Service Bulletin: MART Power Washer

MART Tech Services

Correct Installation of Steam Exhaust Blower Motor

MART Tech Services' field technicians are reporting a common observation from the field. Many installations do NOT have the proper orientation of the Steam Exhaust Blower Motor.

Many MART Owners are not using the Twist Transition that comes with their MART Power Washer. To increase the life of the blower unit, and to reduce condensation that can drip onto the top of the washer or into the shop, we offer the following reminders concerning the installation of the Automatic Steam Exhaust (ASE).

First, prior to installation review the installation instructions in Chapter 2 of your MART Operating Manual. You can view the latest version of the manual at www.martechservices.com under the support section.

The following pictures show both a vertical installation and a horizontal installation of the Venturi Tube and Blower Unit.



It is important that the Twist Transition be used on all vertical installations. The Twist Transition allows the blower housing motor to be in the correct position for drainage back into the steam exhaust piping and the washer. A good method to make sure of the correct orientation is to verify that the shaft of the blower motor is parallel to the floor.

Please consider the following points when installing the Automatic Steam Exhaust System on your MART Power Washer.

1. DO NOT INSTALL THE VENTURI DIRECTLY ON TOP OF THE MACHINE.

- 2. USE PVC Pipe for exhaust duct.
- 3. PVC Piping MUST be LEAK TIGHT. Water must drain back to machine.
- 4. Any horizontal section of steam exhaust pipe must rise by 1/2-inch (13 mm) per foot (30.5 cm) of pipe. This is necessary for proper condensation drainage back to the washer
- 5. Silicone all joints, even the ones with gaskets. Consider using silicone for joining PVC pipe. It is easier to work with than the solvent based cement used for most PVC connections. Most solvent cements do not provide a long enough working time for the assembly of the pipe. Silicone has a long working time allowing the pipe to be repositioned and adjusted.

If your Steam Exhaust is not powerful enough, call us we can help size a system to meet your installation requirements. Remember, the diameter, length of run and the number of elbows all affect the frictional resistance of flow in the pipe. The total rise effects how much natural draft the steam exhaust creates. Since the blower motor only runs during the cleaning cycle, you want to consider natural draft for times when the machine is idle, heating up or waiting for another parts load. Developing the natural draft means it is important to keep the door closed. Power Washer users with the Bottom Drag-out/ scraper systems must keep the door closed when not in use to prevent the scraper chute becoming a chimney.

We stock all the replacement parts for your ASE including motors, blowers, and overloads. Optional Dampers are available and can be used to minimize heat loss. The steam exhaust can easily suck out too much heat from the machine and prevent you from running at the highest washing temperatures. Higher temperatures are better for cleaning because your chemical is more active. Add a flow **damper** to your system to reduce your heating costs and improve your cleaning. This is a simple retrofit – no piping needs to be changed.

For further information please contact MART Tech Services
M-F 8:00 AM to 5:00 PM (central) or visit our SUPPORT website 24 hour 7days a week.

www.marttechservices.com

