Read the instructions and warnings of this manual and the manual with the various languages carefully before using this airgun.

Special and additional warnings and notices on Weihrauch / HW-airguns

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Explanation: (see manual, "...") refers to the manual with the various languages (especially supplied for the particular models like HW 100 X, HW 90 or others)

We congratulate you on your new Weihrauch air gun.
Always read the instructions and warnings of this manual and of the manual with the various languages carefully before using this air gun.

WARNING: These products can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Not a toy! This airgun is recommended for adult use only. Misuse or careless use may cause serious injury or death. May be dangerous up to 1000 yards (915 meters).

KEEP ALWAYS IN MIND:
BE A SAFE SHOOTER!
SAFETY IS YOUR RESPONSIBILITY!
THE GOLDEN RULE OF SAFE AIRGUN HANDLING:
ALWAYS SEE THAT THE AIRGUN WITH ITS MUZZLE IS POINTED IN A SAFE DIRECTION!
TREAT ALL AIRGUNS AS IF LOADED!

Special warnings and notices on our airguns

EXTREMELY IMPORTANT: DO NOT COCK your airgun until you have read and understood these important notes, instructions, cautions and warnings, the owner's manual with the various languages for each particular model/s, and all other printed material supplied with this airgun.
Misuse may void your repair policy, warranty and service contract and may expose you and others to possible harm! A few minutes now will increase the pleasure you will derive from a fine airgun. WEIHRAUCH strongly recommends that you join an airgun club or obtain instructions from a competent firearms instructor before using any gun. Be sure you understand these instructions and warnings before using this airgun. You must **always** follow the rules of safe airgun handling.
Make sure that this instruction manual and the manual with the various languages as well as all printed material are kept with the gun. They should accompany the gun if it is ever sold, loaned, given away or otherwise disposed of to any other person.
If the manual with the various languages is missing, you can download it or you will get a free copy from the attached address (see back page).

WARNING:

This airgun is recommended for **ADULT USE ONLY.** Precision adult airguns, because of their design, are a special class of non-powder guns. They may have extremely sensitive trigger mechanisms, very light trigger pulls (trigger pull may be below 2 lbs.), may fire if dropped or jarred abruptly, and may not have a trigger block or "safety". These features reflect the more sophisticated needs of precision adult airgun shooting. Such airguns are often carefully designed to have very sensitive trigger mechanisms and trigger pulls which are much lighter than regular airguns. The trigger pull setting as it comes from the manufacturer is usually the best for the airgun in question and should not be lightened. This special class of airguns is intended for use by experienced adult shooters who understand their proper and safe use. **Airguns are no toys. Always think: You have a gun and not a toy in your hands, for which you are fully responsible.**
Misuse or careless use may cause serious injury or even death. Airguns may be dangerous within 1000 yards (915 meters).

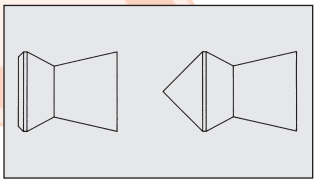
Never dismantle any airgun or **never** do a repair on the action yourself. **Only a skilled gunsmith** may open it. Especially the interior of a spring-piston or gas-ram airgun is **under pressure.** Improper handling or disassembly can cause personal injury or damage to the gun. In case of functional failure it is necessary to have the airgun checked and repaired by this specialist or to return it to us. This applies especially to changing

the piston washer and the mainspring. **Never** use a malfunctioning airgun! Use only Original Weihrauch spare parts.

Some airguns are equipped with a „safety“ but this is not considered to be a necessary design feature of all airguns. With some airguns, the safety is engaged automatically when you cock the airgun. With others, it must be engaged manually. If you are not going to shoot immediately, it is a wise practice to engage the safety at once; but **never** depend on any airgun's „safety“. **Never** leave your airgun loaded.

DANGER: Determine if your airgun has anything in its barrel.
The muzzle end of any airgun is dangerous. **Never** depend on any safety. All safeties are mechanical devices and therefore subject to failure and **never** a substitute for safe gun-handling. Your airgun should be safely locked up when not in use. Store your airgun unloaded. **Always** keep the muzzle pointed in a safe direction.
Be sure your airgun is unloaded when: crossing a fence or ditch, stream, or any other barrier; climbing a tree; letting go off it for any reason; putting it away; or allowing another person to handle it; entering a house, vehicle or any building. The only sure way to be sure that your airgun is not loaded is to look through the bore from the rear or pass an object e. g. a cleaning rod all the way through the bore. A projectile or obstruction could be present anywhere in the bore. If your airgun is a barrel-cocking airgun, simply open the barrel slightly and look down the bore from the rear (see manual, pic.). YOU MUST BE ABLE TO SEE ALL THE WAY THROUGH THE BORE TO CONSIDER IT CLEAR.
If your airgun has a fixed breech block arrangement like our models HW 77 or HW 97 that makes it difficult to look down the barrel directly from the rear, you should use a small mirror or pass a cleaning rod, that will not harm the bore, all the way through to determine if it is clear.
You should have a proper cleaning rod for the above safety checks and to insure best accuracy. A cleaning rod may also be used to clear a projectile or other obstruction out of the barrel. **Never** fire a projectile to clear a barrel! Such an action will only make the problem worse and may be dangerous.

