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.

Benjamin Bulldog Tuning Regulator by Huma-Air

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 rifle parts in this manual are 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. 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**

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

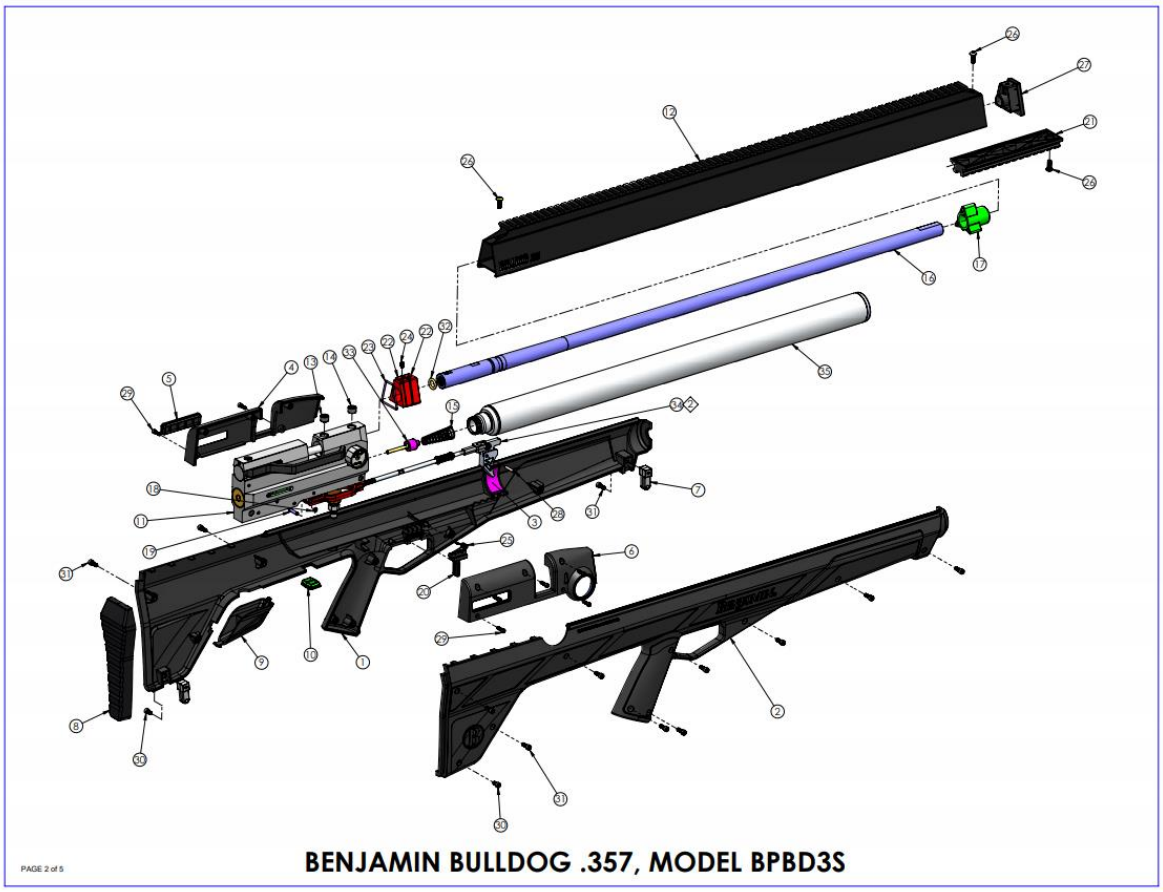
IMPORTANT NOTE:

After you have installed the regulator, the factory fill connector or foster male coupler cannot be used anymore and will be replaced by the Huma-Air fill reservoir endcap with foster male fill connection.
Using the factory fill connection after the regulator is fitted can cause serious damage to the regulator or your rifle

Start with installing the 3x3 mm o-ring on the factory fill connector or foster male coupler to prevent accidental use of the factory fill connection, so you cannot accidentally connect your fillset to this fill connection anymore. The o-ring deliberately slides over the coupler with some difficulty this will ensure it will stay put!

