### ☆ IMPORTANT INFORMATION ☆ KEEP FOR OPERATOR ☆ IMPORTANT INFORMATION ☆

# **OPERATOR MANUAL**



MODEL: NFPC Braising Pan

Stainless Steel Power Tilting Electrically Heated





THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE. READ, UNDERSTAND AND FOLLOW THE INSTRUCTIONS AND WARNINGS CONTAINED IN THIS MANUAL.

### WARNING

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





# **IMPORTANT — READ FIRST — IMPORTANT**

CAUTION:	BE SURE ALL OPERATORS READ, UNDERSTAND AND FOLLOW THE OPERATING INSTRUCTIONS, CAUTIONS, AND SAFETY INSTRUCTIONS CONTAINED IN THIS MANUAL.
WARNING:	THIS UNIT IS INTENDED FOR USE IN THE COMMERCIAL HEATING, COOKING AND HOLDING OF WATER AND FOOD PRODUCTS, PER THE INSTRUCTIONS CONTAINED IN THIS MANUAL. ANY OTHER USE COULD RESULT IN SERIOUS PERSONAL INJURY OR DAMAGE TO THE EQUIPMENT AND WILL VOID WARRANTY.
CAUTION:	ELECTRICALLY GROUND THE PAN AT THE TERMINAL PROVIDED.
WARNING:	THE BRAISING PAN MUST BE INSTALLED BY PERSONNEL WHO ARE QUALIFIED TO WORK WITH ELECTRICITY. IMPROPER INSTALLATION COULD RESULT IN PERSONAL INJURY OR EQUIPMENT DAMAGE.
CAUTION:	STAND AWAY FROM THE HOT WATER WHILE TILTING THE PAN TO EMPTY IT.
WARNING:	DO NOT HEAT AN EMPTY PAN FOR MORE THAN FIVE MINUTES AT A SETTING HIGHER THAN 300° F.
WARNING:	AVOID ANY EXPOSURE TO THE STEAM ESCAPING FROM THE COVER VENT. DIRECT CONTACT COULD RESULT IN SEVERE BURNS
WARNING:	AVOID ALL DIRECT CONTACT WITH HOT EQUIPMENT SURFACES. DIRECT SKIN CONTACT COULD RESULT IN SEVERE BURNS.
WARNING:	AVOID ALL DIRECT CONTACT WITH HOT FOOD OR WATER IN THE BRAISING PAN. DIRECT CONTACT COULD RESULT IN SEVERE BURNS.
WARNING:	IF THE PAN CONTAINS ITEMS IN SAUCE OR MELTED FAT, THEY COULD SLIDE FORWARD SUDDENLY DURING TILTING AND CAUSE THE HOT LIQUID TO SPLASH OUT.
WARNING:	USE OF ANY REPLACEMENT PARTS OTHER THAN THOSE SUPPLIED BY GROEN OR ITS AUTHORIZED DISTRIBUTORS VOIDS ALL WARRANTIES AND MAY CAUSE BODILY INJURY AND/OR EQUIPMENT DAMAGE. SERVICE PERFORMED BY OTHER THAN FACTORY AUTHORIZED PERSONNEL WILL VOID ALL WARRANTIES.
WARNING:	ALWAYS TURN OFF ELECTRIC POWER BEFORE WORKING ON INTERNAL COMPONENTS.
WARNING:	BEFORE ANY CLEANING OPERATION, TURN THE THERMOSTAT TO "OFF" TO CUT OFF POWER TO THE HEATING ELEMENTS. BEFORE CLEANING ANY PART OTHER THAN THE INSIDE OF THE PAN DISCONNECT THE ELECTRICAL SUPPLY AT THE CIRCUIT BREAKER OR FUSE BOX.
WARNING:	BE CAREFUL TO AVOID CONTACT WITH THE CLEANER IN ACCORDANCE WITH SUPPLIER AND MANUFACTURER RECOMMENDATIONS. MANY CLEANERS ARE HARMFUL TO THE SKIN, EYES, MUCOUS MEMBRANES AND CLOTHING. READ THE WARNINGS AND FOLLOW DIRECTIONS ON THE CLEANER LABEL.
CAUTION:	NEVER LEAVE A CHLORINE SANITIZER IN CONTACT WITH STAINLESS STEEL FOR LONGER THAN 30 MINUTES. LONGER CONTACT CAN CAUSE CORROSION.
WARNING:	DO NOT USE ANY FUSE WITH A HIGHER AMP RATING THAN THE RATING SPECIFIED FOR THAT CIRCUIT. $\ensuremath{2}$

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#### References

ECONOMICS LABORATORY, INC. St. Paul, Minnesota 55102

NATIONAL FIRE PROTECTION ASSOCIATION 60 Battery March Park Quincy, Massachusetts 02269

NFPA/70

The National Electrical Code

NATIONAL SANITATION FOUNDATION 3475 Plymouth Rd. Ann Arbor, Michigan 48106

UNDERWRITERS LABORATORIES, INC. 333 Pfingsten Rd. Northbrook, Illinois 60062

ZEP MANUFACTURING 1390 Lunt Avenue Elk Grove Village, Illinois 60007

### **Equipment Description**

The Groen NFPC is a stainless steel, electrically heated Braising Pan which is equipped with integrated heating elements, a power tilting mechanism, electrical controls and a hinged cover. The Braising Pan serves as a braising unit, griddle, fry pan, oven, kettle, *bain-marie*, or food warmer and server. It can also be adapted for use as a non-pressure steamer.

