

Timeline

1. [winter of early 2021, exact date ?] Malcarne installs 4 HVAC units as part of full HVAC/Solar renovation.
 - a. Per our invoice, this unit cost $\$19425.00 + \$4230.00 + \$5,625.00/3 = \$25,530.00$ plus the Time and Materials to install new ductwork.
 - b. Per the invoice:
 - i. *Living room/Piano room/Front Entry- HVAC-Heating Ventilation & Air Conditioning:*
Install a new high efficiency heat pump
Re-route the heating lines to provide the space heating from the heat-pump hydro coil for back-up heat 19,425.00
Install a zone system to:
Zone 1- Provide HVAC trunk line for the living room
Zone 2- Provide HVAC trunk line for the rooms along the front of the house
4,230.00
Install duct work along the front of the house on a T&M basis at \$125/man/hour
-Duct work will be run along the basement ceiling
0.00
Provide and install three Accuclean Air filters:
1-The unit in the attic
2-The unit in the crawl space
3-The unit in the media room closet
5,625.00
2. [~2/21/21] Cost overruns and documented instances of poor workmanship lead us to discontinue further work by Malcarne.
3. [4/6/21]: We had total bills from Malcarne in the amount of \$292,114.52 which we have an invoice saying fully paid.
4. [4/6/21] : We had total bills from Malcarne in the amount of \$302,114.52 of which we had already paid at least \$280,000.00. Malcarne asking for an additional \$22,114.52.
5. [4/8/21]: We email Malcarne evidence of the poor workmanship and discuss withholding some payment to pay for corrective work to be done by a new contractor. Amount is about \$15000 and this about matches the cost of the corrective work.
6. [10/6/21]: After performing routine maintenance on the HVAC units we discover that two out of the three air cleaners were not functioning due to incomplete installation. Each unit cost \$1875 and had not been operating during the first year. We notify Malcarne with pictured evidence which they come out to correct for free.
7. [4/15/22]: During yearly scheduled service from a new HVAC servicer, American Heating and Cooling, it is discovered that one unit is not working, reporting error code 164.01. American Heating attempts to fix but is unable and tells us that we should go to the original installer since they did not have the expertise to fix the unit. Though we did not want to deal with Malcarne we had no choice since they were 1.) the installers and 2.)

We could not locate an alternate authorized servicer of their brand of equipment in our area.

- a. 5/6/22 [us] "Hi Carol, We've had another issue come up with one of the units installed by you last year. The AC is not working on the one unit and it is reporting an error code (see attached photo). Our HVAC servicer recommended that this should be referred to you as it seems to be a software or circuit issue. Let me know how you'd like to proceed and have a great weekend!"
 - b. 5/9/22 [us] "Hi Carol, I just wanted to follow up on this email from last week."
 - c. 5/16/22 [us] "He guys, given the hotter weather, just wanted to follow up on where we are with the manufacturer on the problem."
 - d. 5/16/22 [them] "Hi Dana I am working on getting the parts so it can be repaired. I should have something for you in the next few days."
 - e. 6/29/22 [us] "Just following up on this repair."
 - f. Finally done by mid-July
8. [7/22]: Malcarne says failure is due to an equipment problem in the valves and say that the issue is fixed. Unit is offline throughout the summer. We are not charged.
9. [6/2/23]: In switching the unit from heating to cooling we notice the same problem unit is again failing, this time with error codes 184.07 and 184.08. Again we do not want to work with Malcarne, but given that other HVAC technicians cannot work on this brand. We contact American Standard to find an authorized technician in our area, but they simply point us to their website which only lists Malcarne. We have the following exchange over email:
 - a. [malcarne] "Hi Dana & Sean I can have someone come out next week I just need you to know that all and any parts will be warranted however the labor is not covered under the warranty. The service call is 250.00 and 175.00 per hr per tech for each additional hr. I need you to confirm that you agree to these charges before I schedule the techs. Thank You. Tony C."
 - b. [us] "Just so I understand, it's a flat \$250 to come out and diagnose the issue. and then \$175 per person per hour (2 men) for any subsequent repair work?"
 - c. [malcarne] "That is correct and I can have them out to you mid week next week"
10. [6/19/23]: Malcarne comes out to inspect the unit.
11. [6/22/23]: Malcarne comes out to attempt repair. Still broken.
12. [7/26/23]: Malcarne makes another attempt at repair. Still broken.
13. [8/10/23]: Malcarne says they have fixed the unit indicating that the problem was "low refrigerant." I notice a few things:
 - a. It is not normal for a brand new unit to lose refrigerant this quickly
 - b. Refrigerant levels are a very common issue in systems, why did it take so long to track the issue down?
 - c. Refilling the refrigerant does not address the root problem. If it is low then there is a leak and it seems like without fixing the root problem, the same issue will just recur.

