

Warmth, from the heart of J.A. Roby





# ATFM



Certified and tested according to CAN/CSA B366-1-M91 norms

September 7th, 2007 Review ATFM

490, rue de l'Argon Québec (Québec) G2N 2C9 Phone: 418-849-8095 Fax : 418-849-0077 www.jaroby.com

# CONTENTS

CHARACTERISTICS – ATFM	4
WARNING	5
NOTICE	7
CREOSOTE	7
CHIMNEY	8
INSTALLATION	8
VERTICAL INSTALLATION INSIDE A MASONRY CHIMNEY	9
EXTERIOR VERTICAL INSTALLATION	9
VERTICAL INSTALLATION ON A CATHEDRAL ROOF10	0
CROSS STYLE INSTALLATION10	0
VERTICAL INSTALLATION1	1
CLEARANCES	2
INSTALLATION OF THE FIREBRICKS	3
FANS AND THERMODISC14	4
INSTALLATION OF THE 460 CFM FAN AND THE PROTECTION BOX1	5
PROPULSION MODE	5
INSTALLATION OF THE 2 EXITS OF 6 INCHES FOR THE FAN SYSTEM $1'$	7
ASPIRATION MODE	8
SEATING	1
LIGHTING	1
AIR CIRCULATION OF THE HEATING SYSTEM	2
IN CASE OF EXTENDED ELECTRIC FAILURE	3
AIR SUPPLY	4
PREVENTIVE MEASURES AND MAINTENANCE	5
INTERCHANGEABLES PARTS LIST	6

# CAREFULLY READ THIS MANUAL AND KEEP IT FOR FURTHER REFERENCES

INSTALLATION OF THIS APPLIANCE MUST BE DONE BY A QUALIFY CERTIFIED TECHNICIAN AND IN CONFORMITY WITH THE OWNER'S MANUAL GUIDE GIVEN WITH THIS APPLIANCE. THE INSTALLATION MUST BE IN AGREEMENT WITH LOCAL AND NATIONAL REGULATIONS APPLICABLE FOR SOLID FUEL BURNING APPLIANCES AND CONNEX EQUIPMENT (CAN/CSA-B365, NFPA211(USA) AND THE APPLICABLE BUILDING CODE.

## WARNING! NEVER MODIFY THIS APPLIANCE !

## **CHARACTERISTICS – ATFM**

Combustible	Wood	
Recommended surface	0 to 2000 Ft <sup>2</sup> (0 to 186m <sup>2</sup> )	
Capacity	59,000 BTU/H	
Evacuation pipe diameter	6 in (15,54cm)	
Chimney minimal height	12 ft (3,66m)	
Top hot air exit	2 X 6 in (5,08cm X 15,54cm)	
Dimensions:		
Exterior height	42¼ in (107,95cm)	
Exterior width	27 ½ in (69,85cm)	
Exterior depth	38 ½ in (97,79cm)	
Door openning	16 in X 10 ½ in (40,64cm X 26,67cm)	
Inside height	12 in (30,48cm)	
Inside width	19 in (48,26cm)	
Inside depth	18 ½ in (46,99cm)	
Maximal length of log	18 in (45,72cm)	
Combustion duration	4 to 8 hours	
Weight	480 pounds (218 kg)	
Clearances		
Back	12 in (25,40cm)	
Lateral	12 in (30,5cm)	
Roof	84 in (2,14m)	

\* One 460CFM fan included

## WARNING

Before installing, please take a few minutes to read this handbook. Keep it in a sure place and easily reachable for future references. Not following these instructions could be a cause of property damages, injuries or death. If this appliance is not properly installed, it could cause fire damages to the property, injuries and death. To reduce fire hazards, follow instructions contained in this handbook.

Contact an official inspector (ex: a fireman) or your insurance company for installation permit. Always respect the provincial and municipal building codes of your region.

Do not connect this appliance to a chimney that already serves for another wood appliance.

#### Do not install the appliance in a mobile house.

The existing chimney should be well inspected before any installation. In doubt, consult a specialist.

The room where the appliance must be installed must measure a minimum of 64  $ft^2$  and must be very well ventilated.

Minimum clearances found in this manual must be observed.

