

DO NOT REMOVE



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Start & Adjust “Quick Step Guide”

The following is a “quick step guide” to expedite four (4) critical adjustments of your new Howe Ice Flaker. When done properly, these adjustments will insure proper operation of this equipment and minimize costly callbacks and or warranty claims.



EPR set too low

Refrig.	Optimum Evaporator Pressure Settings	Temp.
R-404A	1000 MODEL 36 PSI	+3°F
	2000-6000 MODELS 28 PSI	-5°F
R-507	1000 MODEL 38 PSI	+3°F
	2000-6000 MODELS 30.5 PSI	-5°F
R-22	1000 MODEL 26.5 PSI	+3°F
	2000-6000 MODELS 20 PSI	-5°F

Above photos of gauges are examples based on R-404A refrigerant on 2000-6000 models.



EPR set properly

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 -10°F. Model 1000 Howe Flaker has an optimum suction temperature setting of between 0°F and +5°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

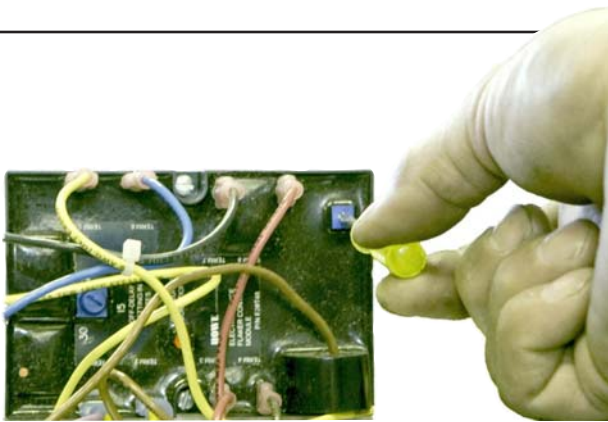
Thermal Expansion Valve Adjustment

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 of 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 in evaporator, damaging component parts, and void warranty.**



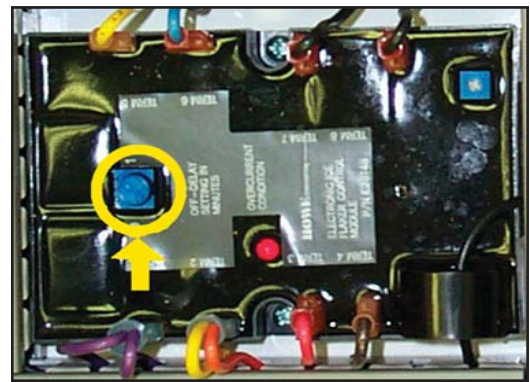
HEAT EXCHANGER INSTALLATION

Howe Corporation recommends installing a suction heat exchanger on its ice flakers when a 10°F TD (temperature differential) equivalent is not maintained between the central rack systems “head pressure” and “liquid temperature”. Installing this heat exchanger helps assure the liquid is adequately sub-cooled to provide a steady column of liquid to the flaker’s TXV.



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 over-current 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 2 minutes after solenoid valve shuts off the refrigeration to the ice flaker. For proper adjustment, turn knob counter-clockwise (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 download the most current manual from our web site at www.howecorp.com (follow the link for parts & service).