

# H V A C - H E A T I N G

## Description of Heating System

### PRIMARY ENERGY SOURCE

- |                              |                                      |                               |
|------------------------------|--------------------------------------|-------------------------------|
| <input type="checkbox"/> Gas | <input type="checkbox"/> Electricity | <input type="checkbox"/> Wood |
| <input type="checkbox"/> Oil | <input type="checkbox"/>             |                               |

### HEATING SYSTEM TYPE

- |                                     |   |                                    |
|-------------------------------------|---|------------------------------------|
| <input type="checkbox"/> Forced Air | <input type="checkbox"/> Radiant                    | <input type="checkbox"/> Hot Water |
| Radiant                             |   |                                    |
| <input type="checkbox"/> Hot Water  | <input type="checkbox"/> Supplemental Plenum Heater | <input type="checkbox"/> Unitary   |
| <input type="checkbox"/> Steam      | <input type="checkbox"/>                            |                                    |

### HEAT DISTRIBUTION METHODS

- |                                     |  |  |
|-------------------------------------|--|--|
| <input type="checkbox"/> Ductwork   | <input type="checkbox"/> Baseboard Heaters | <input type="checkbox"/> Unitary Heaters |
| <input type="checkbox"/> Radiators  | <input type="checkbox"/> Radiant Piping    | <input type="checkbox"/> Radiant Ceiling |
| Wires/Panels                        |  |  |
| <input type="checkbox"/> Convectors | <input type="checkbox"/>                   |  |

### OTHER COMPONENTS

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Humidifier             | <input type="checkbox"/> Condensate Pump               | <input type="checkbox"/> Heat Recovery |
| Ventilator                                      |  |  |
| <input type="checkbox"/> Electronic Air Cleaner | <input type="checkbox"/> Heat Recovery For Wat. Heater | <input type="checkbox"/>               |

### MANUFACTURER HEATING

- |  |   |                                     |                                      |
|--|---|-------------------------------------|--------------------------------------|
| <input type="checkbox"/> AIR-EASE          | <input type="checkbox"/> Consolidated     | <input type="checkbox"/> Hoyt       | <input type="checkbox"/> Ruud        |
| <input type="checkbox"/> Amana             | <input type="checkbox"/> Fedders          | <input type="checkbox"/> Inner City | <input type="checkbox"/> Singer      |
| <input type="checkbox"/> American Standard | <input type="checkbox"/> Friedrich        | <input type="checkbox"/> King       | <input type="checkbox"/> State       |
| <input type="checkbox"/> Armstrong         | <input type="checkbox"/> General Electric | <input type="checkbox"/> Lennox     | <input type="checkbox"/> Temp Star   |
| <input type="checkbox"/> Bryant            | <input type="checkbox"/> Goodman          | <input type="checkbox"/> Luxaire    | <input type="checkbox"/> Trane       |
| <input type="checkbox"/> Cadet             | <input type="checkbox"/> H B Smith        | <input type="checkbox"/> Peerless   | <input type="checkbox"/> Weil-McLain |
| <input type="checkbox"/> Carrier           | <input type="checkbox"/> Heil             | <input type="checkbox"/> Rheem      | <input type="checkbox"/> Whirlpool   |
| <input type="checkbox"/> Comfortmaker      |   |                                     | <input type="checkbox"/> York        |

### SYSTEM DESCRIPTION HEATING

- ☐ Age of # 1 Unit \_\_\_\_ yrs;    ☐ Manufacturer Date: \_\_\_\_\_    ☐ Age of # 2 Unit \_\_\_\_ yrs;    ☐ Manufacture Date: \_\_\_\_\_

#1 ☐ Model # \_\_\_\_\_ 1 ☐ Serial # \_\_\_\_\_

# 2 ☐ Model # \_\_\_\_\_ 2 ☐ Serial # \_\_\_\_\_

### CARBON MONOXIDE TEST

- 1 ☐ Passed    2 ☐ Passed    1 ☐ Failed    2 ☐ Failed

### Furnace

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Near End Of Life Cycle Exchanger Observed: | <input type="checkbox"/> Cadet Heater Recall    | <input type="checkbox"/> Cracked Heat    |
| <input type="checkbox"/> Near End of Like Cycle/Clean & Service     | <input type="checkbox"/> Premature Failure?     | <input type="checkbox"/> Location Unsafe |
| <input type="checkbox"/> Replacement Imminent                       | <input type="checkbox"/> Octopus - Replace ASAP | <input type="checkbox"/> Furnace in      |
| Crawlspace  |   |  |
| <input type="checkbox"/>  |   |  |

