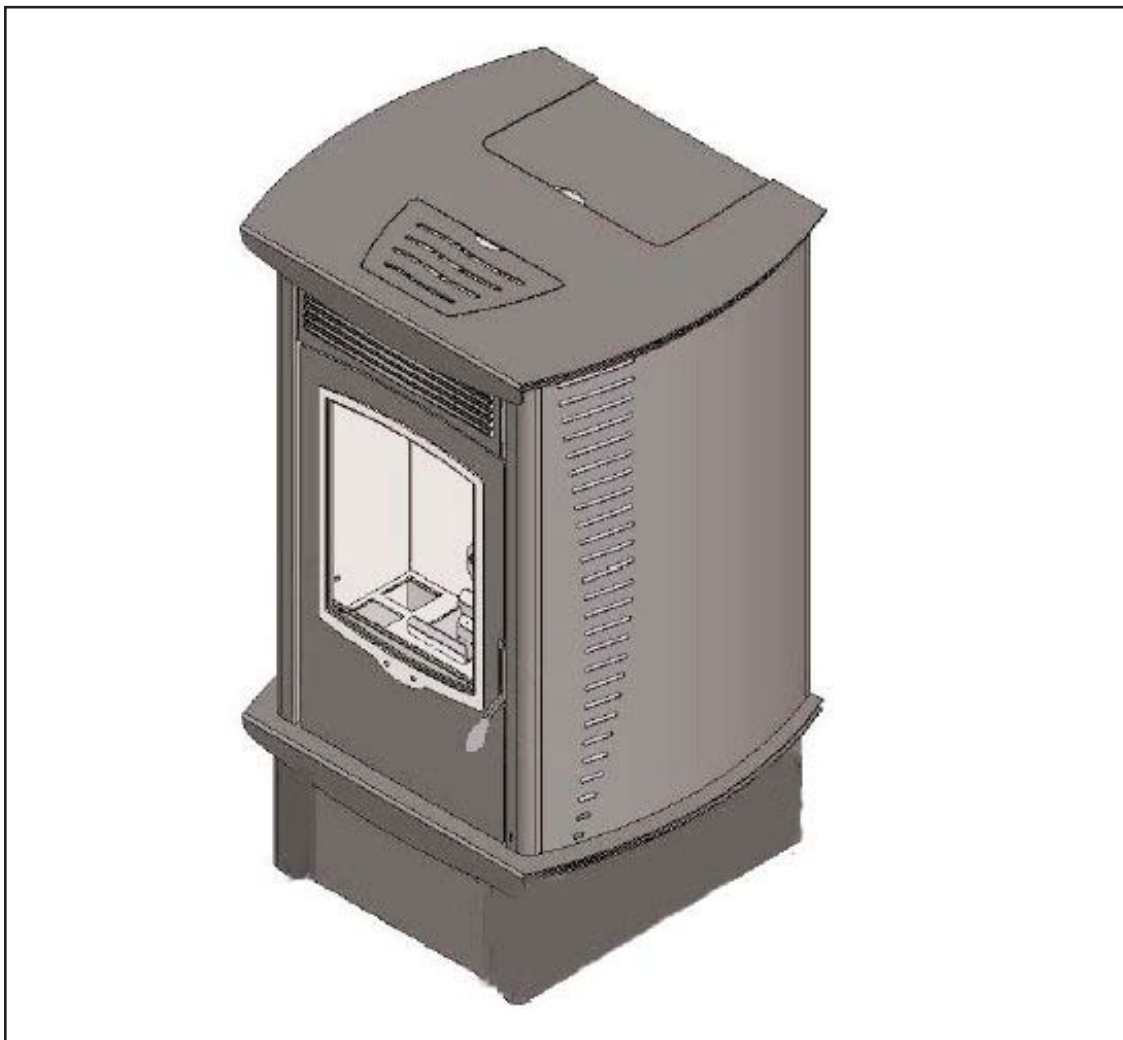




FUSION PELLET STOVE (MK2) (From Serial No. J3000076)



Operating & Installation Manual

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STANDARDS

N.B.: The information in this manual is given only as a general guide, and local, national or EC regulations must also be complied with.

RECOMMENDATIONS:

Before using this appliance, please read all parts of this instruction manual carefully, as the information it contains, is essential in order to use the appliance correctly.

Read this manual prior to installation, maintenance & operation of this appliance.

The manufacturer will not be responsible for any modifications made to this appliance by or on behalf of the user. The manufacturer will not be responsible for any eventual damage or loss as a result of unauthorised modifications. In the event that parts need to be replaced, only use parts recommended by AGA.

The user is responsible for all work involved in the initial installation of the appliance and for keeping it working efficiently thereafter.

Incorrect installation may result in damage to property, or injuries to persons or animals. The manufacturer will not be liable for any damage resulting from incorrect installation, or failure to follow the instructions that accompany this appliance.

GENERAL NOTICE

Important: The appliance MUST be earthed.

Before installing the appliance, the power supply system must be checked to ensure it has an effective earth circuit.

Important: the power supply cable must be of sufficient cross-section for the power requirement of the appliance.

The supply voltage required for the stove is 220-240 V at 50 Hz. Voltage variations greater than 10% of the rated value may cause irregular operation, or damage to the electrical system. The appliance must be positioned so that the domestic power supply plug remains accessible.

If the power supply cable becomes damaged, switch off the power and have it repaired by an authorised AGA service agent.

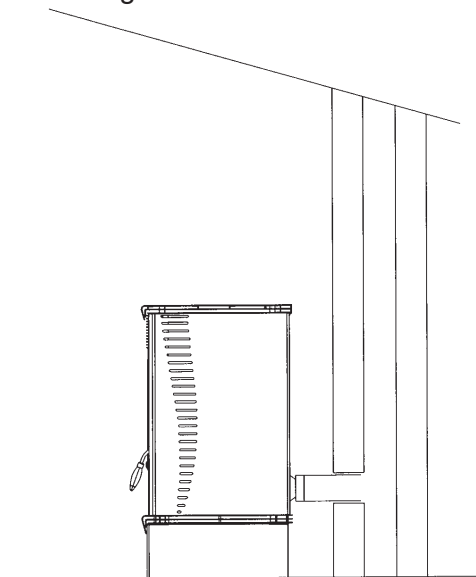
Do not use a flexible liner to connect this appliance to a flue system.

