



Shortening Filter

EZ18/24/34

Operator's Manual

and

Technical Supplement

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Preface

The EZ Melt, Fill and Filter models EZ18, EZ24, and EZ34 are designed to be used with Belshaw fryers. It performs four functions:

- It melts shortening
- It holds shortening
- It supplies shortening to the fryer kettle
- It filters used shortening for re-use

It is not designed to perform any other functions. The EZ Melt, Fill and Filter uses electrical elements to melt shortening.

The EZ Melt moves around on casters. It is meant to be used on the floor. The operator of the EZ Melt is expected to behave safely and to read this manual and follow its instructions and warnings.

Study the instructions and warnings in this manual carefully. A thorough understanding of how to install, maintain, and safely operate the EZ Melt, Fill and Filter will prevent production delays and injuries.

To use the EZ Melt safely, heed the following warnings and all other warnings that appear in this manual:

- Make sure all hose connections are tight. If you do not, you may be sprayed with hot shortening. This could result in serious burns.
- Make sure no water gets into the shortening. Water causes hot shortening to spatter, which could cause serious burns.
- Make sure the EZ Melt kettle has enough room in it before draining shortening from the fryer. If you do not, shortening may overflow the kettle and get on the

floor, possibly causing slips, falls, injury, burns, or even death.

- Hot shortening can cause serious burns. Make sure that proper protective gear (face shield, gloves and apron) are worn before filtering, disassembly and cleaning.
- Make sure the nozzle of the supply hose is securely mounted on the side of the fryer before turning on the pump. If you do not, hot shortening could spray you, resulting in serious burns. Also, shortening could get on the floor, possibly causing slips, falls, injury, burns, or even death.
- Make sure that the system and the shortening are cool before attempting any adjustments or repairs. If you do not, you may be burned.
- Be careful never to get shortening, water, or other materials on the floor. If anything does get spilled on the floor, mop it up immediately. If you do not, someone could slip or fall, be burned or injured, or even die.
- To avoid damaging the EZ Melt, never use force to assemble, disassemble, operate, clean, or maintain it.
- To avoid electrocution, make sure that the power cord is not frayed or cracked and that it does not pass through any water or shortening.
- Make sure that the power cord is routed so that no one will trip over it.

1

Operation

To help familiarize you with the major parts of your EZ Melt model EZ18, EZ24, or EZ34, please study the photographs below.

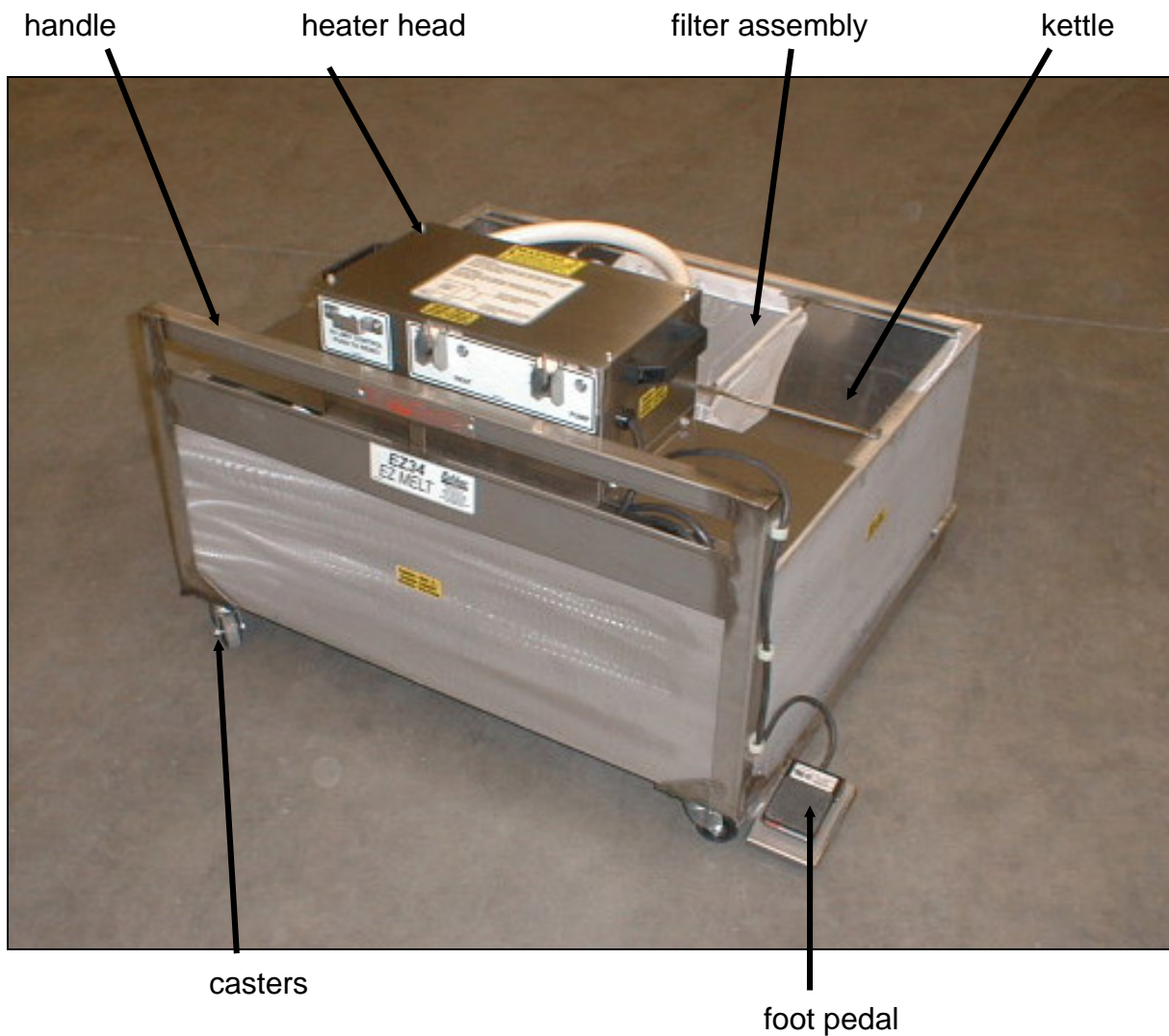


Figure 1-1. Front View.

