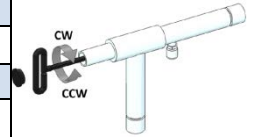


Start & Adjust “Quick Step Guide”

The following is a “Quick Step Guide” to expedite four (4) *critical adjustments* of the new Howe Ice Flaker. The adjustments *always* need to be done at time of startup. When done properly, these adjustments will insure proper operation of this equipment and minimize costly call backs and optimize equipment up-time.



Refrigerant	Model #	Pressure Setting	Temperature Setting
R-407A	1000RLE	22.5 psig	0°F/ -17°C
R-448A	1000RLE	23 psig	0°F/ -17°C
R-449A	1000RLE	24 psig	0°F/ -17°C
R-407A	2000-6000RL	18.5 psig	-5°F/ -20°C
R-448A	2000-6000RL	19.8 psig	-5°F/ -20°C
R-449A	2000-6000RL	20 psig	-5°F/ -20°C



Evaporator Pressure Regulator Adjustment

Suction temperature should be adjusted with use of an Evaporator Pressure Regulator (EPR). Models 2000 - 6000 Howe Flakers have an optimum suction temperature setting of between -5°F and -7°F. Model 1000 Howe Flaker has an optimum suction temperature setting of between 0°F and +2°F. These optimum suction temperature settings are to be checked and maintained at the flaker evaporator suction connection. They can vary slightly due to the effects of water temperatures, water hardness, ambient air temperatures and ice quality requirements.



Improperly adjusted TXV



Adjusting TXV



Properly adjusted TXV

Thermal Expansion Valve Adjustment

Howe Flake Ice Equipment’s Thermal Expansion Valve (TXV) must be adjusted visually (by sight) to assure optimum ice quality and ice harvesting. ***Superheat settings are not a reliable method of adjusting TXV on Howe Flaker.*** Please note how ice appears in photo above for a properly adjusted TXV. An even layer of ice should form completely from top to bottom on the evaporator. If ice on the lower 1” to 4” of the evaporator looks different than the ice above it, this normally indicates the TXV is underfeeding and requires opening. ***Failure to make proper TXV adjustments may cause unwanted ice build-ups on the evaporator. Ice build-ups can lead to the destruction of critical components as well as the ice flaker if left operating incorrectly.***



HEAT EXCHANGER INSTALLATION

Howe Corporation will ship a “loose” suction line heat exchanger with the purchase of your ice flaker. **Installation of this heat exchanger is required.** The heat exchanger should be installed within 4 feet of the flaker per Howe guidelines. Please see Howe installation and service manual for suggested piping diagram.




Hi-Amperage Overload Adjustment

The proper adjustment of Howe’s hi-amperage overload device will insure protection for the machine and help avoid nuisance service calls. To set the overload device correctly, mark location of the setscrew before adjustment is made, as a point of reference. Place a small flat blade screwdriver in adjustment screw - **gently** and slowly turn counter-clockwise (left) until overcurrent LED on control board illuminates (do not force past the bottom stop). Then turn screw clockwise (right) 1 hash mark and stop. Press the reset button to start the machine again.

Off-Delay Timer Adjustment

Under normal conditions (not during cleaning cycle) the off-delay timer should be adjusted to run approximately 3-5 minutes after solenoid valve shuts off the refrigeration to the ice flaker. For proper adjustment, turn knob counterclockwise (left) all the way until it stops. Then turn clockwise (right) 1/8 turn and stop. **(30 minute setting is for clean cycle only).**

For more complete information on how to adjust and maintain your Howe Flaker, please refer to the troubleshooting guide in the installation manual (*included with every ice machine*), or request the most current manual from service@howecorp.com or visit our Howe-To videos at You Tube Link  on the Howe web page www.howecorp.com.