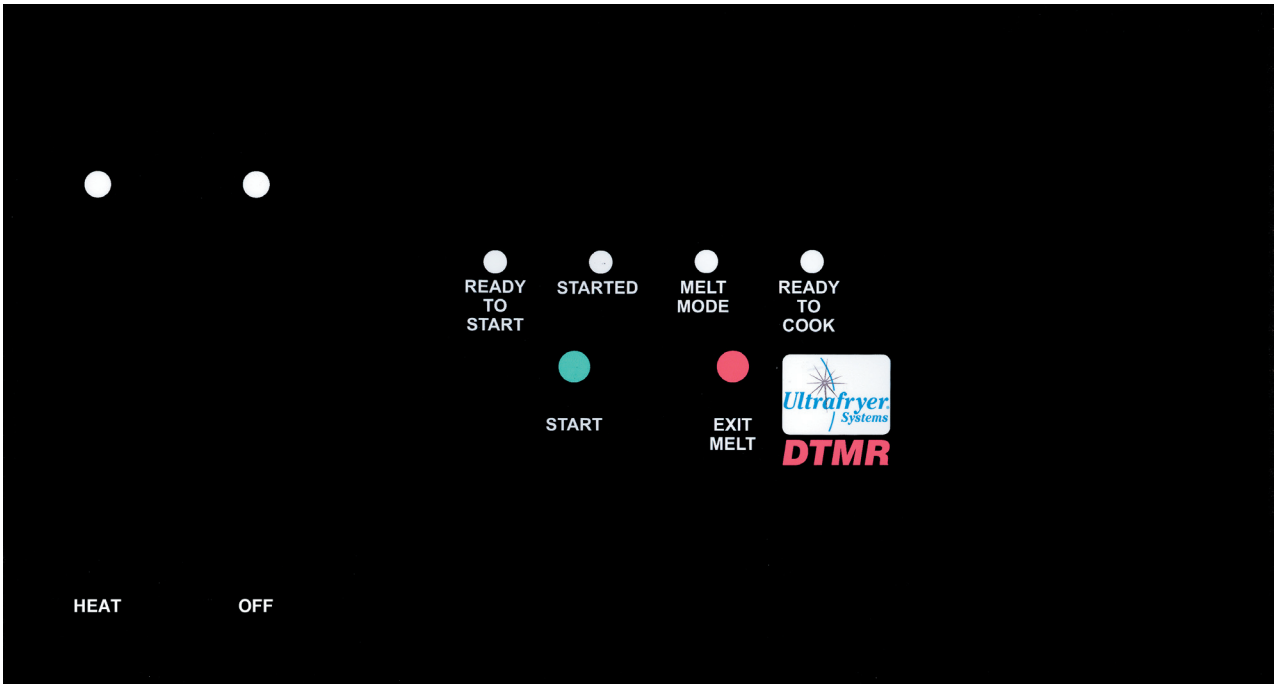

DEFAULT-TO-MANUAL-RESTART CONTROL

Ultrafryer U03

Operation Instruction

302 Spencer Lane · P.O. Box 5369 · San Antonio, Texas 78201
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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.

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

TABLE OF CONTENTS

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 24 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 cleaners or de-greaser solvents 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 Ultrafryer Customer Service Department at 1-800-525-8130.

II. DEFAULT-TO-MANUAL-RESTART CONTROL

A. GENERAL

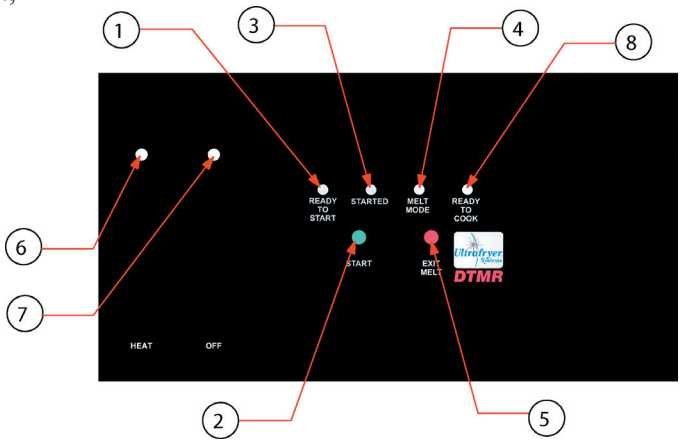
The Default-to-Manual-Restart (DTMR) Control along with an Electronic Thermostat is connected to a fryer's electrical system to control operation of the fryer. The DTMR contains a Default-to-Off circuit that will **DISABLE** the fryer anytime the Drain Valve is **OPEN**, and a Default-to-Melt circuit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

NOTE: On earlier fryer models, the **Toggle HEAT/OFF** Switch may be labeled **"COOK/FILTER."**

B. ELECTRONIC THERMOSTAT

The Electronic Thermostat has a temperature range from 200ºF (93ºC) to 400ºF (204ºC).

