Peak Performance Preventative Maintenance Agreement



Santa Fe Trail USD434

Jim Lentz 1663 East US HWY 56 Carbondale, KS 66414





Value of Our Peak Performance Maintenance

Industry research shows:

- -Every .01" of dirt on evaporation coil can increase operating costs by 5%
- -10% refrigerant undercharge can increase operating costs by 20%

Louisiana State University

And Gulf States Utility found consumers could save about \$30 per month just by making sure that their air conditioning system is cleaned and serviced regularly.

Honeywell

Found that a typical heat pump would lose almost 50% of its efficiency after 20 years, even if a typical "dust stop" filter had been installed.

*In 20 years, a 12 SEER unit could degrade to a 6 SEER if it is not properly maintained. This would double energy costs!

North Carolina Alternative Energy Corp.

This non-profit organization examined the air conditioning manufacturers' efficiencies versus the actual efficiencies that resulted after installation

- -90% of the unites tested exhibited some sort of energy wasting problem
- -50% had an improper refrigerant charge
- -40% failed to meet minimum air flow criterion.
- -20% were barely inside the range specified by manufacturers.
- -A deficiency of 20% in air flow reduces the SEER rating by 17%.
- -A 15% return air leak from a 120 degree attic could reduce a 12 SEER to 6!

Texas A&M University

found that a 23% refrigerant undercharge could result in a 52% efficiency loss.

Pacific Gas & Electric

Found the average heating energy savings for (I) repair of disconnected ducts was 15% (2) repair of diffuser leakage 7.5% (3) correct low air flow 5.6% (4) repair leaks and correct refrigerant charge 18.4%.

Lakeland Electric and Water

And the Florida Solar Energy Center's researchers found that by repairing leaking duct work, cooling energy was reduced by an average of 17.4%.



Peak Performance Maintenance Agreement

Program Benefits

Ι.	This Agreement provides four inspections per year.
2.	This Agreement provides a 10% discount off McElroy's, Inc. base service labor rate.
3.	This Agreement provides priority service. McElroy's, Inc. will respond to the Customer's request for emergency service before providing service to any customer who does not have an agreement.
4.	Upon completion of each inspection, McElroy's, Inc. will provide the Customer with a Comprehensive Inspection Report listing work performed, defects found and corrected, and any recommended corrective action.
5.	McElroy's, Inc. shall maintain the equipment of the Customer to keep utility and repair costs as low as possible, while preserving equipment reliability and life. Occupant comfort will always be a primary consideration.



Overbrook Equipment Info

Unit			Serial	Year	
Number		Equipment	Number	Number	Built
I	Carrier	RTU	48DJE030-601-C	4695F79561	1995
2	Carrier	RTU	48FCEA04A2M6A0B0	4019C89110	2019
3	Carrier	RTU	48HJF007-631LA	4295G20493	1995
4	Carrier	RTU	48FCEM07A2A6A0A0	4819C76128	2019
5	Carrier	RTU	48FCEM07A2A6A0A0A0	2319C54892	2019
6	Carrier	RTU	48HJF007-631LA	4295G20495	1995
7	Carrier	RTU	48HJE004-631LA	4295G20317	1995
8	Carrier	RTU	RTU 48HJE006-631LH		1995
9	Carrier	RTU	48HJD005-631LA	4295G20375	1995
10	Carrier	RTU	48TJE016	4195F73654	1995
П	Carrier	RTU	48TCED09A2M6A	2719P98342	2019
12	Carrier	RTU	48FCEA04A2M6A0B0	4019C89111	2019
13	Carrier	RTU	48HJF007-631LA	4295G20498	1995
14	Carrier	RTU	48HJF007-631LA	4295G20497	1995
15	Carrier	RTU	48HJD008-631LA	4295G30255	1995
16	Carrier	RTU	48HJF007-631LA	4295G20494	1995
17	Carrier	RTU	48HJD005-631LA	4295G20374	1995



