

INSTRUCTION MANUAL  
**CZ 452 ZKM**



 CZ  
ČESKÁ ZBROJOVKA

**Before handling the firearm read this manual carefully and observe the following safety instructions.**

Improper and careless handling of the firearm could result in unintentional discharge and could cause injury, death, or damage to property. The same consequences can be caused by any unauthorized modifications or adjustments, corrosion, or use of non-standard or damaged ammunition. In these cases the manufacturer shall not be responsible in any manner whatsoever for the resultant consequences.

Before leaving the factory this firearm was tested, carefully inspected, and packed. CZ cannot accept responsibility for product handling while in transit, or upon leaving the factory. Therefore, please examine this rifle carefully at the time of purchase to ensure that it is unloaded and undamaged.

This instruction manual should always accompany the firearm and that even in the case of its loan or sale.

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## SAFETY INSTRUCTIONS

Always follow the safety instructions for your safety and the safety of others.

1. Always handle your firearm as if it were loaded.
  2. Never point your firearm at anything you do not intend to shoot.
  3. Never take anyone's word that a gun is unloaded.
  4. Always make sure that your firearm is not loaded before laying it down, or handing it to another person.
  5. Always store your rifle unloaded with the striking mechanism released.
  6. Never abuse your firearm by using it for any purpose other than shooting.
  7. Never leave a loaded firearm unattended.
  8. Prior to loading the firearm make sure that barrel bore, chamber, and action are clean and clear of obstructions. Clean a dirtied firearm immediately so that it will function properly and safely.
  9. Always use only clean, dry, original high quality commercially manufactured ammunition, which is appropriate to the caliber of your firearm.
  10. Never drink alcoholic beverages or take drugs before or during shooting.
  11. Always wear safety glasses and ear protection during shooting whenever possible.
  12. Always keep the safety on when the rifle is loaded with a cartridge in the chamber, until you are ready to fire. Keep firearm pointed in a safe direction when disengaging the safety.
  13. Always keep clear and keep others clear of the ejection port.
  14. Never squeeze the trigger or put your finger in the trigger guard until you are aiming at a target and ready to shoot.
  15. Always be absolutely sure of your target, and the area behind it, before you squeeze the trigger. A bullet could travel through or past your target up to several hundreds of meters.
  16. Never shoot at a hard surface such as rock, or a liquid surface such as water.
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17. Never fire your firearm near an animal unless it is trained to accept the noise.
18. Never indulge in "horseplay" while holding your firearm.
19. Failure to fire: always hold the firearm, keeping it pointed towards the target, or a safe open area and wait 30 seconds when the firearm fails to fire. If a hangfire (slow ignition) has occurred, the round will fire within 30 seconds. If the round does not fire, remove the magazine, eject the round and examine the primer; if the firing pin indent on the primer is light, or non-existent, have the firearm examined by a competent gunsmith.
20. Always make sure your firearm is not loaded before cleaning, storing or travelling.
21. Always keep and store your firearm and ammunition in separate locked receptacles out of reach and sight of children and untrained people.
22. Never alter any parts of your rifle as the safety and proper function of your rifle could be seriously compromised.
23. Always be aware that corrosion, use of damaged ammunition, dropping the rifle on hard surfaces or other "coarse treatment" could cause a damage you may not see. If something like this happens let the firearm to be examined and tested by a competent gunsmith.

## THE CZ 452 ZKM SMALLBORE RIFLE DESCRIPTION AND TERMINOLOGY

The names of basic smallbore rifle parts used in this Instruction Manual are presented in Fig. 1. Nomenclatures of all CZ 452 ZKM parts are presented in the section *Illustration and List of Parts*.

The CZ 452 ZKM is a classic repeating firearm of sturdy design. It is manufactured in a number of versions. Characteristic features of all versions are:

- The CZ 452 ZKM is well-balanced and consequently quick and easy to aim
- The tangent rear sights are adjustable to a wide range of shooting distances
- Easy mounting of rifle scope

- Controlling elements which are simple in operation, and easy to reach
- Adjustable trigger pull
- Cocking indicator indicates cocking of the striking mechanism
- Easy disassembly for cleaning and routine maintenance, which can be carried out without any tools
- A high degree of accuracy when firing
- A long service life
- High functional reliability in all environments, even with ammunitions made by various manufacturers, and with different types of bullets
- Threaded muzzle as option for Still or Parker Hale sound moderator attachment

