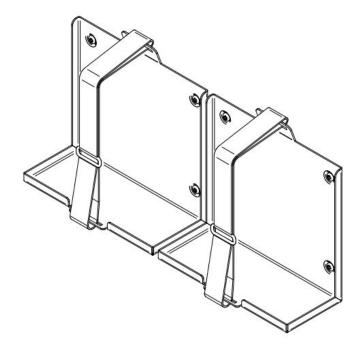


BATTERY* HOLDER KIT AC01452



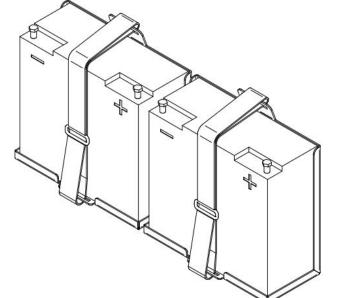
INSTALLATION INSTRUCTION

*Optional 24V (2 x 12V) battery kit (AC01454) sold separately.

Stove Builder International Inc.

250, rue de Copenhague, Saint-Augustin-de-Desmaures (Quebec) Canada G3A 2H3

> After-sale service: 418-908-8002 E-mail: <u>tech@sbi-international.com</u>



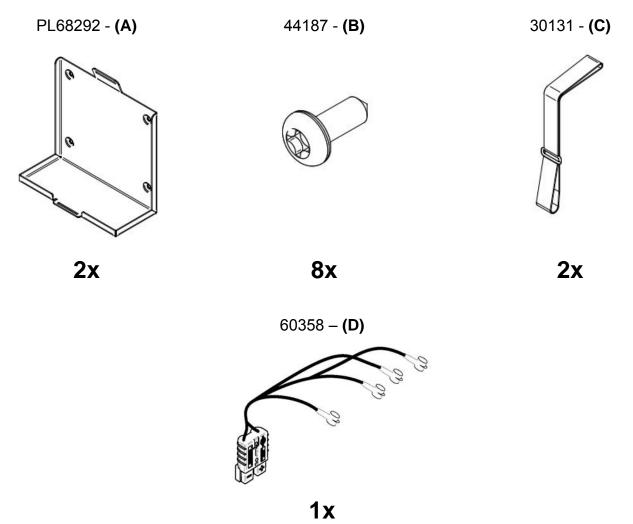


This manual is available for free download on the manufacturer's web site. It is a copyrighted document. Resale is strictly prohibited. The manufacturer may update this manual from time to time and cannot be responsible for problems, injuries, or damages arising out of the use of information contained in any manual obtained from unauthorized sources.

WARNINGS

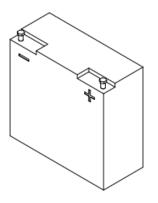
- FOLLOW THE BATTERY MANUFACTURER'S INSTRUCTIONS FOR TESTING, JUMPING, INSTALLING, DISCHARGING, CHARGING, EQUALIZING AND MAINTAINING BATTERIES.
- ALWAYS USE BATTERIES OF IDENTICAL MAKE, MODEL AND WITH THE SAME MANUFACTURING DATE.
- MAKE SURE THE BATTERY CABLES ARE NOT UNDERSIZED FOR THE BATTERY SYSTEM.
- MAKE SURE THE BATTERY CABLES ARE CONNECTED TO THE TERMINALS CORRECTLY. IF UNSURE, PROFESSIONAL ASSISTANCE IS RECOMMENDED.
- NEVER MOVE THE BATTERIES FROM THEIR ORIGINAL POSITION.
- DO NOT SHORT-CIRCUIT THE BATTERIES.
- DO NOT CHARGE WITHIN A SEALED HOUSING.
- WHEN USING AN AUXILIARY BATTERY SYSTEM OTHER THAN THE ONE OF THE STOVE'S MANUFACTURER, ALWAYS USE THE ANDERSON SB50[®] CONNECTOR PROVIDED BY THE STOVE'S MANUFACTURER AND MAKE SURE THAT THE BATTERIES ARE LOCATED BEYOND THE MINIMUM CLEARANCES TO COMBUSTIBLES.
- EXERCISE CAUTION WHEN WORKING WITH METALLIC TOOLS OR CONDUCTORS, TO PREVENT SHORT CIRCUITS AND SPARKS. MAKE SURE THAT THE BATTERY TERMINALS ARE ALWAYS SHIELDED.
- THIS STOVE CAN BE PLUGGED TO A 24 TO 30V BATTERY SYSTEM (MINIMUM 20Ah) AND ABSOLUTLY NEEDS TO USE THE ANDERSON SB50[®] CONNECTOR PROVIDED WITH THE STOVE. IF YOU INSTALL THE BATTERY BEHIND THE STOVE USING THE OPTIONAL BATTERY HOLDER KIT (AC01452), THE BATTERIES MUST BE SEALED AS THE OPTIONAL AC01454.