Never use a non-isolated exterior conduct or a single wall flue pipe as an exterior exit.

Put in place the firebricks before lighting the appliance (if they are not in place yet).

#### WARNING : Very hot while in function

- Keep children far away from the appliance.
- Never let the appliance without supervision when the door is open.
- Always close the doors after the lighting period.
- Do not use chemical products or other liquid to light the fire.
- Do not burn waste or inflammable fluids like gas, naphtha or motor oil.
- Always keep combustible material (clothes, furnitures, wood, matches, plastics, etc...) at a minimal distance of 91,5 cm (3 feet) from the appliance.

#### This appliance is certified to burn wood. Do not use any other combustible.

Wood should not be stocked within the recommended minimums clearances or in the necessary space for the loading and the ashes evacuation.

Always use dried wood. Do not burn green or wet wood. Do not use construction debris such as pieces of 2x4, plywood...

If the appliance starts to blush, it's because it is too charged. Do not add fuel. Immediately close the doors and the air intake of the appliance until everything becomes normal again.

#### Do not load the appliance beyond the firebricks height.

Ashes must be evacuated frequently, put in a steel container provided with a tight lid and be placed outside at once. You must never place other waste in this container.

Considering the need of air for the combustion, a window or a door must be half opened sometimes (fresh air drainage) to balance the pressure in the house, especially if:

- A fan already evacuates air towards outside (kitchen, bathroom.)
- You want to avoid a repression of smoke when lighting the appliance and when reloading the wood.

It is recommended to have a smoke detector near the appliance.

#### You should contact your municipal or provincial fire department to have knowledge of the procedure to be followed in case of a chimney fire. Think of an emergency plan.

In case of a chimney fire:

- Hermetically close the doors and the air intakes.
- Water the combustible material adjacent to the chimney.
- Ring the alarm, evacuate the house if necessary and call the firemen.
- Never touch the pipes until the fire is not completely extinct.
- Do not use the chimney until it has been inspected or repaired.

Keep all the doors closed while the appliance is in function. Frequently verify the ceramics cords, they must always be in good condition.

The chimney pipe should not pass close to water, gas or oil pipes, nor close to electric wire or other types of conduits, of combustible materials in the roofs, the attics, the walls or the floors. If you have to make it pass through a wall or a part of combustible construction, do not forget that the installation must be in accordance with the CAN/CSA-B365. Use at least 12 feet of a 6 inches diameter vertical chimney.

#### NOTE:

#### FOLLOW THESE INSTRUCTIONS IN ORDER TO AVOID FIRE HAZARDS, WOUNDS AND PROPERTY DAMAGES.

## NOTICE

The *ATFM* was conceived to safely function the doors closed and only when burning firewood. Any change, modification or unauthorized installation will automatically cancel the certification of the appliance, its guarantee, its homologation and the appliance might become dangerous.

During the first hours of operation, you must heat it gradually. In order to allow an appropriate cooking of the paint and in order to facilitate its adhesion with metal, do not heat the appliance with a strong fire. It will also avoid thermal shock which could lift up the paint or make it whiten.

Make sure that the room is ventilated enough in order to eliminate the odours and the smoke coming from the paint during the first hours of utilization. It is normal that a light smoke is released from the paint during the first hours of use.

Even if this nuisance is temporary, open the windows and the doors in order to ensure a good ventilation. This special paint is conceived to tolerate temperatures until  $1200^{\circ}$ F (650°C).

## CREOSOTE

The wood burning slowly produces tar and other organic steams, which forms a whole called "creosote". The steam condenses in the cool chimney when the wood is burning slowly. In this way, creosote residues are formed on the walls. Creosote can take several forms: tarry liquid, soot dust or deposits in crystal form. When in fire, the creosote releases a very strong heat and can be the cause of a chimney fire.

- Do not knock on the glasses or violently close the doors.
- Do not use the appliance when a glass is broken or damaged.
- Do not build the fire too close of the glasses.
- Keep the doors closed when using the appliance.
- Do not connect the *ATFM* with a chimney or a flue serving another heating appliance

## CHIMNEY

Only use approved chimneys of the same dimensions as the appliance exit. Therefore, you should use 6 inches diameter chimneys for your *ATFM*. Chimneys must be tested upon the CAN/ULC S629 M87. The *ATFM* wood appliance can be installed onto a masonry chimney following the ULC S635, ULC S640 norms. Do not forget to plan a place for the sweeping of the chimney.