Table of Basic Versions:

Model	Caliber			Surface finish		Threaded for sound moderator	Description
	22 LR	22 WMR	17 HMR	Blued	Nickel		
<b>Standard</b>	●	●	-	●	-	●	Beech wood stock
<b>Lux</b>	●	●	-	●	●	●	Walnut stock, grip parts provided with checkerings
<b>Style</b>	●	-	-	●	●	●	Plastic stock, metal parts nicked or blued
<b>Silhouette</b>	●	-	-	●	-	●	Plastic stock, design of this rimfire rifle meets the requirements of the IMSSA shooting regulations
<b>FS</b>	●	-	-	●	-	-	Walnut full stock, grip parts provided with checkerings
<b>Scout</b>	●	-	-	●	-	-	Version intended for use by juvenile persons
<b>American</b>	●	●	●	●	●	-	Design has been adapted to the requirements governing the USA and Australian markets - without fixed sights
<b>Varmint</b>	●	-	●	●	-	-	Heavy barrel, stock is provided with a mass-reduced rubber buttplate - without fixed sights

## OPERATING INSTRUCTIONS

### Ammunition

Use only factory-manufactured ammunition of appropriate caliber, which are in compliance with CIP regulations (International Proof Commission for Firearms) or SAAMI (Sporting Arms and Ammunition Manufacturers' Institute Inc. of the United States). The use of other cartridges could damage the firearm or cause injury to the shooter.

### Removal of the Magazine

Press the magazine catch located at the front of the magazine in a rearward direction (Fig. 2), and remove the magazine (single-shot adapter) from the firearm.

### Magazine Loading

With the open end uppermost, grasp the magazine in one hand. Place a cartridge on the magazine follower with the base just forward of the retaining lips (Fig. 3). Press the cartridge down and back until it touches the rear flat edge of the magazine. Place the next cartridge on top of the previous cartridge and slide in as already described.

### Loading of the Rifle

**ALWAYS MAKE SURE THE RIFLE IS POINTED IN A SAFE DIRECTION WHEN LOADING!**

Insert a loaded magazine into the rifle until it is securely caught by the magazine catch.

Grip the rifle with the left hand by its fore-end, place the buttplate against your body and grip the bolt handle with the other hand. Open the bolt by raising the bolt handle and pulling it to the rear to its stop. Then push the bolt vigorously to its forward position again and by rotating the bolt handle in a downward direction close the bolt action. This procedure inserts the cartridge into the cartridge chamber and cocks the striker mechanism. The rifle is now ready to fire. If you do not intend to fire immediately ensure the firearm safety as described further in the section *Safety and its Operation*.

When using a single-shot adapter, keep it inserted in the rifle, open the bolt and place the cartridge on the follower. Further proceed in the same manner as when employing the magazine. The single-shot adapter is intended for the highest accuracy levels of shooting as it protects the bullets against damage during the feeding of cartridges.

### The Safety and its Operation

Shift the safety forward to its "Safety-On" position (Fig. 4) until the red dot is fully covered. This procedure locks the trigger mechanism and the bolt, it is not possible to discharge a cartridge or manipulate the bolt.

### **Unloading of the Rifle**

ALWAYS MAKE SURE THE RIFLE IS POINTED IN A SAFE DIRECTION!

- Remove the magazine in the manner as already described
- Move the safety to its "Safety-Off" position in order that the bolt can be opened
- Open the bolt and check to ensure that the cartridge has been extracted from the chamber and ejected
- Close the bolt
- Depress the trigger (dry fire)

### **Cocking Indicator Function**

Cocking of the striking mechanism is indicated by the striker. When the striker is cocked (activated), its rear part protrudes (Fig. 5). This protrusion can be checked both by sight and by touch.

### **Trigger Adjustment**

The trigger pull adjustment is carried out after the removal of the barreled action from the stock and by adjusting the trigger rod nut (Fig. 6).

### **Sight Adjustment**

The CZ 452-2E ZKM small bore rifle sights were sighted-in at the manufacturing plant at a 50 m distance. The tangent rear sight is provided with lines for 25 - 200 m aimed shooting in diversion steps of 25 m.

