

evo

GENERAL MAINTENANCE GUIDE

IMPORTANT - INFORMATION CONTAINED IN THIS MANUAL IS CONSIDERED TO BE VITAL TO THE SAFE OPERATION OF YOUR AIR RIFLE. FAILURE TO FOLLOW THE PROCEDURES WITHIN THIS MANUAL MAY RESULT IN INJURY, DEATH, EQUIPMENT DAMAGE AND/OR THE VOID OF ALL FACTORY WARRANTY TERMS.

V 1.1

IMPORTANT SAFETY INFORMATION

*THESE GUIDES ARE PROVIDED IN ADDITION TO ANY LOCAL LAWS OR REGULATIONS

Familiarize yourself with and follow applicable national, local and regional laws.

Handle this and any other airgun as if it were loaded and ready to fire.

Do not look down the barrel of any airgun.

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

Always keep the muzzle pointed in a safe direction.

Always verify that the compressed air cylinder is fully seated before pressurizing the EVO®.

Always verify that the barrel is fully seated and locked in place before firing the EVO®.

Pressurize and load the airgun only when it will be immediately used.

Never field strip or disassemble the airgun while it is pressurized.

KEEP AIRGUNS OUT OF REACH OF CHILDREN

MUST BE AT LEAST 18 YEARS+ TO PURCHASE OR OPERATE AN AIRGUN

ALWAYS WEAR EYE PROTECTION

DESIGNED FOR SHOOTING SPORTS WHEN OPERATING A PRESSURIZED AIRGUN.

ELECTRONIC TRIGGER WARNING:

The EVO®'s match grade air rifle trigger is extremely sensitive to shock or impact, extreme care must be taken to avoid accidental discharge.

COMPONENT MODIFICATION WARNING:

Never manipulate, adjust or change any of the internal components of your airgun unless specifically directed to do so in this manual. Improper manipulation of any internal component may affect the safety and reliability of your airgun and may cause serious injury or death.

LUBRICATION WARNING:

Use only *SL33K HPS* silicone lubricant (included with the EVO®) to lubricate seals or components where specified. Use of other lubricants may reduce the safety and performance of your air-gun. Damage caused by improper lubrication is not covered under warranty.

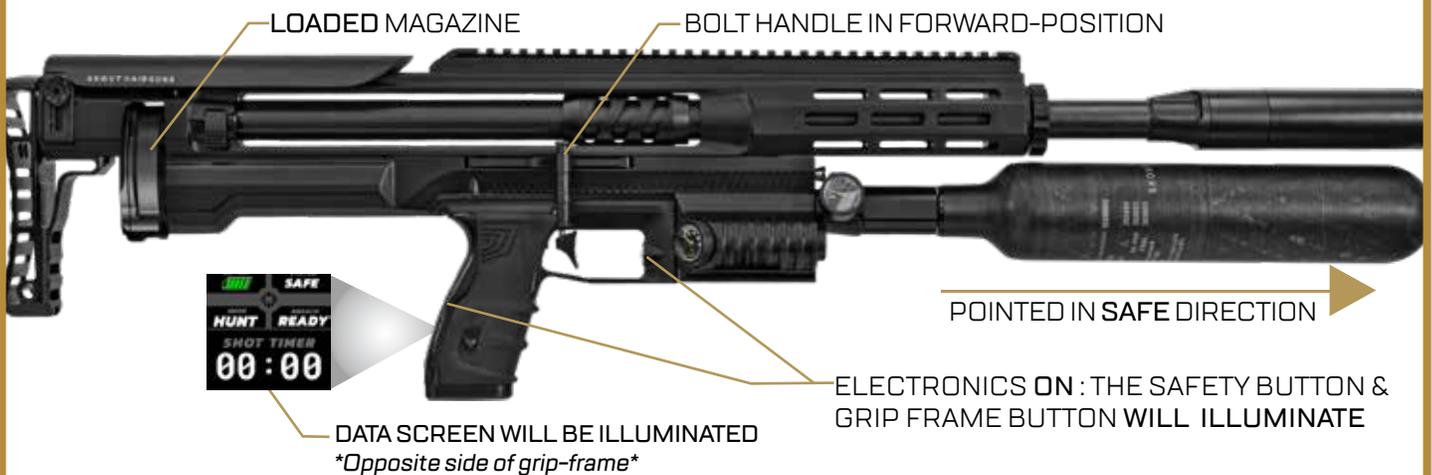
SAFE CONDITION EXAMPLE



The EVO[®] is considered to be in the “**SAFE CONDITION**” when:

