



OPERATOR MANUAL

IMPORTANT INFORMATION, KEEP FOR OPERATOR

888-994-7636, fax 888-864-7636
unifiedbrands.net

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

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.

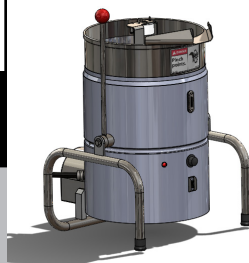
NOTIFY CARRIER OF DAMAGE AT ONCE It is the responsibility of the consignee to inspect the container upon receipt of same and to determine the possibility of any damage, including concealed damage. Groen suggests that if you are suspicious of damage to make a notation on the delivery receipt. It will be the responsibility of the consignee to file a claim with the carrier. We recommend that you do so at once.

Manufacture Service/Questions 888-994-7636.

This manual provides information for:

JACKETED FUDGE KETTLE

MODELS GFK-20-110V, GFK-20-220V



- Self Contained
- Tilting
- Table Top Mounted
- Tilt Lock Option (left hand only)
- Electrically Heated
- Power Agitator

REFERENCES

SPARTAN CHEMICAL COMPANY INC.
1110 Spartan Dr.
Maumee, OH 43537
419/531-5551

NFPA/70 The National Electrical Code

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

NSF INTERNATIONAL
798 N. Dixboro Rd.
P.O. Box 130140
Ann Arbor, Michigan 48113-0140

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

ZEP MANUFACTURING CO.
1310-T Seaboard Industrial Blvd.
Atlanta, Georgia 30318

EQUIPMENT DESCRIPTION

The Groen GFK-20 cooker/mixer consists of a water-jacketed kettle with a motor-driven mixer. The 20 quart tilting kettle is equipped with electronically controlled electric heaters for the jacket.

The kettle of models GFK-20-110V and GFK-20-220V is constructed of stainless steel welded into one piece. The body has a reinforced rim and a butterfly-shaped pouring lip. It is fitted with an integral water jacket. The kettle exterior has a bright semi-deluxe finish. The kettle's pouring height allows filling pans up to 4 inches high on a table top.

The kettle's internal electric heaters provide uniform heat in three stages, with jacket temperature control over the range of 140°F to 180°F (60°C to 80°C).

In addition to the three-stage adjustable thermostat for operating control, the unit has a high limit thermostat, as a safety feature, plus an indicator lamp and water gauge glass, which is used to monitor kettle operation.

The Agitator fits over the agitator post inside the kettle. Mixing is controlled with a power switch. The switch doubles as a circuit breaker for motor protection. The agitator continuously sweeps the side and bottom of the kettle.

Electric power for the kettle and mixer is supplied through a plug-in power cord, which is furnished with the unit.

GFK-20-110V: 6' - 12 AWG cord and 20 amp, 3-wire straight blade plug

GFK-20-220V: 6' - 12 AWG cord and 15 amp, NEMA L6-15 plug

Standard unit operation requires connection to a single phase, 110/115 VAC, 60 Hz, 20A separate, dedicated branch circuit for the 110VAC model and a single phase, 220VAC 50Hz 15A separate, dedicated branch circuit for the 220VAC model.

Capacity	20 quarts	18.8 liters
Diameter	14 inches	36 cm
Depth	11 inches	28 cm
Space Required Side to Side	19 inches	48 cm
Space Required Vertical	29 inches	74 cm
Space Required Front to Back	28 inches	71 cm
Back Tilt Clearance	6 inches	16 cm



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IMPORTANT - READ FIRST - IMPORTANT

- CAUTION:** BE SURE OPERATORS READ, UNDERSTAND AND FOLLOW THE OPERATING INSTRUCTIONS, CAUTIONS, AND SAFETY INSTRUCTIONS 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 EQUIPMENT AND WILL VOID WARRANTY.
- WARNING:** KETTLE MUST BE INSTALLED BY PERSONNEL QUALIFIED TO WORK WITH ELECTRICITY. IMPROPER INSTALLATION CAN RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.
- 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 KETTLE. DIRECT CONTACT COULD RESULT IN SEVERE BURNS.
- CAUTION:** DO NOT OVER FILL THE KETTLE WHEN COOKING, HOLDING OR CLEANING. KEEP LIQUIDS A MINIMUM OF 4-5" (10-15 CM) BELOW THE KETTLE BODY RIM TO ALLOW CLEARANCE FOR STIRRING, BOILING AND SAFE PRODUCT TRANSFER.
- WARNING:** TAKE SPECIAL CARE TO AVOID CONTACT WITH HOT KETTLE BODY OR HOT PRODUCT WHEN ADDING INGREDIENTS, STIRRING OR TRANSFERRING PRODUCT TO ANOTHER CONTAINER.
- WARNING:** WHEN TILTING KETTLE FOR PRODUCT TRANSFER: 1) WEAR PROTECTIVE OVEN MITT AND PROTECTIVE APRON. 2) USE CONTAINER DEEP ENOUGH TO CONTAIN AND MINIMIZE SPLASHING. 3) PLACE CONTAINER ON STABLE, FLAT SURFACE, AS CLOSE TO KETTLE AS POSSIBLE. 4) DO NOT STAND IN POUR PATH OF HOT CONTENTS. 5) POUR SLOWLY, MAINTAIN CONTROL OF KETTLE BODY HANDLE AT ALL TIMES, AND RETURN KETTLE BODY TO

UPRIGHT POSITION AFTER CONTAINER IS FILLED OR TRANSFER IS COMPLETE. 6) DO NOT OVER FILL CONTAINER. AVOID DIRECT SKIN CONTACT WITH HOT CONTAINER AND ITS CONTENTS.

