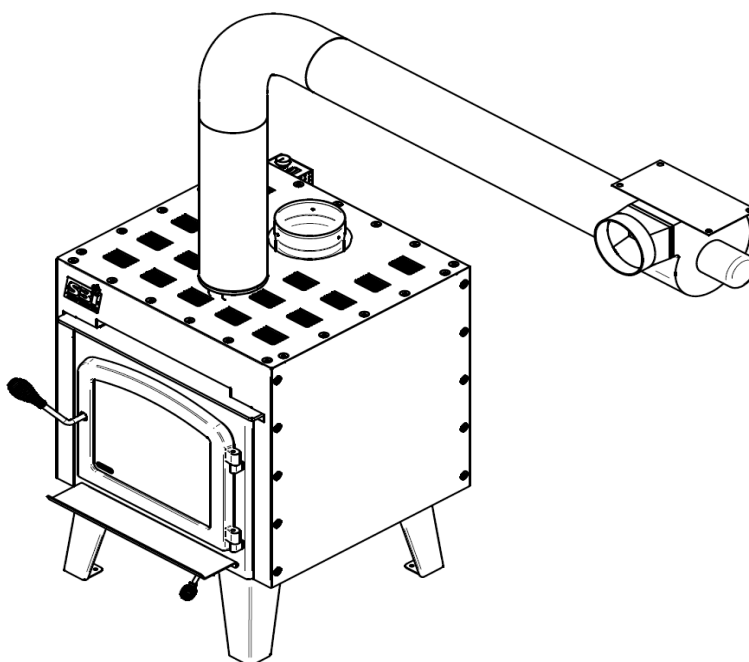


HEATFLOW S5 – Forced air system AC02110

1



THE HEATFLOW S5 CAN BE PAIRED WITH THESE STOVES (Models sold after 2020): AUSTRAL III, LEGEND III, MYRIAD III, FW3200, OSBURN 3300, SOLUTION 3.3

THE HEATFLOW S5 CAN BE PAIRED WITH THESE STOVES (Models sold before 2020): BALTIC II, LEGEND II, AUSTRAL II, MYRIAD II, OSBURN 2300

WARNING: THE HEATFLOW S5 CANNOT BE USED WITH STOVE OPTIONAL BLOWERS.

WARNING: THE CLEARANCE TO COMBUSTIBLE MATERIALS OF THIS ACCESSORY SUPERSEDES THOSE OF THE STOVE.

WARNING: THIS ACCESSORY CAN ONLY BE INSTALLED WITH SINGLE WALL PIPES AND MAY REQUIRE MOVING THE STOVE FURTHER AWAY FROM COMBUSTIBLE MATERIALS.

WARNING: THE DECORATIVE PANELS OF THE STOVE MUST BE REMOVED TO USE THIS ACCESSORY. THIS WILL NOT ALTER THE PRODUCT WARRANTY.

WARNING: THE HEATFLOW S5 CANNOT BE USED WITH A HEATSHIELD (AC02762), LOWERED CEILING, INSIDE AN ALCOVE OR IN A MOBILE HOME.

WARNING: THE HEATFLOW S5 IS NOT A CENTRAL HEATING SYSTEM

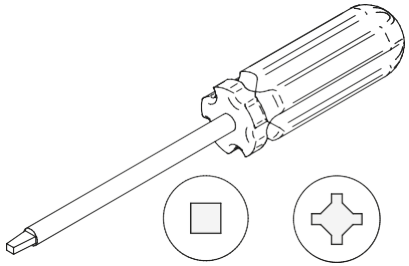
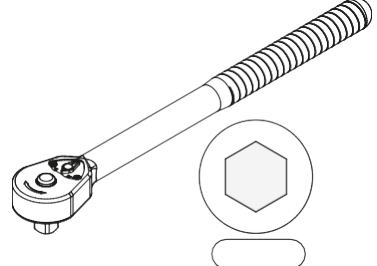
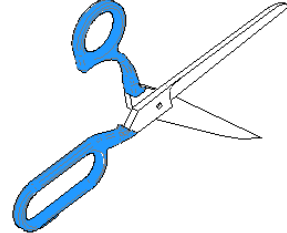

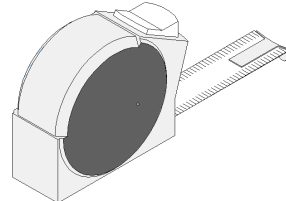
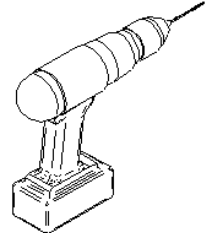
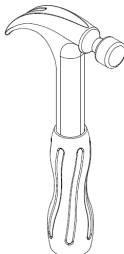
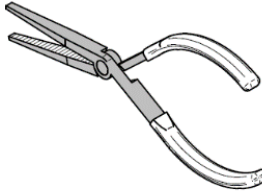

1. General information

This forced heat distribution system supports heating adjacent and upper rooms located at a maximum distance of 50' (15,2m) from the stove. **Rooms below the HEATFLOW S5 cannot be heated with this system.**

2. Content of the accessory

Flue Collar (PL72473) 1x	Back panel (PL72474) 1x	Front panel (PL72470) 1 x
Side panel (PL72477) 2 x	Top panel (PL72472) 1x	Control sub-assembly (SE72475) 1x
Thread cutting screw #10 x 3/8" (30029) (FLAT TIP) 4x	1" Self-adhesive gasket (AC06950) 4' (121cm)	Blower(44121) 1 x
Blower end adaptor (49091) 1x	Metal screw #10 x 3/8" (30132) (POINTY TIP) 80x	6" Adaptor (PL66220) 1 x
Door handle (PL72481) 1x	Self drilling screw #10 x 5/8" (30163) 20x	

3. Tools required

		
Screwdriver	Ratchet wrench & 5/16" socket	Scissors
		
Protective gloves	Measuring tape	Drill
		
Hammer	Pliers	Metal snips

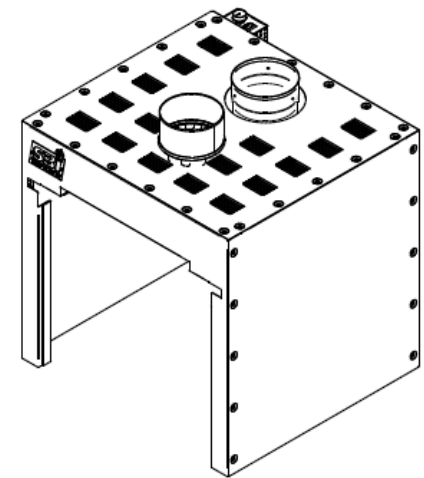
3

4. Other parts (not-included)

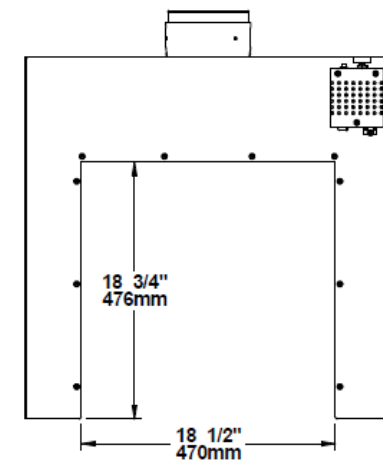
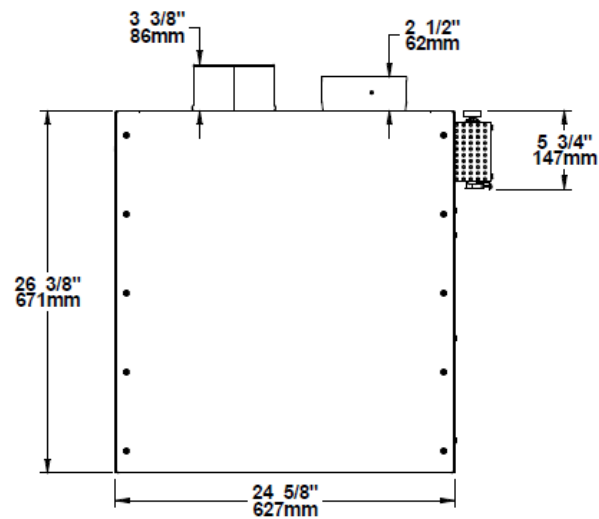
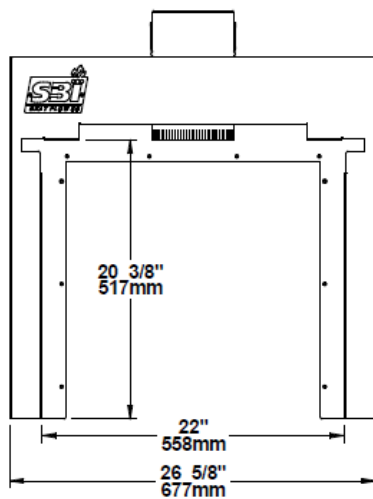
- Rigid galvanized ducts (**non-insulated only**)
- Only use metal air registers
- Galvanized elbow ducts
- Airflow damper or damper blades
- Self drilling screws
- HVAC foil tape
- Electrical wire 14-2
- Electrical wire connectors
- Anti-Seize lubricant
- Flat black paint

Technical drawing of a square plate with dimensions in inches and millimeters. The plate has a square shape with a central circular hole and four smaller circular holes at the corners. The dimensions are as follows:

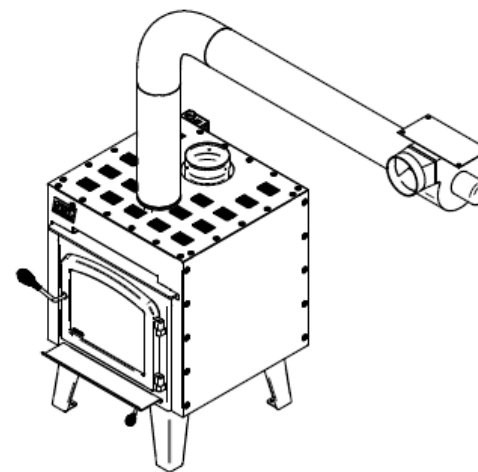
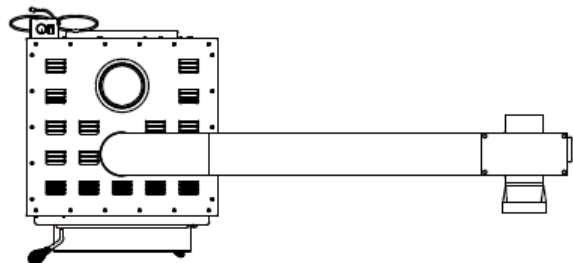
- Top-left corner hole: $2 \frac{3}{4}$ " 71mm (width) and $3 \frac{7}{8}$ " 99mm (height).
- Central hole: $\phi 7 \frac{3}{8}$ " 187mm (diameter).
- Bottom hole: $\phi 5 \frac{3}{4}$ " 147mm (diameter).
- Right side hole: $6 \frac{1}{2}$ " 165mm (height).
- Bottom side hole: $8 \frac{5}{8}$ " 219mm (height).



