



MAR

MODULAR ADAPTIVE RIFLE



**MAR177 Conversion Kit
(MODULAR ADAPTIVE RIFLE)
OWNER'S MANUAL**

**READ ALL INSTRUCTIONS AND WARNINGS IN
THIS MANUAL BEFORE USING THIS AIRGUN**

**Crosman Corporation • 7629 Rts. 5 & 20 • Bloomfield, NY 14469
800-7-AIRGUN • www.crosman.com**

MAR-515

The MAR177 Conversion Kit is designed as an upper for use with an AR/M4 lower receiver ("Lower") to allow the user to shoot .177 caliber pellets using compressed air or Nitrogen. It utilizes the safety and control features of the Lower, but remains incapable of firing an actual firearm projectile. **IT IS NOT DESIGNED OR INTENDED FOR AS A STANDALONE PRODUCT.**

WARNING: 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 500 yards (457 meters).

WARNING: The MAR177 Conversion Kit alone is not considered a firearm. The MAR177 Conversion Kit used in conjunction with and attached to a firearm lower is considered a firearm. Therefore the owner must observe and follow all Federal, State, and Local firearms laws and ordinances when using the MAR177 Conversion Kit.

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 ABOUT THE USE AND OWNERSHIP OF THIS AIRGUN.

THIS AIRGUN IS INTENDED FOR USE BY ADULTS ONLY.

WARNING: This product contains lead, a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm).

WARNING: Explosion Danger. Use only compressed air or Nitrogen in this airgun. Use of other gases, including Oxygen, can cause a fire or explosion that may result in serious injury or death.

Read this owner's manual completely. And remember that an airgun is not a toy. Always carefully follow the safety instructions found in this owner's manual and keep the manual in a safe location for future use. If you have any questions regarding the operation of your new airgun, please contact Crosman at (800) 724-7486.

1. Learning the parts of your new airgun.
2. Operating the safety.
3. Removal of the firearm upper
4. Installation of the MAR177 Conversion Kit
5. Pressurizing the airgun.
6. De-pressurizing the airgun.
7. Loading the airgun.
8. Unloading and uncocking the airgun.
9. Aiming and firing safely.
10. Removing a jammed pellet.
11. MAR177 Conversion Kit removal (upper)
12. Maintaining your airgun.
13. Reviewing safety.

WARNING: The MAR177 Conversion Kit does not have a safety mechanism of its own. Because of this, it could discharge when unattached from the AR/M4 Lower if dropped or jarred. Accordingly, always discharge the air reservoir on the MAR177 Conversion Kit when not in use and before storing, even if it is still attached to the AR/M4 Lower. As always treat the airgun as though it is loaded and with the same respect you would a firearm. Failure to follow these instructions may result in serious injury or death.

1. Learning the parts of your new airgun

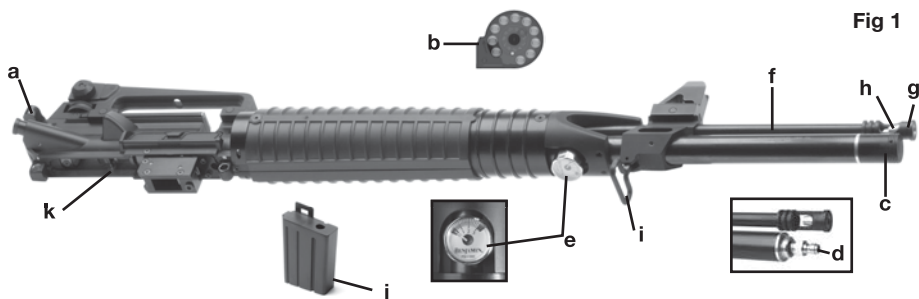


Fig 1

Learning the names and parts of your new airgun will help you understand your owner's manual (Fig. 1).

