HENNY PENNY
Engineered to Last™

Henny Penny
Open Fryer
Model OFE-101

TECHNICAL MANUAL

FM06-050-A
12-21-12

This manual and Wiring diagram should be retained in a convenient location for future reference.
The Model OFE-101X open fryer cannot be operated without electric power.
The unit will automatically return to normal operation when power is restored.

Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE. FIRE OR EXPLOSION COULD RESULT.

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SECTION 1. INTRODUCTION

1-1. INTRODUCTION

The Henny Penny Open Fryer is a basic unit of food equipment designed to cook foods better and easier. This unit is used only in institutional and commercial foodservice operations.

1-2. FEATURES

- Easily cleaned
- 55 lb-65lb. (24.94-29.47 kg.) shortening capacity
- 2 Half size baskets per well (option)
- Stainless steel construction
- Manual reset high limit control
- Gravity drain filter system

1-3. PROPER CARE

As in any unit of food servicing equipment, the open fryer does require care and maintenance. Requirements for the maintenance and cleaning are contained in this manual and must become a regular part of the operation of the unit at all times.

1-4. ASSISTANCE

Should you require outside assistance, call your local independent Henny Penny distributor in your area, call Henny Penny Corp. at 0512-89180268 , or go to Henny Penny online at www.hennypenny.com.

1-5. SAFETY

The Henny Penny Open Fryer has many safety features incorporated. However, the only way to ensure safe operation is to fully understand the proper installation, operation, and maintenance procedures. The instructions in this manual have been prepared to aid you in learning the proper procedures. Where information is of particular importance or is safety related, the words DANGER, WARNING, CAUTION, or NOTE are used. Their usage is described on the next page:

1-5. SAFETY (continued)

SAFETY ALERT SYMBOL is used with DANGER, WARNING or CAUTION which indicates a personal injury type hazard.

NOTICE is used to highlight especially important information.

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

CAUTION used with the safety alert symbol indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

DANGER INDICATES AN IMMINENTLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL RESULT IN DEATH OR SERIOUS INJURY.

SECTION 2. INSTALLATION

2-1. INTRODUCTION

This section provides the installation instructions for the Henny Penny Open Fryer.

Installation of the unit should be performed only by a qualified service technician.

Do not puncture the unit with any objects such as drills or screws as component damage or electrical shock could result.

2-2. UNPACKING

The Henny Penny Open Fryer has been tested, inspected, and expertly packed to ensure arrival at its destination in the best possible condition. The unit is banded to a wooden skid and then packed inside a heavy cardboard carton with sufficient padding to withstand normal shipping treatment.

Any shipping damage should be noted in the presence of the delivery agent and signed prior to his or her departure.

2-3. LEVELING THE OPEN FRYER

For proper operation, the open fryer should be level from side to side and front to back. Using a level placed on the flat areas around the frypot collar, adjust the casters until the unit is level.

2-4. VENTILATION OF OPEN FRYER

The open fryer should be located with provision for venting into an adequate exhaust hood or ventilation system. This is essential to permit efficient removal of the steam exhaust and frying odors. Special precaution must be taken in designing an exhaust canopy to avoid interference with the operation of the open fryer. We recommend you consult a local ventilation or heating company to help in designing an adequate system.

2-5. ELECTRICAL REQUIREMENTS OFE-14X

Refer to the table below for supply wiring and fusing.

VOLT （V）	PH	WATTS （KW）	AMP（A）
380-415	3	14.4	20.6

To avoid electrical shock, this fryer must be adequately and safely grounded (earthed). Refer to local electrical codes for correct grounding (earthing) procedures or in absence of local codes, with The National Electrical Code, ANSI/NFPA No. 70-(the current edition).

SECTION 3. OPERATING

3-1-1. Operating Components- C1000 Controls

Reference Figure 3-1.

