

Heat Pump Summary Sheet

Emergency

Follow-up Needed

Client _____

Job # _____

Address _____

Phone # _____

City/Zip _____

Client Interview _____

	Pre Test	Post Test	Inspection
Indoor Manufacturer _____ Model # _____ Serial # _____			
<input type="checkbox"/> Upflow	<input type="checkbox"/> Downflow	<input type="checkbox"/> Horizontal Left	<input type="checkbox"/> Horizontal Right
Aux. Drain Pan	<input type="checkbox"/> Yes <input type="checkbox"/> No	Pan Added	<input type="checkbox"/> Yes <input type="checkbox"/> No
Kinks In Piping	<input type="checkbox"/> Yes <input type="checkbox"/> No	Repaired	<input type="checkbox"/> Yes <input type="checkbox"/> No
Insulated Vapor Pipe	<input type="checkbox"/> Yes <input type="checkbox"/> No	Insulation Added	<input type="checkbox"/> Yes <input type="checkbox"/> No
Condensate Line Trapped	<input type="checkbox"/> Yes <input type="checkbox"/> No	Repaired	<input type="checkbox"/> Yes <input type="checkbox"/> No
Describe Line Configuration and Termination _____			

CFM (From Page Two) _____ CFM	_____ CFM	_____ CFM	_____ CFM
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Thermostat			
Level And Secure	<input type="checkbox"/> Yes <input type="checkbox"/> No	Repaired	<input type="checkbox"/> Yes <input type="checkbox"/> No
Anticipator 2nd Stage	Measured _____	Set At _____	Reset _____

Ductwork			
Leaky	<input type="checkbox"/> Yes <input type="checkbox"/> No	Repaired	<input type="checkbox"/> Yes <input type="checkbox"/> No
Disconnected	<input type="checkbox"/> Yes <input type="checkbox"/> No	Repaired	<input type="checkbox"/> Yes <input type="checkbox"/> No
In Unconditioned Space	<input type="checkbox"/> Yes <input type="checkbox"/> No	Insulated	<input type="checkbox"/> Yes <input type="checkbox"/> No

Filter/Blower			
Air Filter Condition	<input type="checkbox"/> Dirty <input type="checkbox"/> Clean <input type="checkbox"/> Missing	Replaced/Size _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
Blower Wheel	<input type="checkbox"/> Dirty <input type="checkbox"/> Clean	Cleaned	<input type="checkbox"/> Yes <input type="checkbox"/> No
Blower Motor	<input type="checkbox"/> Direct Drive <input type="checkbox"/> Belt Drive	Speed Changed	<input type="checkbox"/> Yes <input type="checkbox"/> No
Oil Cups Facing Up	<input type="checkbox"/> Yes <input type="checkbox"/> No	Repaired	<input type="checkbox"/> Yes <input type="checkbox"/> No
Fan Centered In Housing	<input type="checkbox"/> Yes <input type="checkbox"/> No	Repaired	<input type="checkbox"/> Yes <input type="checkbox"/> No
Coil Clean	<input type="checkbox"/> Yes <input type="checkbox"/> No	Cleaned	<input type="checkbox"/> Yes <input type="checkbox"/> No

Outdoor Manufacturer _____	Model # _____	Serial # _____	
Elevated Above Snow Line	<input type="checkbox"/> Yes <input type="checkbox"/> No	Repaired	<input type="checkbox"/> Yes <input type="checkbox"/> No
Unit Level	<input type="checkbox"/> Yes <input type="checkbox"/> No	Repaired	<input type="checkbox"/> Yes <input type="checkbox"/> No
Insulated Vapor Pipe	<input type="checkbox"/> Yes <input type="checkbox"/> No	Insulated	<input type="checkbox"/> Yes <input type="checkbox"/> No
Refrigerant Leaks	<input type="checkbox"/> Yes <input type="checkbox"/> No	Repaired	<input type="checkbox"/> Yes <input type="checkbox"/> No
Refrigerant Charge Checked In What Mode		<input type="checkbox"/> Heating	<input type="checkbox"/> Cooling
Refrigerant Charge Changed		<input type="checkbox"/> Yes <input type="checkbox"/> No	
	_____ PSIG Suction	_____ PSIG Suction	_____ PSIG Suction
	_____ PSIG Discharge	_____ PSIG Discharge	_____ PSIG Discharge
	_____ OAT _____ RAT	_____ OAT _____ RAT	_____ OAT _____ RAT

Technician _____ Date _____ Reviewer _____ Date _____ Inspector _____ Date _____

Water Heater			
T and P Relief Valve	<input type="checkbox"/> Gas	<input type="checkbox"/> Electric	
Gas Leaks	<input type="checkbox"/> Yes <input type="checkbox"/> No	Added	<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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Carbon Monoxide Indicators	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Carbon Monoxide	____ / ____ PPM	____ / ____ PPM	____ / ____ PPM
Spillage	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Worst Case Draft/OAT	____ "W.C." _____ °F.	____ "W.C." _____ °F.	____ "W.C." _____ °F.
Water Temperature	____ °F. Adjusted	<input type="checkbox"/> Yes <input type="checkbox"/> No Final Temp.	____ °F.

