

## PM CHECKLIST

### Sterilizer PM Kit (Minor 2540E/M) (HCG/RPI Part #TUK128)

Also available: Sterilizer PM Kit (Major 2540E) (HCG/RPI Part #TUK214)  
and Sterilizer PM Kit (Major 2540M) (HCG/RPI Part #TUK203)

**Annual PM is recommended. Alternate between Major and Minor PM Kits annually. Use the Major PM Kit every other year and the Minor PM Kit in between the Major service to ensure your autoclave is maintained and running at peak performance.**



**CAUTION: HOT!** Allow the sterilizer to cool fully. Air jet valves, door gaskets, chamber filters, and door bellows should be replaced at room temperature.

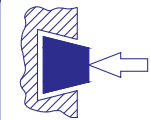
**CAUTION: Disconnect power to the sterilizer.**

## STERILIZER PM TIPS

### Door Gasket HCG/RPI Part #TUG003

Remove the old door gasket. Clean the gasket channel in the door and the chamber face. The door gasket has a slight taper. The wider side is inserted into the door first.

**Gasket Installation Tip #1** - Lubricate the gasket with soapy water before inserting it into gasket channel. **Gasket Installation Tip #2** - For easy installation of the new gasket, use the “North-South-East-West” method (i.e., begin installing the gasket at the top of the door, then install the bottom, then the left side, then the right side, and then everything in between making sure that the gasket fits flush without bumps or gaps).



The wider side of the Gasket goes in first

### Chamber Filters (Mesh Style) HCG/RPI Part #MIF062

Many of the older sterilizers may not have chamber filters at all. Remove all trays and the rack from chamber. Clean the chamber, then remove the old chamber filters if present. Install the new filters. Reinstall rack and trays. **For all manual sterilizers** - The filter at the top position serves as a filter for the steam to the air jet valve, safety valve, control thermostat and the pressure gauge. The filter at the bottom position serves as a filter for the steam to the fill and vent positions of the multi-purpose valve. **For all electronic sterilizers** - The filter at the top position serves as a filter for the steam to the air jet valve, safety valve and the bellows solenoid valve. The filter at the bottom position serves as a filter for the steam to the fill and vent solenoid valves.

### Door Bellows HCG/RPI Part #TUB019

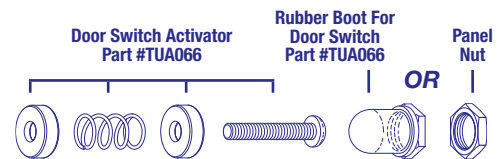
The door bellows assembly is located inside the cavity of the door, which is engaged by the closing device. Remove the Housing Bolt (HCG/RPI Part #TUB064) by using the Housing Bolt and Bellows Removal Tool (HCG/RPI Part #TUT046) **or** a wide flat blade screwdriver and then the door bellows assembly should slide out by pulling the pin. **Service Tip #1:** Use compressed air if the assembly is hard to remove and the pin came out by itself. Use an air hose or canned air and apply pressure to the small hole on the inside of the door. **Caution:** At this time, the bellows assembly will be under a great deal of pressure and will project itself out of the cavity with a great deal of force. **Service Tip #2:** If the assembly is hard to remove and the pin came out by itself, use the Housing Bolt and Bellows Removal Tool (HCG/RPI Part #TUT046) **or** any 4" long drywall type screw. Place the screw into the bellows

and turn the screw until it bottoms out or until the screw locks into the brass bushing and pull the assembly out. Take note of the order of all the parts and reassemble in the same order. Tighten the housing bolt, it needs only to be snug. **Note:** If the threads in the door housing are damaged, rethread using the Tap (HCG/RPI Part #TUT073).

### Rubber Boot for Door Switch HCG/RPI Part #TUB072

Using the rubber boot for door switch may prevent early switch failure by protecting the switch from steam. Remove the old rubber boot, if present, and install the new rubber boot. If installing for the first time, see the installation instructions included with the part. Make the necessary adjustments to the Door Switch Activator (HCG/RPI Part #TUA066) after you have installed the boot. Reinstall the the main cover if removed.

