

**ALTO SHAAM®**

**ELECTRIC FRYER**

**FryTech Series**



*ASF-60E shown with  
basic control and optional  
automatic basket lifts*

# **ASF-60E and ASF-75E Electric Fryers with Basic Control**

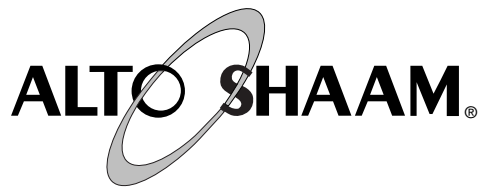


*ASF-75E shown with basic  
control and optional  
automatic basket lifts*

- **INSTALLATION**
- **OPERATION**
- **MAINTENANCE**



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[www.alto-shaam.com](http://www.alto-shaam.com)



## DELIVERY

This Alto-Shaam appliance has been thoroughly tested and inspected to insure only the highest quality unit is provided. Upon receipt, check for any possible shipping damage and report it at once to the delivering carrier. *See Transportation Damage and Claims section located in this manual.*

This appliance, complete with unattached items and accessories, may have been delivered in one or more packages. Check to ensure that all standard items and options have been received with each model as ordered.

Save all the information and instructions packed with the appliance. Complete and return the warranty card to the factory as soon as possible to assure prompt service in the event of a warranty parts and labor claim.

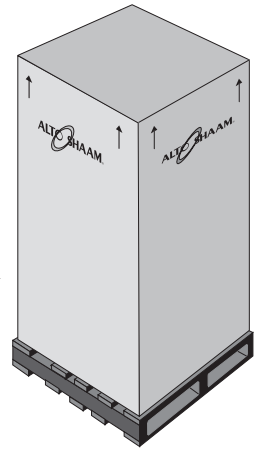
This manual must be read and understood by all people using or installing the equipment model. Contact the Alto-Shaam service department if you have any questions concerning installation, operation, or maintenance.

**NOTE:** All claims for warranty must include the full model number and serial number of the unit.

## UNPACKING

1. Carefully remove the appliance from the carton or crate.

**NOTE:** Do not discard the carton and other packaging material until you have inspected the unit for hidden damage and tested it for proper operation.



2. Read all instructions in this manual carefully before initiating the installation of this appliance.

**DO NOT DISCARD THIS MANUAL.**

This manual is considered to be part of the appliance and is to be provided to the owner or manager of the business or to the person responsible for training operators. *Additional manuals are available from the Alto-Shaam service department.*

3. Remove all protective plastic film, packaging materials, and accessories from the appliance before connecting electrical power. Store any accessories in a convenient place for future use.

**KEEP THIS MANUAL IN A CONVENIENT LOCATION FOR REFERENCE.**

# INSTALLATION

## SAFETY PROCEDURES AND PRECAUTIONS

Knowledge of proper procedures is essential to the safe operation of electrically and/or gas energized equipment. In accordance with generally accepted product safety labeling guidelines for potential hazards, the following signal words and symbols may be used throughout this manual.

### DANGER



Used to indicate the presence of a hazard that **WILL** cause severe personal injury, death, or substantial property damage if the warning included with this symbol is ignored.

### WARNING



Used to indicate the presence of a hazard that **CAN** cause personal injury, possible death, or major property damage if the warning included with this symbol is ignored.

### CAUTION



Used to indicate the presence of a hazard that can or will cause minor or moderate personal injury or property damage if the warning included with this symbol is ignored.

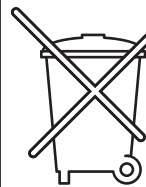
### CAUTION

Used to indicate the presence of a hazard that can or will cause minor personal injury, property damage, or a potential unsafe practice if the warning included with this symbol is ignored.

**NOTE:** Used to notify personnel of installation, operation, or maintenance information that is important but not hazard related.

1. This appliance is intended to cook, hold or process foods for the purpose of human consumption. No other use for this appliance is authorized or recommended.
2. This appliance is intended for use in commercial establishments where all operators are familiar with the purpose, limitations, and associated hazards of this appliance. Operating instructions and warnings must be read and understood by all operators and users.
3. Any troubleshooting guides, component views, and parts lists included in this manual are for general reference only and are intended for use by qualified technical personnel.
4. This manual should be considered a permanent part of this appliance. This manual and all supplied instructions, diagrams, schematics, parts lists, notices, and labels must remain with the appliance if the item is sold or moved to another location.

### NOTE



For equipment delivered for use in any location regulated by the following directive:

**DO NOT DISPOSE OF ELECTRICAL OR ELECTRONIC EQUIPMENT WITH OTHER MUNICIPAL WASTE.**

# INSTALLATION

## ASF-75E SPECIFICATIONS

### DIMENSIONS EXTERIOR H x W x D:

42" x 24-13/16" x 37-7/8"  
(1065mm x 630mm x 961mm)

### BASKET DIMENSIONS (H x W x D)

11-1/2" x 12-3/4" x 21-3/4"  
(292mm x 324mm x 552mm)

### CAPACITY

#### SHORTENING/OIL:

73 lb (33 kg) MAXIMUM

#### LOAD CAPACITY:

13 lb (6 kg) MAXIMUM

### WEIGHT EST

#### NET WEIGHT

#### SHIP WEIGHT

338 lb (154 kg)

460 lb (209 kg)

### CARTON DIMENSIONS:

50" x 31" x 43"

(H x W x D)

(1270mm x 787mm x 1092mm)

### STANDARD ACCESSORIES

☐ Basket, Half-Size (2 INCLUDED AS STANDARD) BS-27140

Brush Set (ONE 3-BRUSH SET INCLUDED AS STANDARD)

☐ ANGLE BRUSH BH-28692

☐ SCRUB BRUSH BH-28693

☐ STRAIGHT BRUSH BH-28691

Filter, Paper (7 PAPER FILTERS INCLUDED AS STANDARD)

☐ 7 COUNT REFILL PACKAGE FI-27791

☐ 100 COUNT REFILL PACKAGE FI-27794

### OPTIONS

☐ Basket, Full-Size (48 CHICKEN PIECE CAPACITY) BS-26998

FILTERS ☐ Charcoal/Carbon (30 COUNT PKG.) FI-27648

☐ Reusable Mesh (SINGLE FILTER) FI-27014

☐ Fry Pot Cover 5005136

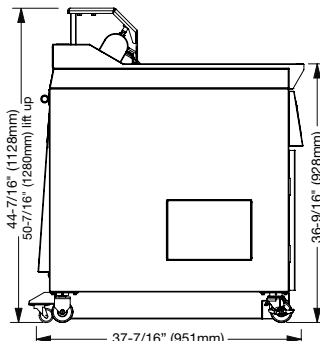
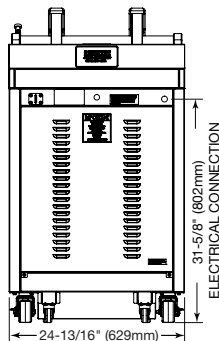
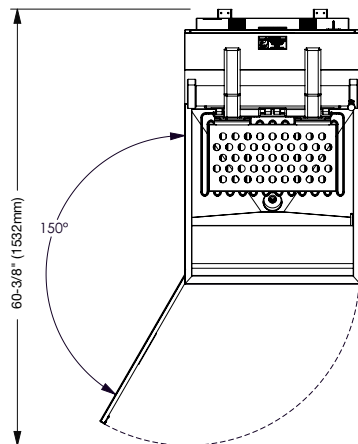
☐ Mobile Drawer Cover 5006073

☐ Strainer/Skimmer CE-27400

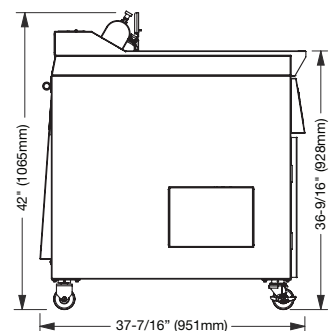
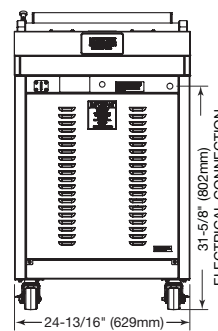
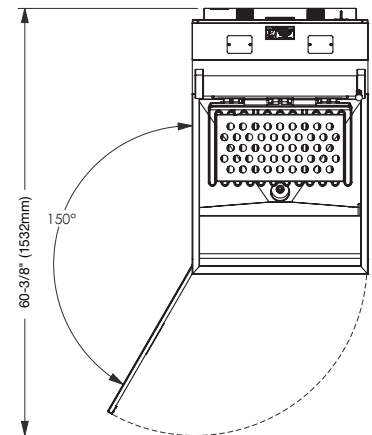
☐ Oil Discard Hose HO-27686



### ASF-75E WITH LIFTS AND FILTRATION



### ASF-75E, NO LIFTS OR FILTRATION



# INSTALLATION

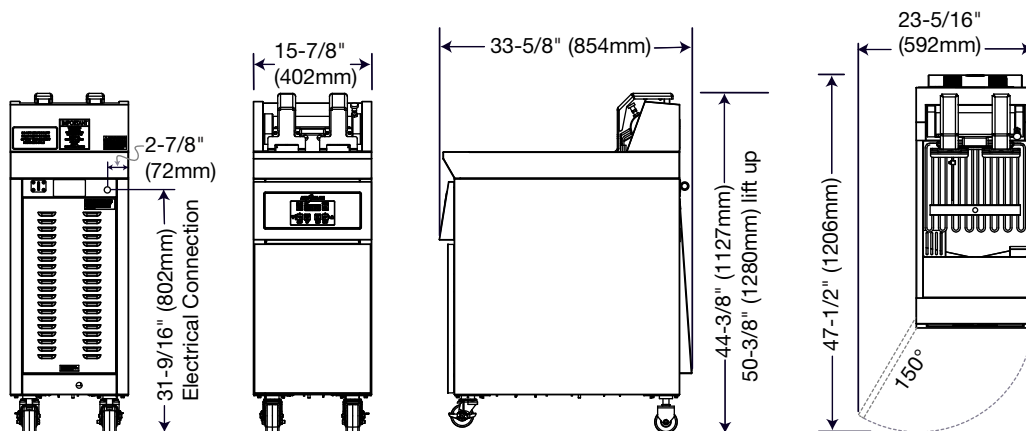
## ASF-60E SPECIFICATIONS

<b>DIMENSIONS</b> EXTERIOR H x W x D:
45-1/8" x 15-3/4" x 33-5/8" (1146mm x 400mm x 854mm)
<b>BASKET DIMENSIONS</b> (H x W x D)
5-7/8" x 5-3/16" x 13-13/16" (149mm x 131mm x 351mm)

<b>CAPACITY</b>
SHORTENING/OIL:
73 lb (33 kg) MAXIMUM
LOAD CAPACITY:
8 lb (4 kg) MAXIMUM

<b>WEIGHT</b> EST	NET WEIGHT	SHIP WEIGHT
	248 lb (113 kg)	330 lb (150 kg)
<b>CARTON DIMENSIONS:</b> (H x W x D)	39" x 22" x 55" (991mm x 559mm x 1397mm)	

<b>STANDARD ACCESSORIES</b>	
<input type="checkbox"/> Basket, Half-Size (2 INCLUDED AS STANDARD)	BS-27963
Brush Set (ONE 3-BRUSH SET INCLUDED AS STANDARD)	
<input type="checkbox"/> ANGLE BRUSH	BH-28692
<input type="checkbox"/> SCRUB BRUSH	BH-28693
<input type="checkbox"/> STRAIGHT BRUSH	BH-28691
<b>OPTIONS</b>	
<input type="checkbox"/> Fry Pot Cover	5007596
<input type="checkbox"/> Strainer/Skimmer	CE-27400



# INSTALLATION

## DANGER



IMPROPER INSTALLATION, ALTERATION, ADJUSTMENT, SERVICE, OR MAINTENANCE COULD RESULT IN SEVERE INJURY, DEATH OR CAUSE PROPERTY DAMAGE.

READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

## DANGER



AVERTISSEMENT : UNE INSTALLATION, UN AJUSTEMENT, UNE ALTÉRATION, UN SERVICE OU UN ENTRETIEN NON CONFORME AUX NORMES PEUT CAUSER DES DOMMAGES À LA PROPRIÉTÉ, DES BLESSURES OU LA MORT.

LIRE ATTENTIVEMENT LES DIRECTIVES D'OPÉRATION ET D'ENTRETIEN AVANT DE FAIRE L'INSTALLATION, OU L'ENTRETIEN DE CET ÉQUIPEMENT.

## SITE INSTALLATION

**NOTE:** To avoid equipment damage, remove the Mobile Oil Trolley before moving this appliance with a forklift or pallet lift.

### MINIMUM CLEARANCE REQUIREMENTS

	COMBUSTIBLE SURFACES	NON-COMBUSTIBLE SURFACES
<b>RIGHT SIDE</b>	0" (152mm)	0" (0mm)
<b>LEFT SIDE</b>	0" (152mm)	0" (0mm)
<b>BACK</b>	6" (152mm)	6" (152mm)
<b>FRONT</b>	25" (635mm)	

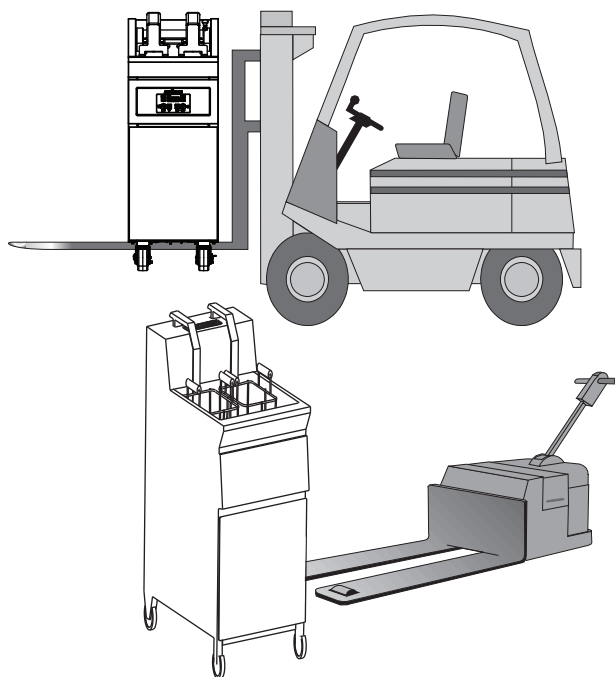
**PLUS:** 6" (152mm) minimum between the element swing in the extended position and the lower edge of the exhaust hood and filter media..

**ENTRY CLEARANCE:** 30" (762mm) UNCRATED

Ne pas installer à une distance inférieure à celle indiquée ce-dessous d'une paroi en matière combustible: Côtés 6 pouches, Arrière 6 pouches.

## CAUTION

DO NOT USE FORKLIFT FROM FRONT OR REAR OF UNIT.  
USE FORKLIFT FROM SIDE ONLY.



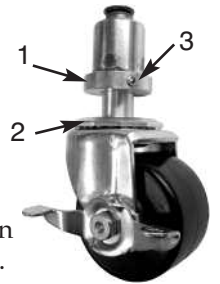
## WARNING

**MINIMUM CLEARANCES MUST REMAIN UNOBSTRUCTED.**  
**DO NOT** place insulation or any other type of materials in clearance areas.

# INSTALLATION

## SITE INSTALLATION

1. It is the responsibility of the installer to verify that this fryer installation is in compliance with the specifications listed in this manual and with local code requirements.
2. Hood installation is required.
3. Both cooking and cleaning functions require unobstructed access. The frypot, control panel, and front access door must be maintained free from obstruction. The access door must be accessible for service and maintenance.
4. Locate the fryer on a firm, level surface ONLY. The area surrounding the fryer must be kept clear of all combustible materials.
5. **FOR YOUR SAFETY DO NOT** store or use any flammable liquids or allow flammable vapors in the vicinity of this fryer or any other appliance.
6. **FOR YOUR SAFETY DO NOT** place insulation or any other type of materials in clearance areas.
7. When properly installed, the electric fryer is designed for operation adjacent to non-combustible floors and walls with a 6" clearance at the back. Clearances from all combustible construction is a minimum of 6" (152mm) at the back and both sides. Concrete, tile, terrazzo, or metal surfaces are recommended. Metal over a combustible material may not meet code for non-combustible surfaces. Verify site selection with local codes for specific requirements.  
**Doit être utilisé seulement sur des planchers non inflammables.**
8. Adequate means must be provided to limit the movement of this appliance. A restraining device is required for field installation.
9. DO NOT install this fryer in any area where it may be affected by any adverse conditions such as steam or dripping water, etc. DO NOT install the fryer over a drain.
10. **LEVELING:** Make certain the fryer is positioned firmly on all four supporting casters. Level fryer front-to-back and side-to-side by holding lower collar (#2) while twisting upper collar (#1). Restraining ties can be used for stabilization if necessary. Use an allen wrench (#3) to lock caster in position.



## WARNING

**BURN WARNING:** Make certain the fryer is stabilized before operation to prevent any movement or tipping and the possibility of severe burns caused by hot, splashing shortening or oil.

## CAUTION



TO PREVENT PERSONAL INJURY, USE CAUTION WHEN MOVING OR LEVELING THIS APPLIANCE.

## DANGER



To avoid electrical shock, this appliance **MUST** be adequately grounded in accordance with local electrical codes or, in the absence of local codes, with the current edition of the National Electrical Code ANSI/NFPA No. 70. In Canada, all electrical connections are to be made in accordance with CSA C22.1, Canadian Electrical Code Part 1 or local codes.

## WARNING



**IMPROPER INSTALLATION MAY RESULT IN FIRE.** Carefully read and follow all installation instructions located in this manual.



### DANGER

**Installation, air ventilation requirements, and service work must be in accordance with all local codes and must be performed by a qualified service technician.**

An adequate ventilation system is required for commercial cooking equipment. Information may be obtained by writing to the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269. When writing refer to NFPA No. 96.



### DANGER

**FAILURE TO VENT THIS FRYER PROPERLY**

**MAY BE HAZARDOUS TO THE  
HEALTH OF THE OPERATOR.**

**Equipment damage and operational problems may also be the consequence of improper venting. Any damages sustained by a failure to properly vent this fryer are not covered under warranty.**

Ventilating hoods and exhaust systems shall be permitted to be used to vent appliances installed in commercial applications.

Where automatically operated appliances are vented through a ventilating hood or exhaust system equipped with a damper or with a power means of exhaust, provisions shall be made to allow the flow of gas to the main burners only when the damper is open to a position to properly vent the appliance and when the power means of exhaust is in operation. IN ACCORDANCE WITH NFPA 54 COMMONWEALTH OF MASSACHUSETTS ONLY.



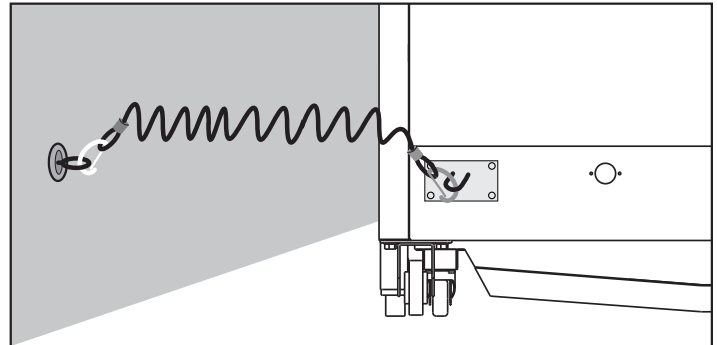
# INSTALLATION

## RESTRAINT REQUIREMENTS - MOBILE EQUIPMENT

The fryer must be supplied with a connector that complies with all state and local installation codes.

Any appliance that is not furnished with a power supply cord but that includes a set of casters must be tethered. Adequate means must be provided to limit the movement of this appliance without depending on or transmitting stress to the electrical conduit. The following requirements apply:

1. Casters must be a maximum height of 4-inches (102mm).
2. Such mobile appliances must be installed with the use of a flexible connector secured to the building structure.



A mounting connector for a restraining device is located on the lower back flange of the appliance chassis, approximately 7-inches (178mm) from the floor. A flexible connector is not supplied by nor is it available from the factory.

	
<b>WARNING</b>	
	<b>RISK OF ELECTRIC SHOCK.</b>
	Appliance must be secured to building structure.

# INSTALLATION

## ELECTRICAL REQUIREMENTS

### DANGER



To avoid electrical shock, this appliance **MUST** be adequately grounded in accordance with local electrical codes or, in the absence of local codes, with the current edition of the National Electrical Code ANSI/NFPA No. 70. In Canada, all electrical connections are to be made in accordance with CSA C22.1, Canadian Electrical Code Part 1 or local codes.

An electrical wiring diagram is located in the front access door of the fryer. The fryer must be installed by a qualified electrician. This appliance must be branch circuit protected with proper ampacities, in accordance with the wiring diagram located in the fryer. The fryer must be properly grounded in accordance with the National Electrical Code and applicable local codes. A means to disconnect the unit must be incorporated into the fixed wiring in accordance with wiring codes.

Wire size for the main incoming power to the unit must match the minimum size listed in the specifications applicable to the specific fryer. For supply connections, locate the wire size posted on the label located on the electrical control box cover, behind the service panel or elsewhere listed in this manual.

Before operating the fryer, check all cable connections in the electrical connection area for tightness since connections can loosen during transport.




### DANGER



**ENSURE POWER SOURCE  
MATCHES VOLTAGE STAMPED  
ON APPLIANCE NAMEPLATE.**

#### 230V:

To prevent an electrical shock hazard between the appliance and other appliances or metal parts in close vicinity, an equalization-bonding stud is provided. An equalization bonding lead must be connected to this stud and the other appliances / metal parts to provide sufficient protection against potential difference. The terminal is marked with the following symbol. 

### DANGER



**APPLIANCES WITH NO CORD  
PROVIDED BY FACTORY MUST BE  
EQUIPPED WITH A CORD OF  
SUFFICIENT LENGTH TO PERMIT  
THE APPLIANCE TO BE MOVED  
FOR CLEANING.**

**ELECTRICAL CONNECTIONS MUST  
BE MADE BY A QUALIFIED SERVICE  
TECHNICIAN IN ACCORDANCE WITH  
APPLICABLE ELECTRICAL CODES.**

#### ELECTRICAL - ASF-60E

VOLTAGE	PHASE	CYCLE/HZ	AMPS	kW
208-220 (AGCY)	3	60	47	17.93
at 208	3	60	45	16.2
at 220	3	60	47.6	18.2
240 (AGCY)	3	60	43	17.93
380-415				
at 380	3	50	20.4	15.4
at 415	3	50	25.4	18.3
440-480 (AGCY)	3	60	21.8	18.1
at 440	3	60	20.4	15.5
at 480	3	60	22.2	18.5
No cord or plug				

#### ELECTRICAL - ASF-75E

VOLTAGE	PHASE	CYCLE/HZ	AMPS	kW	AWG
208-220 (AGCY)	3	60	68.2	26.0	AWG 2
at 208	3	60	66.6	24.0	AWG 2
at 220	3	60	70.8	27.0	AWG 2
240 (AGCY)	3	60	66.8	27.8	AWG 2
380-415 (AGCY)	3	50	38.1	27.5	AWG 6
at 380	3	50	35.2	23.2	AWG 6
at 415	3	50	38.2	27.5	AWG 6
440-480 (AGCY)	3	60	31.3	26.0	AWG 8
at 440	3	60	30.7	23.5	AWG 8
at 480	3	60	33.4	27.85	AWG 8
No cord or plug					

# INSTALLATION

## ELECTRICAL INSTALLATION

1. Refer to the nameplate on the FRONT of the fryer. Verify the electrical service power. Voltage and phase must match the nameplate specifications and available electrical service amperage must meet or exceed the specifications listed.

