STOELTING®
A VOLLRATH® COMPANY

Operator's Manual

Gelato Maker model VB 1

This manual is divided into the following six sections:

INTRODUCTION

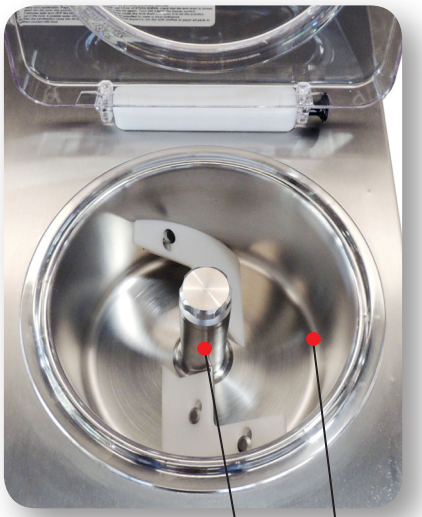
UTILIZATION

OPERATION

MAINTENANCE

TROUBLESHOOTING

PARTS



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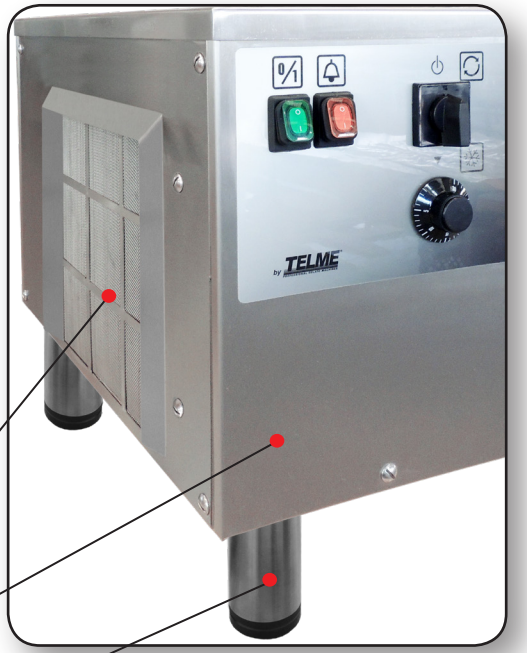
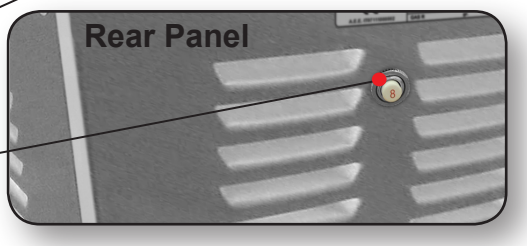


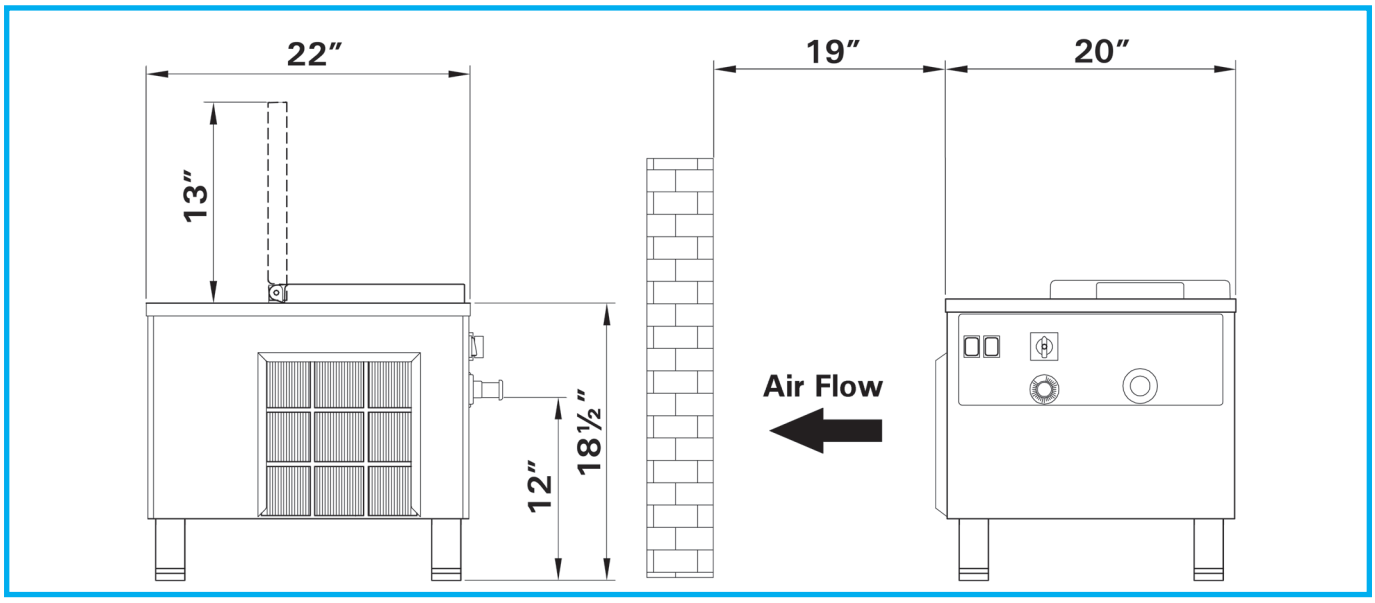


A Parts of the Machine

1. Hopper Cover
2. Mixer
3. Cylinder
4. ON / OFF button
5. Buzzer button
6. Mixer switch
7. Refrigeration Timer (timer)
8. Drain plug
9. Condenser outlet
10. Outer panels
11. Support feet
12. Switch Motor Overload (rear panel)