Construction of the pan body employs heavyduty stainless steel welded into a solid piece. It has a polished interior and a semi-deluxe exterior finish. A pouring lip is welded to the top of the front wall. The cooking surface is a stainless steel clad plate fitting with clamped-on electrical heating elements. The elements are positioned to ensure uniform heat transfer over the entire surface. The pan is mounted on an open-leg frame which is fabricated from tubular stainless steel.

An electrically powered mechanism tilts the pan forward. A three position switch on the front of the control console gives the operator positive, smooth-acting control of tilt.

Heating elements and other electrical components are enclosed for safety. The thermostat, heating indicator light, and tilting switch are contained in a compact control console which is mounted to the right of the pan body. The thermostat provides automatic control of cooking temperature. Turning the thermostat dial starts and stops heating and sets the pan temperature. Only one electrical connection is required to install the unit.

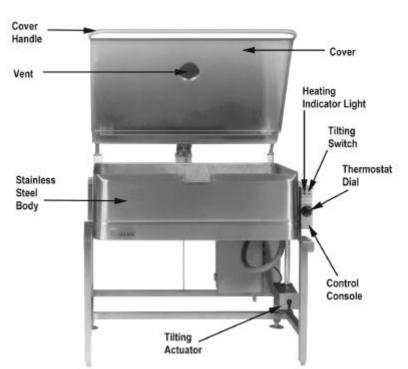
A vented, heavy gauge, one-piece, stainless steel cover with a rear condensate drip shield on the underside is standard on the Braising Pan. A fully enclosed spring-type actuator counter balances the cover to maintain either the opened or closed position. The cover opens to the back. It is hinged to the frame, so it moves independently from the pan body.

The following models and options are available:

Model	Pan Dimensions, Inches				
	Left to Right	Depth	Front to Back		
NFPC-3	31 <b>e</b>	7 or 9	25¼		
NFPC-4	41 <b>e</b>	7 or 9	25¼		

Optional Equipment (Either Model)

- 1. Fill faucet with swing spout and water hose
- 2. Model REJ Steamer Insert
- 3. Casters



### Installation

Internal wiring for the Braising Pan is supplied complete. When you receive it, the unit is ready for connection. A wiring diagram is inside the control box on the right side of the pan, as well as in this manual (Pp 14-21). Your pan was operated and tested at the factory to confirm that all controls and heating elements were functioning correctly.

Installation is as follows:

- 1. Set the unit in place and level it by turning the adjustable feet. Make sure the tilting mechanism has been rotated to its lowest position and check levelness by placing a spirit level on the bottom of the pan. The unit must be level to avoid uneven cooking across the pan.
- 2. At the electrical service entrance in the bottom of the control box, make a waterproof connection with the incoming power line. A BX connection is not recommended.

#### CAUTION ELECTRICALLY GROUND THE PAN AT THE TERMINAL PROVIDED.

 Provide the proper electrical supply as specified on the electrical plate attached to the equipment. Observe local codes and/or the National Electrical Code in accordance with ANSI/NFPA 70 — latest edition.

WARNING THE BRAISING PAN MUST BE INSTALLED BY PERSONNEL WHO ARE QUALIFIED TO WORK WITH ELECTRICITY. IMPROPER INSTALLATION COULD RESULT IN PERSONAL INJURY OR EQUIPMENT DAMAGE.

4. Any mechanical or electrical change must be approved by the Groen Food Service Engineering Department.

ELECTRICAL DATA*				
Voltago	Phase	Power and Current Draw		
Voltage		NFPC-3	NFPC-4	
208	1	11.4 KW - 54.8 AMP	14.25 KW - 68.5 AMP	
208	3	11.4 KW - 31.6 AMP	14.25 KW - 39.6 AMP	
240	1	12 KW - 50 AMP	15 KW - 62.5 AMP	
240	3	12 KW - 28.9 AMP	15 KW - 36.1 AMP	
380	3	12 KW - 18.2 AMP	15 KW - 22.8 AMP	
480	1	12 KW - 25 AMP	15 KW - 31.25 AMP	
480	3	12 KW - 14.5 AMP	15 KW - 18 AMP	
Power tile motor draws 6 AMP at 120 Volts, Single Phase				

\*All data at 60 Hz.

# **Initial Start-Up**

Now that the Braising Pan has been installed, you should test it to ensure that it is operating correctly.

- 1. Remove all literature and packing materials from the interior and exterior of the unit.
- 2. Turn on the electrical power to the unit.
- 3. Put enough water into the pan to cover its bottom to a depth of ¼" to ½". With the tilt mechanism still cranked all the way back to the horizontal position, note how the water covers the pan bottom. This is a good method to confirm that the unit is properly leveled.

- 4. Set the thermostat to 235° F. The heating indicator light should come on to indicate that the pan is heating. Heating should continue until the water boils.
- 5. To shut the unit down, turn the thermostat dial to "OFF."

#### CAUTION STAND AWAY FROM THE HOT WATER WHILE TILTING THE PAN TO EMPTY IT.

6. Position a container for the pour-off and press down on the power tilt switch so that the water pours out. This will confirm that the pan body can be tilted from horizontal to vertical.