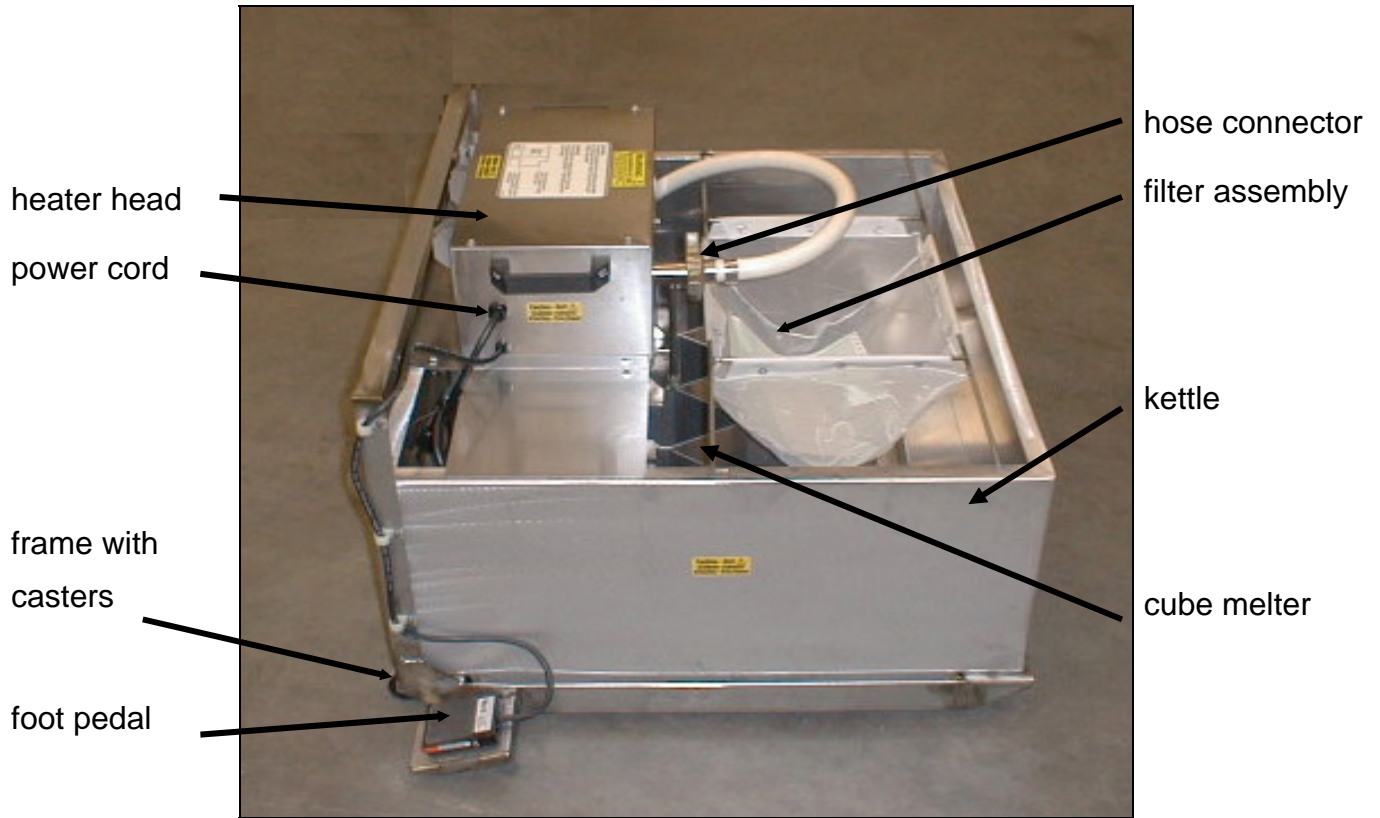


Figure 1-2. Side View.



Figure 1-3. Top View, Heater Head.