**NOTE:** Wire gauge, insulation type and temperature rating, as well as type, size and construction of conduit, must meet or exceed applicable specifications of local codes and of the National Electrical Code.

### **Warning!**

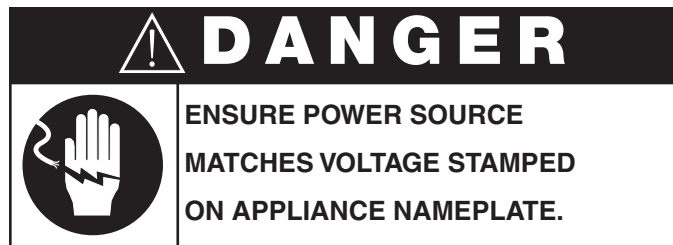
440-480V - 3 Phase Only

The pump motor should *rotate clockwise* when viewed from the rear of the fryer.

To change rotation, swap any two lines of 3 Phase incoming power.

6. The fryer is shipped from the factory wired for 3-phase electrical service. *This fryer is not approved for conversion to single phase. Converting to single phase will void the warranty and invalidate the ETL certification.*

**IMPORTANT:** Field wiring must be routed and secured away from the frypot, tubing, and filter pump and motor. Field wiring must allow access to the rear of the fryer for cleaning and for access to the oil filter pump motor reset button.



## OIL/SHORTENING REQUIREMENTS

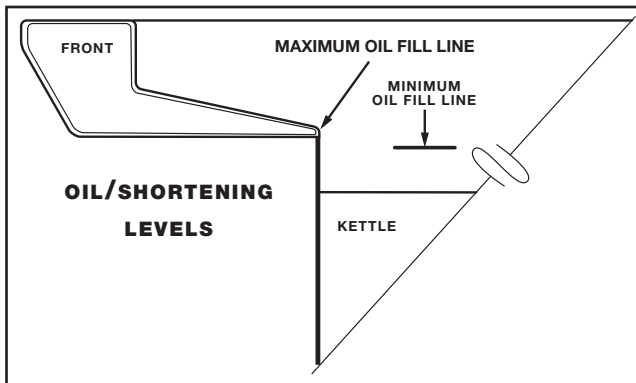
### OIL/SHORTENING REQUIREMENTS

The ASF-75E requires 73-pounds (33 kg) of oil or shortening in the frypot and the ASF-60E requires 62-pounds (28 kg) of oil or shortening. Use only quality, high-grade oil/shortening in the fryer. The high moisture content of many lower grade shortening will result in excessive foaming and boil over. The cold oil/shortening level requirement for the fryer is indicated below.

### CAUTION

Cold oil or shortening expands as the temperature increases. To avoid injury and equipment damage, allow for expansion by filling 1/2" (13mm) below the maximum hot oil fill line.

**NOTE:** ALWAYS maintain the proper level of shortening by adding fresh oil/shortening to the frypot whenever needed.



### WARNING

FAILURE TO PLACE SOLID SHORTENING DIRECTLY ON THE BOTTOM OF THE FRYPOT CAN CAUSE SERIOUS EQUIPMENT DAMAGE.

### CAUTION

ENSURE THERE IS NO WATER IN THE FRYPOT BEFORE FILLING WITH OIL/SHORTENING. WHEN COOKING COMPOUNDS ARE HEATED TO COOKING TEMPERATURE, WATER IN THE FRYPOT WILL CAUSE OIL TO SPLATTER AND MAY BE A BURN HAZARD.

Check the quality of the oil/shortening in the frypot on a daily basis for signs of deterioration. Use an approved test kit. Signs of shortening deterioration include excessive boiling, smoking, foaming, bad taste, and rancid odor. Discard any shortening before it degrades to the point of affecting product quality. Always filter the oil on a regular basis and keep the frypot clean.



### DANGER



FLASH  
POINT

The flash point of shortening occurs at a lower temperature the longer the shortening is used. Discard any shortening showing signs of deterioration to avoid serious burns, fire, and property damage.

Remove ice crystals and ensure that food is dry before frying. Excessive water and ice can cause oil to splatter or overflow. Do not over fill the basket. Food needs to be surrounded by oil for best frying results.

Maximum shortening life is achieved by turning the fryer stations off when not in use. In multiple-station units, heat only the component fryers necessary to meet cooking needs.

### CAUTION

FIRE OR EQUIPMENT DAMAGE CAN RESULT FROM IMPROPER SHORTENING LEVELS. THE LEVEL OF SHORTENING MUST ALWAYS BE ABOVE THE HEATING ELEMENTS WHEN THE FRYER IS OPERATING. THE REQUIRED SHORTENING LEVEL MUST ALWAYS BE ABOVE THE MINIMUM HOT OIL FILL LINE.

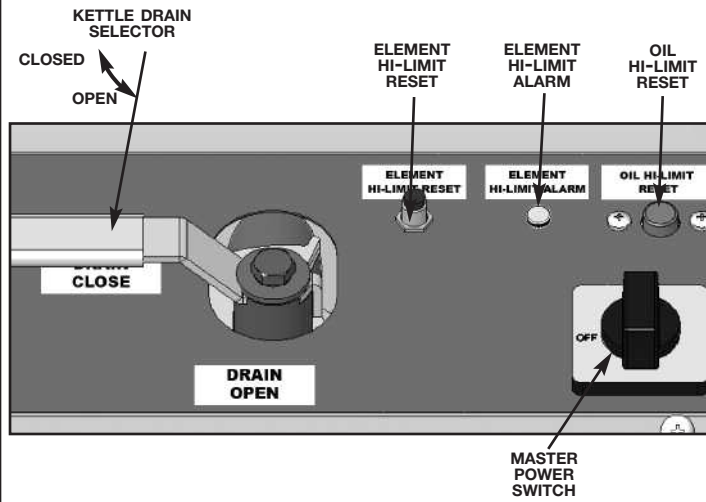
### CAUTION



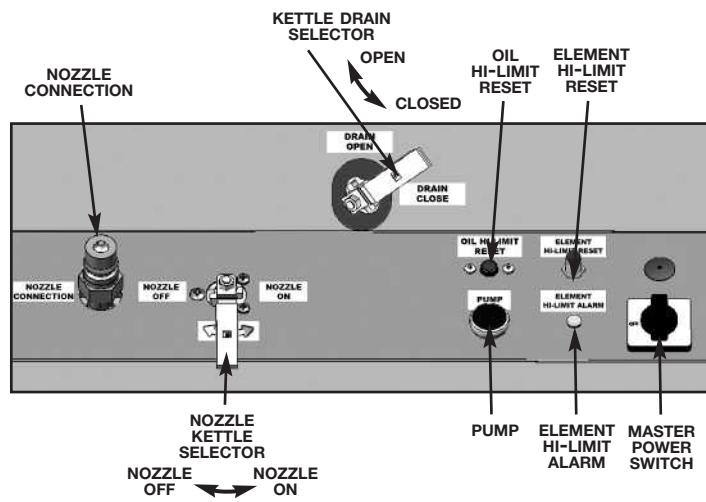
METAL PARTS OF THIS EQUIPMENT BECOME EXTREMELY HOT WHEN IN OPERATION. TO AVOID BURNS, ALWAYS USE HAND PROTECTION WHEN OPERATING THIS APPLIANCE.

# OPERATION

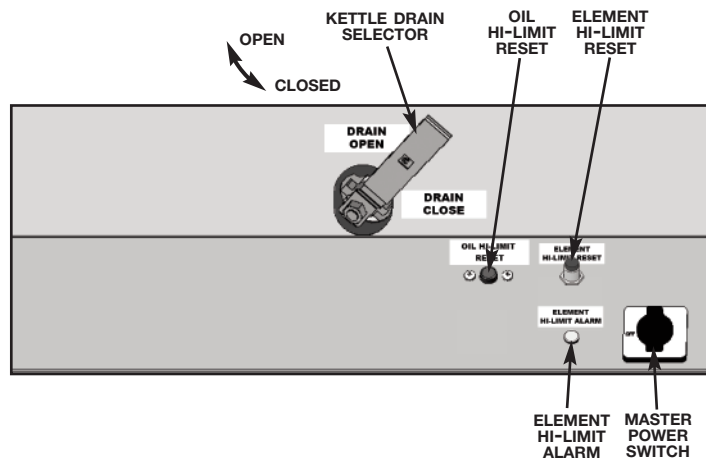
## ASF-60E, 120V



## ASF-75E, 120V WITH FILTRATION



## ASF-75E, 120V



**NOTE:** Perform an initial Boil-Out to clean and sanitize the fryer station before operating.

Carbonized deposits along with an accumulation of oil will eventually build-up on the interior of the frypot as well as fryer accessories. It is important to periodically remove these deposits, not only to maintain fryer efficiency, but also to provide the highest product quality.

**NOTE:** Because each fryer station is controlled separately, the following procedure must be followed for every component fryer in multiple-station units.

**NOTE:** Manual Boil-Out can only be performed when the actual temperature of the frypot is less than 230°F (110°C).

### CAUTION

BEFORE ENTERING THIS PROGRAM, MAKE CERTAIN THE FRYPOT IS EMPTY OF ALL OIL OR SHORTENING.

### CAUTION

TO AVOID DAMAGING THE PUMP AND CONTAMINATING CLEAN OIL WITH BOIL-OUT CHEMICAL ON UNITS EQUIPPED WITH A FILTRATION SYSTEM, NEVER ALLOW BOIL-OUT SOLUTION OR RINSE WATER TO CIRCULATE THROUGH THE FRYER PUMP SYSTEM OR FAT DRAWER.

### CAUTION

BOIL-OUT SOLUTION AND SURROUNDING METAL SURFACES BECOME EXTREMELY HOT. TO AVOID BURNS, ALWAYS USE HAND PROTECTION WHEN PERFORMING THE BOIL-OUT FUNCTION AND FOLLOW THE MANUFACTURER'S SAFETY INSTRUCTIONS FOR THE BOIL-OUT PRODUCT BEING USED.

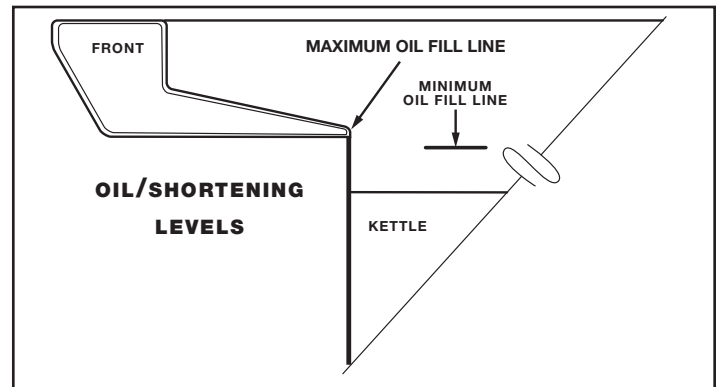
### CAUTION

DO NOT LEAVE THE FRYER UNATTENDED DURING THE BOIL-OUT PROCESS. THE FRYER MUST BE CONTINUOUSLY MONITORED FOR BOIL-OVER CONDITIONS, PARTICULARLY IN HIGH-ALTITUDE LOCATIONS. IF BOIL-OVER IS IMMINENT, IMMEDIATELY TURN THE MASTER POWER SWITCH OFF AND ALLOW THE SOLUTION TO COOL. WHEN THE SOLUTION HAS COOLED, RE-ENTER THE BOIL-OUT MODE.

1. After emptying the fryer of oil or shortening, remove filter cartridge from unit if equipped with a filtration system. (See filtration instructions on page 19.) Close the **DRAIN**. The handle should be rotated clockwise until it stops.


**NOTE:** Always wear eye protection or a face shield and protective rubber gloves when cleaning the frypot as boil-out chemical is an alkaline solution and can cause severe burns.

2. Fill the fryer to the maximum oil fill line with a mixture of cold water and fryer boil-out solution. Carefully follow the manufacturer's directions for mixing the boil-out solution.



### CAUTION

KEEP A CONTAINER OF COLD WATER ON HAND DURING BOIL-OUT IN CASE OF BOIL-OVER. IF BOIL-OVER IS IMMINENT, IMMEDIATELY TURN OFF MASTER POWER SWITCH AND POUR COLD WATER INTO FRYPOT TO QUICKLY REDUCE SOLUTION TEMPERATURE.

3. Turn the Master Power Switch (located within the front access door) to the **"ON"** position.
4. Press the **ELEMENT HI-LIMIT RESET** button.
5. Wait until the **LED** reads **"HEAT"**, then press the **BOIL OUT** button  on the control panel.
6. When 192°F (89°C) is reached, the **LED** will display **"boil"** and that temperature will be maintained. Using a separate timer, allow the frypot to boil-out for 10 minutes.
7. Turn the Master Power Switch located behind the front access door to the **"OFF"** position.

# OPERATION

## BOIL-OUT

8. Wearing protective gloves to avoid burns, scrub the inside of the frypot with a long-handled scrub brush.
9. Attach the drain pipe and direct boil-out solution into a heat-resistant container.
10. Open the **DRAIN**. The handle should be rotated counterclockwise until it stops.
11. Allow the boil-out solution to completely drain. Discard boil-out solution.
12. Rotate the drain valve clockwise to the **"CLOSED"** position. Follow the boil-out solution manufacturer's additional boil-out instructions to rinse the frypot and neutralize boil-out cleaner residue.
13. There may be residual boil-out solution in the oil fill hole and tube. This must be flushed out and discarded separately before filling the tank with new oil to avoid contamination of new oil.
14. Following the boil-out and rinse procedure, wipe dry all accessible interior metal surfaces and interior accessories with a clean, dry cloth to remove remaining moisture. Clean and dry the fry baskets separately.
15. Wipe the exterior of the fryer cabinet with a degreaser/sanitizer suitable for use on food contact surfaces. Always follow the manufacturer's instructions and/or mixing directions for proper solution strengths.  
  
Wipe exterior stainless steel surfaces with the grain of the metal and avoid the use of abrasive pads, steel wool, or metal implements.
16. Fill tank with new oil or shortening.

## CAUTION

ENSURE THERE IS NO WATER IN THE FRYPOT BEFORE FILLING WITH OIL/SHORTENING. WHEN COOKING COMPOUNDS ARE HEATED TO COOKING TEMPERATURE, WATER IN THE FRYPOT WILL CAUSE OIL TO SPLATTER AND MAY BE A BURN HAZARD.

**NOTE:** Make sure the inside of the frypot, the drain opening and all parts that come into contact with new oil/shortening are as dry as possible.

## START UP & GENERAL OPERATION

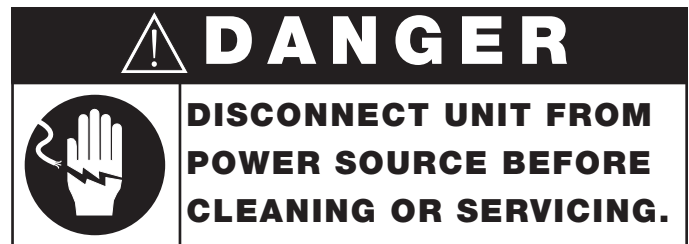
**NOTE:** Perform an initial Boil-Out to clean and sanitize the fryer station before operating.

1. Service is to be performed by an authorized Alto-Shaam service agent.
2. Assure all local electrical codes, fire codes, and all other requirements such as hood installation have been met in the process of installation.

**NOTE:** Because each fryer station is controlled separately, the following procedures must be followed for every component fryer in multiple-station units.

3. Open front access door and ensure drain valve is closed. The handle should be rotated clockwise until it stops.
4. Fill frypot with frying compound as indicated. (SEE ILLUSTRATION ON THE OIL/SHORTENING REQUIREMENTS PAGE)
5. The Master Power Switch is located behind the front access door. Turn Master Power Switch **"ON."**
6. Press the **ELEMENT HI-LIMIT RESET** button.
7. The **LED** display on the control panel will indicate **"-AS-"**, the software version, and then **"CY"**.
8. When the fryer has reached 135°F, the melt cycle is complete and the **LED** display on the control panel will indicate **"HEAT"**.

9. When the fryer displays the set-point temperature, product can be fried.
10. More detailed operating guidelines along with information on programming are located within this manual.
11. To shut the fryer station down, turn the Master Power Switch located behind the front access door to the **"OFF"** position.



**NOTE:** **FOR YOUR PROTECTION** The fryer station is furnished with a hi-limit safety shutoff that will disengage the control if the frying compound temperature in the frypot would ever exceed 415°F (213°C). The **LED** will display **"Hi"**, the heat will shut off, the timer will be cancelled, and a constant alarm will sound. In this event, allow the frying compound temperature to drop below 415°F (213°C). Open the front access door and press the **OIL HI-LIMIT RESET** button for a period of 3-seconds to restart the control.



# OPERATION

## CLEANING & MAINTENANCE



### THOROUGHLY CLEAN DAILY

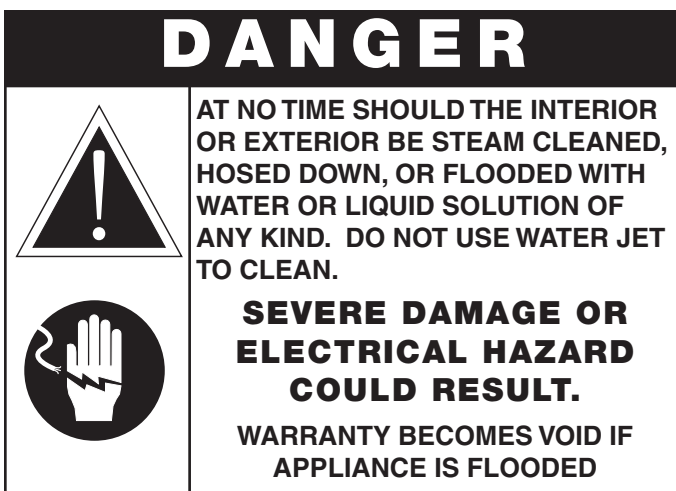
The cleanliness and appearance of this unit will contribute considerably to operating efficiency and savory, appetizing food. Good equipment kept clean works better and lasts longer.

1. Disconnect unit from power source, and let cool.
2. Remove all detachable items. Clean these items separately with a good grease solvent or commercial detergent. Rinse well and dry.
3. Clean control panel, door vents, door handles, and door gaskets thoroughly since these areas harbor food debris. Rinse by wiping with sponge and clean warm water. Wipe dry with a clean cloth.

4. To help maintain the protective film coating on polished stainless steel, clean the exterior of the unit with a cleaner recommended for stainless steel surfaces. Spray the cleaning agent on a clean cloth and wipe with the grain of the stainless steel.

**NOTE:** Avoid the use of abrasive cleaning, compounds, chloride based cleaners, or cleaners containing quaternary salts. Never use hydrochloric acid (muriatic acid) on stainless steel.

Always follow appropriate state or local health (hygiene) regulations regarding all applicable cleaning and sanitation requirements for foodservice equipment.



# OPERATION

## OIL FILTRATION INSTRUCTIONS (FOR UNITS WITH INSTALLED OPTION)

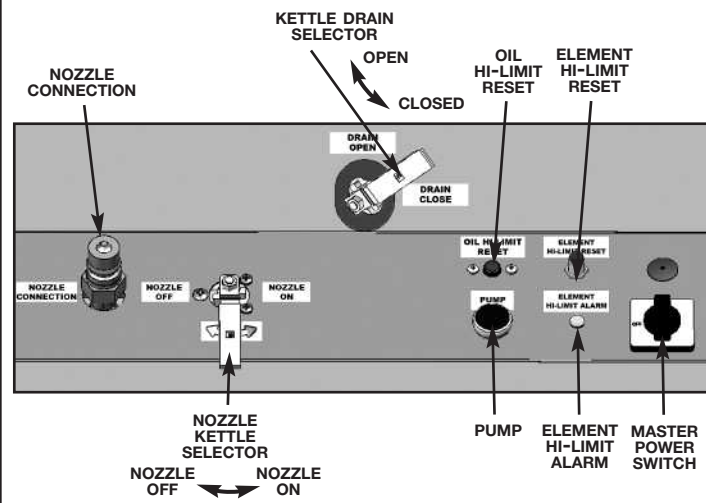
Careful observation of the finished food product will help determine optimal filtering frequency. Filtering the cooking oil at regular intervals will help ensure food quality.

**FOR BEST RESULTS:** Do not allow the temperature of the oil to decrease below the “**Idle Mode**” temperature of 250°F (121°C) when filtering. If filtering at the end of the day, pump oil back into the kettle while still hot. Do not allow oil to cool before returning to kettle.

### CAUTION

OPERATORS MUST BE MADE AWARE OF THE HAZARDS INVOLVED IN THE OPERATION OF A HOT OIL FILTERING SYSTEM. ON-SITE SUPERVISION DURING THE FILTRATION PROCESS AND THE CLEANING PROCESS IS STRONGLY RECOMMENDED.

### ASF-75E, 120V WITH FILTRATION



1. Open the front access door. With the Kettle/Nozzle selector in the “**KETTLE**” position, rotate the drain valve counterclockwise until rotation stops and the drain valve is in the “**OPEN**” position. Power to the main control panel will automatically switch “**OFF.**”
2. Allow contents of the fryer to completely drain.
3. Press the **PUMP “ON”** to allow the oil to circulate through the drain system to flush crumbs. Using the brushes provided, brush the sides and bottom of the fryer while the oil is circulating through the system. Use the angle brush under the heat exchangers.
4. Press the **PUMP “OFF”** and allow contents of the fryer to completely drain.
5. Rotate the drain valve clockwise to the “**CLOSED**” position.
6. Press the **PUMP “ON”** and allow the fryer to refill to the recommended level adding additional oil/shortening as required to maintain proper fill level.
7. After the frypot has completely refilled, pull out the mobile oil trolley and discard the filter into a proper receptacle. Clean the filter assembly and oil trolley, if needed.
8. Replace the oil filter and return the trolley to the proper position beneath the fryer.
9. Press and hold the “**ON/OFF**” key on the main control panel for 1-1/2 to 2 seconds to energize the fryer. Continue normal fryer operation after the preheat function has been completed.



### CAUTION



METAL PARTS OF THIS EQUIPMENT BECOME EXTREMELY HOT WHEN IN OPERATION. TO AVOID BURNS, ALWAYS USE HAND PROTECTION WHEN OPERATING THIS APPLIANCE.

