

## **Priorclave Routine Preventive Maintenance**

### **General schedule of work**

#### **Notice:**

Before carrying out any maintenance work the Autoclave is visually checked for any signs of materials which may identify contamination or faulty. Should any such matter be apparent the relevant customer representative is contacted for authority to proceed.

**Do not carry out any work unless you are competent to do so. Items in this section marked with \* are those which require a level of competence as incorrect maintenance or fitting could lead to a safety hazard.**

In the event of difficulty or doubt about any maintenance or service procedure contact Priorclave Limited or your nearest Priorclave approved agent or supplier immediately.

#### **Scope of work:**

### **Recommended weekly inspections by the operator:**

#### **Vessel Cleaning**

Check the front of the machine and the inside walls of the pressure vessel for general cleanliness, particularly around operating parts and switchgear.

#### **Gasket**

To prolong the life of the sealing gasket it is advisable to lubricate the sealing faces. This is carried out with the pressure door in the open position by applying a thin layer of high melting point grease to the exposed surfaces of the gasket, after cleaning the gasket and inspecting for damage. Silicone grease such as high temperature grease is ideal for this purpose.

#### **Door Operation**

Check that the door closure system is opening and closing without undue noise and is running smoothly.

#### **Drainage**

If the autoclave has been plumbed directly into a drain using tubing, this should be checked for any signs of blockage, obstruction or damage. Also ensure that both ends of the tube are connected to the manufacturer's requirements. Check for any obstruction to the safety valve outlets, which must remain exposed and unconnected to any form of drainage at all times.

### **Safety Valve \***

The safety valve should be periodically checked for freedom of movement. This can be done without the need for removing panels from the machine, as the hand lever of the valve may be accessed from above the back of the autoclave. When the autoclave is at working pressure, keeping well clear of the safety valve outlet, lift the hand lever momentarily and check for a free flow of steam from the outlet pipe. If steam does not flow the valve should be replaced or serviced by a qualified person immediately. After releasing the lever ensure that the steam flow stops fully.



### **Standard Routine Preventive Maintenance**

The following sections are checked by the Priorclave Service Engineer during each scheduled service visit:

#### **General Operation**

The general operation and performance of the autoclave should be observed frequently, and any fault or defect reported or rectified immediately, and entered into the notes section of the operating manual. (This will assist the service engineer in locating any persistent fault and reporting it to the manufacturer.)

#### **Door Mechanism\***

The pressure door parts and cables should be cleaned and lubricated with high melting point grease.

In addition the cantilever and column bearings and pulley pivot points should be checked cleaned and lubricated with high melting point grease.

The door clamping mechanism should be inspected and adjusted as necessary.

The hydraulic pump reservoir oil level should also be checked at the level topped up if necessary.

#### **Vacuum Pump and Water Pump**

The correct operation of these should be checked regularly. Please refer to the manufacturers manuals for these pumps.

#### **Water Header Tank(s)**

The condition of the float valve tank and its various connections should be periodically checked and cleaned if necessary. Particular attention should be paid to ensuring that there are no restrictions to the tank overflow. In hard water areas the function of any anti-scaling device fitted to the water supply should be tested.

### **Automatic Water-fill**

The condition of the float valve tank and its various connections should be periodically checked and cleaned if necessary. Particular attention should be paid to ensuring that there are no restrictions to the tank overflow. In hard water areas the function of any anti-scaling device fitted to the water supply should be tested and the heating elements checked for signs of scaling. The water level probe should be inspected and cleaned if necessary as described above

### **Automatic Air Purge Valve \***

It is advisable to replace the expanding switching element and other sealing parts contained in this unit on a regular basis, in order to prevent build up of foreign matter which may impair the operation of the unit. The air purge valve is situated to the rear of the pressure vessel just below the top. To remove the parts for replacement simply unscrew the top cap of the unit and remove. Re-assemble the unit as per the instructions in the repair kit (available from Priorclave Limited or local agent). Should the top cap prove particularly tight the complete valve should be removed from the pressure vessel and the body gripped in a vice to remove the cap, as excessive localised pressure could damage the pressure vessel. Care should be taken when refitting the valve to the pressure vessel that all gaskets etc., are replaced in the correct position and the unit should be checked for leaks when first re-pressurised.

### **Microswitches \***

To ensure the reliable operation of the autoclave the internal microswitches should be regularly cleaned and checked.

### **Locking Solenoids \***

With the Autoclave front cover open, check the locking catch and solenoid for freedom of movement. If necessary the screws should be tightened and the solenoid re-aligned with the catch.

### **Filters (If fitted)**

The condition of air intake and exhaust filters should be inspected regularly. These filters should be sterilised (they can be autoclaved) on a regular basis.

### **Hydraulic Hoses \***

The joints and connections on the hydraulic hoses should be inspected for signs of wear and leakage.

### **Hydraulic Oil\***

The condition of the hydraulic system and the oil in it should be checked annually and the oil changed and filters replaced as necessary.