



HOSHIZAKI CARE TECH-TIPS

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THE CRITICAL CHARGE

Ice machines have a critical charge! How many times have you heard this statement? We teach this in our service seminars and state it to technicians over the phone.

Well, the truth is , an ice machine will probably make a little ice if the refrigerant charge is within 25% of the factory charge. The question is, will a little ice make your customers happy or do they expect the unit to produce according to factory specifications?

Ice machines are designed with a well balanced refrigeration system. Correct charge is an important factor in this balance. This is true for air cooled, water cooled, and remote condenser units as well.

Correct charge means the refrigerant should be weighed into the system according to the nameplate rating. Charging can be done with electronic scales, a dial-a-charge, or a compute-a-charge unit. Contrary to popular belief, you should never use a sight glass to charge an ice machine. A sight glass may work fine for a moisture indicator or to charge a cap tube system with a consistent load. It does not work however, on an ice machine where the load varies throughout the cycle.

The performance data found in the service literature provides a bench mark for system pressures and cycle times at different ambient and water conditions. In order to properly diagnose a refrigeration system problem, a technician checks the operation of the unit against this data. If the charge is not correct, the data will not match the unit operation and a mis-diagnosis could occur.

I am sure you can see that the refrigerant charge is definitely **critical** for proper operation.

EXPEDITE YOUR CALL by Scott Cantrell

Due to the ongoing heat wave that has touched most parts of the country, the number of service calls you receive probably has increased. There are many ways you can expedite these calls without jeopardizing the quality of service you offer. Here are a few tips that may assist you.

Qualify the call when it comes in and when you get to the job site. Ask your customer pertinent questions and **listen carefully** to the answers. They could provide key information that will lead you to the problem area. A simple statement like “when I open for business in the mornings, the bin is half full and the unit is shut off” can lead you to the problem.

Observe the installation and the equipment condition. Look for obvious problems that might cause low production or improper operation. Check the water and drain line sizes to assure they meet installation specifications. Is the electrical service correct? Is there adequate clearance for proper air flow and do ambient conditions meet specifications? These factors may seem trivial to your customer, however they can definitely effect unit production and operation.

Once you have looked for the obvious, follow typical trouble-shooting procedures to find the problem. Try

to keep an **adequate supply of common parts** on your truck. Having the part on your truck reduces service cost to the customer and presents your

company as a well prepared organization. Hoshizaki offers an in-expensive truck stock kit that will get most customers up and running. Check with your local distributor for price and availability.

If you need help in diagnosing the problem on a Hoshizaki unit, call our Care Department technical assistance line. Before you dial (800) 233-1940, make sure you have the following information which will definitely **Expedite Your Call**. We will need: complete model and serial number which is located on the unit nameplate, accurate ambient air and incoming water temperatures, and actual primary and secondary voltages. Depending on the nature of the problem, you may need to provide: freeze time, harvest time, ice batch weight, suction and high side pressures 5 minutes into the freeze cycle, and any other information you feel is important in diagnosing the problem.

Remember that the refrigerant charge is **critical** on an ice machine. You should install gauges, only if you feel there is a refrigeration system problem. Collecting this information will require effort on your part, however, we will need as much data as possible to assist you in diagnosing the failure. If possible, we prefer that you call from the job site for technical assistance. This gives us the opportunity to get additional information as needed.

Following these helpful hints will increase your efficiency and allow you the opportunity to serve more customers during your work day.

DB GEAR MOTOR CHANGE

Recently we have made a change of the gear motor for the DB model, Hotel / Motel dispenser. The original DB gear motor was manufactured by Panasonic. This motor is no longer available from the manufacturer so we have converted to a Von Weise Gear motor on the production line.

We still have a few Panasonic gear motors for service replacements. When these run out, we will sub over to a new replacement assembly which will include new mounting brackets. The update of parts information to the field is in process at this time.

There may be some confusion when ordering replacement parts because the gear motors are not inter-changeable unless the complete new assembly is used. If the Panasonic motor is ordered and our inventory is out, the new assembly will be shipped as follows. For DB-130C units with a serial number up to D11140M use sub assembly number 2A0443A02. For DB-200C units with a serial number up to D13015L use sub assembly number 2A0443A01. You should take care to check the unit you are servicing and make sure that you order the correct replacement parts.

If you need a replacement gear motor for a unit which has a new Von Weise gear motor, order it by part number 4A0183-01. The new gear motor uses a larger 25 MFD capacitor number 439943-02.

The conversion instructions necessary to install the sub gear motor assemblies are included with the parts. Reference service bulletin number SB95-0007 for more details.

ORIGINAL ALPINE BOARD AVAILABLE

The original alpine control board has been used on the assembly line in KM models since mid 1991. The service replacement for the original board has been the 2U0139-01 universal Alpine board with the black jumper cut. Having to modify this universal board in this application has caused some application problems.

To eliminate confusion, we are now offering the original board 2U00127-01 as a service replacement part. The board subs to SA0001 and is packed in a box with the instructions included. We had to issue a sub number to this package assembly to separate it from the assembly line inventory.

Remember this when you place an order for control boards in the future.

COMING NEXT MONTH...

1. Moisture In The System

2. PSC Motors

3. KM Transformers

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