



FIRST RESPONDER TRAINING

RESPIRATOR SYSTEMS



AVON FM 12 PROTECTIVE MASK

Established in Wiltshire, England in 1885, Avon Rubber manufactures a range of high performance, advanced technology products. Listed on the London Stock Exchange, Avon is a significant supplier to the world's automotive, engineering, dairy and defense markets.



AVON FM 12 PROTECTIVE MASK

FM-12 SPECIFICATIONS





AVON FM 12 PROTECTIVE MASK

- May be exposed to temperature variations of -25 to 70 degrees C (-13 to 158 degrees F)
- May be exposed to sunlight, fresh and salt water during use.
- Is designed for continuous wear up to 24 hours



AVON FM 12 PROTECTIVE MASK

- Provides the following fields of view:
 - Binocular 20%
 - Lateral 80%
 - Downward 50 %
- Allows for use of corrective lenses through special optical inserts



AVON FM 12 PROTECTIVE MASK

- Will withstand contact to chemical and biological agents, decontaminates and cleaning agents
- Provides full protection of face, eyes, respiratory organs and gastrointestinal tracts against chemical/biological agents, toxins and radioactive particles



AVON FM 12 PROTECTIVE MASK

FM-12 NOMECLATURE





AVON FM 12 PROTECTIVE MASK





AVON FM 12 PROTECTIVE MASK

- 1 - PSM Front Cover: The PSM Front cover must be securely fitted to the front of the PSM body to protect the outlet valve and aid speech
- 2 - SST: The SST also acts as a sealing plug and must be securely fitted into the second canister mount. Failure to do so will result in a leak path and loss of protection



AVON FM 12 PROTECTIVE MASK

- 3 – Drinking Tube: The drinking tube must be kept in the stowage port when not in use to prevent damage or contamination
- 4 – Valves: Valves must be fitted into both canister mounts and PSM correctly. Failure to do so will result in total loss of protection



AVON FM 12 PROTECTIVE MASK

- 5 – Gasket: Gaskets must be fitted into both canister mounts. The canister and SST both seal against the gaskets. Without gaskets a seal will not be achieved
- 6 – Canister Mount: The location where the canister is secured to the respirator. There is one port on each side.



AVON FM 12 PROTECTIVE MASK

7 – Head Harness and buckles: The harness retains the respirator on the head. If it becomes damaged it may not hold the respirator on the head well enough to maintain a positive seal.



AVON FM 12 PROTECTIVE MASK

FM-12 CARE & MAINTENANCE





AVON FM 12 CARE AND CLEANING

- Clean the mask every 6 months
- Remove monocle inserts (if applicable)
- Remove SST and PSM cover if immersed in water (shake vigorously)
- Rinse face-piece drain excess water



AVON FM 12 CARE AND CLEANING

- Hang upside down to dry
- Replace filter element, SST and PSM
- Replace monocle inserts (if applicable)
- Use a lens-cleaner cloth or toilet paper to wipe lenses



AVON FM 12 PROTECTIVE MASK

FM-12 FILTER CANISTER





AVON FM 12 CHANGING FILTERS

- According to manufacturers specifications (DPF12 filter must be changed 1 year after removal from package)
- After exposure to chemical, biological or radiological agents
- Evidence of mechanical damage
- Canister has been immersed in water



AVON FM 12 CHANGING FILTERS

- Excessive breathing resistance is experienced
- Replace old filter by unscrewing from inlet port and screwing new filter into inlet port
- Do not over tighten filter (damage may occur to filter gaskets and create leaks)



AVON DPF12 FILTER

- DPF12 filter will be issued with each AVON FM12 protective mask
- Filter is approved for acid gases, CS, CN, and as a P100 particulate filter
- Cartridge can filter a wide range of chemical warfare agents:
 - Nerve, Mustard, Tear and Blood agents, Chlorine, and phosgene.



AVON FM 12 PROTECTIVE MASK

FM-12 FITTING





AVON FM 12 FITTING THE MASK

- Mask should be pre-fitted for use
- Loosen all buckles on head harness straps
- Don mask by seating chin in chin-cup
- Pull head harness over head and hold mask in place on chin
- Center head harness on back of head and hold in place



AVON FM 12 FITTING THE MASK

- Remove hand from chin and tighten bottom buckles first, then top buckles
- Straps should be taut (not pulling skin)
- Eyes should be centered in lenses
- Mask should not apply pressure on flesh or around eyes. Eyes should be vertically centered in eye pieces.



