## NM LAPIERRE naturally innovative

## WATER JACKETED BOTTLING TANK



USER'S MANUAL

# LAPIERRE manymane 

## Naturally innovative

A leader in equipment and products for the maple syrup industry, LAPIERRE EQUIPMENT distinguishes itself by our passion to innovate and develop high-performance solutions. This is what enables us to make significant changes in production techniques and processes in order to produce more abundant, high quality syrup.

LAPIERRE EQUIPMENT represents a rich experience built over three generations of maple syrup producers. We are driven by a passion and deep desire to help the industry evolve with the utmost respect for nature.

## Honoured to serve your customers

LAPIERRE EQUIPMENT is honoured to actively assist maple syrup producers in Quebec, eastern Canada and the northeastern United States during the sugar season.

Today you have made a wise choice for at least two good reasons: the superior quality of our products and the superior quality of all our expert advisers.

We sincerely appreciate your trust. We will be happy to serve you again in your future equipment purchases, regardless of the size of your sugar bush.

Thank you!

## Lapierre Equipment Inc.

99 Rue de l'Escale, Saint-Ludger (Québec) Canada GOM 1WO

##  naturally innovative <br> 

## WATER JACKETED BOTTLING TANK

Please note the information required below when dealing with customer service staff. You can find this information on the data plate affixed to your water jacketed bottling tank as well as on your invoice. You can also refer to Section 1 of this manual for additional information.


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## IMPORTANT INFORMATION ABOUT YOUR WATER JACKETED BOTTLING TANK

Customer Service: 819548.5454 | 1833548.5454 | info@elapierre.com
Model number: $\qquad$
Serial number: $\qquad$
Purchase date: $\qquad$
Invoice number: $\qquad$
We will be pleased to answer any of your questions! Please do not hesitate to contact us.

## WATER JACKETED BOTTLING TANK

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## SECTION 1 FINDING INFORMATION ABOUT YOUR EQUIPMENT

When you contact our customer service professionals, it is important to have certain information about your equipment on hand as you will be asked for it.

You will easily find this information on the data plate affixed to your water jacketed bottling tank as well as on your invoice.

| Information about <br> the equipment | Data plate <br> (affixed to your equipment) | Invoice |
| :--- | :---: | :---: |
| Model number | $\checkmark$ | $\checkmark$ |
| Serial number | $\checkmark$ | $\checkmark$ |
| Purchase date | - | $\checkmark$ |
| Invoice number | - | $\checkmark$ |

## SIZES

$10,24,34$ ou 50 gallons
(12, 29, 41, 60 gallons US)
$-$
$\square$

## OPTION

| Bottling Tank Stand | - | $\checkmark$ |
| :--- | :--- | :--- |

## INSURANCE: CONFIRMATION OF INSTALLATION COMPLIANCE

It is recommended that you contact your insurance company in order to confirm the compliance of your installation with its own requirements as these may differ from one insurance company to another.

## SECTION 2 SAFETY INSTRUCTIONS

### 2.1 INSTRUCTIONS

- It is important to read, understand and follow the instructions and warnings contained in this user manual.
- This manual must be stored in a known place and accessible at all times by staff.
- All operators of the product must be familiar with the contents of this manual.
- Some instructions may not apply to your equipment, depending on your model.


### 2.2 SAFETY

## Electrical

- Before turning on the heater(s), check their power supply specifications. You will find these specifications on the data plate of the water jacketed bottling tank. Also check the specifications of the electrical circuit you intend to use. Then make sure that the two components are compatible.
- Never connect the electrical cords to overloaded electrical circuits.
- Never use extension cords that are longer than necessary or of low gauge.
- Make sure that the electrical cords are in good working order, that they are not pinched or stripped, and that they are not altered in any way that could hinder their safe use.
- Never touch a stripped wire or a wire that has been pulled out of its electrical outlet when it is live. Turn the heater off and repair it before turning it back on and using it.
- The user must check the grounding circuit. Some equipment must be used or connected to other equipment that is also equipped with a grounding circuit. Disabling or malfunctioning of this circuit may cause equipment operating conditions that are hazardous to its users.
- Always unplug the power cord from the heating element when the water jacketed bottling tank is not used for an extended period of time.