USE PROPER PELLETS! Use only high-quality Diabolo / waisted pellets to avoid harmful oils, abrasive materials and air blow-by. Precision adult airguns are intended for use **only** with lead pellets; steel shot or darts damage the rifled bore and may cause far more dangerous ricochets or rebounds. Damaged, used, or unauthorized projectiles may be unsafe.



We do **NOT** recommend the use of steel darts in our rifled bores. Also not recommended is the use of plastic sheathed steel or zinc or alloy pellets, bolts, balls or similar projectiles. Their hard cores can cause dangerous ricochet and penetration through immediate effect. Their lightness and lack of air resistance may cause excessive piston impact inside the airgun.

A PELLET MAY BE STUCK IN THE BARREL! Such an unseen projectile could come out unexpectedly when an apparently empty airgun is fired. This could have tragic results if the airgun was pointed in an unsafe direction. To check if the bore is clear:

1) Look down the barrel from the rear.
2) Pass a cleaning rod through the bore.

CAUTION: Your backstop should be inspected for wear before and after each use. Discontinue use if the backstop surface shows signs of failure. Since backstop surfaces eventually fail, always place the backstop in a location that will be safe should the backstop fail. Discontinue the use of a backstop if the projectile rebounds or ricochets. **Immediately stop shooting!**

STATEMENT OF NON-LIABILITY

Airguns can cause serious harm, and in some instances, even death and should be handled with great care! This airgun is surrendered by Weihrauch with the express understanding that we assume no liability for its resale, handling, use or possession under local laws or regulations. Neither the manufacturer nor the importer or dealer assumes any responsibility whatsoever. Personal injury or property damage resulting from either intentional or accidental discharge or for airgun functions subjected to influences beyond our control, are the sole responsibility of the airgun owner. We will honor no claims that may result from careless handling, unauthorized adjustments, defective or improper ammunition, corrosion or neglect.

By accepting this airgun, the buyer agrees to release the seller and Weihrauch, and all associated persons from liability for any damage to persons or property that may result, for any reason, by using this airgun. **Always keep in mind: Safety is your responsibility!**

All shooters and spectators / bystanders should **always** wear shooting / safety glasses during firing cycles and all shooting activities. Normal optical reading glasses will **not** give you the desired and necessary protection.

Always keep in mind: TREAT ALL AIRGUNS AS IF LOADED!

Follow safe airgun handling practices. Remember that airguns can be dangerous if mishandled.

NEVER DEPEND ON ANY „SAFETY“!

Never rely on a gun's safety-catch to protect you from unsafe gun handling. A safety-catch is only a mechanical device, and never a substitute for safe gun-handling.

USE ONLY SPECIAL LUBRICANTS: Special lubricants are recommended for this special type of airgun. Avoid ordinary lubricants and regular firearm solvents and oils. DO NOT OVER LUBRICATE! Visit your airgun dealer for special advice.

Always store your airgun in a safe and proper manner, secure from unauthoriszed use and beyond the reach of children!
Airguns are no toys. Misuse or careless use may cause serious injury or even death.
Always check to see that the gun is unloaded when removed from storage or received from another person.

WARNING! Modifications and / or tampering with the trigger mechanism may cause your airgun to malfunction and become unsafe to use. Any change in performance such as lowered trigger force and shortened trigger travel indicates possible wear and such airguns should be inspected, replaced or properly repaired. The trigger may be adjustable below 2 lbs., (900 g) and if adjusted below 2 lbs., the airgun could fire even more easily when dropped. Check any airgun that has been dropped to make sure its function has not been affected. Repairs should only be made by Weihrauch or their authorised repair stations. Such special qualified persons are the ONLY ones who should make any adjustments which are not externally available on the fully assembled airgun.

WARNING: MAY FIRE IF DROPPED. As an adult airgun it is exempt from drop test requirements. It may fire if dropped or hit sharply, even if the safety is in the "ON" position. Do not lean or place your airgun where it may fall, and be careful not to impact any part of the loaded airgun.

