



# OWNER`S MANUAL

## OIL BURNING STOVE YUKON

Verified and tested following  
CAN/CSA B140.3 et UL 896 standards by:

**Intertek Testing Services  
Warnock Hersey**



Manufactured by:

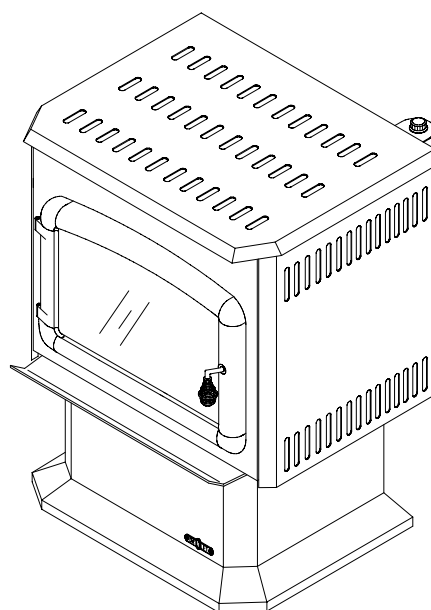


1700 Léon-Harmel  
Québec, (Québec)  
G1N 4R9

[www.drolet.ca](http://www.drolet.ca)

Tel. : (418) 527-3060

Fax : (418) 527-4311



**READ THESE INSTRUCTIONS AND SAVE FOR FUTURE REFERENCE**

## TABLE OF CONTENT

<b>TECHNICAL DATA</b> .....	<b>2</b>
<b>INSTALLATION INSTRUCTIONS</b> .....	<b>3</b>
POSITIONING THE STOVE .....	3
CHIMNEY INFORMATIONS .....	4
CONNECTING THE STOVE TO THE CHIMNEY .....	5
LEVELLING THE STOVE .....	6
FIXING THE STOVE TO THE FLOOR.....	6
CONNECTING THE STOVE TO THE OIL TANK.....	7
MEASURING AND ADJUSTING THE DRAFT .....	8
<b>OPERATING INSTRUCTIONS</b> .....	<b>9</b>
COMBUSTIBLE .....	9
LIGHTING .....	9
CHANGING THE INTENSITY .....	10
TURNING THE STOVE OFF .....	11
MAINTENANCE.....	11
<b>FREQUENTLY ASKED QUESTIONS</b> .....	<b>12</b>
<b>TROUBLE SHOOTING</b> .....	<b>20</b>
<b>LIMITED WARRANTY</b> .....	<b>30</b>

## TECHNICAL DATA YUKON OIL BURNING APPLIANCE

<b>COMBUSTIBLE :</b>	<b>OIL N° 1</b>		<b>OIL N° 2</b>	
<b>HEAT INPUT :</b>	kW	BTU/h	kW	BTU/h
Minimum :	4,8	16 600	3,7	12 800
Maximum :	10,7	36 800	10,3	35 550
<b>FLOWRATE :</b>	cc/min	litres/h	cc/min	litres/h
Minimum :	7,8	0,47	5,8	0,35
maximum :	17,3	1,04	16,1	0,97
<b>MINIMUM DRAFT REQUIRED :</b>	0,05 INWC		0,05 INWC	
<b>EFFICIENCY :</b>	%		%	
with fan :	77		74,5	
without fan :	73		72	

### CLEARANCES TO COMBUSTIBLES

	mm	in
Back	180	7
Side	150	6
Corners	150	6
Top	915	36

A MINIMUM CLEARANCE OF 9" (230 mm)  
FROM PIPE TO COMBUSTIBLES SHOULD BE  
ALLOWED.

### DIMENSIONS

	mm	in
Height :	745	29 ¼
Width :	620	24 ½
Depth :	675	26 ½
Flue pipe diameter:	130	5
Burner diameter :	200	8
Glass ( 3 ) :	144 x 264	5 <sup>11/16</sup> x 10 <sup>13/32</sup>
Weight :	84 kg	185 lbs

# INSTALLATION INSTRUCTIONS

## POSITIONING THE STOVE

- Position the stove as close as possible to the chimney.
- Many configurations are possible, the most frequent are illustrated in figures 1, 2 and 3.
- Respect the clearances indicated on page 1. They reflect Canadian and American safety standards.
- Always respect the clearances specified by the pipe manufacturers. Larger clearances always prevail.

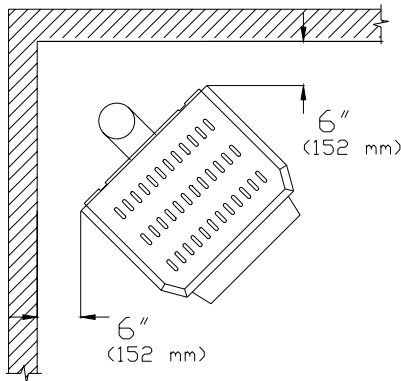


Figure 1 : CORNER INSTALLATION

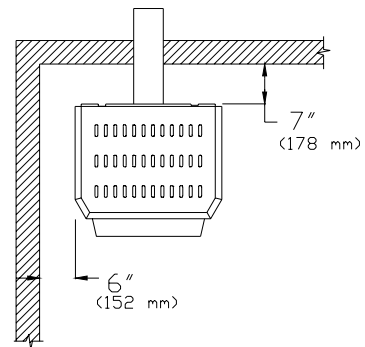


Figure 2 : PARALLEL INSTALLATION

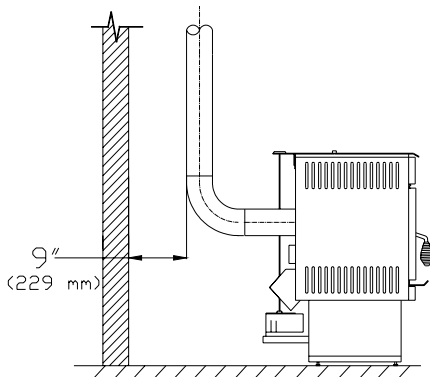


Figure 3 : WALL INSTALLATION

Table 1 : CLEARANCES TO COMBUSTIBLES

	mm	in
Back	180	7
Side	150	6
Corners	150	6
Top	915	36
Flue Pipe	230	9

- **IMPORTANT:** It is essential to ensure that the room in which the stove is installed is sufficiently ventilated to provide an adequate air supply.

THE BURNING OF ONE LITRE OF FUEL (OIL) REQUIRES APPROXIMATELY 30 M<sup>3</sup> OF AIR AND WILL PRODUCE ABOUT 0.8 KG OF WATER VAPOR AND 9 M<sup>3</sup> OF CARBONE DIOXIDE AND ATMOSPHERIC NITROGEN. A SOURCE OF AIR COMING FROM OUTSIDE THE HOUSE IS NECESSARY TO REPLACE COMBUSTION AIR. THIS IS ESPECIALLY TRUE IF YOUR HOUSE IS NEW AND WELL INSULATED.

# CHIMNEY INFORMATIONS

- Before you hook up the stove, inspect the chimney to ensure that it is in good condition.
- Your stove is approved on factory built *type A* or *type L* chimney. The chimney has to be well insulated; a chimney with a cold internal surface can prevent a good draft and create condensation.
- Chimney sections must be of equal diameter. A 5" factory built chimney is required. A larger diameter will have a greater volume and will be more difficult to heat. This can lead to draft problems.
- Masonry chimneys are often oversized. You must insert a 5" stainless steel liner in your oversized masonry chimney in order to reduce its internal diameter to 5 inches.
- The chimney should be at least 15' high (including stove pipe sections). The chimney has to extend at least 3' above the point where it comes out of the roof and at least 2' higher than the tallest roof point or any structure within a horizontal distance of 10'.

- **MINIMUM CHIMNEY HEIGHT :**  
The height of the chimney should be at least 15' (4.6 m).

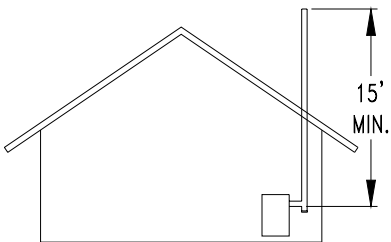


Figure 4: MINIMUM CHIMNEY HEIGHT

- **CLEARANCES WITH THE ROOF TOP AND STRUCTURES NEARBY:**  
The chimney shall extend at least 2' (0,6 m) above the highest roof point or any structure within a horizontal distance of 10' (3,05 m).

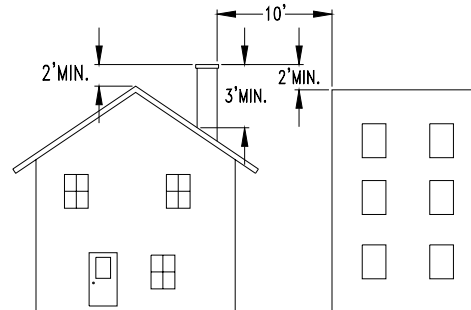


Figure 5: CHIMNEY CLEARANCES

- **CLEARANCE FROM THE ROOF :**
- The chimney shall extend at least 3' (0,91 m) above the point where it comes out of the roof and at least 2' higher than the tallest roof point or any structure within a horizontal distance of 10'. ref.: standard B-139 - 4.2.2.11.

**YOUR STOVE SHALL BE CONNECTED TO A CHIMNEY WHICH WILL PROVIDE AN ADEQUATE DRAFT AT ALL TIMES TO ENSURE SAFE AND PROPER OPERATION OF THE BURNER**

# CONNECTING THE STOVE TO THE CHIMNEY

- The combustion residues are vented at the back of the stove. The female part of the black pipe connector has to be inserted in the flue outlet of the stove. Secure all connections with 3 metal screws, positioned at a 120° distance from one another.
- The connection between the black pipe and the chimney has to be perfectly airtight.
- A maximum horizontal length of 8 feet is allowed. Make sure you have a minimum slope of 1/4" per foot.
- Do not use more than two 90° elbows in your connections.
- It is strictly forbidden to pass through combustible materials walls, floors, or ceilings with a black pipe connector.

## DIRECT HORIZONTAL CONNECTION :

You can connect your stove to the chimney using only a horizontal black pipe connector.

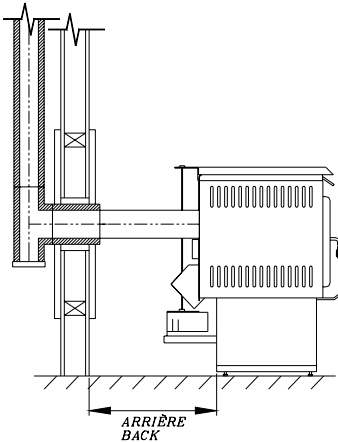


Figure 6: DIRECT HORIZONTAL CONNECTION.

