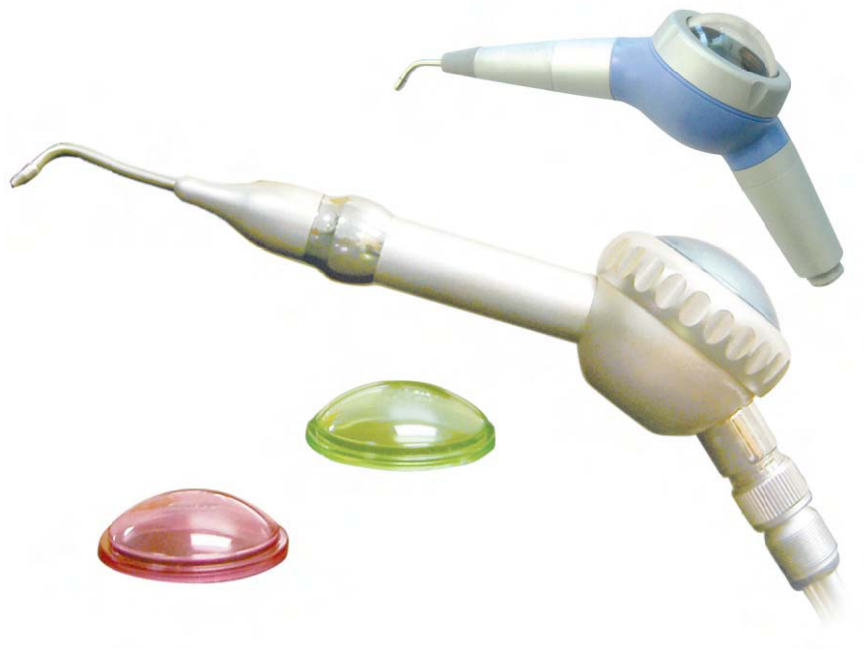


## Operation Manual Air Polishing System



TPC

851 S. Lawson St.

City Of Industry, CA 91748

P626-810-4337 Fax 626-810-4245

[www.tpcdental.com](http://www.tpcdental.com)

# Warning!

This device is intended for use by a dentists and or dental hygienists only.

Do not use on the following patients.
1) Those that require restriction on sodium intake.
2) Those with grave ulcers in digestive organs.
3) Those with hepatic dysfunction.
4) Those with lung or cardiac dysfunction.
5) Those with hyperemia, hemorrhage, or inflammation in the oral cavity.
6) Those with damage or abnormality in oral cavity.
7) Those that tend to develop inflammation in the oral mucous membrane.
8) Those with allergies.
9) Those with contact lenses.
Do not use a powder case cover if it has cracks or deep scratches in it. Use of damaged covers under pressure may cause injury
Do not hit or otherwise impact the powder case cover.
Do not expose the powder case cover to Solvents, etc, it may weaken the material
Powder case covers are a consumption item. It will deteriorate by ultraviolet rays, or by other environment factors. Replace the
Check the powder case covers and o-rings once a week. Check for cracks in the case cover and o-rings. If you notice cracks in either of the items replace it immediately.

## Caution

Do not jet directly onto the oral soft tissues or sublingual.
Use clean and dry air at all times. Moisture in the air will cause the powder to solidify and clog the powder passages.
Care should be exercised at all times to prevent the scattered powder from entering the eyes and nose of the patient.
Fill the powder chamber and use it content completely. If excess powder is left in the powder chamber after a procedure then discard it. Do not leave the powder in the chamber.
Don't attempt to fill the powder chamber if the humidity is high. Moisture in the air can cause the powder to clump.
After each use make sure to empty the powder out of the chamber. Once the chamber is empty place the powder cover back on the unit and run the unit dry. This will remove any excess powder from the chamber.
When storing the unit, rinse with warm water and dry. Make sure to rinse all the excess powder from the chamber and o-rings.

## 1. Caution before use

This product is used for jetting powder. It may clog by moist air or by water. Do not use a delivery system in which the air pressure may increase rapidly when it clogged.

How to check the air pressure of the delivery system.

- Run a high speed hand piece; listen to the sound it generates. If the sound stays consistent then there should be no variations in the air pressure.
- Check the regulator in the junction box and check for proper settings. Generally your air setting will be set to approximately 80 PSI. There are several variations so the setting does not have to be exact.