- CAUTION:** KEEP FLOORS IN FRONT OF KETTLE WORK AREA CLEAN AND DRY. IF SPILLS OCCUR, CLEAN IMMEDIATELY, TO AVOID SLIPS OR FALLS.
- WARNING:** TO AVOID INJURY, READ AND FOLLOW ALL PRECAUTIONS STATED ON THE LABEL OF THE WATER TREATMENT COMPOUND.
- WARNING:** BEFORE REPLACING ANY PARTS, DISCONNECT THE UNIT FROM THE ELECTRIC POWER SUPPLY.
- WARNING:** KEEP WATER AND SOLUTIONS OUT OF CONTROLS AND ELECTRICAL EQUIPMENT. NEVER SPRAY OR HOSE THE SUPPORT HOUSING OR ELECTRICAL CONNECTIONS. NEVER USE A HIGH PRESSURE HOSE TO CLEAN KETTLE SURFACES.
- 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. CAREFULLY READ THE WARNINGS AND FOLLOW THE DIRECTIONS ON THE LABEL OF THE CLEANER TO BE USED.
- CAUTION:** USE OF ANY REPLACEMENT PARTS OTHER THAN THOSE SUPPLIED BY AUTHORIZED DISTRIBUTORS CAN CAUSE OPERATOR INJURY AND DAMAGE TO THE EQUIPMENT, AND WILL VOID ALL WARRANTIES.
- IMPORTANT:** SERVICE PERFORMED BY OTHER THAN FACTORY AUTHORIZED PERSONNEL WILL VOID WARRANTIES.
- WARNING:** DO NOT HEAT AN EMPTY KETTLE. EXCESSIVE STEAM PRESSURE COULD DEVELOP.

INSPECTION & UNPACKING

- CAUTION:** SHIPPING STRAPS ARE UNDER TENSION AND CAN SNAP BACK WHEN CUT. TAKE CARE TO AVOID PERSONAL INJURY OR DAMAGE TO THE UNIT BY STAPLES LEFT IN THE WALLS OF THE CARTON.
- CAUTION:** THIS UNIT IS VERY HEAVY. INSTALLER SHOULD OBTAIN HELP AS NEEDED TO LIFT THIS WEIGHT SAFELY

The unit will arrive in a heavy shipping carton and will be bolted and/or banded to a skid. Immediately upon receipt, inspect the carton carefully for exterior damage.

Carefully cut any polyester straps around the carton and detach the sides of the box from the skid. Pull the carton up off the unit. Thoroughly inspect the unit for concealed damage. Report any shipping damage or incorrect shipments to the delivery agent.

Write down the model number, serial number, and installation date, and retain this information for future reference. Space for these entries is provided at the top of the Service Log at the back of this manual. Keep this manual on file and available for operators to use.

When installation is to begin, carefully cut any straps which holds the unit on the skid. Lift the unit straight up off the skid. Examine packing materials to be sure loose parts are not discarded with the materials.

INSTALLATION

- WARNING:** INSTALLATION OF THE KETTLE MUST BE DONE BY A CERTIFIED ELECTRICIAN OR AUTHORIZED REPRESENTATIVE QUALIFIED TO WORK WITH ELECTRICITY. IMPROPER INSTALLATION CAN RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.
- CAUTION:** ELECTRICALLY GROUND THE UNIT AT THE TERMINAL PROVIDED. FAILURE TO GROUND THE UNIT COULD RESULT IN ELECTROCUTION AND DEATH. DO NOT FORCE THE PLUG OR ALTER IT TO OVERRIDE GROUNDING FEATURES.



The Groen cooker/mixer is provided with complete internal wiring. It is ready for immediate connection. The completed unit was operated at the factory to check the controls, mixer and jacket heater.

Any mechanical or electrical changes must be approved by Groen's Food Service Engineering Department.

- Set the kettle in place and level it.
- Provide electrical power as specified on the electrical information plate attached to the equipment. Observe local codes and/or The National Electrical Code in accordance with ANSI/NFPA 70 - (current edition).
- Confirm that the jacket water level is at the middle of the sight glass. If the level is low, use the following procedure for adding water:
 - If you are replacing water lost by evaporation, use distilled water. To replace treated water that ran out of the jacket, prepare more treated water as described in Water Treatment, Page 10.
 - Remove the plug from the elbow.
 - Add water or treated water through the elbow, until the water level rises to the middle of the sight glass. Note that added water must raise the level in the whole jacket, so a substantial amount of water will be needed to make a small change in the level.
 - Replace the plug in the elbow. Follow instructions under "Jacket Filling and Water Treatment" in the "Maintenance" section of this manual.

ELECTRICAL SPECIFICATIONS		
Frequency	60 Hz	50 Hz
Voltage	110/115VAC	220VAC
Power, KW	1.9	1.9
Draw, AMP	16.5	8.3
Power, HP	1/4	1/4
Full-load current, AMP	1.6	0.9
Start Capacity	40	40
Service Power suggested	20 AMP, 1 PH	15 AMP, 1 PH

OPERATION

CAUTION: DO NOT OPERATE THE KETTLE WHEN THE WATER LEVEL IN THE JACKET IS LOW. YOU MAY BURN OUT THE HEATING ELEMENTS.

The operator controls the cooker/mixer with the:

CONTROLS

1. Temperature control dial. The dial turns electric power for the heaters on or off and sets the operating temperature of the kettle, with a maximum jacket temperature of 180°F. (Maximum temperature of a product heated by the kettle is less than 180°, due to heat loss out the top of the kettle.)
2. Mixer power switch, a switch that turns electric power for the motor drive on and off.

TO OPERATE THE KETTLE (HEATING)

1. Every day make sure that the jacket water level is at the middle of the sight glass. If the level is low, see "Jacket Filling" in the "Maintenance & Cleaning" section of this manual.
2. Plug in the power cord. If necessary, turn on the power at the circuit breaker or fuse box.
3. Turn the temperature control dial to the desired setting. The red indicator light indicates that the kettle is heating. Cycling of the light on and off indicates that the kettle is being held at the set temperature. Once in each cycle the temperature controller will make a clicking sound as it cycles on and off. This is normal.
4. To shut down the kettle, turn the temperature control dial to "OFF."
5. For prolonged shut-down or before cleaning the outside of the unit, unplug the unit.

