

Quick Reference Guide

3M Air-Mate Powered Air Purifying Respirator (PAPR), Biologic

Description:

The 3M Air-Mate Powered-Air Purifying Respirator (PAPR) is intended to protect workers against airborne communicable infectious diseases. A complete Air-Mate PAPR system includes a 3M Air-Mate blower/filtration unit, appropriate respirator headpiece assembly, a breathing tube assembly, rechargeable battery and appropriate High Efficiency Particulate Air (HEPA) filter cartridge/canister. The hood features a wide view lens and a shoulder length Tyvek shroud. Ambient air is drawn through the belt mounted HEPA air filter unit and passes through the breathing tube connected to the hood. The filtered air passes over and in front of the user's head and face, providing pleasant, respirable air. Air is expelled at the base of the hood.

Assembly:

1. To connect the breathing tube to the HEPA air filter unit, insert the breathing tube (male end with pin) into the HEPA air-filter unit and twist clockwise to lock into place.
2. To test the airflow, hold the free end of the breathing tube up and drop the airflow indicator into the slotted connector.
3. Switch the HEPA air filter unit on. Hold the breathing tube so that it is vertical and at eye level. The airflow indicator should "float" on the air coming out and both band lines on the airflow indicator should be visible above the connector's rim.
4. After confirming sufficient air-flow, connect the breathing tube to the headpiece by inserting the free end of the breathing tube into the rear of the headpiece until it snaps in place. Remove the protective tissue paper covering the visor.

Donning and Doffing:

Training should be conducted on-site at the hospitals. Although self-donning is possible, we recommend that each wearer utilize a "buddy" to help.

Maintenance:

- A completely exhausted battery pack should be charged for 16-24 hours before use. When fully charged, the unit will run for 8 hours. If the battery is getting low, there is a change in the pitch of the motor-blower.
- To recharge the battery, plug the power cord into a 120-volt AC 60Hz power outlet. The green LED light will turn on.
- Insert the AC Adaptor/ Charger three-prong plug into the socket on the side of the HEPA air filter unit. The LED will turn off, indicating that the battery pack is being charged in a high rate mode. After approximately 8 hours, the LED will turn back on, indicating that the charger has switched to a trickle rate mode to prevent overcharge damage.
- The HEPA filter should be changed when an airflow check does not rise to the specified level, when damaged, when wet, and on an annual basis.
- After each use, wipe the outside of the HEPA air filter unit using a soft cloth dampened in a mild solution of warm water and mild detergent.
- 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 of the breathing tube with a soft damp cloth.

Storage:

After all components of the respirator have been cleaned, inspect all parts for damage or wear and allow to dry away from sunlight and direct heat. Store the respirator in a clean area, away from moisture, heat and direct sunlight. Storage temperatures must not exceed 120 degrees F. Always charge batteries at a temperature of 77 degrees F or less.

This guide is intended as a quick reference only. Receivers/users assume all responsibility for the proper maintenance and use of this equipment. This guide is not intended as a substitute for manufacturer provided reference materials and user instructions. This guide is available upon request from SMRRC.