## 2. Operation

- (1) Connecting your air prophylaxis to your HP tubing.  
4-Hole, or 2-Hole type Powder Case  
Connect the powder case directly to the corresponding handpiece hose.
- (2) Mounting nozzle to Powder Case  
Slide back the handpiece release ring on the powder case joint and hold. Insert the nozzle into the powder case joint, and release the ring.
- (3) Filling Cleaning Powder  
Unscrew the powder case cap and remove. Fill the powder chamber to small groove on the chamber. Recap the powder case cap securely.



- Do not use left-over powder or powder that has been sitting open in the package. Moisture can solidify

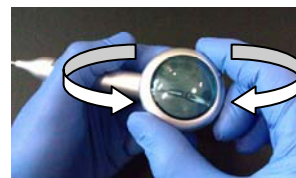


### (4) Jetting Powder

Aim the nozzle at the cuspidor, and jet for 3 seconds to verify that the powder jets uniformly. And use on the patient. Use with the nozzle 5-10 mm

- Do not jet the powder directly to the oral soft tissues, gum or sublingual.
- Always use the high volume evacuator to prevent the patient from swallowing the powder. Use intermittently and have the patient wash his or her mouth as often as needed.

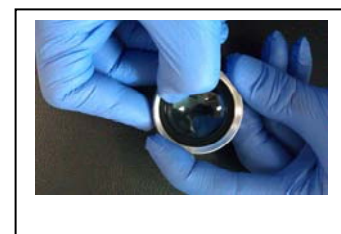
Open



Close

## 3. Care after Use

1. Unscrew the powder case cap, and completely empty the powder case.
2. Slide back the nozzle release ring, and remove the nozzle from the powder case.
3. Wipe saliva and debris off the nozzle with alcohol-immersed cloth.
4. Remove the powder case from the coupling, or from the nozzle.
5. Remove the O-ring from the powder case cap, plastic powder case cover, and thin gasket. Clean the powder case cover, O-ring, thin gasket and the serrated powder case cover ring.
6. Clean the powder case passages with the supplied wire tool. Clean the powder case, its body and nozzle. If the powder passages are clogged badly, you may place the nozzle in boiling water for 10 min to loosen the obstructions.
7. Dry completely so that your unit is ready for its next use.



## 4. Sterilization

The manufacturer recommends autoclaving this device

(1) Disassemble Air prophylaxis unit into the following components.

- Powder case and nozzle.
- Powder case into the powder case body and the powder case cap.
- Powder case cap into the O-ring, powder case cover, thin gasket and serrated cover ring.

Autoclave for 20min, at 121°C, or 15min, at 132°C.

- Skip dry cycle if the chamber temperature could exceed 135°C.
- Place the pouch in the center or top tray, as the local temperature at the chamber bottom could exceed the set temperature.
- Do not sterilize with other instruments that are not completely cleaned from the chemicals. Chemical vapors could set on the Air Prophylaxis Unit components and cause them to discolor or malfunction.

## 5. Troubleshooting

Number	Problem	Probable Cause	Solution
1	No air or powder exits from nozzle.	The nozzle is clogged.	Remove the nozzle with no powder in the powder case. Clean the nozzle and the powder case with the cleaning file.
		powder case is clogged.	Insert the cleaning wire into the hole in the center of the nozzle joint section all the way until it stops in the hole. If this does not cure the problem, clean the powder case body in the boiling water for 10 minutes. Dry it thoroughly.
2	Air and powder exit from the nozzle, but is not in sufficient power.	Powder that has been left unused was used.	Change with new powder.
		Water has been introduced into the powder chamber.	Change the O-ring at the coupling end of the powder case. Check for moisture in the air line.
		Air passage is partially blocked in the nozzle.	Remove the nozzle. Clean the nozzle.
3	Water leaks from the nozzle joint at the powder case	O-ring is damaged.	Replace the o-ring
4	Nozzle is hard to swivel	Powder has accumulated on the o-rings groove.	Clean the o-ring and grooves. Make sure that powder has not accumulated on it.

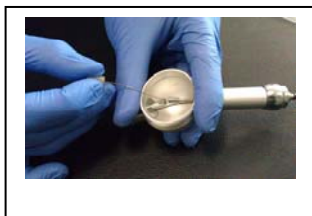


Fig 1



Fig 2

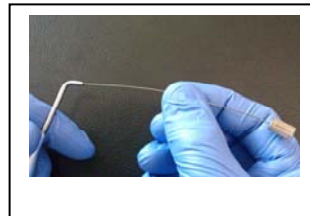


Fig 3



Fig4