## CEILING CONNECTION :

If your chimney starts at the ceiling level, use one 90° elbow and the necessary black pipe sections to reach the chimney.

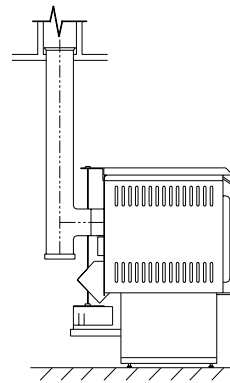


Figure 7: CEILING CONNECTION.

- THE CHIMNEY MUST NOT BE SHARED WITH OTHER APPLIANCES.
- FIX THE BLACK PIPE CONNECTORS TOGETHER WITH METAL SCREWS.
- MAKE SURE YOU RESPECT A MINIMUM SLOPE OF 1/4" PER FOOT OF HORIZONTAL PIPE LENGTH.
- RESPECT CLEARANCES TO COMBUSTIBLES VERY CAREFULLY. THEY ARE PRESCRIBED BY THE PIPE MANUFACTURER.
- PIPE CLEARANCES TO COMBUSTIBLES MAY VARY DEPENDING ON THE TYPE AND THE MANUFACTURER.

## VERTICAL CONNECTION :

It is recommended not to use more than two (2) 90° elbows when connecting your stove to the chimney. Otherwise, draft problems may occur.

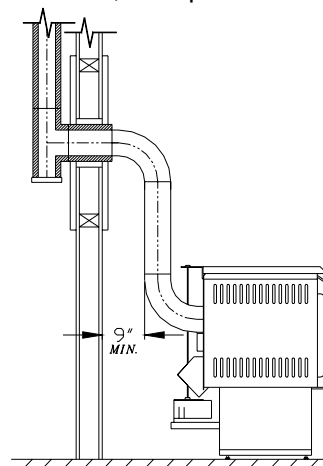


Figure 8: VERTICAL CONNECTION.

## LEVELLING THE STOVE

- Now that the stove is into place and properly hooked up to the chimney, you have to adjust the level of the burner.
- Put the level on the burner's rim, parallel to the door. (Figure 9A). Screw or unscrew the adjustable threaded legs to level the burner. Use a 7/16" or 10 mm key.
- Put the level on the burner's rim, parallel to the sides. (Figure 9B). Screw or unscrew the adjustable threaded legs to level the burner. Use a 7/16" or 10 mm key

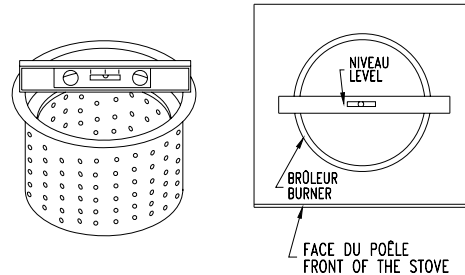


Figure 9A: LEVELLING THE BURNER

### IMPORTANT :

IT IS VERY IMPORTANT THAT THE BURNER ALWAYS BE LEVEL TO ALLOW A PROPER OIL DISTRIBUTION INSIDE THE BURNER AND A PROPER OIL VAPOR DISTRIBUTION THROUGH THE CATALYTIC RINGS.

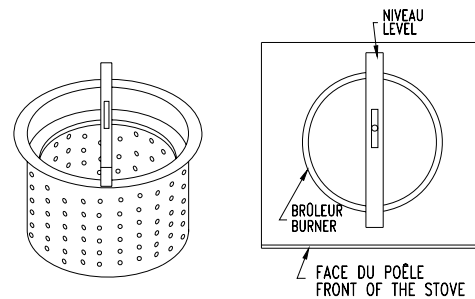


Figure 9B: LEVELLING THE BURNER

## FIXING THE STOVE TO THE FLOOR

- The stove must be fixed in its location using the two fixation brackets. Install the brackets on the two adjustable back legs. (figure 11)
- If the floor is made of combustible material, it is preferable to install the stove on a non combustible surface that covers an area at least equal to the size of the stove.

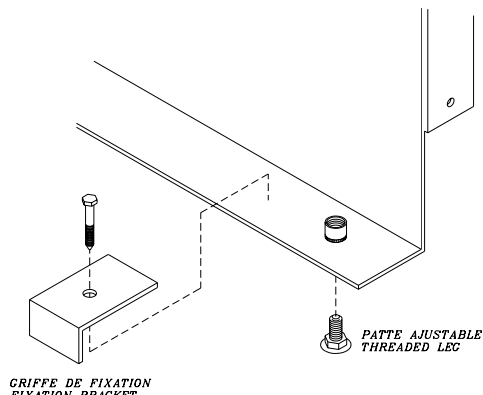


Figure 10: INSTALLATION OF FIXATION BRACKETS

# CONNECTING THE STOVE TO THE OIL TANK

- Make sure that the oil tank is 12" (305 mm) higher than the carburetor. This is very important, since the stove is gravity fed.
- Use only copper piping to connect the tank to the stove.
- Make sure that there is a continuous slope going from the tank to the stove.
- A 1/4" slope per foot is needed on the tank itself, from front to back. This will keep residue accumulations at the back of the oil tank. Otherwise, residues could clog the oil line.
- When the tank is installed outside the house, it is always preferable to use oil #1 in order to avoid viscosity problems.

NOTE : THE TANK SHALL BE LOCATED IN AN AREA WHERE IT WILL NOT BE EXPOSED TO THE DIRECT RAYS OF THE SUN OR ADJACENT TO ANY SOURCE OF INTENSE HEAT.

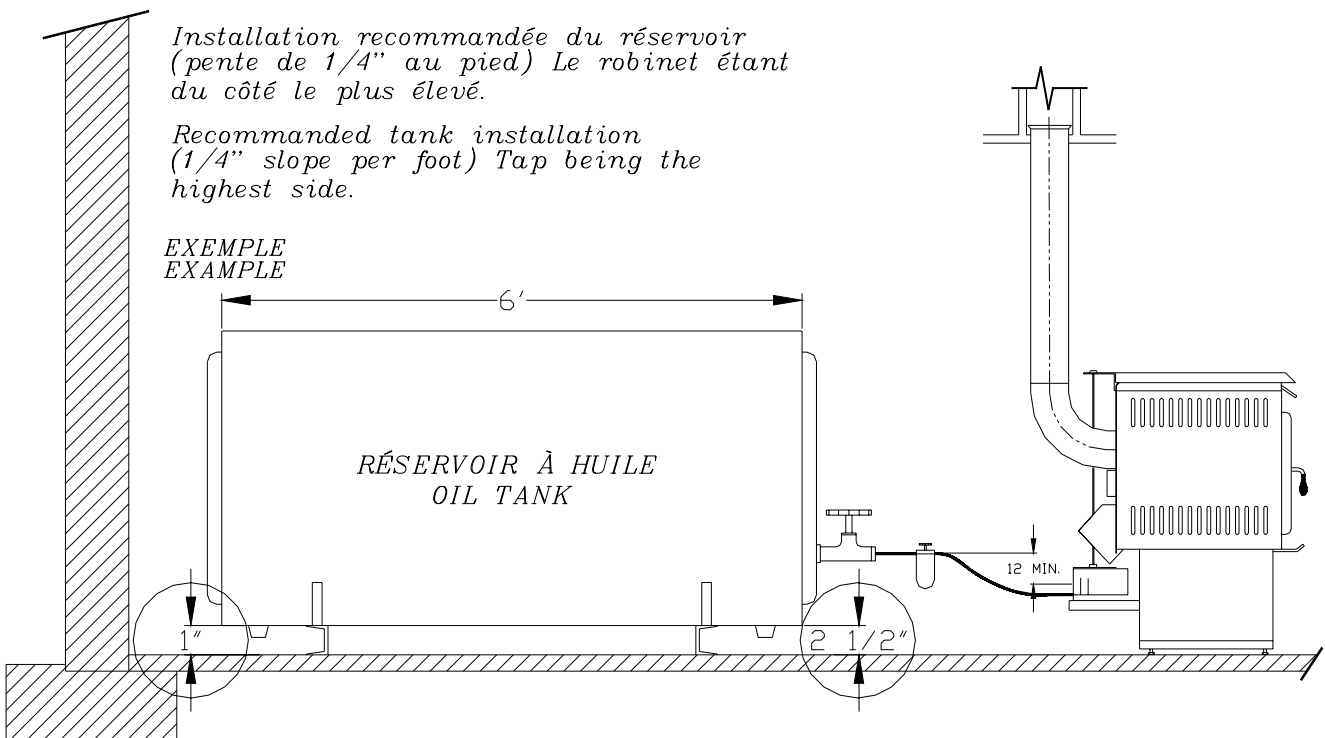


Figure 11 : OIL TANK CONNECTION



# MEASURING AND ADJUSTING THE DRAFT

- Your stove operates with a natural draft, created by the ascension of combustion gases in the chimney. This movement creates a suction effect in the stove and forces ambient air to pass through the perforations in the burner. That air is needed for combustion.
- To make sure the stove will function properly, it is essential that a draft reading be taken. The draft is measured in inches of water column using a manometer. Your qualified technician should have this tool.
- The minimum draft requirement is 0,05 INWC. This is indicated on page one of the manual. The draft has to be attained when the oil flow control knob is set at position #1.
- The draft can be taken using the hole located on the stove's cooking surface, or using the opening on the draft regulator (usually plugged by a rubber cap). The hole on the cooking surface is the best area.

**IMPORTANT : ALWAYS MEASURE THE DRAFT WITH ALL AIR-MOVING EQUIPMENT OPERATING (RANGE HOOD, BATHROOM FAN, AIR EXCHANGER, DRYER, ETC.)**

ref. : standard CAN/CSA B-139 art. 4.1.5.

## DRAFT REGULATOR

- An excessive draft is just as bad as one that is too low.
- The regulator at the back of the stove controls the draft if it becomes excessive.
- If the draft exceeds 0.08 INWC, the draft regulator needs to be adjusted.

To adjust the draft regulator, you have to screw or unscrew the counterweight located on the regulator. If the regulator is open, it lowers the draft. If it is closed, it increases it.

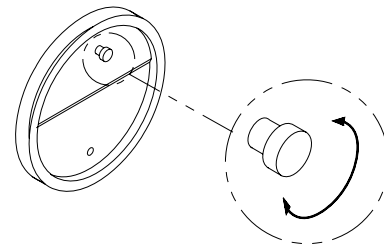


Figure 12: DRAFT REGULATOR

THE ONLY RIGHT WAY OF MEASURING THE DRAFT IS BY USING A MANOMETER THAT GIVES A READING IN INCHES OF WATER COLUMN. ANY OTHER METHOD (CANDLE, MATCHES, ETC.) ARE UNRELIABLE.