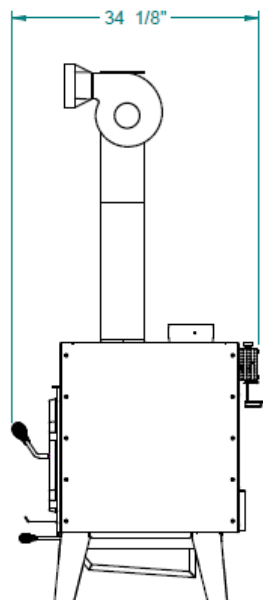
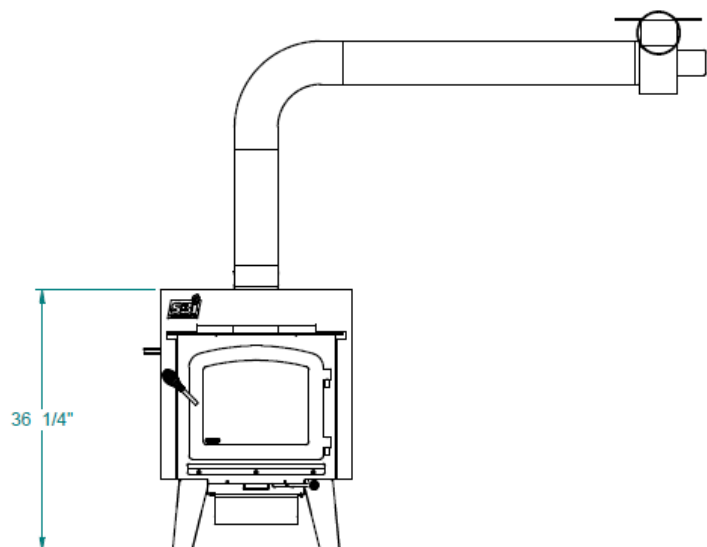
4



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HEATFLOW S5 (AC02110)

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6. Assembly instructions



Wear protective gloves for the following instructions

WARNING

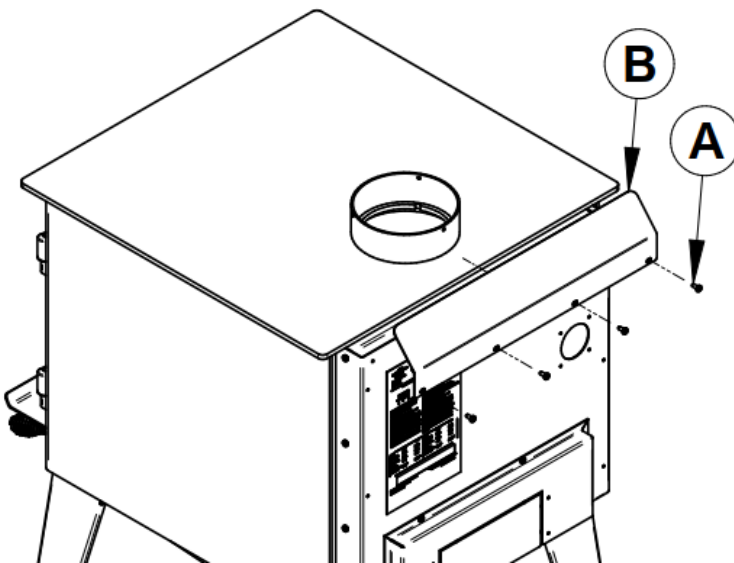
The HEATFLOW S5 can only be used with single wall pipe, refer to the Annex B section for shielded single wall pipe.

The HEATFLOW S5 cannot be used with Heat shield (AC02762), lowered ceiling, inside an alcove or in a mobile home.

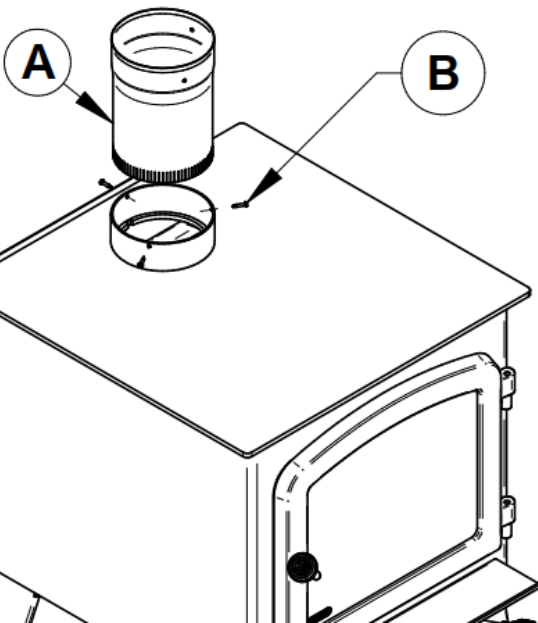
THE HEATFLOW S5 CANNOT HAVE CLEARANCES TO COMBUSTIBLE MATERIALS REDUCED**

6

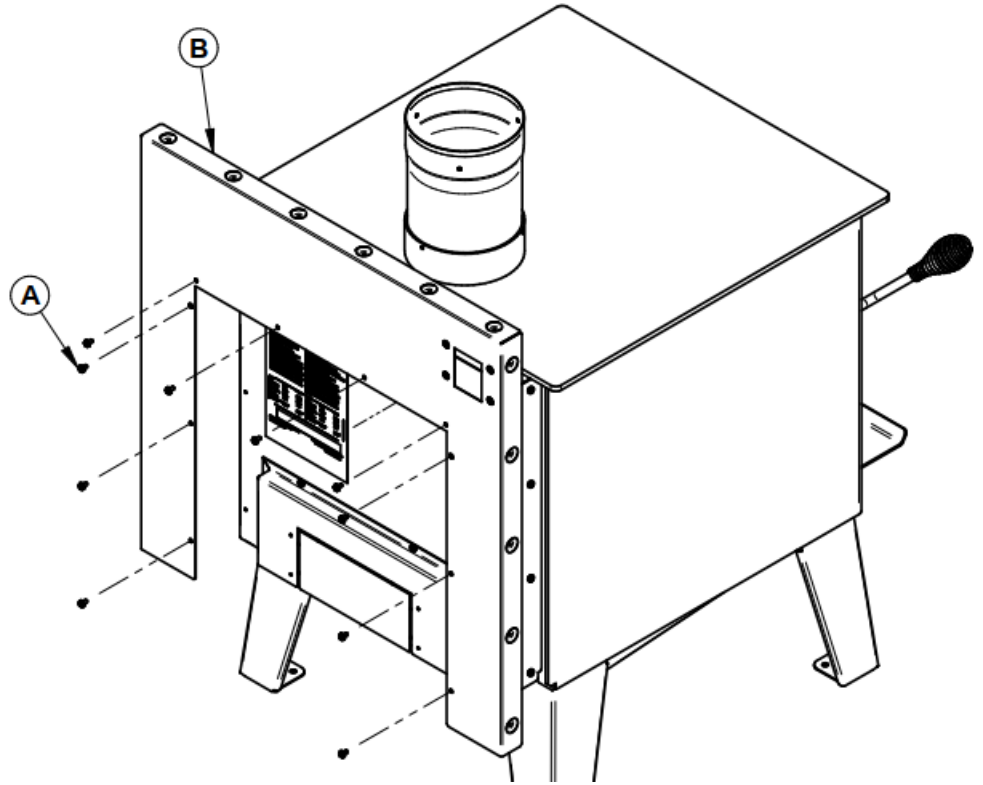
1. Remove the air baffle (B) by removing the 4 screws (A) at the back of stove.



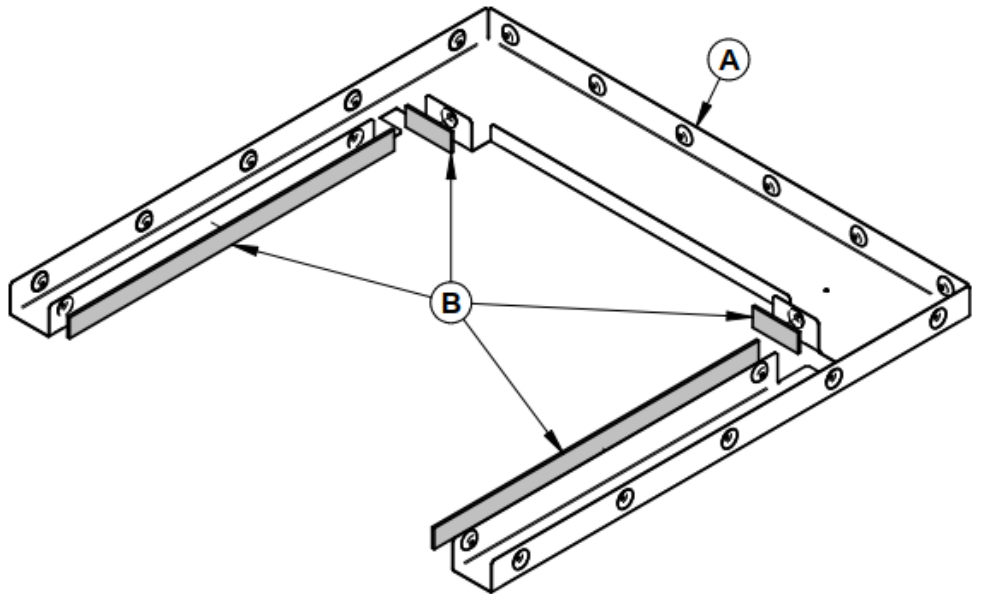
2. Place the flue collar (A) and attach it to stove flue with 3 self-drilling screws. (B)



