



Ware Council on Aging

1 Robbins Road
Ware , MA 01082
413-967-9645
413-967-9294

jzienowicz@townofware.com

The Honorable Board of Selectmen
126 Main Street
Ware, MA 01082

Re: 5 year HVAC Summary - Ware Senior Center

Council on Aging Members

Julianne Cappe

Irene Eskett

Cheryl Haigh

Carl Waal

John L. Zienowicz
Executive Director

To the esteemed members of the Board,

I have been asked to provide you with a synopsis of my experiences with the HVAC system since assuming the role of Executive Director on July 1st 2015. It is my understanding that this had been a re-occurring problem before my arrival, however; I do not feel it is appropriate to comment on events that I was not a witness to personally and therefore will only talk about my experiences. I am also attaching the invoices from Heat Pro over the past five years to demonstrate the amount of money that has been spent in service calls and repairs in just my tenure.

My introduction to the HVAC system was given to me by the late Dick Towlson. He spent the better part of an hour reviewing the very intricate steps he had devised to get the heating system to turn on and maintain a temperature that was comfortable for the seniors. It involved manually turning the furnace on and off at different points of the day including him coming in in the middle of the night to turn it back on to keep the building from freezing. I asked the obvious question as to why do you need to do that? He said the computer controlled system doesn't work, once you turn the furnace on it runs continuously not only wasting oil but making the building too hot, the opposite is true with the A/C system. It is all controlled by a computer panel that is run through proprietary owned software. The Town of Ware has no control over the settings or diagnostics. In order for anything to be changed the Town would have to agree to

pay thousands of dollars to the software engineer to come out and make changes to the software.

In an effort to get a better handle on this I reached out to Heat Pro, the installers of the system, for a professional walk through to understand how to make this work more efficiently. Surprisingly the outcome was not what I expected, they were just as much in the dark as I was only they had had the technical knowledge to keep it functioning in spite of itself and thus began a relationship of seasonal service calls. Eventually we got around to having a representative from Honeywell come out and go through the building to give us a breakdown as to what that would cost, I never saw the outcome of that meeting as that representative left Honeywell before providing a finished report.

I instructed everyone here to not touch anything to do with the HVAC system, Heat Pro would be the only ones to troubleshoot the system and the only ones to convert from A/C to heat and back. Anytime the temperature was way out of range we called Heat Pro and it would take several trial and error attempts sometimes to get the system to respond and come back to normal. Even then I have had to make adjustments to keep the equipment functioning. For instance, in order to keep the A/C unit from overheating and shutting down I have to make time every Friday to go outside and hose off the fins and coils to make sure they don't get clogged. In the winter I have to make a daily visual checks on the furnace temperature gauges to make sure that it hasn't tripped off and shut down or there aren't any leaking valves.

Throughout the past five years I have had several conversations with Heat Pro about what it would take to make this system work better for us and the answer was always the same, take it out and start over with something that is simple and user/service friendly. After the failure in 2020, we have met with Honeywell again and have begun that process of investigating options for system replacement.

Technical

The panel itself (See Picture 1 attached) offers just three options to the user for each circuit attached to it. On/Auto/Off. On puts that circuit on continuously, Auto defaults to the computer program and Off is off. (See Picture 3 attached) Interestingly enough none of the switches are labeled in the panel as to which switch turns on which circuit so we had to figure that out for ourselves (Through

Heat Pro checking each wire). The only way to make changes to the system is through a computer interface port, using proprietary software. (See picture 2 attached) There are three boxes mounted on the wall in three locations in the building. (See picture 4 attached) There are two settings on this box, a picture of a sun (1) and a picture of a snowflake (2). Dick explained to me that to put the system on notice to use the furnace settings you place the switch to the sun setting and to place the system on the A/C setting use the snowflake. These are sensors not thermostats, again there is no control over the actual temperature setting, it is simply telling the computer system to treat the situation according to one or the other selected.

