

ND FURNACE FIELD INSPECTION

NORTH DAKOTA DEPARTMENT OF COMMERCE
 DIVISION OF COMMUNITY SERVICES
 SFN 59497 (10/16)

State of North Dakota Weatherization Assistance Program Heating System Clean, Tune, and Inspection Form

Job #		Name		Phone	
Address		City		State	Zip
Fuel Type			Heating System Type		
Input	Output	Owner/Renter		Date	

	Pre-test	Post-test		Pre-test	Post-test
Gas leaks	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Open air returns	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Venting problems	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Missing main shutoff	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Carbon indicators	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Asbestos	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			Heat exchanger check	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Anticipator:	Measured:		Set at:	Reset:	
Cycling on high limit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Oil system smoke test		
Fan on (15 sec)/off temp	_____/____	_____/____	Draft, breech		
Spillage/backdraft	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Draft, overfire		
Steady State Heatrise	Pre _____ - _____ = _____		Steady State Heatrise	Post _____ - _____ = _____	
Carbon monoxide	Pre _____ ppm	Post _____ ppm	High limit temp		
Check filter	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Clean heat exchanger	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Cleaned blower	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Check belt	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Blower amp. draw	<input type="checkbox"/> Yes <input type="checkbox"/> No ____	<input type="checkbox"/> Yes <input type="checkbox"/> No ____	A-coil dirty	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Net stack temp			O2% or CO2%		
Efficiency %			Run final furnace cycle		<input type="checkbox"/> Yes <input type="checkbox"/> No
Duct problems					

H2O heater CO	ppm	ppm	H2O heater Draft		
Oven CO	ppm	ppm	Ambient CO	ppm	ppm

At the time of this inspection, this heating system was operating properly.

Comments/Warning

Technician Signature	Date
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I understand the above problems:

Combustion Test Analysis Guidelines			
Heating Unit Type	Oxygen (O2)	Net Stack Temp	Smoke Test
Gas	4-9 percent		
Atmospheric	4-9 percent	300-600 °F	NA
Fan-assisted	See man. Info.	300-480 °F	NA
Condensing	4-9 percent	See man. Info.	NA
Standard Power Burner		300-650 °F	NA
Oil (No. 1 & 2)			
Oil gun burner	4-9 percent	325-600 °F	1 or less
Flame Retention burner	4-7 percent	325-600 °F	1 or less

Acceptable Draft Test Ranges	
Outside Temperature (degree F)	Minimum Draft Pressure (Pa)
<10	-2.5
10-90	(Outside Temperature ÷ 40) – 2.75
>90	-0.5

— For Use with Carbon Monoxide Testing —

Appliance	Action CO Level	Allowable CO Level	Comments
Gas Furnace/Boiler	100 ppm/200 ppm	200 ppm/00 ppm	as-measured/air-free
Gas Water Heater	100 ppm/200 ppm	200 ppm/400 ppm	as-measured/air-free
Range Bake Burner	800 ppm	800 ppm	air-free
Oil Furnace/Boiler	100 ppm	200 ppm	as-measured
Oil Water Heater	100 ppm	200 ppm	as-measured

“Action CO Level” indicates level above which repair or adjustment to appliance is recommended to lower CO emissions.
 “Allowable CO Level” indicates maximum CO emission levels allowed by the North Dakota Weatherization Program.