## Liquids

- Never expose the equipment to rain or excessive condensation.
- Never bring liquids into contact with the electronic components.
- Unless otherwise specified, never submerge the electrical components of this equipment.


## Other

- Always keep hair, hands and jewelry out of reach of equipment components that are or could unexpectedly turn on.
- Never place heavy objects on your equipment, as their weight could damage certain parts of your water jacketed bottling tank.


## SECTION 2 Safety instructions (continued)

### 2.3 REPAIRS AND MAINTENANCE

- Stop using the equipment immediately if a malfunction is detected.
- Only someone authorized by our service centre may carry out repairs on this equipment.
- Unauthorized modifications or repairs may result in equipment operating conditions that are hazardous to users. These conditions may also cause varying degrees of injury to users.
- Always unplug the power cord before servicing or repairing.
- It is recommended that equipment inspections and maintenance be carried out diligently to ensure optimal operational integrity. See Section 5: Cleaning the equipment for more information.
- Never disassemble the electrical components of this equipment.


## PROTECTING CHILDREN

- Never allow children to use this equipment.
- Never leave children unattended in proximity to this equipment, whether it is switched on or not.


## SECTION 3 EQUIPMENT INSTALLATION; PART DESCRIPTIONS AND CODES

To reduce the risk of fire, electric shock or injury, it is important to follow these instructions when installing your equipment.

- The installation of the power supply must be done by a properly qualified contractor. The work must be carried out in accordance with the local regulations in effect.
- If you have to work in existing walls and ceilings, be careful not to damage electrical conduits or other utilities that may be present.

$\triangle$
Your water jacketed bottling tank must be SAFELY INSTALLED ON A HORIZONTAL AND
PERFECTLY STABLE SURFACE. If it tips or tilts, it may cause severe injury or burns to the operator and others in the vicinity of the equipment. Its weight and the heat of its contents present a real danger.

## ILLUSTRATION 1 | Typical installation, water jacketed bottling tank



## SECTION 3 Equipment installation; part descriptions and codes (continued)

## No Part description

1 Outer water jacket tank
2 Inner syrup tank
3 Base for the tank cover
4 Cover for the bottling tank
5 Set of 2 filling valves for containers or bottles
6 Water drainage valve
7 Angle iron supports
8 Water level gauge for outer tank
9 Heating element(s) and thermostat
10 Non-shouldered eye bolt
11 Hexagonal nut
12 Filling point for water jacket tank
13 Filling points for the maple syrup tank cauldron
14 Steam exhaust duct
15 Syrup level sight gauge
16 Thermometer indicating syrup temperature

## PART DESCRIPTIONS AND CODES

Equipment illustrated above:

Model number:

Water jacketed bottling tank 2 outlets
$20 \mathrm{in} \times 16$ in ( $50.8 \mathrm{~cm} \times 40.6 \mathrm{~cm}$ ), 10 gallons ( 12 gallons US)
EM140-000010ST

