

Indiana WX Oil Furnace Inspection Guide

Client: _____ **Job # :** _____

Address: _____ **Phone:** _____

Client Interview: _____

Oil Dealer: _____ **Date of last service:** _____

Comments/Billing information: Standard Inspection / Clean and Tune

Follow-up: Emergency / Furnace Replacement

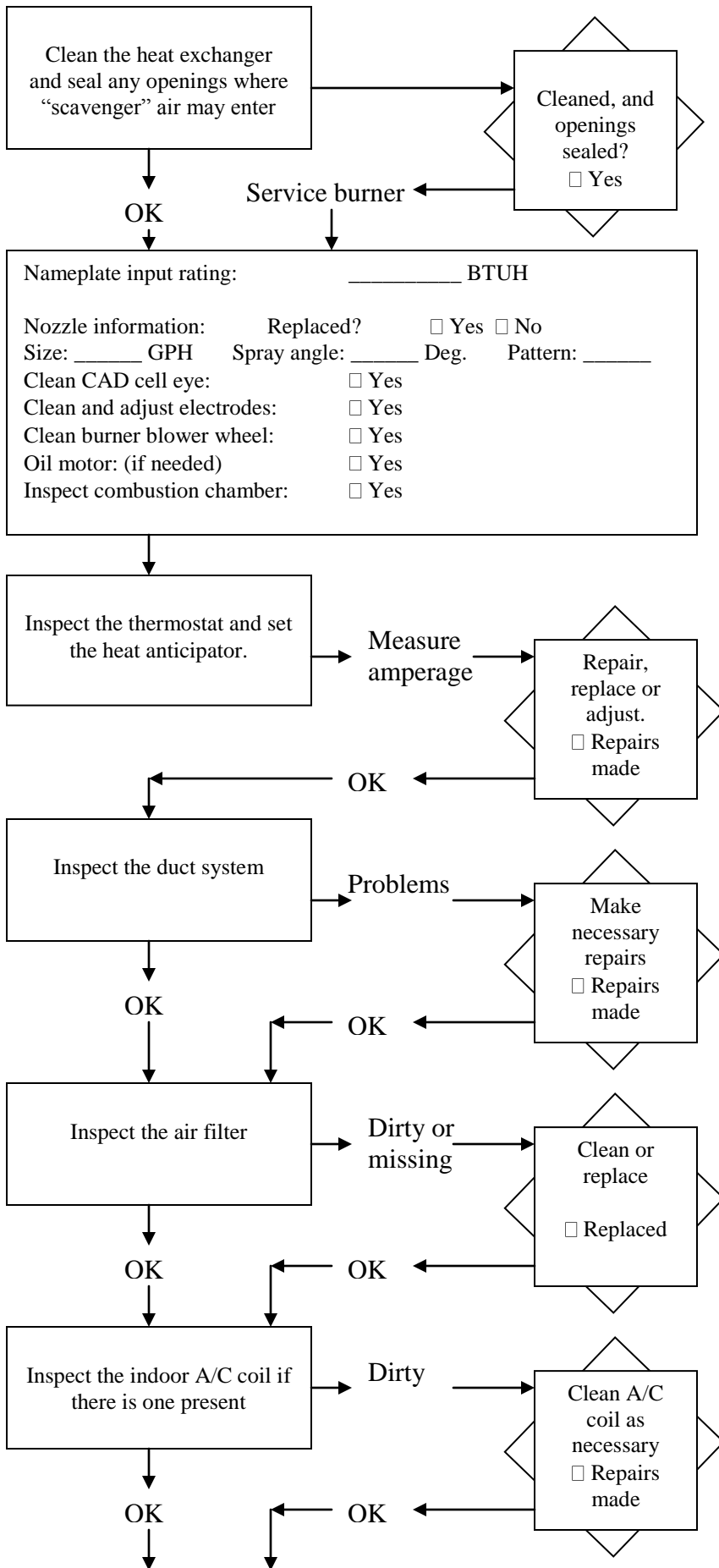
Fuel Type: # 1 oil # 2 oil **Forced air?** Y N