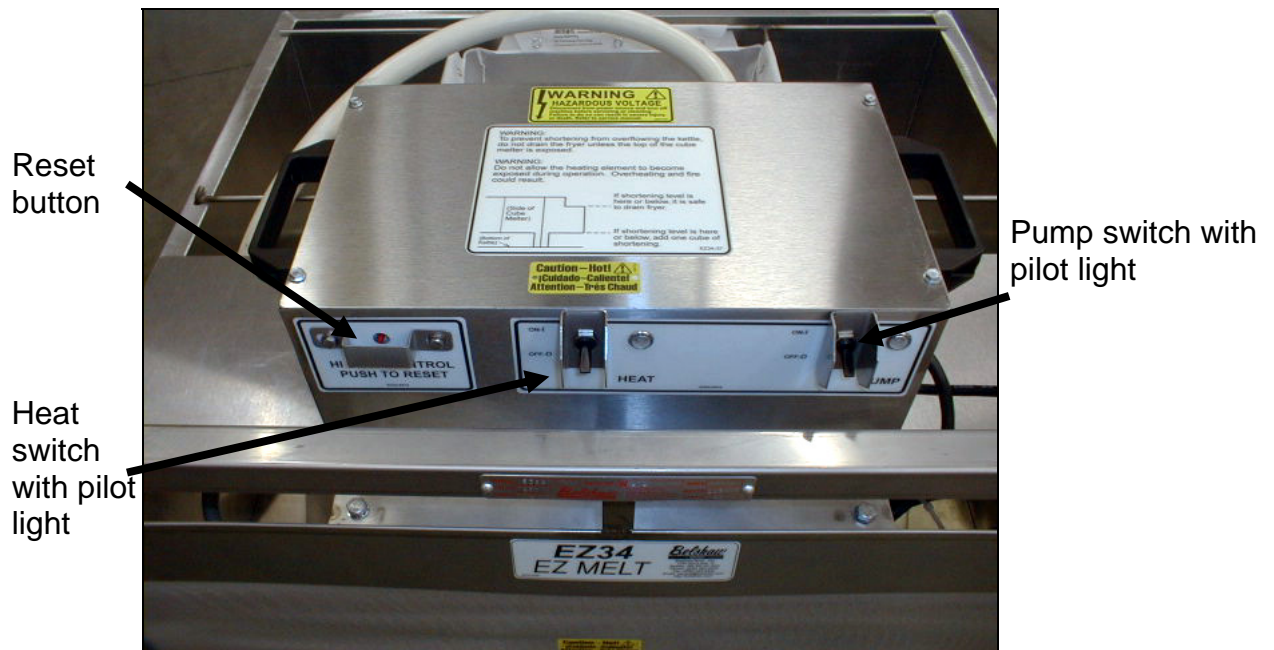


Figure 1-4. Heater head

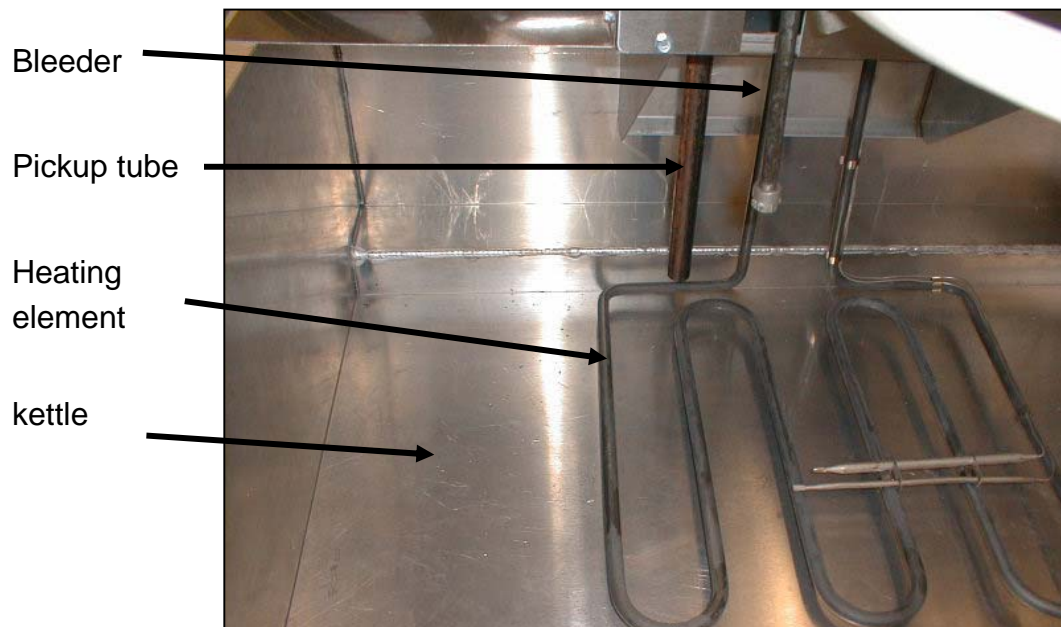


Figure 1-5. Elements and kettle.

Thoroughly clean your EZ Melt before using it. Refer to Section 2, "Cleaning," for cleaning instructions.

WARNING

Moisture causes hot shortening to spatter, which may cause serious injury. Thoroughly dry the kettle and any other parts you wash.

WARNING

To avoid electrocuting yourself or damaging the EZ Melt, never allow water, steam, cleaning solution, or other liquid to enter the heater head.

Make sure that the power requirements of the EZ Melt, shown on the data plate, match your power source.

Melting and Filling

1. Completely cover the heating element with shortening. There are two ways to do this:
 - Pre-melt some shortening in a pan on the stove and pour it into the kettle to cover the element.
 - Pack solid shortening tightly around the heating element and bulbs. Do not leave any air spaces. Cover the heating element at least 2⁷/₅ cm. (See Figure 1-6)

WARNING

Air spaces can cause the shortening to overheat and catch on fire.

2. Install the cube melter in the kettle, opposite the heater head. Push the cube melter through the shortening so its legs rest on the bottom of the kettle. (See Figures 1-7 & 1-8.)



Figure 1-6. Packing Solid Shortening in the Kettle.

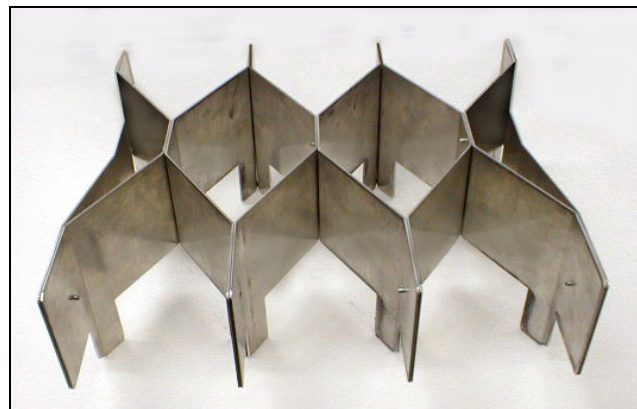


Figure 1-7. Cube Melter



Figure 1-8. Installing the Cube Melter.

3. Position the EZ Melt near the fryer.
4. Install the supply hose. Follow these steps:
 - a. Attach the hose to the pump outlet by hand-tightening the hose connector.
 - b. Mount the nozzle of the hose on the edge of the fryer kettle with the opening inside the kettle.

