

## INSTRUCTIONS FOR CLEARING JETPOLISHER 2000 CLOGGING

### BACKGROUND

Your Jetpolisher 2000 unit incorporates Deldent's patented H.S.T.® polishing system. This advanced system premixes the air / powder stream with the water stream just before exit from the *single* orifice nozzle.

This is in contrast to other airpolishing units, that deliver the water stream and air / powder stream from distinctly separate concentric or adjacent nozzles. The H.S.T. (Homogenous stream technology) design, virtually eliminates nozzle clogging by significantly reducing the risk of build-up of *Anhydrous Sodium Bicarbonate*, a hard, white crystalline deposit that builds up, so frequently, in the lumen of the nozzle orifice, in other systems. The unique H.S.T. system has been shown to give prolonged clog-free nozzle function as compared to competitive units.

However, there are other reasons why your Jetpolisher 2000 unit may become clogged. Careful attention to these points will avoid unnecessary clogging.

- **Damp air supply** – always ensure that a quality air drying system is fitted to the main air supply system of the operatory. The compressor should be drained of water build-up every day according to its manufacturer's instructions.
- **Loose connection between the dental unit tubing connector and the connector on the front of the Jetpolisher 2000** - This can result in water mixing with the dry air supply before entering the Jetpolisher 2000 unit. Ensure that the connector is firmly screwed to ensure adequate pressure against the Jetpolisher 2000's connector gasket.
- **Occluding the nozzle orifice against soft tissue or otherwise, may result in a back-flow of water along the air / powder supply tubing in the Jetpolisher 2000 handpiece, which in extreme conditions may reach the powder reservoir.**- ensure that the sprayhead nozzle is held approx 3-5 mm from the work surface being treated.
- **Never use inferior quality prophy powder in your Jetpolisher 2000.** Deldent's specially formulated and carefully graded JETSTREAM™ powder, is the airpolishing powder of choice for your unit, to give you trouble free function. It is available from most leading dealers.
- **Never use aluminum oxide or other powder in your Jetpolisher 2000.**

In the event that your Jetpolisher 2000 system becomes clogged, our professional staff is always available to offer you advice and help. However, in most instances, clearing the blockage is a simple procedure, that, if performed by yourself or your staff, will quickly have your unit back in function, save you the need to reschedule your patients, and save unnecessary service costs.

## **CLEARING A CLOGGED UNIT.**

The following are simple to follow steps to help you get your unit back in function quickly.

1. Disconnect the unit from the dental supply tubing.
2. Remove the powder reservoir lid.
3. Check the powder reservoir. – If the powder is lumpy or does not flow freely when agitated, discard all remaining powder in the reservoir. Flush the reservoir with a little warm water to dissolve any remaining traces of powder, and dry thoroughly by means of tissues or a dry air supply, if available.
4. Reconnect the unit to the dental supply tubing.
  - Firmly close down the water control valve fully.
  - Ensure that the intensity valve has been fully opened.
  - Activate the unit with the mode selector switch in the 'POLISH' mode position.
  - Confirm that there air is flowing from the air inlet tube ( U – shape) of the powder resevoir.

*This confirms that there is no blockage in the system prior to the powder reservoir.*

5. Replace the powder reservoir lid firmly. Do not add powder at this stage.
6. Disconnect the polishing handpiece from the handpiece tubing by unscrewing the handpiece connector.
7. Activate the unit and confirm that air is flowing from the wider diameter tube of the handpiece connector.

*This will confirm that the blockage is in the handpiece, and not in the handpiece tubing. Proceed to the section on handpiece blockage below, if the blockage appears to be in the handpiece*

8. If no air is flowing from the handpiece connector, remove the powder reservoir lid and, using a stream of compressed air if available or, blow air, backwards from the handpiece connector along the wider bore tube towards the powder reservoir. This will normally clear the blocked handpiece tubing. Warning: To prevent particulate material getting into the eyes, avoid looking into the powder reservoir, during this procedure. Replace the powder lid and repeat step 7.
9. If this does not clear the blockage, gentle tapping along the length of the handpiece tubing will often break-up clumps of powder that may have accumulated in the tubing especially if the unit has not been operational for some time.
10. The handpiece tubing can easily be removed from the unit by disconnecting its wide-bore air tube from the connector at the powder reservoir outlet, and its narrow-bore water tube that is connected to the water control valve outlet. Activate the unit and confirm that air is flowing from the outlet connector of the powder

reservoir. The absence of airflow indicates a blockage in the L-shaped outlet tube of the powder reservoir.

11. Blockage in the L-shaped outlet tube of the powder reservoir can be cleared either by blowing air through this tube in either direction, or filling the empty powder reservoir with warm water and a little vinegar to cover the L-shaped outlet tube, and leaving for a few hours. Soaking a blocked handpiece tubing in warm water and a little vinegar will dissolve any build-up of sodium bicarbonate inside the tubing. Some mild effervescence may be generated during this procedure, so it is better performed with the unit or handpiece tubing placed in a suitable receptacle.
12. Replace the powder lid and repeat step 7.
13. Repeat step 11 if the blockage persists, followed by step 7.
14. If the handpiece tubing has been disconnected from the unit, reconnect at this time and repeat step 7.
15. The unit should be fully dried at this stage by dry tissues and / or a constant stream of dry air, until no sign of condensation or water mist is observed on a mirror surface placed close to the air outlet tube of the handpiece connector. Operating the unit without powder in the powder reservoir can achieve this.

#### **BLOCKED HANDPIECE:**

1. Disconnect the handpiece from the handpiece connector if this has not already been done.
2. disassemble the handpiece into its 3 components, as for the handpiece autoclaving procedure.
3. Carefully remove the transparent spray head tubing it may be necessary to cut this if it will not pull off gently or with aq little rotation movement. Warning: Excessive force may result in bending of the spray head water tube or even failure of its solder joint.
4. Soak the handpiece components in warm water and a little vinegar, to dissolve any accumulated sodium bicarbonate. Dry the components thoroughly, and confirm by holding the components up to the light, that all of the channels are clear. Repeat step 4 as necessary.
5. Before reassembling the Handpiece, repeat step 7 of the 'Clearing a clogged unit' section above.
6. Place some Jetstream Powder in the powder reservoir and firmly replace the powder reservoir lid. Repeat step 7 of the 'Clearing a clogged unit' section above and confirm that powder is flowing freely from the wide-bore tubing of the handpiece connector.
7. **MOVE THE MODE SELECTOR SWITCH INTO THE 'RINSE' MODE POSITION** and repeat this step, to clear the tubing of residual powder.
8. Reassemble the handpiece components, and connect the handpiece to the handpiece connector. With the mode selector still in the

- 'RINSE' mode position, open the water control valve fully. And activate the unit. Confirm that there is a steady stream of atomized water flowing from the spray nozzle.**
- 9. Move the mode selector switch into the 'POLISH' mode position, and activate the unit. Adjust the water flow rate as necessary to create a steady flowing homogenous atomized stream of air water and powder.**

**RECOMMENDATIONS.**

- **Between treatment sessions, always flush the system for a few moments by activating the unit in the 'RINSE' mode position. This will flush residual powder from the system.**
- **Regularly disassemble the handpiece into its components for autoclaving or cleaning.**
- **Always change the transparent spray head tubing after each patient.**
- **Use only reputable prophylaxis powder such as Deldent's Jetstream™ powder in your Jetpolisher 2000.**