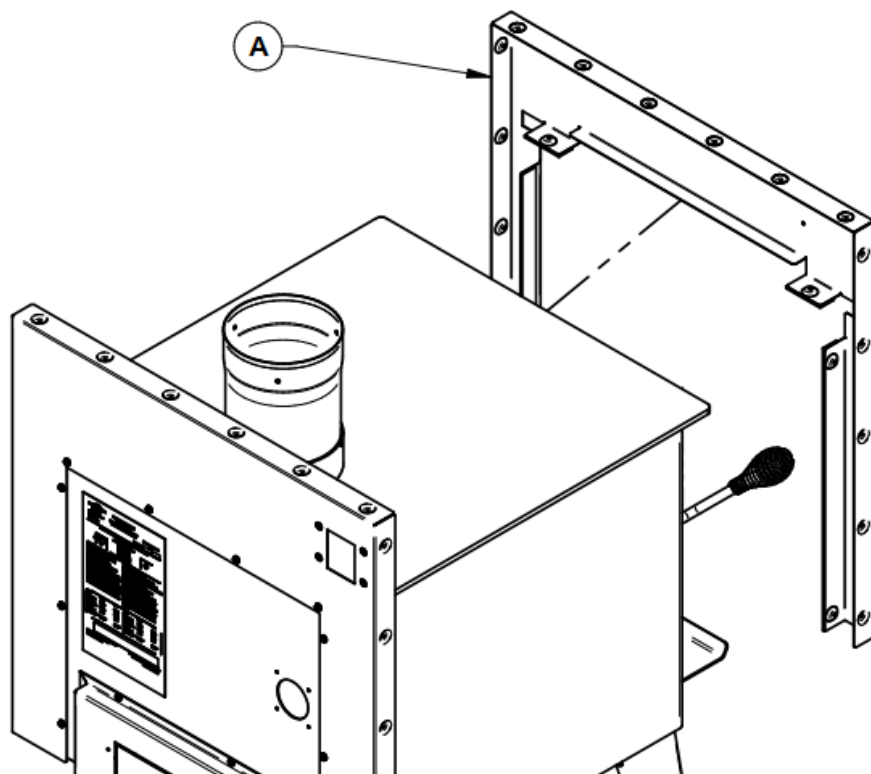
3. Place the back panel (**B**) and attach to the back of the stove with 10 pointy tip metal screws (**A**)



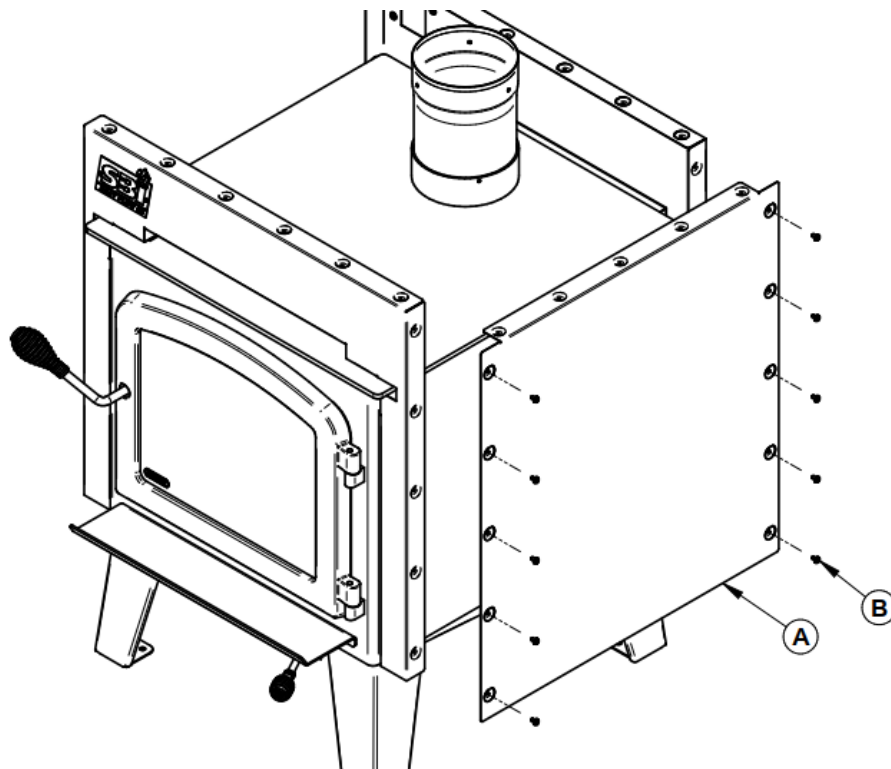
4. Cut the self-adhesive gasket (**B**) into 4 parts and stick them to the 4 bent up edges (as per image) of the front panel frame (**A**)



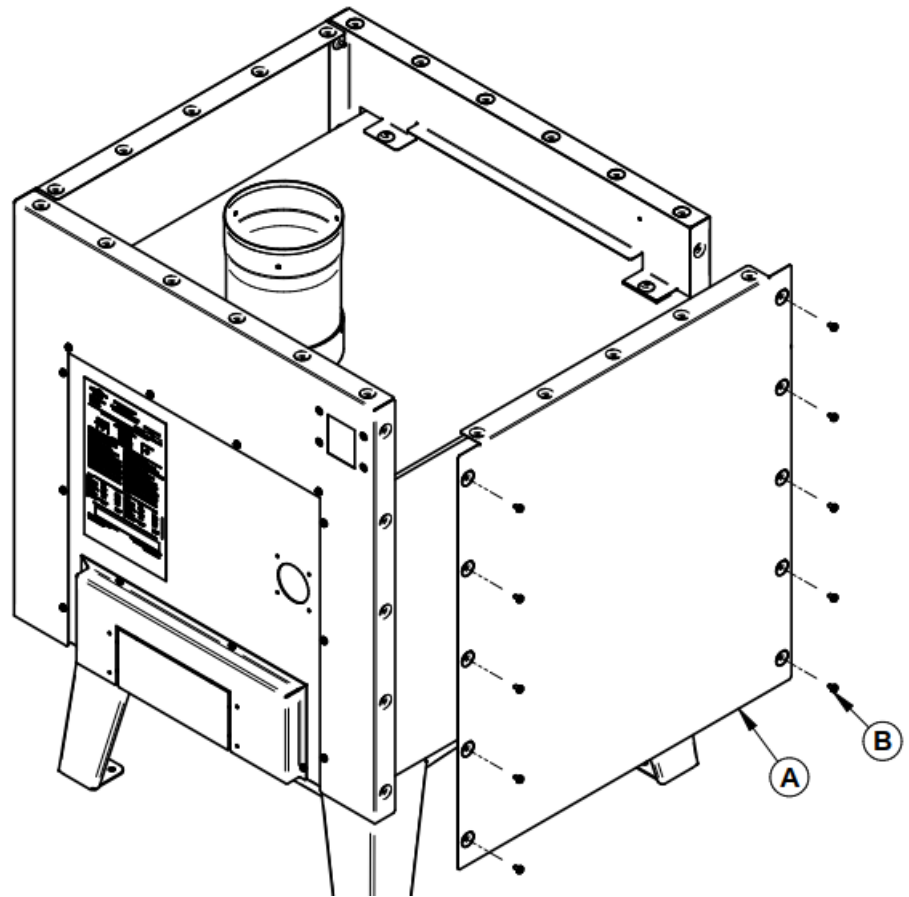
5. Place the front panel **(A)** on the top of the stove.