DO NOT BRANDISH OR DISPLAY THIS AIRGUN IN PUBLIC - IT MAY CONFUSE PEOPLE AND MAY BE A CRIME. POLICE AND OTHERS MAY THINK THIS AIRGUN IS A FIREARM. DO NOT CHANGE THE COLORATION AND MARKINGS TO MAKE IT LOOK LIKE A FIREARM. THAT IS DANGEROUS AND MAY BE A CRIME.

Special and additional warnings and notices on Weihrauch / HW-airguns

WARNING: Not a toy! This air gun is recommended for adult use only. Misuse or careless use may cause serious injury or death. May be dangerous up to 1000 yards (915 meters).

WARNING: Before using read owner´s manual available free from Weihrauch, Postfach 20, D-97634 Mellrichstadt or from e-mail info@weihrauch-sport.de or as download from www.weihrauch-sport.de.

Store the gun unloaded in a safe and proper manner.

Always check to see that the gun is unloaded when removed from storage or received from another person.

You should always take care for and maintain the air gun properly. Only in this way your air gun can perform and give you the desired success. If you have any questions or doubts please contact somebody qualified like e. g. your gun dealer / gunsmith or directly us.

Modification of the gun mechanism may cause a gun to malfunction and tampering with a gun may make it unsafe to use.

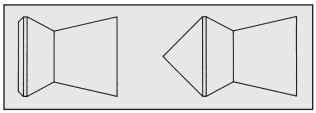
Any change in the performance, such as lowered trigger force and shortened trigger travel, indicates possible wear and such guns should be inspected, replaced, or properly repaired. Repairs should only be made by qualified personnel.

Always have the gun checked by qualified personnel, if any gun has been dropped to ensure that its function has not been affected.

Select safe and proper targets.

CAUTION: Your backstop should be inspected for wear before and after each use. Discontinue use if the backstop surface shows signs of failure. Since backstop surfaces eventually fail, always place the backstop in a location that will be safe should the backstop fail. Discontinue the use of a backstop if the projectile rebounds or ricochets. **Immediately stop shooting!**

We produce air guns in the following calibers (see also our website for more information on the different products and the available calibers):



4,5 mm / .177”
5,0 mm / .20”
5,5 mm / .22”
6,3 mm / .25”

We recommend to use only high quality Diabolo / waisted pellets in your air gun, and **do not** use steel darts, -bolts, -balls or similar projectiles.

WARNING: The use of incorrect projectiles may not be safe. Do not use damaged pellets. Never reuse pellets once shot.

Always use shooting / safety glasses when handling or shooting your air gun. Normal optical reading glasses will not give you the desired and necessary protection.

Additional special warnings and notices on our spring-piston airguns

”SLAM SHUT“ DAMAGE IS NOT COVERED (see manual, pic.)
DO NOT snap shut excessively hard a barrel cocking airgun‘s barrel / cocking barrel or allow it to fly up from an open position. This can cause an upward bent barrel, a bent cocking barrel, a bent cocking lever, a cracked or broken stock and even personal damage. This combination of damage **always** represents abuse and is **not** covered by any warranty, repair policy, or service contract! Snapping such airguns shut may also cause a discharge of the gun. **Always point every airgun in a safe direction!**

COCK THE AIRGUN CAREFULLY (see manual, pic.): The cocking mechanism of many spring-piston airguns may close suddenly if released accidentally; this may injure the shooter, spectators / bystanders, and damage the airgun. Avoid excessive cocking force. Cock smoothly and go easy near the end of the cocking stroke. During cocking always brace the stock against hip or thigh. **Always** hold the barrel / cocking barrel firmly with one hand while cocking and loading. DO NOT slam / snap the airgun shut!
Keep your fingers, clothing, or any other objects **away** from the trigger and safety when cocking, loading, and closing the airgun. Breech may close suddenly if the trigger is tipped!
DO NOT LEAVE THE AIRGUN COCKED AND / OR LOADED: Avoid leaving the mainspring of spring-piston airguns under full compression for extended periods of time. It is the best to cock it only just before firing. **Always** check every airgun to see if it is loaded every time you handle it. **Always** assume your airgun is loaded . . . any time.

SPECIAL NOTE: On all cocking types avoid excessive force in opening or closing / shutting the airgun!

ALWAYS keep all airguns pointed in a SAFE DIRECTION . . . Any TIME.

DO NOT ATTEMPT TO UNCOCK YOUR AIRGUN! If you have cocked your air rifle, loaded a pellet and decided not to take the shot in a reasonable amount of time, do not leave your airgun cocked.

