

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, aluminumbronze, chrome-moly steel and precision belleville springs, our ultra-compact regulators are high performing.

Huben GK1 regulator set



For adjustment tips, frequently asked questions and a complete list of installation manuals and instructions on how to adjust your Huma-Air regulator <u>https://www.huma-air.com/Fitting-instructions</u>



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/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 <u>read and adjust the</u> <u>regulator pressure</u> and our <u>General Adjustment Tips</u> to set up your rifle perfect.

Before you start, read the full manual. This manual is a 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 300 Bar.
- Do not exceed the factory advised fill pressure of your rifle!

Fitting of the regulator

As standard the package consists of:

- Regulator
- Regulator adapter for Huben GK1
- Endplug with pressure gauge
- Fillprobe



We will first start to vent the GK1. The easiest way to do so is to remove the valve reset spring and fire a shot. To do this first remove the screw and spring of the rearsights using a 2mm hex key. Be sure you do not loose the spring



Now unscrew the two M5 screws that hold the backplate using a 4mm hex key and remove it.



Remove the spring that now shows, but keep the rubber buffer in the hole.



Reinstall the backplate so the valve is not launched across the room!



Now fire a shot. The valve will not reset and the gun will slowly vent till it is completely empty

Unscrew the long M5 screw that holds the grip in place using a 4mm hex key vent



Using a 7mm hex wrench unscrew the front cap or Silencer adapter The barrel shroud can now be slid of.



Using a 4mm hex ket unscrew the trigger assembly, this is under slight tension from the power adjuster.



Unscrew the trigger bar from it's lever using a 2,5mm hex key. This is not absolutely necessary but will ease working on the gun.



Now you can remove the cylinder from the action by turning the cylinder clockwise. It is held in place by a bayonet construction. This should be relatively easy to do so. If you feel resistance double check that the gun is completely empty!! We have encountered a couple of GK1's where the cylinder required a little more force to turn so if you encounter any resistance here, make absolutely sure your gun is empty or otherwise the cylinder can get launched from the gun.





Now unscrew both sides from the tube



Take your parts from their bags and set the regulator to your required pressure. For info on how to adjust regulator pressure follow this link.

https://huma-air.com/app/uploads/2024/01/how-to-adjust-the-regulator-pressure.pdf

We'll discuss the setting we used later .:



Put a light coat of silicone on the regulator orings and insert it in the adapter



The regulator will not be flush with the adapter



Also put some silicone on the adapter orings and the front plug oring







Now screw everything together you can rotate both plugs slightly to ensure proper alignment of the front gauge.



Reinsert the cylinder in the action



And screw on the trigger assembly to the action. The assembly acts as a key to avoid rotation of the cylinder. Be sure they are aligned before tightening the screw



Reinstall the triggerbar



Now we will reinstall the valve reset spring. Do do this make sure the safety is set to fire and pull the trigger wile applying a little force to the spring. You should feel the valve reset and move a little forward.



Now you can screw on the endcap again.

Insert the foster fillplug (this can be done from both sides) and pressurize the system. You'll hear the valve cycle and the magazine will rotate a notch.



The front plug gauge will now show fill pressure and the old pressure gauge will show regulator pressure.



Only thing to do is reinstall the shroud and your done!

Now more on the setting of the regulator. Although the GK1 is already pretty consistent, we were able to achieve a reduction of max spread and standard deviation by 40%. With the regulator set at 145 bar using JSB King we were able to achieve 17 shots from a 250bar fill.

HUMA-AIR.COM

Please shoot slowly, like on the course. Use steady fixed rifle and good lightning.

Rifle:	Pellet:	Weight (gn): 25,40
Huben GK1	jsb king	Weight (gr): 1,65
Regulator set pressure: 145	Fill pressure: 250	





Max spread	9,0
Max speed m/s	242,0
Max power ft/lbs	35,55
Min speed m/s	233,0
Min power ft/lbs	32,95
Average speed	238,8
Average power	34,60
Gem deviation	2,3

5,0
225,0
30,73
220,0
29,38
222,5
30,06
1,4

Please make sure you keep regulator pressure set safely above 100bar to ensure reliable magazine indexing.