



 **BRK** | **GHOST**
BROCK
OFFICIAL HANDBOOK

SAFETY FIRST!

- ✗ 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 sidelever, 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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INTRODUCTION

Congratulations on choosing this fine BRK Ghost precharged pneumatic (PCP) air rifle. All BRK-Brocock rifles are made in the United Kingdom to the highest quality standards and hand-assembled with components manufactured 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 air rifles comply with the latest PCP safety and product-testing protocols. Use this handbook to help you get the best from it.

For the latest information on BRK-Brocock products, visit the official website: **brocock.co.uk**


Follow us on social media:

 @BrocockOfficialPage

 @brocockairguns

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BRK-Brocock also has an active Owners' Club and Facebook Group:

 @Brocock Owners Group (Official)

BRK GHOST MODEL TYPE

The BRK Ghost is available in three model formats - Carbine, Plus and HP (High Power).

Notes:

- Maximum power levels and caliber availability will vary according to prevailing legislation in the territory supplied
- The regulator pressure adjuster (see page 11) are not fitted to sub-12ft/lb (UK) versions of the BRK Ghost Carbine and BRK Ghost Plus; the factory-set reg pressure on these UK-specced models cannot be altered
- All model configurations feature the main power adjuster (see page 11)

BRK GHOST CARBINE



BRK GHOST PLUS



BRK GHOST HP (HIGH POWER)



BRK GHOST MODEL SPECIFICATION

	GHOST CARBINE	GHOST PLUS	GHOST HP
Caliber	.177"/4.5mm .22"/5.5mm	.177"/4.5mm .22"/5.5mm	.177"/4.5mm .22"/5.5mm .25"/6.35mm .30"/7.62mm
Length	665mm (26")	731mm (29")	855mm (33.6")
Barrel length	430mm (17")	430mm (17")	585mm (23")
Bottle size	300cc HiLite	480cc HiLite	480cc HiLite
Maximum fill pressure	250BAR	250BAR	250BAR
Weight:	3.1kg (6.8lbs)	3.2kg (7lbs)	3.4kg (7.5lbs)
Regulator	Huma-Air (pressure adjustable*)	Huma-Air (pressure adjustable*)	Huma-Air (pressure adjustable)
Muzzle energy (max)	.177" - 18ft/lbs .22" - 35ft/lbs	.177" - 18ft/lbs .22" - 35ft/lbs	.177" - 31ft/lbs .22" - 65ft/lbs .25" - 70ft/lbs .30" - 100ft/lbs
Power Adjustment**	20 settings via onboard Power Adjuster Wheel	20 settings via onboard Power Adjuster Wheel	20 settings via onboard Power Adjuster Wheel
Single magazine shot capacity - single (twinned***)	.177" - 13 (26) .22" - 11 (22)	.177" - 13 (26) .22" - 11 (22)	.177" - 13 (26) .22" - 11 (22) .25" - 10 (20) .30" - 8 (16)

*No regulator pressure adjustment available on sub-12ft/lb version

**Incremental changes to power output when using the Power Adjuster Wheel will vary according to caliber and model – typically, the 'MIN' setting is equivalent to 60% of the factory-set 'MAX' setting

***Requires optional second magazine and cheekpiece riser

Shots available per-charge of air will vary according to model and power setting

FILLING YOUR AIR RIFLE WITH COMPRESSED AIR

Fill your BRK Ghost with clean, compressed air to a maximum of 250 BAR pressure from a separate charging unit – either a scuba tank or manual pump – using an air line (hose) connected with the supplied Foster-type female charging connector. The pressure of air in the buddy-bottle is shown by the gauge on the right side of the rifle, forward of the trigger (fig.1).

