

Remit To: Auburn Mechanical
PO BOX 249
Auburn, WA 98071

Work Order: 22011
Customer #: 10402

Invoice 30870
Invoice Date 12/08/22
Due Date 01/07/23
Terms Net 30

Bill To: 77 Central Apartments
2630 77th Ave SE
Mercer Island, WA 98040

Service Location: 77 Central Apartments
2630 77th Ave SE
Mercer Island, WA 98040

Requested By: Miranda Rainbolt

Scope Detail: CU-04 Address 65, 13 VRF AHU's Leak Check and Repair: email: 77centralmgr@cushwake.com; terry.graham@cushwake.com

Work Description: 11/10 - Tech gathered materials for job from vendors. Arrived onsite and checked in. Proceeded to pressure test and leak check all test equipment before starting. Tested for leaks and calibrated all gauges to 550 psig. Torqued all schrader valves on isolation valves attached to BC and outdoor unit. Isolated 1 side of branch and mounted all pressure gauges to service ports on BC vapor line. Will return tomorrow to put the system on pressure.

11/28 - Returned the following day and continued pressure test. Results as follow, 501 and 502 both lost pressure. Both branches appear to have significant leaks. Once both leaking branches were isolated, performed evacuation. Returned following day and achieved 300 micron vacuum level. Charged system with 85 lb 410A. Got system up and running and verified operation and maintenance tool. On return trip received access to 501 and 502 for inspection. Access to 501 and inspected pipe connections and tube sheets. Found dye on tube sheet indicating leak on coil. Coil will need to be replaced. Accessed 502 and performed inspection on pipe connections and coil. Found dye and oil on pipe connections. Attempted to torque flare nuts to spec. Retested. Still had leak. Could not find leak on coil due to limited access. Unit will need to be disassembled for further troubleshooting. *** while on site and during time while evacuating system, checked out HP2, HP3, and HP7. All three systems were shutting down due to errors. Performed preliminary inspection and troubleshooting. Found that all three systems are low on charge. HP7 also had two failed sensors. Replaced sensors and got system up and running but found significant refrigerant loss. *** all three systems are down and will not function. All three will require a leak check.

12/1 - Talked with primary got directions on which equipment and where to start. Picked up supplies from supply house. Arrived on site checked in with staff. Looked at unit 201. Checked coil in fan coil. Pressure tested line set. Pressure tested ok. Checked coil. Found coil leaking audible. Removed pressure test gear and mobilized to van. Created quote for repairs. Will return tomorrow to check other units.

12/2 - Looked over fc502 and 311 made quotes for repairs. Turned into office awaiting quotes to be sent.

Price Method: Time and Materials

Date of Service	Description	Technician	Quantity	Unit Price	Price Total
Cost Type: 1 - Labor					
11/07/22	Labor - Service	Morfin, Juan G	5.00	161.50	807.50
11/10/22	Labor - Service	Morfin, Juan G	5.00	161.50	807.50
11/09/22	Labor - Service	Morfin, Juan G	5.00	161.50	807.50
11/14/22	Labor - Service	Morfin, Juan G	4.00	161.50	646.00
11/15/22	Labor - Service	Morfin, Juan G	4.00	161.50	646.00
11/16/22	Labor - Service	Morfin, Juan G	4.00	161.50	646.00
11/17/22	Labor - Service	Morfin, Juan G	2.00	161.50	323.00
11/22/22	Labor - Service	Morfin, Juan G	1.50	161.50	242.25
11/23/22	Labor - Service	Morfin, Juan G	1.50	161.50	242.25
12/01/22	Labor - Service	Karlson, Nigel I	6.00	161.50	969.00
12/02/22	Labor - Service	Karlson, Nigel I	3.50	161.50	565.25
Cost Type: 2 - Materials & Equ					
11/07/22	Purchase - Misc Materials		1.00	727.16	727.16
11/15/22	Purchase - Refrigerant and Misc Supplies		1.00	2,048.02	2,048.02
12/01/22	Purchase - Fittings, Sealant, etc		1.00	194.37	194.37
Cost Type: 7 - Miscellaneous					
11/01/22	Other - Truck Charge		1.00	60.00	60.00
11/01/22	Other - Consumable Fee		1.00	25.00	25.00
11/01/22	Other - Refrigerant Evacuation and Recovery		2.00	40.00	80.00
11/01/22	Other - Nitrogen Fee		3.00	20.00	60.00
11/01/22	Other - Small Weld		2.00	20.00	40.00
				Subtotal	9,936.80
				Tax	1,003.64
				Total	10,940.44

A FINANCE CHARGE OF 1.5% PER MONTH (18% PER ANNUM)
WILL BE CHARGED ON UNPAID BALANCES.