INDUCED DRAFT BLOWERS

Many of the new energy-efficient gas furnaces use induced draft blowers to control flue gas. All induced draft blowers incorporate some type of signaling device to signal to the furnace that the induced draft blower is operating. Some use a sail switch in the exhaust air stream. Others utilize a centrifugal switch or electronic sensor built into the motor, and some use a static pressure tap in the blower housing. All blowers are intended to provide air flow prior to ignition.

In today's furnace market, draft inducers are becoming a common replacement part. Since these furnaces are being designed with specific induced draft blowers, it is very important that replacements are installed using exact replacements. It is important that the replacements match the original blower for safety reasons.

These blowers play an important part in controlling the availability of gas to the burners. Most blowers will employ either a centrifugal switch, electronic sensor, or a vacuum tap to generate a signal to the gas valve that the induced draft blower is operating. This feature is necessary to prevent the gas valve from being turned on prematurely or in the event the blower does not operate properly.

These blowers control the removal of the burnt by-products. Therefore, only replacement blowers made for specific furnaces or water heaters should be used for these replacements. The following example describes why. The blower is designed to produce a certain amount of airflow measured in CFM (cubic feet per minute). The airflow in some furnaces is needed to create a specific amount of vacuum at the vacuum tap mentioned above. If the replacement blower is not the exact one needed but 'looks close', it may produce a lesser airflow and thereby a lesser vacuum at the vacuum tap. This may not allow the furnace to operate since the furnace will not think the induced draft blower is operating.