### WARNING



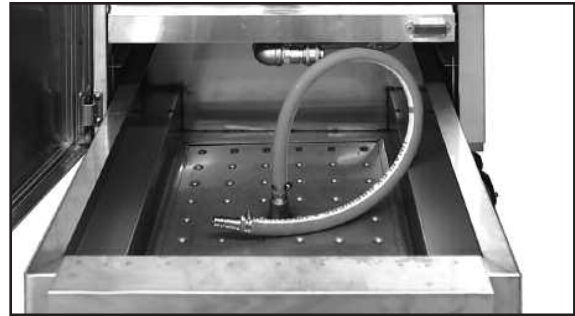
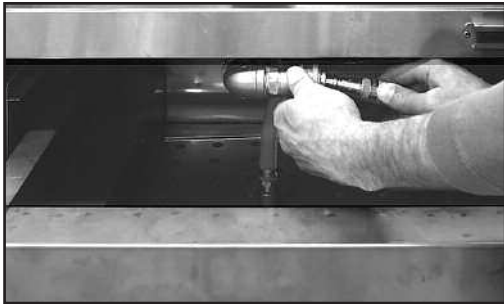
TO AVOID PERSONAL INJURY, USE CAUTION WHEN SURFACES BECOME SLIPPERY DUE TO SPILLED OR DRIPPING OIL.

# OPERATION

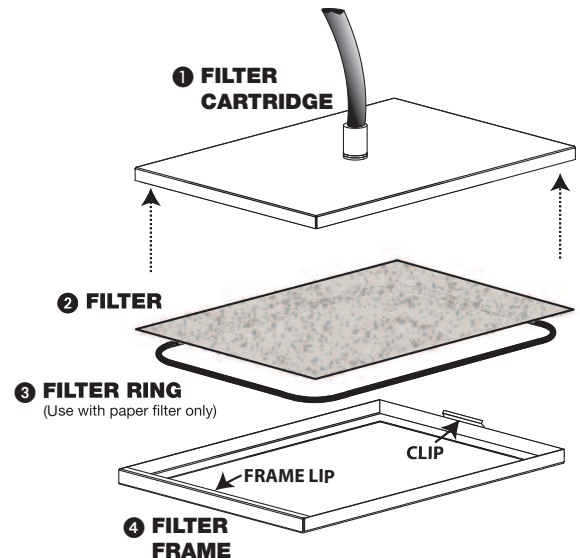
## OIL FILTRATION INSTRUCTIONS (FOR UNITS WITH INSTALLED OPTION)

### FILTER REPLACEMENT

1. With the **DRAIN** in the “**CLOSED**” position, pull the trolley from the fryer and disconnect the hose from the fryer.



2. Pushing down on filter frame **4** clip, pull side of filter cartridge **1** closest to clip upwards. Slide opposite edge of filter cartridge out from beneath the filter frame lip.
3. Remove used filter **2** and filter ring **3**. Discard filter **2**. Retain filter ring **3**.
4. Place new filter **2** and filter ring **3** next to screen on underside of filter cartridge **1**. Reverse step 2 above.
5. Reconnect hose to fryer and return trolley to the full position under the fryer.



STANDARD AND OPTIONAL FILTERS	
PART NO.	DESCRIPTION
FI-27791	PAPER (STANDARD WITH FRYER) 7-count package
FI-27794	PAPER (STANDARD WITH FRYER) 100-count package
FI-27648	CHARCOAL / CARBON FILTER 30-count pkg.
FI-27014	REUSABLE MESH FILTER, single

## OIL FILTRATION INSTRUCTIONS (FOR UNITS WITH INSTALLED OPTION)

### FILTER CLEANING & MAINTENANCE

**NOTE:** Make certain to use hand protection when working with hot surfaces.

**REUSABLE MESH FILTER OPTION:**

Clean the reusable mesh filter (**FI-27014**) by spraying thoroughly with hot water. **DO NOT** clean in the dishwasher. **DO NOT** use detergents to clean. Detergents and detergent residues will significantly reduce the life of oil and shortening products.

### CAUTION

A WORN FILTER WILL AFFECT  
PRODUCT FRYING RESULTS.

Make certain the filter is performing efficiently by inspecting the filter each time it is cleaned. Examine for cuts and holes. For the best results, replace the filter whenever necessary.

### CAUTION

TO PREVENT FILTER DAMAGE, DO NOT USE SHARP  
IMPLEMENTS TO REMOVE SCRAPS FROM THE FILTER.

Make certain the filter is securely fastened to the support basket before returning the assembly to the trolley.

To discard deteriorated oil/shortening, the trolley can be pulled from the fryer and can be rolled to a convenient location for use with a pumping device.

**ALWAYS MAKE CERTAIN THE TROLLEY IS  
PROPERLY POSITIONED BENEATH THE  
FRYER BEFORE OPERATION.**

### WARNING



TO AVOID PERSONAL INJURY, USE  
CAUTION WHEN SURFACES BECOME  
SLIPPERY DUE TO SPILLED OR  
DRIPPING OIL.

### CAUTION



METAL PARTS OF THIS EQUIPMENT  
BECOME EXTREMELY HOT WHEN IN  
OPERATION. TO AVOID BURNS,  
ALWAYS USE HAND PROTECTION  
WHEN OPERATING THIS APPLIANCE.

# OPERATION

## OIL FILTRATION INSTRUCTIONS (FOR UNITS WITH INSTALLED OPTION)

### CLEANING & MAINTENANCE

#### OIL DISCARD HOSE OPTION:

The oil discard hose option (HO-27686) is available as an option to assist both the boil-out and filtration operation.

With the discard hose attached to the nozzle connection, place the Kettle/Nozzle selector in the **"NOZZLE"** position.

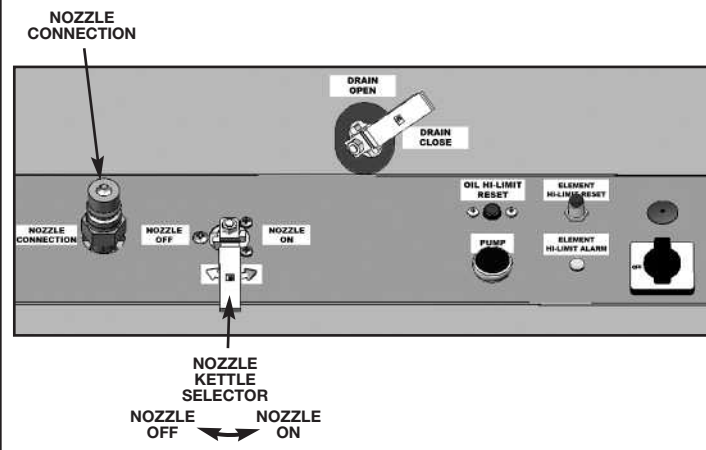
The drain can be placed in the **"OPEN"** or **"CLOSED"** position as required.

Disconnect hose following use and return the selector to the **"KETTLE"** position.



Nozzle will contain a small amount of oil after use. Dispose of properly.

#### ASF-75E, 120V WITH FILTRATION



## DANGER



TO AVOID SERIOUS PERSONAL INJURY DO NOT STAND ON THE FRYER OR FRYER COVER. THE FRYER COVER IS DESIGNED TO HOLD A MAXIMUM OF 10-POUNDS (4,5 KG) OF WEIGHT.

## ALL SUGGESTED FRYING TIMES ARE BASED ON A FULL LOAD OF PRODUCT

Remove ice crystals and ensure that food is dry before frying. Excessive water and ice can cause oil to splatter or overflow. Do not over fill the basket. Food needs to be surrounded by oil for best frying results.

### SUGGESTED FRYING TIMES

ITEM		MINUTES	TEMPERATURE	DISPLAY
PROGRAM KEYS	1. Fries (FROZEN)	3:30	350°F (177°C)	Fries
	2. Chicken Nuggets (FROZEN)	3:30	350°F (177°C)	Nuggets
	3. Fish, Breaded (FROZEN)	4:30	350°F (177°C)	Fish
	4. Chicken Pieces, Breaded (FRESH)	17:00	340°F (171°C)	Chicken
	5. PRODUCT A			ProductC
	6. PRODUCT B			ProductD
ITEM		MINUTES	TEMPERATURE	
Appetizer		3:30	350°F (177°C)	
Breaded Cauliflower		3:30	340°F (171°C)	
Breaded Fish		Per pkg. instructions	340°F (171°C)	
Breaded Mac & Cheese		3:30	340°F (171°C)	
Breaded Mushrooms		3:30	340°F (171°C)	
Broccoli Cheese Nuggets		2:30	350°F (177°C)	
Cheese Cake, Fried		8:30	350°F (177°C)	
Cheese Nuggets		1:30	350°F (177°C)	
Chicken Breasts (FRESH)		12:00-17:00	315°F (171°C)	
Chicken Breasts (FROZEN)		20:00	330°F (166°C)	
Chicken Fried Steak		4:00	350°F (177°C)	
Chicken Gizzards (FRESH)		3:30	350°F (177°C)	
Chicken, Legs & Wings (FRESH)		12:00-17:00	315°F (171°C)	
Chicken Legs (FROZEN)		18:00	330°F (166°C)	
Chicken, Patty		6:00	350°F (177°C)	
Chicken Pieces - MRB (FROZEN)		17:00	340°F (171°C)	
Chicken Strips		6:00	340°F (171°C)	
Chicken Tenderloins (FRESH)		3:00	350°F (177°C)	
Chicken Tenders, Breaded (FROZEN)		3:30	350°F (177°C)	
Chicken Wings (FRESH)		3:30	350°F (177°C)	
Chicken Wings (FROZEN)		15:00	330°F (177°C)	
Clam Strips		2:00	340°F (171°C)	
Corn Dogs		10:00	350°F (177°C)	
Cream Cheese Jalapeño Poppers		3:30	340°F (171°C)	

THE TIMES AND TEMPERATURES ARE SUGGESTED GUIDELINES ONLY. ALL COOKING SHOULD BE BASED ON INTERNAL PRODUCT TEMPERATURES. DUE TO VARIATIONS IN PRODUCT QUALITY, WEIGHT, AND DESIRED DEGREE OF DONENESS, THE COOKING TIMES AND TEMPERATURES MAY NEED TO BE ADJUSTED ACCORDINGLY. ALWAYS FOLLOW LOCAL HEALTH (HYGIENE) REGULATIONS FOR ALL INTERNAL TEMPERATURE REQUIREMENTS.

# OPERATION

## ALL SUGGESTED FRYING TIMES ARE BASED ON A FULL LOAD OF PRODUCT

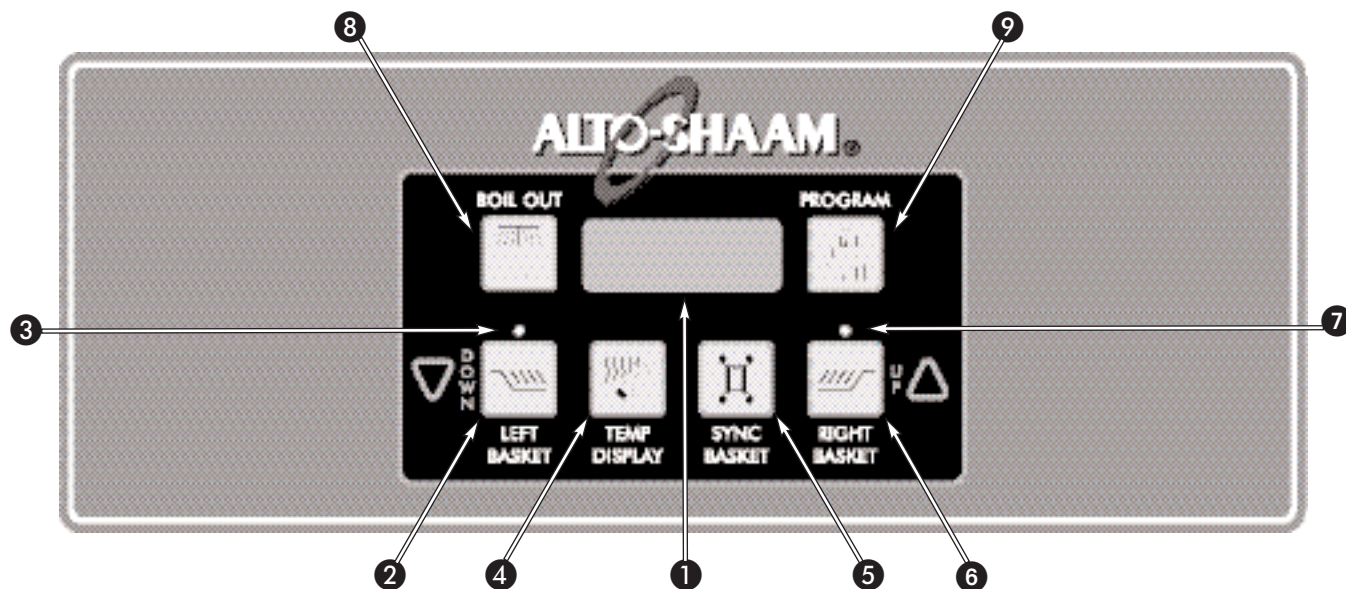
Remove ice crystals and ensure that food is dry before frying. Excessive water and ice can cause oil to splatter or overflow. Do not over fill the basket. Food needs to be surrounded by oil for best frying results.

SUGGESTED FRYING TIMES		
ITEM	MINUTES	TEMPERATURE
Eggplant	4:00	340°F (171°C)
Egg Rolls (FROZEN)	5:00	340°F (171°C)
Fries, Crinkle-Cut	5:00	340°F (171°C)
Fries, Seasoned	4:00	340°F (171°C)
Fries, Sour Cream & Chive	4:00	340°F (171°C)
Fries (FRESH)	5:00	340°F (171°C)
Fries, Thin Cut	3:30	340°F (171°C)
Hash Brown Circles	4:00	340°F (171°C)
Jalapeno Peppers, Stuffed	4:00	350°F (177°C)
Mozzarella Sticks, Battered or Breaded	Per pkg. instructions	340°F (171°C)
Mushrooms, Breaded	3:30	350°F (177°C)
Onion Rings	3:00	340°F (171°C)
Pork Chops (FRESH)	10:00	340°F (171°C)
Pork (FRESH)	12:00	340°F (171°C)
Potato Chips (fresh)	2:45	325°F (163°C)
Potato Wedges	3:00	350°F (177°C)
Quesadilla Rolls	3:30	350°F (177°C)
Shrimp	3:30	340°F (171°C)
Vegetables	3:00	350°F (177°C)
Zucchini, Breaded (FRESH)	3:30	350°F (177°C)

THE TIMES AND TEMPERATURES ARE SUGGESTED GUIDELINES ONLY. ALL COOKING SHOULD BE BASED ON INTERNAL PRODUCT TEMPERATURES. DUE TO VARIATIONS IN PRODUCT QUALITY, WEIGHT, AND DESIRED DEGREE OF DONENESS, THE COOKING TIMES AND TEMPERATURES MAY NEED TO BE ADJUSTED ACCORDINGLY. ALWAYS FOLLOW LOCAL HEALTH (HYGIENE) REGULATIONS FOR ALL INTERNAL TEMPERATURE REQUIREMENTS.



## PANEL IDENTIFICATION



### CONTROL PANEL IDENTIFICATION

1. L.E.D. 4-DIGIT DISPLAY	6. RIGHT BASKET BUTTON
2. LEFT BASKET BUTTON	7. RIGHT BASKET INDICATOR LIGHT
3. LEFT BASKET INDICATOR LIGHT	8. BOIL OUT BUTTON
4. TEMP DISPLAY BUTTON	9. PROGRAM BUTTON
5. SYNC BASKET BUTTON (Optional)	

## CAUTION



METAL PARTS OF THIS EQUIPMENT BECOME EXTREMELY HOT WHEN IN OPERATION. TO AVOID BURNS, ALWAYS USE HAND PROTECTION WHEN OPERATING THIS APPLIANCE.



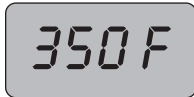
# OPERATION

## LEFT AND RIGHT BASKET OPERATION

**NOTE:** Because each fryer station is controlled separately, the following procedures must be followed for every component fryer in multiple-station units.

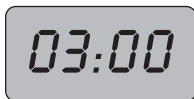
1. Ensure that the fryer has reached the set-point temperature and it is displayed on the control panel.

(FOLLOW INSTRUCTIONS ON THE START UP AND GENERAL OPERATION PAGE)



2. **LOAD PRODUCT** Load product in basket(s) and set basket(s) in the fryer lift brackets.

3.  To operate the left basket, press the **LEFT BASKET** button on the control panel.

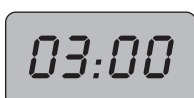


The left basket will lower.

The display will show the programmed time and count down the remaining time for the left basket IF IT HAS LESS TIME LEFT THAN THE RIGHT BASKET.

During cooking, the Left Basket Indicator Light will blink fast if its time is displayed and at a slower rate if its time is not displayed.

4.  To operate the right basket, press the **RIGHT BASKET** button on the control panel.

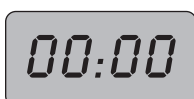


The right basket will lower.

The display will show the programmed time and count down the remaining time for the right basket IF IT HAS LESS TIME LEFT THAN THE LEFT BASKET.

During cooking, the Right Basket Indicator Light will blink fast if its time is displayed and at a slower rate if its time is not displayed.

5. When the programmed time for either basket has expired:



The basket will automatically rise.

The display will show **"00:00"**, then flash **"L"** or **"r"**, and the alarm will sound on and off.

CONTINUED

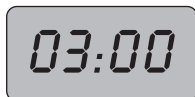
## LEFT AND RIGHT BASKET OPERATION

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6. Press the **LEFT BASKET** or **RIGHT BASKET** button to stop alarm.

### 7. REMOVE PRODUCT

**NOTE:** To stop the cooking function of either basket before the programmed time, press the **LEFT BASKET** or **RIGHT BASKET** button.



The Indicator Light for that basket will go out.

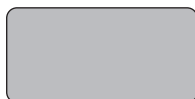
The display will revert to the other basket's remaining time or the frypot temperature.

The basket will automatically rise.

## SHUTDOWN

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To shut the fryer station down, turn the Master Power Switch located behind the front access door to the **"OFF"** position.



The basket will automatically rise.

The display will become blank.

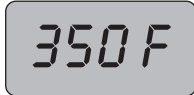
# OPERATION

## SYNCHRONIZED BASKETS OPTION


**NOTE:** Because each fryer station is controlled separately, the following procedures must be followed for every component fryer in multiple-station units.

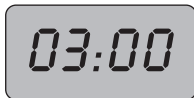
1. Ensure that the fryer has reached the set-point temperature and it is displayed on the control panel.

(FOLLOW INSTRUCTIONS ON THE START UP AND GENERAL OPERATION PAGE)



2. **LOAD PRODUCT** Load product in baskets and set baskets in the fryer lift brackets.

3.  To operate the both baskets simultaneously, press the **SYNC BASKET** button on the control panel along with either the **LEFT BASKET** or **RIGHT BASKET** button.



Both baskets will lower.

The display will show the programmed time and count down the remaining time.

During cooking, the Indicator Light of the pushed button will blink fast.

4. When the programmed time has expired:



The baskets will automatically rise.

The display will show “00:00”, then flash “L” or “r”, depending on the pushed button, and the alarm will sound on and off.

5. Press the **LEFT BASKET** or **RIGHT BASKET** button to stop alarm.

6. **REMOVE PRODUCT**

**NOTE:** Another cooking function can not be started during a synchronized cooking function.

## CONTROL PROGRAMMING OVERVIEW


### CAUTION


THIS SECTION IS PROVIDED FOR THE ASSISTANCE OF QUALIFIED PERSONNEL ONLY AND IS NOT INTENDED FOR USE BY UNTRAINED OR UNAUTHORIZED PERSONNEL.



**NOTE:** Because each fryer station is controlled separately, the following procedures must be followed for every component fryer in multiple-station units.

Control Programming allows you to:


- Set the left and right timers
- Choose the set-point temperature
- Choose the correct melt cycle for our frying compound
- Lock the Control Programming
- Select °F or °C for the temperature display




Press the **"PROGRAM"** button  to enter Control Programming.

 **OR** 

Press the **LEFT BASKET** or **RIGHT BASKET** button to scroll through the choices for each function.



Pressing the **PROGRAM** button confirms the change and moves on to the next function.

 **+ HOLD**

Pressing and holding the **PROGRAM** button for one second exits Control Programming.

# OPERATION

## PROGRAMMING THE CONTROL

### CAUTION




THIS SECTION IS PROVIDED FOR THE ASSISTANCE OF QUALIFIED PERSONNEL ONLY AND IS NOT INTENDED FOR USE BY UNTRAINED OR UNAUTHORIZED PERSONNEL.

**NOTE:** Because each fryer station is controlled separately, the following procedures must be followed for every component fryer in multiple-station units.




**1. Enter Control Programming.** Press the **PROGRAM** button.

- If unlocked, the display will go right into the Control Programming sequence.
- If locked, **“LoC”** will display, and the password routine must be pressed. (The password routine = **LEFT BASKET - LEFT BASKET - RIGHT BASKET - RIGHT BASKET.**)




**2. Set the left and right timer.** First, the Left Basket Indicator Light will come on and the currently set time for the left basket will appear in the **LED** with its colon flashing.

- Scroll up or down in one second increments by pressing  or .
- Press  to accept the new setting and proceed to the right basket timer.




Then, the Right Basket Indicator Light will come on and the currently set time for the right basket will appear in the **LED** with its colon flashing.

- Scroll up or down in one second increments by pressing  or .
- Press  to accept the new setting and go on to the set-point temperature.

**3. Choose the set-point temperature.** The current set-point temperature will appear in the **LED** with a flashing **“F”** or **“C”**.

- Scroll up or down in one degree increments by pressing  or .
- Press  to accept the new setting and proceed to offset the temperature.

**4. Calibrate (offset) the temperature.** The current offset temperature will appear in the **LED**, always in °F. The offsets available range from -20°F to 20°F.




- Scroll up or down in one degree increments by pressing  or .
- Press  to accept the new setting and proceed to the melt cycle.

## PROGRAMMING THE CONTROL

### CAUTION




THIS SECTION IS PROVIDED FOR THE ASSISTANCE OF QUALIFIED PERSONNEL ONLY AND IS NOT INTENDED FOR USE BY UNTRAINED OR UNAUTHORIZED PERSONNEL.

5. Choose the correct melt cycle for your frying compound. The melt cycle will appear in the **LED** as **“CY L”** or **“CY S”**. **“CY L”** is for liquid frying compounds such as oil and **“CY S”** is for solid frying compounds such as shortening. Do not choose **“CY 0”**.





- Scroll to change melt cycles by pressing  or .
- Press  TWICE to accept the new setting and proceed to the lock.


**NOTE:** Do not press just once and change the **“gAS”** or **“ELEC”** setting.

6. Lock or unlock the Control Programming. **“LoC”** or **“ULoC”** will appear in the **LED** display. **“LoC”** will prohibit unqualified personnel (without the password) from entering Control Programming. **“ULoC”** will leave Control Programming locked.

- Scroll to change lock condition by pressing  or .
- Press  to accept the new setting and proceed to select °F or °C.

7. Select °F or °C for the temperature display. **“F”** or **“C”** will appear in the **LED** display. **“F”** will cause the **LED** to display Fahrenheit. **“C”** will cause the **LED** to display Celsius.

- Scroll to change from °F to °C by pressing  or .
- Press  to accept the new setting and proceed to restart Control Programming sequence or press and hold  for one second to exit Control Programming.

**NOTE:** At any point in the sequence, pressing and holding  for one second will exit Control Programming.

# BASIC CONTROL TROUBLESHOOTING

## TEMPERATURE VERIFICATION

**NOTE:** Because each fryer station is controlled separately, the following procedures must be followed for every component fryer in multiple-station units.