A. Crosman MAR177

- a. Bolt (Cocking Lever)
- b. Rotary magazine
- c. Protective cap for fill nipple
- d. Fill nipple
- e. Pressure gauge
- f. Barrel
- g. Muzzle
- h. Air stripper
- i. Sling swivel
- j. False Magazine (for weight and hand placement)
- k. Trigger block

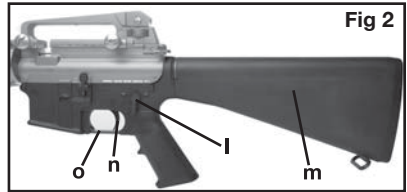


Fig 2

B. AR Compatible Firearm Lower (Not supplied / required. Style may vary)

- l. Safety
- m. Stock
- n. Trigger
- o. Trigger guard

⚠ WARNING: The MAR177 CONVERSION KIT IS ONLY INTENDED FOR USE WITH A FIREARM COMPATIBLE LOWER. The MAR177 conversion kit does not have its own safety mechanisms. Consult your firearms owner's manual for proper use of your firearm's safety and trigger features. Do not store you MAR177 charged with air when not in use. Failure to follow these instructions may result in serious injury or death.

2. Operating the safety

a. Refer to firearm owner's manual

Even when the safety is on, you should continue to handle the airgun safely. Don't point the gun at anything you don't intend to shoot.

Like all mechanical devices, safeties can fail. Even when the safety is "ON SAFE", you should continue to handle the airgun safely. NEVER point the airgun at any person. NEVER point the airgun at anything you do not intend to shoot.

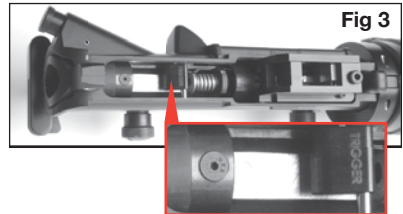


Fig 3

3. Removal of Firearm Upper

b. Refer to firearm owner's manual

4. Installation of MAR Conversion Kit (Upper)

⚠ WARNING: When handling the MAR177 Conversion Kit follow warnings engraved on MAR177 Conversion Kit. Do not depress the TRIGGER block located on underside of upper. (Fig. 3) TRIGGER is engraved on the block. Keep hands clear of TRIGGER block at all times. Failure to follow these instructions may result in serious injury or death.

- 1. Ensure the lower is in the "on safe position"
Typically the hammer must be in the cocked position to engage safety
- 2. Ensure the rotary magazine has been removed.
- 3. Install pivot pin and takedown pin.

NOTE: If takedown pin is difficult to insert, remove carry handle and loosen flathead screw (fig 4) with 1/16 hex wrench (not included). Insert take down pin, tighten screw and reattach carry handle.

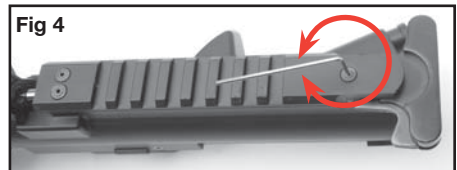


Fig 4

5. Pressurizing the Airgun

This owner's manual describes operating the gun with air or N₂ (Nitrogen) only. This airgun is designed for use at pressures between 1000 PSI and 2900 PSI (200Bar)

⚠ WARNING: Explosion Danger. Use only compressed air or Nitrogen in this airgun. Use of other gases, including Oxygen, can cause a fire or explosion that may result in serious injury or death.

a. Pressurizing (filling) the airgun with a hand pump

⚠ WARNING: Do not disconnect the fill hose before first bleeding the air. Failure to follow these instructions may result in serious injury or death.

1. Be sure to wear eye protection.
2. Make sure the airgun is unloaded and not cocked. (See section 6 for instructions on unloading and uncocking).
3. Read all instructions with your hand pump so you are familiar with its operation. Use only a pump designed for filling a pre-charged airgun and outfitted with a Foster #12FS quick disconnect fitting. Do not use a standard air compressor or bicycle pump.
4. Point the airgun in a SAFE DIRECTION.
5. Remove the pop-off protective cap that covers the fill nipple on the airgun
6. Connect the quick-disconnect fitting on the hand pump hose to the fill nipple (Fig. 5).
7. Make certain the bleed valve on the hand pump is fully closed (tighten in a clockwise direction) (Fig.6).
8. Start pumping and continue until the gauge needle on your pump and on the airgun are between 1000 PSI (138 Bar) and 2900 PSI (200Bar) depending on your desired fill pressure.
9. DO NOT fill the airgun to more than 2900 PSI (200Bar). See "Overfill" information (Section 5C).