6. Install the right panel **(A)** with the help of 10 pointy tip metal screws **(B)** to the front and back panels.

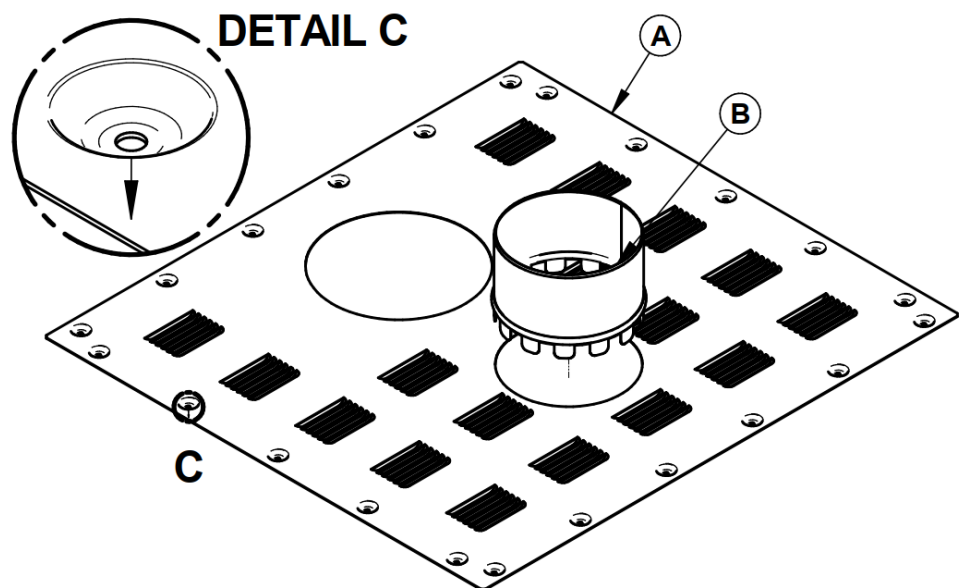


7. Install the left panel **(A)** with the help of 10 pointy tip metal screws **(B)** to the front and back panels.

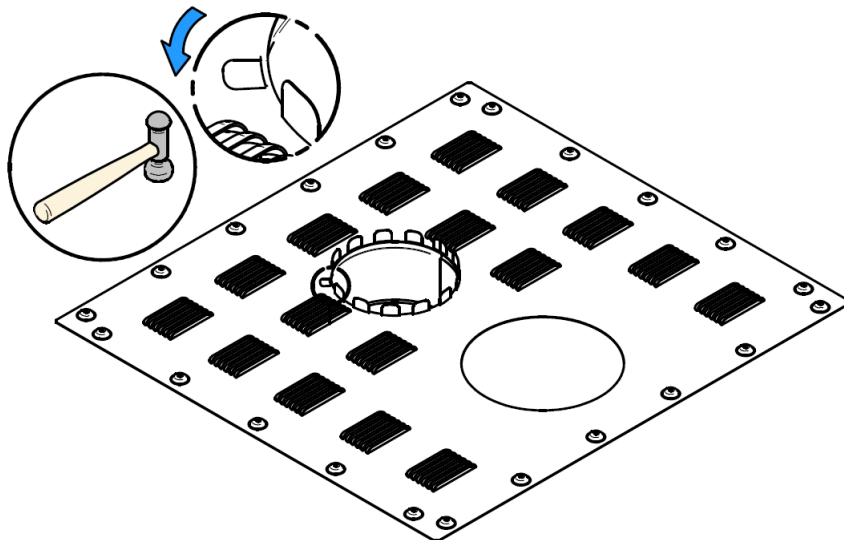


8. Install the 6" adaptor **(B)** to the top panel. **(A)**

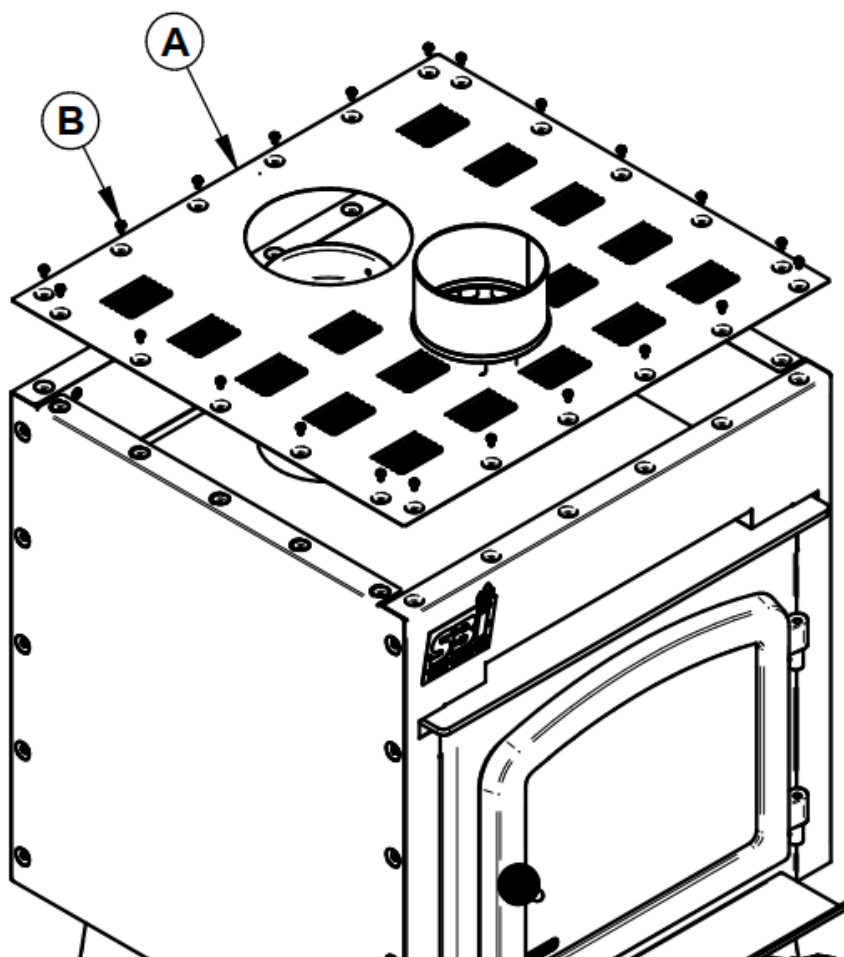
IMPORTANT: The dimples in **DETAIL C**, of the top panel, must be pointing downward.



9. Flip the top panel over and fold the metal tabs of the 6" adaptor with the help of a hammer or pliers so that it remains attached to the top panel.



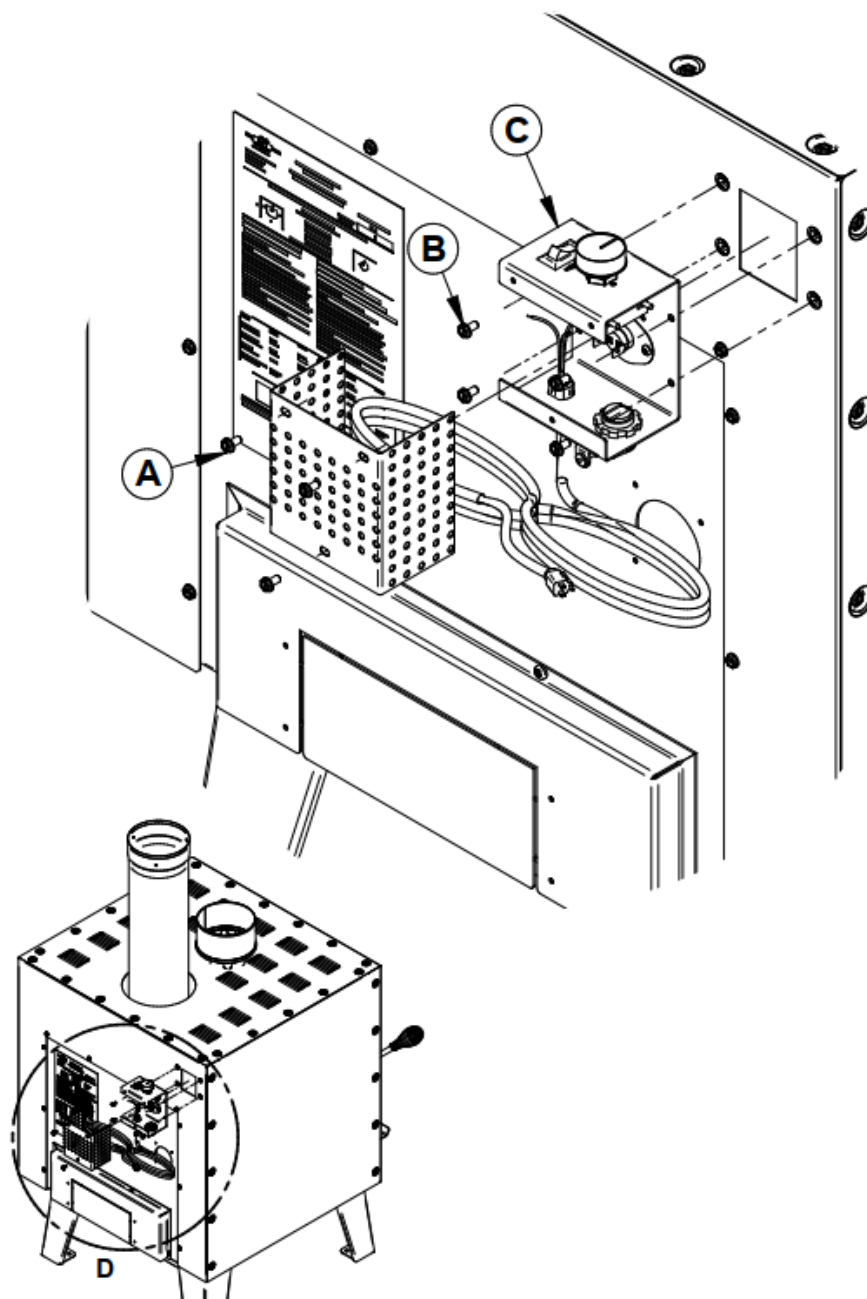
10. Install the top panel (A) to the other panels with the help of 22 pointy tip metal screws. (B)



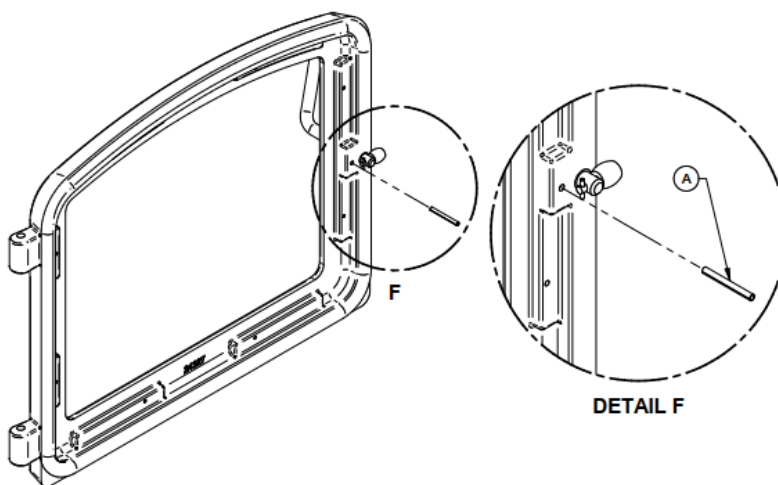
11. Remove the 3 screws **(A)** from the control sub-assembly **(C)** so as to remove the cover. Keep the screws.

Attach the control sub-assembly to the back panel with the help of 4 **flat tip** metal screws **(B)**.

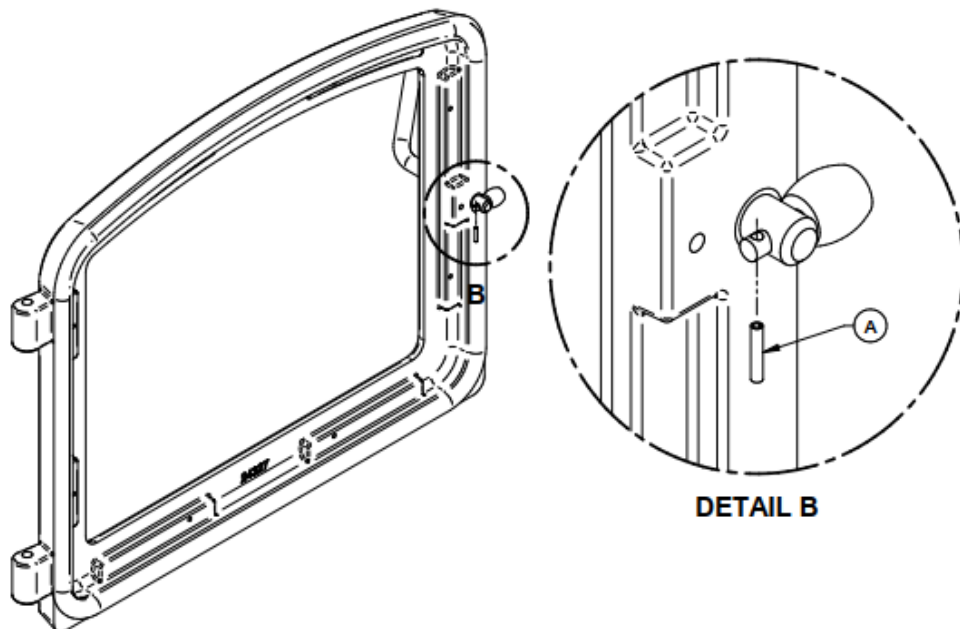
Reattach the cover of the control assembly with the 3 **(A)** screws previously removed.



