

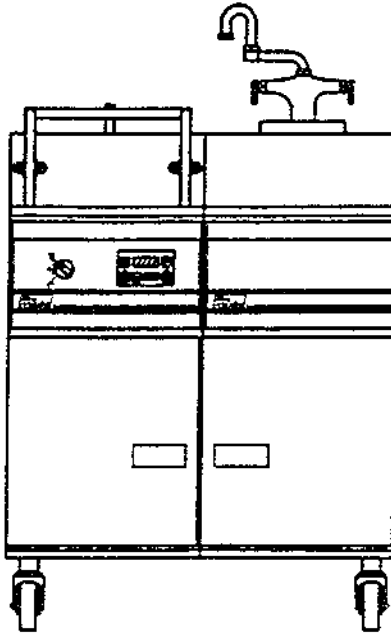
SERVICE SECTION



There's Always Something Cooking!

Service, Parts, and Schematics
For Gas Pasta Cookers with Options

Covering Models
PPG14D, PG14D, and RS14D



Pitco Frialator, Inc., P.O. Box 501, Jet I-89 & I-93 Concord, NH 03302-0501 • 509 Route 3A, Bow, NH 03304
(800) 258-3708 • (603) 225-6684 • FAX (603) 225-8497

A BLODGETT Company

NOTICES

There are three different types of notices that you should be familiar with, a NOTICE, CAUTION, and WARNING. A NOTICE is a special note used to call attention to a particularly important point. CAUTION is used to point out a procedure or operation which may cause equipment damage. The WARNING notice is the most important of the three because it warns of an operation that may cause personal injury. Please familiarize yourself with your new cooker before operating it and heed the notices throughout this manual. The WARNINGS are listed below and on the following page for your review prior to operating the unit.

FOR YOUR SAFETY

DO NOT store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

WARNING: 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.

TO THE PURCHASER

POST IN A PROMINENT LOCATION INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THAT AN OPERATOR SMELLS GAS. OBTAIN THIS INFORMATION FROM YOUR LOCAL GAS SUPPLIER.

THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE

SAFETY

SAFETY

SAFETY

SAFETY

SAFETY

WARNING

The cooker must be electrically grounded in accordance with local codes. If local codes do not apply, follow the requirements of National Code ANSI/NFPA 70-1990.

WARNING

This cooker is equipped with a three prong safety plug. This safety plug protects operators from electrical shock in the event of an equipment malfunction. DO NOT remove the grounding (third) prong from this plug.

WARNING

DO NOT use an open flame to check for gas leaks!

WARNING

A cooker that is equipped with casters and a flexible power cord must be connected to the gas supply with a Quick-Disconnect device. This quick disconnect must comply with ANSI Z24.41-1989. A restraining cable must be installed to limit the movement of the cooker.

WARNING

There is an open gas flame inside the cooker. The unit may get hot enough to set nearby materials on fire. Keep the area around the cooker free from combustible materials.

WARNING

Ensure that the cooker can get enough air to keep the flame burning correctly. If the flame is starved for air it can give off dangerous carbon monoxide. Carbon Monoxide is a clear odorless gas that can cause suffocation and death.

WARNING

Be sure the burner tubes are COMPLETELY covered with water before lighting the pilot or main burners. If the tubes are exposed, the cooker may overheat, causing damage to the kettle, creating a fire hazard, and voiding the warranty.

SAFETY

SAFETY

SAFETY

SAFETY

SAFETY

SAFETY

SAFETY

SAFETY

SAFETY

SAFETY

WARNING

Carbon monoxide can build up if the flue is blocked. Blocking the flue will also cause the cooker to overheat. Ensure that minimum clearances specified in the installation instructions are maintained. DO NOT obstruct the flow of combustion/ventilation or air opening around the cooker. Adequate clearance around the cooker is necessary for servicing and proper burner operation. Ensure that you meet the minimum clearances specified in the installation instructions.

WARNING

The power supply must be disconnected before servicing or cleaning the appliance.

WARNING

For gas cookers, DO NOT supply the cooker with a gas that is not listed on the data plate. If you need to convert the cooker to another type of fuel, contact your dealer.

WARNING

For gas cookers, WAIT five (5) minutes before attempting to relight the pilot. This allows time for any gas remaining in the cooker to dissipate.

WARNING

DANGER - HIGH VOLTAGE PRESENT

NEVER remove fuses from the cooker until the cooker is unplugged from the facility power supply.

THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE

SAFETY

SAFETY

SAFETY

SAFETY

SAFETY

Table of Contents

Section	Title	Page
	Safety Notice	
	Table of Contents.....	i
	List of Tables.....	iii
	List of Figures.....	iii
CHAPTER 4: SERVICE		4-1
4.1 Replacement Procedures		4-1
4.1.1	Main Burner Removal and Replacement.....	4-1
4.1.2	Changing the Main Burner.....	4-1
4.1.3	Replacing the Heat Baffles.....	4-2
4.1.4	Pilot Burner Removal and Replacement.....	4-2
4.1.5	Pilot Orifice Replacement.....	4-2
4.1.6	Thermopile Replacement.....	4-2
4.1.7	Thermostat Replacement.....	4-3
4.1.8	Limit Control Replacement.....	4-3
4.1.9	Basket Lift Replacement.....	4-4
4.2	Troubleshooting Main Burner Systems.....	4-6
4.3	Troubleshooting Pilot Lights.....	4-8
4.4	Troubleshooting Digital Controllers.....	4-9
4.5	Troubleshooting Basket Lift Problems.....	4-11
CHAPTER 5: PARTS		5-1
	Alphabetical Parts List.....	5-2
	Numerical Parts List.....	5-3
CHAPTER 6: SCHEMATICS		6-1

CHAPTER 4: SERVICE

This chapter provides the replacement and troubleshooting procedures necessary to service the Pitco Frialator Gas Pasta Perfect cookers.

4.1 REPLACEMENT PROCEDURES

These procedures are provided as a guide to removal and replacement of various cooker components. If a test is required to verify component operation after installation, the test will be referenced.

WARNING

To prevent burns, always ensure the cooker is completely SHUT DOWN and COOLED down before performing any work. Do not break any gas connections while the cooker is connected to a gas supply line.

WARNING

The power supply must be disconnected before servicing or cleaning the cooker.

4.1.1 Main Burner Removal and Replacement

- a. Loosen the set screw in the base of the burner casing.
- b. Unscrew and remove the two hex head screws at the top of the burner.
- c. Loosen the set screw on the air collar. Lift the burner and air collar up to clear the top of the burner fitting. Remove the burner from the cooker.
- d. To re-install the burner, reverse the procedure.

4.1.2 Changing the Main Burner Orifice

- a. Unscrew the orifice with a 3/8" wrench and remove the orifice.
- b. Insert the new orifice and tighten with the 3/8" wrench. Ensure the orifice is tight enough to prevent gas leakage around the orifice.

4.1.3 Replacing the Heat Baffles

- a. Remove the Main Burner as described in 4.1.1.
- b. The heat baffles are located inside the heat tubes. They are attached to the rear of the baffle supported by tack welds. Using a chisel, break away the baffle support and remove the old baffles. Be careful not to puncture the heat tubes because this will require complete tank replacement.
- c. Insert the new baffles in the tubes in the original position. The new baffles sit in position and not not require welding.
- d. Install the main burners.

