ACCESSORIES & BATTERY

FIG. 14 M-LOK SLOTS



FIG. 15 REMOVE GRIP & CHARGE



BARREL (CONTINUED)

NOTE: The barrel inserts and projectiles of your air rifle work as a system and must be matched appropriately. The projectile type and caliber must match the barrel insert, or damage to the insert and bolt may result. Only pellets may be fired through standard barrel inserts. Slugs must only be fired through inserts bearing the slug icon. For more information about matching projectiles to barrel inserts and changing inserts, visit www.SKOUTairguns.com. If strong resistance is felt when closing the bolt action of the Epoch[®], stop and check for proper barrel insert to projectile match.

RISER. STOCK. & MOUNTS

Adjustable Cheek Riser

The cheek riser height can be adjusted for a personal fit. Lock screws are right hand thread (counterclockwise to loosen, clockwise to tighten). To adjust, loosen both lock screws and then raise or lower the cheek riser to desired height. After position is set, the lock screws should re-tightened. NOTE: The lock screws must be aligned with one of the 6 lock hole recesses in the cheek riser arm. [FIG.14]

Adjustable Stock

The Epoch stock can be adjusted for a personal fit. Lock screws are right hand thread. Length - Rotate stock length adjuster wheel to adjust length. [FIG.08]

Shoulder Pad Height – Loosen shoulder pad lock screws then re-position shoulder pad to desired position. After shoulder pad position is set re-tighten lock screws. [FIG.08] Accessory Mounts

The Epoch® air rifle will accept M-Lok compatable accessories at any of the 6 mouting points located on the front of its body. [FIG.15]

BATTERY

Charging the Epoch® battery

The charge level of the Epoch® battery is indicated on the bottom of the OLED display. The battery can be accessed for charging by the following steps:

- > Remove the grip backstrap by pulling up on the release latch at its base, and pivoting it off of the grip frame. [FIG.16]
- > Remove grip cap from trigger frame by unscrewing both 10-32 mount screws with a 5/32 hex wrench. [FIG.16]
- > Remove wrap around grip from trigger frame by pulling down and forward to disengage the tabs at the top on either side. [FIG.16]
- > Plug included USB-C charger and cable into port on circuit board [FIG.16]. The charge indicator light will shine blue to indicate the battery is charging.

WARNING! The Epoch® airgun uses a lithium ion battery as its power source for its electronics. When used correctly, batteries provide a safe and dependable source of portable power. However, misuse or abuse may result in leakage, fire, or explosion.

> Keep batteries away from children. There is a chemical burn hazard associated with batteries. > Batteries can explode or leak and cause burns if disassembled, charged, or exposed. After charging, re-assemble grip components in the reverse order. When installing the back strap, press in and down on its release latch to engage it with the grip.

WARRANTY

Warranty – SKOUT Airguns warrants to the original retail purchaser of the Epoch® that that it shall be free from defects in materials and workmanship for three (3) years with the following exceptions: Electronic components and solenoid pilot valve are warranted for one (1) year. Parts subject to wear and tear during normal use (batteries, o-rings, seals, springs, screws, etc.) are not subject to warranty coverage. SKOUT Airgun's warranty obligations are not transferrable beyond the initial retail purchaser. This warranty is effective only if the original retail purchaser registers their airgun online with the SKOUT Airguns RMA system (visit www.SKOUTairguns.com/support). The purchaser's sole remedy to warranty claims shall be repair or replacement of defective parts with the customer responsible for transporting the product to and from the SKOUT Airguns authorized service location.

This warranty does not cover: Surface damage (scratches, nicks and abrasions), misuse or damage caused by improper disassembly or reassembly. Attempts made to drill, mill or otherwise remove material from internal or external surfaces may degrade performance and or safety of the airgun and may only be performed with written approval of SKOUT Airguns. The only authorized lubricant for the airgun is SL33Ktm. Use of any other lubricant may result in reduced performance and invalidation of the SKOUT Airguns warranty. Aside from adjustments described in this manual, trigger alteration of any kind may result in accidental discharge and serious injury or death. Do not attempt to alter the airgun's trigger assembly in any way. Use of aftermarket components or firmware within the valve, regulators, trigger, barrel or other operational portions of the airgun voids any warranty on the modified assembly and its interacting systems. Removal of factory anodizing or other finish voids the warranty of any affected component, as its tolerances will be impacted by such action. SKOUT Airguns strongly discourages use of aftermarket internal components as they may jeopardize the performance and or safety of your airgun. Defects or malfunctions resulting from careless handling or from unauthorized adjustments of modifications made or attempted by anyone other than a qualified SKOUT Airguns airsmith voids this warranty.