B Specifications

Model			**VB 1**
Net weight		lbs / kg	136,6 / 62
Dimensions		width / height / depth	20” (51cm) / 18 ½” (47cm) / 22” (56cm)
Hopper Volume (max)		gal / L	0,52 / 2
Quantity of product that can be processed (min. to max.)		gal / L	0,26 ÷ 0,52 / 1 ÷ 2
Max. ambient temperature		°F / °C	95 / +35
Compressor		Number / Btu/hr	1 / 1914
Coolant gas		(type)	R 404
	air version (quantity)	g / oz	600 / 21,16
AIR version:	(coolant gas pressure)	bar	17,2 ÷ 22
	"CONDENSATION" (coolant gas temperature)	°C / °F	+40 ÷ +50 / 104 ÷ 122
AIR version:	(coolant gas pressure)	bar	0,2 ÷ 0,1
	“EVAPORATION” (coolant gas temperature)	°C / °F	-20 ÷ -29 / -68 ÷ -84,2
Drive motor		Number / hp	1 / 0,5
Rating Motor Overload		A	8
Rated power		kW	1
Rated current		A	12,3
Power supply		Voltage (Volts) Frequency (Hz) Phases (PH)	115 60 1
Plumbing Fittings			-



C Machine's operation:

1. ON/OFF button To turn the machine on and off. When ON, the indicator light goes on.

2. Buzzer button To start the acoustic signal at the end of the refrigeration time. When the bell is on, the indicator light goes on.

3. Mixer switch The knob can be set in 2 different positions:

a) STOP Position ⏻

The mixer inside the cylinder is not moving and the refrigerating system of the machine is off, independently from the Timer.

b) MIXING Position ⟳

By turning the knob from the vertical STOP position ⏻ to the MIXING position ⟳ the mixer starts rotating clockwise. To stop the mixer, turn the knob back to STOP position ⏻.

Note: It is recommended to start first the mixer and then the refrigerating system, setting the refrigerating time..

4. Refrigeration Timer By turning the knob, the refrigerating system is activated for the required time. The knob turns backwards to the starting position.The knob can also be manually turned to increase (clockwise) or to reduce (counterclockwise) the refrigeration time or to switch off the refrigerator turning the knob to the starting position.

D Production:

The production of gelato requires the following operating phases:

- (D1) Open the lid and pour the mix into the cylinder.

- (D2) Close the lid of the cylinder.

- (D3) Turn the knob of the Mixer switch to “MIXING” position to start it clockwise.

- (D4) Turn the Re to set the refrigerating time (in minutes) according to the quantity and type of the mix used.

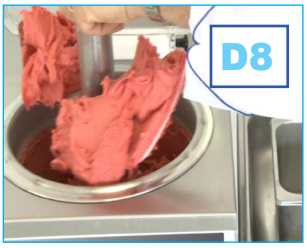
- (D5) Press the Buzzer button to start the acoustic signal at the end of the refrigeration time. When the bell is on, the indicator light goes on.

- (D6) The timer knob progressively turns backwards to the starting position, this corresponding to the end of the refrigerating time (the refrigerating system is off).

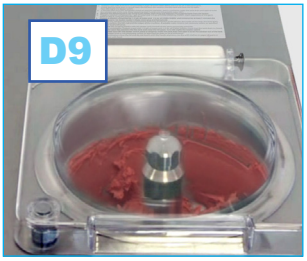
Nota: The timer knob can also be manually turned to increase (clockwise) or to reduce (counterclockwise) the refrigeration time or to switch off the refrigerator turning the knob to the starting position.

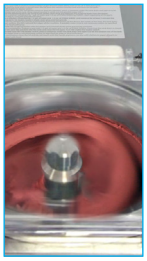
- (D7) At the end of the processing cycle the acoustic signal goes on. Gelato is ready for extraction. Turn the mixer’s switching knob to “STOP” position to stop the mixer rotation.

- (D8) Open the lid and extract gelato using the spatula.



- (D9) Close the lid of the machine and turn the knob to start the mixer for a short time. This will allow any remaining product to be collected on the mixer’s blades. Open the lid again and extract the remaining gelato using the supplied spatula. This operation can be repeated a few times until all gelato is completely removed from the cylinder.



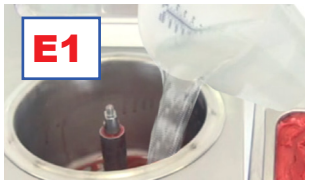


Note: In order to avoid activating the mixer’s switching knob many times, by opening the lid and unscrewing the fixing knob, the mixer can be removed and the product easily wiped from the blades.

E Rinsing Phase:

Do not carry out the rinsing having a very cold cylinder.

