



*Model U421 & U431
Operator's Manual
513713 Rev.0*

Section 1: Introduction

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This manual provides basic information about the machine. Instructions and suggestions are given covering its operation and care.

The illustrations and specifications are not binding in detail. We reserve the right to make changes to the machine without notice, and without incurring any obligation to modify or provide new parts for machines built prior to date of change.

DO NOT ATTEMPT to operate the machine until instructions and safety precautions in this manual are read completely and are thoroughly understood. If problems develop or questions arise in connection with installation, operation, or servicing of the machine, contact Stoelting.



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Section 1: Introduction

This manual is divided into the following five sections:

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- B. Specifications

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- A. Empty the Freezing Cylinders - Start here if cleaning a machine with mix in it
- B. Disassemble Parts - Start here if cleaning an empty machine
- C. Cleaning Disassembled Parts
- D. Cleaning the Machine
- E. Assembling the Machine
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- A. Troubleshooting Flow Charts

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- A. Auger Shaft & Front Door Parts
- B. Cab Tubing

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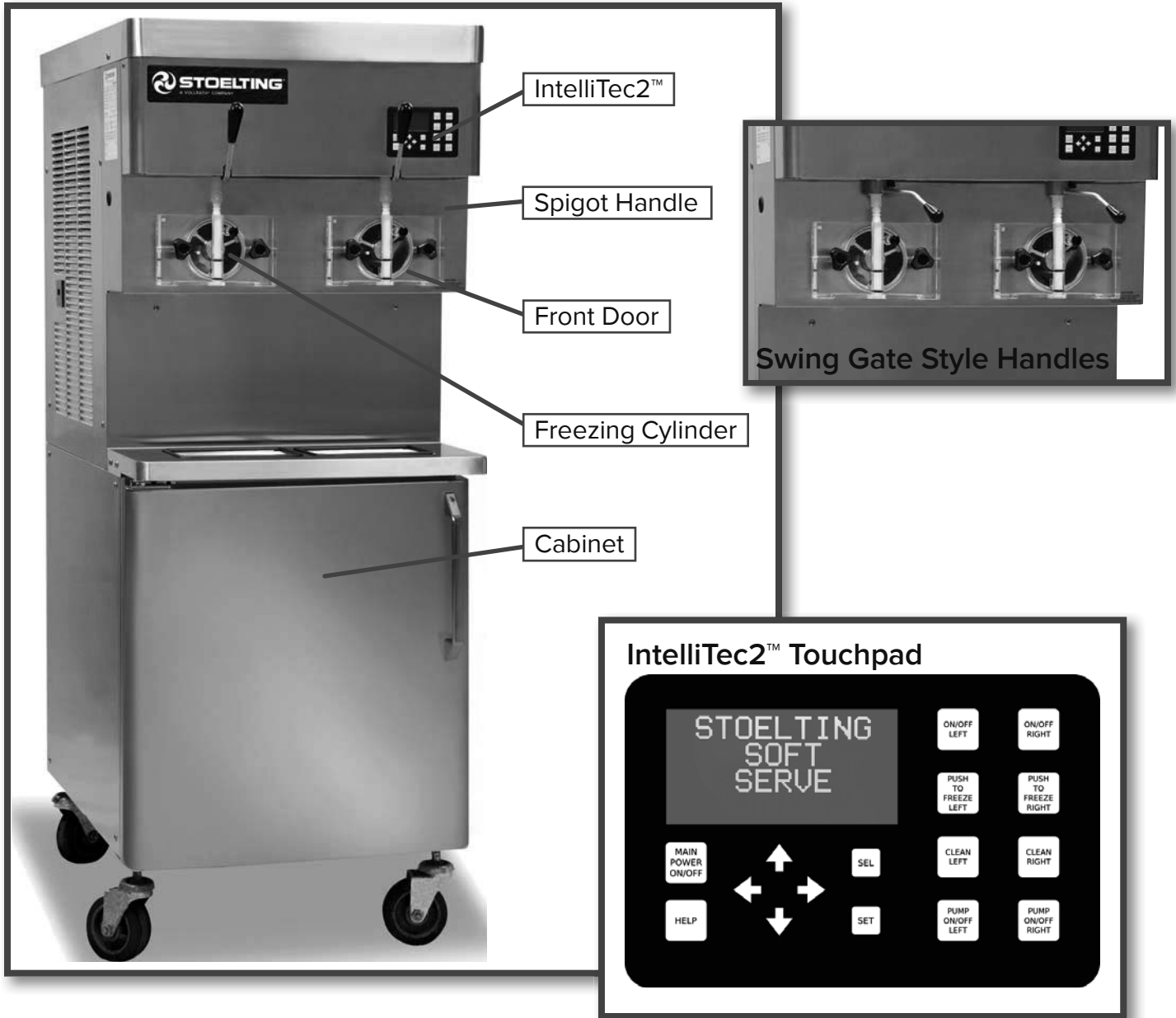
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A. Parts of the U421-I2A Machine

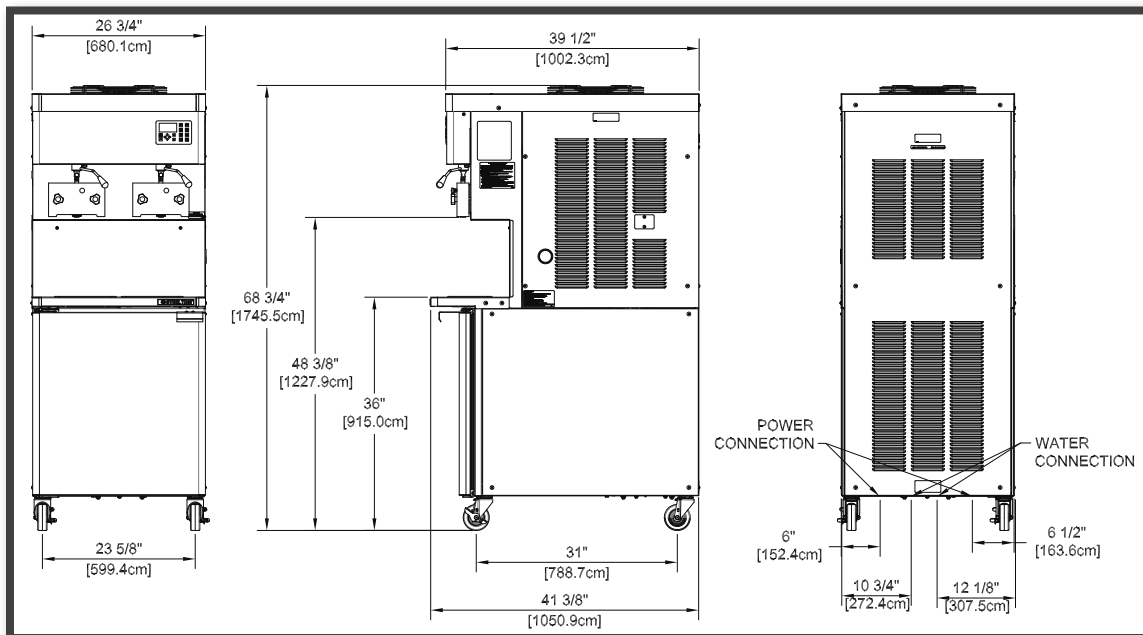


The U421 has two types of spigot handles, swing gate and pull-down. The swing gate style is opened by moving the handle to the left. The pull-down style is opened by pulling downwards.

This manual shows the pull-down handles which are self-closing. The swing gate style handles need to be closed when finished dispensing.

B. U421-I2A Specifications

| Dimensions | U41-I2A A/C | | U421-I2A A/C Remote | | U421-I2A W/C | |
|---|---|-----------------------|--|-----------------------|--|-----------------------|
| | Machine | with crate | Machine | with crate | Machine | with crate |
| width | 26-3/4" (67,9 cm) | 34" (86,4 cm) | 26-3/4" (67,9 cm) | 34" (86,4 cm) | 26-3/4" (67,9 cm) | 34" (86,4 cm) |
| height | 68-3/4" (174,6 cm) | 78" (198,1 cm) | 67-3/4" (172,1 cm) | 78" (198,1 cm) | 67-1/2" (171,5 cm) | 78" (198,1 cm) |
| depth | 39-1/2" (100,3 cm) | 48" (121,9 cm) | 39-3/4" (101,0 cm) | 48" (121,9 cm) | 39-1/2" (100,3 cm) | 48" (121,9 cm) |
| Weight | 785 lbs (356,0 kg) | 935 lbs (424,1 kg) | 760 lbs (344,7 kg) | 908 lbs (411,8 kg) | 760 lbs (344,7 kg) | 908 lbs (411,8 kg) |
| Electrical | 1 PH | 3 PH | 1 PH | 3 PH | 1 PH | 3 PH |
| circuit ampacity (per barrel) | 32A | 20A | 36A Left / 31A Right | 20A | 32A | 20A |
| overcurrent protection device (per barrel) | 50A | 30A | 50A Left / 45A Right | 30A | 50A | 30A |
| The machine requires one dedicated electrical circuit per barrel. | | | | | | |
| Compressor | Two - 19,000 Btu/hr Cabinet - 1,300 Btu/hr Compressor (R-134a) | | | | | |
| Drive Motor | Two - 2 hp | | | | | |
| Cooling | Air cooled units require 6" (15,2 cm) air space on all sides and open at the top. | | Remote air cooled requires two remote condensers and two precharged line sets. | | Water cooled units require 1/2" N.P.T. water and drain fittings. Maximum water pressure of 130 psi. Minimum water flow rate of 3 GPM per barrel. Ideal EWT of 50°-70°F. The machine requires 6" (15,2 cm) air space on all sides for the cabinet refrigeration system. | |
| Hopper Volume | Two - 8 gallon (30,28 liters) | | | | | |
| Freezing Cylinder Volume | Two - 1.33 gallon (5,03 liters) | | | | | |



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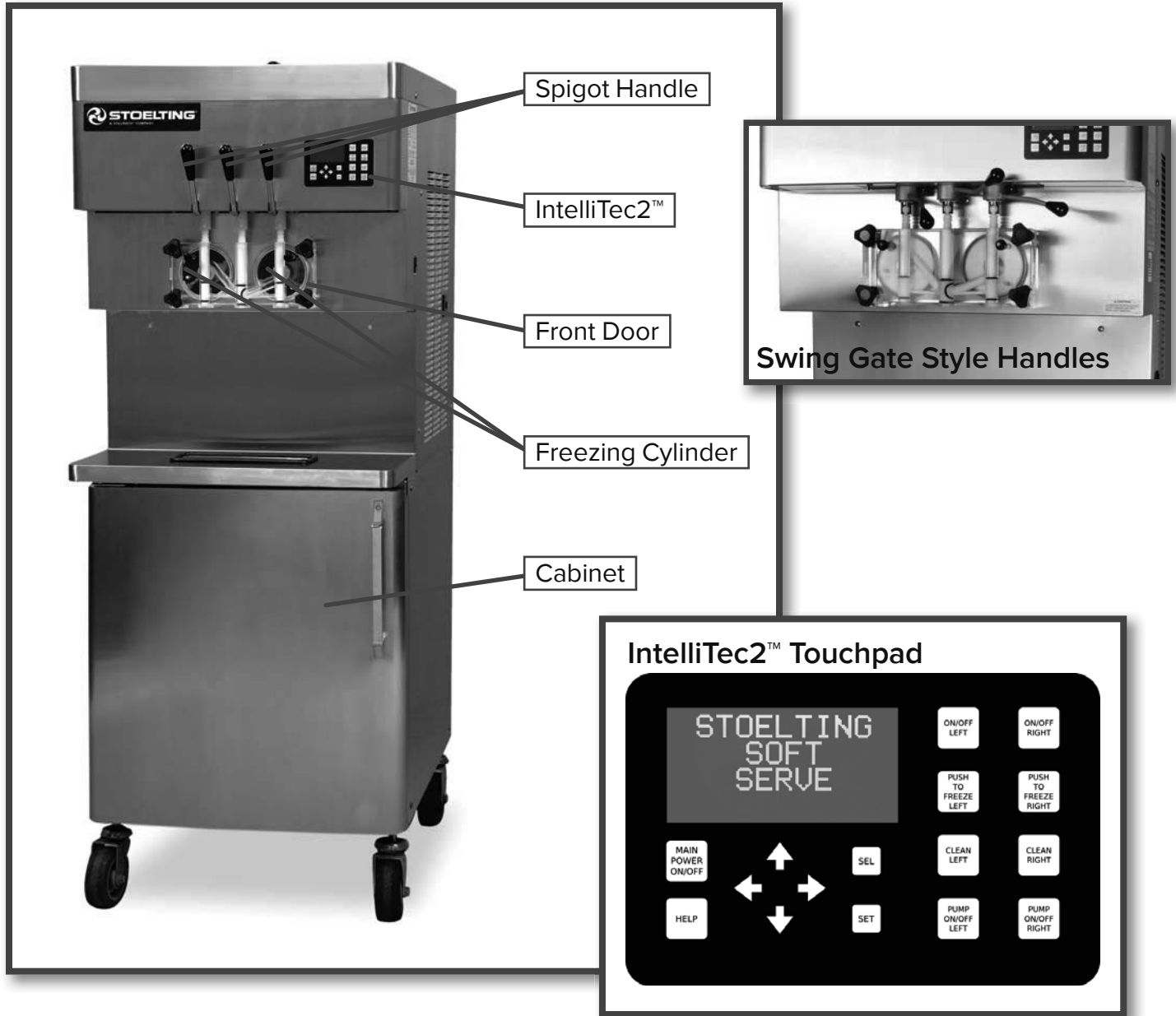
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C. Parts of the U431-I2A Machine