5. Make sure that the HEAT and PUMP switches are in the OFF position. Connect the EZ Melt to the power source.

To avoid damaging the heating element, make sure it is completely covered with shortening before you turn the heater on.

6. Turn the machine on using the HEAT switch. When the heat is on, the heating element melts shortening at 200°F/93°C. The heat must also be on to operate the pump.
7. Turn the pump on using the PUMP switch.
8. When you want to supply shortening to the fryer, press the foot pedal.

WARNING

To avoid burning yourself, never touch the nozzle while the machine is in use.

9. When the fryer has enough shortening in it, release the foot pedal.
10. As needed, add shortening to the kettle, one cube at a time. Always add a cube if the shortening level drops to the tops of the legs of the cube melter. (See Figure 1-9 & 1-9A.)

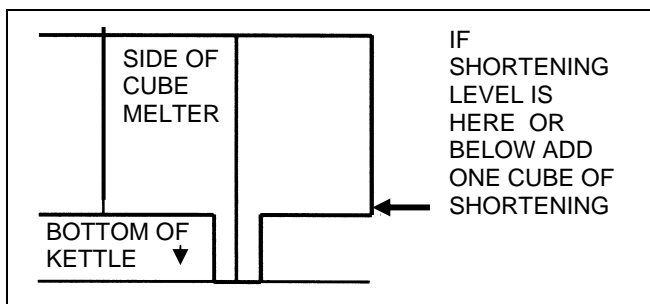


Figure 1-9. When to Add a Cube of Shortening.

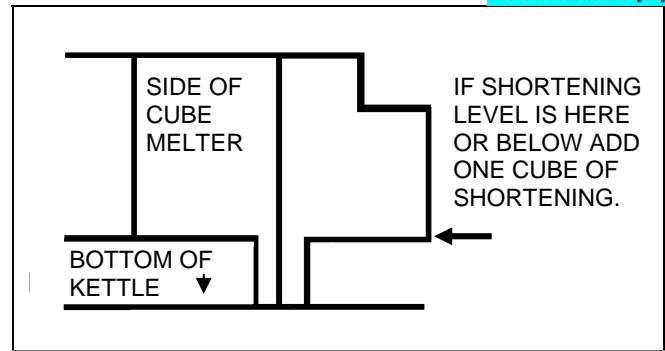


Figure 1-9A. (**EZ34 ONLY**) When to Add a Cube of Shortening.

To add a cube of shortening, follow these steps:

1. Position the filter assembly so you can add shortening. The edge of the kettle has one or two sets of holes in it. Use the set of holes that is nearer to the heater head. When two of the filter frame's pins rest in these holes, the filter assembly hangs vertically. (See Figure 1-10.)



Figure 1-10. Positioning the Filter Frame for Melting.

- b. Place a solid cube of shortening on the cube melter. Let one cube melt and be pumped out before adding another cube. Do not overload the EZ Melt.

WARNING

Be careful with hot shortening. Always wear proper protective gear (face shield, apron and gloves) when filtering, disassembling and cleaning

Filtering

1. Turn the fryer off. Allow the shortening to cool to **250°F/121°C**. Because hot shortening is dangerous, **FILTER SHORTENING AT THE LOWEST TEMPERATURE THAT WORKS**. Hot shortening may also trip the pump motor.

WARNING

Maximum filtering temperature is **325°F/163°C**

WARNING

Hot shortening may cause serious injury.

2. Turn the EZ Melt off. Make sure that both the HEAT and PUMP switches are in the OFF position.
3. Make sure that the top of the cube melter is exposed.

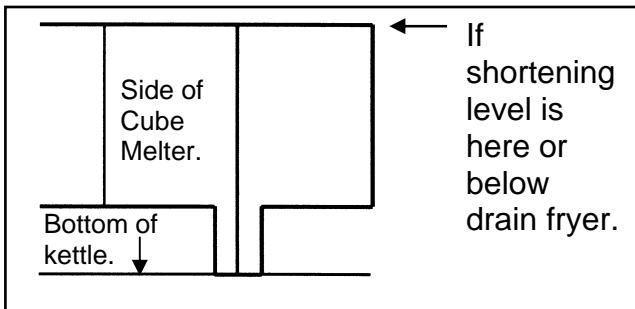


Figure 1-11. When to Drain the Fryer.

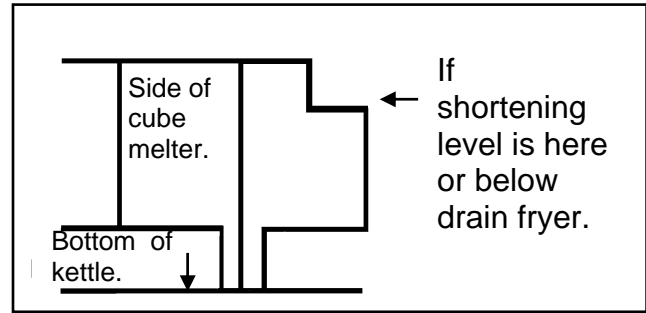


Figure 1-11A. **(EZ-34 ONLY)** When to Drain the Fryer.

WARNING

When you begin to drain the fryer, the shortening in the EZ Melt must be shallow enough for the top of the cube melter to be exposed. If the shortening is deeper it might overflow when you drain the fryer, thus causing burns or other serious injury.

4. Position the shortening filter assembly on the EZ Melt kettle. The edge of the kettle has one or two sets of holes in it. Use the set of holes that is farther from the heater head. When two of the filter frame's pins rest in these holes, the filter assembly rests horizontally on the end of the kettle. (See Figure 1-12.)

