

PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE
PELLET STOVE

HP-0020S

Freestanding

OWNER'S MANUAL



Contact your building or fire officials about restrictions and installation inspection requirements in your area.

PLEASE READ THIS ENTIRE MANUAL BEFORE INSTALLATION AND USE OF THIS PELLET BURNING ROOM HEATER. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.

THIS MANUAL IS PRINTED ON RECYCLED PAPER. PRODUCTS SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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PELLET QUALITY:

the burning process]. This hard mass will block the air flow through the Burn Pot Liner and affect the performance of the stove. Any fuel, even approved types, may tend to clinker. Check the Burn-Pot Liner daily to ensure that the holes are not blocked with clinkers. If they become blocked, remove the liner (when the unit is cold) and clean/scrape the clinkers out. Clean the holes with a small pointed object if required. Refer to the section Routine Cleaning and Maintenance.

PELLET FEED RATES: Due to different fuel densities and sizes, pellet feed rates may vary. This may require an adjustment to the slider damper setting or to the auger feed trim setting on low.

Since stove supplier has no control over the quality of pellets that you use, we assume no liability for your choice in wood pellets.

Store pellets at least 36" (1 m) away from the pellet stove.

Caution: Keep the fire box clean, before you start the stove.

Introduction

IMPORTANT SAFETY DATA:

Please read this Owner's Manual before installing or operating your Pellet Stove. Failure to follow these instructions may result in property damage, bodily injury or even death. Contact your local building or fire official to obtain a permit and any information on installation restrictions and inspection requirements for your area.

To prevent the possibility of a fire, ensure that the appliance is properly installed by adhering to the installation instructions. The dealer will be happy to assist you in obtaining information with regards to your local building codes and installation restrictions.

Be sure to maintain the structural integrity of the home when passing a vent through walls, ceilings, or roofs.

The stove's exhaust system works with negative combustion chamber pressure and a slightly positive chimney pressure. It is very important to ensure that the exhaust system be sealed and airtight. The ash pan and viewing door must be locked securely for proper and safe operation of the pellet stove.

Do not burn with insufficient combustion air. A periodic check is recommended to ensure proper combustion air is admitted to the combustion chamber. Setting the proper combustion air is achieved by adjusting the slider damper located on the left side of the stove.

When installing the stove in a mobile home, it must be electrically grounded to the steel chassis of the

home and bolted to the floor. Make sure that the structural integrity of the home is maintained and all construction meets local building codes.

Minor soot or creosote may accumulate when the stove is operated under incorrect conditions such as an extremely rich burn (black tipped, lazy orange flames).

If you have any questions with regard to your stove or the above-mentioned information, please feel free to contact your local dealer for further clarification and comments.

SAFETY WARNINGS AND RECOMMENDATIONS:

Caution: Do not connect to any air distribution duct or system.

Do not burn garbage or flammable fluids such as gasoline, naptha or engine oil.

Unit hot while in operation. Keep children, clothing and furniture away. Contact may cause skin burns.

FUEL: This pellet stove is designed and approved to only burn wood pellet fuel with up to 3% ash content. Dirty fuel will adversely affect the operation and performance of the unit and may void the warranty. Check with your dealer for fuel recommendations.

THE USE OF CORDWOOD IS PROHIBITED BY LAW.

SOOT: Operation of the stove with insufficient combustion air will result in the formation of soot which will collect on the glass, the heat exchanger, the exhaust vent system, and may stain the outside of the house. This is a dangerous situation and is inefficient. Frequently check your stove and adjust the slider/damper as needed to ensure proper combustion. **See: "SLIDER/DAMPER SETTING".**

CLEANING: There will be some build up of fly ash and small amounts of creosote in the exhaust. This will vary due to the ash content of the fuel used and the operation of the stove. It is advisable to inspect and clean the exhaust vent semi-annually or every two tons of pellets.

Introduction

ASHES: Disposed ashes should be placed in a metal container. The closed container of ashes should be on a non-combustible floor on the ground, well away from all combustible materials pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispensed, they should be retained in the closed container until all cinders have been thoroughly cooled.

ELECTRICAL: **The use of a surge protected power bar is recommended.** The unit must be grounded. The grounded electrical cord should be connected to a standard 220 volts (4.5 Amps), 50 hertz electrical outlet (Europe standard), or 115 volts (4.5 Amps), 60 hertz electrical outlet (North

America Standard). Be careful that the electrical cord is not trapped under the appliance and that it is clear of any hot surfaces or sharp edges and also must be accessible. If this power cord should become damaged, a replacement power cord must be purchased from the manufacture or a qualified dealer. The stove's maximum power requirement is 520 watts.

GLASS: Do not abuse the glass by striking or slamming the door. Do not attempt to operate the stove with broken glass. The stove uses ceramic glass. Replacement glass must be purchased from a qualified dealer. Do not attempt to open the door and clean the glass while the unit is in operation or if glass is hot. To clean the glass, use a soft cotton cloth and mild window cleaner, gas or wood stove glass cleaner, or take a damp paper towel and dip into the fly ash. This is a very mild abrasive and will not damage the glass.