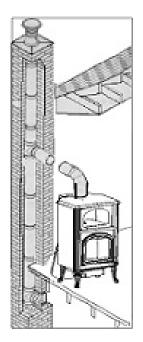
When possible, it is preferable to avoid an outside chimney or built on an exterior wall, and this is even more important for colder areas. Outside chimneys generally have a less efficient draught. They can even have an inverse draught because it is hard to heat them enough so that they can reach their operating temperature. A greater accumulation of creosote, a less efficient draught and a lesser performance are some characteristics of cold chimneys. Draught is proportional to the total chimney height as well as its temperature. It is therefore possible to get a better draught by increasing the chimney's height and by reducing the heat loss with an insulated lining. The chimney has to be installed with a stainless steel lining. Make sure that all smoke pipe joints are really airtight. A leak reduces the efficiency of the appliance and could even make its utilization dangerous.

## **INSTALLATION**

A good installation is extremely important for a safe and efficient use of your J.A. Roby Inc. appliance. If you doubt on the way to install the appliance correctly, seek for professional installation service. We suggest you to call masters fitters.

- 1. Withdraw firebricks placed inside the appliance in order to reduce the weight and to facilitate the installation.
- 2. You must install a fireproof plate under the appliance, which must exceed of 18 inches at the front and of 8 inches at each side and at the back.
- 3. The free space shall not be reduced except under the approval of the authorities responsible for the application of the building code.
- 4. Install the chimney and an insulated wall thimble for an installation passing through a wall according to the instructions from the chimney manufacturer.
- 5. Install the firebricks in accordance with the recommended instructions for your model.
- 6. The appliance should not be connected to an hot air conduct.

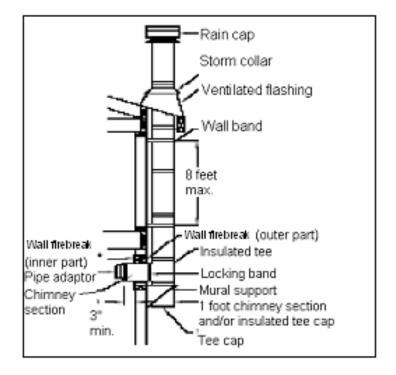
#### VERTICAL INSTALLATION INSIDE A MASONRY CHIMNEY

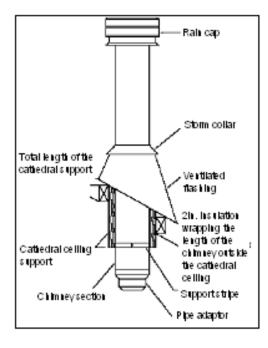


The *ATFM* wood appliance must be installed in accordance with the applicable local laws or the CAN/CSA-B365, ULC S635, ULC S640, UL 1777 norms. Install the chimney following the manufacturer's instructions.

#### **EXTERIOR VERTICAL INSTALLATION**

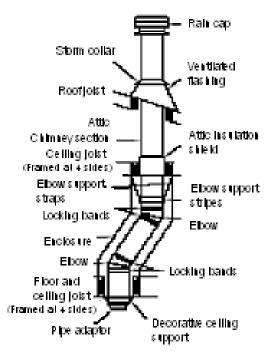
The *ATFM* wood appliance must be installed in accordance with the applicable local laws or the CAN/CSA-B365 norm. Install the chimney following the manufacturer's instructions.





The *ATFM* wood appliance must be installed in accordance with the applicable local laws or the CAN/CSA-B365 norm. Install the chimney following the manufacturer's instructions.

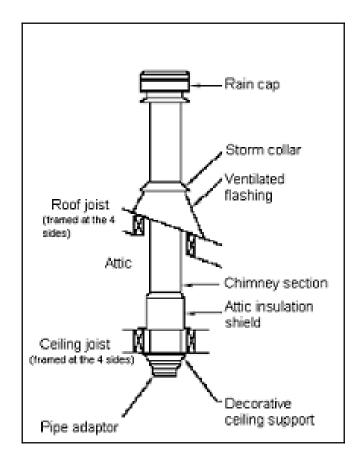
#### **CROSS STYLE INSTALLATION**



The *ATFM* wood appliance must be installed in accordance with the applicable local laws or the CAN/CSA-B365 norm. Install the chimney following the manufacturer's instructions.