| No | Qty | Part description | Code de la pièce |
| :---: | :---: | :---: | :---: |
| 3 | 1 | Base for the tank cover, $20 \times 16$ in | EM440-030100st |
| 4 | 1 | Cover for the bottling tank, $20 \times 16$ in | EM440-040100st |
| 5 | 1 | Set of 2 filling valves for containers or bottles | CSO25-000001sT |
| 6 | 1 | Water drainage valve, $5 / 8$ in tube | CSO25-000004ST |
| 7 | 2 | Angle iron support, stainless steel, $1 \times 1 \times 1 / 8$ in | MP150-161602S2 |
| 8-15 | 2 | Water level gauge for outer tank, syrup level sight gauge; polycarbonate, 5/8 $\times 21$ in | EV210-001021J9 |
| 9 | 1 | 3000-watt heating element and 240-volt thermostat | EM340-013000XX |
| 10 | 1 | Non-shouldered eye bolt, zinc plated, 1/4-20 $\times 1$ in | BU110-042016K1 |
| 11 | 1 | Hexagonal nut, zinc, 1/4-20 | BU207-000420K1 |
| 16 | 1 | Fahrenheit graduated dial thermometer for the inner tank, 3 in <br> Lapierre Equipment \| WATER JACKETED BOTTLING TANK | USER'S MANUAL | Ver | EITCO330 |

Hot syrup can cause severe burns. Always wear SAFETY GOGGLES and HEAT RESISTANT GLOVES AND CLOTHING when working with this equipment.

Also be especially cautious with all other PERSONS NEAR THE EQUIPMENT, whether they are children, family members or guests, as well as pets.

1. Check that the water drainage valve (Figure $1 \mathrm{No.6}$ ) on the water jacketed bottling tank is closed.
2. Add water to the water jacketed bottling tank through the filling point for water jacket tank (Figure 1 No. 12).

- Using the water level gauge for outer tank (Figure 1 No. 8), check that the water level covers the heating element(s) (Figure 1 No. 9).

3. Make sure the gaskets are flexible and free of cracks. Then firmly secure the pipe connections.
4. Make sure that both filling valves (Figure 1 No. 5) on the containers are closed.
5. Add the maple syrup into the syrup tank through one of the two filling points (Figure 1 No. 13). located on the top of the water jacketed bottling tank lid (Figure 1 No. 4).

- You can monitor the level of syrup in the syrup tank using the sight gauge on the syrup tank. (Illustration 1 No. 15).
- Bring the syrup level to the desired height without exceeding the capacity of the syrup tank.

6. Turn on the heating element (Figure 1 No. 9).

- Bring the syrup temperature to $185^{\circ} \mathrm{F}\left(85^{\circ} \mathrm{C}\right)$ on the thermometer (Figure 1 No. 16).
- This is the optimum temperature for syrup storage.

7. You can only bottle your syrup when the temperature has reached $185{ }^{\circ} \mathrm{F}\left(85^{\circ} \mathrm{C}\right)$.

- If the syrup temperature drops below $180^{\circ} \mathrm{F}\left(82^{\circ} \mathrm{C}\right)$, wait for the syrup temperature to reach $185^{\circ} \mathrm{F}\left(85^{\circ} \mathrm{C}\right)$ again before restarting the maple syrup bottling operation.

8. Steam discharge at the steam exhaust duct (Figure 1 No. 14) is normal.
9. Leave one side of the cover (Figure 1 No. 4) partially open during use of your water jacketed bottling tank.

- This will prevent condensation water from falling into the syrup.

10. Open the filling valves (Figure 1 No. 5) in order to pour the contents of the syrup tank into the containers.

- Adjust the flow rate to achieve a pouring rate that gives you complete control over the operation, including container replacement.
- Adjust the flow rate to minimize foaming on the surface of the syrup in the containers.

11. If the bottling tank is located in an unheated location or at risk of freezing, it is essential to purge the equipment of its water after use. This precaution can prevent major damage or breakage to the equipment.

## SECTION 5 CLEANING THE EQUIPMENT

1. Immediately after use, turn off the heating elements of the water jacketed bottling tank and run hot water in the syrup tank to rinse and clean the inner walls and bottom. Drain the syrup tank of its cleaning water.
2. Clean the piping system using hot water. To facilitate the work, it is recommended to remove the collars, the filling valves (Figure 1 No. 5) and the thermometer (Figure 1 No. 16).
3. Lubricate the silicone gaskets with food grade grease to prevent drying and cracking.
4. The stainless steel components of your equipment must be cleaned with a product specially designed for this purpose. Do not use flammable liquids.
5. Never use abrasive products or products containing chlorine or muriatic acid (also known as hydrochloric acid) to clean the components of the bottling tank. The use of wire brushes and steel wool should also be avoided.