4.1.4 Pilot Burner Removal and Replacement

- a. Unscrew the tubing nut from the pilot tubing connection at the gas valve. Disconnect the thermopile from the connection on the gas valve.
- b. Unscrew and remove the two screws that attach the pilot assembly to the cooker vat. Lift the entire pilot assembly out of the cooker.
- c. To replace the pilot assembly, reverse the procedure.

4.1.5 Pilot Orifice Replacement

- a. Remove the pilot assembly as described in 4.1.4.
- b. Unscrew the tubing nut from the pilot tubing connection at base of the pilot burner. The pilot orifice is located inside the tubing connection.
- c. Remove the orifice and replace with the new orifice. Ensure the orifice is tight enough to prevent gas leakage around the orifice.
- d. Replace the tubing nut in the pilot tubing connection and tighten the tubing nut tight enough to prevent gas leakage.
- e. Replace the pilot assembly and adjust the pilot flame as described in 1.5.2.

4.1.6 Thermopile Replacement

- a. Remove the pilot assembly as described in 4.1.4.
- b. Unscrew and remove the thermopile from the pilot assembly.

- c. Remove from gas valve magnet.
- d. Insert the new thermopile in the pilot assembly.
- e. Replace the pilot assembly and adjust the pilot flame as described in 1.5.2.

4.1.7 Thermostat Replacement

This procedure only applies to NON-Digital controlled units

- a. Drain the water from the cooking/warming section tank.
- b. Open the cooking/warming section door.
- c. Remove the wires from the thermostat located on the left hand side of the tank.
- d. Remove the screws holding the thermostat to the tank.
- e. Remove the thermostat.
- f. Place sealant on the new thermostat.
- g. Install the thermostat in the tank.
- h. Replace the screws and tighten them.
- i. Replace the wires.

4.1.8 Limit Control Replacement

The limit control includes a temperature sensor inside the cooker tank, control unit inside the cooker cabinet, and connecting capillary tubing. The high limit control temperature sensor looks like the thermostat temperature sensor, so ensure that the correct temperature sensor is removed.

CAUTION

The limit control capillary tubing is very delicate. Be VERY CAREFUL when working with the capillary tubing. The limit control is no longer usable if the tubing is kinked or broken.

- a. Drain the water from the cooker and remove the heat tube screens.
- b. The limit control probe (heat sensor) is clamped to the heat tube inside the kettle. Unscrew and remove the two screws in the probe clamp.

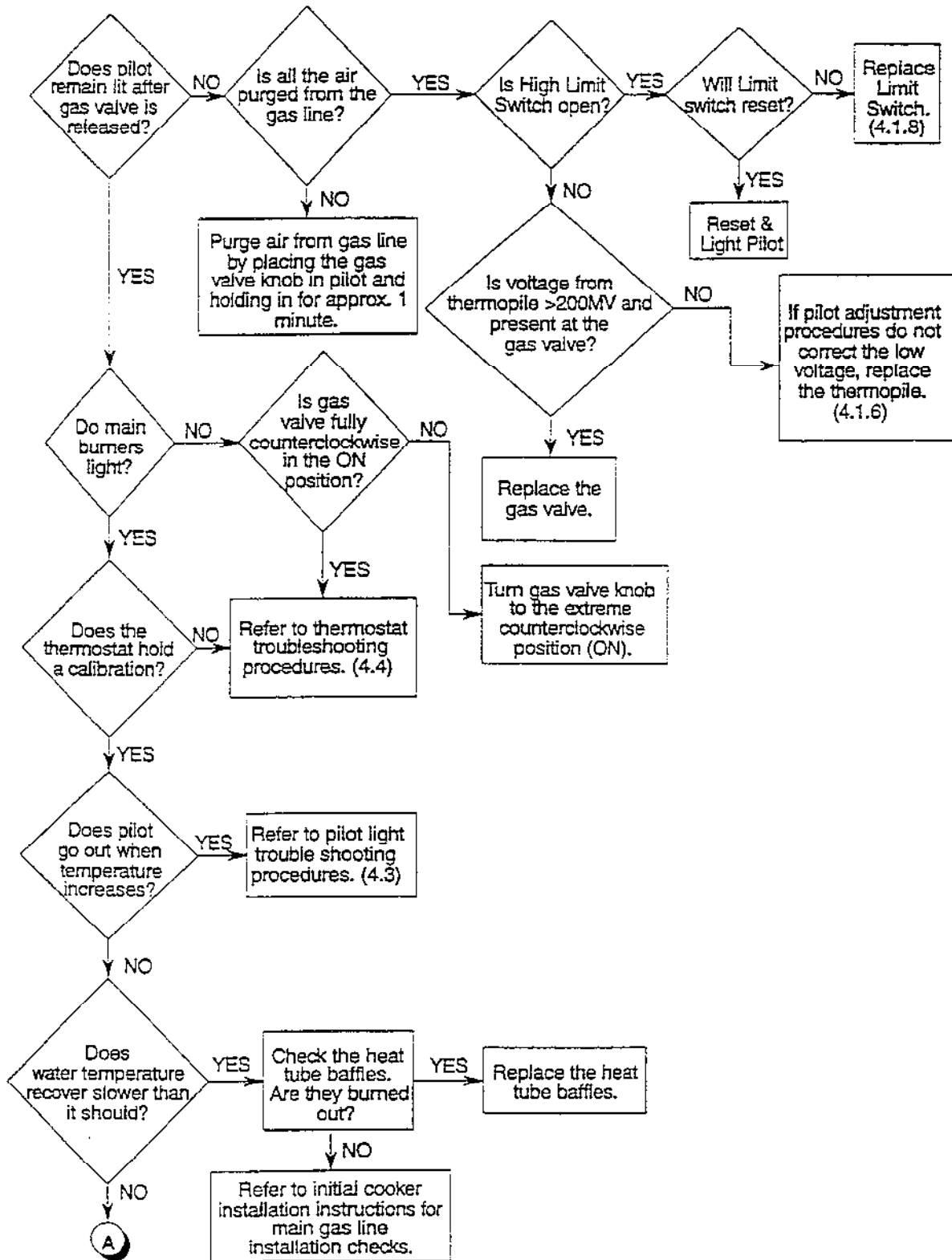
- c. Remove the probe from the clamp and straighten the capillary tubing. Unscrew the small hex nut inside the cabinet at the bottom of the tank for the limit control.
- d. Unscrew the large connector nut from the vat and pull the probe and capillary tubes through the opening.
- e. Remove the two mounting screws from the limit control bracket and remove the limit control unit. Mark and disconnect the wires from the limit control box.
- f. Reverse the above procedures to install the new limit control.
- g. Use pipe joint compound on the large fitting before installing to prevent oil leakage. **DO NOT** use joint compound on the small nut.