C. DEFAULT-TO-MANUAL-RESTART CONTROL PANEL



1. **BLUE "READY TO START" LAMP -** When lit, indicates the fryer's Toggle HEAT/OFF switch is in the **HEAT** position (or to "COOK" if the switch is labeled "COOK/FILTER"), 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 melt 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, to heat the shortening gradually and safely.

TYPE FRYER	TIME	
	ON	OFF
Electric	4 seconds	28 seconds
Gas (PAR 2)	8 seconds	28 seconds
Gas (PAR 3)	12 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.

6. **AMBER "POWER" INDICATOR LAMP** - When lit, indicates that electrical power to the fryer is on.

7. **RED "BURNER" INDICATOR LAMP** - When lit, indicates that the fryer's heating mechanism is in operation.

8. **WHITE "READY TO COOK" INDICATOR LAMP** - When lit, indicates that the preset temperature has been reached and a cook cycle can be started.

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 HEAT/OFF Power Switch to the **OFF** Position (or to "FILTER" if switch is labeled "COOK/FILTER").

2. Fill the fryer vat with 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 hood's 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 HEAT/OFF switch to the **HEAT** position (or to "COOK" if the switch is labeled "COOK/FILTER").	A. The **AMBER POWER INDICATOR** lamp 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.
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 preset temperature or to boiling, whichever comes first.
4	Turn the Toggle HEAT/OFF switch to the **OFF** position (or to "FILTER" if the switch is labeled "COOK/FILTER"). 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.** All DTMR lights will stay off.

B. GAS FRYER

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

1. Turn the Toggle HEAT/OFF Power Switch to the **OFF** Position (or to "FILTER" if switch is labeled "COOK/FILTER").

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 restaurant's **MAIN GAS SHUT-OFF VALVE** is in the **ON** position and that the hood's **EXHAUST FAN** is **ON.**

5. Turn the **MANUAL** gas valve to the **ON** position.

6. 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 HEAT/OFF switch to the **HEAT** position (or to "COOK" if the switch is labeled "COOK/FILTER").	A. The **AMBER POWER INDICATOR** lamp 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

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 preset temperature or to boiling, whichever comes first.
4	Turn the Toggle HEAT/OFF switch to the **OFF** position (or to "FILTER" if the switch is labeled "COOK/FILTER"). 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.** All DTMR lights will stay off.

IV DTMR EQUIPPED FRYER OPERATION

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

ITEM	ACTION	DTMR CONDITION
1	**ENSURE** the drain valve lever is in the CLOSED **(UP)** position and that shortening is at the proper level; then turn the Toggle HEAT/OFF switch to the **HEAT** position. (or to "COOK" if the switch is labeled "COOK/FILTER").	A. The **AMBER POWER INDICATOR** lamp 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 preset temperature.
4	When the fryer's **RED** indicator lamp turns **OFF** and the **WHITE "READY TO COOK LAMP** turns on, the pre-set temperature has been reached, and a cook cycle can be initiated.	

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

ITEM	ACTION	DTMR CONDITION
1	**ENSURE** the drain valve lever is in the CLOSED **UP** position and that shortening is at the proper level; then turn the Toggle HEAT/OFF switch to the **HEAT** position. (or to "COOK" if the switch is labeled "COOK/FILTER").	A. The **AMBER POWER INDICATOR** lamp 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 preset temperature.
4	When the fryer's **RED** indicator lamp turns **OFF** and the **WHITE "READY TO COOK LAMP** turns on, the pre-set temperature has been reached, and a cook cycle can be initiated.	

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 stablize the system.

G. After the shortening temperature has stablized, record the temperature reading of the **TEST THERMOMETER** immediately after the **RED** indicator lamp and the fryer turns **ON.**

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 probe; 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, Ulftfryer 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

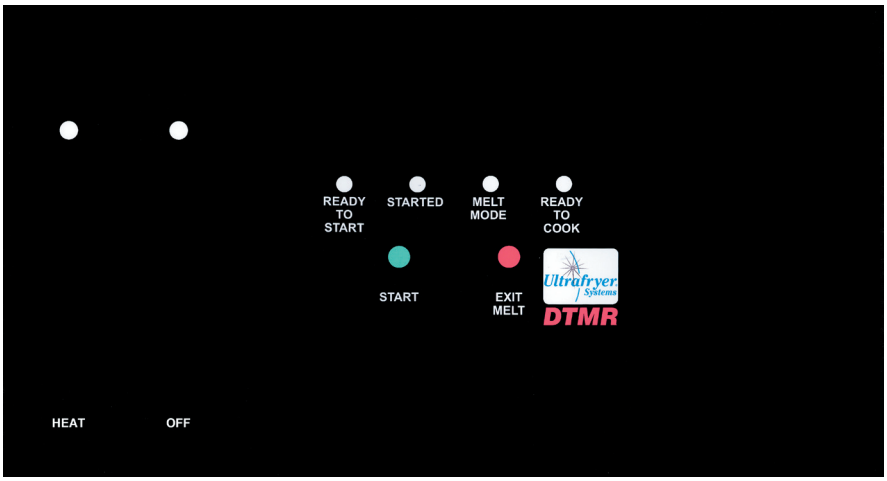
Phone in order to:	1-888-331-5031
FAX order to:	1-210-731-5099
Mail order to:	Ultrafryer Systems Order Entry Office P.O. Box 5369 San Antonio, TX 78201
E-Mail your order to:	Ultrafryerservice@ultrafryer.com

