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TECHNICAL BULLETIN

TECHNICAL BULLETIN #129

SUBJECT: Torque Specifications for SCBA Cylinder and Valve Assemblies, Installation Instructions. (This Technical Bulletin supercedes TB 93.)

DATE: March 7, 2006

PRODUCTS AFFECTED: Survivair® SCBA Cylinder Valves, Part Numbers 921040, 921045, 921050, 921055, 961165, 921065, 921000, 921070, 920312, 920322, and 964833.

This Technical Bulletin provides information regarding the proper procedures necessary to install a Survivair Valve Assembly into an SCBA cylinder.

Tools necessary to perform this installation procedure:

- 0 – 175 ft-lb. torque wrench with an accuracy of no more than +/- 4 ft lb. (A variation of no more than 4%)
- 1-1/4 in Crows Foot
- Cylinder Vise (use padding to protect the cylinder surfaces)

Valves must be re-installed to the proper torque under all conditions, such as:

- The cylinder has been hydrostatically tested.
- The cylinder valve has been removed for overhaul, maintenance or repairs of any kind.
- The cylinder valve appears loose.
- The cylinder valve o-ring has or needs to be replaced.



WARNING: Be sure to remove all lubricants from the cylinder valve, the o-ring seal area at the top of the cylinder, the cylinder valve threads, including the face of the cylinder valve that contacts the top of the cylinder. Remove any excess solvents or cleaning agents and allow the valve to thoroughly dry before re-installing into the cylinder. Failure to remove all lubricants, solvent, or agents may lead to valve failure, which may cause serious injury or death.

Follow these steps when torquing the valve into the cylinder.



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- Place the cylinder into a suitable holding fixture.



WARNING: Do not over-tighten the cylinder into the holding fixture. Damage to the cylinder may result. If using a chain vise or other similar device or tools, use padding to prevent cylinder damage. Damage to the cylinder may lead to serious injury or death.

- Lightly lubricate the correct, new cylinder valve o-ring using Christolube, P/N: 910699, and install the o-ring on the valve. Reference a current Survivair Parts Price book for the correct o-ring part number.
- Install the valve into the cylinder, clockwise.



WARNING: Over-tightening the valves may cause them to later rupture, which could cause serious injury or death.

- Use a 1-1/4" crow's foot adapter and a torque wrench set to 70 ft-lb. Torque the valve into the cylinder.
- Remove the cylinder from the holding fixture.

Inspection and Leak Test

- Pressurize the cylinder to approximately 200 psig using Grade D breathing air.
- Close the cylinder valve and disconnect from the air source.
- Check for leaks with a liquid leak detector. No leakage is allowed.
- Open the valve slowly to vent a small amount of air, close the valve and check for leaks. No leakage is allowed.
- Repeat this test at 1000 psig and at full cylinder pressure.
- If leakage is detected, Purge all air from the cylinder, remove the cylinder valve, and check for damage to the o-ring or scratches on the valve or cylinder sealing surfaces.
- If no scratches are found, re-assemble using a new o-ring and following the above installation procedure.
- If damage or scratches are found on the sealing surfaces of the valve, it must be replaced.
- If damage or scratches are found on the sealing surfaces of the cylinder, it must be replaced.

For further information, contact Survivair Technical Services @ (800) 394-0410.

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