- The air rifle is **UNLOADED**, with no magazine installed.
- Electronics are powered “**OFF**”, the OLED screen and Safety Button are not illuminated.
- The breach is in the open position- **COCKING HANDLE REARWARD**

READY CONDITION EXAMPLE



The EVO[®] is considered to be in the “**READY CONDITION**” when :

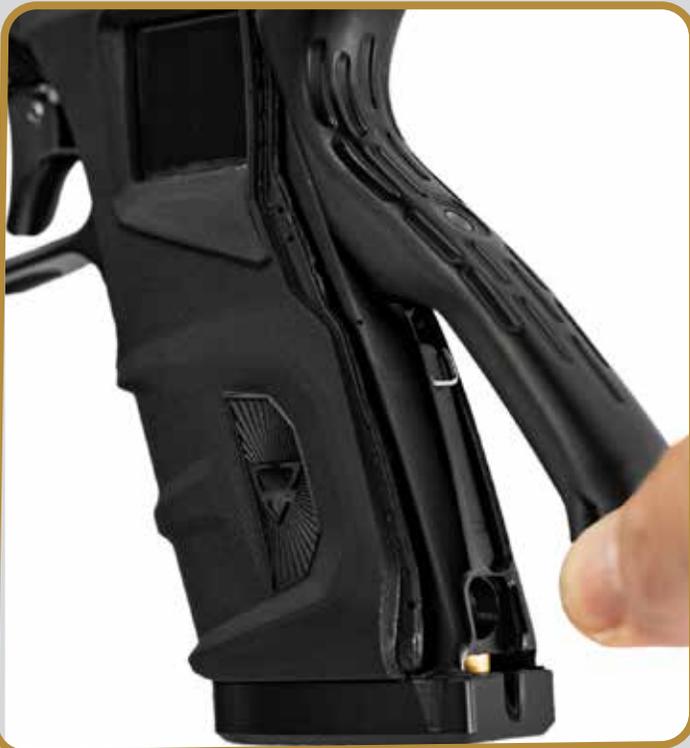
- The air rifle is **LOADED**, with a magazine installed.
- Electronics are powered “**ON**”, the LCD screen is illuminated
- The “**Safety Button**” will illuminate *when pressed*.
- The breach is in the closed position - **COCKING HANDLE FORWARD**

BATTERY CHARGING

The EVO® airgun uses a lithium ion battery as the power source for its electronics. When used correctly, lithium ion batteries provide a safe and dependable source of portable power.

Misuse or abuse may result in leakage, fire, or explosion.
KEEP BATTERIES AWAY FROM CHILDREN.

- THERE ARE CHEMICAL BURN HAZARDS ASSOCIATED WITH ALL BATTERIES.
- USE ONLY SKOUT AIRGUN'S BATTERY PACKS WITH THE EVO® AIR RIFLE.
- USE ONLY SKOUT CHARGING SYSTEMS TO CHARGE THE EVO® AIR RIFLE.
- DO NOT MODIFY THE EVO® BATTERY.
- DO NOT MODIFY THE EVO® ELECTRONIC CONTROL BOARD.
- DISCONTINUE USE IMMEDIATELY IF BATTERY SWELLS, EMITS FUMES, - SMOKE OR BECOMES HOT WHILE CHARGING OR IN USE.



To access the charging port and battery compartment of the EVO®, simply remove the backstrap of the grip frame.

Gripping at the finger grooves at the base of the back strap, pull backwards away from the grip frame.

The backstrap will pivot, on a post at the top of the backstrap.

When reinstalling, be sure to insert this post and pivot the backstrap into place in the same way it was removed.

BATTERY - CONTINUED



You will now have access to the USB-C charging port & battery compartment.

Charge the battery of the EVO® without removing it from the airgun, through the USB-C slot **(A)**.

You can swap your battery or remove it completely, for long term storage, by lifting the battery tab **(B)** and jostling the battery out of location.

Lifting the battery slightly and tapping the rear of the grip frame to pop the battery out of place maybe needed.