The temperature of the cooking oil / shortening and the temperature set-point can be verified at any time.

Press **TEMP DISPLAY** button once to verify the actual temperature of the cooking oil / shortening.

Press **TEMP DISPLAY** button twice to verify the set-point temperature.

Press **TEMP DISPLAY** button three times to return the **LED** to its previous reading. The **LED** will also automatically return to its previous reading after three (3) seconds.

If a defective probe is suspected, measure the temperature of the oil / shortening with a thermometer. Compare the thermometer reading with the temperature shown in the control to make certain the readings are reasonably close. If there is a wide discrepancy, perform a complete fryer station shutdown and contact Alto-Shaam service.

ALARM MESSAGES	
PROBABLE CAUSE	SOLUTION
 <p>Probe open. Probe wired wrong.</p>	<p>Refer to wiring diagram for correct wiring. Measure probe in ice water bath for 100 ohms resistance.</p>
 <p>Probe shorted. Hi-limit tripped.</p>	<p>Contact Alto-Shaam service. Allow frypot to cool and press the <b>OIL HI-LIMIT RESET</b> button for three (3) seconds.</p>
   <p>Drain valve interlock.</p>	<p>Turn Master Power Switch off, ensure the drain is closed, and turn Master Power Switch back on.</p>



## DANGER



**DISCONNECT UNIT FROM  
POWER SOURCE BEFORE  
CLEANING OR SERVICING.**

## CAUTION

THIS SECTION IS PROVIDED FOR THE ASSISTANCE  
OF QUALIFIED SERVICE TECHNICIANS ONLY AND  
IS NOT INTENDED FOR USE BY UNTRAINED OR  
UNAUTHORIZED SERVICE PERSONNEL.

## CAUTION

IT IS RECOMMENDED THIS APPLIANCE BE INSPECTED  
BY A QUALIFIED SERVICE TECHNICIAN AT REGULAR  
INTERVALS AS PART OF A STANDARD KITCHEN  
MAINTENANCE PROGRAM.



### EXTENDED LIMITED FRYPOT WARRANTY

Alto-Shaam, Inc. warrants to the original purchaser that any frypot that is found to be defective in material or workmanship will, at Alto-Shaam's option, subject to provisions hereinafter stated, be replaced with a new or rebuilt frypot.

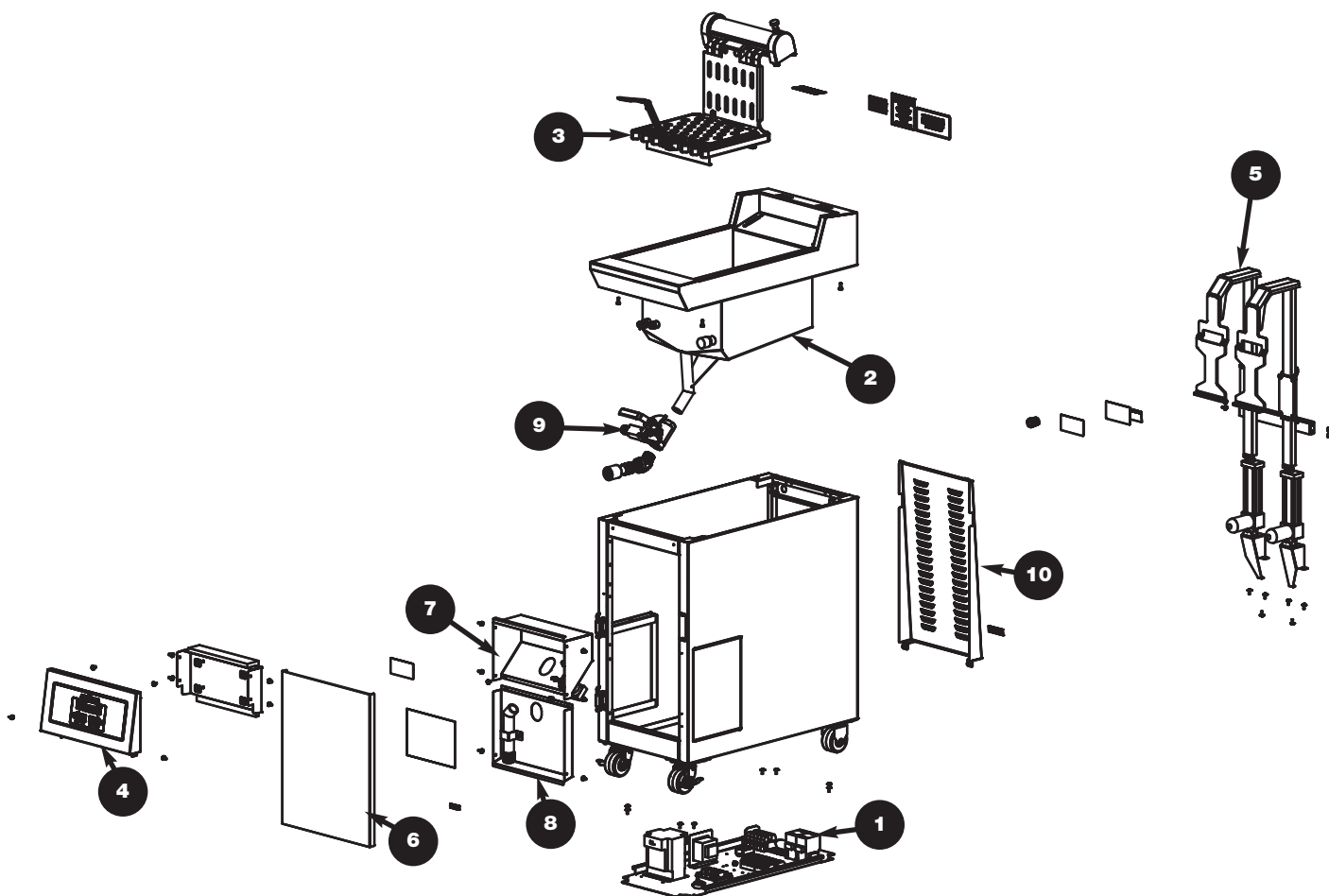
The labor warranty remains in effect for three (3) years from the shipping date. Alto-Shaam will bear shipping and normal labor charges for installation performed during standard business hours, and excluding overtime, holiday rates or any additional fees.

The parts warranty remains in effect for seven (7) years from the shipping date. Following the initial three (3) year labor warranty, Alto-Shaam will replace the frypot only, with freight, labor and all additional charges at the full responsibility of the owner/operator.

Extended frypot warranty coverage is subject to all remaining provisions as set forth in Alto-Shaam's standard published warranty.



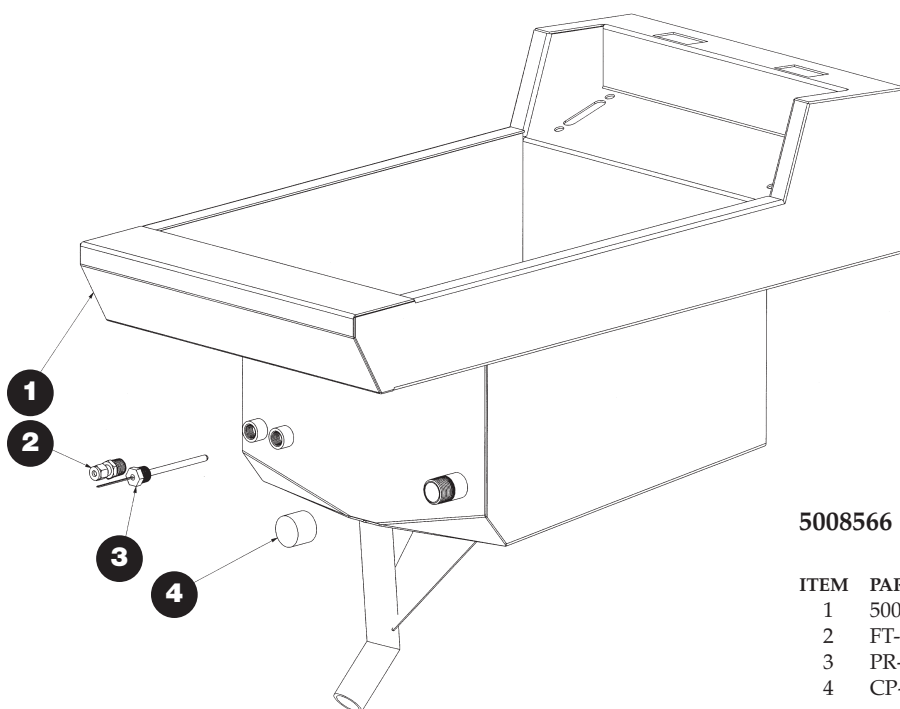
# ASF-60E WITH AUTOMATIC LIFTS



See details for these assemblies on following pages:

ITEM	PART NO	DESCRIPTION	QTY
1	5007680	ELECTRIC ASSY 208-220, 240V, BSC, LIFT	1
2	5008566	KETTLE ASSY-ASF60E BASIC W/LIFT	1
3	5008656	ELEMENTS ASSY-ASF60E 208-220V	1
4	5007494	CONTROL PANEL ASSEMBLY	1
5	5007518	LIFT ASSEMBLY-ASF-60	1
6	5007555	DOOR-ASF 60	1
7	5008570	DRAIN PANEL AND SWITCHES-60E	1
8	5008503	LOWER PANEL WITH DRAIN PIPE	1
9	5007792	VALVE-DRAIN ASSEMBLY ASF-60	1
10	1008458	PANEL-BACK	1

# ASF-60E WITH AUTOMATIC LIFTS

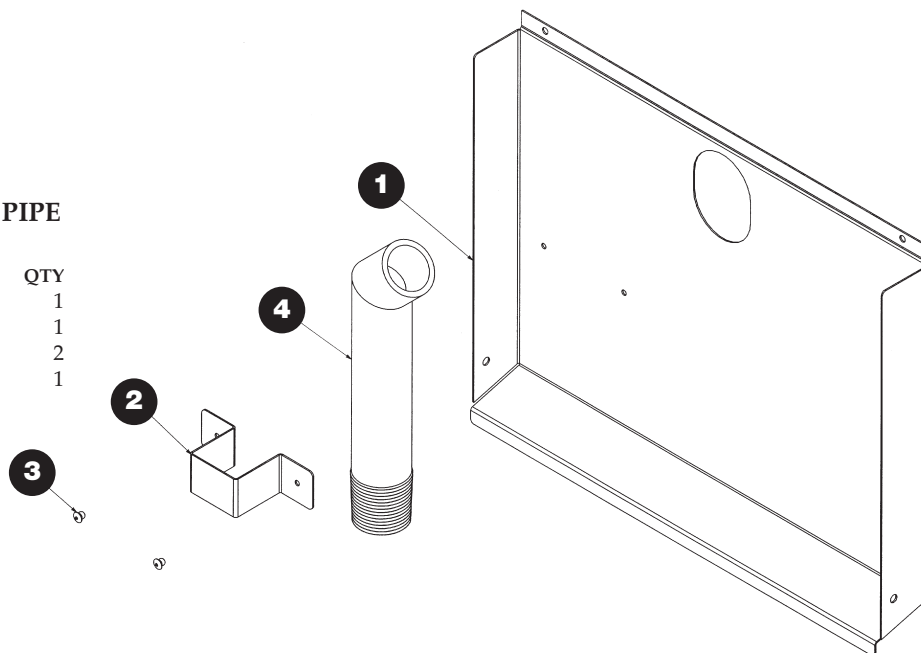


## 5008566 KETTLE ASSY, BASIC W/LIFT

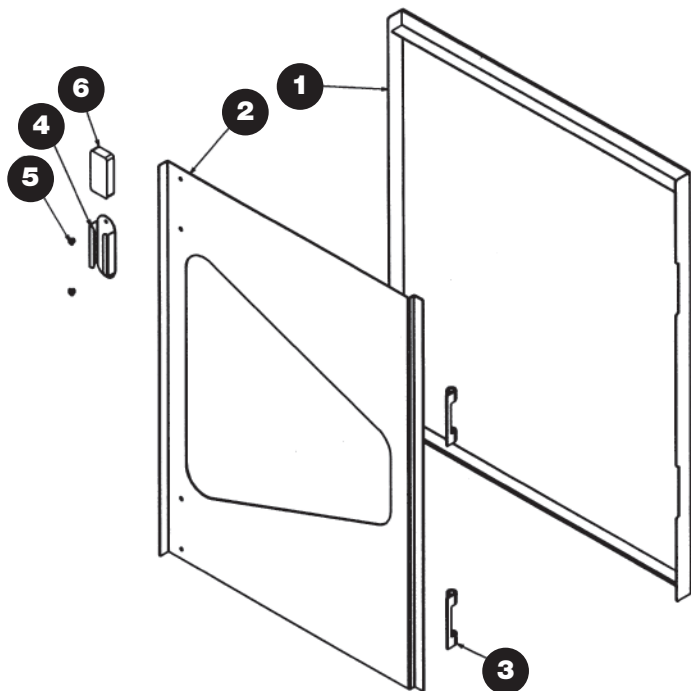
ITEM	PART NO	DESCRIPTION	QTY
1	5007603	KETTLE W/LIFT	1
2	FT-27250	FITTING-1/4" COMPRESSION x 3/8 NPT	1
3	PR-34483	PROBE-NTC THERMISTOR 100K OHM	1
4	CP-28016	CAP-3/4 NPT	1

## 5008503 LOWER PANEL WITH DRAIN PIPE

ITEM	PART NO	DESCRIPTION	QTY
1	1009173	PANEL, LOWER	1
2	1009174	BRACKET-DRAIN HOLDER	1
3	RI-2097	#42 STAINLESS RIVET	2
4	PP-28126	PIPE - DRAIN	1



# ASF-60E WITH AUTOMATIC LIFTS

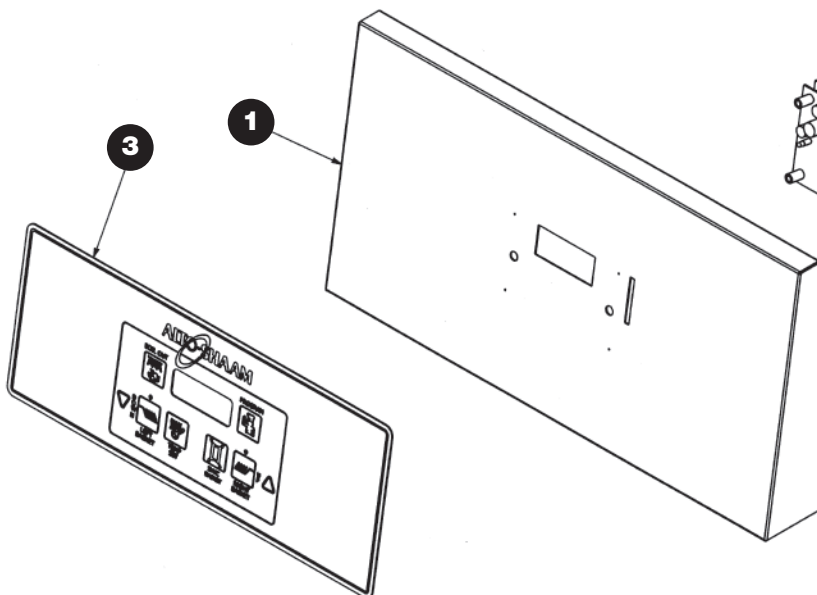
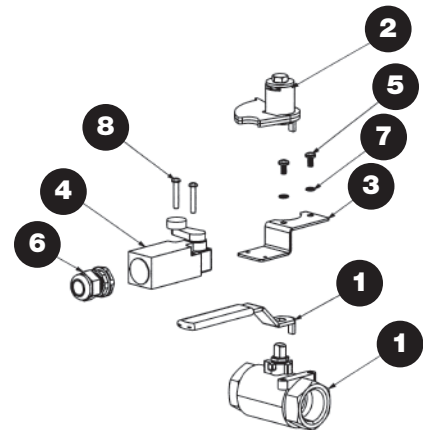


## 15007555 DOOR

ITEM	PART NO	DESCRIPTION	QTY
1	1008455	OUTER DOOR	1
2	1008462	INNER DOOR	1
3	HG-26994	HINGE, FEMALE, DOOR	2
4	1006303	BRACKET-MAGNET	1
5	RI-2097	#42 STAINLESS RIVET	2
6	MA-25734	MAGNET, DOOR, AR-7E	1

## 5007792 VALVE-DRAIN ASSEMBLY

ITEM	PART NO	DESCRIPTION	QTY
1	VA-28114	VALVE-BALL USE WITH FT-28113	1
2	5008497	WLDMT-DRAIN CAM	1
3	1008739	BRACKET, DRAIN SWITCH MOUNT	1
4	SW-34246	LIMIT SWITCH	1
5	SC -28288	SCREW-10-24 x .375 PHMS	2
6	BU-3964	BUSHING, STRAIG HT, STRAIN RELIEF	1
7	WS-23671	WASHER, LOCK, #10, 18-8 S/S	2
8	SC -2069	SCREW, 8-32 X 1, NC PHILLIPS PAN	2



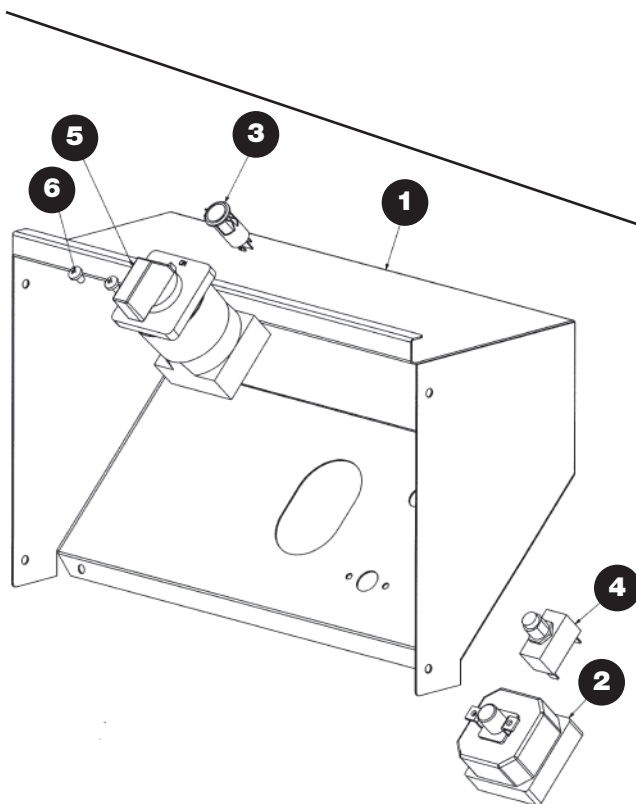
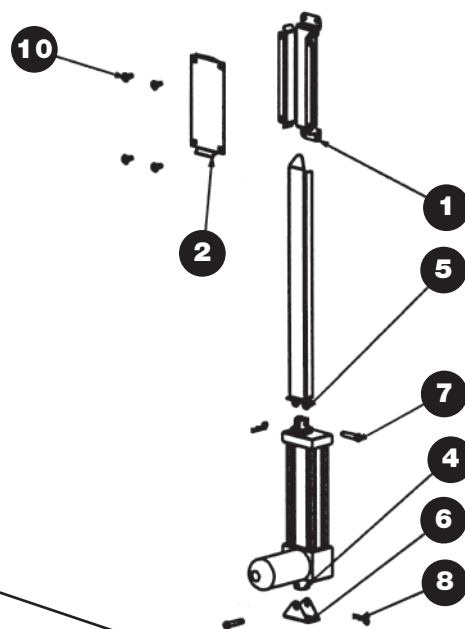
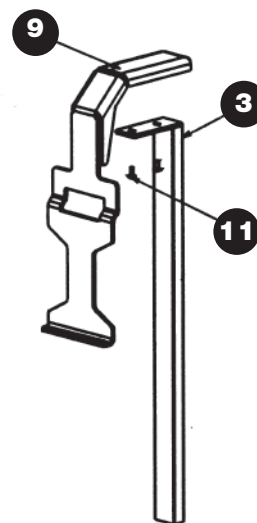
## 5007494 CONTROL PANEL ASSEMBLY

ITEM	PART NO	DESCRIPTION	QTY
1	5007565	WLDMT-BASIC CONTROL PANEL	1
2	CC-34499	CONTROL-SIMPLE	1
3	PE-27929	OVERLAY WITH MEMBRANE	1
4	NU-2361	NUT, 6-32 HEX, S/S	4

# ASF-60E WITH AUTOMATIC LIFTS

## 5007518 LIFT ASSEMBLY-ASF-60

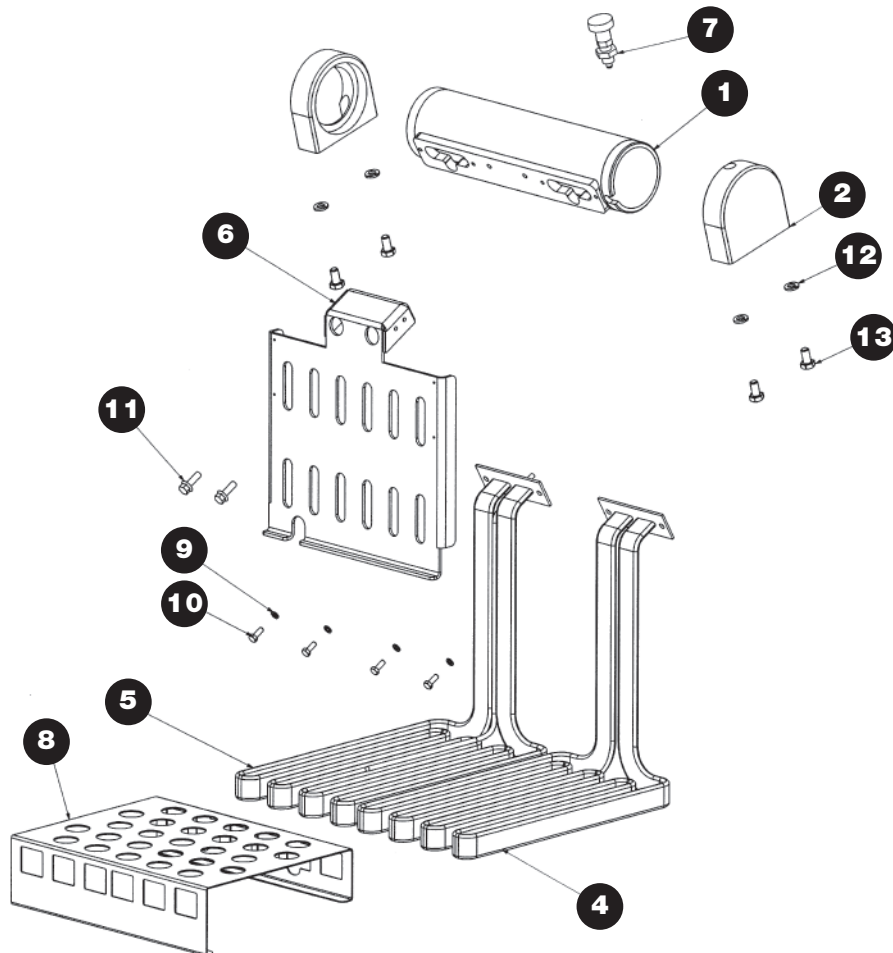
ITEM	PART NO	DESCRIPTION	QTY
1	1008420	GUIDE COLUMN	2
2	1008421	GUIDE SUPPORT	2
3	RD-28118	ROD, LIFT, WELD	2
4	MO-27011	MOTOR, LIFT	2
5	1008419	GUIDE PEN	2
6	1008418	BRACKET, LIFT MOTOR MOUNT	2
7	PI-27539	PIN, 1/4" X 1 1/4", CLEVIS	4
8	PI-27540	PIN, COTTER	4
9	HL-28117	WLDMT-BASKET LIFT	2
10	SC-2661	SCREW, 10-32 X1 1/2,NF PHIL TRUSS M/S,18-8 SS	24