> Epoch® is a registered trademark owned by SKOUT Airguns. SL33K™ is a trademark of GOG Paintball SA. The Epoch® airgun is covered by multiple patents and patents pending. Visit www.SKOUTairguns.com for patent information.



WELCOME TO THE EPOCH® EXPERIENCE

Welcome to the SKOUT Airguns family. Your Epoch® was hand assembled in the United States of America by a team that is passionate about maximizing your airgun experience. The Epoch represents a new evolutionary era in precision match grade air rifles. With decades of experience modifying, designing and manufacturing professional grade airguns, the SKOUT Airguns team has combined impeccably high manufacturing tolerances with balanced regulation, a hammerless pneumatic valve system, cutting edge digital control, voice feedback and enhanced safety features to produce a multi-caliber air rifle that excels on the benchrest or out in the field.

WARNING! THIS EPOCH® IS NOT A TOY, IT IS A PRECISION MATCH GRADE AIR RIFLE. THOROUGHLY READ THIS EPOCH® QUICK START GUIDE BEFORE OPERATING. READ THESE INSTRUCTIONS AND WARNINGS CAREFULLY. BE SURE YOU UNDERSTAND THESE INSTRUCTIONS AND WARNINGS BEFORE USING THIS AIRGUN. FAILURE TO READ THESE INSTRUCTIONS AND TO FOLLOW THESE WARNINGS MAY RESULT IN SERIOUS INJURY OR DEATH TO YOU AND OTHERS AND DAMAGE TO PROPERTY. The SKOUT Epoch® air rifle is a dangerous weapon that must be handled with extreme caution. This air rifle should always be pointed in a safe direction and treated as if it is loaded and ready to fire. The Epoch® air rifle is a Match Precision air rifle capable of extreme accuracy for competition shooting. To achieve this level of competition accuracy the Epoch® has an extremely light weight electronic trigger pull. The airgun must be in its "Safe" condition anytime it is to be handled or transported. When the airgun is in the "Fire" condition a bump or impact may cause an accidental discharge. The user must exercise extreme caution anytime the gun is handled or transported always keep the gun unloaded, in the safe condition or powered off to prevent an accidental discharge, and always keep the airgun pointed in a safe direction with the breech open and the magazine removed.

SAFETY IS YOUR RESPONSIBILITY

- > Do not load or fire this airgun until you have completely read this manual and are familiar with its safety features.
- > Handle this and any other airgun as if it were loaded and ready to fire.

- > Always keep the muzzle pointed in a safe direction.
- > Pressurize and load the airgun only when it will be immediately used.
- > Never field strip or disassemble the airgun while it is pressurized.
- > Do not brandish or display this product in public as it may cause confusion and may be a crime.
- > Do not pressurize a compressed air cylinder after its certification has expired.
- > The Epoch®'s match grade air rifle trigger is extremely sensitive to shock or impact, extreme care must be taken to avoid accidental discharge.
- manual. Improper manipulation of any internal component may affect the safety and reliability of your airgun and may cause serious injury or death.
- > Any maintenance, repair or service not performed by a SKOUT qualified airsmith may affect the safety and reliability of this airgun.
- > Only SKOUT genuine parts should be used in your air rifle. This safety & instruction manual should always accompany this airgun and be transferred with it upon change of ownership or

OPERATION

Safe Condition

The airgun is considered to be in the Safe Condition when it is un-loaded and powered off with its breech in the open position (bolt handle pulled to its rear position) and the magazine removed.

Fire Condition

The airgun is in the Fire Condition when it is powered on, and the Fire Condition Indicator ring in the front of the trigger guard is lit red [FIG.01]. Because the Epoch trigger is very sensitive and may be activated by shock or impact, the airgun should only be placed in Fire Condition when it is pointed in a safe direction and ready to shoot.