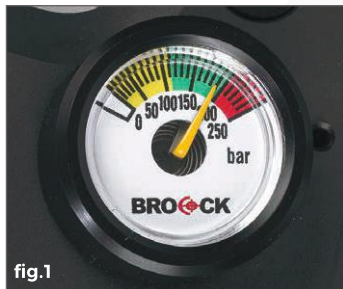


fig.1



fig.2

The needle on the gauge will move gradually after each shot to indicate the reducing air pressure in the buddy-bottle air reservoir. You should monitor the position of this gauge to know when to refill your rifle. A regulator pressure gauge (marked with the HUMA-air logo) is on the left side of the rifle (fig.2). This gauge indicates the regulator's pressure. Refill your rifle before or when the pressure in the buddy-bottle air reservoir drops to the indicated regulator pressure.

1. Screw the supplied snap-on female charging connector to your hose assembly
2. Firmly attach the snap-on connector to the rifle's inlet valve at the base of the action, forward of the trigger guard. Ensure the connector's outer sleeve has locked and that the connection is secure (fig.3)
3. Close the bleed screw on your charging unit



fig.3



fig.4

4. Slowly open the charging unit's main valve (if using a scuba tank/air bottle), or begin pumping (if using a manual pump), to allow air to transfer into the rifle's main buddy-bottle air reservoir

5. Noting the gauge on your charging assembly, fill the rifle to its maximum pressure of 250 BAR

6. Once the required pressure has been reached, turn off the charging unit's main valve (if applicable) and undo the bleed valve to rapidly bleed off the remaining air in the air line

7. The snap-on connector can now be safely removed from the rifle (fig.4)

Note: The bottle contains its own valve, making it possible to buy spare bottles, or to remove it from the rifle for maintenance or transportation

IMPORTANT

- **USE ONLY dry, clean compressed air of breathing quality**
- **DO NOT USE any other gas**
- **DO NOT MODIFY any part of the filling assembly**
- **DO NOT SPRAY ANY LUBRICATION INTO any internal parts of the filling assembly**

SAFETY CATCH

The BRK Ghost is equipped with a manually-operated, crossbolt style safety catch. Located above the blade, it should be engaged whenever the rifle is in a loaded and/or cocked state and only disengaged when you are ready to take the shot.

TO ENGAGE THE SAFETY CATCH (SAFETY 'ON' - SAFE MODE)

Press the safety switch from the left-hand side of the action, so it protrudes to the right-hand side (fig.5)



TO DISENGAGE THE SAFETY CATCH (SAFETY 'OFF' - FIRE MODE)

Press the safety switch from the right-hand side of the action, so it protrudes to the left-hand side (fig.6)



Note: When the safety catch is 'off', a red line is visible

LOADING THE MULTI-SHOT MAGAZINE

1. Apply the safety catch - located above the trigger - by pressing it to the right to ensure the rifle cannot fire (fig.7)



2. Pull the sidelever all the way back (fig.8)



3. Slide the magazine (if deployed) out of the breech (fig.9) (see Notes below)



4. Open the front loading gate on the magazine and fully rotate the inner drum one rotation clockwise (fig.10)



5. While holding the drum against spring tension, insert a pellet - nose first - into the lower magazine chamber (fig.11)

6. Tension on the magazine drum can now be released

7. Insert pellets into the remaining chambers and then close the magazine loading gate (fig.12)



8. Insert the loaded magazine into the breech of the rifle, with the printed side facing rearwards (fig.13)



9. Push the sidelever all the way forward:

THE RIFLE IS NOW LOADED

10. Disengage the safety catch by pressing it to the left to reveal the red 'fire' marking (see 'SAFETY CATCH' left):

THE RIFLE IS NOW READY TO FIRE

11. After the shot is taken, recycling the sidelever will cock the rifle and allow the magazine to automatically index.

The next pellet will be chambered on the lever's return



LOADING THE MULTI-SHOT MAGAZINE

Notes:

Magazine capacity is dependent on the caliber

A single magazine can be inserted/extracted from either the right or left side of the breech. The BRK Ghost also allows the use of magazines placed back-to-back with an optional magazine and cheek-piece riser. Load one from each side and recycle the sidelever until the active magazine is depleted. Then fully open the sidelever and slide the other, full magazine across to continue firing

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

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

IMPORTANT

- **Always keep the muzzle of your air rifle pointing in a safe direction**
- **Always ensure the last shot has been fired from the barrel before finishing the shooting session, and then remove the magazine**

FITTING A RIFLESCOPE

Attaching the mounts

Loosely fix the scope mount(s) to the rifle's Picatinny rail; BRK-Brocock recommends the use of Blue Print Mounts.