# Operation

Operator Controls on the Braising Pan are the thermostat dial and power tilt switch on the console to the right of the pan body. The dial turns electric power for the pan on or off, and sets the pan's operating temperature. The power tilt switch is used to raise or lower the pan body. Press the switch **down to raise** the pan or **up to lower** it.

#### A. Start-up Procedure

- Set the thermostat dial to the desired temperature between 100 and 400° F. The glowing Heat Indicator Light shows that the pan is heating. When the light cycles on and off, it indicates that the pan is being held at the set temperature. Once in each of these cycles you may hear the contactors in the control box make a clicking sound.
- For best results when braising or frying, preheat the pan before putting in any food.
  For an even temperature across the pan, reheat at a setting of **300° F or less** for 15 minutes, or through several on/off cycles of the thermostat.

#### WARNING

DO NOT HEAT AN EMPTY PAN FOR MORE THAN FIVE MINUTES AT SETTINGS ABOVE 300°F. DAMAGE TO THE PAN COULD RESULT.

#### B. Cooking

- To simmer or slowly heat an item, set the dial at about 210° F or lower. Put the cover down to keep moisture loss at a minimum, or leave it up to help dry the product. Set the thermostat higher to cook or drive moisture off faster. The thermostat may be adjusted to any setting in its range to cook exactly as you wish.
- 2. Leave the cover vent open to allow excess steam to escape. For longer simmering, you may wish to close the vent.



WARNING AVOID ANY EXPOSURE TO THE STEAM ESCAPING FROM THE COVER VENT. DIRECT CONTACT COULD RESULT IN SEVERE BURNS

3. To check cooking progress when the cover has been closed, grasp the plastic handle of vent cover and lift it slightly while moving it quickly to either side. Standing at one side of the pan to avoid the steam that will be released, grasp the nearest corner of the cover handle and raise the cover. The cover will stay in the open position until you put it down.

4. To pour or dump product, remove grease, or assist cleaning, first raise the cover, then tilt the pan up and forward by pushing down on the power tilt switch. Whenever you release the tilt switch the pan body will hold its position.



#### WARNING

AVOID ALL DIRECT CONTACT WITH HOT EQUIPMENT SURFACES. DIRECT SKIN CONTACT COULD RESULT IN SEVERE BURNS.

AVOID ALL DIRECT CONTACT WITH HOT FOOD OR WATER IN THE BRAISING PAN. DIRECT CONTACT COULD RESULT IN SEVERE BURNS.

IF THE PAN CONTAINS ITEMS IN SAUCE OR MELTED FAT, THEY COULD SLIDE FORWARD SUDDENLY DURING TILTING AND CAUSE THE HOT LIQUID TO SPLASH OUT.

- 5. To return the pan to the horizontal position, pull the switch up.
- 6. If the power tilt mechanism stops working (See the Trouble Shooting Section) and you must raise or lower the pan body without delay, you can tilt the body manually. Fit the provided hand crank onto the slotted shaft end that protrudes from the actuator motor (the end facing the front of the unit). Turn the crank clockwise to lower the pan or counterclockwise to raise the pan.
- 7. Manual cranking will take several minutes, but the operation can be speeded up by using a reversible electric drill with a screwdriver bit in place of the hand crank.

#### C, Routine Clean Up

After each use, turn the thermostat to "OFF" and clean all food contact surfaces to ensure proper sanitation. At the end of the day, or at least once every 24 hours, turn off the heat and shut off electric power to the unit and clean both the interior and exterior of the pan. See Page 9 for more detailed cleaning instructions.



The pan body may also be tilted manually using a hand crank on the slotted shaft of the actuator motor.

### **Sequence of Operation**

The following "action-reaction" outline is provided to help you understand how the braising pan actually functions.

When you start up the pan by turning the thermostat from "OFF" to a desired temperature, the thermostat switch closes. This causes the contactors to close, and allows power to flow to the heating elements and the indicator light.

When the pan temperature reaches the value set on the thermostat dial, the thermostat switch opens and causes the contactors to open. This stops the flow of power to the heating elements and the indicator light.

As soon as the thermostat senses that the pan is cooling below the set temperature, the thermostat closes, the contactors close, and the heaters and indicator light come on again.

This on and off cycle continues, maintaining the pan at the set temperature. This is why the indicator light on and off cycling is seen during normal operation.

If the pan temperature exceeds 425° F for any reason, a high-limit thermostat shuts off the power until the pan cools. At that point, the thermostat automatically resets to permit normal operation to start again.

Turning the thermostat to "OFF" shuts down all control and heating circuits.

The thermostat controls heating by alternating between feeding full power and completely cutting power off. The pan heats as fast as it can until it reaches the set temperature, no matter what that temperature is. Turning the thermostat to a higher setting will cause heating to continue *longer*, until the pan reaches a higher temperature, but it cannot make the pan heat any *faster*.

The power tilt switch controls a reversible motor that drives a ball screw mechanism. When the switch is held in the lowered position, the mechanism raises the pan body. The body rests on a trunnion near the front corners, so it tilts forward until the switch is released or the body reaches its vertical limit.

If the tilting motor gets too hot during operation, an overheat protection switch will open and stop the motor. When the motor has cooled sufficiently, the switch will automatically reset and permit tilting to begin again.