This battery holder kit contains the following parts:



Other required parts (not included)

40173 - **(E)**

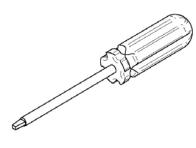


The battery holder kit (AC01452) does not include the batteries. To use the batteries recommended by the pellet stove manufacturer, buy the 24V (2 X 12V) battery kit (AC01454), sold separately.

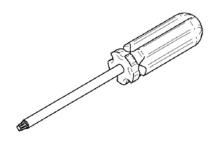
WARNING: Any batteries other than those from the stove's manufacturer must respect all conditions presented in the **OTHER BATTERIES** section.

2x

Required tools for installation:



Square Screwdriver



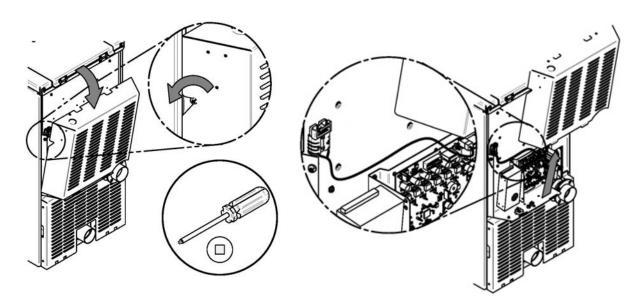
or

Phillips Screwdriver

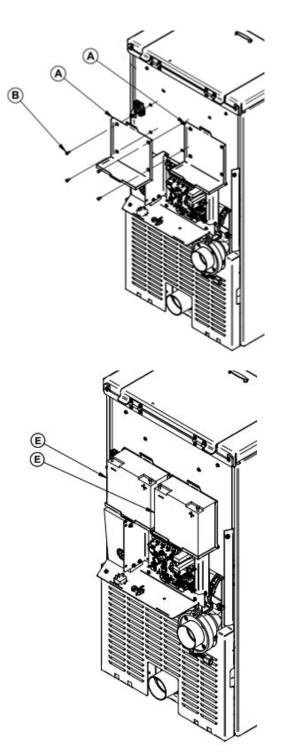
INSTALLATION

The optional battery holder kit (AC01452) is design to be installed above the main board, under the top rear ventilated panel. If you do not use this kit, you must install the batteries in a cool dry place and beyond the minimum clearances to combustible material (see **Appendix A: Minimum clearances to combustible materials**).

1. Remove the top rear ventilated panel. An Anderson SB50[®] is provided and installed on the appliance. Always use this connector to connect your battery harness.

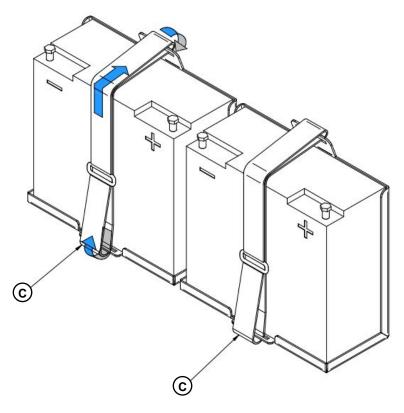


2. Use the screws (B) to secure the battery holders (A) on the stove's back panel.



If you have bought the optional 24V (2 X 12V) battery kit (AC01454)
(E), or if you have batteries that meet the conditions and dimension presented in the OTHER BATTERIES section, place them on the batteriy holders.

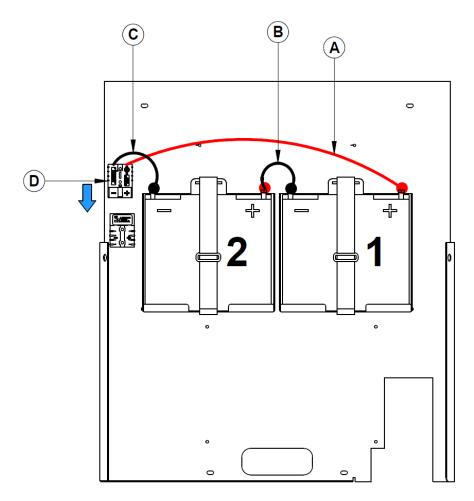
4. Use the straps **(C)** to secure the batteries.