The LED power button will display 3 colors based upon status:

BLUE = On/Normal Use

RED = Plugged in Charging

GREEN = Fully Charged



Observe the markings on the battery pack during installation of the battery.

Make sure the arrows on the battery are oriented forward into the battery compartment.

Looking into the compartment **before installation**, one can see the connectors and confirm orientation before install as a recommended cautionary step to prevent damage to the board or battery.

BARREL MAINTENANCE

- 300-500 cycles -

There are many factors that determine debris accumulation in an air-gun barrel maintenance should be preformed as needed.

Non-Metallic swabs, cotton patches, and non-corrosive cleaner can be used regularly. SKOUT® recommends CORBIN® brand barrel cleaner or high quality starting fluid (if no barrel specific solvent is available.)

DO NOT
REMOVE



Factory Hybrid Bull Barrels are assembled with fixed liners inside a dense carbon sleeve. During the assembly process the liner is tensioned & epoxied into place.

This tension nut **CANNOT** be removed from these barrel.

DO NOT
REMOVE



Factory Hybrid Bull Barrels utilize a unique indexing system. This indexing system allows the user to “Clock” their rifling to achieve their highest accuracy.

Because of this design, the chamber **CANNOT** be removed from these barrels.

MODERATOR MAINTENANCE

- As Needed -

NOTE: The moderator will contain fine lead powder & should be handled with gloves in a well ventilated area.



To disassemble the moderator, unscrew the moderator base from the barrel & separate it into its components as shown above.

Cleaning the moderator components with rubbing alcohol, or dish soap and warm water is generally sufficient. Test any solvent on a non-visible section of the component, as acidic or caustic cleaners may damage the anodized finish.

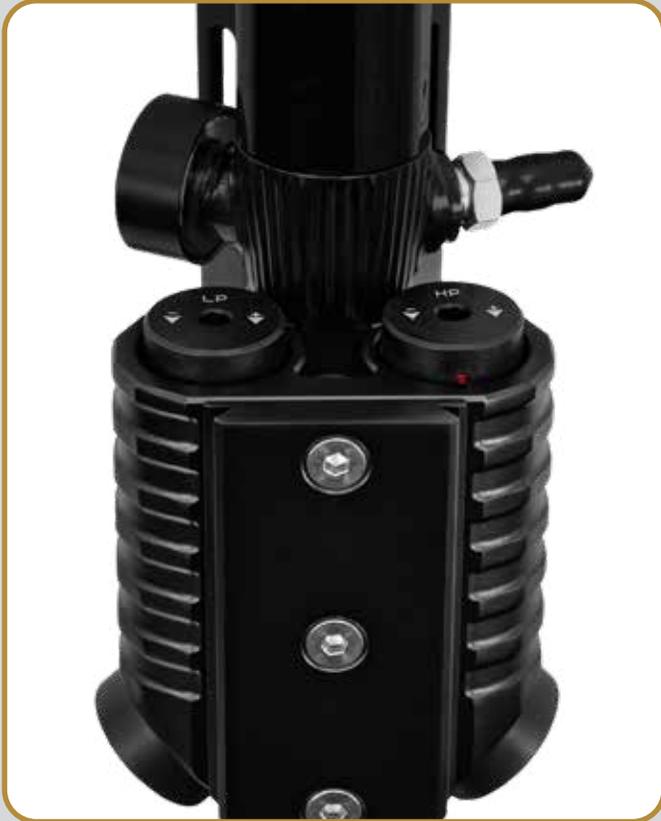
Many traditional solvents contain harsh and corrosive compounds and should not be used in cleaning the barrel or moderator systems.

SKOUT® recommends Corbin® brand barrel cleaner, or a premium starter fluid to remove stubborn lead and build up inside the moderator.

Wash your hands with lead removing soap after servicing.

REGULATOR MAINTENANCE

- 3000 cycles -



The EVO® has two regulators that control its cycling pressure and its chamber pressure. These are located on the front of the airgun, under the air tank adapter.

HP = HIGH PRESSURE
LP = LOW PRESSURE

The **HP** regulator controls the pressure used to propel the projectile.

The **LP** regulator controls the pressure of the pneumatic cycling operations of the airgun.

Regulator maintenance is suggested on your SKOUT® EVO to maintain peak consistency and performance.

The majority of air propellant used in airgun application is not dried or filtered prior to use, this leads to debris and moisture infiltrating your EVOs regulation system.

