

DESA Heating LLCtm

PFA Pump Replacement

Rotor Kit



- Includes rotor, blades, and plastic insert.
- Designed to fit a range of kerosene heaters. Check the package for your specific model number.

Common Tools Needed

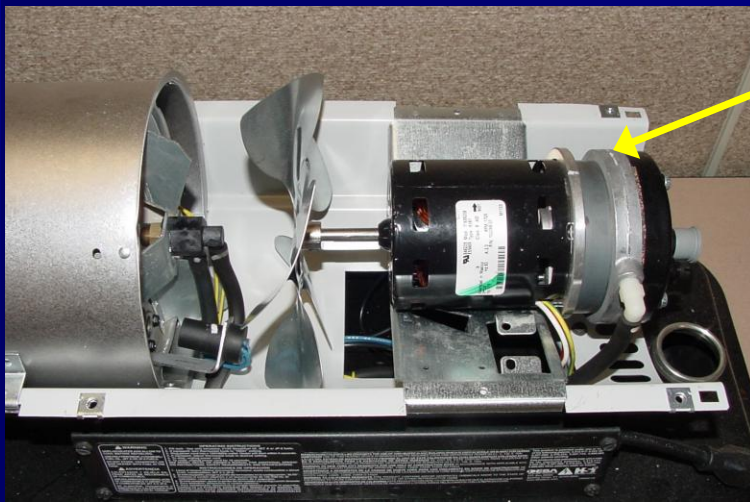


- 5/16" Nutdriver
- Philips head screwdriver
- Feeler gauge
- Low pressure air gauge
(Part # HA1180)
- Flathead screwdriver

Getting Started

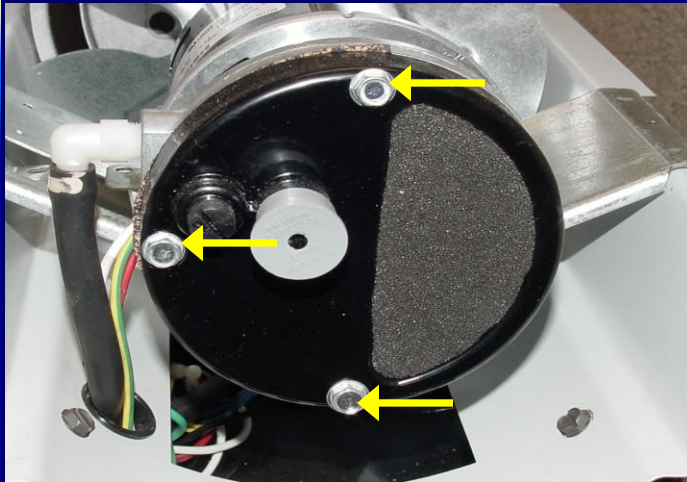


- Remove the upper shell and end-cover guard

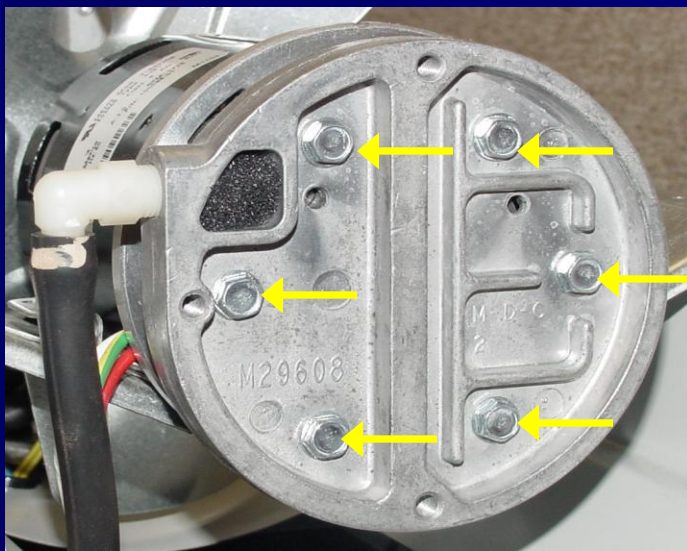


- You can now see the pump assembly attached to the back of the fan motor.

Disassembly



- Remove the three screws holding the end-cover in place and set the end cover aside.

