

DEFAULT-TO-MANUAL-RESTART CONTROL

Operation Instructions



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PREFACE

This manual was written and published by the Technical Publications Department, Ultrafryer Systems, for use by store personnel who operate an Ultrafryer Fryer equipped with the Default-To-Manual-Restart (DTMR) Control. This manual complements and should be used in conjunction with the applicable Ultrafryer Fryer Operations Manual provided with each Ultrafryer Fryer.

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NOTE: This Manual is applicable to both Electric and Gas Fryers equipped with a Default-To-Manual-Restart Control.

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I. INTRODUCTION

The Default-To-Manual-Restart (DTMR) Control is intended to reduce the possibility of “operator errors” that can result in **DRY FIRING** a fryer causing shortening to be scorched, heat mechanism damage, and/or a vat fire.

- A. **SAFETY** - The DTMR operates on 120 volt single phase electrical power, and like other electrical equipment, should not be operated with wet hands or while standing in water. Water should **NEVER** be sprayed on or at the DTMR, as there is a danger of electrical shock and / or serious damage to its electrical circuitry. Should the DTMR accidentally be sprayed with water, **1) IMMEDIATELY** turn the Power **OFF** at the Main Power Switch and **2) IMMEDIATELY** contact a qualified service agent to check the DTMR. The DTMR is located in close proximity to hot liquid shortening and care must be taken to avoid serious burns. The floor in front of, and area around the fryer should be kept clean and dry. Whenever anything is put into a cooking vat, care should be taken to not splash the hot shortening. Products should always be “placed” into the shortening, not thrown.

- B. **SAFE CLEANING PROCEDURE** - Before performing any cleaning routine, electrical power to the DTMR should be turned OFF at the Main Power Switch. A **SLIGHTLY** dampened cloth may then be used to clean any debris from the face of the DTMR. **DO NOT USE** any cleaner or de-greaser solvent as they may mar the face or damage the internal circuitry of the control. Any questions regarding correct cleaning procedures should be directed to the Customer Service Department at 1-800-525-8130.

II. DEFAULT-TO-MANUAL-RESTART CONTROL

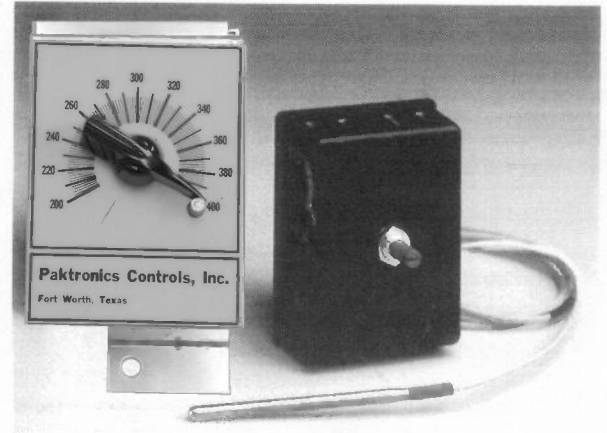
A. GENERAL

The Default-to-Manual-Restart (DTMR) Control along with an Electronic Thermostat is connected to a fryer's electrical system to control operation of the fryer. The DTMR contains a Default-to-Off circuit that will **DISABLE** the fryer anytime the Drain Valve is **OPEN**, and a Default-to-Melt circuit that will automatically place the fryer in a **SHORTENING MELT MODE** to gradually and safely heat shortening each time the fryer's Toggle ON/OFF Switch is turned **ON**.

NOTE: Some older stores may be equipped with a Fenwal Temperature Control in lieu of an Electric Thermostat.

B. ELECTRONIC THERMOSTAT

The Electronic Thermostat has a temperature range from 200°F (93°C) to 400°F (204°C) and will accurately maintain a pre-set shortening cook temperature within $\pm 2^\circ$ of the pre-set temperature.