The o-ring slides into the groove in the foster coupler!

Now we start with disassembly of the Bulldog



Installing the Benjamin Bulldog regulator is quite straightforward but there are some things you need to pay attention to while doing so. We have included the parts diagram to help indicate what parts need to be removed! A link to higher resolution diagram can be found **here**

(https://www.crosman.com/fileuploader/download/download/?d=0&file=custom%2Fupload%2FBPBD3S_EVP.pdf)

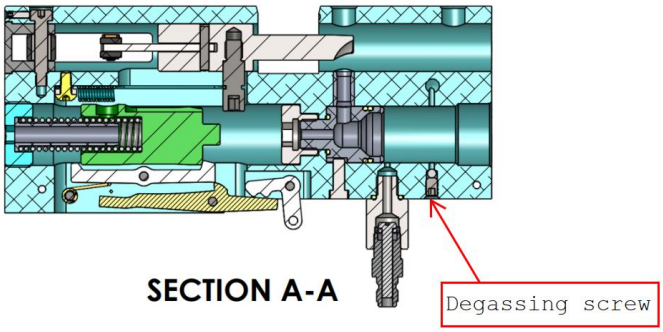
Check again that the rifle is unloaded and decocked!

Start by removing the plastic stock. This can be done by removing the screws 26, 29, 30 and 31 Removing the cheekpiece 4 and 6 and sliding the shroud 12 forward removing the butpad 8.

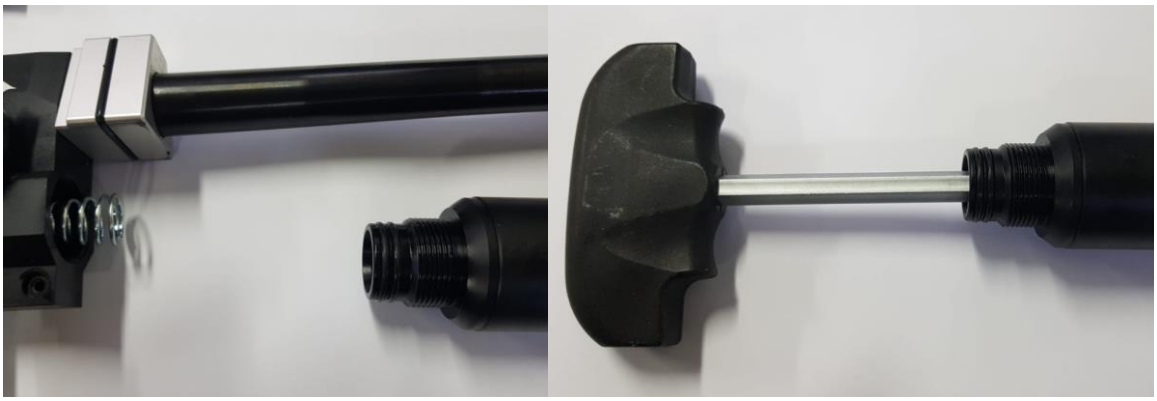
The stock halves will then come loose. Take care with the trigger parts and make note of their arrangement.

You will now have access to the action for degassing.

You can double check that the rifle is empty by loosening the little grub screw that is on the underside of the action slightly. You will hear air escaping and you don't need to turn further than that! Wait till all air is drained! After the gun is depressurized, tighten the grubs crew again!



After depressurizing the rifle the air cylinder can be unscrewed from the action.

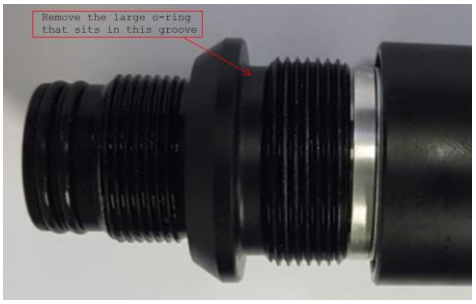


When unscrewing the cylinder from the action, most of the times the endplug will come out together with the cylinder. You can use a fitting hex wrench to unscrew the plug from the action.