It is for this reason that we recommend routine maintenance, even if performance has not been drastically affected. This maintenance can also be applied prolifically prior to competition, or hunting expedition.

NOTE: Early servicing is recommended when any drop in performance occurs. Generally, performance related to velocity consistency can be traced to a dirty or otherwise compromised regulator.

REGULATOR MAINTENANCE

- TIPS & RECOMMENDATIONS -

Regulator maintenance is important to the proper function of your EVO air rifle. If you do not feel comfortable servicing your regulators, you can send them into the factory to have them serviced at a nominal charge + shipping.

Service one at a time:

It is recommended that you service one regulator at a time, preventing any accidental swapping of o-rings or components.

Cleaning cloth:

A lint-free cloth should be used to prevent any fiber catching under o-rings or on threaded connections.

Solvents and cleaners:

Many cleaners can be caustic and cause damage to metal surfaces like the aluminum and steel used in the EVO® regulator. Be sure to confirm that the cleaning agent used is non-toxic and non-corrosive before use.

The regulators can also be cleaned without solvent, wiping them down with a clean cloth before re-lubricating is generally sufficient.

Heavily or accidentally contaminated:

If, for any reason, your regulator is covered in dirt, sand, or other granular material while outside of the air rifle - do **NOT** immediately reinstall the regulator.

Inspect and clean all components prior to re-installation. Larger debris entering the air chambers of your air rifle can damage critical components such as the solenoid.

Additional instructional can be found on SKOUTAirguns.com calling 724-879-5204 or emailing Darryl@SKOUTAirguns.com

REGULATOR REMOVAL



Remove the **3 bolts** that secure the ARCA rail attachment. The standard short rail & the longer match rail have the same mount location & hardware.

These bolts are **1/8** allen key and do not require thread locker.



Remove the **silver retainer** shown in this image (left). A non-marking dental pick maybe neccessary to remove this wireform.

Remember to Re-Install

Failure to re-install this retainer may compromise the safety of your regulators by allowing them to be fully unscrewed while underpressure.

REGULATOR CAP ASSEMBLIES HIGH + LOW PRESSURES



WSH106

IMPORTANT NOTE:
Your High Pressure
Regulator will contain
5-7 shims.

Each of these
shims is 0.005 inch
(0.127mm) and are
installed as part of
the factory tuning
process that ac-
counts for machining
& spring tolerance
allowances.