During prolonged storage, even the slightest CLEANING PRODUCT RESIDUE ON ALL COMPONENTS may lead to damage of the bottling tank components. Rinse each cleaned component thoroughly.

### 6.1 ISSUE | THE SYRUP IS NOT HOT ENOUGH

## Solutions

- Make sure that the water level in the water jacketed bottling tank is sufficient, i.e., above the heating element(s) (Figure 1 No. 9).
- Check that the heating elements are turned on and working.
- If one of the heating elements is no longer working, it must be replaced.


### 6.2 ISSUE | THE FLOW RATE IS TOO LOW

## Solutions

- Bring the syrup temperature to $185^{\circ} \mathrm{F}\left(85^{\circ} \mathrm{C}\right.$ ) on the thermometer (Figure 1 No .16 ). The more the syrup cools below this temperature, the slower its flow rate. Bring the syrup to the recommended temperature.
- The filling valves (Figure 1 No. 5) may have an accumulation of sugar or syrup. They must then be disassembled, soaked in hot water and cleaned as appropriate.


### 6.3 ISSUE | THERE IS BULGING IN THE WALLS OF THE WATER JACKETED BOTTLING TANK

## Solution

The water contained in the water jacketed bottling tank is frozen. DO NOT POWER THE HEATING ELEMENT, you may damage it. After the water has completely thawed, use the water jacketed bottling tank normally ONLY IF NO LEAKS are present. Otherwise, contact LAPIERRE EQUIPMENT immediately.

| WATER JACKETED BOTTLING TANKS |  |  |  |
| :--- | :---: | :---: | :---: |
| SIZE | Fill valves <br> (Figure 1 No. 5) | Heating element(s) <br> (Figure 1 No. 9) | Model <br> number |
| 10 gallons (12 gallons US) | 2 | 1 | EM140-000010ST |
| 24 gallons (29 gallons US) | 2 or 4 | 2 | EM140-000024ST |
| 34 gallons (41 gallons US) | 2 or 4 | 2 | EM140-000034ST |
| 50 gallons (60 gallons US) | 2 or 4 | 2 | EM140-000050ST |

The specifications are subject to change without notice.

## WARRANTY CERTIFICATE

1. Two-year warranty
2. Warranty certificate exclusions
2.1 Observed conditions
2.2 Costs and lossess
3. Disclaimer of liability
4. Making your warranty claim

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## KEEP YOUR PURCHASE INVOICE

It is very important to keep the original invoice for the purchase of your equipment or a legible copy of it. Otherwise, LAPIERRE EQUIPMENT INC. will not accept your warranty claim.

The term MANUFACTURER is used for LAPIERRE EQUIPMENT in order to lighten the text.

## 1. TWO-YEAR WARRANTY

The MANUFACTURER warrants that any new product is free from manufacturing, material and workmanship defects. The warranty is valid for a period of two years from the date of purchase of the product. It applies when the product meets normal conditions of installation, use and maintenance.

PRODUCT DEFECT. The appearance of a defect before the expiry date of the warranty must be reported immediately to the MANUFACTURER. The MANUFACTURER will then repair or replace the defective parts with equivalent new parts.

DEFECTIVE PARTS. Replaced defective parts become the property of the MANUFACTURER. They are recovered during the after-sales service process.

AESTHETICS. The aesthetic appearance of the products - parts and equipment - is covered by a warranty covering 7 days from the date of delivery.

## 2. WARRANTY CERTIFICATE EXCLUSIONS

### 2.1 OBSERVED CONDITIONS

This warranty becomes null and void where one or more of the following conditions are observed.

