



BRK **XR**
BROCK
OFFICIAL HANDBOOK

GENERAL INFORMATION

Congratulations on buying this fine BRK/Brocock precharged pneumatic (PCP) air rifle. All BRK/Brocock rifles are made in the United Kingdom to the highest quality standards and hand assembled using components made using the very latest CNC production methods. Before

leaving the factory, each rifle has been tested for power and accuracy to ensure it is performing at its best. All BRK/Brocock air rifles comply with the latest PCP safety and product-testing protocols.

SAFETY

-  Never point your air rifle at anyone, nor at anything other than a legitimate target
-  Never leave your air rifle unattended
-  Never leave a pellet in the breech when storing your air rifle; remove the magazine when not shooting
-  Always check your air rifle is not loaded when you first pick it up
-  Always treat your air rifle as if it were loaded, even if you know it is not
-  Always use a safe, large backstop to catch your pellets - and pay due attention to what is behind the target should you miss
-  Always store your air rifle and pellets separately and securely so that no unauthorised person can access or use them
-  Always apply the safety catch when reloading, moving or whenever the rifle is inactive

Know and abide by the air rifle laws applicable in your state or country



WARNING! HIGH STRENGTH MAGNETS

**The side lever, filler cover
and magazine contain high
strength magnets.
Care should be taken
with close proximity to
heart pacemakers and
credit cards.**

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Where illustrated, scope, mounts and bipod are not included, but are available from BRK/Brocock / MTC Optics stockists

FILLING YOUR AIR RIFLE WITH COMPRESSED AIR

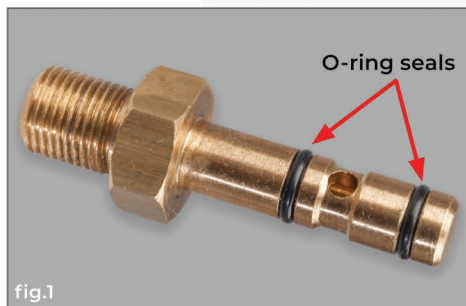
Your BRK/Brocock PCP is filled with compressed air from a separate charging unit, either a scuba tank or manual stirrup pump. The rifle should be filled when the needle on the rifle's main cylinder/bottle pressure gauge falls below the green area, so it is important to monitor this. While the method of filling with compressed air is similar, the way your rifle connects to the charging unit is model dependent (see below). BRK/Brocock supplies every rifle with the appropriate charging connector that should be attached to the filler hose of the charging unit being used.

IMPORTANT

- Use **ONLY** use clean, dry, compressed AIR
- **DO NOT** 'over-fill' your rifle with more air than indicated in the following instructions

RANGER/ATOMIC XR & CONCEPT XR MODELS

Note: Before every filling operation, the two O-ring seals on the filler probe supplied with the rifle should be checked to ensure they are in good condition (fig.1)



To access the filling valve, rotate the protective collar at the end of the rifle's cylinder and fully insert the filling probe into the exposed inlet port (fig.2)

Close the bleed screw on the charging unit and then **SLOWLY** open the unit's main valve

Compressed air will now fill the rifle's main air cylinder

Note the pressure indicated by the air gauge at the end of the rifle's cylinder. You should fill the rifle to the following charging pressures:



RANGER/ATOMIC XR / CONCEPT XR (REGULATED) Maximum 250BAR (3,600psi)

Once the correct pressure has been reached, fully close the main valve on the charging unit

Open the charging unit's bleed valve to rapidly bleed off the remaining air in the filler hose

Pull the filling probe from the rifle, and rotate the protective collar on the rifle's cylinder to cover the filling valve port

XR

To access the filling valve, remove the magnetic dust cap located underneath the rifle's forend (fig.3)

Pull back the outer sleeve of the extended charging connector and push it over the male inlet valve on the rifle. Secure it in place by ensuring the outer sleeve (fig.4) is returned to the fully-forward position

Close the bleed screw on the charging unit and then SLOWLY open the unit's main valve. Compressed air will now fill the rifle's buddy-bottle

Note the pressure indicated by the air gauge on the side of the rifle's action. Fill the rifle**

Once the correct pressure has been reached, fully close the main valve on the charging unit

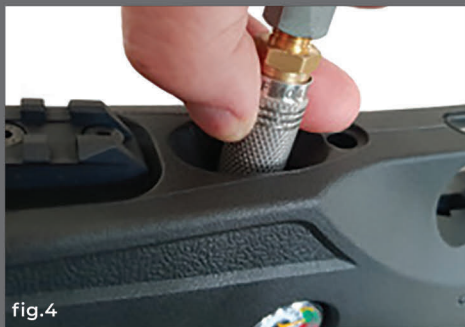


fig.4



fig.3

Then open the charging unit's bleed valve to rapidly bleed off the remaining air in the filler hose

Pull back the outer sleeve of the extended charging connector to disengage it from the rifle, then refit the rifle's inlet valve's magnetic cover.

PATHFINDER XR / SNIPER XR / COMMANDER XR / MAGNUM XR

These models are exclusively fitted with a factory-fitted HUMA-AIR regulator which improves air efficiency and shot-to-shot consistency.