Fig. No.	Item No.	Description	Function
3-1	1	Digital Display	Shows the shortening temperature, the timer countdown in the Cook Cycle, and the selections in the Program Mode; the temperature of the shortening can be shown by pressing P once, or twice to view set-point temperature; if shortening temperature exceeds 425°F (218°C), the display reads "E-5, FRYER TOO HOT"
3-1	2		This LED lights when the shortening temperature is within 5° of the setpoint temperature, signaling the operator that the shortening temperature is now at the proper temperature for dropping product into the frypot
3-1	3		The timer buttons are used to start and stop Cook Cycles
3-1	4		The idle buttons are used to start an Idle Mode which reduces the temperature of the shortening during non-use periods
3-1	5		The program button is used to access the Program Modes; also, once in the Program Mode, it is used to advance to the next parameter
3-1	6 & 7		Used to adjust the value of the currently displayed setting in the Program Mode and to change set-point temperature.
3-1	8 & 9		Used to adjust the value of the currently displayed setting in the Program Mode and to change set-point temperature

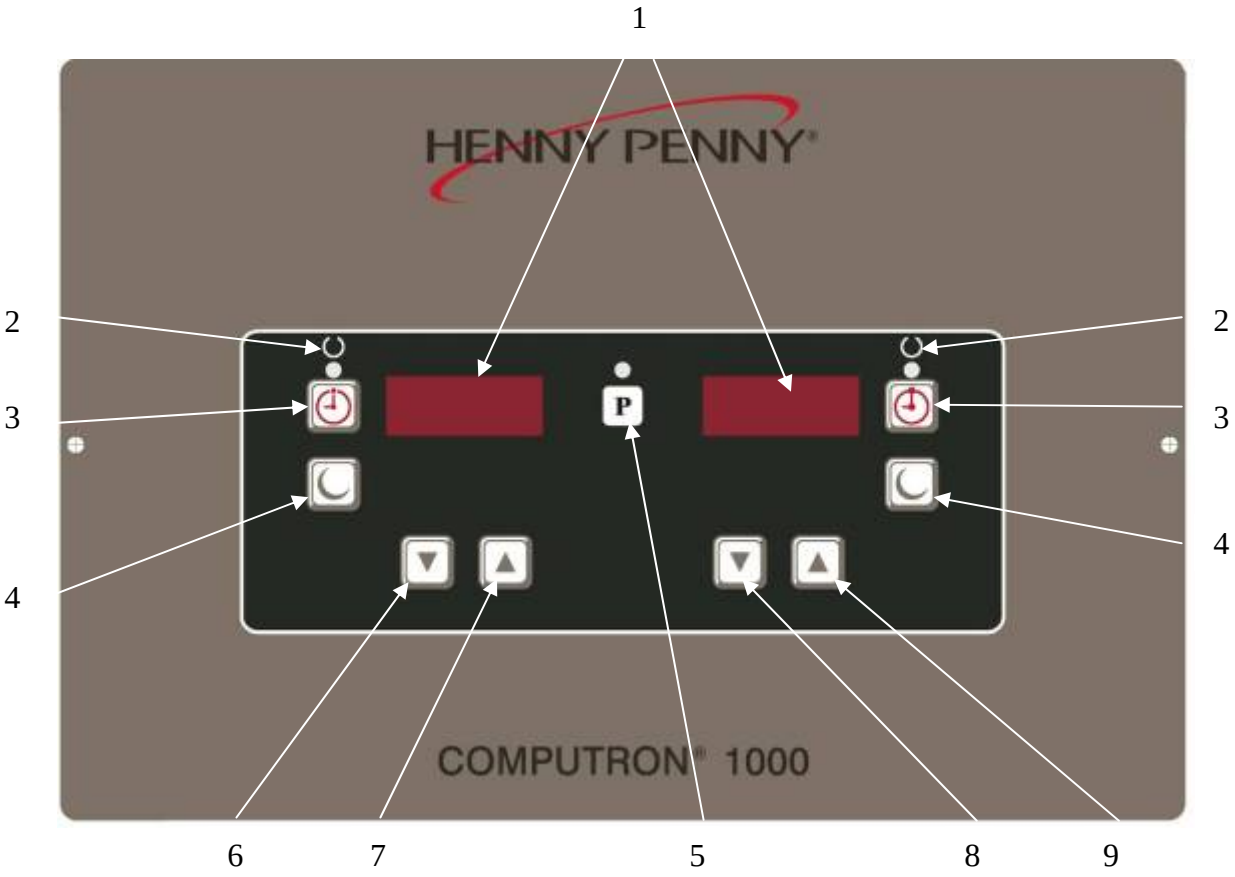


Figure 3-1

3-1-2. C1000 OPERATIONS AND PROCEDURES

The Computron 1000 controls are available on both split frypot and full frypot fryers. The following is a brief description of the operating procedures for fryers with these controls.

