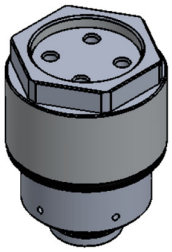
HUMA-AIR

Market Leader In Accuracy

Welcome to Huma-Air. We design and manufacture brand- and model specific precision regulators for PCP air rifles.

By using only the highest quality materials such as aircraft grade aluminum, aluminum-bronze, chrome-moly steel and precision belleville springs, our ultra-compact regulators are high performing with less than 1% fluctuation.

Regulator installation Guideline Huma-Air replacement regulator for daystate MK3 FTR, X2R, Merlyn and air ranger



For adjustment tips, frequently asked questions and a complete list of installation manuals and instructions on how to adjust your Huma-Air regulator

https:/www.huma-air.com/Fitting-instructions

Or go there directly by scanning the QR code

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Before you you start, realize this;

- Working on a high pressure rifle could potentially be harmful or lethal to you or bystanders if you do not know what you are doing.
- The pictures of the rifle parts in this guideline can be universal and meant as an example to explain the working principle. They might not be equal to the parts in your rifle.
- Do not attempt to install this regulator yourself if you do not have a clear understanding of how these pcp rifles and regulators work.
- Do not attempt to install this regulator if you are not skilled to work on an air rifle; contact your local gunsmith to do the fitting.
- Installation and operation is done completely at your own risk.
- Installing this regulator might void your rifle's factory warranty.
- Your rifle may never be filled higher in pressure as stated in your rifle's manual.
- Do not attempt to fit this regulator in another rifle as mentioned in our order conformation.
- These regulators are not suitable to use as a CO2 to HPA conversion, this could potentially be harmful or lethal to you or bystanders.
- We cannot be held liable for any accidents in relation to this regulator and its installation.

Before you start, make sure that the rifle is unloaded, remove the magazine and make absolutely sure ALL the air is drained from the pressure tube. If there is a pressure gauge, it will give you just an indication. Follow the manufactures instructions for depresurizing and double check to make sure all the air is out of the rifle

If the regulator is fitted and there is no output pressure after filling the pressure tube, something might be wrong causing the airflow to block totally.

Please beware even though there is no output pressure, the pressure tube is fully charged with high pressure air!!
If you are not able to relieve the pressure of the pressure tube according to the manufacture instructions or by dry firing the rifle then:

Contact a professional gunsmith to retrieve a solution!

- **DO NOT try to unscrew or to open the pressure tube in any way.**
- **DO NOT try to pierce/drill or to use force to open the pressure tube or unscrew parts in an attempt to relieve the blocked pressure.**
- **These actions can cause serious injury or death to you or bystanders**

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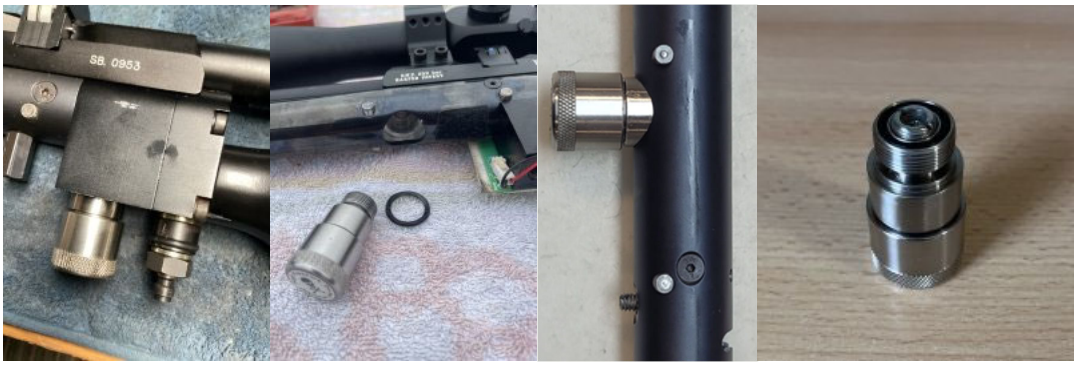
This regulator is a replacement for the stainless steel Korick regulator as used by daystate in the MK3 FTR, Merlyn, X2R and some air ranger modells. Please make sure before your purchase that your rifle has the Stainless steel outrigger regulator as pictured below.



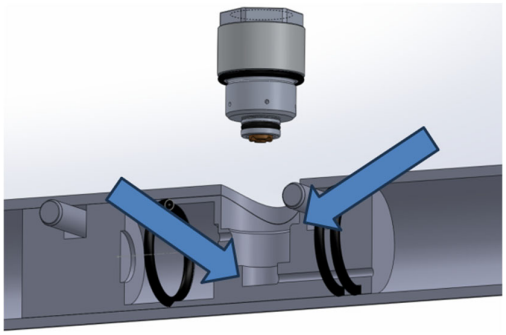
Before you start to work on the rifle be absolutely sure to drain all air from the gun

The regulator can be very tight from the factory and years of use. If in doubt consult your local (air)gunsmith, rfd. In order to remove you will need to have a way to clamp to the regulator parts. For this you can use a fitting pipe clamp or similar tool.