### Cleaning

#### 1. Suggested Tools

- a. Cleaner, such as Klenzade HC-10
- b. Brushes in good condition
- c. Cloth for cleaning controls
- d. Chlorine sanitizer such as Klenzade XY-12
- e. Heavy Duty Cleaner, such as Klenzade LC-30

#### 2. Procedure



WARNING BEFORE ANY CLEANING OPERATION, TURN THERMOSTAT DIAL TO "OFF" TO CUT ANY POWER TO THE HEATING ELEMENTS. BEFORE CLEANING ANY PART OTHER THAN THE INSIDE OF THE PAN, DISCONNECT ELECTRICAL SUPPLY AT CIRCUIT BREAKER OR FUSE BOX.

a. Clean all food-contact surfaces soon after use. It is best to clean the pan before it has completely cooled. If the unit is in continuous use, completely clean and sanitize both the inside and outside at least once every 12 hours.

#### CAUTION

KEEP WATER AND SOLUTIONS OUT OF CONTROLS AND ELECTRICAL EQUIPMENT. DO NOT SPRAY OR HOSE THE CONTROL BOX OR OTHER ELECTRICAL CONNECTIONS. THEY ARE NOT WATER-PROOF.

b. To remove any large amount of food left in the pan, tilt the pan all the way up and flush it with lukewarm water. Do not damage the surface of the pan by scraping it with a metal tool.



Use a sponge, cloth or plastic brush to clean the pan.



Scrapers or steel wool can harm the pan surface.



CAUTION MOST CLEANERS ARE HARMFUL TO THE SKIN, EYES, MUCOUS MEMBRANES, AND CLOTHING. PRECAUTIONS SHOULD BE TAKEN. WEAR RUBBER GLOVES, GOGGLES OR FACE SHIELD AND PROTECTIVE CLOTHING. READ THE WARNINGS AND CAREFULLY FOLLOW THE DIRECTIONS ON THE CLEANER LABEL.

- Following the supplier's directions, make up a warm solution of the cleaner.
  Carefully wash the inside and outside of the pan body with the cleaning solution.
- d. Use a cloth moistened with cleaning solution to clean controls, the control console, and electric conduit.
- e. Rinse the pan very well with lukewarm water, and drain it completely.
- f. As part of the daily cleaning program, clean all inside and outside surfaces that may have been soiled. Remember to

- check such parts as the undersides of the cover, the electrical console and other more remote spots. Clean between the pan body and the control console using the brush provided (P/N 058705).
- g. To remove materials stuck to the equipment, use a brush, sponge, cloth, plastic or rubber scraper, or plastic wool with the cleaning solution. To make washing easier, let the cleaning solution sit in the unit and soak into the residue, or heat the solution briefly. Do **not** use any gritty cleaner or metal tool that might scratch the surface. Scratches make the surface harder to clean, and also provide places for bacteria to grow. Do **not** use steel wool. Small bit of steel wool left in the surface of the unit can cause rusting and pitting.
- h. The outside of the unit may be polished with a recognized stainless steel cleaner such as Zepper from the Zep Manufacturing Company.
- i. When the equipment needs to be sanitized, use a sanitizing solution equivalent to one that supplies 100 parts per million available chlorine. Get advice about the best sanitizing agent from you supplier of sanitizing products. Following supplier instructions, apply the sanitizing agent after the unit has been cleaned and drained. Thoroughly drain off the sanitizer.

#### CAUTION

NEER LEAVE A CHLORINE SANITIZER IN CONTACT WITH STAINLESS STEEL SURFACES FOR LONGER THAN 30 MINUTES. LONGER CONTACT CAN CAUSE CORROSION.

- j. After the unit has been cleaned, sanitized and drained, let all surfaces air dry unless the unit must be used again right away.
- k. It is recommended that the unit be sanitized just before use. Follow the directions of the sanitizer supplier.
- About once a week (more often if the water is very hard), use a heavy duty cleaner to remove any mineral deposits or film left by hard water or foods. Follow the supplier's directions very carefully, and rinse the unit off thoroughly as soon as cleaning is finished.
- m. If especially difficult cleaning problems persist, contact your cleaning product supplier for help. The supplier has a trained technical staff with laboratory facilities to serve you.

### Maintenance

WARNING USE OF REPLACEMENT PARTS OTHER THAN THOSE SUPPLIED BY GROEN OR THEIR AUTHORIZED DISTRIBUTORS CAN CAUSE INJURY TO THE OPERATOR AND DAMAGE TO THE EQUIPMENT AND WILL VOID ALL WARRANTIES. SERVICE PERFORMED BY OTHER THAN FACTORY-AUTHORIZED PERSONNEL WILL VOID ALL WARRANTIES.

Your Braising Pan is designed to require minimum maintenance, but certain parts may require replacement after prolonged use. After installation, no user adjustment should be necessary. If a service need arises, only authorized personnel should perform the work.

Service personnel should check the unit at least once a year. This should include inspecting electrical wires and connections and cleaning inside of the control console. A Maintenance and Service Log is provided at the rear of this manual. Each time work is performed, enter the date on which it was done, what was done, and who did it.



WARNING ELECTRICAL POWER MUST BE SHUT OFF BEFORE WORK IS DONE ON INTERNAL COMPONENTS.

