SECTION 4. TROUBLESHOOTING

4-1. 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 motor does not run	• Drain valve clogged with crumbs • Motor thermal protector tripped	• Open valve, force cleaning brush through drain • Reset thermal switch per section on Filter Pump Motor Protector – Manual Reset

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

4-2. 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 on	Turn switch to OFF, then back to ON; if "E-31" persists, wire missing or have jumper wires J2 & J4 on the 12-pin connectors disconnected 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

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 Error message "E-10" • Drain valve open Error message "E-15"	• Reset high limit per High Temperature Limit Control section • Turn drain valve handle to closed position
Foaming or boiling over 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	• Drain valve clogged with crumbs	• Open valve, force cleaning brush through drain
Filter switch ON but motor does not run	• Motor thermal protector tripped	• Reset thermal switch per section on Filter Pump Motor Protector – Manual Reset

NOTICE

More detailed troubleshooting information is available at 1-800-417-8405 or 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-20A"	Air pressure switch failure (stuck closed)	Press the Timer button to try the ignition process again; if "E-20A" persists check the air switch; refer to Technical Manual
"E-20B"	Draft fan or air pressure switch failure (stuck open)	Press the Timer button to try the ignition process again; if "E-20B" persists, check the air switch or the blower motor; refer to Technical Manual

5-2. ERROR CODES (Continued)

DISPLAY	CAUSE	PANEL BOARD CORRECTION
"E-20C"	Ignition modules not responding	Press the timer button to try the ignition process again; if "E-20C" persists, check the ignition module, the spark ignitor, or the I/O board; refer to Technical Manual
"E-20D"	Pilots not lit or no flame sense	Press the timer button to try the ignition process again; if "E-20D" persist, check the ignition module, the I/O board, or the flame sensor; refer to Technical Manual
"E-31"	Fan jumper wire missing	Check for jumper wire on 12-pin connector & add if missing
"E-47"	Analog converter chip or 12 volt supply failure	Turn switch to OFF, then back to ON; if "E-47" persists, have the I/O board, or the PC board replaced; if speaker tones are quiet, probably I/O board failure; refer to Technical Manual
"E-48"	Input system error	Have PC board replaced
"E-54"	PCB component failure	Turn switch to OFF position, then turn switch back to ON; if "E-54" persists, have PCB 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
"E-70A" (C1000)	Fan switch jumper missing	Have jumper wire checked on 12 pin connect to panel
"E-70D" (C1000)	MV jumper missing	Have jumper wire checked on connectors to panel
"E-92"	24-VAC fuse on I/O open	24-VAC fuse on I/O board open; check for shorted component in 24 volt circuit. (i.e., hi limit, drain switch, air switch)