CAUTION! Always assume that the airgun may fire if its electronic controls are powered on.

> Familiarize yourself with and follow applicable national, local and regional laws for compressed air and airgun use and transport.

> Do not look down the barrel of any airgun. Accidental discharge could cause blindness, other serious injury or death.

> Keep the airgun in a safe condition until ready to shoot. Never point the airgun at anything you do not intend to shoot.

- > Must be 18 years or older to purchase or operate this airgun. Keep this airgun out of reach of children.
- > Always wear eye protection designed for shooting sports when handling or firing a pressurized airgun.

> Never manipulate, adjust or change any of the internal components of your airgun unless specifically directed to do so in this

when presented to another person. A copy of this safety and instruction manual is available for download from www.SKOUTairguns.com.



FIG. 02 GAUGE & FILL NIPPLE



Air Cylinder Gauge 0-6000 psi

FIG. 03 PROJECTILE LOADING



FIG. 04 MAGAZINE LOADING



AIR CYLINDER

Safety Tips

WARNING! Improper use, filling or storage of an air cylinder may result in property damage, serious injury or death.

- > Do not overfill the air cylinder (max fill pressure = 4350psi or 300bar).
- > Do not modify the air cylinder in any way.
- > Any air cylinder that has been exposed to fire or heated to a temperature above 250° F (121° C) or more must be destroyed by properly trained personal. > Only fill with compressed air.
- > Inspect the air cylinder for any cracks or physical damage before filling. *IF* any cracks or physical damage are noticed the air cylinder should not be filled, and should be checked by an airsmith before use or replaced.
- > If a hose, fitting or other high-pressure component begins leaking, get away from it immediately and allow it to continue leaking until the pressure has dissipated.
- > Never grab or place any body part near leaking high pressure air, as air-injection injury may occur.

WARNING! Do not put any lubricants in the air cylinder or fill fittings, as this may cause an explosion.

Pressurizing the Epoch®

- The pressure of the air cylinder is indicated on the Air Cylinder Pressure Gauge. [FIG.02] > Air cylinder must be fully seated and airgun should be in the Safe Condition before
- pressurizing. > Connect a 1/8-inch female disconnect to the fill nipple [FIG.03] located at the bottom
- front of the airgun. Make sure the female disconnect is fully engaged before filling. > Do not fill above 4350psi or 300bar.

LOADING & UNLOADING

Loading the Magazine

- > Remove the lid from the magazine base. This can be done by pulling upward on the lid and breaking the magnetic force used to hold the base and lid together. Verify that projectile and magazine are of matching calibers and correct for your Epoch® (for more information on barrel insert and projectile selection, see www.SKOUTairguns.com).
- > Rotate the magazine turret counter clockwise at least 1.5 revolutions before installing a projectile nose first into the first position before the feed hole.
- > Release the turret quickly and allow spring pressure to pin the first projectile in place. **[FIG.03]** Load the remaining projectiles. Do not skip projectile positions. The turret can be pre-wound 1.5 to 2.5 revolutions to provide more or less spring tension. Less tension reduces friction for bolt action and applies less force onto the projectiles before loading. More tension provide faster, more consistent feeding.
- > Do not pre-wind the turret more than 2.5 revolutions as this can damage the internal spring. The finger depression on the magazine turret should be used to count revolutions when winding the spring.
- > Once the magazine is fully loaded place the lid back onto the base with the entrance and exit holes aligned.

Loading the Epoch®

- > Airgun should be in the Safe Condition.
- > Make sure the barrel lock knob is securely engaged (snugged down away from its top positon). [FIG.08]
- > Make sure the breech is open and bolt fully to the rear by pulling the bolt handle all the way back to its rear position. Insert a loaded magazine into the air rifle maga zine well (with the lid towards the rear and exit hole facing up). [FIG.04]
- > Do not set airgun to Fire Condition until ready to fire. When you are ready to fire and the Epoch is facing a safe direction, slide the bolt handle forward to move the bolt forward, chambering a projectile into the breech. If excessive resistance is felt do not force the bolt forward. Pull the bolt handle back, remove the magazine and unstick the jammed projectile.
- > After firing, pull the bolt handle fully to the rear. You may feel or hear the turret rotate the next projectile into position before returning the bolt handle forward to load the next round and close the breech.