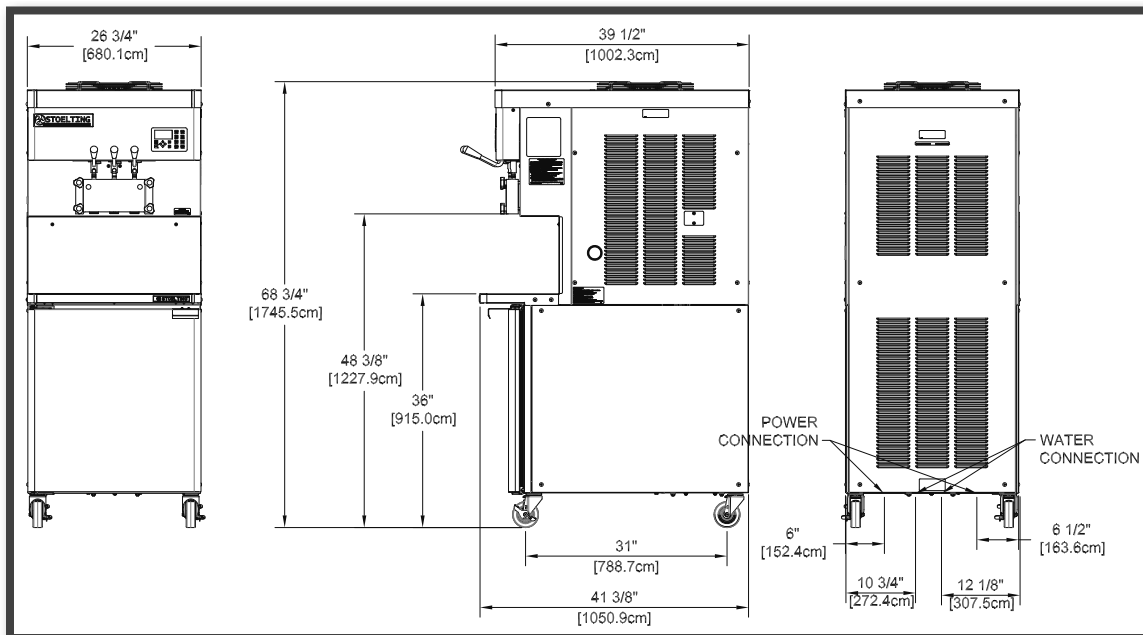


The U431 has two types of spigot handles, swing gate and pull-down. The swing gate style is opened by moving the handle to the left. The pull-down style is opened by pulling downwards.

This manual shows the pull-down handles which are self-closing. The swing gate style handles need to be closed when finished dispensing.

D. U431-I2A Specifications

| Dimensions | U431-I2 A/C | | U431-I2 A/C Remote | | U431-I2 W/C | |
|---|---|-----------------------|--|-----------------------|--|-----------------------|
| | Machine | with crate | Machine | with crate | Machine | with crate |
| width | 26-3/4" (67,9 cm) | 34" (86,4 cm) | 26-3/4" (67,9 cm) | 34" (86,4 cm) | 26-3/4" (67,9 cm) | 34" (86,4 cm) |
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| circuit ampacity (per barrel) | 32A | 20A | 36A Left / 31A Right | 20A | 32A | 20A |
| overcurrent protection device (per barrel) | 50A | 30A | 50A Left / 45A Right | 30A | 50A | 30A |
| The machine requires one dedicated electrical circuit per barrel. | | | | | | |
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| Hopper Volume | Two - 8 gallon (30,28 liters) | | | | | |
| Freezing Cylinder Volume | Two - 1.33 gallon (5,03 liters) | | | | | |



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NOTE

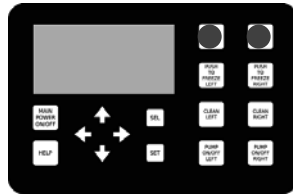
The machine must be emptied, disassembled, cleaned and sanitized every 3 days or per local health code requirements (whichever is sooner).

OPERATION

A. Empty the Freezing Cylinders

A.1

Turn off freezing cylinders.



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A.2

In the cab, lift the drawer latches and pull out the drawers.



Disconnect the bag adapters from the bags and place caps on the bags

TROUBLESHOOTING

NOTE

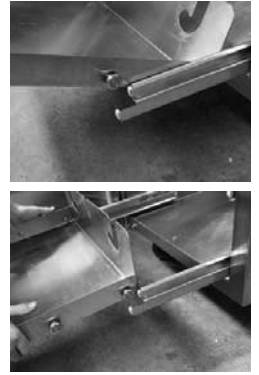
Wire trays are located at the upper left and right corners of the cab to store bag caps.

PARTS

A.3

Set up cab and hoses for rinse procedure.

1. Remove the bags from the cab and store them in a cooler.
2. Remove the three plastic bins from the cab.
3. Remove the drawers. To remove a drawer, pull it out. Tilt the drawer up to disengage the front rollers. Pull it further out then up to disengage the rear rollers.



A.4

Fill a bucket with 2 gallons of cool tap water and place the coiled hoses with bag adapters into the bucket.



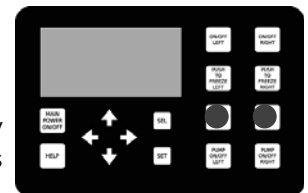
NOTE

Optional: Fill the bucket with Stera Sheen solution to make cleaning parts easier after disassembly.

A.5

Press the Clean buttons.

Make sure the display shows that the mix pumps are on



A.6

Open spigots to drain product until no product is visible through the front door. Refill the bucket with water as necessary.



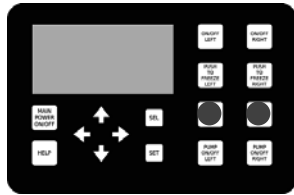
NOTE

If the “Clean Time Exceeded” warning is displayed on the IntelliTec2™, turn the freezing cylinder on and off again to clear the warning. Press the Clean button to resume cleaning.

A.7

Remove the buckets to help clear any remaining liquid in the hoses.

Drain the water from the freezing cylinders and press the Clean and Pump buttons to stop the augers.



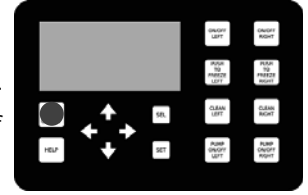
A.8

Open the spigots to release any pressure in the freezing cylinders (machines with gate style handles).



A.9

Press and hold the Main Freezer Power button for three seconds to turn off the power.



B. Disassemble Parts

Before using the machine for the first time, complete machine disassembly, cleaning and sanitizing procedures need to be followed. Routine cleaning intervals and procedures must comply with the local and state health regulations. Inspection for worn or broken parts should be made at every disassembly of the machine. All worn or broken parts should be replaced to ensure safety to both the operator and the customer and to maintain good machine performance and a quality product. Check the wear line on the auger flights on a regular basis and replace as needed.



Auger Flight Wear

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1. Front Door Disassembly

B.1

Remove the spigot extensions or rosette caps if installed.

Unscrew the knobs on the front door and remove the door.



B.2

Remove the front door o-rings and remove the spigots from the front door.



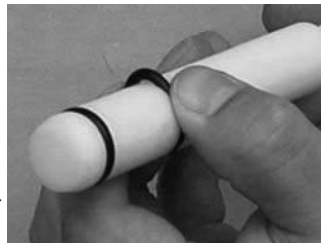
B.3

Remove the air bleed valve from the front door.



B.4

Remove all o-rings from parts by first wiping off the lubrication using a clean towel. Then squeeze the o-ring upward to form a loop. Roll the o-ring out of the groove.



2. Removing Auger

B.5

Remove front auger supports and bushings and remove the augers from the freezing cylinders. As the augers are being pulled out, remove the plastic flights with springs.



B.6

Wipe any remaining lubricant off the hex end of the auger and remove the rear seal assembly and o-ring. Wipe any remaining lubricant off the o-ring and auger.



Remove the rear seal adapter from the rear seal.

B.7

Unscrew springs from the auger flights.



NOTE

The pump hose must be replaced every 800 gallons or every two weeks, whichever occurs first. Go to Section 3 A for pump hose replacement instructions.

C. Cleaning Disassembled Parts

Disassembled parts require complete cleaning, sanitizing and air drying before assembling. Local and state health codes will dictate the procedure required. Some state health codes require a four sink process (pre-wash, wash, rinse, sanitize, air dry), while others require a three sink process (without the pre-wash step). The following procedures are a general guideline only. Consult your local and state health codes for the procedures required in your location.

C.1

Place all parts in 90° to 110°F (32°C to 43°C) mild detergent water and wash thoroughly. **Use the brushes that shipped with the machine** to clean all holes in the front door, flights, mix pickup assembly, etc.



NOTE

Be sure to use the brushes that shipped with the machine to properly clean the parts.

C.2

Rinse all parts with clean 90° to 110°F (32°C to 43°C) water. Then place all parts in a sanitizing solution for at least 1 minute, then remove and let air dry completely before assembling in machine.

D. Cleaning the Machine

D.1

Using a detergent solution and the large barrel brush provided, clean the freezing cylinders by dipping the brush in the solution and brushing the inside of the freezing cylinders.



Make sure to thoroughly clean the rear seal surfaces on the inside of the freezing cylinders.

D.2

Wrap the brush in a clean cloth and thoroughly dry the freezing cylinder.

D.3

Remove the drain tray from the side of the machine. Remove the drip tray from the front panel. Clean and replace the trays.



D.4

The exterior of the machine should be kept clean at all times to preserve the luster of the stainless steel. A high grade of stainless steel has been used on the machine to ease cleanup. To remove spilled or dried mix, wash the exterior with 90° to 110°F (32°C to 43°C) mild detergent water and wipe dry.

Do not use highly abrasive materials, as they will mar the finish. A mild alkaline cleaner is recommended. Use a soft cloth or sponge to apply the cleaner. For best results, wipe with the grain of the steel.

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E. Assembling Machine

NOTE

Total Blend lubricant or equivalent must be used when lubrication of machine parts is specified.