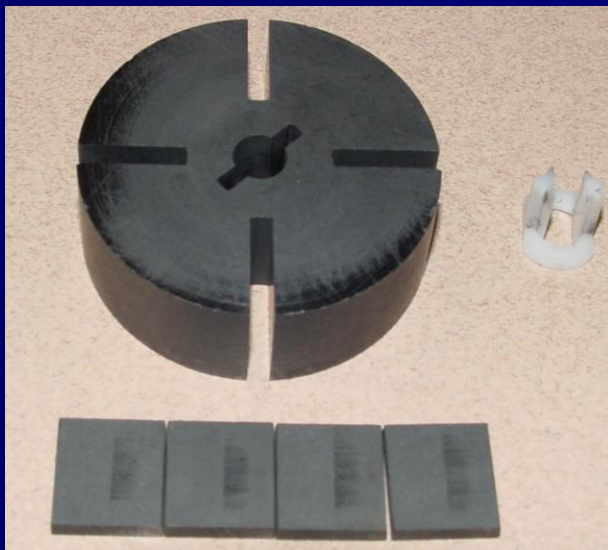


- Remove the back plate of the pump – it is held in place by six screws – and set the back plate aside.

Remove the Old rotor

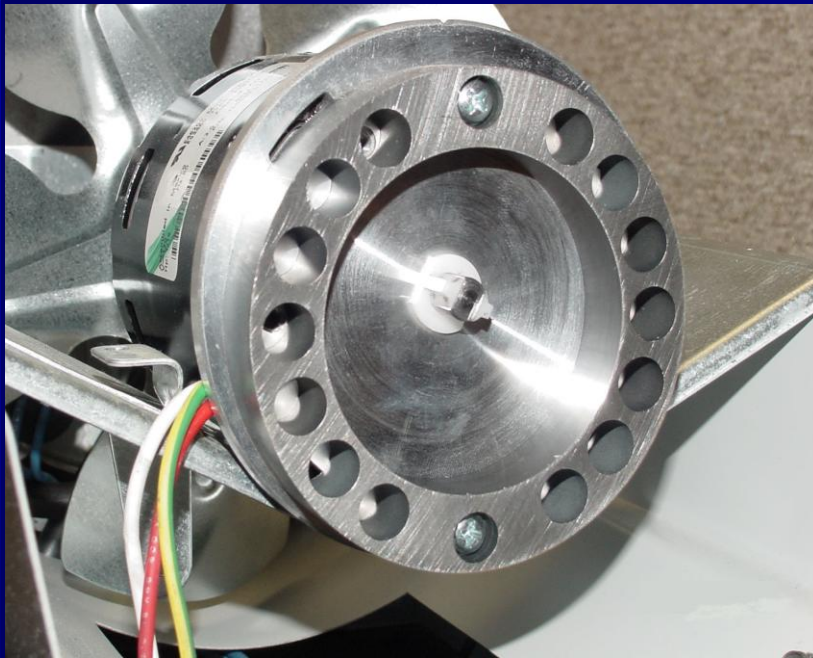


- Rotate the rotor slowly with your hand underneath to catch the blades.



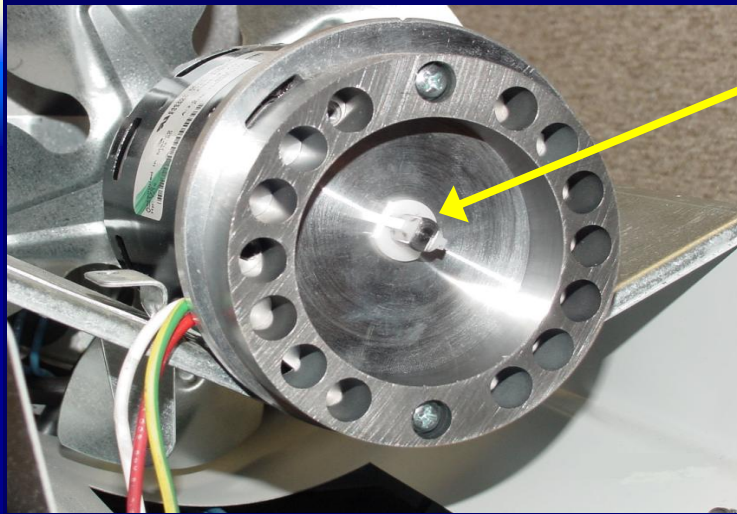
- Remove the rotor and the plastic insert. The removal of the insert may require a pair of long-nosed pliers.