#### VERTICAL INSTALLATION

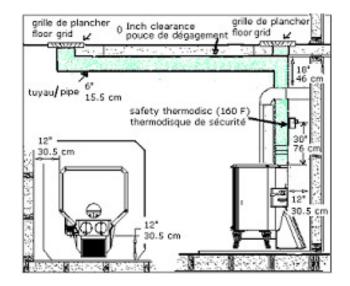
The *ATFM* wood appliance must be installed in accordance with the applicable local laws or the CAN/CSA-B365 norm. Install the chimney following the manufacturer's instructions.



## **CLEARANCES**

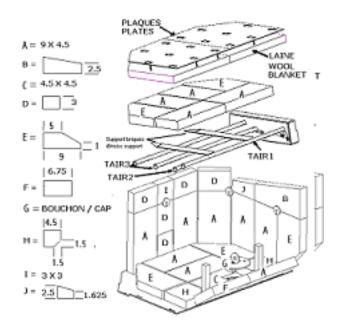
Due to its reduced clearances, this appliance occupies a minimum of space in the room where it is installed. No matter where you install it, this appliance will perfectly complete your decoration by its originality and its heat. This appliance only needs a 12 inches clearance at its back and 12 inches from the lateral walls. For the heat exchanger, the clearances of zero.

Do not place the safety thermodisc under the 6in pipes. The door's heat may stop the appliance and the fans may not restart when the electricity returns; the thermodisc being too hot.



## **INSTALLATION OF THE FIREBRICKS**

- 1. Install the bottom wall bricks.
- 2. After that, install the side wall bricks.
- 3. Install the back ones.
- 4. Then, install three pipes (#2 and #3) and fix them.
- 5. Install the two plates retaining the wool.
- 6. Slide the bricks to be placed under the wool and to be supported by the three pipes.
- 7. To finish with, install the pipe #1 and fix it.



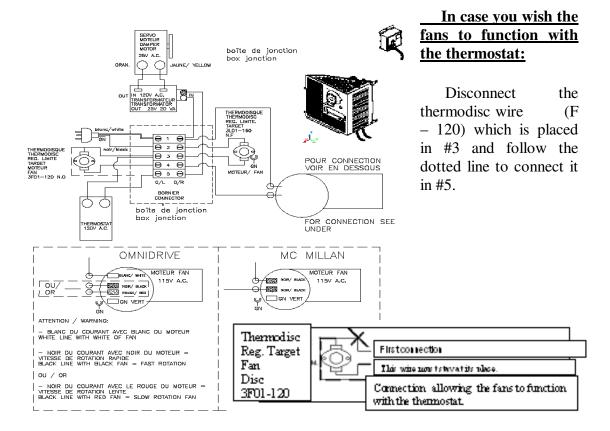
## FANS AND THERMODISC

The 115 volts fans must be screwed under the ventilation conduct at the planned place in the appliance rear. The protection thermodisc box must be fixed at 72 inches (182,88cm) from the appliance on the ventilation conduct. A hole must be done in order to permit the air coming from the fans to touch lightly the thermodisc. Plug the terminal.

When the appliance is in function, the heat reaching a temperature of  $120^{\circ}$ C activates the thermodisc. At this moment, the thermodisc activates the fans for a better distribution of heat in your home. As soon as the heat goes under  $120^{\circ}$ C, the thermodisc automatically stops the fans. When the appliance is in fonction, and that the protection thermodisc fixed on the ventilation conduct reaches a temperature of  $160^{\circ}$ F, the thermodisc will stop the fans and will close the air entry in order to slow down the combustion and will stop distributing the heat in the ventilation conduct of your home. When the heat goes under  $160^{\circ}$ F, the thermodisc will start the fans.