Also, another mitigating factor is the mandated air replacement system. A building of this size is required to vent out at least 12% of its total air volume at regular intervals in a 24-hour period. In other words, the HVAC system closes off the internal circulation system and opens a vent to the outside wall drawing in air from the external environment and sending it through the circulation vents. When enough air has been exchanged, the external vent closes and the internal circulation system comes back online and either heating or cooling continues. For some reason this unit appears to vent 20% which makes a dramatic change in the overall temperature of the rooms. The effect of that is the system has to work harder to get back up or down to the set temperature. Another challenge is this appears to be preset to happen around 10AM just as the most amount of seniors are in the building finishing programs and coming in for lunch. So in the summer, the hot and humid air is pumped into the building, raising the temps to an uncomfortable level and causing the floors to "sweat" and become slippery. In the winter we have seniors scrambling to put their jackets back on as the temp drops up to ten degrees depending on how cold it is outside. And inexplicably, it would also become colder in the summer than the system should have allowed, based on the outside temperature and the air replacement overage. (See email thread dated 7/23/2019 attached as an example) Apparently along with the three wall units, there are three other sensor units located around and outside the building that contribute to the overall HVAC picture. Although no one seems to know where they are and if they are currently functioning. (It is assumed that these sensors, along with the absence of an emergency failure backup system that caused the catastrophic failure in the early winter of 2020.)

Failure

The system failure was purely a system result. Sometime over the weekend, the computer closed the internal circulation vent, began shunting inside air out and outside air in to replace 20% of the existing air. As this was going on the system did not return to its normal state by closing the outside vent and recirculating the heated air through the coils and circulation vents. Instead unseasonably cold air (20 degrees) was continually forced through the vents and the coils for the entire weekend, which eventually froze all three of them solid and split the copper coils contained within.

If the system had an emergency fail safe in place the heated air would have been allowed to continue to flow through the coils and the circulation system.

Currently the computer panel is unresponsive to anything other than On or Off. Even after the coils have been replaced and the circulation system is back up and running, the furnace will only operate in two modes, On or Off. The furnace will run until it hits its high temp limit then shut down and when it hits its low temp limit it will run continuously until the high temp is met again. Meanwhile the heated water in the pipes continues to be circulated through the system and the internal temperature of the building reaches around 85 degrees. This is not efficient. This leads to more questions as to why we have this system.

As a response, Heat Pro had to install a temporary jump to circumvent the computer panel and allow the furnace to function as essentially a cold start furnace, turning on and off based on a wired, portable thermostat and the furnaces set limits of high and low water temps. This simple arraignment is holding the building steady at 70 degrees.

I hope this helps to clarify the picture a little, if you have any questions feel free to contact me. Thank you for your cooperation on this matter.

Yours in health,

John L. Zienowicz
Executive Director
Ware Council on Aging

Beckley, Stuart

From: Peter Harper <heatproinc@gmail.com>
Sent: Monday, January 18, 2021 4:18 PM
To: Zienowicz, John
Cc: Beckley, Stuart
Subject: invoices from 2015 to current
Attachments: Senior center 1.pdf; senior center 4.pdf; senior center 5.pdf; senior center 3.pdf; senior center 2.pdf; senior center 7.pdf; senior center 6.pdf; senior center 8.pdf; senior center 9.pdf; senior center 10.pdf; senior center 13.pdf; senior center 11.pdf; senior center 14.pdf; senior center 12.pdf; senior center 15.pdf; senior center 16.pdf; senior center 19.pdf; senior center 17.pdf; senior center 18.pdf; senior center 20.pdf; senior center 21.pdf; senior center 22.pdf; senior center 23.pdf; senior center 25.pdf; senior center 24.pdf

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Hello

I have attached the information, we have some that have better details than others but I do keep paper copies so I can gather better information if the need arises. Please let me know if there is anything else. Thank you

Zienowicz, John

From: Beckley, Stuart
Sent: Tuesday, July 23, 2019 11:24 AM
To: Zienowicz, John
Subject: RE: temperature

Thank you. Not sure this makes sense. If the room is cold enough at night, why does the unit want to make it colder?

