

Owner's manual



850 AIRMAGNUM

CO2 repeater rifle
cal. .177 (4.5mm) pellet
cal. .22 (5.5mm) pellet

⚠ WARNING: Not a toy. Adult supervision required. Misuse or careless use may cause serious injury or death. May be dangerous up to 500 yards (457 meters).

YOU AND OTHERS WITH YOU SHOULD ALWAYS WEAR SHOOTING GLASSES TO PROTECT YOUR EYES. READ ALL INSTRUCTIONS BEFORE USING.
BUYER AND USER HAVE THE DUTY TO OBEY ALL LAWS REGARDING THE USE AND OWNERSHIP OF THIS AIRGUN.

THIS AIRGUN IS INTENDED FOR USE BY THOSE 16 YEARS OF AGE OR OLDER.

⚠ WARNING: Lead pellets.

Do not inhale dust or put pellets in mouth. Wash hands after handling. This product contains lead, a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm.)

Please read this owner's manual completely. This air rifle is not a toy. Treat it with the same respect you would a firearm. Always carefully follow the safety instructions found in this owner's manual and keep this manual in a safe place for future use.

If you have any questions regarding your new air rifle, please contact Umarex USA Customer Service at Umarex USA Inc.

6007 South 29th Street
Fort Smith, AR 72908 USA

Phone: (479) 646 - 4200

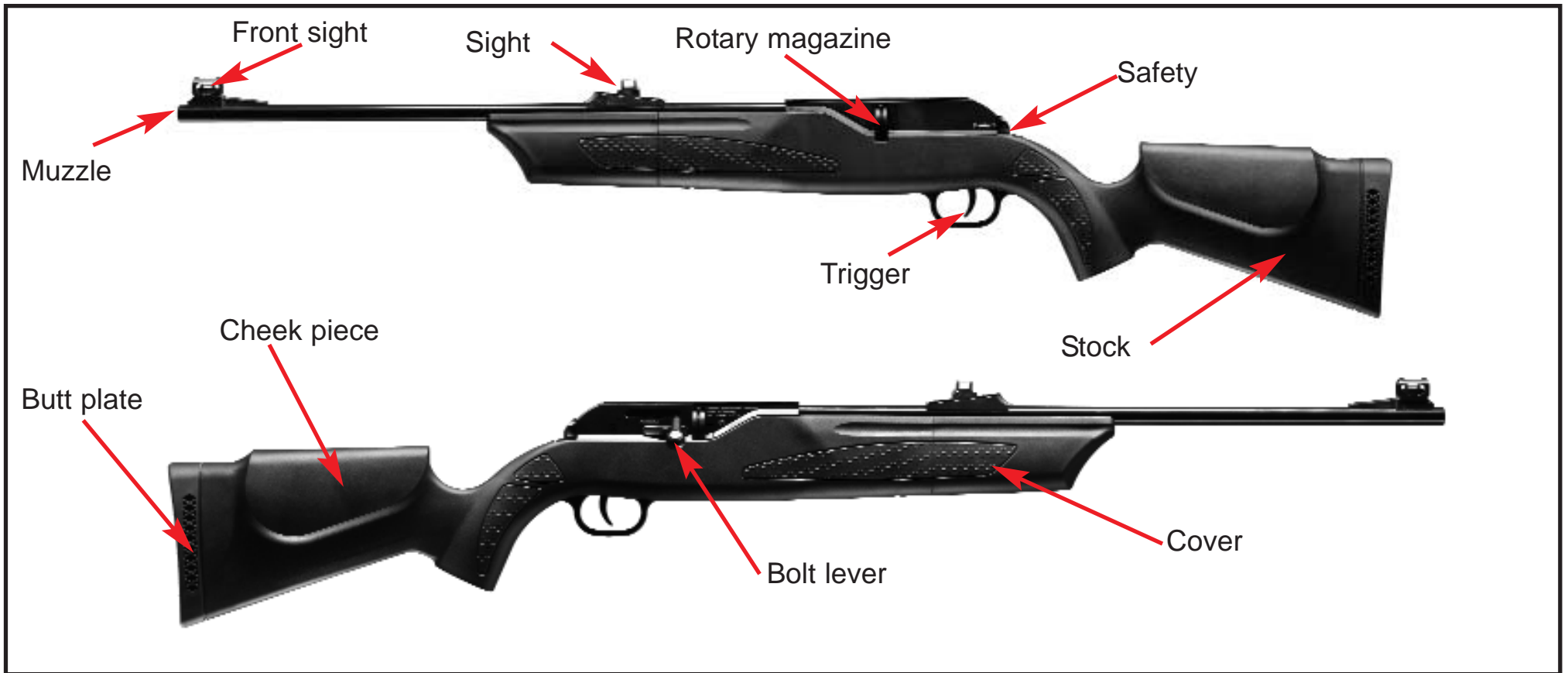
Fax: (479) 646 - 4206

www.umarex-usa.com.

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1. Parts of your new CO2 rifle

To fully understand the usage instructions, know the different parts of your new air rifle.



2. Handling the safety

⚠ WARNING: Keep the air rifle in the "SAFE (S)" position until you are actually ready to shoot. Then push the safety to the "FIRE (F)" position.