FLAMMABLE LIQUIDS: Never use Flammable Liquid such as gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire in the heater. Keep all such liquids well away from the heater while it is in use.

SMOKE DETECTOR: Smoke detectors should be installed and maintained in the structure when installing and operating a pellet burning appliance.

OPERATION: The ash pan and door must be closed securely for proper and safe operation of the pellet stove. Also ensure all gaskets on the door are checked and replaced when necessary.

KEEP ASH PAN FREE OF RAW FUEL.

DO NOT PLACE UNBURNED OR NEW PELLETS FUEL IN ASH PAN. A fire in the ash pan may occur.

INSTALLATION: Be sure to maintain the structural integrity of your home when passing a vent through walls, ceilings, or roofs. It is recommended that the unit be secured into its position in order to avoid any displacement.

DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

FRESH AIR: Outside Fresh Air connection is optional. Must be connected to all units installed in Mobile and "Air Tight Homes" (R2000) or where required by local codes. Consider all large air moving devices when installing your unit and provide room air accordingly. Limited air for combustion may result in poor performance, smoking and other side effects of poor combustion.

If you have any questions with regards to your stove or the above-mentioned information, please feel free to contact your local dealer for further clarification and comments.

SINCE STOVE SUPPLIER HAS NO CONTROL OVER THE INSTALLATION OF YOUR STOVE, STOVE SUPPLIER GRANTS NO WARRANTY IMPLIED OR STATED FOR THE INSTALLATION OR MAINTENANCE OF YOUR STOVE. THEREFORE, STOVE SUPPLIER ASSUMES NO RESPONSIBILITY FOR ANY CONSEQUENTIAL DAMAGE(S).

SAVE THIS INSTRUCTION MANUAL FOR FUTURE REFERENCE!

Your pellet Stove has the following safety features:

- A. The stove will shut off when the fire goes out and the exhaust temperature drops below 120°F(52°C).
- B. The stove has a high temperature safety switch. If the temperature on the hopper reaches 200°F (93°C), the auger will automatically stop and the stove will shut down when the exhaust temperature cools. If this happens, call your local dealer to reset the 200°F (93°C) high limit switch. **ALSO FIND THE REASONS WHY THE UNIT OVERHEATED.**
- C. The unit has a convection fan control over-ride. This function causes the convection fan to reach its full speed when the temperature at the back of the firebox reaches 160°F (71°C). This is a normal safety feature of your unit. To compensate for the fan cycling action that may occur, turn up the blower control proportionately to the heat output.
- D. If the power goes out, the unit will stop running. When the power comes back on, the stove will not restart unless the exhaust temperature is still above 120°F (52 °C).

Product performance introduction

Pellet stove is advanced designed and has individual fresh air input and venting system. Negative pressure burning technology causes high efficiency and little ash outlet during burning. It will be shut off automatically by wrong burning or out of fuel. Large BTU, quick heating and low fuel cost are its advantages.

1. Main performance

Model	HP0020	HP0020S	HP0022I
Rating input MJ/h	33000BTU/H	33000BTU/H	33000BTU/H
Rating fuel consumption kg/h	1.7 +_5%	1.7 +_5%	1.7 +_5%
Heating area m ²	~140	~140	~140
Rating voltage V	230	230	230
Rating frequency Hz	50	50	50
Rating power W	<=150	<=150	<=150
Hopper kg	23	23	23
Venting pipe diameter mm	80	80	80
Air input pipe diameter mm	50	50	50
Unit size (wide* depth*high) mm	620*600*815	620*600*815	615*576*615 131*23*950(faceplate)