TO OPERATE THE MIXER

1. Place the agitator on the shaft.
2. Press the power switch to the "ON" position.
3. To shut down the mixer, press the power switch to "OFF."
4. For prolonged shut-down or when the outside of the unit is to be cleaned, unplug the unit.

CLEANING

WARNING: KEEP WATER AND SOLUTIONS OUT OF CONTROLS AND ELECTRICAL EQUIPMENT. DO NOT USE A HIGH PRESSURE HOSE TO CLEAN THE CONTROL CONSOLE, ELECTRICAL CONNECTIONS, ETC.

WARNING: AVOID ANY DIRECT CONTACT WITH HOT SURFACES. DIRECT SKIN CONTACT COULD RESULT IN BURNS.

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

NOTICE: NEVER LEAVE A CHLORINE SANITIZER IN CONTACT WITH STAINLESS STEEL SURFACES LONGER THAN 30 MINUTES. LONGER CONTACT CAN CAUSE STAINING AND CORROSION.



Use a brush, sponge, cloth, plastic or rubber scraper, or plastic wool to clean. Don't use metal implements or steel wool when cleaning.

SUGGESTED CLEANING SUPPLIES

1. Cleaner, such as Peroxy Protein, from Spartan Chemical
2. Kettle brushes in good condition
3. Sanitizer, such as Sani-T-10 Plus, from Spartan Chemical
4. Film remover such as Klenzade LC-30

PRECAUTIONS

Before cleaning, shut off the kettle by turning the thermostat dial to "OFF" and unplug the unit or shut off its electric power at a remote switch, such as the circuit breaker.

PROCEDURE

1. Clean food contact surfaces as soon as possible after use, preferably while the kettle is still warm. If the unit is in continuous use, clean and sanitize inside and outside at least once every 12 hours.
2. Scrape and flush out food residues. Be careful not to scratch the kettle with metal implements.
3. Prepare a solution of the detergent/cleaning compound as instructed by the supplier. Clean the unit thoroughly. A cloth moistened with cleaning solution can be used to clean controls and electrical conduits.
4. Rinse the agitator parts and the inside of the kettle thoroughly with hot water to remove every trace of detergent. Drain them completely and allow them to AIR dry or wipe them dry. (The agitator may be cleaned in a dishwasher.)
5. As part of the daily cleaning program, clean soiled external and internal surfaces. Remember to check the sides and back of the unit.
6. To remove stuck materials, use a brush, sponge, cloth, plastic or rubber scraper, or plastic wool with the cleaning solution. To reduce effort required in washing, let the detergent solution sit in the kettle and soak into the residue. Do NOT use abrasive materials or metal tools that might scratch the surface. Scratches make the surface harder to clean and provide places for bacteria to grow. Do NOT use steel wool, which may leave particles in the surface and cause eventual corrosion and pitting.
7. The outside of the unit may be polished with a stainless steel cleaner such as "Zepper" from Zep Manufacturing Co.
8. When equipment needs to be sanitized, use a solution equivalent to one that supplies 200 parts per million available chlorine. Obtain advice on sanitizing agents from your supplier of sanitizing products. Following the supplier's instructions, apply the agent after the unit has been cleaned and drained. Rinse off the sanitizer thoroughly.
9. It is recommended that the equipment be sanitized just before use.
10. If there is difficulty removing mineral deposits or a film left by hard water or food residues, clean the kettle thoroughly and use a deliming agent, like Groen Delimer/Descaler (Part Number 114800) or Lime-Away® from Ecolab, in accordance with the manufacturer's directions. Rinse and drain the unit before further use.
11. If cleaning problems persist, contact your cleaning product representative for assistance. The supplier has a trained technical staff with laboratory facilities to serve you.

ELECTRICAL

Probe Resistance	500 Ohms \pm one percent in a stirred ice bath	
No-Load Running Current	110/115 Volts	1.8 Amperes
	220 Volts	1.0 Amperes
Full-Load Running Current	110/115 Volts	2.5 Amperes
	220 Volts	1.3 Amperes
Motor Speed	60 Hz	1500 RPM at full load
	50 Hz	1250 RPM at full load
Agitator Speed (No-Load)	60 Hz	50 RPM
	50 Hz	50 RPM
Motor Start/Circuit Breaker Trip Current	110/115 Volts	1.75 Amperes
	220 Volts	1.35 Amperes
Over-Temperature Switch Opening Temp	195°F \pm 6°F	
Heater Power 110/115 Volts & 220 Volts	1850 Watts	

MAINTENANCE

WARNING: SHUT OFF THE ELECTRIC POWER TO THE UNIT BEFORE YOU OPEN THE BOTTOM COVER.

WARNING: TO AVOID INJURY, READ AND FOLLOW ALL PRECAUTIONS STATED ON THE LABEL OF THE WATER TREATMENT COMPOUND.

WARNING: BEFORE REPLACING ANY PARTS, DISCONNECT THE UNIT FROM THE ELECTRIC POWER SUPPLY.



NOTICE: Contact an authorized representative when repairs are required.

PERIODIC MAINTENANCE

A Maintenance & Service Log is provided at the back of this manual. Each time there is maintenance performed on your Groen kettle, enter the date the work was done, what was done, and who did it. Keep this manual on file and available for operators to use. Periodic inspection will minimize equipment down time and increase the efficiency of operation. The following points should be checked often:

1. The jacket water level should be at the middle of the gauge glass when the kettle is at room temperature. If the level is low, see "Jacket Filling".
2. The inside of all housings should be kept clean and dry.
3. Electrical wiring should be kept securely connected and in good condition.
4. The fill plug on the elbow at the back of the kettle should have vent holes in it. These holes must be kept free of debris for proper venting. Plugging the holes could cause pressure to build!