   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 noted 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 l5% 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.



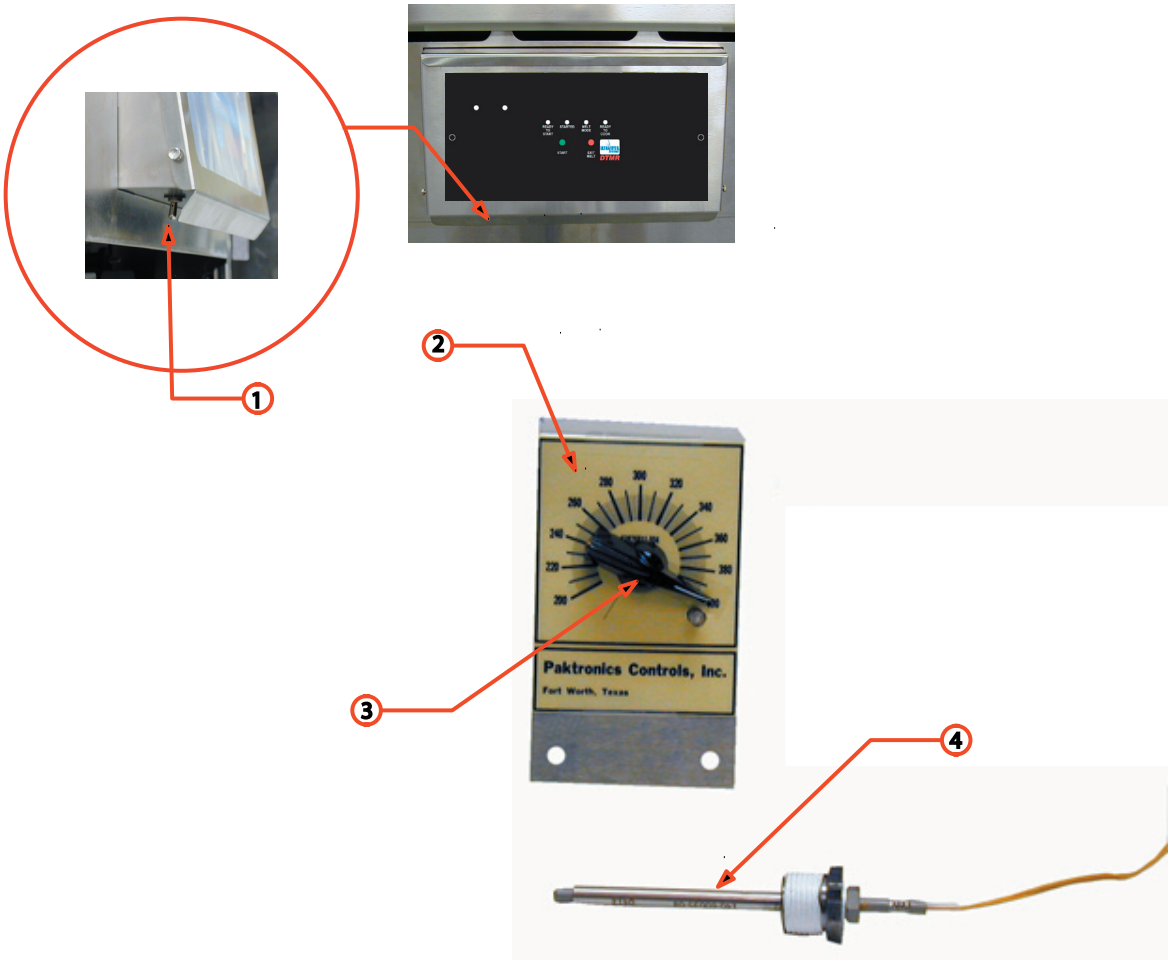
A. DTMR CONTROL FOR FRYERS EQUIPPED WITH A FENWAL THERMOSTAT PN 18-233

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



ITEM	DESCRIPTION	PN
1	Toggle ON/OFF Switch	18A081
2	Electronic Thermostat Face Plate	18A070
3	Electronic Thermostat Knob	22A169
4	Temperature Probe	18A276