Job #125368277

HB Maintenance Tune Up

Job Details

Date

2024-09-25

Customer Name

Alastair McIntyre

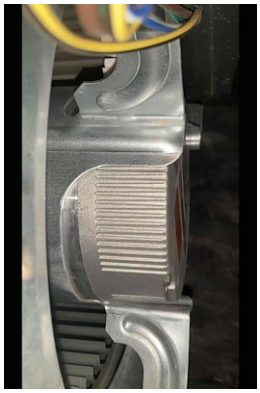
Address

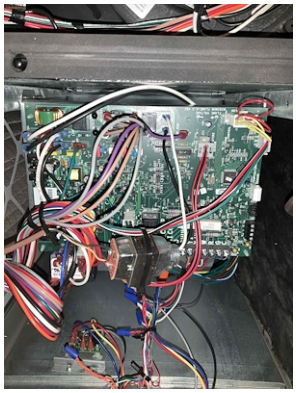
167 Raleigh Street, Chatham, ON N7M 2N3 Canada

Technician On SIte

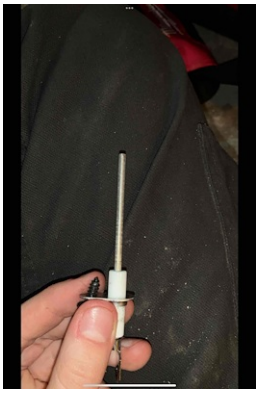
Makayla Smith

Key Points 1

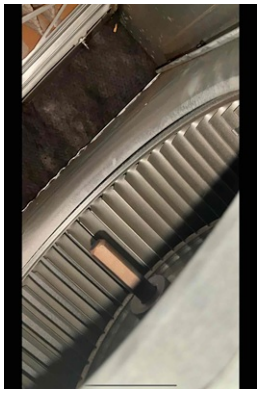


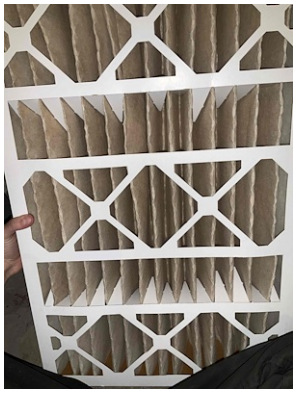


Key Points 2



Key Points 3





Technicians Comments

Please note anything of importance you found during todays visit.

ECM SMART motor and control board is unprotected from power surges and brown outs.
Burners have a tiny bit of rust.
Filter was changed 2 months ago, blower wheel is looking good.
Gas sniffer detected leak, soap test twice, no leak.

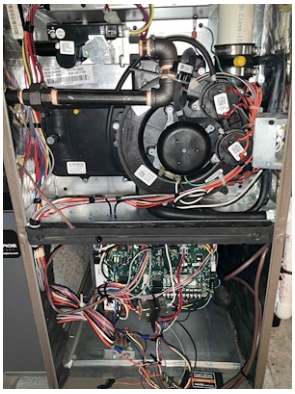
Technicians Recommendations

Please note any recommendations or required repairs.

I would recommend furnace protection package to prevent wear and tear to the unit.

Before Photos of Equipment Serviced Today

Stand back and take a photo of the equipment with the doors off, as you found it before you have performed your maintenance.



After Photos of Equipment Serviced Today

Stand back and take a photo of the equipment with the doors off, after you've performed your maintenance.

Equipment Life Expectancy

Green rated equipment and components are in "good as new" condition.
Yellow rated equipment is considered aging, components are functioning, but are at risk of sudden failure.
Red rated equipment and components are considered failed and require replacement.

Equipment Efficiency

Green rated equipment is operating at designed efficiency
Yellow rated outside is operating outside of designed efficiency and will require service.
Red rated equipment is operating far beyond design efficiency and needs immediate attention.

Are Additional Services or Repairs Being Completed Today?

Is service being performed today to repair or increase system performance?

No

Final Check and Walkthrough

Check that the unit is running from the thermostat before you leave to avoid callbacks.

Yes

HB Seal of Approval

Picture of the HB sticker on the equipment

Equipment Details

Make:

YORK

Model #:

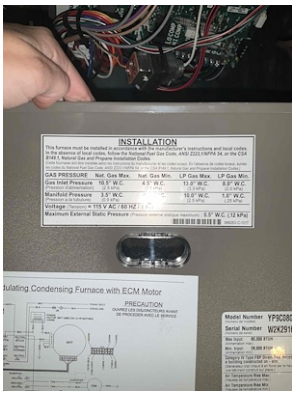
YP9C080B12MP13C

Serial #:

W2K2916503

Photo of Rating Plate(s)

photo of the rating plate(s) of the equipment being worked on today. please make sure the full model and serial are clear and visible.



