

Scuba Instruments

Regulator Break-in Fixture



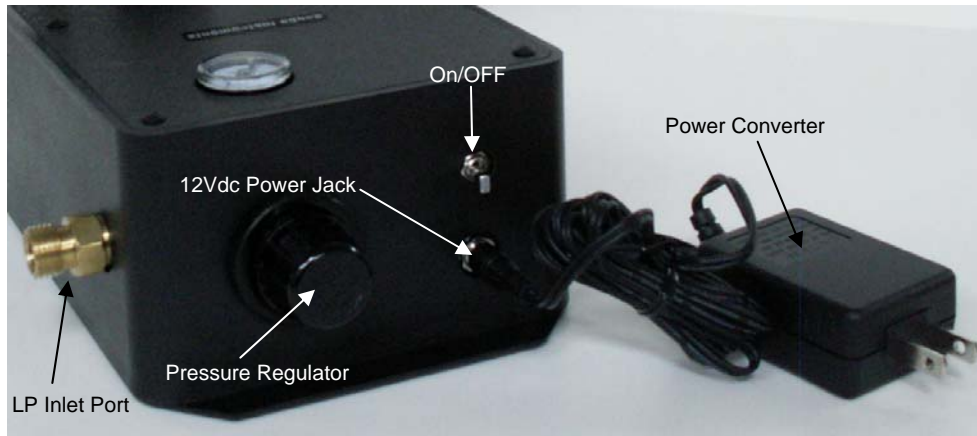
After rebuilding the first and second stages of a regulator, final regulator adjustments cannot be effectively completed until both first stage HP seat and second stage poppet have taken a set. The Scuba Instruments **Regulator Break-In Fixture** is designed to set newly replaced poppets and HP seats by automatically cycling the regulator.

Fixture Set-up

- Select a location to place the fixture, preferably near a high pressure (3000 psi) air source for the regulator and a secondary low pressure (120 psi) air source for the operation of the unit. The fixture may be placed on the bench top or wall mounted as shown below.

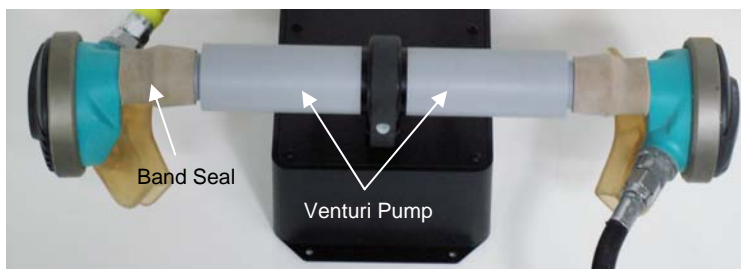


- Connect the 12 Vdc power converter to the power jack on the fixture and plug the converter into a 100 -240 Vac, 50-60 Hz line receptacle (Operation in foreign countries may require an AC plug adapter, not supplied).
- Connect a low pressure supply (80 – 150 psi) to the supply inlet port of the fixture. This low pressure can be generated by a low pressure port on a diving regulator, a pressure reducing regulator, or a standard low pressure air compressor. Use compressed air only! Not for Oxygen or enriched air.

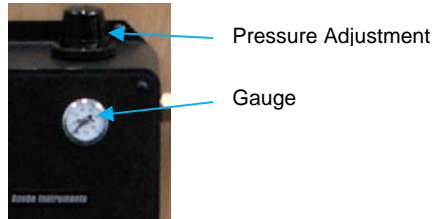


Operation

- Connect the second stage of the regulator to the band seal of the venturi pump as shown below. If there are two second stages, the fixture will accommodate both.



- Adjust the pressure regulator on the fixture so the gauge reads between 30 to 60 psi.
- Turn the power switch on to begin cycling the regulator.



Note:

It may be helpful to connect a test gauge to the IP port of the diving regulator to detect second stage actuation during the cycling. It may be necessary to adjust the pressure on the fixture to ensure second stage actuation.

The time duration for Poppet and HP seat break-in may vary between regulator types and can range from 1 to 2 minutes for an 80% set.

Specifications

Pump Operation Basis..... Electro Pneumatic
 Fixture Air Supply Requirements 2 CFM at 60 psig (Filtered and Dry)
 Regulator Air Consumption.....0.6 CFM per second stage
 Vacuum at reference conditions* 10" H₂O
 Power Supply.....12Vdc,1000 mA through 100-240 VAC, 50-60 Hz Power Converter
 Cycle Rate.....110-130 CPM per second stage

Note: *Open channel, blocked suction with 6 CFM airflow at 60 psig supply pressure.

Specifications are subject to change without notice.
 Provisional Utility Patent applied for.