BRK/Brocock's regulated PCPs are identifiable by the addition of a second air gauge (above the main pressure gauge) that allows the regulator's factory-set air pressure to be independently monitored (fig.5). The regulator's pressure is factory set* and indicates the regulator's set pressure.

Recharge the rifle when the two gauges show equal pressure. Should the pointer of the regulator's gauge point fully to the left or right, this can indicate a regulator malfunction. In this event, the rifle should be returned to an authorised BRK/Brocock agent.

***WARNING** Do not attempt to adjust the regulator's pressure without first consulting a trained servicing agent, as to do so can irreparably damage the regulator seals and invalidate the warranty.

Go to <http://brocock.co.uk/index.php/user-manuals/> for more details on regulators and authorised adjustment.

****** XR Fill to 200BAR (2,600psi). All other models fill to a maximum of 250BAR (3,600psi)



fig.5

LOADING YOUR RIFLE

Your BRK/Brocock rifle can be fired in single or multi-shot modes; each loading method requires the rifle to be cocked first. In single-shot mode, a loading tray is placed in the breech and a pellet is hand-fed into its channel for each shot. Multi-shot mode uses a self-indexing removable, rotary magazine to automatically present pellets to the breech, and therefore allows for quicker shooting.

SINGLE-SHOT MODE

Engage the safety catch to the right (SAFE position) (fig.7)



Cock the action by pulling back the side lever (fig.8)



Slide in the single-shot tray (fig.9)



Check that the pellet is not deformed and place it, nose first, into the channel. Push the side lever forward to insert the pellet into the breech

THE RIFLE IS NOW COCKED AND LOADED

Disengage the safety catch to the left (FIRE position) and squeeze the trigger to fire the rifle

MULTI-SHOT MODE

Engage the safety catch to the right (SAFE position) (fig.7)

Pull back the side lever and slide out the single-shot tray (if fitted) or magazine

MAGAZINE – REMOVAL & LOADING

Insert and extract the magazine from the right-hand side of the breech (fig.10)

Open the front loading gate on the magazine and rotate the inner drum one rotation clockwise (fig.11)





While holding the drum against spring tension, insert a pellet into the lower magazine chamber (fig.12). The magazine drum can now be released

Insert pellets into the remaining chambers. Close the magazine loading gate (fig.12b)

Insert the loaded magazine into the right side of the rifle. Push the side lever forward (fig.13)



THE AIR RIFLE IS NOW COCKED AND LOADED

Disengage the safety catch to the left (FIRE position) and squeeze the trigger to fire the rifle. Recycling the bolt/side lever will cock the rifle and automatically index the magazine on the backward stroke, and the next pellet will be loaded on the bolt's return.

IMPORTANT

The magazine will index each time the side lever is cycled. To avoid a 'double-load' do not recycle the side lever without having first fired the rifle.

The rifle can be dry fired with no pellets in the breech - without any mechanical damage occurring provided there is air in the rifle.

Keep the muzzle of your air rifle pointing in a safe direction at all times **ALWAYS** ensure the last shot has been fired from the barrel before finishing the shooting session.

Dry-fire a shot in a safe direction if necessary.

PELLETS

The power, accuracy and consistency of your BRK/Brocock rifle is dependent on the quality of the pellets used. Additionally, the BRK/Brocock self-indexing magazine has been specifically engineered to operate with waisted roundhead pellets. If other pellet shapes are used, the magazine may not index properly and could even jam.

RECOMMENDED PELLET TYPES

UK SPECIFICATION RIFLES

Up to 12 ft/lbs (16J):

Rangemaster Kaiser

.177 = 8.64gr .22 = 14.66gr

Rangemaster Sovereign*

.177 = 8.44gr .22 = 15.89gr

*Factory test pellet for UK legal limit

MEDIUM POWER RIFLES

30-40 ft/lbs (42-55J):

Rangemaster Sovereign Heavy

Rangemaster King

HIGH POWER RIFLES

40-55: ft/lbs (54-75J):

Rangemaster King

Rangemaster Emperor

Rangemaster Juggernaut



FITTING A RIFLE SCOPE

For maximum accuracy, your BRK/Brocock rifle requires a separate scope (telescopic rifle sight) to be mounted, although other sights (eg: red-dot, reflex, night-vision) may also be used. BRK/Brocock recommends riflescopes from MTC Optics (www.mtcoptics.com), and two-piece BluePrint mounts. You should choose your scope and mounts with due consideration to your scope choice, shooting needs and the specific BRK/Brocock model onto which they are being fitted.