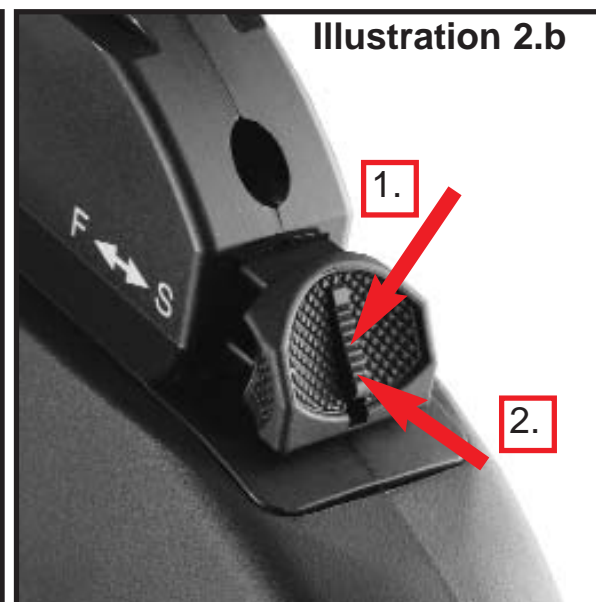
After each shot, the gun will automatically have the safety in place.

2.1 To set the safety manually, pull the safety back, as shown in illustration 2.a, until it is in position (the red mark must be completely hidden). **The safety is not on "Safe" unless it is pulled all the way back and the RED mark is hidden. The air rifle will not fire when on "Safe". Even when the safety is on "Safe", you should continue to handle the air rifle safely. Do not ever point the air rifle at any person. Do not ever point the air rifle at anything you do not intend to shoot.**

2.2 The rifle is fitted with a double safety system. To deactivate it, you must:

1. press the fixing lever down and
2. push the safety button forward (illustration 2.b)

When the red mark is visible, the air rifle is ready to shoot (illustration 2.c).



3. Inserting and removing the 88 g CO₂ cartridge

⚠ WARNING: CO₂ cartridges may explode at temperatures above 120°F (48.9°C). Do not mutilate or incinerate them. Do not expose them to heat or store CO₂ cartridges at temperatures above 120°F (48.9°C).

⚠ WARNING: Keep hands away from escaping CO₂ gas. It can cause frostbite if allowed to come in contact with skin.

Note: Make sure you use only Umarex / RWS accessories to guarantee good operation.

Make sure the air rifle is on "Safe" (See **Step 2.1**). Make sure the air rifle is unloaded (See **Step 5.2**) and pointed in a **SAFE DIRECTION**.