Information for Todays Visit

This maintenance is for your:

Heating Maintenance

Does anyone in the home have allergies? Are there rooms that are hard to heat or cool?

☑ No

Relative Humidity in the Living Space

Measure the RH% near the thermostat in the living space. Optimal relative humidity is between 30-50%

How have your energy bills been lately?

- [x] Low

Carbon Monoxide Detectors

Are carbon monoxide detectors installed on each floor? Are they up to date?

Yes

Notes from the Customer

-

Thermostat

Is the customer satisfied with their thermostat? Is it accurate? Check the overall condition of the thermostat. Replace batteries if required(customer supplied)

Water heater ownership?

Customer Owned

Heating Equipment

What type of heater?

Modulating High Efficiency Furnace

Heating Maintenance for Protection, Performance and Peace of Mind

Offline Visual Inspection and Cleaning

Operational Check

Does the unit turn on and run? For a proper maintenance to be performed, the equipment must be in operational condition

Yes

Test Furnace Pressure Safety Switch

Inspect and test the pressure safety switch for proper/safe operation.

Pass

Test Furnace Door Switch

Inspect and test the door switch for proper/safe operation.

Pass

Air Filter Condition

Grade the condition of the air filter, a restricted air filter is the most common cause of system failure and has the biggest negative effect on system performance.

Air Filter Photos

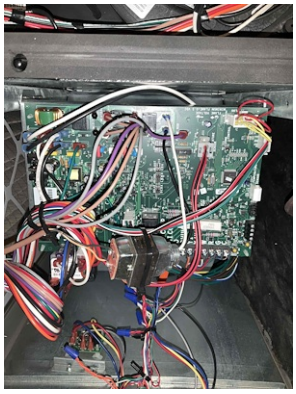
Replace air filter as required. Take a photo that includes the size, date installed, and your initials.

Circuit board

Clean and Inspect the circuit board. Blowout using your blower and a soft brush to clean of any dust and debris, and inspect the board for hotspots and corrosion.

Circuit board Photo

Photo of the circuit board after being cleaned in place



Blower Assembly Condition

Visually inspect and test the blower motor and fan wheel on the furnace/air handler. Inspect for bearing play and oil leakage, check amps on the neutral wire of the unit with the doors on and filter in place for proper readings. Also inspect fan wheel for dirt/dust buildup.

Blower Motor Photo

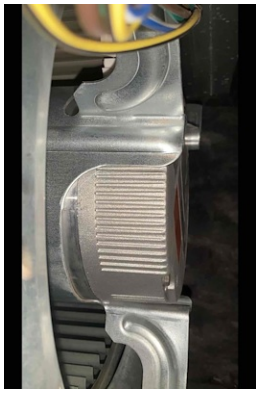


Photo of the Blower Wheel

Flush Out and Inspect Drain System

Flush the drain system using your blower to pressurize the piping and push out any potential blockages. Inspect the hoses, trap and collector box for damage or potential leak points.

Photo of the Drain system with Cleanout Access

Take a photo of the clean out access for future cleanings.

Overall Burner Condition

Brush off the burners in place. Use your blower to blow out any debris to ensure proper firing and no delayed ignition. Full teardown and cleaning of burners is recommended by the manufacturer every 4 years. Additional service may be required.

Photo of the Burners

Take a Photo of the burners in place using an inspection mirror.

What type of ignition system?

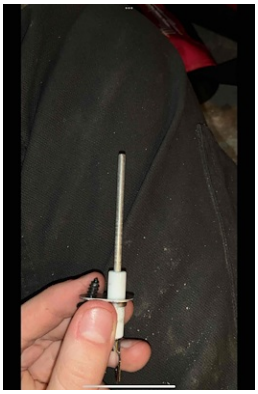
Hot Surface Ignitor

Photo of HSI

Take a Photo of HSI in place using an inspection mirror.

Before and After Photos of the Flame Sensor

Photo of the flame sensor removed, before and after being cleaning lightly with a wire brush. Further service may be required for difficult access.



