

510 Inspection and Repair of Self Contained Breathing Apparatus and Air Cylinders

Purpose:

To provide for a minimum standard for the inspection of Self Contained Breathing Apparatus (S.C.B.A.) and Air Cylinders. Also to outline the procedure for any units that are in need of repair.

Scope:

This policy is applicable to all S.C.B.A. and air cylinders that are in use in the Florence Township Fire Department.

Procedure:

All personnel are responsible for the inspection of their S.C.B.A. before donning and at the completion of their use.

The Chief, through the use of the career staff, shall be responsible for the weekly inspection of the department's S.C.B.A. equipment.

All S.C.B.A. equipment shall be inspected weekly and a report of the inspection shall be completed on an approved self-contained breathing apparatus inspection log.

The Following Procedures Shall be followed for weekly inspections:

The following procedure shall be used when a respirator is received and for weekly inspection of the respirator. A respirator not routinely used, but kept for emergency use, shall be inspected at least weekly. Cylinder pressures shall be inspected at least weekly. All respirators should be inspected after each use. **If any malfunction is noted, remove the respirator from service and tag for repair by authorized personnel.**

Warning:

FOLLOW THE REGULATOR OPERATIONAL INSPECTION PROCEDURE EXACTLY. IF THE VIBRALERT ALARM DOES NOT ACTUATE, THE PURGE DOES NOT ACTUATE, THE DONNING SWITCH DOES NOT OPERATE AS DESCRIBED, OR ANY OTHER OPERATIONAL MALFUNCTION IS NOTED, DO NOT USE THE RESPIRATOR.

1. Visually inspect the complete respirator for worn or aging rubber parts, worn or frayed harness webbing, or damaged components.
2. Check the latest cylinder hydrostatic test date to ensure it is current.
3. Visually inspect cylinder for dents or gouges in fiberglass wrapping. Cylinders which show exposure to high heat or flame, such as paint turned brown or black, decals charred or missing, gauge lens melted or elastomeric bumper distorted, **shall** be removed from service and emptied of compressed air.

Warning:

CYLINDERS WHICH EXHIBIT THESE CONDITIONS MAY SUDDENLY LEAK OR RUPTURE IF CHARGED WITH COMPRESSED AIR.

4. Check cylinder pressure gauge for "FULL" indication. If cylinder pressure is less than "FULL", replace with a fully charged cylinder.
5. Check to ensure reducer hose coupling is hand tightened to the cylinder outlet.

CAUTION

WRENCHES SHALL NOT BE USED, AS DAMAGE PARTICULARLY TO THE COUPLING GASKET MAY RESULT.

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6. Check that the breathing regulator purge valve (red Knob on regulator) is closed(full clockwise and pointer on knob upward).
7. Fully depress the center of the donning switch or air saver switch on the top of the regulator and release.
8. Slowly open the cylinder valve fully by rotating knob counterclockwise. Vibralert alarm shall actuate and then stop. There shall be no airflow from the facepiece.
9. Don the facepiece or hold the facepiece to the face to effect a good seal.
10. Inhale sharply to automatically start the flow of air
11. Breathe normally from the facepiece to ensure proper operation.
12. Remove facepiece from face. Air shall freely flow from the facepiece.
13. Fully depress the center of the donning switch or air saver switch on the top of the regulator and release. The flow or air from the facepiece shall stop.
14. Rotate purge valve ½ turn counterclockwise (pointer on knob downward). Air shall freely flow from regulator.
15. Rotate purge valve ½ turn clockwise to full closed position (pointer on knob upward). Air flow from regulator shall stop.
16. Push in and rotate cylinder valve knob clockwise to close. When cylinder valve is fully closed, open purge valve slightly to vent residual air pressure from the system. The vibralert shall actuate as the pressure drops below 1/4 mark on remote gauge. When airflow stops, return purge valve to the fully closed position (pointer on knob upward).

Once each Quarter the air in all cylinders and the cascade system will be bled off and refilled with new air to maintain with current niosh standards.

When any units are found to be unserviceable they will be removed from service and tagged so that the unit is marked clearly that it is not to be used.

Once any unit is removed from service the station officer will complete a maintenance request form.

Administrative Procedures for Authorized S.C.B.A. repair personnel:

Once any S.C.B.A. or Cylinder has been repaired the authorized repair person shall complete a repair form (DF-SCBARF-02) that will include the Department number, serial number, what the problem was and will list the parts that were replaced and certify that the unit was tested according to manufacture specifications.

The forms listed in this policy will be filed with the Chief to be kept on permanent record.