HP



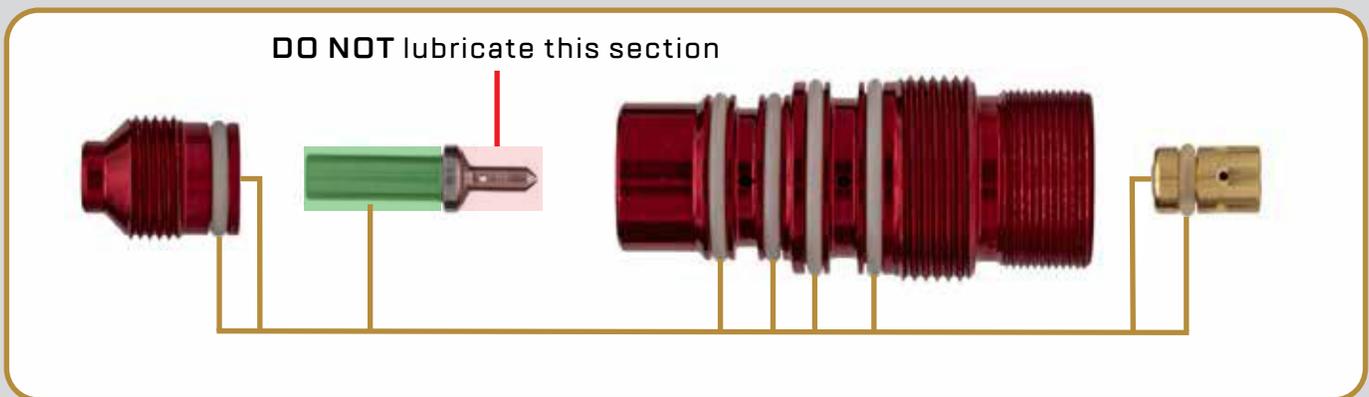
MFE212K

LP

HIGH PRESSURE REGULATOR - MAINTENANCE -

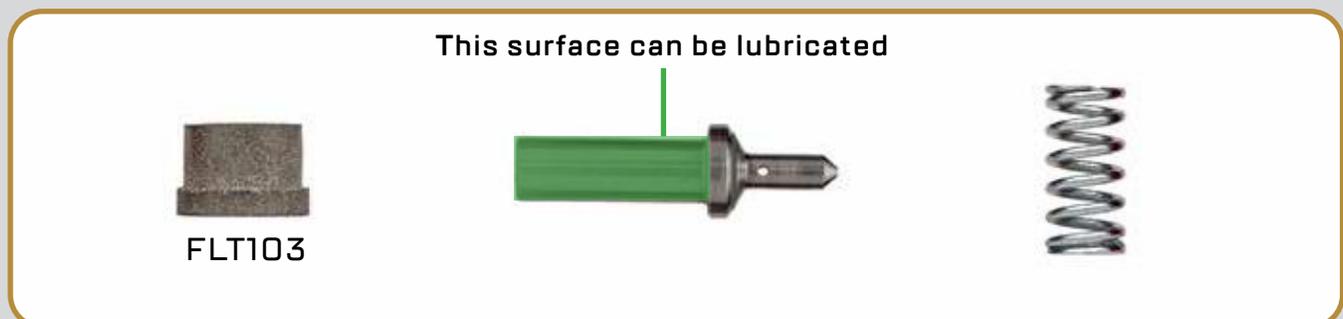
This section covers basic maintenance:
For a complete diagram including o-ring part #s and sub-assembly components, please see the appendix of this manual.

Only factory rebuild kits, o-rings and lubrication should be used when maintaining or repairing your EVO® air rifle.



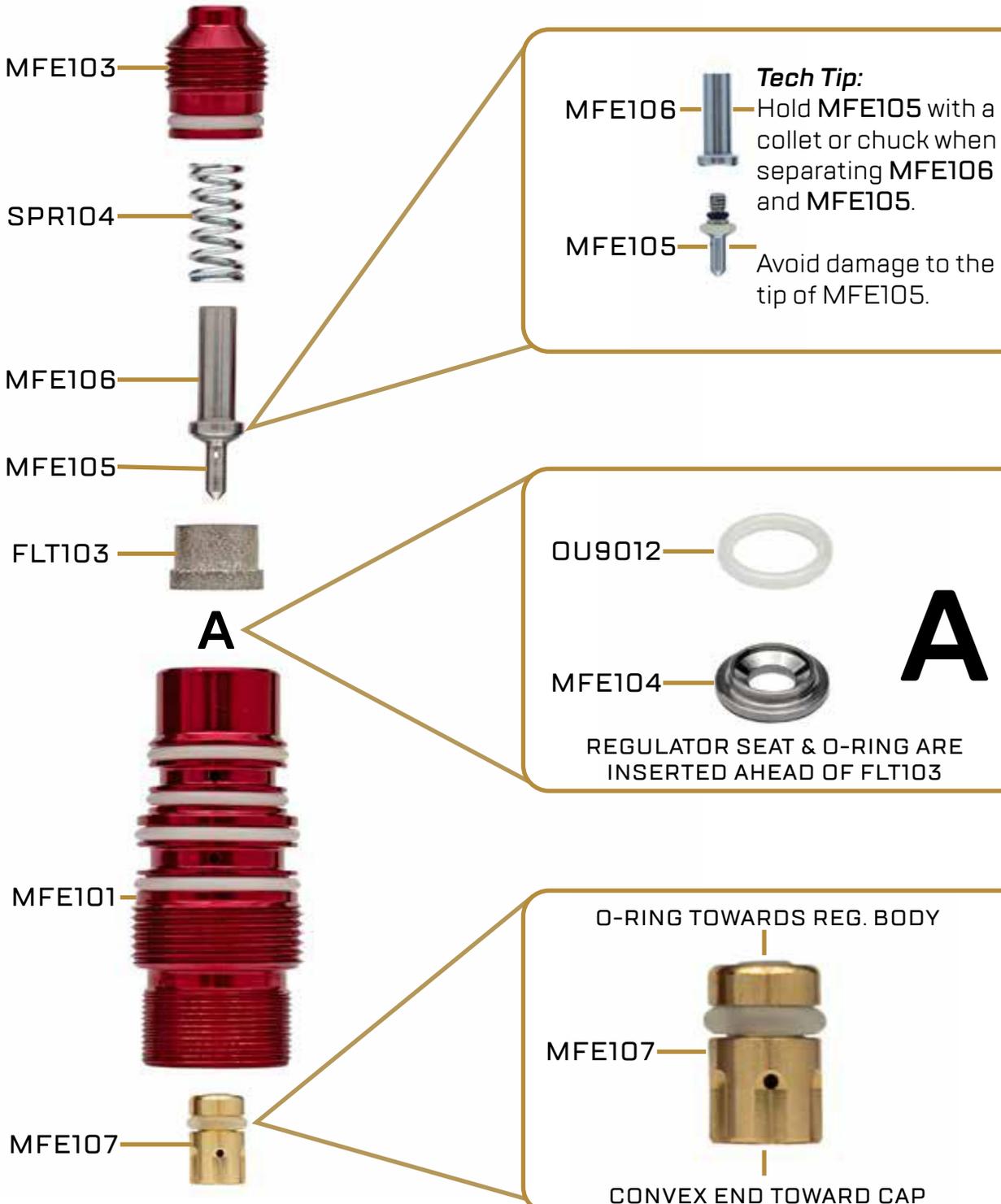
The above components should be cleaned with non-corrosive cleaner and a clean cotton cloth or lint free microfiber should be used to prevent surface damage or contamination. Factory specified lubrication should be applied sparingly to areas/orings indicated in the above graphic.