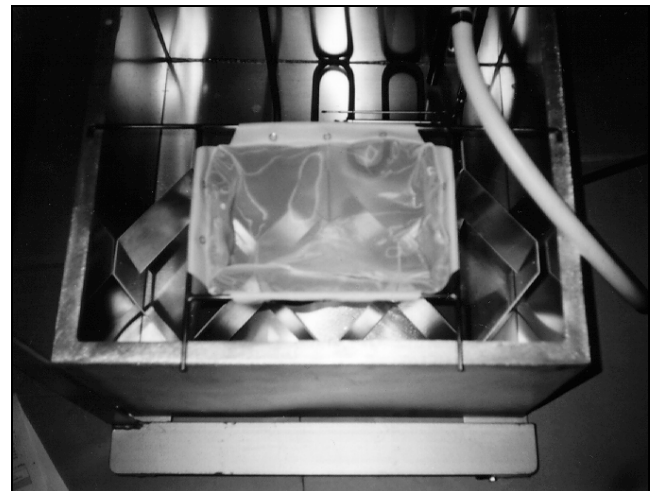


Figure 1-12. Positioning the Filter Assembly for Filtering.

5. Disconnect the supply hose from the hose connector. Hold the two ends of the hose up so shortening does not drip out. Hang hose vertically over a pan so the shortening will drip into the pan.
6. Attach the rinsing hose securely to the hose connector. (See Figure 1-13.)

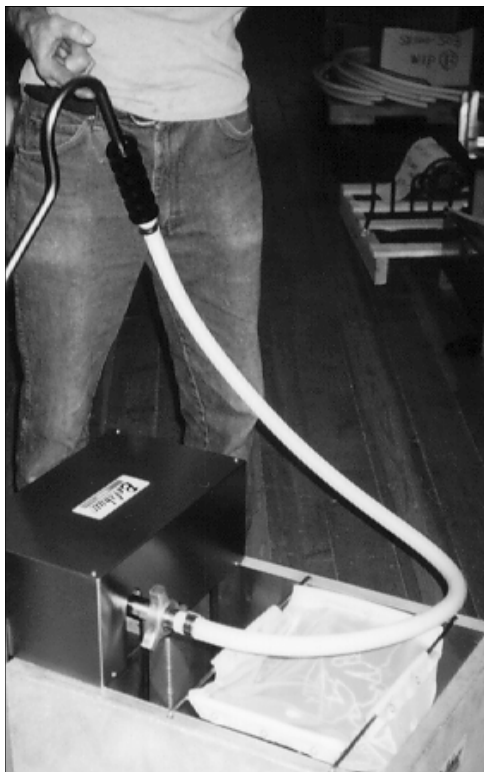


Figure 1-13. Rinsing Hose.

7. Position the EZ Melt so the filter is directly under the drain in the fryer kettle.
8. Reach under the table and slowly open the fryer's drain valve.
9. Move the HEAT and PUMP switches of the EZ Melt to the ON position.
10. Hold the insulated handle of the hose. Direct the nozzle into the fryer kettle. Press the foot pedal and rinse the kettle with shortening. Do not let shortening splash out of the kettle!

WARNING

To avoid burning yourself, never hold or touch the metal portion of the nozzle while the machine is in use. Wear protective gloves.

WARNING

Thoroughly clean and dry the floor if shortening, water, or other materials are spilled. Materials spilled on the floor may cause serious injury and loss of life.

11. After you have rinsed all the loose particles out of the fryer kettle, release the foot pedal.
12. After the shortening has drained out of the fryer kettle and through the EZ Melt filter, close the drain valve.
13. Turn the EZ Melt off. Make sure that both the HEAT and PUMP switches are in the OFF position.
14. Disconnect the rinsing hose assembly. Hold the two ends of the hose up so shortening does not drip out. Hang the hose vertically over a pan so shortening will drip into the pan.
15. Bring the supply hose back to the EZ Melt, holding the two ends of the hose up so shortening does not drip out.
16. Securely attach the supply hose to the hose connector. Make sure the outlet nozzle is securely mounted to the fryer, with the opening inside the kettle.
17. Move the HEAT and PUMP switches to the ON position. Press the foot pedal to supply filtered shortening to the fryer.
18. Before you filter shortening again, empty the EZ Melt filter. Follow these steps:

- a. Allow the filter assembly to cool to the touch.
- b. Lift off the filter assembly, holding it by the frame.
- c. Invert the filter assembly over a sink or garbage can and shake the sediment off of it. **DO NOT** rinse the filter.

WARNING

Rinsing the filter could cause water to drop into the kettle. Hot shortening could spatter and cause serious injury.

- d. Put the filter assembly back on the EZ Melt.

To order replacement filters for your EZ Melt, call Belshaw.

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Cleaning

WARNING

Be careful with hot shortening. Always wear proper protective gear (face shield, apron and gloves) when filtering, disassembling and cleaning

Clean the EZ Melt after every use. Follow these steps:

1. Turn on the heat and the pump.
2. Press the foot pedal to pump shortening out of the EZ Melt and into a metal container or fryer kettle.
3. When you cannot pump any more shortening out of the EZ Melt, release the foot pedal. Turn off the heat and the pump.
4. Disconnect the EZ Melt from the power source.
5. Disconnect the filter hose assembly **while still hot** and drain any remaining shortening back into the filter kettle to prevent shortening from hardening in the hose.
6. Store the hose hanging vertically with the lower end of the hose in a metal container to catch any shortening that may drip.
7. Allow the shortening in the EZ Melt kettle to cool to 115°F/46°C.

WARNING

Hot shortening can cause serious injury.

8. Clean the EZ Melt filter. Follow these steps:
 - a. Allow the filter assembly to cool to the touch.
 - b. Lift off the filter assembly, holding it by the frame.
 - c. Invert the filter assembly over a sink or garbage can and shake the sediment off of it.
 - d. Unsnap the filter to remove it from the filter frame.
 - e. Rinse the remaining shortening and crumbs off of the filter.

WARNING

Thoroughly clean and dry the floor if shortening, water, or other materials are spilled. Materials spilled on the floor may cause serious injury and loss of life.

