

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

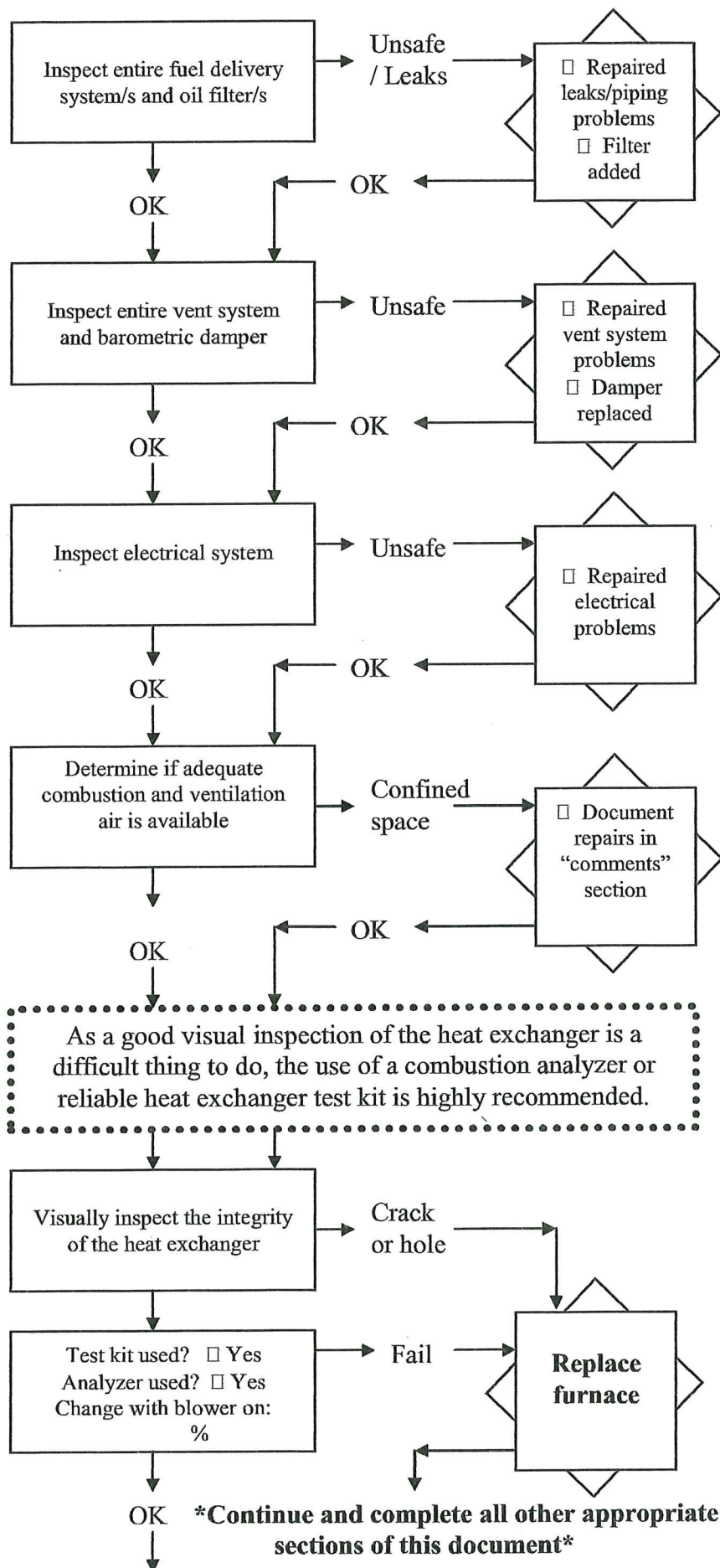
Fuel Type: ☐ # 1 oil ☐ # 2 oil **Forced air?** ☐ Y ☐ N

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

Fuel Delivery System:

- ☐ OK
- Operational shut-off valve/s?
☐ Yes
- Oil filter present?
☐ Yes
- Oil filter cartridge replaced?
☐ Yes ☐ No

Vent System:

- ☐ OK
- Operational barometric damper?
☐ Yes ☐ N/A

Operational shut-off switch?