Fig 5

⚠ WARNING: Do not disconnect the fill hose from the airgun without bleeding the air first. Failure to follow the instructions may result in serious injury or death.

Open the bleed screw on the pump base slightly in a counter-clockwise direction to COMPLETELY bleed the hose. You must bleed the fill hose COMPLETELY to avoid hose whip from pressure in the fill hose.

- Disconnect the pump from the fill nipple on the gun.
- Replace the cap over the fill nipple. Always keep the fill nipple capped to eliminate the possibility of dirt entering the check valve.

b. Pressurizing (filling) the airgun with a high pressure tank.

⚠ WARNING: Do not disconnect the fill hose before first bleeding the air. Failure to follow these instructions may result in serious injury or death.

The MAR177 may be filled from a high pressure tank (bottle) like the Benjamin HPB3K. Use the Crosman FAH002 Universal Fill Adapter with this option. Properly inspected Scuba tanks can also be utilized for the task. For scuba tanks use the Crosman FAH003 scuba yoke adapter.

1. Be sure to wear eye protection.
2. Make sure the airgun is unloaded (rotary magazine removed)
3. Read all instructions with your tank so you are familiar with its operation.
4. Point the airgun in a SAFE DIRECTION.
5. Remove the cap that covers the fill nipple on the airgun.
6. Connect the quick-disconnect fitting on the adaptor's hose to the fill nipple (Fig. 5).
7. Slowly open the valve on your tank and start filling the gun SLOWLY. Filling too quickly will cause heat buildup that can affect accuracy of the fill pressure.
8. **DO NOT FILL AT A RATE GREATER THAN 1000 PSI (69BAR) PER MINUTE.**
9. Watch the gauges on the airgun and your tank (if equipped) until the desired pressure is reached (1000 - 2900 psi (200 Bar)).
10. DO NOT fill the airgun to more than 2900 psi (200 bar). See "overfill" information in (Section 3C).
11. Turn the valve on your tank off when the desired fill pressure is reached.
12. BLEED the hose COMPLETELY to avoid hose whip from pressure in the fill hose.
13. Disconnect the tank's fill hose from the fill nipple on the airgun.
14. Replace the cap over the fill nipple. Always keep the fill nipple capped to eliminate the possibility of dirt entering the check valve.

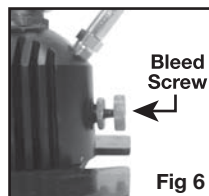


Fig 6

TIP: If your airgun is completely empty (zero pressure) prior to filling, the tension of the hammer pressing against the valve may keep the valve open which will cause air to leak down the barrel. In the event this occurs, make certain the airgun is not loaded and there is not a pellet in the chamber and put the gun "ON SAFE." Afterwards, try cocking the bolt and leaving it in the rear (fully open) position to eliminate the force on the valve allowing it to close. Always make certain the airgun is not loaded and there is not a pellet in the chamber.

c. Overfill

! WARNING: Do not attempt to repair or disassemble a pressurized airgun to correct for overfill or valve lock. Doing so may cause parts to fly from the airgun at dangerous speeds. Failure to follow these instructions may result in serious injury or death.

- Over filling does not improve performance. It will actually lessen performance and may cause the valve to lock. If you discover that the airgun has been over filled, depressurize the airgun. Refer to Section 6a and 6b.
- If the airgun will not discharge air with each shot, the valve may be completely pressure locked and will require use of the hex wrench included with your airgun to depressurize (Refer to Section 6b).

6. Depressurizing the Airgun

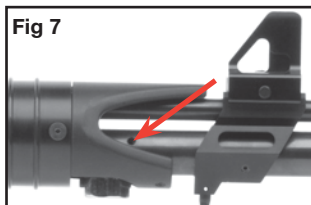
a. Dry Fire Method

1. Keep the air rifle pointed in a SAFE DIRECTION.
2. Remove all the air from your air rifle by repeatedly cocking and dry-firing with the airgun pointed in a SAFE DIRECTION until the pressure gauge on your airgun shows no pressure and air cannot be heard when the shot is fired.
3. Put the air gun "ON SAFE".

