

Care and maintenance of the Solectria 12 volt vacuum pump



The pump is serviceable for oiling and freeing up the rotor if it does not rotate.

1. If, upon applying voltage, there is no motion, then the rotor can be accessible by removing the 4 small screws on the end of the electrical connection. Pry the cover off, slipping it past the 2 spade lugs. Note that the cover can be re-assembled in 2 ways, but only one is correct (Voltage polarity will be incorrect). There is a notch on the cover that mates with a notch in the body. In my case, the rotor would not rotate, but I pushed hard on an eccentric balancing wheel, until it moved.

2. The rotor is supported by a roller bearing on the business end, which is not accessible. I suppose one could drop some oil on it, but it may be a sealed bearing. On the opposite end of the rotor, the shaft is supported by a bushing, which can be oiled. The small circular object, in the photo lower left, is a removable cover to the bushing. Apply some oil to the bushing and press the cover back on.
3. The top of the pump, where the hoses are connected, can be pried off, by pressing 9 tabs inward. This exposes the piece that contains the 2 check valves. I applied some oil to the rubber inserts, hoping the vacuum sealing would improve, and vacuum levels would build up more rapidly.