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.

1197 Inline regulator By Huma-Air

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

Or go there directly by scanning the QR code

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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.
- Installation and operation is done completely at your own risk.

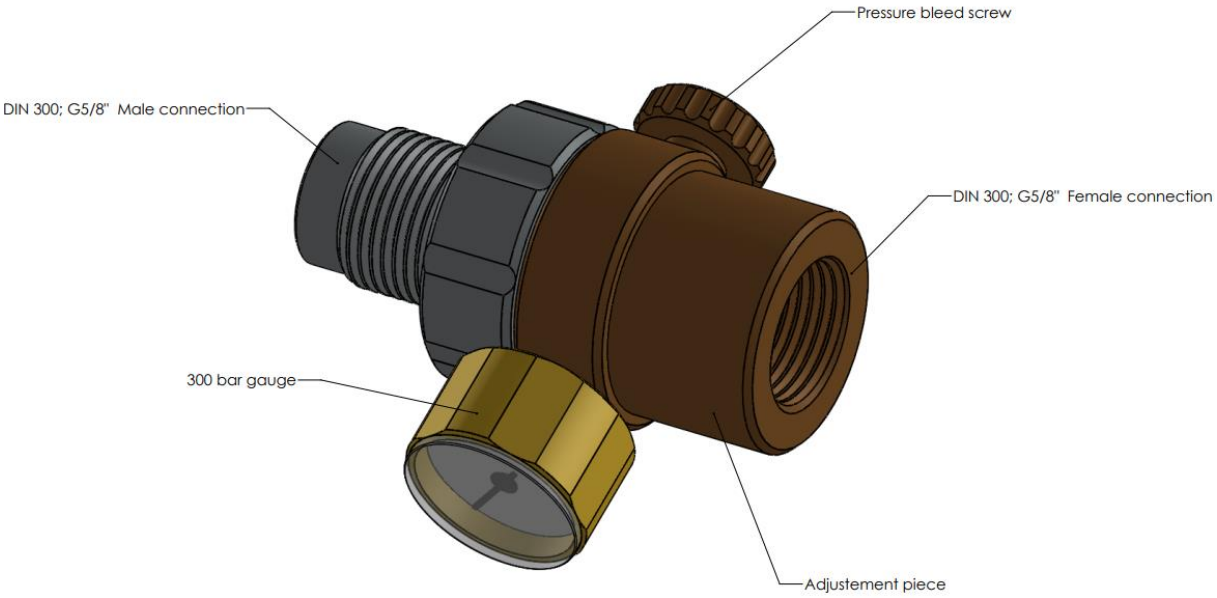
- Your rifle may never be filled higher in pressure as stated in your rifle's manual.
- These regulators are not suitable to use as a CO2 to HPA conversion nor is it suitable to be used with CO2, this could potentially be harmful or lethal to you or bystanders.
- We cannot be held liable for any accidents in relation to this regulator and its use.

Before you start, make sure that the rifle is unloaded, remove the magazine and make absolutely sure no projectile is in the breach.

In this Manual we will explain the function of our 1197 model inline regulator. The 1197 model is meant to be used for tethered shooting or as a stand alone fillset but can also be used in conjunction with your existing fillset that is commenly used to fill your airrifle or pistol. It limits the risk of overfilling your airgun, but please note it is not a replacement for paying attention and using common sense while filling your airrifle. Never leave your rifle unattended and never exceed the maximum recommended working pressure of your airgun.

Features:

The 1197 Inline regulator comes with a set of desirable features that will be discussed below.



- 300 bargauge that shows regulated pressure (Please note that the gauge shown in the manual may differ from the one mounted). The regulator uses standard 1/8”BSP (also known as G1/8”) thread so you can upgrade if you so please.
- DIN 300 male connector to be compatible with the most common bottle connection in the airgun industry. Max input pressure is matched to 300bar cylinders (4350PSI)
- DIN 300 female connector to insert your fillset or one of our DIN 300 adapters for instance; this will let you connect a hose directly to the inline regulator
- Adjustable part to increase pressure. One full turn equals about 100bar in the middle pressure range.
- Pressure bleed screw to depressurize the complete regulator.