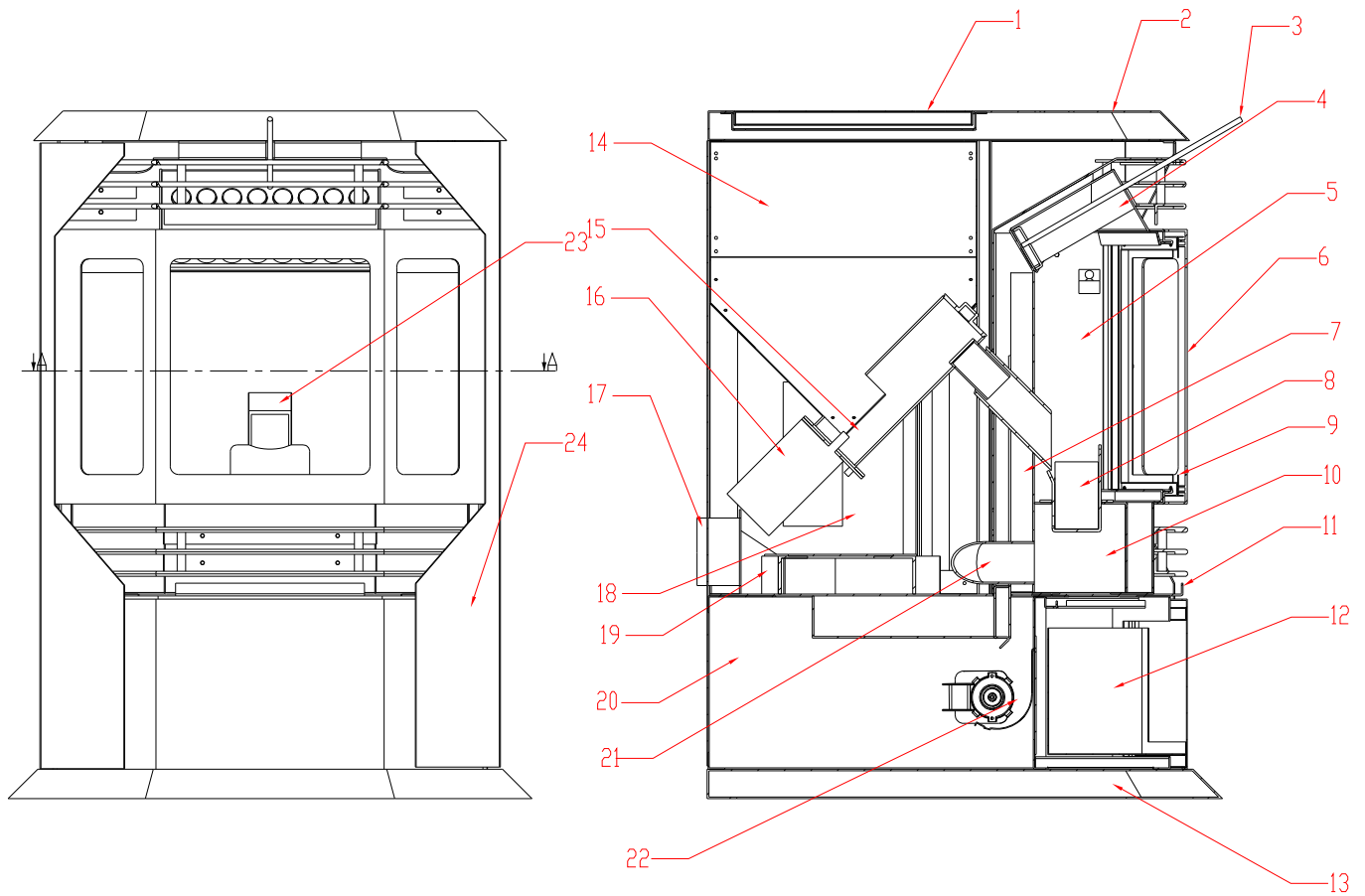
2. Wood pellet

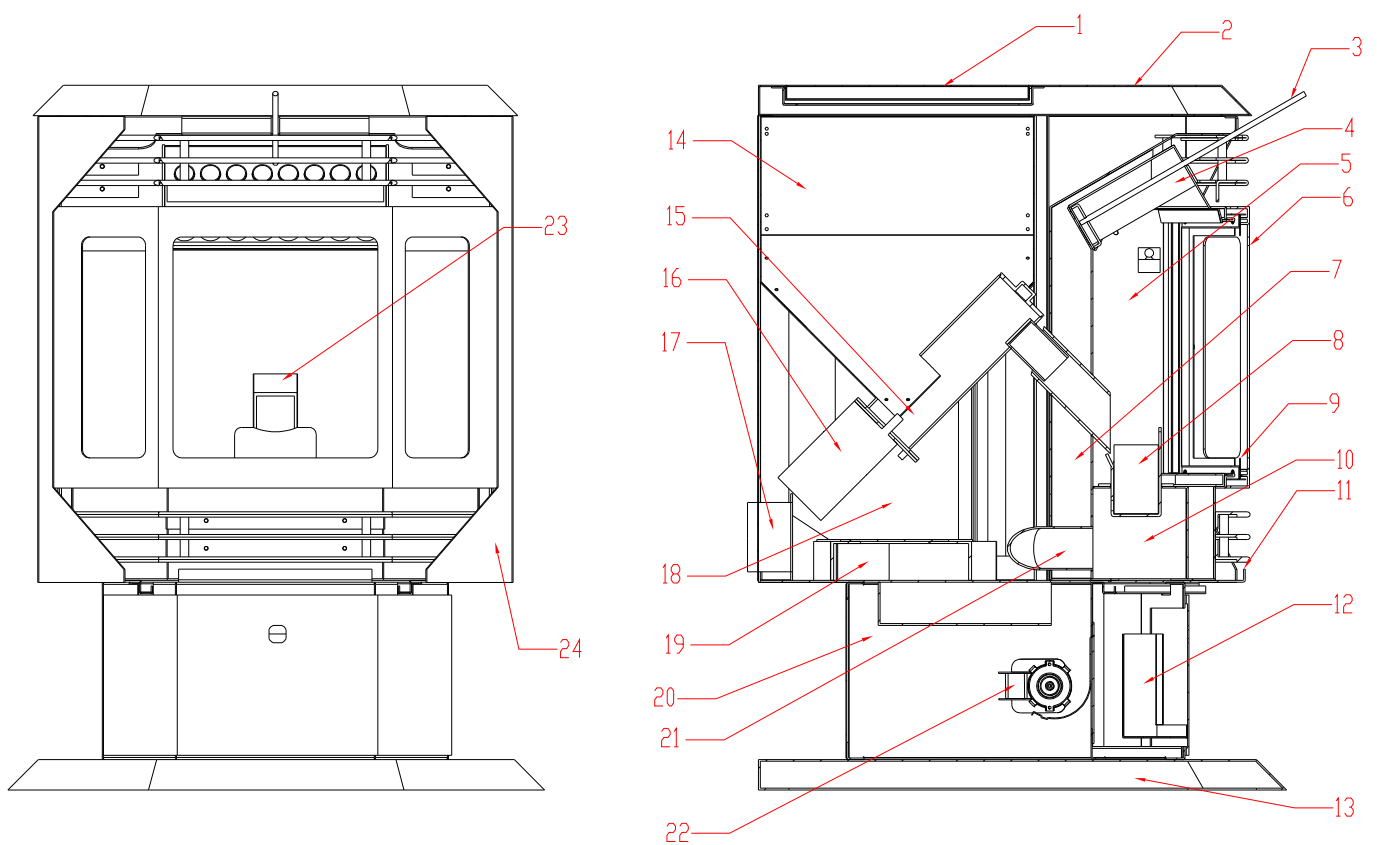
This stove uses wood pellet fuel. It is small column pellet with cleaning surface. The diameter is φ6-8mm, the length is no more than 35mm, and its humidity is no more than 10%. Ash is no more than 1%.