5. Plug the batteries with the provided harness.

The stove operates with 24V voltage. To do this, the two 12V batteries must be connected <u>in</u> <u>SERIES and not in parallel</u>. Thus, the two 12V 20Ah batteries become a 24V 20Ah set. The connections must be done according to the instructions and figure bellow:

- **5.1** The long red wire **(A)** which is plugged into the "+" of the grey connector **(D)** must be plugged to the "+" of **battery 1**.
- 5.2 The short black wire (B) must link the "-" of battery 1 with the "+" of battery 2.
- 5.3 The other short black wire (C) is plugged from the "-" of the grey connector (D) to the "-" of battery 2.
- **5.4** Insert the grey Anderson SB50[®] connector **(D)**, which is already connected to the harness of the auxiliary battery system, into the grey Anderson SB50[®] connector secured to the back of the stove.



- **6.** Check on the LCD screen if the battery logo is charging.
- **7.** Replace the top rear ventilated panel (see **Step 1**).

USE

When your battery system is installed, you only need to unplug the power cord of your residential electricity network to use your stove on the battery mode.

In the case of a power failure, the stove will switch automatically to the battery. The table below shows the autonomy of your stove with different burning setups. It is important to note that the autonomy will drop really fast when the igniter is on. If you need to ignite your stove while a power failure, make sure to not run out of pellets because a second ignition will decrease dramatically the autonomy.

Time*	Combustion parameters		State of the stove before the power failure
Up to 24 hours in continuous	Convection fan	Minimum	 The stove was in function in a manual mode or on thermostatic mode with pilot ON.
	Heat output	Minimum	
	Number of ignition	None	
Up to 16 hours in continuous	Convection fan	Minimum	The stove was not in function, in a thermostatic mode with pilot OFF. Thermostat called for heat twice in the period.
	Heat output	Minimum	
	Number of ignition	2	
Up to 10 hours in continuous	Convection fan	Maximum	 The stove was in function in a manual mode or on thermostatic mode with pilot ON.
	Heat output	Maximum	
	Number of ignition	None	
Up to 6 hours in continuous	Convection fan	Maximum	The stove was not in function, in a thermostatic mode with pilot OFF. Thermostat called for heat twice in the period.
	Heat output	Maximum	
	Number of ignition	2	

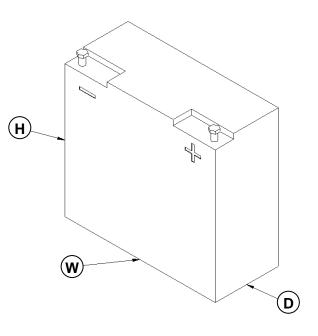
Note: the number of maximum ignition with auxiliary batteries is 2. At the 3rd ignition, you will reach the "Low Voltage" error message because voltage will drop below the acceptable limit.

*All tests are performed with new batteries charged at full capacity. Time may vary depending on battery state.

OTHER BATTERIES

In the case where you would like to buy only the supports without buying the batteries recommended by the stove manufacturer, you must respect those conditions:

- Maximum dimensions (H x D x W): 6.71" (170.4 mm) x 3.125" (79.4 mm) x 7.2" (182.9 mm)
- Minimum capacity : 20 Ah
- Battery type : Sealed (SLA, VRLA or AGM)
- Minimum voltage with batteries wired in series : 24V
- Maximum voltage with batteries wired in series : 30V



MAINTENANCE

FOLLOW THE BATTERY MANUFACTURER'S INSTRUCTIONS FOR TESTING, INSTALLING, DISCHARGING, CHARGING, EQUALIZING AND MAINTAINING BATTERIES

The auxiliary battery system is sealed and maintenance free. It is important to ensure that the openings in the top rear ventilated panel are clear to prevent overheating of electronic components. If you do not use your stove for a long period of time, disconnect the auxiliary battery system and store the batteries in a cool, dry place. To ensure the longevity of the batteries, charge each one once a month and keep the battery voltage above 12.5V.

