



# 31 Series Service Instructions

**Warning!!! Relieve All Pressure In The Line Before Servicing Filter Assembly**

- Follow all company and OSHA safety rules, such as wearing protective gloves and eye wear, etc.
- Disconnect the filter assembly from the system.
- Unscrew the plug from the case.
- Discard the plug seal.
- Unscrew the filter element from the plug.
- For Wire Mesh Elements
  1. Pre-Wash: Parts are to be hand washed using Dawn® liquid detergent or equivalent. Oils and grease to be removed using acetone or IPA (Isopropyl Alcohol)
  2. First Rinse: Parts are to be rinsed using filtered non-DI Water to remove any detergent or solvent residue. DI water rinses are acceptable but not mandatory in this step
  3. Ultra-sonic Wash: Parts are to be immersed in degassed heated (105° - 140° F) wash solution for no less than 30 minutes. Use OCC (Octagon) for random metal fiber elements.
  4. Second Rinse: Parts to be rinsed using DI Water to remove any cleaning fluid
  5. Pre Drying (if necessary): To expedite drying of DI Water, dip PIECE in a de-wetting agent of IPA (Isopropyl Alcohol).
  6. Drying Techniques:
    - i. N2 (99.9% pure filtered Nitrogen) Drying (when necessary): Parts shall be dried using an N2 blow dryer to remove any DI water or de-wetting rinse residue.
    - ii. Conventional Oven Drying: Parts shall be dried using an oven (212° - 230°F) to remove any DI water. Intake to conventional oven should be filtered to a level greater than the media it is cleaning.
    - iii. Vacuum Oven Drying



- Discard and replace the filter element seal.
- Discard or clean the filter element and replace. Sintered elements and Glass Fiber elements are not re-cleanable.
- Install a new seal on the plug.
- Install a new seal on the filter element.
- Using proper lubricant, apply to the threads of the element.
- Thread the element into the plug. Torque to 5ft. lbs.
- Using proper lubricant, apply to the threads of the plug.
- Thread the plug into the filter case. Torque to 35 ft. lbs.
- Re-install the filter into the system and lubricate the inlet and outlet threads with the proper lubricant compatible for oxygen service.
- While the system is re-pressurizing, check for leaks.