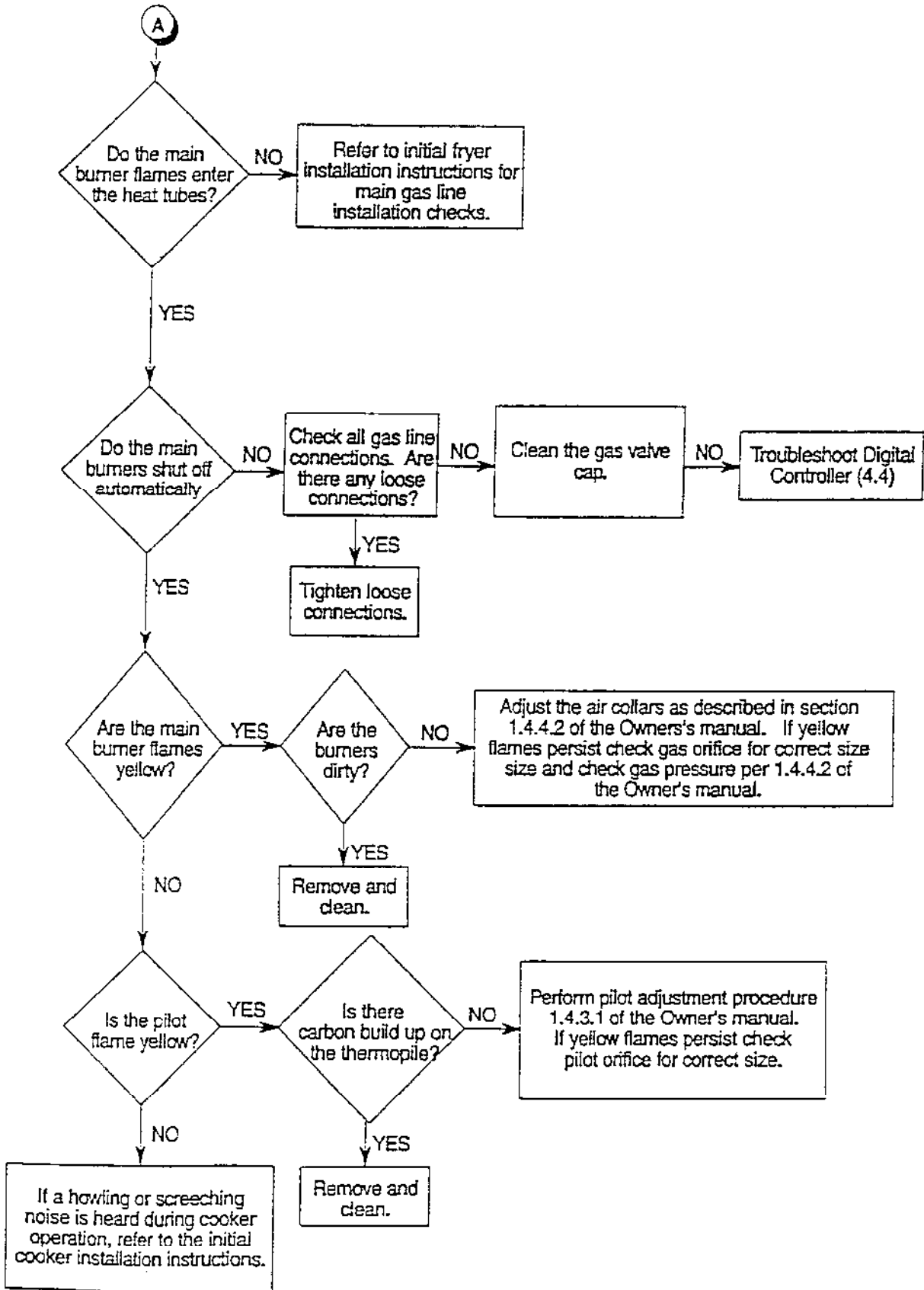
4.1.9 Basket Lift Motor Replacement

- a. Disconnect the cooker from the power source.
- b. Drain the water from the cooking/warming section tank.
- c. Pull the cooker away from the enclosure.
- d. Remove the rear cover.
- e. Remove the nut from the motor shaft.
- f. Remove the screw connecting the linkage bar to the guide assembly.
- g. Remove the inside panel.
- h. Remove the four (4) screws holding the motor to the panel.
- i. Remove/replace the motor.
- j. Install and tighten the four (4) screws holding the motor to the panel.
- k. Replace the inside panel.
- l. Connect the linkage bar to the guide assembly and reinstall screw.
- m. Reinstall the linkage rod on the motor shaft and secure with the nut that was removed.
- n. Replace the rear cover.
- o. Place the cooker back in its position.

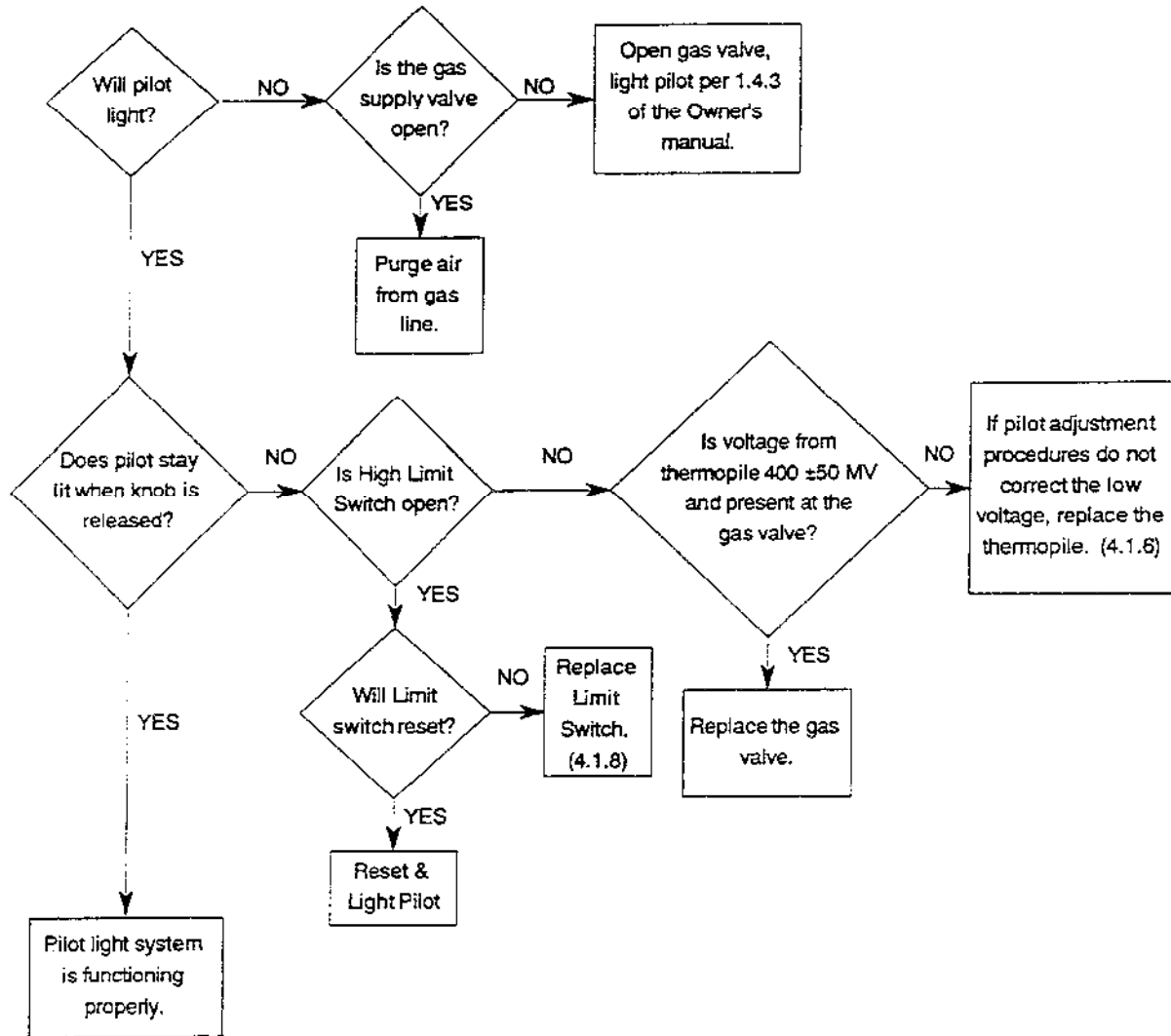
p. Connect the cooker to the power source.