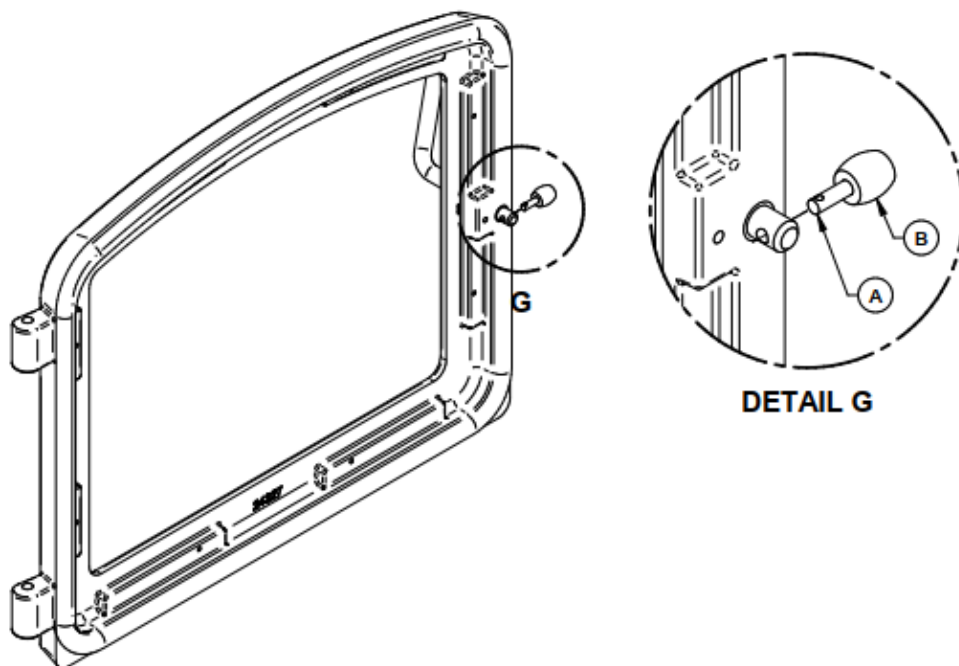
12. With the help of pliers, remove the spring pin **(A)** blocking the rotation of the door handle mechanism. Keep it for later.



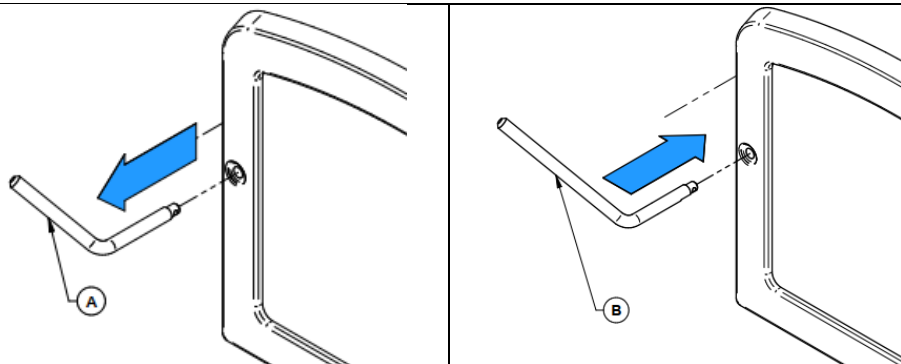
13. With pliers, remove the small spring pin. **(A)** This will remove the door latch roller.
- Keep it for later.



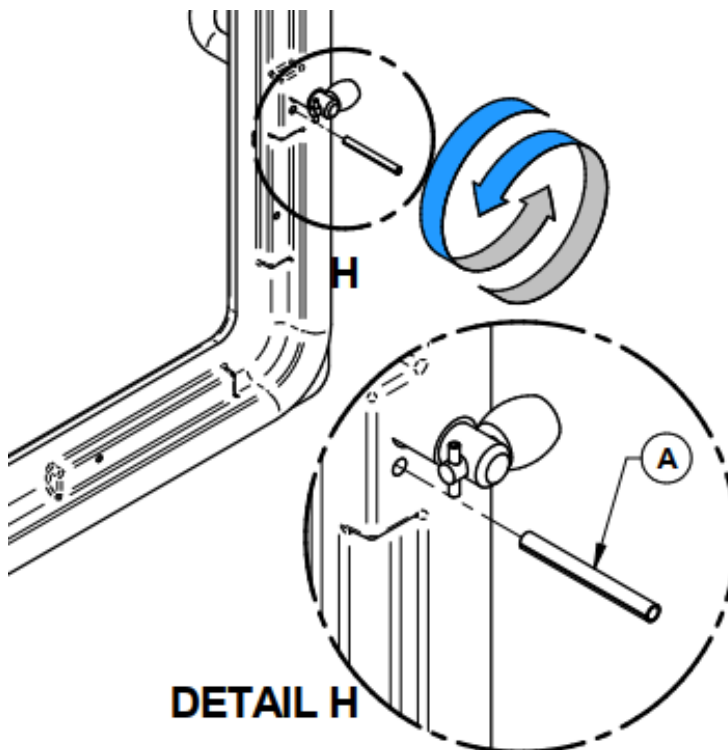
14. Remove the pin **(A)** and latch mechanism roller **(B)** from the handle shaft.
- Keep them for later.



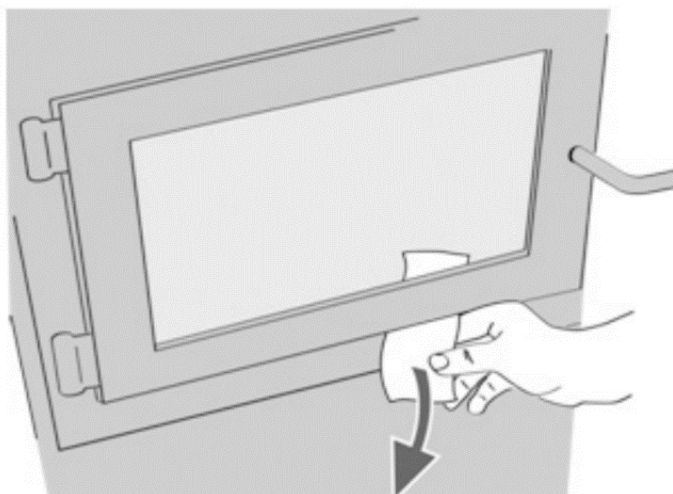
15. Remove the former handle shaft **(A)** and replace it with the one provided **(B)** with the accessory. (The new handle is longer.)
- You can recycle the former door handle.



16. Put back the pin, its roller and the small spring pin. Adjust the door latch mechanism by screwing/unscrewing the door handle to ensure a tight seal and proper latching.



17. Verify the door seal by closing and locking it on a small piece of paper. If the paper slips out easily anywhere around the door, the door adjustment must be reviewed, or the seal gasket must be changed. Once this is done put back spring pin of step 12 to stop any handle rotation.



7. Clearances to combustible materials using the HEATFLOW S5

WARNING

The HEATFLOW S5 can only be used with single wall pipe, refer to the Annex section for shielded single wall pipe.

The HEATFLOW S5 cannot be used with Heat shield (AC02762), a lowered ceiling, in an alcove or in a mobile home.

The following below clearances for stoves using the HEATFLOW S5 must be respected, failure to do so may result in damages to the stove, air ducts, blower and may also cause a fire.

THE HEATFLOW S5 CANNOT HAVE CLEARANCES TO COMBUSTIBLE MATERIALS REDUCED.

WARNING

IT IS ABSOLUTELY ESSENTIAL TO POSITION THE STOVE IN ORDER TO RESPECT THE REQUIRED CLEARANCES FROM THE JACKET.

NOTE: The following models will have **GREATER** clearances to combustibles with the HEATFLOW S5: **LEGEND III**, **OSBURN 3300** and **SOLUTION 3.3** for the models sold after 2020 and **BALTIC II**, **LEGEND II** and **OSBURN 2300** for the models sold before 2020.

The following clearances for the **AUSTRAL III**, **LEGEND III**, **MYRIAD III**, **FW3200**, **OSBURN 3300** and **SOLUTION 3.3** stoves (after 2020 models) using the HEATFLOW S5 must be respected:

JACKET CLEARANCE WITH SINGLE WALL PIPE CONNECTOR		
	CANADA	USA
A	14 ½" (368mm)	14 ½" (368mm)
B	12 ½" (318mm)	12 ½" (318mm)
C	10" (254mm)	10" (254mm)

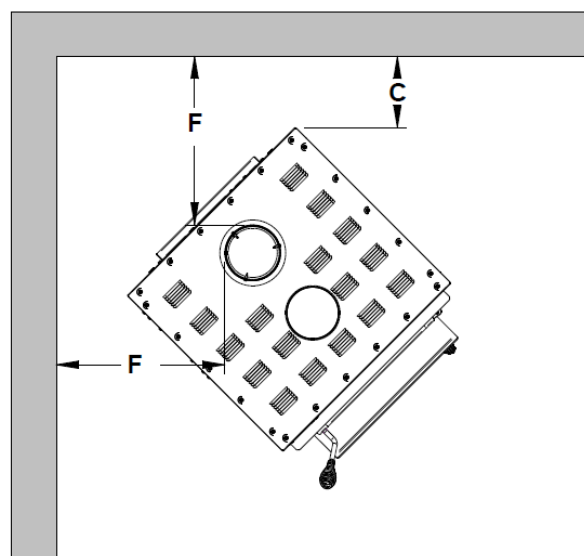
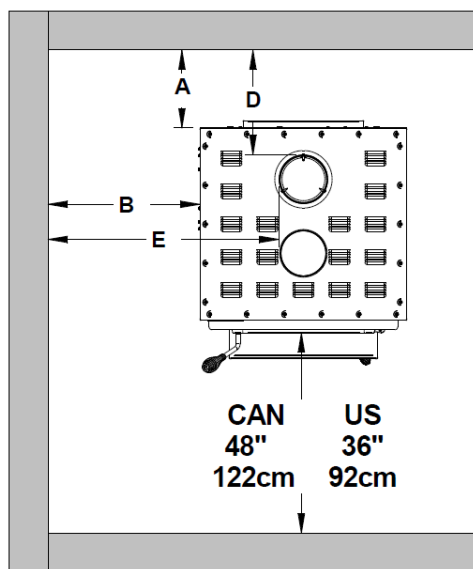
DISTANCE FROM PIPE CONNECTOR WITH SINGLE WALL PIPE CONNECTOR		
	CANADA	USA
D	18" (457mm)	18" (457mm)
E	22 ¾" (578mm)	22 ¾" (578mm)
F	19 ¾" (502mm)	19 ¾" (502mm)

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The following clearances for the **BALTIC II**, **LEGEND II**, **AUSTRAL II**, **MYRIAD II** and **OSBURN 2300** stoves (before 2020 models) using the HEATFLOW S5 must be respected:

JACKET CLEARANCE WITH SINGLE WALL PIPE CONNECTOR		
	CANADA	USA
A	15" (381mm)	9" (229mm)
B	22 5/8" (575mm)	22 5/8" (575mm)
C	16" (406mm)	16" (406mm)

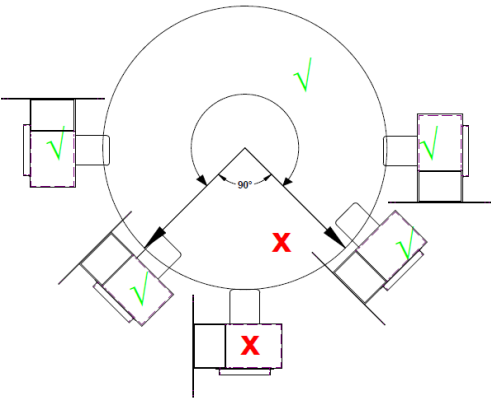
DISTANCE FROM PIPE CONNECTOR WITH SINGLE WALL PIPE CONNECTOR		
	CANADA	USA
D	18 ½" (470mm)	12 ½" (318mm)
E	33" (838mm)	33" (838mm)
F	24 ½" (622mm)	24 ½" (622mm)



8. Blower installation

WARNING

The blower must be positioned in a way so that the shaft of the motor is not pointing downward.

