# VACSTAR®

HydroMiser Installation Kit

Part Numbers: 56041 for VacStar 50 (VS50) 56042 for VacStar 80 (VS80)

#### DENTAL VACUUM SYSTEMS

## Installation Instructions

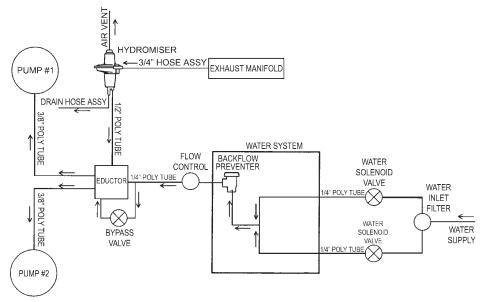
Supplied Components. This kit includes the following items listed below.

Part Number	Description	Quantity
30920	Lock Washer, 1/4 inch	3
55142	Separator Drain Hose Assembly w/ Elbow	1
55981	Exhaust Hose Assembly w/ Teflon Tape	1
55499	VS80H Eductor Assembly	1
55498	VS50H Eductor Assembly	1
55147	1/2 inch OD Poly flow tubing, 14 inch Long	1
55231	1/4 inch OD Poly flow tubing, 18 inch Long	1
30914	Hex Head Bolt; 1/4-20x1/2 inch	3
30711	Hex Washer Head Screw; 10-24x1/2 inch	2
56057	Vent Hose and w/ Cuffs	1
49833	Hose Clamp, 2.5 to 3.5 inch diameter	2
56006	VS80 HydroMiser Assembly w/ Bracket & Water System	1
57278	1 inch Rubber Coupling (incl. w/ Separator Assembly)	1
56005	VS50 HydroMiser Assembly w/ Bracket & Water System	1
55927	Adapter Fitting, 1 inch MNPTx1 inch Barb	1

Tools Required. Tools needed but not supplied for this installation include the following.

<b>7/16</b> inch Wrench	5/16 inch Nut Driver	Phillips Screwdriver
Cutter	Tape Measure	Adjustable Pliers

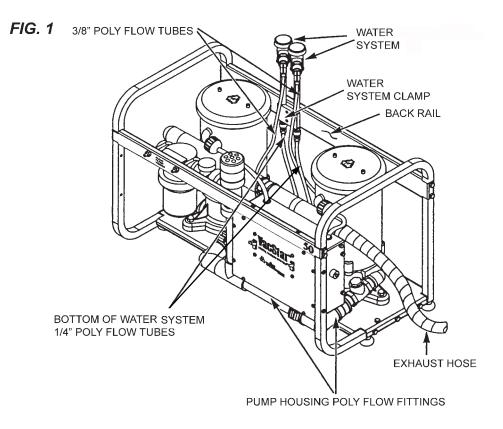
Review the FLOW DIAGRAM, below, before beginning installation.



### Prepare the VacStar to receive the hydromiser assembly

Note: 36 inch height clearance is required for proper vent installation.

- A. Disconnect the power and shutoff the water supply
- B. Disconnect the water system (See Fig. 1).



- 1. Disconnect both 3/8 inch poly flow tubes at the water system.
- 2. The other end of the 3/8 inch poly flow tubes are connected to the pump housing. Measure 13-1/2 inch from the tube fittings on the pump housing. Cut off the excess tubing.
- 3. Disconnect both 1/4 inch poly flow tubes at the bottom of the water system.

- 4. Remove and discard both water systems from the back rail using a Phillips screwdriver to disengage the clamp.
- C. Remove and discard the existing exhaust hose and fitting between the exhaust manifold and the drain.

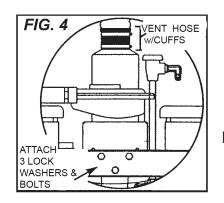
Cut off the exhaust hose. Use adjustable pliers to unscrew the rest of the fitting(See Figs. 1 and 6).

**Note:** Since one tube is longer than the other, make sure to install the tubes in same place they were disconnected.

## Install Hydromiser Assembly, Eductor, Reattach Tubing

## A. Install the eductor; connect poly flow tubing.

- Using a 5/16 inch nut driver and 2 hex washer head screws provided, attach the eductor assembly's bracket to the base plate of the VacStar chassis. Set the eductor valve on recycle mode (See Fig. 3).
- 2. Route the 3/8 inch poly flow tube from the left pump assembly over the intake manifold to the left port of the "Y" connector on the eductor assembly. Insert until the tube stops (See Fig. 3).
- Route the 3/8 inch poly flow tube from the right pump assembly to the right port of the "Y" connector on the eductor assembly. Loop tubes to avoid kinks. Insert until the tube stops.
- Insert the 1/2 inch poly flow tube (incl. w/ kit) into the side port of the eductor assembly until the tube stops (See Fig. 3).
- Insert 1/4 inch poly flow tube (incl. w/kit) into tee fitting on top of eductor assembly until the tube stops (See Fig. 3).