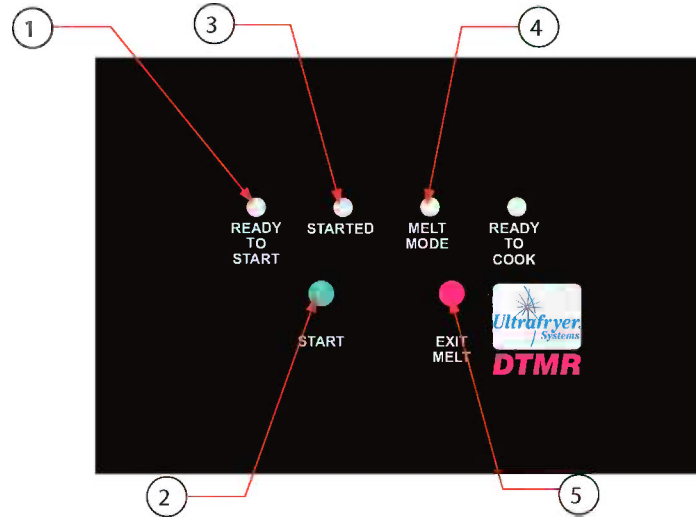


C. DEFAULT-TO-MANUAL-RESTART CONTROL PANEL

1. BLUE READY TO START LAMP - When lit indicates the fryer's Toggle ON/OFF switch is in the **ON** position, the Drain Valve is **CLOSED** and the fryer is ready to be placed in operation.

2. START BUTTON - When the button is momentarily pressed, it places the fryer in operation.

3. RED STARTED LAMP - When lit indicates the **START BUTTON** has been pressed, placing the fryer in operation.



4. AMBER MELT MODE LAMP - When lit indicates the fryer is in the **MELT MODE** and that the timer in the DTMR Default-to-Melt circuit is turning the fryer's heat mechanism **ON** and **OFF**, as follows,

TYPE FRYER	TIME	
	ON	OFF
Electric	4 seconds	36 seconds
Gas	7 seconds	28 seconds

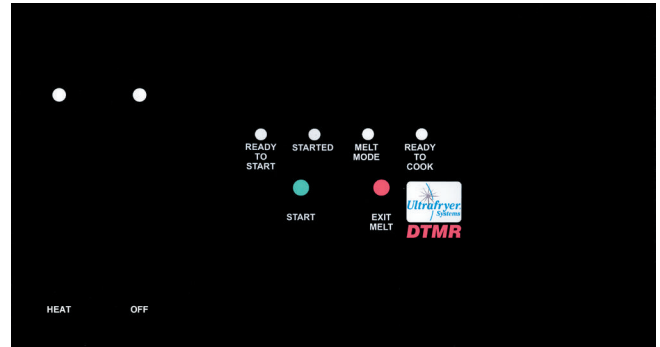
5. EXIT MELT BUTTON - When this button is momentarily pressed, the **TIMER** in the DTMR's Default-to-Melt circuit will switch to the **FULL-ON** position allowing the Electronic Thermostat to heat shortening to its **PRE-SET** temperature.

III DTMR TEST OPERATION

A. ELECTRIC FRYER

TO TEST OPERATE an Ultrafryer Electric Fryer equipped with a Default-To-Manual-Restart (DTMR) control:

1. Turn the Toggle ON/OFF Power Switch to the **OFF** Position.
2. Fill the fryer vat with hot or cold water to the middle of the “E ←” in the word LEVEL of the applicable shortening level mark on the rear of the vat.
3. **ENSURE** that the Exhaust Fan is **ON**.
4. Perform the following steps, in the order listed:



ITEM	ACTION	DTMR CONDITION
1	ENSURE the drain valve lever is in the CLOSED UP position and that water is at the proper level; then turn the Toggle ON/OFF switch to the ON position.	A. The AMBER power indicator will LIGHT . B. BLUE READY TO START lamp will LIGHT .

CAUTION: PRIOR TO PROCEEDING TO STEP 2 VISUALLY CHECK THAT THE HEAT MECHANISM IS COVERED WITH AT LEAST 2” (51 mm) OF WATER.

2	Press, then release the momentary START button	A. RED STARTED lamp and AMBER MELT MODE lamp will light. B. BLUE READY TO START lamp will turn OFF . C. A TIMER in the Default-To-Melt electrical circuit will begin cycling the fryer heat mechanism ON for four (4) seconds and OFF for 36 seconds to safely heat the water.
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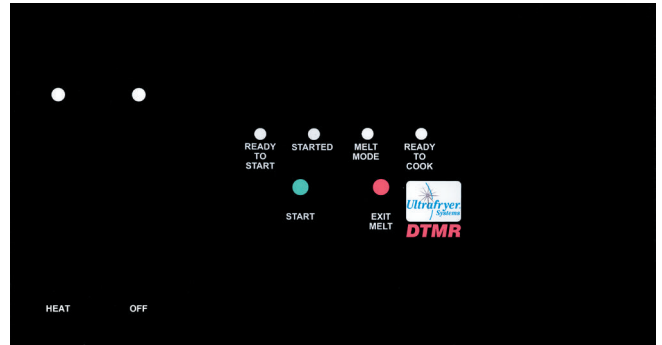
CAUTION: PRIOR TO PROCEEDING TO STEP 3, VISUALLY CHECK THAT THE WATER COMPLETELY COVERS THE HEAT MECHANISM.