MTC Optics SWAT Prismatic series come with adjustable mounts as standard. Picture shows the 10x30 'Atom'



ATTACHING THE MOUNTS

Note

Besides selecting the correct height/ring size mount for your scope, its clamping system must also suit the dovetail rail of the BRK/Brocock rifle model. Two types are used, either 11mm or 22mm (Picatinny), dependent on model and country of use

With the top straps removed to expose the mount cradles, position the mounts on the rifle's dovetails in a position that allows the correct eye-relief of the scope when you are aiming the rifle

Ensure the saddle of the scope does not interfere with the magazine when it is inserted into the breech

Attach the top straps, but only nip-up their bolts finger tight; just enough to allow the scope to be rotated by hand

ALIGNING THE CROSSHAIR

Using a gun-vice or similar, place a spirit

level across the rifle's breech block to ensure it is level

Look through the scope and rotate it until the crosshairs are perfectly vertical and horizontal. You can use a plumb line downrange as an aid

Once the crosshairs are aligned to the rifle, tighten all the mount ring bolts to their recommended torque

ZEROING THE SCOPE TO THE RIFLE

In front of a safe, suitable backstop, set up a large paper target with a visible mark in the centre around 10 metres (12 yards) away. This may be closer than the distance you prefer to shoot at, but it is a method used to initially zero your rifle/scope

Aiming at the mark, fire a few pellets and note where they land*

Turn the scope's elevation and windage turrets the required amount to move the group toward the aiming mark, and repeat the procedure until the shots impact roughly at the aim point

Then move the target to your primary zero distance and fine-tune the scope's elevation and windage turrets until the combo is precisely zeroed-in

*If the initial shots group around 13cm (5ins) or more below the aim point, then we recommend the use of adjustable mounts or shimming the rear of the scope up to provide enough adjustment (fig.14).

Do not over-pack the mount, however, as this may damage the scope

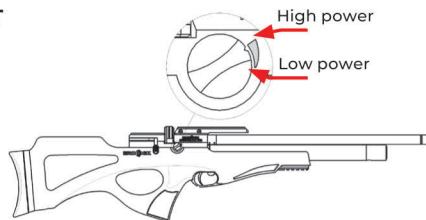


fig.14

ADJUSTMENTS

POWER ADJUSTMENT

All model variants incorporate a user-operable power adjuster, located on the side of the action. The range of power adjustment available is dependent on model and calibre and ranges from two to five clicks. In all cases, the power of the rifle will not exceed the highest permissible muzzle energy output allowed for that model's intended market. To choose a lower power setting, turn the dial clockwise; turn anti-clockwise to choose a higher power setting.



Note:

Fully clockwise = Lowest power setting
Fully anti-clockwise = Highest power setting

REGULATOR ADJUSTMENT

All XR models* are factory-equipped with a Huma-Air regulator, which is factory set to the correct pressure for your rifle.

On Sniper, Commander and Pathfinder XR, this pressure is shown on the gauge on the left side of the action (see page 4). For higher-powered models over 12ft/lbs, the regulator can be adjusted in situ, via an access hole in the base of the stock (fig xxx). This enables fine-tuning of the rifle's firing cycle. When the regulator pressure is adjusted, the regulator gauge will move to reflect the regulator's new set pressure.

- To increase the regulator pressure, turn the knob counter-clockwise
- To lower the regulator pressure, turn the knob clockwise.

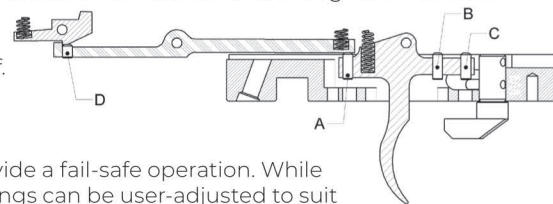
IMPORTANT: When lowering the pressure in the regulator, the main bottle should be unscrewed/removed and air removed from the rifle's secondary chamber. To empty the secondary chamber, the rifle should be dry-fired continually until no air can be heard discharging. Failure to do this will damage the regulator's seal, requiring specialist repair (not covered under warranty).

*XR and Compatto models that are unregulated are available in some regions

TRIGGER ADJUSTMENT

The trigger of your BRK/Brocock rifle is two-stage and has been expertly set at the factory for a safe, crisp let-off.

Additionally, the safety catch has been adjusted to provide a fail-safe operation. While the factory settings can be user-adjusted to suit personal preferences, it is highly recommended that this is done in conjunction with a qualified gunsmith or BRK/Brocock agent.

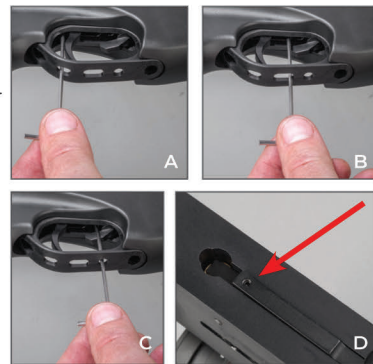


A - First stage trigger adjustment

B - Trigger position

C - Safety catch adjustment – check function and adjust as needed after any trigger adjustment

D - Second stage trigger adjustment



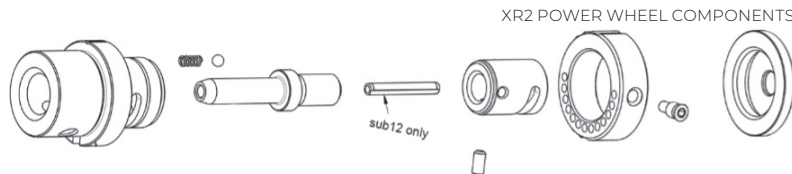
XR2 POWER WHEEL

The Commander, Sniper, and many Ranger XR2 models feature a 13-position power wheel that works in conjunction with the existing three-position transfer port selector. Together, these controls provide up to 39 settings with a 5-10 fps difference between settings (depending on caliber).