A. If already loaded: Removing the pellet is not advisable and doing this with a sharp object could seriously damage the delicate rifling. The best course of action is to shoot the airgun into soft ground, a pellet trap or thick pile of newspapers or magazines.
B. If unloaded: BE SURE THE AIRGUN IS UNLOADED. Then put muzzle tightly against firm, soft pad (such as padded rug - but **NEVER** against any part of your or any other body / anatomy) to provide air resistance, and discharge the airgun. Try not to do this often. A better way is to load a pellet and discharge the airgun safely in the regular way (as discribed under A).

Always check an airgun to see if it is loaded and / or cocked when removed from storage or received from another person. The ONLY way to be sure that your barrel is unloaded is to look through the bore from the rear or pass a cleaning rod through the bore.

Shooting the airgun (see p. 4 ”Use proper pellets“)
First, a word of warning: NEVER SHOOT A SPRING-PISTON AIRGUN WITHOUT A PELLET! To do so permits the piston to slam hard against the front of the compression chamber. Repeated „dry-firing“ can definitely damage your airgun. It needs the cushioning action of the air compressing behind a properly fitting pellet to work correctly. Also, for this reason, you should not shoot damaged or already used / previously fired pellets. Steel BB‘s and darts, low quality or irregular pellets can damage your airgun and should not be used. Any other unauthorized projectiles are definitely not recommended (see manual, pic.).
Shoot your airgun shortly after cocking and loading. It is not advisable to leave the airgun cocked for extended periods of time.

Always be sure of your backstop. Be sure that the entire path of travel of your pellet, even beyond the target, is safe! Do not shoot at glass or hard surfaces. Avoid ricochets or ribounds. It is impossible to predict where a glancing shot will fall. Remember a pellet may travel up to about 1000 yards (915 meters).

Safety / shooting glasses are a must for all airgun shooters and spectators / bystanders.

CAUTION: DO NOT USE OILS OR SOLVENTS INTENDED FOR FIREARMS OR OTHER DEVICES IN THE COMPRESSION CHAMBER OF ANY SPRING-PISTON AIRGUN! TO DO SO CAN CAUSE SEVERE DETONATION OR THE SO-CALLED ”DIESELING” EFFECT, RESULTING IN POSSIBLE DAMAGE TO THE AIRGUN AND INJURY TO THE SHOOTER AND / OR SPECTATORS / BYSTANDERS!

Only special lubricants specifically designed for the compression chambers of spring-piston airguns should be used. These are sophisticated silicone oils specially formulated for this purpose. Of the hundreds of silicone oils available, only a few have the proper flash point, viscosity, lubricity, lack of acids, etc., for use in fine quality spring-piston

airguns. Incorrect lubes can be dangerous. The reason for this is that during the firing cycle of a spring-piston airgun the air in the compression chamber is compressed to quite high pressures, resulting in high temperatures for a fraction of a second. This heat can actually explode any vaporized flammable oils in the chamber. Very light "dieseling" is often experienced with a new airgun that has not been „broken-in" (see manual, "Recommendations"). Our manufacturer oils and lubricants can cause minor dieseling. The airgun may make a loud „crack" and give off some smoke. Usually this stops after a few dozen shots and the airgun settles down to its normal pressures. Sometimes it may take a tin or two of pellets before the excess lubricants are cleared. A wisp of mist or smoke after shooting is **not** a cause for alarm and is a sign that your airgun is getting some vapor lubrication into the barrel, a good thing.

Additional special warnings and notices on our pcp-airguns

WARNING: Do not attempt to operate our pre-charged pneumatic (pcp)-airguns at low power (see manual, ref. "Filling of the air cylinder"). An insufficient force may cause a stuck pellet and a jammed barrel or lead a person to believe the airgun is unloaded – a potentially dangerous situation. **Always** check to see if the barrel is clear.

To clear a jammed barrel: **DO NOT** load in another projectile! Use an **empty** magazine, cock, aim, and fire the airgun in a safe direction. If that does not clear the barrel, open the cocking lever, take out the magazine and use a proper size cleaning rod to push the stuck projectile from the muzzle end out of the barrel. **Attention:** Do not hurt the rifling!

If more than one pellet is stuck, you have to visit a gunsmith for inspection and / or repair.

DO NOT LEAVE THE AIRGUN LOADED: **Always** check every airgun to see if it is loaded every time you handle it. **Always** assume your airgun is loaded . . . any time.

WARNING: Internal lubrication of PCP's or their components can result in an explosive effect due to their high operating pressures. Any questions, call Weihrauch.