**INSTALLATION OF YOUR STOVE SHALL BE IN ACCORDANCE WITH THE CAN/CSA B-139 (INSTALLATION CODE FOR OIL-BURNING EQUIPMENT) IN CANADA AND THE NFPA 31 STANDARD (NATIONAL FIRE PROTECTION ASSOCIATION STANDARD FOR OIL-BURNING EQUIPMENT) IN THE UNITED STATES.**

THE INSTALLATION SHOULD BE PERFORMED BY A QUALIFIED TECHNICIAN, MEMBER OF A RECOGNIZED ASSOCIATION IN YOUR AREA.

# OPERATING INSTRUCTIONS

## COMBUSTIBLE

- Your stove has been designed to work with oil #1 or #2. **DO NOT USE GASOLINE, CRANKCASE OIL OR ANY OIL CONTAINING GASOLINE.** The manufacturer declines all responsibility regarding damages caused by the use of other combustibles.
- Make sure to use oil without impurities which may plug the filters or the carburetor (valve). Impurities will cause an improper combustion.

## LIGHTING

### BEFORE LIGHTING THE STOVE:

- Make sure that :
  - The tank is full;
  - The taps are open;
- Make sure that the (3) rings are in the right position. Each of them is stamped with the letter A, B, or C (figure 13).
- Make sure that the oil flow control knob is set at « 0 » (figure 14B).
- If not already done, arm down the carburetor's lever located behind the stove (figure 14A).
- Wait for the carburetor to fill up with oil and let the level stabilize.
- **BEFORE ATTEMPTING TO LIGHT YOUR STOVE, MAKE SURE THAT THE OIL FLOW CONTROL KNOB IS SET AT "0".**

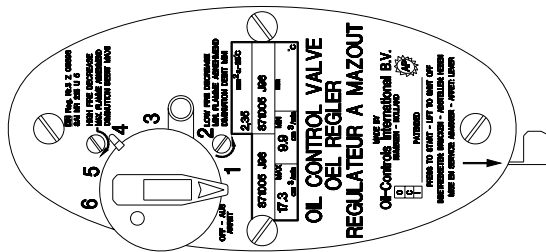


Figure 14B: CARBURETOR (VALVE)

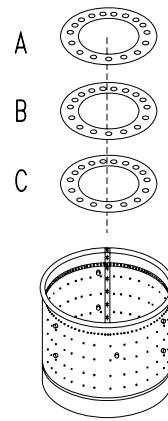


Figure 13: BURNER RINGS POSITION

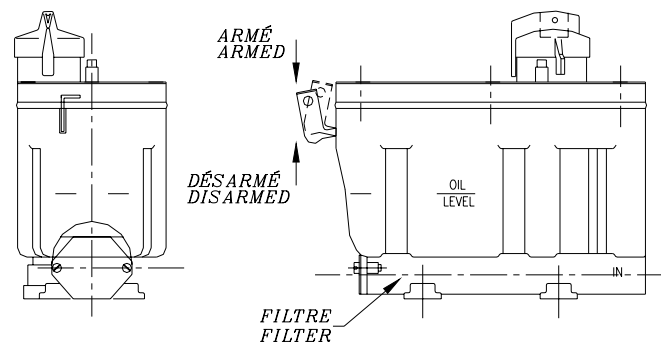


Figure 14A: ARMING / DISARMING THE CARBURETOR (VALVE)

## LIGHTING (CONT'D)

- Set the oil flow control knob at "1". As soon as the oil starts flowing into the burner, set it back to "0".
- Open the door and pour 2 to 3 ounces (app. 75 ml) of lighting gel or wood alcohol into the burner.

**NOTE : USING LIGHTING GEL IS BETTER AND SAFER.**

- With a long wood match or a BBQ lighter, ignite and close the door. The burning gel will allow the burner and exhaust system to warm up.
- After a few minutes (before the fire goes out), set the oil flow control knob at "1".
- Increase the oil flow by one position every ten minutes until you reach the desired intensity.

Note : Never leave matches, paper, or other materials in the burner.

**IF LIGHTING FAILS, ALWAYS WAIT FOR THE BURNER TO COOL DOWN TO ROOM TEMPERATURE BEFORE USING WOOD ALCOHOL AGAIN.**

**IF, FOLLOWING A LIGHTING FAILURE, THE BURNER FINDS ITSELF WITH AN EXCESS QUANTITY OF OIL, ALL OF THE OIL MUST FIRST BE REMOVED BEFORE LIGHTING THE STOVE AGAIN.**

## CHANGING THE INTENSITY

- Waiting 10 minutes before increasing the oil flow by one position will allow the flame to stabilize and will prevent soot build-up.
- No waiting is needed when decreasing the oil flow.

## TURNING THE STOVE OFF

- Set the oil flow control knob to position "0".
- If you plan on keeping the stove off for a long period of time, it is recommended that you disarm the carburetor's lever and close the taps on the oil line.

**ALWAYS KEEP THE CARBURETOR SHUT OFF WHEN THE BURNER IS NOT OPERATING**

## MAINTENANCE

### ONCE A WEEK :

- Clean the burner oil inlet tube with the cleaning tee :
  - Push the rod of the cleaning tee toward the inside of the burner while turning it at the same time.
  - Move back and forth 2 or 3 times;
  - Pull it back into place to finish the operation.

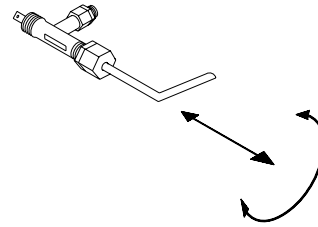


Figure 15 : CLEANING TEE

**WHEN YOUR STOVE IS WORKING, ALWAYS KEEP THE CLEANING TEE LEVER PULLED BACK INTO PLACE.**

### ONCE A MONTH :

- Clean the following parts with a steel wool;
  - the burner;
  - the burner rings.

### AT THE BEGINNING OF EACH HEATING SEASON :

- Clean the carburetor's filter and replace the tank's filter;
- Inspect the firebox through the opening of the rear flue outlet.;
- Clean the chimney and pipe connectors.

**MAKE SURE THAT EVERYTHING IS CLOSED BEFORE STARTING THE CLEANING PROCEDURES.**

### IF NECESSARY :

- Clean the door glasses.
- Always clean the glasses when the stove is cold. Use products specifically designed for this purpose or a water and vinegar solution.

### REPAIRING

- Ask your Drolet dealer to provide you with the appropriate replacement (Borofloat) glass 3.3mm. Do not use substitute materials.
- To replace the glass, remove the screws of the glass retainers inside the door. Remove the retainers and replace the damaged piece with a new one. Reinstall glass retainers and screws.
- If the door gasket is damaged, replace it with an identical one. To get a new gasket, refer to your Drolet dealer.

# FREQUENTLY ASKED QUESTIONS

## CAN I CONVERT MY STOVE FROM A YELLOW FLAME BURNER TO A BLUE FLAME BURNER?

Your stove has been tested and certified according to North-American standards with a specific burner, which produces a yellow or blue flame effect. It is therefore strictly forbidden to bring any modification to your stove. Otherwise, your insurance coverage could cease and your warranty would be automatically nullified.

## CAN MY STOVE FUNCTION WITHOUT ELECTRICITY?

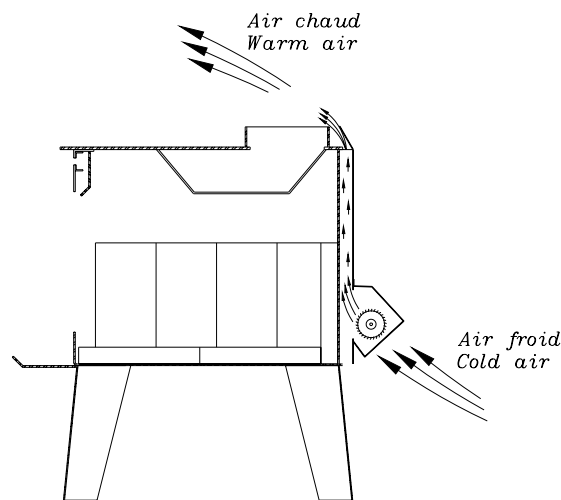
Absolutely. Since the stove is gravity fed, no electricity is required.

**Exception #1:** If the oil tank is lower than the stove and that an electric pump is needed to bring the oil to the burner, you will not be able to operate the stove without electricity, unless you use a generator to activate the pump.

**Exception #2:** The optional blower and the wall thermostat kit both possess components that run on electricity. You will not be able to use these options without electricity.

## WHY SHOULD I INSTALL A BLOWER?

A blower can be installed at the back of your DROLET stove. This option enables you to redistribute into a room the heat trapped at the back of your stove. By forcing hot air toward the front, the blower enables you to extend the radiation power of your stove. If you do not have a blower and would like to purchase one, please consult our **accessories** section at [www.drolet.ca](http://www.drolet.ca)



## **DO I NEED A FLOOR PROTECTION?**

You do not need a floor protection if your stove already sits on a non-combustible surface. Furthermore, it is not necessary to install a floor protection if your stove sits on a wood floor. However, any floor that is made of combustible synthetic material (ex: carpet) needs to be covered with a floor protection. In all cases, your best bet is prudence. Everywhere there is fire, there is a risk.

## **IS IT POSSIBLE TO REDUCE THE MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS?**

*Before you read this section, please take note that the information supplied in the table below is based on Canadian standards and may not apply to other countries.*

The minimum clearances can be reduced by installing a protective shield. The shield can be made of various non-combustible materials, such as ceramic, brick or metal. After installing a heat shield, the minimum clearances indicated on the stove's certification plate can be reduced as summarized in the table below:

TYPE OF PROTECTION	Percentage of clearance reduction using shielding	
	Sides and back	Top
Sheet metal, with minimum thickness of 0,013" (0,33mm), spaced out at least 1" (25.4mm) by non-combustible spacers.	67%	50%
Ceramic tiles, or an equivalent non-combustible material installed on a non-combustible support, spaced out at least 1" (25.4mm) by non-combustible spacers.	50%	33%
Ceramic tiles, or an equivalent non-combustible material installed on non-combustible supports with a minimum of 0,013" (0,33mm) sheet metal backing spaced out at least 1" (25.4mm) by non-combustible spacers.	67%	50%
Brick, spaced out at least 1" (25.4mm) by non-combustible spacers.	50%	N/A
Brick, with a minimum of 0,013" (0,33 mm) sheet metal backing spaced out at least 1" (25.4mm) by non-combustible spacers.	67%	N/A

**Source: CSA Standard B365-1991, Table 4, Page 27**

## **WHAT TYPE OF EXHAUST SYSTEM DO I NEED?**

Your exhaust system should be comprised of two main elements: a chimney and a connector (commonly called stove pipe). There exists two types of chimneys for oil stoves: type A and type L chimneys. The chimney is hooked up to the stove using the connector, which is made of steel with a minimum thickness of 24 ga. The connector cannot go through ceilings, closets, floors, or any other combustible material. Only type A insulated chimney can go through combustible material and out to the exterior of the house, as per the manufacturer's specifications.