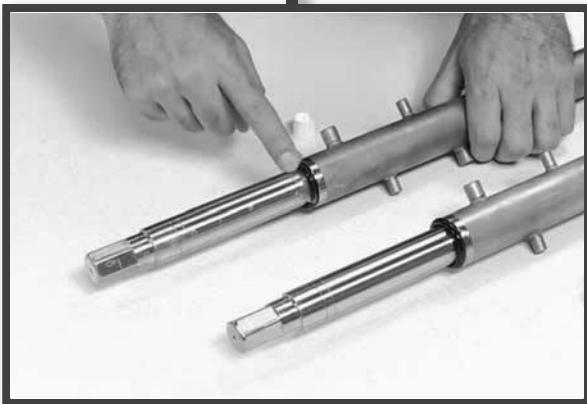
The USDA and FDA require that lubricants used on food processing equipment must be certified for this use. Use lubricants only in accordance with the manufacturer's instructions.

NOTE

Stoelting recommends allowing the parts to air dry before assembling.

E.1

Install the rear seal o-rings onto the augers. Lubricate the outside of the o-rings with a generous amount of sanitary lubricant.



E.2

Install the stainless steel adapter into the rear seal WITHOUT LUBRICANT. Then lubricate the inside of the adapter and install it onto the auger.

DO NOT lubricate the outside of the rear seal.



E.3

Lubricate the hex end of the auger with Total Blend lubricant.



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E.4

Screw the springs onto the studs in the plastic flights. The springs must be screwed into the flights completely to provide proper compression.



E.5

Install the two plastic flights onto the rear of the auger and insert it part way into the freezing cylinder.



E.6

Install the remaining plastic flights, push the auger into the freezing cylinder and rotate slowly until the auger engages the drive shaft.



E.7

Apply a thin layer of Total Blend lubricant to the inside and outside of the auger support bushing.



E.8

Install the bushing onto the auger support and install the auger support into the front of the auger. Rotate the auger support so that one leg of the support points straight up.



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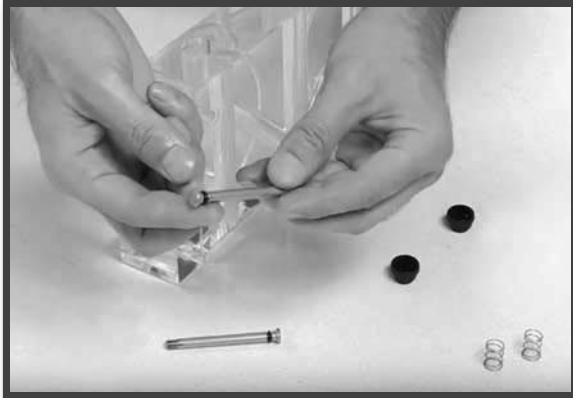
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E.9

Assemble the air bleed valve o-ring onto the air bleed valve. Position the o-ring into the groove. Apply a thin film of Total Blend lubricant to the o-ring.



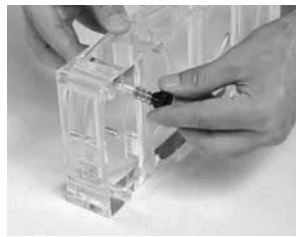
E.11

Install the o-rings onto the spigot bodies and apply a thin layer of Total Blend lubricant to the o-rings. Install the spigot bodies through the bottom of the front door.



E.10

Insert the air bleed valve into the back of the front door. Install the compression spring onto the air bleed valve then screw the knob on finger tight.



E.12

Fit the front door o-rings into the groove on the rear of the front door.



E.13

Place the front door assembly on the mounting studs and the push front door against the machine carefully.



NOTE

Make sure the pins on the front door do not touch the legs of the auger supports.

E.14

Secure the front door to the machine by placing the knobs on the studs and tightening until finger tight. Tighten in a crisscross pattern. Do not overtighten. Proper o-ring seal can be observed through the transparent front door.



F. Sanitizing

Sanitizing must be done after the machine is clean and just before the machine is filled with mix. Sanitizing the night before does not ensure sanitization the next day. However, you should always clean the machine and parts after using it.

NOTE

The United States Department of Agriculture and the Food and Drug Administration require that all cleaning and sanitizing solutions used with food processing equipment be certified for this use

When sanitizing the machine, refer to local sanitary regulations for applicable codes and recommended sanitizing products and procedures. The frequency of sanitizing must comply with local health regulations. Mix sanitizer in quantities of no less than 2 gallons of 90°F to 110°F (32°C to 43°C) water. Allow sanitizer to contact the surfaces to be sanitized for 5 minutes. Any sanitizer must be used only in accordance with the manufacturer's instructions and to provide a 100 parts per million strength solution.

Section 2: Operation

F.1

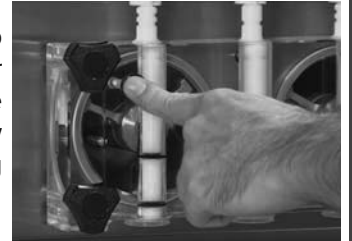
Prepare 2 gallons of sanitizing solution for each freezing cylinder. Following the sanitizer manufacturer's instructions for preparing the sanitizing solution.

Place the coiled hoses with bag adapters into the buckets of sanitizer.



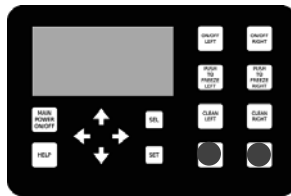
F.4

After you hear the pump shut off, press the air bleed valves to release the air pressure. Allow water to fill the freezing cylinders.



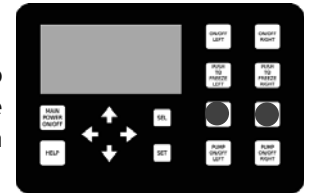
F.2

Press the Main Power button. Then press the Pump buttons to turn the pumps ON.



F.5

Press the CLEAN buttons to start the augers rotating. The IntelliTec2™ display shows a 5-minute timer.



F.3

Check for leaks when the freezing cylinder is first pressurized with sanitizing solution.

1. Check for leaks at the front door seals.
2. Check the drain tray located in the side panel for leaks coming from the rear of the rear auger seal.
3. Check the inside of the cab unit for leaks at the hose connections.

F.6

While the cylinders are being sanitized complete the following:

1. Remove the buckets containing sanitizer.
2. Install spigot extensions and rosette caps (if applicable).

F.7

After the five minute timer expires, open the spigots to drain the sanitizing solution into a container.

When the solution has drained, press the Pump and Clean buttons to stop the pump and auger. Allow the freezing cylinder to drain completely.



F.8

Install the three drawers. Start with the bottom drawer.

1. Pull the drawer guides out so they are fully extended.
2. Insert the rear rollers into the guides.
3. Push the drawer in and insert the front rollers into the guides.
4. Place the plastic bins into the drawers.
5. Insert the bag adapters (connected to the coiled hoses) into the cutouts at the back of the drawers.



The machine is now sanitized and ready for adding mix.

G. Freeze Down

Make sure the display shows the freezing cylinders are off. If they are not, press the On/Off Left or On/Off Right button to turn them off.

G.1

Place a bag of mix into one of the bottom drawer sections.

NOTE

Make sure the bag opening is facing up and towards the back of the drawer. Align the bag corners with the corners of the drawer so the bag is not twisted and drains evenly.

G.2

Remove the cap on the bag and place it in the cap tray.



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G.3

Push as much air out of the bag as possible and connect the bag adapter to the bag. Make sure the adapter is fully inserted into the bag.



G.6

Place a container under the spigot and open the spigot to allow the mix to flush out about 8 ounces (0.23 liters) of sanitizing solution and liquid mix.



OPERATION

IMPORTANT TIP

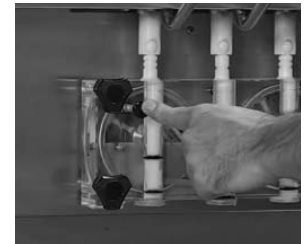
Purge excess air from the bags before fully inserting the adapters.

Excess air in the bags and hoses will negatively affect product overrun and machine operation.

G.7

Allow cylinders to fill until the pumps shut off. Press the valves to release pressure in the cylinders.

The cylinders will be filled to the proper level after the pumps shut off the second time.



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G.4

Insert the bag adapter into the cutout at the back of the drawers.



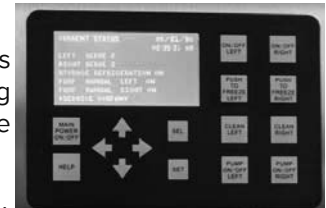
Make sure the adapter is fully inserted into the bag.



G.8

Press the On/Off buttons to turn on the freezing cylinders then press the Push to Freeze buttons.

When the product is ready, the display will read "SERVE" or "SERVE 2". Open the spigot to dispense product.

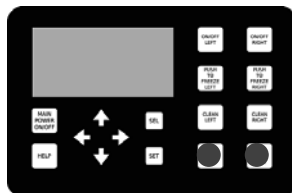


TROUBLESHOOTING

G.5

Repeat for each of the drawer sections.

Then press the Pump buttons to turn the pumps on.



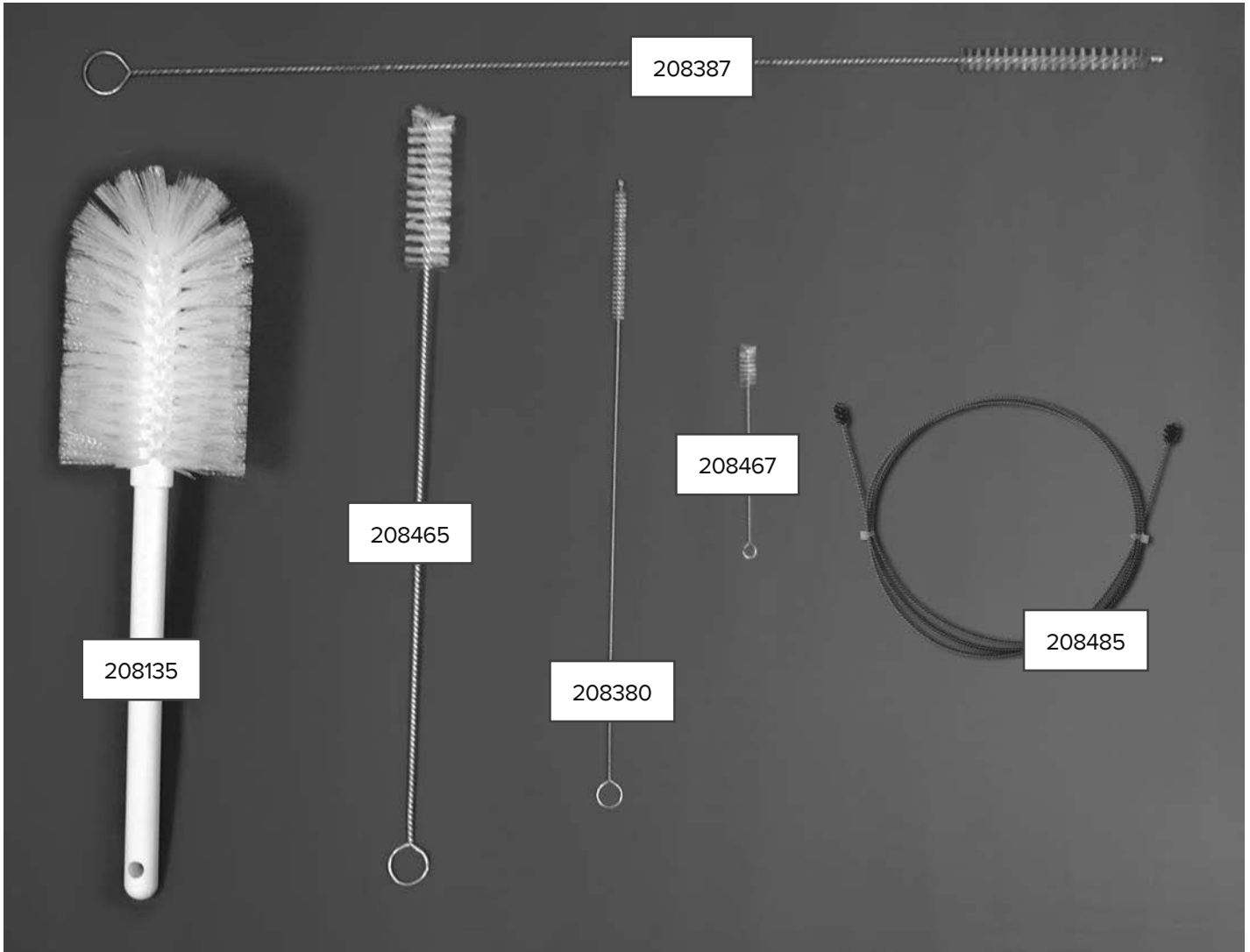
G.9

If the control flashes and displays "Check Mix", open the cabinet and check the mix bags. This message is generally displayed when air gets into the mix lines. Operate normally to clear the error.