Unloading the Epoch®

The Epoch should be unloaded anytime it is going to be transported or handled. To unload the gun, these steps should be followed:

- > Pull the bolt handle all the way to the rear to open the breech, and remove the magazine from the magazine well.
- > Push the bolt handle all the way forward to close the breech.
- > Fire in a safe direction to clear the barrel of any projectiles.
- > Depressurize the airgun and power off. Anytime the airgun is going to be stored, it should be unloaded and the air cylinder should be fully depressurized (see depressurizing).

BARREL & ACCESSORIES

FIRING MODES & PROGRAMMING

Firing Modes

Select between the HUNT, MATCH and LIMIT firing modes.

LIMIT – In this general use mode, switching into Fire Condition by pressing the Safety Button will begin a Fire Countdown on the OLED display. When the airgun is fired, or the timer reaches zero, the Epoch's digital safety will automatically re-engage. **MATCH** – In this bench rest competition mode, the digital safety must be disengaged with the safety button, but will not re-engage until the Fire Timer has expired or it is reengaged manually. Multiple shots may be fired without leaving Fire Condition. HUNT - Voice feedback will be silenced by default, and the digital safety must be disengaged after every shot.

Programming Mode

NOTE: The airgun should be de-pressurized, un-loaded and pointed in a safe direction before entering programming mode.

Entering Progamming Mode

- > The breech must be open (bolt handle in the rear position).
- > Hold the safety button while powering on the gun.
- > Cycle through software parameters by depressing the safety button. Select a parameter to adjust by pressing the power button, once the power button is pressed the parameter value can be changed by pressing the safety button again.

To exit the programming mode and save your changes hold the power button for 3 seconds which will power off the airgun and save any changes.

Adjustable Board Parameters

FIRING MODE - Select between Hunt, Match, Limit

FIRE TIMER – Adjust fire timer period (between 1 to 60 minutes) **DWELL** – Adjust the length of time the pneumatic valve is opened for each shot (10-50 milliseconds). BREACH SENSOR BYPASS - Turning on Breech Sensor Bypass will allow the airgun to fire if the breech sensor is damaged and unable to detect when the breech is closed. If this value is set to on, the bypass will be announced by voice when the airgun is powered on.

WARNING! – When the Breech Sensor Bypass is on, it is possible for the airgun to discharge when the breech is open position. Firing the airgun when the breech is not fully closed (bolt handle fully forward) may result in a high pressure blast of air from the magazine well which could cause injury to eyes, ears or face. ONLY use this setting if the breech sensor circuit is damaged, and have the breech sensor circuit repaired as soon as possible by a Skout certified airsmith. SPEAKER VOLUME - Turn voice feedback ON or OFF.

AUTO SHTDN - If the no action is taken (firing, disengaging/reengaging safety) in this amount of time, airgun will automatically power down to conserve battery charge. VOICE SEL - Select between one of four available voice sets.

VALVE STICK – The dwell time for the first shot of a group will be increased by this amount of time. This may be used to prevent a low-velocity first shot if old seals or improper lubrication are causing the valve to stick after sitting still for an extended period of time. Unless this feature is needed, the value should be set to 0 milliseconds. **STICK TIMER** – This timer determines how long the airgun must go between shots before the Valve Stick value is added to the next shot's dwell timing. SOFT VER - Non-adjustable setting indicates the software release version installed in the airgun. **SHOT COUNT** - This counter is similar to a car's odometer, displaying the number of times the airgun has been fired.

FACTORY RESET - Factory Reset will return all settings to their factory default values.

BARREL

Identifying and Changing Barrel inserts

The Epoch includes three barrel inserts of matching caliber and projectile type to optimize fit with a variety of projectile brands. Each insert is marked with identifying information **[FIG.12].** The standard insert is perfectly sized for the selected caliber. while the - insert is slightly smaller, and the + insert is slightly larger. A slug symbol differentiates slug inserts from pellet inserts. The following steps must be taken to change or identify the installed barrel insert. [FIG.12]

- > With the airgun in the safe condition, unscrew the moderator from the barrel shroud.
- > Unscrew the barrel insert locking cap. Pull out the cap and insert.
- > If swapping inserts, remove the cap and slide it onto the new insert until it engages the friction o-ring goove.
- > When re-assembling, turn both the locking cap and moderator hand tight.