## **WHAT IS THE DIFFERENCE BETWEEN TYPE A AND TYPE L CHIMNEY?**

Type A chimneys have insulation. Type L chimneys have a double wall. It is the air “cushion” that creates the insulation on a Type L chimney. Drolet recommends the use of a Type A chimney for its oil stoves.

## **WHERE CAN I FIND AN INSTALLER FOR MY OIL STOVE?**

There are many companies specializing in the installation of heating equipment, including oil burning stoves. Your dealer may have its own installation service or may be able to refer a qualified installer for your region. If your dealer cannot put you in contact with an installer, consult your local directories and look for companies specializing in “plumbing, heating, and ventilation”. Companies that provide installation and maintenance services for fuel oil furnaces can often install all kind of oil burning equipment, including oil stoves. Drolet has a database with the name of many installers across Canada. Contact us so that we verify if we can refer a qualified installer for your region.

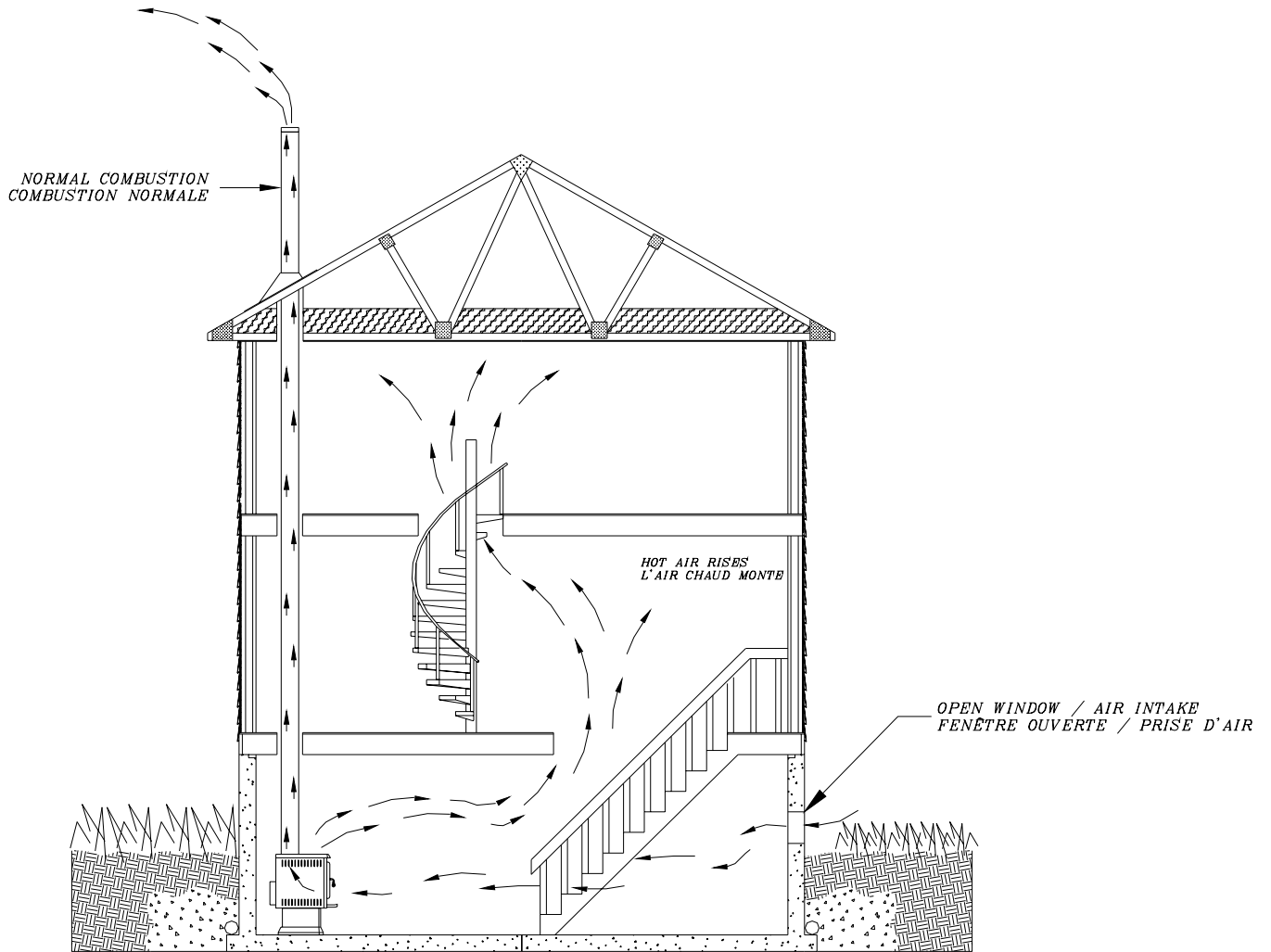
## **WHAT DO THE WORDS “DRAFT” AND “NEGATIVE PRESSURE” MEAN?**

The word “draft” refers to the hot air movement that circulates in your stove’s exhaust system, going from the stove to the outside of the house, and carrying with it the combustion residues. The draft is a natural phenomenon. Hot air weights less than cold air, causing it to rise. This is why the higher the temperature in the exhaust system, the stronger the draft. It is also important to say that the “tunnel effect” created by the exhaust system contributes to increasing the draft effect. This is why chimneys that are excessively long often create excessive draft, while chimneys that are abnormally short will have an excessively low draft.

“Negative pressure” can be seen as a “reverse draft”. That is, air will circulate from the chimney toward the interior of the house. Negative pressure is often what causes smoking problems. In general, negative pressure is the result of either one or a combination of the three factors explained below:

- 1- A cold chimney. Cold air, which is heavier than hot air, has a tendency to go down the chimney and create the effect of a “clog”. This explains why a stove that has not worked for a long time and which chimney is very cold will sometimes be hard light. (consult drawing #2C).
- 2- Negative pressure can also occur as a result of a “vacuum effect” in the room or the house. The air in a house is constantly moving. Hot air rises, cold air moves down. Air can also be expelled outside of the house with the use of air-moving equipment, such as a range hood, a air exchanger, a bathroom fan, a dryer, etc. Furthermore, air goes in and out of the house through cracks, doors, windows, etc. If air leaves a room without being replaced, a “vacuum effect” is created. Therefore, if a house is well insulated and all windows are closed, the room will source its air through the easiest alternative route, which is often your stove’s exhaust system. This creates a negative pressure in your exhaust system. You now understand why it is often suggested that a window be slightly open in the room where the stove is located. This enables the room to easily source its air outside the house without searching for an alternative route. The vacuum effect can be amplified when your stove is located in the basement. This is due to the fact that your house itself acts like a chimney. Since hot air will rise to upper floors in the house, it will “draw” air from the basement of the house. This is called the “chimney stack effect”. (consult drawings #3C).
- 3- Wind can also be a third cause of negative pressure. When your house is located near a structure which height is superior to your chimney’s, wind currents can create an interference with your chimney, leading to negative pressure problems. (consult drawing #4C and #5C).

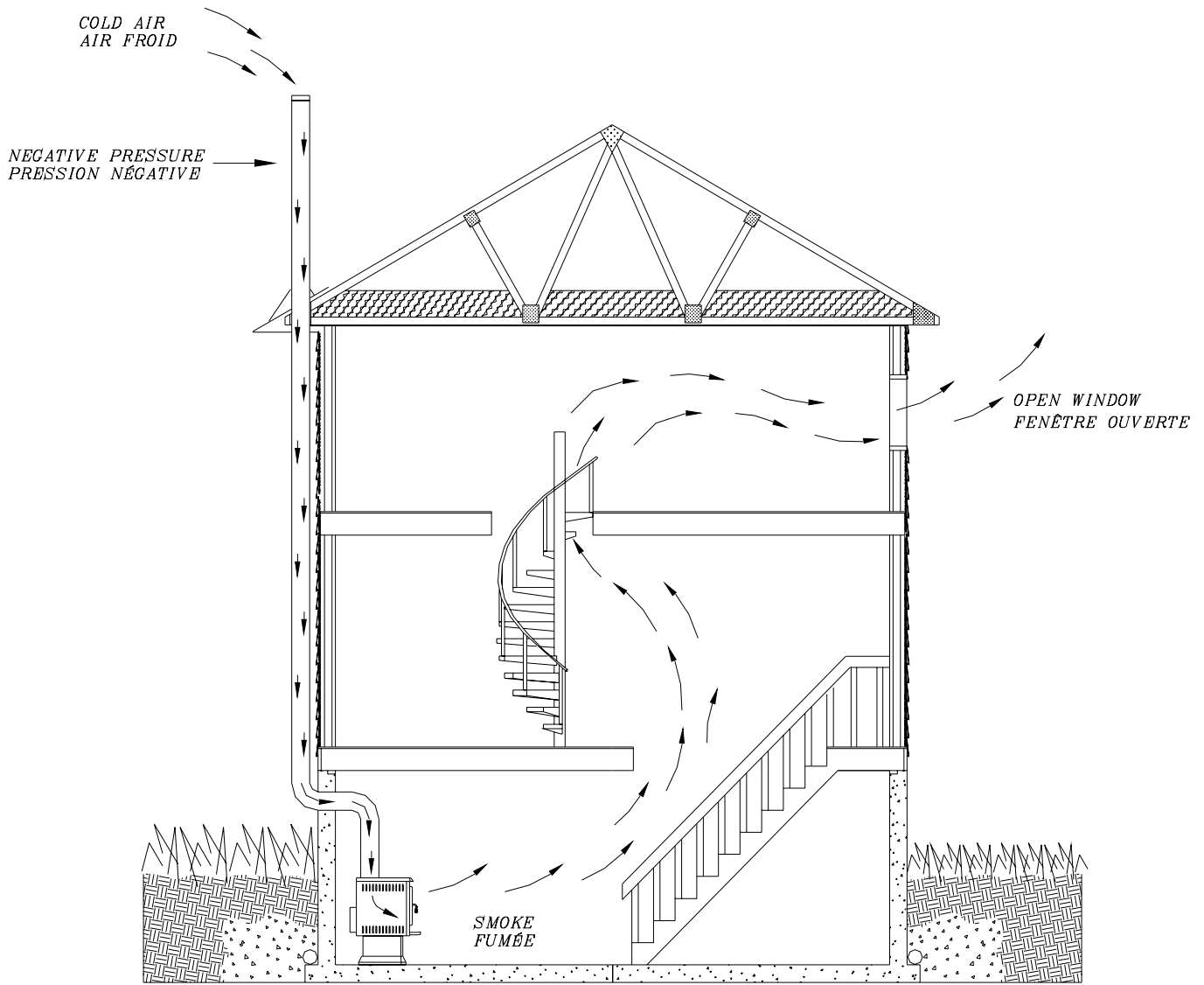
**DRAWING #1C**



**DRAWING #1C** shows a stove functioning under normal and adequate conditions. Heat rises to the upper floors and the room where the stove is located has an adequate supply of oxygen. The chimney draft is sufficient and the combustion gases are evacuated normally through the exhaust system.