Take care of the pellet. Do not damp or crush it. Or, it will affect the efficiency and the dust will be collected on the door glass.

Structure instruction of pellet stove

Note:





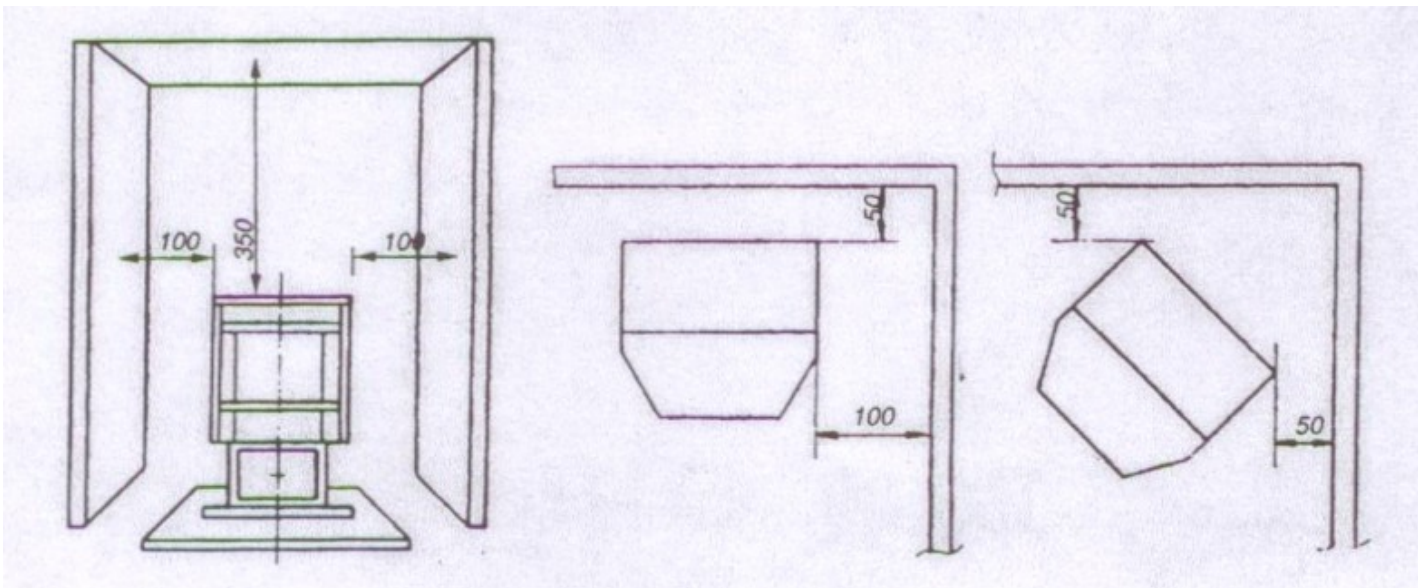
1. hopper cover 2.top cover 3.ash scraper 4.heat exchanger 5.burning chamber 6.window 7.hot wind channel 8.pellet grill 9.seal rope 10.fresh air chamber 11.ash cleaner 12.ash drawer 13.base 14.hopper 15.auger 16. auger motor 17.venting pipe 18. air input pipe 19. exhaust blower 20.pedestal 21.fresh air pipe 22. conversion blower

Installation

1. Deciding Where to Locate your Pellet Appliance and **CLEARANCES TO COMBUSTIBLES:**

When installing this unit on a combustible floor (for example linoleum, hardwood flooring) a non-combustible hearth pad (15mm thickness) must be under the unit. The pad must extend at least the width of the appliance [22" (558 mm)] and at least the depth of the appliance plus 6" (153 mm) in front of the appliance [29 3/4" (756 mm)].

