A Brief History of Heating, Cooling, and Ventilation

COOLING
HEATING
Miracula
BY GEMCO
S WITHOU
E OR FU
Miracula

The heating, cooling, and ventilation industry is quite young – equipment and techniques were developed in the 1930s and 40s and solidified in the 50s and 60s. Since then, we have seen gradual improvements in efficiency, comfort, and reliability. The two biggest innovations to take us into the modern age (2017) have been the computerization of the equipment and the ability to modulate the output of the equipment to meet the heating or cooling load.

Here are two examples of early HVAC technology that still closely resembles what we install today.

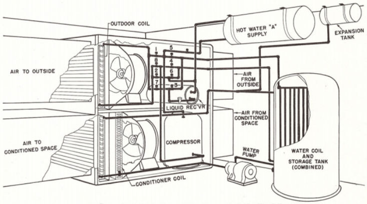
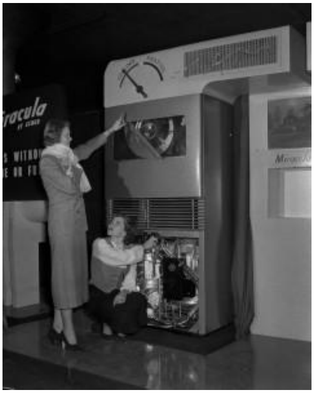

OUTDOOR COIL
HOT WATER "A" SUPPLY
EXPANSION TANK
AIR TO OUTSIDE
1
5
8
4
2
6
7
3
AIR FROM OUTSIDE
LIQUID REC'VR
AIR FROM CONDITIONED SPACE
AIR TO CONDITIONED SPACE
COMPRESSOR
WATER PUMP
WATER COIL AND STORAGE TANK (COMBINED)
CONDITIONER COIL

FIG. 2-9. Air-to-Water System Using Storage Tank (See Fig. 2-5)
Heat exchanger and filter not shown

Here is a depiction of an air to water heat pump (for domestic hot water production, heating, and cooling) from 1948!



Here is the **Miracula air source heat pump** from a 1948 trade show in Chicago. It used outside air as a heating and cooling source and provided year round comfort. Because it used R-12, pressures and temperatures were fairly low so it worked best in a mild climate. But the concept was proven and was a commercial success. Unfortunately, innovations in heat pumps were doomed by oil at very low prices….
Why spend the money on a large heating system like this when boilers and radiators were so successful and effective and inexpensive to operate and maintain? It would take another thirty years before fossil fuel became expensive enough to encourage heat pump sales again.

Air conditioning systems fared better – they offered something that no other existing technology could offer and everyone wanted AC. These pictures are from a Carrier AC system from the 50s in the basement of a store on Main Street, Vineyard Haven.

OFF
HUMITROL
ON

CARRIER
WEATHERMAKER

Our goal is to be **Martha's Vineyard's premier plumbing and HVAC shop – to do that we need to know the past of our industry.** We are always interested in any stories and pictures about older heating and cooling systems on the Vineyard. ***If you know of any existing historic HVAC installations on the island, please let us know.***