

**Maintaining your HVAC equipment protects one of your buildings most valuable investments. The following examples show what a proper preventive maintenance plan will provide:**

- Diagnostic Evaluation: *Optimizes the buildings comfort levels.*
- Calibrating, cleaning and adjusting your equipment: *Less down time and repair costs.*
- Air filtration and belt replacement: *Healthier indoor work environment and optimal running efficiency.*
- System Balancing: *Maximizes energy cost while maintaining a comfortable work environment.*
- Burner Adjustment: *Equipment runs more efficiently reducing down time and energy costs.*
- Analyze equipment performance: *Extends the life of the equipment.*

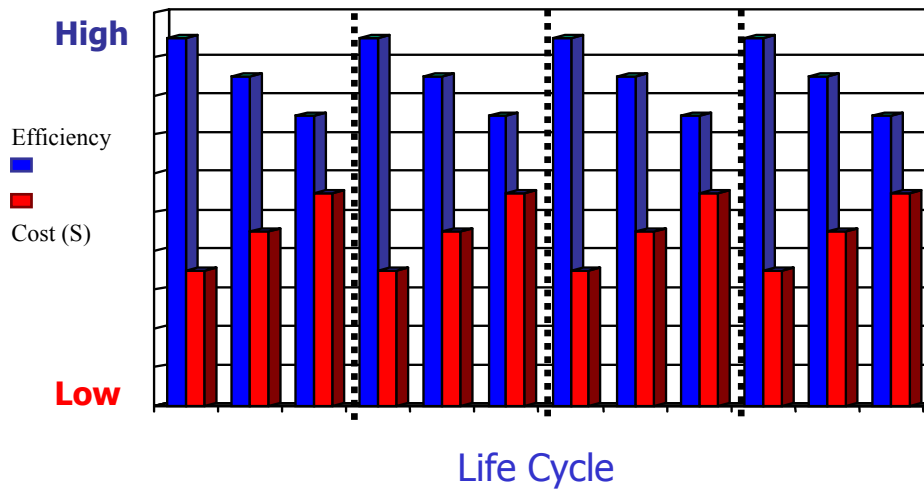
**Preventive Maintenance Procedures Savings (%)**

- |   |               |
|---|---------------|
| • <i>Adjusting operating sequence of equipment</i>        | <b>25-35%</b> |
| • <i>Removing scale from the condenser coils</i>          | <b>25-30%</b> |
| • <i>Eliminating belt slippage &amp; pulley alignment</i> | <b>15-20%</b> |
| • <i>Cleaning burner assembly</i>                         | <b>15%</b>    |
| • <i>Adjusting air/fuel ratio of burners</i>              | <b>15%</b>    |
| • <i>Changing dirty air filters</i>                       | <b>10-15%</b> |
| • <i>Cleaning coils</i>                                   | <b>5-15%</b>  |
| • <i>Removing soot from fire side of burner</i>           | <b>10%</b>    |

***\*information adheres to ASHRAE standards.***

Seasonal Maintenance

Regular scheduled maintenance returns your systems to its maximum efficiency reducing your energy costs.



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## HEATING MAINTENANCE

**Heating & Domestic Boilers, Make-up Air Units, Air Handling Units,  
Packaged Roof Top Units, Heat Pumps and Forced Air Furnaces:**

### Fall Start-up:

- ✓ *Lubricate all bearings required.*
- ✓ *Inspect all belts, fans and pulleys. Replace belts.*
- ✓ *Lubricate and ensure that dampers and linkage move freely.*
- ✓ *Replace air filtration media.*
- ✓ *Inspect all electrical wiring and related components. Tighten all connections.*
- ✓ *Inspect and prove all operating controls.*
- ✓ *Inspect strainers, humidifiers, steam traps and valves.*
- ✓ *Inspect and clean burners and burner related components.*
- ✓ *Clean & adjust burners. (Computerized Combustion Analysis.)*
- ✓ *Observe and prove the sequence of all equipment.*
- ✓ *Inspect and clean all drain connections including drain pans.*
- ✓ *Inspect all safety controls relief valves and low water cut-offs.*
- ✓ *Confirm CSD-1 testing. (Per customer request).*
- ✓ *Check all piping connections for leaks. Tighten if necessary.*

### Winter Mid-Season:

- ✓ *Inspect all units operations and perform minor adjustments if necessary.*
- ✓ *Replace air filtration.*
- ✓ *Inspect all belts, fans and pulleys. Adjust as needed. Replace belts if necessary.*

## AIR CONDITIONING MAINTENANCE

**Chillers, Cooling Towers, Condensing Units, Split Systems, Self Contained Units (computer rooms, etc...).**

### Spring Start-up:

- ✓ *Lubricate all bearings required.*
- ✓ *Inspect all belts, fans and pulleys. Replace belts if necessary.*
- ✓ *Lubricate and ensure that dampers and linkage move freely.*
- ✓ *Replace air filtration media.*
- ✓ *Inspect all electrical wiring and related components. Tighten all connections.*
- ✓ *Inspect and prove all operating controls.*
- ✓ *Start and observe the operation and sequencing for all units.*
- ✓ *Inspect for proper refrigeration flows, operating pressures and temperatures.*
- ✓ *Inspect and record compressor oil level and sample for acidity, when applicable.*
- ✓ *Ensure all casting heaters are operational.*
- ✓ *Inspect and clean all drain connections including drain pans.*
- ✓ *Inspect and prove all safety controls.*
- ✓ *Power wash coils.*
- ✓ *Check all piping connections for leaks. Tighten if necessary.*

### Summer Mid-Season:

- ✓ *Inspect all units operations & perform minor adjustments if necessary.*
- ✓ *Replace air filtration.*
- ✓ *Inspect all belts, fans and pulleys. Adjust as needed. Replace belts if necessary.*