### FURNACE COMPONENTS

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Servicing Needed       | <input type="checkbox"/> Air Filter Dirty                   | <input type="checkbox"/> Condensate Line |
| Dirty   |   |  |
| <input type="checkbox"/> Blower/Motor Suspect   | <input type="checkbox"/> Electronic Air Cleaner Dirty       | <input type="checkbox"/> Condensate      |
| Pump Inoperative                                | <input type="checkbox"/> Electronic Air Cleaner Not Working | <input type="checkbox"/> Prior           |
| <input type="checkbox"/> Humidifier Replacement | <input type="checkbox"/> Fan Limit Inoperative              | <input type="checkbox"/> Active          |
| Condensate Leakage                              | <input type="checkbox"/> Fan Limit Adjustment               | <input type="checkbox"/> Service         |
| <input type="checkbox"/> Humidifier Maintenance |   |  |
| Condensate Leakage                              | <input type="checkbox"/> Fan Dirty                          |  |
| <input type="checkbox"/> Belching Exhaust       |   |  |
| Heat/Maint Lacking                              |   |  |
| <input type="checkbox"/>                        |   |  |

### Ductwork

### SUPPLY AIR

- ☐ No Heat Supply: \_\_\_\_\_
- ☐ Overhead Heat Supply: \_\_\_\_\_
- ☐ Low Flow: \_\_\_\_\_

- ☐ Supplement Basement Heat below Slab
- ☐ Balancing Needed
- Dampers Suspect
- ☐ Proximity of Furnace Poor

- ☐ Duct Cleaning Needed
- ☐ Seal Openings
- ☐ Old Ducts Undersized

- ☐ Rusted Ducts
- ☐ Motorized
- ☐

RETURN AIR

- ☐ No Return Air Vent At: \_\_\_\_\_
- ☐ No Return Flow
- ☐ Return Vent near Furnace

Boiler

- ☐ Nearing End of Life
- ☐ Replace Soon
- ☐ Old Boiler - Loss of Efficiency

- ☐ Prior Leak
- ☐ Asbestos Covering?
- ☐ One Pipe Steam

- ☐ Two Pipe Steam
- ☐

BOILER COMPONENTS

- ☐ Servicing Needed
- Inoperative
- ☐ Expansion Tank Waterlogged

- ☐ PR Valve Needed
- ☐

- ☐ Pump

- ☐ Leak At: Relief Valve, Expansion Tank, Boiler, Circulating Pump, High Temperature Limit Control, Low Water Cut-Out Control, Zone Valve, Return Leg
- ☐ Adjustment Needed At: Relief Valve, Expansion Tank, Boiler, Circulating Pump, High Temperature Limit Control, Low Water Cut-Out Control, Zone Valve, Return Leg
- ☐ Corrosion At: Relief Valve, Expansion Tank, Boiler, Circulating Pump, High Temperature Limit Control, Low Water Cut-Out Control, Zone Valve, Return Leg

Piping and Radiators

PIPING AND RADIATORS

- ☐ No Heat Source Condition?
- ☐ Leaks At Various Points

- ☐ Prior Leak/Corrosion
- ☐ Bleed Valves Missing/Damaged

- ☐ Radiant Heat
- ☐

Combustion/Exhaust

COMBUSTION

- ☐ Combustion Air Lacking
- ☐ Burner Old
- Oil Tank
- ☐ Burner Suspect
- ☐ Oil Tank Leak:

- ☐ Burner Dirty/Soot
- ☐ Burner Rust
- ☐ Deposits
- ☐ Flashback

- ☐ Pilot Problems?
- ☐ Underground
- ☐

EXHAUST SYSTEM

- ☐ Back Drafting
- Fan Suspect
- ☐ Flue Connections
- Damper Improve
- ☐ Vent Material Inappropriate