1. Be sure the drain valve is in the closed position.
2. Place basket support inside of frypot.
3. Make sure frypot is filled with shortening to the proper
   1. level.
4. Display shows "OFF" until power switch is turned to the "ON" position. Display now shows the cook time and the unit automatically goes into the Melt Cycle until the shortening temperature reaches 230°F (110°C). The control then automatically exits the Melt Cycle.
   The Melt Cycle may be bypassed, if desired, by pressing and holding  for 3 seconds.

5. Once out of the Melt Cycle, the shortening is heated until 

lights and the cook time is displayed.

   Thoroughly stir shortening to stabilize the temperature throughout the frypots.

6. Before loading product into the baskets, lower baskets into the hot shortening to keep the product from sticking to the baskets.

7. Once the shortening temperature has stabilized at the setpoint temperature, lower the basket with product into the frypot.

Do not overload, or place product with extreme moisture content into the basket. 12.5 lbs. (5.7 kg) is the maximum amount of product per frypot (6.25 lbs. (2.8 kg) maximum for the split frypot fryers). Failure to follow these directions can result in shortening overflowing the frypot. Serious burns or damage to the unit could result.

8. If the right basket was dropped into the shortening, then press the right  .

   If the left basket was dropped, then press the left  .

9. The timer on the appropriate side (right or left) starts counting down.

10.

NOTICE

The timing operation of the two sides of the control is entirely independent of each other. One may be set, started, or stopped without affecting the other.

11. At the end of the Cook Cycle a tone will sound and the display flashes "DONE". Press button and lift the basket from the shortening.

3-1-3. C1000 PROGRAMMNG INSTRUCTIONS

Timer Programming

1. Anytime the cook time is displayed, press under the appropriate display to change the cook time.

2. **Set-Point Temperature Programming**

   a. Press P once to view the actual shortening temperature and press P again to view the set-pointtemperatue.

   b. While the set-point temperature is in the display, press nge the set-point temperature.

NOTICE

If "LOCK" shows in display when pressing , the controls are locked and must be unlocked before changing the time or set-point temperature. See C1000 Special Programming Section.

3-1-4. C1000 SPECIAL PROGRAMMING

Special Programming is used to set the items below:

- Fahrenheit or Celsius
- Initialize System
- Lock or Unlock Controls
- Fryer Type – Electric; Gas w/standing pilot; Gas w/electronic ignition; Gas-Induced Draft
- Split or Full Vat (frypot)

1. To enter Special Programming, turn off power switch (either side). Press and hold P and turn the power switch back on.

2. "SPEC" "PROG" followed by, "DEG" "°F" or "°C". Use to change to "°F" or "°C" or vice versa.

3. Press P and "INIT" shows in the display.

Press and hold the right and display shows “In-3”, “In-2”, “In-1” followed by “Init Sys” “DONE DONE”.

The controls now are reset to factory parameters, the time set to 0:00 and temperature 190°F or 88°C.

4. Press P and “LOCK” or “UNLOCK” shows in the displays. Use ▼ ▲ to change from “LOCK” to “UNLOCK, or vice versa.

5. Press P and “FRYR” shows in the display. Use ▼ ▲ to change the fryer type: “ELEC” for electric models; “GAS” for units with standing pilot; SSI for units with solid state ignition; IDG for units with induced draft gas burners.

6. Press P and “VAT” shows in the display. Use ▼ ▲ to change the vat (frypot) type from “SPLIT” to “FULL” or vice versa.

7. Press and hold P to exit Special Programming at any time.

3-2. FILLING OR ADDING SHORTENING

CAUTION

The shortening level must always be above the heating elements when the fryer is heating and at the frypot level indicators on the rear of the frypot. Failure to follow these instructions could result in a fire and/or damage to the fryer. Less than level will caught fire. When using solid shortening, it is recommended to melt the shortening on an outside heating source before placing it in the frypots. The heating element must be completely submerged in shortening. Fire or damage to the frypot could result.

1. It is recommended that a high quality frying shortening be used in the open fryer. Some low grade shortenings have a high moisture content and will cause foaming and boiling over.

WARNING
BURN RISK

Wear gloves to avoid severe burns when pouring hot shortening into frypot. Shortening and all metal parts that are in contact with the shortening are extremely hot, and take care to avoid splashing.