From: Zienowicz, John
Sent: Tuesday, July 23, 2019 11:18 AM
To: Beckley, Stuart <sbeckley@townofware.com>
Subject: RE: temperature

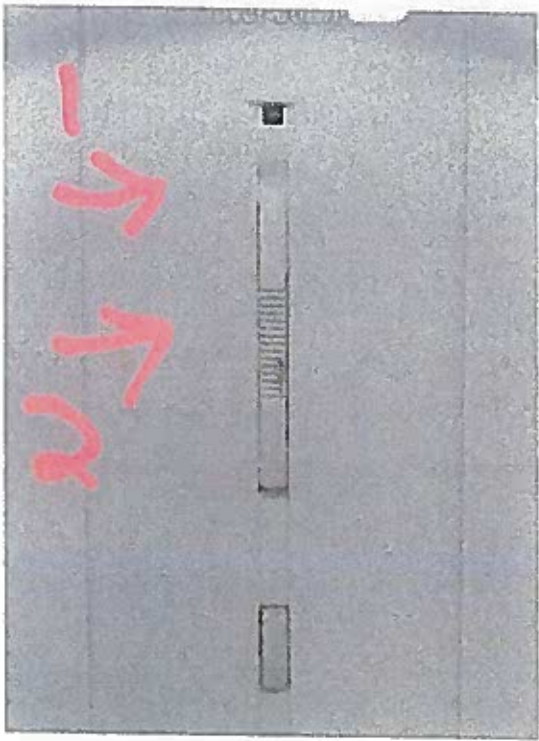
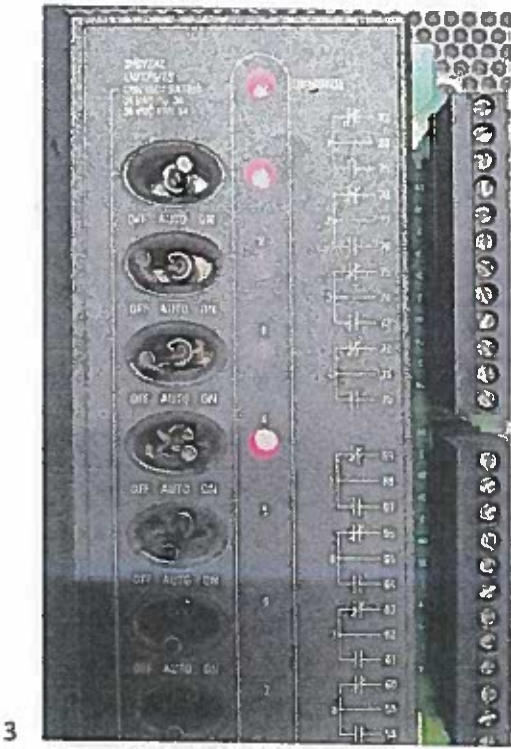
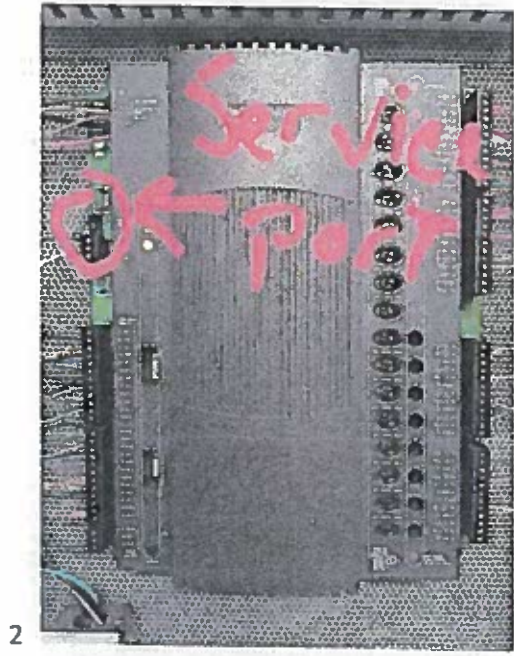
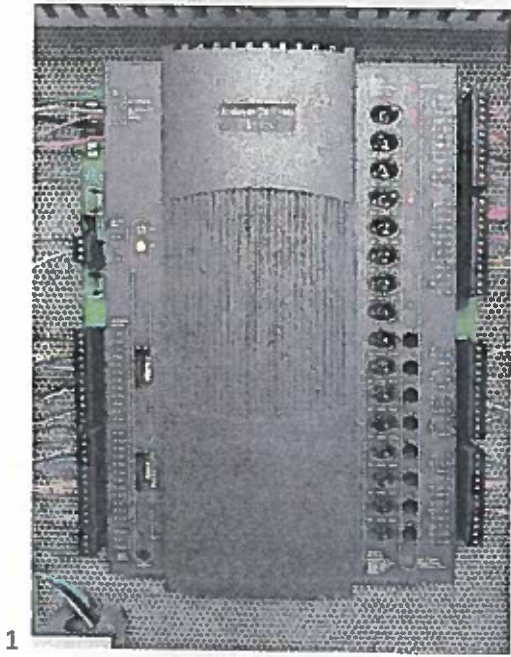
Already been taken care of. Had Heat Pro here and they said everything is functioning the way it should. The temp drop outside hasn't helped either so the ERU keeps bringing in air from outside as part of the cycle, well it's been dropping down below 60 overnight so that's well below the 72 they are used to. It's 65 outside now so that trend will continue. The A/C isn't actually coming on until the inside goes over 74ish at this point.