ASSEMBLY AND INSTALLATION INSTRUCTIONS

N.B. To install the stove, use only authorised and trained personnel, or contact the dealer.

1. Check that the floor can support the total weight of the stove (140kgs).
2. Refer to the figure that shows the dimensions of the flue pipe, and allowing for the thickness of the floor-protection base (if applicable), make a hole in the chimney to accommodate the smoke outlet pipe (diameter 80 mm).
3. Connect the stove to the chimney with a certified steel pipe suitable for this use and seal it. This appliance must not be connected to a shared flue.
4. Leave adequate clearance around the stove for cleaning and servicing. If the appliance is to be installed in an alcove a minimum of 400mm clearance is required all round to allow access for cleaning and servicing. This appliance has adjustable legs.

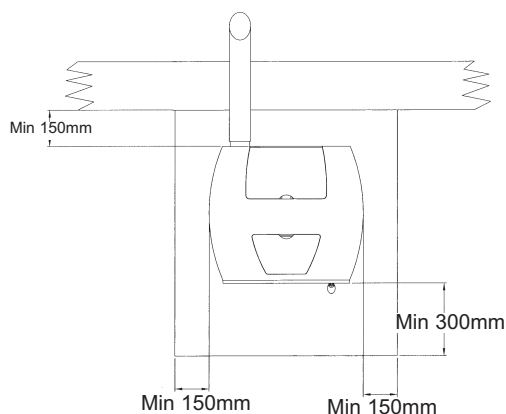
Fig.1



HEARTH DIMENSIONS

The hearth should extend 150mm to the rear of the stove and 150mm to both sides and 30cm to the front.

Fig.2



STOVE DIMENSIONS (MM)

Fig.3

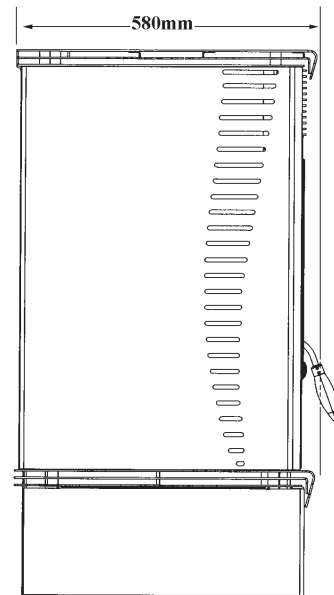


Fig.4

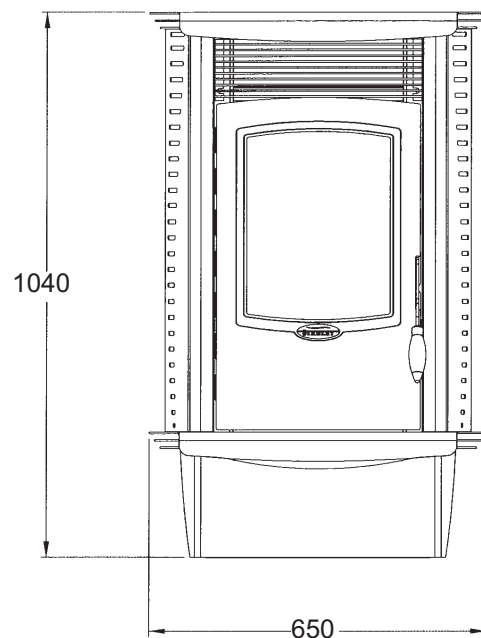
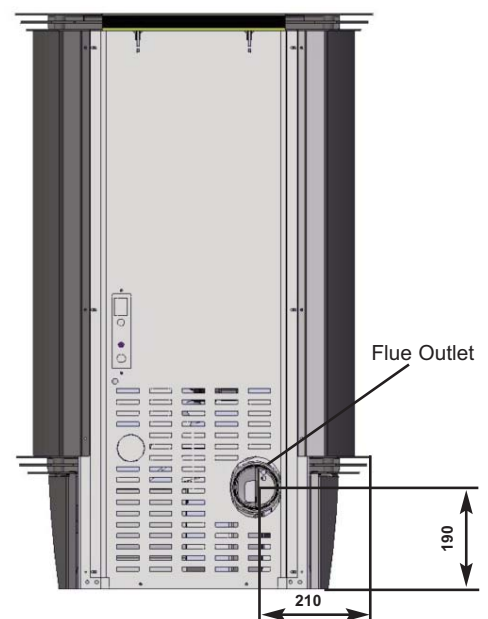


Fig.5



SAFETY WARNINGS

This appliance is not suitable for connection to a shared flue.

The stove must be placed on a non combustible hearth. If it is to be supported on a combustible floor surface, it must be supported on a floor-protection plate of at least the size shown in 3.1. It must be at least 8mm thick.

The appliance must be connected to a chimney suitable for solid fuels with a minimum diameter of 100mm and with a minimum length of 2m from the appliance flue outlet.

For insulating and sealing the pipes, use only heat-resistant materials (250° C).

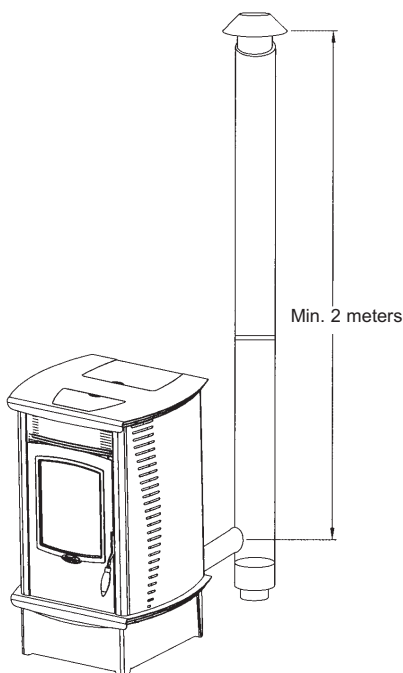


Fig.6

FLUE - VERTICAL EXTERNAL OR INTERNAL CHIMNEY

The flue arrangement shown is the best solution for evacuating smoke, even when the ventilator is off (no power supply, or lock out flame). Any installation must comply with current building regulations.

The minimum 2m level difference between the roof outlet and the T fitting inside or outside the building, ensures a minimum vacuum inside the stove, thus preventing smoke issue into the room.

External flues must be insulated: for example by using double-wall flue pipes.

The figure shows the recommended arrangement for flue outlets above roof level. In all cases, there must be a T fitting with inspection plug. The flue duct must be suitably fastened and fitted with a chimney pot for rain protection.