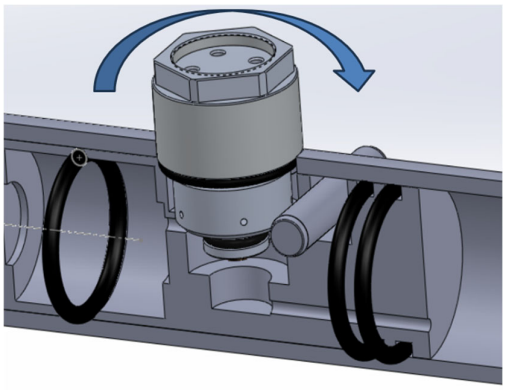
While working on the rifle it may be worthwhile to exchange all orings on the gun and clean the internal parts as the internals can be pretty gunked up after several years of use.

Asuming you have cleaned all the parts and reassembled the rifle apart from the regulator installation is very straight forward.

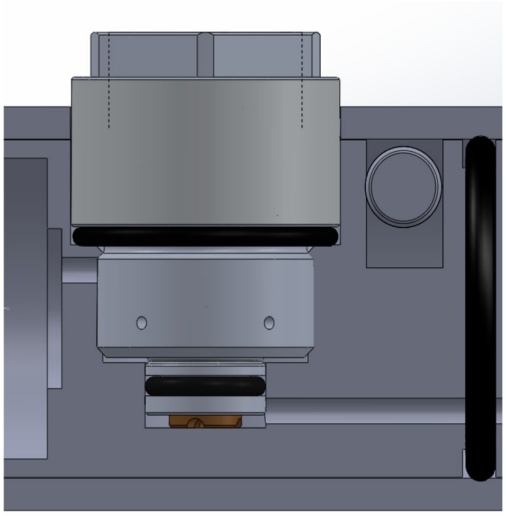
The regulator is a completely self contained unit, tested and set to the pressure written on the bag it is delivered in and will only require screwing it into the regulator pocket exposed by the hole in the MK3 airtube. Be sure to oil the Regulator pocket with some silicone point where the regulator orings interface. You can also put a little silicone on the orings of the regulator. As the larger oring on the outside is not captive on the regulator body it may be easier to install that in the regulator pocket first and screw the regulator on there afterwards.



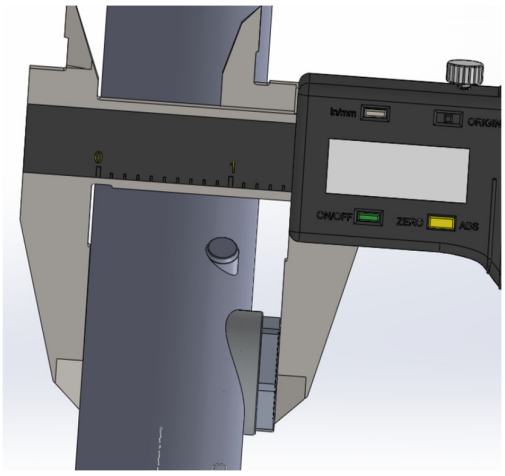
Then screw in the regulator using a 19mm Hex socket.



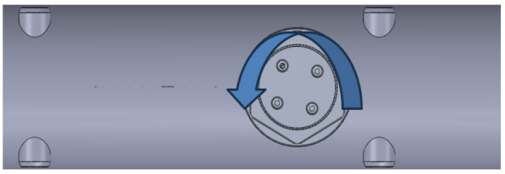
It is important that during the mounting of the regulator you go slowly so you have a feel for the orings seating in their recesses. Also when fully seated you will need to apply a little torque so the regulator is completely seated and the small nozzle in the regulator is held firmly in its place and has no play.



To check that the regulator is fully seated you can measure this dimension. It should measure approximately 37,4mm give or take.



Now that the installation is done you can complete the assembly of the rifle, and it is time to set the regulator pressure to your specific needs. The adjustment range of the regulator is between 60-180bar and should be more than suitable to cater to both <12ft.lbs guns as wel as FAC rifles. It comes supplied around 100 bar (the exact pressure is written on the bag). The adjustment of the regulator is ±26bar for every ¼ turn of the adjustment screw. You can use a small circlip plyer to adjust the regulator



Turning the adjustment screw (stainless part with the 4 holes in it) counter clockwise will increase pressure. But while pressurized please note that you can only increase regulator pressure. If you want to lower regulator pressure you will first have to drain the gun and adjust it down, then repressurize it. Counter clockwise will increase regulator pressure. Clockwise will decrease it.

Consider what power you want to be shooting.

<12ft.lbs will generally require between 70 and 90 bar of regulator pressure depending on caliber and projectil.

FAC power will generally require between 100-140 bar. So before you pressurize the rifle you might want to lower the pressure. This can be done by turning the adjuster clockwise. If you want to start as low as possible you can turn it down with as little effort as possible until you feel the seal hitting the nozzle. This should result in a pressure of 0 bar.

Because these rifles don’t have a gauge you will need to set the pressure using a chronograph.

1. Start at any of the base adjustments described above.
2. Fill the gun and make sure the plenum is receiving a little pressure.
3. Now shoot a few shots over the chrony.
4. Is your velocity lower than your intended speed increase your hammer spring tension a ¼ turn and check if the velocity increases.
5. If it doesn’t you will have to increase the regulator pressure by turning the adjuster counter clockwise
6. Repeat steps 3-5 untill you reach your intended velocity. For further information we would like to point you to the following file.
   https://huma-air.com/app/uploads/2024/01/General-airrifle-adjustment-tips.pdf