JACKET FILLING AND WATER TREATMENT

The jacket must be kept filled with the proper amount of treated water. From time to time, you will need to restore the jacket water to the proper level, because its water slowly evaporates. You may also need to replace treated water, if the jacket is drained for any reason. The procedure for adding water follows:

1. If you are replacing water lost by evaporation, use distilled water. If you are replacing treated water that ran out of the jacket, prepare more treated water as directed below.
2. Remove the plug from the elbow on the back of the kettle body. Note the venting holes in the image above.
3. Add water or treated water through the elbow, until the water level rises to the middle of the sight glass. Since the water you are adding must raise the level in the whole jacket, a substantial amount of water is needed to make a small change in the level.
4. Replace the plug in the elbow.

WATER TREATMENT PROCEDURE

Obtain water treatment compound and a pH test kit from your supplier, or directly from your Groen Parts Distributor.

1. Place exactly one gallon of water in the mixing container. Distilled water is recommended.
2. Hang a strip of pH test paper on the rim of the container. Allow about one inch of the strip below the surface of the water.
3. Measure the water treatment compound you will be using. (One way to do this is to add the compound to the water from a measuring cup.)
4. Stir the water continuously, while you slowly add water treatment compound, until the water reaches a pH between 10.5 and 11.5. Judge the pH by frequently comparing the color of the test strip with the color chart provided in the pH test kit. Color blind people mixing the treated water solution must use an electroanalytical instrument to measure pH or have a person who is not color blind check the test strip color level.
5. Record the exact amounts of water and treatment compound used. These amounts may be used again, if the same sources of water and compound are used to refill the jacket in the future. However, it is advisable to check the pH every time treated water is prepared.

COMPONENT REPLACEMENT

Internal wiring is marked as shown on the circuit schematic drawings. Be sure that new components are wired in the same manner as those being replaced.

REPLACEMENT PARTS

To order parts, contact your Authorized Service Agent. Supply the model designation, serial number, part description, part number, quantity, and when applicable, voltage and phase.

CONTACT US

If you have questions pertaining to the content in this manual, contact Groen at 888-994-7636.

TROUBLESHOOTING

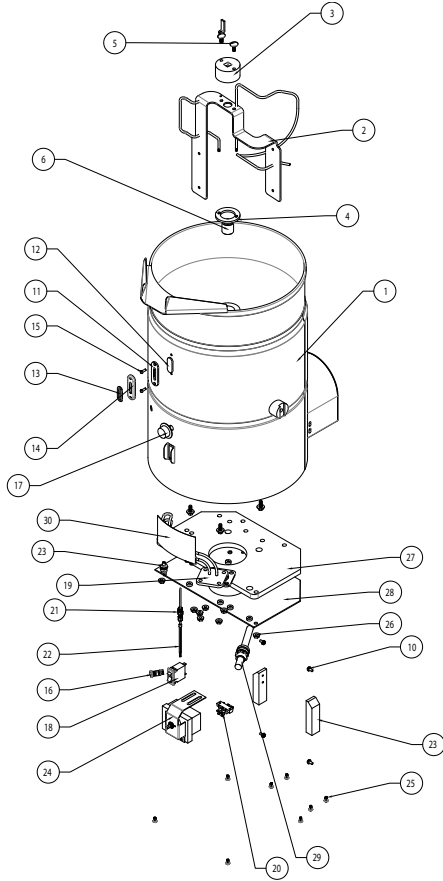
This unit is designed to operate smoothly and efficiently if properly maintained. However, the following is a list of checks to make in the event of a problem. Wiring diagrams are found at the end of this manual. When in doubt, turn unit off and call for service at 888-994-7636. USE OF ANY REPLACEMENT PARTS OTHER THAN THOSE SUPPLIED BY THE MANUFACTURER OR AN AUTHORIZED DISTRIBUTOR CAN CAUSE INJURY TO THE OPERATOR AND DAMAGE TO THE EQUIPMENT AND WILL VOID ALL WARRANTIES.

Kettle makes grinding noise. (Some amount of noise is normal for this kettle and does not necessarily indicate a problem)	Authorized Service Rep Only	<ul style="list-style-type: none"> a. Drive shaft coupling may be loose or slipping. b. Gear motor not properly secured, mounting bolts loose. c. Drive shaft bushing is binding.
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SYMPTOM	PROCEDURE	PROCEDURE
Kettle will not heat, and heating indicator will not come on.	User	<ul style="list-style-type: none"> a. That unit is firmly plugged into outlet. b. That branch circuit is on. Check fuse or circuit breaker for the outlet.
	Authorized Service Rep Only	<ul style="list-style-type: none"> c. Probe may be open. Continuity should measure 540 to 600 at room temperature. d. The over-temperature switch may be faulty or open. The switch should open at $\pm 195^{\circ}\text{F}$. e. Defective temperature controller. f. Loose wire.
Kettle will not heat, but heating indicator comes on.	User	<ul style="list-style-type: none"> a. Check for proper water level. Fill as necessary (See filling instructions).
	Authorized Service Rep Only	<ul style="list-style-type: none"> b. Heating element may be open. Check for continuity. c. Loose wire.
Kettle exceeds set temperature.	User	<ul style="list-style-type: none"> a. Temperature control setting. b. Check for proper water level. Fill as necessary (See filling instructions).
	Authorized Service Rep Only	<ul style="list-style-type: none"> c. Probe not fully inserted into water jacket. d. Probe type incorrect for controller (see NOTE below). e. Defective temperature controller.
Kettle does not get hot enough.	User	<ul style="list-style-type: none"> a. Temperature control setting. b. Check for proper water level. Fill as necessary (See filling instructions).
	Authorized Service Rep Only	<ul style="list-style-type: none"> c. Probe type incorrect for controller (see NOTE below). d. Check probe resistance. e. Defective temperature controller.
Kettle heats but motor will not run.	User	<ul style="list-style-type: none"> a. Fudge may be too thick. Lift agitator off the top of the shaft and restart the motor. If the shaft turns, the fudge is too thick. Add water until the motor will turn.
	Authorized Service Rep Only	<ul style="list-style-type: none"> b. Loose wire.
Motor will not run; kettle does not heat.	User	<ul style="list-style-type: none"> a. Check that plug is firmly plugged into wall outlet. b. Check that branch circuit is on. Check fuse or circuit breaker for the outlet. Other equipment on the same circuit may cause an overload.
	Authorized Service Rep Only	<ul style="list-style-type: none"> c. Loose wire.
Motor circuit breaker trips frequently.	User	<ul style="list-style-type: none"> a. Fudge may be too thick. Lift agitator off the top of the shaft and restart the motor. If the shaft turns, the fudge is too thick. Add water until the motor will turn.
	Authorized Service Rep Only	<ul style="list-style-type: none"> b. Drive shaft bushing binding. Remove agitator. Put two drops mineral oil on top of the shaft on the inside of the white plastic bushing. When you turn on the motor the bushing should not rotate. If it does, replace it. c. Start capacitor not wired correctly. Check wiring diagram.