Connect Meters and Probes to Perform Operational Tests

Flame Sensor

Overall condition of the flame sensor, after being cleaned. Measure the flame sensor microamps in series. A green reading is >2.5ua, yellow is 2.2-2.5ua. Anything below 2.2ua mark as red as additional service will be required. Manufacturer recommends sensor be replaced every 5 years. Additional service may be required.

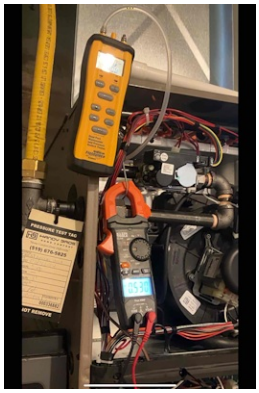
Flame Sensor Micro-Amps

Hot Surface Ignitor

HSI condition based on visual inspection and amp draw.

Hot Surface Ignitor Amp Draw

Amp draw on the ignitor, low amp readings are a sign of failure. Also check for hotspots, cracks and white discoloration. Manufacturer recommends the ignitor be replaced every 5 years. Additional service may be required.



Gas Valve

Overall condition of the gas valve

High Fire Gas Valve Manifold Pressure

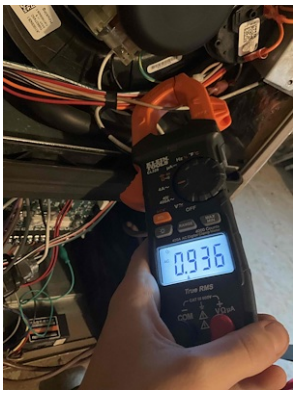
Manifold gas pressure in high fire

Inducer/Combustion Motor

Check the overall condition of the inducer motor. listen for bearing wear and look for oil leakage.

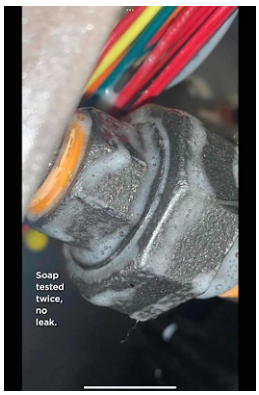
Inducer/Combustion Motor Amp Draw

Amp draw on the neutral wire compared to the rating plate of the motor at high speed. Include a photo of the rating plate.



Gas Piping Inspection Video

Inspect the gas piping from the shut off to the appliance and test for gas leaks. Check for outdated components like spring shut offs and thread protectors. additional service may be required.



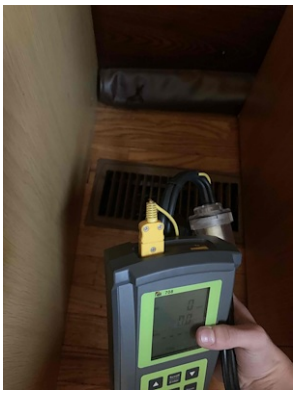
Final Checks

Exhaust Combustion Analysis

Photo of the combustion analyzer screen in the exhaust after the equipment has been running for 3-5 minutes

Living Space Carbon Monoxide (CO)

Check the CO levels in the airstream/living space. Take a photo of your analyzer



Heat Exchanger Condition

Rate the heat exchanger based on burner condition, visual inspection, and combustion analysis.

Temperature Split

Measure the return temperature and the supply temperature in Fahrenheit and compare it to the rating plate of the equipment

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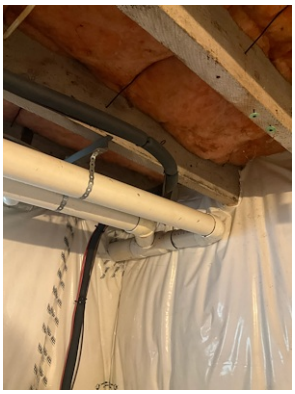
Exhaust Venting Inspection

Inspect the Exhaust Venting for cracks, damage and leaks. Inspect termination for blockages and damage.



Equipment High Limit Safety Switch

Inspect and test the High limit safety switch for proper/safe operation.

Pass

Equipment Flame Rollout Safety Switch

Inspect and test the Flame Rollout safety switch for proper/safe operation.

Pass

Electrical System

Inspect the electrical system of the unit for corrosion, loose connections, frayed wires, or any potential hazards.

Emergency Shut Off Switch

Is the emergency shut off switch to code and operational? Attach label to the switch.

Yes

Photo of Emergency Shut Off Switch