Inspect the o-rings for damage or discoloration and replace as needed. O-rings do not need to be removed for general maintenance.



The above components should be cleaned with non-corrosive cleaner and a clean cotton cloth or lint free microfiber. The filter component (FLT103) should NOT receive any direct lubrication.

HIGH PRESSURE REGULATOR - ASSEMBLY DIAGRAM -



LOW PRESSURE REGULATOR - MAINTENANCE -

This section covers basic maintenance:

For a complete diagram including o-ring part #s and sub-assembly components, please see the appendix of this manual.

Only factory rebuild kits, o-rings and lubrication should be used when maintaining or repairing your EVO® air rifle.



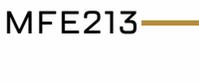
The above components should be cleaned with non-corrosive cleaner and a clean cotton cloth or lint free microfiber should be used to prevent surface damage or contamination. Factory specified lubrication should be applied sparingly to areas/orings indicated in the above graphic.

Inspect the o-rings for damage or discoloration and replace as needed. O-rings do not need to be removed for general maintenance.

Note: A dirty or damaged LPR will cause a variety of symptoms related to cycle and consistency. However, the most obvious indication that the LPR needs to be serviced will be an inconsistent LPR pressure reading coinciding with an unstable velocity.

A low LPR setting, will result in low velocity or incomplete cycling. Please see SKOUT®'s tuning literature for base settings.

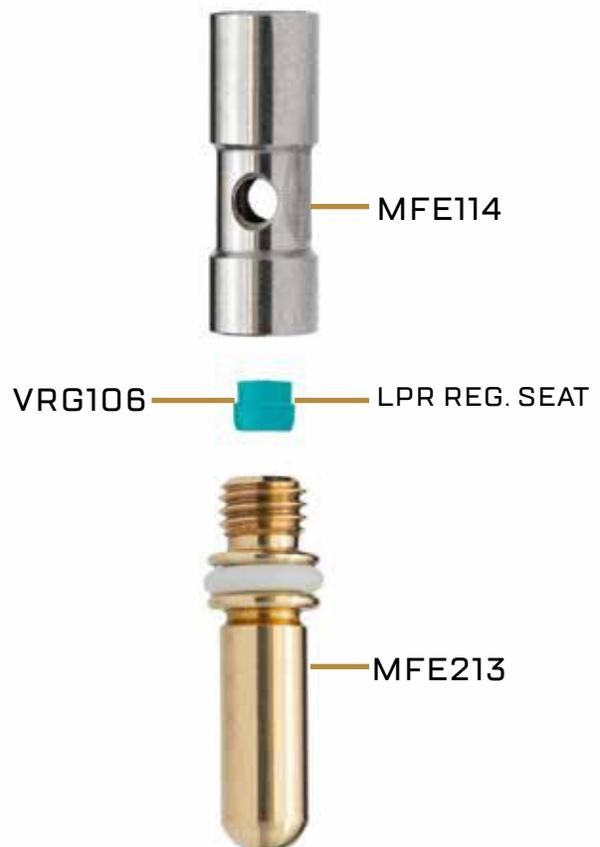
LOW PRESSURE REGULATOR - ASSEMBLY DIAGRAM -



Note- VRG106 is a single use seal, once removed it must be replaced with a new component.