- *(E1) Proceed with rinsing to eliminate the residual ice-cream, using 1,5 gal. of warm water (30°C), if you soon will produce other ice-cream;*



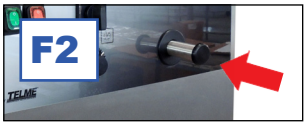
- *(E2) Proceed with rinsing to eliminate the residual ice-cream, using 1,5 gal. of warm water (30°C) and, if the production has come to an end, proceed with simple washing, accurate washing and disassembling of the parts (see E, F, G steps).*

F Simple washing:

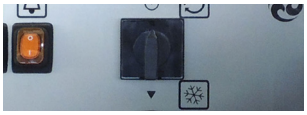
CARRY OUT THE WASHING OF THE MACHINE FOLLOWING THESE PROCEDURES:

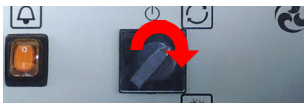
- *(F1) Prepare a pail with a solution composed by 1,5 gal. of hot water (50°C) and 1/2 oz. of a mild detergent.*

- *(F2) Check that the tank drain is closed, open lid, pour the detergent solution in the tank and close the lid again.*

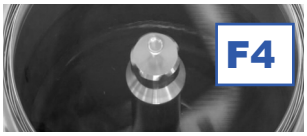


- *(F3) close the lid and turn mixer switch clockwise, this will cause the detergent solution to be agitated in the tank.*

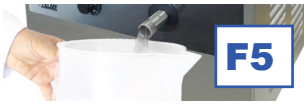




- *(F4) 2 minutes later, stop mixer with mixer switch, again to stop the agitation, place a pail under the tank drain and clear out the tank.*



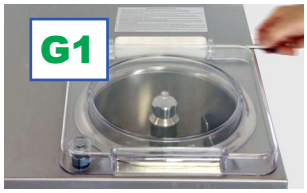
- *(F5) Rinse only with hot potable water (50°C), repeating steps 2,3,4 until the rinse water being drawn from the tank is clear.*

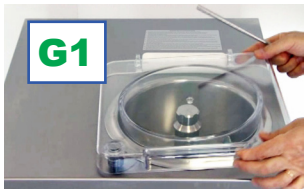


G Disassembling parts

CARRY OUT THESE OPERATIONS ONLY WITH THE SOCKET'S MAIN BREAKER ON "0".

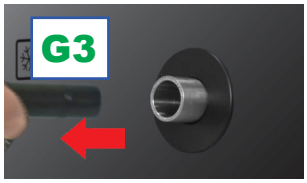
- *(G1) extract the rod from the lid's hinge and remove the lid;*





- *(G2) unscrew counterclockwise the fixing knob and extract the mixer;*

- *(G3) remove the drain plug and gaskets;*



- *(G4) remove the mixer's blades from the mixer.*

H Cleaning Disassembled Parts:

- (H1) Prepare a pail with a solution composed by 1 gal. of water and 1/4 oz. of mild detergent and using the provided brushes carry out the cleaning of the underlisted parts:


- the mixer and the fixing knob;
- the mixer's blades;
- the lid;
- the drain plug;

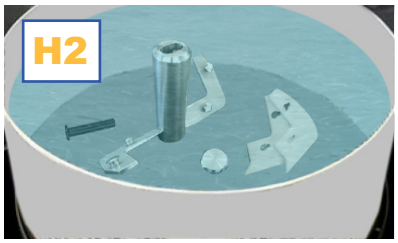



H Cleaning Disassembled Parts:

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.

Be sure to use the brushes that shipped with the machine to

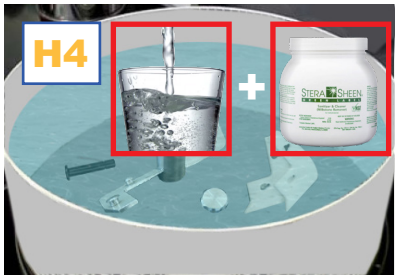
- (H2) Place all parts in 90° to 110°F (32°C to 43°C) mild detergent water and wash thoroughly. Use the brushes that shipped with the machine to clean all holes of the the removed parts (*mixer*, *fixing knob*, *mixer's blade*, *drain plug*, etc.).



OPERATION

- (H3) Rinse all parts with clean 90° to 110°F (32°C to 43°C) water.

- (H4) Prepare a container with a solution composed by 1,5 gal. of water and 1/3 oz. of disinfecting STE-RA-SHEEN manufactured by PURDY PRODUCTS and immerse for at least 5 minutes, then remove and let air dry completely before assembling in machine.



L Cleaning Machine:

- (L1) Before reassembling the components, accurately wash the fixed parts of the device as illustrated in the images, using the mild detergent.



- 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.

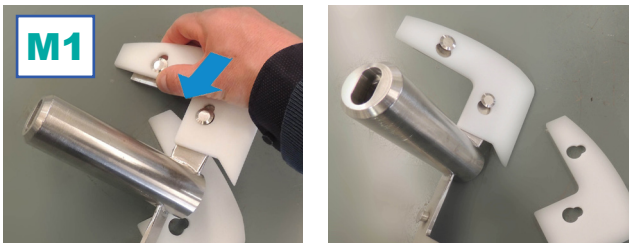
Do not use highly abrasive materials, as they will mar the finish. A mild alkaline cleaner is recommended. Use a soft cloth or sponge to apply the cleaner. For best results, wipe with the grain of the steel.