9. Remove the cube melter.
10. Loosen the two fasteners at the back of the heater head, lift it off the kettle and place it in a clean safe place. The foot valve and cord will unsnap from the frame. See Figure 2-1.



Figure 2-1. Removing the Heater Head.
(Place heater head as shown above so no damage is done to the element.)

15. Dry all the parts completely. The kettle and all other parts must be completely dry before you use the EZ Melt again.

WARNING

Failure to dry the kettle and all parts of the EZ Melt completely may cause shortening to spatter or erupt. Shortening will overflow the EZ Melt and may result in fire, injury, or death.

16. Re-assemble the EZ Melt.

WARNING

Do not touch the heating element! It is very hot and will burn you.

11. Remove the kettle from the frame. You must remove it from the rear.
12. Pour any shortening remaining in the kettle into a metal container. If it is too heavy or awkward for you to lift by yourself, get someone to help you.

WARNING

Thoroughly clean and dry the floor if shortening, water, or other materials are spilled. Materials spilled on the floor may cause serious injury and loss of life.

13. Scrape out any residue and discard it.
14. Wash the kettle, the cube melter, and the filter frame with warm, soapy water.



EZ Melt Fill & Filter

EZ18, EZ24 & EZ34

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floor, possibly causing slips, falls, injury, burns, or even death.

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- To avoid damaging the EZ Melt, never use force to assemble, disassemble, operate, clean, or maintain it.
- To avoid electrocution, make sure that the power cord is not frayed or cracked and that it does not pass through any water or shortening.
- Make sure that the power cord is routed so that no one will trip over it.

1

Installation

To help familiarize you with the major parts of your EZ Melt model EZ18, EZ24, or EZ34, please study the photographs below.

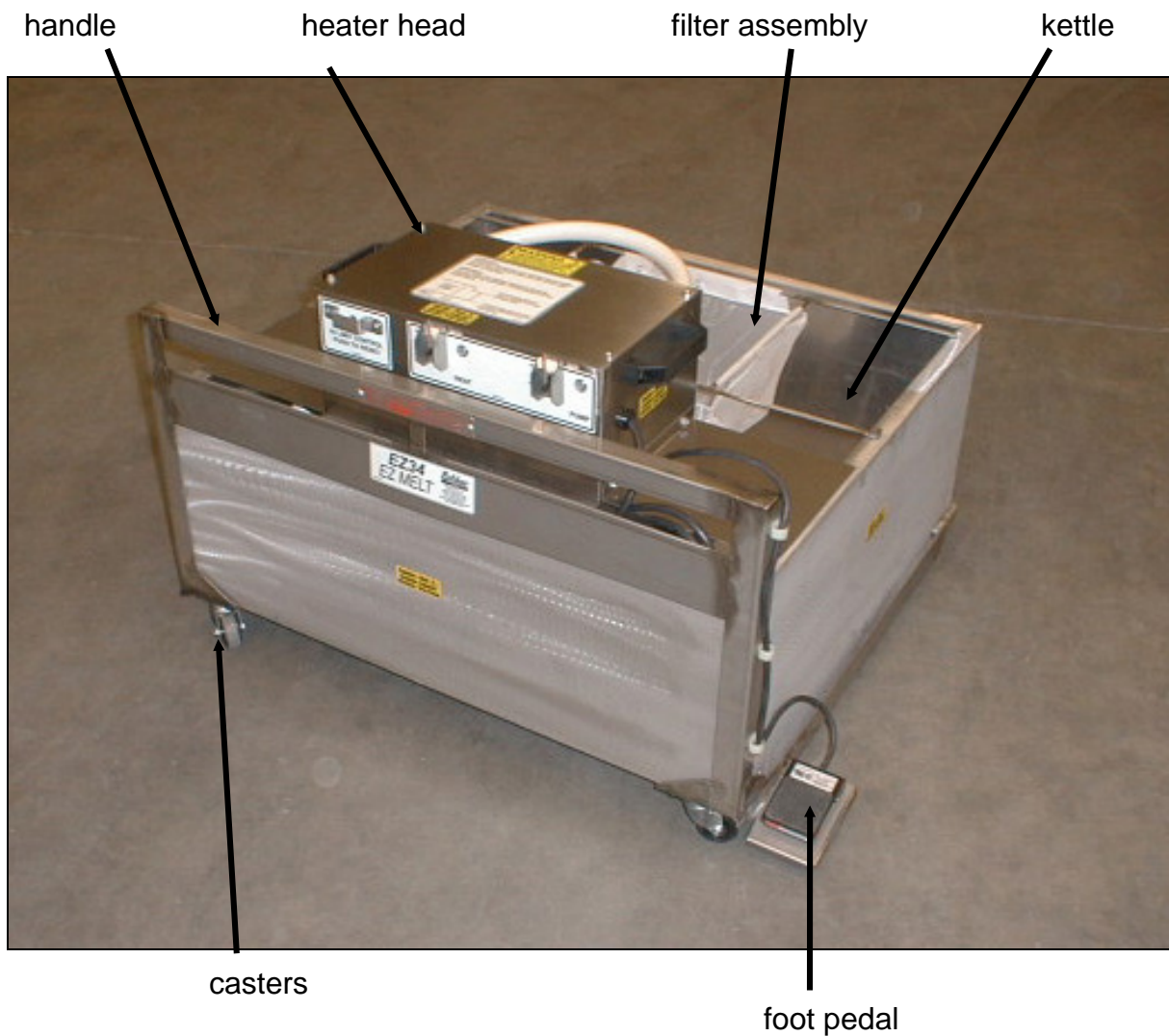


Figure 1-1. Front View.