AVON FM 12 FITTING THE MASK

- Nose-cup should not press painfully on nose
- The edge of the mask should not cut into throat
- The edge of the mask should not touch the ears
- If gaps or channels are noted, readjust



AVON FM 12 PROTECTIVE MASK

FM-12 METHODS OF CARRY



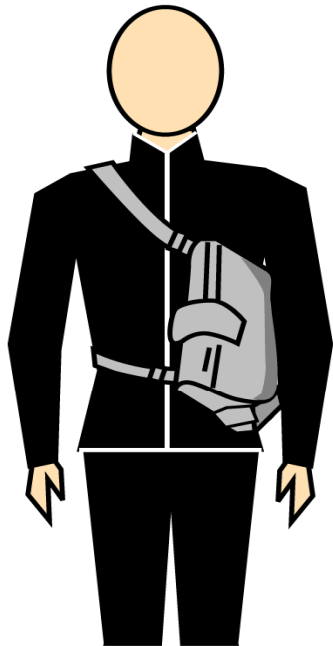


CARRYING THE AVON FM 12

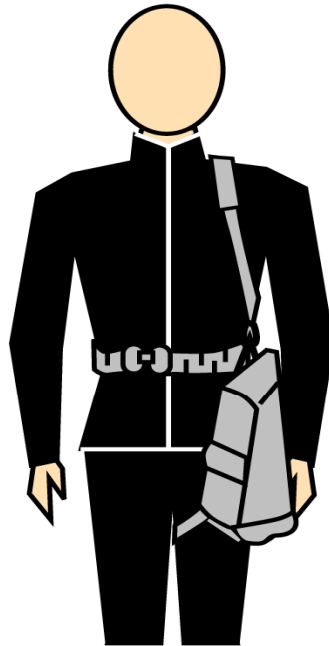
- Carrier is provided with mask
- May be mounted on leg, duty belt, tactical gear or slung over shoulder
- Stow mask in the carrier when not in use



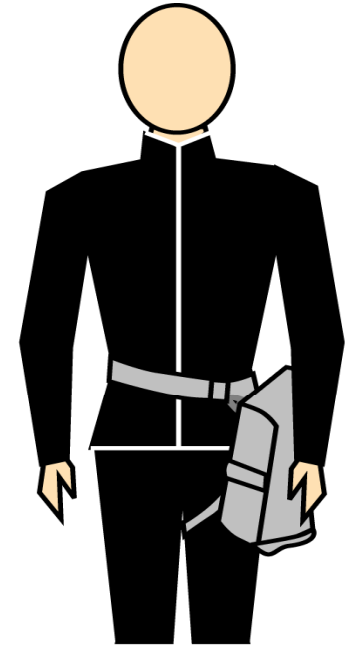
CARRYING THE MASK



**SHOULDER
CARRY POSITION**



**LEG
CARRY POSITION
(WITH WEB BELT)**



**LEG
CARRY POSITION
(WITHOUT WEB BELT)**



STOWING THE AVON FM 12

- Ensure mask is clean before stowing
- Head harness should lie in face-piece
- Hold mask upright with lenses facing toward rear of the carrier
- Insert mask in carrier with the bottom resting on the bottom of the carrier
- Store mask and carrier in cool dry place



AVON FM 12 PROTECTIVE MASK

FM-12 DEPLOYMENT





DONNING THE AVON FM 12

- Personnel who suspect they are in an environment immediately dangerous to life and health should immediately don their protective mask
- When a threat is announced stop breathing and close your eyes
- Remove headgear/helmet (if applicable)



DONNING THE AVON FM 12

- Remove glasses and contact lens
- Remove protective mask from carrier
- Grasp two bottom straps with your thumbs on either side of the harness
- Insert your chin into the chin-cup
- Pull head harness over the head



DONNING THE AVON FM 12

- Tighten bottom two straps until light tension is felt
- Run hand over harness to feel for twisted straps
- Seal outlet valve with palm of hand and exhale



DONNING THE AVON FM 12

- Perform negative pressure check
 - place palm of hand over filter inlet port
 - breathe in
 - face-piece should collapse against face
- Resume breathing and open eyes
- If there are leaks check for items that may be caught between face and mask



DOFFING THE AVON FM 12

- Fully slacken bottom straps of mask
- Grasp PSM and pull forward lifting mask off the face
- Move mask upward toward the back of the head
- Stow mask properly after decontamination



CONCLUSION

- You must be knowledgeable of your equipment, understand its limitations, and be proficient in the donning and use of respirator systems to ensure adequate protection.
- Issue Department Policy, discuss policy, sign off on policy