# Troubleshooting

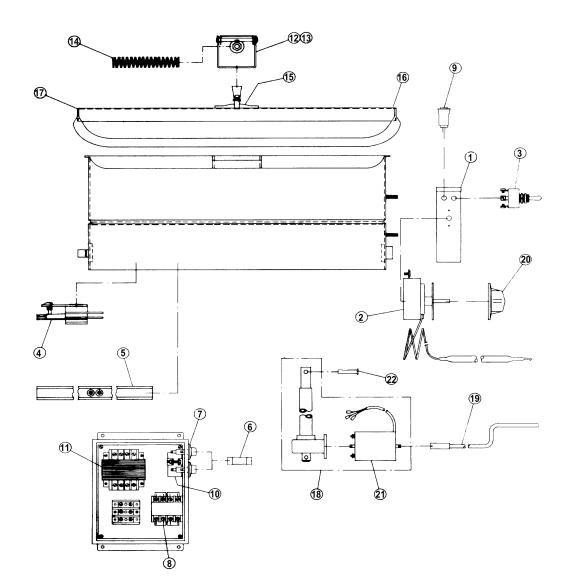
Your Groen Braising Pan will operate smoothly and efficiently if properly maintained. However, the following is a list of checks to make in the event of a problem. If the actions suggested do not solve the problem, call your qualified Groen Service Representative. For the phone number of the nearest agency, call your area Groen representative or the Groen Parts and Service Department. If an item on the list is followed by  $\mathbf{Y}$ , the work should only be performed by a qualified service representative.

#### WARNING

#### USE OF ANY REPLACEMENT PARTS OTHER THAN THOSE SUPPLIED BY GROEN OR THEIR AUTHORIZED DISTRIBUTORS CAN CAUSE INJURY TO THE OPERATOR AND DAMAGE TO THE EQUIPMENT AND WILL VOID ALL WARRANTIES.

# SERVICE PERFORMED BY OTHER THAN FACTORY-AUTHORIZED PERSONNEL WILL VOID ALL WARRANTIES.

SYMPTOM	WHO	WHAT TO CHECK xindicates items which must be performed by an authorized technician.	
Pan will not heat, but indicator light comes on.	Auth Service Rep Only	a. Heating elements for short circuit.x	
Pan will not heat, and indicator light will not light	User	a. b.	That power supply is on. Fuses, accessible by removing caps on the side of the control box.
	Auth Service Rep Only	c. d. e.	For loose or broken wire.x Thermostat functioning, by listening for a click when the switch opens or closes.x Contactor functioning.x
Pan continues to heat	User	a.	Thermostat dial setting
after it reaches desired temperature	Auth Service Rep Only	b. c. d.	Thermostat functioning, by listening for a click when the switch opens or closes.x Thermostat calibration.x Contactor, to determine if it is de-energized.x
Pan does not reach	User	a.	Thermostat dial setting.
desired temperature.	Auth Service Rep Only	b. c. d. e.	Heating elements for ground short or open (burned out) element.x Thermostat functioning, by listening for a click when the switch opens or closes.x Thermostat calibration.x Contactor functioning.x
Rapid clicking noise	User	a.	For low voltage.
(chattering)	Auth Service Rep Only	b.	Contactor for dirt or corrosion on the contacts.x
Uneven cooking due to "hot spots."	User	a. That the pan body is level	
Uneven cooking due to "cold spots."	Auth Service Rep Only	a. For open (burned out) heating element.x	
Pan will not tilt	User	a. b.	That electrical power supply is on. For overheated actuator motor. Wait 15 minutes or less for motor to cool, then operate the power tilt. (For instructions on manual operation see Page 7.
	Auth Service Rep Only	C.	For burned out capacitor or motor.x



Key	Description	Part No.	Key	Description	Part No.
1	Control Box	050377	13	Actuator Cover Model 51 9"pan	014085
2	Thermostat	002180	14	Spring	012533
3	Switch, Toggle	002664	15	Cover Assembly, Vent	017494
4	Thermostat, High Limit	012840	16	Hinge Bracket	013485
5	Heater, Strip*	—	17	Bracket	004556
6	Fuse, 6 Amp	003982	18	Actuator	045880
7	Fuse Holder	004326	19	Crank, Manual, Actuator	050242
8	Contactor (Units after 1/1/85)	006950	20	Thermostat Knob	003908
	Contactor (Units pre-1/1/85)*	—	21	Actuator Motor	054716
9	Indicator Light	002986	22	Support Pin	056909
10	Capacitor	050384	—	Optional Spray Unit	003283
11	Transformer	051469	—	Adapter	003284
12	Actuator Cover Model 51 7"pan	014052		*See Electrical Parts Chart	
		10			

ELECTRICAL PARTS CHART (All data for 60 Hz)						
Мо	Model		ater	Contactor — See footnote		
		Quantity	Part No.	Quantity	Part No.	
NFPC-3	208V, 1PH	12	012842	1	006950	
NFPC-3	208V, 3PH	12	012842	1	013432*	
NFPC-3	240V, 1PH	12	012843	1	006950	
NFPC-3	240V, 3PH	12	012843	1	013432*	
NFPC-3	380V, 3PH	12	012843	1	013432*	
NFPC-3	480V, 1PH	12	012908	1	013432*	
NFPC-3	480V, 3PH	12	012908	1	013433*	
NFPC-4	208V, 1PH	15	012842	1	006950	
NFPC-4	208V, 3PH	15	012842	1	013432*	
NFPC-4	240V, 1PH	15	012843	1	006950	
NFPC-4	240V, 3PH	15	012843	1	013432*	
NFPC-4	380V, 3PH	15	012843	1	013432*	
NFPC-4	480V, 1PH	15	012908	1	013432*	
NFPC-4	480V, 3PH	15	012908	1	013433*	

