Respirators – Respirator Care Fact Sheets

WHAT IS AN EXAMPLE OF A CHECKLIST FOR CARING FOR MY RESPIRATOR?

- Checklist for care of respirators
- Inspect the respirator before and after each use and during cleaning.
- Inspect equipment designated for “emergency use” at least monthly, and before and after each use.
- Replace all parts that are cracked, torn, broken, missing or worn.
- Follow the manufacturer’s instructions and consult CSA Standard Z94.4-11 (R2016) Selection, Use and Care of Respirators, for information on the care, maintenance, and storage of respirators.

Facepiece

- Ensure that no holes or tears are present.
- Inspect for cracked, scratched or loose-fitting lenses and missing gaskets.
- Ensure that the metal nose clip forms easily over the bridge of the nose on disposable respirators.
- Make sure the facepiece edges are not rippled or distorted.
- For a full facepiece respirator, check for missing mounting clips.

Head strap/harness

- Check webbing for breaks.
- Look for deterioration of elasticity or fraying edges.
- Test excessively worn head harness.

Inhalation and exhalation valves

- Ensure the valve and valve seat are free of dust particles or dirt that may cause a poor seal or reduce efficiency.
- Replace any missing or defective valve covers.

Filter elements

- Ensure that the filter and mask are certified for use together.
- Check the filter to see that they are approved for the hazard.
- Inspect both the filter threads and facepiece threads for wear, make sure they are screwed together properly, and there is no cross threading.
- Check the filter housing for cracks or dents.
- Check the end of service life indicator for gas masks. Check the expiration date.

Air supply system

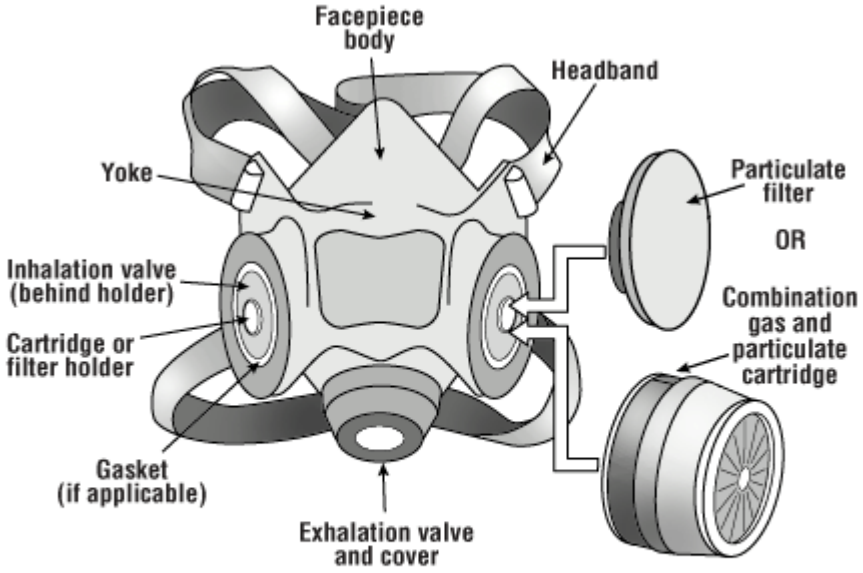
- Inspect the air-supply hose and end-fitting attachments for breaks, cracks, or kinks.
- Test the tightness of connections.
- Ensure the proper operation and condition of all regulators, valves or other airflow device
- Monitor the operation of air-purifying elements and carbon monoxide or high-temperature alarms.
- Check seams in suit or blouse for rips and tears.
- Ensure that protective screens are intact and fit correctly over facepiece (abrasive blasting hoods and blouses).

Respiratory battery pack

- Follow the manufacturer’s instructions for charging/discharging.
- Before recharging nickel-cadmium (NiCad) batteries, fully discharge them with a discharger designed for those batteries. If this is not done regularly, the NiCad batteries may not provide power for as long as the specifications state.
- Ensure that the batteries are fully charged before using them.