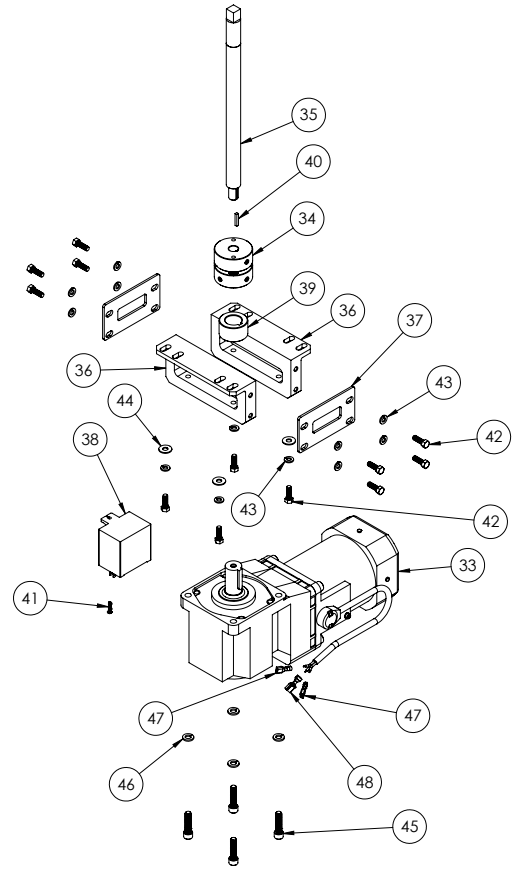
BODY ASSEMBLY

Parts List



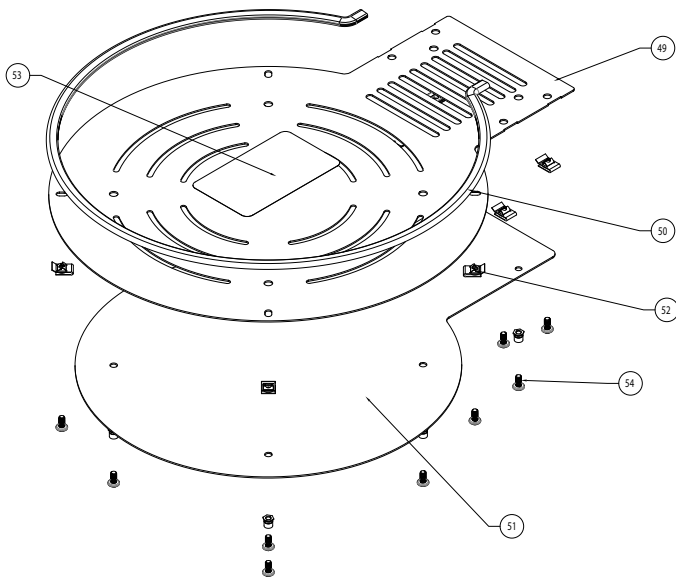
DRIVE ASSEMBLY

Parts List



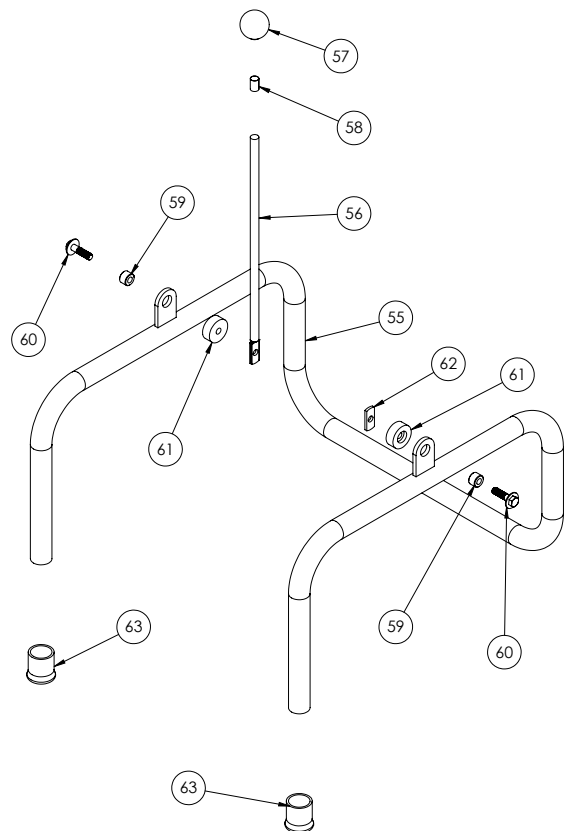
BOTTOM COVER ASSEMBLY

Parts List



NON LOCKING BASE ASSEMBLY

Parts List



**PARTS LIST FOR
110 VAC KETTLE**

Parts List

Key	Qty	Description	Part #
1	1	KETTLE BODY & TRUNNION, TALL TDB/8-20 CFC, DIRECT DRIVE	178809
2	1	AGITATOR ASSY TDB/8-20	Z072014
3	1	GUIDE AGITATOR	Z072016
4	1	RING SUPPORT AGITATOR	Z072015
5	2	SCREW THUMB 1/4"-20	Z002080
6	1	BEARING AGITATOR	Z072049
7	1	ELBOW 90 DEG STREET 3/4 NPT BRASS CHROME	Z010668
8	1	PIPE PLUG 3/4 NPT SQUARE W/4 VENT	Z074528
9	2	STOP, TALL KETTLE, DIRECT DRIVE	178853
10	4	SCREW, WASHER HEAD CAP, SLOTTED	Z069773
11	1	GASKET WATER LEVEL, COVER GFK-20	Z072025
12	1	GLASS GFK-20, WATER LEVEL COVER	Z072027
13	1	GASKET GLASS WATER, LEVEL COVER GFK-20	Z072026
14	1	COVER, GLASS WATER	Z072028
15	2	SCREW ROUND HEAD	Z012970
16	1	PILOT LAMP 115V RED INDUSTRIAL	Z002986
17	1	KNOB GFK-20	Z073413
18	1	CIRCUIT BREAKER	Z074513
19	1	ELEMENT, 1850W 115V	Z072039
20	1	TERMINAL BLOCK, 2 POS, 6 POLE	Z056746
21	1	CONNECTOR-MALE-REWORK	Z070175
22	1	PROBE TEMPERATURE (CALICO)	Z086410
23	1	THERMOSTAT, KETTLE	Z074529
24	1	TEMPERATURE CONTROLLER	Z077889
25	2	MACHINE SCREW, ROUND HEAD, 6-32 X 5/8"	Z056745
26	10	NUT- HEXSERRATEDZINC 1/4-20	NT1101
27	1	SPACER MOTOR & GEARBOX	Z072040
28	1	PLATE ASSEMBLY, MOTOR	Z072010