b. Hex Wrench Method(Included)

4. Make certain the airgun is not in the cocked position by:
5. To check for cocked position:
 - a. Point the airgun in a SAFE DIRECTION.
 - b. Remove the rotary magazine.
 - c. Close the airgun bolt by sliding forward and latching.
 - d. Pull the trigger.
6. Insert the hex wrench (included with your MAR177 upper) into the plug port as shown in (Fig. 7).
7. Turn the wrench counter clockwise until venting is heard. This will indicate that the pressure is being relieved from the gun. It will only take approximately 1/8 turn to properly vent the pressure.
8. Turn the tool in a clockwise direction until the set screw is completely snug.
9. Pressure gauge should read empty (red- left side)
10. Check the gauge to make certain all pressure has been relieved from the airgun.
11. With the airgun pointed in a safe direction cock the airgun and dry-fire (no pellet) to make certain all pressure has been relieved from the airgun.

Fig 7

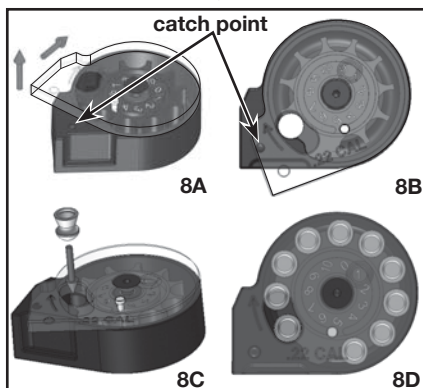


7. Loading the Airgun

CAUTION: Use .177 caliber pellets only in your Model MAR177 Conversion Kit. Never reuse ammunition. Use of any other ammunition can cause injury to you or damage your airgun.

a. Loading the Rotary magazine

1. Lift the clear cover over the catch point and rotate in the direction of the arrows (clockwise) per (Fig. 8A). Turn until the cover appears as show in (Fig. 8B).
2. Place a finger under the rotary magazine covering the hole, place the first pellet in the rotary magazine, nose first (Fig. 8C). Make certain the pellet does not protrude out the back of the rotary magazine. In the event the pellet does protrude simply push the pellet inward.
3. Rotate the cover counter clockwise and place the remaining pellets into the rotary magazine. Upon completion of filling the remaining positions rotate the cover until it comes to rest at the catch point as shown in (Fig. 8D).



b. Inserting the Rotary magazine

NOTE: Following these directions will result in your gun being loaded and ready to fire.

1. Put the air gun "ON SAFE" (see Firearm lower manual) and point in a SAFE DIRECTION.
2. Pull the bolt back to the cocked position.
3. With the clear cover of the rotary magazine facing the butt of the airgun insert the rotary magazine from the right side and push it inward until it snaps into place (Fig. 9).
4. The airgun is now ready to fire.
5. To chamber a pellet, push the bolt forward fully and then down to latch.

Fig 9



8. Unloading and Uncocking the Airgun

a. Unloading – Removing the Rotary magazine

1. Cock the bolt fully rearward in order to remove the rotary magazine.
2. Put the airgun "ON SAFE" (see firearm owner's manual) and point in a SAFE DIRECTION.
3. Push the rotary magazine out of the receiver from the left side.
4. With the airgun pointed in a safe direction close bolt and discharge
5. The airgun is now ready for storage or removal from firearm lower.

9. Aiming and Firing Safely

- Always point your airgun in a SAFE DIRECTION.
- Follow the instructions for filling the airgun (section 5A or 5B) and loading pellets (sections 7A and 7B).
- You and others with you should always wear shooting glasses to protect your eyes.
- 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.
- Always choose your target carefully and be sure to have a safe backstop.
- Your airgun is designed for target shooting and is suited for both indoor and outdoor use. Always remember to place your target carefully. THINK about what you will hit if you miss the target.
- Before firing the airgun make certain there is sufficient pressure for proper operation. The gauge needle should be pointing to the area between 1000 PSI and 2900 PSI (200Bar) on the gauge.