3	Press, then release the momentary EXIT MELT button.	A. AMBER MELT MODE lamp will turn OFF , RED STARTED lamp will remain lit. B. The TIMER in the Default-To-Melt circuit will switch to the FULL ON position allowing the Electronic Thermostat to heat water to its pre-set temperature.
4	Turn the Toggle ON/OFF switch to the OFF position. After the water inside the fryer and the metal surfaces on the fryer have COOLED , drain the water into a floor drain.	A. The AMBER power indicator lamp will turn OFF . B. The RED STARTED lamp will turn OFF .

B. GAS FRYER

TO TEST OPERATE an Ultrafryer Gas Fryer equipped with a Default-To-Manual-Restart (DTMR) control:

1. Turn the Toggle ON/OFF Power Switch to the **OFF** Position.
2. Fill the fryer vat with hot or cold water to the middle of the “E ←” in the word **LEVEL** of the applicable shortening level mark on the rear of the vat.
3. Turn the **MANUAL** gas valve to the **OFF** position and wait **FIVE (5)** minutes for any accumulated gas to disperse.
4. **ENSURE** the **MAIN** gas shut-off valve is in the **ON** position, and that the **EXHAUST FAN** is **ON**.
5. Turn the **MANUAL** gas valve to the **ON** position.
6. Perform the following steps, in the order listed:



<u>ITEM</u>	<u>ACTION</u>	<u>DTMR CONDITION</u>
1	ENSURE the drain valve lever is in the CLOSED UP position and that water is at the proper level; then turn the Toggle ON/OFF switch to the ON position.	A. The AMBER power indicator will LIGHT . B. BLUE READY TO START lamp will LIGHT .

CAUTION: PRIOR TO PROCEEDING TO STEP 2 VISUALLY CHECK THAT THE HEAT MECHANISM IS COVERED WITH AT LEAST 2” (51 mm) OF WATER.

2	Press, then release the momentary START button	A. RED STARTED lamp and AMBER MELT MODE lamp will light. B. BLUE READY TO START lamp will turn OFF . C. A TIMER in the Default-To-Melt electrical circuit will begin cycling the fryer heat mechanism ON for seven (7) seconds and OFF for 28 seconds to safely heat the water.
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CAUTION: PRIOR TO PROCEEDING TO STEP 3, VISUALLY CHECK THAT THE WATER COMPLETELY COVERS THE HEAT MECHANISM.

3	Press, then release the momentary EXIT MELT button.	A. AMBER MELT MODE lamp will turn OFF , RED STARTED lamp will remain lit. B. The TIMER in the Default-To-Melt circuit will switch to the FULL ON position allowing the Electronic Thermostat to heat water to its pre-set temperature.
4	Turn the Toggle ON/OFF switch to the OFF position. After the water inside the fryer and the metal surfaces on the fryer have COOLED , drain the water into a floor drain.	A. The AMBER power indicator lamp will turn OFF . B. The RED STARTED lamp will turn OFF .