We've also insulated the building better so it's holding it in. (just a theory)

From: Beckley, Stuart
Sent: Tuesday, July 23, 2019 11:01 AM
To: Zienowicz, John <jzienowicz@townofware.com>
Subject: temperature

Good morning sir,

I had a Selectmen state that he has received a couple of calls that the Center is too cold. Is this fixable? Tied to the inability to play with the thermostat?



Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 006703
Invoice Date: 11/24/2020
Due Date: 11/24/2020
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
11/24/2020	Tune Up replace pressure relief valve and rebuild pump with 1600 kit	350.00 2,315.00

Total \$2,665.00

Payments/Credits -\$2,665.00

Balance Due \$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 006657
Invoice Date: 11/12/2020
Due Date: 11/12/2020
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
11/12/2020	service call switch temp for heat mode drip from relief valve will order new and replace	125.00

Total	\$125.00
Payments/Credits	-\$125.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 006485
Invoice Date: 9/3/2020
Due Date: 9/3/2020
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
9/3/2020	service call no a/c fan airhandler breaker tripped belt loose reset breaker and tightened belt tested ok	175.00

Total \$175.00

Payments/Credits -\$175.00

Balance Due \$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 352727
Invoice Date: 6/16/2020
Due Date: 6/16/2020
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
5/28/2020	12x24x2 24x24x2	600.00

Total	\$600.00
Payments/Credits	-\$600.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 006164
Invoice Date: 2/17/2020
Due Date: 2/17/2020
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
1/18/2020	service call no heat unit running rough replaced filter nozzle strainer and tested	190.00

Total	\$190.00
Payments/Credits	-\$190.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 006148
Invoice Date: 12/4/2019
Due Date: 12/4/2019
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
12/4/2019	service call unit runs constantly using lots of oil checked unit it is fine just colder this year than the same time last year	125.00

Total	\$125.00
Payments/Credits	-\$125.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 005875
Invoice Date: 7/24/2019
Due Date: 7/24/2019
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
7/19/2019	service call no cooling performed a/c maintenance	200.00

Total \$200.00

Payments/Credits -\$200.00

Balance Due \$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 005815
Invoice Date: 6/11/2019
Due Date: 6/11/2019
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
5/24/2019	a/c and heating service rib realy 1600 series seal kit	800.00
Total		\$800.00
Payments/Credits		-\$800.00
Balance Due		\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 005811
Invoice Date: 5/23/2019
Due Date: 5/23/2019
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
5/15/2019	service call no heat rib relay n/g and pump not pulling oil replaced pump and bypass rid relay will come back for service	500.00

Total	\$500.00
Payments/Credits	-\$500.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 005640
Invoice Date: 2/5/2019
Due Date: 2/5/2019
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
1/24/2019	service call water leak at pump bad pump seal and housing rotted replaced 1600 series assembly with new	1,246.00

Total	\$1,246.00
Payments/Credits	-\$1,246.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 005349
Invoice Date: 10/25/2018
Due Date: 10/25/2018
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
10/17/2018	service call switch system to heat for the season fixed loose wire and did filters left additional filters on site	475.00