The clearance between the walls or to the top is no more than the size in the figure.



Min. installation clearance (mm)

1. Electrical:

The unit must be grounded. The grounded electrical cord should be connected to a standard 220V, 50Hz(4.5 Amps), (115 volts (4.5 Amps), 60 hertz) electrical outlet. Be careful that the electrical cord is not trapped under the appliance and that it is clear of any hot surfaces or sharp edges and also must be accessible. If this power cord should become damaged, a replacement power cord must be purchased from the manufacturer or a qualified dealer.

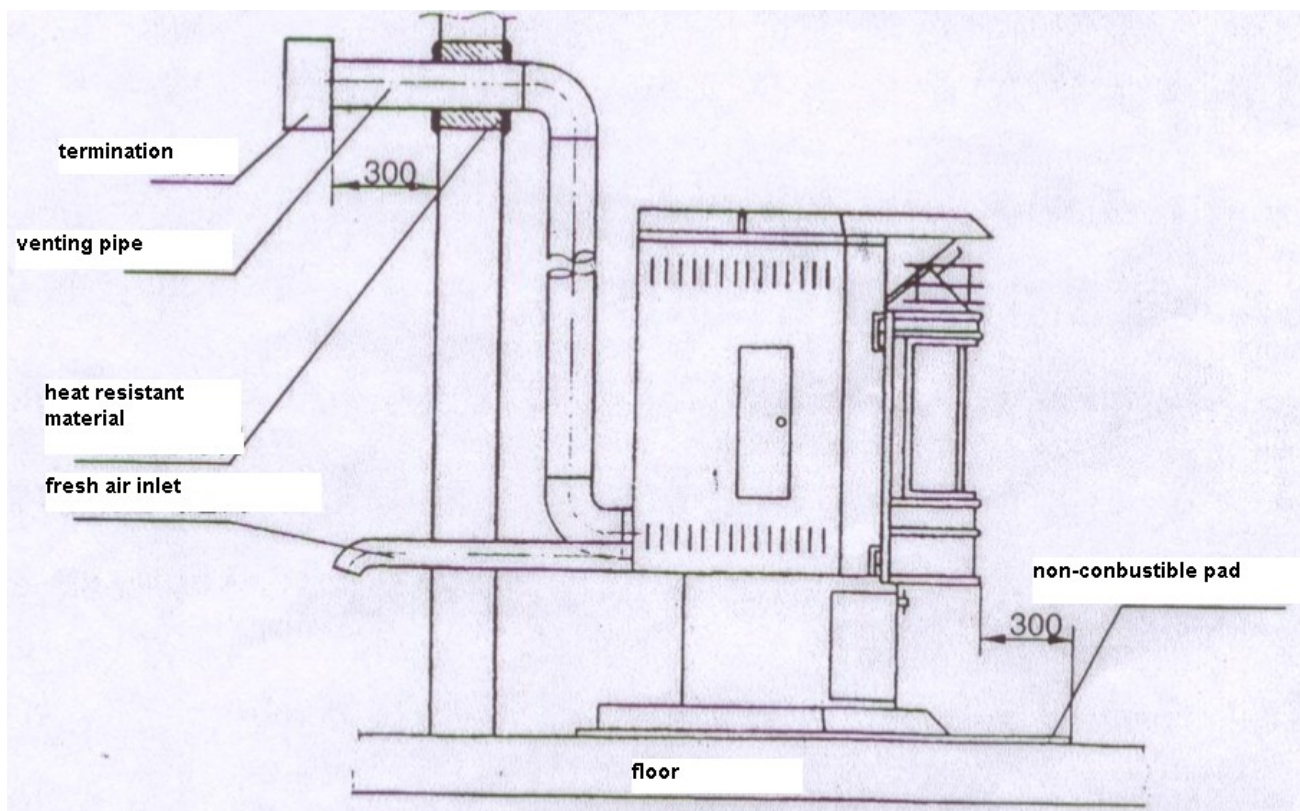
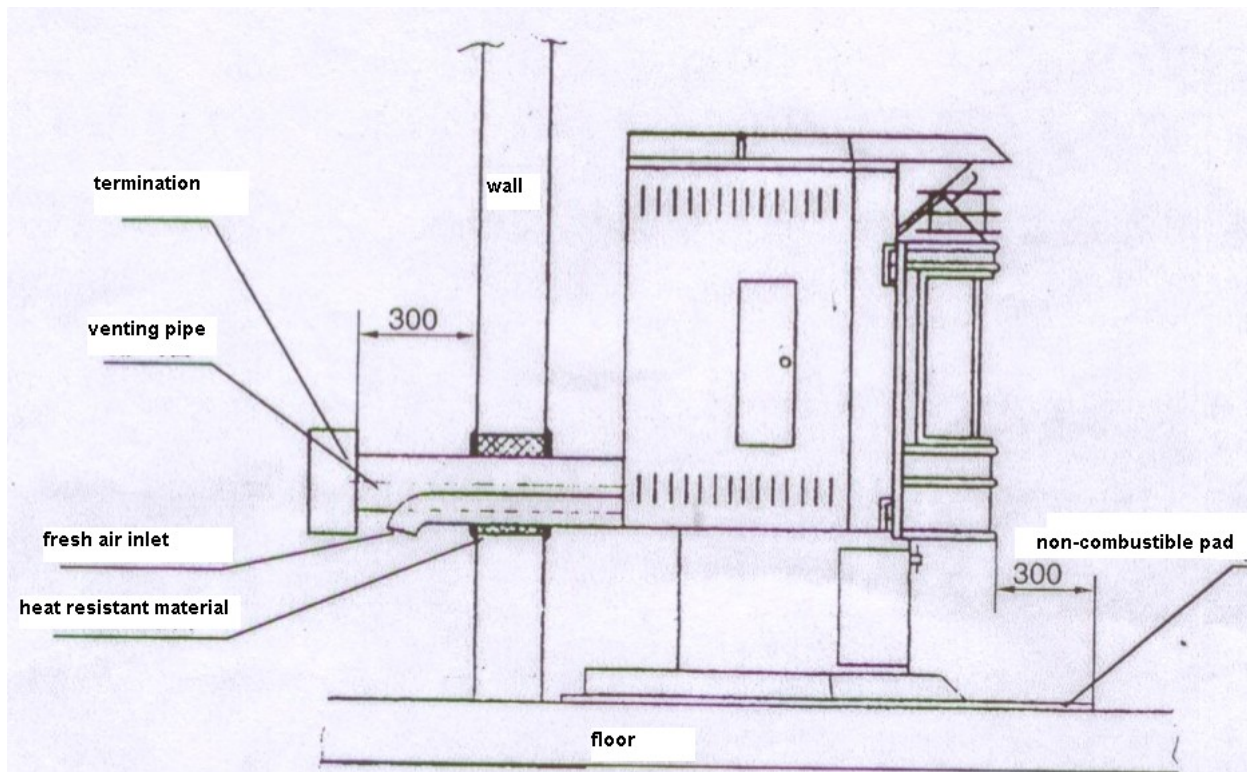
2. Air input and venting pipe Installation