2. Cold shortening should be filled to the lower indicator when the frypot has 2 indicator lines.

3-3. CARE OF SHORTENING

FOLLOW THE INSTRUCTIONS BELOW TO AVOID SHORTENING OVERFLOWING THE FRYPOT, WHICH COULD RESULT IN SERIOUS BURNS, PERSONAL INJURY, FIRE, AND/OR PROPERTY DAMAGE.

1. Maintain the shortening at the proper cooking level. Add fresh shortening as needed.
2. Discard any shortening which has a bad flavor or shows signs of excessive foaming or boiling. Keep the frypot clean.

WITH PROLONGED USE, THE FLASHPOINT OF SHORTENING IS REDUCED. DISCARD SHORTENING IF IT SHOWS SIGNS OF EXCESSIVE SMOKING OR FOAMING. SERIOUS BURNS, PERSONAL INJURY, FIRE, AND/OR PROPERTY DAMAGE COULD RESULT.

3-4. FILTERING OF SHORTENING

1. Turn the main switch to the OFF position. Remove and clean the fry basket in soap and water. Rinse thoroughly.

Best results are obtained when shortening is filtered at the normal frying temperature

2. Use metal spatula to remove any build up from the sides of frypot. Do not scrape heating elements on electric models.

3-4. FILTERING OF SHORTENING (Continued)

Scraping the electric fryer elements，produces scratches in these surfaces causing breading to stick and burn.

The filter drain pan must be placed all the way to the front of the fryer. Be sure dairy union is connected .Failure to follow these instructions causes splashing of shortening and could result in personal injury. Surfaces of fryer and baskets will be hot. Use care when filtering to avoid getting burned.

3. Slowly turn drain valve handle a half turn. Leave for a few minutes, then slowly, fully open drain valve. This prevents much splashing of the hot shortening as it drains

4. As the shortening drains from the frypot, use brushes on the heating elements. If the drain fills with breading, use straight white brush to push excess breading into the filter drain pan.
.

IF THERE ARE AIR BUBBLES COMING UP IN THE SHORTENING BEFORE ALL SHORTENING IS PUMPED UP, IT'S POSSIBLE THAT THE FILTER CONNECTION AT THE UNION ON THE FILTER TUBE IS NOT TIGHTENED PROPERLY. IF SO, TURN OFF THE PUMP AND WEAR PROTECTIVE GLOVES OR CLOTH WHEN TIGHTENING THE UNION. THIS UNION WILL BE HOT. SEVERE BURNS COULD RESULT.

5. Pull out the pump handle, pump all of the shortening out of the filter drain pan and back into the frypot. When the pump is pumping air only, move the pump switch from PUMP to OFF

3-4. FILTERING OF SHORTENING (Continued)

6. Check the level of the shortening in the frypot. Add fresh shortening if necessary, until it reaches the bottom level indicator line on the right wall of the frypot.

About 10 to 12 filterings can be made with one filter paper envelope, depending on:

- the quantity and type of product fried and filtered
- he type of breading used
- the amount of crumbs left inside the filter drain pan. When the filter screen assembly and filter paper become clogged, and the pumping flow slows. Clean the filter screen assembly and change the filter envelope.

7. To continue cooking, move the main POWER switch to the ON position, and shortening reheats.

3-5. FILTER PUMP PROBLEM PREVENTION

To help prevent filter pump problems:

1. Properly install paper envelope over the filter screens. Fold the open end of the envelope, and clamp with retaining clips so that crumbs cannot enter. Figure 3-2.

2. Pump shortening, until you see bubbles in the fry pot.

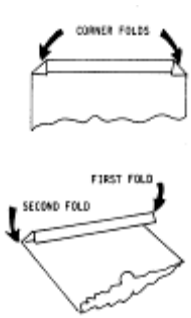


Figure 3-2

3-6. FILTER PUMP MOTOR PROTECTOR – MANUAL RESET

In the event it overheats, the filter pump motor is equipped with a manual reset button located on the rear of the motor. After waiting 5 minutes to allow the motor to cool, press the reset button. It takes some effort to reset the motor. A screwdriver can be used to help press reset button. Figure 3-3.

Figure 3-3

To prevent burns caused by splashing shortening, turn the unit's filter PUMP switch to the OFF position before resetting the filter pump motor's manual reset protection device.