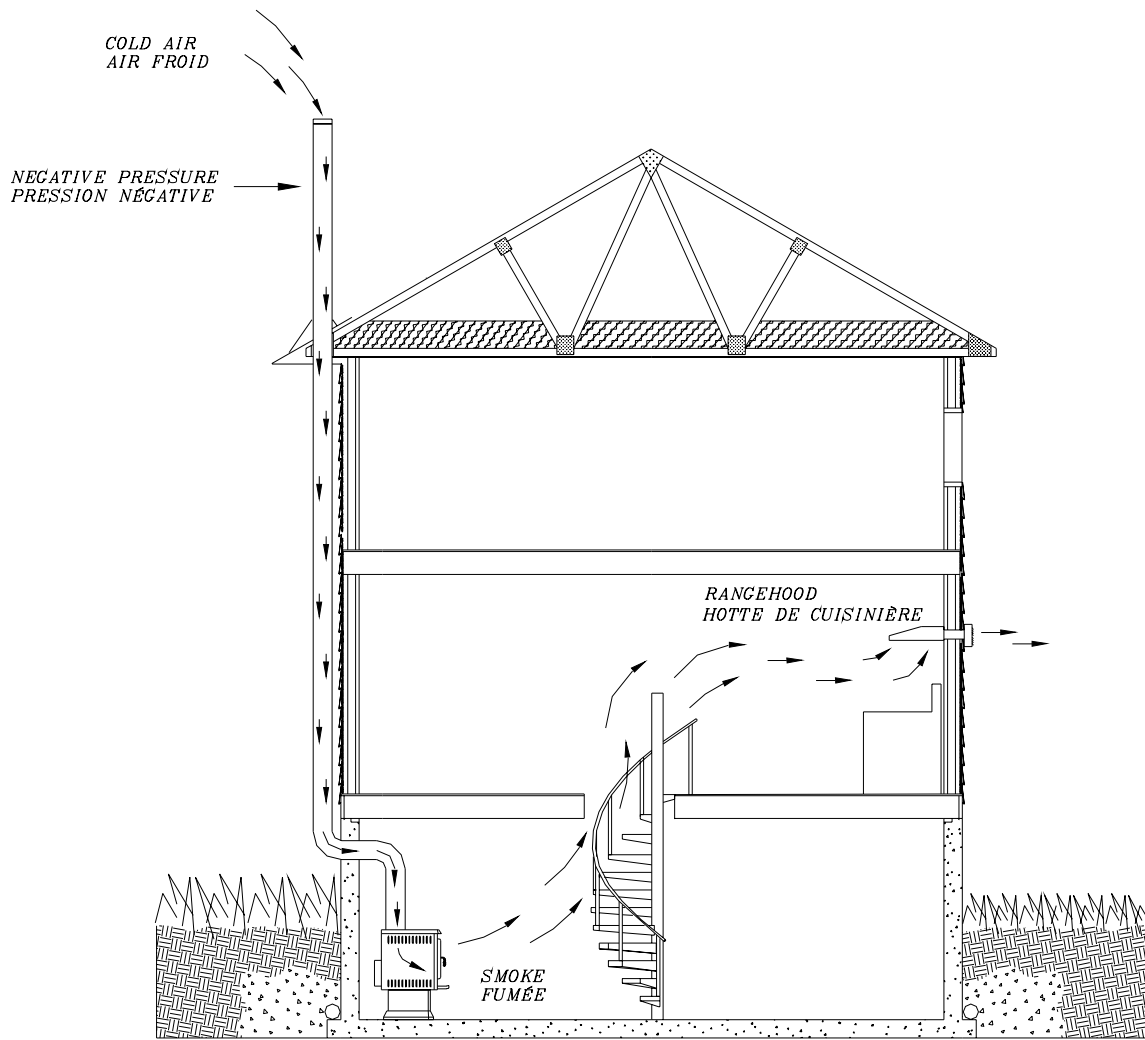


**DRAWING #2C**



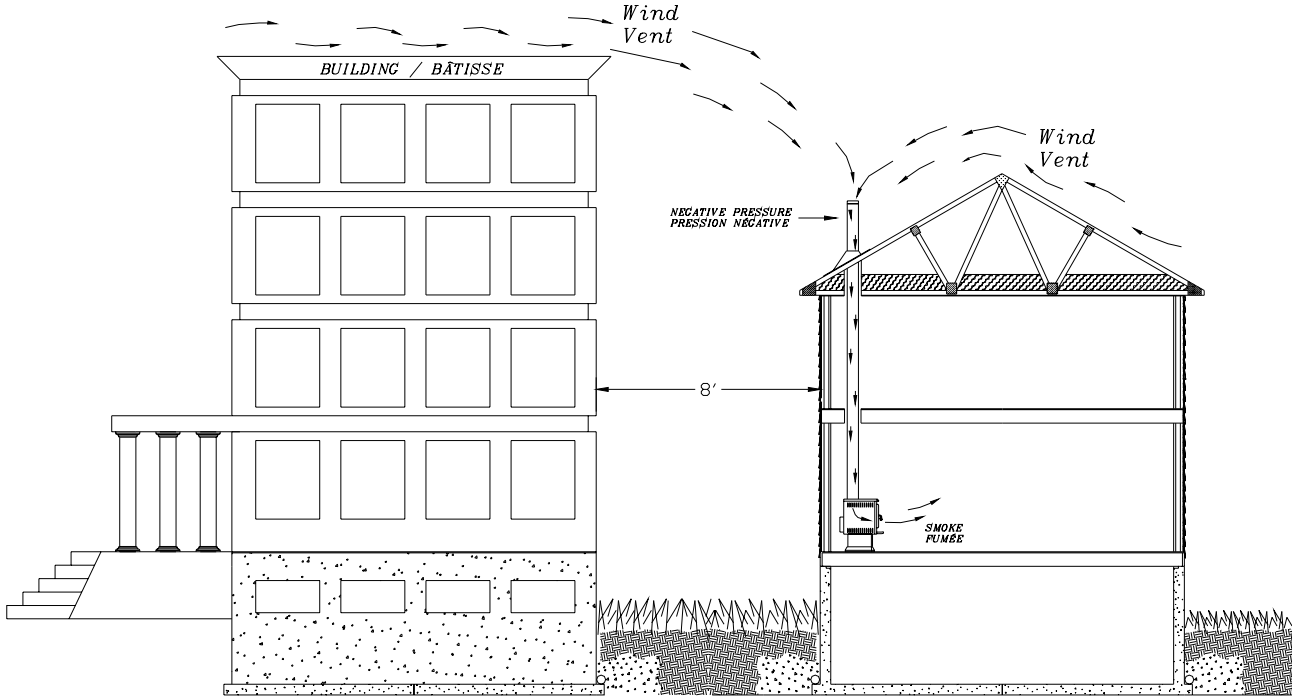
**DRAWING #2C** shows the effect of a cold chimney. Cold air creates a reverse draft (negative pressure), which causes smoking problems. This phenomenon is amplified by the fact that heat rises, which creates a draft from the basement of the house to the upper floors ("chimney stack effect").

**DRAWING #3C**



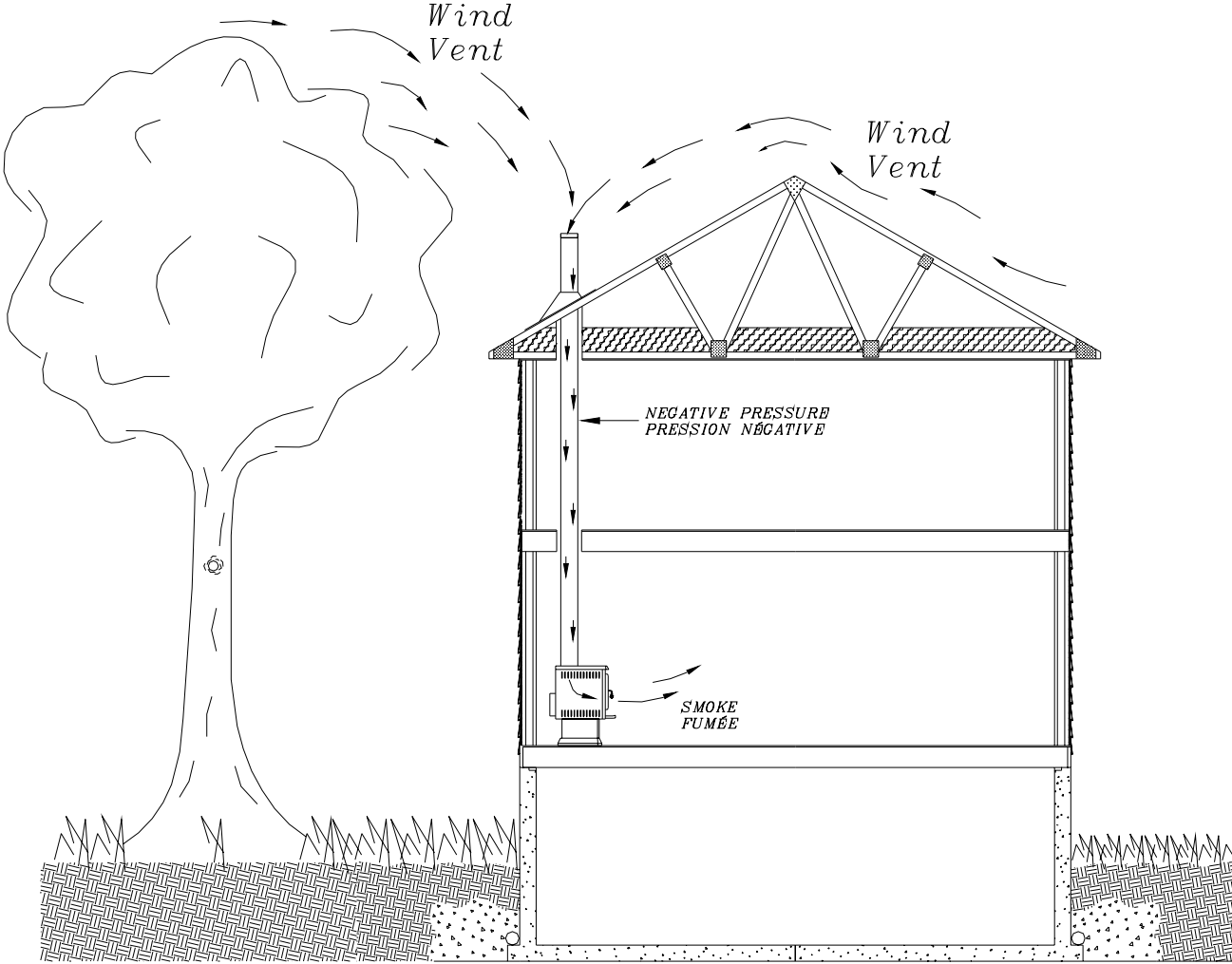
**DRAWING #3C** shows the effect of negative pressure caused by an air-moving device inside the house. In the example above, the range hood draws air from inside the house, which is replaced by air coming from the chimney. The result is a smoking problem.