AIR INJECTION WARNING: **NEVER** allow a finger, or any other part of your body / anatomy to be over the muzzle of the airgun or any point of the air cartridges / air cylinders, or filling devices / charging units, where compressed air is or could be released. High pressure air alone can penetrate your skin or clothing with serious medical implications! If air penetration occurs, seek emergency medical attention immediately.

WARNING: The air cartridges / cylinders or reservoirs of precharged pneumatic (pcp)-air-guns may become dangerously overheated if incorrectly filled or lubricated. Oiling or spraying the airgun associated mechanism and filler devices / charging units with lubricants, or other materials, can cause contamination to find its way into the air cartridges / cylinders or air reservoirs. The use of industrial compressors to charge the air cartridges / cylinders or reservoirs can result in contamination with oil and / or dust particles. They must be equipped with appropriate filters. Oil and dust-free, pure, clean, dry diving-grade air (DIN EN 12021) should **only** be used in our pcp air guns. No other gas or gas mixture other than compressed air should ever be used. The use of a hand pump with our pcp-airguns will cause damage to air cartridges / cylinders from excess moisture allowed into cylinder. Damages caused by improper filling, excessive pressure, or lubrication to

these airguns, or their associated filling devices / charging units, will not be covered by any service contract or policy and is not subject to any declared or implied warranty. Neither Weihrauch nor any of its employees or importers or dealers will be responsible or liable for such damages, or injury to property or persons. It is easy to be safe, if you pay attention to the cautions of this booklet and especially to the manual with the various languages, ref. to the particular models.

WARNING: Our pcp-models are equipped with rechargeable air cartridge / cylinder systems.

The maximum filling pressure depends on the model, you intend to use:
- HW 44, HW 110, HW 100 with an air cylinder for 200 bar (2.900 p.s.i.) and
- HW 100 X with an air cylinder for 250 bar (3.625 p.s.i.).
The compressed air used to charge the cylinder must be dry, clean, and filtered. Use only compressed air that is free of oil and water; this means divers' quality air **only** (DIN EN 12021)! We recommend the usage of diver bottles. Make certain that your charging specialist supplies **this** kind of compressed air before your cylinder / air tank is filled. **Never** use any other gas, particulary industrial or welding gases such as oxygen, carbon, dioxide, acetylene, hydrogen, argon etc., or any addition of lubricants / additives (as e. g. petroleum based).

- **According to regulations, you must not use the air cylinder / cartridge longer than 10 years.** After 10 years from the manufacturing date the air cylinder / cartridge **must not be used** any further and **must be emptied** (see manual, "Emptying the air cylinder" p. 19).
  Especially the **steel** air cartridges of the models HW 44, HW 110 and HW 100 can be sent back to the manufactures for checking against extra charge and can be then reused for another 10 years. This is only possible once.
  Please note the date of your rifle's manufacture, or check the date inscribed on the rifle's air cylinder / cartridge. (see manual, "Inscription of the compressed air cylinder", p. 26). Relevant laws of your country should be followed as well.
- Protect air cylinders / cartridges from the effects of external force, i. e. falling.
- An air cylinder / cartridge that is leaking, damaged or more than 10 years old cannot be used or even filled. It must be emptied immediately (see Manual, "Emptying the air cylinder" p. 19) after which it must be exchanged and placed out of use. The manufacturing date is marked on the air cylinder / cartridge. **Always** take care of your air cylinder / cartridge and check it **regulary** for damages and cracks. If you find damages, cracks or similar destructions you have to empty it **immediately** and send back the air cylinder / cartridge to us.
- **Never** oil the connecting threads and valves of your rifle's air cylinder / cartridge and **always** protect the thread and inlet valve with the dustcover cap provided. **– Danger of explosion –.**
- **Never** attempt to engrave, stamp, dismantle or to make mechanical modifications to any air cylinder / cartridge. **Only** the manufacturer may dismantle or open the valves and manometer / pressure gauge.
- **Attention: You are only allowed to use Original-Weihrauch-air cylinders / cartridges. Repairs can only be made by the manufacturer using Original spare parts. Otherwise the manufacturer is exonerated from any liability and guarantee.**
- Improper use, filling, storage or disposal of such air cartridges / cylinders may result

in personal injury, property damage, and even death.