3-7. CHANGING THE FILTER ENVELOPE

The filter envelope should be changed after 10-12 filterings or whenever it becomes clogged with crumbs. Proceed as follows:

The filter union could be hot. Wear protective glove or cloth, or severe burns could result.
Use care to prevent burns caused by splashing of hot shortening.

1. Move the main POWER switch to the OFF position.
2. Disconnect the filter union and remove the filter drain pan from beneath the frypot.
3. Remove the filter screen assembly from the drain pan.
4. Wipe the shortening and crumbs from the filter drain pan. Clean the drain pan with soap and water. Thoroughly rinse with hot water.
5. Unthread the standpipe from the filter screen assembly.
6. Remove the crumb catcher and clean with soap and water. Rinse thoroughly with hot water.
7. Remove the filter clips and discard the filter envelope.
8. Clean the top and bottom filter screen with soap and water. Rinse thoroughly with hot water.

3-8. CLEANING THE FRYPOT

After the initial installation of the open fryer, as well as before every change of shortening, the frypot should be thoroughly cleaned as follows:

1. Turn the main POWER switch off

The filter drain pan must be as far back under fryer as it will go. Failure to follow these instructions causes splashing of shortening and could result in personal injury.
Moving the fryer or filter drain pan while containing hot shortening is not recommended. Hot shortening can splash out and severe burns could result.

3-8. CLEANING THE FRYPOT (Continued)

Always wear chemical splash goggles or face shield and protective rubber gloves when cleaning the frypot as the cleaning solution is highly alkaline. Avoid splashing or other contact of the solution with your eyes or skin. Severe burns may result. Carefully read the instructions

on the cleaner. If the solution comes in contact with your eyes rinse thoroughly with cool water and see a physician immediately.

2. If hot shortening is present in the frypot, it must be drainedby Leave for a few minutes, then slowly open the valve to full open position.
3. Close the drain valve. Discard the shortening .

4 Remove the filter screen assembly from the filter drain pan. **The filter union could be hot. Wear protective glove or cloth, or severe burns could result.**

5. Fill the frypot to the level indicator with hot water. Add 4 ozs. (0.12 liters) of open fryer cleaner to the water and mix thoroughly. The fry basket can be placed inside the frypot for cleaning.

6. Turn the main POWER switch to the ON position and set temperature to 195° F (90.5° C).
7. When the solution reaches 195° F (90.5° C), turn the main POWER switch to the OFF position.
8. Let the cleaning solution stand for 15 to 20 minutes with the power off.
9. Using the open fryer brush (never use steel wool), scrub the inside of the frypot.

CAUTION

If the cleaning solution in the frypot starts to foam and boil over, immediately turn the power switch to OFF or damage to components could result.

Do not use steel wool, other abrasive cleaners or cleaners/ sanitizers containing chlorine, bromine, iodine or ammonia chemicals, as these will deteriorate the stainless steel material and shorten the life of the unit.

Do not use a water jet (pressure sprayer) to clean the unit, or component damage could result.

3-8. CLEANING THE FRYPOT (Continued)

10. After cleaning, open the drain valve and drain cleaning solution from the frypot into the filter drain pan and discard.

11. Replace the empty filter drain pan, close the drain valve, and refill the frypot with plain hot water to the proper level.

12. Add approximately 8 ozs. (0.24 liters) of distilled vinegar and bring the solution back up to 195° F (90.5° C).

13. Using a clean brush, scrub the interior of the frypot. This will neutralize the alkaline left by the cleaning compound.

14. Drain the vinegar rinse water and discard.

15. Rinse down the frypot using clean, hot water.

16. Thoroughly dry the filter drain pan and the frypot interior.

Make sure the inside of the frypot, the drain valve opening, and all the parts that will come in contact with new shortening are as dry as possible.