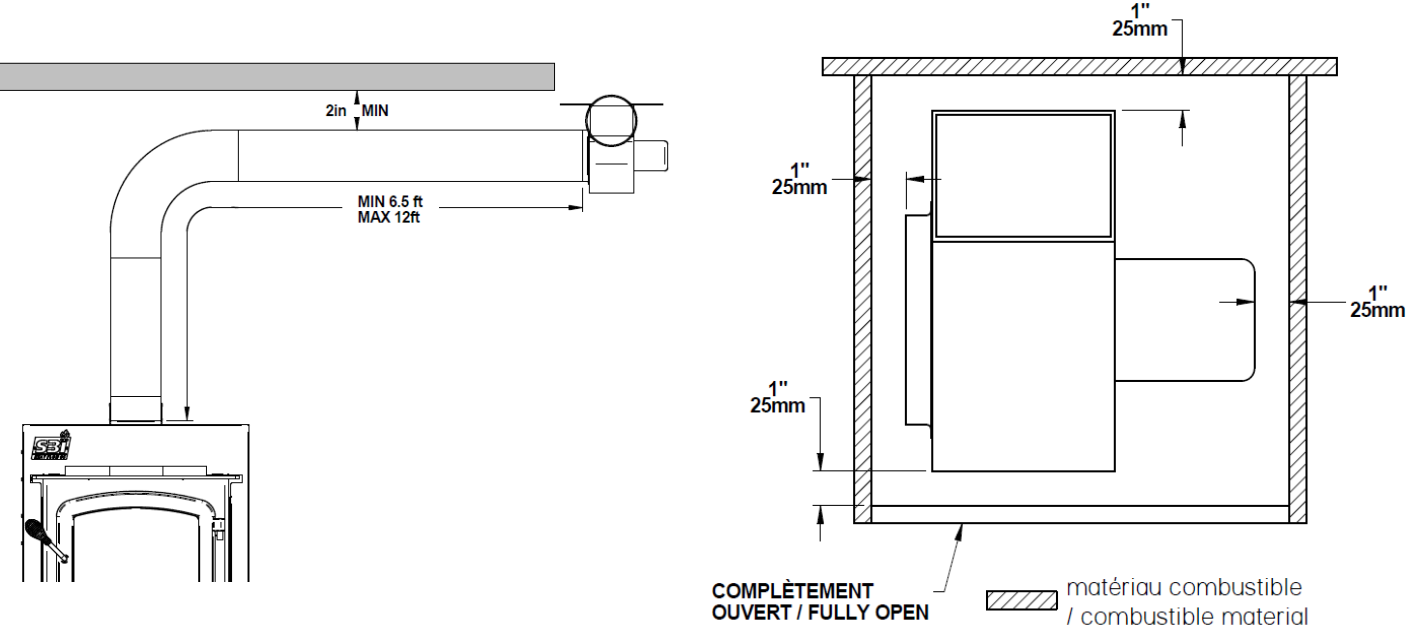


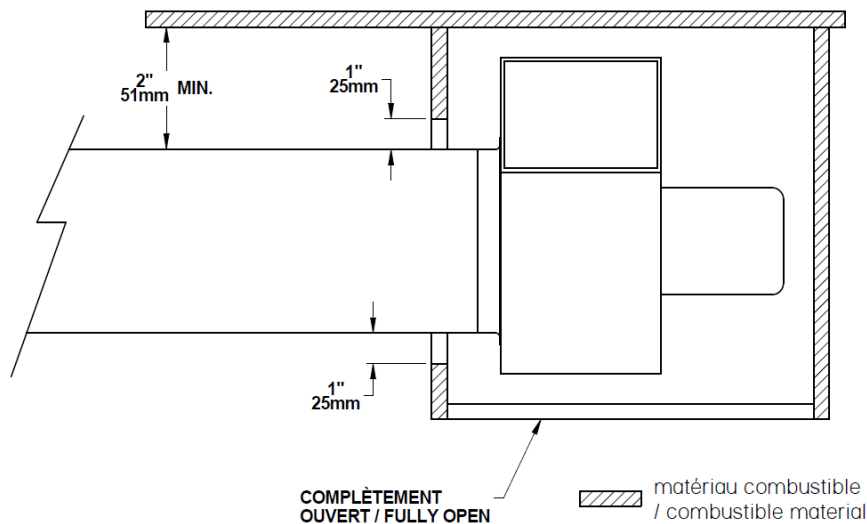
There must be openings around the blower to ventilate the motor. **DO NOT COMPLETELY ENCLOSE THE BLOWER BETWEEN JOISTS.**

The blower should be installed in a location with easy access for maintenance purposes and where the noise will not be an annoyance.

DUCT CLEARANCE FOR COMBUSTIBLE MATERIALS

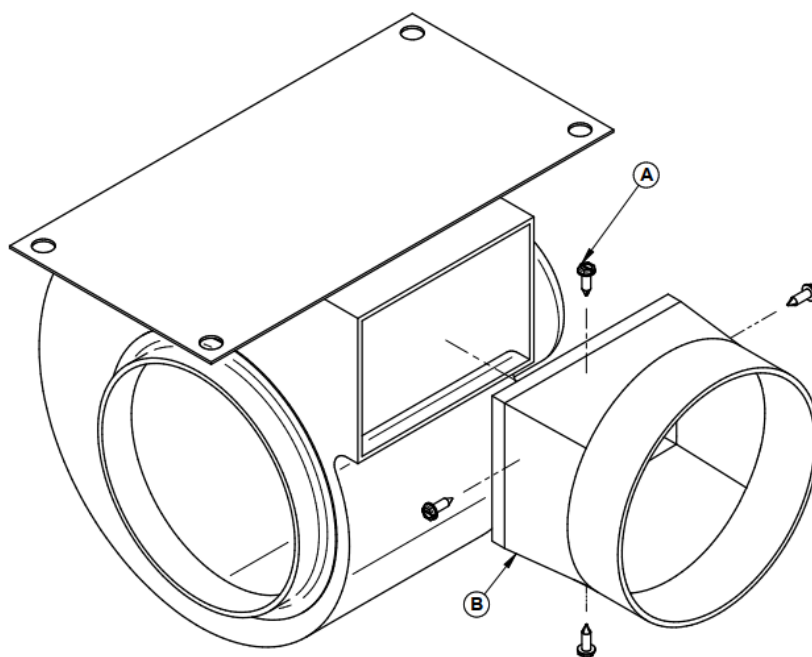
Clearance to the ceiling of the FIRST HORIZONTAL duct	2in MIN
Clearance around the blower box	1in MIN
Clearance around duct connected to blower	1in MIN
Clearance around air register	1in MIN
Duct length between the HEATFLOW and blower (min – max)	6.5ft (2m) – 12 ft (3.7m)





Install the blower with the rubber gromets provided so as to lower vibration noises.

1. Install the blower end adaptor **(B)** to the blower with the help of 4 self-drilling screws. **(A)**



9. Electrical wiring

WARNING

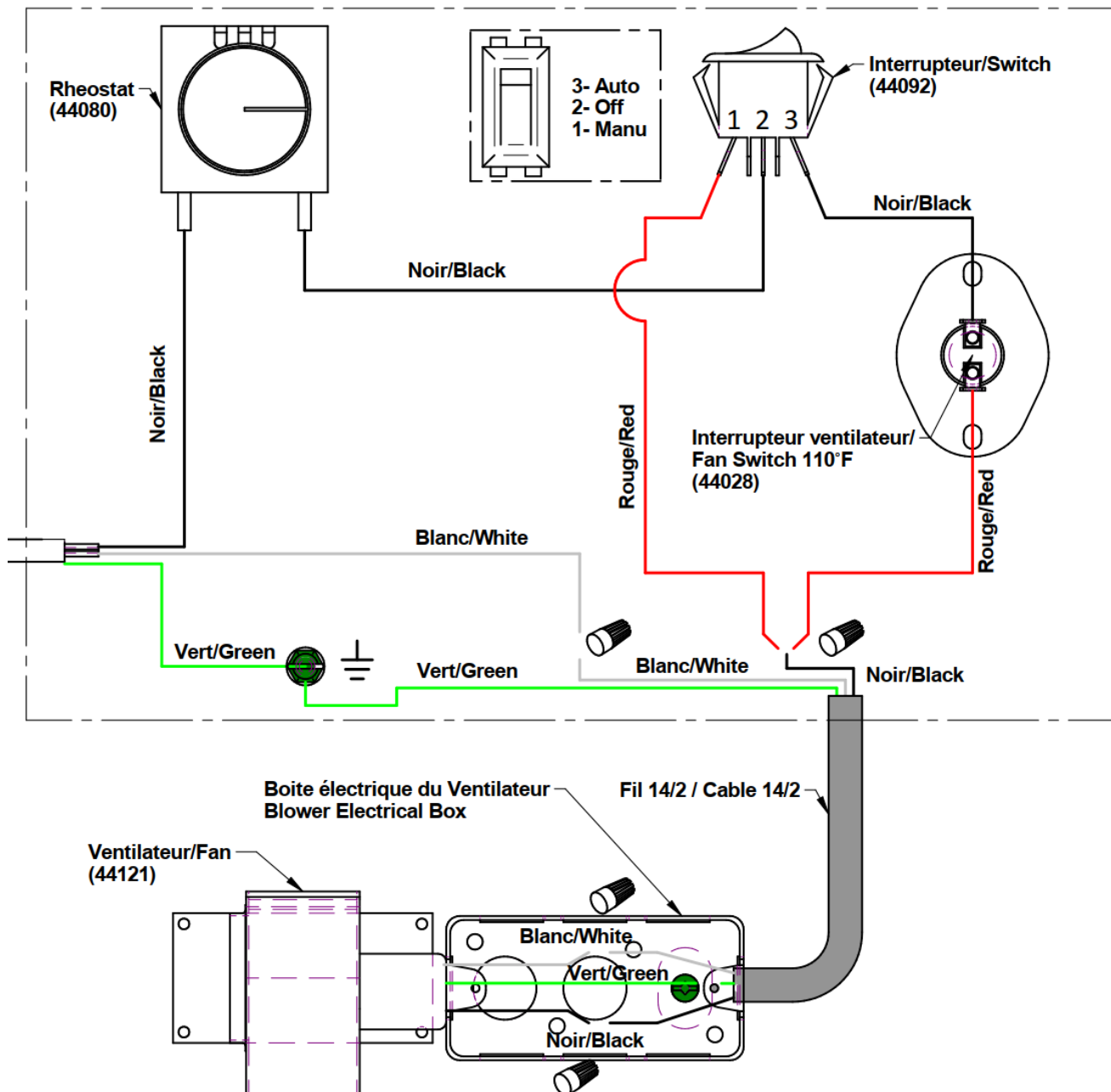
The installation of the Heatflow S5 requires a power outlet (120V). The wiring must be done in accordance to local legislation/norms and national building code.