Recommended maintenance

	Stove unplugged and batteries unplugged	Stove plugged (120-240V) and the batteries are plugged
1 x complete recharge every months	Х	
1 x complete discharge every 2 months (operate the stove in demo mode during summer).	Х	Х

Even if the batteries are new, they shall not be stored for more than 2 months without recharging. If you do not recharge them frequently, they will decrease their life cycle capacity. It is not recommended to store unused batteries without recharging them periodically.

APPENDIX A

Clearances to Combustible Material

The clearances shown in this section have been determined by tests according to procedures set out in safety standards ULC S627 (Canada), ASTM E1509 (USA) and UL1482 (USA). When the pellet stove is installed according to the minimum clearances specified, combustible surfaces will not overheat under normal and even abnormal operating conditions.

<u>WARNING</u>: NO PART OF THE STOVE MAY BE LOCATED CLOSER TO COMBUSTIBLES THAN THE MINIMUM CLEARANCES SPECIFIED ON THE CERTIFICATION LABEL.

<u>CAUTION</u>: NO PART OF THE PELLET VENT SYSTEM MAY BE LOCATED CLOSER TO COMBUSTIBLES THAN THE MINIMUM CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.

<u>CAUTION</u>: DO NOT USE MAKESHIFT MATERIALS OR MAKE ANY COMPROMISES WHEN INSTALLING THIS STOVE.

Certification Label Location

Since the information given on the certification label affixed to the stove always overrides the information published in any other media (owner's manual, catalogues, flyers, magazines and/or web sites), it is important to refer to it in order to have a safe and compliant installation. In addition, you will find important information about your stove (model, serial number, etc.). You will find the certification label on the inner side of the hopper lid of the stove.

Minimum Clearances to Combustibles

LETTER	MINIMUM CLEARANCES TO COMBUSTIBLES		
	CANADA	USA	
A*	1″ (25 mm)	1″ (25 mm)	
В	4″ (102 mm)	4″ (102 mm)	
С	1″ (25 mm)	1″ (25 mm)	
D	Refer to vent manufacturer's clearances	Refer to vent manufacturer's clearances	
I	54″ (1 372 mm)	54″ (1 372 mm)	

LETTER	RECOMMENDED CLEARANCES FOR MAINTENANCE		
	CANADA	USA	
A*	12" (305 mm)	12″ (305 mm)	
В	24″ (610 mm)	24″ (610 mm)	
С	12″ (305 mm)	12" (305 mm)	
D	Refer to vent manufacturer's clearances	Refer to vent manufacturer's clearances.	

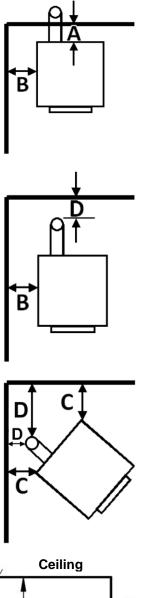
* From rear panel.

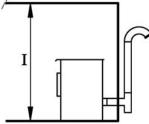
Note: These clearances are also valid for an *alcove* installation.

<u>WARNING</u>: IF THE STOVE IS INSTALLED IN AN ALCOVE, TO PERFORM MAINTENANCE, YOU SHOULD EXPECT TO MOVE THE APPLIANCE TO GET TO THE MAINTENANCE ACCESS DOORS AND COMPONENTS.

Ceiling Clearances

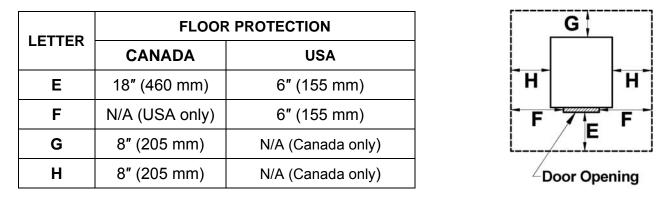
For ceiling clearances refer to the first table.





Floor Protection

For floor protection clearances refer to the following table:



<u>CAUTION</u>: THE STOVE MUST BE PLACED ON A CONTINUOUS (GROUTED JOINTS) NONCOMBUSTIBLE MATERIAL SUCH AS CERAMIC TILE*, CEMENT BOARD, BRICK, MILLBOARD OR EQUIVALENT, OR ANY OTHER APPROVED OR LISTED MATERIAL SUITED FOR FLOOR PROTECTION.

*Any type of tile will require a continuous non combustible sheet beneath to prevent the possibility of embers falling through to the combustible floor if cracks or separation should occur in the finished surface, this would include floor protection for built-in raised hearths. Check local codes for approved alternatives.