## 5008570 DRAIN PANEL AND SWITCHES

ITEM	PART NO	DESCRIPTION	QTY
1	1009268	PANEL, FRONT LOWER	1
2	TT-34245	THERMOSTAT, HI-LIMIT	1
3	LI-3951	WHITE PILOT LIGHT 250V	1
4	SW-33495	SWITCH-PUSH BUTTON SPST	1
5	SW-34254	SWITCH, CAM, FOR SINGLE PHASE	1
6	SC -22271	SCREWS, M4-0.7X6MM PHIL	2

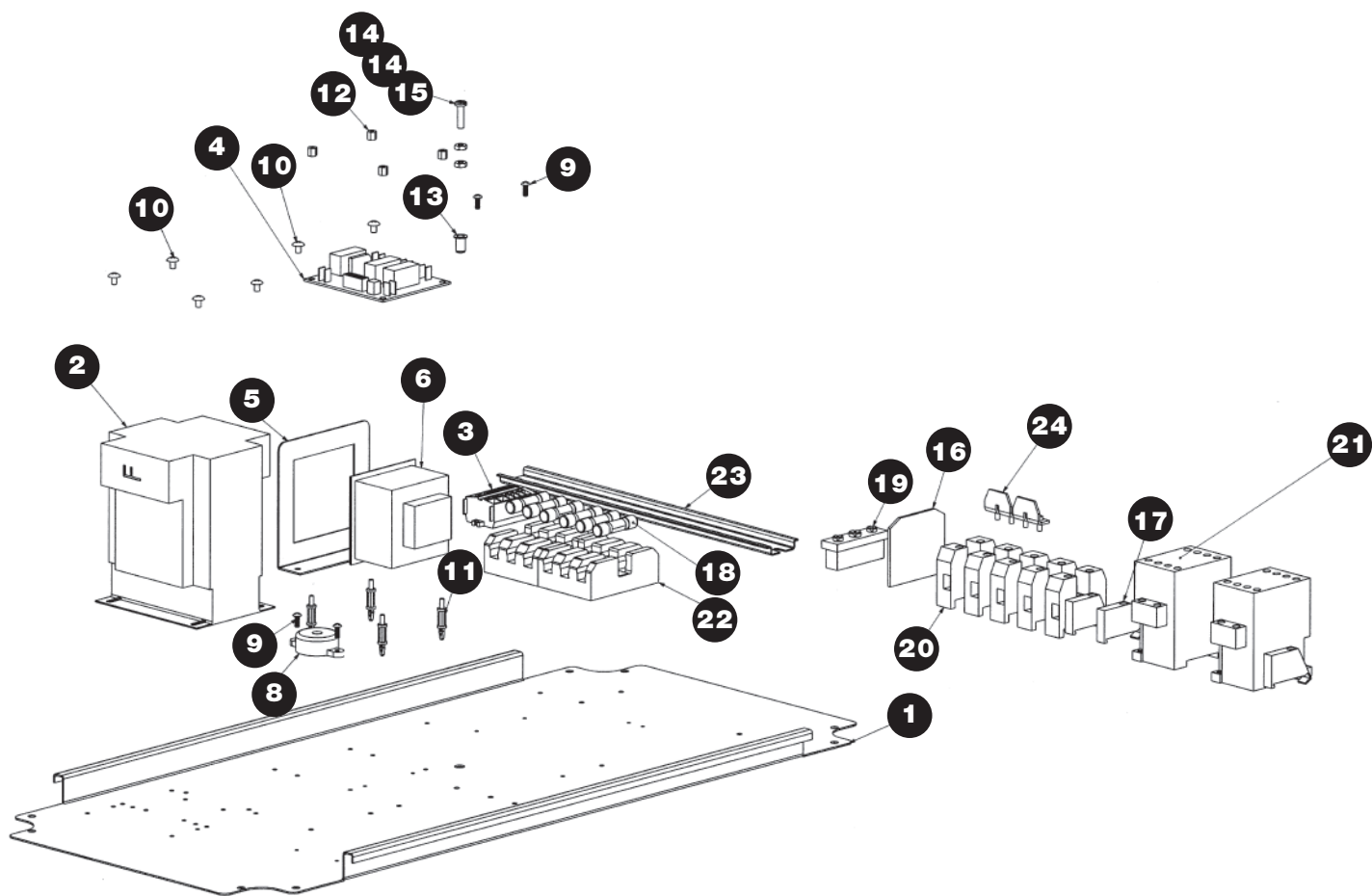
# ASF-60E WITH AUTOMATIC LIFTS



## 5008656 ELEMENTS ASSY-ASF60E 208-220V

ITEM	PART NO	DESCRIPTION	QTY
1	PP-28143	PIPE, 2-1/2" SC H-40 304 SS	1
2	BK-27098	HINGE BLOCK WITH SECURITY PIN	1
3	BK-27099	HINGE BLOCK WITHOUT	1
4	EL-34352	ELEMENT 208-220V	1
5	EL-34387	ELEMENT 208-220V W/TC	1
6	1008527	GUARD, HEATER	1
7	PI-27152	PIN, SECURITY	1
8	1009262	ELEMENT GUARD	1
9	WS-23671	WASHER, LOCK, #10, 18-8 S/S	4
10	SC -27481	SCREW, 10-32 X 1 1/2" HEX HD, SS	4
11	SC -25286	1/4-20 X 3/4" FLANGED HD	2
12	WS-22303	M8 SPLIT RING WASHER	4
13	SC -26462	HEX HEAD SCREW, M8 X 15	4

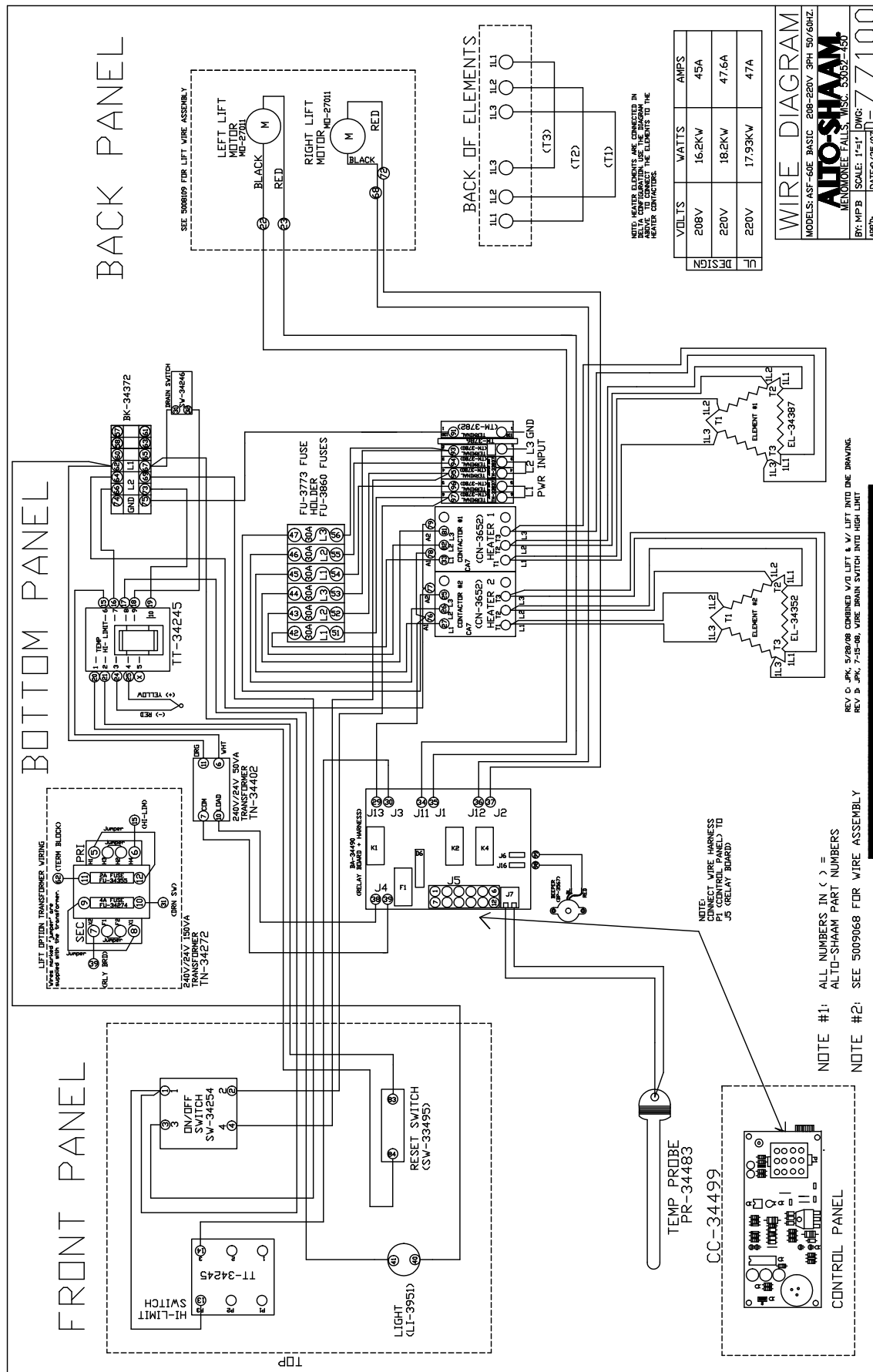
# ASF-60E WITH AUTOMATIC LIFTS

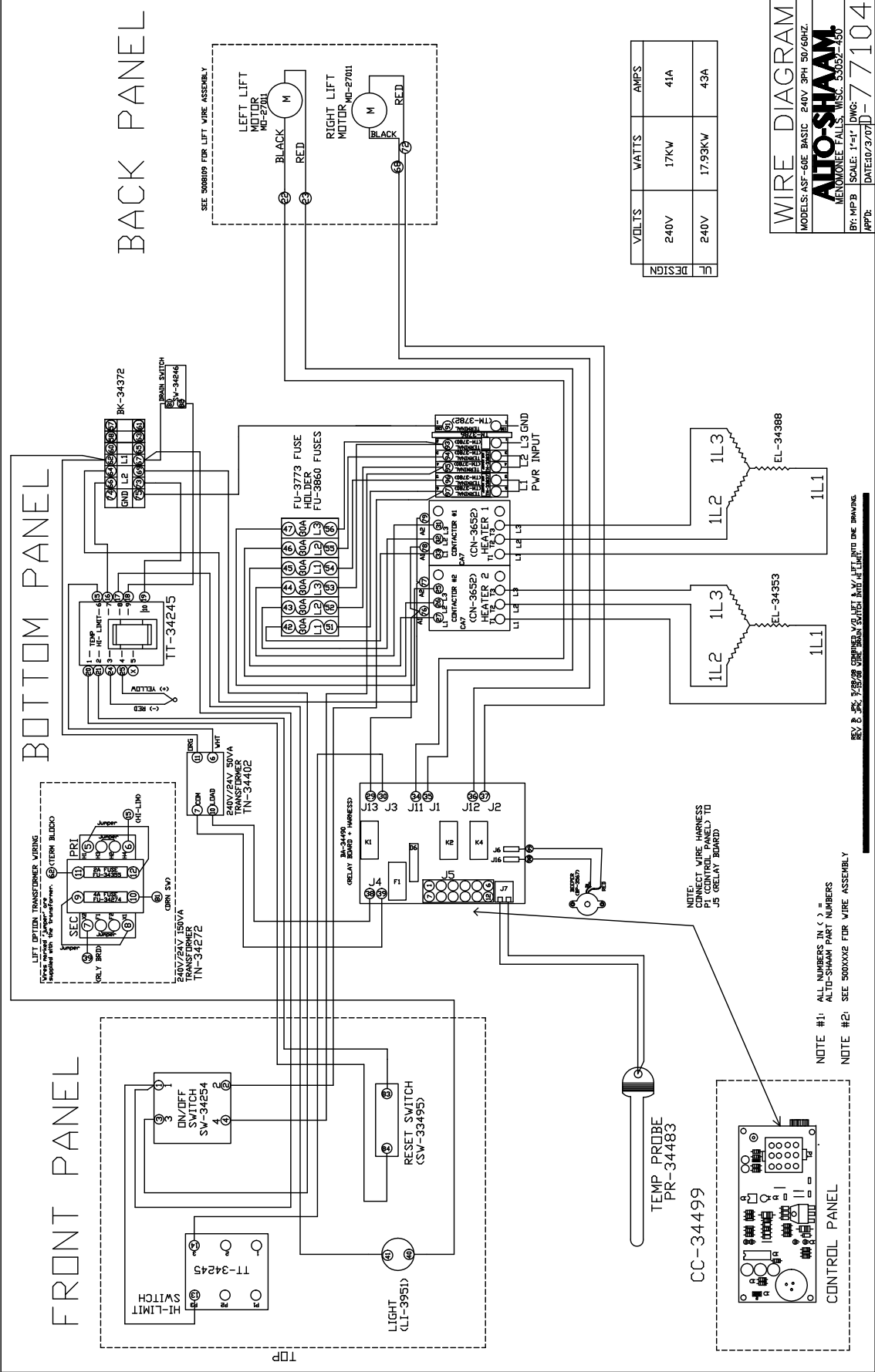


## 5007680 ELECTRIC ASSY 208-220, 240V, BSC, LIFT

ITEM	PART NO	DESCRIPTION	QTY	ITEM	PART NO	DESCRIPTION	QTY
1	1008453	BASE	1	15	SC -2071	10-32 X 3/4 PAN HD	1
2	TN-34272	TRANSFORMER, 120V/240V-24V, 150VA	1	16	TM-3786	TERMINAL, CT, 35mm WALL, PART	1
3	BK-34372	T-BLOCK, MODULAR	1	17	TM-3926	TERMINAL-CT, PLUG, 6.10	3
4	BA-34490	RELAY BOARD	1	18	FU-3860	FUSE-30 A, CLASS G, QC	6
5	1006917	BRACKET, HI-LIMIT CONTROLLER	1	19	TM-3782	TERMINAL, GROUND, 35mm	1
6	CC -34378	CONTROLLER, HI-LIMIT	1	20	TM-3780	TERMINAL, CT, MARK, L	5
7	5007681	WIRE SET, 208-220V	1	21	CN-3652	CONTACTOR	2
8	BP-3567	BEEPER	1	22	FU-3773	FUSE HOLDER	2
9	SC -23455	6-32 X 3/8 RD HD	4	23	1003551	DIN RAIL-QC 12"	1
10	SC -2459	8-32 x 1/4" PHIL SCREW	6	24	TM-33837	JUMPER STRIP	2
11	SP-33901	SPACER, 7/16 FOR .125 HOLE IN .062" BOARD	4	25	FU-34274	FUSE-4A SECONDARY, 3AG TYPE	1
12	SP-33707	SPACER, SUPPORT, NYL, 1.4"	4	26	FU-34355	FUSE-2A 250V, T-LAG, GLS, MOL	1
13	HG -22672	10-32 THREADED INSERT	1	27	CR-3226	CONNECTOR, TERM., # 10 STUD RING	1
14	NU-2215	NUT, 10-32, NF HEX MS, # 18-8 S/S	2				