Note: The scope rail on the BRK Ghost is of the Picatinny type (22mm). This rail has a 0.3mm downward tilt to assist scope zeroing. As the rail is adjustable, ensure the indicator arrow on the rail is pointing forwards (see page 10).

Aligning the Crosshair

To perfectly align the sight, use a benchrest system or sandbag to hold the air rifle level and secure.

1. Place a spirit level across the flat part of the breech block and adjust the air rifle until it is level
2. Look through the sight, and without moving the gun, rotate the scope until the vertical crosshair aligns with a vertical object or plumb line. Tighten all scope mount screws and double-check vertical alignment

ZEROING THE RIFLE / SCOPE

Note: The BRK Ghost features a power adjustment wheel (see page 9). Zeroing your rifle/scope at the power level you intend to use; changing the power setting and/or pellets will change the pellet's trajectory and your rifle's zero.

1. Set up a large paper target, with a safe and suitable backstop at around 10 metres
2. Fire some test shots and note the group's position in relation to the aimpoint
3. Using the elevation and windage turrets on the scope, adjust until the centre of the crosshair and the pellets' point of impact coincide
4. Now move the target to your chosen primary shooting distance (zero range) and fine-tune the scope's zero in the same manner

PELLETS

The power, accuracy, and consistency of your BRK Ghost relies on the quality of the ammunition used. According to the specification of your BRK model, the following choices are recommended for best performance:

UP TO 12FT/LBS MUZZLE ENERGY

Rangemaster Sovereign*
.177 (8.44gr); .22 (15.9gr)

Rangemaster Sovereign Hunter
.177 (10.3gr); .22 (18.3gr)

Rangemaster Kaiser
.177 (8.64gr); .22 (14.66gr)

UP TO 30FT/LBS MUZZLE ENERGY

Rangemaster Sovereign Hunter
.177 (10.3gr); .22 (18.3gr)

Rangemaster King
.177 (13.42gr); .22 (25.38gr)

UP TO 40FT/LBS MUZZLE ENERGY

Rangemaster King
.177 (13.42gr); .22 (25.38gr); .25 (25.38gr)

Rangemaster Emperor
.177 (15.89gr)

OVER 40FT/LBS MUZZLE ENERGY

Rangemaster Emperor Lite
.30 (44.75gr)

Rangemaster Emperor
.22 (33.95gr); .25 (33.95gr); .30 (50.15gr)

Rangemaster Juggernaut (slug)
.22 (25.3gr); .25 (33.49gr)

*The factory set-up and test pellet for UK specification (12ft/lbs)



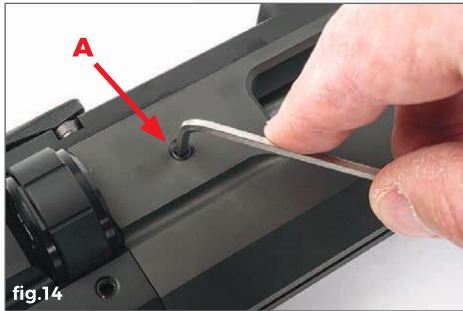
BARREL AND CALIBER CHANGE

The BRK Ghost incorporates an interchangeable barrel system to allow users to switched between calibers. Barrel assemblies (including corresponding breech feed probe) are available in 17- and 23-inch lengths. Spare magazines are also available. These can only be acquired through an official BRK-Brocock dealer.