Repair, cleaning and storage

- Do not clean with solvents.
- Follow the manufacturer’s instructions.
- Wash with a mild dish detergent or a combination of detergent and disinfectant. Use a brush and warm water (49-60ºC or 120-140ºF).
- Rinse with clean water, or rinse once with a disinfectant and once with clean water. The clean water rinse removes excess detergent or disinfectant that can cause skin irritation or dermatitis.
- Dry on a rack or clean surface. Position the respirator so that the facepiece rubber will not “set” crookedly as it dries.
- Store the respirator at the end of each shift to protect it from dust, sunlight, heat, extreme cold, excessive moisture, and chemicals.
- Clean and disinfect respirators after each use, where appropriate.
- Permit only trained and qualified personnel to repair respirators.
- Do not mix parts from different manufacturers.
- Record all repairs and inspections.
- Remove dirt.
- Check for distortion caused by improper storage.



The basic parts of a typical half-facepiece respirator are shown.
Two common options are illustrated on the right.
Both sides of the respirator would take the same type of filter or cartridge.

Figure 1 – Sample Half-face Respirator

WHAT IS AN EXAMPLE OF A CHECKLIST FOR CARING FOR MY SELF-CONTAINED BREATHING APPARATUS (SCBA)?

Checklist for self-contained breathing apparatus (SCBA)

- Inspect the SCBA unit before each use. Test and clean after each use.
- Inspect the equipment designated for “emergency use” at least monthly and after each use.
- Follow the manufacturer’s instructions and CSA Standard Z94.4-11 (R2016) for care and maintenance.
- Permit only trained, manufacturer-certified personnel to maintain SCBA.
- Do not mix parts from different manufacturers.
- Maintain a complete record for each SCBA facepiece and cylinder.

Facepiece

- Disconnect the facepiece from the breathing apparatus. Wash alone in warm (49-60 ºC or 120-140 ºF) soapy water using a mild dish detergent.
- Rinse the water through the facepiece by placing the palm of the hand over the breathing tube connector on the exhalation-valve body.
- Remove excess water with a paper towel or lint-free cloth.
- Allow to air dry.
- Sanitize according to the manufacturer’s instructions.
- Check for tears or cracks in the rubber.
- Check head strap for deterioration.
- Examine lenses for cracks, excessive scratching or other deformities.
- Check rings and clamps securing the lens for bends or bulges in the metal.
- Check the exhalation valve to ensure that it is properly located and that the valve cover is in place.
- Test the exhalation valve. Block the air intake opening and exhale gently. If the exhalation valve is not working properly, a heavy blow-by will be felt at the temples. Inhale and a partial vacuum will be formed.
- Do not mix demand and pressure-demand facepieces and regulators.

Regulator

- Check the regulator, breathing-tube threads, pressure gauge, and bypass and mainline valves for impact damage.
- Store with the cylinder valve completely closed.
- Bleed off air remaining in the regulator after each use, following manufacturer’s instructions.

Breathing tube

- Stretch the breathing tube and check for cracks, tears and punctures.
- Check gaskets.
- Check clamps and rings to ensure that they are tight, properly located, not dented and not excessively corroded.
- Wash the breathing tube separately and allow to air dry. If it is permanently attached to the facepiece, allow the breathing tube to dry for several days before using.

High-pressure hose

- Check the hose for cuts, bubbles and abrasions.
- Check the fitting between the high-pressure hose and the regulator for damage.

Audible alarm

- Check the audible alarm for damage.
- Clean bells or whistles.

- Ensure that the alarm is working. If the alarm does not go off when the pressure reaches 20-25% of service time, the unit is defective. Remove the unit from service.

Backpack

- Inspect the straps of the backpack for excessive wear, broken stitching, and damaged or missing hardware.

Cylinder

- Ensure cylinders are hydrostatically tested as set out in CSA Standard Z94.4-11 (R2016), Selection, Use and Care of Respirators.
- Inspect for cuts or gouges that can cause the unraveling of the composite fibers of the cylinder overwrap.
- Check unwrapped cylinders for impact damage.
- Check for evidence of exposure to heat. Look for discoloured paint or melted gauge lenses.
- Ensure air meets air quality set out in CSA Standard Z180.1-13, Compressed Breathing Air and Systems.

Cleaning the rest of the unit

- Remove backpack, cylinder and regulator assembly.
- Clean with water, or soapy water.
- Wipe the regulator, high-pressure hose, audible alarm, air cylinder, backpack and harness with a damp cloth.
- Dry with a cloth.