29	1	CORD & PLUG ASSEMBLY 6'	149179
30	1	WARNING LABEL, PINCH POINT	176385
31	1	LABEL, COMBO OVEN CAUTION	Z072139
32	1	HARNES, WIRE, KETTLE DIRECT DRIVE (NOT SHOWN)	176260
33	1	GEARMOTOR 110 VAC	176207
34	1	COUPLING, KETTLE, DIRECT DRIVE	176211
35	1	(CALICO) SHAFT AGITATOR	Z072064
36	2	GEARMOTOR MOUNTING BRACKET	176094
37	2	GEARMOTOR MOUNT REINFORCING PLATE	176136
38	1	START CAPACITOR, 110/115 VAC	176485
40	1	KEY, AGITATOR SHAFT, WIDE BODY KETTLE	177177
41	1	MACHINE SCREW, ROUND HEAD, 6-32 X 5/8"	56745
42	12	SCREW HEX HEAD CAP 1/4"-20 X 3/4" L.	5609
43	12	LOCK WASHER- 1/4" SS	NT1216
44	4	FLAT WASHER- 1/4 " SS	NT1219
45	4	SOCKET HEAD CAP SCREW, 5/16-18 X 1-1/4", 18-8 SS	176212

Key	Qty	Description	Part #
46	4	WASHER LOCK 5/16"	5656
47	2	CONNECTOR, QC RCPT 18-22AWG 0.187	176381
48	1	CONNECTOR, QC RCPT 18-22AWG 0.250	176380
49	1	KETTLE BOTTOM COVER, TALL	178813
50	1	BOTTOM COVER EDGE TRIM, TALL DIRECT DRIVE	178815
51	1	KETTLE BOTTOM COVER SPLASH GUARD, TALL	178814
52	8	NUT, #10 "U" TINNERMAN	FA NUT0404
53	1	LABEL, WIRING DIAGRAM, KETTLE DIRECT DRIVE	176262
54	16	SCREW 10-32X.38 P PH SS MS	H15327
55	1	TALL KETTLE BASE FRAME ASSEMBLY, DIRECT DRIVE	178808
56	1	HANDLE TILTING GFK-20	Z072021
57	1	KNOB, RED BALL HANDLE	Z012691
58	1	RING TOLERANCE 1/2"	Z012692
59	2	PLAIN CYLINDRICAL BEARING CFC	Z072050
60	2	BOLT WASHER TRUNNION MOUNTING	Z088093
61	2	WASHER FRAME GFK-20	Z072053
62	1	SPACER FRAME GFK-20	Z072052
63	2	TIP CRUTCH 1" ID	Z002032