M Assembling Parts of the Machine:

**Note: When dismantling parts for washing, regularly check that gaskets are intact and replace them if damaged or dilated. Use only genuine gaskets, made of food-compatible rubber.
Lubricate new gaskets with food compatible grease and fit them on.**

When finished with the washing, all machine components need to be reassembled as follows:

- (M1) Assemble the scraping blades on mixer's supports.



- (M2) Carefully place the mixer into the cylinder, taking care to keep it vertical without dropping it.

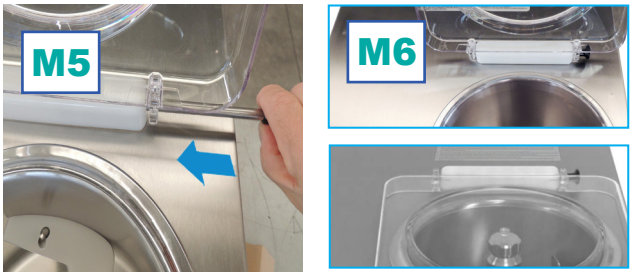
The slot on the beater's hub goes into the shaft clutch;

- (M3) Assemble the gasket with the drain plug.

- (M4) Insert the drain plug in the tank drain.

- (M5) Place the cover over the machine cylinder and line up the holes in the cover with the through hole in the block. Insert the fixing pin to secure the cover to the machine.

- (M6) Check that the fixing pin is completely inserted in the holes in the cover and the block.



OPERATION

N Sanitizing:

Sanitizing must be done after the machine is clean and just before the machine is filled with cream. 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 1 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.

After reinstalling all the machine's components (as previously described), carry out a sanitization with water solution and disinfecting STERA-SHEEN manufactured by PURDY PRODUCTS. Follow accurately the next steps:

- *(N1) Prepare a pail with a solution composed by 1,5 gal. of water (max 40°C) and 1/3 oz. of disinfecting STERA-SHEEN.*

- *(N2) Check that the tank drain is closed, open lid, pour the detergent solution in the tank and close the lid again.*

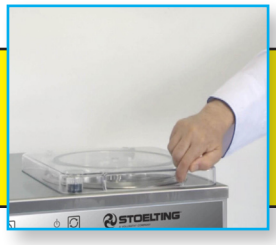
- *(N3) Pour solution into the cylinder up to half of its capacity.*

- *(N4) Turn ON (right) the mixer switch, this will cause the sanitizing solution to be agitated in the cylinder.*

- *(N5) 5 minutes later, turn OFF (left) the mixer switch, place a pail beneath the tank drain, remove the drain plug and clear out the tank.*

A POTABLE WATER RINSE IS NOT NECESSARY UNLESS SO SPECIFIED BY STATE OR LOCAL ORDINANCE.

AFTER THE SANITIZATION, CLOSE THE LID AND DO NOT TOUCH WITH THE HANDS ANYMORE, NOR DRY WITH CLOTHES OR PAPER ALL PARTS IN DIRECT CONTACT WITH FOOD.



P Replacing the gaskets

CHECKING INTERVAL: 500 hours or quarterly

AUTHORISED OPERATOR: 1 Operator

TIME NEEDED: 5 minutes

TOOL: Non-metallic pointed tool

- Regularly check the integrity of the gaskets and substitute them if they are broken, worn or swollen.

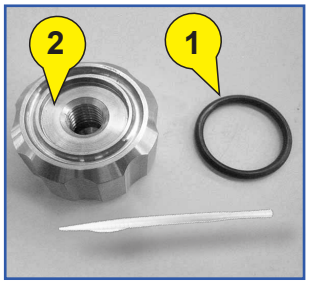
- Only use original gaskets, made of food-safe rubber.

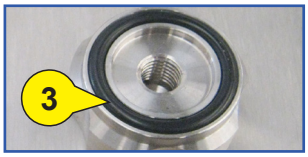
- The machine is supplied with a full set of spare gaskets.

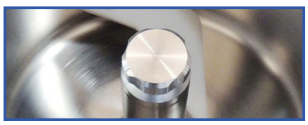
DO NOT PUT GASKETS IN THE INDUSTRIAL DISHWASHER, AS THE HIGH TEMPERATURES COULD DEFORM THEM, MAKING THEM UNUSABLE.

a) Fixing knob gasket:

- Remove the worn gasket (1) from the fixing knob (2) using a non-metallic pointed tool, taking care not to scratch the knob seat.
- Remove all product residues from the seat and fit the new gasket (3) without lubricating it.
- Screw on clockwise the fixing knob (B) on the mix.

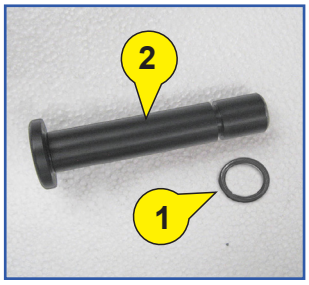






b) Drain plug gasket:

- Remove the worn gasket (1) from the drain plug (2) of the cylinder, using a non-metallic pointed tool, taking care not to scratch the knob seat.
- Remove all product residues from the seat and fit the new gasket (3) without lubricating it.
- Insert the drain plug.