a. Sight Adjustment

1. This airgun comes with an adjustable rear sight for windage (left or right movement) and elevation (Fig. 11A). You can adjust the rear sight right or left by turning the vertical knob attached to the dual aperture to the desired direction. The horizontal knob is for elevation adjustment. Use large aperture for short range and the small aperture for normal range. (Fig. 11B) To change aperture size, simply push the desired size to the top.
2. The front sight is adjustable for elevation. To adjust elevation, depress detent and rotate post (Fig. 12)

10. Removing a Jammed Pellet

A jammed pellet is usually the result of trying to fire the airgun when the pressure is too low. Before firing the airgun make certain there is sufficient pressure for proper operation, by making sure the gauge needle is pointing to the area between 1000 PSI and 2900 psi (200 bar). If the gun becomes jammed, depressurize the gun follow the Hex Wrench Method: (section 6B)

a. Make certain the airgun is not in the cocked position by:

1. Pointing the airgun in a SAFE DIRECTION.
2. Removing the rotary magazine.
3. Closing the airgun bolt by sliding forward and latching.
4. Pulling the trigger.

Fig 10



Fig 11

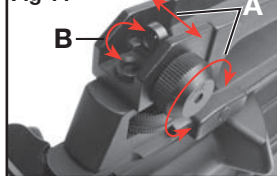


Fig 12



Fig 13

5. Depressurize (see section 6a, 6b)
6. Point the airgun in a SAFE DIRECTION.
7. Put the airgun "ON SAFE" (see firearm owner's manual).
8. Open the bolt by pushing the bolt handle up and pulling it all the way back until you hear two clicks.
9. With the bolt in the rearward position insert a ramrod of the proper size into the barrel (start at the muzzle) (Fig. 13). The barrel could be damaged if the proper sized cleaning rod is not used.

NOTE: The bolt must be cocked and open for the jammed pellet to clear the breech when it is pushed out by the ramrod.

10. Using the ramrod push the pellet into the pellet loading port (forward of the bolt) remove and discard the pellet. Do not reuse that pellet.
11. Put the airgun "ON SAFE" (see firearm owner's manual).
12. Pressurize (see section 5a, 5b)
13. If you are not able to unjam your airgun by following this procedure, take no further action. Crossman Corporation or an Authorized Service Station will unjam your airgun (no cost during the warranty period).

11. MAR177 Conversion Kit removal (Upper)

⚠ WARNING: When handling the MAR177 Conversion Kit follow warnings engraved on MAR177 Conversion Kit. Do not depress the TRIGGER block located on underside of upper. TRIGGER is engraved on the block. Keep hands clear of TRIGGER block at all times. Failure to follow these instructions may result in serious injury or death.

a. Before removal

1. Depressurize (refer to 6A & 6B)
2. Ensure firearm lower safety is in the on or safe position
3. Ensure the MAR177 Conversion Kit is unloaded
4. Ensure the rotary magazine is removed

b. Remove take down and pivot pins

12. Maintaining Your Airgun

- Crosman recommends the use of silicone chamber oil only.
- Apply Crosman silicone chamber oil (Crosman Model RMCOL) on the barrel o-ring every 3 months or 500 shots. Apply with a cotton swab as shown in (Fig. 14).
- Do not use any petroleum based lubricants.



Fig 14

⚠ WARNING: Explosion Danger. Do not introduce petroleum based products into the high pressure reservoir, or it may cause an explosion. Failure to follow these instruction may result in serious injury or death.

DO NOT MODIFY OR ALTER YOUR AIRGUN. Attempts to modify the airgun in any way inconsistent with this manual may make your airgun unsafe to use, cause serious injury or death, and will void the warranty.

If you drop your airgun, visually inspect looking for obvious damage. If anything seems changed, for example, you notice a shorter or weaker trigger pull, this may mean that part in your airgun has become worn out or broken. Under these circumstances, call Crosman Customer service or one of its Authorized Service Stations for assistance before using your airgun again.