Use:

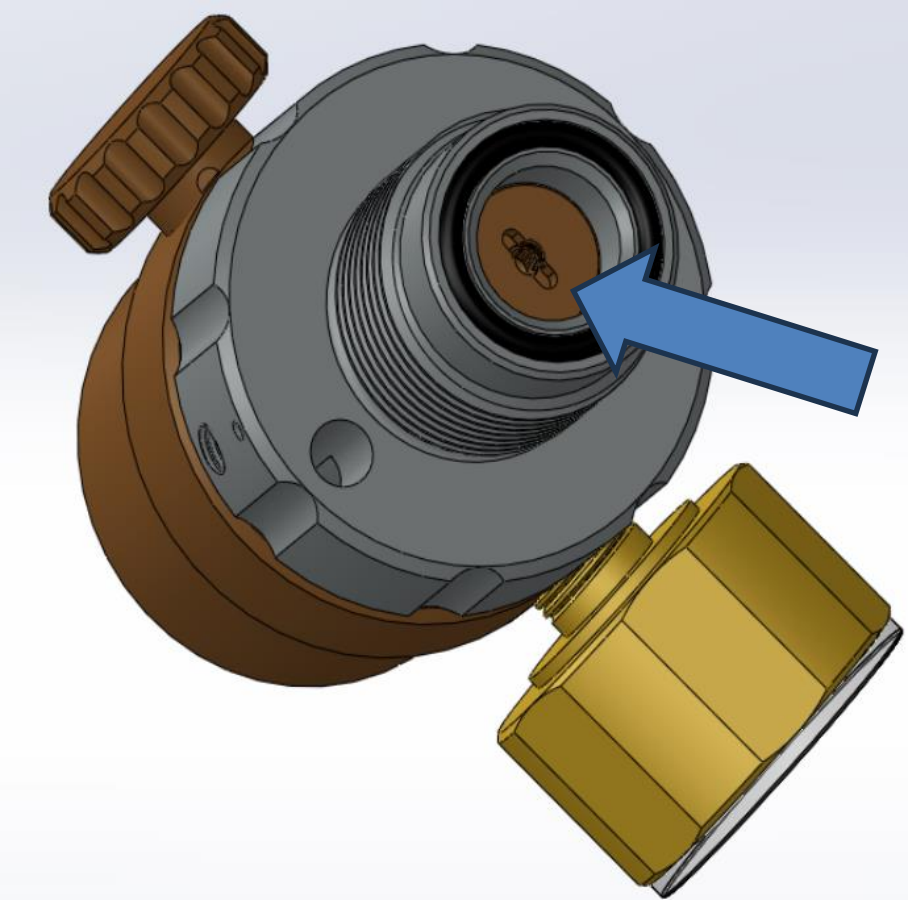
This regulator with integrated fill set can be used on a 200/300 bar scuba bottle The regulator is equipped with a pressure gauge and a bleed screw, so it can be used as a solitary fill set. You can also screw your existing fill set into the regulator.

The gauge gives a pressure indication . Always refer to the pressure gauge on your rifle or external fill set.

Instructions for first use:

As supplied the regulator is set in such a way that it will pass pressure and not block airflow from your bottle, the regulator must be adjusted to the pressure of your liking.

In front of the regulator there is a big bronze set screw indicated with the big arrow below



With this screw you can set the maximum outgoing pressure. Screw the stainless steel part of regulator directly into the valve of the scuba bottle, (If you use an external fill set, it can be screwed into the regulator female DIN 300 connection)

Screw the filling hose into the regulator and close the end of the hose with an end cap, Now turn the brass bodypart of the reg fully open (1 turn) upto its stop. Slowly open the valve of the tank and check the outgoing reg-pressure, If needed, you can adjust the working pressure by adjusting the big reg set screw. Close the bottle's valve and de-pressurize the reg before you remove it from the bottle. Adjust the setscrew according to the tabel below and repeat the steps above When finished,

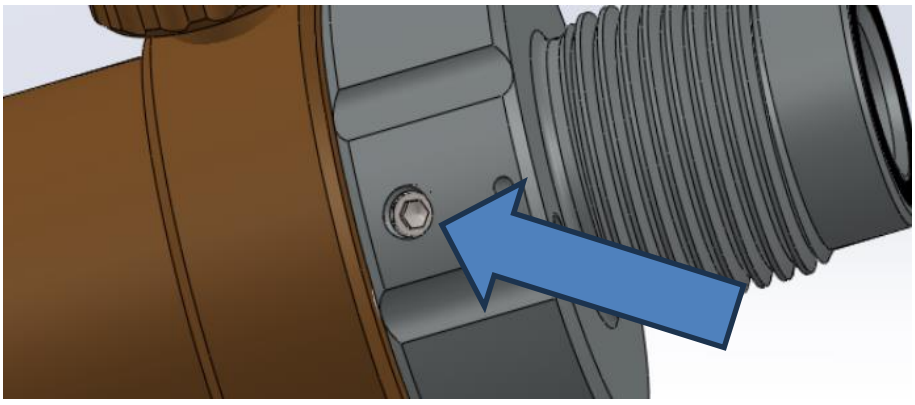
the regulator is ready for use. Please note adjusting the regulator with the Bronze adjustment part can only be done upwards. Never lower pressure while the regulator is pressurized as this will damage the valvedisc