IV DTMR EQUIPPED FRYER OPERATION

A. ELECTRIC FRYER - Safely operate an Ultrafryer Electric Fryer equipped with the DTMR as follows:

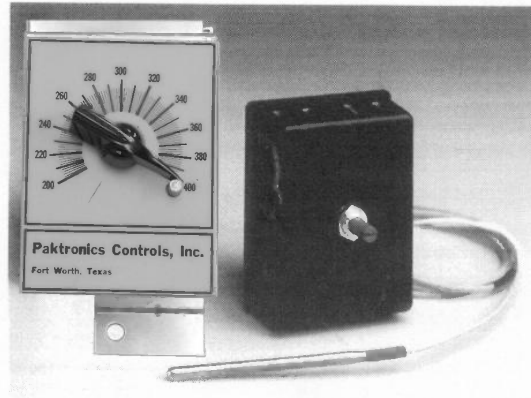
<u>ITEM</u>	<u>ACTION</u>	<u>DTMR CONDITION</u>
1	ENSURE the drain valve lever is in the CLOSED UP position and that shortening is at the proper level; then turn the Toggle ON/OFF switch to the ON position.	A. The AMBER power indicator will LIGHT. B. BLUE READY TO START lamp will LIGHT.
CAUTION: PRIOR TO PROCEEDING TO STEP 2 VISUALLY CHECK THAT THE HEAT MECHANISM IS COVERED WITH AT LEAST 2" (51 mm) OF SHORTENING.		
2	Press, then release the momentary START button.	A. RED STARTED lamp and AMBER MELT MODE lamp will light. B. BLUE READY TO START lamp will turn OFF. C. A TIMER in the Default-To-Melt electrical circuit will begin cycling the fryer heat mechanism ON for four (4) seconds and OFF for 36 seconds to safely heat the shortening
CAUTION: PRIOR TO PROCEEDING TO STEP 3, VISUALLY CHECK THAT SHORTENING COMPLETELY COVERS THE HEAT MECHANISM.		
3	Press, then release the momentary EXIT MELT button.	A. AMBER MELT MODE lamp will turn OFF, RED STARTED lamp will remain lit. B. The TIMER in the Default-To-Melt circuit will switch to the FULL ON position allowing the Electronic Thermostat to heat shortening to its pre-set temperature.
4	When the fryer's RED indicator lamp turns OFF, indicating the pre-set temperature has been reached, initiate a cook cycle.	

B. GAS FRYER - Safely operate an Ultrafryer Gas Fryer equipped with the DTMR as follows:

<u>ITEM</u>	<u>ACTION</u>	<u>DTMR CONDITION</u>
1	ENSURE the drain valve lever is in the CLOSED UP position and that shortening is at the proper level; then turn the Toggle ON/OFF switch to the ON position.	A. The AMBER power indicator will LIGHT. B. BLUE READY TO START lamp will LIGHT.
CAUTION: PRIOR TO PROCEEDING TO STEP 2 VISUALLY CHECK THAT THE HEAT MECHANISM IS COVERED WITH AT LEAST 2" (51 mm) OF SHORTENING.		
2	Press, then release the momentary START button.	A. RED STARTED lamp and AMBER MELT MODE lamp will light. B. BLUE READY TO START lamp will turn OFF. C. A TIMER in the Default-To-Melt electrical circuit will begin cycling the fryer heat mechanism ON for seven (7) seconds and OFF for 28 seconds to safely heat the shortening.
CAUTION: PRIOR TO PROCEEDING TO STEP 3, VISUALLY CHECK THAT THE SHORTENING COMPLETELY COVERS THE HEAT MECHANISM.		
3	Press, then release the momentary EXIT MELT button.	A. AMBER MELT MODE lamp will turn OFF, RED STARTED lamp will remain lit. B. The TIMER in the Default-To-Melt circuit will switch to the FULL ON position allowing the Electronic Thermostat to heat shortening to its pre-set temperature.
4	When the fryer's RED indicator lamp turns OFF, indicating the pre-set temperature has been reached, initiate a cook cycle.	

ELECTRONIC THERMOSTAT CALIBRATION

V Electronic Thermostat CALIBRATION - The Electronic Thermostat in all fryer configurations are equipped with a Dial and Knob and should be checked and calibrated when necessary as follows:



- A. **ENSURE** electrical power and, if applicable, gas to the fryer has been turned **OFF**.
- B. **CAREFULLY** drain sufficient shortening from the fryer to **LOWER** the shortening about 4" (102 mm) beneath the Electronic Thermostat sensing probe.
- C. After the sensing probe has **COOLED**, loop the bead of an **ACCURATE** digital test thermometer temperature probe around the sensing element; then connect the probe to the thermometer.
- D. Replace shortening drained in step B and **ENSURE** it is level with the shortening level mark on the rear of the vat; then turn the power and, if applicable, gas to the fryer **ON**.
- E. Set the **KNOB** of the Electronic Thermostat to the **CENTER** (300) of the dial and periodically **STIR** the shortening in a **COUNTER-CLOCKWISE (CCW)** direction with a long handle skimmer to pull congealed shortening **UPWARD** from the Cold Zone area.
- F. When shortening has reached the set temperature and the **RED** indicator lamp on the fryer has turned **OFF**, allow the Electronic Thermostat to cycle **ON** and **OFF** about five (5) times to stabilize the system.
- G. After the shortening temperature has stabilized, record the temperature reading of the **TEST THERMOMETER** immediately after the **RED** indicator lamp and the fryer turns **OFF**.
- H. **CAREFULLY** loosen the set screw on the Electronic Thermostat **KNOB** without turning the thermostat potentiometer, set the thermostat knob pointer to the temperature recorded by the test thermometer; then tighten the set screw on the thermostat knob taking care not to turn the thermostat's potentiometer.
- I. Repeat steps A and B above, remove the test thermometer temperature probe from the Electronic Thermostat sensing element; then repeat step D to return the fryer to normal operation.

