

Inspection: [REDACTED] Address: [REDACTED]

Heating System(s)

We are not inspecting the heating system to make sure it is Code Compliant. That is the job of the local Code Enforcement Officers. We will test natural gas and propane furnaces for carbon monoxide and combustible gas leaks.

High-efficiency forced air natural gas and propane furnaces have a primary and secondary heat exchanger that are very restrictive in regards to accessing them for inspection. Most models require a licensed HVAC Contractor to open up the plenum, tilt up the A-coil, and inspect the primary heat exchanger using a mirror & flashlight. If that's not a viable option, then the other method entails disconnecting the gas lines and electric lines, prying apart the sealant, and sliding the heat exchanger out the front. When the inspection is all complete, they would then have to put it all back together if no cracks are found. This is way beyond the scope of our home inspection! We will not open up a high-efficiency furnace for these reasons to inspect the heat exchangers.

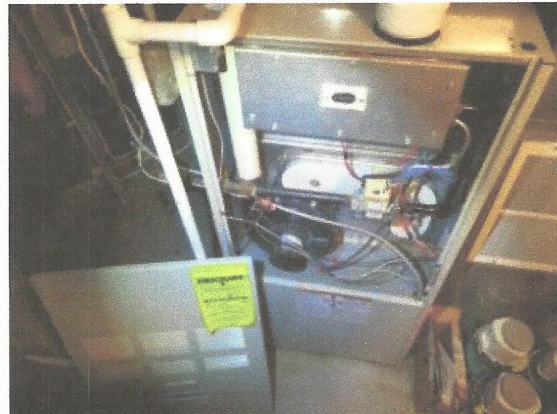
For 80% efficiency or less natural gas or propane furnaces, we can attempt to access the heat exchanger for inspection using techniques from Ellis Prach's Heat Exchanger Experts course. This type of inspection is beyond the ASHI Standards of Practice. It is also up to the discretion of the Inspector if that type of inspection is necessary. Sometimes, we'll remove the blower and gain access on newer furnaces that are only a few years old. Sometimes, we'll gain access and inspect only if they are much older. It's up to the call of the Inspector and what they are seeing on that specific inspection.

If the gas line is off to a furnace, we will not turn it on. If the gas is off at the meter and you would like us to return once the gas has been turned on, then we can return for an additional fee.

HEATING SYSTEM

Heating System Type:

Tempstar, Natural gas forced air high efficiency furnace.



Year Manufactured:

2000.



Furnace Condition:

This furnace failed to have the burners ignite. The exhaust fan would turn on, but

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nothing more. I could hear sloshing in the exhaust fan indicating it had some water in it.

This furnace has a Serpetine heat exchanger with eyelets holding the sides of each shell together. I removed the high-limit control switch and found a cracked eyelet above off to the right. See picture. I suspect there are more, but it's a high efficiency furnace that I can't access the rest of the exchanger. This furnace has a cracked heat exchanger and is not safe! DO NOT USE!!! When cracks develop, there is a potential for flue gas (aka-carbon monoxide) to leak through into the supply air and be blown throughout the home.

At 16 years old with the other issues, I don't see the point of trying to repair it. This furnace needs to be replaced.

There is also a natural gas leak at the shutoff valve to the water heater.



Recommendation(s):

Recommend having a licensed HVAC Contractor replace the furnace for safety reasons.

Recommend having the licensed HVAC Contractor also repair/replace the shutoff valve with the natural gas leak.



We recommend signing up for a licensed HVAC Contractor's annual service plan to properly maintain your mechanical systems which will in turn make them last longer.