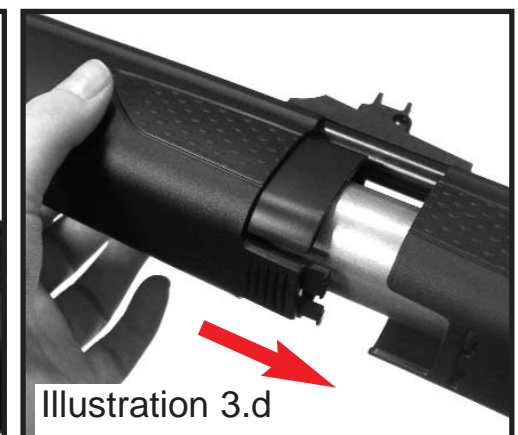
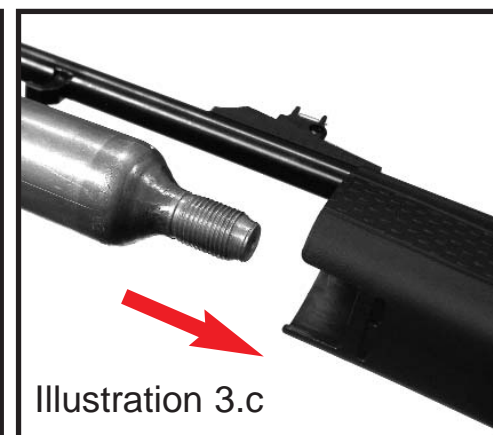
FIRING THE AIR RIFLE WITH LOW GAS PRESSURE MAY CAUSE A PELLET TO GET STUCK IN THE BARREL.

To insert an 88 g CO₂ cartridge, press the cover down on the grooves (illustration 3.a) and pull off the cover towards the barrel (illustration 3.b). If you are changing an 88 g CO₂ cartridge, remaining CO₂ gas may escape.

Insert the new 88 g CO₂ cartridges with the narrow end first, into the forearm (illustration 3.c) and screw in tightly.

The 88 g CO₂ cartridges is now in place and hermetically sealed. Slide the cover back into place (illustration 3.d).

Never remove a full, inserted 88 g CO₂ cartridge. The seals may be damaged by the high pressure.



⚠ WARNING: Do not use steel pellets (or BBs), darts or other unsuitable ammunition. Use only lead pellets of the caliber which matches your airgun.

⚠ WARNING: Do not place your hand or fingers over the muzzle. Always make sure your air rifle is pointing in a SAFE DIRECTION, and keep your finger away from the trigger. Failure to follow these warnings may cause serious injury or death.

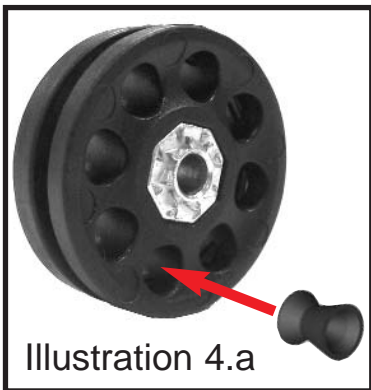


Illustration 4.a

4. Loading the rotary magazine

- Activate the safety (see chap. 2).
- Pull back the bolt lever of the lock and the retainer lever (see the sequence in illustration 5.a).
- Remove the rotary magazine from the air rifle (illustration 5.b).
- Load the rotary magazine by inserting pellets in the holes (illustration 4.a). The pellets are held in place by an o-ring that traps them.
- Never shoot a used pellet. It might damage the rotary magazine and the barrel.
- Your new air rifle performs with all the pellets described in the accessories section. Pellets with a maximum total length of 10 mm may be loaded.

5.1 Loading the rifle

- Activate the safety (see chap. 2).
- Pull back the bolt lever of the lock and the retainer lever (see the sequence in illustration 5.a). THE BOLT LEVER MUST BE IN THE REAR POSITION.
- Place the rotary magazine in the air rifle (illustration 5.b).
- Push the retainer lever.
- Push the lever of the lock forward and lower it.

WARNING: A pellet is automatically loaded in the barrel during the locking process.

