

HUMA-AIR.COM

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.

Regulator installation guide 400-500 CC. Bottle Regulator

HUMA-AIR



Bottle regulator

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

**Before 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 rifleparts in this manual are universal and mend 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. Dry fire the rifle or follow the manufactures instructions 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/bottle 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**

Before you start, we would like to advice you to read our manual how to [read and adjust the regulator pressure](#) and our [General Adjustment Tips](#) to set up your rifle perfect.

Pressure Regulator for bottled rifles with a 400 or 500 CC bottle with M18x1,5 treads:

Before you start, read the full manual.

This manual is an universal guideline and can be different in detail compared to your rifle.

Important Safety Notes:

- These regulators are not suitable for stand-alone pressure bottles/buddy bottles.
- The maximum working pressure of this model is 250 Bar.
- Do not exceed the factory advised fill pressure of your rifle.
- Do not exchange the original factory bottle for a higher pressure version.
- These regulators are not suitable for a CO2 to HPA conversion, because they do not have a safety burst disk.
- This regulator cannot be used as a replacement regulator for factory regulators equipped with a safety burst disk, as this model does not have a burst disk. (like paintball regs or RTI priest regulator)

Pressure setting of your new regulator

The set pressure of the regulator is marked on the label of the bag.

Setting the pressure can be done by adjusting the bronze colored set screw what is visible inside the male threaded part of the regulator.

A 5 minutes turn contra clockwise will give a pressure increase of about 6 bar.

The pressure range of this regulator is between 70 and 155 bar. An extra high pressure range is available as option.



On the picture left you see the setscrew with screw driver slot and a marking dot to indicate the position of the pressure setscrew

When the factory pressure gauge is fitted behind the pressure regulator,(most situations) the gauge will show the regulated pressure after you have fitted the regulator and it will not show the fill pressure anymore.

Fitting of the regulator

The parcel consists of:

The regulator body

The fill- and pressure gauge collar

A stainless steel foster male quick connect fill connection

A mini pressure gauge with o-rings



The foster male fill connector has a o-ring powered fill valve. By loosening or tightening the small screw you can adjust the fill speed.

The pressure gauge comes with a small and a thicker o-ring. One of these two can be used for fitting the pressure gauge



The collar of the regulator has 2 holes in it: a blind threaded hole with a tiny measuring hole inside it and a fully open threaded hole



Inside the blind hole one of the small o-rings can be placed and after this you can screw in the pressure gauge.

When you feel the gauge touches the o-ring, you can adjust the gauge for about $\frac{1}{2}$ a turn for proper line up. Do not use a wrench or pliers, just hand tight is enough.

If the gauge does not line up properly, you can exchange the o-ring for the thicker or thinner one included what will give you about $\frac{1}{2}$ turn extra adjustment space.

(If the gauged does not read any pressure when finished and the rifle is filled, the gauge is probably screwed in to hard causing the o-ring to close the measuring hole)

Do not screw in the foster male connector yet.



Now remove the pressure bottle of your rifle.

Remove any o-rings what are left on the treads of the rifle. The regulator is already equipped with an o-ring.

Screw the regulator body on the M18x1,5 treads of your rifle and tighten it firmly with your hands.

After you screwed the regulator body on the rifle you can place the regulator collar on the regulator body. The position of the pressure gauge can chosen left or right.

Now you can screw on the pressure bottle on the treaded part of the regulator and screw it on firmly with your hands, holding the collar on the position you want it to have.

After everything is screwed together you can screw in the foster male fill connector. Tighten it with a spanner using just a little force. There is an o-ring underneath the collar of the foster what will seal easy.

Please note: the collar cannot be removed of the regulator with the foster in place. You need to unscrew it first before removing the collar of the regulator body.



If everything is checked and ok, you can fill your rifle using the foster fill connector of the regulator.

Do not use the rifles original fill port or fill connector anymore as it will damage the regulator.

Just apply a bit of air and check if the pressure gauge of the regulator will react, if not there is a good chance the gauge is tightened to far causing the o-ring to seal the measuring hole.

When the original rifle's pressure gauge is fitted behind the pressure regulator,(most situations) the gauge will show the regulated pressure after you have fitted the regulator and it will not show the fill pressure anymore.

Now you can start adjusting your rifle and finding the balance between regulator set pressure and hammer spring setup. On our website there is a manual "how to set up a regulated rifle" with tips and advices how start.

The maximum power setting of your rifle depends also of the amount of regulated air what is available in the action of the rifle, behind the regulator. A lack of volume can be partial compensated with a higher regulator fill pressure but all within limits.

When setting up the rifle over the chrony, please shoot slowly like you are on the range keeping some time in between shots.

Any comments or tips about this manual are very welcome to make things easier.