IMPORTANT: Always ensure the rifle is unloaded (with no pellet in the barrel) and safe before changing caliber

TO REMOVE THE BARREL

1. Loosen 2mm screw 'A' (fig.14) and gently slide the barrel assembly forward (fig.15) to fully extract it from the action



2. When changing caliber, you will need to also swap the pellet feed probe that is housed in the breech - refer to the step-by-step instructions (right)



3. Barrel reassembly is the reverse of this procedure. Always ensure screw 'A' has been tightened before re-zeroing

Note: The breech probe is caliber-specific, and you will need to swap it whenever you are changing to a different caliber barrel

TO SWAP THE BREECH PROBE:

1. Open the sidelever fully (fig.16)



2. Remove the 2mm hex bolt from the probe carrier (fig.17)



3. Extract the probe from the rear of the action (fig.18). Tip: Tilting the rifle will assist probe's removal



4. Insert the new probe (of correct caliber) and reverse the procedures in 3 and 2 above

BARREL TUNER

A Barrel Tuner is available for the BRK Ghost as an accessory and is fitted standard on the Ghost World Record Limited Edition. The barrel tuner is designed to add barrel stability and reduce vibration.

The tuner is pre-tensioned from the factory for optimal results with the pellets recommended for your rifle. It is possible to retune to allow for different ammunition and power settings.

HP TUNER

Loosen the 6 screws indicated on the barrel collar.



Insert a tool such as an Allen key or screwdriver into the 3.5mm hole in the muzzle silencer adaptor to adjust tension.

Retighten the barrel collar.



LP TUNER

Remove the two 3mm shroud screws and slide forward to remove the carbon shroud to show the 2 remaining barrel collar screws.



Loosen the barrel collar screws and by inserting a tool such as a screwdriver in the silver muzzle break to adjust tension.

Retighten collar screws and replace shroud.



ADJUSTMENTS

To ensure the best possible shooting experience, the BRK Ghost incorporates many adjustable features that will enable you to customise your rifle's set-up to your exact needs.

POWER

The BRK Ghost has an adjustable power facility, allowing the user to set the output to best suit the pellet and shooting scenario without the need of tools. There are 20 settings in total.

Rotating the power adjustment wheel – located at the butt – from MIN, 1, 2, 3... through ...17, 18, MAX will incrementally increase the power; the higher the number, the higher the power output (fig.19).



According to model and/or region, your BRK will have been set up at the factory to attain maximum power output when the power adjustment wheel is set to 'MAX'. When the wheel is turned to 'MIN', the

power output of the BRK Ghost will be at its lowest – typically around 60% of full power.

Notes:

- *The amount by which the power output is changed by the wheel will vary according to the rifle's caliber and model specification; the biggest incremental differences are seen in the higher power and larger calibre models. You should experiment to find your preferred settings. A chronograph may be useful if you need to know the specific outputs of your rifle/pellet set-up*
- *The lower the power output, the greater the shots-per-charge capacity of the BRK Ghost. Shot-count is also dependent on caliber and power configuration*

- *Adjusting the power wheel will affect the pellet's trajectory and, therefore your point of aim, particularly at longer ranges. You may need to re-zero your BRK Ghost when changing the power settings*

- *On higher power rifles, a regulator pressure adjuster is included to fine-tune the firing cycle. This can also be used to vary the BRK Ghost's power output (see right).*

REGULATOR

All BRK Ghost models are factory-equipped with a Huma-Air regulator, the set pressure for which is shown on the gauge on the

left side of the action (see page 4). Certain, higher-powered models feature an external regulator pressure adjustment knob. This enables fine-tuning of the rifle's firing cycle and is located forward of the action, between the barrel and buddy-bottle (fig.20). When the regulator pressure knob 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.

