

Safety Notice – Secondary Heat Exchangers

Serious Gas Furnace Issues

Recently we replaced and repaired many seriously failed furnaces. This was one of many **90+ efficient** furnaces (1993 – 2008) we have been seeing recently with a problematic secondary heat exchanger. Many of these units have developed serious operational issues or have failed completely. When combined with poor installation workmanship, these issues can result in an unsafe operating condition or a complete shutdown of the furnace, rendering it non-functional.

This issue can be confirmed via several online sources.

We are finding a large number of failed secondary heat exchangers in these particular models, which relate to a failure of a polypropylene coating.

The secondary heat exchanger is designed to extract the maximum remaining heat from the fuel source, resulting in a normal condensation reaction. The chamber becomes corroded from the inside, possibly due to a reaction from acidic condensation on the polypropylene coating. The company not yet explained the cause of the failure; however, the result is a slow blockage of the system, leading to heat retention and further damage of system components. When left untreated, the furnace will no longer operate and in some situations result in melting of exhaust pipes and a serious risk of carbon monoxide leakage.

This is not fear mongering or marketing hype but a serious condition we are seeing regularly. Like many failures, there are several stages and conditions evident. Extreme failures are quite obvious. Early failure needs to be caught early by a trained technician, as letting the condition persist will result in progressive issues. It will only get worse if left alone.

PRODUCT CATEGORY: 90%

Gas Furnaces MODELS AFFECTED: 340A, 340M, 345M, 350A, 350M, 351D, 352A, 352M, 355A, 355B, 355C, 355M 58MCA, MCB, MXA, MXB, MSA, UVB, MVP, MVB, MVC, MTA, MTB 490A, PG9M

Serial Number Range: 2993A00001 – 1808A99999

Examples of visual extremes

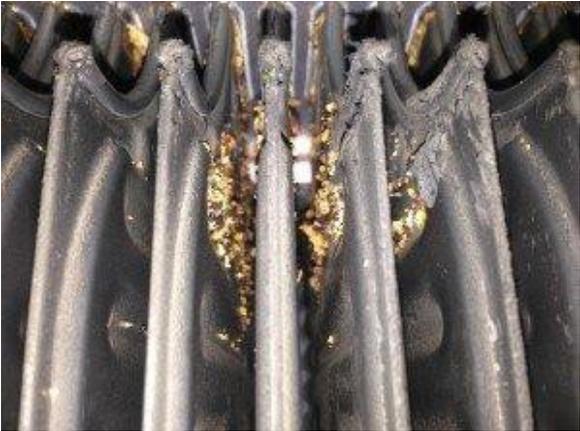
Failed Secondary Cells



Vent pipe damaged from heat



Corrosion buildup on secondary cells



WHAT CAN YOU DO?

Get your system inspected by an authorized heating company.

We can provide you with some critical information to allow you to take action to determine if your unit has an issue and how to proceed. The most effective method to confirm the condition of your furnace is to have us do a system checkout and audit, which includes a combustion analysis. This will confirm if the secondary heat exchanger is in good condition or if there are any issues. The diagnosis is required to ensure your system is operating safely.

Should any problems be found, we can give you the options to proceed.

Most homeowners are unaware of this issue and the manufacturer has not formally issued any safety recalls. We believe homeowners should be informed and understand their options. We understand this is a disappointing situation and we will do everything we can to ensure the safe operation of the unit and for your family.

Failure or imminent failure is defined by the following criteria:

1. The furnace no longer functions to produce heat due to diagnosed heat exchanger restriction per inspection guidelines provided in SMB 09-0022.

Key indicators: (Too plugged up to run)

2. The furnace produces heat but fails combustion analysis test due to heat exchanger restriction as diagnosed per guidelines provided in SMB 09-0022.

Key indicators: (High Carbon monoxide from combustion flue pipe and front top burner box is hot, trips off roll out switch and/or melts furnace parts and/or pipe in burner box)

3. The secondary heat exchanger meets the visual inspection failure criteria per visual inspection instructions provided in SMB 09-0022.

Key indicators: (water leaks from holes in the heat exchanger, inside has fallen apart plugging up combustion chamber and P trap)