4.2 TROUBLESHOOTING MAIN BURNER SYSTEMS

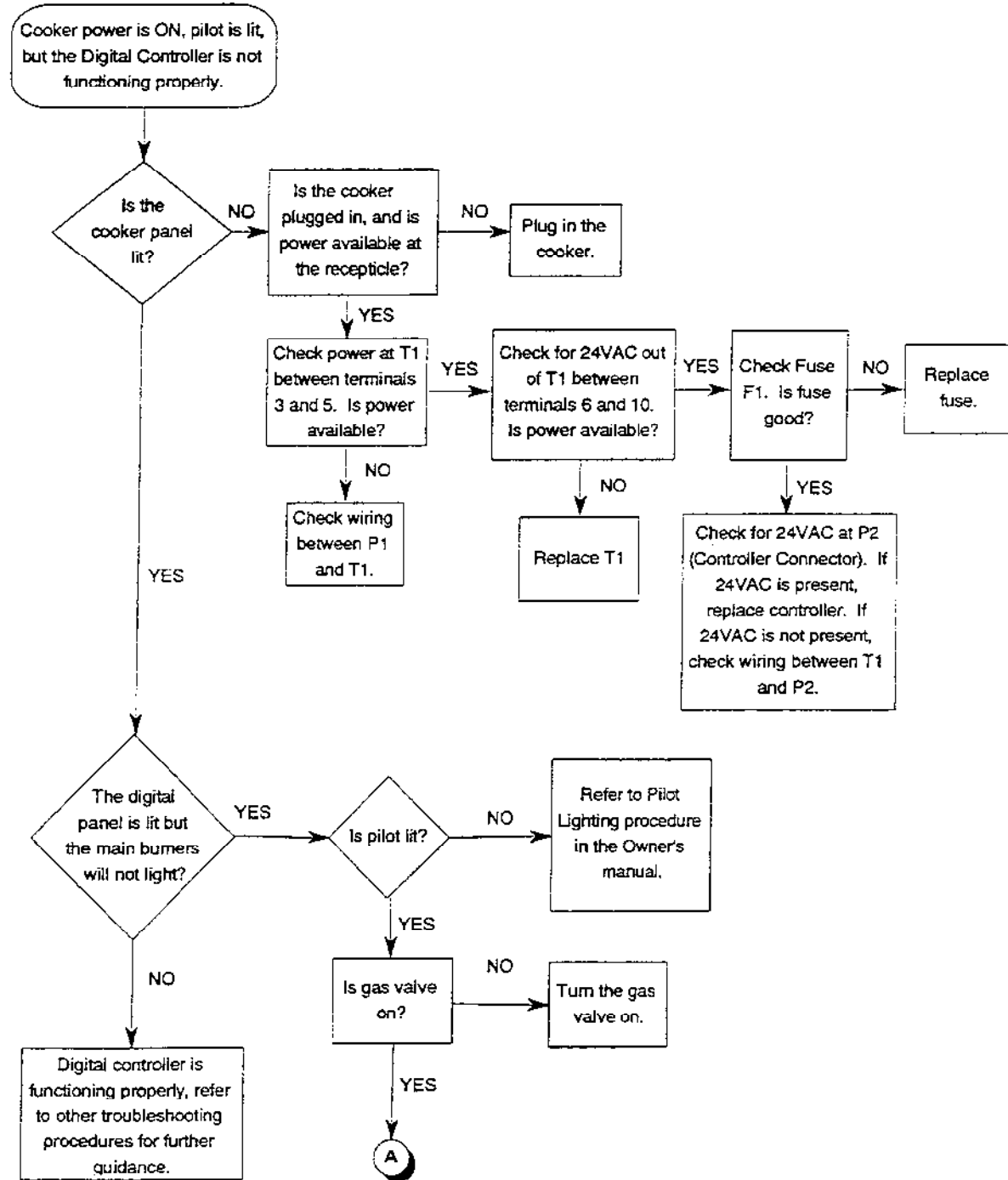


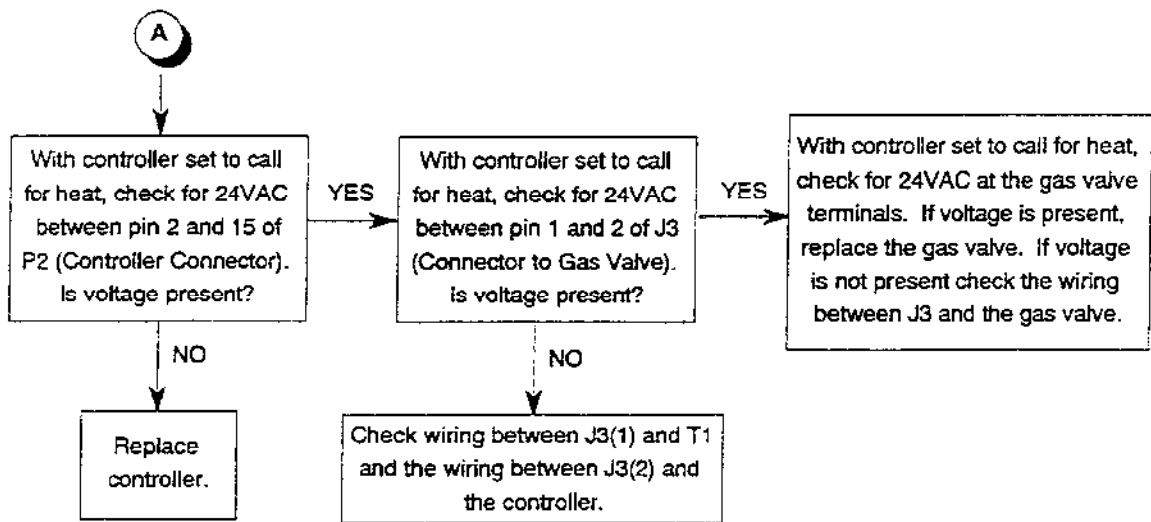


4.3 TROUBLESHOOTING PILOT LIGHTS

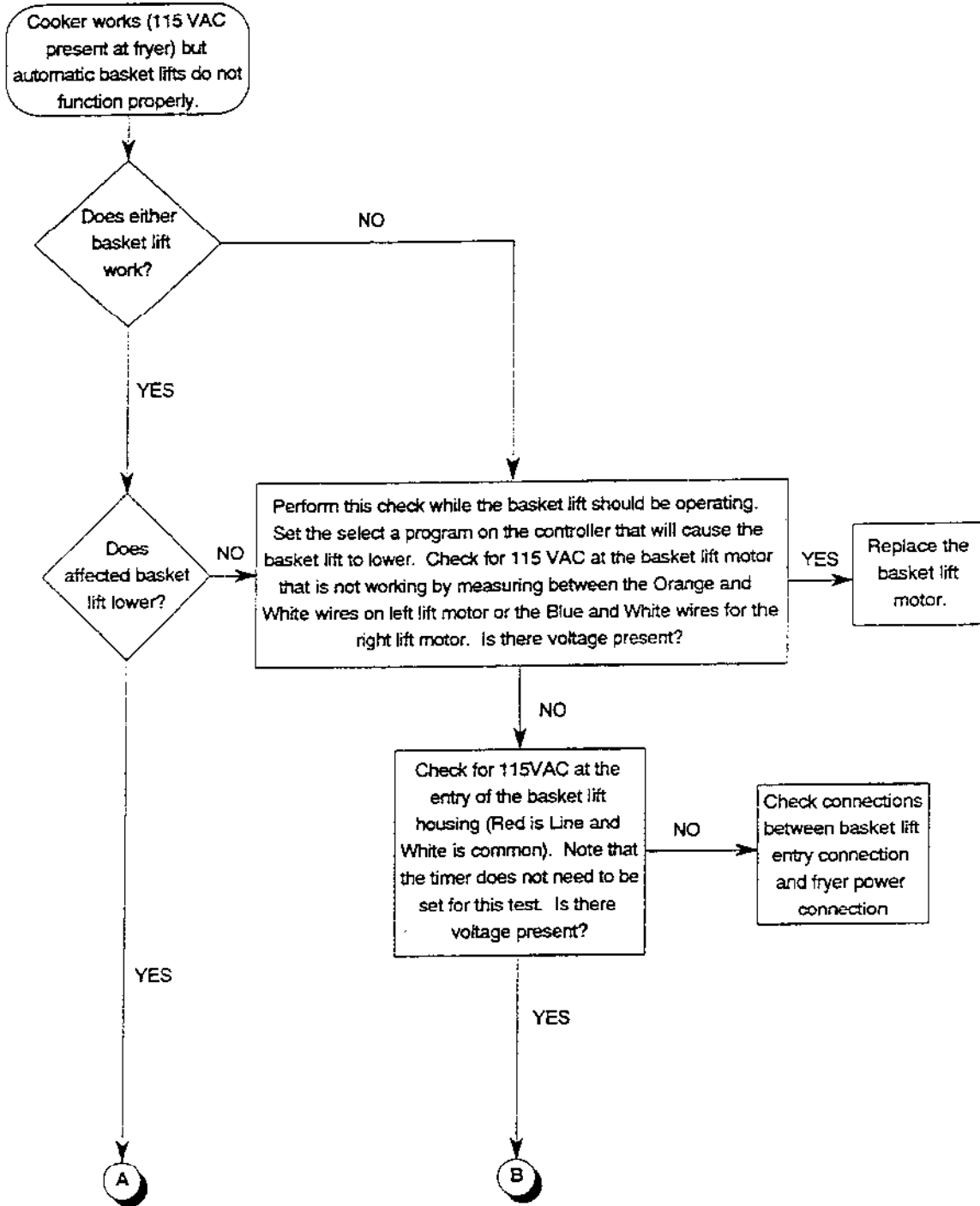


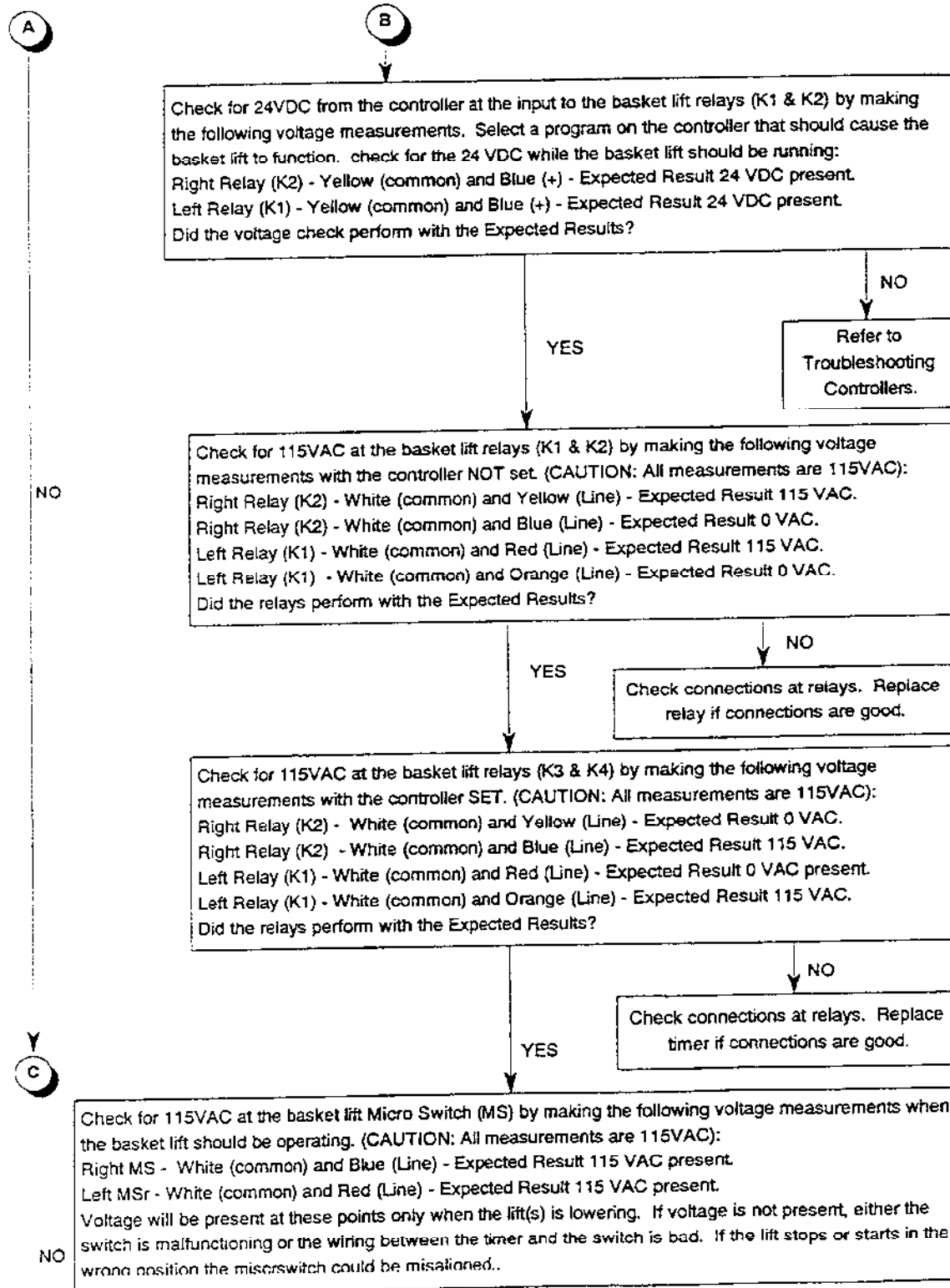
4.4 TROUBLESHOOTING DIGITAL CONTROLLERS

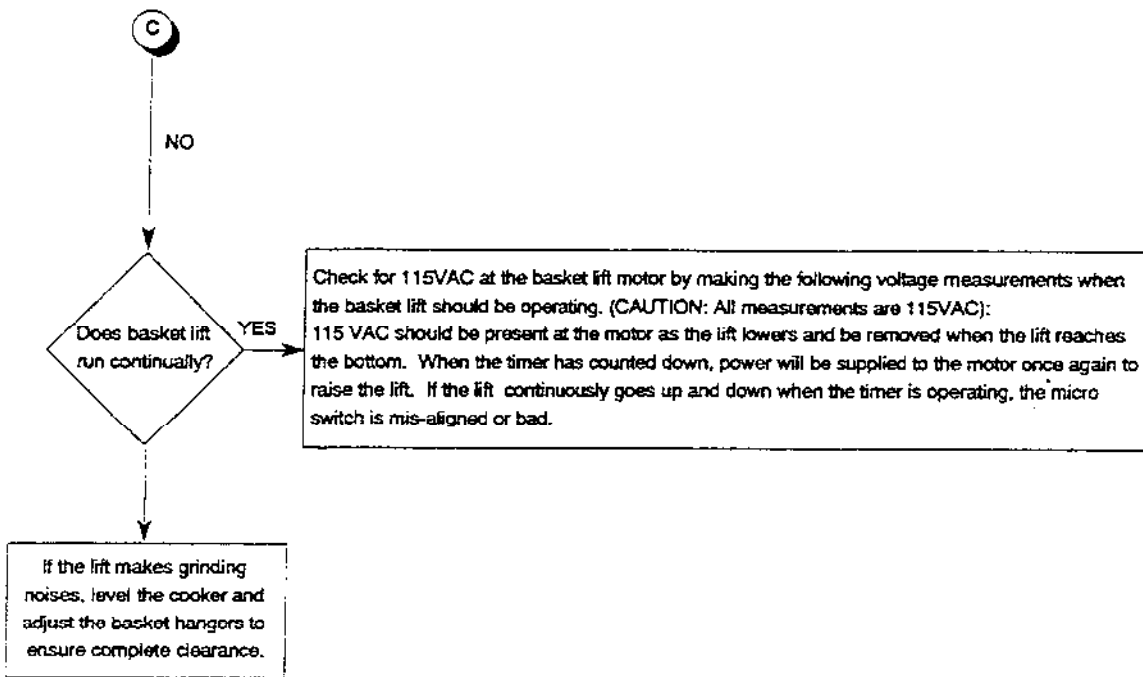




4.5 TROUBLESHOOTING BASKET LIFT PROBLEMS







CHAPTER 5: PARTS

This chapter contains listings of the components used in the Pasta Perfect Cooker models PPG14D, PG14D and RS14D.

At the end of this chapter there are alphabetical and numerical listings of all parts used in the fryer. The alphabetical