- Do **not** alter such air cartridges / cylinders in any way.
- Do **not** over pressurize. The maximum filling pressure PW is noted on your air cartridge / cylinder. You must not charge the rifle's compressed air cylinder / cartridge beyond this limit!
- Do **not** expose pressurized cylinders / cartridges to temperarures in excess of 50° C (122° F) or below – 20° C (–4° F). Filling rapidly WILL RUIN VALVES AND SEALS! Filling MUST take at least one minute!
- Air cartridges / cylinders exposed to a fire or heated must be hydrostatically tested prior to filling.
- Do **not** use caustic cleaners.
- Keep the air cartridge / cylinder out of reach of children and in a safe position.
- Master cylinders must be filled only by properly trained personnel in accordance with CGA Pamphlets P.I and G-6.3, available from the Compressed Gas Association, 4221 Walney Road, 5th Floor, Chantilly VA 20151-2923. If you are not trained, you should use established certified SCUBA cylinder filling stations.

For further advice contact your airgun dealer or Weihrauch.

WARNING: CHARGE SLOWLY! All storage cylinders, removable air cartridges / cylinders, and large master cylinders should all be filled very slowly! The whole process should take at least a minute. Rapid filling will burn the seals. Such damage is due only to overly rapid filling and is not covered by any warranty, repair policy, or service contracts.

NOTES: To maintain the valves of pcp-airguns in the best possible condition, it is recommended that some air pressure is maintained in the air cartridge / cylinder, even when the airgun is not being used. This will reduce the possibility of dirt or dust entering the air cartridge / cylinder and affecting the valve operation and will help to maintain the proper shape of the seals. Make sure that charged airguns are left unloaded and very secure and locked away from use by unauthorized persons or those not familiar with the safe use of such airguns as pcp, especially children.

CAUTION: DO NOT USE OILS OR SOLVENTS INTENDED FOR FIREARMS OR OTHER DEVICES IN ANY PCP-AIRGUN! TO DO SO CAN CAUSE SEVERE DETONATION RESULTING IN POSSIBLE DAMAGE TO THE AIRGUN AND INJURY TO THE SHOOTER AND SPECTATORS / BYSTANDERS!

Only special lubricants specifically designed for pcp-airguns should be used. These are sophisticated oils specially formulated for this purpose. Of the hundreds of oils available, only a few have the proper viscosity, lubricity, lack of acids for use in fine quality pcp-airguns. Incorrect lubes can be dangerous.

Special and additional warnings and notices on our pcp-guns

The maximum filling pressure PW is noted on your air cartridge / cylinder. **The compressed air used to charge the cylinder must be dry, clean, and filtered.** Use only compressed air that is free of oil and water; this means diver´s quality air only (DIN EN 12021)! We recommend the usage of diver bottles. Make certain that your charging

specialist supplies **this** kind of compressed air before your cylinder / air tank is filled.

Never use any other gas, particularly industrial or welding gases such as oxygen, carbon, dioxide, acetylene, hydrogen, argon etc., or any addition of lubricants / additives (as e.g. petroleum based).

Inscription of the compressed air cylinder:

The operating pressure PW (2.1), the test pressure PH (2.2) and the

capacity / filling volume (2.4) are marked on the air cylinder in English units bar and l.

(see also manual of the air gun: “Inscription of the air cylinder”, description and drawing).

Additional special warnings and notices on our gas-ram system mod. HW 90

DO NOT LEAVE THE AIRGUN LOADED: **Always** check every airgun to see if it is loaded every time you handle it. **Always** assume your airgun is loaded . . . any time.

COCK THE AIRGUN CAREFULLY (see manual, pic.): The cocking mechanism of the gas-ram airgun may close suddenly if released accidentally; this may injure the shooter, spectators / bystanders, and damage the airgun. Avoid excessive cocking force. Cock smoothly and go easy near the end of the cocking stroke. During cocking always brace the stock against hip or thigh. **Always** hold the barrel firmly while cocking and loading. DO NOT slam / snap the airgun shut!
Keep your fingers, clothing, or any other objects **away** from the trigger and safety when cocking, loading, and closing the gun. Breech may close suddenly if the trigger is tipped!

CAUTION: Overpumping will invalidate all backing, repair policies, and service contracts, as well as cause irreparable damage to the gun due to excess cocking force. Proceed always with care!

DISASSEMBLY OF YOUR AIR RIFLE WILL VOID YOUR WARRANTY!
We strongly advise against disassembly or modifying your air rifle mod. HW 90. Doing so could be dangerous to the person attempting it, and will also void any warranty. The powerful piston is kept charged under considerable pressure of the gas-ram; even when the rifle is not cocked. Improper disassembly may lead to serious injuries, or even death, if the air cylinder base / dummy is released suddenly. Specialized training, as well as the proper tools are required to safely disassemble and reassemble the air rifle and its system.
NEVER remove the stock or attempt to cock the air rifle with the stock removed.

There is a pressure gauge available for the mod. HW 90. The maximum charge may read about 24 / 25 bar. The optimal pressure is about 22 / 23 bar to gain the best accuracy with reasonable cocking force and best handling. The maximum pressure must not exceed 26 bar.