MAINTENANCE

Q Replacing the mixer's scraper blades

CHECKING INTERVAL: 500 hours or quarterly

AUTHORISED OPERATOR: 1 Operator

TIME NEEDED: 1 minute

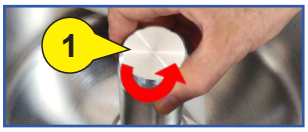
TOOL: -

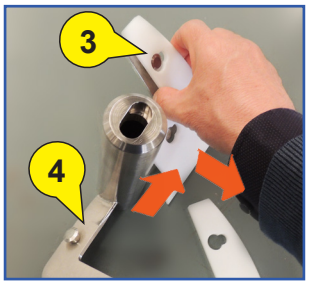
- Optimum scraping of the cylinder allows good machine performance and product quality.

Substitute the mixer's scraper blades when they show signs of wear which are obvious when looking at their scraping profiles and also indicated by the formation of streaks of product residue on the surface of the cylinder.

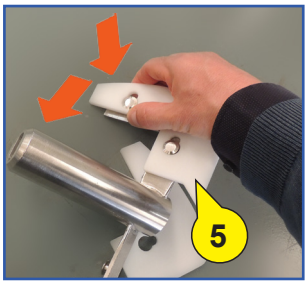
– ***Substitute as follows:***

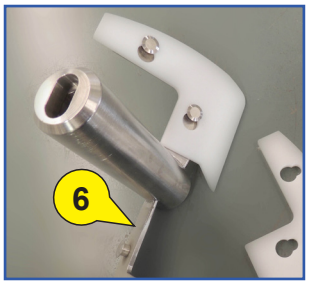
- Unscrew counterclockwise the fixing knob (1) and remove the mixer (2).
- Remove the scraper blades (3) from the mixer's supports (4).





- Position the new scraper blades (5) on the mixer's support (6).





- Insert the mixer (2) on the cylinder and screw clockwise the fixing knob (1).

R Troubleshooting – flowchart

In fault conditions the machine may malfunction, as specified below:

MACHINE DOES NOT OPERATE OR OPERATION IS INTERRUPTED THE MAIN SWITCH IS IN THE ON POSITION (1), THE POWER WARNING LIGHT DOES NOT SWITCH ON.

The plug is not inserted in the socket correctly. — YES → *Insert it correctly.*

NO

The socket is faulty. — YES → *Have it substituted by a qualified technician.*

NO

No electric power in the network or in the socket. — YES → *Check that the disconnecting switches, all-pole (phase & neutral) isolating switches and residual current operated circuit breakers (cut-outs) on the electrical system, upstream of the socket, are closed.*

If not, before closing them, make sure that no one is carrying out electrical repairs.

NO

A fuse designed to protect the auxiliary electrical system has blown. — YES → *Identify and eliminate the cause of the overload and substitute the blown fuse with another having the same specifications and level of protection.*

Contact the technical assistance service.