If "Mix Out" is displayed, check the mix levels in the bags and replace as necessary.

PARTS

H. Brushes for Cleaning



| Part Number | Where Used |
|-------------|---|
| 208135 | Freezing cylinder |
| 208465 | Front door, check valve block, pump hose |
| 208380 | Front door, pump hose, mix sensor |
| 208467 | Front door, manifold, check valve block |
| 208485 | Coiled hose |
| 208387 | Front door, pump hose, manifold, mix sensor, mix tube |

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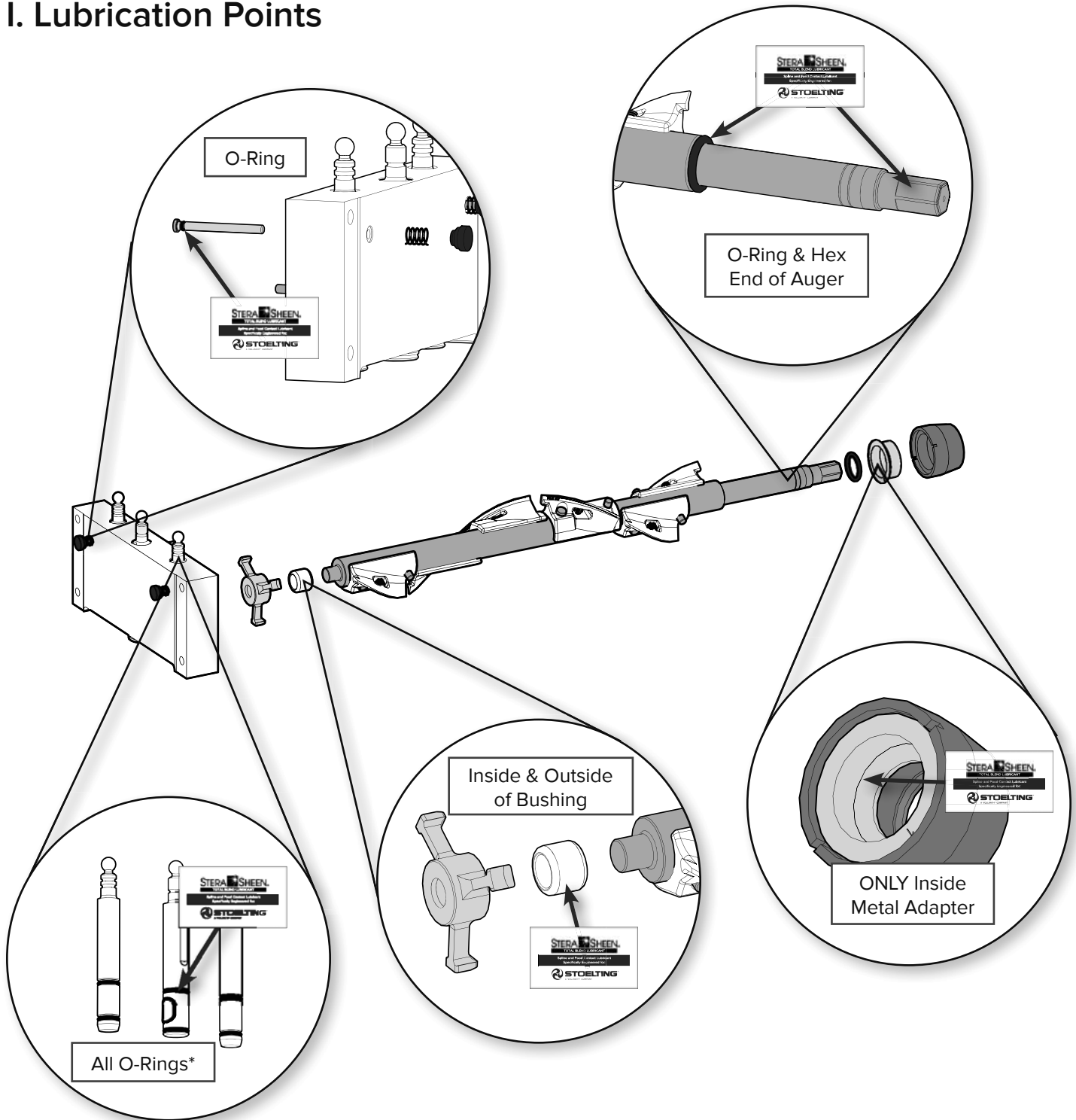
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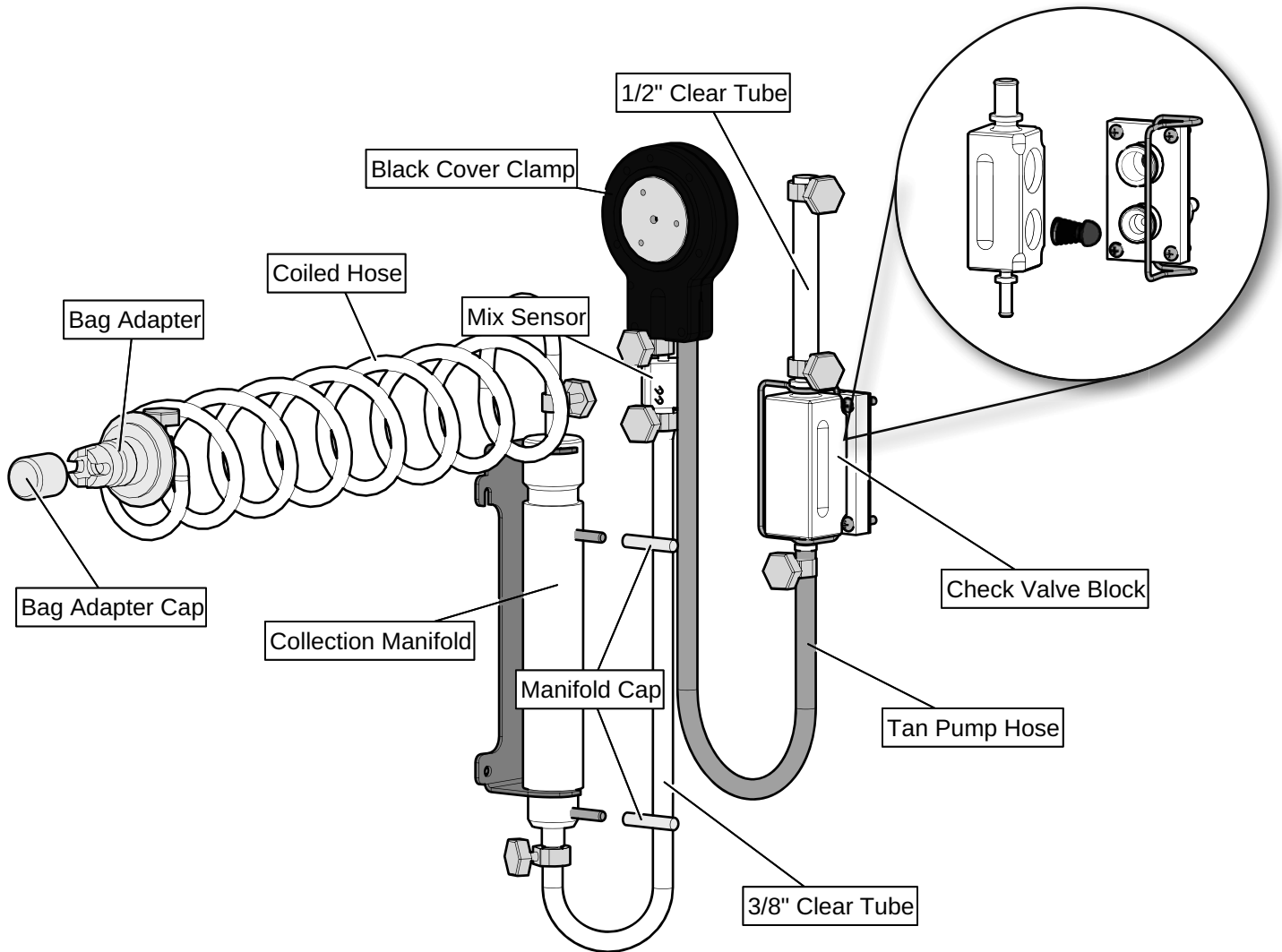
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I. Lubrication Points



* U431 spigot bodies shown, U421 has only one spigot

J. Pump Hose Routing



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A. Mix Pump Hose Replacement

NOTE

Replace pump hose every 800 gallons or every 2 weeks, whichever occurs first.

Replace the hose during the cleaning process.

A.1

Remove the three drawers from the cab. To remove a drawer, pull it out. Tilt the drawer up to disengage the front rollers. Pull it further out then up to disengage the rear rollers.

A.2

Turn the pump on and pull down on the pickup end of the tan hose until a few inches of tubing is visible. The pickup end is on the left side.

Then turn the pump off.



A.3

Loosen the clamps on the tan hose at the mix sensor and check valve block.

Disconnect the hose at both ends.



A.4

Turn the pump on and pull the hose out of the black cover.

Then turn the pump off.

A.5

Rotate the pump rollers so one of the rollers is at the 6:00 position.

With a brush, clean the roller assembly with detergent water, then with clear water.



Section 3: Maintenance

A.6

Connect a new length of tan hose to the mix sensor using a clamp.



A.7

Turn the pump on and feed the other end of the tan hose into the left side of the black cover.

Face the natural curve of the tan hose towards the outside of the cover to prevent the hose from looping around twice.



A.8

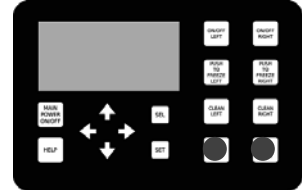
As the hose feeds through the cover, orient the sensor at an angle so the sensor wire does not interfere with the drawer closing and is not obstructed by the other hoses.

Then turn the pump off.

Connect the hose to the check valve block.

A.9

Press and hold the Pump buttons until the pump hose reset message appears on the screen.



A.10

Continue normal cleaning and sanitizing procedures.

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B. Mix Pump Hose Cleaning

NOTE

Any cleaning procedure must always be followed by sanitizing before filling the machine with mix.

The mix pump is approved for CIP (clean-in-place). It is thoroughly cleaned when the cleaning solution is pumped through the machine. To ensure CIP has been properly performed, the pump should be completely disassembled and cleaned every 7 days.



WARNING

Hazardous Moving Parts

Revolving pump head can grab, mangle, and cause serious crushing injury. Make sure the display shows the freezing cylinders and pump are off. If they are not, press the On/Off button and Pump button to turn them off.

CAUTION

System Under Pressure

Never disconnect hoses from the machine or the pump without first opening the spigot to relieve pressure.

1. Disassembly and Coiled Hose Cleaning

B.1

Remove the three drawers from the cab. To remove a drawer, pull it out. Tilt the drawer up to disengage the front rollers. Pull it further out then up to disengage the rear rollers.