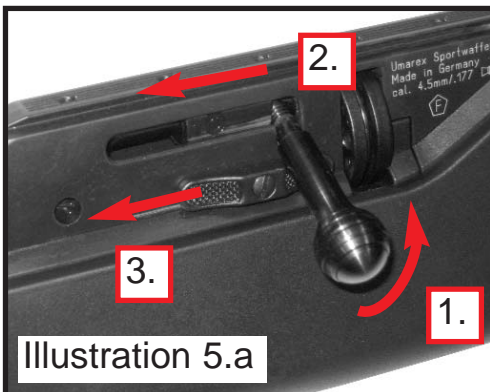


Illustration 5.a

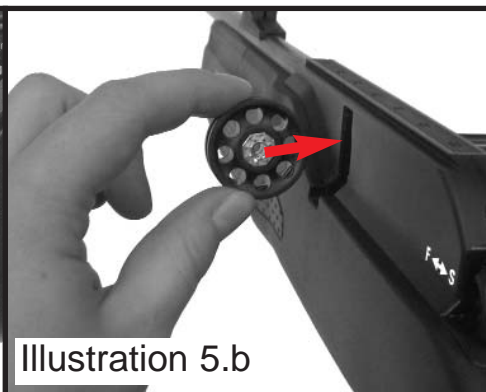


Illustration 5.b

5.2 Unloading the rifle

- Activate the safety as described (see chap. 2).
- Pull back the bolt lever and then the retainer lever (illustration 5.a) to be able to remove the rotary magazine.
- Remove the rotary magazine (illustration 5.b).
- If there is a pellet in the barrel, remove it with a cleaning brush or proceed as described in chapter 8 “Jams”.

WARNING: When removing any pellet from the barrel with a cleaning brush, place the rifle horizontally and pointed in a safe direction (see chapter 8 “Jams”). Do not hold the air rifle in a vertical position, as the pellet could fall into the mechanism and cause damage.

- Never shoot a used pellet. It might damage the rotary magazine and the barrel.
- Remove the pellets from the rotary magazine.
- Make sure the gun is completely unloaded.
- Put the empty rotary magazine back into the air rifle.
- Push the bolt lever forward.
- Hold the air rifle pointing in a safe direction.
- Release the safety and uncock by pulling the trigger and making a dry shot.
- Then engage back the safety.

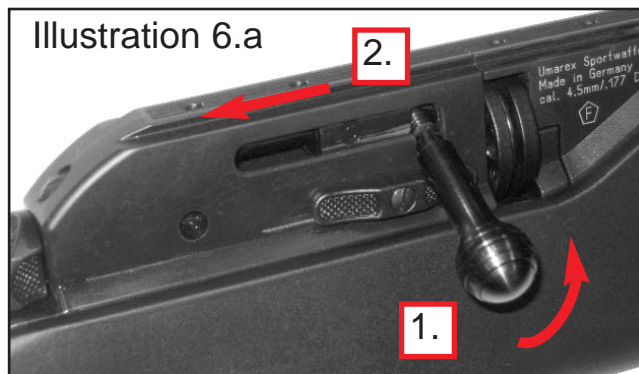
⚠ WARNING: Never use sharp metal objects to remove pellets from the rotary magazine or the air rifle. Any damage to the rotary magazine or the barrel could cause faulty operation.

6. Point and shoot safely:

⚠ WARNING: Due to high shooting velocity of this airgun, take particular care and caution in choosing a safe target. Only choose targets with a safe backstop. Do not choose targets that will cause ricochets. Never shoot at water.

⚠ WARNING: Make sure that the air rifle always points in a safe direction. Never point at people or animals. Always handle the air rifle as if it was loaded and ready to fire.

- You and others with you should always wear shooting glasses to protect your eyes.
- Always aim your air rifle in a SAFE DIRECTION before shooting.
- Check behind and beyond your target to be certain you have a safe backstop and that no person or property could be endangered.
- Do not shoot at hard surfaces or at the surface of water. The pellet may bounce off or ricochet and hit someone.
- Always choose your target carefully. Your backstop should be checked for wear before and after each use. Replace your backstop if the surface is worn or damaged, or if a ricochet occurs.
- Your air rifle is designed for target shooting. Always remember to place your target carefully. THINK about what you will hit if you miss the target.



7. Adjusting the trigger travel

Activate the safety.

Unload the air rifle as described in point 5.2.

Adjust your customized trigger travel by using a screwdriver to give a slight turn to the screw on the trigger (illustration 7.a).

8. Jams

⚠ WARNING: A jam is a dangerous situation.

⚠ WARNING: If the air rifle fails to shoot, never assume that there is no ammunition left in the gun.