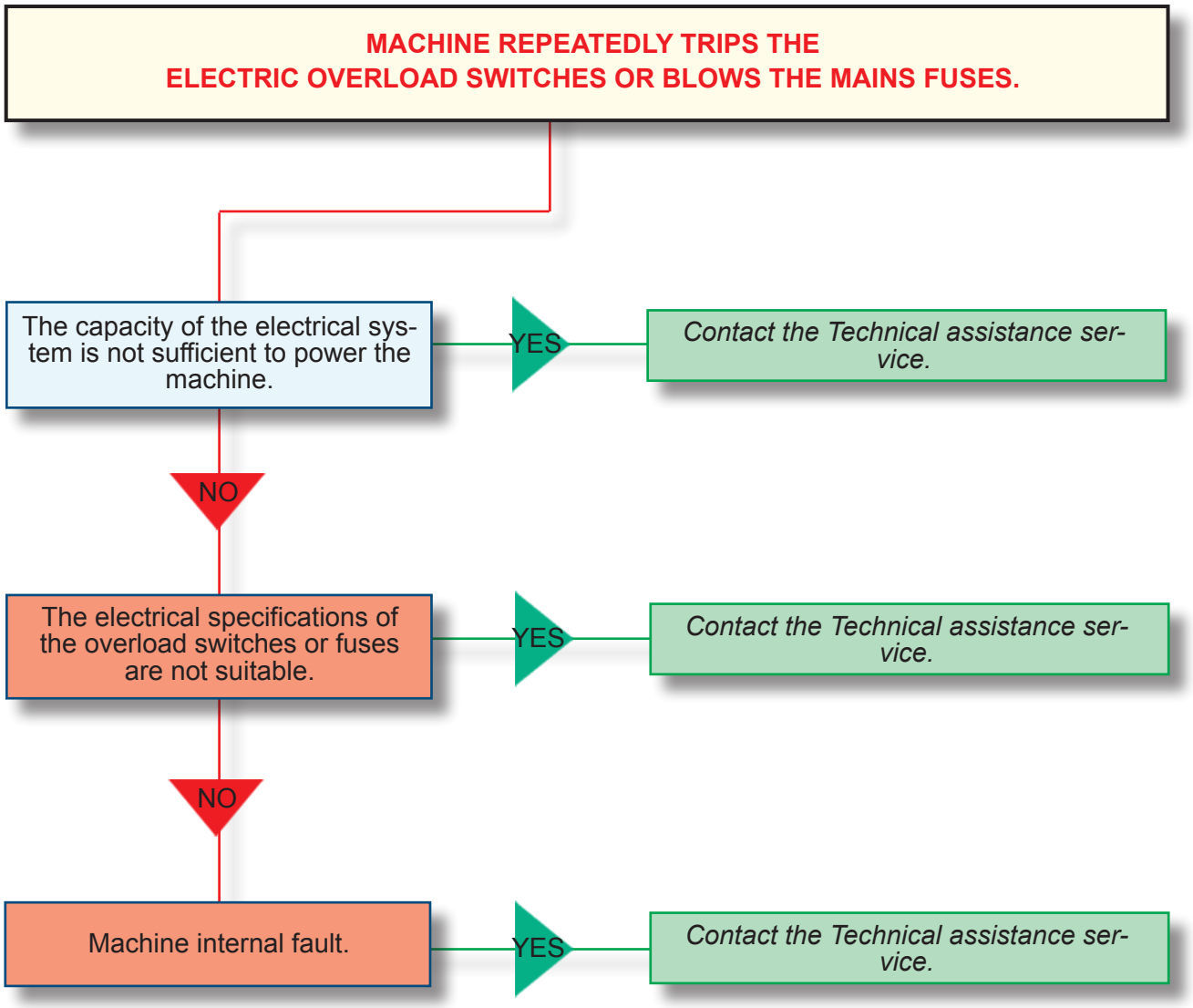
NO

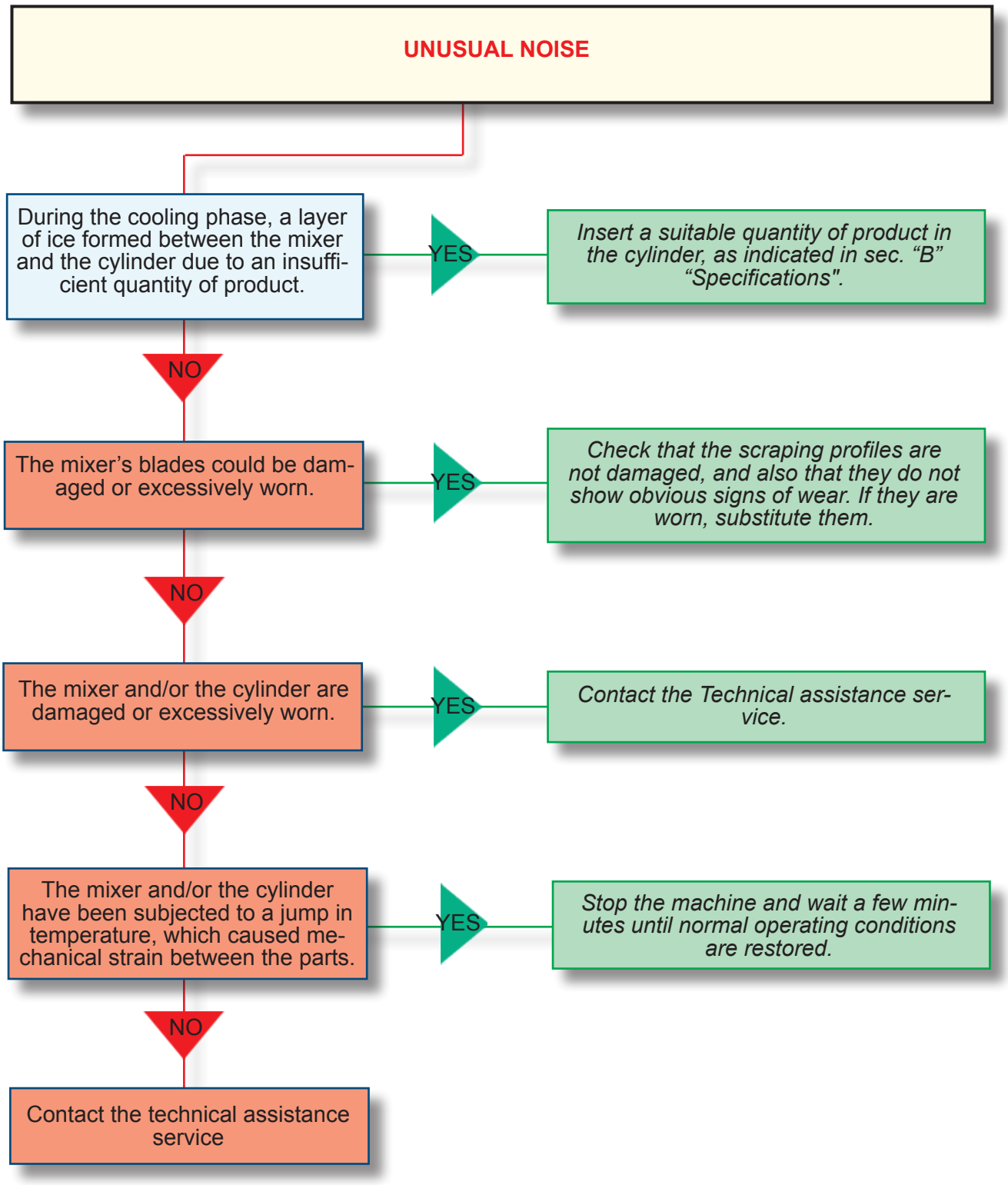
The power cable is damaged. — YES → *Cut off the electricity supply to the socket by opening the disconnecting switch upstream of it, then disconnect the plug and contact the Technical assistance services.*