SERVICE AND PARTS

1. **TECHNICAL ASSISTANCE** - Contact an authorized service agent or the Customer Service Department, Ultrafryer Systems at 1-800-525-8130 for technical assistance.

2. **ORDERING INFORMATION:**

A. **REPLACEMENT PARTS** - Provide the following information when ordering replacement parts by phone, fax or mail:

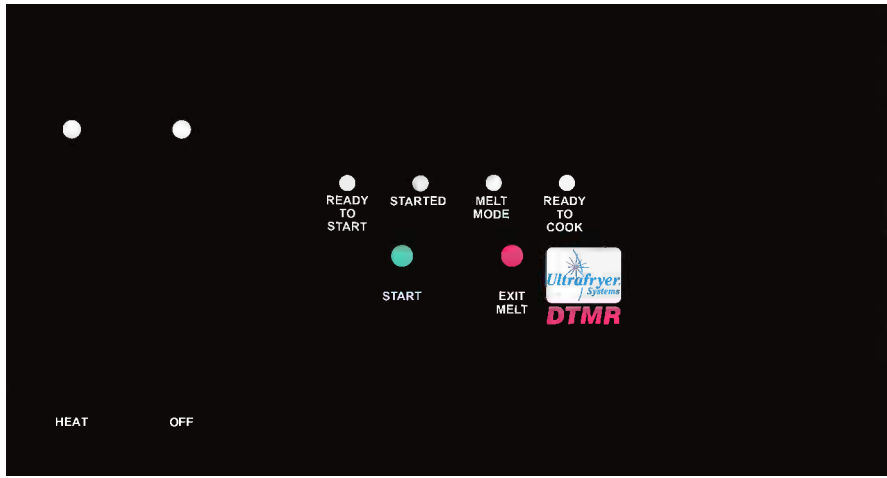
Your company name and phone number
Your company purchase order number
Bill-to address
Ship-to address
Quantity desired
Part number and description of the desired-item
Your name or signature of authorized-buyer
Phone in order to: 1-888-331-5031
FAX order to: 1-210-731-5099
Mail order to: Ultrafryer Systems
Order Entry Office
P.O. Box 5369
San Antonio, TX 78201
E-Mail your order to: Ultrafryerservice@afce.com

B. **TERMS** - Net 30 days for customers on open accounts. Past due balances will be charged 1 1/2% per month (18% per annum) until full balance is paid.

C. **DAMAGES** - Ultrafryer Systems is not responsible for damage occurring in transit. All deliveries must be inspected for damage to shipping containers prior to departure of the delivering carrier. Any damage must be notated on the receiving document to facilitate filing of freight claims. Carriers must be notified immediately and freight inspections must be requested from the carrier. Ultrafryer Systems can and will gladly assist you in preparing and processing of the necessary claims only if proper notification has been accomplished on the carrier delivery document. Damaged equipment and or containers must be available for the claims inspector to inspect.

D. **RETURNS** - Ultrafryer Systems cannot guarantee credit for items returned without proper authorization. All returns must have prior Ultrafryer Systems Customer Service or Warranty department approval. An assigned number will be issued by the approval authority. Please print the assigned number on all returned packages and corresponding paperwork. Returned goods are subject to a 15% restocking charge. Ultrafryer Systems is not responsible for freight charges on returned goods unless authorized by Customer Service and or Warranty personnel. Ultrafryer Systems does not receive freight collect or C.O.D. shipments.