Water Heater: Gas Oil Electric **Is this a mobile home?** Y N

Is the Water Heater in the same CAZ as the furnace? Y N

Is this the Final Inspection of a new furnace installation? Y N

Describe appliance types, locations, venting configurations and BTUH input ratings: _____



Technician

Heat exchanger cleaned?
 Yes No

Burner serviced?
 Yes No

Measured amperage at the thermostat:
_____ Amps

Heat anticipator reset?
 Yes No N/A

Any open returns?
 Yes No

Ducts sealed?
 Yes No N/A

Duct sealing performed by others

Filter clean and supported properly?
 Yes

Remote filter/filter grille?
 Yes No

Indoor A/C coil clean?
 Yes

Inspector

Burner serviced?
 Yes No

Heat anticipator setting:
_____ Amps

N/A

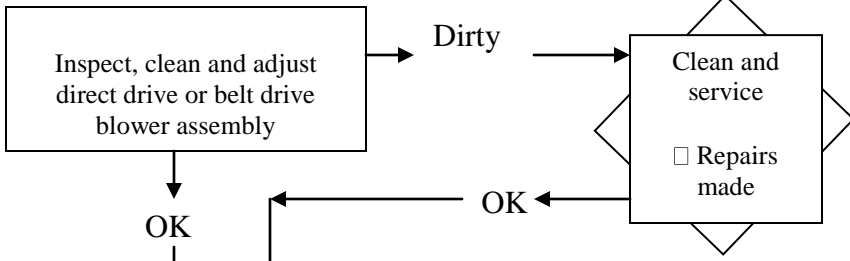
Any open returns?
 Yes No

Ducts sealed?
 Yes N/A

Filter clean and supported properly?
 Yes

Return ducts sealed all the way back to the furnace if a remote filter/filter grille is used?
 Yes

Indoor A/C coil clean?
 Yes



All vented combustion appliances are to be tested under "Worst Case Depressurization" conditions in the combustion appliance zone (CAZ). More than one CAZ requires more than one CAZ depressurization test.

<u>Set-Up</u>	<u>Technician</u>	<u>Inspector</u>
Furnace and water heater off?	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Furnace filter clean or removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Exterior windows and doors closed?	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Fireplace or wood stove dampers closed?	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Clothes dryer and all exhaust fans on? (Exception: Do not run whole house fans)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Interior doors closed? (Exception: Do not close doors to rooms with exhaust fans only - no supply ducts)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Blower door exhausting 300 CFM fireplace flow?	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
<input type="checkbox"/> N/A		

<u>CAZ Depressurization Test</u>	<u>Technician</u>
Gauge set-up to measure CAZ WRT outside?	<input type="checkbox"/> Yes
Is there a door from the interior to the CAZ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Forced air furnace?	<input type="checkbox"/> Yes <input type="checkbox"/> No

CAZ door:

	<u>Open</u>	<u>Closed</u>
Furnace Fan OFF	_____ Pa	_____ Pa
Furnace Fan ON	_____ Pa	_____ Pa

<u>Water Heater Test Procedure</u>	<u>Initial</u>
<i>*Note: The water heater is always tested first.</i>	
Does the water heater have a properly installed pressure and temperature relief valve?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Water temperature/Adjusted? _____ Deg.F.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Fire the water heater	
Was initial flow established in the vent?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Was there spillage after two minutes?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Draft pressure after five minutes: _____"WC or _____ Pa	
Carbon monoxide after five minutes: _____/____PPM	
<input type="checkbox"/> Repairs made	

<u>Technician</u>	
Blower assembly serviced? <input type="checkbox"/> Yes	
<input type="checkbox"/> N/A No blower	
Blower speed increased? <input type="checkbox"/> Yes <input type="checkbox"/> No	

"Worst Case" set-up complete? <input type="checkbox"/> Yes	

"Worst Case" Depressurization measurement of the CAZ _____ Pa	

Water Heater:	
T&P relief valve? <input type="checkbox"/> Yes	
Temp: _____ Deg.F. Adjusted? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Establish flow in vent? <input type="checkbox"/> Yes	
Spillage? <input type="checkbox"/> No	
Draft pressure: _____"WC or _____ Pa	
Carbon monoxide: _____/____PPM	