#### Order of Assembly



### Air Jet Valve (Black Top) HCG/RPI Part #TUJ034

**Removal** - Remove the old air jet valve using a 10mm wrench. Remove old Teflon tape/pipe sealant and debris from the valve(s) holder/mounting block.

**Installation** - For this job, use 1/4" wide Teflon Tape (HCG/RPI Part # RPT579) or Pipe Sealant 567 (HCG/RPI Part #RPA459). Install the new air jet valve flush into the valve holder/mounting block using a 10mm wrench. Make sure the clean out wire moves freely.

**Service Tip:** It is necessary to remove any accumulated dirt or debris from the air jet valve. For best results, move the clean out wire back and forth/in and out ~10 times at least once a week or during refilling of the water reservoir. A dirty/clogged air jet valve can cause failed spore test and more.

### Sterilizer

After replacing the PM parts: • Check the reservoir, drain, and clean if dirt or debris are present. **Note:** Debris is the number one reason for Multi-Purpose Valve failure on the M Series units and for Solenoid Valve failure on “E” Series units. • Refill reservoir with distilled water only. • Conduct a temperature check using a Max Register Thermometer (HCG/RPI Part #RPT113). • Conduct a pressure check to identify any leaks that may need to be addressed. • Begin a cleaning cycle using TUTT-CLEAN™ (HCG/RPI Part #TUC094), *see the back side for instructions for your model*. • To aid in proper cleaning and maintenance of autoclaves, use the Cleaning Kit (HCG/RPI Part #RPK791), which includes a variety of brushes, sponges, and cleaning pads organized in a convenient carrying case.

### “PM Kit” Sticker

For future PM planning, write the date on the PM Kit sticker included in this Kit, and place on the sterilizer in a visible location. Annual PM is recommended. Alternate between Major and Minor PM Kits annually. Use the Major PM Kit every other year and the Minor PM Kit in between the Major service to ensure your autoclave is maintained and running at peak performance.

## TUC094 & TUC095 TUTT-CLEAN™

**TUTT-CLEAN™** is a mild acidic salt cleansing compound formulated for descaling and removal of water deposits, oxides and other sediments from sterilizers. Always follow equipment manufacturer's instructions and recommended maintenance schedules. TUTT-CLEAN™ is intended for use in most Tuttnauer® sterilizers including the 1730, 2340, 2540, 3850, and 3870 series. TUTT-CLEAN™ is not intended for use with any pre/post vacuum sterilizers.

### DIRECTIONS FOR USE - Use after every 20 cycles

- Gloves should be worn during cleaning procedure (see **Caution** note to the right).
  - Before performing a cleaning cycle: a) Chamber must be at room temperature; and, b) Chamber pitch must be properly adjusted (see **Important Note** to the right regarding how to set the pitch of the chamber).
- Remove the trays and tray holder and use a clean damp lint-free cloth to wipe them down.
- Take a packet(s) of TUTT-CLEAN™ and pour the powder in a straight even line, from back to front, along the bottom of the chamber.
  - Use (1) one packet of TUTT-CLEAN™ for models 1730, 2340 and 2540 (all suffixes).
  - Use (2) two packets of TUTT-CLEAN™ for models 3850 and 3870 (all suffixes).

**Never sterilize instruments during a cleaning cycle.**
- Depending on the model, run the appropriate cycle as indicated below, and according to the manufacturer's instructions. At the end of all cycles, exhaust the chamber.
  - M – Run a Sterilization Cycle **Without a Drying Cycle** for 30 minutes @ 273° F (134° C).
  - MK and Valueklave – Run a Sterilization Cycle **Without a Drying Cycle** for 15 minutes @ 273° F (134° C).
  - E, EA, EZ, EK and EKA – Run a Standard Unwrapped Cycle for 3 minutes @ 273° F (134° C).
- At the end of the Exhaust Cycle, completely drain the water reservoir. Thoroughly clean the inside of reservoir tank of any residue, dirt, or debris and flush out.
 