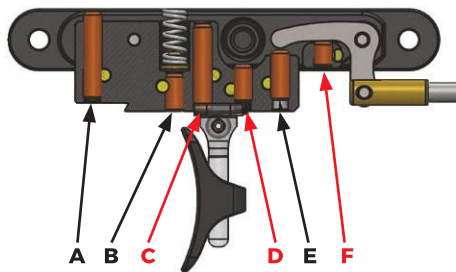
IMPORTANT: When lowering the pressure in the regulator, the main bottle should be unscrewed/removed and air removed from the rifle's secondary chamber. To empty the secondary chamber, the rifle should be dry-fired continually until no air can be heard discharging. Failure to do this will damage the regulator's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

ADJUSTMENTS

TRIGGER

The BRK Ghost's two-stage trigger has been set at the factory to be operationally safe and suitable for most shooters' needs. However, its first and second stage travel and weight can be fine-tuned if required.

IMPORTANT: Incorrect adjustment can make the rifle dangerous! Do not attempt adjust the trigger set-up if you do not feel confident in doing so; ideally use the services of an experienced gunsmith or BRK-approved service agent. After making any adjustments, ensure the correct functioning of the safety catch.



The trigger adjustment screws can be accessed via the aperture in the base of the trigger guard and will require a 1.5mm hex tool.

A. First stage travel: turn counter-clockwise to increase travel

B. First stage weight: turn clockwise to increase weight

C. Factory set - DO NOT ADJUST!

D. Safety adjustment: Check and adjust *after* all other adjustments have been made to ensure correct function of the safety catch

E. First stage travel: turn counter-clockwise to increase travel

F. Second stage weight: turn counter-clockwise to increase weight of second stage let-off. **Important: do not adjust too far clockwise or rifle will not function**

CHEEKPIECE

The lateral and fore/aft positions of the cheekpiece can be adjusted, or switched from the left-to the right-hand side by loosening/re-tightening the 2mm hex bolts (fig.21).



BUTT-PAD

The butt-pad can be lowered and raised as required by unscrewing the central 3mm hex bolt and re-tightening it when the butt pad is in the desired position (fig.22).



SCOPE RAIL

The Picatinny scope rail can be positioned along the length of the action to accommodate all types of riflescopes and other sighting systems, like day/night scope attachments and NV equipment. To reposition the scope rail, loosen the four 3mm hex bolts, slide the rail to its desired position and re-tighten the bolts.

Note: This rail has a 0.3mm downward tilt to assist scope zeroing. Ensure the dot on the rail is pointing toward the muzzle (fig.23).



ADJUSTMENTS

SIDELEVER

The sidelever is user-swappable with minimal tools, allowing either right- or left-hand cocking of the BRK Ghost. Change the orientation of the sidelever as follows (sequence shows bolt changing from right-hand operation to left-hand):

1. Open the sidelever fully and remove the 3mm hex bolt (fig.24)



2. Lift off the plate from the opposite side of the action (fig.25)



3. Remove the bolt holding the carrier assembly with a flat-head screwdriver (fig.26)



4. Remove the 3mm hex bolt to lift off the sidelever assembly (fig.27)



5. Flip over the sidelever assembly and reverse the procedures 2-5 on the opposite side (fig.28)



6. Finally, flip the sidelever hand grip to the correct position by unscrewing and refitting its 2mm hex-head holding bolt (fig.29)



Note: The scope rail has been removed in these sequences for clarity; it is not necessary to do so

ACCESSORIES

Your BRK Ghost accepts a wide range of purpose-built BRK-Brocock Custom Accessories and other aftermarket accessories (eg bipods, silencers, butt plates, forend extension rail, sidelever grips, cheek risers etc). The list of accessories is continually expanding; view the BRK-Brocock website for the up-to-date range for the latest kit – brocock.co.uk/product-category/accessories

ODB SILENCERS



OdB Silencers come in a range of lengths and diameters to suit both low, mid- and high-power models of the BRK Ghost, and will screw directly to its threaded muzzle

