

### TECHNICAL SERVICE DEPARTMENT Technical Service Bulletin 1-800-432-8373



Ignitor Burnout & Replacement- AdvantagePlus

Exhaust gas recirculation is the primary cause of premature ignitor failure in the AdvantagePlus. Carbon Monoxide (CO) levels above 10 parts per million will cause igniter failure, premature burner failure, and huffing and puffing sounds. Exhaust gas recirculation on an 'unbalanced' system will cause the CO to jump above 10 parts per million.

# Is the venting allowing the exhaust gases to re-circulate into the fresh air intake "T"?

Yes. Many failed igniters, returned in warranty, have failed due to exhaust gas re-circulation. Exhaust gas re-circulation is caused by the exhaust gases returning to the combustion chamber thru the fresh air intake "T". Proper installation will prevent this; or using a prescribed termination vent kit will prevent exhaust gas re-circulation. The appearance of the igniter subjected to re-circulation will be green and/or brown stains on the ceramic body; white deposits on the igniter surface; or pieces of the igniter missing. See drawings on the next page for proper venting.

# Do I need to clean the combustion chamber if the exhaust gases have been re-circulated?

Yes. It is mandatory the combustion chamber be cleaned out before replacing the igniter. There are a couple of ways to clean out the chamber. The <u>hard way</u> is to remove the blower motor, the burner, and the burner mounting plate. The <u>easy way</u> is to plug up the exhaust pipe, temporarily, shut off the gas supply at the gas valve, remove the igniter and igniter plug, and let the AdvantagePlus attempt to fire off. The blower should start its pre-purge cycle and blow any debris out of the combustion chamber thru the igniter hole. Reassemble the exhaust vent, install a new igniter, turn on the gas valve and the unit should fire off.

# When replacing the ignitor do not touch the hot surface end. Oils in your hands will cause premature failure of the ignitor.

# VERY IMPORTANT SET-UP INSTRUCTIONS!

If you have a combustion analyzer, the following ratings will be very helpful in setting up your advantage plus:

# FOR NATURAL GAS -

 $CO_2$  reading should be between  $(9 \frac{1}{2}\% - 10\%)$  $O_2$  reading should be between  $(3 \frac{1}{2}\% - 4 \frac{1}{2}\%)$ CO reading should be under 10 PPM

# FOR PROPANE GAS –

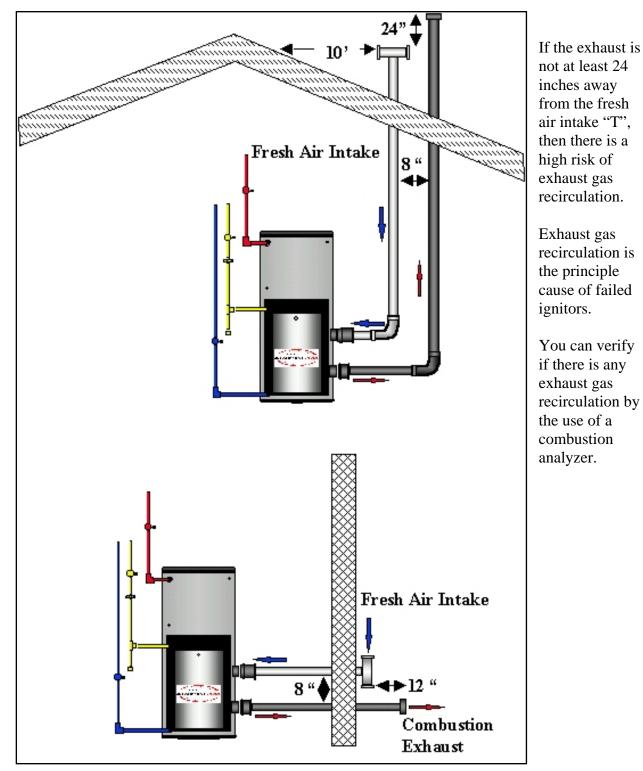
 $CO_2$  reading should be between  $(10\frac{1}{2}\% - 11\frac{1}{2}\%)$  $O_2$  reading should be between  $(3\frac{1}{2}\% - 4\frac{1}{2}\%)$ CO reading should be under 10 PPM



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Termination using PVC pipe in accordance with Use and Care Manual