HYDROMISER ASSY. SIDE FRONT FIG. 2 ELBOW FLIP . CLAMPS ATTACH TO BRACKET 1" BLACK RUBBER SWIVEL COUPLING FITTING FIG. 3 CONNECT 1/4" POLY FLOW TUBE TO TOP EDUCTOR ASSY OF WATER SYSTEM ALIGN BRACKET HOLES WITH HOLES ON BASE PLATE OUTER RING CONNECT 1/2" POLY ø FLOW TUBE 17 IYPAS: OF HYDROMISER FRONT OF VACSTAR VACSTAR BASE OUTER OUTER RING RING PLATE CONNECT 3/8" POLY FLOW TUBE CONNECT 3/8" POLY FLOW TUBE CONNECTOR TO LEF PUMF FROM "Y" CONNECTOR TO RIGHT PUMP

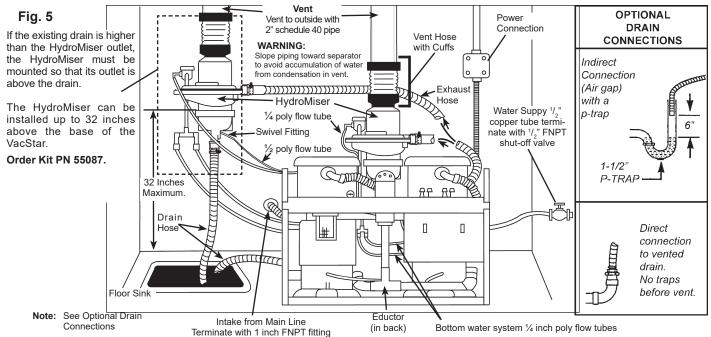
- **Note:** If, for any reason, it becomes necessary to remove a poly flow tube held in place with a push to connect fitting, simply push the outer ring in and pull on the tube.
- **B.** Attach the HydroMiser assembly to the back rail of the VacStar. Secure with 3 bolt and lock washer pairs (incl. w/kit). Tighten in three places using a 7/16 inch wrench (See Fig. 4).

## C. Connect the poly flow tubing to HydroMiser Assembly (See Fig. 5).

1. Reconnect the 1/4 inch poly flow tubes between the bottom of the water system and the solenoids.

**Note:** Since one tube is longer than the other, make sure to install the tubes in same place they were disconnected.

- 2. Insert the free end of the1/2 inch poly flow tube into the swivel fitting of the HydroMiser assembly until the tube stops. (See Fig. 2).
- 3. Connect the 1/4 inch poly flow tube from the tee fitting on top of the eductor assembly, (See Fig. 3), to the elbow found at the top of the water system (See Fig. 2).



## D. Attach the Exhaust hose (See Fig. 6).

- Screw the 1 inch MNPT end of the exhaust hose assembly (incl. w/kit) into the exhaust manifold and tighten. This fitting is pre-taped with Teflon tape.
- 2. Attach the other 3/4 inch Female Garden Hose Thread end of the hose to the HydroMiser Assembly inlet and tighten.
- 3. If the exhaust hose is too long, cut it to the correct length & attach supplied adapter fitting, reuse clamp.

## E. Connect the drain hose

- 1. Connect the drain hose assembly to the drain outlet with the 1 inch black rubber coupling. Use a 5/16 inch nut driver (See Fig. 2).
- 2. Connect the other end of the drain hose to the building drain. See Fig. 5 for proper drain connections. The drain installation must conform to local codes.

## F. Connect the Vent Hose with Cuffs

- 1. Connect the Vent Hose with Cuffs to the HydroMiser assembly using the hose clamp, (incl. w/kit). Tighten using a 5/16 inch nut driver (See Fig. 4).
- 2. Connect the other end of the Vent Hose with Cuffs to the building vent using a hose clamp (incl. w/kit). Tighten using a 5/16 inch nut driver.

## CHECK OUT PROCEDURE

- 1 Reconnect the power and turn on the water supply.
- 2. Close all HVE's and SE's and turn on the VacStar.
- 3. If leaks are present, turn off the unit and repair accordingly.
- 4. If no leaks are present, turn on the VacStar and set the eductor to recycle mode (See Fig. 3). Note the reading on the vacuum gauge. Then, set the eductor to bypass mode. Note the reading again on the vacuum gauge. If there is no more than 1 In Hg. difference between readings, the HydroMiser has been installed successfully.
- 5. If the readings are not the same or widely different, review the installation. If the HydroMiser was installed correctly, see the VacStar Service Technicians Manual, Trouble Shooting Guide, Low or No Suction.



