HOSHIZAKI TECHNICAL SUPPORT
TECH -TIPS

Danny Moore
Writer/Editor

Hoshizaki America, Inc.
618 Hwy. 74 South
Peachtree City, GA 30269
Ph: (800) 233-1940 Fax: (800) 843-1056 E-mail: techsupport@hoshizaki.com

Volume 146
December 19, 1997

E-MAIL RESPONSE

Back in July of this year, the Hoshizaki Technical Support Department moved into cyberspace and added an e-mail address. Hoshizaki has a web site at www.hoshizaki.com . Stop by and check us out next time your out surfing the web.

Our responses average 5 a week. We are getting service questions and requests for technical data. We have only encountered one problem with the e-mail. Several requests have come in with no name or city and state listed. It's difficult to send you information if we don't know who you are or where to send it.

Our aim is to be accessible to the field and to provide the best customer support for the best ice machine in the industry.

KM-2400 CONTACTOR

The KM-2400SRB3 is the largest of the KM series units produced. It has additional controls that the smaller units do not have and uses a 5 HP Toshiba compressor. Additional controls and safeties are included to protect the larger compressor and shut down the unit if necessary. They include a low pressure switch, a discharge temperature switch, an additional high pressure switch "B", and contactor protection.

The 3 phase contactor includes overload protection in case of a power failure or single phasing which can cause an over current condition. This protection consists of a thermal overload protector connected to each phase. It can be adjusted to reset automatically or by a manual reset button. The reset is set in the "automatic" position from the factory.

There is also a variable adjustment for the trip point of the current protection. The setting should be 22 amps or 2.2 on the adjustment dial. The installation information is provided in Service Bulletin SB96-0002. A copy of this bulletin should be included with the replacement contactor.

In the near future, we will be changing the original contactor to one manufactured by Telemecanique. This is due to the manufacturer discontinuing production of the original contactor. A service bulletin will be published to announce this change when it occurs. Conversion instructions will also accompany the new contactor.

1998 TRAINING PLANS

The 1998 training season is quickly approaching. Beginning the week of January 5th 1998, our Technical Support Department has scheduled 112 Basic Service Seminars through May 1998. More seminars will be added as needed. These 4 hour seminars will be held in hotels throughout the nation.

The Basic Seminars focus on "SERVICE" and cover the sequence of operation and trouble shooting tips on Hoshizaki cuber and flaker models. Each year we update the seminar to include any new products and diagnostic techniques we have released during the previous year. Even though we haven't changed the

dependable basic sequence of operation since mid 1988, attendees can always learn something new.

Attending the Basic Seminar is suggested for anyone who does service repairs or installations on Hoshizaki products. It is mandatory for Hoshizaki

Contracted Service Representatives (HCSR's) to attend the local Basic Seminar. A minimal registration fee is usually required. The training and handouts are offered at no charge and your support and attendance is greatly appreciated.

Hoshizaki also offers a 2 day Advanced Seminar at the factory and at select locations throughout the nation. We have 10 Advanced Seminars scheduled through May 1998. This seminar offers more in- depth service training on our products. Registrants must attend a basic seminar prior to this seminar.

A training schedule is published in November each year. For information concerning the seminar nearest you, contact your local Hoshizaki distributor.
If you don't know who that is, contact the Technical Support Department or send us an e-mail message with your name, address and location. We will get you signed up in the next available seminar.

SERVICE Q & A

Question: The rubber boot that fits on the bottom of the KM float switch seems to dry out and crack in certain locations. It also collects scale deposits. How can I reduce the scale problem and address the rubber deterioration?

Answer: ***by Danny Moore***

The rubber boot attaches to the bottom of the float switch and feeds water to the float housing from the reservoir. It is essentially the lowest point in the water reservoir system. Since it is in the water system, it is susceptible to scale formation. The water flows into the float housing by gravity and sediment can settle in the bottom of the boot.

The KM unit has a built in power flush of the float switch housing during the pump-out cycle. A small amount of water is flushed through the tube at the top of the housing during this pump-out. The control board can be adjusted to allow for a pump-out to occur every 1, 2, 5, or 10 cycles. You will find that the factory setting is usually every 10th cycle. This is the most efficient water saving setting. To get more cleaning of the float switch housing, adjust dip switches number 5 & 6 on the Alpine control board
to provide additional pump-outs per this chart.

Switch #		5	6
Every cycle	1/1	OFF	OFF
Every 2 cycles	1/2	ON	OFF
Every 5 cycles	1/5	OFF	ON
Every 10 cycles	1/10	ON	ON

Every cycle pump-out provides maximum cleaning of the float housing greatly reducing scale build up.

The deterioration of the float boot is another problem altogether. This is usually found in areas with a high chlorine content in the local water system. Chlorine tends to absorb the petroleum out of the rubber part causing it to get dry and brittle. Originally, we used thin rubber for these parts and found that they deteriorated quickly. We later changed to the thicker version of the rubber parts which extended the life considerably.

As you know, chlorine is added to the water to kill bacteria. You can reduce the amount of chlorine by using a charcoal charged filter. This is normally done to eliminate taste and odor from the water. It will help extend the life of the rubber parts that are deteriorating however, it may allow additional bacteria or slime growth inside the unit.

When deterioration occurs on the float boot, it can cup upward and actually push the float up keeping it closed. This can also occur if a build up of scale is present in the boot. The symptoms of this are long 60 minute freeze cycles, larger than normal cubes, and the pump cavitating (sucking air) towards the end of the freeze cycle.

In the case of scale, clean the complete float assembly thoroughly including the tube that feeds water from the reservoir. Squeeze the connecting tube on the boot to break up the scale. Be sure to remove all the scale flakes so that they do not stop up the water system or pump-out check valve. If the float boot has deteriorated, it must be replaced.

COMING NEXT MONTH...

1. New Control Board
2. KML Pump Out
3. Service Q & A