

**For Technical Service Assistance**  
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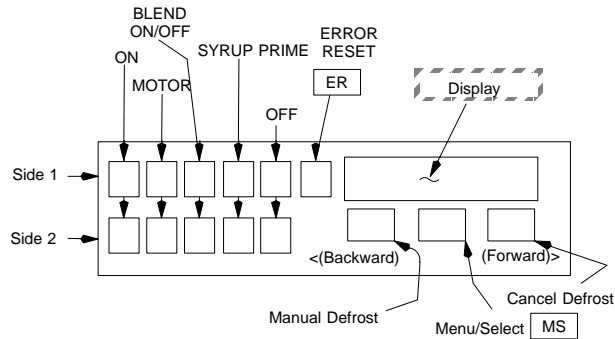
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Anoka, MN 55303 -  
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**Revision Date: May 06, 2014**

Revision: B

# QUICK REFERENCE GUIDE FCB V4 PROGRAMMING



## CONTROL PANEL SWITCH IDENTIFICATION

## MENU SELECTIONS AND DESCRIPTIONS

Enter the Programming Mode, by pressing and holding the switch “Menu/Select” until “Clock” appears on “MESSAGE DISPLAY”. To advance through the “MENU SELECTIONS” you must repeatedly press and release the “Forward” (Cancel Defrost) switch. The following is a list of menu selections and their brief descriptions.

MENU SELECTIONS	BRIEF DESCRIPTIONS
<b>CLOCK</b> (SEE NOTE 1)	Time of day and the day of the week.
<b>DEFROST</b> (AUTOMATIC)	Time of day, defrost cycle is to occur.
<b>SLEEP</b> (SLEEP TIME)	Time of day, the Unit is to go to sleep.
<b>WAKE UP</b> (WAKE UP TIME)	Time of day, Unit is to wake up.
<b>VIS SET</b>	Adjust product viscosity setting.
<b>VIS READ</b>	Displays actual viscosity readout.
<b>SENSORS</b>	Displays sensors temperatures readout.
<b>VOLTAGE</b>	Displays voltage readout.
<b>DIAGNOSE</b>	Checks Unit components for proper operation.
<b>TOTALS</b>	Displays cycles and hours totals.
<b>MOTORS</b>	Programs beater motors into Unit electronics.
<b>REF TYPE</b>	Programs refrigerant type into Unit electronics.

**NOTE 1:** The “CLOCK” (time of day) must be programmed into the Unit electronics before the Unit “DEFROST” (AUTOMATIC), SLEEP (SLEEP TIME), and “WAKE UP” (WAKE UP TIME) WILL FUNCTION.

**NOTE 2:** When DIP6 switch is in “ON” position, the control panel switches will disable (lock-out) after 90 seconds. Pressing any switch on the control panel for 5-seconds will enable (activate) the control panel switches. When in programming menu, control panel security will not re-establish until after exiting the programming menu.

## OPTIONS: (DIP SWITCHES 1 THROUGH 10)

**DIP1**  
(POS MESSAGE) Used to program POINT OF SALE display messages into Unit electronics.

**DIP2**  
(POS MESSAGE) Used to program POINT OF SALE display messages into Unit electronics.

**DIP3**  
(EXPANSION VALVES) Switch No. 3 *must* be in the "OFF" position for standard Units with pulse expansion valves. Switch No. 3 *must* be in the "ON" position for older Units with mechanical expansion valves.

**DIP4** (BEATER MOTOR CURRENT CALIBRATION) Used to adjust beater motor current (either side).

**DIP5**  
(DISABLE AUTO CALIBRATION) Switch in "ON" position prevents beater motors current from automatically self-calibrating at completion of each defrost cycle.

**DIP6**  
(CONTROL PANEL SECURITY) Switch in "ON" enables and switch in "OFF" disables control panel security. See Note 2.

**DIP7**  
(CELSIUS MODE) Switch "ON" for celsius or "OFF" for fahrenheit readings.

**DIP8**  
(DAYLIGHT SAVINGS TIME) Switch No. 8 *must* be in "ON" position to enable daylight (summer) savings or standard (winter) time to be programmed into the Unit electronics.