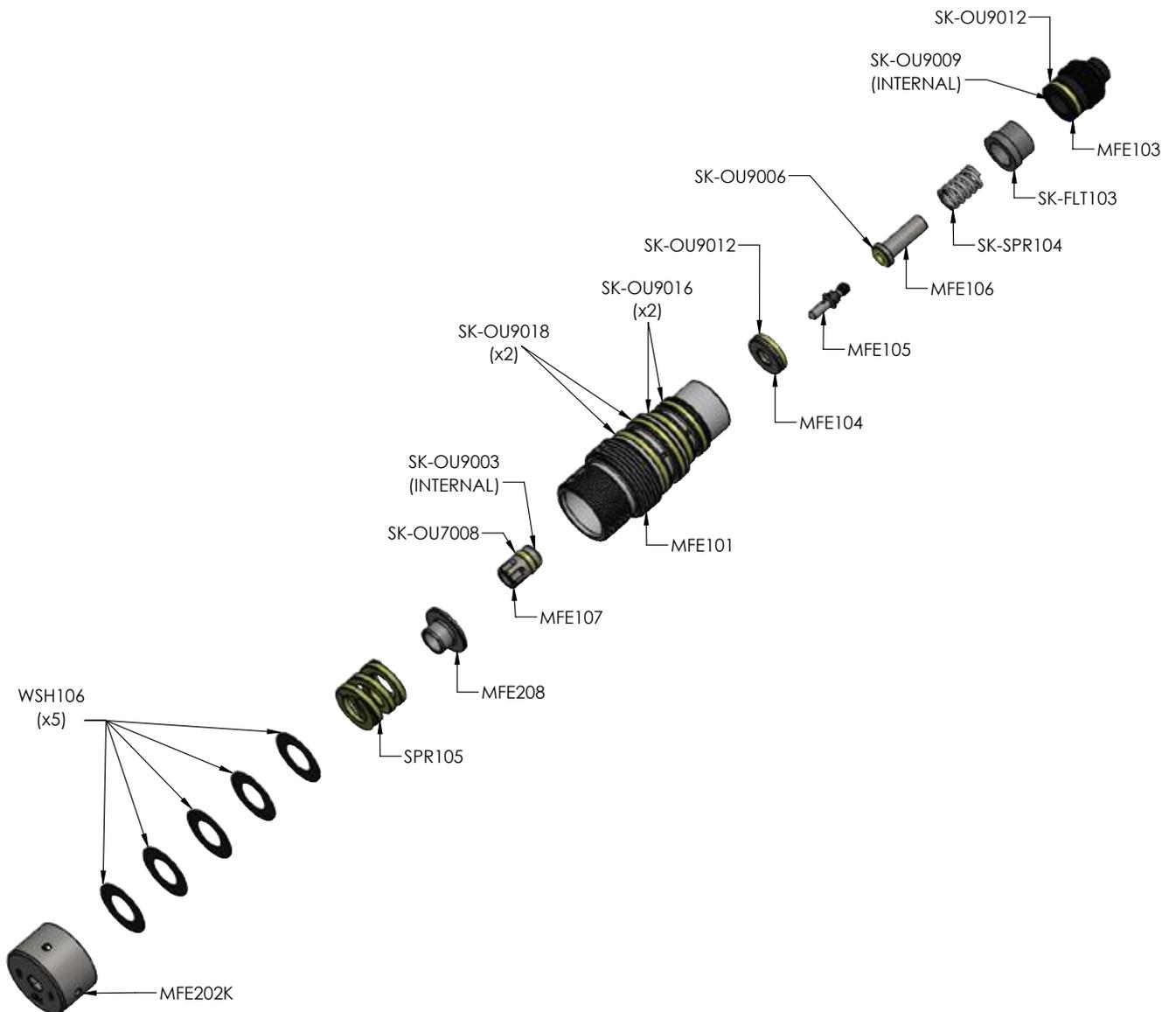
Replacing the regulator seat (VRG106) *is not part of normal maintenance.*

If LPR pressure climbs when the airgun is at rest, then disassembly & replacement of the regulator seat is required.