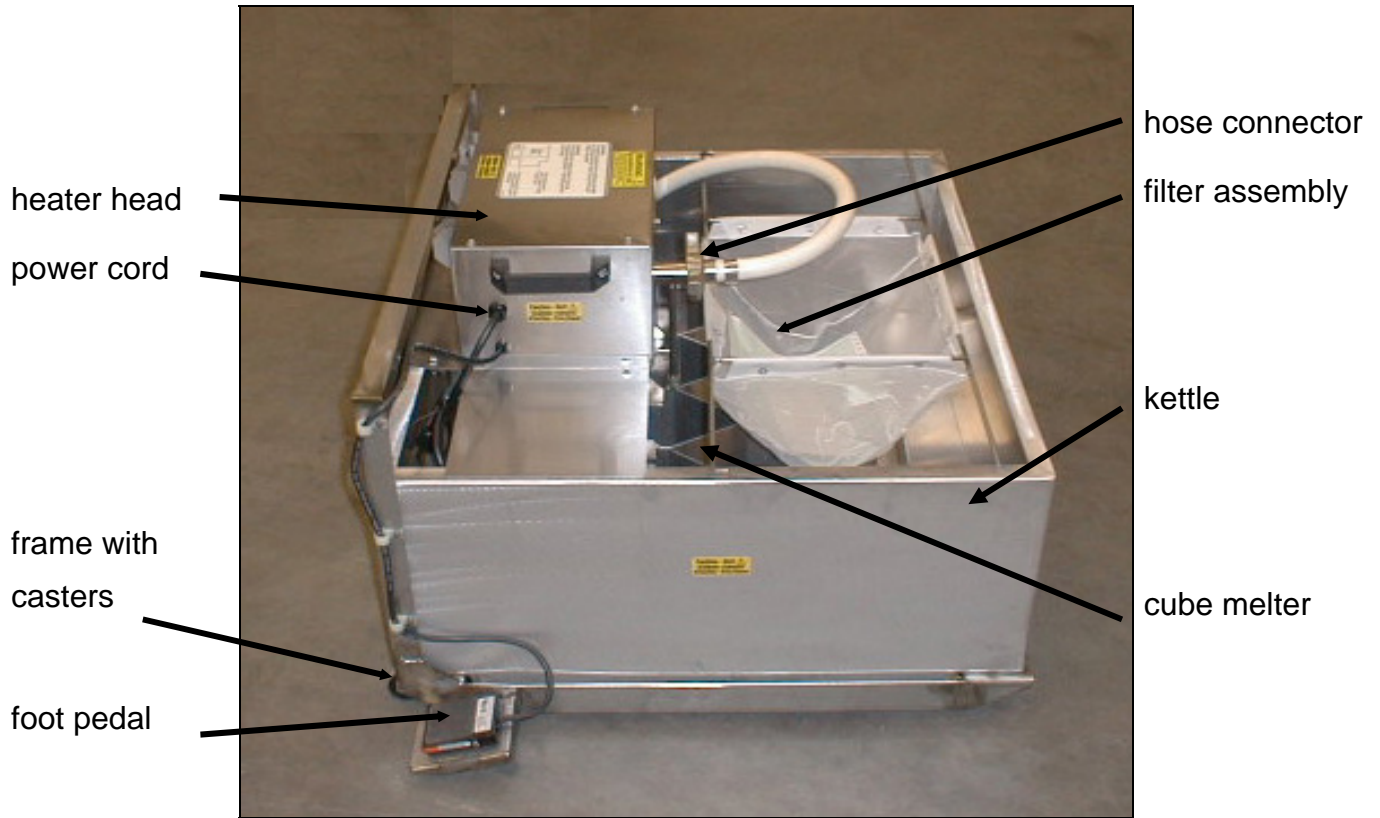


Figure 1-2. Side View.



Figure 1-3. Top View, Heater Head.