If you use the appliance without thermostat, see the section named "In case of extended electric failure"

## <u>The electrical cord of the fans must never touch the appliance surfaces in order to avoid electrical shock or fire.</u>



## ELECTRICAL PLAN

## INSTALLATION OF THE 460 CFM FAN AND THE PROTECTION BOX

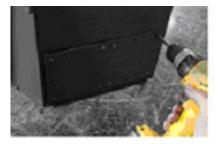
#### **PROPULSION MODE**

1. Fix the electrical box on the side (2 screws)

Position the rod allowing the air intake into the hole.







Remove the panel recovering the two square holes.



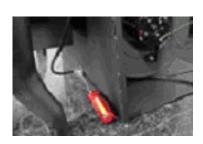
Fix the 460CFM fan on the appliance with the 4 bolts, rings and nuts.



Place the bottom of the protection box.



Install the panel to recover the two square entries.



Pass the fan power supply wire into the connector and let it exceed of 6 inches in the protection box.



Tighten the connector screw.Connect the wires.



Position and fix the left and right sides of the 460CFM fan box.



➢ Use 7 screws for each sides.



OPTIONPut in place the air filter.



 $\blacktriangleright$  Fix the grate with 6 screws.

3.

4.

5.

### INSTALLATION OF THE 2 EXITS OF 6 INCHES FOR THE FAN SYSTEM

- 1.
- Remove the panel recovering the 2 exits of 6 inches.
- Fix the two pipes of 6 inches diameter by using 2 screws per pipe.
- Do not block the anti-repression valves operation.



- Fix the thermocouple box (L-160) at  $30^{1}$  (76cm).
- Plan the thermodisc hole before fixing the box.

3.



Install the fan conducts without any clearance from the ceiling. At each conduct extremity, install a floor grid.

#### **ASPIRATION MODE**

Installation of the 460cfm ceiling fan of the basement with a flexible aluminium pipe or a rigid coated sheet pipe.

1.



Install the starting collar on the 460 cfm fan with three screws.



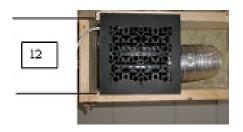
Install the retaining collar with 2 bolts and nuts (1/4 " X 2 ") and then tighten the end on the simple pipe.



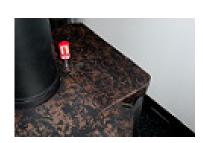
 $\succ$  Fix it all with 6 screws.



Screw the fan grid (GV460) by using 5 bolts (1" X ¼") with locks.



Screw the basement ceiling grid with 6 screws of 1 <sup>1</sup>/<sub>2</sub>". The necessary space between the joists must be of 12 inches centre in centre. Be sure that the box does not touch the joists in order to avoid noises.



2.

Be sure that the panel recovering the two 6 inches exits over the appliance is well closed and fixed.





Position the 90 degrees elbow and the 6 inches diameter coated sheet pipe (or black steel). Fix the 90 degrees elbow only with screws of less than ½" of length because it could affect the good operation of the anti-repression valve.



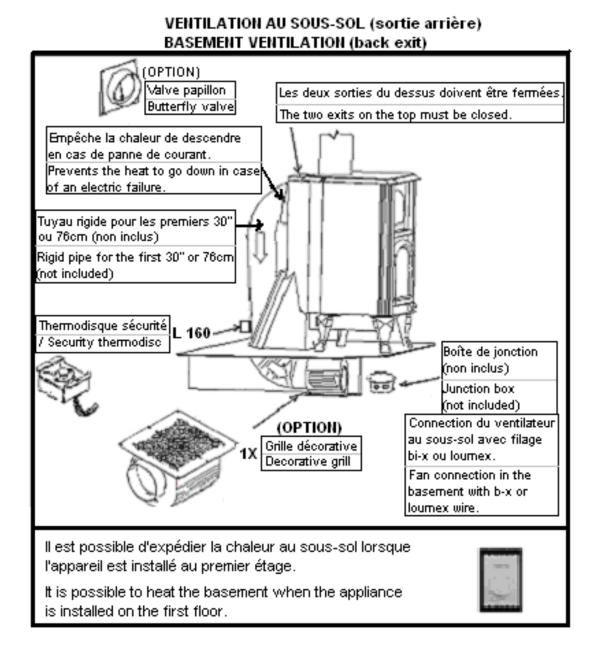
Remove the square panel at the back of the appliance.