Overbrook Equipment Info

Tag	Brand	Type of Equipment	Model Number	Serial Number	Year Built
18	Carrier	RTU	48TCEA07A2A6	3617C57078	2017
19	Carrier	RTU	48HJE006-631LA	4295G20480	1995
20	Carrier	RTU	48HJE006-631LA	4295G20481	1995
21	Carrier	RTU	48KCEA06A2A6A0	3317C75824	1995
22	Carrier	RTU	48KCEA06A2A6A0	2718C83055	2018
23	Carrier	RTU	48HJE004-631LA	4295G20316	1995
24	Carrier	RTU	48HJD005-631LA	4295G20376	1995



1 1 7.		Type of	Model	Serial	Year
Number		Equipment	Number	Number	Built
AHU-I	Trane	AHU	TWE120E100AB	17104N3DBA	2017
AHU-2	Trane	AHU	GAM5B0B36M31EAA	17194J281V	2017
AHU-3	Trane	AHU	GAM5B0B36M31EAA	17194K2UIV	2017
CU-I	Trane	AC	TTA120H400AA	17153WPCYA	2017
CU-2	Trane	AC	4TTA4036A4000AA	17192RHP3F	2017
CU-3	Trane	AC	4TTA4036A4000AA	17135L1M3F	2017
BLR-I	Lochinvar	Boiler	FTX500N	1616102891432	2016
HVU-I	Hastings	AHU	HVB-600-FP	020577	????
HVU-2	Hastings	AHU	EB-400-FP	020578	????
MS-I	LG	Mini-Split HeatPump	LUU247HV	402KAFX00275	2004
MS-2	LG	Mini-Split HeatPump	LSU181HSV3	408KAXV00058	2004
MS-3	LG	Mini-Split HeatPump	LUU187HV	407KARW00030	2004
MS-IE	LG	Mini-Split Evaporator	LCN187HV	407KASL00062	2004
MS-2E	LG	Mini-Split Evaporator	LSN181HSV3 408KAKN0038		2004
MS-3E	LG	Mini-Split Evaporator	LCN247HV	407KAAE00024	2004



Unit Number	Brand	Type of Equipment	Model Number	Serial Number	Year Built
I	Carrier	RTU	48FCEA04A2M660B0A0	4019C89123	2019
2	Carrier	RTU	48KCEA04A2A6A0A0A0	4018C61683	2018
3	Carrier	RTU	48KCEA05A2A6A0A0A0	3718C60270	2018
4	Carrier	RTU	48HJD005-631LA	3395G20908	1995
5	Carrier	RTU	48CEA05A2M6A0BA0	4019C89131	2019
6	Carrier	RTU	48TCEM08A2A6-0A0A0	3420C58278	2020
7	Carrier	RTU	48HJE004-631LA	3395G20966	1995
8	Carrier	RTU	48TCEM08A2A6-0A0A0	N/A	2020
9	Carrier	RTU	48TCEA04A2A3A0A0A0	0213C82042	2013
10	Goodman	RTU	CPG0902104BXXXAA	0907030571	2009
- 11	Goodman	RTU	CPG0721404BXXXAA	0909707176	2009
12	Carrier	RTU	48TCEA04A2A3A0A0A0	0213C82035	2013
13	Carrier	RTU	48TCEA04A2A3A0A0A0	0213C82041	2013
14	Trane	RTU	YSC060G3EHB040	195110585L	2019
15	York	RTU	DIHGC	NGJM???792	2000
16	York	RTU	DH180N32B4AAA1A	NBMM019048	2003
17	Trane	RTU	YCD180F4HABA	120710629D	2012
18	Trane	RTU	GAC180A4EMA0000	16151200JA	2016