Using and adjusting the regulator:

Screw the reg directly into the valve of the scuba bottle. Turn the brass body part of the regulator fully in (1 turn clockwise) till the endstop. (If you use an external fill set, it can be screwed into the regulator) Screw the filling hose into the regulator and close the end of the hose with an end cap, Slowly open the valve of the scuba and check the outgoing reg-pressure, You can now raise outgoing pressure by turning the brass body part counter clockwise to the preferred pressure When you have adjusted the regulator to your wishes you can depressurize the fill hose, remove the endcap and fill your pressure tube. Never pressurize the regulator without having the fill hose attached. This can cause seriously injury or death.

NOTE: If you want to lower the regulator pressure during use, always open up the de-pressurize screw of the regulator simultainiously with turning the brass bodypart clockwise, so the pressure can be reduced by releasing air. Lowering the pressure without de-pressurizing will cause damage to your regulator Raising the pressure can been done during use by turning the bronze part counter clockwise (1 turn till the endstop)

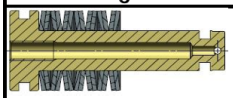
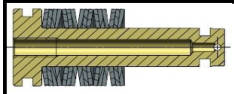
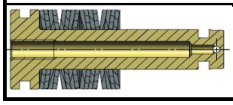
In the collar of the stainless steel part of the regulator there is a M4 grub screw. You can use this bolt to adjust the force needed to turn the brass body part for the pressure setting.



On the side of the regulator there is a small M4 grubscrew visible. Use this to set the tension to your liking.

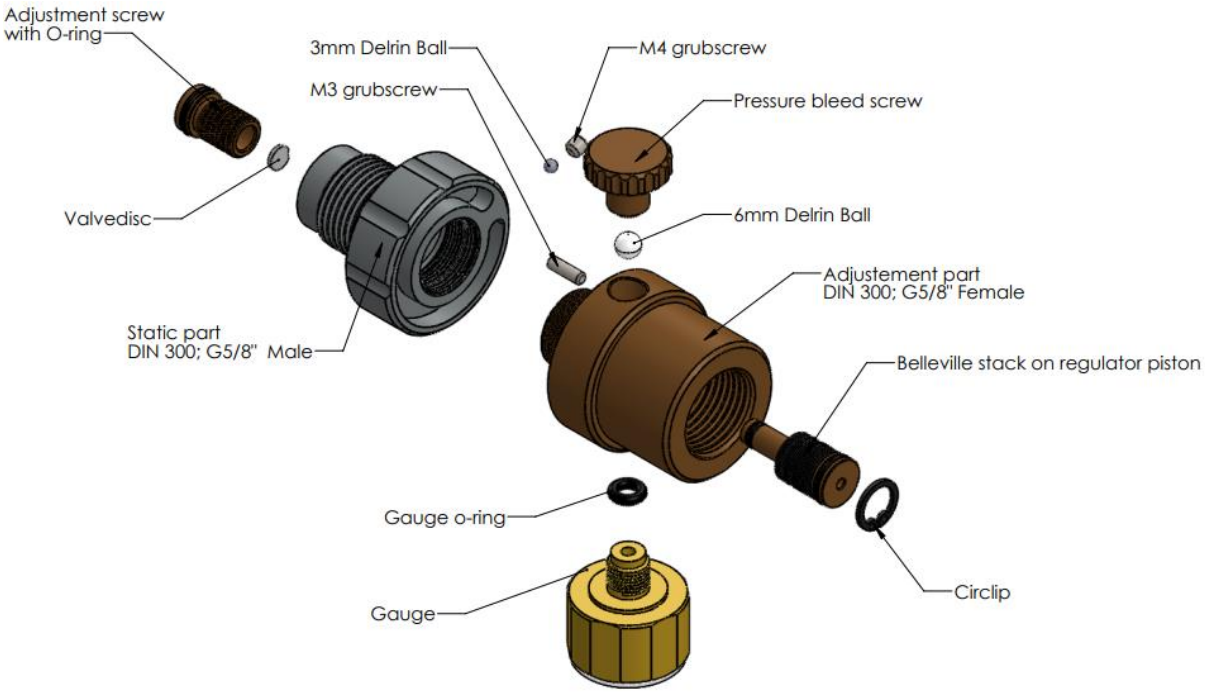
The regulator comes pre-set in the medium setting, with max outgoing pressure of 200 bar This setting is the most common setting for average use. If needed you can re-adjust the spring setting to "low or high" You can change the spring stack in the reg by removing the C-clip visible in the DIN 300 female side of the regulator, Then use an M3 bolt to pull out the reg piston, which holds the spring stack, Remove the upper o-ring from the piston before changing the spring stack, Do not forget the white valve disk on top of the reg piston when re-assembling the reg.