After depressing the rear sight-locking piece it is possible to shift the slide for the desired range. Windage adjustment is achieved after loosening the screw (Fig. 7) on the side you want to shift the point of impact and then tighten the screw on the opposite side. A full turn of the screw shifts the point of impact 5 cm (2 in.) at 50 m. Elevation correction is carried out by drifting the front sight in a dovetail. The front sight is secured in its place by a screw. The front side base is provided with auxiliary lines (Fig. 8). Drifting the front sight by one line shifts the point of impact by 1.5 cm (.6 in.) at 50 m.

On the CZ 452 ZKM Scout version, windage correction is carried out by shifting the front sight in the transverse groove, and securing it in the desired position with an indentation punch. Elevation adjustment is carried out by shifting of the rear sight leaf slide (Fig. 10). Shifting the slide by one increment changes the point of impact by 1.25 cm (.5 in.) at 50 m.

### **Rifle Scope**

Mounting of the riflescope and sighting-in of the rifle should be entrusted to a qualified gunsmith's workshop.

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## MAINTENANCE INSTRUCTIONS

### Stripping for Cleaning - Disassembly

1. Remove the magazine.
2. Shift the safety to its "Off" position, in order that the bolt can be manipulated.
3. Open the bolt, and after depressing the trigger to its extreme rear remove the bolt by moving it rearward.

### Disassembly of the Bolt

1. Remove the bolt from the receiver as previously described.
2. Keeping the firm grip of the bolt body rotate the bolt handle to the right (in the same manner as if closing the bolt in the firearm). The main spring is thus released.
3. Place the striker spring support against a suitable solid object (Fig. 9) and push it a little way into the bolt body. At the same time pulling the safety up and out.
4. After detaching the safety, carefully release the bolt while holding the striker spring support. Be very careful when doing this disassembly procedure as the spring support is under main spring tension and its ejection could result in the loss of this part, or could cause an injury.

### CAUTION:

Do not strip your firearm any further. If you assume that your firearm requires adjustment or repair, entrust this work to a competent gunsmith in a specialized workshop!

### Cleaning of the Rifle

Clean the rifle

- Each time you use it
- If you get your rifle wet
- As soon as possible after shooting
- At least once a year in a temperate climate
- As often as once a month in a tropical climate, or other demanding environment



### **Cleaning the Barrel Bore and the Cartridge Chamber**

If the firearm has not been fired or if only a few cartridges have been fired, clean the barrel bore and cartridge chamber by a clean patch attached to a cleaning rod. Repeat, changing patches, until the last patch comes out clean.

When the barrel bore is very dirty, apply a gun cleaning solution using a cleaning brush. Let the solvent act for about 10 minutes (this time may vary depending on the solvent agent being used). Then thoroughly scrub out the barrel bore. Subsequently, dry the barrel bore and cartridge chamber with a clean patch and check that all powder residues or fouling have been removed. If necessary repeat this procedure.

The cleaning rod and the brush must be inserted into the barrel bore from the chamber, to prevent wear or damage to the muzzle. Pass the brush all the way through the barrel bore before reversing the movement. If you try to change directions with the brush in the barrel, the brush could stick.

### **Cleaning of Other Rifle Parts**

Other parts of the rifle can be cleaned with a dry cloth, old toothbrush, copper bristle brush or a wooden scraper. Preserving oil or paraffin oil can be used for proper cleaning. Never use the agent designed for barrel bore cleaning! These solutions could remain in the joints, and after some time could cause corrosion. Check that cloth particles or brush bristles have not become lodged in any part of the rifle.

The maintenance of the stock can be carried out with a dry cloth or by some furniture-polishing product.

### **Preserving**

When the barrel bore, cartridge chamber, and all accessible parts are clean and dry, wipe these parts with a cloth soaked in gun oil or apply the oil in a spray. Remove all excess oil.

Before shooting always wipe the barrel bore dry. At very low temperatures remove the oil from all accessible parts or apply a lubricant prepared especially for these conditions.

Use thick preserving agents for example, preserving grease only for long-term storage in demanding climate environments, and before any use of the rifle it must be thoroughly removed from all parts of the firearm.