The through-holes in walls or floors must always have an insulated tube or ventilation passage, so that it is always possible to disassemble the chimney components for cleaning and inspection, and to prevent contact between these components and wall masonry or inflammable surfaces.

Fig.7

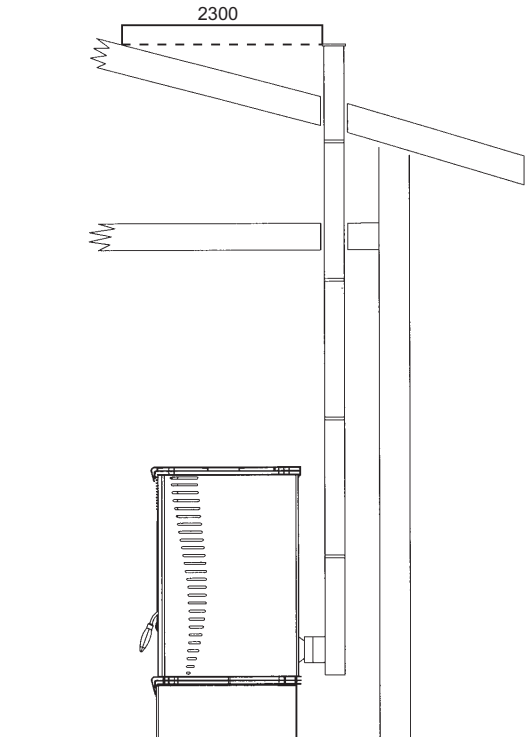
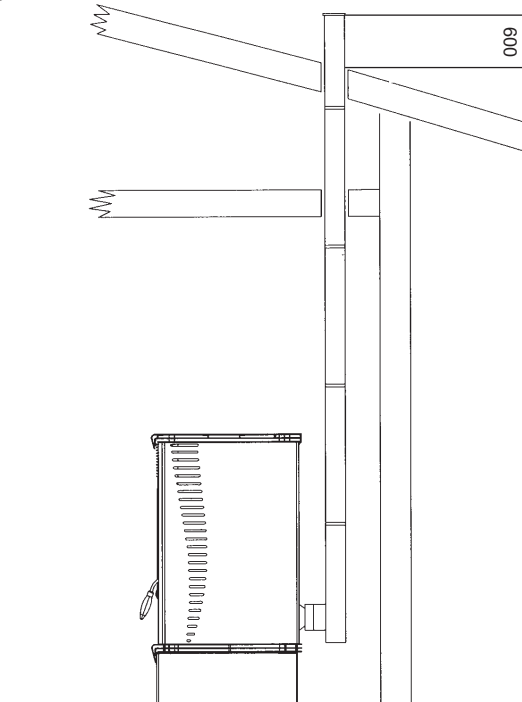


Fig.8



It is useful to have planned inspections of the pipe bends for periodic maintenance of the flue duct. The smoke outlet pipe must be protected against rainwater ingress.

Where it is necessary to have a horizontal length of pipe, there must be a minimum positive gradient of 3% along its length.

Do not run flue pipe in a totally horizontal plain or in a reverse gradient.

Do not install the smoke outlet at pavement level, on public streets, car-parks or anywhere that might cause annoyance to people and/or animals.

The flue must be installed with the outlet above roof level complying with current building regulations. A maximum flue length of 8 metres is allowed. For each 90° bend or T fitting, reduce the length by one metre. A minimum flue draught of 10 Pascals is required.

IMPORTANT: All sections of the flue pipe must be accessible for inspection, and allow for internal cleaning, removal or substitution.

Do not place a net or grill over the flue outlet. When they become dirty they will obstruct the outlet and cause poor combustion, and the stove may be blocked with soot.

COMBUSTION AIR

The process of combustion requires oxygen, and therefore air. When in operation, the stove draws air from the room in which it is installed; poor combustion may therefore result if the room is insufficiently ventilated.

To resolve this problem, a suitable vent hole must be provided to allow a permanent supply of fresh air from the outside. The cross-section of the vent must be 6cm² for each kW of energy consumed at maximum input therefore the ventilation hole must have a cross-sectional area of 83cm² if a flue draught stabiliser is fitted.

If no flue draught stabiliser is fitted the ventilation requirement is 44cm².

If the stove is located in a room containing another appliance cooker hood or extractor fan, it is essential to provide ventilation equivalent to the sum of the air requirement for all appliances.

The vent must not be placed directly beside the appliance in order to avoid drawing in air that is too cold: at certain times of the year when the appliance is very cold, the stove may be locked out when you first attempt to light it. If this occurs, the situation should be considered absolutely normal, and you can unlock the stove using the switch #4 located on the control panel. Then switch on again.

INITIAL COMMISSIONING

It is vital that the installation of the AGA Fusion Pellet stove is in accordance to manufacturer's instructions.

On commissioning the appliance it is important that the Auger is filled with pellets prior to firing.

To do this the fire door must be closed:

- a) Fill the hopper with 6mm diameter pellets taking care to keep sawdust in the bag.
- b) Turn the power ON to the appliance and press the power switch ON (located on the back of the unit).
- c) Press and hold button 4 for 4 seconds to turn the unit ON (this will activate the fan required to activate the air pressure switch), then re-press button 4 for 4 seconds to turn the unit OFF. Leave the mains power onto the appliance.
- d) Press buttons 5 and 6 together, this will activate the Auger, hold the buttons until pellets are seen to enter the burner from the pellet chute, the Auger should now be loaded.
- e) Remove pellets from the burner pot.

The stove has sequence settings which are factory-set by the manufacturer and **these should not be altered.**

However these must be checked during initial commissioning before firing. To do this press button 3 a number of times until UT01 shows. If the lower display shows OFF then you will need to set the correct day and time (See Page 10).

Day 1 - Monday
Day 2 - Tuesday
Day 3 - Wednesday
Day 4 - Thursday
Day 5 - Friday
Day 6 - Saturday
Day 7 - Sunday

1. Press button 3 until UT04 shows on the upper display.
2. Press buttons 1 or 2 until A9 shows on the lower display, then press button 3.

3. The upper display should show Pr 01 and its setting shows on the lower display. Should its setting be incorrect, change the setting using buttons 1 or 2. Once confirmed as correct press button 3 to check the next setting, Pr 02 etc ... there are 28 settings in total under A9.