part list is arranged in alphabetical order according to the part name. Each part name also has the Pitco Frialator part number. The numerical list is in Pitco Frialator part number order. A brief description of each component is provided for each part.

ALPHABETICAL PART LIST

Part Description	Pitco Frialator Part Number
CONNECTOR, JACK-4 SOCKET MOLEX	PP10203
CONNECTOR, JACK-3 SOCKET MOLEX	PP10089
CONNECTOR, JACK-6 SOCKET MOLEX	PP10205
CONNECTOR, PLUG-15 PIN MOLEX	PP10518
CONNECTOR, PLUG-4 PIN MOLEX	PP10202
CONNECTOR, PLUG-3 PIN MOLEX	PP10090
CONNECTOR, PLUG-6 PIN MOLEX	PP10204
CONTROLLER, PASTA EP3300	PP10939
CORD, PLUG MOLDED, 14-3 NEMA 5-15P	PP10439
FUSE, 1 AMP, SLOW BLOW (GLASS)	PP10122
HI-LIMIT SWITCH ASSEMBLY, LIMIT 250°F	PP10803
MOTOR, GEAR, 120V, 60HZ, LH MOLON	PP10929
MOTOR, GEAR, 120V, 60HZ, RH MOLON	PP10928
MOTOR, GEAR, 220/240V, 60HZ, LH MOLON	PP10931
MOTOR, GEAR, 220/240V, 60HZ, RH MOLON	PP10930
PROBE, THERMOSTAT	PP10679
RELAY, 24VDC - SPST	P5046690
SWITCH, ROCKER SPST (1-0)	PP10654
SWITCH, ROCKER SPST (1-1)	PP10093
SWITCH, ROLLER - SPST (BASKETLIFT)	P5047169
SWITCH, THERMOSTAT FENWALL	P5047580
TRANSFORMER, 40VA - 120/208/240 TO 24V	PP10210
VALVE, GAS 1/2 BMSER 24V T-PILE LP GAS	P5045639
VALVE, GAS 1/2 BMSER 24V T-PILE NATURAL GAS	P5045638

