HOSHIZAKI AMERICA, INC SERVICE BULLETIN

SB91-0007

OCTOBER 28, 1991

SUBJECT: NEW CONTROLLER BOARD

As part of Hoshizaki America's continuing effort to improve the KM series, we have designed a new controller board.

The new controller board will be known as the "Alpine" controller board, Hoshizaki America part number 200127-01.

This board has the same sequence of operation as the "C" style controller board, yet it provides the capability of finer adjustments allowing for better efficiency and lower water consumption. The board includes a pump out frequency selection that allows for a pump out once every cycle, once every two cycles, once every five cycles or once every ten cycles. The voltage protection is included in the board transformer, so the high voltage protection relay is eliminated. The board also has built in protection against foreign noise or distribution.

The board has eight dip switches:

A. Switch # 1 & 2 will adjust the defrost completion timer from one to three minutes - position as follows:

| • | - A | В | C | D |
|------|------------|---------|----------|----------|
| #1 | OFF | ON | OFF | ON |
| #2 | OFF | OFF | ON | ON |
| TIME | 60 SEC. | 90 SEC. | 120 SEC. | 180 SEC. |

The factory settings on switches 1 & 2 are:

KM-250BAB 2 minutes (C) KM-250BWB 3 minutes (D) All Other KM's 1 minute (A)

Switch # 3 & 4 will adjust the pump out time - positions В. as follows:

| | A | В | C | D |
|-------------------------|---------|---------|---------|---------|
| #3 | OFF | ON | OFF | ON |
| #4 | OFF | OFF | ON | ON |
| PUMP OUT | 10 SEC | 10 SEC | 10 SEC | 10 SEC |
| WATER VALVE | OFF | OFF | ON | ON |
| MIN. DEFROST TIME | 150 SEC | 180 SEC | 120 SEC | 180 SEC |

The factory settings for switches 3 and 4 are:

KM-250B (B)
KM "M" series (A)
KM "S" series (D) KM-250B

C. Switch # 5 & 6 will adjust the pump out frequency.

| 5 5 £ 1 £ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | A | В | C | D |
|---|---------|---------|---------|----------|
| #5 | OFF | ON | OFF | ON |
| #6 | OFF | OFF | ON | ON |
| PUMP OUT OCCURS EVERY | 1 CYCLE | 2 CYCLE | 5 CYCLE | 10 CYCLE |

The factory settings for switches 5 and 6 are:

energy in the second way of Original Production KM-1600 M/S (A) KM-250 M (A)

1 18 25

After September 16, 1991 production, (D) All models produced with Alpine Boards.

Switch # 7 sets the mode for future options and is not D. used. This switch should remain off.

E. Switch # 8 is for the board check out procedure and is explained in detail in the service manual. This switch should remain off, unless the check out procedure is being preformed.

NOTE: The new alpine board has the same back up timers as the "C" board.

- 6 minute maximum water fill timer.
- 20 minute defrost completion timer.
- 60 minute freeze completion timer.
- 1 minute water fill cycle.

You will find Alpine Control Boards on the following models and serial numbers.

```
KM-250BAB
                A22956 --->
KM-250BWB
                A10706
                       --->
KM-250M
                ALL UNITS
KM-450MAB
                A26245
       MWB
                A22106
      MRB
                A10181
 KM-630MAB
                A23851
      MWB
                A11501
       MRB
                A12201
KM-800MAB
                A21181
       MWB
                A20731
       MRB
                A20806
KM-1200MAB
                A20981
                        ---->
      MWR
                A10679
      MRB
                A12196
KM-1600
                ALL UNITS
KM-2000
                ALL UNITS
KM-2400
                ALL UNITS
```

There will be two part numbers available:

#200127-01 - will be used in all units produced with the alpine board.

#200139-01 - will be a drop in field replacement for the units utilizing the "C" style control boards from original production. A change from the "C" board will allow pump out frequency adjustability, which will allow lower water consumption and better efficiency in higher ambient conditions. This board will not replace the 200127-01 in an original alpine board production unit. It will be in parts inventory around January 1, 1992.

HOSHIZAKI AMERICA, INC. SERVICE BULLETIN

SB91-0007 SUPPLEMENT

December 3, 1991 Page 1 of 1

SUBJECT: ALPINE CONTROL BOARD SUPPLEMENT

The alpine control board is utilized on these additional models/ serial numbers.

| MODEL NUMBER | SERIAL NUMBERS |
|--------------------------|--------------------|
| KM-1200SAB KM-1200SWB | A20431> A10381> |
| KM-1200SWB KM-1200SRB | A11381> |