Total	\$475.00
Payments/Credits	-\$475.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 005165
Invoice Date: 7/18/2018
Due Date: 7/18/2018
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
7/17/2018	a/c unit not cooling found dirty filter condenser full of grass clipping and dirt evap coils needed cleaning as well	350.00

Total \$350.00

Payments/Credits -\$350.00

Balance Due \$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 005134
Invoice Date: 6/1/2018
Due Date: 6/1/2018
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
5/29/2018	turn on a/c switch off all 3 heating pumps and boiler turned on 1st and 2nd stage on cooling cleaned coil checked pressure checked outdoor unit changed filters 24x24x2 12x24x2	200.00

Total	\$200.00
Payments/Credits	-\$200.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 004669
Invoice Date: 10/27/2017
Due Date: 10/27/2017
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
10/26/2017		350.00

Total \$350.00

Payments/Credits -\$350.00

Balance Due \$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 004641
Invoice Date: 10/27/2017
Due Date: 10/27/2017
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
10/17/2017	tu Dave	0.00

Total	\$0.00
Payments/Credits	\$0.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 004025
Invoice Date: 11/9/2016
Due Date: 11/9/2016
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
10/27/2016	burnt conrtol	253.00

Total	\$253.00
Payments/Credits	-\$253.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 004070
Invoice Date: 10/13/2016
Due Date: 10/13/2016
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
10/13/2016	3.50x60ss fb-4 a-b high cover brush, vac, changed filter,check safety	250.00

Total \$250.00

Payments/Credits -\$250.00

Balance Due \$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 003899
Invoice Date: 7/7/2016
Due Date: 7/7/2016
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
7/7/2016	service call water coming thru cieling blew out drain line	85.00

Total	\$85.00
Payments/Credits	-\$85.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 003892
Invoice Date: 6/30/2016
Due Date: 6/30/2016
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
6/28/2016	service call a/c not keeping up, washed coils,recycle power, checked filters,found unit low on charge. Misc Parts 10 lbs of R-22 refrigerant	255.00
		750.00

Total \$1,005.00

Payments/Credits -\$1,005.00

Balance Due \$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 003859
Invoice Date: 6/28/2016
Due Date: 6/28/2016
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
6/28/2016	1 case 12x24x2 and 1 case 24x24x2 filters, beckett clean cut pump, 1 jet line, fittings 2 hours	359.00
		170.00

Total \$529.00

Payments/Credits -\$529.00

Balance Due \$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 003665
Invoice Date: 1/14/2016
Due Date: 1/14/2016
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
1/11/2016	service call replace oil solenoid Misc Parts V4046B honeywell	170.00 120.93
Total		\$290.93
Payments/Credits		-\$290.93
Balance Due		\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 003602
Invoice Date: 12/28/2015
Due Date: 12/28/2015
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
12/22/2015	service call	520.00
Total		\$520.00
Payments/Credits		-\$520.00
Balance Due		\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 003504
Invoice Date: 12/7/2015
Due Date: 12/7/2015
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
12/3/2015	service call 3.50x60ss fb 4 a-b high cover after hours over due for service	500.00

Total	\$500.00
Payments/Credits	-\$500.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 003586
Invoice Date: 11/23/2015
Due Date: 11/23/2015
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
11/23/2015	service call change coupling Misc Parts 4je coupling	85.00 50.00

Total	\$135.00
Payments/Credits	-\$135.00
Balance Due	\$0.00

Heat Pro Inc.
51 West St
Ware, MA 01082
(413) 967-4721
heatproinc@gmail.com

Invoice

Invoice #: 03225
Invoice Date: 5/4/2015
Due Date: 5/4/2015
Project:
P.O. Number:

Bill To:
Ware Senior Center
1 RobbinsRd.
Ware, MA. 01082

Date	Description	Amount
4/16/2015	no heat water leak found pump seals no good rebuild and test Misc Parts 2 1600 series pump rebuild kits	340.00 450.00

Total	\$790.00
Payments/Credits	-\$790.00
Balance Due	\$0.00