<u>Inspector</u>	
Blower assembly serviced? <input type="checkbox"/> Yes	
<input type="checkbox"/> N/A No blower	

"Worst Case" set-up complete? <input type="checkbox"/> Yes	

Inspector	
Fan Off:	
Open _____ Pa	
Closed _____ Pa	
Fan On:	
Open _____ Pa	
Closed _____ Pa	

Final "Worst Case" Depressurization measurement of the CAZ _____ Pa	

Water Heater:	
T&P relief valve? <input type="checkbox"/> Yes	
Temp: _____ Deg.F. Adjusted? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Establish flow in vent? <input type="checkbox"/> Yes	
Spillage? <input type="checkbox"/> No	
Draft pressure: _____"WC or _____ Pa	
Carbon monoxide: _____/____PPM	

Note:

Initial combustion safety testing must be completed. If it is found that the appliances will not work under "Worst Case" conditions, then continue testing and repair under "normal operating conditions" and document for the Wx Inspector in the "Follow-up" section of this guide.

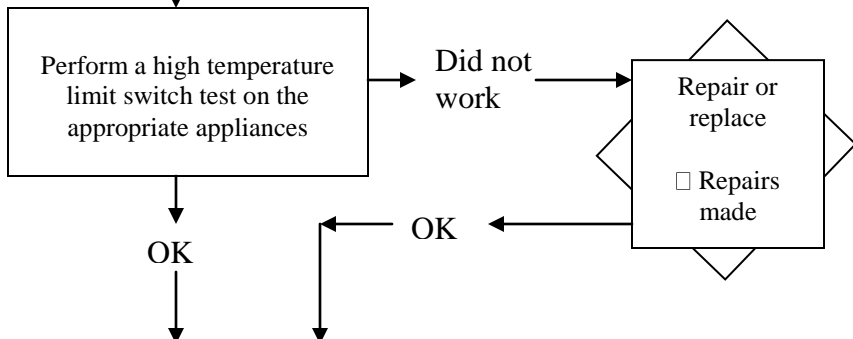
Calibrate analyzer and insert probe in the vent connector upstream of the barometric damper.

Monitor the oxygen reading on start-up! A change in O2 greater than 1% validates a bad heat exchanger.

Furnace Combustion Testing Procedure Initial

Fire the furnace
Change in O2 when blower comes on: _____%
Did the operation of the heating appliance cause spillage or a reduction in draft at any other appliance? Yes No N/A
Pump pressure: (optional) _____PSIG Adjusted to: _____ PSIG
Steady state O2: _____%
Steady state Stack Temperature - _____ Deg.F.
Subtract Combustion air temperature - _____ Deg.F.
To get Net Stack Temperature: _____ Deg.F.
Steady state Combustion efficiency: _____%
Burner type: Retention head Non-Retention head
Breech draft: _____"WC or _____ Pa
Overfire draft: _____"WC or _____ Pa
Outside air temperature: _____ Deg.F.
Smoke: _____#
Carbon Monoxide: _____ PPM
Temperature rise: Supply minus Return: _____ Deg.F.

Repairs/adjustments made Bad heat exchanger



Technician

Not tested under "Worst Case"

Furnace Steady state:

O2 _____%

Stack temp: _____ Deg.F.

Combustion air temp: _____ Deg.F.

Net stack temp: _____ Deg.F.

Combustion efficiency _____%

Breech draft: _____"WC or _____ Pa

Overfire draft: _____"WC or _____ Pa

Outside air temp: _____ Deg.F.

Smoke: _____#

Carbon monoxide: _____ PPM

Temperature rise: _____ Deg.F.

Inspector

Furnace Steady state:

O2 _____%

Stack temp: _____ Deg.F.

Combustion air temp: _____ Deg.F.

Net stack temp: _____ Deg.F.

Combustion efficiency _____%

Breech draft: _____"WC or _____ Pa

Overfire draft: _____"WC or _____ Pa

Outside air temp: _____ Deg.F.

Smoke: _____#

Carbon monoxide: _____ PPM

Temperature rise: _____ Deg.F.

High temperature limit switch operational? Yes

Limit temperature: _____ Deg.F.

High temperature limit switch operational? Yes