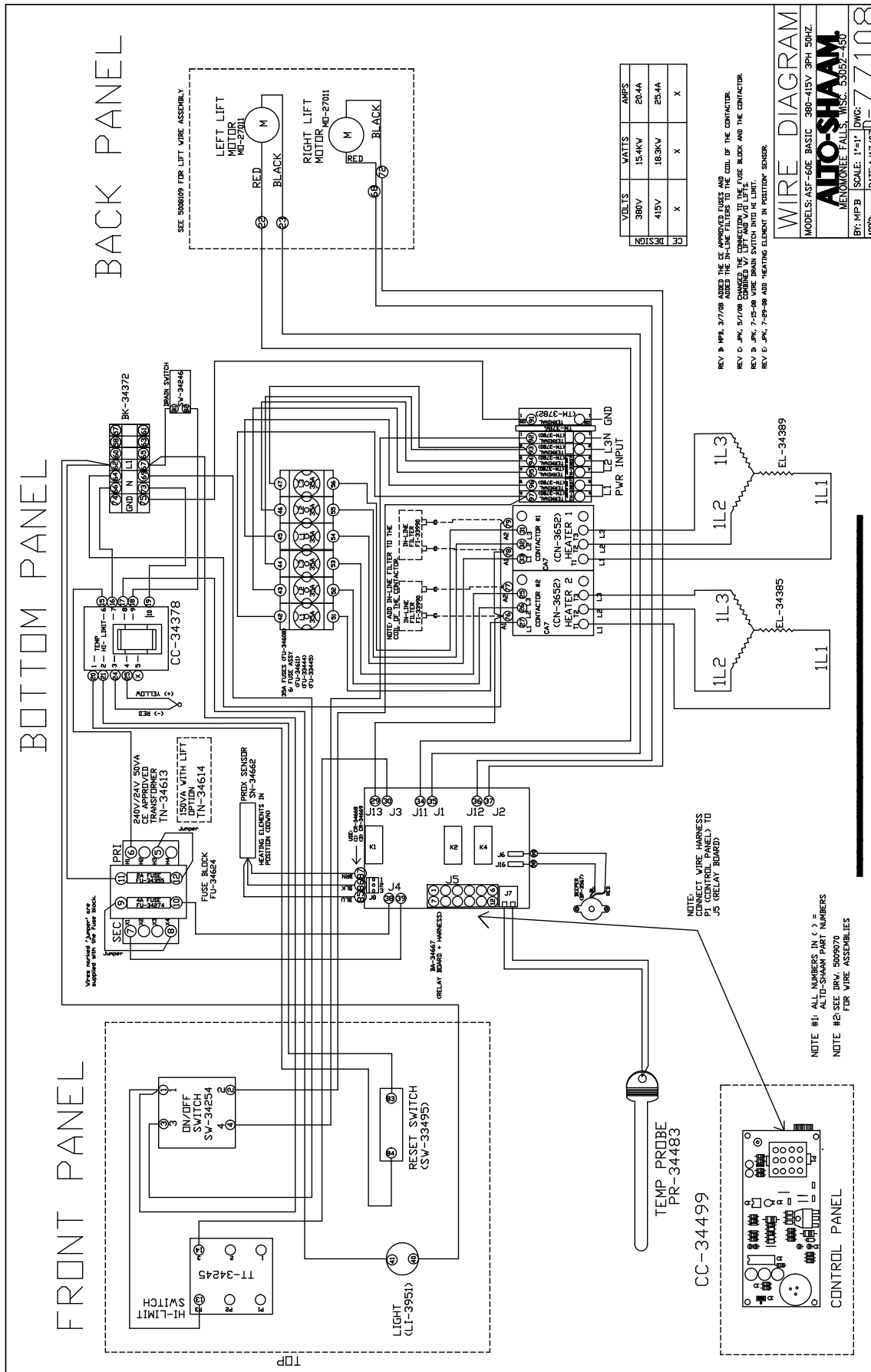
# ASF-60E SERVICE

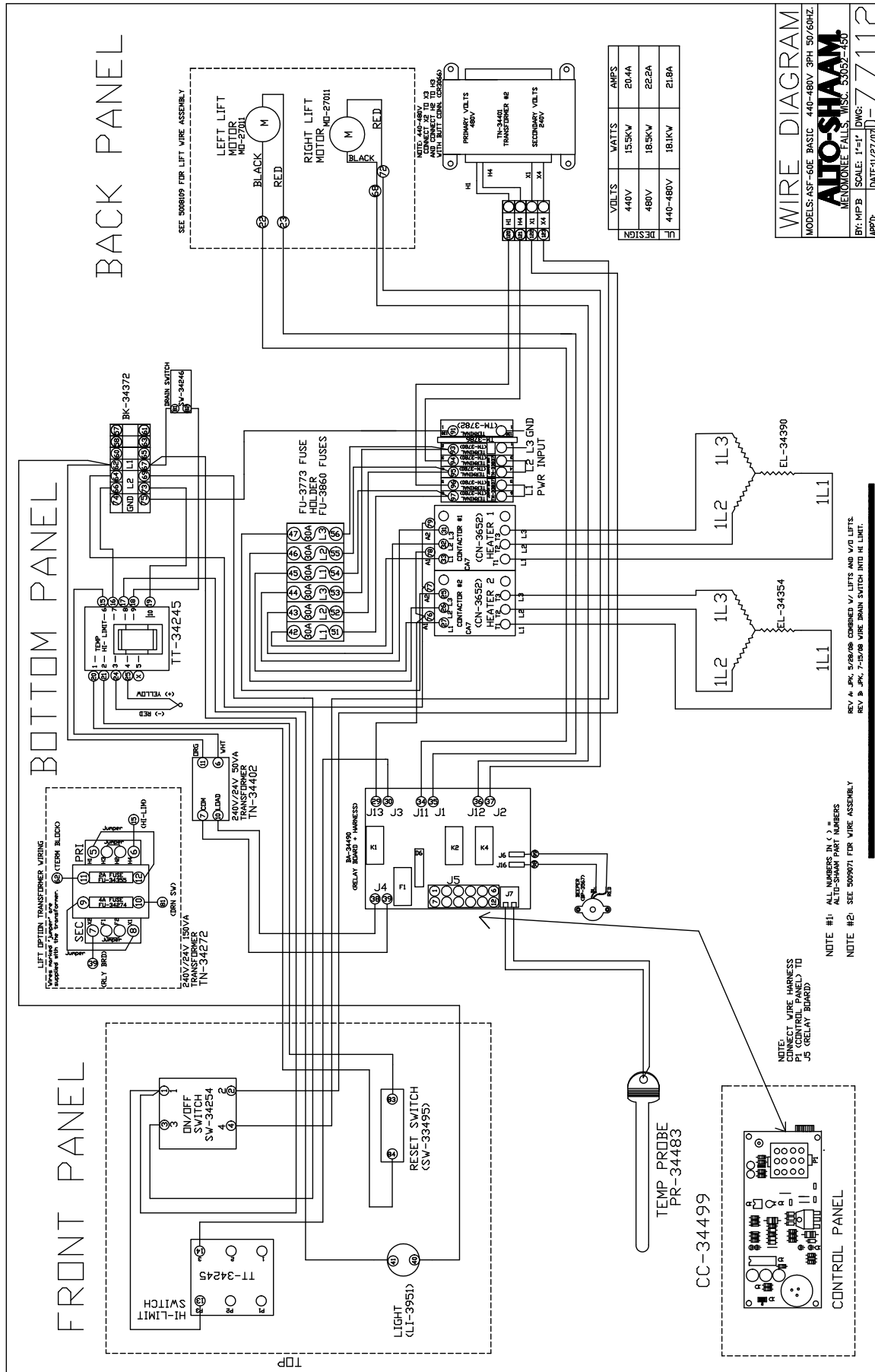




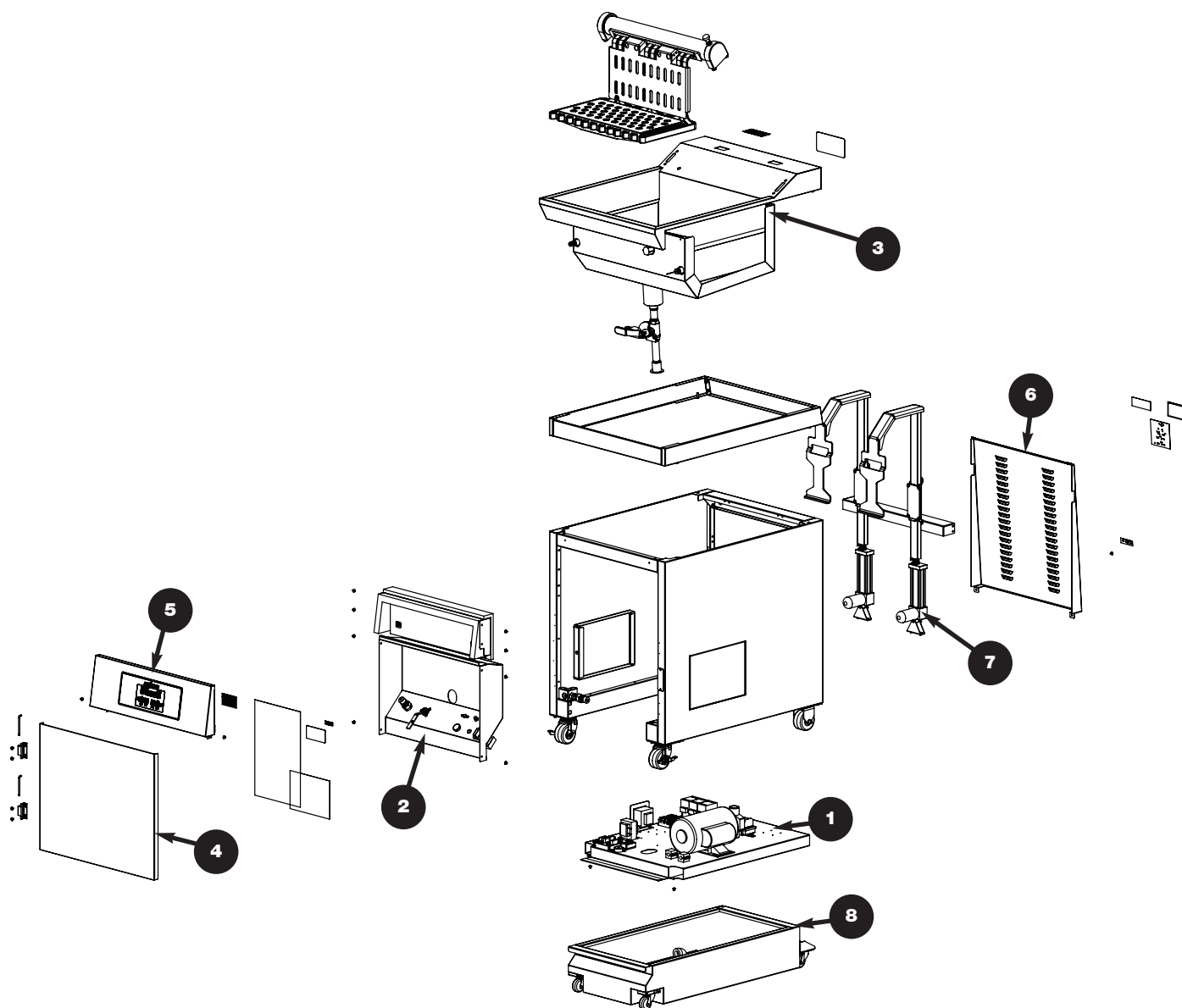


# ASF-60E SERVICE





# ASF-75E, WITH FILTRATION & LIFTS



See details for these assemblies on following pages:

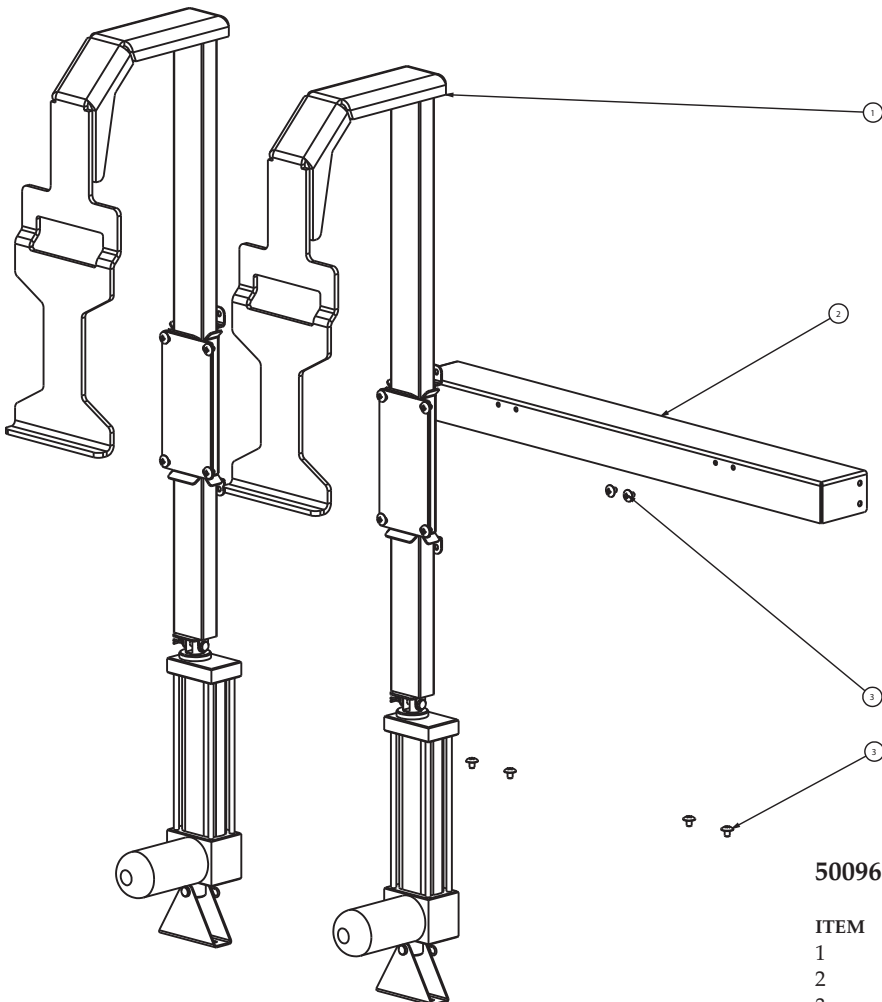
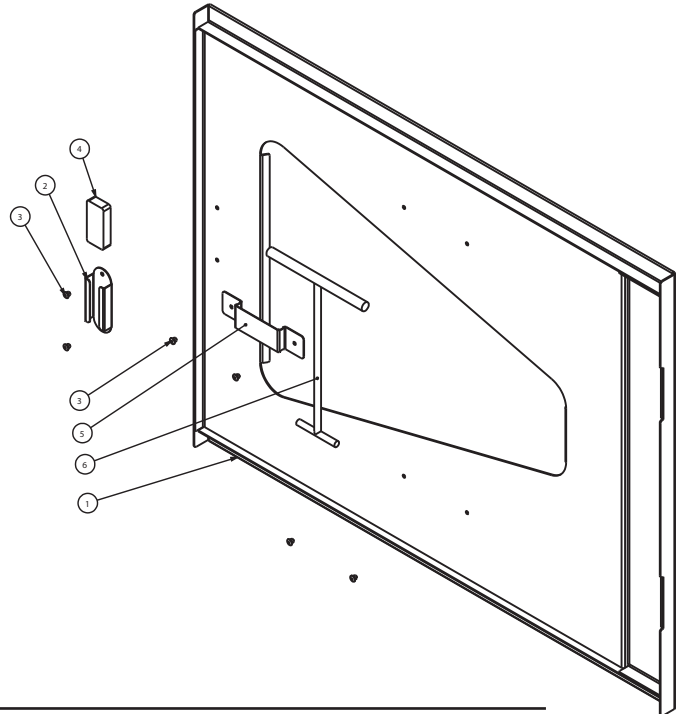
ITEM	PART NO	DESCRIPTION	QTY
1	5009735	MOUNT-MOTOR AND ELECTRICAL	1
2	5009636	PANEL, LOWER ASSY W/FILTRATION	1
3	5009628	KETTLE, 208-220 BSC	1
4	5009179	DOOR	1
5	5009211	CONTROL PANEL	1
6	1009361	BACK PANEL	1
7	5009630	LIFT ASSEMBLY	1
8	5008588	FAT DRAWER ASSEMBLY	1

# ASF-75E, WITH FILTRATION & LIFTS

## 5009179

## DOOR ASSEMBLY

ITEM	PART NO	DESCRIPTION	QTY
1	5009177	DOOR	1
2	1006303	MAGNET BRACKET	1
3	RI-2097	#42 STAINLESS RIVET	6
4	MA-25734	DOOR MAGNET	1
5	1009689	ELEMENT LIFT BRACKET	1
6	RL-27690	ELEMENT LIFT	1



## 5009630

## LIFT ASSEMBLY

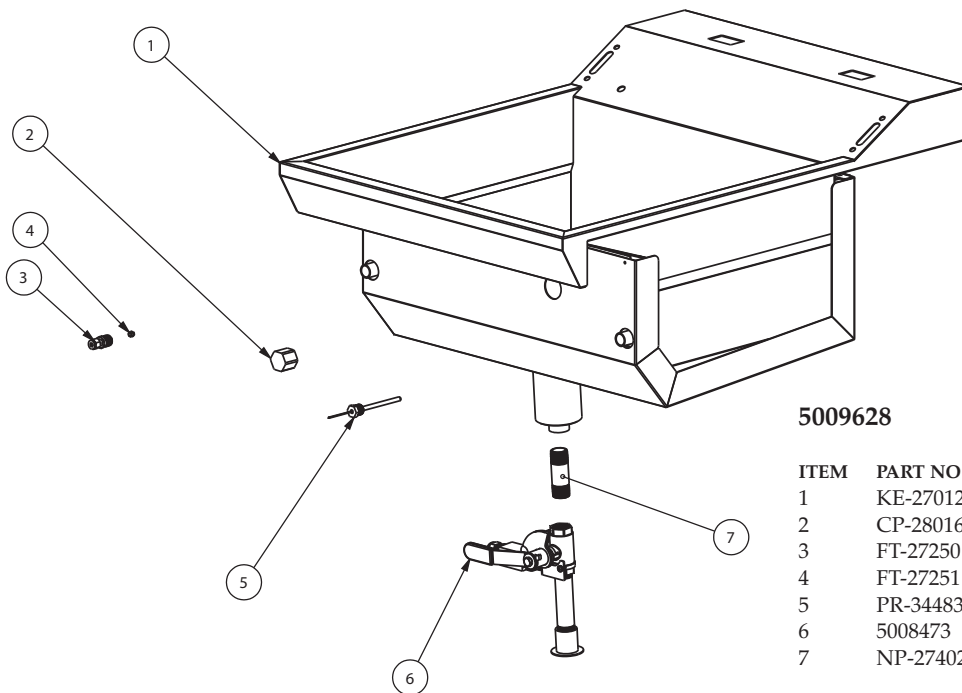
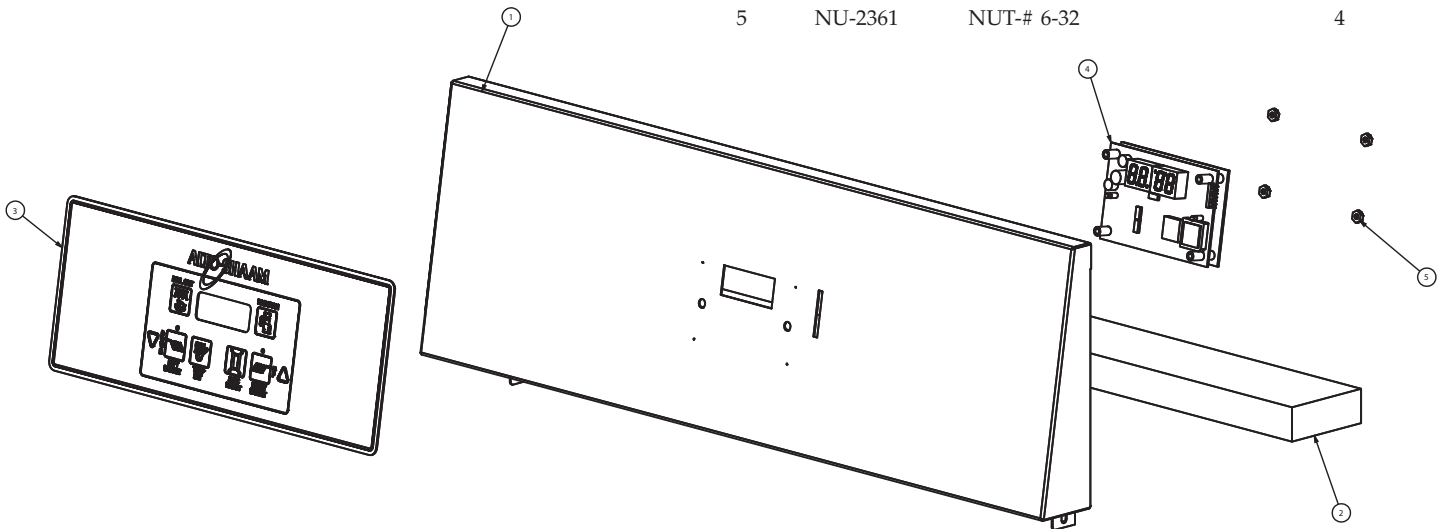
ITEM	PART NO	DESCRIPTION	QTY
1	5008597	SINGLE LIFT ASSEMBLY	2
2	1010240	BRACKET, LIFT SUPPORT	1
3	SC-26791	SCREW 10-32 X 1/4" PAN HEAD	8

# ASF-75E, WITH FILTRATION & LIFTS

## 5009211

## CONTROL PANEL

ITEM	PART NO	DESCRIPTION	QTY
1	5009212	WELDMENT-CONTROL PANEL	1
2	IN-22985	INSULATION, 1/2" CER WOOL	1
3	PE-27929	OVERLAY WITH MEMBRANE	1
4	CC-34499	CONTROL	1
5	NU-2361	NUT-# 6-32	4

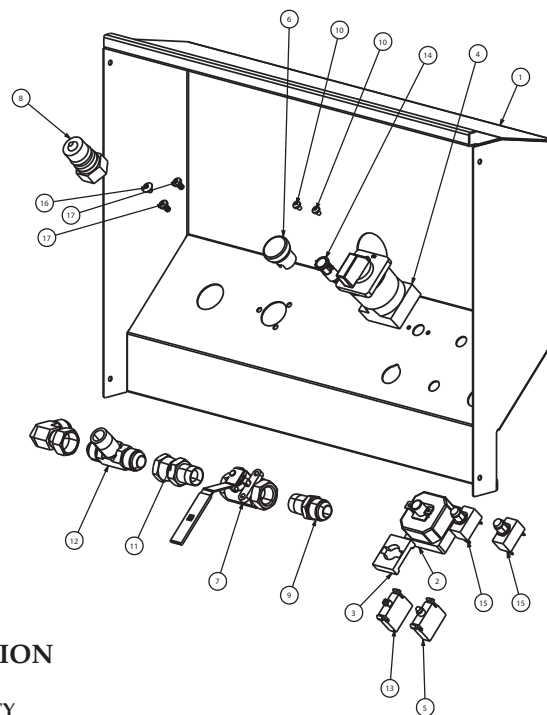
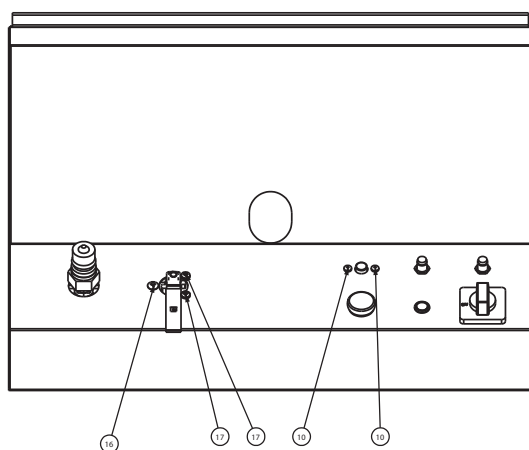


## 5009628

## KETTLE, 208-220 BASIC

ITEM	PART NO	DESCRIPTION	QTY
1	KE-27012	ASF-75E KETTLE ASSY.	1
2	CP-28016	CAP-3/4 NPT	1
3	FT-27250	FITTING-1/4" COMPRESSION	1
4	FT-27251	FERRULE, COMPRESSION, 6MM	1
5	PR-34483	PROBE-NTC THERMISTOR	1
6	5008473	DRAIN ASSEMBLY	1
7	NP-27402	PIPE NIPPLE, 3/4NPT X 10" LG	1

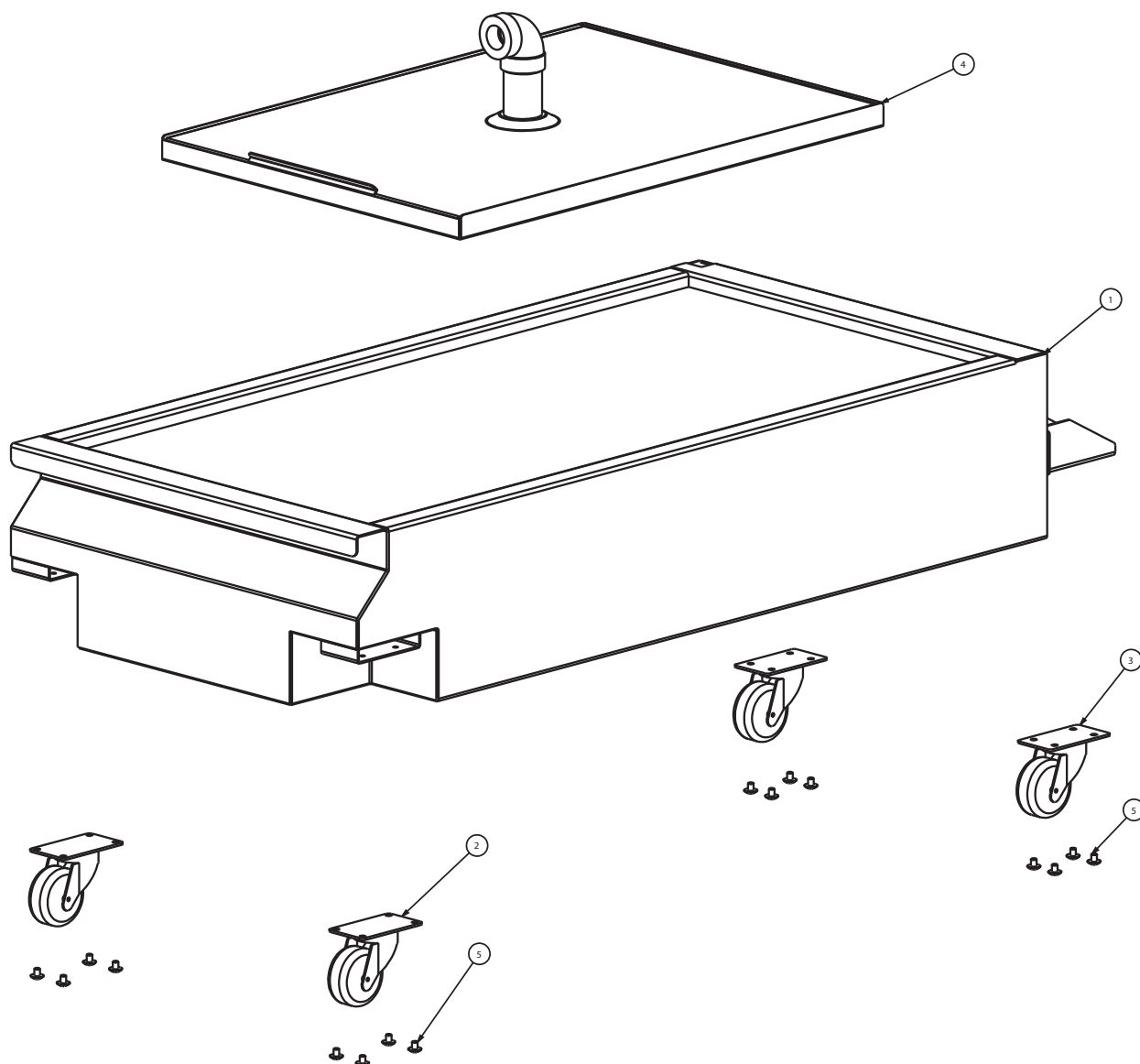
# ASF-75E, WITH FILTRATION & LIFTS



## 5009636 PANEL, LOWER ASSY W/ FILTRATION

ITEM	PART NO	DESCRIPTION	QTY
1	1009369	PANEL, FRONT LOWER	1
2	TT-34245	THERMOSTAT, HI-LIMIT	1
3	PA-27057	PLATE-LIGHT MOUNTING	1
4	SW-34254	SWITCH, CAM, FOR SINGLE PHASE	1
5	LI-34252	LIGHT PUMP, PUSH BUTTON	1
6	SW-34240	PUSH BUTTON SWITCH-PUMP	1
7	VA-28274	VALVE-BALL 1/2" NPT PANEL MOUNT	1
8	FT-28008	FITTING-1/2 NPT X 1/2 QUICK DISCT	1
9	FT-28275	FITTING-1/2-14 NPTF X 37° CONNECTOR	1
10	SC-22271	SCREWS, M4-0.7 X 6MM PHIL	2
11	FT-28661	FITTING-ADAPTER 37° TO NPTF	1
12	TE-28662	TEE-37° X 37° X NPTF	1
13	LI-34251	SWITCH-PUSH BUTTON	1
14	LI-3951	WHITE PILOT LIGHT 250V	1
15	SW-33495	SWITCH-PUSH BUTTON SPST	2
16	SC-26791	SCREW10-32 X 1/4" PAN HEAD	1
17	SC-28288	SCREW-10-24 X .375 PHMS	2
18	EB-28687	ELBOW-#1037° X 37°	1