Each click of the power wheel typically changes muzzle velocity by approximately 5–10 feet per second (fps), depending on calibre and the rifle's overall power output.

The power wheel is more than a simple spring-tension adjuster. It incorporates a patented worm-drive system that enables precise and repeatable control of hammer spring tension with every adjustment.

BRK-Brocock recommends making power adjustments with the hammer spring un-tensioned whenever possible, as this minimises wear on the power adjustment mechanism and helps ensure long-term reliability.



SAFETY CATCH OPERATION

All BRK/Brocock PCPs are fitted with a manual safety catch, located inside the trigger guard, forward of the trigger blade. When the catch is pointing toward the right, it is engaged (safe) and the trigger cannot be operated. Switch the catch to the left to disengage it (fire) when you are ready to take the shot.

Note:

Some models are marked 'S' (safe) and 'F' (fire)



RIFLE BUTT ADJUSTMENT

For models fitted with a telescopic rifle butt. Press in the catch (fig.15) to adjust.



The butt can be replaced with optional butt designs of compatible configuration.



To remove the butt completely, push in the catch and at the same time pull the lever out as shown in fig.16. In addition, on Compatto 2 & XR the recoil pad may be adjusted for height to improve gunfit. To do this, loosen the central bolt with a 6mm hex tool, set the pad to the required position and re-tighten the bolt.



Some models are fitted with a folding stock option. To unlock, pull up on the rear section while pushing down on the housing attached to the rifle. Do not use excessive force and keep the unlocking motion square to the housing.

ACCESSORY RAIL/MOUNT

The 22mm Picatinny scope rail can be fitted with an optional side rail/mount for additional accessories. Remove the magazine, unscrew and slide the scope rail off the rear of the rifle. The optional side rails can then be fitted to the underside of the scope rail with the three bolts provided, as in fig.17



ADDITIONAL SOUND MODERATOR

The end piece of the integral silencer fitted to all BRK/Brocock models also features an industry-standard 1/2-in UNF thread (male) to take a further sound suppressing device, like the 0dB Silencer. To expose the thread, unscrew the muzzle collar (fig.18).



RECOMMENDED MAINTENANCE

Precharged pneumatic (PCP) air rifles operate under extremely high pressures of compressed air and so can potentially become dangerous if not serviced correctly. All servicing and warranty work should be carried out by an approved factory-trained technician. Correct and regular maintenance also ensures your BRK/Brocock PCP will operate at peak performance. We therefore recommend that the rifle be returned to the factory or a BRK/Brocock-approved agent for a routine service every three years. Between service intervals, however, you can keep your rifle shooting trouble-free by paying attention to the following areas:

AIR RESERVOIR

The steel under-barrel air cylinders, buddy-bottles and alloy/carbon-fibre buddy-bottles used on the various BRK/Brocock PCP models will withstand pressures many times the working pressure of the rifle. However, the rifle should be returned to the factory or approved agent for them to be inspected and, if necessary, replaced every 10 years.

CHARGING UNIT – HAND PUMP

A hand-operated stirrup pump offers an inexpensive and convenient method of charging your rifle. However, as most do not contain water extraction and dirt removal systems, they can shorten the life of sealing valves and O-rings. If you regularly use this type of charging unit, care should be taken to avoid condensation build-up from inside the pump being transferred to the rifle. The pump should not be used in sandy or dusty conditions. Always refer to the pump manufacturer's operating instructions.



CHARGING UNIT – SCUBA TANK

If you use a scuba tank to charge your rifle with compressed air, make sure you open its main feed valve slowly when transferring air from the tank to the rifle's cylinder/bottle. Keep all charging connectors clean and free from oil. Handle the charging unit with care at all times, and NEVER blast high pressure air directly onto your skin.

CHARGING UNIT – COMPRESSOR

There are now a number of affordable electric and petrol-engine compressors that can deliver breathing quality air. While these are suitable to directly fill your BRK/Brocock PCP, ensure that you do not inadvertently fill your rifle's cylinder/buddy-bottle with more than the recommended pressure.



ACTION

After every shooting session, protect your rifle's metal parts with quality gun oil. Apply the oil to a cloth and wipe over the gun. NEVER allow oil to enter into the rifle's filler valve.

LUBRICATION

To maintain smooth cocking, periodically lubricate the shaft of the bolt-handle/side lever bolt sparingly with a light grease, but do not allow any grease to get into the barrel. Wipe over the action with an oily rag, but never oil any internal parts

BARREL CLEANING

For optimum performance, the barrel rifling should be periodically cleaned using felt cleaning pellets lubricated with a light-grade oil. The cleaning frequency depends on the pellets used and the individual barrel, but as general rule, do it each time you begin a new tin of pellets.

BARREL CLEANING AND BREECH O-RING

The breech O-ring can become dislodged should you inadvertently fire the rifle with the breech open. Replacement O-rings (70-Shore hardness rated) are provided with your rifle. To replace a breech O-ring, remove the magazine, scope rails and then the two screws that secure the barrel. The barrel can be extracted from the action block with the shroud assembly for O-ring replacement (and easier cleaning).