**DIP9**  
(HOT-GAS DEFROST) Switch "ON" hot-gas defrost or "OFF" electric defrost.

**DIP10** Service use only.

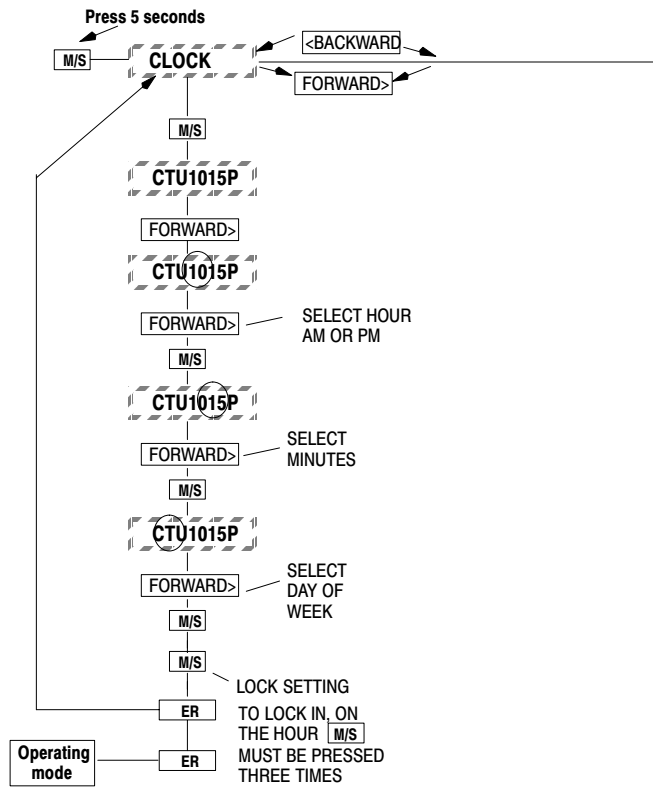
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**CALENDAR** Used to program month, day, and year into the Unit electronics.

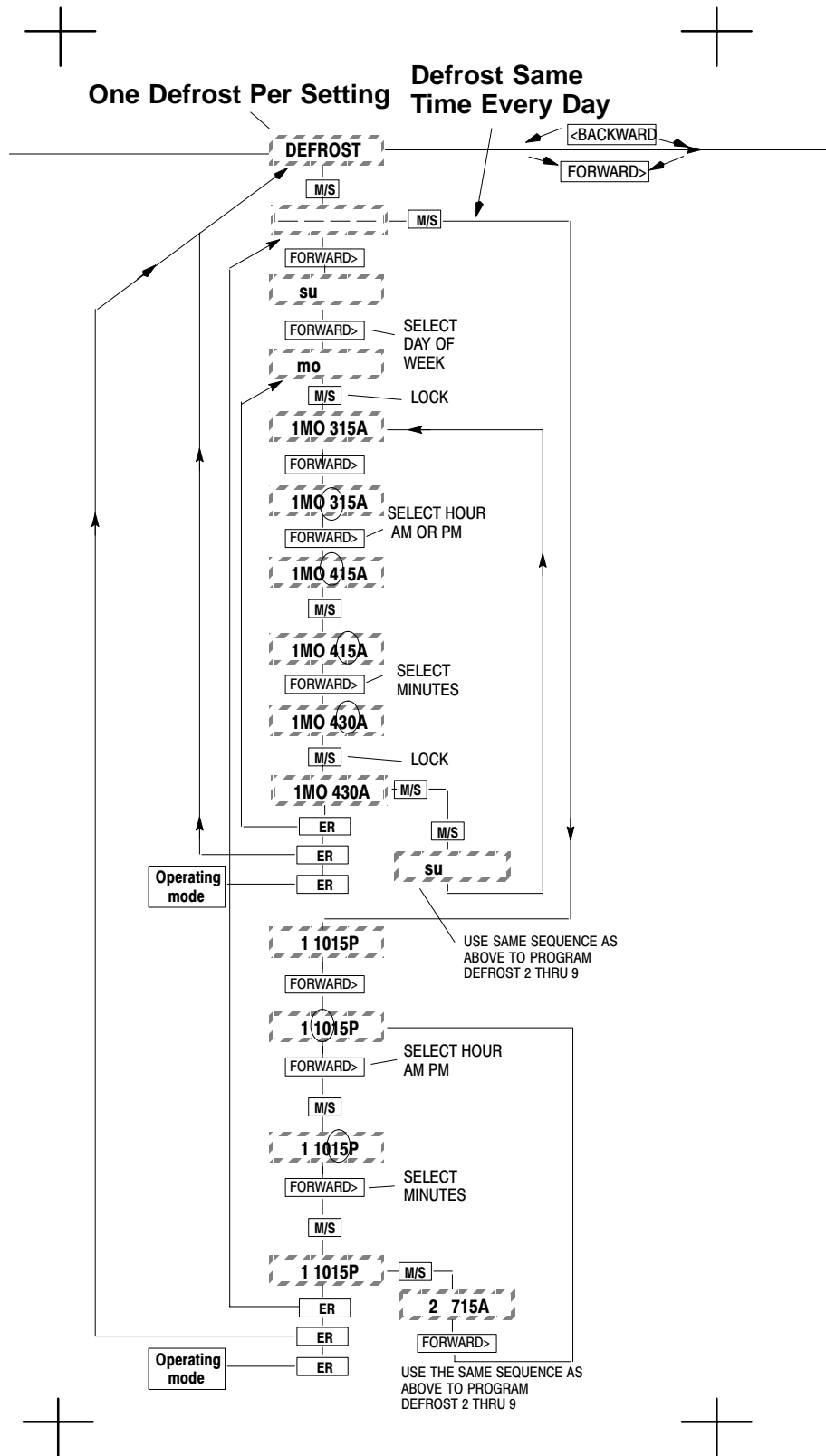
**DST+1HR**  
(see **DIP 8**) Programming daylight (summer) savings time into Unit electronics.