# ASF-75E, WITH FILTRATION & LIFTS

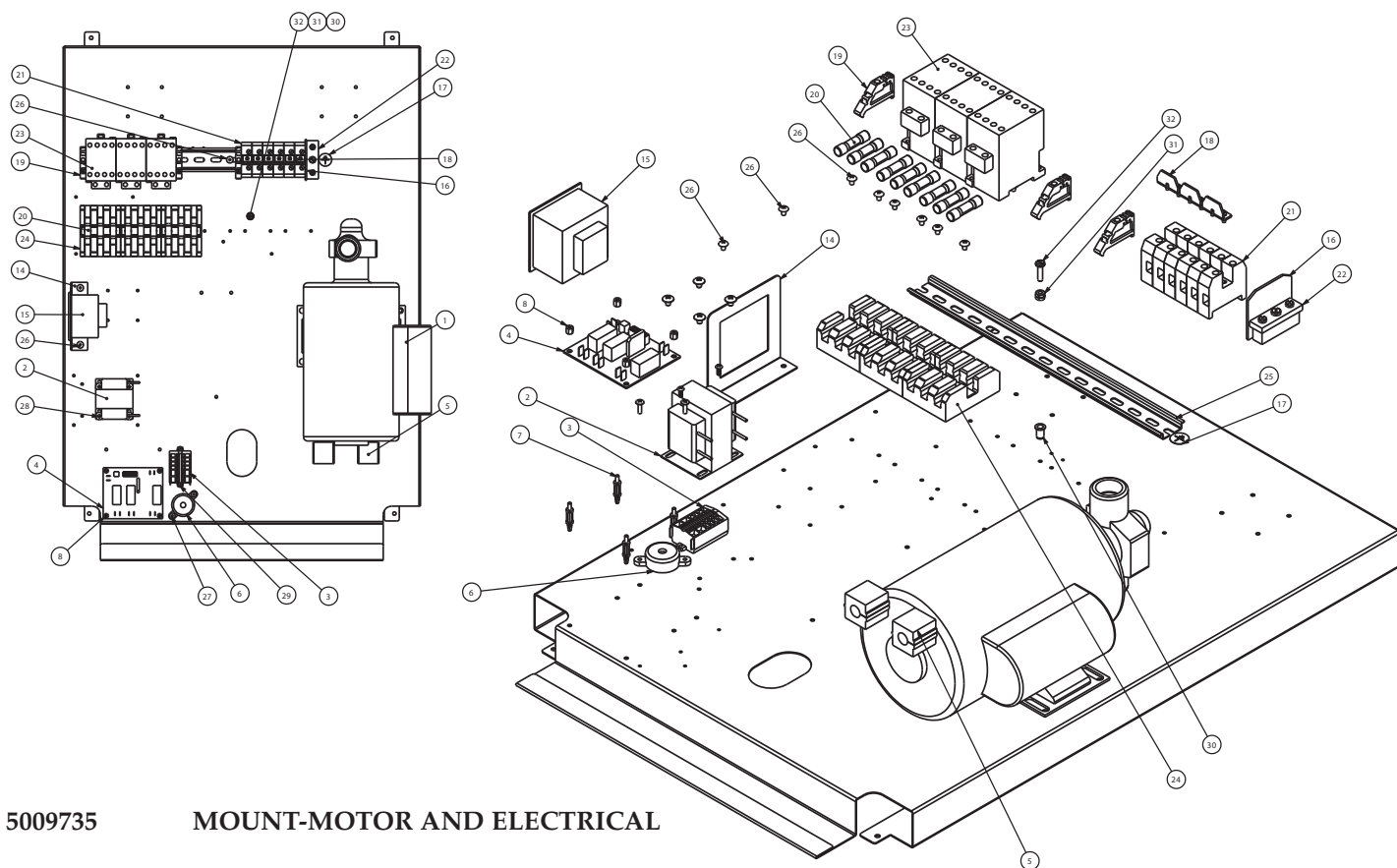


5008588

## FAT DRAWER ASSEMBLY

ITEM	PART NO	DESCRIPTION	QTY
1	5008589	WLDMT-FAT DRAWER	1
2	CS-27054	CASTER, 2" WHEEL	2
3	CS-27253	CASTER, 2" WHEEL	2
4	5008591	FILTER CARTRIDGE	1
5	SC-26791	SCREW 10-32 X 1/4" PAN HEAD	16
6	HO-27649	HOSE, FRYER FILTER	1

# ASF-75E, WITH FILTRATION & LIFTS



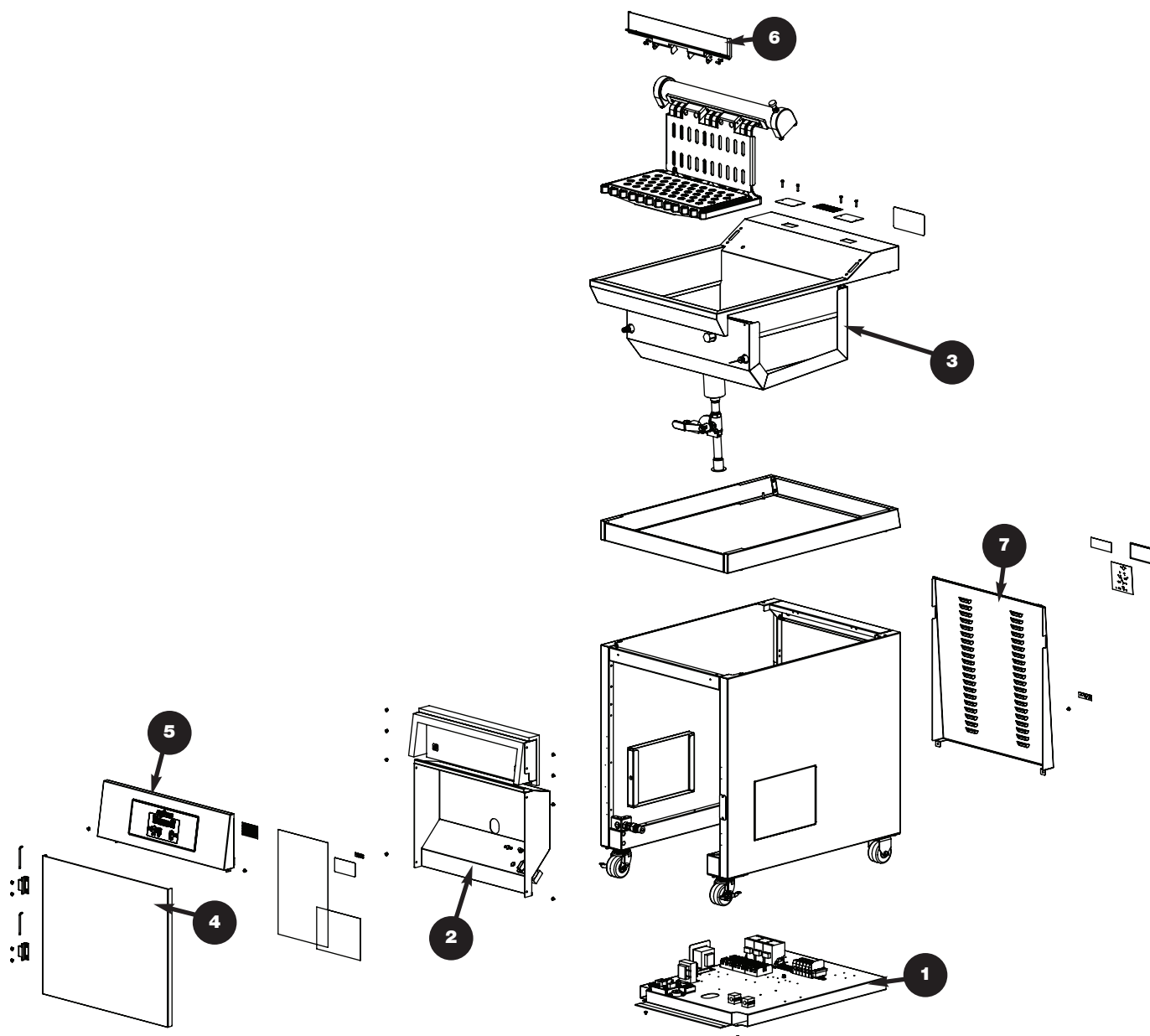
5009735

## MOUNT-MOTOR AND ELECTRICAL

ITEM	PART NO	DESCRIPTION	QTY
1	1009269	MOTORPLATE-ASF-75	1
2	TN-33282	TRANSFORMER, 230V / 24V, 50A,	1
3	BK-34372	T-BLOCK,MODULAR	1
4	BA-34490	RELAY BOARD-ASF-60	1
5	FI-33406	FERRITE FILTER-CLAMP	2
6	BP-3567	BEEPER	1
7	SP-33901	SPACER, 7/16 FOR .125 HOLE IN .062" BRD	4
8	SP-33707	SPACER, SUPPORT, NYL, 1.4"	4
9	FU-34355	FUSE-2A 250V, T-LAG, GLS, MOL	1
10	CD-34380	CORD, SOOW 16GA, 3COND.	1
11	CR-3226	CONNECTOR, TERM., #10 STUD RING	1
12	5007274	WIRESET, ASF-75E, 208-220V	1
13	FU-34274	FUSE-4A SECONDARY, 3AG TYPE	1
14	1006917	BRACKET, HI-LIMIT CONTROLLER	1
15	CC- 34378	CONTROLLER,HI-LIMIT	1
16	TM-3786	TERMINAL, CT, 35MM WALL, PART	1
17	LA-33002	INTERNAL GROUND LABEL	1
18	TM-33837	JUMPER STRIP	3
19	TM-3926	TERMINALS, *CT, PLUG, 6.10	3
20	FU-3860	FUSE-30A, CLASS G, QC	9
21	TM-3780	TERMINAL, CT, MARK, L	6
22	TM-3782	TERMINAL, GROUND, 35MM	1
23	CN-3652	CONTACTOR	3
24	FU-3773	FUSE HOLDER	3
25	1006484	DIN RAIL	1
26	SC-2459	8-32X1/4" PHIL SCREW	12
27	SC-2472	SCREW, 6-32X1/2, NC PHIL TRUSS M/S	2
28	SC-26791	SCREW10-32X1/4" PAN HEAD	4
29	SC-23455	6-32X3/8 RD HD	2
30	HG-22672	10-32 THREADED INSERT	1
31	NU-2215	NUT, 10-32, NF HEX MS, #18-8 S/S	2
32	SC-2071	10-32X3/4 PAN HD	1
33	MO-34469	5EW/S74 MOTOR-230V CE	1



# ASF-75E, NO FILTRATION OR LIFTS



See details for these assemblies on following pages:

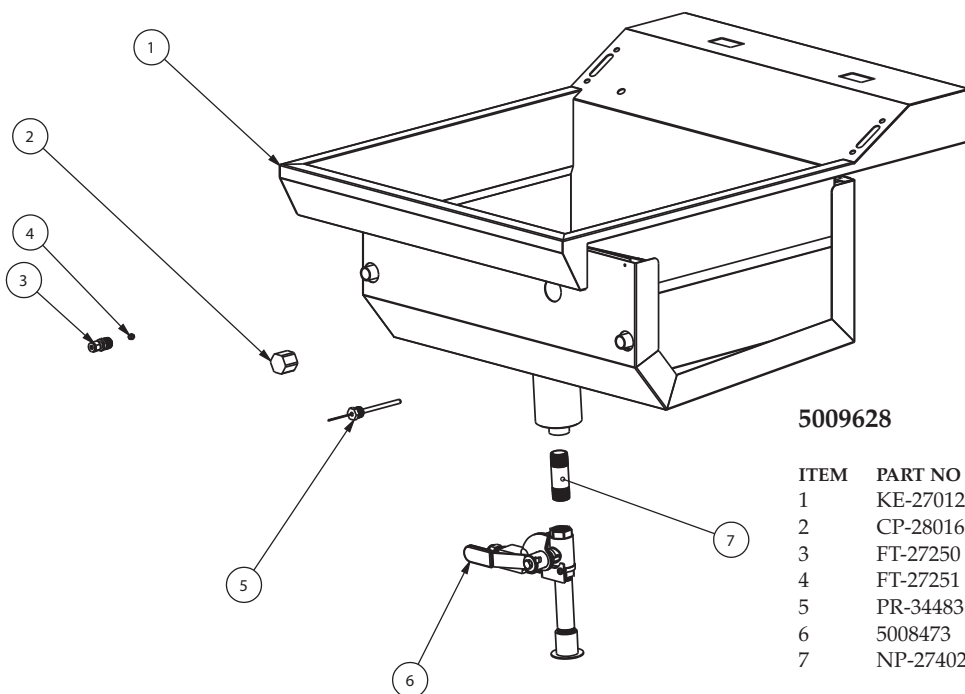
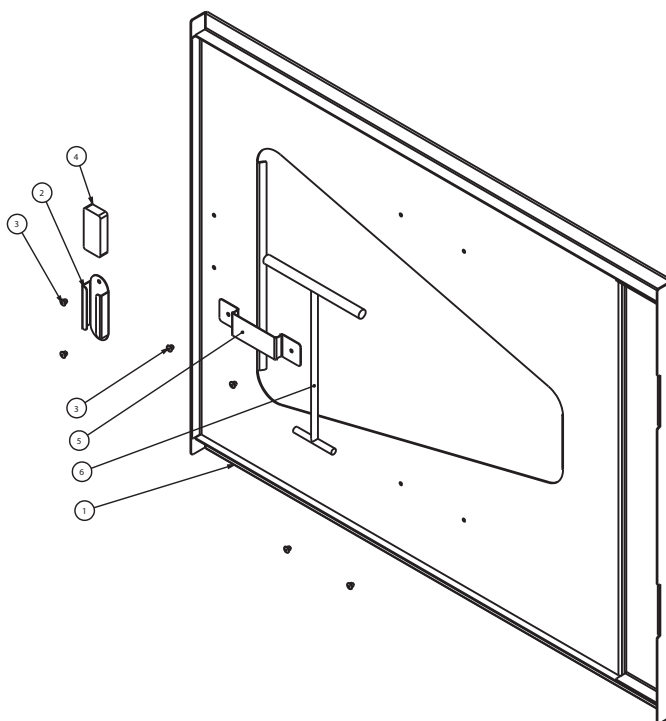
ITEM	PART NO	DESCRIPTION	QTY
1	5009634	MOUNT-MOTOR AND ELECTRICAL	1
2	5009217	PANEL, LOWER ASSY	1
3	5009628	KETTLE-75E, 208-220 BSC	1
4	5009179	DOOR	1
5	5009210	CONTROL PANEL-ASF-75 BSC	1
6	5009645	BASKET HANGER	1
7	1009361	PANEL-BACK	1

# ASF-75E, NO FILTRATION OR LIFTS

5009179

## DOOR ASSEMBLY

ITEM	PART NO	DESCRIPTION	QTY
1	5009177	DOOR	1
2	1006303	MAGNET BRACKET	1
3	RI-2097	#42 STAINLESS RIVET	6
4	MA-25734	DOOR MAGNET	1
5	1009689	ELEMENT LIFT BRACKET	1
6	RL-27690	ELEMENT LIFT	1

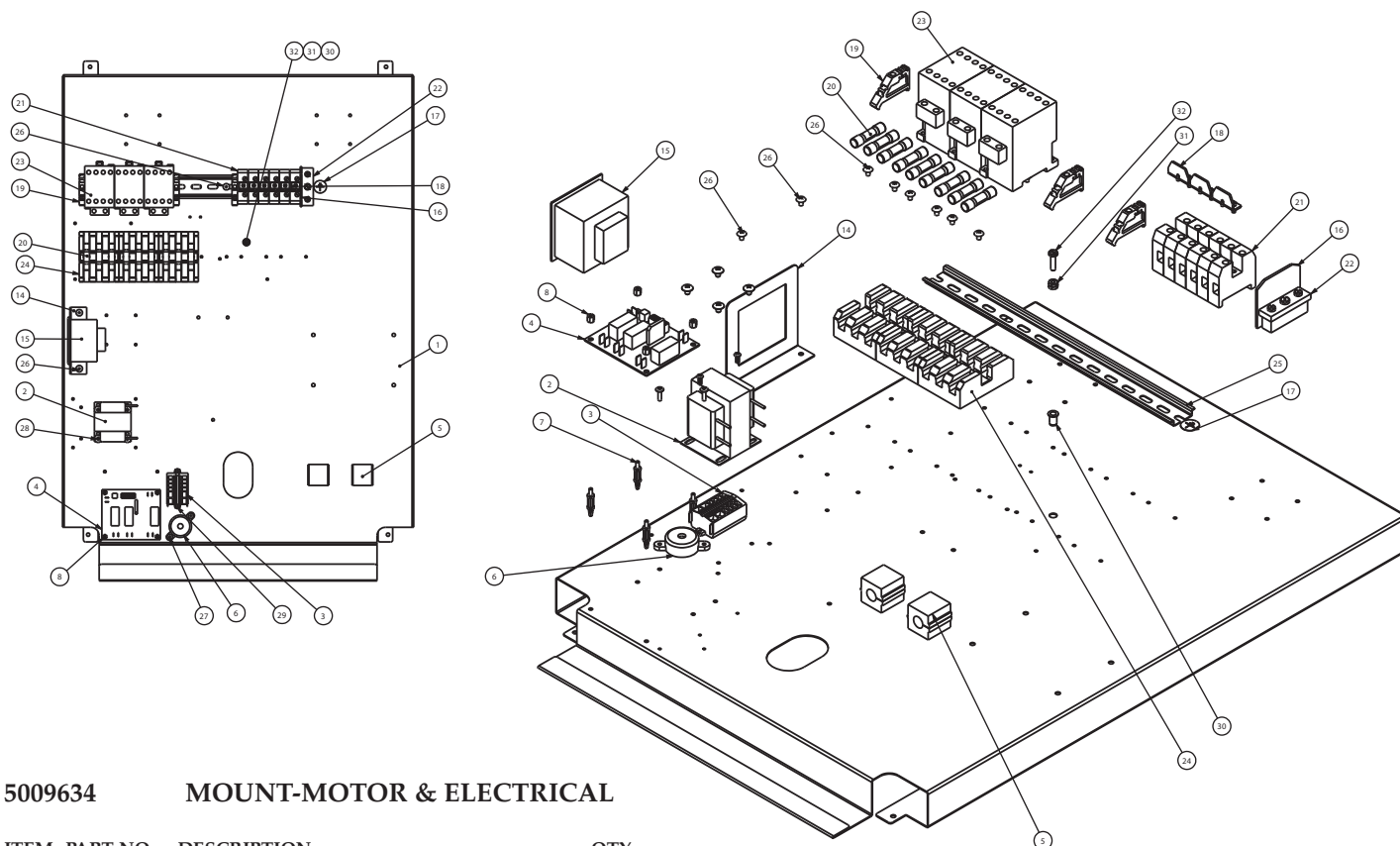


5009628

## KETTLE, 208-220 BASIC

ITEM	PART NO	DESCRIPTION	QTY
1	KE-27012	ASF-75E KETTLE ASSY.	1
2	CP-28016	CAP-3/4 NPT	1
3	FT-27250	FITTING-1/4" COMPRESSION	1
4	FT-27251	FERRULE, COMPRESSION, 6MM	1
5	PR-34483	PROBE-NTC THERMISTOR	1
6	5008473	DRAIN ASSEMBLY	1
7	NP-27402	PIPE NIPPLE, 3/4NPT X 10" LG	1

# ASF-75E, NO FILTRATION OR LIFTS



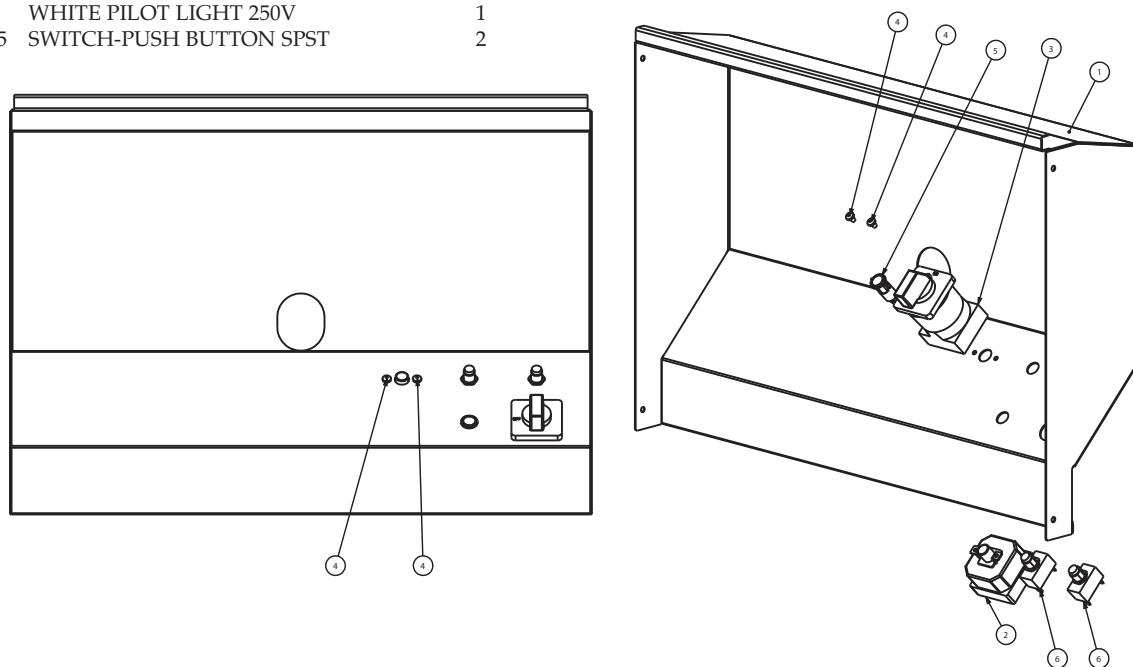
## 5009634 MOUNT-MOTOR & ELECTRICAL

ITEM	PART NO	DESCRIPTION	QTY
1	1009269	MOTOR PLATE	
2	TN-33282	TRANSFORMER, 230V / 24V, 50A	1
3	BK-34372	T-BLOCK, MODULAR	1
4	BA-34490	RELAY BOARD ASF-60	1
5	FI-33406	FERRITE FILTER-CLAMP	2
6	BP-3567	BEEPER	1
7	SP-33901	SPACER, 7/16 FOR .125 HOLE IN .062" BRD	4
8	SP-33707	SPACER, SUPPORT, NYL, 1.4"	
9	FU-34355	FUSE-2A250V, T-LAG, GLS, MOL	1
10	CD-34380	5CORD, SOOW 16 GA, 3 COND.	
11	CR-3226	CONNECTOR, TERM., # 10 STUD RING	1
12	5007274	WIRESET, ASF-75E, 208-220V	1
13	FU-34274	FUSE-4 A SECONDARY, 3AG TYPE	1
14	1006917	BRACKET, HI-LIMIT CONTROLLER	1
15	CC-34378	CONTROLLER, HI-LIMIT	1
16	TM-3786	TERMINAL, CT, 35MM WALL, PART	1
17	LA-33002	INTERNAL GROUND LABEL	1
18	TM-33837	JUMPER STRIP	
19	TM-3926	TERMINALS, *CT, PLUG, 6.10	
20	FU-3860	FUSE-30A, CLASSG, QC	9
21	TM-3780	TERMINAL, CT, MARK, L	6
22	TM-3782	TERMINAL, GROUND, 35MM	1
23	CN-3652	CONTACTOR	3
24	FU-3773	FUSEHOLDER	3
25	1006484	DINRAIL	1
26	SC-2459	8-32X1/4" PHILSCREW	12
27	SC-2472	SCREW, 6-32X1/2, NC PHIL TRUSS	2
28	SC-26791	SCREW10-32X1/4" PANHEAD	4
29	SC-23455	66-32X3/8 RD HD	2
30	HG-22672	10-32 THREADED INSERT	1
31	NU-2215	NUT, 10-32, NF HEX MS, # 18-8 S/S	2
32	SC-2071	10-32X3/4 PAN HD	1