### 2.1.1 An altered, modified or removed serial number

2.1.2 Product damaged by:

### 2.1.2.1 User

- Use deemed abusive or negligent.
- Accident caused by the user.


### 2.1.2.2 Failure to comply with user manual instructions

- Failure by the user to follow the instructions in the user manual: safety instructions, installation of the equipment, start-up and operating procedures, maintenance and cleaning of the equipment, as well as any other installation recommendations provided by the MANUFACTURER.


### 2.1.2.3 Installation, modification, repair

- Installation in a place not suitable for normal use.
- Unauthorized repair or modification - not approved by your service centre - performed by the customer.
- A repair or modification carried out by a third party not authorized by the MANUFACTURER.


### 2.1.2.4 Parts

- The use of parts other than original MANUFACTURER parts.
- Use of parts obtained through a service centre, technician or distributor not authorized by the MANUFACTURER.
- Use of parts that cause deterioration or damage to the product.


### 2.1.2.5 Electricity

- A variation, electrical overload or excessive voltage.
- Poor power supply quality or electrical connections.


### 2.1.2.6 Cleaning products

- The use of cleaning products or acids that are not recommended, or used without following the recommendations of their respective manufacturers.


### 2.1.2.7 Non-controllable events

- Events that are beyond the MANUFACTURER's control such as mechanical shock; water damage or flooding; fire or burning; storm, earthquake or other natural or man-made disasters.


### 2.2 COSTS AND LOSSES

This warranty does not cover the following costs or losses.

### 2.2.1 Costs for:

- Making the product accessible during a service call,
- The trip of the authorized technician during a service call,


## SECTION 8 Our warranty (Warranty certificate) (continued)

- Service calls for reasons other than those provided for in the warranty. The warranty applies when a defect or malfunction or a defect in manufacture, material or workmanship appears,
- Service calls associated with product start-up at the beginning of the season, and shutdown at the end of the season or post-season. However, costs may be covered if specified in the purchase contract,
- Service calls received when the warranty expires, i.e., two years from the date of purchase of the product.


### 2.2.2 For losses of:

- Income caused by the quality of the syrup,
- Production related to the provisions covered by this warranty.


## 3. DISCLAIMER OF LIABILITY

The MANUFACTURER shall not be liable for incidental or consequential damages or implied property damage
The MANUFACTURER shall not be liable for any direct or consequential loss of time, production or profits, inconvenience, cost of equipment acquisition or parts replacement or storage due to a warranty claim.

## 4. MAKING YOUR WARRANTY CLAIM

The following is the procedure for making a warranty claim.

- Contact your representative or distributor, our service centre or our head office to submit your warranty claim and plan the necessary after-sales service operation.
- IMPORTANT | For any claim, the customer must submit a copy of their invoice. Otherwise, the MANUFACTURER will not accept your claim.
- The MANUFACTURER will then proceed with an inspection of your equipment and confirm whether your warranty claim is accepted. If so, the MANUFACTURER will carry out an after-sales service operation in accordance with the provisions specified in Section 1. TWO-YEAR WARRANTY.
- The functioning equipment will then be returned to the customer in a condition comparable to that in which it was received. This comparable condition will have been previously determined by the MANUFACTURER and/ or one of its representatives or distributors.
- This warranty after-sales service operation does not extend the warranty period of the equipment. The end date of the warranty remains the same, i.e., two years from the date of purchase of the product.


## SECTION 9 PARTS AVAILABILITY

Parts for your water jacketed bottling tank or any other equipment manufactured at LAPIERRE EQUIPMENT are available at our main plant in Saint-Ludger, Québec, Canada and at our service center in Waterloo, Québec, Canada. However, do not hesitate to contact us to locate the distributor nearest you.

## HEAD OFFICE and MAIN PLANT

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# LAPIERRE <br> naturally innovative 

## We sincerely appreciate your trust. <br> Thank you!



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