- ☐ Flue Slope
- ☐ Flue Clearance
- ☐ Primary Control Suspect

- ☐ Induced Draft
- ☐ Barometric
- ☐

CHIMNEY

- ☐ Liner Needed For Gas Chimney
- ☐ B-Vent Clearance

- ☐ Clean out Needed
- ☐ Clean Out Dirty

- ☐ Obstructed
- ☐

Baseboard/Radiant Heat

- ☐ Inoperative Heater
- ☐ No Source Of Heat
- Unsafe
- ☐ Damaged Heater
- ☐ Rusted Heater
- Radiant Heat
- ☐

- ☐ Control Damaged
- ☐ Old Heaters
- ☐ Condensation/Ventilation Problems

- ☐ Wiring Unsafe
- ☐ Radiant Heat
- ☐ No Heat
- ☐ Ceiling Cracks -

Other Components

THERMOSTAT

- ☐ Thermostat Loose
- Location

- ☐ Thermostat Old

- ☐ Thermostat

HEAT RECOVERY VENTILATOR

- ☐ Inoperative
- Plugged

- ☐ Improper Set Up

- ☐ Condensate Line

☐ Dirty

☐ Loose Ventilator

☐

### Other Components

#### THERMOSTAT

☐ Thermostat Loose

☐ Thermostat Old

☐ Thermostat

Location

☐

#### HEAT RECOVERY VENTILATOR

☐ Inoperative

☐ Improper Set Up

☐ Condensate Line

Plugged

☐ Dirty

☐ Loose Ventilator

☐

### Discretionary Improvements

☐ Install Set Back Thermostat

☐ Oil System Old - Install Gas

☐ Add Air Conditioning

☐ Supplement Heat For:

☐ Add Independent Air Conditioning

☐ Install Electronic Air Cleaner

☐ Humidifier Installation

☐

#### CONVERSION CONSIDERATIONS

☐ Oil To Gas

☐ Unitary To Forced Air

☐ Hot Water To

Forced Air

☐ Electronic To Gas

☐ Heat Pump

☐

## H V A C C O O L I N G / H E A T P U M P S Y S T E M S

### Description Of Cooling / Heat Pumps

#### ENERGY SOURCE:

☐ Electricity

☐ 240 Volt Power Supply

☐ 120 Volt Power Supply

☐ Gas

☐

#### SYSTEM TYPE:

☐ Air Cooled - Central

Heat Pump

☐ Air Source Heat Pump System

☐ Ground Source

☐ Water Cooled - Central

W/Auxiliary Heat

☐ Water Source Heat Pump System

☐ Air Heat Pump

☐ Air Cooled Independent System

☐ Evaporative Cooler

☐ Window Units

#### OTHER COMPONENTS:

☐ Condensate Pump

☐ Air Handler/Fan

☐ Heat Recovery Unit for Water Heater

☐ House Fan

☐

#### MANUFACTURER COOLING

☐ Amana

☐ Columbian

☐ Heil

☐ Rheem ☐ York

☐ American Standard ☐ Comfortmaker

☐

☐ Inner City Products

☐ Ruud

☐ Armstrong

☐ Concept

☐ International Comfort Products

☐ Sears

☐ A. O. Smith

☐ Consolidated

☐ Kenmore

☐ Snyder General

☐ Bryant

☐ Ducane

☐ Lennox

☐ Standard

☐ Carrier

☐ General Electric

☐ Luxaire

☐ Temp Star

☐ Coleman

☐ Goodman

☐ Payne

☐ Trane

#### SYSTEM DESCRIPTION COOLING

☐ Age of # 1 Unit \_\_\_\_\_ yrs; Manufacture Date: \_\_\_\_\_

☐ Age of # 2 Unit \_\_\_\_\_ yrs; Manufacture Date: \_\_\_\_\_

☐ Temp Drop Recorded 1<sup>st</sup> Unit \_\_\_\_\_ °

☐ Temp Drop Recorded 2<sup>nd</sup> Unit \_\_\_\_\_ °

1 ☐ Model # \_\_\_\_\_ ☐ Serial

# \_\_\_\_\_

2 ☐ Model # \_\_\_\_\_

☐ Serial # \_\_\_\_\_

### Central Air Conditioning

#### SYSTEM PERFORMANCE

☐ Inoperative System

☐ System Obsolete

☐ Temperature

Drop Insufficient

☐ Old System

☐ Undersized System?