CAUTION: INCREASING THE PRESSURE ABOVE THE RECOMMENDED LEVELS WILL CAUSE A TEMPORARY INCREASE IN POWER BY BURNING SMALL AMOUNTS OF THE PISTON SEAL, CAUSING "DIESELING", AND THEREFORE INCREASING POWER. HOWEVER, THIS WILL CAUSE PERMANENT DAMAGE TO THE SEAL NECESSITATING REPLACEMENT, AND VOIDING ANY WARRANTY OR SERVICE CONTRACT. THE GAS SPRING IN THE MOD. HW 90 MUST NEVER BE CHARGED TO A PRESSURE GREATER THAN 26 BAR.

Troubleshooting: Problems and solutions

Adult airguns have characteristics which are unique. Most „problems" encountered by new owners are often really no problems at all or can easily be corrected.
In any case, most experts agree that the spring-piston system is the most trouble free of all airgun power mechanisms.

Never dismantle any airgun or **never** do a repair on the action yourself. **Only a skilled gunsmith** may open it. Especially the interior of a spring-piston or gas-ram airgun is **under pressure.** Improper handling or disassembly can cause personal injury or damage to the gun. In case of functional failure it is necessary to have the airgun checked and repaired by this specialist or to return it to us. This applies especially to changing the piston washer and the mainspring. **Never** use a malfunctioning airgun! Use only Original Weihrauch spare parts.

PROBLEM: POOR ACCURACY-Possible Causes

- Dirty bore: Most accuracy complaints are traced to an unclean bore. Even a barrel which appears to be clean may be shooting well below its potential. Look up the bore from the breech (directly or with a small mirror). If you don't see a shiny clean rifling the bore is dirty.
  SOLUTION: Use felt cleaning pellets or an airgun cleaning rod.
- Not using special shooting techniques: Because of the relatively long time that the pellets remain in the airgun's barrel after the trigger is pulled, as compared to bullets in a firearm's barrel, airguns are much more sensitive to the shooter motion. This is one of the reasons why airguns are so good for teaching technique to firearm shooters. Many excellent firearm marksmen do NOT do well with airguns until they have improved techniques that were not so critical with firearms. Published accuracy figures were obtained by AIRGUN experts under ideal and best conditions. Imperfect techniques, especially some techniques which are excellent for firearms, may cause oversize groups.
  SOLUTION: Give yourself time to become accustomed to each airgun. Do not rest the barrel on anything while shooting. Using firearm bench rest methods often will give very poor accuracy with airguns. Use loose consistent pressure and replace the airgun to the same position for each shot. For air pistols, use a firm two handed grip. The air pistol should not touch the rest (see manual, "Recommendations").
- Minor "dieseling" often occurs in new spring piston airguns: This is the burning off of manufacturing oils and greases. The airgun „cracks" and shots go high or wild due to higher velocity.

SOLUTION: This problem usually solves itself after a few shots. Some airguns may require 500 up to 1,000 pellets or even internal „super tune-up“, to be completely „cured“. Over lubrication, or improper lubrication, is a very common cause of this and several other airgun problems (see manual, ”Recommendations”).

