

TEMPLATE
Standard Operational Guideline
Global Secure CF 60 Power Air Purifying Respirator (PAPR)

PURPOSE:

To provide instructions for usage of the Global Secure CF 60 Power Air Purifying Respirator System.

This Powered Air Purifying Respirator (PAPR) system is used to provide respiratory protection for staff during the care of patients placed on airborne precautions i.e. known or suspected tuberculosis.

EQUIPMENT LOCATION: (REMAIN BLANK FOR EACH HOSPITAL TO FILL IN)

OPERATIONAL INSTRUCTION GUIDELINES:

AIRFLOW RATE CHECK

At the beginning of each shift perform airflow rate check to ensure system is providing adequate airflow. Using a fully charged battery (a partially charged battery will give a false reading), plug the cord from the battery pack into the cord from the motor-blower unit. Remove the breathing tube from the blower/filter outlet tube.

Test for airflow with Airflow Test Indicator, by holding the Indicator against the outlet tube. Ensure no air escapes at the base of the Indicator. Hold the item so that the Indicator is upright. Indicator Ball should rise to touch top of the tube. If airflow is too low, replace the battery and check the connections. If airflow is still too low, use another PAPR.

After assuring yourself of sufficient airflow, remove the airflow indicator. Reattach one end of the breathing tube to the motor-blower unit outlet tube, securing it with the clamp provided. Ensure the breathing tube is correctly oriented and is free of kinks or unnecessary bends.

DONNING RESPIRATOR

1. Ensure that one end of breathing tube is attached to motor-blower unit outlet tube and other end of the breathing tube is attached to the assembled facepiece.
2. Attach the charged battery pack to the support belt, (note: turning the female portion of the buckle sideways on the belt before sliding through the battery pack will make this operation easier). They may be put on either side of the belt. Put the belt around your waist and snap the buckle in place. Adjust the belt to a comfortable fit by pulling on the free end.
3. Adjust the position of the Battery pack so that it is placed over the wearer's hip. The blower/filter assembly will be approximately in the small of the wearer's back.
4. Place the assembled facepiece on your face. See instructions below for donning the respirator headpiece.

Respirator Headpiece Donning:

1. With the facepiece opening facing you, grasp the facepiece on either side with the thumb and fingers of each hand. Put the facepiece over the head, inserting the face first and then pull the chin seal into place.
2. Make sure that the breathing tube is attached to the rear of the facepiece. There must be no kinks or sharp bends.
3. Adjust the headstrap by turning the adjusting knob counterclockwise

Removing the PAPR:

Remove the PAPR only in accordance with the Respiratory Protection Program.

1. Return to an area of clean air.
2. Loosen the headgear ratchet, DO NOT over tighten.
3. Lift the hood straight up over your head.
4. Turn off the blower by unplugging battery from unit.
5. Unbuckle the belt, clean the PAPR as directed below, and carefully stow the equipment.
6. Connect the battery to the battery charger and then plug in the charger into an outlet to recharge the battery pack.

Battery Pack Care:

Battery charging -- A completely exhausted battery pack should be charged for 14 to 16 hours. Charge the battery pack by first plugging in the end of the charger/battery pack cord into the battery pack. Then plug the battery charger into a 120 volt outlet. If the battery pack is accepting a charge, the small light on the battery charger will be illuminated. A fully charged battery will operate for approximately 8 hours.

If the battery does not hold a charge, replace the battery pack.

Cleaning & Storage of equipment:

1. Surface clean the PAPR unit after each use by using a damp sponge soaked in an approved cleaning solution to wipe the exterior surfaces of the filter/motor-blower assembly, the breathing tube, the battery pack, and the support belt. Allow them to air dry.
2. Surface clean the facepiece with a disinfectant before storing at the end of the shift. The facepiece can be submerged in a mild cleaning solution, scrub gently until clean, then rinse thoroughly in clean water. Allow to air dry.
3. Clean the top and chin seals and sweat band between users. Cloth seals should be appropriately laundered. Tyvek top and chin seals can be surface cleaned with a disinfectant and allowed to air dry.

Note: Do not use alcohol, solvents, or harsh detergents to clean the respirator as it may cause deterioration of the components.

4. Store the PAPR unit and facepiece in the blue respirator bag.

MAINTENANCE

Filter Care:

Prefilter Cleaning/Replacement -- To remove the pre filter, pull one end of the retaining screen down from the intake side of the HEPA filter, then remove the retaining screen and remove the prefilter. Replace the used filter with a new one. Do not forget to replace the retaining screen.

HEPA Filter Replacement -- Replace the HEPA filter cartridge when replacement of the prefilter does not restore adequate airflow with a properly charged battery pack.

1. Remove the HEPA filter/motor blower unit from the support belt, and sit the filter unit on a flat work surface.
2. Remove and discard the seal protector between the blower and the filter box.
3. Loosen the three screws holding the filter box to the blower, using an appropriate screwdriver. The screws have special discs to prevent their loss. Remove the used filter box and dispose of it properly. Retain for future use support harness and the retaining screen.
4. Check HIF seal under the blower. Always replace if worn or damaged. Place a new HEPA filter and prefilter under the blower and tighten the three mounting screws to reattach the filter to the blower. Place new seal protector which is provided with the new HEPA filter around the flange.
5. Replace the retaining screen.

Preventive Maintenance:

Battery recharging: Infrequently used battery pack should be fully charged initially, then recharge periodically to maintain a full charge. Charge over night once per week to maintain a full charge.

Monthly PAPR inspections: Inspect the Global Secure CF 60 PAPR using the Global Secure CF 60 PAPR Monthly Inspection Checklist.

Global Secure CF 60 PAPR (powered air purifying respirator)
Monthly Inspection Checklist

1. Battery recharging:
Infrequently used battery pack should be fully charged initially, then recharge periodically to maintain a full charge. Charge over night once per week to maintain a full charge.
2. Powered Air Purifier:
 - a) Carefully examine the case for cracking or other signs of damage.
 - b) Wipe the Global Secure blower unit with soft cloth dampened with a mild cleaning solution as necessary. Do not immerse the unit. Recharge the nickel cadmium battery pack as required. Store the system in a clean area, away from moisture, heat, and direct sunlight.
3. Breathing Tube:
 - a) Carefully examine the entire breathing tube. Look for tears, holes, or cracks.
 - b) Bend the tube to verify that it is flexible.
 - c) If cleaning is necessary, disassemble the breathing tube from the headpiece by pulling apart at the snap connection. Cover both ends of the breathing tube and rinse it under clean, running water. Wipe the outside only of the breathing tube with a soft, damp cloth to remove any dirt and grime and air dry. Abrasive cleaners must not be used.
4. Airflow Check:
 - a) Test for airflow with airflow test Indicator, by holding the Indicator against the outlet tube.
 - b) Hold the item so that the Indicator is upright. Indicator Ball should rise to touch top of the tube.
 - c) Reattach the breathing tube to the high efficiency air filter unit.