Barrel Maintenance and Care

The Epoch®'s barrel material and design was specifically made for use with lead projectiles only. When only lead projectiles are used the air rifle can be shot for an extremely long time before any cleaning is necessary. Using projectiles with materials other than lead could lead to a shortened barrel life or damage and require more routine cleaning intervals.

FIG. 12 BARREL ASSEMBLY



ELECTRONIC OPERATION

FIG. 09 TRIGGER ADJUSTMENT







TRIGGER ADJUSTMENT

WARNING! The Epoch® airgun has an extremely lightweight competition trigger pull which should always be handled with care. Any bumps or impacts while the gun is in the Fire Condition may result in an accidental discharge. The airgun should only be put into the Fire Condition when it is ready to be fired in a safe direction. Because the Epoch uses a digital safety instead of a mechanical trigger-block, its trigger pull can be adjusted through a broad range of weight, length and engagement settings and fine tuned to individual taste. Care must be taken when configuring the Epoch's trigger, as improper adjustment may result in unintended discharge.

WARNING! Anytime the trigger is adjusted for a shorter or lighter trigger pull the chance of a accidental discharge from bump or impact is increased. Do not adjust the trigger from factory settings when the Epoch® is used for hunting purposes. The incredibly customizable Epoch® trigger features five points of adjustment. The airgun must be powered off, in Safe Condition and pointed in a safe direction before any trigger adjustments are made. All adjustment can be made with a 1/6-inch hex wrench.

Trigger Shoe Height/Angle – A lock screw in the side of the trigger shoe secures it to the trigger [FIG.09]. The trigger shoe may be adjusted up or down along the trigger and biased with a twist to the left or right, before being locked into place with its set screw. The trigger shoe may need to be re-centered to access some of the other trigger adjustment points. [FIG.09]

Post-travel – Post-travel adjusts the rear limit of the trigger's swing. Ideally, the trigger should stop just after the trigger break (activation of the electronic microswitch) is felt. Turning the adjuster clockwise brings the post-travel limit forward, while counterclockwise moves it back. [FIG.09]

Pre-travel – Pre-travel adjusts the forward limit of the trigger's swing. Turning the adjuster clockwise moves the pre-travel limit back, while turning counter-clockwise moves it forward. The pre-travel limit must be set far enough forward that the trigger can reset after each shot. [FIG.09]

Magnetic Return Force – The Epoch® uses magnetic trigger resistance for a trigger pull that is consistent in all weather, unlike spring based systems. Turning this adjuster clockwise brings it closer to the trigger return magnet, increasing the weight of the trigger pull, while turning it counter-clockwise makes the trigger pull lighter. [FIG.10] Switch Activation - This adjuster sets the position of the trigger's break within its pull, by changing its position relative to the trigger's microswitch. Turning the adjuster clockwise fires earlier in the trigger pull, while turning counter-clockwise moves the activation point further back in the trigger's swing. **[FIG.09]**

IMPORTANT! – The trigger must be adjusted such that the trigger comes to a stop against the Post-travel limit adjuster. Turning the Switch Activation adjuster in too far, so that the trigger pull is limited by physical interaction with the trigger's microswitch will lead the microswitch vulnerable to damage from aggressive trigger pulling. The trigger must be adjusted with enough swing to both activate the trigger's microswitch when the trigger is pulled and allow the microswitch to reset when the trigger is released.

ELECTRONIC OPERATION

The Epoch® marker is operated by an advanced electronic circuit board. See operating procedures below. All board conditions are indicated on the rear facing oled screen and voice feedback.

POWER ON - Hold power button for 3 seconds or double tap power button quickly. **POWER OFF** – Hold power button for 3 seconds.

Electronic Safety

The Epoch® has several criteria that must be met before it will switch into Fire Condition. These criteria are required to reduce the chance of an accidental discharge, but should never be relied upon to replace safe airgun handling practices. The airgun should always be pointed in a safe direction and powered off until it is intended to be fired. **POWER ON**- The airgun must be powered on, in preparation to fire.

