

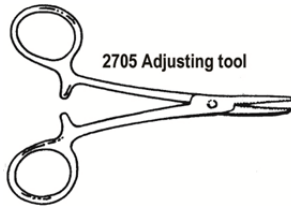
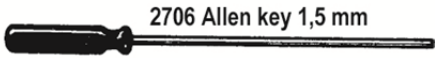
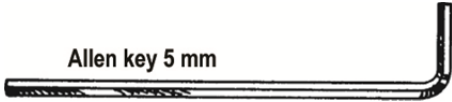
### **Field Repair Instructions Jetstream/Xstream – Intermediate pressure and cracking pressure**

If repairs have to be performed in an environment where test equipment recommended in the service manual isn't available, the following equipment and methods can be used when setting the intermediate pressure of the 1<sup>st</sup> stage and inhalation cracking pressure of the 2<sup>nd</sup> stage.

#### **Equipment.**

The following equipment is needed:

- A tank of compressed air, with a minimum pressure of 180 bar / 2610 psi.
- Adjustment tool with Poseidon article number 2705.
- Allen Key 1,5 mm with Poseidon article number 2706.
- Allen key 5 mm.
- A low pressure gauge (0-10 bar / 0 – 145 psi minimum) that can be attached to a 1<sup>st</sup> stage low pressure port.
- A bucket of water, at least 4 inches deep

Article number	Description	Picture
2705	Adjustment tool.	
2706	Allen key, 1,5 mm	
N/A	Allen key 5 mm.	

#### **Setting intermediate pressure on the 1<sup>st</sup> stage.**

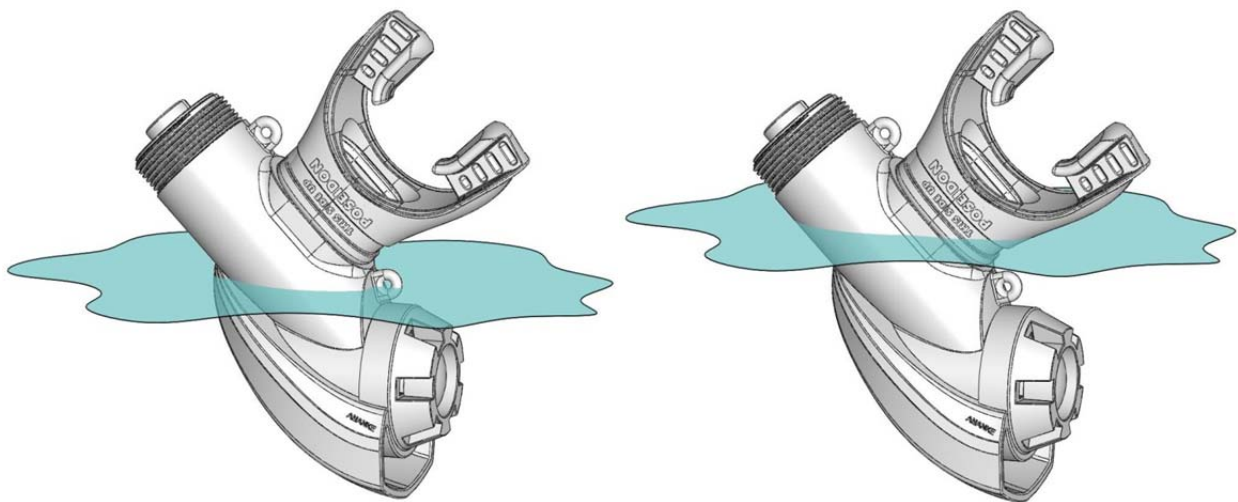
- Attach the 1<sup>st</sup> stage to the tank.
- Attach the low pressure gauge to a low pressure port of the 1<sup>st</sup> stage.
- Attach a low pressure hose and 2<sup>nd</sup> stage to another low pressure port.
- Make sure all other ports are blinded.
- Open the tank valve and pressurize the regulator.
- Check the low pressure gauge to see what the intermediate pressure is.
- If needed, use the 5 mm Allen key to turn the adjustment screw of the 1<sup>st</sup> stage so that the intermediate pressure reaches 8,5 bar / 123 psi. Purge the 2<sup>nd</sup> stage repeatedly during this process.
- When an intermediate pressure of 8,5 bar / 123 psi has been set, check the low pressure gauge to make sure the pressure isn't increasing or decreasing.
- If the intermediate pressure remains stable at 8,5 bar / 123 psi, the intermediate pressure has been set.



### Setting the cracking pressure on the 2<sup>nd</sup> stage.

When the correct intermediate pressure has been set, it's time to set the cracking pressure of the 2<sup>nd</sup> stage.

- Make sure the +/- switch on the 2<sup>nd</sup> stage is set to the + position. (if a Jetstream/Oden 2<sup>nd</sup> stage)
- Hold the 2<sup>nd</sup> stage in such position that the large diaphragm is horizontal and facing downwards, towards the bottom of the bucket.
- Slowly lower the 2<sup>nd</sup> stage in this position, in to the bucket of water until you hear a sizzling sound from the low pressure valve, i.e. the 2<sup>nd</sup> stage low pressure valve opens.
- Measure how deep below the surface the diaphragm is. If it is between 30 – 40 mm / 1.18 – 1.57 inches below the surface, the cracking pressure is within allowed parameters.
- If the depth is bigger or smaller than 30 – 40 mm / 1.18 – 1.57 inches, the position of the servo valve needs to be re-adjusted and the cracking pressure tested again.



immerse the 2nd stage as shown in the illustration. A sizzling sound from the servo-valve opening shall occur within the two markings.

### How to re-adjust the position of the servo valve.

- Loosen the locking screw located on the valve house nut using the Allen key 1.5 mm. The locking screw is accessible through the mouthpiece hole.
- Use the Adjustment tool to turn the low pressure valve tube to move the servo valve closer to the diaphragm (decreasing the cracking pressure) or further away from the diaphragm (increasing the cracking pressure).
- When the desired position has been set, tighten the locking screw and test the 2<sup>nd</sup> stage cracking pressure as per above method.
- Repeat until correct cracking pressure has been set.

If repairs and/or re-adjustments have been performed in accordance with these instructions, it's recommended that the regulator is re-checked in a controlled environment, with the proper testing equipment, as soon as this is possible.