The stove air input pipe diameter is $\phi 50$ mm, venting pipe diameter is $\phi 80$ mm. The total length of pipes is no longer than 3m and elbows are not available. Indoor venting pipe joint should be sealed by silicone sealant to prevent exhaust leaking into the room. Venting pipe and termination should be waterproof and avoid being blocked. Or, the stove can not work properly.

When the installation is limited by space or the owner's special requirements and the pipes' length should be longer than 3m and need elbows, the diameters of the air input pipe and venting pipe must be increased

properly for smooth convection. If not, it will influence the burning and the stove can not work properly. The owner should connect with the local seller for the right installation.

When pellet stove is normal working, the temperature on venting pipe surface can reach 200°C, so the combustible things, clothes and furniture should be away from the venting pipe. To prevent scald, don't touch the heating surface!



Operation Instructions

1. The first ignition

Please open the window and door when igniting first. The paint smell can be get rid of by burning.

Please connect the power and put wood pellet fuel(10kg) into the hopper ,then operate as the instruction on section 2"start and operation"

2. Start and operation

Please operate the stove as following (refer to stove structure figure and electrical control figure):

- a. Check the box, pellet gratebar, airmate board and ash pan then adjust to proper position.
- b. Fill the hopper with pellet.
- c. Switch on K1, K2, the power light is on.
- d. Open the stove door ,put enough pellet in gratebar , then ignite it .After about2-3 min, it forms the stable flame.
- e. Close the stove door, press the start button (ST):
____auger motor starts and feeds fuel
____convection blower starts up
- f. Depending on the heating desire, fuel intake quantity can be adjusted from few to large by the fuel control switch (SV3). At the same time adjust the switch (SV1) and (SV2) to blow the hot wind to the room to reach the best combustion.

Note: if the ignition is failure, the thermal control will shut off the stove automatically. Then, follow the above process to ignite and start again.

3. TURNING YOUR PELLET STOVE OFF

Please turn off the stove as the following:

- a. Put switch (SV3) on "OFF";
- b. Turn off switch (K1, K2), the power and the light is off.
- c. The stove will power off and the fire will be put out within 25min by the thermodisc (T0, TI).

4. Safety

- a. The stove will power off and the fire will be put out within 25min when the auger motor stops.
- b. The stove will power off and the fire will be put out within 30min when the convection blower stops.
- c. Auger motor stops feeding when thermodisc $T3 \geq 93^{\circ}\text{C}$. When the $T3 < 93^{\circ}\text{C}$, the auger motor feeds again, the stove will keep working.