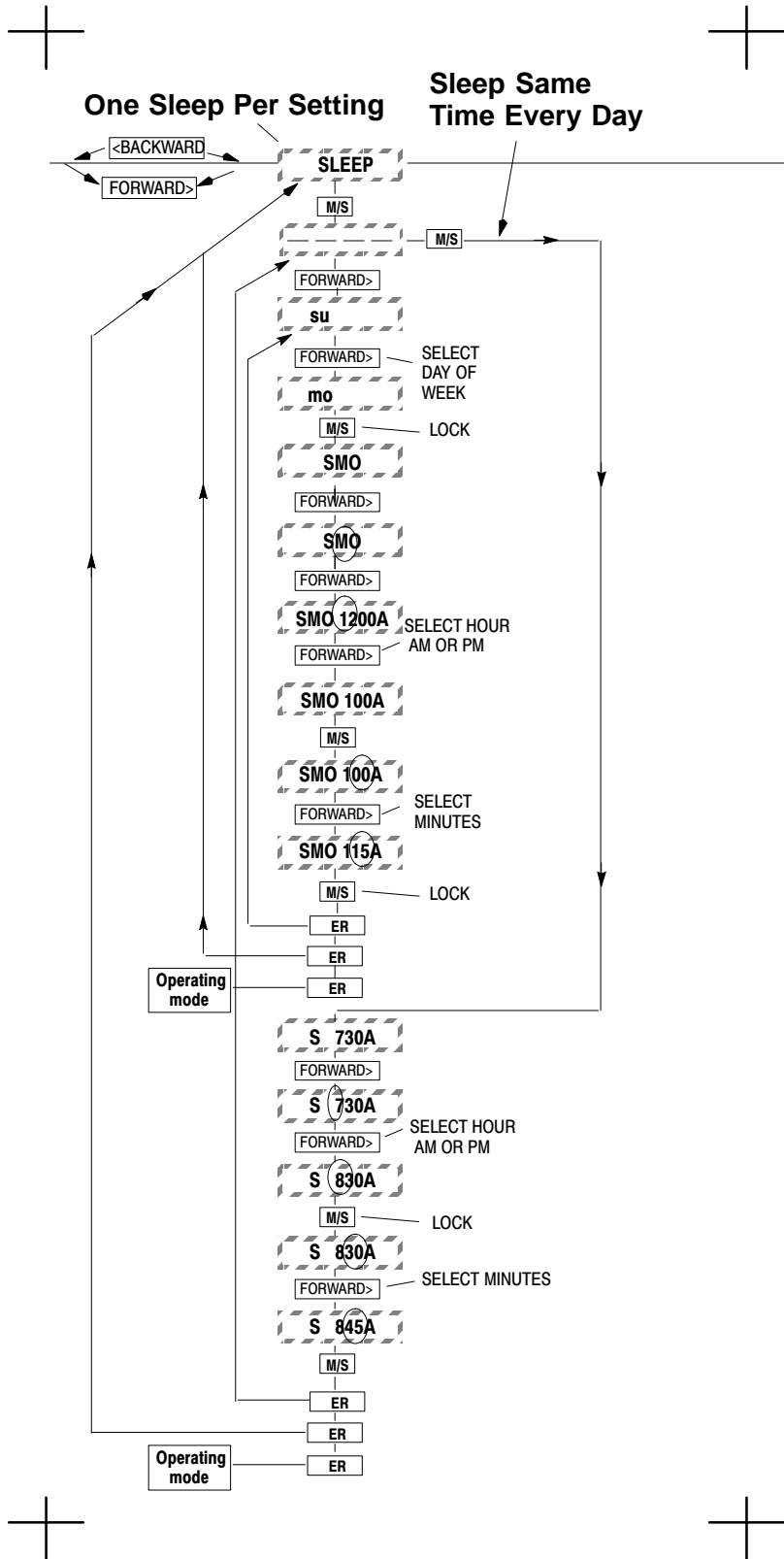
**DST-1HR**  
(see **DIP 8**) Programming standard (winter) time into Unit electronics.