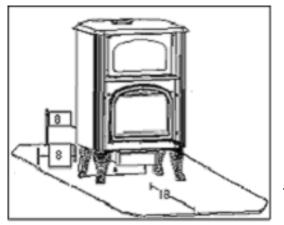
➢ Fix the butterfly valve.



- Fix the thermodisc box (L-160 stop) at 30<sup>\coloredot</sup> (76cm) from the bottom of the rear collar exit of 6 inches. Drill the pipe in front of the thermodisc to capture the fan heat.
- To fix the thermodisc to a flexible pipe, a collar is available (option).



## SEATING



You must install a fireproof plate under the appliance, which must exceed it of 18 inches at the front, of 8 inches at the sides and of 8 inches at the back.

<u>\*\*\*Use only non-combustible materials</u> such as ceramics, marble or granite.

## LIGHTING

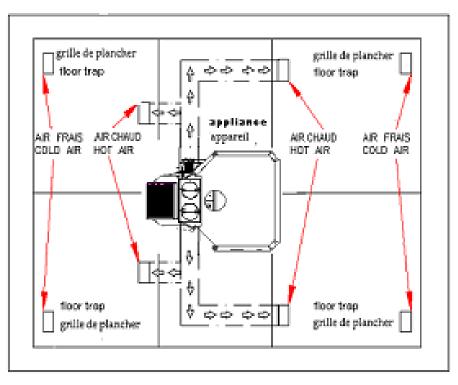
Now that you have completed the installation of the appliance according to the recommendations, you are ready for the lighting!

- 1. Place papers and small wood in the appliance.
- 2. Before lighting, be sure that the chimney is warm enough.
- 3. When the fire is well lit, gradually add bigger wood logs until an ember bed is formed.
- 4. You can then control combustion by closing or opening the air intakes (a rod pulled down indicates a closed air intake). The wood will burn more quickly if the air intakes are opened to the maximum and more slowly if they are only slightly open.

### Do not charge the appliance beyond the bricks.

## AIR CIRCULATION OF THE HEATING SYSTEM

Always refer to the applicable building code before installing the hot air conduct.



It is recommended to install a floor trap in order to balance the air pressure between the floor where the appliance is installed and the superior floor.

It is also recommended to install those floor traps at each room extremity.

An air supply must be installed if :

- a) The appliance seems to have an irregular draft control, a smoke return, a bad combustion and a counter-blow even though you have a combustion or not.
- b) Your other appliances, such as hearths or other heating appliances, release odors, heat badly, provoke smoke return or a counterblow, even though there is combustion or not.
- c) An opened window, even slightly, by a calm temperature (without wind) stops the situation above.
- d) Your home was built with isolated dandruffs and with well adjusted windows, and/or was built with a mechanism to evacuate the interior air.

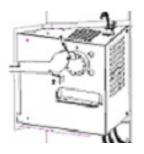
If, with these indications, there is not enough air infiltration, you must ensure an air supply.

\*In doubt, it is recommended to ensure an air supply.

## IN CASE OF EXTENDED ELECTRIC FAILURE

Please refer to the following instructions and images:

1) Lift up the air entry rod



2) Hook the rod onto the support in order to allow an air supply.



3) To measure out the quantity of air into the combustion chamber, you have to rotate the handle.; upwards for an opening and downwards for a closing.



4) It is important to lower the ventilation door at the front so that heat can spread out in the room. The appliance will become much hotter without the circulation of air coming from the fans; thus the ceilings, the walls and everything around the appliance will be exposed to an higher heat than usual.



5) As soon as the electrical failure ends, replace the air entry rod at its first position (step 1) et keep the handle upwards in order to have an opened air entry (step 3). Then, close the door of the appliance..

## AIR SUPPLY

A new air supply can be done by the following ways:

- **Indirect method :** In the case of an appliance not certified for a direct connection with a source of new air supply, the new air is brought in a conduit at a maximum of 300mm (12 Po) of the appliance, in order to not compromise its operation.
- <u>Mechanical ventilation</u>: If the home is built with a ventilation system (air exchange or heat recovery)
  - I. The ventilation system might be able to supply an efficient air quantity to a solid combustible appliance, and
  - II. The owner should be informed that the ventilation system may have to be rebalanced by a technician specialized in ventilation after the installation of the solid combustible appliance..