If the position of the pressure gauge is not right when the reg is screwed into the bottle, you can swap the the gauge and bleed screw they are interchangeable with each other. Remember to move the gauge gauge O ring if swapping them over. You need to de-pressurize the regulator to do this

Base setting*	Maximum outgoing pressure	Spring stacking	Pressure setting (clockwise)
 Low	Max. 125 bar	7 x 2 pc. |(())(())(())((	1/4 turn = 12,5 bar decrease
 Med.	Max 200 bar	1x4 + 4x3 pc. |((((()))((()))(((	1/4 turn = 25 bar decrease
 High	Max 250 bar	4 x 4 pc |))))((((())))((((	1/4 turn = 28 bar decrease

You will get the best regulating behavior if your preferred pressure is close to, but below maximum working pressure of the chosen base setting. (if you shoot at 100 bar, chose the low setting. If 180 is desired then chose medium setting) If you have any questions, do not hesitate to contact us.

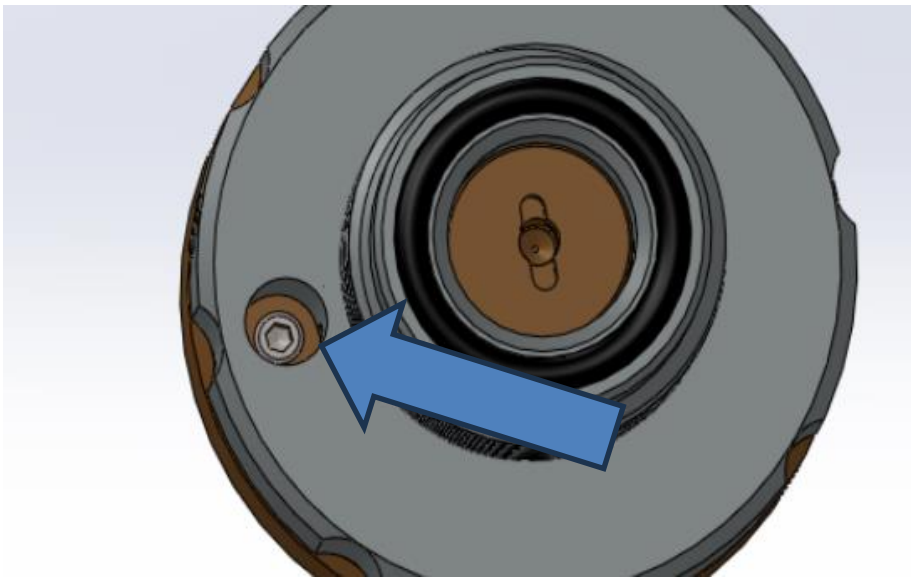
Construction/service and maintenance:



- This regulator is a low maintenance unit but for reference we will shortly discuss it's construction and basic maintenance.
- The Belleville washers should be stacked as follows. Depicted in the table above.
- The valve disc seals the inlet- from outlet pressure. If you notice irregular behavior it might be time to exchange the valve disc.
- A complete rebuild kit with all appropriate o-rings and the valve disc is available to reseal the complete regulator.

- Before starting the rebuild be sure to accurately measure the depth of the internal adjustment screw, do this measurement without the face oring. The Depth of the adjustment screw should be around 8mm for the middle pressure Belleville stack, but this is only getting you in the ballpark. That is why it is a accurate measurement on your regulator is important

- Although in most case this is not needed for regular maintenance, to separate the static and adjustable part you will have to remove the M3 grubscrew that acts as a stop pin. You will find it by looking in the hole adjacent the DIN 300 male connector and turning the static and adjustable part until you see the screw



- The adjustable part and static part threads should be lubricated with a little ceramic grease. Apply it with a little brush making sure it will not get on any of the o-rings.
- Before reinstalling the rest of the components we recommend lubricating them with a quality silicone lubricant like the HuMa-Air Airgun Lube Silicone Grease.

Enjoy your 1197 Inline regulator from HuMa-Air