## TROUBLESHOOTING, CAUSES AND REMEDIES

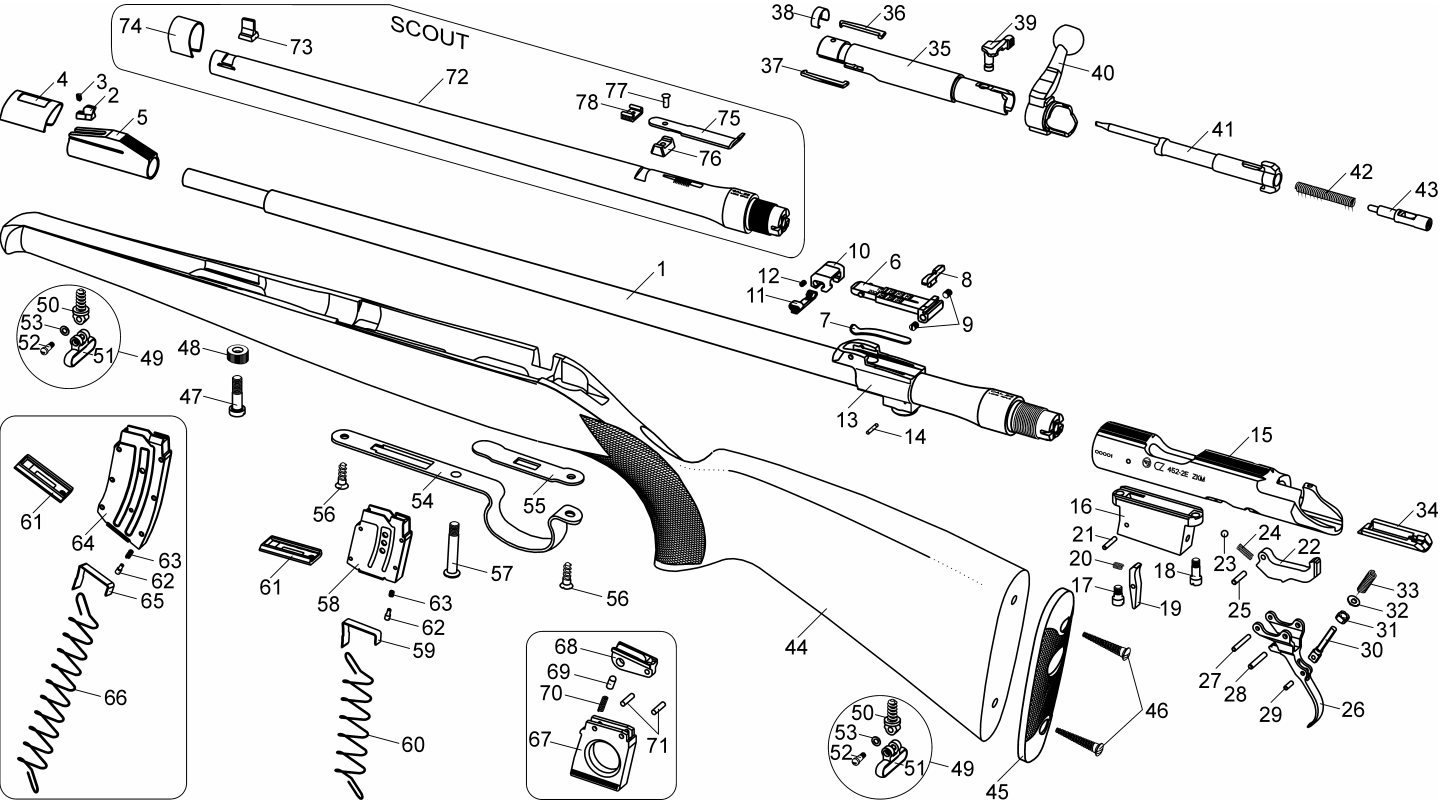
If your firearm is properly used and maintained, malfunctions will rarely occur. However, if such a situation does occur please observe the following instructions.

**CAUTION** - if a malfunction occurs, the possibility of an unintentional discharge is substantially increased. For this reason, when clearing malfunctions, observe the Safety Instructions already mentioned above. Keep the rifle pointed in a safe direction, do not turn the rifle against your body or anyone else's. Do not place your hands in front of the barrel!