Pr 01 - 18 Pr 02 - 5 Pr 03 - 30 Pr 04 - 2.5
Pr 05 - 1.5 Pr 06 - 1.5 Pr 07 - 2.0 Pr 08 - 2.5
Pr 09 - 3.0 Pr 10 - 4.0 Pr 11 - 60 Pr 12 - 60
Pr 13 - 60 Pr 14 - 259 Pr 15 - 80 Pr 16 - 2500
Pr 17 - 2600 Pr 18 - 1850 Pr 19 - 1900
Pr 20 - 1950 Pr 21 - 2050 Pr 22 - 2250
Pr 23 - 10 Pr 24 - 12 Pr 25 - 16 Pr 26 - 22
Pr 27 - 30 Pr 28 - 250

4. It is then necessary to check the settings on C9. This is reached in exactly the same way, by pressing buttons 1 or 2 then button 3 when C9 is reached.
C9 settings are all set to zero.

Pr 56 - 0 Pr 57 - 0 Pr 58 - 0 Pr 59 - 0 Pr 60 - 0
Pr 61 - 0 Pr 62 - 0 Pr 63 - 0 Pr 64 - 0 Pr 65 - 0

5. Repeat the procedure for the D9 settings.

Pr 81 - 2150 Pr 82 - 2200 Pr 83 - 2250 Pr 84 - 2350
Pr 85 - 2550

6. If you pause longer than 60 seconds when checking these settings you will need to return to step 1, then go to where you left off.

SAFETY AND CORRECT USE OF THE APPLIANCE

Before switching on for the first time, read the following safety instructions.

1. Some parts of the stove become hot (door, glass, flue, etc.), and contact with these parts may cause burns.
2. Do not place combustible or inflammable material beside the stove, and never at less than 1 metre.
3. Do not store bags of pellets close to the stove.
4. Your stove burns pellets only - it is not an incinerator. It is forbidden to burn other materials or household waste as fuel.
5. When loading pellets into the tank, avoid pouring sawdust along with them. Failure to follow this instruction may make the appliance unsafe, and void all warranties.
6. Keep children away from the stove. Do not open the door when the stove is lit.
7. Do not switch off the electric power supply while the stove is on. This will cause the smoke extractor fan to stop, and the burning fuel will cause smoke to issue into the room if there is no natural upward draught in the chimney.
8. When the stove is lit for the first time, the varnish may release fumes, and these may emit an unpleasant odour. The room must therefore be ventilated to evacuate these fumes. The varnish will be fully hardened after several heating cycles (2-3). On first lighting the stove may lockout as there is no pellet in the feed. The display will show ALARM NO FIRE. The stove has to be switched off and on again to reset.
9. Periodically ensure that the gaskets between stove and flue pipe are gas tight.
10. In case of fire switch off the stove, move any flammable materials away, and call the fire services.

IN CASE OF CHIMNEY FIRE

Switch off appliance and close all openings into the stove, watch for ignition of adjacent combustibles from hot embers or sparks from chimney.

FUEL

WHAT ARE PELLETS?

PELLETS consist of sawdust or real wood scraps ground and pressed into small cylinders about 6 mm in diameter and 20-30 mm in length.

As fuel, pellets are completely environmentally friendly, as they are made entirely of natural wood, without glue or other chemical compounds. Pellets have a high calorific value (4.7 to 5.3 kW/kg), and low moisture content.

IMPORTANT: Pellets must be stored in a dry place. Use only good quality pellets, without sawdust.

IMPORTANT NOTICE: The small quantities of sawdust normally present at the bottom of the bags should not be emptied into the tank, but should be held inside the bag while pouring the pellets carefully so that the sawdust remains inside.

If sawdust accumulates in the tank, it should be removed periodically with a vacuum cleaner (with the door open and disconnecting the power plug from the electricity supply), to prevent it entering the loading system and causing serious malfunctions.

IMPORTANT: If, during a loading operation, or for any other reason, foreign matter is allowed to enter the tank and then the pellet loader, it may cause damage to the internal mechanisms.

Besides causing damage, this would cause the stove to stop. In this case, the manufacturer cannot accept any liability.

ONLY 6mm DIAMETER PELLETS MUST BE USED

DO NOT USE POOR QUALITY PELLETS OR RE-PROCESSED PELLETS WITH HIGH SAWDUST CONTENT. THIS TYPE OF PELLET CAN SERIOUSLY IMPAIR THE FUNCTIONS IN YOUR STOVE, VOID THE WARRANTY AND THEREFORE RELEASE THE MANUFACTURER FROM ALL LIABILITY.

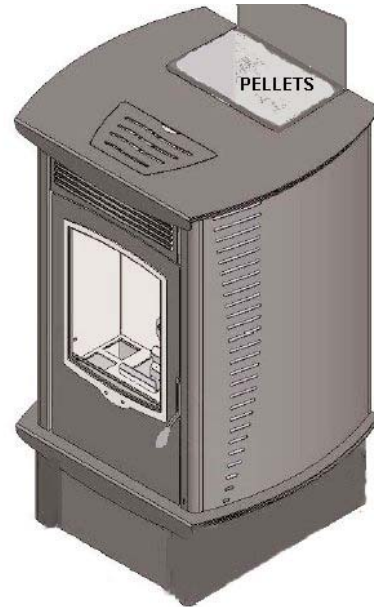
PELLET LOADING

The pellet tank capacity is 25 Kg. To load, lift the pellet tank lid, and pour in the pellets, taking care to keep any sawdust inside the bags.

Close the lid when loading is complete.

IMPORTANT: LOADING MUST BE CARRIED OUT ONLY WHEN THE STOVE IS OFF AND HAS COOLED DOWN.

Fig. 9



When pellets are used up, the stove cannot work and is therefore locked out, the display shows **“ALARM NO FIRE”**.

When refilling with pellet at this point it will take a little while for the pellet to come through so the fire may go to lockout again. This is normal and will light normally once the pellet has started to feed, probably at the second attempt.

NOTES ON OPERATION

Description of front panel controls

Button 4: ON/OFF and exit programming mode

Button 3: press once to change temperature settings, then button 1 to raise and to lower.

Buttons 5 and 6: UP/DOWN for thermal power setting.

Buttons 2 and 1: UP/DOWN for temperature setting, programming functions and indicators.