# ASF-75E, NO FILTRATION OR LIFTS

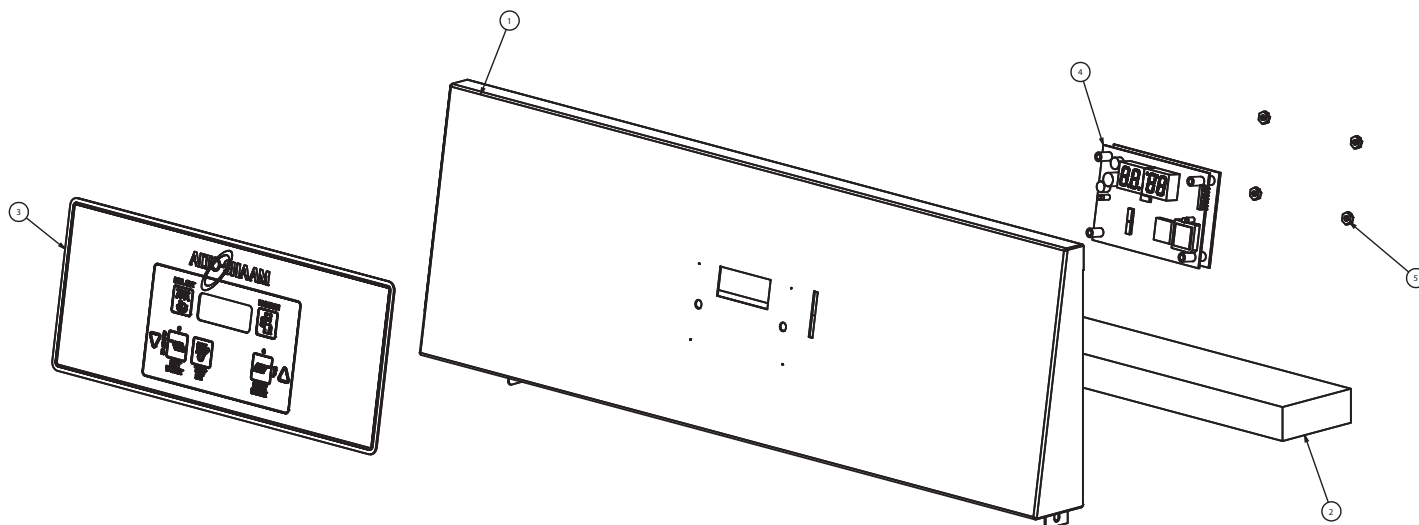
## 5009217 PANEL, LOWER ASSY

ITEM	PART NO	DESCRIPTION	QTY
1	1009947	PANEL, FRONT LOWER NO FILTER	1
2	TT-34245	THERMOSTAT, HI-LIMIT	1
3	SW-34254	SWITCH, CAM, FOR SINGLE PHASE	1
4	SC-22271	SCREWS, M4-0.7X6MM PHIL	2
5	LI-3951	WHITE PILOT LIGHT 250V	1
6	SW-33495	SWITCH-PUSH BUTTON SPST	2

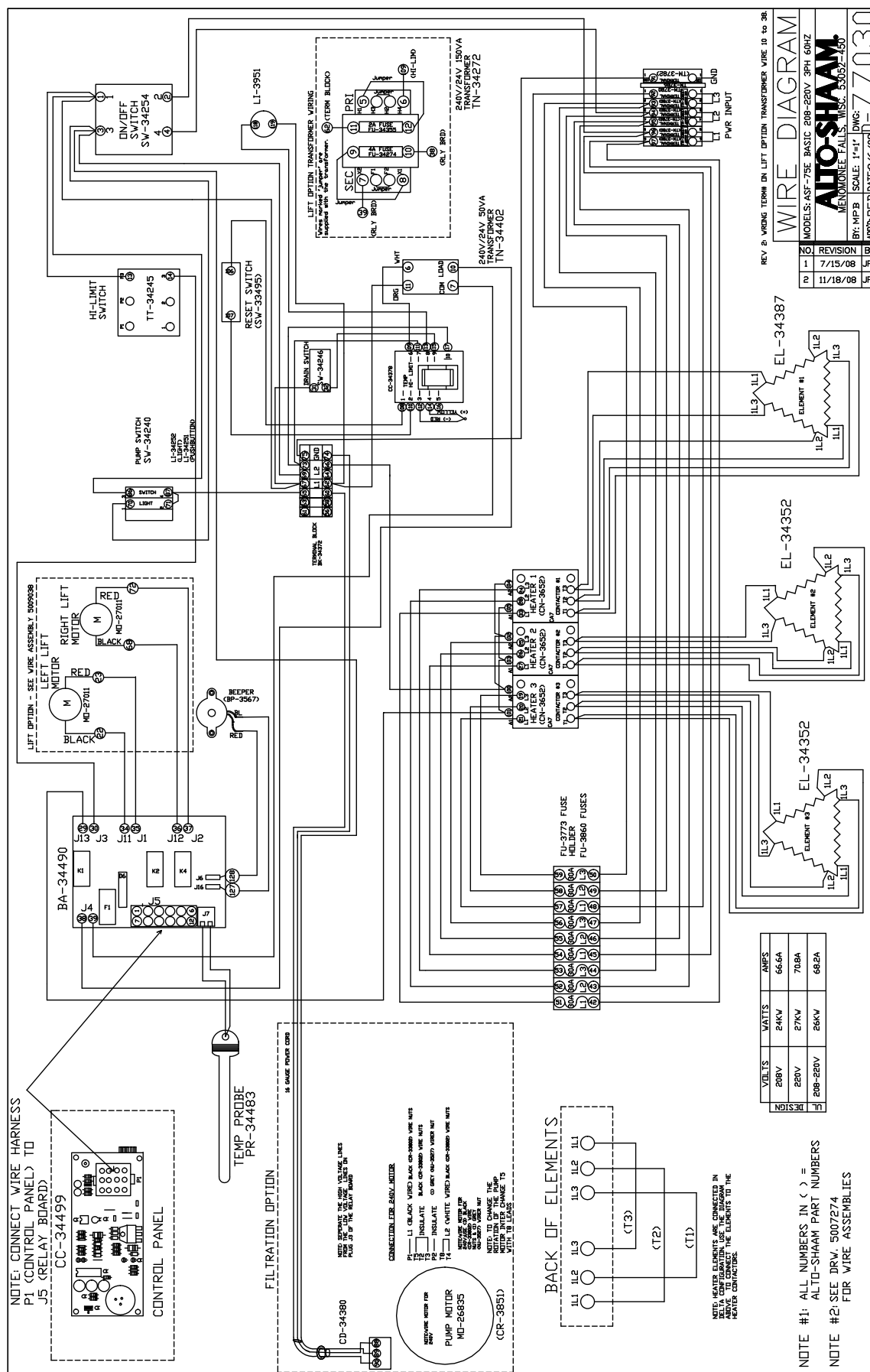


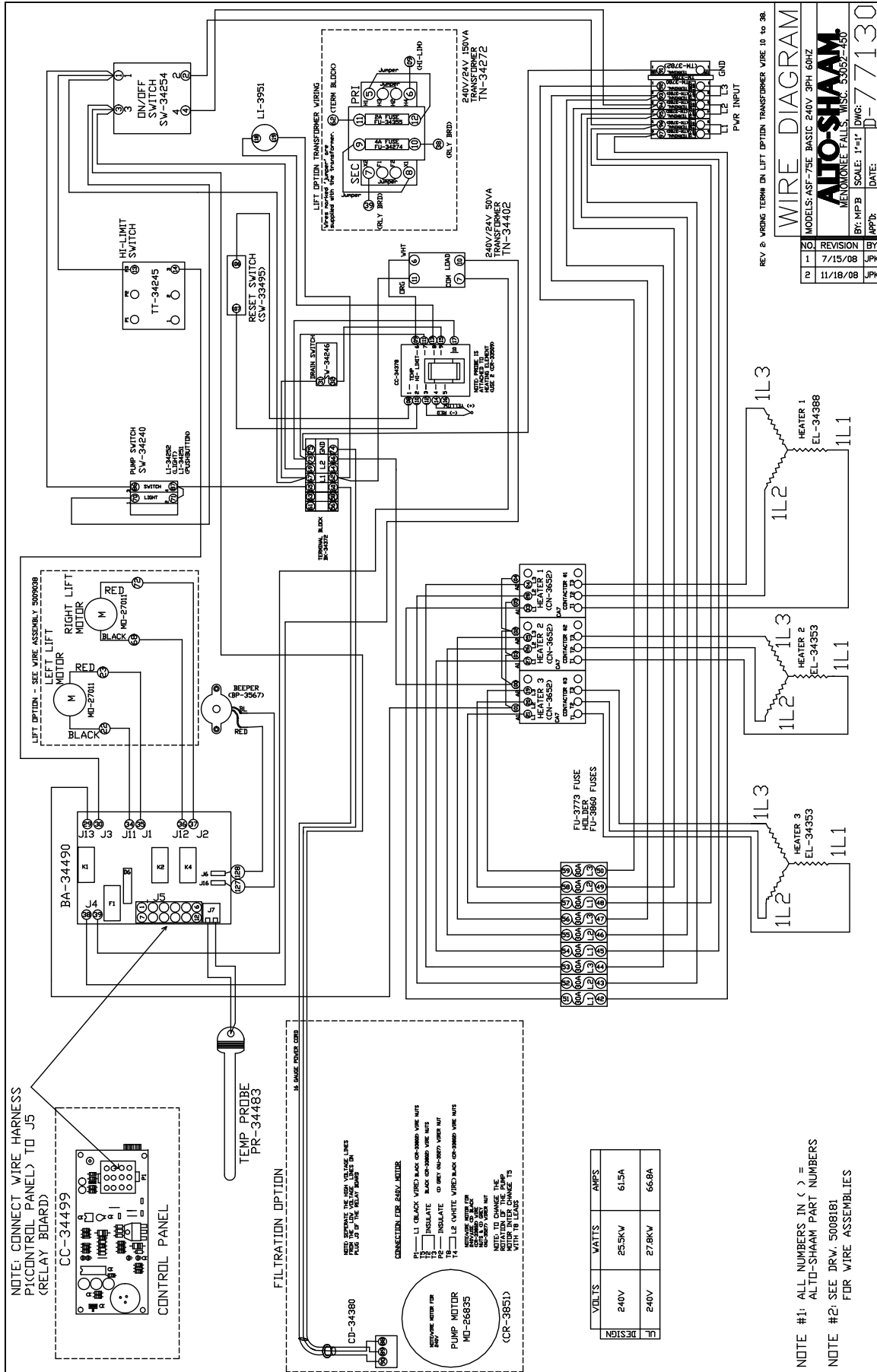
## 5009210 CONTROL PANEL

ITEM	PART NO	DESCRIPTION	QTY
1	5009212	WELDMENT-CONTROL PANEL, ASF-75 BSC	1
2	IN-22985	INSULATION, 1/2" CERAMIC WOOL	1
3	PE-28022	OVERLAY WITH MEMBRANE- NO LIFT	1
4	CC-34499	CONTROL-SIMPLE	1
5	NU-2361	NUT-# 6-32	4

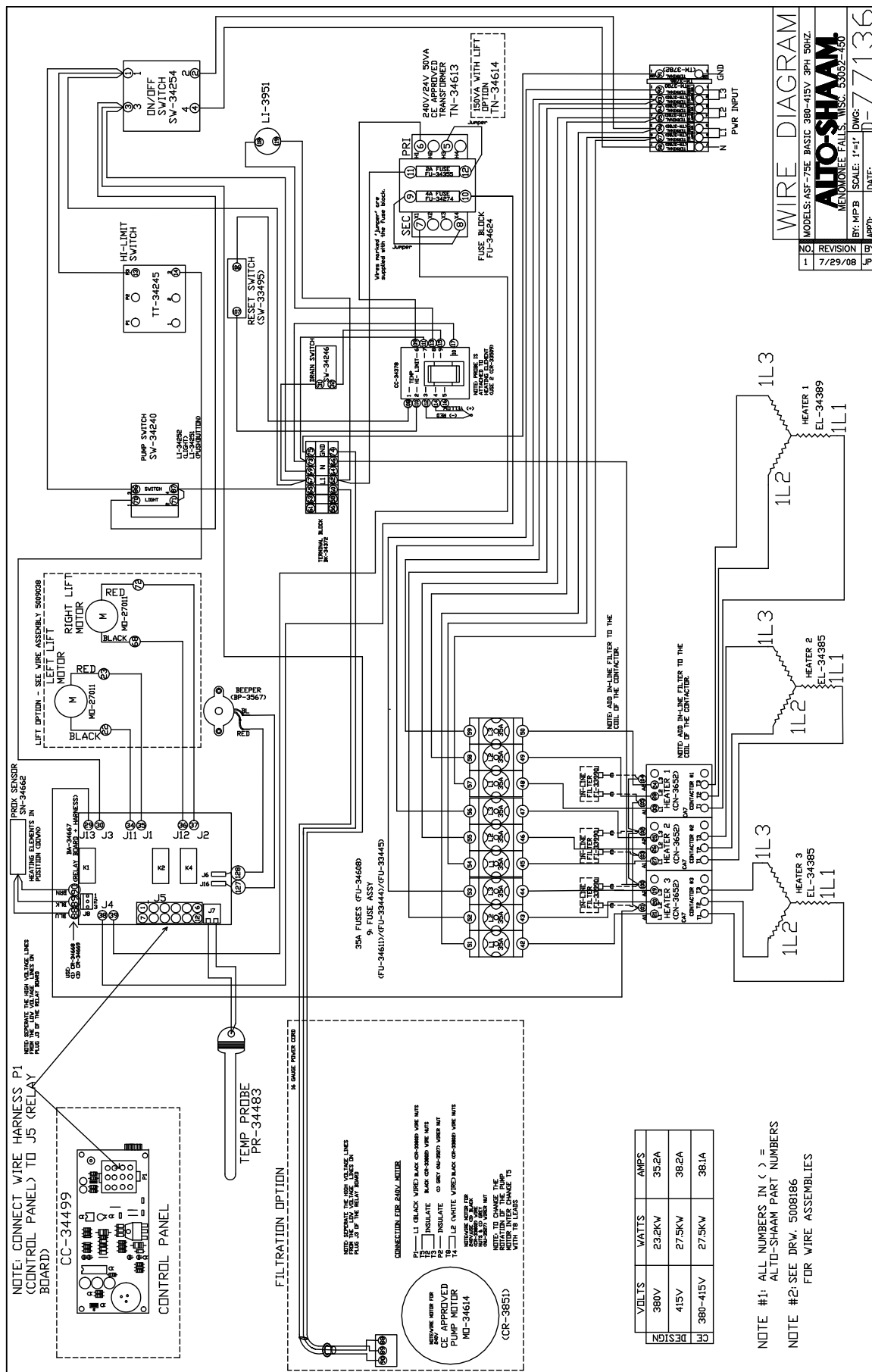


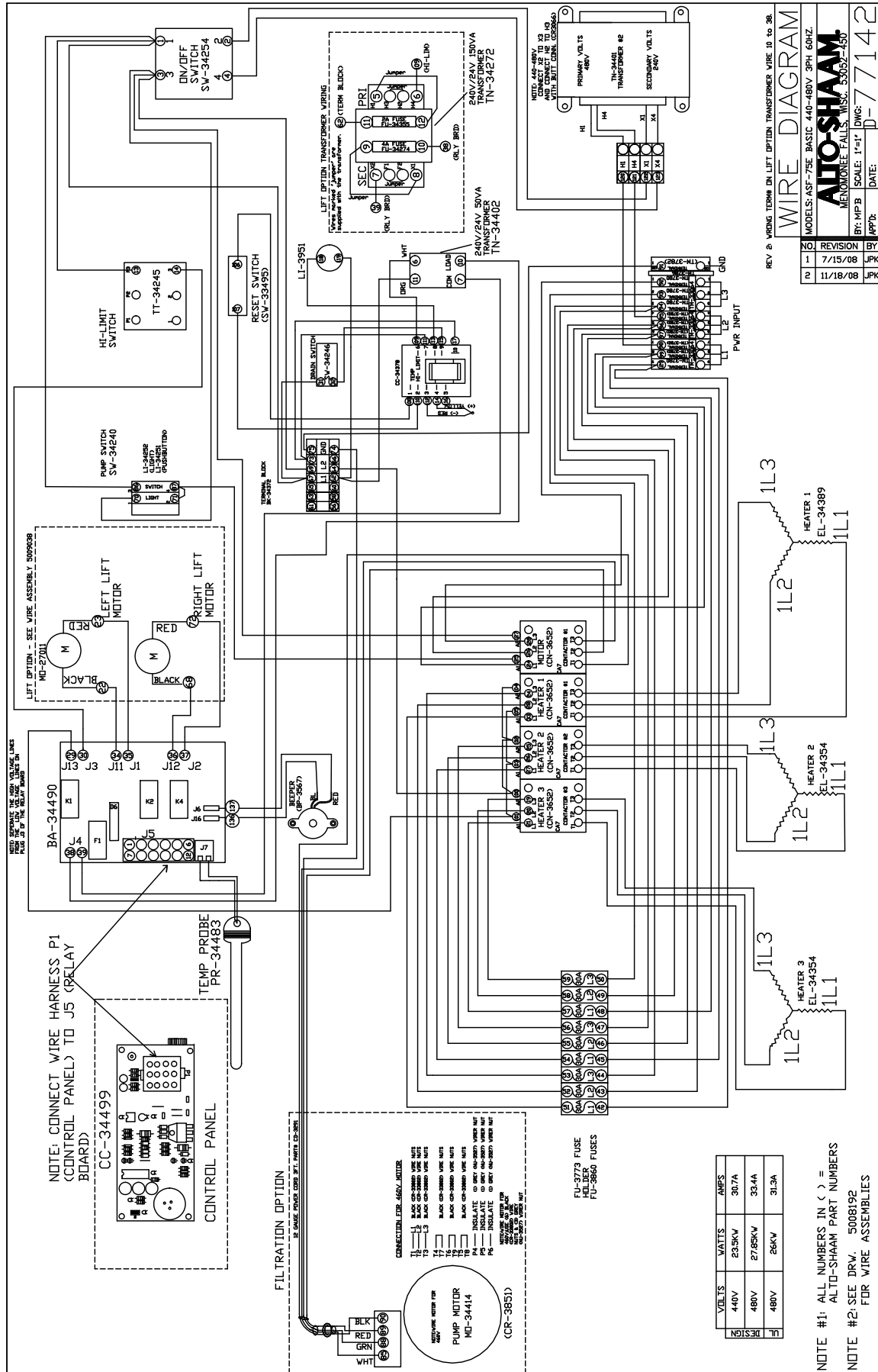
## ASF-75E SERVICE





## ASF-75E SERVICE







## TRANSPORTATION DAMAGE and CLAIMS



All Alto-Shaam equipment is sold F.O.B. shipping point, and when accepted by the carrier, such shipments become the property of the consignee.

Should damage occur in shipment, it is a matter between the carrier and the consignee. In such cases, the carrier is assumed to be responsible for the safe delivery of the merchandise, unless negligence can be established on the part of the shipper.

1. Make an immediate inspection while the equipment is still in the truck or immediately after it is moved to the receiving area. Do not wait until after the material is moved to a storage area.
2. Do not sign a delivery receipt or a freight bill until you have made a proper count and inspection of all merchandise received.
3. Note all damage to packages directly on the carrier's delivery receipt.
4. Make certain the driver signs this receipt. If he refuses to sign, make a notation of this refusal on the receipt.
5. If the driver refuses to allow inspection, write the following on the delivery receipt:  
*Driver refuses to allow inspection of containers for visible damage.*
6. Telephone the carrier's office immediately upon finding damage, and request an inspection. Mail a written confirmation of the time, date, and the person called.
7. Save any packages and packing material for further inspection by the carrier.
8. Promptly file a written claim with the carrier and attach copies of all supporting paperwork.

We will continue our policy of assisting our customers in collecting claims which have been properly filed and actively pursued. We cannot, however, file any damage claims for you, assume the responsibility of any claims, or accept deductions in payment for such claims.

## ALTO SHAAM. LIMITED WARRANTY

Alto-Shaam, Inc. warrants to the original purchaser only that any original part that is found to be defective in material or workmanship will, at Alto-Shaam's option, subject to provisions hereinafter stated, be replaced with a new or rebuilt part.

### The parts warranty period is as follows:

For the refrigeration compressor on Alto-Shaam Quickchillers™, five (5) years from the date of installation.

For the heating element on Halo Heat® cook/hold ovens, as long as the original purchaser owns the oven.

For all other parts, one (1) year from the date of installation or fifteen (15) months from the shipping date, whichever occurs first.

The labor warranty period is one (1) year from the date of installation or fifteen (15) months from the shipping date, whichever occurs first.

Alto-Shaam will bear normal labor charges performed during standard business hours, excluding overtime, holiday rates or any additional fees.

To be valid, a warranty claim must be asserted during the applicable warranty period. This warranty is not transferable.

### THIS WARRANTY DOES NOT APPLY TO:

1. Calibration.
2. Replacement of light bulbs and/or the replacement of display case glass due to damage of any kind.
3. Equipment damage caused by accident, shipping, improper installation or alteration.
4. Equipment used under conditions of abuse, misuse, carelessness or abnormal conditions, including but not limited to, equipment subjected to harsh or inappropriate chemicals, including but not limited to, compounds containing chloride or quaternary salts, poor water quality, or equipment with missing or altered serial numbers.
5. Damage incurred as a direct result of poor water quality, inadequate maintenance of steam generators and/or surfaces affected by water quality. Water quality and required maintenance of steam generating equipment is the responsibility of the owner/operator.
6. Damage caused by use of any cleaning agent other than Alto-Shaam's Combitherm® Cleaner, including but not limited to damage due to chlorine or other harmful chemicals. **Use of Alto-Shaam's Combitherm® Cleaner on Combitherm® ovens is highly recommended.**
7. Any losses or damage resulting from malfunction, including loss of product or consequential or incidental damages of any kind.
8. Equipment modified in any manner from original model, substitution of parts other than factory authorized parts, removal of any parts including legs, or addition of any parts.

This warranty is exclusive and is in lieu of all other warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose. In no event shall Alto-Shaam be liable for loss of use, loss of revenue or profit, or loss of product, or for any indirect, special, incidental, or consequential damages. No person except an officer of Alto-Shaam, Inc. is authorized to modify this warranty or to incur on behalf of Alto-Shaam any other obligation or liability in connection with Alto-Shaam equipment.

**ALTO-SHAAM, INC.**

Effective 02/09

RECORD THE MODEL AND SERIAL NUMBER OF THE APPLIANCE FOR EASY REFERENCE.  
ALWAYS REFER TO BOTH MODEL AND SERIAL NUMBER IN ANY CONTACT WITH ALTO-SHAAM REGARDING THIS APPLIANCE.

Model: \_\_\_\_\_ Date Installed: \_\_\_\_\_  
Voltage: \_\_\_\_\_ Purchased From: \_\_\_\_\_  
Serial Number: \_\_\_\_\_

**W164 N9221 Water Street • P.O. Box 450 • Menomonee Falls, Wisconsin 53052-0450 • U.S.A.**  
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