- ☐ Yes
- Electrical polarity correct?
☐ Yes
- Appliance grounded?
☐ Yes

Total BTUH

_____ BTUH

Volume of air needed:
(BTUH/20)

_____ Cu.Ft.

Volume available:
(LxWxH)

_____ Cu. Ft.

- ☐ Combustion air work done by others

Crack or hole in the heat exchanger?
☐ Yes

Replace furnace.

Inspector

Fuel Delivery System:

- ☐ OK

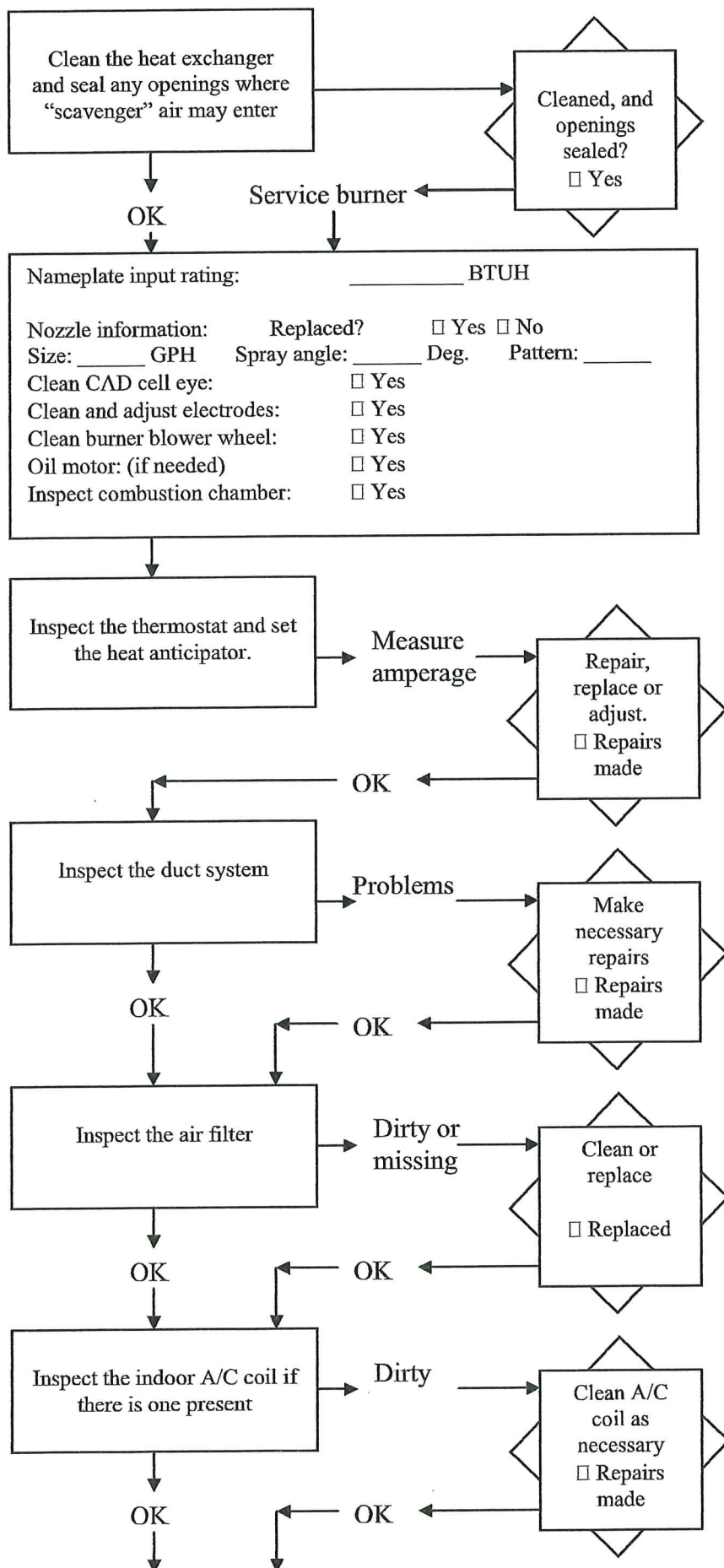
Vent system:

- ☐ OK

Electrical system:

- ☐ OK

Proper amount of combustion and ventilation air provided
☐ Yes



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

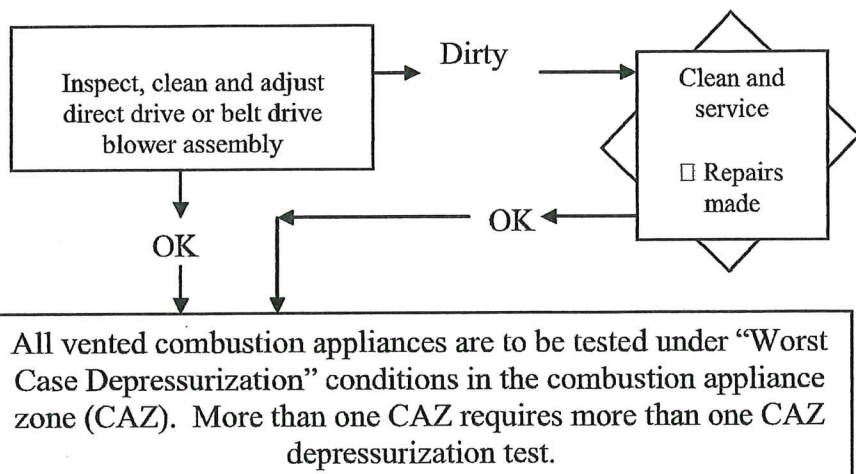
Any open returns?
☐ Yes ☐ No

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



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

CAZ Depressurization Test	Technician
Gauge set-up to measure CAZ WRT outside?	☐ Yes
Is there a door from the interior to the CAZ?	☐ Yes ☐ No
Forced air furnace?	☐ Yes ☐ No

CAZ door:

	Open	Closed
Furnace Fan OFF	_____ Pa	_____ Pa
Furnace Fan ON	_____ Pa	_____ Pa

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

Technician	
Blower assembly serviced?	
☐ Yes	
☐ N/A No blower	
Blower speed increased?	
☐ Yes ☐ No	

"Worst Case" set-up complete?	
☐ Yes	

"Worst Case" Depressurization measurement of the CAZ	
_____ Pa	

Water Heater:	
T&P relief valve?	
☐ Yes	
Temp: _____ Deg.F.	
Adjusted? ☐ Yes ☐ No	
Establish flow in vent?	
☐ Yes	
Spillage? ☐ No	
Draft pressure: _____ "WC or _____ Pa	
Carbon monoxide: _____ / _____ PPM	

Inspector								
Blower assembly serviced?								
☐ Yes								
☐ N/A No blower								

"Worst Case" set-up complete?								
☐ Yes								

<table border="1"> <thead> <tr> <th>Inspector</th> </tr> </thead> <tbody> <tr> <td>Fan Off:</td> </tr> <tr> <td>Open _____ Pa</td> </tr> <tr> <td>Closed _____ Pa</td> </tr> <tr> <td>Fan On:</td> </tr> <tr> <td>Open _____ Pa</td> </tr> <tr> <td>Closed _____ Pa</td> </tr> </tbody> </table>		Inspector	Fan Off:	Open _____ Pa	Closed _____ Pa	Fan On:	Open _____ Pa	Closed _____ Pa
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?								
☐ Yes								
Temp: _____ Deg.F.								
Adjusted? ☐ Yes ☐ No								
Establish flow in vent?								
☐ Yes								
Spillage? ☐ 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

Perform a high temperature limit switch test on the appropriate appliances

Did not work

Repair or replace

☐ Repairs made

OK

OK