Unit Number	Brand	Type of Equipment	Model Number	Serial Number	Year Built
Iduilibei		Equipment	INGILIDE	201412-	Duit
19	Aaon	RTU	RN-008-8-0-EA09-222	ANGH41120	2014
20	Lennox	RTU	KGA024S4DS2P	5614M02950	2014
21	Lennox	RTU	KGA024S4DS2P	5614M02951	2014
22	Aaon	RTU	RN-008-8-0-EA09-222	201412- ANGH41119	2014
23	Lennox	RTU	KGA060S4BU3Y	5614M02949	2014
24	Lennox	RTU	KGA300S4BH2Y	5614M02821	2014
PH-I					
HU-I	Lennox	Furnace	GH32CV5-100	5802E86557	2002
PH-I					
HU-2	Lennox	Furnace	GH32CV5-100	5802E86541	2002
PH-I	_	_			
HU-3	Lennox	Furnace	GH32CV5-100	5802E86551	2002
PH-I HU-4	Lamman	F	C1133CVE 100	E002EE0727	2002
PH-I	Lennox	Furnace	GH32CV5-100	5802E50737	2002
CU-I	Lennox	AC	HS26-060-2G	5802G31646	2002
PH-I	Lermox	710	11020 000 20	5002051010	2002
CU-2	Lennox	AC	HS26-060-2G	5803B61128	2003
PH-I					
CU-3	Lennox	AC	HS26-060-2G	5802K62528	2002
PH-I					
CU-4	Lennox	AC	HS26-060-2G	5802H09632	2002
PH-2					
HU-I	Lennox	Furnace	GH32CV5-100	5802E50725	2002
PH-2		_	CL132CV (5.100	F002F50720	2002
HU-2	Lennox	Furnace	GH32CV5-100	5802E50729	2002
PH-2 HU-3	Lennox	Furnace	GH32CV5-100	5802E50726	2002
PH-2	LEITIOX	Turriace	Gi 132C ¥ 3-100	J002LJ0720	2002
HU-4	Lennox	Furnace	GH32CV5-100	5802E50727	2002



Unit	Brand	Type of	Model	Serial	Year
Number		Equipment	Number	Number	Built
PH-2					
CU-I	Lennox	AC	HS26-048-3G	5802L21628	2002
PH-2					
CU-2	Lennox	AC	HS26-048-3G	5802H09621	2002
PH-2					
CU-3	Lennox	AC	HS26-060-3G	5803B61144	2003
PH-2					
CU-4	Lennox	AC	HS26-048-3G	5802H09624	2002
PH-3					
HU-I	Lennox	Furnace	GH32CV5-100	5802D25801	2002
PH-3					
HU-2	Lennox	Furnace	GH32CV5-100	5802E86543	2002
PH-3					
HU-3	Lennox	Furnace	GH32CV5-100	5802E86559	2002
PH-3					
HU-4	Lennox	Furnace	GH32CV5-100	5802E86562	2002
PH-3					
HU-5	Lennox	Furnace	GH32CV5-100	5802G31642	2002
PH-3					
HU-6	Lennox	Furnace	GH32CV5-100	5802E86556	2002
PH-3					
CU-I	Lennox	AC	HS26-060-3G	5803D38624	2003
PH-3					
CU-2	Lennox	AC	HS26-060-3G	5802G31622	2002
PH-3					
CU-3	Lennox	AC	HS26-060-3G	5803D38629	2003
PH-3					
CU-4	Lennox	AC	HS26-060-3G	5803D38625	2003
PH-3					
CU-5	Lennox	AC	HS26-048-3G	5802H09630	2002
PH-3					
CU-6	Lennox	AC	HS26-060-3G	5803D38618	2003



