TIL NUMBER:
02-110

REVISED DATE:
January 2003
(added Part Number to TIL btm of pg1)

SUBJECT

GAS ULTRAFRYER MODELS PAR-1 ANDPAR-2 FRYER KNOB OPERATOR ON/OFF SWITCH RETROFIT

I. PURPOSE: New Ultrafryer Gas Fryers built **AFTER** March 1, 2000 will be equipped with a more user friendly and readily available **TOGGLE ON/OFF SWITCH** and an **AMBER POWER INDICATOR LAMP** in lieu of the illuminated **KNOB OPERATOR ON/OFF SWITCH**. A Toggle ON/OFF Switch Assembly retrofit kit is now available that can be used to replace any defective Knob Operator ON/OFF switches in Model PAR-1 and PAR-2 gas fryers presently in use. This Technical Information Letter (TIL) will provide a description of a Toggle ON/OFF Switch Assembly and step-by-step procedures to replace a defective knob operator ON/OFF switch with a toggle ON/OFF switch assembly.

II. PRECAUTIONS:

A. This TIL is applicable to all Model PAR-1 and PAR-2 Ultrafryer gas fryers.

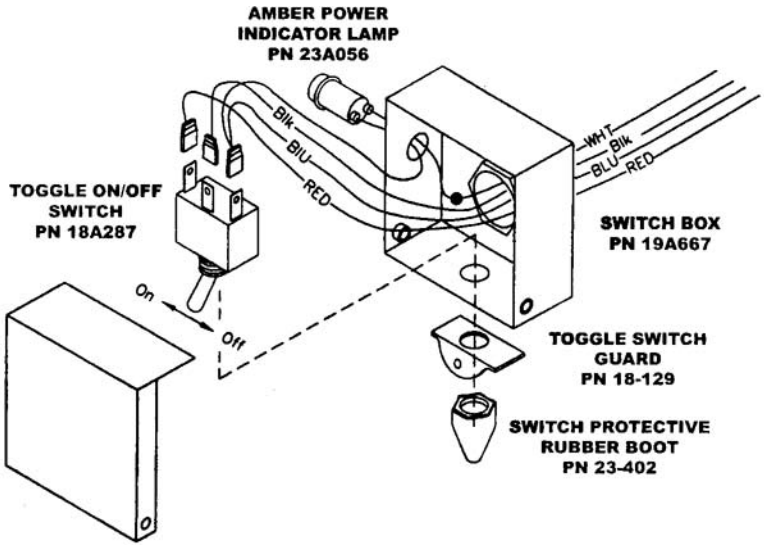
B. Defective Knob Operator ON/OFF Switches which fail in a fryer manufactured between **JANUARY 1, 1999** and **FEBRUARY 1, 2000** will be replaced with a Toggle ON/OFF Switch Assembly at the expense of Ultrafryer Systems. To determine the warranty status of a fryer with a defective knob operator ON/OFF switch, contact the Customer Service Department at 1-800-525-8130 or send an E-mail to Ultrafryer Service@afce.com

C. Fryers manufactured **AFTER AUGUST 1998** which are equipped with **a FIVE (5) WIRE** Knob Operator ON/OFF Switch can be retrofitted according to procedures in paragraph VC2 and fryers manufactured **BEFORE AUGUST 1998** with a **FOUR (4) WIRE** switch can be retrofitted according to paragraph V C 1.

D. It is strongly recommended that defective knob operator ON/OFF switches be replaced with a Toggle ON/OFF Switch Assembly and that **ALL** switches in a fryer bank be replaced with toggle ON/OFF switch assemblies upon failure of the first switch.

E. Illuminated push button ON/OFF switches installed in early model PAR-1 fryers can also be replaced with the Toggle ON/OFF Switch Assembly using this TIL as a guide.