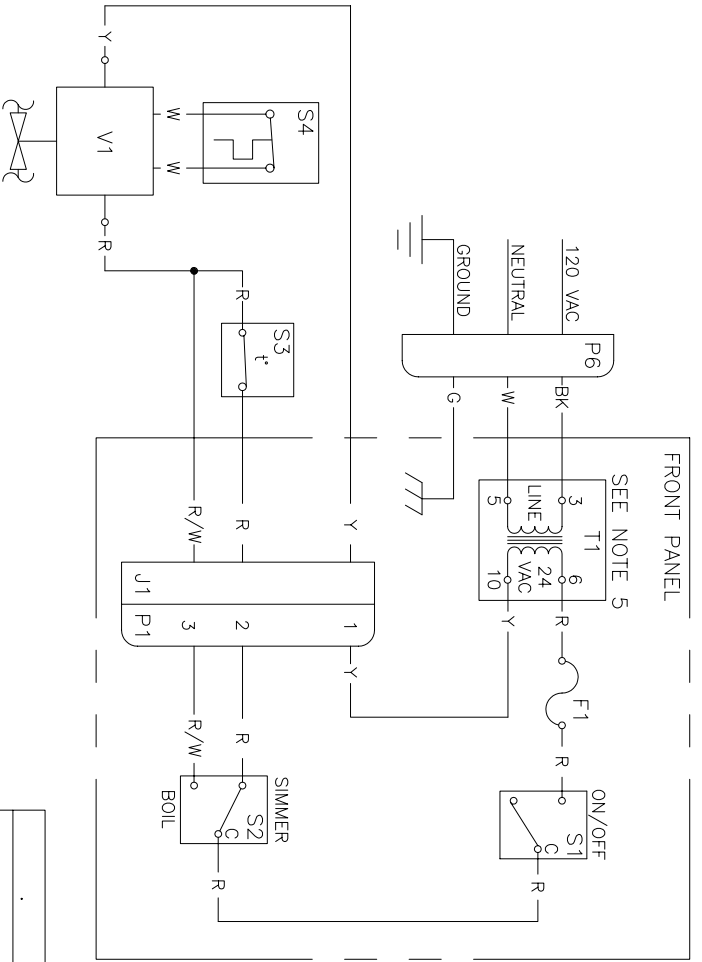
NUMERICAL PART LIST

Pitco Frialator Part Number	Part Description
PP10089	CONNECTOR, JACK-3 SOCKET MOLEX
PP10090	CONNECTOR, PLUG-3 PIN MOLEX
PP10202	CONNECTOR, PLUG-4 PIN MOLEX
PP10203	CONNECTOR, JACK-4 SOCKET MOLEX
PP10204	CONNECTOR, PLUG-6 PIN MOLEX
PP10205	CONNECTOR, JACK-6 SOCKET MOLEX
PP10518	CONNECTOR, PLUG-15 PIN MOLEX
PP10939	CONTROLLER, PASTA EP3300
PP10439	CORD, PLUG MOLDED, 14-3 NEMA 5-15P
PP10122	FUSE, 1 AMP, SLOW BLOW (GLASS)
PP10803	HI-LIMIT SWITCH ASSEMBLY, LIMIT 250°F
PP10929	MOTOR, GEAR, 120V, 60HZ, LH MOLON
PP10928	MOTOR, GEAR, 120V, 60HZ, RH MOLON
PP10931	MOTOR, GEAR, 220/240V, 60HZ, LH MOLON
PP10930	MOTOR, GEAR, 220/240V, 60HZ, RH MOLON
PP10679	PROBE, THERMOSTAT
P5046690	RELAY, 24VDC - SPST
PP10654	SWITCH, ROCKER SPST (1-0)
PP10093	SWITCH, ROCKER SPST (1-1)
P5047169	SWITCH, ROLLER - SPST (BASKETLIFT)
P5047580	SWITCH, THERMOSTAT FENWALL
PP10210	TRANSFORMER, 40VA - 120/208/240 TO 24V
P5045639	VALVE, GAS 1/2 BMSER 24V T-PILE LP GAS
P5045638	VALVE, GAS 1/2 BMSER 24V T-PILE NATURAL GAS

CHAPTER 6: SCHEMATICS

Schematic Description	Schematic Number
SCHEMATIC, PILOT - PASTA MECHANICAL T-STAT	700192
SCHEMATIC, PILOT - PASTA WITH DIGITAL TIMER	700193

- NOTES:
1. AT FUSE F1 USE FUSE HOLDER (P5045794).
 2. CONNECT HI-LIMIT S4 TO VALVE V1 WITH WIRE ASSEMBLY (P5047625)
 3. UNLESS OTHERWISE SPECIFIED ALL WIRES ARE 18 AWG
 4. 220 VAC UNITS ARE WIRED IDENTICALLY TO 240 VAC UNITS
 5. 220, 240 VAC MODELS ONLY: P6 IS OMITTED. T1 IS WIRED TO 10 FT OF 14-3 POWER SUPPLY CORD (PP10615) - BROWN TO T1-1, BLUE TO T1-5, GREEN/YELLOW TO CHASSIS.



NOMENCLATURE	PART NUMBER	DESCRIPTION
V1	P5045638	VLV,GAS 1/2 BMSER 24V T-PILE NAT
	P5045639	VLV, GAS 1/2 BMSER 24V T-PILE LP
T1	PP10210	TRANSFORMER, 40VA-120/208/240 TO 24
S4	PP10803	SW, HIGH TEMPERATURE LIMIT 250°F
S3	P5047580	SW, THERMOSTAT FENWALL
S2	PP10093	SW, ROCKER SPDT (1-1)
S1	PP10654	SW, ROCKER SPST (1-0)
P6	PP10439	CORD, PLUG-MOLD 14-3 NEMA 5-15P
P1	PP10090	CONNECTOR, PLUG-3 PIN MOLEX
J1	PP10089	CONNECTOR, JACK-3 SKT MOLEX
F1	PP10122	FUSE, 1 AMP SLOW BLOW (GLASS)

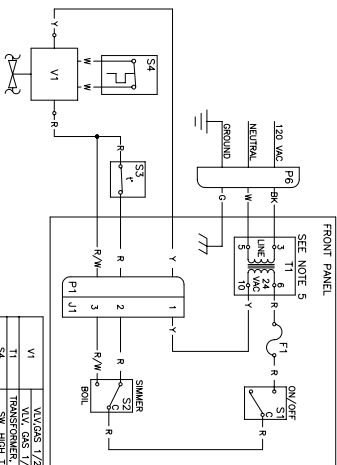
REV	DATE	BY	APPD	DESCRIPTION
B	5/10/95	D.B.	APPD	5/10/95
4413	7/14/95	B. PARKER	DR	5/10/95
1	7/14/95	D.B.	DR	5/10/95
1	7/14/95	D.B.	DR	5/10/95
1	7/14/95	D.B.	DR	5/10/95

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		.XX ± .02	
		.XXX ± .015	
		ANGLES ± .5°	
SEE PARTS LIST			
MATERIAL:			
FINISH:			
PITCO FRILATOR, INC. P.O. BOX 501 CONCORD, NH 03302-0501			
SCHEMATIC, PILOT - PASTA MECHANICAL T-STAT			
PART NO:	N/A	SCALE:	NTS
DWG NO:	700192	SIZE:	B
REV:	2	SH 1 OF 2	B

5.500

4.250

- NOTES:
1. AT FUSE F1 USE FUSE HOLDER.
 2. CONNECT HI-LIMIT S4 TO VALVE V1 WITH WIRE ASSEMBLY.
 3. UNLESS OTHERWISE SPECIFIED ALL WIRES ARE 18 AWG.
 4. 220 VAC UNITS ARE WIRED IDENTICALLY TO 240 VAC UNITS.
 5. 220, 240 VAC MODELS ONLY: PB IS WIRED TO 10 FT OF 14-3 POWER SPLIT/3 COND - BROWN TO T1-1, BLUE TO T1-2, GREEN/YELLOW TO CHASSIS.