Scranton Equipment Info

Unit	Brand	Type of	Model	Serial	Year
Number		Equipment	Number	Number	Built
I	Carrier	RTU	48HJE007-631LA	3995G20962	1995
2	Aaon	RTU	9970RH-16-3-EO-217	95LHGM465	1995
3	Carrier	RTU	48TCEA06A2A6A0A0A0	3915C87260	2015
4	Carrier	RTU	48HJE007-631LA	3995G20961	1995
5	Carrier	RTU	48HJE006-631LA	3995G20951	1995
6	Carrier	RTU	48FCEA06A2A6A0A0A0	2719C87633	2020
7	Carrier	RTU	48HJF007-631LA	3995G20970	1995
8	Carrier	RTU	48HJF007-631LA	3995G20971	1995
9	Carrier	RTU	48HJE009-631LA	3995G30483	1995
10	Carrier	RTU	48FCEM07A2A6A0A0A0	3219C85347	2019
П	Carrier	RTU	48HJE006-631LA	3995G20953	1995
12	Carrier	RTU	48HJE006-631LA	3995G20949	1995
13	Carrier	RTU	48HJE006-631LA	3995G20950	1995
14	Carrier	RTU	48HJE007-631LA	3995G20963	1995
15	Carrier	RTU	48HJE004-631LA	3995G20908	1995
16	16 Trane RTU YCD420A4LEIAIBCI0		YCD420A4LEIAIBCI0	C00C06872	2000



Carbondale Equipment Info

Unit	Brand	Type of	Model	Serial	Year
Number		Equipment	Number	Number	Built
BLR-I	Burnham	Boiler	4FW-180-40-LB	14394	1994
AHU-I	Carrier	AHU	39NXH49-N-72229	3395T72229	1995
Comp-I	Speedaire	Air Compressor	5Z699	1943894	2016
I	Carrier	RTU	48TCED08A2A5A0A0G0	3018P44175	2018
2	Carrier	RTU	48HJE008-531LA	2195G30553	1995
3	Carrier	RTU	48TCED12A2A5A0A0G0	3318P32132	2018
4	Carrier	RTU	48TCED12A2M5A0B0F0	4014P73860	2014
5	Carrier	RTU	48TCEA07A2A5A0A0A0	2717C82463	2017
6	Carrier	RTU	48HJF007-531LA	3495G20595	1995
AC-I	Carrier	Condensing Unit	38AH-124A-500FA	4095F72584	1995
AC-2	Carrier	Condensing Unit	38CKB036500	1995E05811	1995
MS-I	Mitsubishi	Mini Split	PUY-A18NHA4	25U06188C	2006



Peak Performance Maintenance Agreement

Pricing and Acceptance

Customer:	USD 434 Santa Fe Trail
Billing Address:	1663 East US HWY 56
	Carbondale, KS 66414

Contact Name: Jim Lentz

Phone Number: (785) 836-9525

Email: jlentz@usd434.us

McElroy's, Inc.

Also referred to as the Service Company, agrees to furnish services in accordance with the General and Supplemental Terms and Conditions and each Peak Performance Maintenance Schedule.

The Agreement Price is \$ 23,120.00 per year. Payment due in advance of \$ 23,120.00

This agreement is effective from 7/1/21 and will remain in effect from year to year unless McElroy's Inc. or the customer gives written notice of contract termination forty-five (45) days preceding the contract anniversary date.

Customer Acceptance:	McElroy's Inc. Approval:		
Name	Name	<u>Ke</u>	ith Watkins
C :	C :	H	w Wates
Signature	Signature		
Title	Title	Commercial H	IVAC Service Manager
	Phone (7	85) 266-4870	keith.watkins@mcelroys.com

*The above maintenance proposal is good for thirty (30) days after the proposal date.