17. Replace the clean filter screen assembly in the drain pan, and install filter drain pan under open fryer.

18. Refill the frypot with fresh shortening.

3-9. REGULAR MAINTENANCE

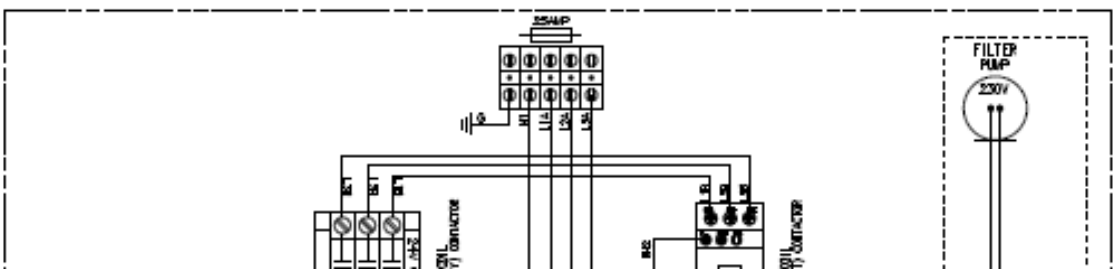
As in all food service equipment, the Henny Penny Open Fryer does require care and proper maintenance. The table below provides a summary of scheduled maintenance procedures to be performed by the operator.

Procedure	Frequency

Filtering of shortening	Daily (3-4 loads)
Changing of shortening	When shortening smokes, foams up violently, or tastes bad
Changing the filter envelope	After 10-12 filterings, or when envelope is clogged with crumbs
Cleaning the frypot	Every change of shortening.

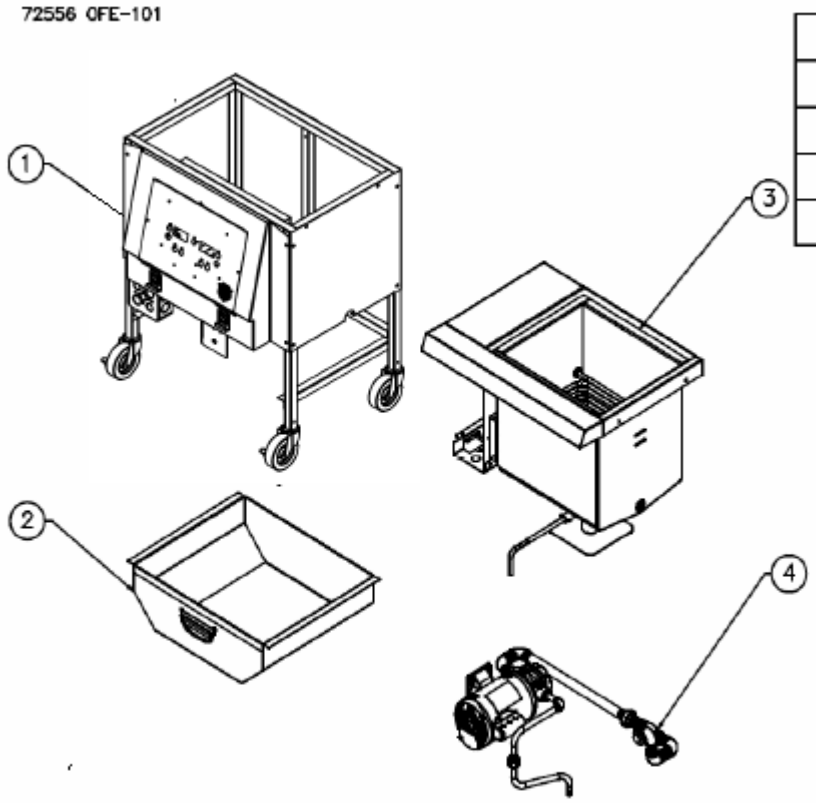
If moving fryer to perform preventive maintenance:
Electrical supply should be unplugged or wall circuit breaker turned off to avoid electrical shock.

3-10. OFE101 Wiring Diagram



SECTION 4. PART LIST

4-1 GENERAL ASSY



ITEM	PN	DESCRIBE	QUANTITY
1	71959	FRAME-ASSY	1
2	72650	WELD ASSY DRAIN PAN-101	1
3	71960	ASSY-POT	1
4	72559	FILTER SYSTEM ASSY	1

