

## Maintenance Schedule for FIRESTORM 400

Periodic maintenance of the heater is necessary to ensure proper performance and to prevent failures. Maintenance should be performed at periodic intervals shown below. Operating in dirty or dusty environments will require maintenance in shorter intervals.

### Daily maintenance

- Inspect air inlet / air outlet, remove debris if any, secure ductwork if necessary
- Verify fuel tank is full
- Verify there are no visible fuel leaks
- Verify Exhaust Stack is properly installed and ducting is straight (no sharp bends)



Figure 1

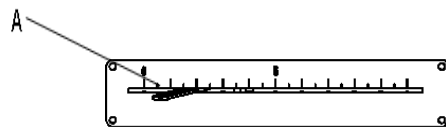
### Weekly maintenance

- Inspect fuel filter and replace if necessary (Figure 1). If fuel filter is full during operation, it is clogged and should be replaced. Normal operation should fill the filter approximately half or less.
- Disassemble burner head (see figures 4-6 below)
  - Remove top panel to wipe fan and all visible components. *Unit won't fire unless panel is reinstalled.*
  - Ensure Combustion Air settings are correct (Figure 2 and Figure 2-A)
  - Inspect and clean burner diffuser – clean all soot and debris by wiping out with a cloth or an abrasive pad. Photo eye, shown in figure 3, depends upon a clean combustion chamber to reflect light back which allows the unit to detect sufficient light for run mode.
  - Clean ignition electrodes and adjust settings to 3mm apart (Figure 7)
  - Make sure Photo eye is wiped clean (Figure 3)
- Inspect the fuel hose assembly and check for any leaks – tighten connections as needed

Figure 2



Figure 2-A



Set 'A' at 1.5 for  
Firestorm 400

Figure 3



### Monthly maintenance

- Disassemble burner head (see figures 4-6 below)
  - Inspect and replace nozzle if necessary
  - Check air combustion setting
- Inspect and clean the combustion chamber as instructed above
- Open electric board, inspect electrical components and check connections
- See Service Manual regarding Pump PSI (Firestorm 400 @ 160 / 218 PSI) - Fuel Pressure Test Gauge item # 48.7265
- Test the burner when maintenance has been completed – *top cover must be installed in order to run/test*

Figure 4

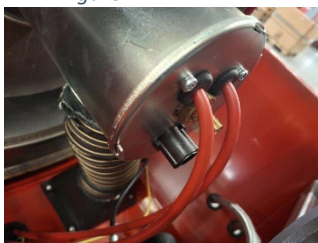


Figure 5



Figure 6

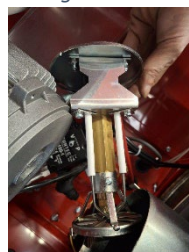


Figure 7



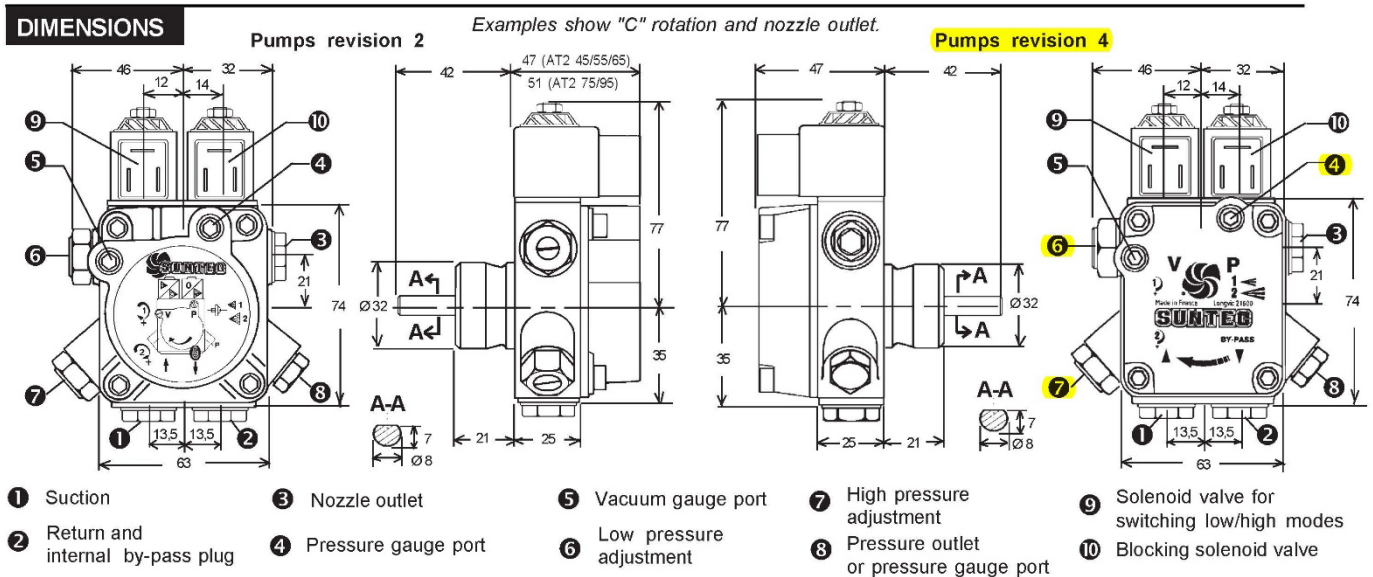
## FUEL PUMP

- Remove the top cover access panel by removing four screws and get access to motor/fuel pump assembly
- Prepare a manometer (suitable to be used for diesel and/or other fuel), full scale 15 bar, having 1/8" male connection on one end



- Loosen pressure gauge port (4) on front of fuel pump and connect manometer on it

viscosity - 3 cSt - Rated speed - 2000 rpm



### WARNING

The following operation shall be done with top cover removed and possible access to rotating fan.

Fan rotating area is covered by fan support even if accessible

**FAN CAN SUDDENLY START TO ROTATE DURING THIS PROCESS AND HIT OBJECTS**

**TAKE MEASURE TO AVOID TOUCHING ANY ROTATING PARTS WHILE SETTING FUEL PRESSURE**

- Set "HIGH - LOW THERMAL POWER SWITCH" on LOW stage position, then switch on heater and wait until flame is ignited and stable: reading of pressure level can now be done and compared to indicated level on instruction booklet;
- If necessary, act on screw (6) to reach the desired level pressure (turning clockwise pressure rises, turning anti-clockwise pressure decreases)
- Set "HIGH - LOW THERMAL POWER SWITCH" on HIGH stage position, then switch on heater and, after flame is ignited and stable, wait until switch lights on (heater always starts at first stage and after about 20 seconds switches automatically on second stage, switch light on to confirm high stage is now working): reading of pressure level can now be done and compared to indicated level on instruction booklet;
- If necessary, act on screw (7) to reach the desired level pressure (turning clockwise pressure rises, turning anti-clockwise pressure decreases)
- Remove manometer and tighten pressure gauge port (4)
- Reinstall the top cover.