The wiring must only be done by a certified electrician.

The Heatflow S5 must be wired to a 120V/15 amp circuit breaker.

WARNING: Special attention must be taken to the passage of wires and should be shielded from radiant heat. WIRES SHOULD NEVER BE IN CONTACT WITH ANY PART OF THE SYSTEM (Stove, Heatflow S5 jacket, air conduit, pipe, etc ...)

Connect the blower to the control sub-assembly (**G**) with a 14/2 wire and wire connectors. The following schematic shows how:



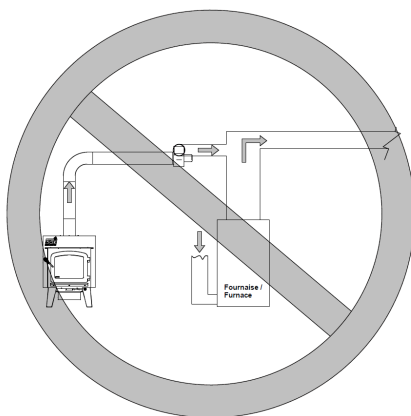
10. Conduit configuration & assembly instructions

WARNING

WARNING : THE USE OF INSULATED DUCTING IS PROHIBITED

The configuration of the ductwork system will have a direct effect on the capacity of the blower to distribute the warm air efficiently.

The HEATFLOW S5 must never be connected to the existing ductwork system of a furnace. To use an existing ductwork system, the furnace must be completely removed. The HEATFLOW S5 must be the only heating source connected to the ductwork.



Only use rigid galvanised ductwork and HVAC foil tape to seal the ductwork.

The use of an airflow damper or damper blade(s) is highly recommended in each conduit leading to an air outlet in order to balance the airflow in the system.

The ductwork should always be secured to reduce vibration noise.

The ductwork should always have a positive slope towards each air outlet for good gravity airflow.

The air registers should always be made of metal.

Attach each section of ductwork with at least 3 self drilling screws.

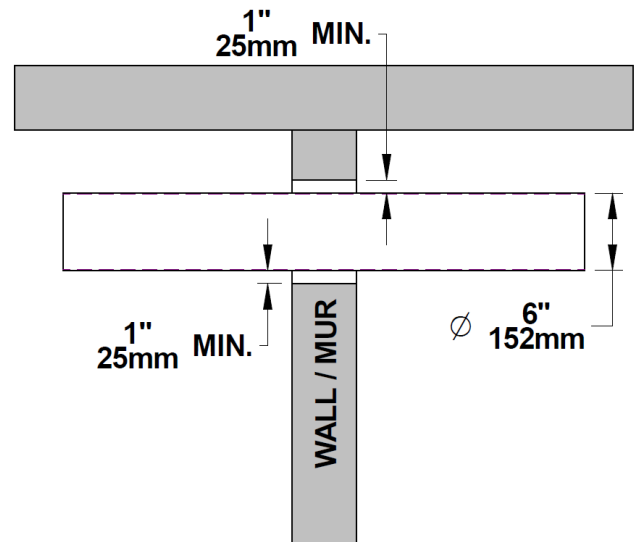
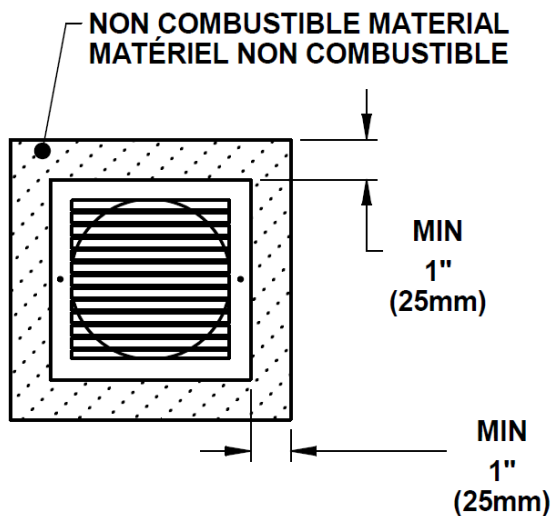
Reducing deviations in the system will result in a better airflow to the air outlets.

DUCTWORK DIMENSIONS

Number of air outlet [MIN - MAX]	[1 – 4]
Recommended diameter of main ductwork	6 in
TOTAL length of main ductwork	50ft (15.2m) MAX
Recommended length of main ductwork after the blower	38ft (12.2m) MAX
Distance between stove and blower [MIN - MAX]	[6.5ft (1.9m) / 12ft (3.6m)]
Length of secondary ductwork from main ductwork	12ft (3.6m) MAX
TOTAL Length of secondary ductwork	48ft (14m) MAX
TOTAL length of ductwork system	100ft (30m) MAX
Recommended speed of air draft at the air outlet (feet per minute)	500 to 750 fpm

DUCTWORK CLEARANCES FOR COMBUSTIBLE MATERIALS

Clearance to the ceiling of the first horizontal ductwork connecting the blower	2in MIN
Clearances to combustibles materials from the blower	1in MIN
Clearance to combustibles materials around air register	1in MIN
Clearance to combustibles materials around air outlet	1in MIN
Clearance around ductwork passing through wall	1in MIN

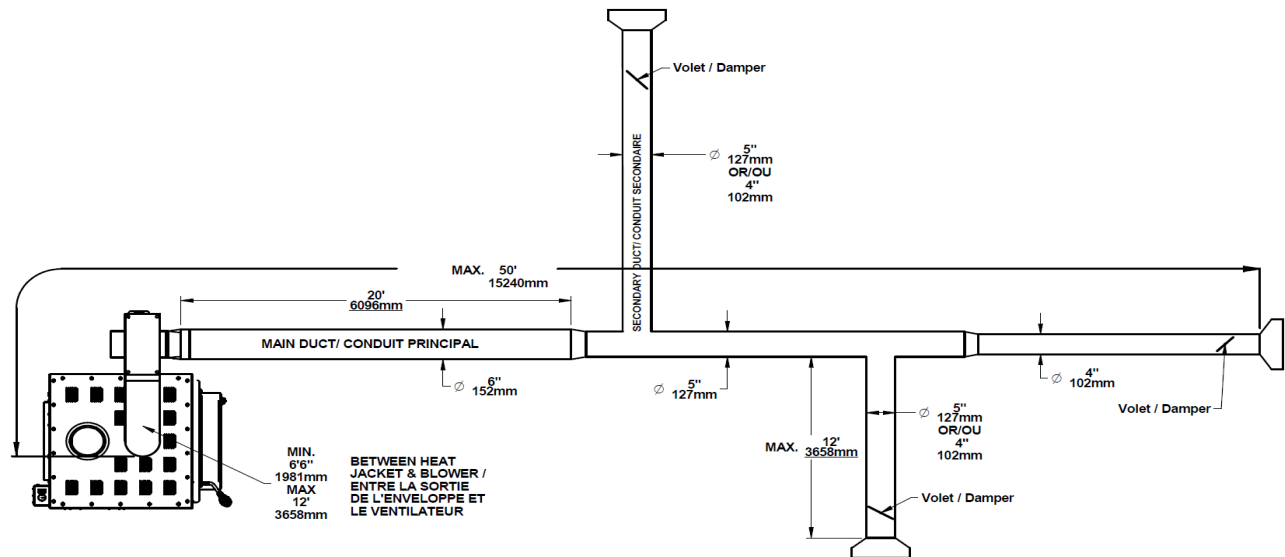


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Instructions to balance the airflow at the different air outlets:

1. The diameter of the main conduit should be reduced to 5" (127mm) after 20ft(6.1m) and/or reduced by 1 inch every 2 air outlets.
2. After the system is completely installed, put the control sub-assembly to "M" to start blower (refer to Section 11, Operating instructions).
3. Open all dampers located in ductwork leading to an air outlet.
4. Locate the outlet with the strongest airflow (it should be the first outlet from the blower).
5. Slightly close the outlet damper and verify the airflow at each air outlet to compare their speed. If the airflow of the strongest is still too strong, repeat this step.
6. Proceed progressively with each damper by closing them slightly and balancing each airflow at air outlet. If at a last air outlet, it is impossible to keep a consistent airflow with the previous air outlets, it might be an indicator that the section of the ductwork should be reduced.
7. The damper of the furthest air outlet from the stove should stay fully open.

Note: The following image is to be used as reference only for a typical 3 air outlet system.



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11. Operating instructions

WARNING

NEVER BLOCK ANY HOLES/LOUVERS ON THE HEATFLOW S5 METAL JACKET. FAILURE TO COMPLY COULD RESULT IN FIRE, INJURY, DAMAGE TO THE STOVE, BLOWER OR AIR DUCTWORK SYSTEM, etc..

DO NOT MODIFY THE SYSTEM. FAILURE TO COMPLY COULD RESULT IN FIRE, INJURY, DAMAGE TO THE STOVE, BLOWER OR AIR DUCTWORK SYSTEM, etc..

ALWAYS SET THE SYSTEM TO "OFF" WHEN RELOADING THE STOVE WITH WOOD.