FOREND ACCESSORY RAILS



PRS CHEEKPIECE RISER

The PRS Cheekpiece riser allows the factory cheekpiece to be vertically adjusted to suit higher-mounted sighting systems. It is also required when using the BRK Ghost's twin-magazine option



MTC OPTICS

BRK-Brocock recommends MTC Optics scopes for the BRK Ghost, with Blue Print mounts where required separately (Picatinny fit). While the moveable rail allows for many types of sighting system, the following are highly suited for general use:



MTC SWAT 10x30 'Atom' Prismatic

MTC SWAT 12x50 Prismatic



MTC King Cobra 6-24x50 F2

BARREL KITS



Barrel kits, complete with corresponding pellet probe, are available in 17 inch or 23 inch lengths in four calibres: .177, .22, .25 and .30

PICATINNY-FIT AIM-GRIP BIPOD



The Picatinny-fit Aim-Grip BiPod offers a tilt/height adjustable shooting platform along with a handy drop-down hand-grip

SLING KIT

The BRK-Brocock Sling Kit attaches to the BRK Ghost and offers a handy, ergonomic carrying system for the field



GEN4 ADJUSTABLE BUTT PLATE



The PRS GEN4 Adjustable Butt Plate allows for a fully-bespoke gunfit in the shoulder

RECOMMENDED MAINTENANCE

IMPORTANT: Precharged pneumatic air rifles work at extremely high air pressures and can be dangerous if not serviced correctly. There are no user-serviceable parts on the BRK Ghost air rifle. Any regular servicing or repair work must be carried out by a BRK-approved servicing agent. BRK recommends that the rifle be returned to the factory, or agent, for routine maintenance every three years.

Correct maintenance will ensure a long, trouble-free life. Routine and general maintenance can, and should, be carried out by the owner, as follows:

AIR RESERVOIR

The BRK Ghosts buddy-bottle will withstand pressures many times the working pressure of the air rifle. The air buddy bottle should be inspected every five years and replaced every 10 years

ACTION

To keep the rifle clean, a suitable gun cleaner or oil can be applied to a cloth and used to wipe over the outside of the gun
DO NOT allow oil to enter into the inlet valve or other internal mechanical areas

LUBRICATION

Periodically, the bolt shaft and sidelever pivots should be sparingly lubricated with light grease or oil