CAUTION: Shooting with an air rifle with insufficient CO₂ pressure can cause a pellet to get stuck in the barrel.

If this happens:

- Insert a new 88 g CO₂ cartridge, remove the magazine, close the bolt lever and shoot the gun at a safe target **without** the rotary magazine.
- The blocked pellet will be released and fired.
- If this fails to resolve the problem, remove the magazine and carefully push out the blocked pellet with a cleaning brush. **NOTE: If you are not able to unjam your air rifle by following this procedure take no further action.** Umarex USA or an authorized service station will unjam your air rifle.

⚠ WARNING: When removing any pellet from the barrel with a cleaning brush, place the rifle horizontally. Do not hold the air rifle in a vertical position, as the pellet could fall into the mechanism and cause damage.

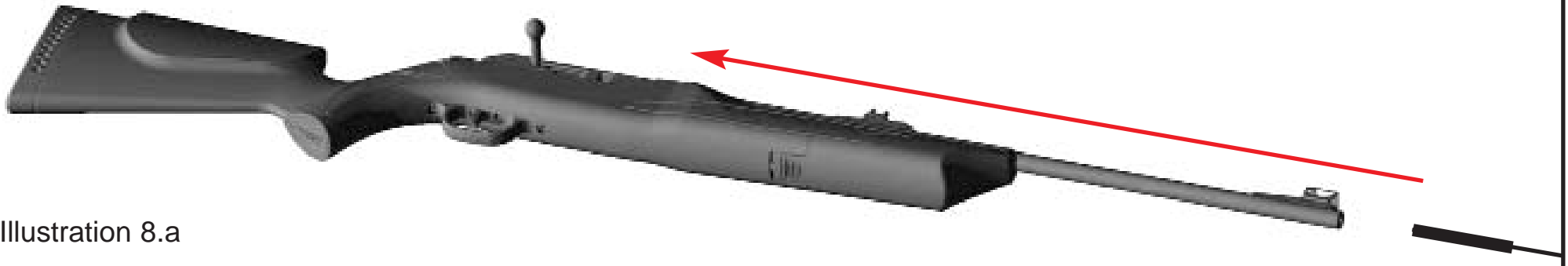


Illustration 8.a

9. Special features of CO₂

CO₂ air rifle performance might be affected by certain conditions. This includes storage at extremely high or low temperatures than normal outdoors (from 59°F / 15°C to 69.8°F / 21°C).

High temperatures can increase pressure in the 88 g CO₂ cartridge and also within the gun, to higher than standard operating pressure. This excessive pressure might prevent firing and cause permanent damage to the air rifle. Maximum temperature of storage or operation should never exceed 122°F (50°C).

⚠ WARNING: Shooting with low CO₂ pressure can cause a pellet to get jammed in the barrel. Bear in mind the indications for jams.

Do not try not to shoot the air rifle with an 88 g CO₂ cartridge that has already lost a considerable amount of its pressure.

Here are some indicators of insufficient 88 g CO₂ cartridge pressure:

- A) The sound of the shot is not as loud as when the cartridge is full.
- B) The ammunition hits the target, but in a lower position than it would with a full 88 g CO₂ cartridge.
Consequently, the shooting speed has dropped.
- C) No pellet leaves the barrel.

10. Adjusting the sight

The rifle is adjusted by the factory to shoot from a distance of 10 m.