**DRAWING #4C**



**DRAWING #4C** shows the negative pressure effect caused by wind, influenced by nearby structures such as a building.

**DRAWING #5C**



**DRAWING #5C** shows the negative pressure effect that can be caused by wind, influenced by nearby structures such as a tree.

## **WHEN DO I NEED TO REPLACE MY DOOR GASKET WHAT TYPE OF GASKET DO I NEED TO BUY?**

The gasket is there to insure that your stove remains air tight, which is necessary for your stove to function properly. How frequently you replace the gasket really depends on how often you fire your stove. When the gasket becomes really hard and that you notice an gap between the door and the stove, it is time to replace it. If you fire your stove on a regular basis during all winter, you may need to replace the gasket before every heating season. We strongly suggest that you use the genuine gasket supplied by the manufacturer. The genuine gasket has a better density and comes with a special adhesive. It will last much longer. Avoid liquid glue and low density gasket, with large and flabby knits. To obtain the genuine gasket replacement kit for your stove, please consult our **accessories** section at [www.drolet.ca](http://www.drolet.ca)

## **WHY DID THE STAINLESS STEEL DEFLECTOR INSIDE MY STOVE TARNISH?**

The tarnishing of the stainless steel deflector is absolutely normal. The role of this deflector is to reflect heat, as well as protect the firebox. It is not a decorative accessory. We use stainless steel because it is an extremely heat resistant material that will provide the best protection for the long term durability of your stove's firebox. The only inconvenient of stainless steel is its tendency to tarnish when it is exposed to intense heat.

# **TROUBLE SHOOTING**

## **WHY DOES THE GLASS GET SO DIRTY?**

### **Possible causes and solutions :**

- 1- The door is not properly closed or there is a gap between one of the glass lamellas. The door gasket could also be too old. The air that goes into your stove through openings (other than the openings in the burner) can cause a instability in the combustion process, resulting in sooth deposits on the glass.

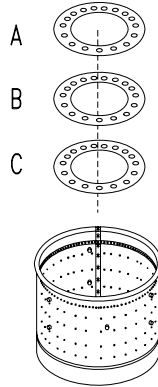
**Solution :** The door must be closed at all times. Make sure that the glass lamellas are tightly in place. Furthermore, if the door gasket is too old and does not seal the door properly, replace it.

- 2- The burst disc located on the top of the stove is not put in place properly. The air that goes into your stove through openings (other than the openings in the burner) can cause instability in the combustion process, resulting in sooth deposits on the glass.

**Solution :** Make sure that the burst disc is put in place properly. It should be even with the top of the stove.

3- The catalytic rings are not in the right position, causing instability in the combustion process.

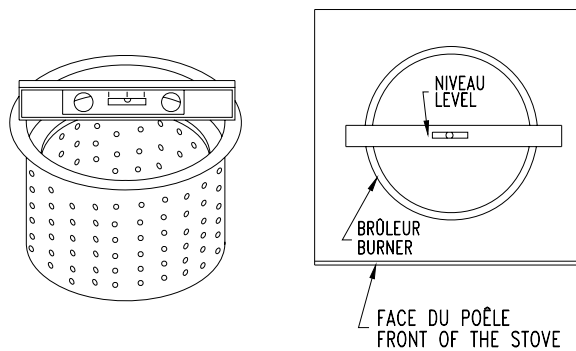
**Solution :** Each ring is stamped with the letters “A”, “B”, or “C” . The location of each ring is very important. Ring “A” is always the top ring, “B” is the middle one, and “C” is the bottom one.



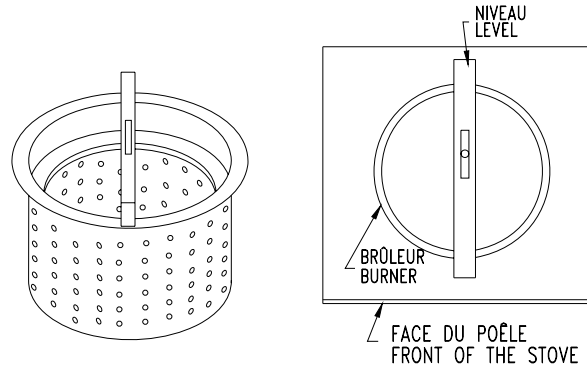
4- The burner is not level. This prevents an even dispersion of the oil on the burner surface. When too much oil is accumulated in one spot, there is not enough air to allow for a complete combustion, which creates soot deposits on the glass.

**Solution:** Make sure the burner is level. Put a level on top of the burner. Then, adjust the stove’s threaded legs accordingly.

*Step #1 : level the burner in the east/west direction.*



Step #2: level the burner in the north/south direction.



- 5- The burner is dirty. A burner that has not been cleaned on a regular basis will accumulate residues, which will end up clogging the burner holes. This causes instability in the combustion process, resulting in soot deposits on the stove's glass.

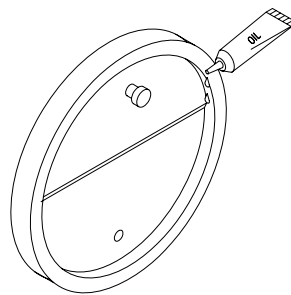
**Solution:** Visually inspect the burner on a weekly basis. Remove residues by scrubbing the burner with a steel wool. Use an industrial vacuum cleaner (ex: "Shop Vac") to collect the remaining dirt.

- 6- The oil flow has been increased to rapidly.

**Solution:** Decrease the oil flow back to position #1. Allow a few minutes for the combustion to become stable. Increase the oil flow by one position every 10 minutes until you reach the desired intensity.

- 7- The draft regulator at the back of the stove needs lubrication. If the draft regulator does not open freely, the stove may not get the air it needs to complete the combustion process and reach the appropriate draft, causing soot deposits on the glass.

**Solution :** Make sure that the draft regulator at back of the stove opens and closes freely. Apply a lubricant (ex: WD40) on moving parts.



- 8- The chimney draft is too weak. As a result, combustion residues are not properly evacuated, causing soot deposits on the glass.

**Solution #1 :** The lack of adequate draft may simply be caused by a lack of heat inside the chimney. Start the fire by pouring 2 ounces (50ml) of fire-lighting gel into the burner. Do not turn the oil on right away (leave the oil flow control knob at zero). The burning gel will allow the chimney to heat up until it reaches a temperature that will generate an adequate draft. When the burning gel's intensity starts to diminish, turn the oil flow control knob to position #1. Increase the oil flow by one position every 10 minutes until you reach the desired intensity.

**Solution#2:** The lack of adequate draft may be due to an improper adjustment of the draft regulator located at the back of the stove. The draft regulator should have been adjusted by a qualified technician when the stove was installed. If this has not been done, have a qualified technician take a draft reading and adjust the draft regulator. Your qualified technician must use a manometer to obtain a draft reading. During this procedure, the oil flow control knob must be set at position #1 and all air-moving equipment inside the house (range hood, heat exchanger, bathroom fan, etc.) must be in operation. The reading on the manometer must correspond to the minimum prescribed draft indicated on the certification plate located at the back of the stove. The prescribed draft is set at 0,05 INWC for most oil stoves. If the adjustment of the draft regulator does not increase the chimney draft, go to solutions #3 to #6.

**Solution #3:** Your stove may be located in an area where the volume of oxygen is not sufficient to allow for a complete combustion. If there is a window in the room where the stove is located, open it by at least 2 inches. If this solves the problem, it may indicate that your house is over-insulated or the room is too small. Without an additional supply of oxygen, your stove will not function normally. The ideal solution is to install a permanent fresh air intake located at a distance of 6 to 12 inches from the stove.

**Solutions #4:** Your exhaust system may be too short. In order to obtain a sufficient draft, your exhaust system must have a minimum height. A minimum height of 15 feet (from the connector at the back of the stove to the chimney cap outside the house) will be adequate in most cases. HOWEVER: remember that longer is not always better. An exhaust system that is excessively high may be difficult to pre-heat and control. If your exhaust system is too short, add some chimney sections.

**Solution #5:** Your exhaust system may be too tortuous or may not have the minimum slope required to allow for a proper draft. Your exhaust system should never have more than two 90° elbows. Furthermore, the horizontal sections of your exhaust system should be as short as possible (maximum 8') and must have a minimum upward slope of ¼" per foot.

**Solution #6:** Your chimney may be oversized. The effect of an oversized chimney is generally the reduction of the temperatures inside the chimney, due to the larger volume that needs to be heated. This weakens the chimney draft. Our oil stoves are tested to be installed on a chimney with an interior diameter of 5 inches (127mm). If you do not have a 5" chimney, you can insert a stainless steel liner inside the existing chimney in order to reduce its interior diameter to 5 inches. This will help keep chimney temperatures higher, therefore increasing the chimney draft.

## **WHY IS THERE ODORS OR OCCASIONAL SMOKING PROBLEMS?**

### **Possible causes and solutions :**

- 1- The room where the stove is located is under a negative pressure effect.

**Solution #1:** If this situation occurs when you light-up the stove, it is probably due to the fact that the chimney is very cold. Start your stove by pouring approximately 2 ounces (50ml) of fire-lighting gel into the burner. Do not turn the oil on right away (leave the oil flow control knob at zero). The burning gel will allow the chimney to heat up until it reaches a temperature that will generate an adequate draft. When the burning gel's intensity starts to diminish, turn the oil flow control knob to position #1. Increase the oil flow by one position every 10 minutes until you reach the desired intensity.

**Solution #2:** Check if this situation occurs when air-moving devices are working (range hood, heat exchanger, bathroom fan, etc.). If so, make sure you turn those systems off when you operate the stove. If this is not possible, you will need to install a permanent fresh air intake near to stove in order to replace the air that is sucked out of the house by your ventilation systems. The fresh air intake should be installed at a distance of 6 to 12 inches from the stove.