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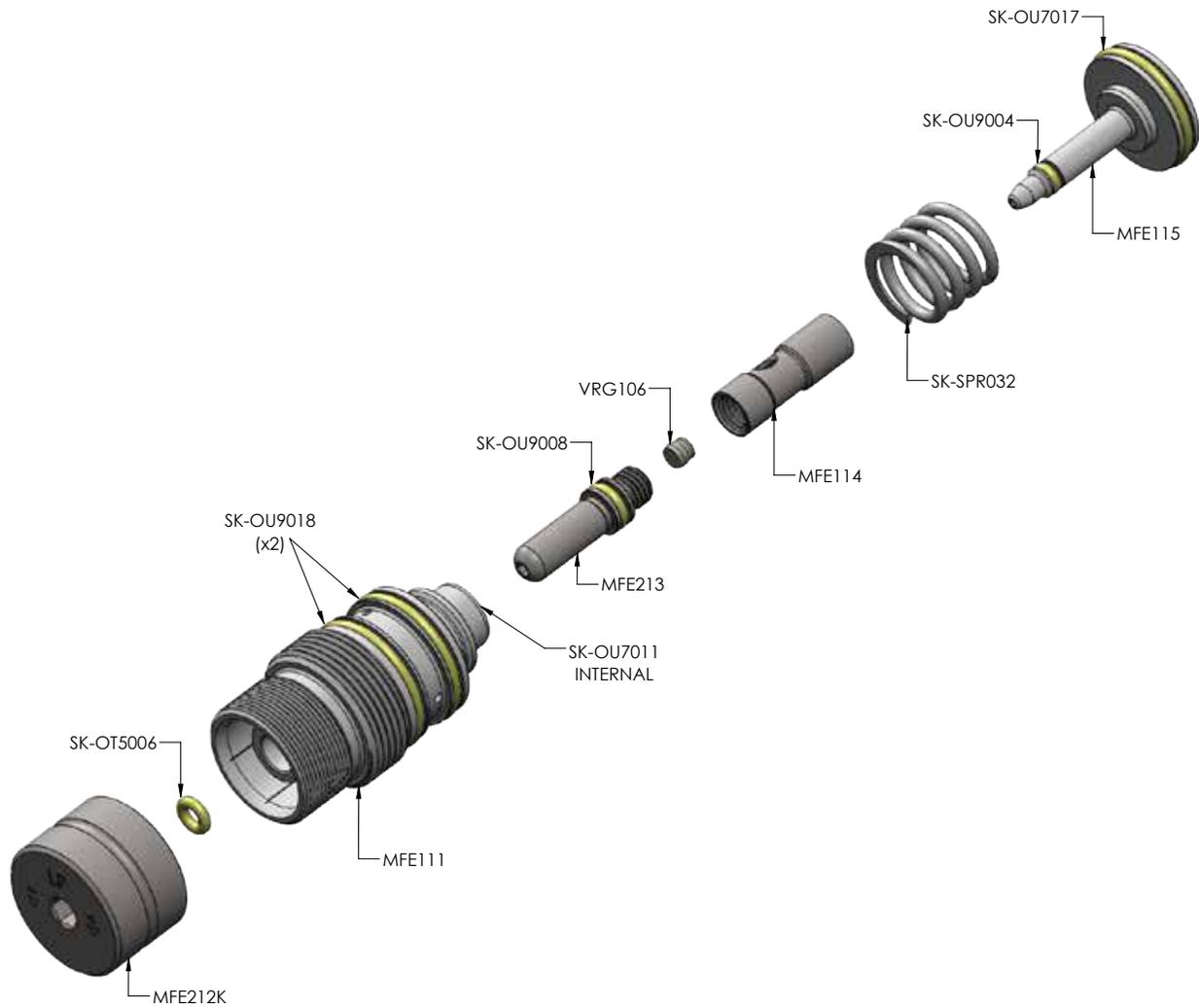
HIGH PRESSURE REGULATOR - PARTS DIAGRAM



HP

evo

LOW PRESSURE REGULATOR - PARTS DIAGRAM



LP