

Assembly and Use of 0 - 6000 PSIG Regulator

American Airworks offers a 0 - 6000 PSIG regulator that allows the pressure in the PosiChek3 manifold to be adjusted during testing.

This Instruction sheet covers the assembly and Insertion of the 0-6000 PSIG regulator between the air source and PosiChek3 manifold. This document is intended for professionals with a great deal of experience with SCBA maintenance and assumes reasonable proficiency with the PosiChek3. PosiChek3 software requires a minimum testing pressure of 3200 PSIG for high pressure (4500PSI) SCBA and 1600 PSIG for low pressure 2216 (PSI) SCBA. Using the Pressure Reducing regulator and Valve Assembly increases the number of tests that can be done using one cylinder or air.

Additionally, the Pressure Reducing Regulator and Valve Assembly is required for testing some redundant alarms and HUDs.

Assembly

The 0 - 6000 PSIG regulator must be positioned at the air source. If any additional piping is needed to complete the connection, it should be located between the air source and the 6000 PSIG regulator, **NOT** between the regulator and SCBA. The regulator must be installed with the appropriate CGA 347 inlet can mate either to a low pressure or high pressure cylinder. The valve is positioned on the outlet side of the regulator.

The assembly come with a CGA-347 outlet. If you are testing low pressure (2216/3000 PSI) SCBA, then you need to purchase a 35-0475 low pressure adapter. Attach the proper PosiChek3 supply manifold "T" assembly hand wheel onto the CGA outlet from your regulator. The SCBA being tested is attached to the "T" assembly outlet. The hand wheel at the long end of the manifold is attached to the front of the PosiChek3.



Testing the redundant alarm in an SCBA may be difficult because the redundant and primary alarms operate simultaneously. The primary alarm in the SCBA is mechanical and draws a relatively large amount of air from the manifold while it is active. With some alrams, the rate at which the air in the manifold is exhausted makes it virtually impossible to acknowledge the redundant alarm before the pass/fail window is missed. The 0-6000 PSIG regulator allows the pressure in the manifold to be maintained and adjusted while testing the redundant alarm.

Use

1. Be sure to choose the model in the software that matches the SCBA that is being tested. You will be given an opportunity to indicate whether the redundant alarm test should be performed before the primary alarm test is started.

2. The redundant alarm test will be performed after the primary alarm test is completed.

3. The pressure in the manifold will be quite low at this point. The software will then instruct you to dial the (0-6000 PSIG) regulator down to a level that is close to the alarm activation point. Don't worry about dialing the regulator to a precise point. Further pressure adjustments will be made in the next step. Click OK or hit the Enter Key when you are ready to continue.

4. The software will instruct you to pressurize the system. Open the valve. **THE VALVE SHOULD RE-MAIN OPEN FROM THIS POINT UNTIL THE RE-DUNDANT ALARM TEST IS COMPLETED**. If you dialed the regulator down a little too much in the previous step, the software will show you a pressurization screen that will help you pressurize the manifold to the needed pressure (slightly above the alarm point). Do this by slowly dialing the regulator back up until you see high enough pressure on the pressurization screen.

5. **WITH THE AIR SOURCE OPEN**, the software will instruct you to slowly dial the pressure down until the redundant alarm activates. Click OK or hit Enter when you hear the redundant alarm.

Posichek3 software requires a minimum testing pressure of 3200 PSIG for high pressure (4500 PSI) SCBA and 1600 PSIG for low pressure 2216 (PSI) SCBA. For alarm tests, the pressure required is slightly above the alarm activation pressure, which is generally around 1100 PSIG for high pressure SCBA and around 550 PSIG for low pressure SCBA.

6. If the pressure is within the limits for the redundant alarm, the test will pass and the software will continue to the next test. If the pressure is too high, the test will fail and the software will continue to the next test. If you overshoot and the pressure is too low, the software will give you another chance to pass the test.

7. The software will instruct you to dial the regulator back up until the redundant alarm stops. Be sure to dial it slowly so you will not overshoot again. Click OK or press Enter when the redundant alarm stops. If the pressure is within the limits, the test will pass and the software will continue to the next test. If it is still too low, the test will fail. If you overshoot again and the pressure is too high, the software will give you one last chance.

8. The software will instruct you to dial the regulator back down until the redundant alarm starts. You should be quite close to the activation point, so dial **SLOWLY**. Click OK or press Enter when the redundant alarm starts. If the pressure is within the limits, the test will pass. Otherwise it will fail.