Caution

1. It is important to select and use only pellets that are dry and free of dirt or any impurities such as high salt content. Dirty fuel will adversely affect the operation and performance of the unit and will void the warranty. The Pellet Fuel Industries (P.F.I.) has established standards for wood pellet manufacturers. We recommend the use of pellets that meet or exceed these standards. Ask your dealer for a recommended pellet type.
2. Please keep the door closing and sealing during burning for good effect and preventing hot ash flying out.
3. The burning features ---bright yellow flame, the pellet burning with a little jumping in the gratebar. No pile pellet and no smoke venting. If it becomes a little dark glow and lazy flame, smoke appears from the venting terminal, speed up the convection blower to add the air input.
4. For reducing the heat output, its better to reduce the pellet feed. At the same time turn down the speed of convection blower and exhaust blower till it reaches the best effect.
5. This stove can work economically by the regular fuel input; try best to avoid long time operation under the overload for long life use.
5. Venting pipe and air input pipe should keep unblocked.

Safety instructions

1. The power jack must be grounded.
2. No combustion or explosive things around the stove when it is operating.
3. When installing this unit on a combustible floor (for example linoleum, hardwood flooring) a non-combustible hearth pad (15mm thickness) must be under the unit.
4. Do not open the stove door to prevent smoke and fire flow out when the stove is operating.
5. Do not touch the surface when the stove is operating. The high temperature of the stove glass door and venting pipe will scald you.
6. Use the solid combustion-supporting to ignite. For safety, do not use gasoline or other combustion or explosive things to ignite

Maintenance

Maintenance must be handled only when the stove is cold and out of power.

1. Using a metal scraper, remove material that has accumulated or is clogging the gratebar's holes. Then dispose of the scrapped ashes from the gratebar and from inside the burn box to ensure proper air flow through the gratebar.
2. Clean the door glass and doorframe with wet soft cloth and cleanser daily. Check the gasket complete and well in position or not.
3. Clean the dust in box weekly. Take out the box, put the dust out, and then sweep the dust with brush into the ash drawer.
4. Clean the dust on the heat exchange pipe fortnightly. Close the door first. Heat exchange tube cleaner rob is to be pulled back and forth a few times in order to clean away any fly ash that may have collected on the heat exchanger tubes.
5. Put the ash in the ash drawer out monthly.
6. When stop using it for a long time, it should be cleaned completely. Especially clean the airmate board, convection blower and venting pipe.

- a. Move the airmate board, clean the surface with the brush, and then recover it.
- b. Screw out the bolts from the connection of input and output on the convection blower, clean the dust deposited inside the blower with the brush.
- c. Take off the venting pipe, clean the dust inside the pipes and elbows. Then install them again and ensure the joint is sealed.

Troubleshooting

The control panel of the stove has trouble examine lights kit which are red, green and orange by 230V. The auger motor lights are bright and flash when the stove is on normal work. When the sensor detect the abnormal work temperature (below 50°C or over 93°C), the auto-control temperature switches will shut off the fuel feed system automatically to prevent the pellet pile or overheat. When temperature is below 50°C, the safety control system will stop the stove automatically.

The general trouble, the possible reason and the solution are as following, after solving problems, start the stove again:

problems	reason	solution
1. The blower doesn't work after pressing the start bottom.	No power in stove or in the control panel.	Check the power and wires.
2. No feeding after igniting. A. Three lights are bright and flash.	Feed unit is blocked. Auger motor doesn't work.	Check the auger is blocked or not. Check auger motor is blocked or not. And the wires break or not. Check the fasten screw between auger and motor loose or not.
B. The orange lights are bright but no flash.	No fuel in the hopper. The clock unit breaks.	Fill the fuel into the hopper. Change the clock unit.
C. The red light is bright and flash but other lights aren't bright.	The high temperature switch disconnects. The high temperature switch breaks.	Tight the high temperature switches connection. Change the high temperature switch
D. The feed motor lights aren't bright.	No 230V power. Pellet feeder is power off. The wires of start and clock unit loose or break.	Check the 230V power. Turn on the auger motor switch. Check the wires of start and clock unit or change the unit.
3. After ignition the power is off 15min late.	Pellet feeder unit is off or pellet is too little. 50°C temperature switch breaks or the connection wires of switch loose.	Check the pellet feeder unit and restart. Check the connection wires or change the 50°C temperature switch.
4. orange and lazy fire, piled pellet, carbon on the glass	Lack of air intake for burning.	Clean the block in gatebar. Adjust the knob of convection blower and increase the air intake. Check the door and window glass gasket sealed or not. Check the air intake pipe and venting pipe blocked or not, and clean it. Change to the big diameter pipes if pipes are too long to