B.2

Disconnect the bag adapters from the coiled hoses.

Pull the coiled hoses so they are straight. Then use detergent water with the long brush to clean the hoses.



NOTE

Rotate the coiled hose as it is stretched to help straighten it out.

B.3

Lift the collection manifold upwards then tilt it back to detach it from the bracket.

The manifold may need to be rotated so the metal stem clears the bracket.



B.4

Disconnect the wires from the low mix sensor.



B.5

Turn the pump on and pull down on the pickup end of the tan hose until a few inches of tubing is visible. The pickup end is on the left side.

Then turn the pump off.

Loosen the clamp on the tan hose and disconnect the hose at the low mix sensor.



B.6

Turn the mix pump on and pull the tan house out of the black cover clamp then turn the mix pump off.

B.7

Unfasten the wire clamp on the check valve block by swinging the clamp to the right. Remove the check valve.



B.8

Loosen the clamp on the mix tube at the top of the cab and remove the hose from the tube.

B.9

Remove the two o-rings from the base of the check valve block.



B.10

Remove the hose assemblies from the cab.

Loosen all clamps and disconnect all hoses including the following:

- Bag adapters
- Mix collection manifold
- Low mix sensor
- Check valve block

2. Inspect and Cleaning

B.11

Inspect all the parts for wear and replace as necessary.

B.12

Thoroughly clean the parts with 90° to 110°F detergent water and brushes provided. Rinse with clean, 90° to 110°F water.

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B.13

Wash the mix tube and the check valve base in the cabinet with the detergent water and brushes. Rinse with clean, 90° to 110°F water.



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3. Reassembly

B.14

Connect the coiled hoses to the bag adapters and to the mix collection manifold.

Connect the clear hose to the bottom of the manifold.



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B.15

Install the manifolds into the bracket.



TROUBLESHOOTING

B.16

Connect the tan hose to the low mix sensor.

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B.17

Turn the pump on and feed the tan hose into the left side of the black cover clamp.



NOTE

Face the natural curve of the tan hose towards the outside of the cover to prevent the hose from looping around twice.

B.18

As the hose feeds through the cover, orient the sensor at an angle so the sensor wire does not interfere with the drawer closing and is not obstructed by the other hoses.

Then turn the pump off.

B.19

Connect the hose from the bottom of the manifold to the low mix sensor.



Section 3: Maintenance

B.20

Connect the tan hose to the bottom of the check valve block. The bottom of the block has the smaller hose connector.

B.21

Install the o-rings onto the base of the check valve block. Apply a thin layer of sanitary lubricant to the o-rings.



B.22

Connect the clear hose to the top of the check valve block and tighten the clamp.

Insert the other end of the clear hose onto the mix tube at the top of the cabinet. Do not tighten the clamp until the check valve block is installed.

B.23

Install the check valve into the block and secure the block with the wire clamp. Make sure the rubber check valve is installed in the bottom seat of the assembly.



B.24

Adjust the clear hose so that it is not kinked and tighten the clamp holding the hose to the mix tube.

B.25

Connect the low mix sensor wires to the sensor



B.26

Sanitize assembled machine as per instructions outlined in Section 2 F.

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C. Fine Consistency Adjustment

Product consistency can be adjusted on the Fine Consistency Adjustment Screen.

C.1

From the Current Status screen, press the left arrow button to access the password screen.

| | |
|-------------------|----------|
| Current Status | 01/01/01 |
| | 12:34:56 |
| Left | Serve |
| Right | Sleep 1 |
| Storage Left | On |
| Storage Right | On |
| _ Service Company | |

Press the right arrow then the SEL button.

C.2

Press the SET button on the Fine Consistency Adjustment screen. And use the arrows to change the value.

| | |
|--|-------|
| Fine Consistency Adjustment | |
| Cylinder | Right |
| Changing the fine consistency changes the firmness of the product. | |
| Consistency CutIn Limit | 00 |
| Consistency CutOut Limit | 00 |
| _ Fine Consistency | 00.0 |

Increase the value for higher consistency (thicker). Change the +/- symbol to “-” and adjust the value for lower consistency (thinner) product.

Make adjustments in increments of 5 for best results. Allow 3-4 draws or 30 minutes for the changes to take effect.

C.3

Press the SET button to save the changes.

Press the SEL button to toggle between freezing cylinders.

C.4

Press the left arrow button when done to return to the Current Status screen.

Section 3: Maintenance Daily Procedures

D. Daily Procedures - Night

D.1

Remove the drip tray from the front panel. Clean the tray and reinstall it.



D.2

Remove the spigot extensions. Clean and sanitize them and let them air dry.

D.3

Clean the underside of the clear front door and the exposed portion of the spigots with mild detergent water and then with sanitizing solution.

D.4

Wipe the exterior clean with a mild detergent water to remove spilled or dried mix and wipe dry.

E. Daily Procedures - Morning

E.1

Clean the underside of the clear front door and the exposed portion of the spigots with brushes and a mild detergent water and then with sanitizing solution.

E.2

Install the spigot extensions.

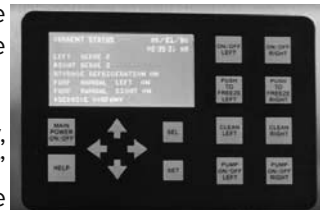
E.3

Check the mix level of the mix bags in the cab.
Add new mix bags as necessary.

E.4

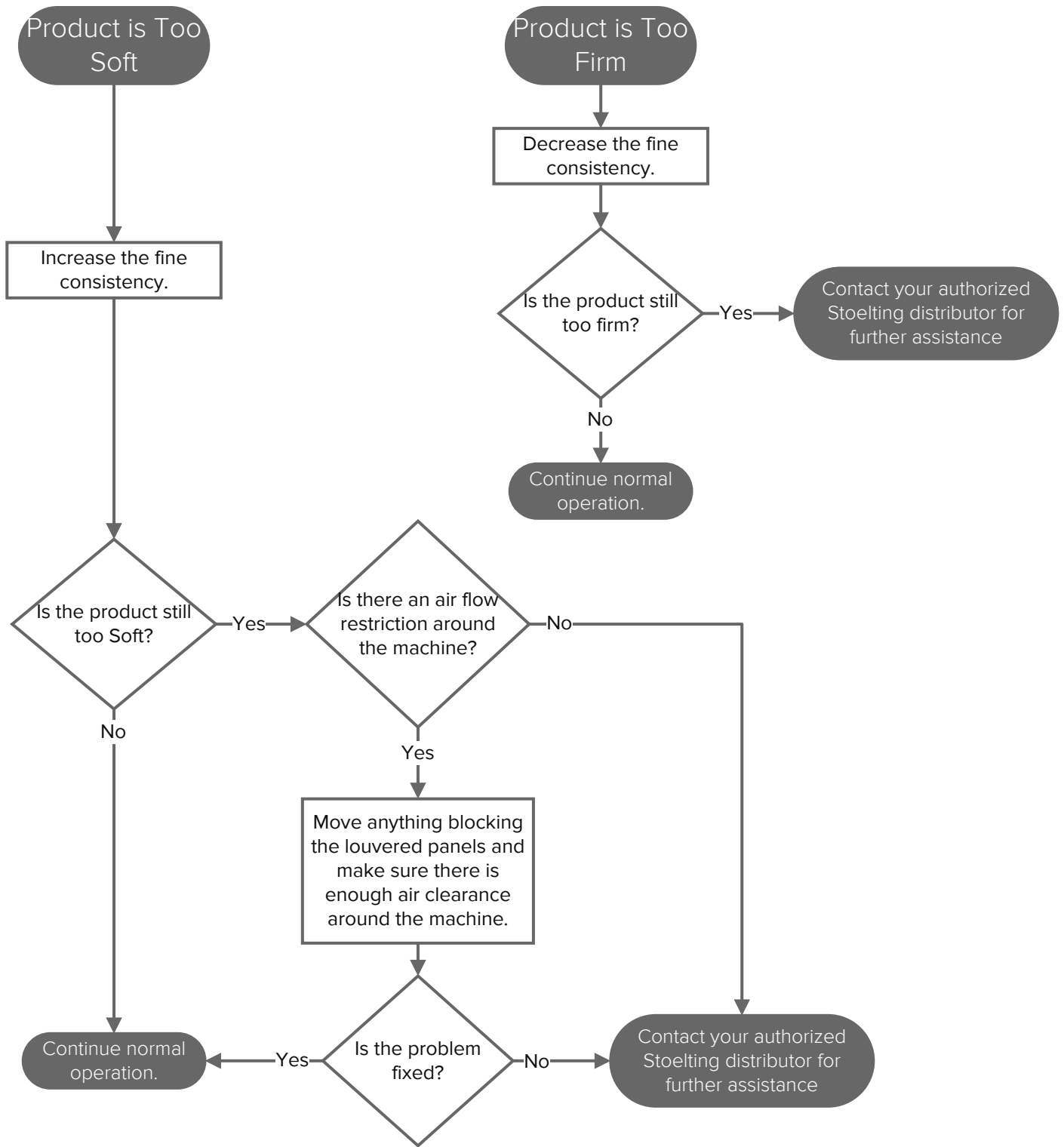
Press the Push To Freeze button to start freezing the product.

When the product is ready, the display will read "SERVE" or "SERVE 2". Open the spigot to dispense product.



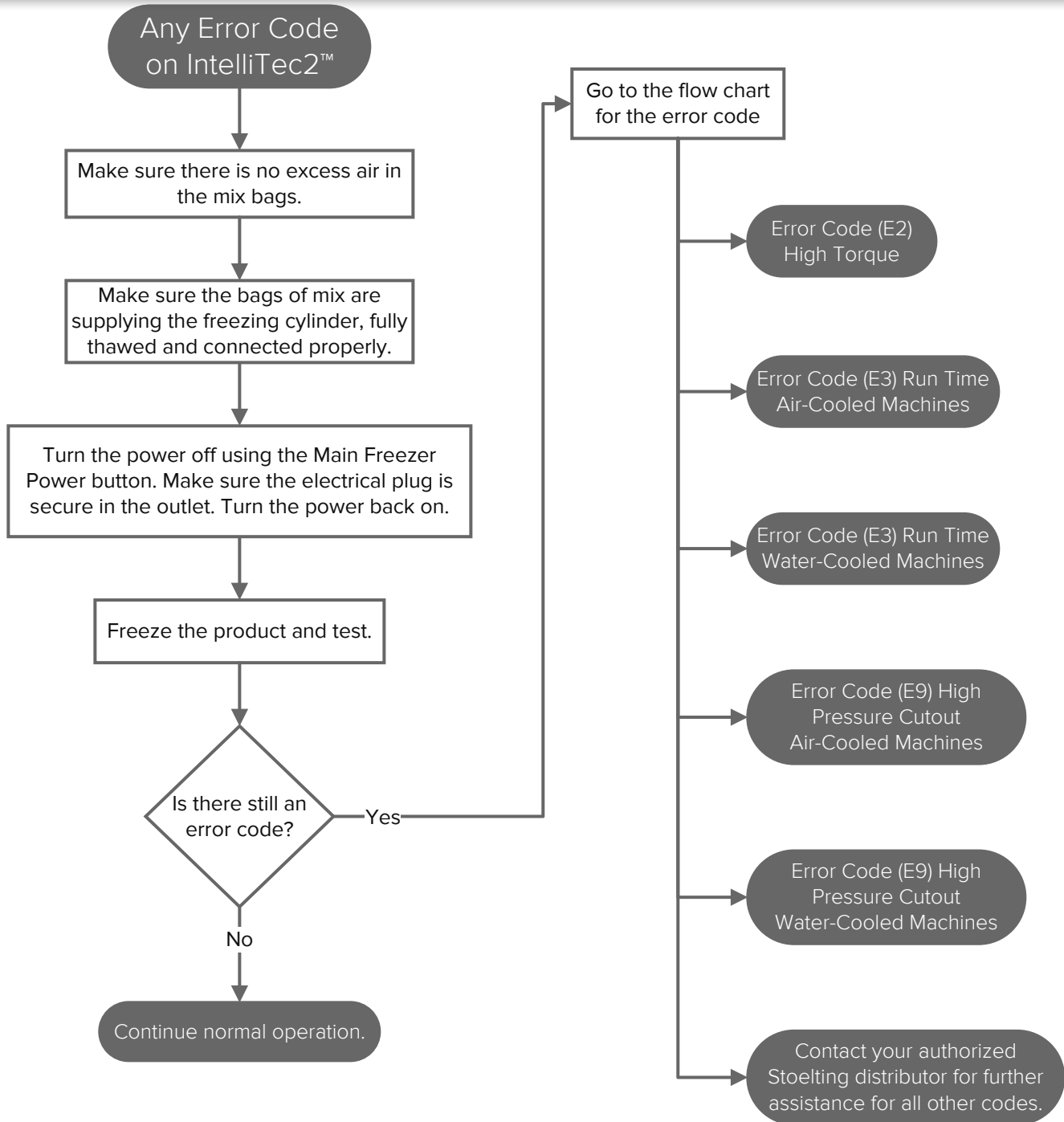
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Section 4: Troubleshooting