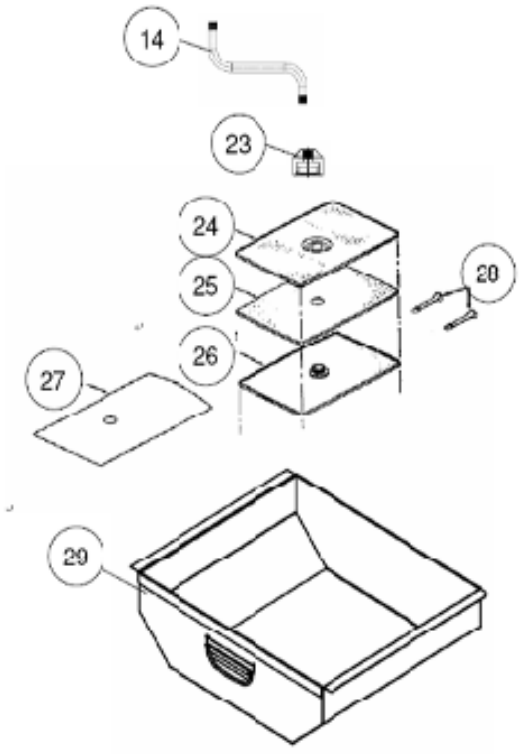
4-2 FRAME ASSY

ITEM	PN	DESCRIBE	QUANTITY
1	SC03-004	SCREW #8 X 3/4 PH PHD TEC C	2
2	SC03-005	SCREW SD #8 X 1/2 PH PHD	4
3	72562	SUPPORT-CONTROL PANEL	1
4	140138	KIT-C1000 CONTROL ASSY_OFE101	1
5	SC03-005	SCREW SD #8 X 1/2 PH PHD	2
6	60718	BRACKET-DRAIN VALUE ROD	1
7	EF02-126	BUSHING-SNAP 1/2 ID X 5/8 OD PLASTIC	2
8	18227	MICRO SWITCH	1
9	SC01-058	SCREW #6-32 X 1 PH PHD C	2
10	SC03-005	SCREW SD #8 X 1/2 PH PHD	4
11	SC03-005	SCREW SD #8 X 1/2 PH PHD	4
12	SC03-004	SCREW #8 X 3/4 PH PHD TEC C	2
13	73341	PANEL SIDE-RIGHT	1
14	19707	BOX-JUNCTION	1
15	72558	PANEL SIDE-LEFT	1
16	ME70-005	SPEAKER-16 OHM-2 INCH	1

Recommended Parts

4-3 FILTER SYSTEM ASSY –DRAIN PAN

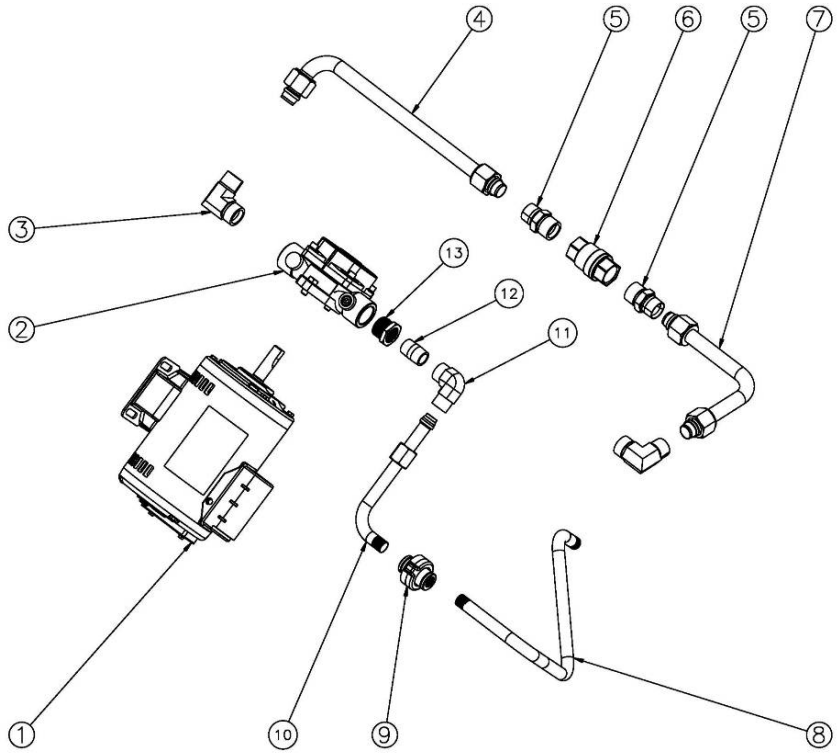
72559 FILTER SYSTEM ASSY



ITEM	PN	DESCRIBE	QUTY
23	65208	NUT-FILTER-FRMALE	1
24	65211	CRUMB CATCHER	1
25	17502	TOP FILTER SCREEN	1
26	65447	WELD ASSY-SS WOVEN FILT SCREEN	1
27	12102	PHT FILTER ENVELOPES-100CT	1
28	17505	CLIP-FILTER SCREEN	1
29	72650	WELD ASSY DRAIN PAN-101	1