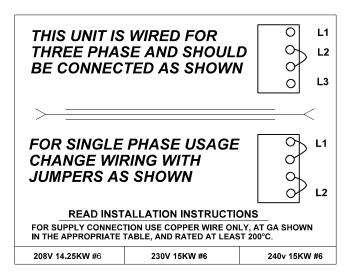
\*Before Jan 1, 1985. All units built after that date used Part No. 006950

#### **Wiring Diagrams**

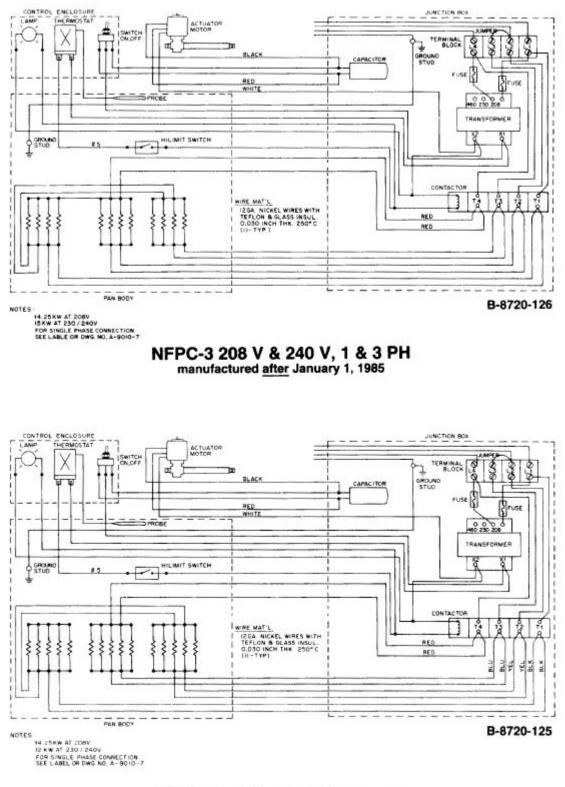
For certain models of NFPC, all units manufactured after January 1, 1985, have been wired for three phase power supply. The models affected are:

Size 3, 208 Volts Size 3, 240 Volts Size 4, 208 Volts Size 4, 240 Volts

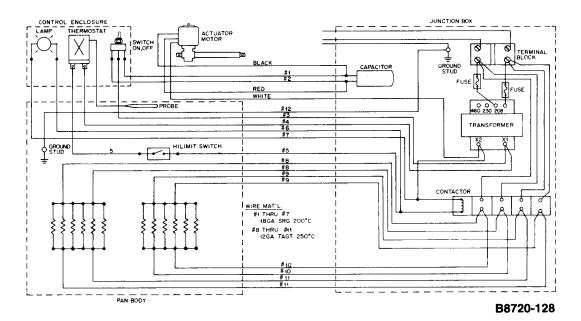
If one of these Braising Pans will be used with single phase supply, it must be field converted as shown below:



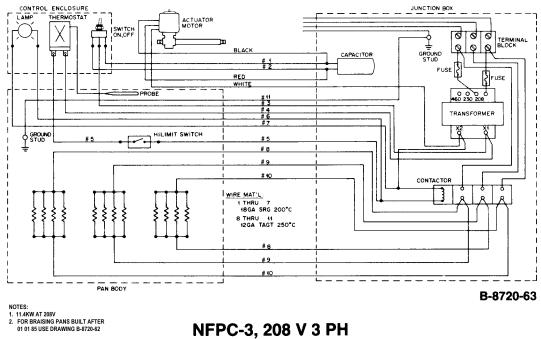
Phase Conversions for NFPC Sizes 3 and 4, 208 and 240 Volts manufactured <u>after</u> January 1, 1985.