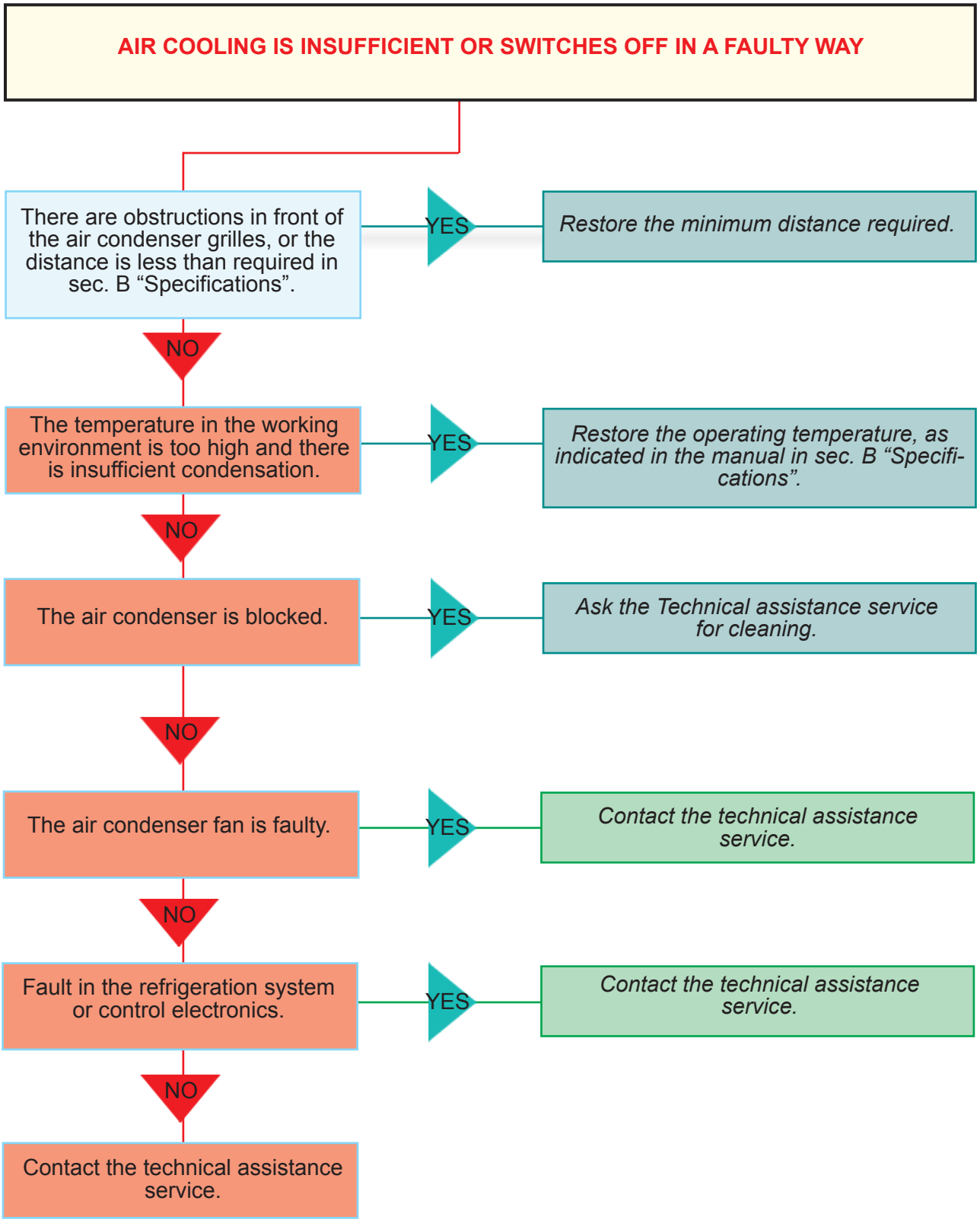
DO NOT TOUCH DAMAGED ELECTRIC CABLES BEFORE CUTTING OFF THE ELECTRICITY SUPPLY!