√ **Recommended Parts**

4-4 FILTER SYSTEM ASSY –TUBE



ITEM	PART NUMBER	DESCRIBE	QTY
√ 1	89323	MOTOR-1/2 HP FILTER PUMP	1
2	64218	ASSY-FILTER PUMP-8 GPM	1
3	FP01-169	CON-90 MALE 3/4 TUBE 3/4 NPT	2
4	82327	ASSY-TUBE FILTER TO PUMP TUBE	1
5	FP01-170	CON-STR. MALE 3/4 TUBE 3/4 NPT	2
6	90353	VALVE-3/4 INCH	1
7	82328	ASSY-TUBE FILTER TO POT TUBE	1
8	83710	TUBE FILTER	1
9	69289	ASSY-FILTER UNION	1
10	83709	ASSY -TUBE FILTER TO PUMP 101	1
11	FP01-118	ELBOW-5/8 TUBE-1/2 NPT FEMALE	1
12	FP02-011	NIPPLE - 1/2 X 1 1/4 304 SS	1
13	FP01-185	BUSHING-3/4R1X1/2Rc	1

√ Recommended Parts

SECTION 5. TROUBLESHOOTING

5-1. TROUBLESHOOTING GUIDE

Problem	Cause	Correction
POWER switch ON but fryer completely inoperative	• Open circuit	• Plug fryer in • Check breaker or fuse at supply box
Shortening will not heat but lights are on	• Open high limit • circuit	• Reset high limit per • Drain valve open • Turn drain valve handle to closed Position
Foaming or boiling of shortening	• Water in shortening • Improper or bad shortening • Improper filtering • Improper rinsing after cleaning the fryer	• At end of cook cycle, drain shortening and clean • Use recommended shortening • Refer to the procedure covering filtering the shortening • Clean and rinse the frypot, then dry thoroughly
Shortening will not drain from frypot Filter switch ON but does not run	• Drain valve clogged with crumbs • Motor thermal protector tripped	• Open valve, force cleaning brush through drain • Reset thermal switch per section motor on Filter Pump Motor Protector – Manual Reset

Or detailed troubleshooting information is available in the Technical Manual, available at www.hennypenny.com, or 0512-89180262 or 1-800-417-8405 , 1-937-456-8405

5-2. ERROR CODES In the event of a control system failure, the digital display shows an error message. The message codes are shown in the DISPLAY column below. A constant tone is heard when

an error code is displayed, and to silence this tone, press any button.

DISPLAY	CAUSE	PANEL BOARD CORRECTION
"E-4"	Control board overheating	Turn switch to OFF position, then turn switch back to ON; if display shows "E-4", the control board is getting too hot; check the louvers on each side of the unit for obstructions
"E-5"	Shortening overheating	Turn switch to OFF position, then turn switch back to ON; if display shows "E-5", the heating circuits and temperature probe should be checked
"E-6A"	Temperature probe open	Turn switch to OFF position, then turn switch back to ON; if display shows "E-6A", the temperature probe should be checked; to replace, refer to Technical Manual
"E-6B"	Temperature probe shorted	Turn switch to OFF position, then turn switch back to ON; if display shows "E-6B", the temperature probe should be checked; to replace, refer to Technical Manual
"E-10"	High limit	Reset the high limit by manually pushing up on the red reset button; if high limit does not reset, high limit must be replaced; refer to Technical Manual
"E-15"	Drain switch failure	Close drain, using the drain valve handle. If display still shows "E-15", check the drain microswitch; refer to Technical Manual
"E-41", "E-46"	Programming failure	Turn switch to OFF, then back to ON; if display shows any of the error codes, try to reinitialize the control (Special Program Mode section); if error code persists, replace the control board; refer to Technical Manual
"E-31"	Fan switch jumper wire missing or disconnected	Turn switch to OFF, then back to ON; if "E-31" persists, have jumper wires J2 & J4 on the 12-pin connectors on the PC board; if jumpers are OK, have PC board replaced
"E-54"	Faulty PC board component	Turn switch to OFF, then back to ON; if "E-54" persists, have PC board replaced
"E-70"	Faulty power switch, or switch wiring; faulty I/O board	Have POWER switch checked, along with its wiring. Have Input/Output board replaced if necessary