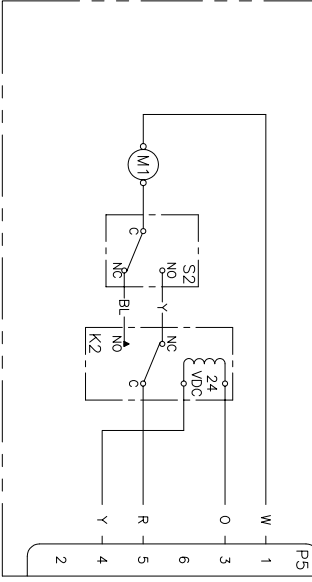
SYMBOL	DESCRIPTION
V1	VALVE 1/2 BUBBER 24V T-BRE MAT
T1	V.V. GAS 1/2 BUBBER 24V T-BRE LP
S4	TRANSFORMER, 40VA-120/208/240 TO 24
S3	SW. HIGH TEMPERATURE LIMIT 250°F
S2	SW. ROCKER SPST (-0)
S1	SW. ROCKER SPST (-0)
PB	COND. PLOT. MOD. 14-3 NEKA 5-19P
L1	CONNECTOR, JACK-3 SMT W/KEY
F1	FUSE, 1 AMP SLOW BLOW (GLASS)

700192-1

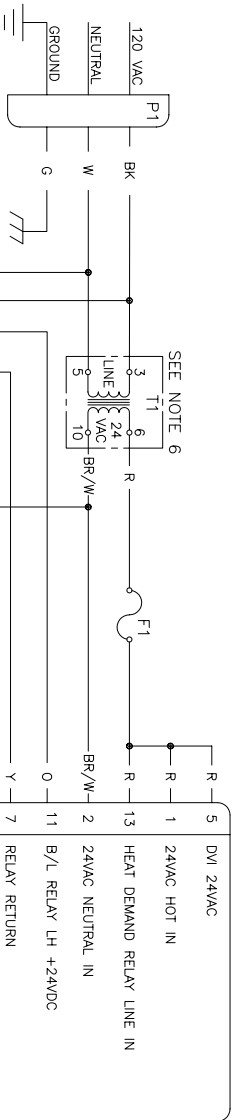
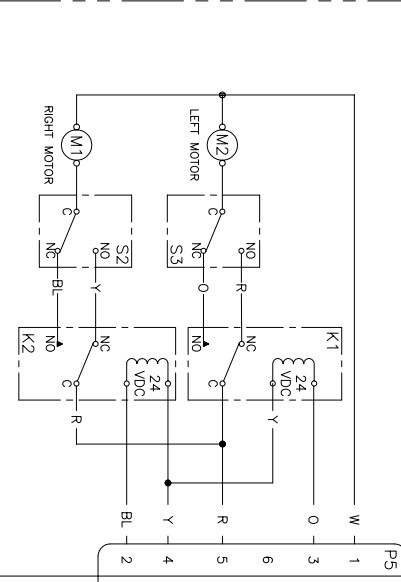
- NOTES:
1. MAT'L: 2 MIL WHITE MYLAR WITH 1 MILL CLEAR CAP.
 2. ALL LETTERING, LINES AND SYMBOLS TO BE BLACK IN COLOR.
 3. LABEL BACK TO HAVE PRESSURE SENSITIVE L-23 ADHESIVE WITH SPLIT LINER.

THE INFORMATION CONTAINED ON THIS DOCUMENT IS THE PROPERTY OF PICO FUSILATOR AND IS NOT TO BE DISSEMINATED TO THIRD PARTIES WITHOUT THE WRITTEN PERMISSION OF PICO FUSILATOR INC. CONCORD, NH 03301 U.S.A.	
PART NO:	700192-1
SCALE:	NTS
DWG NO:	SH 2 OF 2
SIZE:	B
REV:	B

BASKETLIFT HOUSING, SINGLE LIFT OPTION



BASKETLIFT HOUSING, DUAL LIFT OPTION



SEE NOTE 6

NOTES:

1. AT FUSE F1 USE FUSE HOLDER (P5045794).
2. CONNECT HI-LIMIT S1 TO VALVE V1 WITH WIRE ASSEMBLY (P5047625).
3. UNLESS OTHERWISE SPECIFIED ALL WIRES ARE 18 AWG.
4. DESIGNATION OF RIGHT AND LEFT BASKETLIFT MOTOR AS VIEWED FROM FRONT OF FRYER.
5. 220 VAC UNITS ARE WIRED IDENTICALLY TO 240 VAC UNITS.
6. 220, 240 VAC MODELS ONLY: P1 IS OMITTED. T1 IS WIRED TO 10 FT OF 14-3 POWER SUPPLY CORD (PP10615) - BROWN TO T1-1, BLUE TO T1-5, GREEN/YELLOW TO CHASSIS.

V1	P5045638	VLV,GAS 1/2 BMSER 24V T-PILE NAT
	P5045639	VLV, GAS 1/2 BMSER 24V T-PILE LP
T1	PP10210	TRANSFORMER, 40VA-120/208/240 TO 24
S2, S3	PP047169	SW, ROLLER-SPDT (BASKETLIFT)
S1	PP10803	SW, HIGH TEMPERATURE LIMIT 250° F
RT1	PP10679	PROBE, THERMISTOR
P4, P5	PP10204	CONNECTOR, PLUG-6 PIN MOLEX
P3	PP10202	CONNECTOR, PLUG-4 PIN MOLEX
P2	PP10518	CONNECTOR, PLUG-15 PIN MOLEX
P1	PP10439	CORD, PLUG-MOLD 14-3 NEMA 5-15P
M1	PP10928	MOT, GEAR 120V 60HZ RH MOLON
	PP10930	MOT, GEAR 220/240V 60HZ RH MOLON
M2	PP10929	MOT, GEAR 120V 60HZ LH MOLON
	PP10931	MOT, GEAR 220/240V 60HZ LH MOLON
K1, K2	P5046690	RELAY, 24VDC - SPDT
J4, J5	PP10205	CONNECTOR, JACK-6 SKT MOLEX
J3	PP10203	CONNECTOR, JACK-4 SKT MOLEX
F1	PP10122	FUSE, 1 AMP SLOW BLOW (GLASS)
C1	PP10939	CONTROL, PASTA EP3300

NOMENCLATURE		PART NUMBER		DESCRIPTION	
PARTS LIST					
<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:</p> <p>.XX ± .02 XXX ± .015 ANGLES ± .5°</p>					
REV		DWG APPROVAL		DATE	
B		[Signature]		5/5/95	
4413		[Signature]		5/5/95	
7/14/95		D.B.		5/10/95	
DR		D.B.		5/5/95	
CK		D.B.		5/10/95	
APPD		D.B.		5/10/95	
<p>THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF PITCO FRYALATOR, INC. AND MAY NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN PERMISSION OF PITCO FRYALATOR, INC. CONCORD, NH 03302-0501</p>					
<p>PITCO FRYALATOR, INC. P.O. BOX 501 CONCORD, NH 03302-0501</p>					
<p>SCHHEMATIC, PILOT - PASTA WITH DIGITAL TIMER</p>					
PART NO:		SCALE:		NTS	
700193		700193		SH 1 OF 2	
REV		REV		REV	
B		B		B	

In the event of problems with or questions about your order, please contact the Pitco Frialator factory, from 8:00 a.m. - 5:00 p.m., Eastern Standard Time, Monday through Friday, toll-free at:

1/800/258-3708 (USA/Canada)
1/603/225-6684 (World Wide)

In the event of problems with or questions about the equipment, please contact your local ASAP (Authorized Service and Parts) representatives through the ASAP network:

1/800/356-1008 (USA/Canada)
1/603/225-6684 (World Wide)