NO

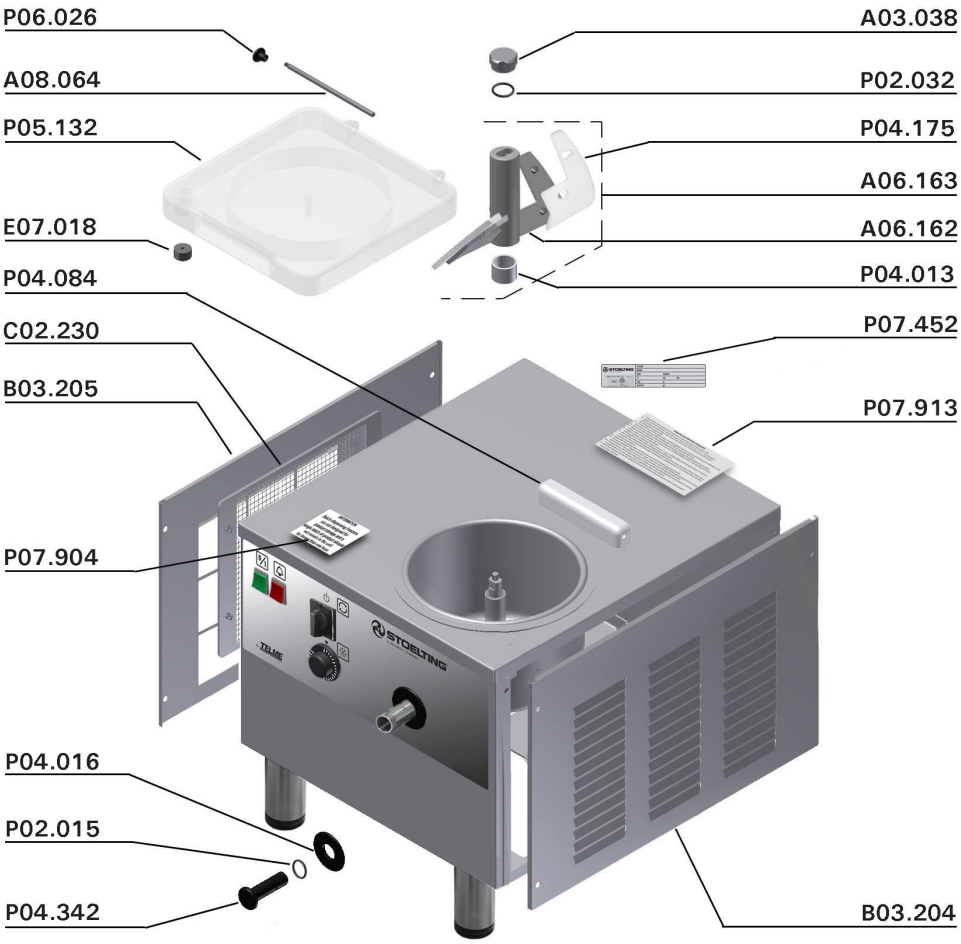
Contact the technical assistance service.


MACHINE REPEATEDLY TRIPS THE
ELECTRIC OVERLOAD SWITCHES OR BLOWS THE MAINS FUSES.
The capacity of the electrical system is not sufficient to power the machine.
YES
Contact the Technical assistance service.
NO
The electrical specifications of the overload switches or fuses are not suitable.
YES
Contact the Technical assistance service.
NO
Machine internal fault.
YES
Contact the Technical assistance service.


UNUSUAL NOISE
During the cooling phase, a layer of ice formed between the mixer and the cylinder due to an insufficient quantity of product.
YES
Insert a suitable quantity of product in the cylinder, as indicated in sec. “B” “Specifications".
NO
The mixer’s blades could be damaged or excessively worn.
YES
Check that the scraping profiles are not damaged, and also that they do not show obvious signs of wear. If they are worn, substitute them.
NO
The mixer and/or the cylinder are damaged or excessively worn.
YES
Contact the Technical assistance service.
NO
The mixer and/or the cylinder have been subjected to a jump in temperature, which caused mechanical strain between the parts.
YES
Stop the machine and wait a few minutes until normal operating conditions are restored.
NO
Contact the technical assistance service


AIR COOLING IS INSUFFICIENT OR SWITCHES OFF IN A FAULTY WAY
There are obstructions in front of the air condenser grilles, or the distance is less than required in sec. B “Specifications”.
YES
Restore the minimum distance required.
NO
The temperature in the working environment is too high and there is insufficient condensation.
YES
Restore the operating temperature, as indicated in the manual in sec. B “Specifications”.
NO
The air condenser is blocked.
YES
Ask the Technical assistance service for cleaning.
NO
The air condenser fan is faulty.
YES
Contact the technical assistance service.
NO
Fault in the refrigeration system or control electronics.
YES
Contact the technical assistance service.
NO
Contact the technical assistance service.

S Replacement Parts:



Part Number	Description	Quantity
A03.038	FIXING KNOB	1
A06.162	MIXER	1
A06.163	MIXER ASSEMBLY	1
A08.064	ROD	1
B03.204	RIGHT SIDE PANEL	1
B03.205	LEFT SIDE PANEL	1
C02.230	PROTECTION GRID	1
E07.018	MAGNET OF THE COVER	1
P02.015	GASKET ORING 119	1
P02.032	GASKET ORING 4100	1
P04.013	TEFLON BUSH	1
P04.016	HOLE COVER WASHER	1
P04.084	HINGE BLOCK	1
P04.175	MIXER'S BLADE	2
P04.342	DRAIN PLUG	1
P05.132	HOPPER COVER	1
P06.026	HANDLE	1
P07.452	DATA PLATE	1
P07.904	TIME STORAGE PLATE	1
P07.913	WASHING AND SANITIZING PLATE	1

STOELTING
A VOLLRATH® COMPANY

WARRANTY
CUSTARD EQUIPMENT AND BATCH EQUIPMENT

1. **Scope**:
Stoelting, A Vollrath Company ("Stoelting") warrants to the first user (the "Buyer") that the freezing cylinders, hoppers, compressors, drive motors, speed reducers, beaters, and auger shafts of Stoelting custard equipment and batch equipment will be free from defects in materials and workmanship under normal use and proper maintenance appearing within two (2) 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 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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