**Solution #3:** The negative pressure effect may be caused by the wind blowing into your chimney. This is often caused by the interference of nearby structures. In order to avoid such interference, your chimney should be higher (by at least two feet) than any structure located in a horizontal distance of 10 feet. Most houses located in residential areas do not have structures located within a 10 foot distance of the chimney, other than the house's own roof top. If this is your case, you must make sure that the chimney exceeds the highest roof point by at least 2 feet.

## **WHY DID THE FIRE GO OUT?**

### **Possible causes and solutions :**

- 1- The oil tank is empty and/or the taps are closed.

**Solution:** Verify that there is oil in the tank and that the taps are open. If the tank is empty, fill-it up. Then, verify that the oil reaches the burner by leaving the stove's oil flow control knob at position #1 for a few seconds. You should be able to see and touch a thin layer of oil inside the burner.

- 2- The carburetor's small float compartment is full of oil and activates the safety mechanism. This generally occurs when the oil is injected too rapidly in a new or empty carburetor. If this situation has occurred, you will not be able to operate the stove properly until all the oil is removed from the small float compartment.

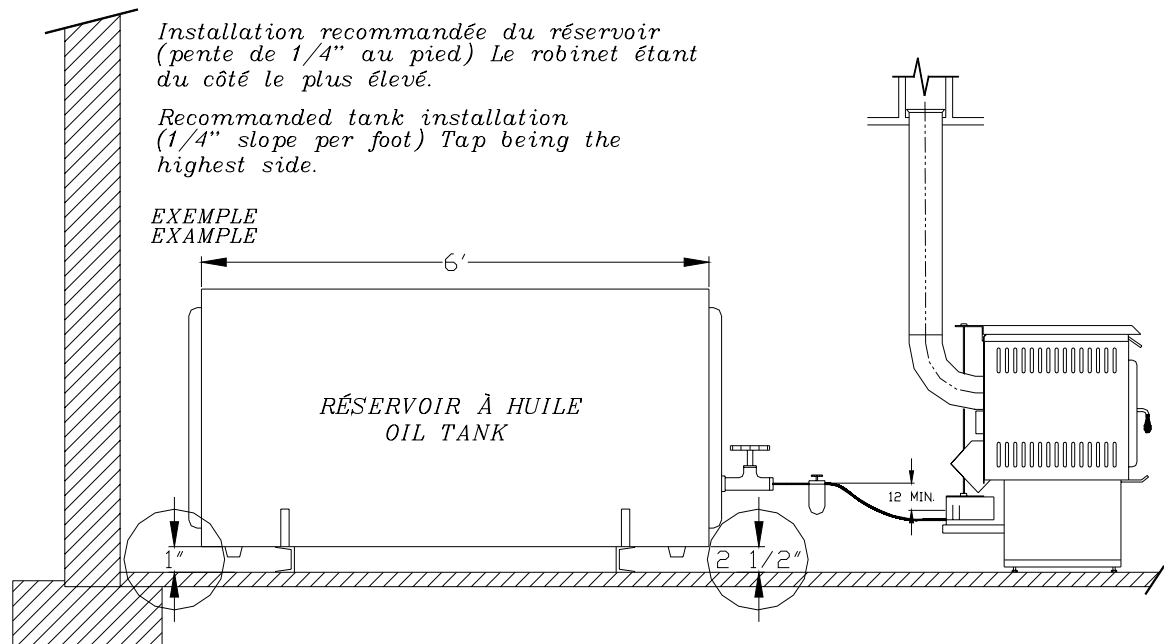
**Solution :** Remove the 4 screws on the silver data plate located on top of the carburetor. Then, remove the 3 screws that retain the top portion of the carburetor. With a needle, grab the little float located in the small compartment. Remove the oil with a sponge. **BE CAREFULL:** if you are not sure about what you are doing, consult a qualified technician. If you remove the wrong screws, you may disarrange the carburetor, which will need to be replaced.

- 3- The oil tank is located outside the house and you are burning oil #2. When the outside temperature is very cold, the flow of oil #2 can be greatly reduced. Therefore, your stove may not have the oil flow necessary to operate at its full capacity.

**Solution :** Always use oil #1 when your oil tank is located outside. Furthermore, we recommend that you use a copper pipe with a 1" diameter to link the oil tank to the house. The copper pipe must however keep a 3/8" diameter when it is inside the house.

- 4- The oil tank filter is clogged. This can occur when the filter is not periodically replaced.

**Solution:** Ideally, replace the oil tank filter at the beginning of each heating season. Furthermore, in order to avoid the risk of blocking the filter with oil tank residues, it is recommended that your oil tank be installed with a horizontal slope of at least 1/4" per foot. This will help concentrate the accumulation of residues at the back of the oil tank instead of near the tap entry.



- 5- The carburetor's filter is clogged.

**Solution :** Clean the carburetor's filter. Start by closing all taps. Remove the two screws on the small silver plate on the side of the carburetor. Then, remove the rubber joint and the nylon filter. Clean the filter with hot water. Put everything back into place.

- 6- The chimney draft is too weak. This causes the fire to slowly go out.

**Solution #1 :** The lack of adequate draft may simply be caused by a lack of heat inside the chimney. Start the fire by pouring 2 ounces (50ml) of fire-lighting gel into the burner. Do not turn the oil on right away (leave the oil flow control knob at zero). The burning gel will allow the chimney to heat up until it reaches a temperature that will generate an adequate draft. When the burning gel's intensity starts to diminish, turn the oil flow control knob to position #1. Increase the oil flow by one position every 10 minutes until you reach the desired intensity.

**Solution#2 :** The lack of adequate draft may be due to an improper adjustment of the draft regulator located at the back of the stove. The draft regulator should have been adjusted by a qualified technician when the stove was installed. If this has not been done, have a qualified technician take a draft reading and adjust the draft regulator. Your qualified technician must use a manometer to obtain a draft reading. During this procedure, the oil flow control knob must be set at position #1 and all air-moving equipment inside the house (range hood, heat exchanger, bathroom fan, etc.) must be in operation. The reading on the manometer must correspond to the minimum prescribed draft indicated on the certification plate located at the back of the stove. The prescribed draft is set at 0,05 INWC for most oil stoves. If the adjustment of the draft regulator does not increase the chimney draft, go to solutions #3 to #6.

**Solution #3:** Your stove may be located in an area where the volume of oxygen is not sufficient to allow for a complete combustion. If there is a window in the room where the stove is located, open it by at least 2 inches. If this solves the problem, it may indicate that your house is over-insulated or the room is too small. Without an additional supply of oxygen, your stove will not function normally. The ideal solution is to install a permanent fresh air intake located at a distance of 6 to 12 inches from the stove.

**Solutions #4:** Your exhaust system may be too short. In order to obtain a sufficient draft, your exhaust system must have a minimum height. A minimum height of 15 feet (from the connector at the back of the stove to the chimney cap outside the house) will be adequate in most cases. **HOWEVER:** remember that longer is not always better. An exhaust system that is excessively high may be difficult to pre-heat and control. If your exhaust system is too short, add some chimney sections.

**Solution #5:** Your exhaust system may be too tortuous or may not have the minimum slope required to allow for a proper draft. Your exhaust system should never have more than two 90° elbows. Furthermore, the horizontal sections of your exhaust system should be as short as possible (maximum 8') and must have a minimum upward slope of ¼" per foot.

**Solution #6:** Your chimney may be oversized. The effect of an oversized chimney is generally the reduction of the temperatures inside the chimney, due to the larger volume that needs to be heated. This weakens the chimney draft. Our oil stoves are tested to be installed on a chimney with an interior diameter of 5 inches (127mm). If you do not have a 5" chimney, you can insert a stainless steel liner inside the existing chimney in order to reduce its interior diameter to 5 inches. This will help keep chimney temperatures higher, therefore increasing the chimney draft.

## **WHY IS THE FLAME PATTERN UNSTABLE?**

### **Possible causes and solutions :**

- 1- The chimney is oversized. The effect of an oversized chimney is generally the reduction of the temperatures inside the chimney, due to the larger air volume that needs to be heated. This weakens the chimney draft, which can cause instability in the flame pattern.

**Solution:** Our oil stoves are tested to be installed on a chimney with an interior diameter of 5 inches (127mm). If you do not have a 5" chimney, you can insert a stainless steel liner inside the existing chimney in order to reduce its interior diameter to 5 inches. This will help keep chimney temperatures higher, therefore increasing the chimney draft and stabilizing the flame pattern.

- 2- The chimney is too long. The longer the chimney, the longer it takes to reach the adequate draft and stabilize the flame pattern.

**Solution:** Start the fire by pouring 4 ounces (100ml) of fire-lighting gel into the burner. Do not turn the oil on right away (leave the oil flow control knob at zero). The burning gel will allow the chimney to heat up until it reaches a temperature that will generate an adequate draft. When the burning gel's intensity starts to diminish, turn the oil flow control knob to position #1. Increase the oil flow by one position every 10 minutes until you reach the desired intensity. This lighting procedure should allow the chimney to heat up until it reaches a temperature that will generate an adequate draft and stabilize the flame pattern.

- 3- The flame pattern may be disturbed by the wind blowing into your chimney. This is often caused by the interference of nearby structures.

**Solution :** In order to avoid the interference of nearby structures, your chimney should be higher (by at least two feet) than any structure located in a horizontal distance of 10 feet. Most houses located in residential areas do not have structures located within a 10 foot distance of the chimney, other than the house's own roof top. If this is your case, you must make sure that the chimney exceeds the highest roof point by at least 2 feet. You can also use a chimney cap that is specifically designed to reduce the effects of wind. Your retailer will be able to provide you with the part you need.

## WHY DOESN'T MY STOVE PRODUCE ENOUGH HEAT?

### Possible causes and solutions :

- 1- The oil flow control knob is set too low.

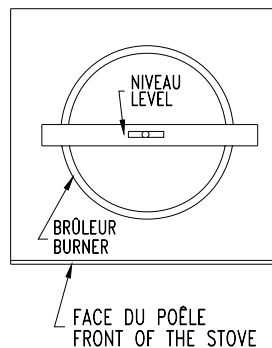
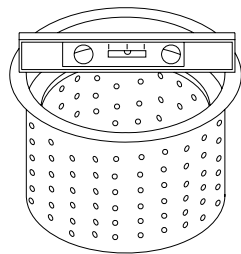
**Solution #1:** Increase the oil flow control knob by one position every 10 minutes until the desired intensity is reached. DO NOT MODIFY THE ADJUSTMENTS ON THE CARBURATOR. The adjustments on the carburetor are done at the factory level, using specialized equipment. By trying to adjust the carburetor yourself, you will worsen the problem.