**Tip:** Leaving the drain valve open will make flushing quick and easy. (Note: RPI offers a convenient Cleaning Kit (RPI Part #RPK791), see details to the right.)
- Refill the water reservoir with clean distilled water.
- Run 2 (two) consecutive sterilization cycles (without TUTT-CLEAN™) and **Without a Drying Cycle**. Refer to Step #4 for cycle temperatures and times. When both cycles are complete, exhaust the chamber.
- Once again, at the end of the Exhaust Cycle completely drain and rinse the water reservoir until the water runs clear.
 

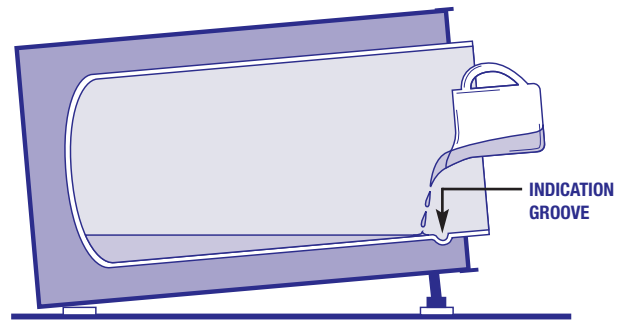
**Tip:** Leaving the drain valve open will make flushing quick and easy.
- Turn the sterilizer off and allow the chamber to cool to room temperature. Wipe down the inside of the chamber using a clean damp lint-free cloth.
- Fill the water reservoir with clean distilled water.
- Depending on the model, perform a final rinse to purge flow lines/tubing of any residue - as indicated below.
  - M, MK and Valueklave – Rotate the Multipurpose Valve knob to the FILL position and allow 4-5 ounces of water to flow into the chamber.
  - E, EA, EZ, EK and EKA – Press the "Manual Water Fill" button and allow 4-5 ounces of water to flow into the chamber.
- Take a large sponge and remove the 4-5 ounces of water from the chamber. Wipe down the chamber one last time with a clean damp lint-free cloth.
- Reinstall cleaned tray holder and trays.
- The sterilizer is ready for use.

#### CAUTION

Keep out of reach of children. Contains mildly acidic ingredients. DO NOT take internally. If ingested, seek medical attention immediately. Avoid direct contact with skin, eyes and clothes. If contact with skin: Wash area thoroughly. If contact with eyes: Immediately flush with running water for at least 15 minutes. Seek medical attention if irritation persists.

#### IMPORTANT NOTE

To verify chamber pitch, the amount of water (as indicated in **Table A** below) when poured into the chamber must reach the indication groove inside the chamber (see illustration below). Adjust leveling feet to attain proper water level if necessary. Performing a cleaning cycle with a low chamber water level, applying cleaning powder to a warm or hot chamber surface, or allowing the sterilizer to enter a Drying Cycle could cause an unpleasant odor and bake residual cleaning solution onto the chamber wall. If this occurs, the cleaning procedure will have to be repeated!



**TABLE A - AMOUNT OF WATER NEEDED TO REACH INDICATION GROOVE.**

Model	Amount of Water
1730 Series & Valueklave 1730 MKV	10 - 12 oz. (300 - 355 ML)
2340 & 2540 Series	12 - 15 oz. (355 - 444 ML)
3870 Series	24 - 27 oz. (710 - 798 ML)

#### CLEANING KIT AVAILABLE - ASK FOR RPI PART #RPK791

To assist in the cleaning of sterilizers, RPI offers a complete **Cleaning Kit (RPI Part #RPK791)** that includes: Large Diameter Brush (1-3/4") (RPI Part #RPB792), Small Diameter Brush (3/8") (RPI Part #RPB793), Scrub Brush (RPI Part #RPB794), Handle Brush (RPI Part #RPB795), Flexible Tube Brush (7/8") (RPI Part #RPB796), Sponge (4-1/4" x 6") (RPI Part #RPS797), Cleansing Pad (RPI Part #RPP798) and Carrying Case (RPI Part #RPC799).

#### Cleaning Kit (RPI Part #RPK791)