Examine the Pump

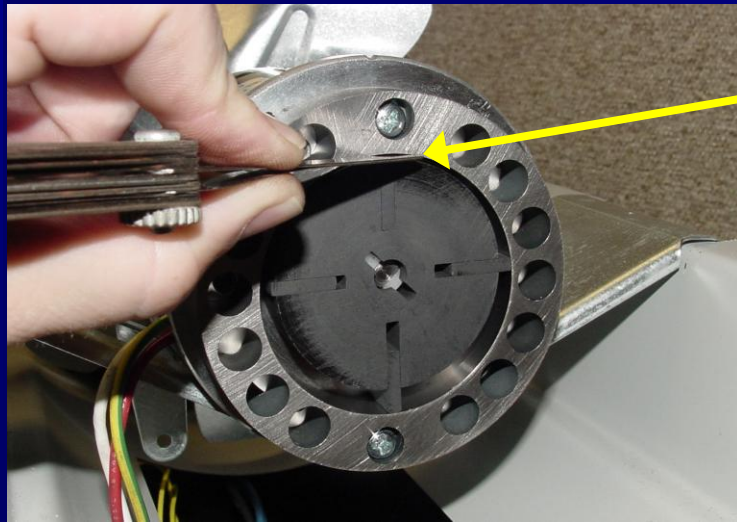


- If the old rotor is cracked or broken, wipe out the inside of the pump with a dry cloth. Make sure the inside of the pump is clean and dry. Do not lubricate.

Installing the new rotor

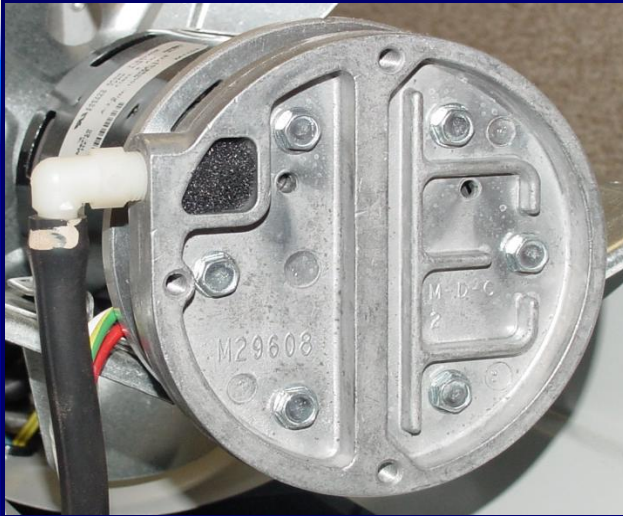


- Put the new insert in place
- Slide the rotor onto the shaft, bevel-side first
- Insert the blades, making sure they are flush with the face of the rotor.

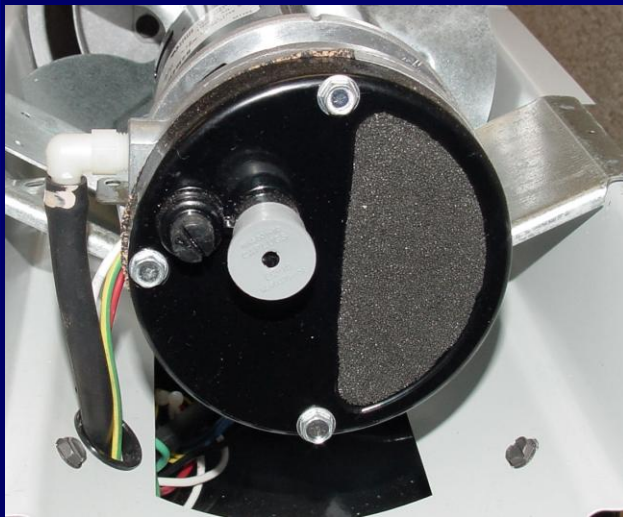


- Measure the gap at the top – adjust to between .03"-.04" by loosening the upper and lower adjustment screws. Make sure the rotor is centered inside the pump body.

Reassembly



- Re-attach the back plate of the pump. Do not over-tighten the screws – over-tightening will damage the threads and can cause a pressure leak.



- Re-attach the end-cover. Do not over-tighten the screws. Over-tightening will crack the end-cover causing a pressure leak.

Finishing up



- Double-check that the motor is in proper position and that all hoses are properly attached.
- The fan should spin freely by hand. If the fan does not spin freely, disassemble and check the rotor gap and blade alignment.
- Replace the end-cover guard, slide the upper-shell back on, and fasten in place.

Testing and final adjustments



- Remove the solid plug on the back of the end cover (left side) and thread in your low pressure 0-15 psi gauge.



- Start the heater and compare the pressure reading to the specified pressure on the data decal. Adjust the pressure relief screw as necessary.

Desa Heating LLC

Thank you!