun which show evidence of material or workmanship defects. The guarantee is provided exclusively in terms of the statutory repair requirements.

Conditions for recognizing warranty claims are

- **notification of the defect within one month of being detected,**
- **the submission of the warrant card enclosed in the attachment to this manual to us within 20 days of the purchase.**

– **professional judgement and decision by us.**

In case of unjustified complaints we retain the right to charge for any costs incurred.

Warranty claims are invalid:

- **with the use of certain (see details in the weapon passport) or non CIP authorized ammunition (including reused ammunition)**
- **with improper use, inadequate care and mechanical damage of all types**
- **if the gun is damaged or destroyed through force majeure or by environmental conditions**
- **if modifications or alterations are performed by non-authorized workshops or the gun is damaged by attempted DIY repairs at**
- **or if gun-barrel oxidizing or heat treatment has been performed by third parties**
- **on firing accuracy of the gun if the telescopic sights are not installed by us**

– **if in the case of models with muzzle adjustments or alterations carried out by non-authorized persons**

– **for the sight and rubber gunstock cap provided by the customer**

- **in the absence of or incomplete warranty card and missing weapon passport.**

Further claims for damages and losses caused by the gun or its use are invalid.

The fulfillment of the provisions of the warranty requires the gun to be submitted to a specialist workshop, to a dealer or the manufacturer for further investigation.

Great success and a traditional “Waidmanns Heil” greeting with your new gun from

**Merkel Jagd- und Sportwaffen GmbH
Schützenstr. 26
Postfach 100261
98490 Suhl**

Address:
Address:



Merkel
Jagd- und Sportwaffen GmbH
98527 Suhl – Schützenstraße 26
98490 Suhl – Postfach 100 261
Germany

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Sender:



Merkel
Jagd- und Sportwaffen GmbH
98527 Suhl – Schützenstraße 26
98490 Suhl – Postfach 100 261
Germany

Merkel Jagd- und Sportwaffen GmbH

GEWÄHRLEISTUNGSKARTE / KUNDENDIENSTKARTE

Die Karte ist ein wichtiger Beleg für den Ersterwerber und den Hersteller der Waffe zur Gewährleistung der Garantie und für die Kundenbetreuung.

Bitte sorgfältig ausfüllen und innerhalb von **20 Tagen** ab Verkaufstag an den Hersteller einsenden.

Bitte geben Sie uns bekannt:

vom Verkäufer auszufüllen:

Waffen Nr.: Verkaufsdatum:

Model:

eventuelle vor dem Verkauf vorgenommene Veränderungen am

Lauf:

Schaft:

Abzugssystem: Stempel/Siegel

Fachgeschäft

vom Käufer auszufüllen:

Name, Vorname des Käufers:

Anschrift des Käufers:

Unterschrift des Käufers:

Wir danken Ihnen.

Merkel Jagd- und Sportwaffen GmbH

Merkel Jagd- und Sportwaffen GmbH

WARRANTY/SERVICE CARD

This card is an important document for the first buyer and the manufacturer of the weapon with regard to the warranty granted and after-sales service. Complete carefully and return to the manufacturer within **20 days** from day of purchase.

Please specify:

To be completed by the seller:

Weapon no.: Date of sale:

Model:

Modifications, if any, made prior to sale

Barrel:

Stock:

Stamp/Seal

Trigger mechanism: Specialist Shop

To be completed by the buyer:

Name, first name:

Buyer's address:

Buyer's signature:

Many thanks, *Merkel Jagd- und Sportwaffen GmbH*

CARTE DE GARANTIE/

CARTE DE SERVICE APRES VENTE

Cette carte est un document important pour le premier acheteur et pour le fabricant d'arme pour la garantie et pour l'attention permanent vers le client après la vente.

Nous vous prions de remplir soigneusement la carte et de l'envoyer au fabricant en **20 jours** comptant du jour de la vente.

Nous vous prions de nous faire connaître:

à remplir par le vendeur:

numéro d'indification: date de vente:

modèle:

des modifications éventuelles faites avant la vente

au canon:

à la crosse:

timbre/cachet

au système de détente: magasin spécialisé

à remplir par l'acheteur:

nom, prénom du vendeur:

adresse du vendeur:

signature de l'acheteur:

Nous vous en remercions *Merkel Jagd- und Sportwaffen GmbH*