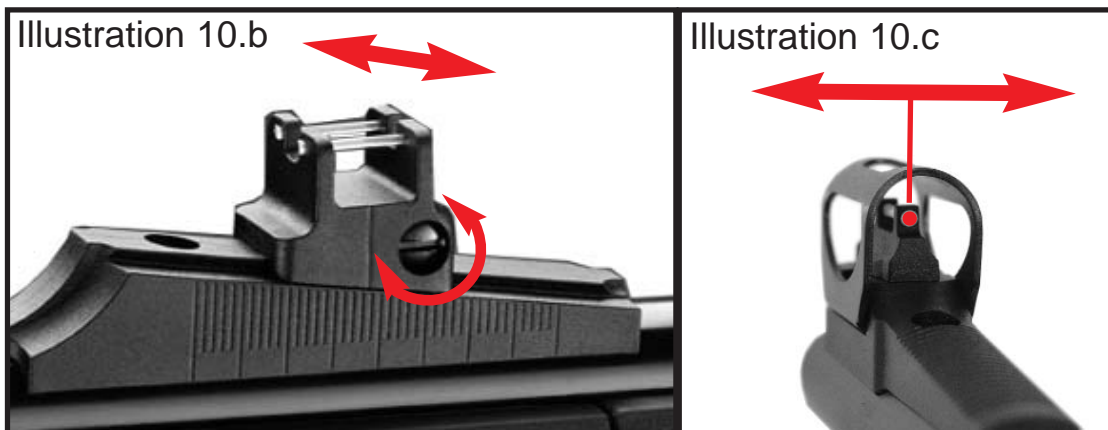
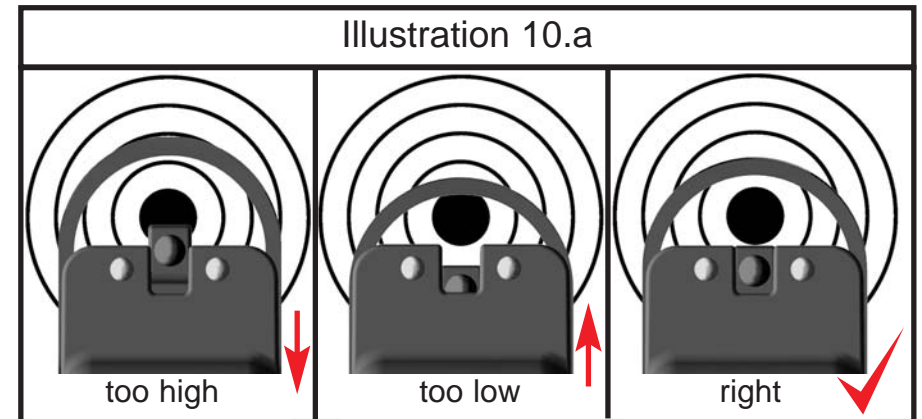
Adjusting the sight

To **adjust the elevation** of the sight, move the rear sight by slightly loosening the screw (illustration 10.b).

With excessively high shots: Move the rear sight back.

With excessively low shots: Move the rear sight forward.

Once the sight adjustment is complete, tighten the screw.



To adjust the windage of the sight, it is necessary to move the front sight. (Illustration 10.c):

If your air rifle is shooting too far to the right: Move the front sight to the right.

If your air rifle is shooting too far to the left: Move the front sight to the left.

11. Storage

⚠ WARNING: Never leave the air rifle loaded.

Always store the air rifle with the ammunition removed and the safety on. Carefully check that there is no ammunition in the barrel and remove the pellets from the rotary magazine. Before storing it, we recommend to also remove the 88 g CO₂ cartridges.

Keep the air rifle out of the reach of children and users not familiarized with its use. Store the air rifle separately from the pellets and the CO₂ cartridges.

12. Care and Maintenance

If you maintain and care for your air rifle properly, you will be able to enjoy it for many years.

⚠ WARNING: Before you attempt to clean your air rifle, always make sure it is "On Safe" (see **Step 2.1**), the rotary magazine is removed and you have checked the barrel to make sure there are no pellets left in it.

- Occasionally clean the exterior metal parts of the air rifle. Use a soft cloth slightly dampened with special oil for air rifles. Occasionally apply 2 or 3 drops of oil for air rifles in the feeder and also in the air rifle through the **empty** magazine (see illustration 12.a). Proceed in the same way with the valve seals.

Never use cleaning pellets, as they can damage the air rifle.

- Tampering with the air rifle or attempts to modify the air rifle in any way may make it unsafe to use and will void the warranty.

- If you drop your air rifle, check to see that it works properly before you use it again.

If your air rifle is damaged or does not perform properly, call Umarex USA Customer Service for assistance before using your air rifle again.