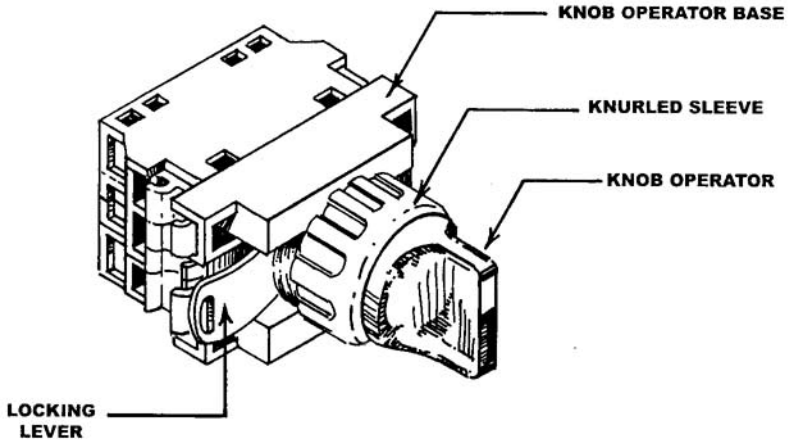
III. TOGGLE ON/OFF SWITCH ASSEMBLY DESCRIPTION – The Toggle ON/OFF Switch Assembly is housed in a stainless steel box 3" W x 3" H x 1" D containing; 1) a 125 volt 6 amp SPDT toggle switch PN 18A287, 2) a 125 volt ⅓ watt snaplight with amber lens PN 23A056, 3) an ON/OFF switch guard PN 18-129 and switch boot PN 23-402, 4) four (4) 16 gauge stranded wires 18 inches long with **BLACK**, **BLUE**, **RED** and **WHITE** insulation and 5) five (5) wire nuts for use in connecting the toggle ON/OFF switch assembly to the fryers electrical wiring.



TOGGLE ON/OFF SWITCH ASSEMBLY
PN 12A651

IV KNOB OPERATOR/PUSH BUTTON ON/OFF SWITCH REMOVAL –

A. **CAREFULLY** remove a defective knob operator ON/OFF switch as follows:



KNOB OPERATOR SWITCH

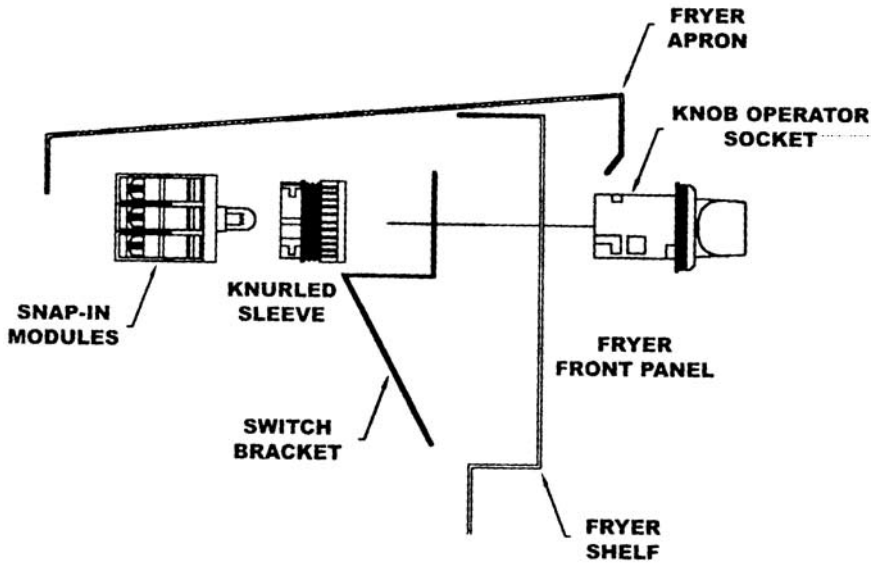
1. Turn electrical power to the fryer **OFF**; then lower/remove the Temperature Control Access Panel from the fryer.