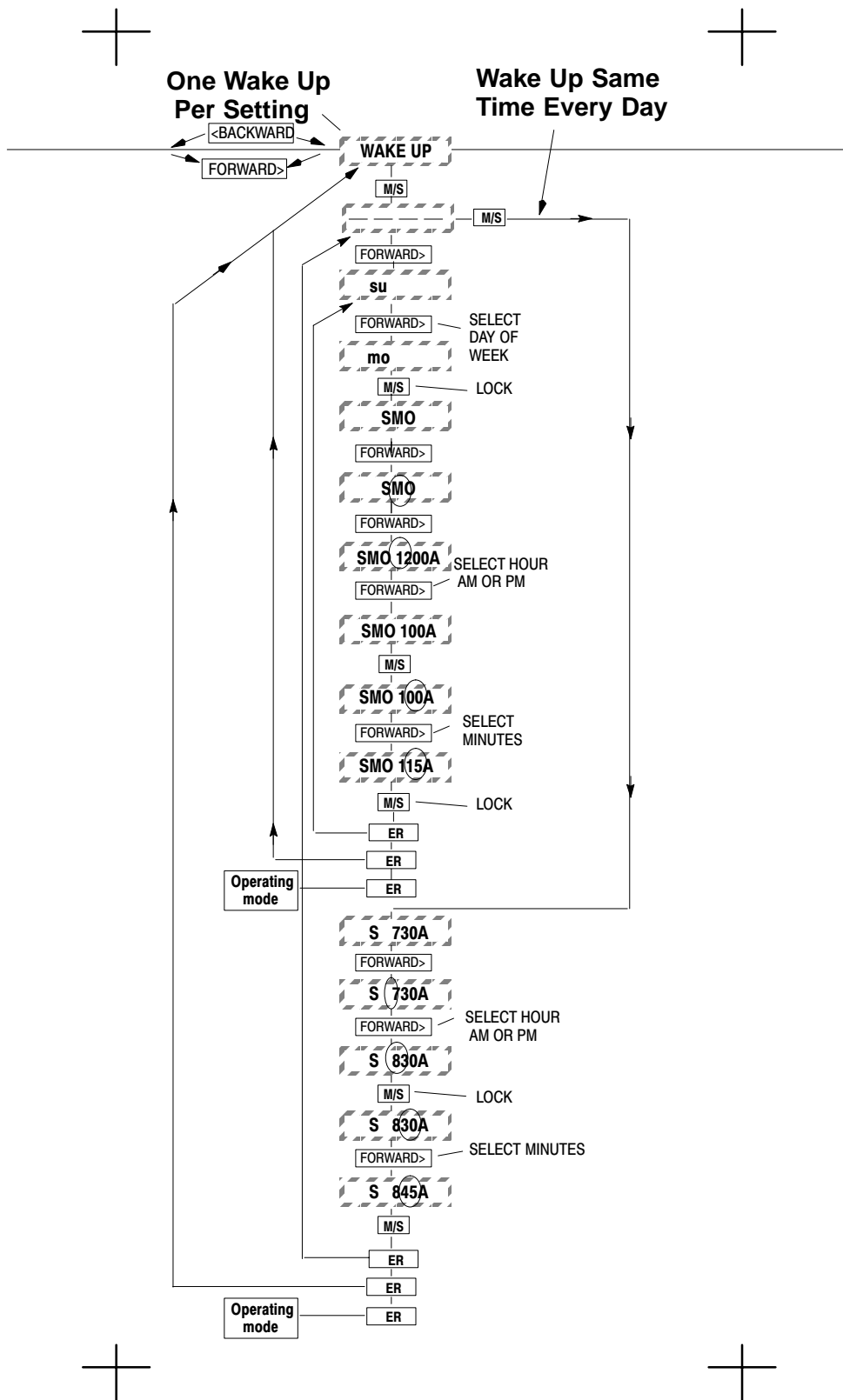
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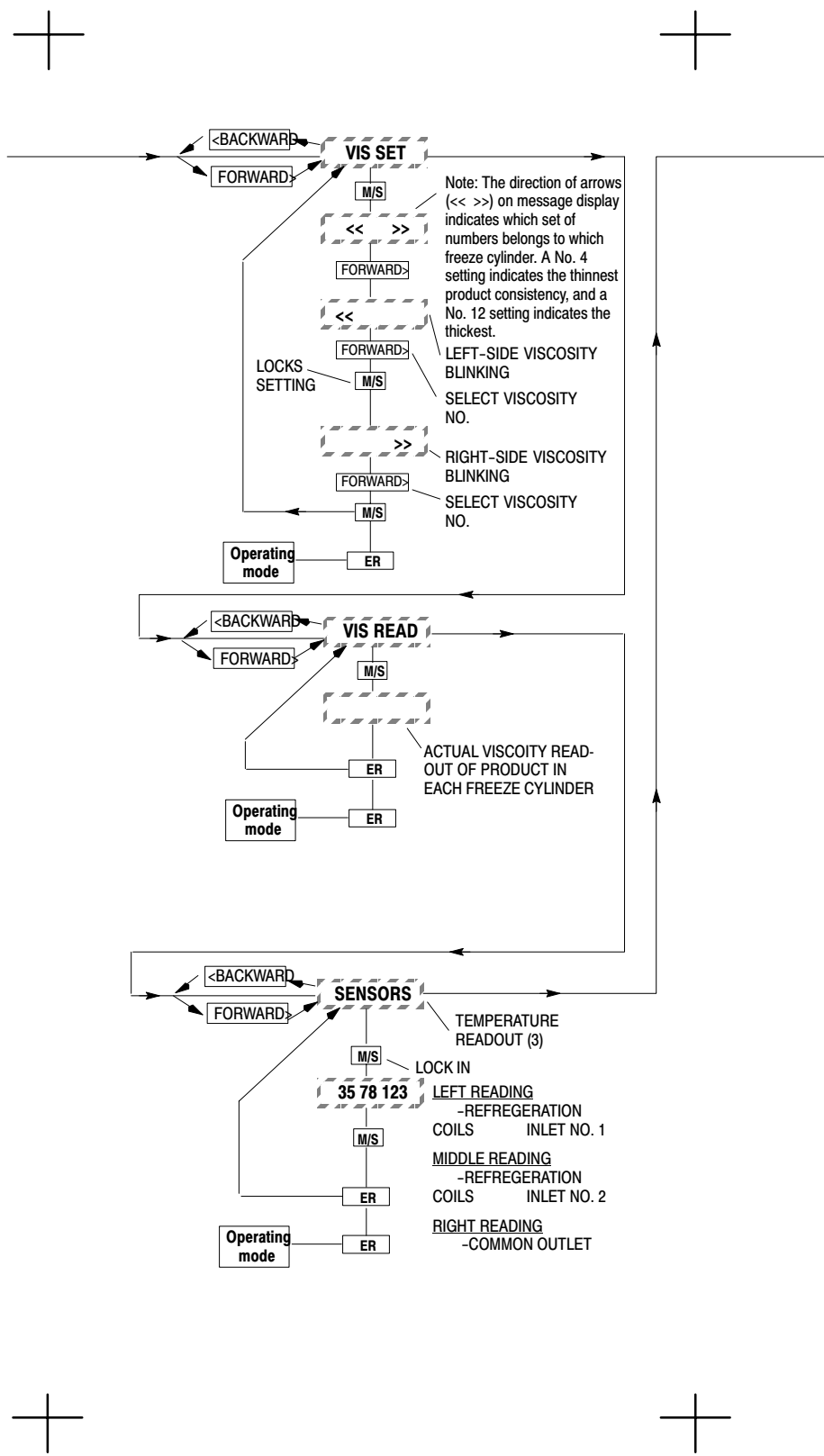


**NOTE: The "clock" (TIME OF DAY) must be programmed into the Unit before "DEFROST" (AUTOMATIC) "SLEEP" (SLEEP TIME) and "WAKE UP" (WAKE UP TIME) will function.**

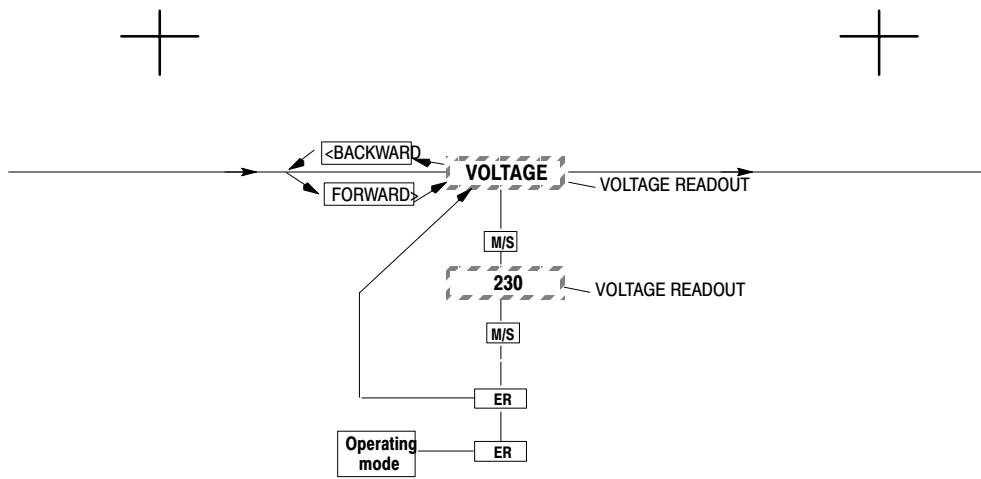


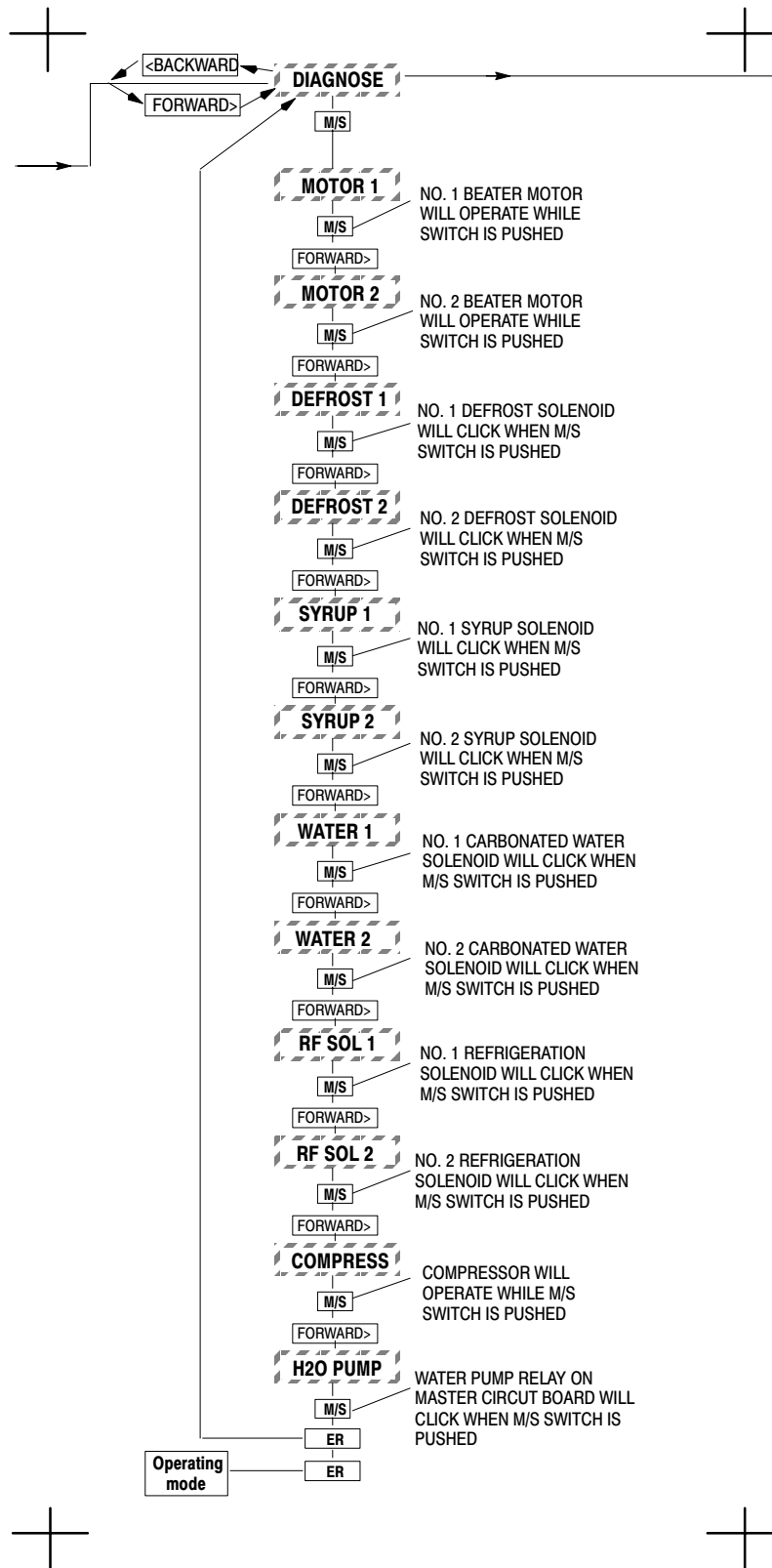


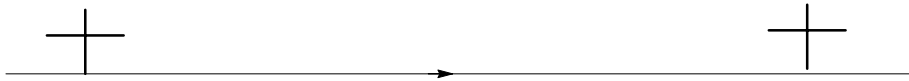






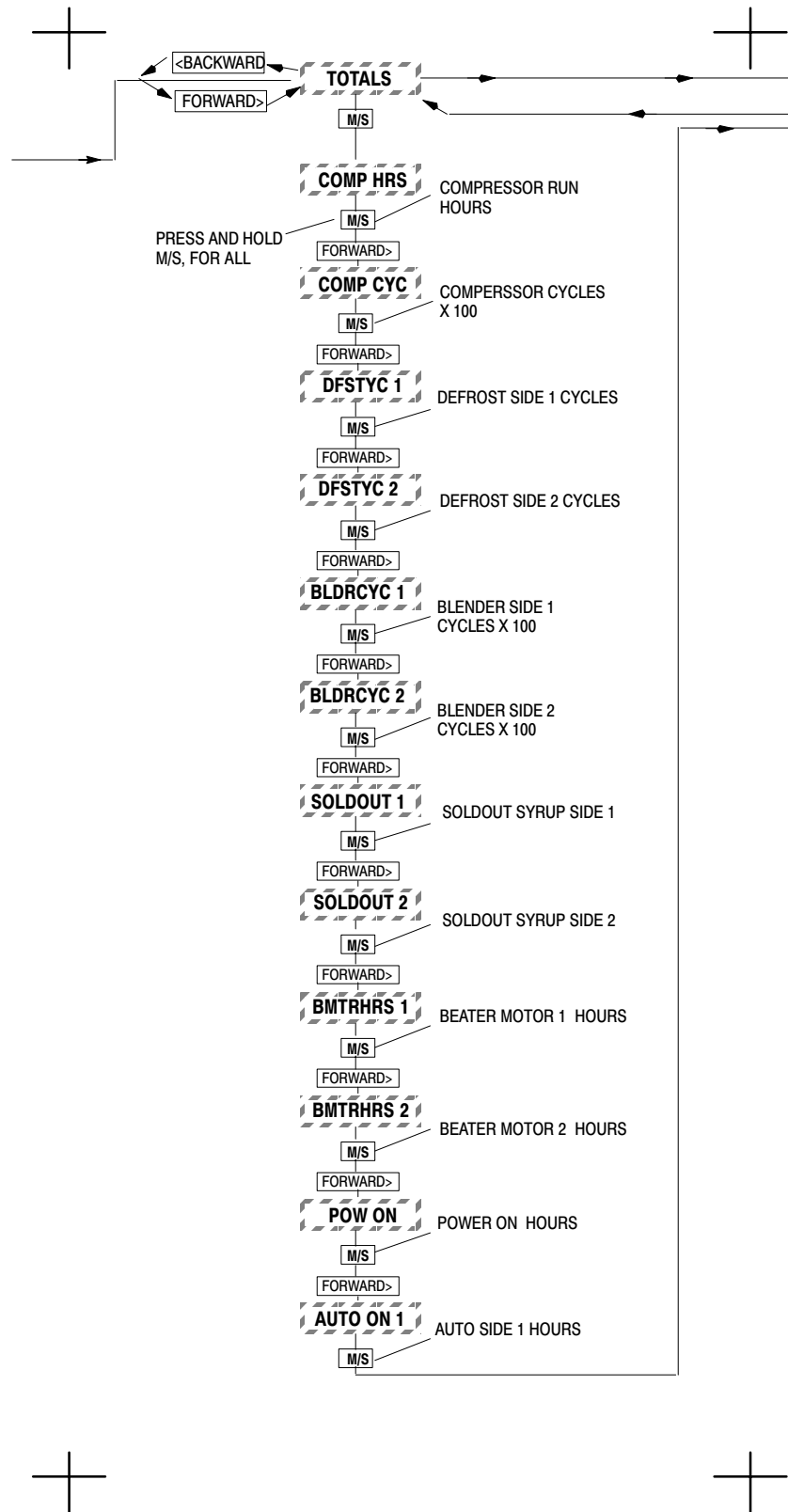


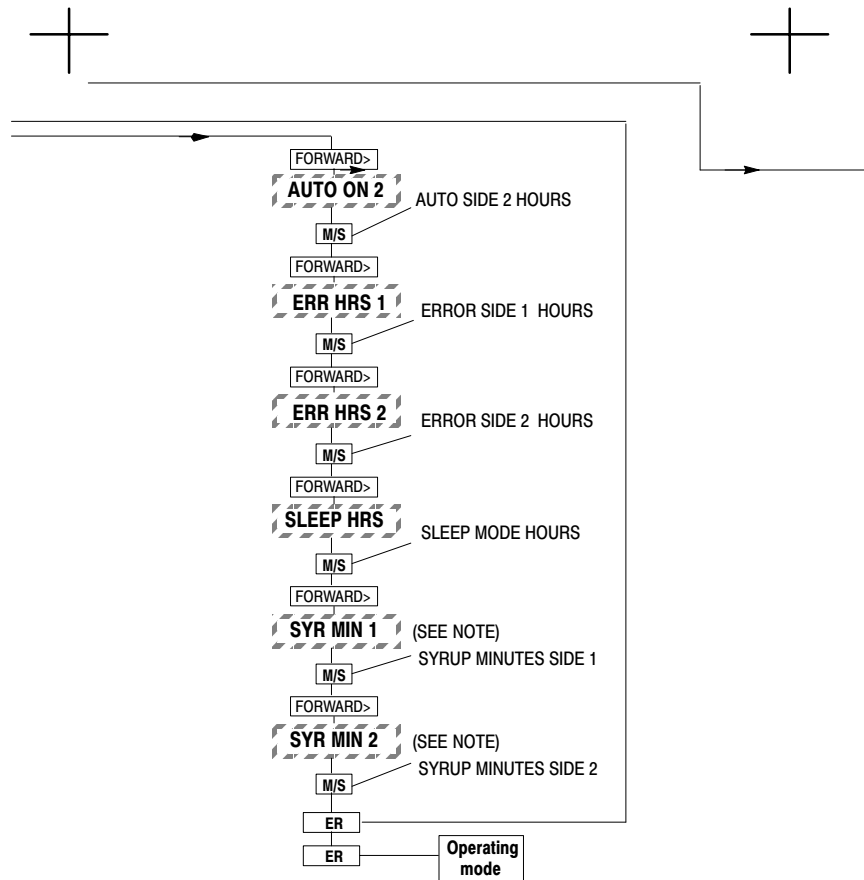




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NOTE: DISPLAYING "SYR MIN 1" OR "SYR MIN 2" ON MESSAGE DISPLAY WILL INDICATE TIME IN MINUTES SYRUP ACTUALLY HAS BEEN DISPENSED. REFER TO TABLE AND FORMULA BELOW TO CALCULATE HOW MUCH SYRUP HAS BEEN DISPENSED.

GALLONS= "GALLON" OR "LITER" X SYRUP MINUTES

Note: "GALLON" or "LITER" numbers are based upon 4.4 to 1 water to syrup "ratio".

Using the table below, choose the "GALLON" or "LITER" number that corresponds to your BRIX setting. Multiply the "GALLON" or "LITER" number by the syrup minutes reading to obtain the amount (gallons) of syrup used.

BRIX	"GALLON"	"LITER"
11.1	0.1358	.5140
11.5	0.1420	.5375
12.0	0.1481	.5606
12.5	0.1543	.5840
13.0	0.1605	.6074
13.5	0.1667	.6310
14.0	0.1728	.6540
14.5	0.1790	.6775
15.0	0.1852	.7010
15.5	0.1914	.7244
16.0	0.1975	.7475