**PARTS LIST FOR
220 VAC KETTLE**

Parts List

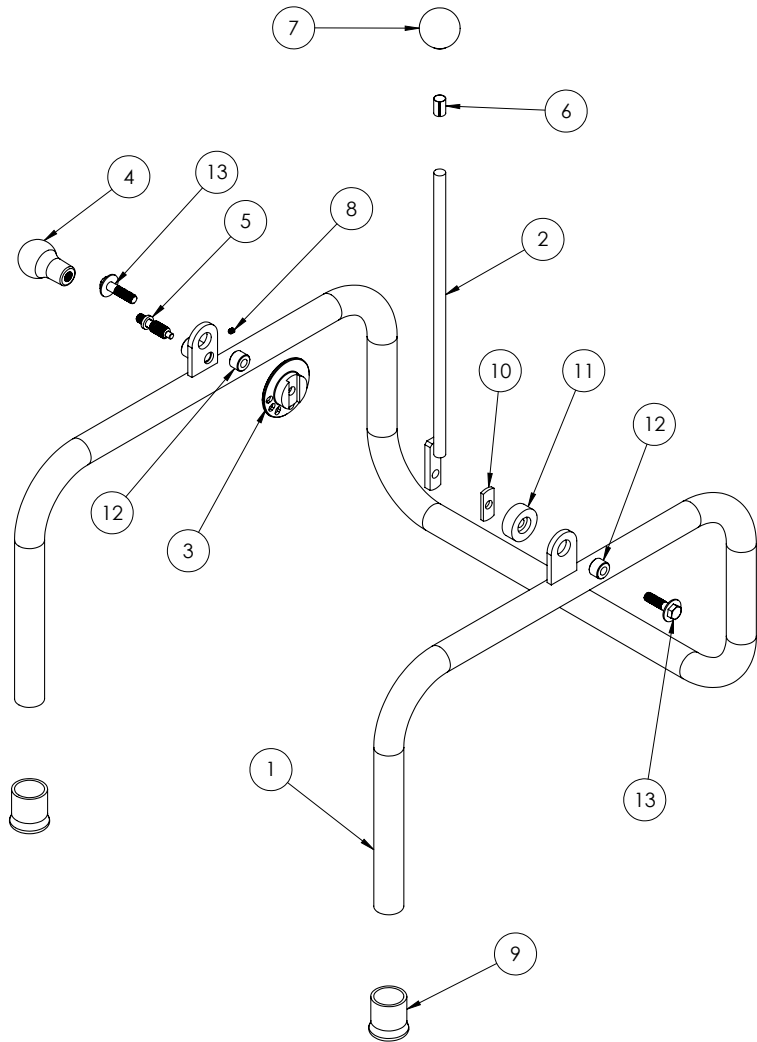
Key	Qty	Description	Part #
1	1	KETTLE BODY & TRUNNION, TALL TDB/8-20 CFC, DIRECT DRIVE	178809
2	1	AGITATOR ASSY TDB/8-20	Z072014
3	1	GUIDE AGITATOR	Z072016
4	1	RING SUPPORT AGITATOR	Z072015
5	2	SCREW THUMB 1/4"-20	Z002080
6	1	BEARING AGITATOR	Z072049
7	1	ELBOW 90 DEG STREET 3/4 NPT BRASS CHROME	Z010668
8	1	PIPE PLUG 3/4 NPT SQUARE W/4 VENT	Z074528
9	2	STOP, TALL KETTLE, DIRECT DRIVE	178853
10	4	SCREW, WASHER HEAD CAP, SLOTTED	Z069773
11	1	GASKET WATER LEVEL, COVER GFK-20	Z072025
12	1	GLASS GFK-20, WATER LEVEL COVER	Z072027
13	1	GASKET GLASS WATER, LEVEL COVER GFK-20	Z072026
14	1	COVER, GLASS WATER	Z072028
15	2	SCREW ROUND HEAD	Z012970
16	1	PILOT LAMP 250V RED	Z016028
17	1	KNOB GFK-20	Z073413
18	1	CIRCUIT BREAKER	Z077883
19	1	ELEMENT, 1850W 240V	Z077882
20	1	TERMINAL BLOCK, 2 POS, 6 POLE	Z056746
21	1	CONNECTOR-MALE-REWORK	Z070175
22	1	PROBE TEMPERATURE (CALICO)	Z086410
23	1	THERMOSTAT, KETTLE	Z074529
24	1	TEMPERATURE CONTROLLER	Z077889
25	2	MACHINE SCREW, ROUND HEAD, 6-32 X 5/8"	Z056745
26	10	NUT- HEXSERRATEDZINC 1/4-20	NT1101
27	1	SPACER MOTOR & GEARBOX	Z072040
28	1	PLATE ASSEMBLY, MOTOR	Z072010
29	1	CORD & PLUG ASSEMBLY 6'	160228
30	1	WARNING LABEL, PINCH POINT	176385
31	1	LABEL, COMBO OVEN CAUTION	Z072139
32	1	HARNESS, WIRE, KETTLE DIRECT DRIVE (NOT SHOWN)	176260
33	1	GEARMOTOR 220 VAC	176208
34	1	COUPLING, KETTLE, DIRECT DRIVE	176211
35	1	(CALICO) SHAFT AGITATOR	Z072064
36	2	GEARMOTOR MOUNTING BRACKET	176094
37	2	GEARMOTOR MOUNT REINFORCING PLATE	176136
38	1	START CAPACITOR, 220 VAC	176486
39	1	COUPLING SPACER	177170
40	1	KEY, AGITATOR SHAFT, WIDE BODY KETTLE	177177
41	1	MACHINE SCREW, ROUND HEAD, 6-32 X 5/8"	56745
42	12	SCREW HEX HEAD CAP 1/4"-20 X 3/4" L.	5609
43	12	LOCK WASHER- 1/4" SS	NT1216
44	4	FLAT WASHER- 1/4 " SS	NT1219