2. Separate the knob operator ON/OFF switch wiring connectors from the fryer wiring harness as follows;

   a. If applicable disconnect the two (2) pin white socket with a **WHITE** and **YELLOW** wire from the two (2) pin white plug attached to gas burner indicator lamp with a **WHITE** and **YELLOW** wire.
   b. If applicable, disconnect the two (2) pin white socket with one (1) **YELLOW** wire and a **YELLOW** jumper wire from the two (2) pin plug attached to the fryer wiring harness.
   c. Disconnect the **FOUR (4)** or **FIVE (5)** wire white socket from the mating plug containing four (4) or five (5) wires.

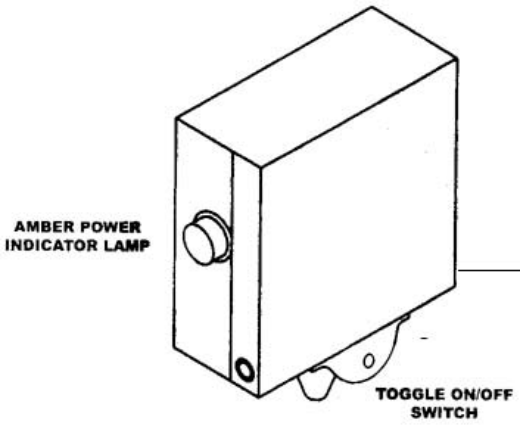
3. Separate the knob operator **BASE** with the three (3) snap-in modules and white sockets from the **KNOB OPERATOR** by pushing **the LOCKING LEVER**, identified above, **UP** while pulling the base towards the rear of the fryer.

4. Remove the knob operator **BASE**, and if applicable, the switch bracket, shown below, from the front panel by removing the **KNURLED SLEEVE**. **NOTE:** Retain the **BASE** with the white sockets for determining wire connections to the toggle ON/OFF switch assembly.



5. **THOROUGHLY** clean the front and rear area around the ⅞" switch mounting hole to remove grease and any other debris.

V. TOGGLE ON/OFF SWITCH ASSEMBLY INSTALLATION

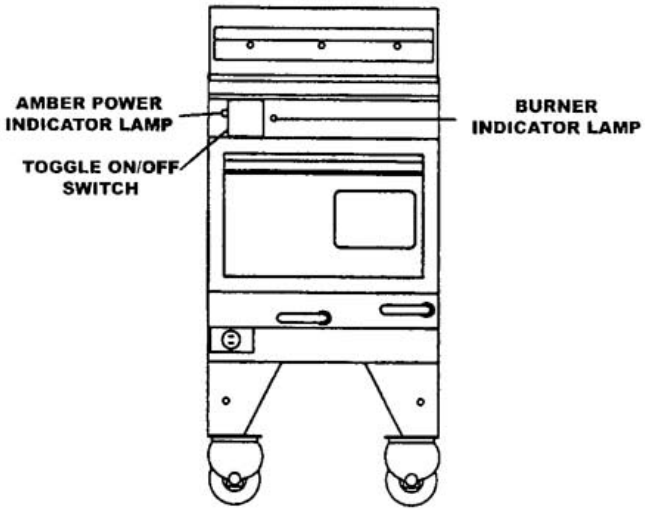


A. Separate the toggle ON/OFF switch assembly from the retrofit kit and place the five (5) wire nuts to one side for use later.

B. **CAREFULLY** mount the toggle ON/OFF switch assembly on the front panel of the fryer as follows:

1. Remove the ¾" lock nut from the fitting on the rear of the switch box.

2. Place the assembly in front of the ⅞" mounting hole in the front panel of the fryer with the switch towards the **FLOOR** and the amber light towards the **LEFT** of the fryer as shown below.



FRONT VIEW

3. When the assembly is positioned as shown above, feed the **BLACK**, **BLUE**, **RED** and **WHITE** wires through the ⅞" hole; then insert the ¾" fitting on the rear of the assembly in the ⅞" hole and **SECURE** the assembly to the front panel using the ¾" lock nut removed above.