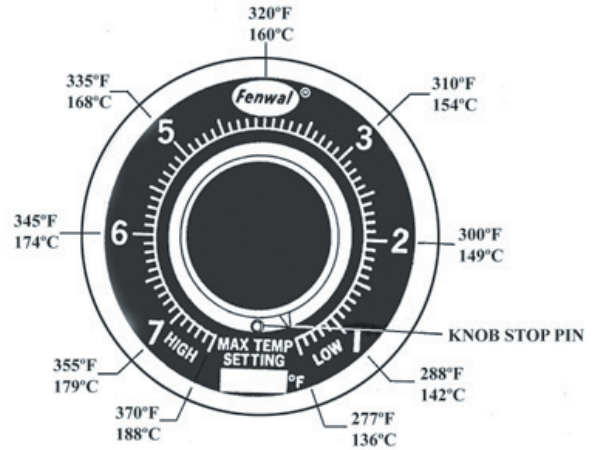
3. **PARTS IDENTIFICATION** - Locate the part on the following sketches and note the index number i.e, 1, 2, etc; then obtain the part number and description for that index number beneath the sketch. Use that part number when ordering a replacement part.



A. DTMR CONTROL FOR FRYERS EQUIPPED WITH A FENWAL THERMOSTAT PN 18-233

FENWAL THERMOSTAT DIAL

FRYER DESCRIPTION	DTMR PN
Model Par-2 Gas Fryer	12A259
Model Par-3 Gas Fryer	12A798
Model ZRT Gas Fryer	12A824
Model EU or Countertop Electric Fryer	12A265
Model ZRT Electric Fryer	12B051

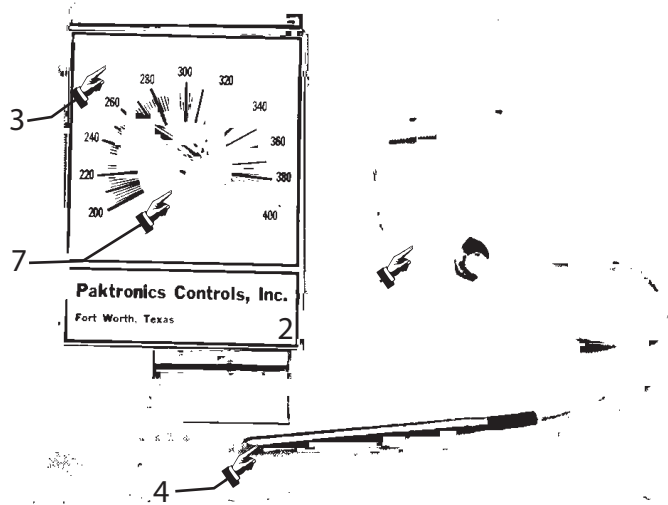
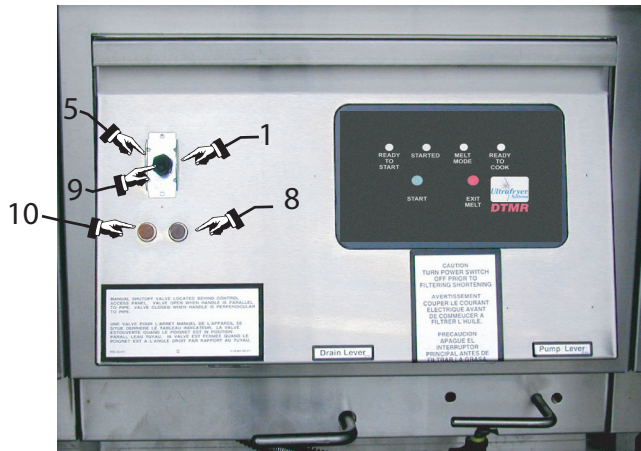


B. DTMR CONTROL FOR FRYERS EQUIPPED WITH AN ELECTRONIC THERMOSTAT PN 12B077

FRYER DESCRIPTION	DTMR PN
Model Par-2 Gas Fryer	12B057
Model Par-3 Gas Fryer	12B013
Model ZRT Gas Fryer	12B014
Model EU or Countertop Electric Fryer	12B070
Model ZRT Electric Fryer	12B069



ELECTRONIC THERMOSTAT DIAL



<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PN</u>
1	Toggle ON/OFF Switch Guard	18-129
2	Electronic P14 Thermostat	18A058
3	Electronic Thermostat Face Plate	18A070
4	Temperature Probe	18A276
5	Toggle ON/Off Switch	18A287
*6	Electronic P14 Thermostat Bracket	19B174
7	Electronic Thermostat Knob	22A169
8	125 Volt 3 Watt Snaplight w/Red Lens	23-362
9	Toggle ON/OFF Switch Protective Boot	23-402
10	125 Volt 3 Watt Snaplight w/Amber Lens	23A056

* Not Shown