**Solution #2:** Verify that the cleaning tee rod is completely pulled out toward the exterior of the burner. If the cleaning tee rod extends too far into the burner, it can overheat. This can cause the small orange rubber joint to melt and partially block the oil entry into the burner.

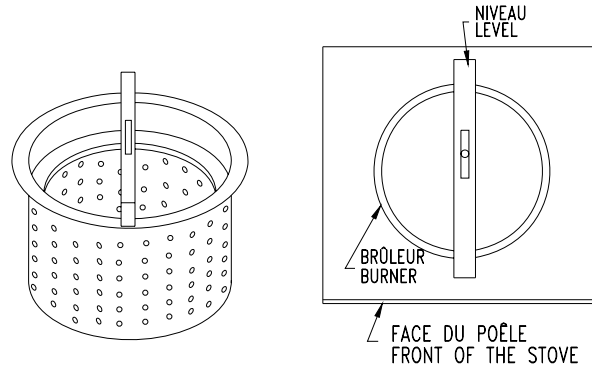
- 2- The stove is not level and the carburetor is sitting lower than the burner. Since your stove is gravity fed, it is essential that the oil be able to flow from the carburetor to the burner. For this to occur, the carburetor must be sitting at a higher level than the burner. The burner must also be level in order to allow for a uniform dispersion of the oil.

**Solution:** Make sure that the carburetor is sitting higher than the burner. Then, make sure that the burner is level. Put a level on top of the burner and adjust the stove's threaded legs accordingly.

*Step #1 : level the burner in the east/west direction.*



Step #2: level the burner in the north/south direction..

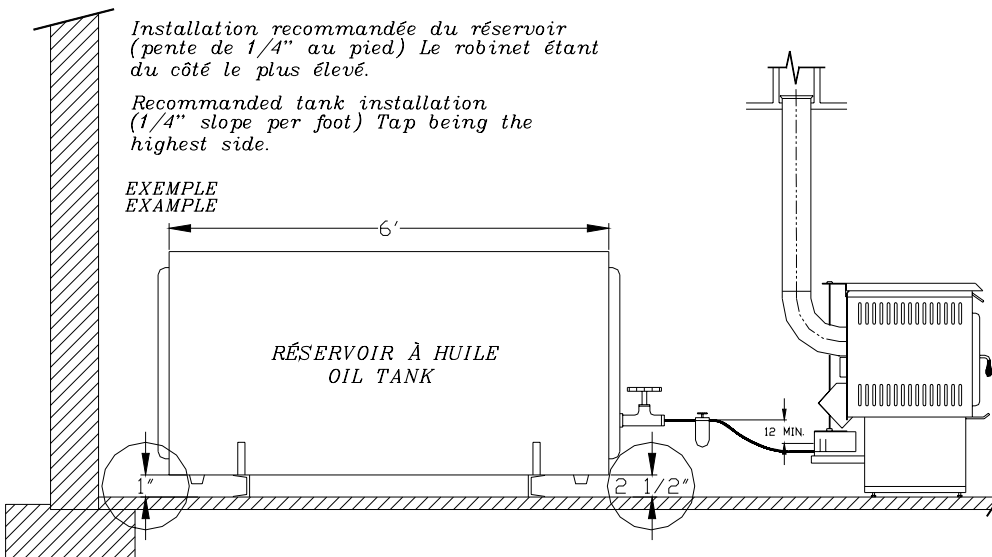


- 3- The oil tank is located outside the house and you are burning oil #2. When the outside temperature is very cold, the flow of oil #2 can be greatly reduced. Therefore, your stove may not have the oil flow necessary to operate at its full capacity.

**Solution :** Always use oil #1 when your oil tank is located outside. Furthermore, we recommend that you use a copper pipe with a 1" diameter to link the oil tank to the house. The copper pipe must however keep a 3/8" diameter when it is inside the house.

- 4- The oil tank filter is clogged. This can occur when the filter is not periodically replaced.

**Solution:** Ideally, replace the oil tank filter at the beginning of each heating season. Furthermore, in order to avoid the risk of blocking the filter with the oil tank residues, it is recommended that your oil tank be installed with a horizontal slope of at least 1/4" per foot. This will help concentrate the accumulation of residues at the back of the oil tank instead of near the tap entry.



- 4- The carburetor's filter is clogged, which reduces the oil flow.

**Solution :** Clean the carburetor's filter. Start by closing all taps. Remove the two screws on the small silver plate on the side of the carburetor. Then, remove the rubber joint and the nylon filter. Clean the filter with hot water. Put everything back into place.

- 5- The chimney draft is too weak or too strong.

**Solution #1:** In the case of a chimney draft that is too weak, the problem may simply be caused by a lack of heat inside the chimney as a result of an inadequate lighting procedure. Start the fire by pouring 2 ounces (50ml) of fire-lighting gel into the burner. Do not turn the oil on right away (leave the oil flow control knob at zero). The burning gel will allow the chimney to heat up until it reaches a temperature that will generate an adequate draft. When the burning gel's intensity starts to diminish, turn the oil flow control knob to position #1. Increase the oil flow by one position every 10 minutes until you reach the desired intensity.

**Solution #2 :** A draft that is too strong or too weak may be the result of an improper adjustment of the draft regulator located at the back of the stove. The draft regulator should have been adjusted by a qualified technician when the stove was installed. If this has not been done, have a qualified technician take a draft reading and adjust the draft regulator. Your qualified technician must use a manometer to obtain a draft reading. During this procedure, the oil flow control knob must be set at position #1 and all air-moving equipment inside the house (range hood, heat exchanger, bathroom fan, etc.) must be in operation. The reading on the manometer must correspond to the minimum prescribed draft indicated on the certification plate located at the back of the stove. The prescribed draft is set at 0,05 INWC for most oil stoves.

**Solution #3 :** If the chimney draft remains too weak, Your stove may be located in an area where the volume of oxygen is not sufficient to allow for a complete combustion. If there is a window in the room where the stove is located, open it by at least 2 inches. If this solves the problem, it may indicate that your house is over-insulated or the room is too small. Without an additional supply of oxygen, your stove will not function normally. The ideal solution is to install a permanent fresh air intake located at a distance of 6 to 12 inches from the stove.

**Solution #4 :** Your exhaust system may be too short. In order to obtain a sufficient draft, your exhaust system must have a minimum height. A minimum height of 15 feet (from the connector at the back of the stove to the chimney cap outside the house) will be adequate in most cases. HOWEVER: remember that longer is not always better. An exhaust system that is excessively high may be difficult to pre-heat and control. If your exhaust system is too short, add some chimney sections.

**Solution #5:** Your exhaust system may be too tortuous or may not have the minimum slope required to allow for a proper draft. Your exhaust system should never have more than two 90° elbows. Furthermore, the horizontal sections of your exhaust system should be as short as possible (maximum 8') and must have a minimum upward slope of ¼" per foot.

**Solution #6:** Your chimney may be oversized. The effect of an oversized chimney is generally the reduction of the temperatures inside the chimney, due to the larger volume that needs to be heated. This weakens the chimney draft. Our oil stoves are tested to be installed on a chimney with an interior diameter of 5 inches (127mm). If you do not have a 5" chimney, you can insert a stainless steel liner inside the existing chimney in order to reduce its interior diameter to 5 inches. This will help keep chimney temperatures higher, therefore increasing the chimney draft.

**Solution #7:** In the case of excessive draft, it is possible to install a second draft regulator located within the first 18 inches on the stove connector. Your dealer will be able to supply the appropriate part.



1700, rue Léon-Harmel, Québec (Québec) G1N 4R9  
 tel. : (418) 527-3060 fax : (418) 527-4311  
 e-mail : tech@drolet.ca web site : drolet.ca

## LIMITED WARRANTY

The warranty of the manufacturer extends only to the original consumer purchaser and is not transferable. This warranty covers brand new products only, which have not been altered, modified nor repaired since shipment from factory. Proof of purchase (dated bill of sale), model name and serial number must be supplied when making any warranty claim to your **Drolet** dealer.

This warranty applies to normal residential use only. Damages caused by misuse, abuse, improper installation, lack of maintenance, over firing, negligence or accident during transportation are not covered by this warranty.

This warranty does not cover any scratch, corrosion or discoloration caused by over firing, abrasives or chemical cleaners. Any defect or damage caused by the use of unauthorized parts or others than original parts void this warranty.

An authorized qualified technician must perform the installation in accordance with the Instructions supplied with this product and all local and national building codes. Any service call related to an improper installation is not covered by this warranty.

Returned products are to be shipped prepaid to the manufacturer for investigation. If a product is found to be defective, the manufacturer will repair or replace such defect and reasonable transportation fees will be refund. Repair work covered by the warranty, executed at the purchaser domicile by an authorized qualified technician requires the prior approval of the manufacturer. Labour cost and repair work to the account of the manufacturer are based on predetermined rate schedule and must not exceed the wholesale price of the replacement part.

The manufacturer at its discretion may decide to repair or replace any part or unit after inspection and investigation of the defect. The manufacturer may, at its discretion, fully discharge all obligations with respect to this warranty by refunding the wholesale price of any warranted but defective parts.

The manufacturer shall in no event be responsible for any special, indirect, consequential damages of any nature, which are in excess of the original purchase price of the product.

DESCRIPTION	WARRANTY APPLICATION	
	PARTS	LABOUR
Combustion chamber (Weldings Only)	<b>5 YEARS</b>	5 years
Stainless Baffle	5 years	1 year
Carbon Steel Baffle	2 years	1 year
Coil Handle	5 years	n/a
Cast Iron parts	5 years	1 year
Ceramic glass (thermal breakage only)	<b>1 YEAR</b>	<b>N/A</b>
Burner	<b>1 YEAR</b>	1 year
Gaskets, Blower, Switch (thermodisc), Rheostat, Paint, Burner Rings, Catalyst Ring	<b>1 YEAR</b>	n/a
Valve (Carburetor)***	1 year	1 year
Gold Plating (Tarnishing Only)	5 years	1 year

\*\*\*Note : No modification or adjustment to the valve is permitted. Any changes to the valve void the warranty.

Shall your unit or a components be defective, contact immediately your **Drolet** dealer. Prior to your call make sure you have the following information necessary to your warranty claim treatment:

- You name, address and telephone number;
- Bill of sale, dealer's name;
- Serial number and model name as indicated on the nameplate fixed to the back of your unit;
- Nature of the defect and any relevant information.

Before shipping your unit or defective component to our plant, you must obtain from your **Drolet** dealer an Authorization Number. Any merchandise shipped to our plant without authorization will be refused automatically and returned to sender.