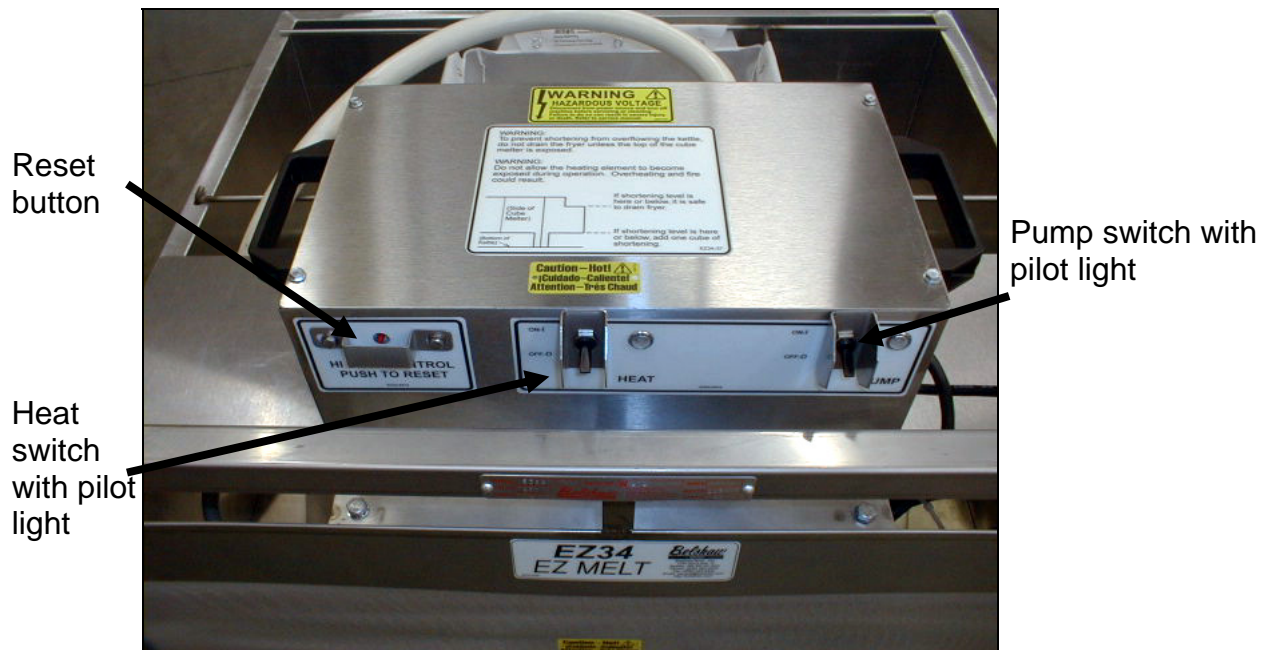


Figure 1-4. Heater head

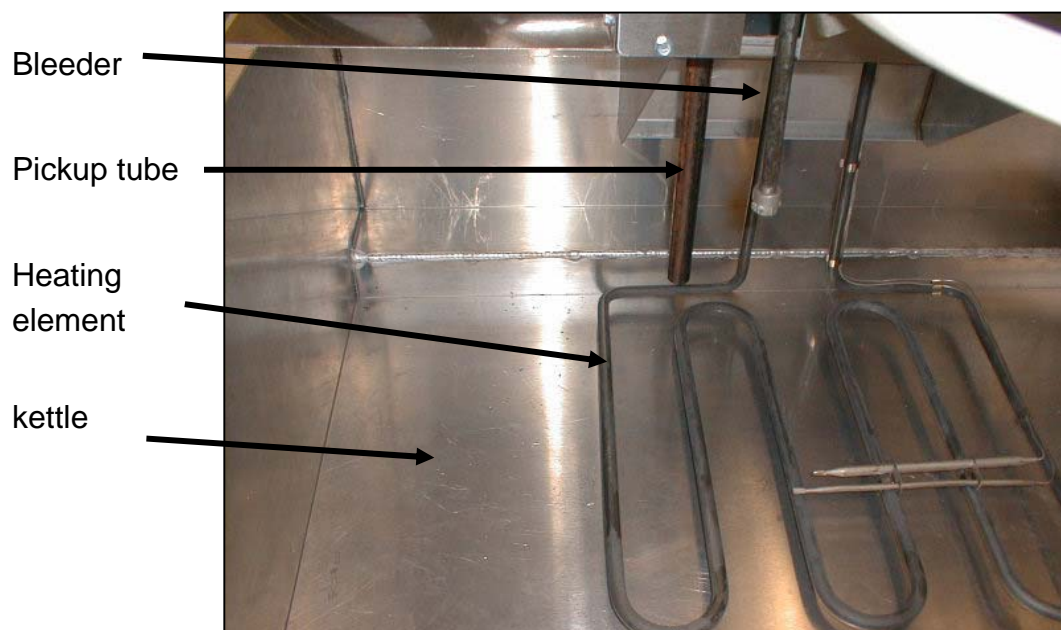


Figure 1-5. Elements and kettle.

Thoroughly clean your EZ Melt before using it. Refer to Section 2 in the Operator's Manual, "Cleaning," for cleaning instructions.

WARNING

Moisture causes hot shortening to spatter, which may cause serious injury. Thoroughly dry the kettle and any other parts you wash.

WARNING

To avoid electrocuting yourself or damaging the EZ Melt, never allow water, steam, cleaning solution, or other liquid to enter the heater head.

Make sure that the power requirements of the EZ Melt, shown on the data plate, match your power source.

2

Troubleshooting

This section is designed as an aid in troubleshooting, not as a substitute for a qualified technician. You may encounter a problem with your EZ Melt that is not covered in this section, or you may try the remedies suggested here and find that they do not correct the problem. In either case, feel free to call Belshaw Bros. at (206)322-5474. One of our customer support representatives will be happy to help you. When you call, please specify the following:

- The model number of the machine.
- The serial number of the machine.
- The voltage, phase, and hertz (cycle) of the machine.

CAUTION

If you perform repairs yourself or have them performed by anyone other than Belshaw Bros. or a service technician authorized by Belshaw Bros., you do so at your own risk.

For factory service, call us for a return goods authorization. Then send your machine to us, freight prepaid, with your instructions for service, your phone number, and the name of the person for us to contact when we have made a cost estimate. In most cases, the machine can be shipped back, freight collect, within five days.

To avoid down time, call us to see whether we have a machine we can loan to you while your machine is being serviced.

Ship machines in need of servicing to:

Belshaw Bros., Inc.
814 44th Street NW, Suite 103
Auburn, WA 98001 USA

Following is a troubleshooting chart to help you identify and solve some basic problems.

WARNING

Disconnect the machine from the power source before disassembling, repairing, or wiring.

THE SHORTENING DOES NOT FLOW FREELY THROUGH THE FILTER SYSTEM	
Possible Causes	What To Do
The hose is crimped.	Straighten the hose.
Solid shortening is building up inside the hose and pump	Filter shortening at a higher temperature.
	WARNING
	To avoid being burned, before doing any of the following, turn off the EZ Melt and allow the shortening to cool.
The hose is clogged with shortening.	Soak the hose in warm or hot water to help release the clogged shortening. Hang it up and let it dry before you use it again.
The drain tube is clogged with solid shortening.	Remove the drain tube and soak it in warm or hot water to help release the clogged shortening.
The pickup tube is clogged with residue.	Remove the pickup tube and clean it.
THE PUMP MOTOR WILL NOT RUN	
Possible Causes	What To Do
The connection of the power cord to the power source is faulty.	Make sure the power cord is fully plugged in to a proper power source.
The circuit breaker has been tripped.	Press the reset button. If the problem persists, consult your Belshaw dealer, or call Belshaw.
	WARNING
	Before doing the following, turn off the machine, allow it to cool, and disconnect it from the power source.
The power switch is defective.	Repair or replace the power switch.
The motor is defective.	Repair or replace the motor.