<b>Malfunction</b>	<b>Possible Cause</b>	<b>Remedy</b>
A round has not been fed into the chamber.	Magazine is not fully inserted or is damaged. The rifle or cartridges are fouled (dirty).	Insert magazine properly or change magazine. Clean the rifle and cartridges and wipe them dry or as the case may be slightly lubricate.
Misfire	Defective cartridge. Firing Pin hole fouled (dirty) or improper lubrication agent used during low temperature conditions.	Follow the Safety Instructions according to point 19. Disassemble and clean the firing pin or use low temperature lubricant.
A shot sounds "weak".	The primer has been activated but no powder load was inside the cartridge case.	Unload the rifle and check that the bullet is not lodged in the barrel. Any subsequent shot could cause damage to the barrel!
The spent case has not been ejected.	Cartridge chamber, extractor or ammunition dirty or unsuitable lubricant in low temperature environment	Clean and wipe the rifle dry or eventually lubricate lightly with a suitable agent. Use clean and new ammunition.

If you cannot clear away any malfunction in the manner described above, entrust the rifle to a competent gunsmith for inspection and repair.

ILLUSTRATION AND LIST OF PARTS



- 1 Barrel
- 2 Front Sight
- 3 Front Sight Screw
- 4 Front Sight Cover
- 5 Front Sight Base
- 6 Rear Sight Leaf
- 7 Rear Sight Leaf Spring
- 8 Rear Sight Blade
- 9 Rear Sight Windage Screw
- 10 Rear Sight Slide
- 11 Rear Sight Locking Piece
- 12 Locking Piece Spring
- 13 Rear Sight Base
- 14 Rear Sight Base Pin
- 15 Receiver
- 16 Magazine Housing
- 17 Magazine Housing Front Screw
- 18 Magazine Housing Rear Screw
- 19 Magazine Catch
- 20 Magazine Catch Spring
- 21 Magazine Catch Pin
- 22 Sear
- 23 Sear Steel Ball
- 24 Sear Spring
- 25 Sear Pin
- 26 Trigger
- 27 Trigger Rivet
- 28 Trigger Pin
- 29 Trigger Rod Pin
- 30 Trigger Rod
- 31 Trigger Rod Nut
- 32 Trigger Spring Washer
- 33 Trigger Pull Spring
- 34 Bolt Guide
- 35 Bolt
- 36 Extractor
- 37 Holder
- 38 Extractor Spring
- 39 Safety
- 40 Bolt Handle
- 41 Striker
- 42 Striker Spring
- 43 Striker Spring Support
- 44 Stock
- 45 Butt Plate
- 46 Butt Plate Screw (2x)
- 47 Front Stock Screw
- 48 Front Escutcheon
- 49 Sling Swivel Assembly
- 50 Sling Swivel Wood Screw
- 51 Sling Swivel
- 52 Sling Swivel Screw
- 53 Elastic Spacer
- 54 Trigger Guard
- 55 Trigger Guard Plate
- 56 Trigger Guard Screw (2x)
- 57 Rear Stock Screw
- 58 Magazine Shell
- 59 Magazine Follower
- 60 Magazine Follower Spring
- 61 Magazine Base
- 62 Magazine Plunger
- 63 Magazine Plunger Spring

*10 Shot Magazine:*

- 1 Magazine Shell
- 2 Magazine Follower
- 3 Magazine Follower Spring

*Single-shot Adapter:*

- 1 Adapter Body
- 2 Feeder
- 3 Pin
- 4 Spring
- 5 Pin (2x)

*Scout Version:*

- 1 Barrel
- 2 Front Sight
- 3 Front Sight Cover
- 4 Rear Sight Leaf
- 5 Rear Sight Base
- 6 Rivet
- 7 Slide

