



Respirator Inspection Procedure


EHSS-Phos Program – Respiratory Protection, Appendix J

Respirator users must check their respirator before and after each use. Follow the below directions based on the respirator type.

1 Air Purifying Respirators

1.1 Examine face piece for:

- Cracks, tears, holes, or distortion from improper storage
- Cracked or badly scratched lens in full face piece models
- Incorrectly mounted full-face piece lens or broken or missing mounting clips
- Cracked or broken air purifying element holders (cartridge or filter holders), badly worn threads, or missing gaskets (if required)
- Inflexibility

 **Note:** Stretch and massage to restore flexibility. If face piece is still inflexible, place unit out of service and replace

1.2 Examine the head straps or head harness for:

- Breaks
- Loss of elasticity (flexibility)
- Broken or malfunctioning buckles, and attachments
- Excessively worn serrations or knobs (hold unit tight) on head harness that permit slippage

1.3 Examine the exhalation valve (after removing cover) for:

- Foreign material, such as detergent residue, dust particles, or human hair under the valve seat
- Cracks, tears, or distortion in the valve material
- Improper insertion of the valve body in the face piece
- Missing or defective valve cover
- Improper installation of the valve in the valve body

1.4 Examine air-purifying elements for:

- Incorrect cartridge, canister or filter for the hazard
- Incorrect installation, loose connections, missing or worn gaskets, or cross threaded holder
- Expired shelf-life date on cartridge or canister
- Cracks or dents in outside case of filter, cartridge or canister
- Evidence of prior use of sorbent cartridge or canister, indicated by absence of sealing material, tape, foil over inlet

1.5 if the device has a corrugated breathing tube, examine it for:

- Broken or missing end connectors, gaskets, or O-rings



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- Missing or loose hose clamps
- Deterioration, determined by stretching the tube and looking for cracks

2 Supplied Air Respirators (SAR) including SCBA

2.1 Examine the tight-fitting face piece (if exists) as per the air-purifying inspection procedure

 **Note:** Skip the inspection steps for air-purifying elements (1.4)

2.2 Examine hood, helmet, blouse, or full suit for the following:

- Hood, blouse, or full suite:
 - Rips, tears and seam integrity
- Protective headgear, if any:
 - General condition with emphasis on the suspension inside the headgear
- Protective face shield, if any:
 - Cracks or breaks or scratches which could impair vision
- Protective screen:
 - Ensure that it is intact and secured correctly over the face shield of abrasive blasting hoods and blouses

2.3 Examine the air supply system for:

- Integrity and good condition of air supply lines and hoses, including attachments and end fittings
- Correct operation and condition of all regulators, valves or other airflow regulators
- Proper functioning of low air warning alarms such as vibrating face piece (face tapper) or audible alarm. This requires pressuring up the system and letting the pressure bleed down

3 Powered Air Purifying Respirator (PAPR)

3.1 Detach the following components from the motor/blower assembly:

- Belt
- Battery pack
- Breathing tube
- Headgear
- Filter cover
- Filter
- Pre-filter or spark arrestor/pre-filter (if used).

3.2 Inspect the motor / blower for:

- Cracks, holes, or other damage



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- Plastic discoloration, chalkiness, or softness
- Area under motor / blower under the filter should be free of contaminants and clean
- User interface (motor / blower display) cleanliness
- LED segments lit and clearly visible during initial startup of motor / blower
- ON/OFF switch should have no cuts, tears, or holes
- Flow control buttons should have no cuts, tears, or holes
- Filter release button should function smoothly and hold the filter/cartridge securely onto the motor/blower
- Filter cover (if used) should sit securely onto the filter / cartridge
- The outlet of the motor/blower (i.e. where the breathing tube attaches) should be inspected for any damage, dirt, debris, or other contamination
- Breathing tube properly attached
- The belt attachment T-bars on the back of the motor / blower should be intact and undamaged
- Check the airflow per manufacturer's instructions
- Check operation of low airflow alarm per manufacturer's instructions

3.3 Inspect filters and filter accessories:

- Filter cover must be intact with no cracks or other damage
- Filter / cartridge should be intact with no cracks, tears or other damage
- Inspect filter / cartridge plastic housing including the corners and latches, outer rectangular barrier, and inner circular filter seal gasket for cracks, tears, cuts, distortion, indentations or debris
- Filter should not be wet or heavily loaded with particulate or damaged
- Filter should not be beyond useful life
- Pre-filter (if used) should be intact with no tears or cuts
- The metal spark arrestor / pre-filter (if used) should be clean and intact with no damage

3.4 Inspect battery pack for:

- Cracks, holes or other damage
- Plastic case should not be discolored, chalky, or soft. These may be signs of deterioration of the battery housing
- Battery pack electrical contacts should be clean and dry with no corrosion
- Battery pack hinge should be intact with no damage or erosion
- Battery pack release button should move freely and function properly
- Attach the battery pack to the motor / blower and gently tug on the battery pack to confirm it properly attaches and the battery pack is being held firmly in place



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- When pushing the “Test” button on a fully charged battery pack, on a new battery all five LEDs should light up. On an aged battery, less than five LEDs may light up even if the battery is fully charged

3.5 Inspect belt for:

- Inspect the belt buckle for damage such as breaks or cracks
- Inspect the belt leads for cuts and tears
- Inspect the hip belt for tears and integrity

3.6 Inspect battery charger for:

- Inspect the power base and cradle for cracks or other damage
- Inspect the power cord for frayed wires or other damage
- Ensure the gold electrical contacts are clean, dry and free of debris
- Gently push on each of the gold contact pins. They should easily push down and quickly pop back up
- Ensure the charger tray is clean, dry and free of debris

3.7 Inspect headgear:

- Follow manufacturer’s instructions

4 Escape Only or Emergency Use Respirator:

4.1 Examine expiration date on canisters or cartridges

- If expired, dispose of and obtain new ones

4.2 Ensure respirator applicability – works for its designed purpose

4.3 Review proper donning and doffing procedures with local personnel

4.4 Examine face piece, hood, or mouth-bit (as applicable) for:

- Inflexibility
- Tears or rips
- Haziness in face piece
- Insecure connections

4.5 Examine canister, cartridge or pony bottle (as applicable) for:

- Dents
- Discoloration
- Malfunctioning or not functioning valves (where applicable)

4.6 Examine the straps or harnesses (as applicable) for:

- Insecure connections to respirator
- Adjustability (to prevent “caught in” hazards)