Upper LED display

Top left: timer program active

Bottom right: pellet auger ON

Top right: not active

Bottom left: this will flash when stove is cooling after being lit. Wait until this lamp goes out before restarting.

Lower LED display

Top left: heating elements ON

Top right: thermostat ON (set temperature achieved)

Operation: (Please refer to diagram on Page 12)

- a) To start the stove press button 4 for 4 seconds. The appliance will then energise the flue fan, the glow coil LED will light and FAN CAND will show on the panel.
- b) After allowing approximately two minutes for the glow coil to heat up the auger energises (timed) to load the pellets and LOAD WOOD appears on the LED display and the green LED on the right hand side of the display flashes indicating auger in operation. This phase will continue until 60°C is sensed in the flue by the flue thermistor.

At any time it is possible to read what temperature the flue thermistor is sensing by pressing and holding button 1. The lower display shows the temperature, the upper figure shows the fan speed.

- c) Once 60°C has been sensed in the flue the stove enters its stabilisation stage (5 minutes), FIRE ON is displayed on the LED display, the glow coil is de-energised and the stove will run at the chosen power setting.
- d) The circulation fan will turn on when 80°C has been sensed at the flue thermistor, the fan speed will run as per the chosen settings.
- e) If the pellets are not lit within 15 minutes; the stove displays the message ALARM NO FIRE. This is normal at first start up if the auger is empty and has not been loaded as described in the commissioning instruction. Switch OFF and ON again to reset, making sure there are pellets in the hopper.

When the stove reaches the chosen room temperature setting the LED display shows ECO and the unit goes into ECO mode. This is the same as user setting no. 1.

Power Setting

During operation the user can change the power setting by pressing buttons 5 and 6.

Setting 1

Time auger operates 1.5 seconds in every 5 seconds
Flue fan speed 1850rpm
Convactor fan setting 10

Setting 2

Time auger operates 2.0 seconds in every 6 seconds
Flue fan speed 1900rpm
Convactor fan setting 12

Setting 3

Time auger operates 2.5 seconds in every 7 seconds
Flue fan speed 1950rpm
Convactor fan setting 16

Setting 4

Time auger operates 3.0 seconds in every 8 seconds
Flue fan speed 2050rpm
Convactor fan setting 22

Setting 5

Time auger operates 4.0 seconds in every 8 seconds
Flue fan speed 2250rpm
Convactor fan setting 30

Cleaning cycle

Every 60 minutes the Fusion stove will speed its flue fan up for 60 seconds, this is to help keep the glass from staining during operation.

The cleaning LED illuminates on the left hand side of the display.

The flue fan speeds vary during cleaning, dependent upon the chosen power setting:

Power setting 1 - 2150rpm
Power setting 2 - 2200rpm
Power setting 3 - 2250rpm
Power setting 4 - 2350rpm
Power setting 5 - 2550rpm

ECO Setting

Should the unit be kept in ECO mode for 250 seconds the Fusion stove will turn itself off. Should the temperature drop below the temperature setting and the timer be calling for heating as set by the user, the stove will restart, after completing its full shut down cycle.

Room Temperature Setting

To change the temperature setting at any time, press button 3 and then use buttons 1 and 2 to adjust the temperature shown on the lower display. Whilst setting or programming is underway the **SET LED** illuminates on the right hand side of the display.

When the selected room temperature is achieved the **OK LED** illuminates.

Programming and Timing Settings

Press button 3, **SET** to scroll through the timer programming functions and to confirm the selection.

Pressing button 4 **ON/OFF** will exit programming mode.

| Display shows | Action |
|---------------|--|
| UT01 | Set the current day. If today is Monday then using buttons 1 & 2 set to DAY 1. If Wednesday, set to DAY 3. |
| UT02 | Current clock time in hours using 24 hour clock (4pm = 16) |
| UT03 | Current clock time in minutes (0-59) |
| UT04 | Not used |
| UT05 | ON time (first event setting) |
| UT06 | OFF time |
| UT07 | Day for programme to run. For Monday to Friday working, set Day 1 ON, Day 2 ON, Day 3 ON, Day 4 ON, Day 5 ON and Day 6 OFF, Day 7 OFF. The stove will not function on Saturday and Sunday. To only run on Saturday/Sunday set Day 1 - 5 to OFF and Days 6 - 7 to ON. |
| UT08 | ON time (Second event setting) |
| UT09 | OFF time (Second event setting) |
| UT10 | Day for programme to run (As UT07) |

If it is required for the stove to run all day using only one event from say 0800 to 2000 then set **UT05** to 0800 and **UT06** to 2000. Select the day using **UT07**. At **UT10** set all days used at **UT07** to off. When using two event programming allow at least 30 minutes between the end of the first event to the start of the second event.

If the stove is not required to work automatically set **UT01** to OFF. In this case the stove ignores all other settings and will maintain the set room temperature. If the remote thermostat is connected this will take priority for the temperature setting.

When the stove is off, pressing and holding button 1 or 2 will show the heating setting of the stove when lit. This will either display **ECO** if the room temperature is at or above the set temperature or the heat setting 1-5 as previously set.

If the flue gas temperature rises above 260°C, then stove goes into economy mode and the message **ECO** is displayed. This message is also displayed when the selected room temperature has been reached.

Switching OFF and shut down

The stove can be switched off in different ways:

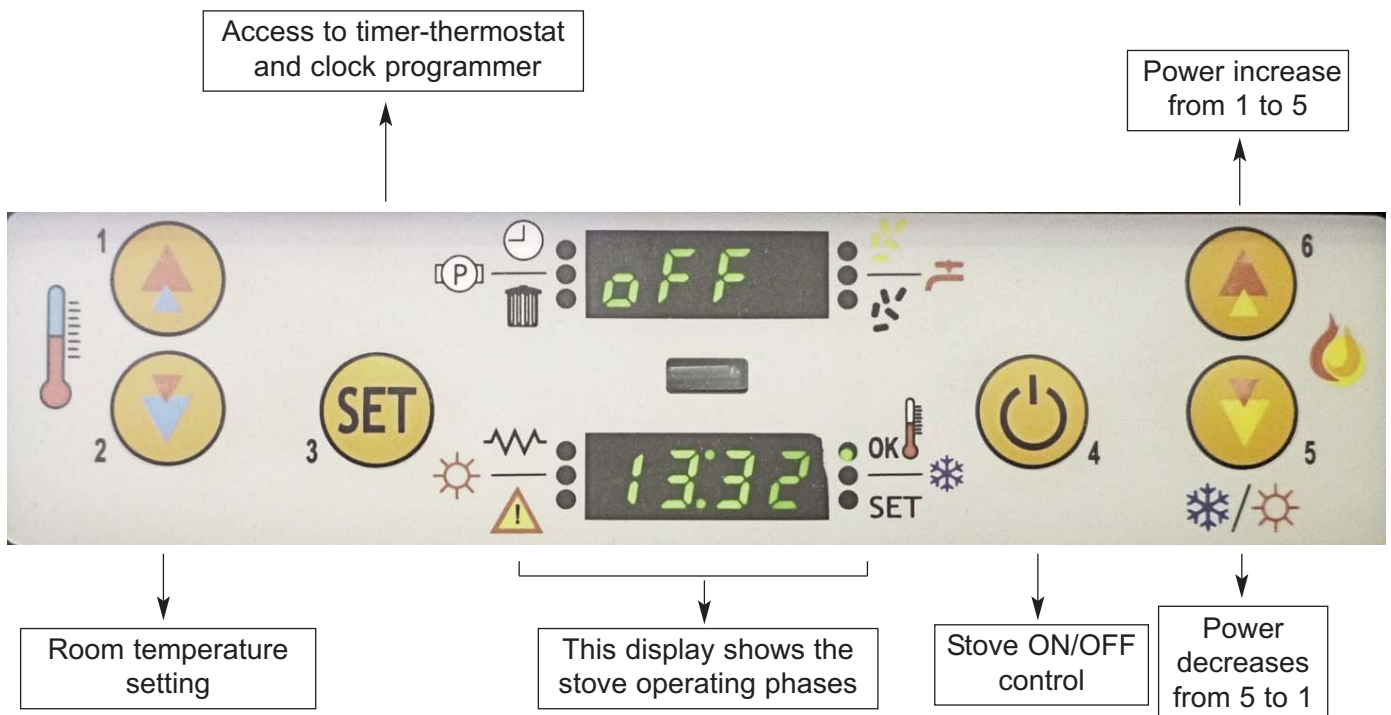
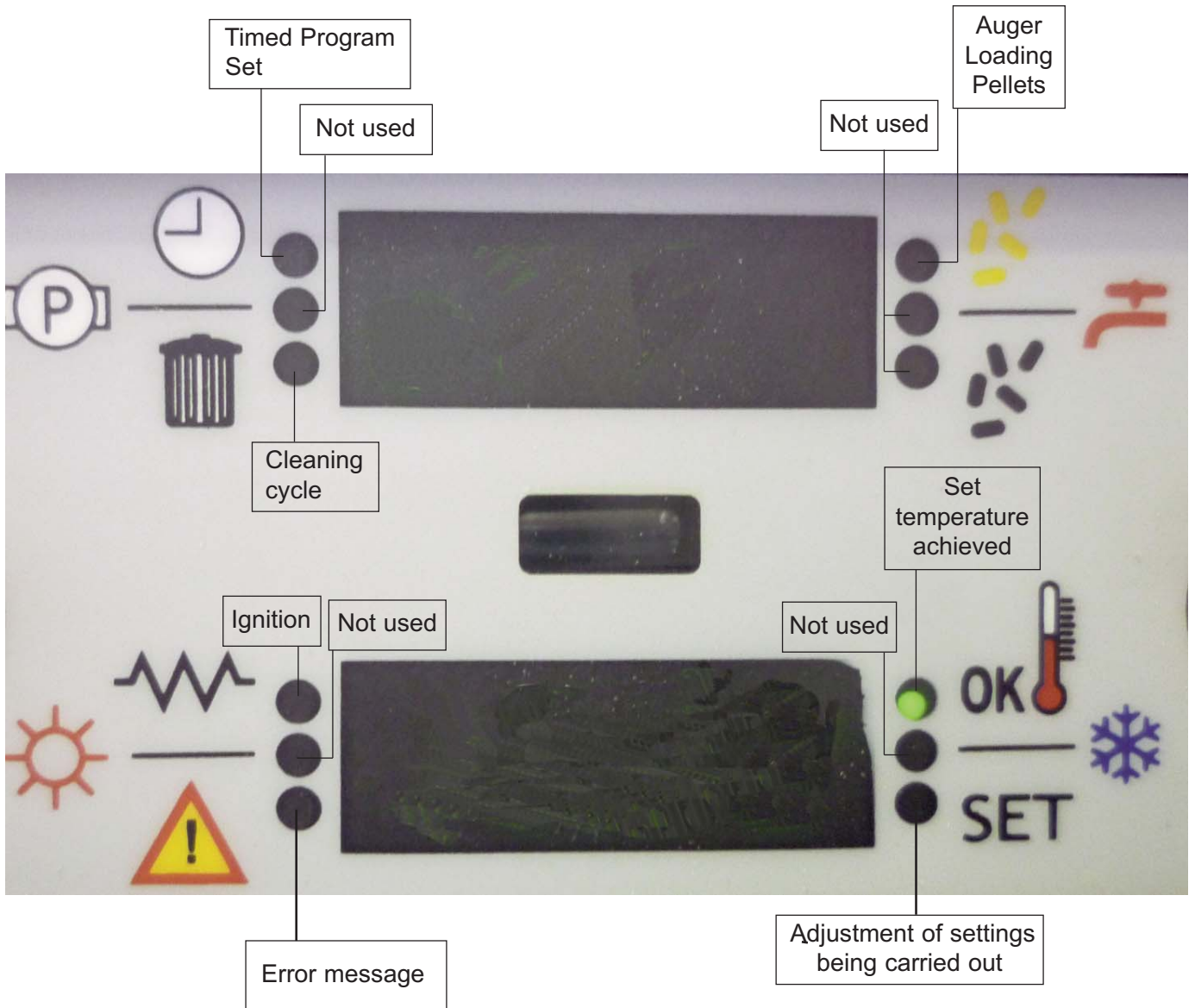
1. Manually (putting the On/Off switch on the back of the stove in the Off position).
2. By actuation of a room thermostat, if this is connected.
3. By a timer program.

Press button 4 for 4 seconds. OFF will appear in the display. During shut down the stove will de-energise the auger which in turn will stop feeding pellets into the burner, the flue fan and circulation fan will run at full rate and the stove will go through its cleaning cycle, the fans will stop when the flue thermistor drops below 60°C.