☐ Service Needed

☐ Old System(s)..more than one

☐ Temperature Drop Excessive

☐ Service Needed

- Neglected

- ☐ Very Old System  
Refrig. Lines
- ☐ Too Cold To Test

#### OUTDOOR UNIT

- ☐ Outdoor Unit Out Of Level
- ☐ Outdoor Unit Dirty
- ☐ Outdr Unit Fin Aging Prematurely

#### INDOOR COMPONENTS

Dirty/Corroded

- ☐ Condensate Tray Leak  
Needed
- ☐ Condensate Discharge Location Poor  
Needed
- ☐ Water in Overflow Pan  
Return Air
- ☐ Prior Condensate Leakage

#### FAN

- ☐ Indoor Fan Noisy/Vibrates  
(Cleaning Needed)

- ☐ Air Filter Dirty

- ☐ Outdoor Unit Fin Damage
- ☐ Outdoor Unit Noisy
- ☐ Cut Back Vegetation

- ☐ Condensate Line Blocked

- ☐ Inoperative Condensate Pump

- ☐ Bubbles in Sight Glass

- ☐ Corroded Auxiliary Drain Pan

- ☐ Indoor Fan Undersized?

- ☐ Ins. Damage On

- ☐ Oversized Fuses
- ☐

- ☐ Coils

- ☐ Condensate Trap

- ☐ Drip Pan

- ☐ Clean & Seal

- ☐ Fan Dirty

### Heat Pump

#### SYSTEM PERFORMANCE

- ☐ System Inoperative  
Temperature Drop
- ☐ Old System  
Needed
- ☐ Very Old System  
Refrig. Line

#### HEATING MODE PERFORMANCE

- ☐ Disconnected In Heating Mode

#### OUTDOOR UNIT

- ☐ Outdoor Unit Out Of Level  
Noisy
- ☐ Outdoor Unit Dirty  
Vegetation

#### INDOOR COMPONENTS

- ☐ Condensate Tray Leak  
Needed
- ☐ Condensate Discharge Location Poor  
Needed

#### FAN

- ☐ Indoor Fan Noisy/Vibrates

- ☐ Obsolete System

- ☐ Undersized System?

- ☐ Excessive Temperature Drop

- ☐ Troublesome In Heating Mode

- ☐ Outdoor Unit Fin Damage

- ☐

- ☐ Condensate Line Blocked

- ☐ Condensate Pump Inoperative

- ☐ Indoor Fan Undersized?

- ☐ Insufficient

- ☐ Servicing

- ☐ Ins. Damage On

- ☐ Outdoor Unit

- ☐ Cut Back

- ☐ Condensate Trap

- ☐ Drip Pan

- ☐ Fan Dirty

### Ductwork

#### SUPPLY AIR

- ☐ No Supply  
Ducts
- ☐ Balancing Needed  
Below Slab
- ☐ Proximity Of Indoor Fan Poor

#### RETURN AIR

- ☐ No Return Air Vent  
Up
- ☐

- ☐ Low Flow

- ☐ Duct Cleaning Needed

- ☐ Seal Duct Openings

- ☐ No Return Flow

- ☐ Undersized Old

- ☐ Ducts Rusted

- ☐

- ☐ Older Home Set

### Evaporative Cooler

#### EVAPORATIVE COOLER

- ☐ Lacking Maintenance  
Marginal
- ☐ Older System
- ☐ Obsolete Unit  
Humidity In House
- ☐ Inoperative Cooler  
Pads/Blankets Dirty

- ☐ Noisy Motor

- ☐ Spray Nozzle Restricted
- ☐ Float Valve Suspect

- ☐ Pump Suspect

- ☐ Roof Jacks

- ☐ Roof Jacks Poor
- ☐ Excess

- ☐ Water

### Other Components

#### THERMOSTAT

- ☐ Loose

- ☐ Old

- ☐ Location

**HOUSE FAN**

- ☐ Inoperative
- ☐ Removal Recommended
- ☐

**HEAT RECOVERY FOR WATER HEATER**

- ☐ Pump Inoperative
- ☐ Pump Noise
- ☐ Leakage

**Discretionary Improvements**

**DISCRETIONARY IMPROVEMENTS**

- ☐ Install Set Back Thermostat
- ☐ Additional Return Air Vent
- ☐ Install Electronic Air Cleaner
- ☐ Supplemental Cooling In: