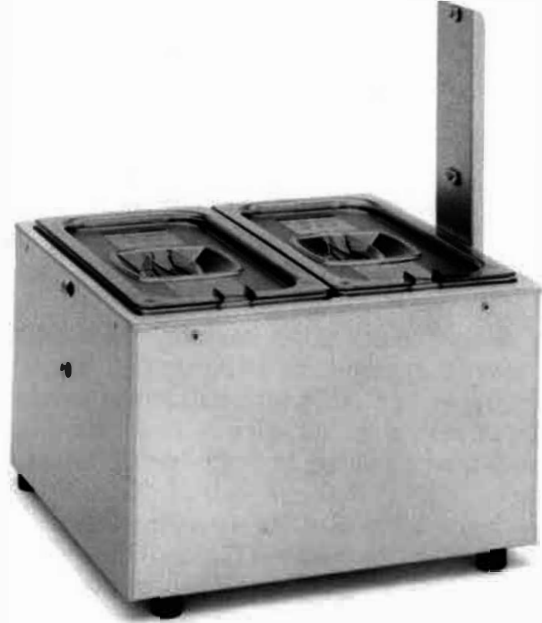


Place this chapter in the Marinators  
section of the *Equipment Manual*.

MANUFACTURED  
EXCLUSIVELY FOR  
McDONALD'S®  
BY

WELLS  
MANUFACTURING  
265 Hobson Street  
Smithville, Tennessee 37166  
www.wells-mfg.com



### TABLE OF CONTENTS

WARRANTY .....	Page 2
INTRODUCTION .....	Page 2
SAFETY .....	Page 2
PARTS IDENTIFICATION/FUNCTION/PHOTO .....	Page 3
EQUIPMENT SET-UP AND CLOSE PROCEDURES .....	Page 7
TROUBLESHOOTING .....	Page 7
NON-SCHEDULED MAINTENANCE .....	Page 9
ORDERING/SERVICE INFORMATION .....	Page 9
WIRING DIAGRAM .....	Page 11
WIRING PICTORIAL .....	Page 12

## **WARRANTY**

This MDMW-2 Marinator manufactured by Wells is warranted to be free from defects in materials and workmanship for a period of one year from the date of original installation and is for the benefit of the original purchaser only but is not against damage caused by abuse, faulty installation, including improper electrical current (125 volts, AC). THIS WARRANTY IS THE COMPLETE AND ONLY WARRANTY, THERE BEING NO OTHER WARRANTIES, EXPRESSED OR IMPLIED IN LAW OR IN FACT, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, AND/OR FOR DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH WELLS PRODUCTS.

Wells' obligation under this warranty is limited to the repair of defects or replacement without charge by a WELLS factory authorized service agency or one of its sub-service agencies. This service will be provided on customer's premises.

Please contact the Service Department: Wells Manufacturing Company, P.O. Box 280, Verdi, Nevada 89439; to arrange service or for additional information and other details concerning the product and/or this warranty.

## **INTRODUCTION**

This Commercial, Counter top marinator Model MDMW-2 is designed to be used wet. The unit will hold food at the desired serving temperatures. Wet operation distributes heat evenly to the food which is to be placed on false bottom trays provided.

## **SAFETY**

Knowledge of proper installation, operation and maintenance procedures is essential to insure safe operation of any equipment. The instructions in this chapter are meant as guidelines; major considerations to be kept always in mind are:

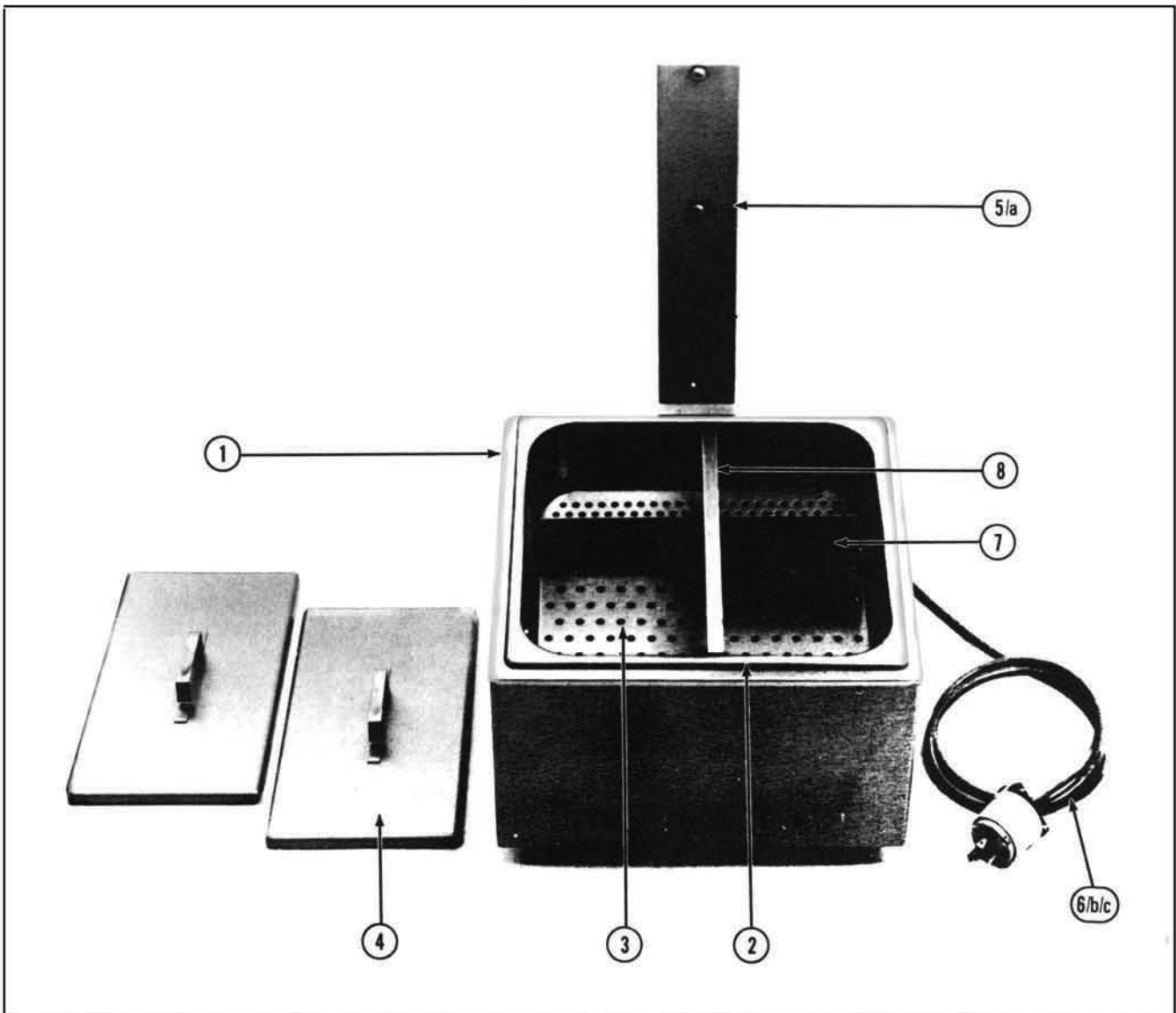
1. Use dry hands to turn power switch on or off.
2. Turn off power switch anytime marinator is not in use.
3. If an electric shock is felt when touching the cabinet, disconnect immediately. Call Wells Service Department for repair.
4. Have electrical supply outlet installed by a licensed electrician. Make sure that equipment is properly grounded.
5. If you find that the electrical cord is frayed, DO NOT PLUG INTO A RECEPTACLE.

If it is already plugged in, disconnect the plug after shutting off the circuit breaker.

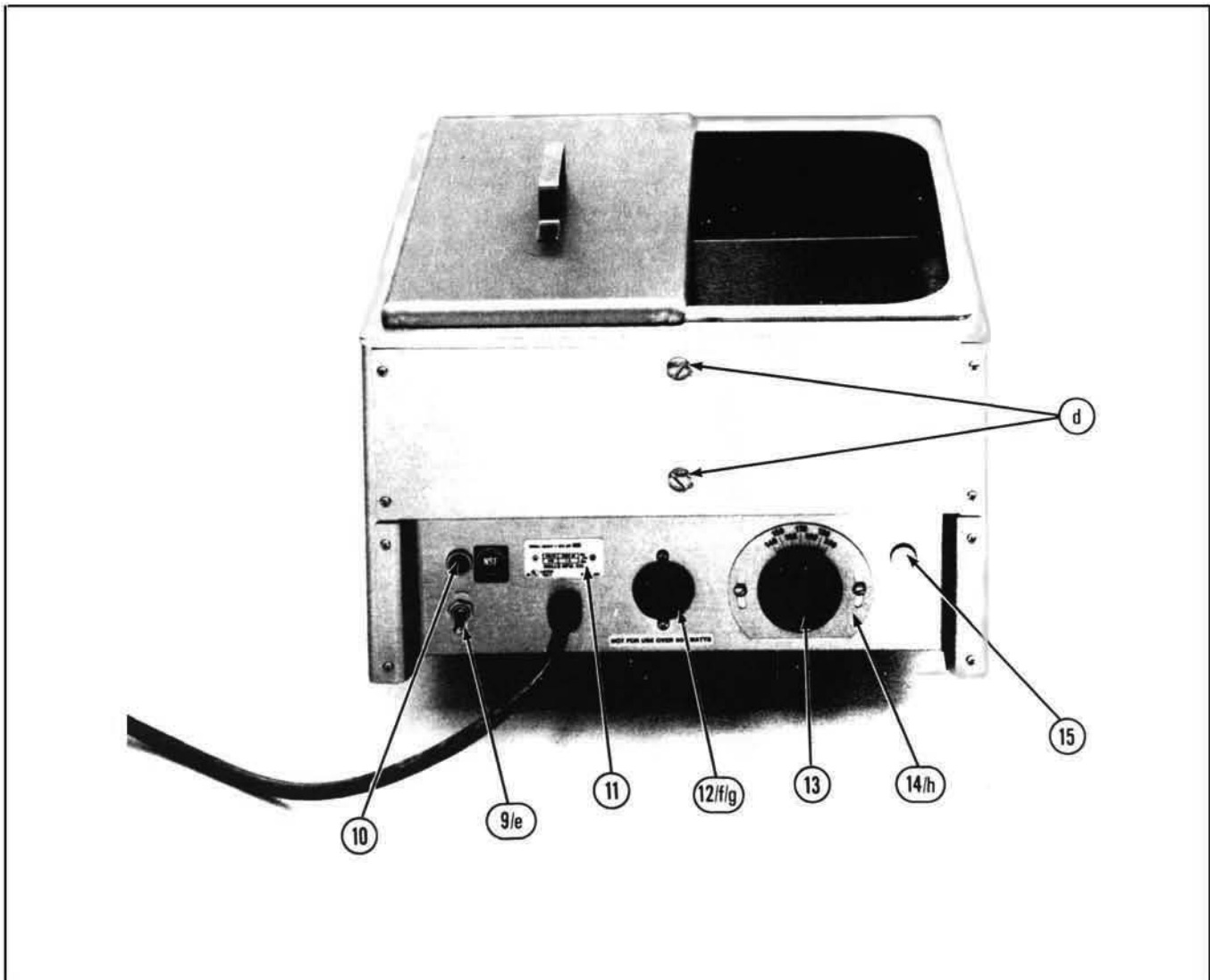
6. DISCONNECT POWER CORD BEFORE ATTEMPTING ANY REPAIRS AND/OR CLEANING THE UNIT WITH WATER.
7. Allow unit to cool before cleaning.
8. DON'T EVER SPLASH WATER WITH A HOSE OR OTHERWISE ONTO THE UNIT. WET ELECTRICAL COMPONENTS AND WIRING MAY PRESENT A SHOCK HAZARD.
9. DON'T REMOVE SCALE FROM PAN WITH A SHARP KNIFE — FOLLOW CLEANING PROCEDURE DESCRIBED ON THE PLANNED MAINTENANCE SYSTEM CARD #61.

**PARTS IDENTIFICATION/FUNCTION/PHOTOS**

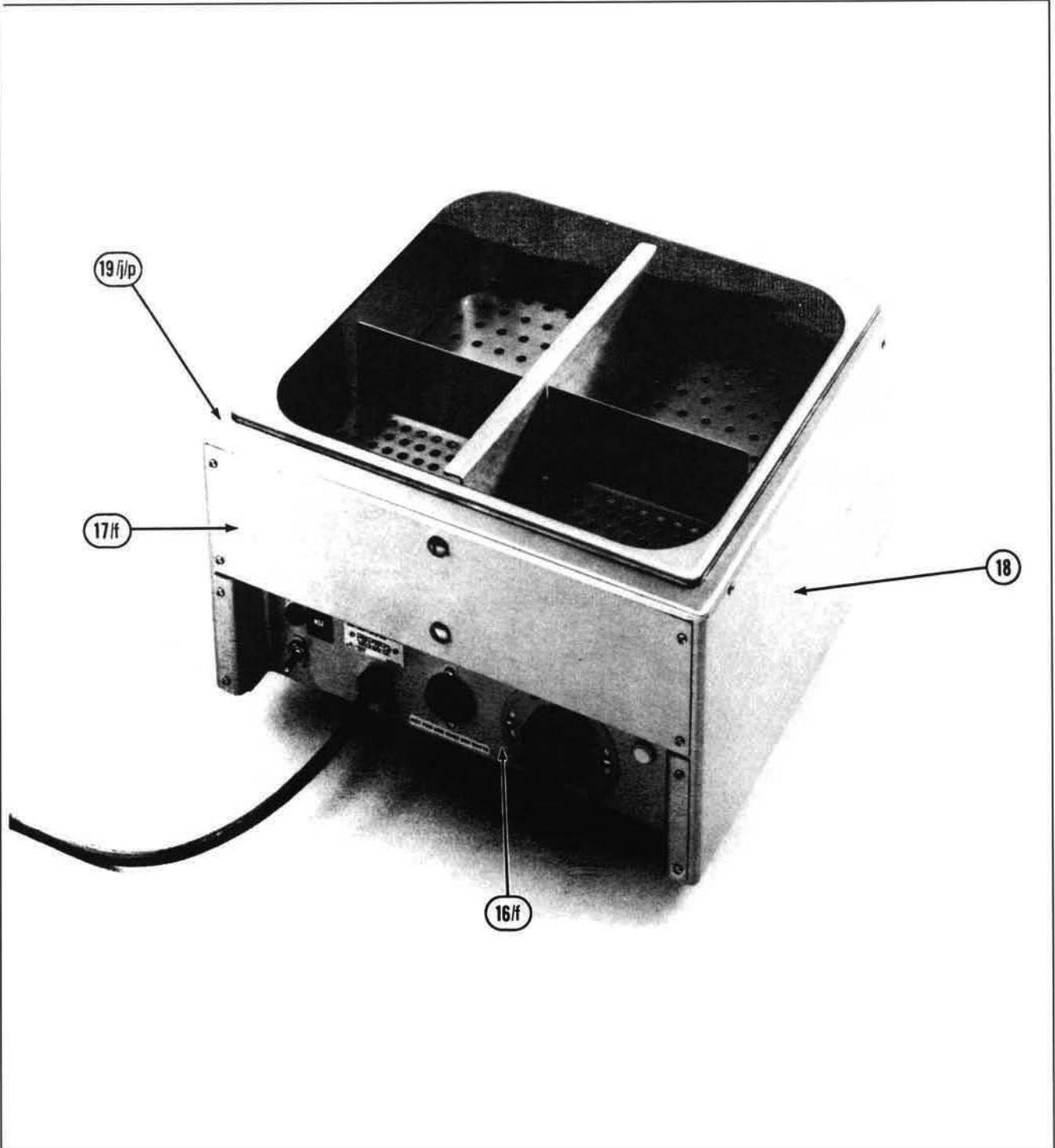
<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY.</b>	<b>FUNCTION</b>
1	21077	Marinator with 2/3rd Size Pan	1	Marinator to hold hot food in 2/3rd size pan equipped with false bottom tray, lids, 2 piece divider and timer mounting bracket.
2	61132	2/3rd Size Pan	1	Pan equipped with false bottom tray to hold food.
3	61155	False Bottom Tray	1	To hold hot food and let grease drip thru holes onto water (5 oz. per pan).
4	61149	Lids	2	Lids to cover pan.
5	61728	Timer Bracket	1	To mount the countdown timers.
6	60648	Cord Set	1	Protective wire set to connect appliance to electrical supply system and to ground the unit.
7	61980	Product Divider Insert	1	Used to separate products.
8	61981	Product Divider — Center	1	Used to separate products.



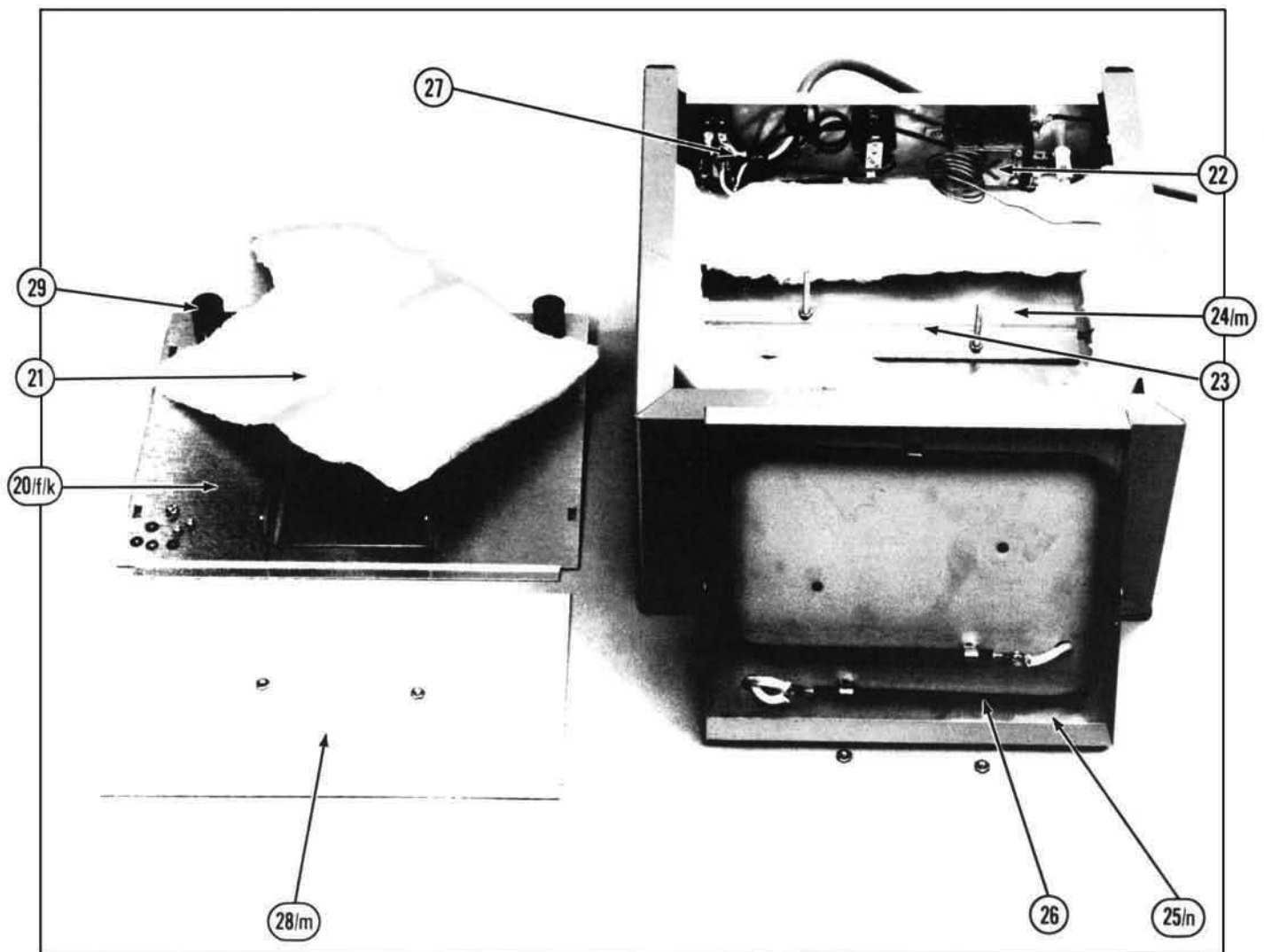
ITEM	PART NO.	DESCRIPTION	QTY.	FUNCTION
9	50330	Power Switch	1	Turns electric power ON or OFF to the unit.
10	51157	Power Telite (Red)	1	When lighted, indicates power is provided to unit.
11	—	Specification Plate	1	Indicates model number, serial number and electrical rating of the unit.
12	60590	Convenience Outlet	1	120V, 4 Amp, 500 Watt outlet for limited usage device. Energized at all times. (For Timer).
13	60588	Thermostat Knob	1	To manually set temperature of water in the pan.
14	60587	Calibration Plate	1	Inscribed with temperature scales of 140°F to 200°F (60°C - 93°C) Permits calibration to the indicator point of the thermostat knob.
15	60563	Thermostat Telite (White)	1	Telite cycles ON-OFF with thermostat indicating when the unit is calling for heat to maintain water temperature.



ITEM	PART NO.	DESCRIPTION	QTY.	FUNCTION
16	60597	Control Panel	1	Used to mount electrical components.
17	60596	Rear Panel	1	Encloses rear of unit.
18	60591	Shell	1	Encloses all electrical components and water pan.
19	60594	Water Pan with Water Level Markings	1	Pan used to hold heated water.



ITEM	PART NO.	DESCRIPTION	QTY.	FUNCTION
20	61732	Rail Mount Base	1	Panel to cover electrical components at the bottom.
21	60660 60661	Fiberglass Insulation (Sides) (Bottom)		Insulation to prevent heat dissipation thru sides and bottom.
22	60892	Thermostat	1	To maintain water pan temperature.
23	—	Thermostat Bulb (Part of Item 22)	1	Temperature sensing part of the thermostat.
24	60598	Thermostat Clamp Plate	1	Clamps thermostat bulb to the water pan.
25	60599	Heating Element Pan and Clip Assembly	1	Clips retain heating element and element radiates heat into water pan.
26	60566	Heating Element	1	To convert electric power to heat.
27	60586	Wiring Harness	1	Electrical distribution system for electrical components.
28	60638	Cover, Insulation	1	Panel to retain insulation.
29	60564	Feet	2	Non-skid and raises unit off table for air circulation.



## HARDWARE IDENTIFICATION

ITEM	PART NO.	DESCRIPTION	QTY.
a	60670	Screw, 1/4 — 20 x 3/8 SS Truss Hd.	2
b	60589	Strain Relief	1
c	55736	Nut, Green W/Washer 8-32	1
d	60612	1/4 — 20 x 1/2 SS Truss Hd.	2
e	53192	On-Off Plate	1
f	55135	Screws, Rd. Hd. Phillip 6-32 x 1/4	16
g	60565	Label	1
h	60669	Screws, Slotted Truss Hd. SS 6-32 x 3/16	2
j	55492	Screws, Flat Hd. Phillip 8-32 x 1/2	6
k	51716	Washer, Flat #6 Monel Element	4
m	55313	Nut, Kep 10-32	4
n	50397	Clip, Heating Element	5
p	55137	Speed Nut, 8-32	6

### SET-UP AND CLOSE PROCEDURES

#### Set-Up — Complete the Following:

- Ensure that the power cord is plugged into the appropriate receptacle.
- Ensure that water pan has warm water up to the water level mark on the sides of the pan.
- Ensure thermostat dial is set correctly.
- Ensure that dividing strip is in the middle of the pan.
- Install the one (1) 2/3rd size pan.
- Ensure that false bottom tray is in the pan.
- Cover the pan with lids. Turn the power switch to the ON position.
- Allow the unit to warm up for 60 minutes before placing product inside.

#### Close — Complete the Following:

- Turn the power switch to the OFF position.
- Unplug the unit and the timer(s).
- Remove the lids and the pan with false bottom tray.
- Remove the timer mounting bracket.
- Empty the water from water pan.
- Using a clean damp cloth towel, wipe the water pan.

- Wash and sanitize all lids and pans and set aside to air dry.

**CAUTION: Do not immerse the marinator in water or damage will occur.**

- Store the unit in designated area.

**CAUTION: Equipment and water contents are hot, use breakfast cart to transport to sink area.**

Also use necessary precautions such as gloves etc. to handle hot unit and water or let it cool before handling.

### TROUBLESHOOTING

In servicing equipment which has malfunctioned, it is very important to:

1. DEFINE the problem and accurately determine what the malfunction is.
2. Determine the BASIC CAUSE.
3. ELIMINATE the cause and repair the malfunction (obviously, if the cause is not properly identified and eliminated, the malfunction may recur).

It is usually relatively easy to define the malfunction, but sometimes very difficult to spot the cause.

If the problem remains after following the suggestions listed, contact your service representative.

## TROUBLESHOOTING GUIDE

**WARNING:** Inspection, testing and repair of electrical equipment should be performed only by qualified service personnel. The unit should be unplugged when servicing, except when electrical tests are required.

**DANGER:** Use extreme care during electrical circuit tests. Live circuits will be exposed.

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
Warmer does not heat. No power on telite (red).	a. Power switch not on.	a. Turn power switch on.
	b. Store circuit breaker off.	b. Reset store circuit breaker.
	c. Cord-plug not plugged into the receptacle.	c. Plug in the cord and make sure twist lock is engaged.
	d. Power switch defective.	d. Replace power switch. (See page 9.)
	e. Cord not connected inside.	e. Call service agency.
Pans floating in water.	a. Too much water in the water pan.	a. Scoop water out with a cup until water level is down to the mark.
Product is too dry.	a. No water under false bottom tray.	a. Add five (5) oz. of water under the false bottom tray.
	b. Temperature too high.	b. Perform Calibration Check according to PMS Card 61.
Power switch is on. a. No thermostat telite (white).  b. No thermostat telite and no heat.  c. No heat, but thermostat telite is on.	a. Thermostat set too low, or thermostat telite defective.	a. Rotate thermostat knob to higher setting. If thermostat telite does not come on, call service agency or replace telite. (See page 9.)
	b. Thermostat defective.	b. Replace thermostat. (See page 10.)
	c. Heating element defective or not connected.	c. Replace heating element. (See page 10.)
Thermostat telite on and water boils at 180°F setting.	a. Thermostat out of calibration.	a. To recalibrate follow PMS Card 61.
	b. Defective Thermostat.	b. Replace thermostat. (See page 10.)
Thermostat telite on but water temperature does not reach 180°F setting.	a. 2/3 size pan not in the unit.	a. Install the 2/3 size pan in the unit.
	b. Thermostat out of calibration.	b. Recalibrate per PMS Card 61.
	c. Defective thermostat or heating element.	c. Replace thermostat or heating element. (See page 10.)
	d. Water pan has lime build-up.	d. Delime per PMS Card 61.
Unit is working but timer does not work.	a. Timer cord not plugged into convenience outlet.	a. Plug the timer in.
	b. Timer cord defective.	b. Try another timer.
	c. Convenience outlet on the unit not wired.	c. Call service agency.



## PARTS ORDERING/SERVICE INFORMATION

If service parts or technical information is required, please contact the Factory Service Department. To help speed up your inquiry the following information is required:

1. Model Number: MDMW-2
2. Serial Number: \_\_\_\_\_  
(Fill in for your records)
3. Voltage: 120V
4. Item Part Number: \_\_\_\_\_
5. Quantity Required: \_\_\_\_\_
6. Nature of service problem and symptoms.
7. Any other information that may be helpful in solving your service problem.

## NON-SCHEDULED MAINTENANCE

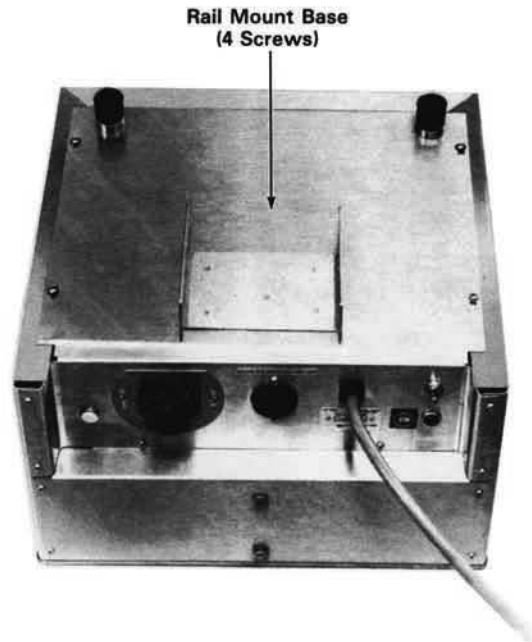
Under normal conditions, with proper use and cleaning, very little non-scheduled maintenance will be required for this unit. However, this section provides procedures for checking and replacement of the various parts used within the cabinet in the event that it becomes necessary. Before replacement of any parts, refer to the Troubleshooting section for assistance in determining the cause of any malfunction to insure that maintenance is required.

**WARNING** — The procedures contained in this section involve accessing bare electrical terminals and exposes one to voltages capable of producing fatal shock.

Before performing any maintenance on your Wells marinator, you must do the following:

- Turn the switch to OFF position.
- Unplug the cord. **WARNING:** Failure to do so may result in electrical shock.
- Let the unit and the water cool.
- Perform "CLOSE" procedure.
- Place the unit bottom side up.
- Unscrew and remove the rail mount base.
- Refer to Wiring Pictorial (page 12) for wiring assistance.

**Note:** Loctite #242 (Purple) should be applied to all threaded parts before reassembly, except for electrical connections.



### Procedure 1: To Replace the Power Switch

**Tools:** #2 Phillips Screwdriver, 1/4" Flatblade Screwdriver, 9/16 Open End Wrench

**Parts:** Power Switch (Part Number 50330)

1. Unscrew the retaining nut from the switch located on the control panel.
2. Pull the switch from inside.
3. Unscrew wire terminals and remove wires.
4. Reverse procedure to install new switch.

**Note:** Ensure that ON-OFF plate or marking is in place on the control panel and around the switch bushing.

### Procedure 2: To Replace a Telite (White or Red)

**Tools:** #2 Phillips Screwdriver, Needle Nose Pliers

**Parts:** Telite (White or Red) Part Number 50563 (white) or 51157 (red)

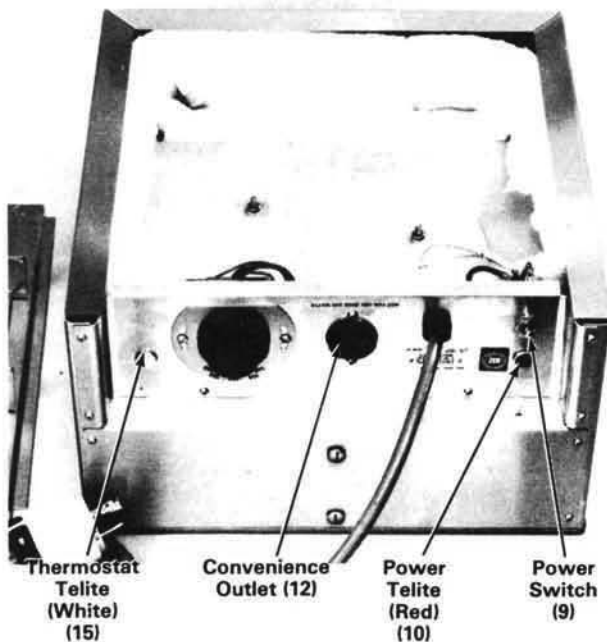
1. Pull the wires with spade terminals off the telite.
2. Squeeze the two (2) ears on the plastic body of the telite and force it out the front of the control panel.
3. Follow reverse procedure to install a new telite.

### Procedure 3: To Replace the Convenience Outlet

**Tools:** #2 Phillips Screwdriver, 1/4" Flatblade Screwdriver

**Parts:** Convenience Outlet (Part Number 60590)

1. Unscrew two (2) screws holding the convenience outlet to the control panel.
2. Pull the convenience outlet out through the back of the control panel.
3. Unscrew the wire terminals on the outlet and remove wires.
4. Follow reverse procedure to install new convenience outlet.



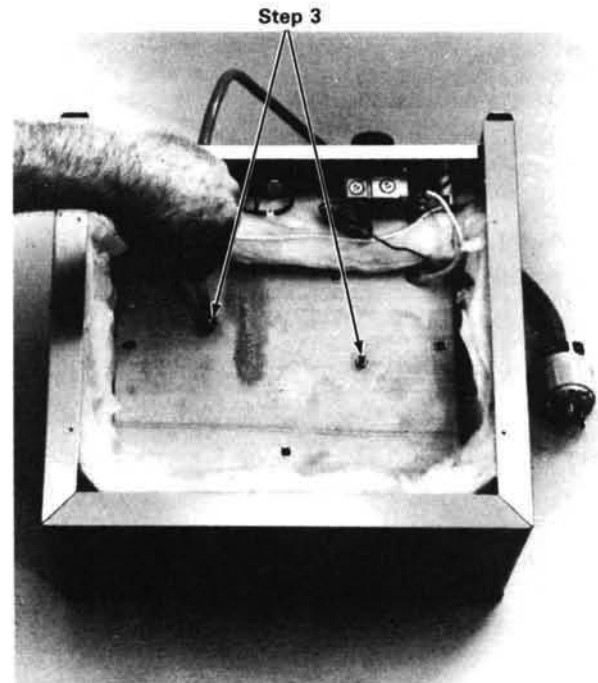
### Procedure 4: To replace the Heating Element Pan Sub-Assembly

**Tools:** #2 Phillips Screwdriver, 3/8" Nut Driver

**Parts:** Heating Element Pan Sub-Assembly Consisting of Part Number 60599 Heating Element Pan and Clip Assembly and 60566 Heating Element

1. Remove the two (2) nuts and the insulation holding plate.
2. Remove the 9" x 11" piece of insulation.
3. Remove the two (2) nuts retaining heating element pan.

4. Remove the heating element pan from the two (2) studs.
5. Unscrew the heating element wire terminals No. 1, 2, and 3 (See wiring diagram page 12).
6. Follow reverse procedure to replace the heating element pan assembly.



### Procedure 5: To Replace the Thermostat

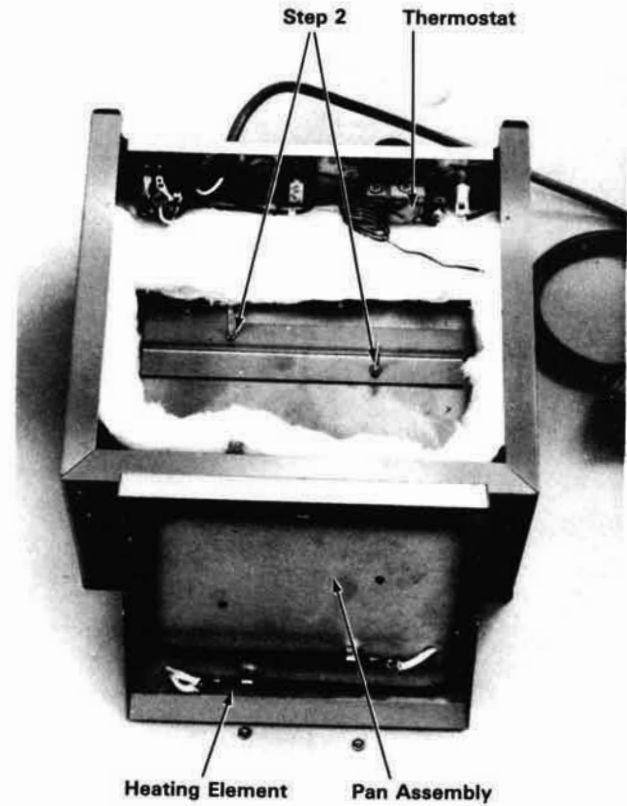
**Tools:** #2 Phillips Screwdriver, 1/4" Flatblade Screwdriver, 3/8" Nut Driver, 3/8" Open End Wrench

**Parts:** Thermostat (Part Number 58968)

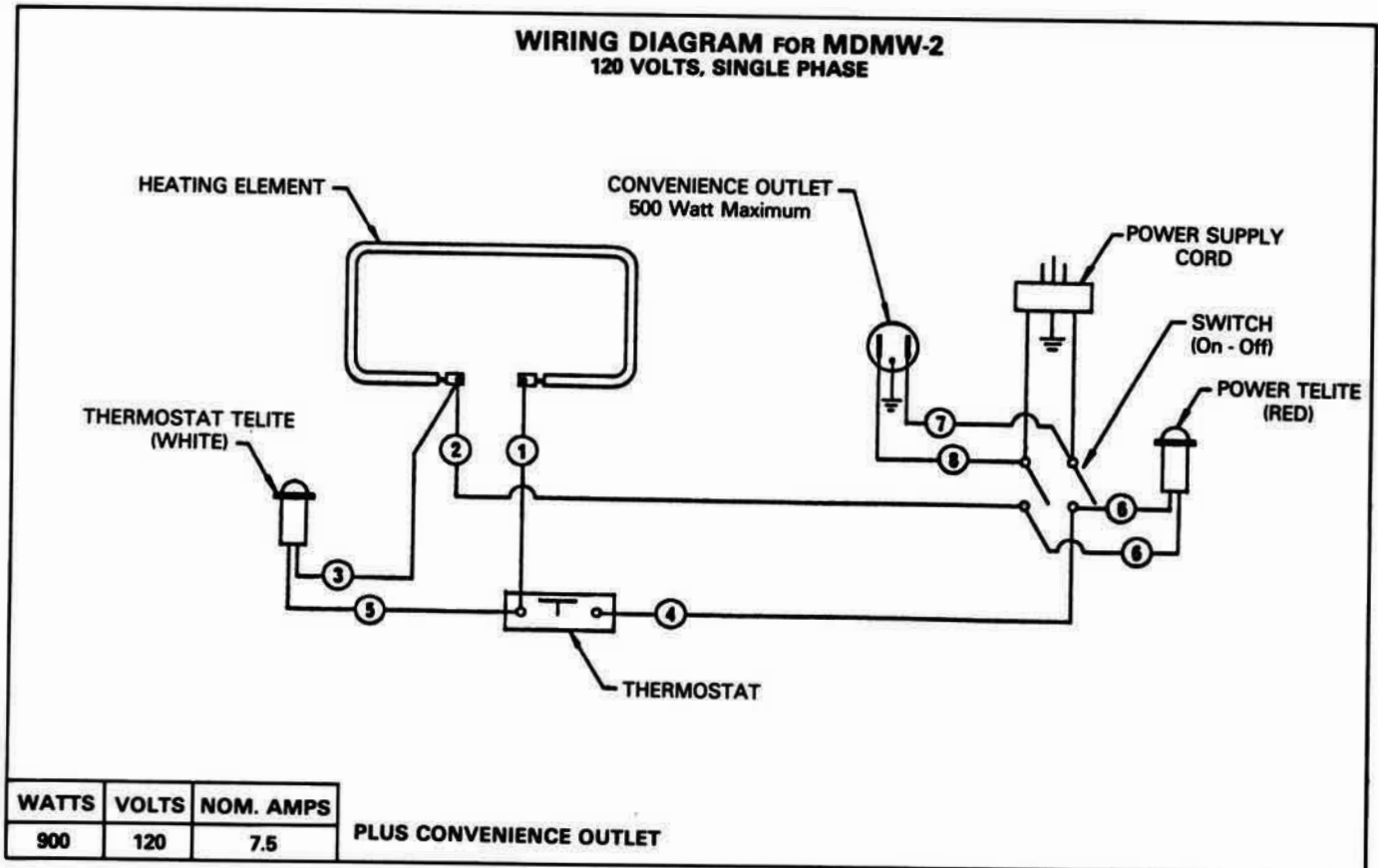
1. Remove heating element pan assembly according to Procedure 4.
2. Unscrew two (2) nuts and loosen or remove the thermostat bulb clamp.
3. Slide thermostat bulb out.
4. Remove the thermostat knob and unscrew the two (2) screws mounting the thermostat to the control panel.
5. Unscrew the wire terminals to the thermostat and remove wires.
6. Remove the thermostat.

7. Follow the reverse procedure for installing a new thermostat.

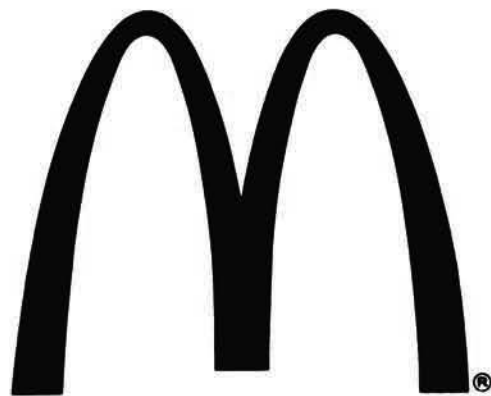
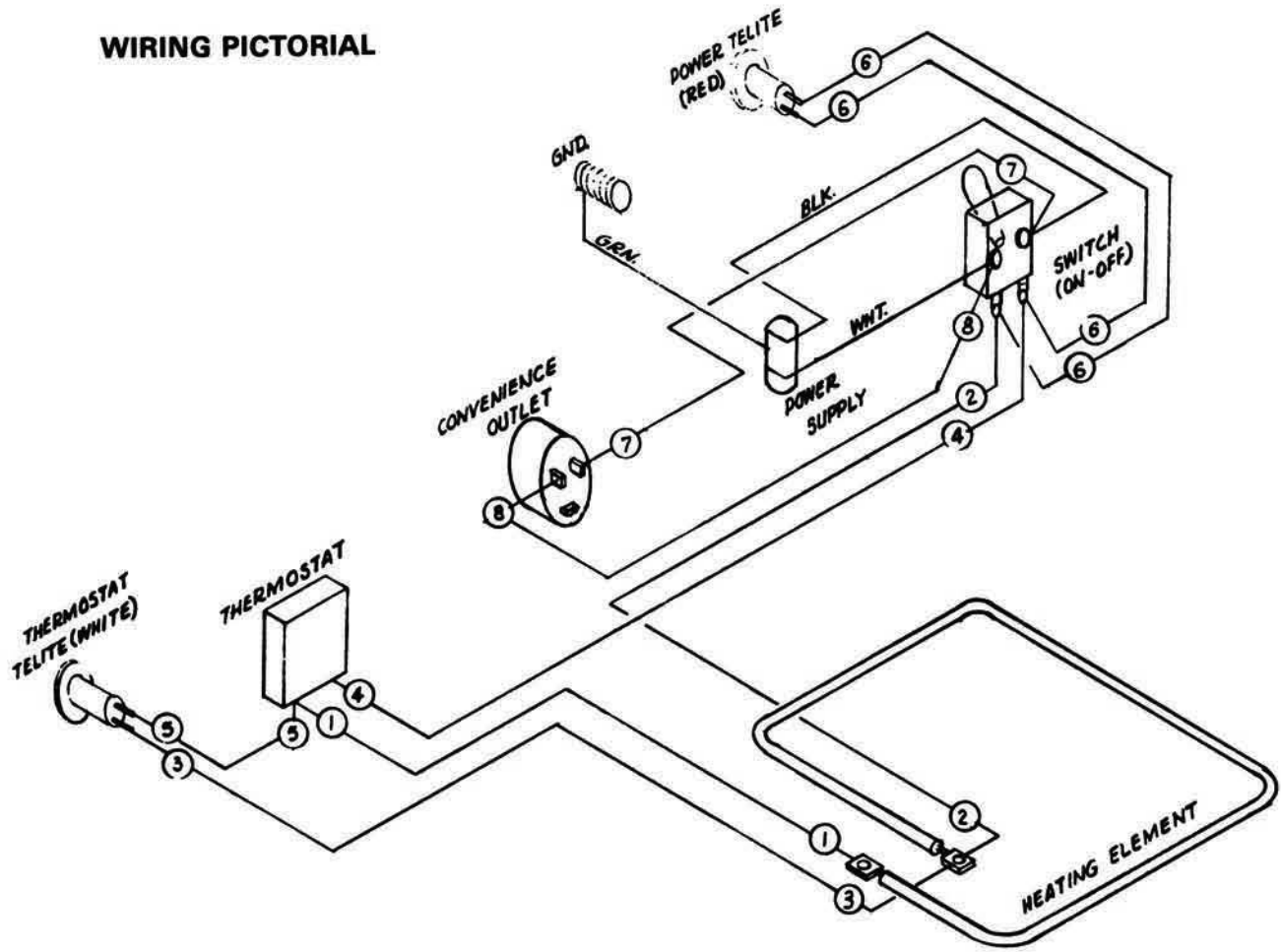
**Note:** After installing a new thermostat check thermostat calibration according to PMS Card 61.



**WIRING DIAGRAM**



**WIRING PICTORIAL**





# Marinators

CARD NO.

61

## Planned Maintenance System Maintenance Requirement Card

**Equipment:** Wells: All Models

**Precaution:** Exposure to hot water occurs with these procedures. Use protective gloves or allow equipment to cool. Always use dry hands when handling electrical parts.

PICTURES AND ADDITIONAL INFORMATION: Corresponding Chapter of Equipment Manual

### Monthly Check Calibration

**Tools:**

- Digital thermometer with needle probe, flatblade screwdriver, protective gloves.
1. Ensure power cord is plugged in.
  2. If the marinator is hot, turn the power switch OFF and remove pans to allow the marinator to cool.
  3. Fill the water pan with fresh clean water to the water level mark.
  4. Place pan(s) and lid(s) into the marinator.
  5. Turn the power switch ON.
  6. Rotate the knob until the arrow points to the 180° F (82° C) mark on the calibration plate.
  7. Allow the marinator to heat for 1 hour.
  8. When the thermostat cycles OFF (**the white telite goes out**), remove 1 pan with lid. Immediately submerge the needle probe in the water. Make sure the tip of the thermocouple is not touching any metal. Obtain the actual water temperature from the thermometer. If the temperature reads between 175° and 185° F (79° and 85° C), the calibration check is complete. If not, proceed to Step 9.
  9. Loosen the 2 screws holding the calibration plate and rotate the calibration plate left or right until the thermostat knob agrees with the thermometer reading. Do not turn the thermostat knob. Retighten the screws.
  10. Place the pan with lid back into the marinator, reset knob at 180° F (82° C), and allow the heat to cycle ON and OFF for 1 cycle. Repeat Step 8.
  11. Calibration check is completed.

### Monthly Deliming of the Water Pan

**Tools:**

- Kay Delimer, protective gloves, towel.
1. Set the marinator as described in opening procedure.
  2. Remove the pan(s) and lids.
  3. Ensure the water in the water pan is full up to 1 inch (2.5 cm) above the water level markers.
  4. Pour 2 ounces (60 ml) of Kay delimer into the water.
  5. Turn the thermostat knob CLOCKWISE all the way up.
  6. Boil the water for 1 or 2 hours.
  7. Turn the power switch to OFF and unplug the cord.
  8. Let the water cool.
  9. Transport the marinator carefully to sink area.

10. Scrub the inside of the water pan to remove white liming stains.
  11. Pour the water into the sink.
  12. Fill the marinator with fresh warm water up to 3" (7.6 cm) depth.
  13. Scrub the marinator gently without splashing water and pour the water out into the sink.
  14. Dry the marinator with clean dry towel.
-