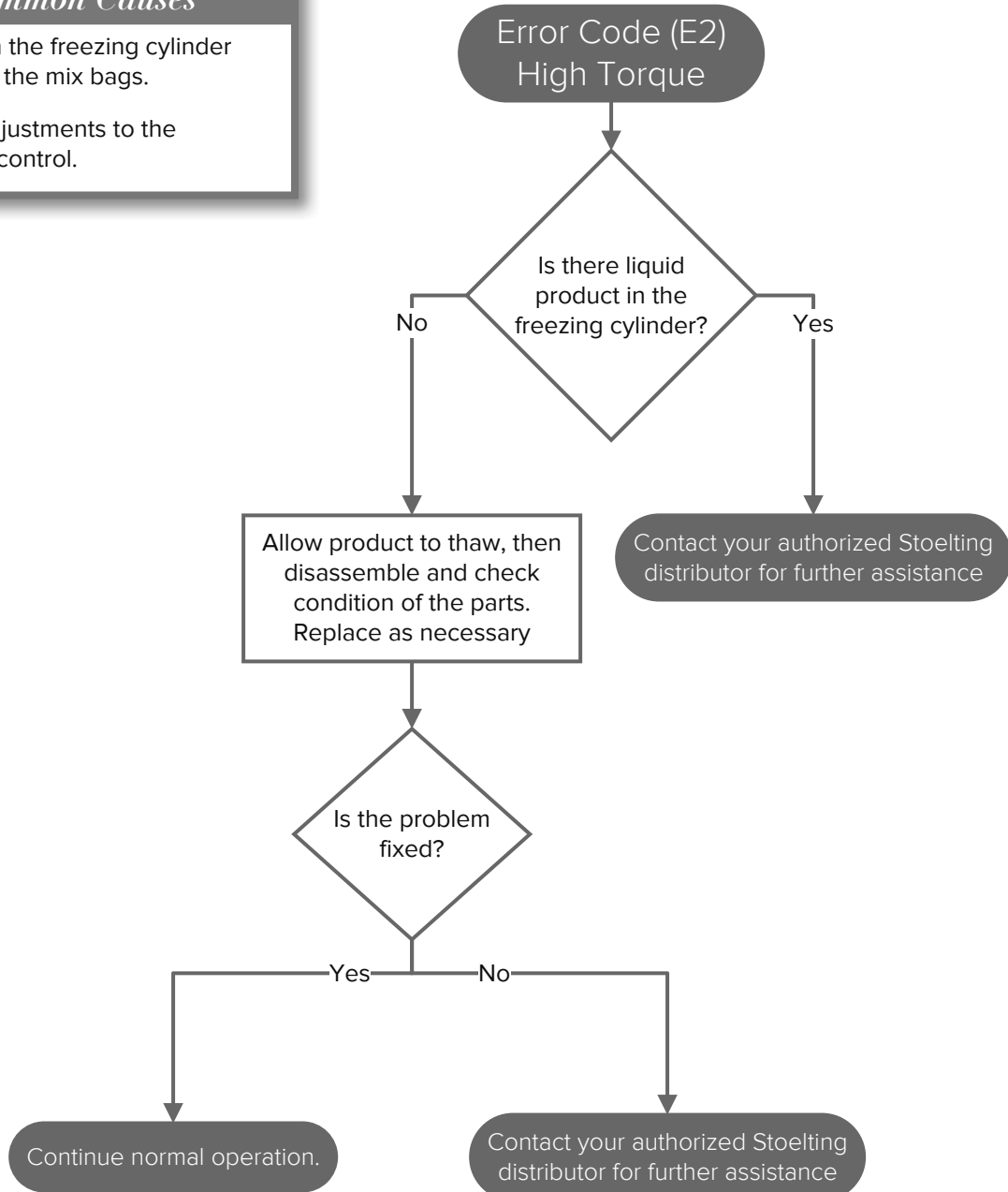
If an error code appears on the machine complete the steps on the following pages before calling your authorized Stoelting distributor. Oftentimes the issues can be resolved using new/fresh product in a clean and sanitized machine.



Section 4: Troubleshooting

E2 Common Causes

- Excess air in the freezing cylinder due to air in the mix bags.
- Improper adjustments to the IntelliTec2™ control.



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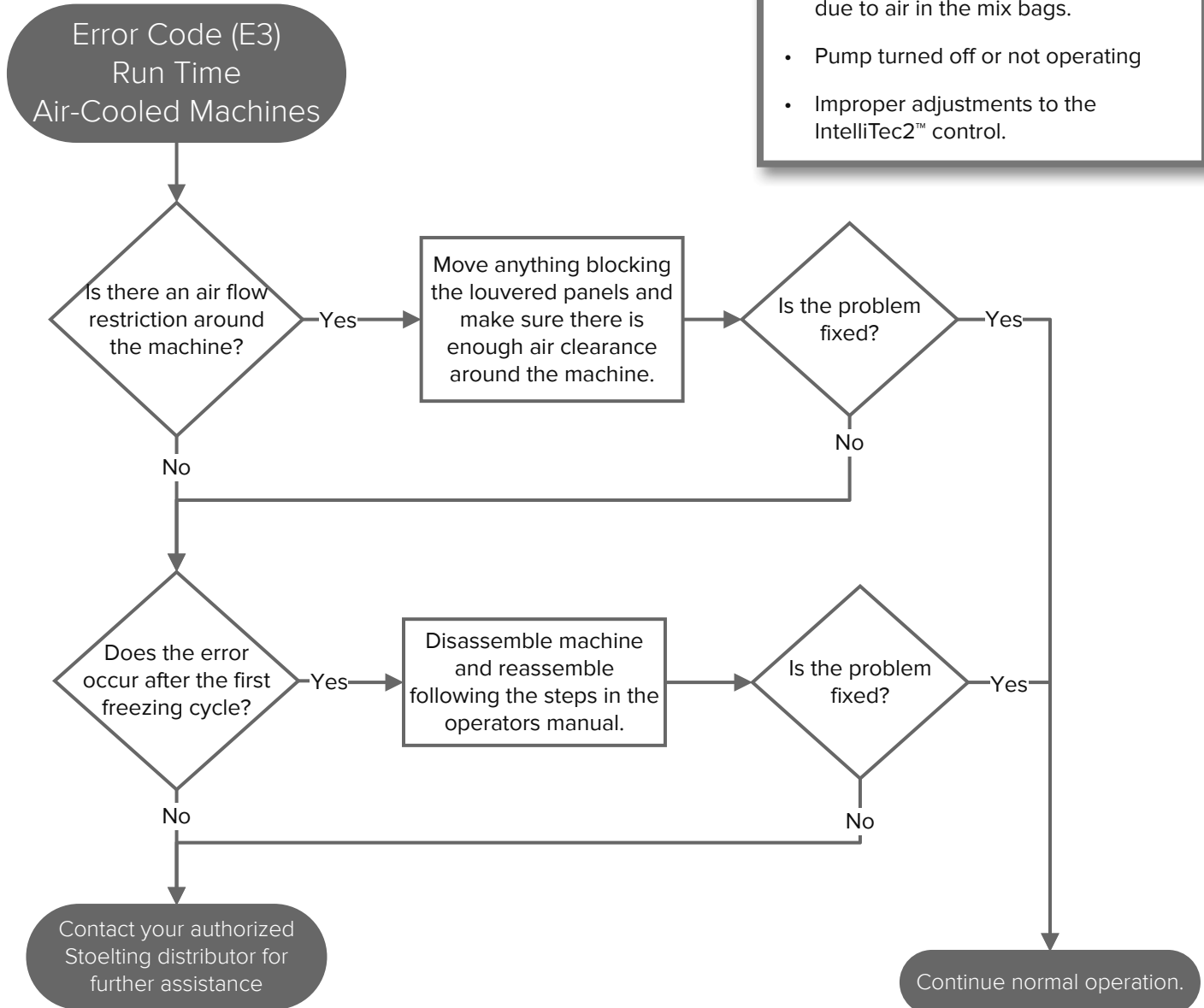
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Section 4: Troubleshooting

E3 Common Causes

- Blocked airflow around machine or dirty air filter.
- Excess air in the freezing cylinder due to air in the mix bags.
- Pump turned off or not operating
- Improper adjustments to the IntelliTec2™ control.