13. Problems

Problems	POSSIBLE CAUSES	Safety activated 88 g CO ₂ capsule empty	Dirty barrel	88 g CO ₂ capsule not inserted	High temperatures	Unsuitable ammunition pellets loaded incorrectly		
Faulty shooting direction		●	●		●	●	●	
The air rifle does not shoot	●	●		●	●	●	●	
Low shooting speed		●	●		●	●	●	

14. Safety Review

- **Do not ever point the air rifle at any person. Do not ever point the air rifle at anything you do not intend to shoot.**
- Always treat the air rifle as if it was loaded and handle it with the same respect you would a firearm.
- Always aim in a SAFE DIRECTION. Always keep the muzzle of the air rifle pointed in a SAFE DIRECTION.
- Always keep the air rifle on "Safe" until you are ready to shoot in a SAFE DIRECTION.
- Check behind and beyond your target to be certain you have a safe backstop and that no person or property could be endangered.
- This air rifle may only be shot on the owner's property or at shooting ranges allowed by the police, and only if the ammunition does not travel further than the shooting area. Bear in mind the maximum range of the pellet (approximately 500 yards (457m)).
- Always check to see if the air rifle is on "Safe" and unloaded when getting it from another person or from storage.
- Always keep your finger away from the trigger and away from the trigger guard until ready to shoot.
- You and others with you should always wear shooting glasses to protect your eyes.
- Use only ammunition and an 88 g CO₂ cartridge designed for this air rifle.
- Never reuse pellets.
- Do not shoot at hard surfaces or at the surface of water. The pellet may bounce off or ricochet and hit someone or something you had not intended to hit.
- Replace the backstop if it becomes worn. Place the backstop in a location that will be safe should the backstop fail.
- Always store the air rifle with the safety on, unloaded, separated from the ammunition and 88 g CO₂ cartridge, and in a safe manner to prevent unauthorized people from accessing it.
- Do not attempt to disassemble or tamper with your air rifle. Use an Authorized Service Station or return it to the factory for repair.
- Do not put the air rifle away loaded. (See **Step 5.2**).
- Always store this air rifle in a secure location.
- Never leave the air rifle loaded if it is out of your reach.
- Unload the air rifle before giving it to someone else.

15. Technical Data

Caliber:	.177 (4.5 mm) / .22 (5.5 mm)
Magazine capacity:	8 shots
Length:	40.94 in
Weight:	91.71 oz
Muzzle speed (energy):	Up to 251.53 yd/s* (16 Joules) / Up to 218 yd/s* (16 Joules)
Barrel length:	23.62 in
Action:	88 g CO ₂ cartridge / 2 x 12 g CO ₂ cartridge (12 g to 88 g CO ₂ adapter required)
Safety:	Automatic trigger safety

* Many factors affect velocity, including brand and type of projectile, amount of CO₂ in cylinders, lubrication, barrel condition and temperature.

REPAIR SERVICE

If your air rifle needs repair, we recommend that you take or send it to an authorized service station or send it to Umarex USA. **For an Authorized Service Station near you, visit our web site at www.umarex-usa.com or call Customer Service at (479) 646 - 4200. (International customers should contact their distributor.)** DO NOT ATTEMPT TO DISASSEMBLE THE AIR RIFLE! Your air rifle requires special tools and fixtures to repair it. If you take it apart, you probably will not be able to reassemble it correctly. Umarex USA assumes no warranty responsibility under such circumstances.

16. Warranty

LIMITED ONE YEAR WARRANTY

This product is warranted to the retail consumer for one year from date of retail purchase against defects in material and workmanship and is transferable.

WHAT IS COVERED

Replacement parts and labor. Transportation charges to consumer for repaired product.

WHAT IS NOT COVERED

Transportation charges to Umarex USA for defective product. Damages caused by abuse or failure to perform normal maintenance. (See **Step 9**) Any other expense. CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, OR INCIDENTAL EXPENSES, INCLUDING DAMAGE TO PROPERTY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

WARRANTY CLAIMS

for U.S. and Canadian Customers:

Please return product to your nearest distributor. If you do not know your distributor, please visit www.umarex-usa.com and click on "warranty and repair service" or call (479) 646 - 4200 and ask for our assistance.

IMPLIED WARRANTIES

ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO ONE YEAR FROM DATE OF RETAIL PURCHASE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

To the extent any provision of this warranty is prohibited by federal, state, or municipal law which cannot be preempted, it shall not be applicable. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state and country to country.

UMAREX®

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