

HI-VELOCITY USER GUIDE

SEQUENCE OF OPERATION

The HE fancoil has been specifically engineered to offer maximum flexibility for each installation. Constant fan sequence can be energized from the thermostat and can draw as little as 45 watts of power. Heating and Cooling sequences each offer a high and low sequence to support high efficiency boilers, condensing units and thermostats when used. When more than one function is called for, the higher control sequence will take priority. E.g. if constant fan is operating and a call for heating or cooling is called for, then that program will take over and increase the airflow to its pre-programmed settings.

No further adjustments are required for system operation.

NOTES:

- On some thermostats there is a “fan switch” which can be set in the “auto” or “on” position. For best operational efficiency and comfort, this setting should be set to “on” to run the constant fan, but can be turned off if desired.
- In heating or cooling mode, the fancoil will automatically give priority to the highest programmed speed.
- In order for the multi-speed functions to operate on the HE fancoil, a supporting thermostat must be used.

TIMER CHIP (FLASHING RED LIGHT)

The printed circuit board within the fancoil contains a timer circuit that will energize the pump for 5 minutes every 24 hours. This timer will cycle the pump on potable water systems to flush the water through the system and prevent any water stagnation. The timer circuit is equipped with a red light in the center of the circuit board. It is normal for the red light to be on, as it shows power is being supplied to the unit. A flashing light indicates normal pump operation. If you do not need to use the timer circuit, move the jumper header from the ON pins to the OFF pins and it will be disabled.

EPC CONTROL BOARD

The Electronic Performance Control (EPC) Board controls the motor operation to a pre-programmed sequence of operation. Unless you are a trained professional familiar with the function of the dip switches on this board, any adjustment can seriously hamper the unit operation and void all warranties. There are two lights on this board: the green light indicates proper functioning of the board, and the amber light indicates a system fault and requires servicing by a trained professional familiar with the Hi-Velocity System.

MAINTENANCE

Only the 1” air filter requires maintenance on a regular basis. With a clean air filter, you not only have cleaner air to breathe, but you will also help maintain unit efficiency, and increase operating life. Ensure that there is always a filter in place, and check every month to ensure that the filter is clean. To clean the filters, remove from system, wash the white side and vacuum the pink side. Once the filter has been washed, vacuumed and completely dried, replace in system. The amount of time between filter

changes/cleaning will be dependent upon the living habits of the homeowner. **Please note that a dirty filter will increase motor power draw, and may reduce air flow and system performance.**

It is also recommended to have a service contractor perform a system check in both spring and fall for the cooling and heating season.

HI-VELOCITY AIR PURIFICATION SYSTEM (HE PS)

The Hi-Velocity Air Purification System comes with a built-in Remote Mounted Service Panel to automatically keep track of service intervals. Indicator lights will tell you when to change the filter and ultraviolet lamps 30 days in advance.

SYSTEM EFFICIENCY/PERFORMANCE

The following steps should be taken to increase the overall system performance, and decrease system costs.

1. There is great benefit with using the constant fan control. This will reduce the amount of stratified air (hot and cold spots) within the home, giving you more even temperatures between floors, as well as providing constant air filtration. The amount of power actually used with this constant fan operation can be less than a 60w light bulb.
2. Try to maintain your house temperature within a 5 degree temperature range. Residential heating/cooling systems are designed to maintain a set temperature within the home. A big misconception that people have is to turn off their air conditioning/heating when they leave the home, and “crank” it up/down when they get home thinking that this is efficient. For a residential heating/cooling system to bring up/down the temperature drastically like this (as an example lets say more than 5 degrees), the system will have to run much longer than it would have throughout the day, therefore consuming more power and making it much more inefficient.

OUTLETS NEEDED

There may be cases when the number of outlets needed for heating is significantly different than the amount needed for cooling. This is usually caused by a large appliance load or an excessive amount of windows. In cooling mode the outlets must be in the fully open position or there will be a loss in system performance. The vents may need to be partially closed in heating mode, or it may be necessary to close off some of the outlets. The Rough-In Boots have built in dampers and can be adjusted for room comfort. Use the damper key supplied from Energy Saving Products for easy vent adjustments.



FOR COOLING SYSTEMS ONLY

When located in an unconditioned space (crawl space or attic), all the vent outlets must be closed and the return air blocked during winter shutoff times unless the constant fan is being used, to prevent condensation in the ductwork.