Peak Performance Maintenance Agreement

General Terms and Conditions

- 1. McElroy's, Inc. agrees to provide a comprehensive maintenance program designed to reduce your utility and repair costs, after any existing defects are corrected.
- 2. The Customer agrees to furnish safe, reasonable access to the building and covered equipment. If required, the Customer will remove any material, fixtures or walls so adequate access can be gained to the equipment.
- 3. The Customer shall operate the equipment in accordance with the manufacturer's recommendations and promptly notify McElroy's, Inc. of any abnormal conditions.
- 4. This agreement does not include the maintenance, repair or replacement of recording or portable instruments, electrical disconnect switches, casing or cabinets, insulation, gas lines, water lines or non-moving parts such as duct work, vessels, boiler shells, tubes, vents, flues, grilles, tower fill or refractory material. McElroy's, Inc. shall not be required to furnish any equipment, service or materials or to perform tests or make any modifications that have been recommended or required by any insurance company, governmental authority, equipment vendor or regulatory authority, or pay any future taxes imposed by any governmental agency.
- 5. McElroy's, Inc. shall not be liable for:
 - a: damage or loss resulting from freezing, corrosion, electrolysis, vibration, plumbing stoppage, failure of any utility service, low voltage connection, lighting single phasing or other electrical abnormalities.
 - b: damage or loss resulting from negligence, faulty system design, abuse, acts of God, malicious mischief, vandalism or improper operation of equipment by customer's employees, agents or tenants.
 - c: damage, loss or delays resulting from fire, explosion, flooding, the elements, strikes, labor troubles, civil commotion or any other cause beyond its control.
 - d: any accident, injury, damage or loss to equipment, personnel, property or revenue unless directly caused by its process or facilities.
 - e: any indirect or consequential damages such as, but not limited to, loss of revenue or loss of use of any equipment, process or facilities.
 - f: the identification, detection, abatement, encapsulation, storage, removal, handling, recovery, recycling or transportation of any regulated or hazardous substances. Regulated or hazardous substances may include, but are not limited to asbestos, certain refrigerants, and used refrigerant oils. If any such products or materials are encountered during the course of work, McElroy's, Inc. can discontinue work until regulated or hazardous materials have been removed or hazard or liability is eliminated. McElroy's, Inc. shall receive an extension equal to the time of delay to complete the work and reserves the right to be compensated for refrigerant recovery, recycling, reclamation or any loss due to delay.
- 6. Unless otherwise noted, McElroy's, Inc. shall not be liable for starting and stopping equipment, space temperature regulation, air or water balance, indoor air quality, equipment relocation or maintenance or repair other than during normal working hours. If Customer requests work be performed other than during normal hours, the Customer agrees to reimburse McElroy's, Inc. for overtime pay or additional charges.
- 7. Any additional services that are not part of this agreement shall be billed at the prevailing time and material rate, less any discounted listed above.
- 8. McElroy's, Inc. shall use ordinary care in performing the tasks outlined in this agreement. No inspection shall guarantee the condition of the equipment or eliminate obsolescence and normal wear.
- 9. The occurrence of any of the following without prior written consent of McElroy's, Inc. will constitute a default:
 - a: failure by the Customer to make any payment due within ten days after it becomes due and payable
 - b: any alterations, additions, adjustments or repairs to covered equipment, by anyone other than McElroy's, Inc.;
 - c: breach by Customer of any term of this Agreement.
 - If McElroy's, Inc. brings legal action to enforce this Agreement, and is successful, it shall be entitled to recover reasonable attorney fees and the cost of litigation in addition to any judgment for damages.
- 10. This Agreement begins on the date of acceptance and shall remain in force for the term stated. Thereafter, it shall be automatically renewed and shall continue in effect for successive renewal period of one year unless either party gives the other written notice of termination at least 45 days prior to the anniversary date. With 45 days written notice, McElroy's, Inc. may add or delete equipment or services and increase or reduce the Agreement price. Customer shall have the right to terminate if any changes are not acceptable.
- 11. This Agreement contains the entire understanding between McElroy's, Inc. and the Customer. Any modification, amendments or changes must be in writing and signed by both parties.