Specifications

Client Interview: Comments Regarding Operation, Cold Rooms, High Bills, Repairs, Adding Freon...Etc.

Auxiliary Drain Pan: Required By Code If The Unit Is Located Above A Living Space. **Kinks In Piping:** None. **Refrigerant Leaks:** None. **Vapor Pipe Insulation:** Closed Cell Rubber Insulation Of A Minimum 1/2" Wall Thickness. **Condensate Line Trap:** Must Have One / If One Is Added It Should Be Vented On The Outlet.

Describe Line: Concerns Are Length, # Of Fittings, And Termination In Or Out Of The Drain.

CFM: (CFM = BTUH DIVIDED BY 1.08 TIMES TEMPERATURE RISE)

Pre Test _____ Volts X _____ Amps = _____ watts X 3.413 = _____ BTUH _____ =CFM
Supply _____ °F minus Return _____ °F = Δ T _____ °F X 1.08 = _____ | _____ BTUH

Post Test _____ Volts X _____ Amps = _____ watts X 3.413 = _____ BTUH _____ =CFM
Supply _____ °F minus Return _____ °F = Δ T _____ °F X 1.08 = _____ | _____ BTUH

Inspect _____ Volts X _____ Amps = _____ watts X 3.413 = _____ BTUH _____ =CFM
Supply _____ °F minus Return _____ °F = Δ T _____ °F X 1.08 = _____ | _____ BTUH

* Note: These CFM Tests Are Done In The Emergency Heat Mode With The Fan On Continuously At Thermostat Subbase.

Anticipator: Set At Measured Amp Draw As Measured At The Thermostat. **Ductwork Leaky:** Repaired Using Appropriate Materials And Sealed Using Mastic And Mesh Tape. **Disconnected:** Reconnected And Sealed. **Unconditioned Space:** Insulate Using Minimum R-11 Duct Insulation. **Air Filter:** Must Have One / Prefer Washable Type That Client Knows How To Clean. **Blower Wheel/Motor:** Clean. **Coil:** Clean. **Elevated Outdoor Unit:** Should Have A Minimum Clearance Of 4" Above Anticipated Snow Depth. **Level:** Outdoor Unit Should Be Level In All Directions. **Refrigerant Charge:** Adjusted To Meet Manufacturers Specifications. Tech Must Meet All EPA And Applicable Guidelines. **OAT,** Outside Air Temperature. **RAT:** Return Air Temperature. **Gas Leaks:** None. **Venting Problems:** Intact Or Repaired. **Monoxide Indicators:** No carbon, Flame Problems, White Flames. **Carbon Monoxide:** Less Than 100 PPM In The Flue And Checked On Both Sides Of The Baffle. **Spillage:** None Using Smoke Test.

Draft/ OAT: -.005"W.C. @ >80°F, -.01"W.C. @ 30°F To 80°F, -.02"W.C. @ < 30°F (Minimums).

Water Temperature: 120°F / Mark The Dial At The Original Setting.

What You Should Know About Your Heat Pump

This Heat Pump Performance Modification improves the safety and efficiency of your heat pump and water heater. The work completed can save you money on your utility bills during the next year.

You can be more informed about the operation of the equipment and help to save money by reading and maintaining the following items that have been improved and checked.

- ___ 1. The blower has been cleaned. This will allow for better air flow and greater efficiency.
It should be cleaned whenever it starts to get dirty.
- ___ 2. The filter has been changed / washed. A clean filter allows air through the heat pump. No air means heat pump service and higher utility bills. Your filter should be replaced if it is a throw away type or washed if it is reusable every month.
- ___ 3. The blower motor (has has not) been oiled. If the motor can be oiled, it needs 3-5 drops of oil in each port once a year. Do not over oil as this can damage the motor.
- ___ 4. The coil has been cleaned. This is also necessary for good air flow and heat transfer.
- ___ 5. Checked for blocked supply registers and return air grilles. Do not close registers. Also checked for seasonal direction of registers if applicable.
- ___ 6. Sealed and connected leaky ducts. Now the heat is being delivered to the house where you want it. The ducts have also been insulated if they run in an unconditioned space.
- ___ 7. The thermostat has been adjusted for optimum performance. It is not necessary to set the thermostat back at night. Emergency heat should not be used unless the outdoor unit is broken.
- ___ 8. The drain line has been checked for operation. If you ever notice water around the indoor unit, there is a drain problem that needs repair.
- ___ 9. The vapor pipes have been insulated and the refrigerant charge checked and adjusted for peak performance of the heat pump.
- ___ 10. Turned down the hot water temperature. This can save you money. The dial is marked at your old setting. If you need hotter water, turn it up just a little bit, but not higher than the mark.
Hot water temperature _____ °F
- ___ 11. If you have a gas water heater, it has been checked for gas leaks, venting safety, and carbon monoxide.

___ 12. Additional work performed: _____

Additional information: During the defrost cycle it is normal to see the outdoor unit shrouded in steam. Also, try to be aware of the outdoor unit not operating so you are not constantly heating with expensive electric strip heat.

If you have any problems or questions, please call the office at the number listed below.

Tune up performed by: _____ Ph.# _____ Date ____ / ____ / ____