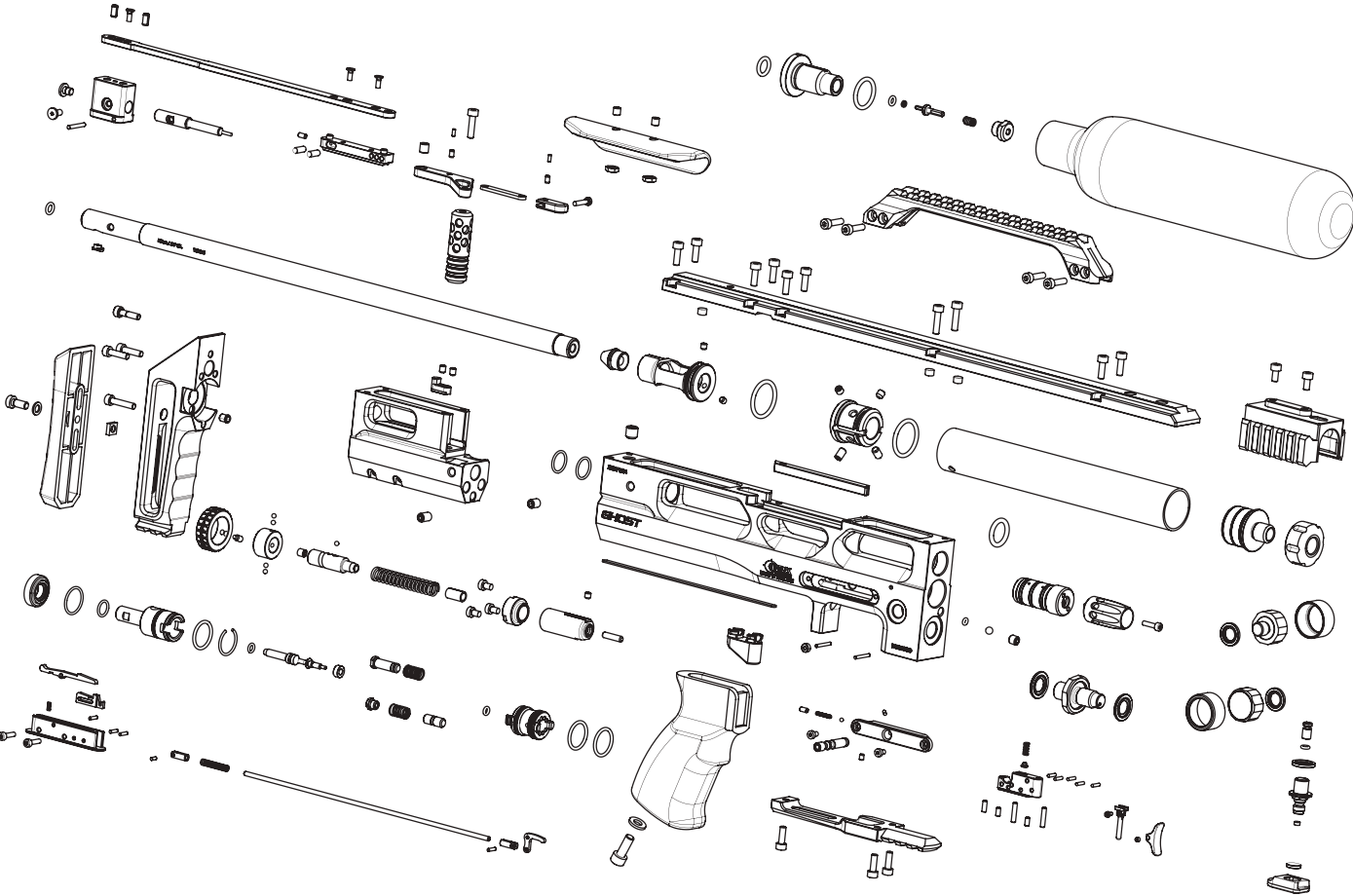
DO NOT lubricate any of the internal parts such as the firing valve or hammer assembly. The snap-on filling connector can be lubricated with a non-combustible grease. The connector can also be maintained by wiping over with oil or grease, but should be left 'dry'

USE OF MANUAL (STIRRUP) PUMPS

This type of charger offers an inexpensive and convenient method of charging your rifle. If one is used regularly, care should be taken to avoid ambient moisture from inside the pump being transferred to the rifle's buddy-bottle/internals. Always refer to the pump manufacturer's operating instructions and, where possible, use a 'dry pack' to extract ambient moisture content from the transferred air



BRK GHOST PARTS



THREE-YEAR WARRANTY

INCLUDED IN WARRANTY

All new BRK 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 or its authorised agent for a service, and subsequently every further three years

The air buddy-bottle should be inspected every five years and replaced every 10 years.

BRK or its approved agent must carry out all maintenance and warranty work.

Use and routine maintenance must have been carried out in line with this handbook

Should a rifle be returned or collected under warranty, BRK 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; and fair wear and tear

GENERAL INFORMATION

More information, including the latest updates on servicing requirements and updates to this handbook can be found online at the official BRK-Brocock website – brocock.co.uk/support/

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

Scopes, mounts and accessories that may be shown throughout this handbook are optional extras, available from BRK-Brocock and/or MTC Optics stockists.



BRK-Brocock also has an active Owners' Club and Facebook Group:

 @Brocock Owners Group (Official)



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