Key	Qty	Description	Part #
45	4	SOCKET HEAD CAP SCREW, 5/16-18 X 1-1/4", 18-8 SS	176212
46	4	WASHER LOCK 5/16"	5656
47	2	CONNECTOR, QC RCPT 18-22AWG 0.187	176381
48	1	CONNECTOR, QC RCPT 18-22AWG 0.250	176380
49	1	KETTLE BOTTOM COVER, TALL	178813
50	1	BOTTOM COVER EDGE TRIM, TALL DIRECT DRIVE	178815
51	1	KETTLE BOTTOM COVER SPLASH GUARD, TALL	178814
52	8	NUT, #10 "U" TINNEMAN	FA NUT0404
53	1	LABEL, WIRING DIAGRAM, KETTLE DIRECT DRIVE	176262
54	16	SCREW 10-32X.38 P PH SS MS	H15327
55	1	TALL KETTLE BASE FRAME ASSEMBLY, DIRECT DRIVE	178808
56	1	HANDLE TILTING GFK-20	Z072021
57	1	KNOB, RED BALL HANDLE	Z012691
58	1	RING TOLERANCE 1/2"	Z012692
59	2	PLAIN CYLINDRICAL BEARING CFC	Z072050
60	2	BOLT WASHER TRUNNION MOUNTING	Z088093
61	2	WASHER FRAME GFK-20	Z072053
62	1	SPACER FRAME GFK-20	Z072052
63	2	TIP CRUTCH 1" ID	Z002032

LOCKING BASE ASSEMBLY

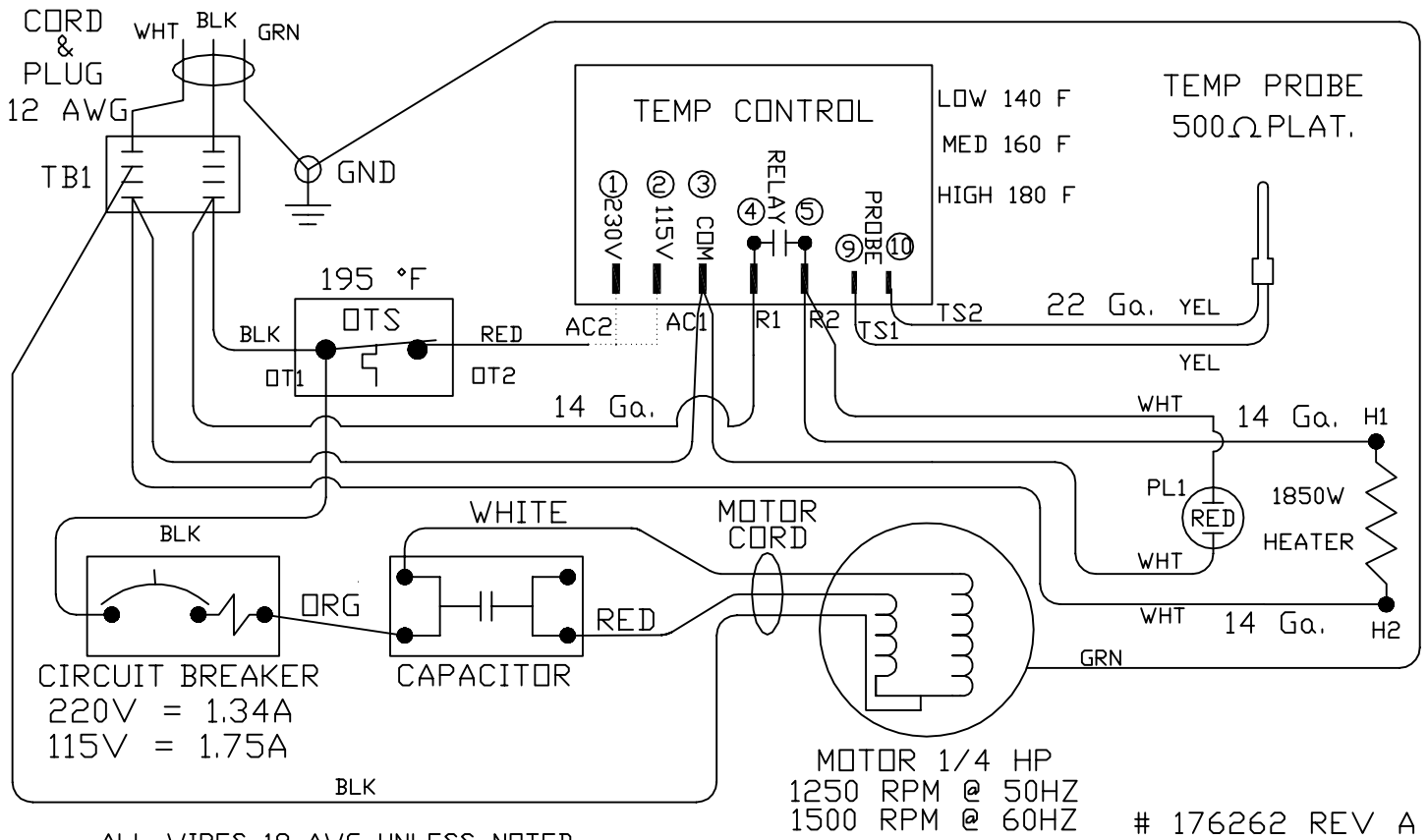
Parts List

Key	Qty	Description	Part #
1	1	TILT LOCK TALL KETTLE BASE FRAME ASSEMBLY	178889
2	1	HANDLE WELDMENT, TILT LOCK WIDE BODY KETTLE	177733
3	1	TILT LOCK TRUNNION, WIDE BODY KETTLE	175950
4	1	RETRACTABLE SPRING PLUNGER KNOB	177725
5	1	RETRACTABLE SPRING PLUNGER	177724
6	1	RING TOLERANCE 1/2"	Z012692
7	1	KNOB, RED BALL HANDLE	Z012691
8	1	SET SCREW, 10-32 X 1/4" LONG, SS, WITH LOCITE PATCH	177726
9	2	TIP CRUTCH 1" ID	Z002032
10	1	SPACER FRAME GFK-20	Z072052
11	1	WASHER FRAME GFK-20	Z072053
12	2	PLAIN CYLINDRICAL BEAR- ING CFC	Z072050
13	2	BOLT WASHER TRUNNION MOUNTING	Z088093



CALL FACTORY FOR
REPLACEMENT PARTS:
888-994-7636

Wiring Diagram



Service Log

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

Date	Maintenance Performed	Performed By