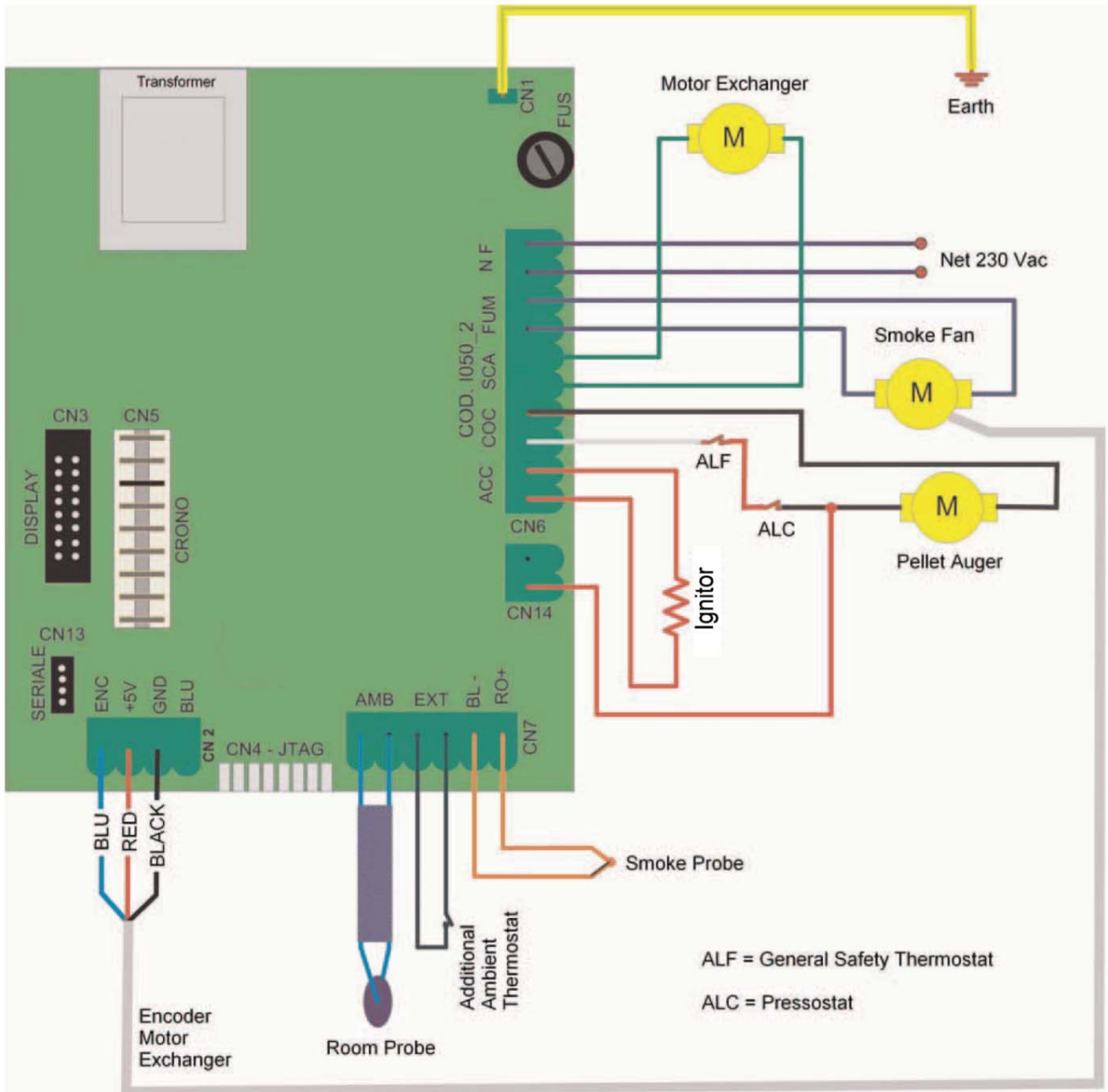
Electrical Power Failure

If there is an electrical power failure, when power is restored, the stove expels any remaining smoke and resumes the working program from the point at which it stopped. It can only do this if the electrical power was lost for a few minutes. If the stove has cooled down during the power failure, the control unit puts the stove back into the ignition phase and re-starts the program from the beginning.

ELECTRONIC CONTROL PANEL



CIRCUIT BOARD WIRING DIAGRAM



MANAGING ALARMS

An alarm indication may appear in one of the following cases (the alarm can be cleared by pressing button 4 "ON OFF"):

- Flue gas temperature probe alarm

ALARM

SOND FUMI

If there is a fault in the flue gas temperature probe, the message "ALARM SOND FUMI" appears and the ventilator and extractor fan are switched on at maximum speed.

- Flue gas over-temperature alarm

ALARM

HOT TEMP

If the flue gas temperature rises above 280° C, the message "ALARM HOT TEMP" appears and ventilator and extractor fan remain lit until the decrease of flue temperature.

- Ignition failure alarm

ALARM

NO FIRE

- Extractor alarm (if this option is available)

This appears if the initial attempt to ignite has failed, or if stove temperature is too low for operation, even after the full ignition period has elapsed. The message "ALARM NO FIRE" is displayed and the extractor fan remains lit for a pre-set time until the stove is completely switched off.

- Pressostat alarm

ALARM

SIC FAIL

In case the exchanger gets dirty or the chimney is obstructed, the safety pressostat switches the motor auger off (stops the fuel).

In certain weather conditions, the Pressostat switch can operate even if there is no malfunction of the stove. This can be caused by a low flue draught. This is a normal event. There is no problem with the stove. If the problem persists check the flue for gas tightness and draught.

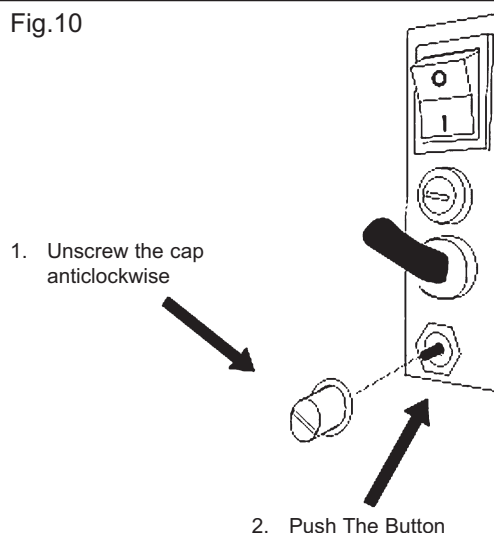
- Safety thermostat alarm

ALARM

SIC FAIL

In case of high stove temperature, the safety thermostat operates and shows on the display the following notice: 'ALARM TERM SICC'. To restart the stove, wait until cool and reset it as shown in Fig. 10.