## PREVENTIVE MEASURES AND MAINTENANCE

We recommend to open the air intakes completely and to maintain an intense fire from 10 to 20 minutes per day.

Verify the accumulation of creosote every week that you use the appliance until you know at which frequency it must be cleaned (minimum once per year).

Remove every creosote deposit in order to prevent chimney fires.

The cleaning of the heat exchanger, of the chimney flue pipe and of the pulling fan, if necessary, is particularly important at the end of each winter season in order to reduce the corrosion made during the summer months and caused by the accumulation of ashes (they must always be in good condition.)

Do not alter or modify the air intakes of the appliance in order to get a stronger fire.

To clean the glasses, J.A. Roby Inc. recommends using products sold for this purpose or an oven cleaner. Avoid cleaning with abrasives or when the glass is hot.

#### In case of a glass replacement:

Remove the screws that retain the glasses and then, the fragments of glasses. Check if the seal cords are damaged.

If so, replace them by a  $\frac{1}{2}$  inch ceramics cord and replace the broken glasses by VITROCERAMICS glasses of 5mm.

Cut the glass edge 3mm smaller on each side, so that the asbestos cord can be slipped on the edge of the glass at the time of its installation. Fix the glass by screwing it.

Contact your retailer to obtain any information you might need for the replacement of the glasses.

### DO NOT USE SUBSTITUTES.

## **INTERCHANGEABLES PARTS LIST**

BRICK PIPES GLASSES BRICKS SUPPORTS DOOR HANDLE APPLIANCE DOOR FAN SEALING CORDS THERMODISC DAMPER MOTOR TRANSFORMATOR THERMOSTAT BUTTERFLY VALVE AIR ENTRY ROD

\* TO ORDER PARTS, PLEASE CONTACT YOUR AUTHORIZED RETAILER.



## LIMITED LIFE WARRANTY

*J.A. ROBY INC.* warrants for life (following conditions written in the present manual) its high quality appliances against all manufacturing defectiveness. This warranty is only valid for the first buyer of the appliance with a purchase proof and the serial number of the appliance.

This warranty is valid only for a normal residential utilisation. All damages caused by a misuse, a wrong installation, a wrong maintenance, a negligence or an accident during transportation are not covered by this warranty.

This warranty does not cover scratches, corrosion or discoloration caused by excessive heat, abrasives and chemical cleaners. All defectiveness or damage caused by the use of parts other than the manufacturer's original parts will automatically cancel this warranty.

This warranty is subject to the following exceptions: glass, paint, firebricks, door's plating, decorations, ceramic cord and installation. The fans and electrical parts are covered by a 90 days warranty (from invoice date).

The 1<sup>st</sup> year, J.A. Roby Inc. engages to undertake the necessary repairs without additional charges. The appliance must be sent to our manufacture, located at 490, rue de l'Argon, Québec (Québec) G2N 2C9. The owner must prepay transportation charges. J.A. Roby inc. will NOT accept any transportation charges.

The 2<sup>nd</sup> year, J.A. ROBY Inc. assume 50% of repairs according to the above conditions. The 3<sup>rd</sup> year, J.A. ROBY Inc. assume 45% of repairs according to the above conditions. The 4<sup>th</sup> year, J.A.ROBY Inc. assume 40% of repairs according to the above conditions. Subsequent years, J.A.ROBY Inc. assume 30% of repairs according to the above conditions.

You MUST return this card in order to register your appliance for the Warranty.

If your appliance has defectiveness, contact immediately your J.A. Roby distributor whom will guide you.

Before sending a product or a part at our manufacture, you must receive an authorization number from your sale representative or your J.A. Roby distributor. All merchandise sent without authorization will not be accepted and will be returned to the shipper.

#### WARRANTY CARD

APPLIANCE MODEL:	
DATE OF PURCHASE:	
STORE:	
	SERIAL #:
NAME:	
ADDRESS:	
PROVINCE:	POSTAL CODE:
INSTALLED BY:	
BUYER'S SIGNATURE:	