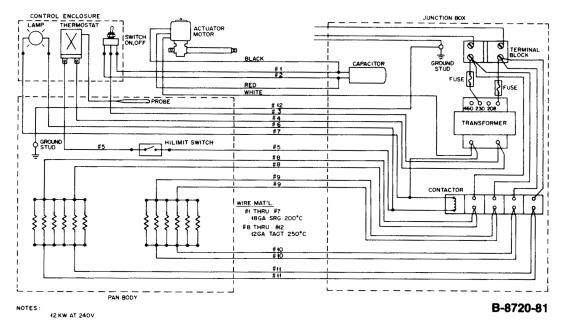


NFPC-3, 208 V 1 PH manufactured before January 1, 1985

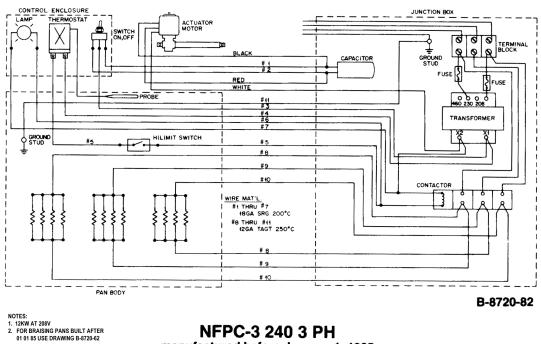


NFPC-3, 208 V 3 PH manufactured before January 1, 1985

### **Wiring Diagrams**

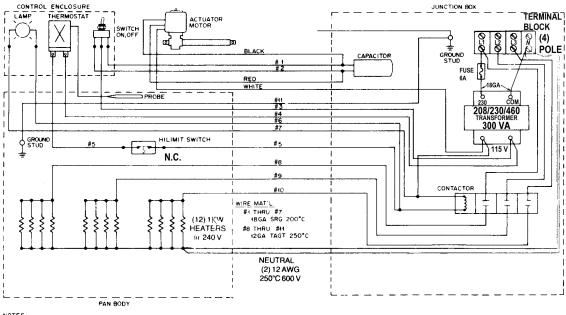


NFPC-3 240 V 1 PH manufactured before January 1, 1985



NFPC-3 240 3 PH manufactured before January 1, 1985

### **Wiring Diagrams**

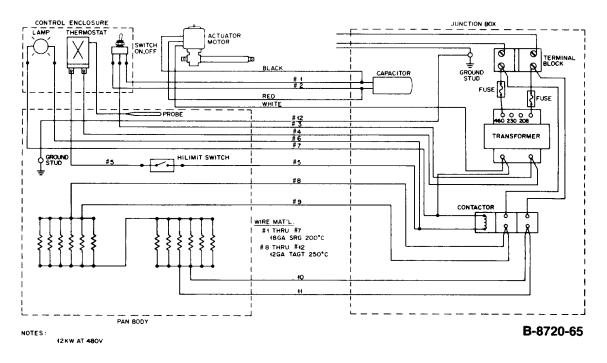


NOTES

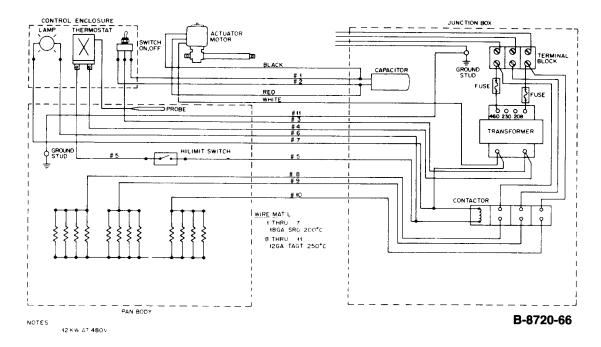
B-8720-64

12 KW AT 415 V 16.7 AMP / LINE 10 KW AT 380 V 15.3 AMP / LINE

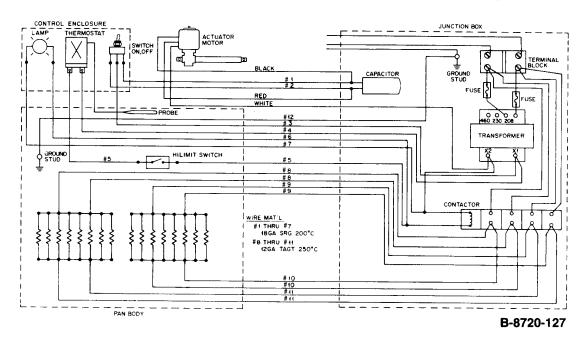




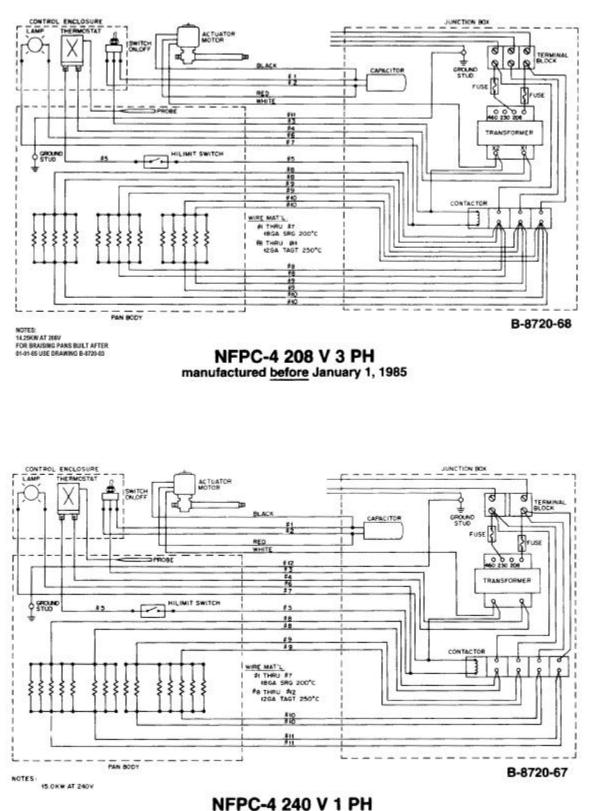
NFPC-3, 480 V 1 PH



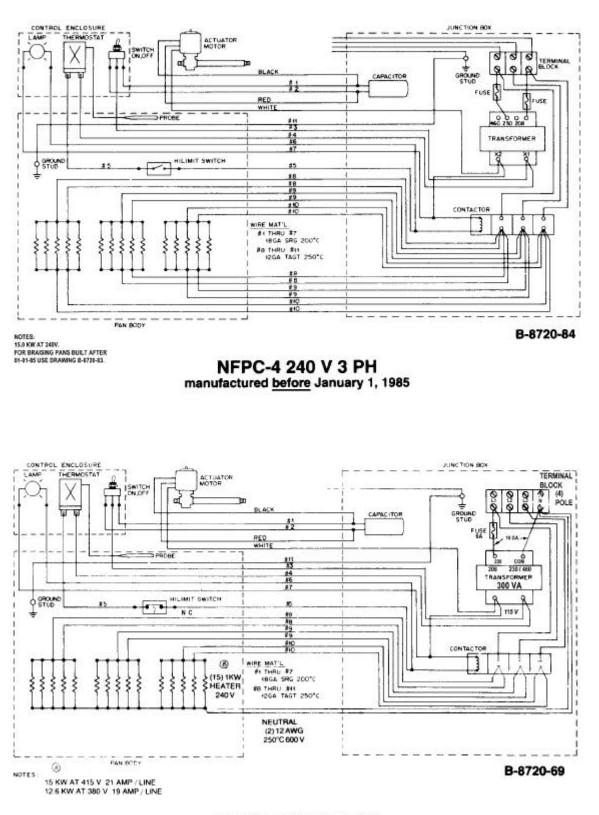




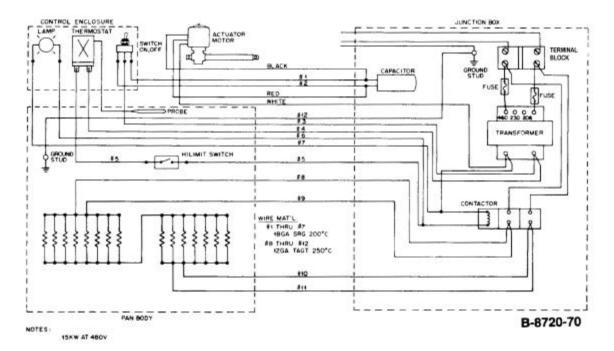
NFPC-4 208 V 1 PH manufactured <u>before</u> January 1, 1985



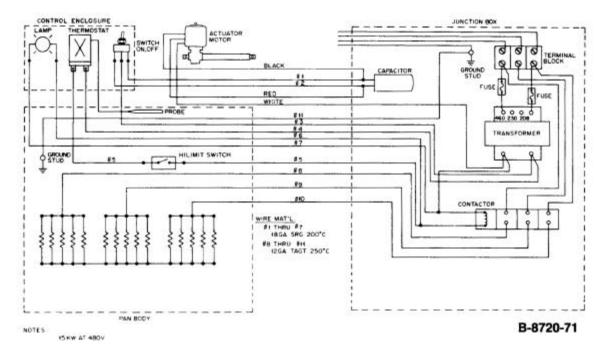
manufactured before January 1, 1985



NFPC-4 380 V 3 PH







NFPC-4 480 V 3 PH

# Service Log

Model No.	Purchased From
Serial No.	Location
Date Purchased	Date Installed
Purchase Order No.	For Service Call

Date	Maintenance Performed	Performed by

Limited Warranty To Commercial Purchasers \*

(Domestic U.S., Hawaii & Canadian Sales Only)

Groen Foodservice Equipment ("Groen Equipment") has been skillfully manufactured, carefully inspected and packaged to meet rigid standards of excellence. Groen warrants its Equipment to be free from defects in material and workmanship for (12) twelve months with the following conditions and subject to the following limitations.

- I. This parts and labor warranty is limited to Groen Equipment sold to the original commercial purchaser/users (but not original equipment manufacturers), at its original place of installation in the continental United States, Hawaii and Canada.