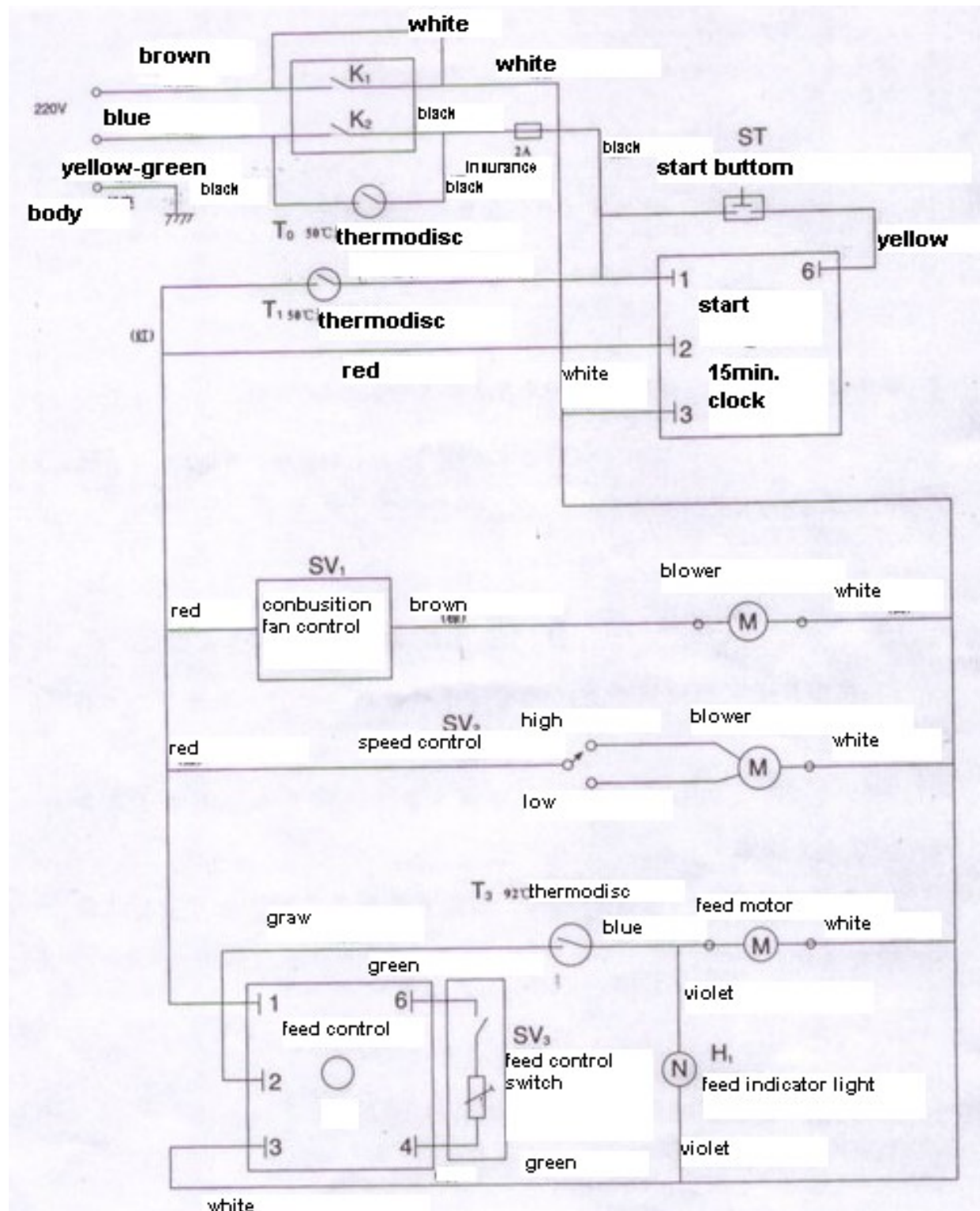
		affect combustion.
5. The fire put out and power is off automatically.	The hopper is empty. No fuel feed. The fuel feed is too little. High temperature switch (93°C) is wrong.	Put fuel into the hopper. refer to (2) Increase the fuel feed. Cool the stove at least 1 hour then operate again or change the high temperature switch (93°C).
6. The blower still works after the stove is cool and fuel feed stops.	The low temperature switch (50°C) is broken.	Change this switch.
7.no enough heat wind	Unqualified fuel Blower speed is too high. Heat exchange tubes are dirty.	Use the standard specially pellet. Turn down the blower. Clean the heat exchange tubes.
8. Ash and smoke fly out.	Leak between the connection of convection motor and venting pipe. The clean method is wrong.	Use silicon rubber to seal. Clean the dust in the stove with brush to ash drawer.

Attention: the stove has a self-checked system, operation: press “on” don’t release, then start the power button. The stove is coming to the self-checked state, use select button choose every parts can work normally or not.

Warranty

1. If the owner follows the operation of this manual, it is guaranteed the stove can well work normally within one year after selling. If the stove be destroyed by the poor quantity or the stove works abnormally within the guarantee period, it will be repaired or changed parts with free charge.
2. The problems caused by the owner’s improperly operation are not our guarantee. We can supply payment service. It’s a lifetime product.

Figure:



Electrical figure