AIR HANDLING UNITS

- A. Preliminary inspection of all unit components; i.e. supply fan/motor assemblies, chilled water coils, dampers, etc.
- **B.** Inspection the evaporator components as follows:
 - 1. Lubricate the evaporator fan motor bearings per manufacturer's recommendations (Spring Only).
 - 2. Check the evaporator coil for fouling. Clean as needed.
 - 3. Check belts.
 - 4. Check frequency drive and clean as needed.
 - 5. Check economizer operation.
 - 6. Change air filters.

EXHAUST FANS

- A. Check and lubricate bearings and motors as needed.
- **B.** Check V-belts and tension.
- C. Check interlocks and starters.
- **D.** Check and record motor amps. Check blower wheels and advise customer if they need cleaned.



COOLING ONLY ROOFTOP UNITS

- **A.** Preliminary inspection of all unit components; i.e. condenser fan/motor assemblies, condenser coils, filter section, fan coil assembly, etc.
- **B.** Inspect the condenser components as follows:
 - 1. Lubricate the condenser fan motor bearings per manufacturer's recommendations (Spring Only).
 - 2. Check the condenser coil for fouling. Clean as needed.
- C. Check Drain pan for cleanliness and blockage.
- **D.** Inspect the supply fan/motor assembly as follows:
 - 1. Check the supply fan belts for proper tension, excessive wear, and good alignment.
 - 2. Lubricate the fan motor bearings and the fan shaft bearings as recommended by unit manufacturer.
 - 3. Record supply fan motor amp draw.
- **E.** Check contacts of compressor starter for pitting/function and record condition (Spring Only).
- F. Complete operating log of the following items. Record information on appropriate log sheets (Spring Only).
 - 1. Suction pressure and temperature.
 - 2. Condensing pressure and temperature.
 - 3. Superheat.
 - 4. Sub cooling.
 - 5. Low pressure cut-out control.
 - 6. High pressure cut-out control.
 - 7. Running voltage.
 - 8. Running amps.
 - 9. Compressor starter contacts and function.
 - 10. Compressor motor meg.
 - 11. Ambient temperature.
 - 12. Condenser fan motor amp draw.
- **G.** Check operation of economizer assembly.
- **H.** Change air filters.



HEATING WATER PUMPS

- **A.** Lubricate motors and bearing assemblies as needed.
- **B.** Check pump couplers for wear and vibration.
- **C.** Check for leaks around seals and gaskets. Record findings.
- **D.** Check volts and amps on motors.

DOMESTIC HOT WATER CIRCULATING PUMPS

- **A.** Lubricate motors and bearing assemblies as needed.
- **B.** Check pump couplers for wear and vibration.
- **C.** Check for leaks around seals and gaskets. Record findings.
- **D.** Check volts and amps on motors.



BOILERS

The following service will be performed:

- A. Preliminary inspection of all boiler system components; i.e. boiler housing, breeching and flue, gas train, etc.
- **B.** Exercise all manual shutoff gas valves and lubricate per manufacturer's recommendations.
- **C.** Perform a complete start-up and test each of the following safety controls. Record condition and settings. Calibrate, if required.
 - I. High limit switch.
 - 2. Boiler pressure relief valve.
 - 3. Gas safety shut-off valves.
 - 4. Check vent piping for obstructions.
 - 5. Main gas pressure regulating valve.
 - 6. Low Water Cut-Off.
- **D.** During startup, perform operational test and log of each of the following devices. Record settings and calibrate, as required.
 - 1. Operating pressure.
 - 2. Outside air temperature.
 - 3. Gas control valve.
 - 4. Pressure controller setting.
 - 5. Clean burners, pilot assembly and probes.
 - 6. Operating temperature.



DOMESTIC WATER HEATERS

The following services will be performed:

- **A.** Check for proper operation of the following:
 - I. Clean burner as needed.
 - 2. Clean pilot assy.
 - 3. Pressure and temperature relief valves.
 - 4. Thermostat.
 - 5. Record thermostat settings.