- d. This seems to be very similar to the first problem that they fixed and I wonder if that fix was done improperly.
 - e. In general, it is unclear whether the equipment is at fault or if there was a faulty installation.
 - f. It seems likely that the problem with the unit has been there since the very beginning and we only notice it when it becomes bad. It also seems like the first fix in early 2021 was only a bandaid.
14. [9/21/23]: Malcarne sends an invoice for \$4125.00 for work done between 6/19 and 8/10 with a due date of 10/21/23..
- a. The billing is a big surprise and does not match their stated rate.
 - b. We believe that everything done between 6/19 and 7/26 falls under the flat \$250 to diagnose the problem and the 9 man-hours at \$175 an hour or \$1575.00 would be the accurate bill.
 - c. We contact Trane/American Standard again and try to get them involved in the issue which they try to avoid.
15. [9/27/23]: We respond to Malcarne with the following questions:
- a. [us] "Hi, We wanted to understand in a bit more detail what the problem was with the unit. Given that this broke down in both the Spring of 2022 and 2023, we are concerned that it will again need repair next Spring and lead to another similar bill. A few questions: What was the cause of failure in Spring 2022? It says on the bill that the cause of the failure in 2023 was low refrigerant pressure. Low pressure after only a year since the previous servicing would be due to a leak correct? Did you identify the source of the leak? And if so, what was the cause of the leak? Was it a specific part from American Standard that failed? Do you know why the error code on the thermostat did not correctly report the problem Thank you for your help!"
16. [10/17/23]: Having received no response from Malcarne, we receive another email for the invoice. Within hours we respond saying that our previous questions were never answered and they ask us to resend the email.
17. [10/18/23]: We receive the following response:
- a. [malcarne]"What we did up to this point is we did identify that there is a leak in the system. The leak has not been repaired yet or do we know where the leak is. The leak needs to be located and corrected. As far as the codes these systems are so Sensitive that if there is a leak in the system it could throw off many different sensors for many different reasons. However there were two sensors in the air handler in the crawlspace that I did change they did fail. However the leak does need to be located and repaired."
 - b. [us] "I have in my notes that the same unit failed in early 2022 with error code 164.01 which American Standard says is caused by "Possible stuck valve ET or GT / sensor is out of calibration / Low refrigerant charge / Restricted liquid line How was this corrected then? Was the refrigerant recharged during that failure?"
 - c. [malcarne] "Yes it was recharged at that point. The Sensor and the valve has been changed. So the codes at that point were correct those are the sensors and valves that I changed in the air handler. When these codes occur American

Standard doesn't go right after the actual code problem what they do is they have us test everything that leads to that code and then we correct all the problems that lead to that code."

18. [10/18/23]: Email from Trane/American Standard:

- a. [trane/american standard] Thank you for following up. I apologize about the delay, I was waiting on technical support to complete their inquiry. I have spoken with technical support who has spoken with Malcarne Contracting. Your dealer has stated that every time they came out to service your equipment, you gave them permission to bill you for their services. Consumer Relations review of this situation has been completed. In order to offer any assistance outside of the limited warranty you would need to submit the paid invoice for review and as previously advised we will only be able to offer some reimbursement towards the August 10th invoice for the actual repair.

19. [10/19/23]: Emails:

- a. [us] "What do you think it will take to locate the leak and have it fixed? I imagine the leak would have to be in the outdoor unit since I have not seen puddles of refrigerant inside, correct? Is this a mechanical failure of the equipment?"
- b. [malcarne]: "American Standard wanted us to get the system up and running the way we have gotten it at this point they wanted to see if the refrigerant is going to push out somewhere. If the refrigerant pushes out and you folks noticed that now the system is not acting correctly call me will put the system under pressure and we will search for the leak. The The leak could be in the indoor or the outdoor unit just because you don't see oil doesn't necessarily mean the indoor units not leaking. I know it's not leaking from any of the joints that we did I have already tested them."

20. [10/18/23]: Invoice for \$4125.00 remains unpaid and is now due within 3 days. We are hesitant to pay it because we believe the repairs should be covered by the party responsible and unfortunately it is unclear to us if that is Trane/American Standard or Malcarne. We believe there is evidence that this unit has been malfunctioning since the initial install and therefore should be covered in full by either the dealer (Malcarne) or the manufacturer. We anticipate that a proper repair may cost upwards of \$20,000-\$30,000 given the original cost of the unit + inflation, etc. Trane claims that their warranty does not cover Labor, and Malcarne is saying that they will continue to charge us above market rates with no end of these problems in sight.

<https://www.star-supply.com/content/Trane%20Alert%20Codes.pdf>

CL2.164.01	Major	EEV OPEN ERR	Indoor EEV error	EEV motor is at the open position and the superheat is greater than 30 degrees	Possible stuck valve ET or GT sensor is out of calibration Low refrigerant charge Restricted liquid line	
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