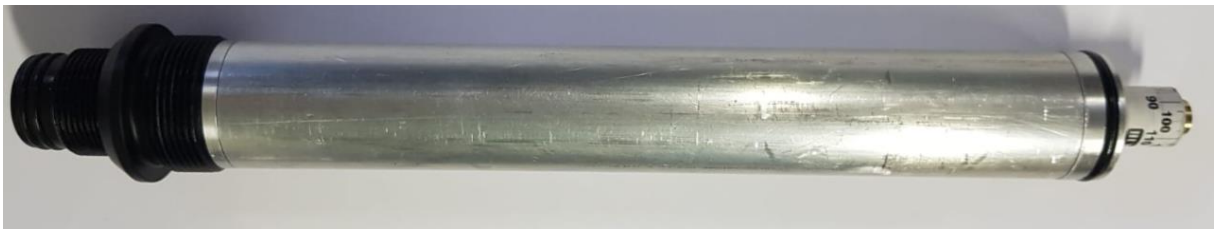
The endplug on the other side of the tube can be unscrewed with a fitting adjustable face hole spanner. Needle nose pliers might work as well!

Now install the new endplug with the foster male fill connection into the front of the tube until fully seated. Use a bit of silicone grease on the o-ring! Handtight will be sufficient!

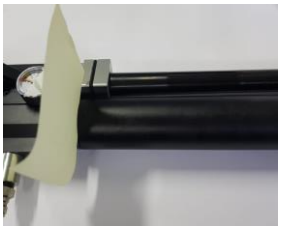
Then continue with removing the o-ring that seals the other endplug of the pressure tube. The o-rings on the regulator will take over that function and removing this o-ring will ensure the regulator can function properly. See picture below. Leave the o-rings on the action block connection just remove the large one on the cylinder side connection.



The endplug of the pressure tube goes onto the regulator adapter what is fitted to the long plenum tube of the regulator. Lightly lubricate the o-rings with silicone grease prior to assembling.



After lightly lubricating the o-rings on the regulator you can now slide in the regulator and screw the endplug back on the cylinder and the action but keep a very tiny crevice for reference pressure to easily let air let air pass past the endplug. Paper width will be sufficient (see picture below)



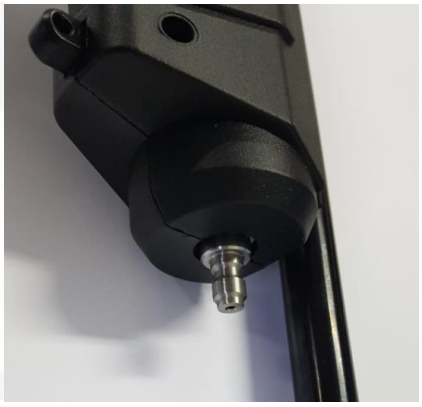
Now you can repressureize the system by using the new foster male connection on the front of the pressure tube and check for leaks.

NOTE:

When the regulator is fitted, the factory pressure gauge will indicate the regulator output pressure and no longer displays the primary fill pressure of your pressure tube. Make sure you use a fill set what will display the filling pressure while filling your rifle and do not exceed the factory advised fill pressure of your rifle.

When filling you rifle for the first time, it might be necessary to cock the gun to relieve hammerforce from the firing valve. Be sure to de-cock after you complete the filling process.

Now fit the action to the stock halves. It might be necessary to enlarge the hole in the stock slightly for the foster to about ½”diameter or 13mm.



If everything fits you can mount all parts and the stock in reverse order.

VERY IMPORTANT NOTE:

Now remove the endcap of the shroud and remove the plastic picatinny rail underneath the shroud as this will block easy access to the foster coupler. When reinserting the screw be sure to either put a ring underneath the screw or shorten it as otherwise the hole in the endcap will get blocked. In our case we opted for a simple thick washer underneath that screw

Be sure to check free passage of the pellet through the shroud endcap!!

And you’re done. Enjoy tuning, adjusting and shooting your regulated Benjamin Bulldog!