

## NEVER PIERCE A CO2 CARTRIDGE IF THE INSERT IS NOT CONNECTED TO THE REGULATOR

#### ALWAYS DEPRESSURIZE THE CO2 INSERT BEFORE REMOVING IT FROM THE REGULATOR

The inserts do not have a pin valve and will not shut off gas flow when disconnected. They must be depressurized before unthreading by removing the cartridge and venting all gas stored in the expansion chamber. The chamber can be vented by firing the gun until it runs out of gas.

### Overview

The PolarStar CO2 Gas Stock (CGS) replaces the existing buffer tube with a CO2 gas system concealed inside a milspec buffer tube. The CGS can be configured to accept various sizes of CO2 cartridges, including the common 12g as well as 33g cartridges.

The CGS is compatible with virtually all M4 receivers, although some modification to the receiver and/or gearbox may be required. Additional adapters are available to mount the CGS on non-M4 platforms.

## Installation

Installation of the CGS is exactly the same as the PolarStar UGS system. Like the UGS, the installation process varies depending on the type of receiver used. For detailed installations instructions please see the complete **UGS User Manual** available in the Downloads section of www.polarstarairsoft.com.

Videos detailing the installation and maintenance of the PolarStar UGS are available at <a href="https://www.youtube.com/PolarStarAirsoft">https://www.youtube.com/PolarStarAirsoft</a>. These videos are also applicable to the CGS.

### **Pressure Adjustment**

The pressure adjustment screw is located on the top of the regulator. Using a 3/32 allen wrench, turn the screw clockwise to increase pressure and counter-clockwise to decrease pressure. When decreasing pressure, you will need to fire your rifle before pressure in the lines will drop to the new set point.

# Maintenance

The CGS Regulator will require periodic cleaning and greasing to maintain top performance. The most basic maintenance is the cleaning of the piston and piston bore. This should be performed every 100,000 to 150,000 cycles or sooner if the recharge rate has slowed or the output pressure has become less consistent.

- 1. Remove any CO2 cartridge from the system and vent any gas stored in the expansion chamber.
- 2. Remove the #4-40 x  $\frac{1}{2}$ " set screw (15) and unthread the regulator (4) from the buffer tube.
- 3. Remove the output cap (5 or 19)
- 4. Remove the piston (11). Be careful not to scratch or damage the stem of the piston, especially the thin edge, as this can lead to leaks or creeping due to poor sealing.
- 5. Clean any dirt and old grease from all components.
- 6. Apply new grease to all o-rings and the outside of the piston stem.
- 7. Insert the piston into the output cap and reinstall both as an assembly into the body.