13. Reviewing Safety

- Never point the airgun at any person or at anything you do not intend to shoot.
- Always treat the airgun as though it is loaded and with the same respect you would a firearm.
- Always aim in a SAFE DIRECTION. Always keep the muzzle of the airgun pointed in a SAFE DIRECTION.
- Always keep the airgun on safe until you are ready to shoot.
- Always check to see if the airgun is "ON SAFE" (see Firearm manual) and unloaded when getting it from another person or from storage.
- Always keep your finger off the trigger and out of the trigger guard until ready to shoot.
- You and others with you should always wear shooting glasses to protect your eyes.
- Your reading or prescription glasses are not safety glasses, make sure you wear shooting glasses over your regular glasses.
- Use .177 caliber (4.5mm) pellets only in your MAR177. NEVER reuse ammunition.
- 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.
- Place the target in a location that will be safe should the backstop fail.
- Your backstop should be checked for wear before and after each use. All backstops are subject to wear and will eventually fail. Replace your backstop if the surface is worn or damaged or if a ricochet occurs.
- Do not attempt to disassemble or tamper with your airgun. Use an Authorized Service Station. Using unauthorized repair centers or modifying the function of your airgun in any way may be unsafe and will void your warranty.
- Store airgun in a secure location. REMEMBER- THERE IS NO SAFETY DEVICE WHEN THE MAR177 Conversion Kit IS REMOVED FROM THE LOWER.
- Before you store your airgun, remove the rotary magazine, make sure there is no pellet in the chamber and make sure the gun is uncocked (see section 6) and depressurize the gun.
- NEVER store this airgun charged with air when not in use.

This airgun conversion kit has been classified as an adult airgun and is recommended for adult use only. Because it is considered to be a special purpose airgun conversion kit, it is exempt from specific types of trigger pull, safety mechanism and drop tests.


SPECIFICATIONS- MAR177

Mechanism	Bolt Action
Capacity	10 SHOT ROTARY MAGAZINE
Power source	PCP
Caliber/Ammunition	.177 CALIBER Lead airgun Pellet
Weight	6.9 lbs (conversion kit only)
Length	28.3 inches (conversion kit only)
Barrel	Rifled Lothar Walther steel barrel
Safety	This is a CONVERSION KIT – All safety features are incorporated in the firearm lower. Consult firearm owner's manual for how to properly use your firearm's safety features.
Velocity	Up to 600 fps

PERFORMANCE

Many factors affect velocity, including brand of projectile, type of projectile, lubrication, barrel condition and temperature. Your airgun was designed to work with CROSMAN®, COPPERHEAD®, and BENJAMIN® ammunition. Use of other ammunition may cause your gun to malfunction.

STOP! DO NOT RETURN THIS PRODUCT TO THE STORE.

 Our customer service representatives can help; contact us directly at 1-800-7AIRGUN (1-800-724-7486), or get answers to frequently asked questions at www.crosman.com

REPAIR SERVICE

If your airgun needs repair, we recommend you take or send it to your nearest Crosman Authorized Service Station. DO NOT ATTEMPT TO DISASSEMBLE IT! Your airgun requires special tools and fixtures to repair it. Any disassembly or modification not performed by an Authorized Service Station will void the warranty.

A SPECIAL CUSTOMER SERVICE

Crosman Authorized Service Stations will unjam your airgun at no cost during the warranty period.

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. To register the serial number of your airgun, contact us directly at 1-800-7AIRGUN (1-800-724-7486), or register on line at www.crosman.com. The warranty is not conditioned on the return of the card. You should retain the original sales receipt as record of date of purchase.

WHAT IS COVERED

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

WHAT IS NOT COVERED

Transportation charges to Authorized Service Station for product. Damages caused by abuse, modification or failure to perform normal maintenance – see Owner's Manual. 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.

HOW TO OBTAIN WARRANTY PERFORMANCE

U.S. Customers- Locate nearest service station (see www.Crosman.com or call Crosman customer service at 800-724-7486 for list of stations). The service station will give you details of how to proceed with sending the item in for repair. You must contact the station prior to shipping your product.

Canadian Customers: Contact Gravel Agency, Quebec (866) 662-4869.

International Customers- Please return product to your nearest distributor. If you do not know your distributor, please call 585-657- 6161 and ask for our International Department for assistance.

IMPLIED WARRANTIES

Any implied warranties including the implied warranties of merchantability and fitness for a particular purpose are limited in the duration to one year from the 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.

CROSMAN, is a registered trademark of Crosman Corporation in the United States and/or other countries.

This product was developed in conjunction with the master gunsmiths at Pilkington Competiton, LLC.