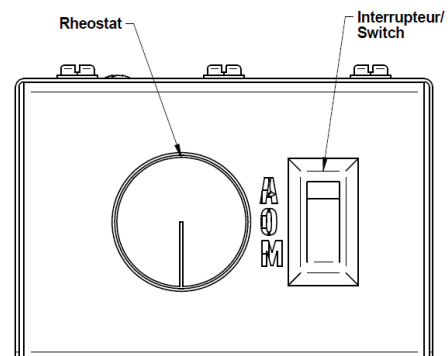
IMPORTANT : If the stove is new, it is normal to have an odor of smoke when lighting it for the first time. This initial fire(s) should always be done before connecting the air ductwork system to the HEATFLOW S5 in order to prevent the odor of smoke from being dispersed to all rooms having an air outlet.

1. Plug the control sub-assembly into an electrical outlet.
2. Select the desired mode with the 3 position switch located on the top of the control box behind the HEATFLOW S5.

A- « AUTO MODE » in this position, the blower will start and stop automatically with the temperature of the stove.

O- « OFF MODE » in this position, the blower is stopped immediately. **It is highly recommended to put the system in this mode when reloading the stove with wood.**

M- « MANUAL MODE » in this position, the blower will always be energized.



3. Adjust the blower speed with the rheostat to optimise comfort at air outlet
 - a. Higher blower speed → Lower temperature at air outlet
 - b. Lower blower speed → Higher temperature at air outlet

12. Troubleshooting

Blower does not start	<ul style="list-style-type: none"> • Make sure the control assembly is connected to an electrical outlet. • Verify the switch is not in the « O » position • Verify the rheostat is open • Verify the electrical wiring is correct • Sufficient wood loading
Blower starts and stops frequently	<ul style="list-style-type: none"> • Low quantity wood • Blower speed is too fast • The air ductwork system is not balanced
Temperature at air outlet is cold	<ul style="list-style-type: none"> • Low quantity of wood • Blower speed is too fast • The air ductwork system is not balanced

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13. Technical specifications

Models from	AUSTRAL III, LÉGENDE III, MYRIAD III, FW3200, OSBURN 3300, SOLUTION 3.3
Electrical rating	120V, 15 amps
Blower (outtake, airflow)	6" (152mm), 400 CFM
Power (electrical)	200 watts
Fan delay	110°F (43°C)
Main duct diameter	6" (152mm)
Number of air outlets	4 MAX
Length of main duct	50' (15,2 m) MAX

Annex

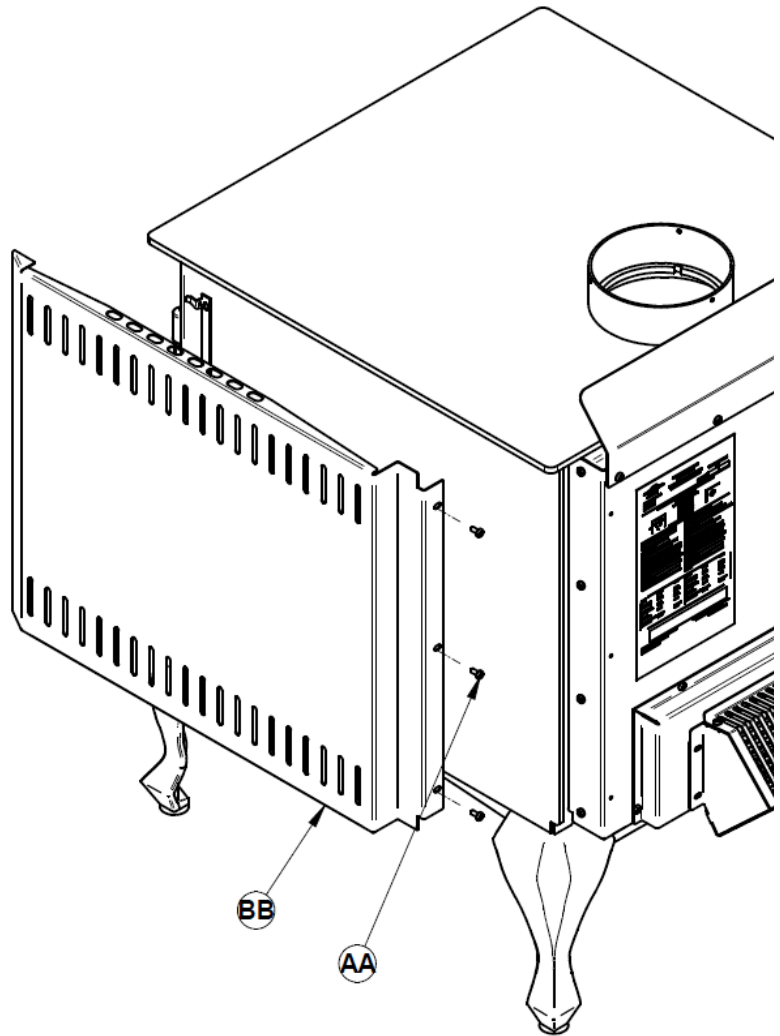
A. Assembly instruction for retrofit of models with decorative panels

WARNING : If the HEATFLOW S5 is removed, the decorative panels must be put back on the stove.

1. Unscrew the 3 screws **(AA)** behind the decorative panel **(BB)**.
2. Gently twist the decorative panel to remove.
3. Repeat steps 1 & 2 for removal of the other decorative panel.

***** Keep the decorative panels for future use.**

4. Hammer the clips so as to flatten them.
5. Paint the sides of the stove that may have not been painted with flat black, high temperature, spray paint in accessories **(AC05956)**.



B. Retrofit from a double wall pipe to a shielded single wall pipe

WARNING

The HEATFLOW S5 can only be used with SINGLE WALL PIPE

A pipe section can only have 1 single pipe shield

CLEARANCE TO COMBUSTIBLE MATERIALS

From Single wall pipe (DIMENSION "B")

18in MIN

CLEARANCE FROM SINGLE WALL PIPE SHIELD TO COMBUSTIBLE MATERIALS FOR APPROVED SBI HEATING ACCESSORIES

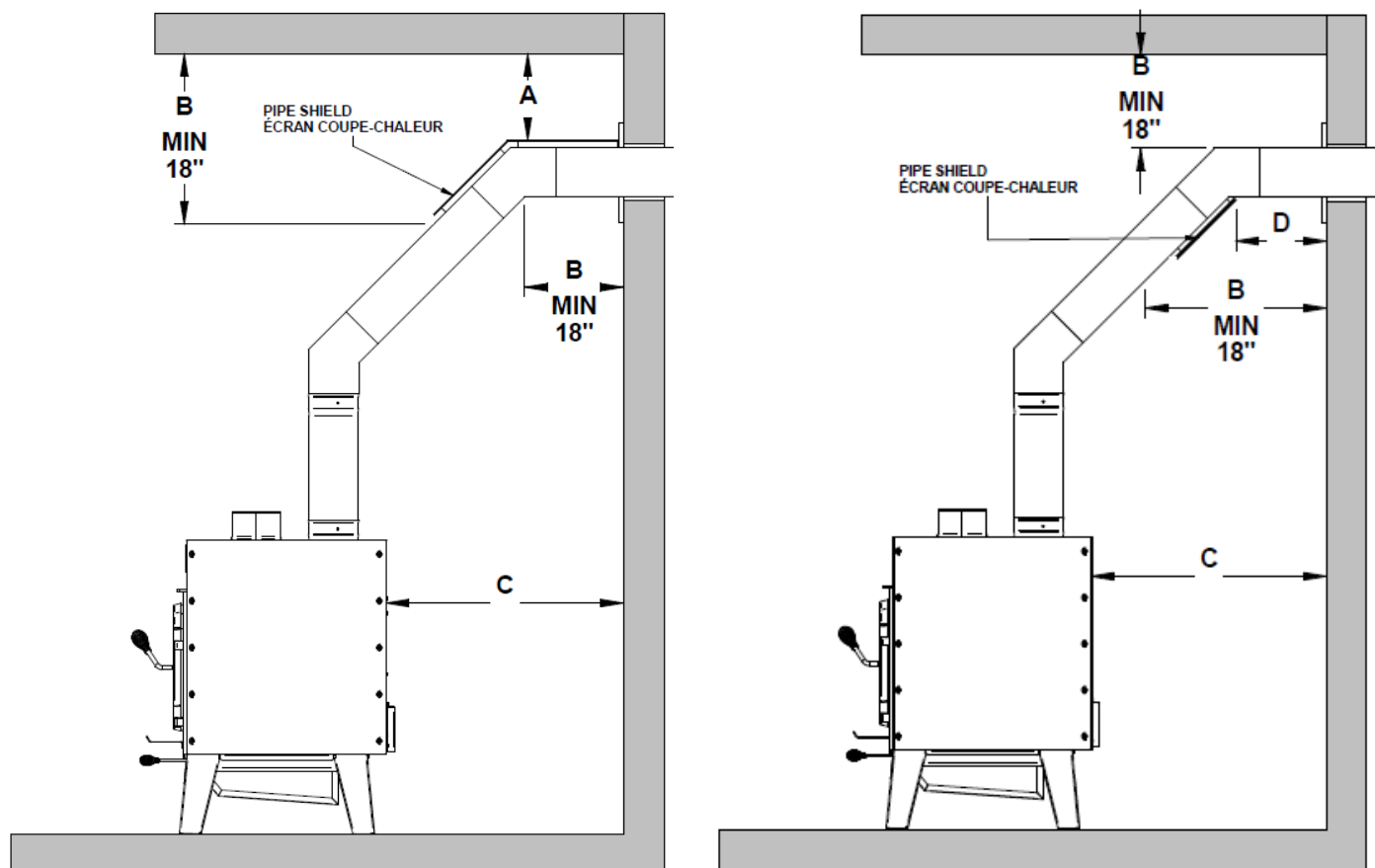
	CANADA	U.S.
To Ceiling (DIMENSION "A")	9" MIN	9" MIN
To Wall (DIMENSION "D")	6"*** MIN	6" MIN

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*** note: For products other than SBI Heating Accessories, the clearance is 9"

- The retrofit of a double wall pipe to a single one can be done by placing a pipe shield on part of the pipe at places where the clearance from combustible materials is less than **18in (0.46m)**.
- The clearances with the use of a pipe shield are presented in table above.
- The retrofit with a pipe shield may require the user to move the stove away from the wall (Dimension "C").

Next schematic is for reference:



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Stove Builder International inc.
250, De Copenhague street,
St-Augustin-de-Desmaures (Québec)
Canada
G3A 2H3
418-908-8002
www.sbi-international.com