

# **USERS MANUAL**

## **WARNING!**

## Airguns are dangerous items and can kill or cause serious bodily harm.

Never under any circumstances should any Rapid Air Weapons product be shot indoors unless at a dedicated indoor shooting facility.

All airguns must be treated in the same manner as a firearm would be handled under the same circumstances, with the same safety cautions observed.

# What comes with your new rifle

TM1000 & BM500

Guarantee Card Spare Quick Fill Seals

HM1000 & HM1000X

Guarantee Card
Spare Quick Fill Seals
Magazine
Magazine Instructions
Magazine Box

# PLEASE READ THIS MANUAL BEFORE USING YOUR NEW RIFLE, IT CONTAINS IMPORTANT INSTRUCTIONS AND SAFETY INFORMATION

\*\*\*\* SAFETY \*\*\*\*

- 1 AT ALL TIMES TREAT THIS AIR RIFLE AS IF IT IS LOADED.
- 2 NEVER POINT THIS WEAPON AT ANYONE, EVEN IF UNLOADED.
- 3 NEVER LEAVE THIS RIFLE UNATTENDED WHEN NOT SECURED.
- 4 ALWAYS KNOW WHAT IS BEYOND YOUR TARGET, AND IS IT SAFE TO FIRE.
- 5 ALWAYS WEAR SAFETY GLASSES.

WARNING! – UNAUTHORISED DISASSEBLEY OF THIS RIFLE WILL INVALIDATE THE MANUFACTURERS WARRANTY.

# **Manufacturers Warranty**

This product has a limited 12 month warranty commencing from the date of purchase and is transferable. The warranty is limited to defects in materials and/or workmanship. Proof of original shop purchase is required to receive warranty repairs.

#### WHAT IS COVERED?

Replacement of parts and labour. Return transportation to the consumer (USA only).

#### WHAT IS NOT COVERED?

Transportation from consumer to Rapid Air Weapons.

Damage caused by misuse, abuse, lack of routine maintenance or disassembly.

Parts subject to normal wear and tear.

Any consequential costs to the consumer.

Any modifications not made by Rapid Air Weapons

# **Checking Performance**

The current laws on ownership and use of air rifles in certain countries make it very difficult for manufacturers to satisfy both the shooter and there countries legislation. The shooter wants maximum power, but legislation demands an upper limit. Pellets vary in size, weight and design; every rifle performs slightly differently and, this results in a performance variable that can in some cases make a legal rifle into a firearm/prohibited product, just by a pellet change.

#### **FILLING INSTRUCTIONS**

## ONLY USE CLEAN, DRY AND FILTERED COMPRESSED AIR,

#### OVER PRESSURISATION MAY DAMAGE THE CYLINDER BEYOND REPAIR.

1. The female snap connector (pictured below) has a 1/8th BSP male thread which will screw directly into the hose of your pump or bottle.







2. Next remove the dust cover which can be found at the end of your bottle as shown above or at the "V" Block as shown on pg 12.

#### **FILLING INSTRUCTIONS**

#### WARNING NOTE REGARDING 300 BAR BOTTLES.

IF YOU ARE USING A 300 BAR BOTTLE, CARE HAS TO BE TAKEN WHEN FILLING YOUR RIFLE. THE FILLING PROCEDURE DESCRIBED IN THIS MANUAL MUST BE FOLLOWED TO AVOID DAMAGE TO THE RIFLE, PARTICULARLY THE SLOW OPENING OF THE VALVE ON THE BOTTLE. OPENING THE VALVE QUICKLY WILL ALLOW UP TO 300 BAR OF PRESSURE INTO THE CYLINDER AT ONCE, AND COULD CAUSE SERIOUS PERSONAL INJURY OR IRREPARABLE DAMAGE TO THE CYLINDER AND RIFLE.

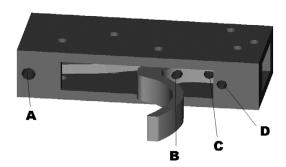
The filling pressure of the rifle is dependant on the bottle size fitted to your gun. WARNING Over filling may lower the power and cause serious injury.

#### Bottle Fill Pressures are

180cc – 200 bar 210cc – 207 bar 280cc – 230 bar 360cc – 207 bar 400cc – 207 bar 480cc – 230 bar 500cc – 230 bar Titanium Slim Bottle 230 bar

Please note the 480cc Bottle is a Carbon Fiber Bottle.

## **Trigger Adjustments**



Trigger adjustments. Ensure any screw that is moved is only moved half a turn maximum at a time before trying. If the trigger does not work as expected immediately return the screw back to its original position.

Screw "A" will increase or decrease the trigger pressure. To increase turn clockwise, to decrease turn anticlockwise.

Screw "B" will increase or decrease first stage travel. To increase turn clockwise, to decrease turn anticlockwise.

Screw "C" will increase or decrease second stage travel. To increase turn anticlockwise, to decrease turn clockwise.

Screw "D" will also give an increase or decrease to first stage travel, although this is normally not required.

If you require a single stage trigger then increase screw "B" by turning clockwise.

#### NEVER ADJUST YOUR TRIGGER SO IT IS UNSAFE.

## Trigger Mechanism:

The trigger mechanism has been made with certain components being hardened to prevent wear. The lubrication applied at the factory is normally sufficient for tens of thousands of shots, however any roughness felt during operation may indicate that re-lubrication could be necessary.

If you have low knowledge of a precision trigger mechanism, maintenance and lubrication should be left to an experienced gunsmith or returned to the factory. Do **not** allow any lubricant added to the trigger to come into contact with the hammer and springs. The shot-to-shot velocity consistency could be affected if this happens. It is strongly advised that the rifle is only serviced by a competent gunsmith. The frequency of servicing is determined by the amount of use but should be at least once a year. Under or over lubrication will affect the operation of this rifle.