- Over lubrication, or improper lubrication is a very common cause of airgun problems.
  SOLUTION: Degreasing the system may be necessary.
- Loose stock screws: This is a major cause of inaccuracy in airguns new or old. One quarter of a turn may affect accuracy by 2 inches (50 mm).
  SOLUTION: Tighten front and rear stock screws very firmly. If problem recurs, remove screws, degrease screws and screw holes thoroughly and apply a screw securing liquid. Do not over tighten rear trigger guard screw on HW / Weihrauch air rifles.
- Incorrect or defective pellets: Keep in mind that each air rifle and air pistol is unique and it requires some experimentation on your part to find just exactly the types of pellets that will work best for each of your particular airguns. Damaged pellets will not shoot well and may damage the airgun (see par. ”Use proper pellets”, p. 4 and manual, ”Recommendations”).
- Improper pellet seating: Correctly seated pellets have the pellet skirt flush with, or below, the face of the breech or the barrel. Improper pellet seating may cause the pellet skirt to become smashed when the breech or the barrel is closed.
  SOLUTION: Seat pellets deep enough, carefully and consistently. Using e. g. a ”Pell Seat” will give consistency and increase potential accuracy and power by smoothing the skirt.
- Breech seal leak: The breech seal on spring-piston and gas-ram airguns may be defective, worn from use or damaged due to ”dieseling”.
  TEST: Cock and load the airgun. Hold the palm of your hand about .112“ (15 mm) above the joint between breech and receiver. Be very careful not to let this hand touch the airgun. Fire the airgun. If there is a seal leak you will feel a strong blast of air, a slight leak is a normal blow-off of excess pressure in many models.
  SOLUTION: Replace the barrel seal. A severe leak can cause a piston to slam into the end of the chamber with eventual piston, spring and chamber damage. (Don't disturb even an ugly, blemished seal if it works well!)
- Bent or weakened mainspring: On spring-piston airguns mainsprings can assume a „set,“ become bent, or even break. Metal fatigue can cause a spring to loose some of its elasticity. Years of use or leaving your airgun cocked overnight can cause low velocities. If an airgun becomes hard to cock or velocity decreases this is a good indication of a broken and / or weakened mainspring.
  SOLUTION: Have mainspring replaced only by a gunsmith / technician (see manual, ”Care”).
  WARNING: Only skilled gunsmiths should repair these. Airgun springs or gas-rams are under tension even when not cocked and can cause personal injury when improperly handled.
- Loose sight: Front and / or rear sight screws or scope mount screws can work loose.
  SOLUTION: Tighten all sight and scope mount screws firmly with correctly fitting gunsmith screwdrivers. If problem continues, remove sights or scope mount and degrease all mating surfaces thoroughly three times, apply a screw securing liquid to sight / airgun contact points and reinstall tightening screws well.

PROBLEM: AIRGUN DOES NOT SHOOT-Possible Causes

- Shooter Error: Shooter may not be bringing the spring-piston or gas-ram airgun to full cock. **SOLUTION:** Bring barrel or cocking barrel all the way back until it stops and gradually increase pressure until a final „click“ is felt. DO NOT force (see manual, ”Safety”).
- Broken mainspring: **CAUTION!** Repairing airguns should only be attempted by skilled gunsmiths. Personal injury and / or airgun damage is possible if this is incorrectly done.
  NOTE: Repairs and / or enhancements performed by a non gunsmith / technician will void your warranty, service contract and / or repair policy!
- Safety in „on“ position: Always check safety before forcing trigger. Some airguns have an automatic safety, in others the safety may have been manually engaged.
  SOLUTION: Put safety in „fire“ position manually. **Always** point airgun in safe direction before releasing the safety (see manual, ”Safety”).
- Worn or defective parts: Sears and / or trigger parts may have been worn or broken.
  SOLUTION: Have worn parts replaced.

PROBLEM: ACCIDENTAL DISCHARGE-Possible Causes

- Airgun not fully cocked: Due to hasty cocking.
  SOLUTION: Be sure to cock deliberately. Excessive force is never necessary.
- Trigger setting too light: This is a dangerous situation. Most commonly due to owner over „improving“ trigger pull.
  SOLUTION: Increase trigger pull weight setting. **Never** adjust the forward screw of HW / Weihrauch air rifles.
  NOTE: We recommmend that you leave the trigger settings as they come from our factory or take it to a qualified airgunsmith for adjustment. Improper adjustments can make the airgun unsafe.

PROBLEM: STOCK BREAKS OR CRACKS-Possible Causes

- This is always caused by dropping the airgun or allowing the barrel to snap shut by itself. (This also causes cocking levers and barrels to bend!) This is not covered by any repair policy, warranty and / or service contract.
  Due to variations, between the country of origin and final area where the wooden stock is used, minor drying cracks (called checks) may appear. They are superficial blemishes and almost never enlarge. All new airgun stocks may have such small blemishes: but no stock is perfect.

Should you still have problems with the safe usage and correct handling of your airgun, or should you have additional questions, please do not hesitate to contact a competent gunsmith or dealer or address your enquiry to our factory directly.

The privilege of ownership and use of your airgun carry a personal responsibility that everyone should be aware of. Shooting accidents will not occur if all the above and all supplied rules of shooting safety are observed and followed.

WARNING: The actual gun / firing system does not contain any lead; however it does fire ammunition containing lead or lead compounds known to the State of California to cause cancer, birth defects and / or reproductive toxicity. Those who discharge a gun or firearm, stand near someone who discharges a gun / firearm or cleans guns / firearms, are hereby warned of the dangers presented by lead and lead compounds and should take protective health measures. Avoid exposure to lead while handling and wash your hands after contact. Proper air ventilation is necessary when shooting indoors. Do not inhale dust or put pellet in mouth.

WARNING: These products can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

IMPORTANT NOTICE:

With this air gun we supply a manual with various languages and this particular manual. If one of them is missing, you can download them from www.weihrauch-sport.de or send us your address, and you will get a free copy from:

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