UNIT HEATERS, DUCT FURNACES OR ELECTRIC HEATERS

- A. Lubricate all motors and bearings as needed.
- **B.** Check V-belts and pulleys and adjust.
- C. Check condition of coils.
- D. Check all operating and safety controls for proper operation. Adjust and calibrate as needed.
- **E.** Check flue pipe on gas units.
- F. Clean burners and adjust as needed.
- **G.** Electric heaters Check all operating controls and safeties.
- **H.** Check all heating coils and record amps.
- I. Check all fan and limit controls.
- J. Inspect heat exchangers for cracks, splits, burnouts, etc.



SPLIT SYSTEM CONDENSING UNITS

- **A.** Preliminary inspection of all unit components; i.e. condenser fan/motor assemblies, condenser coils, filter section, fan coil assembly, etc.
- **B.** Inspect the condenser components as follows:
 - 1. Lubricate the condenser fan motor bearings per manufacturer's recommendations.
 - 2. Wash condenser coils with coil cleaner.
- C. Check drain pan for cleanliness and blockage.
- **D.** Inspect the supply fan/motor assembly as follows:
 - 1. Check the supply fan belts for proper tension, excessive wear, and good alignment.
 - 2. Lubricate the fan motor bearings and fan shaft bearings as recommended by unit manufacturer.
- **E.** Check contacts of compressor starter for pitting/function and record condition (Spring Only).
- F. Complete operating log of the following items. Record information on appropriate log sheets (Spring Only).
 - 1. Suction pressure and temperature.
 - 2. Condensing pressure and temperature.
 - 3. Superheat.
 - 4. Sub-cooling.
 - 5. Running voltage.
 - 6. Running amps.
 - 7. Ambient temperature.



SPLIT SYSTEM HEATING UNITS

- **A.** Preliminary inspection of all unit components; i.e. supply fan/motor assemblies, heat exchanger, filter section, pilot assembly, etc.
- **B.** Inspect the supply fan/motor assembly as follows:
 - 1. Check the supply fan belts for proper tension, excessive wear, and good alignment.
 - 2. Lubricate the fan motor bearings and fan shaft bearings as recommended by unit manufacturer.
- **C.** Perform a complete start-up and test each of the following safety controls. Record condition and settings. Calibrate, if required.
 - 1. High limit switch.
 - 2. Gas control valve.
 - 3. Gas pressure setting.
 - 4. Supply temperature rise.
 - 5. Clean burners and pilot assy.
 - 6. Check the heat exchanger ribbon assemblies for fouling. Clean as needed
 - 7. Adjust fuel/air mixture, if required.
 - 8. Check flue pipe and draft.
 - 9. Inspect heat exchangers for cracks, splits, burnouts, etc.

BYPASS HUMIDIFIERS

- A. Preliminary inspection of all unit components; i.e. duct piping, supply water line, housing and mounting.
- **B.** Perform a complete start-up and test each of the following.
 - I. Replace water panel.
 - 2. Check solenoid water valve.
 - 3. Clean supply water orfice.
 - 4. Check supply water strainer and clean.
 - 5. Adjust bypass damper assy.



PACKAGE ROOFTOP UNITS

SPRING INSPECTION

The following services will be performed during the spring operating season:

- **A.** Preliminary inspection of all unit components; i.e. condenser fan/motor assemblies, condenser coils, filter section, fan coil assembly, etc.
- **B.** Inspect the condenser components as follows:
 - 1. Lubricate the condenser fan motor bearings per manufacturer's recommendations (Spring Only).
 - 2. Check the condenser coil for fouling. Clean as needed.
- **C.** Inspect the supply fan/motor assembly as follows:
 - 1. Check the supply fan belts for proper tension, excessive wear, and good alignment.
 - 2. Lubricate the fan motor bearings and the fan shaft bearings as recommended by unit manufacturer.
 - 3. Record supply fan motor amp draw.
 - 4. Check Drain pan for cleanliness and blockage.
- **D.** Check contacts of compressor starter for pitting/function and record condition (Spring Only).
- **E.** Test and adjust the outside air damper.
- **F.** Complete operating log of the following items. Record information on appropriate log sheets.
 - 1. Suction pressure and temperature.
 - 2. Condensing pressure and temperature.
 - 3. Superheat.
 - 4. Sub-cooling.
 - 5. Low pressure cut-out control.
 - 6. High pressure cut-out control.
 - 7. Running voltage and amps.
 - 8. Compressor starter contacts and functions.
 - 9. Compressor motor meg.
 - 10. Ambient temperature.
 - 11. Condenser fan motor amp draw.