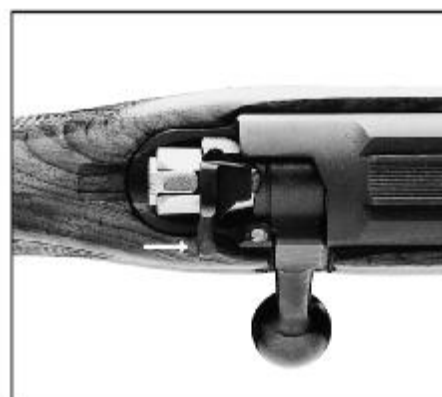
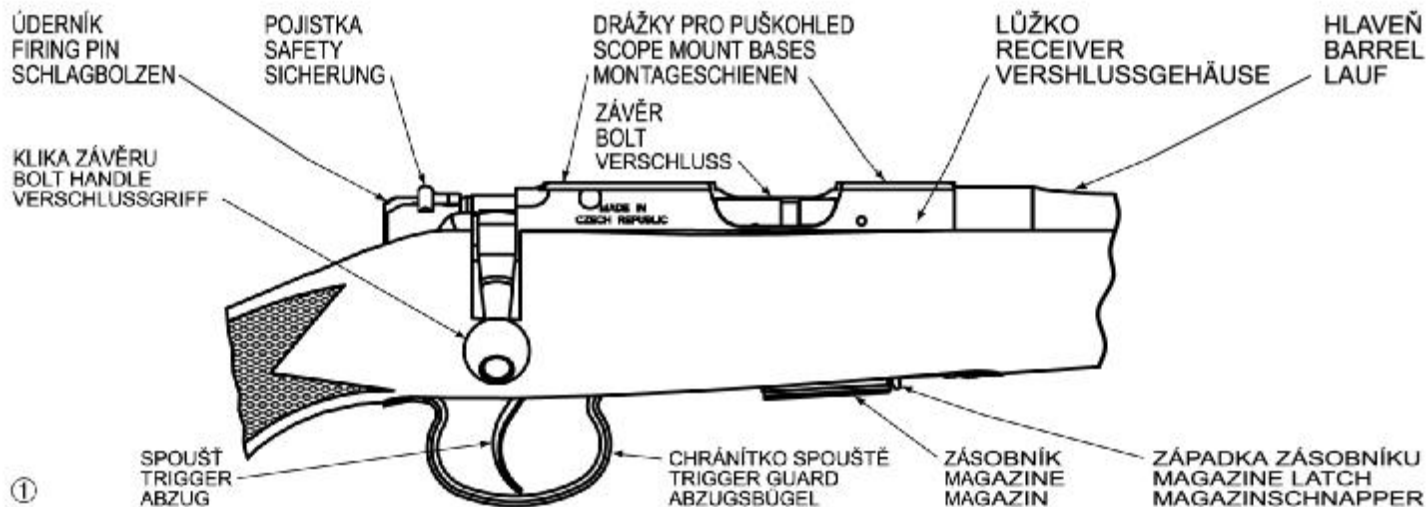
The Company, reserves the right to make any changes it thinks necessary to improve its models or to meet any requirements of manufacturing or commercial nature.

**TECHNICAL SPECIFICATIONS**

<b>Model</b>	<b>Standard Lux</b>	<b>Style Silhouette</b>	<b>FS</b>	<b>Scout</b>	<b>American</b>	<b>Varmint</b>
Caliber	22 LR 22 WMR	22 LR	22 LR	22 LR	22 LR 22 WMR 17 HMR	22 LR 17 HMR
Overall Length [mm]	1083	1083	995	830	1020	998
Barrel Length [mm]	630	630	495	412	572	530
Sight Radius (Open Sights) [mm]	508	508	410	320	-	-
Weight (Empty Magazine) [kg]	3	3	2,9	1,8	2,8	3,2
Magazine Capacity [cartridges]	<b>22 LR: 5/10/1 - 22 WMR: 5 - 17 HMR: 5</b>					
Trigger Pull, Adjustment Range [N]	14 ÷ 18					

**LIST OF ILLUSTRATIONS**

1. The Names of Basic Parts
2. Magazine Removal
3. Magazine Loading
4. Shifting the safety to its "Safety-On" position
5. Activated (cocked) striker
6. Trigger pull adjustment
7. Rear sight ramp with slide, rear blade and rear sight windage screws
8. Close-up of front sight base with auxiliary lines and front sight proper
9. Disassembly of the bolt
10. Close-up of rear sight ramp - Scout version.

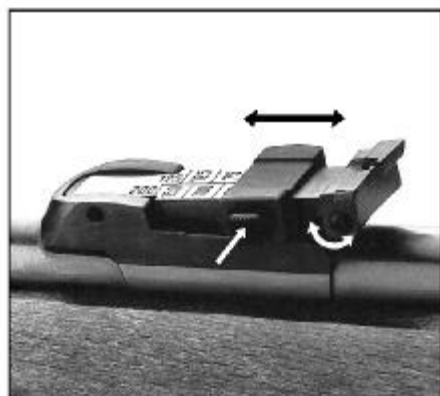




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