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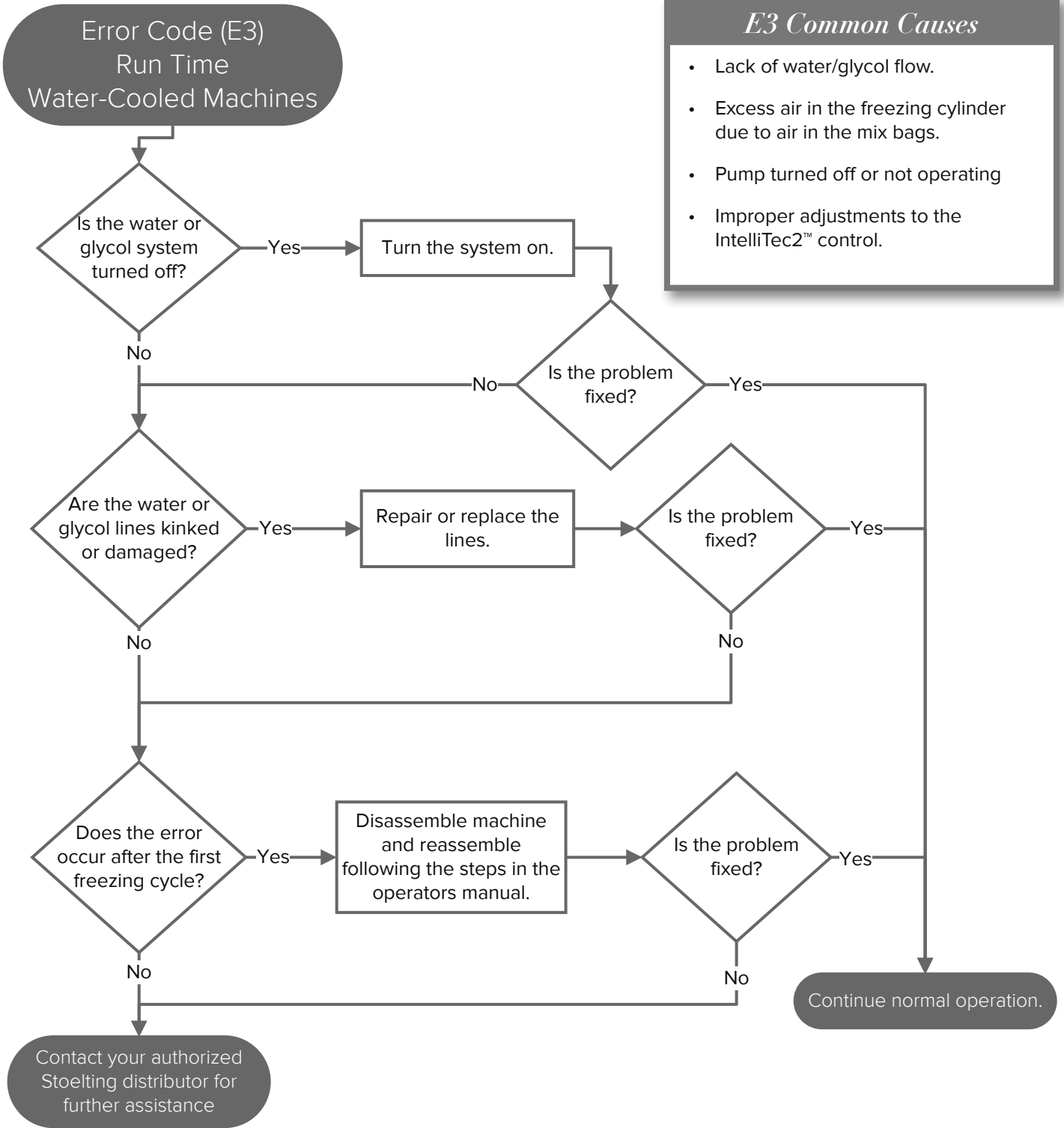
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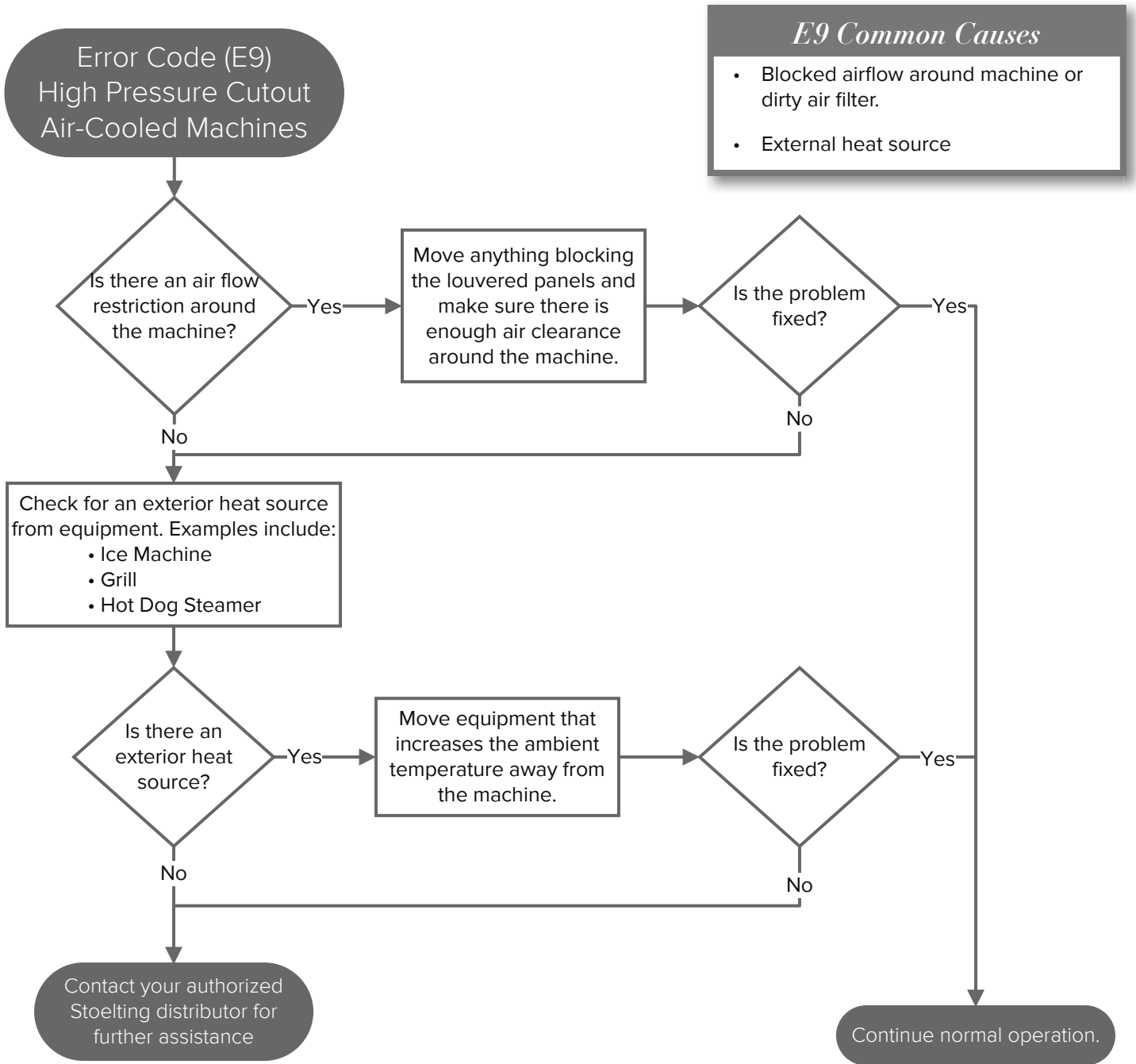
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- E3 Common Causes**
- Lack of water/glycol flow.
 - Excess air in the freezing cylinder due to air in the mix bags.
 - Pump turned off or not operating
 - Improper adjustments to the IntelliTec2™ control.

Section 4: Troubleshooting



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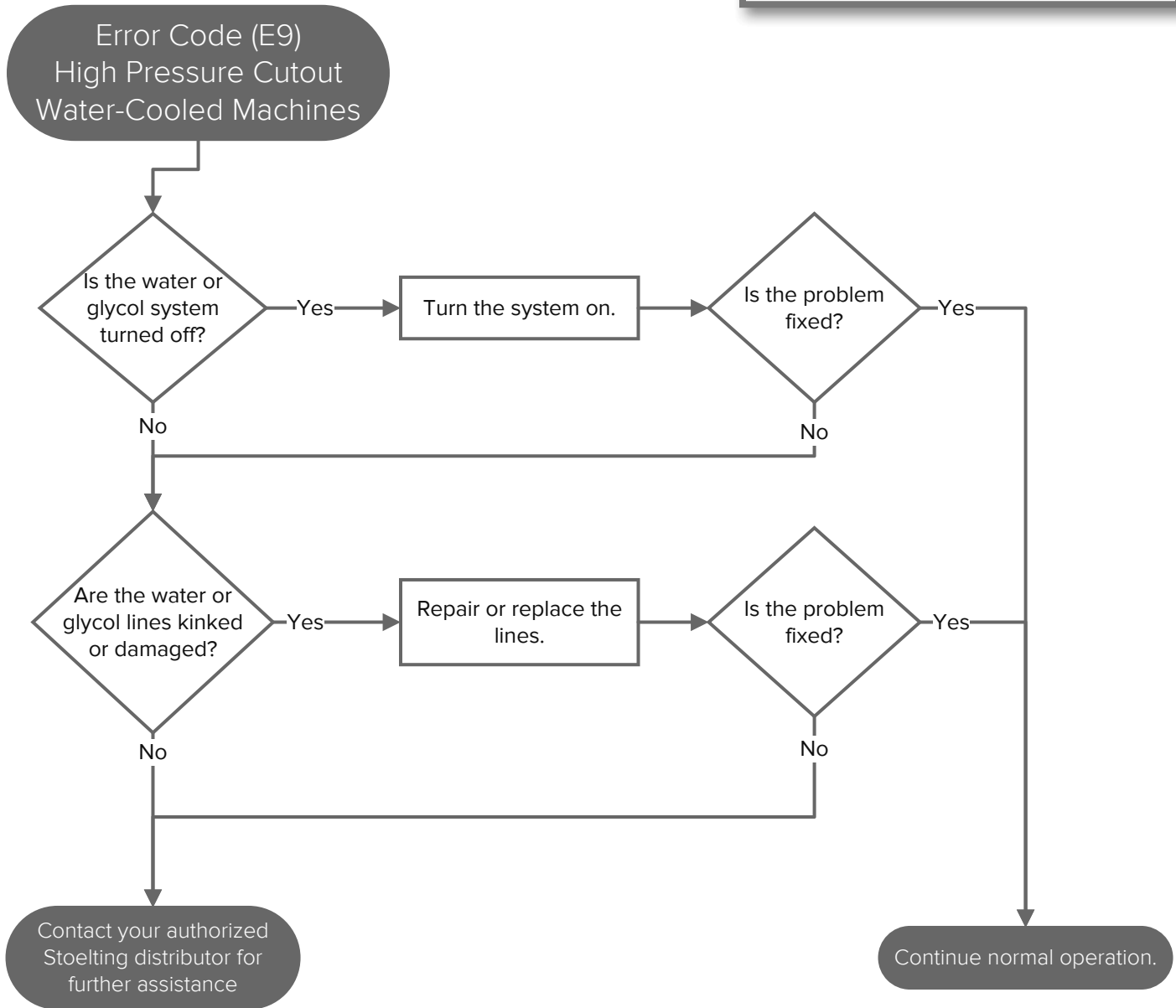
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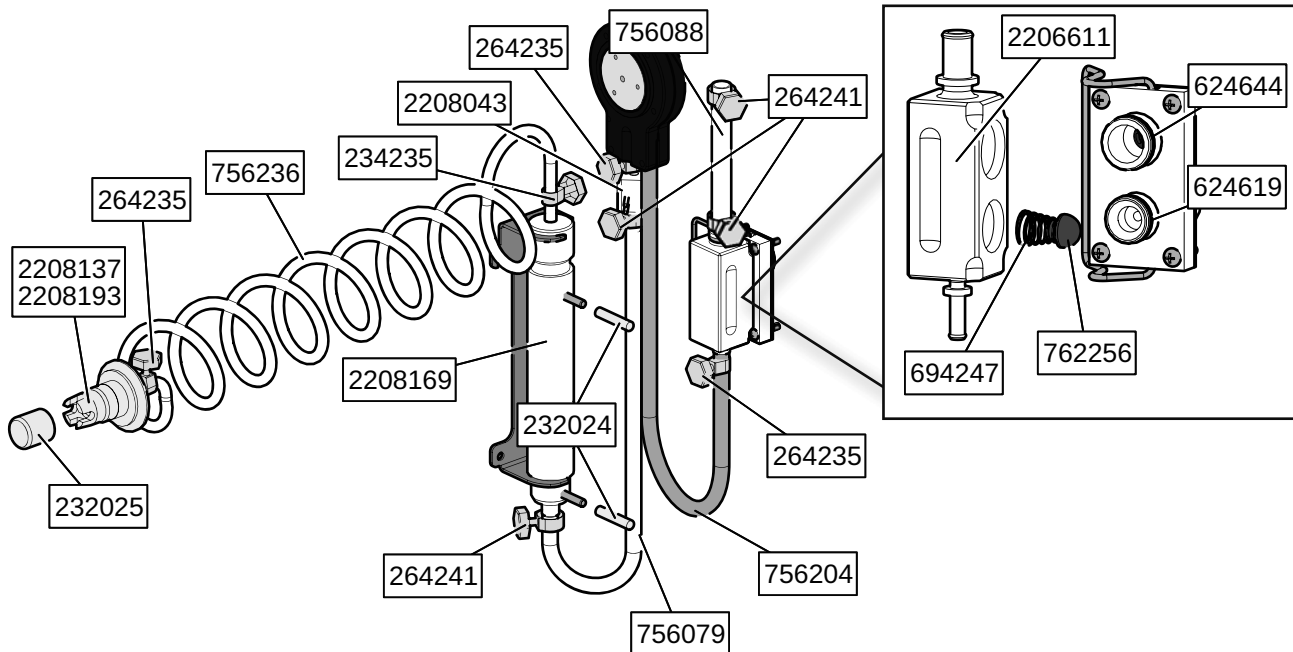
E9 Common Causes

- Lack of water/glycol flow.