PACKAGE ROOFTOP UNITS

FALL INSPECTION

The following services will be performed during these inspections:

- A. Inspect the supply fan/motor assembly as follows:
 - 1. Check supply fan belts for excessive wear, proper tension, and good alignment.
 - 2. Check evaporator coil for fouling.
 - 3. Record supply fan motor amp draw.
- **B.** Perform the following inspections in the gas fired heat exchanger section:
 - 1. Check operation of pilot assembly. Clean as needed.
 - 2. Check the heat exchanger ribbon assemblies for fouling. Clean as needed
 - 3. Adjust fuel/air mixture, if required.
 - 4. Test fan and adjust the outside air damper.
 - 5. Sequence test all controls and safeties.
 - 6. Test and adjust the outside air damper.
 - 7. Check operation of low ambient damper assembly.
 - 8. Clean burners as needed.

BUILDING AUTOMATION CONTROL SYSTEM

The following services will be performed:

- 1. Perform all system checks. Check data logs to make sure system is operating at optimal performance.
- 2. Visit with facilities staff to assess system operability and note any changes they may request.



REFRIGERATION UNITS

The following services will be performed:

- **A.** Preliminary inspection of all unit components; condenser section, supply fan, compressor section, controls, etc.
- B. Check system for proper refrigerant charge. Record information.
- **C.** Perform the following inspections in the evaporator section:
 - 1. Check supply fan bearings for excessive wear.
 - 2. Check evaporator coil for cleanliness. (cleaning will be extra)
 - 3. Check drain pan for foreign debris.
 - 4. Record supply fan motor amp draw.
- **D.** Perform the following inspections in the condenser section:
 - 1. Check the condenser coil for fouling. Clean as needed.
 - 2. Lubricate the condenser fan motor bearings per manufacturer's recommendations.
 - 3. Check all electrical controls and wiring.
 - 4. Check defrost cycle.

AIR COMPRESSOR AND AIR DRYER

- **A.** Check automatic drain on air tank
- B. Change oil in compressor during each scheduled inspection. Oil provided in this contract
- **C.** Check and adjust V belt and Pulleys.
- **D.** Lubricate motor as needed.
- E. Check Pneumatic controls on air system for any problems and adjust and calibrate as needed during inspection.

CLOTHES DRYER

A. Clean Dryer vent during winter visit.



Maintenance Schedule

There will be four (4) inspections per year as follows.

- 1. Spring start-up of Cooling and change filters.
- 2. Summer inspection of Cooling and change filters.
- 3. Fall start-up of Heating and change filters.
- 4. Winter inspection of Heating, clean dryer vent, and change filters.

Owner's Approval Required

During the scheduled maintenance any problems discovered, not included in the contract, will be brought to your immediate attention for approval to proceed with needed repairs.

NO repairs will be made without first obtaining approval.

This contract does not include replacement of the following items:

- I. Belts
- 2. Motors
- 3. Compressors
- 4. Equipment and component failure

Labor Discount On All Service Work

BY SIGNING THIS AGREEMENT, YOU ARE ENTITLED TO THE FOLLOWING LABOR RATES ON ALL SERVICE WORK PERFORMED AT YOUR FACILITIES.

REGULAR - \$98.00 PER HOUR OVERTIME - \$140.81 DOUBLETIME - \$160.81 PER HOUR