C. Examine the knob operator **BASE** removed in step IVA4 to determine if it has a **FOUR (4)** or **FIVE (5)** wire white socket attached; then connect the **BLACK**, **BLUE**, **RED** and **WHITE** wires of the toggle ON/OFF switch assembly to the fryer wiring harness as follows:

1. Fryer with **FOUR (4)** wire white socket:

   a. **CAREFULLY** remove the **TWO** two (2) pin white plugs and four (4) pin white plug, previously connected to the knob operator switch by cutting the wires about 1" from the plug.

   b. Remove 5⁄16" of insulation from the end of each wire; then connect these seven wires as follows:

      1) Connect the two (2) **YELLOW** wires together and secure this connection using a wire nut provided.

      2) Connect the **WHITE** wire attached to the **RED** burner indicator lamp, the **WHITE** wire cut from the 4 pin white plug and the **WHITE** wire attached to the toggle ON/OFF switch assembly together and **SECURE** this connection with a wire nut provided.

      3) Connect the **BLACK**, **BLUE** and **BLUE/WHITE** wires cut from the 4 pin white plug to the remaining three (3) wires attached to the toggle ON/OFF switch assembly together, as shown below, and secure these connections with wire nuts provided.

FRYER WIRE	TOGGLE SWITCH WIRE
BLACK	**BLACK**
BLUE/WHITE	**BLUE**
BLUE	**RED**

2. Fryer with FIVE (5) wire white socket:

   a. **CAREFULLY** remove the five (5) pin white plug, previously connected to the knob operator switch by cutting the wires about 1" from the plug.

   b. Remove 5⁄16" of insulation from the end of each wire; then connect these seven wires as follows:

      1) Connect the **YELLOW** wire cut from the 5 pin white plug to one (1) **BLACK** wire attached to the red indicator lamp with a wire nut provided

      2) Connect the remaining **BLACK** wire attached to the **RED** burner indicator lamp, the **WHITE** wire cut from the 5 pin white plug and the **WHITE** wire attached to the toggle ON/OFF switch assembly together and **SECURE** these connections with a wire nut provided.

      3) Connect the **BLACK**, **BLUE** and **RED** wires cut from the 5 pin white plug to the remaining 3 wires attached to the toggle ON/OFF switch assembly together, as shown below, and secure these connections with wire nuts provided.

FRYER WIRE	TOGGLE SWITCH WIRE
BLACK	BLACK
BLUE	BLUE
RED	RED

C. Neatly secure all loose wires with plastic cable tyes, and seal the perimeter of the toggle ON/OFF switchbox with silicone.

VI TOGGLE ON/OFF SWITCH ASSEMBLY TEST - Raise/replace the Temperature Control Access Panel on the fryer, turn electrical power to the fryer **ON**; then test operate the fryer and filtration system as follows:

A. Turn the toggle ON/OFF switch to the **ON** position. The **AMBER** power indicator lamp should **LIGHT**.

B. Turn the **FILTER PUMP LEVER** to the open **DOWN** position. The pump motor **SHOULD NOT** come on. Return the filter pump lever to the closed **UP** position.

C. Activate the applicable control [Default-to-Manual Restart (DTMR) Control, Ultrastat 21 Cooking Computer, Adjustable Digital Temperature Control (ADTC), etc.]. The following should occur:

1. The **RED** burner indicator lamp will **LIGHT.**
2. Blower motor will come **ON** activating the centrifugal switch.
3. The centrifugal switch will **CLOSE** completing the electrical circuit to the transformer.
4. The transformer will supply 24 volts to the **IGNITER MODULE** and **GAS CONTROL VALVE** and the igniter will **SPARK** lighting the gas in the burner.

D. Turn the toggle ON/OFF switch to the **OFF** position. The **AMBER** power indicator lamp should turn **OFF**.

E. Turn the **FILTER PUMP LEVER** to the open **DOWN** position. The pump motor should come **ON**. Return the filter pump lever to the closed **UP** position.

NOTE: QUESTIONS TO THE CONTENTS OF THIS PUBLICATION SHOULD BE REFERRED TO THE CUSTOMER SERVICE DEPARTMENT AT 1-800-525-8130.