- II. Damage during shipment is to be reported to the carrier, is not covered under this warranty, and is the sole responsibility of purchaser/user.
- III. Groen, or an authorized service representative, will repair or replace, at Groen's sole election, any Groen Equipment, including but not limited to, draw-off valves, safety valves, gas and electric components, found to be defective during the warranty period. As to warranty service in the territory described above, Groen will absorb labor and portal to portal transportation costs (time & mileage) for the first twelve (12) months from date of installation or fifteen (15) months from date of shipment from Groen.
- IV. This warranty does not cover boiler maintenance, calibration, periodic adjustments as specified in operating instructions or manuals, and consumable parts such as scraper blades, gaskets, packing, etc., or labor costs incurred for removal of adjacent equipment or objects to gain access to Groen Equipment. This warranty does not cover defects caused by improper installation, abuse, careless operation, or improper maintenance of equipment. This warranty does not cover damage caused by poor water quality or improper boiler maintenance.
- V. THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EACH OF WHICH IS HEREBY EXPRESSLY DISCLAIMED. THE REMEDIES DESCRIBED ABOVE ARE EXCLUSIVE AND IN NO EVENT SHALL GROEN BE LIABLE FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OR DELAY IN PERFORMANCE OF THIS WARRANTY.
- VI. Groen Equipment is for commercial use only. If sold as a component of another (O.E.M.) manufacturer's equipment, or if used as a consumer product, such Equipment is sold AS IS and without any warranty.

\* (Covers All Foodservice Equipment Ordered After October 1, 1995)

A DOVER INDUSTRIES COMPANY



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OM-NFPC (Revised 3/98) Part Number 121009