Section 5: Replacement Parts

A.1 Cab Tubing



| Part Number | Description | Quantity |
|-------------|---|----------|
| 232024 | Cap - Manifold | 4 |
| 232025 | Cap - Bag Adapter | 4 |
| 264235 | Clamp - Metal (1/4" ID Tubing) | - |
| 264241 | Clamp - Metal (1/2" ID Tubing) | - |
| 624616-5 | O-Ring - Check Valve Block - Lower - Black (5 Pack) | 2 |
| 624644-5 | O-Ring - Check Valve Block - Upper - Black (5 Pack) | 2 |
| 694247 | Spring - Check Valve | 2 |
| 756079 | Tubing - 3/8" ID - Clear | 2 |
| 756088 | Tubing - 1/2" ID - Clear | 2 |
| 756204 | Tubing - 1/4" ID - Pump (50' Box Only) (Per Inch) | - |
| 756204-24 | Tubing - 1/4" ID - Pump (Pre-Cut 24" Piece) | 2 |
| 756236 | Tubing - 1/4" I.D. - Coiled - Blue | 6 |
| 762256 | Check Valve | 2 |
| 2206611 | Check Valve Block | 2 |
| 2208137 | Mix Bag Adapter (Stainless Steel) | 6 |
| 2208169 | Manifold - Mix Collection (Manifold Only) | 2 |
| 2208043 | Sensor - Mix | 2 |

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Section 5: Replacement Parts

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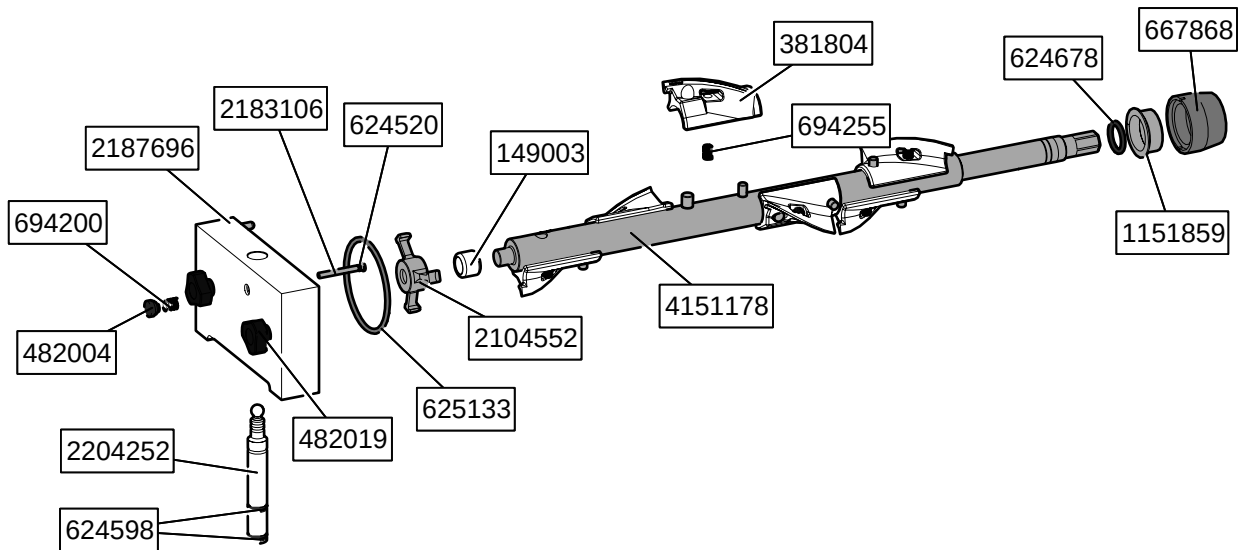
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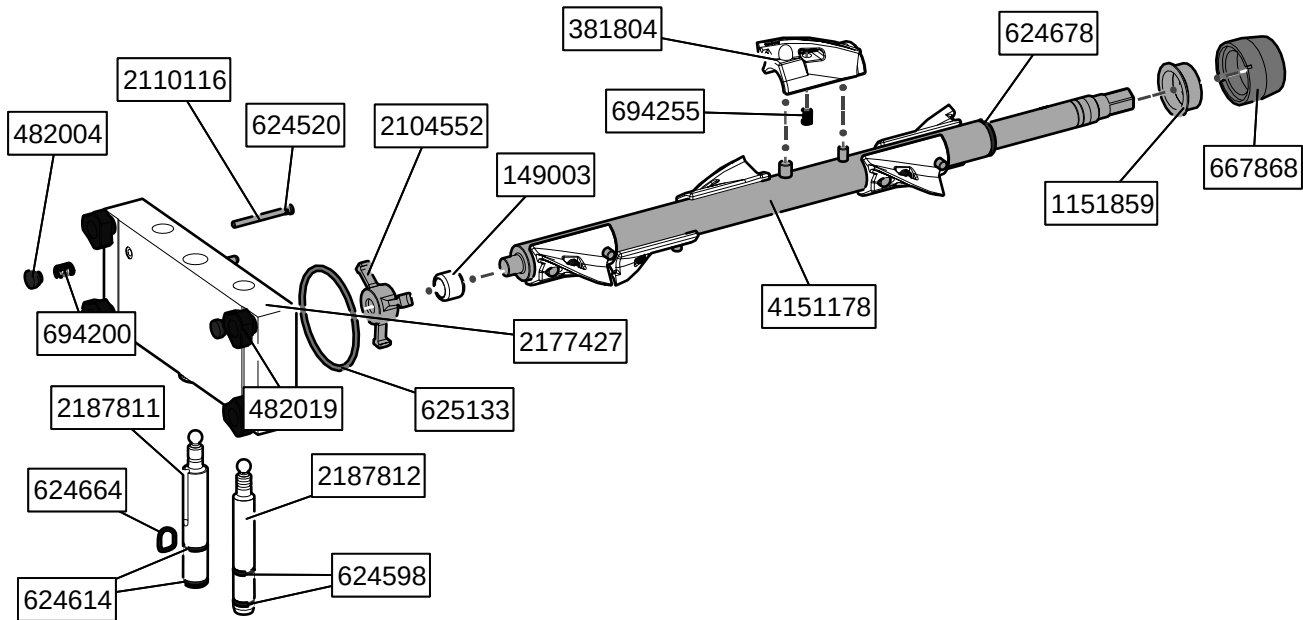
A.2 U421-I2A Auger Shaft & Front Door Parts



| Part Number | Description | Quantity |
|-------------|----------------------------------|----------|
| 149003 | Bushing - Front Auger Support | 2 |
| 381804 | Auger Flight | 12 |
| 482004 | Knob (Air Bleed Valve) | 2 |
| 482019 | Knob - Front Door (Black) | 4 |
| 624520 | O-Ring - Air Bleed Valve - Black | 2 |
| 624598 | O-Ring - Spigot - Black | 4 |
| 624678 | O-Ring - Rear Seal - Black | 2 |
| 625133 | O-Ring - Front Door - Black | 2 |
| 667868 | Seal - Rear Auger (Orange) | 2 |
| 694200 | Spring - Air Bleed Valve | 2 |
| 694255 | Spring - Auger Flight | 12 |
| 1151859 | Adapter - Rear Seal (Code 1) | 2 |
| 2183106 | Valve - Air Bleed | 2 |
| 2104552 | Support - Front Auger | 2 |
| 2187696 | Front Door | 2 |
| 2204252 | Spigot Body | 2 |
| 4151178 | Auger Shaft | 2 |

Section 5: Replacement Parts

A.3 U431-I2A Auger Shaft & Front Door Parts



| Part Number | Description | Quantity |
|-------------|---|----------|
| 149003 | Bushing - Front Auger Support | 2 |
| 381804 | Auger Flight | 12 |
| 482004 | Knob (Air Bleed Valve) | 2 |
| 482019 | Knob - Front Door (Black) | 4 |
| 624520 | O-Ring - Air Bleed Valve - Black | 2 |
| 624598 | O-Ring - Outside Spigot - Black | 4 |
| 624614 | O-Ring - Top & Bottom Center Spigot - Black | 2 |
| 624664 | O-Ring - Middle Center Spigot - Black | 1 |
| 624678 | O-Ring - Rear Seal - Black | 2 |
| 625133 | O-Ring - Front Door - Black | 2 |
| 667868 | Seal - Rear Auger (Orange) | 2 |
| 694200 | Spring - Air Bleed Valve | 2 |
| 694255 | Spring - Auger Flight | 12 |
| 1151859 | Adapter - Rear Seal (Code 1) | 2 |
| 2104552 | Support - Front Auger | 2 |
| 2110116 | Valve - Air Bleed | 2 |
| 2177427 | Front Door | 1 |
| 2187811 | Spigot Body - Center | 1 |
| 2187812 | Spigot Body - Outer | 2 |
| 4151178 | Auger Shaft | 2 |

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**DOMESTIC WARRANTY
(Including Mexico)
SOFT SERVE / SHAKE EQUIPMENT**

1. **Scope:**
PW Stoelting, L.L.C. ("Stoelting") warrants to the first user (the "Buyer") that the freezing cylinders, hoppers, compressors, drive motors, speed reducers, and augers of Stoelting soft serve / shake equipment will be free from defects in materials and workmanship under normal use and proper maintenance appearing within five (5) years, and that all other components of such equipment manufactured by Stoelting will be free from defects in material and workmanship under normal use and proper maintenance appearing within twelve (12) months after the date that such equipment is originally installed.
2. **Disclaimer of Other Warranties:**

THIS WARRANTY IS EXCLUSIVE; AND STOELTING HEREBY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.
3. **Remedies:**
Stoelting's sole obligations, and Buyer's sole remedies, for any breach of this warranty shall be the repair or (at Stoelting's option) replacement of the affected component at Stoelting's plant in Kiel, Wisconsin, or (again, at Stoelting's option) refund of the purchase price of the affected equipment, and, during the first twelve (12) months of the warranty period, deinstallation/reinstallation of the affected component from/into the equipment. Those obligations/remedies are subject to the conditions that Buyer (a) signs and returns to Stoelting, upon installation, the Start-Up and Training Checklist for the affected equipment, (b) gives Stoelting prompt written notice of any claimed breach of warranty within the applicable warranty period, and (c) delivers the affected equipment to Stoelting or its designated service location, in its original packaging/crating, also within that period. Buyer shall bear the cost and risk of shipping to and from Stoelting's plant or designated service location.
4. **Exclusions and Limitations:**
This warranty does not extend to parts, sometimes called "wear parts", which are generally expected to deteriorate and to require replacement as equipment is used, including as examples but not intended to be limited to o-rings, auger flights, auger seals, auger support bushings, and drive belts. All such parts are sold

AS IS.

Further, Stoelting shall not be responsible to provide any remedy under this warranty with respect to any component that fails by reason of negligence, abnormal use, misuse or abuse, faulty repair made by others, use with parts or equipment not manufactured or supplied by Stoelting, any modification or alteration of any parts or equipment, or damage in transit.

The use of this equipment as a rental asset will negate all warranties associated with the equipment.

THE REMEDIES SET FORTH IN THIS WARRANTY SHALL BE THE SOLE LIABILITY STOELTING AND THE EXCLUSIVE REMEDY OF BUYER WITH RESPECT TO EQUIPMENT SUPPLIED BY STOELTING; AND IN NO EVENT SHALL STOELTING BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING AS EXAMPLES BUT NOT INTENDED TO BE LIMITED TO DOWNTIME, OVERHEAD, MATERIALS, AND PERFORMANCE PENALTIES, WHETHER FOR BREACH OF WARRANTY OR OTHER CONTRACT BREACH, NEGLIGENCE OR OTHER TORT, OR ON ANY STRICT LIABILITY THEORY.

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