BREECH CLOSED – The bolt must be in the closed position (bolt handle fully forward) to prevent an air blast from the breech which may injure the user. The bolt position is monitored electronically, and the rear OLED display will show a filled circle when the breech is closed. When the breech is open, the display will show a hollow circle [FIG.10]. When the bolt is in the open position, the airgun will not fire unless the breech sensor bypass has been turned on. DIGITAL SAFETY DISENGAGED - Unlike traditional mechanical safeties, the Epoch's digital safety automatically engages when the airgun is turned on. After it is disengaged, a Fire Timer will start, and the safety will automatically re-engage if no shot is fired before the countdown is complete. Defaulting to safe reduces risk of accidental discharge via bump or impact to the Epoch's extremely sensitive trigger. Digital safety is disengaged by pressing the safety button. The digital safety may be re-engaged by pressing the safety button again. When the three criteria are met, the airgun will be in Fire Condition, which is indicated by a glowing red ring around the safety button and the fire timer counting down on the OLED display.

DEPRESSURIZING

Depressurizing the Air Rifle for Transport or Air Travel

The Epoch® has a bleeder valve which allows the air cylinder to be fully depressurized. To depressurize the air cylinder turn the bleeder valve counter clockwise until air begins venting from the cylinder. [FIG.05] Wait until all air has been released before removing the cylinder. [FIG.06]

WARNING! Even after the air cylinder is depressurized the Low-Pressure regulator will hold enough pressure for one shot.

The air cylinder should be removed from the airgun anytime it is to be transported by air travel to meet FAA and TSA requirements. Before the airgun is repressurized the bleeder valve must be turned clockwise until it re-seals.

REGULATOR

Adjusting the Regulators

WARNING! To prevent accidental discharge, the airgun must be in the Safe Condition before making any pressure adjustments.

High Pressure Regulator (HPR)

The Max Flow HPR supplies air to the pneumatic valve. Its output pressure controls the airgun's velocity. HPR output to the Epoch®'s valve can be read on the Valve Pressure Gauge. [FIG.08] The HPR is adjustable between 500 and 2300psi. Turn a 3/16 hex-wrench clockwise to increase pressure and velocity or counter-clockwise to reduce pressure and velocity. [FIG.07] Unlike other airguns, the Epoch® regulator can be adjusted while it is pressurized without damage to internal components. The regulator's balanced design and pressure bleeding system also allow the pressure setting to be lowered without having to depressurize the airgun. After any regulator adjustment is made the gun should be shot once to allow the regulator to reseat and settle. There is no harm dry firing air through the airgun without a projectile, so long as the breech is closed and the airgun is pointed in a safe direction.

Low Pressure Regulator (LPR)

This regulator drops air pressure even further for the airgun's solenoid driven pilot valve. It does not require adjustment from its factory setting, but can used to fine-tune the feel of each shot as well as gas efficiency. The pilot valve pressure may be read on the Low-Pressure Gauge. [FIG.08] Adjusting the LPR clockwise (CW) with a 1/8-inch hex wrench increases pressure, while turning counter-clockwise (CCW) reduces pressure.

OPERATING PRESSURES

Reasons for adjusting operating pressure/velocity

- > Target shooting velocities are typically lower for maximum accuracy/lower recoil / higher efficiency
- > Higher velocities are typically used for hunting for maximum energy/penetration

Operating Pressure Ranges

	25" barrel length	35" barre
.177 –	500 to 1000psi	500 - 80
.222 –	700 - 1200psi	500 - 10
.250 –	800 - 1400psi	700 - 12
.300 –	800 - 1900psi	700 - 16
.350 -	900 – 2300psi	800 - 2

Brought to you By:



www.newenglandairgun.com 188 Central St, Hudson Ma 01749 978-567-697

FIG. 05 BLEEDER VALVE



Bleeder Valve (CCW to depressurize)

FIG. 06 REMOVE CYLINDER



FIG. 07 ADJUST REGULATORS

Reduce Pressure (CCW) 3/16-inch Increase Hex Wrench Pressure (CW) 1/8-inch Hex Wrench

el lenath

- 800psi
- 000psi
- 200psi
- 600psi
- 2000psi

EPOCH OVERVIEW

FIG. 08 OVERVIEW