## Lubrication

#### SILICONE OR SYNTHETIC BASED OILS SHOULD NOT BE USED

Correct types of lubricant:

Molybdenum Disulphide based grease can be applied to the cocking bolt body and linkage area.

Low viscosity mineral oil can be applied to the pins on the cocking lever and linkage,

Lubrication should be applied in small amounts only as it can migrate into the hammer chamber resulting in erratic performance.

- b> Do not fill the cylinder if there are any surface abrasions or dents. Contact your local dealer for advice if you have any doubts on the suitability of the cylinder to be filled.
- c> Do not store the rifle in a place or near sources with high temperatures such as fires.
- d> Do not dismantle when filled.
- e> Do not fill beyond the stated filling pressure (see filling instructions section). Damage caused by over filling is not covered by the manufacturers warranty and in any case is potentially very dangerous.

If the rifle is being filled by a hand pump it is essential to prevent the ingress of water. The compression of air always results in the separation of water. The higher the pressure the greater the effect. Air that is put into scuba tanks by the likes of diving shops is filtered to a high level and therefore helps to keep the internals of the rifle in good condition. Most hand pumps do not have filtration to match that of diving air compression systems and as a consequence may result in internal corrosion. Internal corrosion caused by the use of unfiltered air is **not** covered by the manufacturer's warranty. Some hand pumps have a purpose designed filtration system that work almost to the levels of diver's air. It is highly recommended that this type of pump/filter combination is used at all times.

The cylinder should be inspected for internal corrosion at least every 2 years. Normally a divers shop will have the equipment to inspect the cylinder but some may not be prepared to give this service to anything other than a scuba tank. Rapid Air Weapons can provide this service at the factory.

The velocity of this rifle has been set using JSB Field pellets. If any other make or type of pellet is to be used it will need testing on a chronograph to establish whether the velocity needs adjusting to ensure the muzzle energy is within the limits determined by current legislation.

Regular velocity checks should be made particularly in the first year of ownership.

Rifles are set up using the most efficient pellet available for your rifle, which is usually a JSB Field pellet.

Chronographs are used to check velocity and calculate the muzzle energy in ft/lbs. Calculate using the following formula applying the constants, V = velocity in feet per second. W = weight of pellet in grains. Check that the chronograph readings are in feet per second.

$$\frac{V \times V \times W}{450240}$$

Example: V = 785fps, W = 8.4gr therefore  $785 \times 785 \times 8.4$  divide by 450240 = 11.4967ft/lbs.

This Air Rifle is not a toy and may cause death or serious injury if used incorrectly or carelessly. Read all instructions before use. The user has the responsibility to conform to all legislation relating to the ownership and use of air weapons within the country of use. Rapid Air Weapons will not be responsible for any damage to the contents or missing items if the box is not original or has been opened between dispatch from the factory and receipt by the end user.

In the event of any complaint regarding this product the supplier should be informed. The consumer's rights are with the supplier not the manufacturer.

The air cylinder fitted to this product will have very high internal pressure when ready for use and must **not** be modified in any way. Serious personal injury may result if this and the advice below is not followed.

a> Only use clean, filtered and dry compressed air. **NEVER** use any other gas particularly industrial or welding gases such as Oxygen, Acetylene, and Hydrogen etc.







3. To charge, pull back the outer sleeve of the female coupling and push firmly onto the quick coupling on the rifle, make sure the coupling has snapped into place, ONLY when it is secure proceed to allow air to pass through the hose and into the rifle, charge slowly and safely, once charged shut off the air and bleed the hose, remove the coupling refit dust cover.

## **Cocking/Loading Instructions**

Hook your fore finger under or over the cocking arm.

Pull back on the lever until it has come to a firm stop. Do not pull past this point as damage to the mechanism could occur.

Load pellet into the barrel and return Cocking Lever to fully closed position, the rifle is now loaded and ready to fire.

If you are using a magazine it might be necessary to hold the cocking lever at the rearmost position to enable the magazine to slide into place, without holding the lever back it will hit the probe and not push all the way to its final position.

# Stock and Bottle Removal for all Models Except BM & Rifles fitted with 180 or 220cc Bottle

Before proceeding ensure the rifle is not loaded, the barrel is empty and safety glasses are used!

#### **WARNING**

Before attempting to remove your stock the bottle will need to be removed to prevent damage to the stock around the Quick Fill area.











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remove your bottle start by securing your rifle between your legs, then begin to unscrew. The bottle will be quite tough to turn until you have a gap of about 2mm, where you will hear a loud pop as the "O" rings releases the pressure, (this method is preferred over dry firing as there is no chance of damaging the valve) then it will be easy to unscrew from your rifle. For stock removal lay the rifle upside down on a flat surface and use a 3/16 Hex Key to remove the stock bolt while being careful to grab the washer. Now the stock will pull away from the rest of the rifle.

## **Stock Cheek and Butt Adjustments**

The cheek piece if fitted to your stock and butt pad are adjustable

The cheek piece adjustment is achieved by unlocking the side screw located opposite the cheek piece and sliding the cheek higher or lower as required, a limited side movement can be achieved by loosening the cross head screws located under the cheek piece. Once a comfortable position has been achieved all screws should be secured.

The butt pad can be loosened by the screw at the rear of the pad. It can then be adjusted higher or lower as required. Once a position has been achieved the screw should be retightened.

## **Additional Accessories**

# 500cc Bottles for additional shot capacity\ 480cc Carbon Fibre Bottle



Magazines available in .177 .20 .22 .25 .30 .357



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