Note that breech O-ring sizes are calibre-specific: .177/4.5mm - 4x1.5mm; .22/5.5mm - 5x1.5mm; .25/6.35mm - 6x1.5mm

STOCK

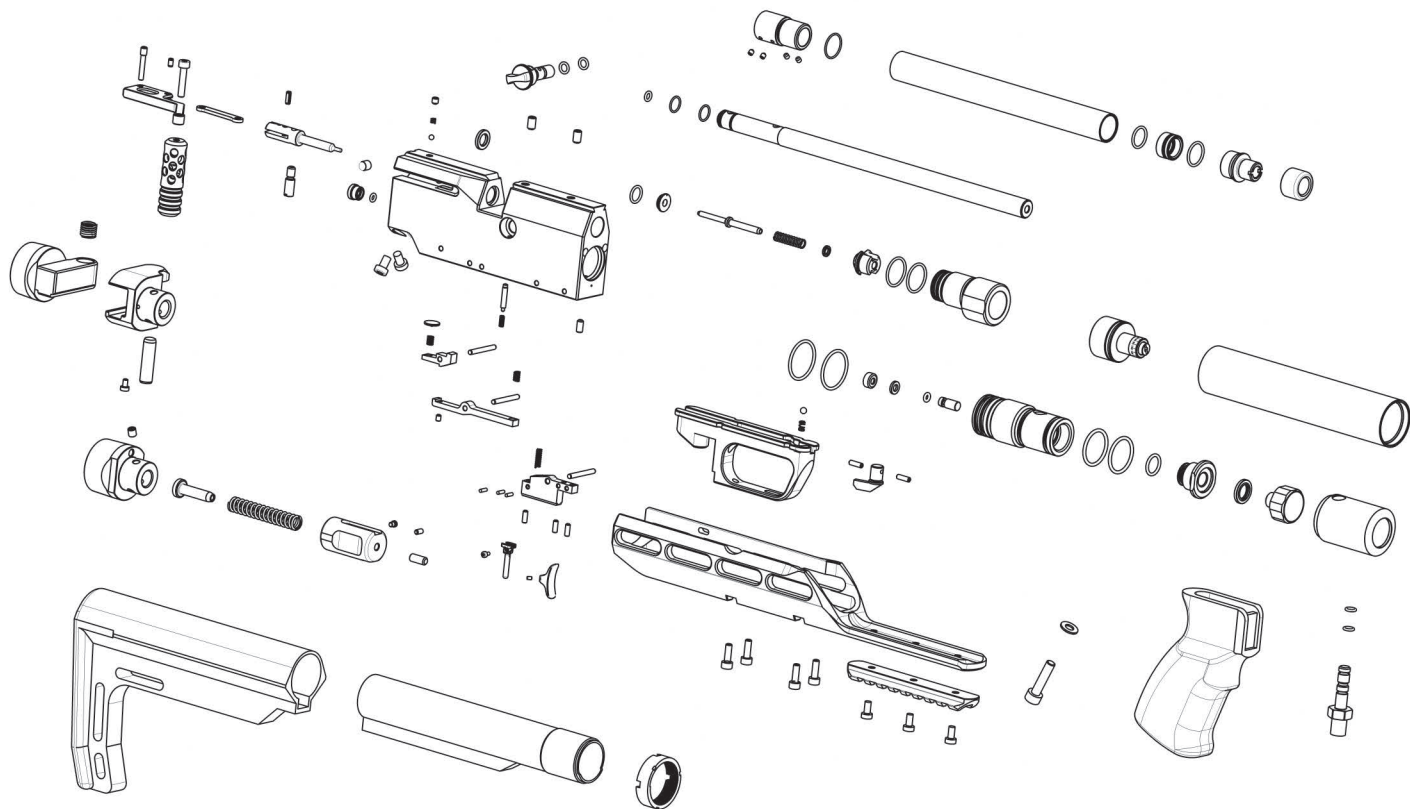
Synthetic – this type of stock requires minimal maintenance. To keep it clean, simply rub it over with a lightly soaped, damp cloth

Laminated wood – this type features a satin varnish. A damp cloth can be used to maintain a matt finish. Use a quality furniture finish if a higher shine is desirable

