

AIR CONDITIONING UNLIMITED INC

Residential / Commercial / Industrial

Call us: 818-993-8713

A routine maintenance inspection assures that your heating and cooling equipment is operating safely and offers peace of mind.

Customer Name _____

Date _____

Address _____

Email _____

Brand of Equipment _____

Age of Equipment _____

Customer Comments _____

Customer Signature _____

Please have someone follow up with this customer.

Maintenance Inspection

Gas + Oil Heating Equipment

- | | |
|--|--|
| <input type="checkbox"/> Inspect burners | <input type="checkbox"/> Check interior of vestibule or manifold compartment |
| <input type="checkbox"/> Inspect flue pipes and draft diverter | <input type="checkbox"/> Check thermostat |
| <input type="checkbox"/> Inspect air filters, recommend replacement if necessary | <input type="checkbox"/> Adjust burner for efficiency |
| <input type="checkbox"/> Check blower belt wear, tension, and alignment | <input type="checkbox"/> Check gas valve |
| <input type="checkbox"/> Check blower motor | <input type="checkbox"/> Check pressure switch operation |
| <input type="checkbox"/> Check for gas leaks in furnace | <input type="checkbox"/> Inspect wiring on furnace |
| <input type="checkbox"/> Inspect pressure regulator | <input type="checkbox"/> Inspect thermocouple |
| <input type="checkbox"/> Check and adjust pilot assembly | <input type="checkbox"/> Check baffles in furnace and inspect heat exchanger |
| <input type="checkbox"/> Check hot surface igniter | <input type="checkbox"/> Check draft at breaching |
| <input type="checkbox"/> Check inducer motor | <input type="checkbox"/> Check for combustible material near furnace |
| <input type="checkbox"/> Check operation of safety controls | <input type="checkbox"/> Make recommendation of any needed repairs to system |
| | <input type="checkbox"/> Apply service sticker |

Comments/

Recommendations: _____

Air Conditioning + Heat Pump Equipment

- | | |
|---|--|
| <input type="checkbox"/> Check air handler filters | <input type="checkbox"/> Inspect contactor contacts |
| <input type="checkbox"/> Check for adequate refrigerant charge | <input type="checkbox"/> Check thermostat |
| <input type="checkbox"/> Check condenser | <input type="checkbox"/> Check lock-out controls if used |
| <input type="checkbox"/> Check condenser fan motor | <input type="checkbox"/> Check cooling/heating dampers for proper position |
| <input type="checkbox"/> Check condenser fan blades for tightness | <input type="checkbox"/> Inspect evaporator coil for cleanliness |
| <input type="checkbox"/> Inspect all electrical connections | <input type="checkbox"/> Inspect starting capacitor |
| <input type="checkbox"/> Check voltage at unit under full load | <input type="checkbox"/> Inspect running capacitor |
| <input type="checkbox"/> Check condensate drain and condensate lines for blockage | <input type="checkbox"/> Check for vibration and noise |
| <input type="checkbox"/> Check float switch | <input type="checkbox"/> Inspect relay |
| <input type="checkbox"/> Check blower belt for condition, tension, and alignment | <input type="checkbox"/> Check and record running and starting amperages |
| <input type="checkbox"/> Check all bearings | <input type="checkbox"/> Check and record suction and discharge pressures |
| <input type="checkbox"/> Check blower for cleanliness | <input type="checkbox"/> Check temperature split |
| <input type="checkbox"/> Check sight glass moisture indicator if used | <input type="checkbox"/> Make recommendation of any needed repairs to system |
| <input type="checkbox"/> Check all safety controls | <input type="checkbox"/> Apply service sticker |

Vital Signs

Draft at Breech +/- _____ Draft Overfire +/- _____

CO₂ % _____ Gross Stack Temp. _____ Net Stack Temp. _____ Smoke # _____

Total Efficiency % _____

Low-Pressure Reading _____

High-Pressure Reading _____

Ambient Temperature _____

Temperature Differential _____

Service Plan Type:

Bronze Gold

Oil Heat Nat. Gas A/C-Heat Pump

Technician: _____

Amount of Oil in Tank: _____

Tank Size: _____

FOR OFFICE USE ONLY:

Water Heater: Oil Gas Electric S/W Indirect

Mfr: _____

Gallons: _____

Humidifier Type: _____

Air Cleaner Type: _____

A/C System: Central Ductless

Please see reverse side for important information about your report.

Your Services Explained

Congratulations! You've taken an important step to save money, increase your family's peace of mind and protect your investment. Here's why:

Maintenance Benefits

- ✓ **Prevents annoying breakdowns and expensive repairs.** All safety shutdown features have been tested and are functioning properly. We've had a chance to review your system and make recommendations to cut your chances of a mid-season service problem, so you can sleep easier.
- ✓ **Reduces your heating and cooling bills.** A properly adjusted and tuned burner keeps soot from building up on furnace walls, which reduces heat transfer and causes your unit to use more fuel. A combustion efficiency improvement of just 10% will reduce fuel consumption by approximately 15%. An a/c tune-up can save you \$30 a month on your summer electric bills.
- ✓ **Extends the life of your heating and cooling equipment.** With new units often costing \$3,000 or more and major parts costing several hundred dollars each, every year you can put off replacement is money in the bank.

What Your System's Vital Signs Mean

HEATING

These areas all test your system's integrity and combustion quality. When taken as a whole, our technician can determine your system's combustion efficiency.

Draft at Breech—If draft is too weak, your system will not expel gases properly. If draft is too strong, it will pull valuable heat outside. **Desired: .03" to .04".**

Draft Overfire %—Excessive draft draws heat up the chimney. **Desired: .02".**

CO₂%—The proper level of carbon dioxide is an important measure of efficiency. Too high, however, is an indication of problems such as air leaks, which must be corrected. **Desired: A reading of 10% to 12%.**

Stack Temperature—The temperature of the gases going up the chimney is another indication of how much heat you're losing up the chimney. Too low, however, and the gases will condense in the chimney and create a dangerous situation. **Desired: A net stack temperature no lower than 350° or higher than 600°.**

Smoke #—A clean smoke test is a sign that your fuel is being burned very efficiently. A dense smoke test shows that the fuel is not burning completely and will form a layer of insulation on the inside of your heating unit, thereby reducing heating efficiency. **Desired: A reading of zero or "trace."**

Total Efficiency %—This is an overall evaluation of your unit, based on all the above test results. High efficiency means you use less fuel to heat your home. Low efficiency means your unit is expensive to run and will likely run into service problems.
85% or higher: Excellent • 78% to 84%: Good • Lower than 78%: Poor

COOLING

Low-Pressure Reading—Measures the vapor pressures from the indoor coil section of the system. The reading will vary with the outside temperature. When the outside temperatures are between 70°F–100°F, a normal pressure reading would be between 65 lbs.–75 lbs.

High-Pressure Reading—Measures the liquid pressure of the refrigerant (Freon) in the outdoor condensing unit. This reading will vary with the outside temperature. When outside temperatures are between 70°F–100°F, a normal pressure reading would be between 200 lbs. – 250 lbs.

Ambient Temperature—The temperature outside at the time of the tune-up.

Temperature Differential—Measures the temperature of the indoor air going into the coil and the temperature of air coming out of the coil. With the outside temperatures between 70°F–100°F, a normal reading would be between 18°F–20°F.