

# 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 with less than 1% fluctuation.

## Regulator installation guide Benjamin pistol/discovery/maximus



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 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 airrifle; 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 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**

1. Make sure your pressure tube is totally empty
2. Remove the action from the stock.
3. Double check / check again if there is absolutely no pressure inside the pressure tube. Only when absolutely certain proceed to remove the pressure gauge.



4. Take a pair of pliers to remove the end cap. Use a piece of leather (belt) to prevent damage to the end cap, and unscrew the end cap.



5. You should be able to push the pressure gauge assembly a little forward into the tube, using an allen wrench or wooden dowel that you place in the hole of the pressure gauge.

**6. "Theoretically" the regulator can be fitted in two ways.**

With (Option A), or without (option B) the original pressure gauge assembly. Unfortunately the factory parts are not always very well aligned causing a lot of people getting pressure leaks when the pressure gauge assembly is used, so we cannot guaranty this working properly and we would not recommend this.

When you chose to fit it with pressure gauge assembly, please remember that after fitting of the regulator, the pressure gauge will indicate only a constant regulated pressure, so it's pretty useless. Our advice to you is to use this space for extra air

7. Make yourself a little "tool" to remove the pressure gauge assembly. With the little hook on the end of your tool you can pull out the assembly.



**Option A****Fitting the reg including the original pressure gauge adapter of the rifle.**

Before you slide back the pressure gauge assembly into the tube, remove the front o-ring of the pressure gauge assembly. This allows the regulator to breathe. Also check if the surface of the pressure gauge adaptor is very smooth and without scratches so the regulator o-ring will seal properly. If your rifle has a spacer between the valve and pressure gauge assembly please leave it in place.

If your plenum has a thick and a thinner o-ring, please place the thickest o-ring to the valvehouse or pressure gauge assembly.

Then slide both the plenum as the regulator into the tube like the picture below.

Please note; the reghouse has an tiny 1 mm. hole in the aluminum body. Please assemble the regulator with this hole facing upwards to the barrel/breech

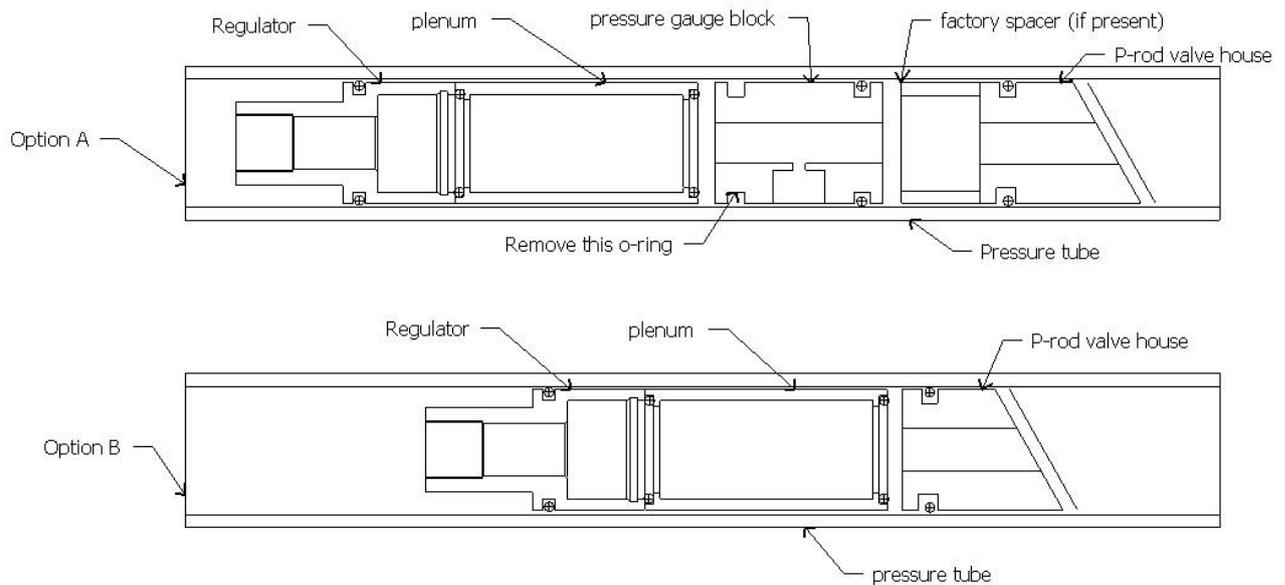


8. When the reg is set in place, you can place the pressure gauge again.

**Option B:**

If you want to fit the regulator without the pressure gauge, then you can totally remove the pressure gauge assembly and also remove the spacer what could be behind it in the pressure tube (not all models use this spacer) and after this slide the plenum and next the regulator into the pressure tube.

See the schedule below for both option A as B working principles:



9. You can use a piece of PVC electric installation pipe to push the regulator in. Please do not push on the set screw because this can adjust the regulator pressure

Tip; A little silicone grease (will aid in installation and help prevent damage to the o-rings. use only silicone grease and NOTHING ELSE)

10. Reinstall the endcap and barrel band and re-fill the marauder carefully. Check around the pressure gauge if the connection is 100% air-tight. You can use water with some soap for it. Keep the hole/pressure gauge pointed to the ground so no soap water can get into the tube.

11. You can adjust the hammer spring tension. When you are testing/adjusting your rifle using a chronograph, please remember to take sufficient time between the shots for the regulator to recharge the regulated chamber volume.

Please note, the regulator valve & valve seat combination needs to break in, so it can take a little while before the regulator is working at its best. You could open the restrictor of the prod's air valve and open up the transfer port in diameter. (I tested my p-rod with a transfer port and valve opening of 3,5 mm) This again is at your risk and we recommend you first read up on this advanced tuning of your rifle on <http://www.marauderairrifle.com/forum/>