PrepStart Trouble Shooting

Problem	Solution
Does not work	• Air connection is connected to PrepStart and operatory quick disconnect. • Air is on in room. • Make sure switch is positioned on (back of PrepStart). • Foot Pedal is connected correctly (blue to blue, red to red). Check Foot Pedal is operating correctly when depressed (piston is working and not sticking). • Pressure dial is turned up (front of PrepStart). • Empty waste powder chamber (bottom of PrepStart). Check for clogs (Usually Moisture Related): 1. Remove handpiece tubing and clear, remove handpiece and clear, remove nozzle and clear: blow air backwards into the disconnected parts. Long wire or endo file is helpful with nozzle. 2. Test PrepStart without handpiece tubing connected. Hold cup in front of orifice to prevent mess. 3. Confirm water has not been connected, this will block the system. Check desiccant and water trap valve on bottom of the unit (orange desiccant good, if green replace and inspect air for excess moisture). Dump abrasive fill jar on top of PrepStart and remove brass nut, inspect for moisture contamination. Contact dealer for service if contaminated with water.
Slow cutting performance	• Slow cutting is caused by: weak abrasive flow, or low pressure and/or a nozzle that is small size, or worn out. A microscope slide is included for a standardized cut test. • Test: With a .019 tip held perpendicular at 1mm, with maximum abrasive flow and 100psi, the slide should be pierced in 3 to 5 sec. 1. Check the abrasive fill and for the correct brass tuning cap inside jar. 2. Check the pressure setting: higher pressure dramatically increases the cut speed. 3. When the PrepStart is activated the pressure gauge should not drop more than a few psi (1/10 bar). See 'Air Source' (Sect. 1.2). 4. Check nozzle size; (.015" nozzles will cut slow).
Abrasive flow does not shut off immediately	1. Empty waste powder chamber. 2. Pinch valve or waste powder chamber filters may need service.
Excessive powder flow	1. Ensure the abrasive tuning cap matches the size of abrasive used 2. (27or 50 micron). 3. Empty the waste powder chamber. 4. Ensure abrasive level in powder jar is below tuning cap.
Internal air leak	Check for excessive pressure. Pressures above 125 psi (8.3 bars) will be automatically vented by an internal safety valve. If the internal leak happens below 125psi the internal safety valve needs to be replaced.
Weak powder flow	Weak abrasive flow will greatly reduce the cutting efficiency. The Prep-Start is tuned to use about 5gm/ min. at 100psi (6.7 bars) at the maximum powder setting. The abrasive stream is most easily viewed when sprayed across a dark background with good lighting. The spray should appear light but clearly defined. Weak abrasive flow can be caused by: 1. Low powder in the abrasive jar. 2. Incorrect abrasive tuning cap. 3. Low abrasive setting or moist abrasive. 4. Plugged jar metering holes result from moisture contamination, and prevents abrasive from being picked up. (Dump out moist abrasive. Inspect the bottom of the jar for abrasive collecting around the inner column. A ring of more than 4mm of abrasive will block the metering holes. Remove the abrasive with an explorer.)
PrepStart H2O No water flow	Check the following: • Air connection is connected to PrepStart and operatory quick disconnect. • Water switch is flipped to the on position, located on the back of the unit. • All connections from water cap are connected. • Water bottle is filled. • Water cap is on correctly to create a tight seal.

	• Water cap does not have a split. If split order replacement. • Adjust water dial in front of unit • Check nozzle for loose carbide tip. If tip is loose stop using your PrepStart H2O and purchase new nozzle. See unclog water line.
PrepStart H2O Unclog water line	If your PrepStart H2O nozzle had a loose carbide tip it has most likely clogged the water line. With a loose carbide tip abrasive could have gone as far as the water cap depending how soon the problem was noticed. Here are the steps to unclog the water line. You will need a can of air, the type you would use to clean a computer keyboard and a cup to catch water from tubing and connections while troubleshooting or be near a sink. 1. Remove nozzle from handpiece and discard. 2. Remove handpiece from handpiece tubing and visually inspect for clog. If handpiece is clogged use can air to blow clog out or soak in ultrasonic to remove a serious clog. 3. Remove handpiece tubing from PrepStart H20 (abrasive & water side). To unclog tubing use can air with its red cannula. The red cannula should fit the orifices of the handpiece tubing connectors. The handpiece tubing is made of two lines, light gray and dark gray. Even though the light gray side is the water line it is still a good idea to clear both lines. 4. (Do not connect handpiece tubing to front yet) Connect your PrepStart H2O to your quick disconnect air supply. On the back of the PrepStart there are two switches. Turn the large switch to the <u>off</u> position and the small switch to the <u>on</u> position. With the switches in these positions the water bottle will be pressurized. 5. Depress the foot pedal and you should see water coming out of the front of the PrepStart where the handpiece tubing connects. If no water is visible try turning the dial. If that solves the problem proceed to step 8. Still no water see step 6. 6. Remove water cap from bottle and disconnect its two luer-lock connections (white & yellow). Unclog blue tubing from cap by using can air with its red cannula. Reattach cap on bottle and connect the yellow luer-lock only (not white). Depress the foot pedal and water should be coming out of white luer-lock connection. If not make sure water cap is on correctly to create a tight seal and no visible cracks are noticed or adjust water dial on the front of the PrepStart. 7. (Do not connect white luer-lock yet) Be prepared with a cup or sink to catch water from the water caps white luer-lock connection/blue tubing. Using can air place the red cannula in the white luer-lock connection on the back of the PrepStart, depress foot pedal and engage canned air. (Do not engaged air without depressing foot pedal first. The foot pedal opens the valve though the water system side of the PrepStart H2O). Clogged material should be coming out of the front of the PrepStart where the water side of the handpiece tubing attaches. You can also do this the opposite direction by placing the can air cannula in the luer-lock connection on the front of the PrepStart. Once unclogged attach the white luer-lock connection on the back of the PrepStart and test by depressing the foot pedal. Water should be flowing out the luer-lock connection on the front of the PrepStart. 8. Reattach the handpiece tubing and depress the foot pedal to make sure clog was thoroughly removed. Give the water a few seconds to flow through. Next proceed one at a time with handpiece then new nozzle. Adjust water flow with dial to a constant steady drip. 9. Flip the big switch on the back of the PrepStart to the on position and test with a glass slide for proper abrasive and water flow. Adjust with dials as needed.