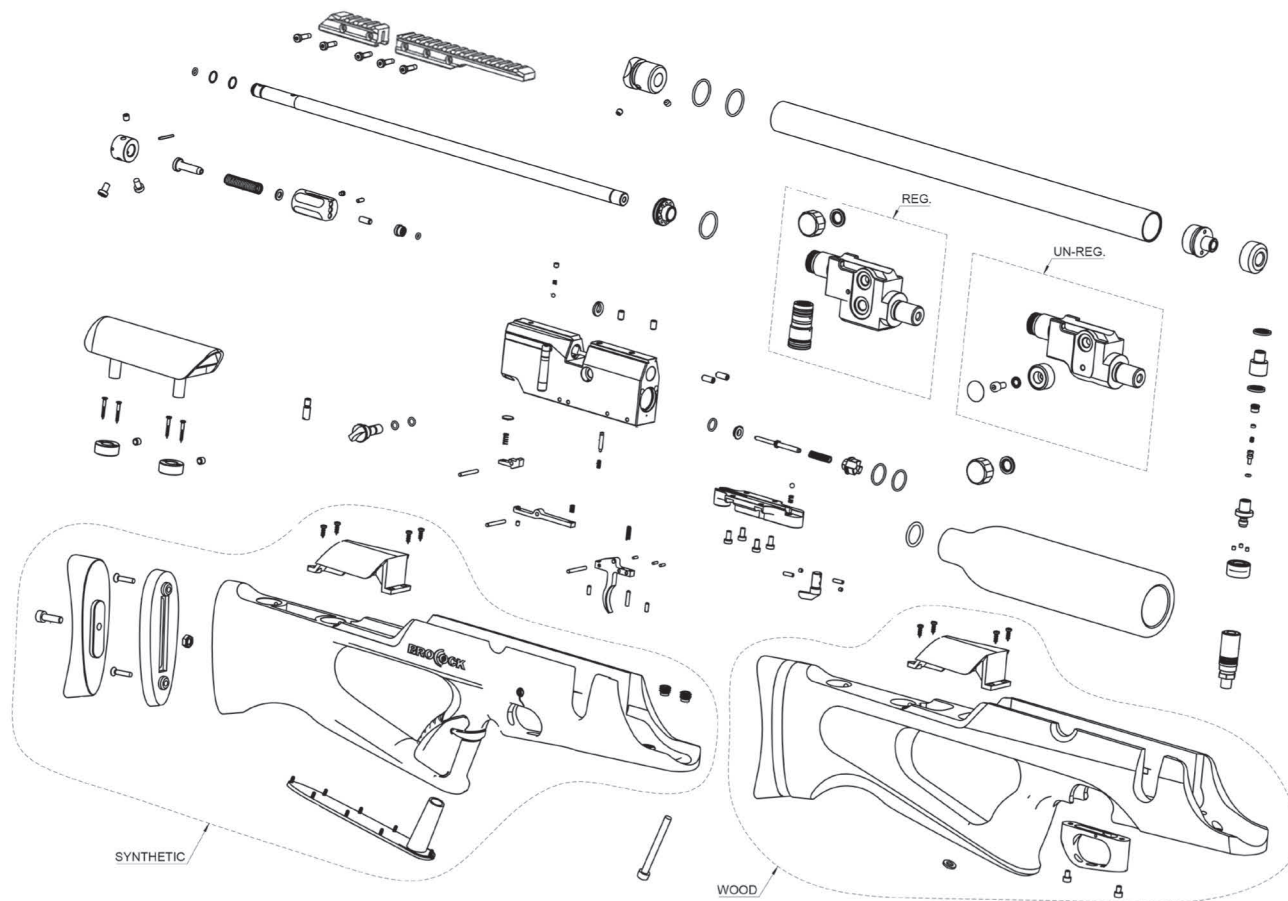
MORE INFORMATION

More servicing information can be found online at www.brocock.co.uk/support

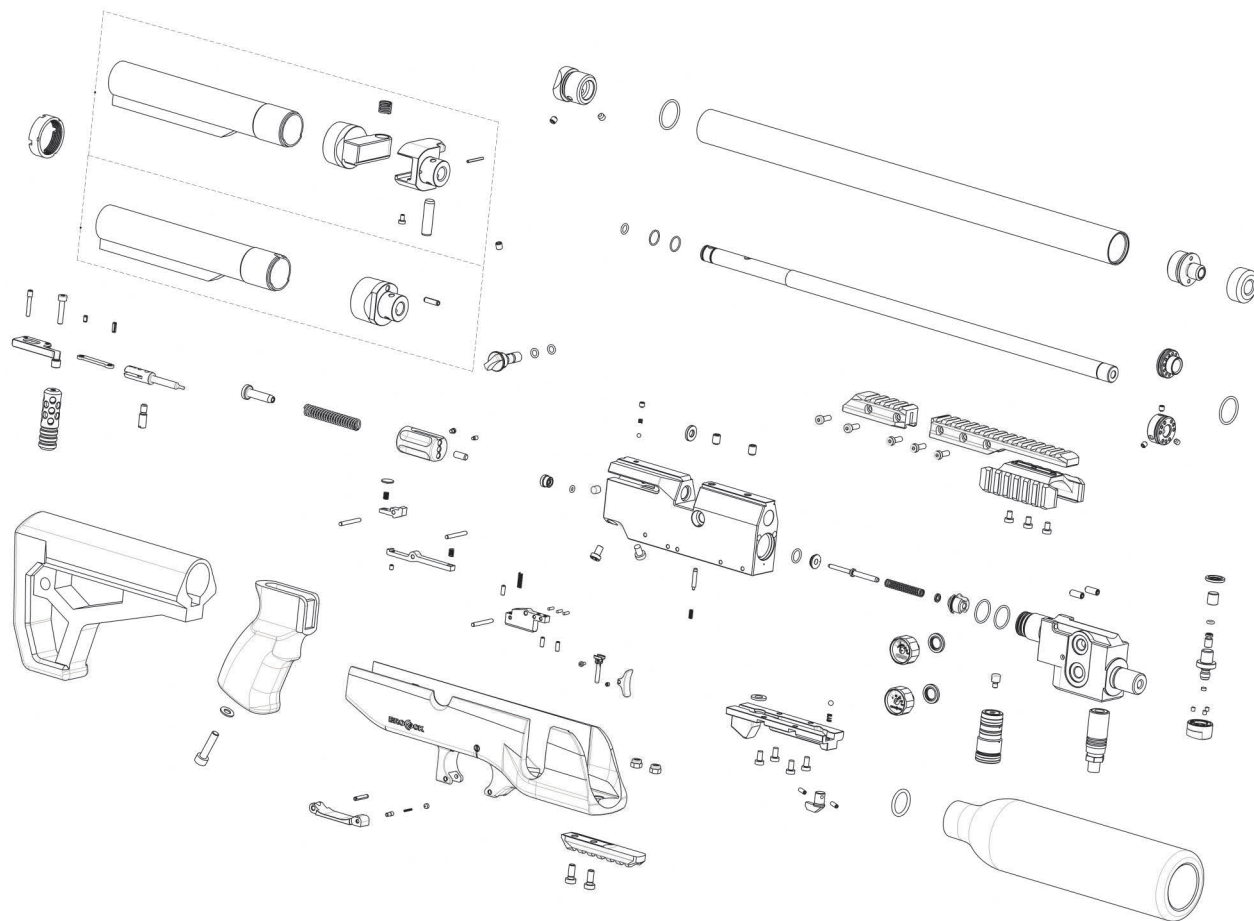
RANGER / ATOMIC XR



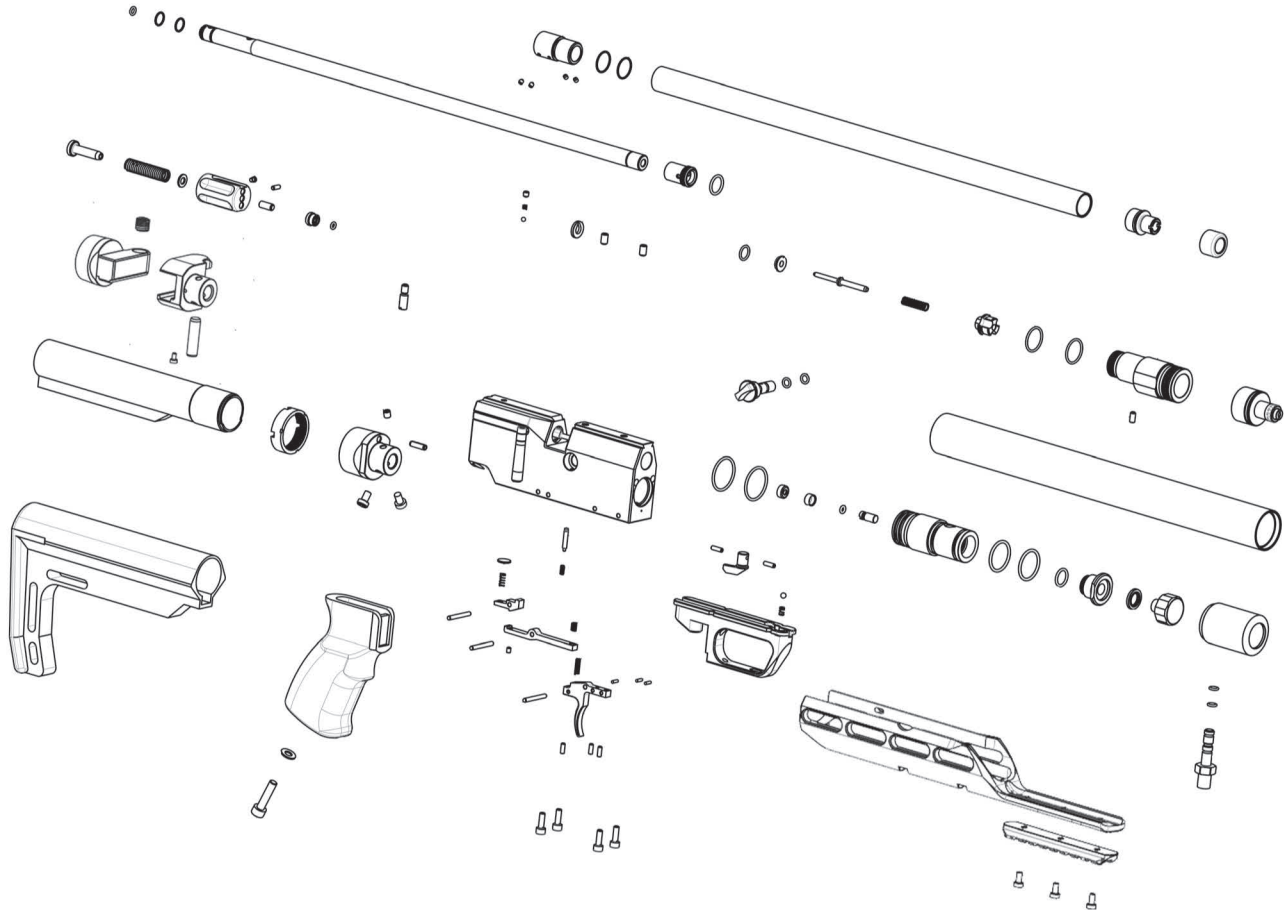
XR



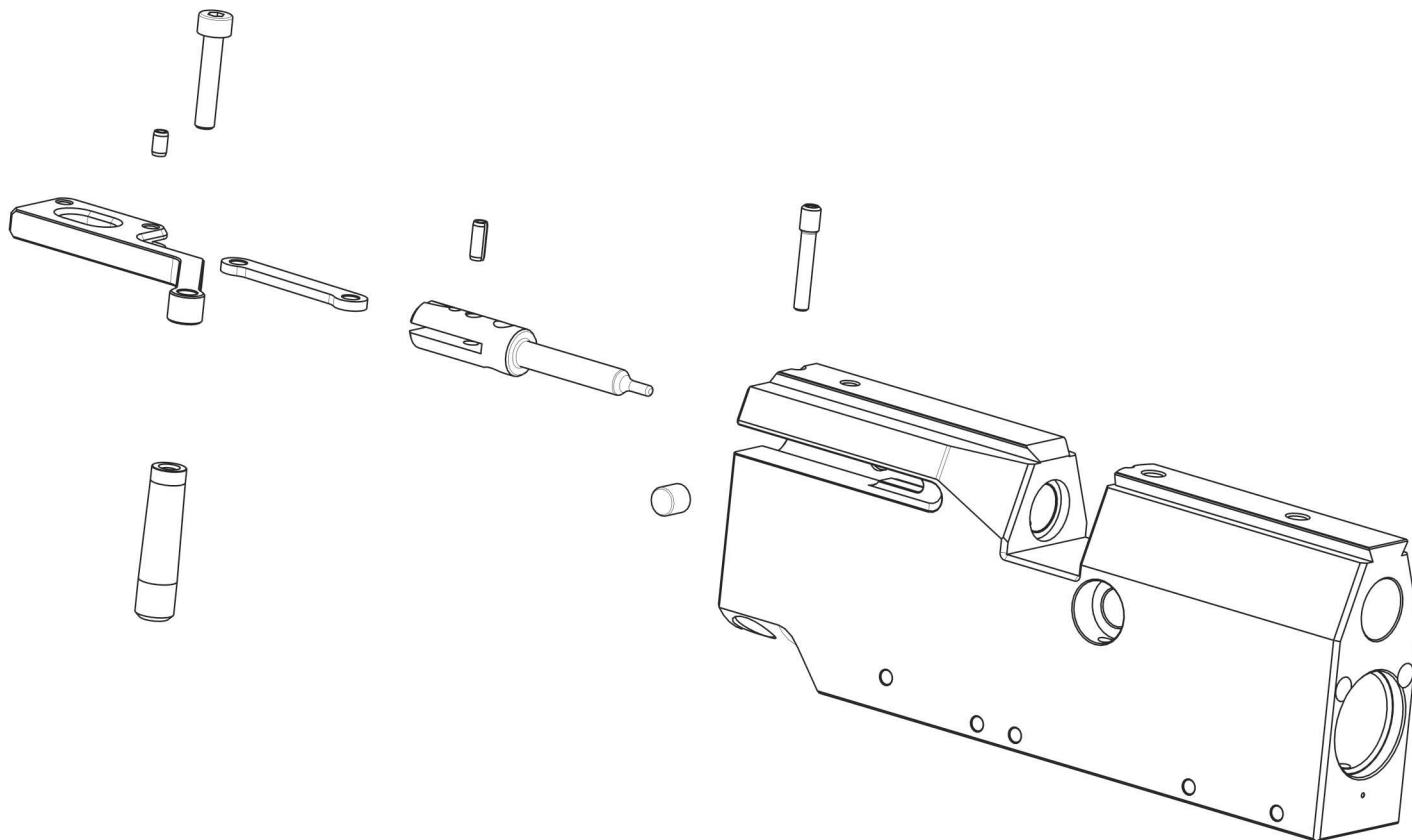
PATHFINDER XR / COMMANDER XR



CONCEPT XR



BREECH & SIDE LEVER



WARRANTY

THREE-YEAR WARRANTY

All new BRK/Brocock rifles are guaranteed against faulty parts and labour for a period of three years from date of purchase (proof of purchase required). The warranty applies to the first purchaser of a new rifle and is not transferable to subsequent owners

After three years, it is recommended that the rifle be returned to BRK/Brocock or its authorised agent for a service, and subsequently every further three years

The air reservoir (cylinder/buddy-bottle) should be inspected and/or replaced by BRK/Brocock or its authorised agent after 10 years

BRK/Brocock or its approved agent must carry out all maintenance and warranty work. The rifle must be maintained and used as outlined in this handbook

Should a rifle be returned or collected under warranty, BRK/Brocock or its approved agent reserve the right to charge for postage and inspection costs

Servicing is charged at the prevailing rate

EXCLUDED FROM WARRANTY

Failure due to misuse or abuse, the fitting of non-standard parts, springs, seals, cosmetic damage to stocks and fair wear and tear

While every effort has been taken to ensure the accuracy of the information in this handbook, BRK/Brocock or its agents cannot be held responsible for errors or omissions. Products are continually updated and specification may change without notice.

View the online handbook at **www.brocock.co.uk/support**

All scopes, mounts and accessories shown in this handbook are optional extras, available from BRK/Brocock and/or MTC Optics stockists.

*BRK/Brocock have an active owners club with over 10,000 members. Log on at **www.brocock.co.uk/brocock-owners-club***





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