Fig.10



ATTENTION: the thermostat has to be reset by hand.

The control panel is situated in the lower rear part of the stove.

N.B. the thermostat does not unlock until the stove has cooled completely.

If the thermostat reset has been successful, a click can be heard immediately. Also refer to Safety Devices Section 4 page 15. Before every new ignition, verify that the burn pot is completely empty. If not, clean it immediately.

The alarm signals can be cancelled by switching off and on the stove with button No.4 situated in the frontal panel of the stove.

Ensure air inlet and flue gas outlet are clear from obstructions before operation of the stove.

If the flue gas temperature rises above 260°C, the stove goes into Economy mode and the message **ECO** appears on the display.

The message **ECO** also appears when the selected room temperature has been reached.

N.B.: Method 1 is used to carry out maintenance or to switch off the stove permanently at the end of the cold season. Never switch off the stove while it is in operation, either by cutting off the current at the plug or at the switch located on the back of the stove.

This will cause the smoke extractor fan to stop immediately, causing smoke to issue into the room if there is no natural upward draught in the chimney.

After switching off the stove on the front panel, or using the remote control (if this option is present), wait for 15 minutes cooling time to elapse before attempting to start again. The stove may not re-light if it has not cooled sufficiently.

During the switch-off phase, the smoke extraction motor continues to run until the stove is cooled, then switches off automatically. Similarly, the room air ventilator continues running until the stove has cooled (the ventilator may switch off and then on again if there is still some heat in the stove).

SAFETY DEVICES

1. Flue Gas Extraction Motor Failure

If the flue gas extractor stops, a pressure switch immediately stops the pellet supply.

2. Flue Gas Outlet Safety Device

If the flue gas outlet is obstructed, the pressure switch prevents fuel from entering the burn pot.

3. Pellet Loading Gear Motor Failure or Blockage

If the gear motor stops, the stove continues to operate until it starts to cool down. The system will attempt to start up the stove, and if the fault persists the stove will stop completely and lock out.

4. Hot Air Distribution Ventilator Failure

When the temperature at the end of the loader reaches 105°C, a safety thermostat stops the gear motor, causing the stove to switch off.

If the thermostat is activated, it must be reset using the special control (protected by a screw plug) on the back of the stove under the main switch and protection fuse.

If the thermostat is actuated again and causes the stove to stop, contact your service engineer.

5. Temporary Electrical Power Failure

If there is a temporary power failure while the stove is in operation, the appliance will come on again automatically. If the power failure is longer lasting, the smoke extractor stops running and the stove may therefore emit smoke into the room.

6. Electrical Safety

The stove is protected by a main fuse located on the rear panel.

CLEANING OF THE STOVE

IMPORTANT: before starting to clean the stove, check that it is switched off and completely cooled and that the electrical power supply is disconnected.

ASHPAN AND BURN POT

WARNING: Do not vacuum hot cinders as they may cause a fire in the cleaner.

The burn pot must be cleaned every day. Pull it out manually by lifting, and empty the accumulated ash. When re-inserting the burn pot, check that it is the right way round, with the hole for the igniter plug facing towards the inside of the stove.

Every two or three days, clear the grid at the bottom of the combustion chamber, take out the drawer, empty it and replace in the correct position. Finish off cleaning the inside of the chamber using a vacuum cleaner. We recommend emptying the lower ashpan periodically, as described in the following paragraphs. It may be necessary to vacuum the small chamber beneath the burn pot.

IMPORTANT: All cleaning and maintenance operations must be carried out when the stove is cold. These cleaning operations ensure that the appliance continues to work efficiently and correctly. The required frequency of cleaning operations depends very much on the quality of the pellets used. We recommend using only tested, good quality pellets.

After the cold season has ended, the exchanger must be cleaned. This operation may be required more often, depending on the pellet quality, but this should not be considered a sign that the stove is not functioning correctly.

CLEANING THE ASHPAN

Open the panel, remove the ashpan, empty it and re-insert correctly. This operation is usually carried out once per week, and more often if required.

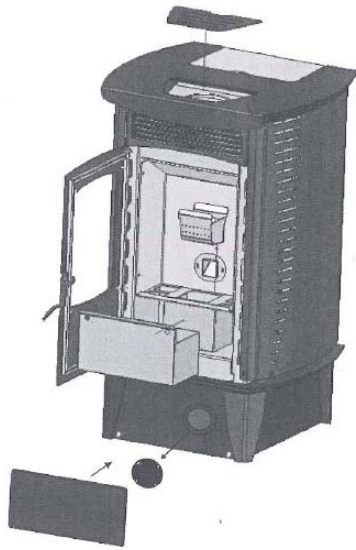


Fig.11

GLASS

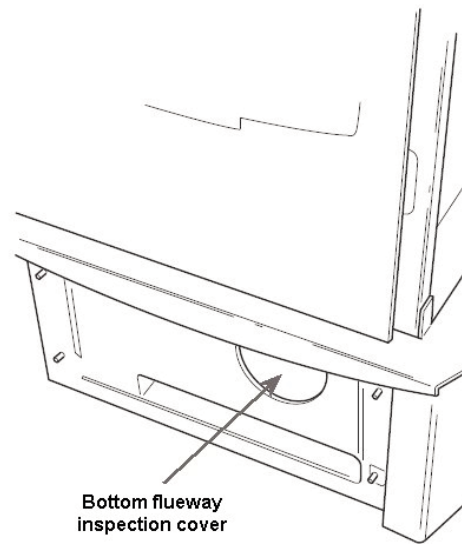
The glass will self clean when there is sufficient heat generated by the burning fuel. If a build-up of deposits occur on the glass it may be due to draft conditions, poor quality fuel or very low burning for a long time. It is best to clean the glass when it is thoroughly cooled. A deposit of ash will usually wipe away with a dry cloth.

PERIODIC CLEANING OF THE STOVE AND HEAT EXCHANGER CLEANING

The stove and heat exchanger must be cleaned periodically, and exclusively by authorised personnel.

For seasonal stove cleaning, remove the panel below the door by pulling it outwards. Loosen the 4 screws which fasten the access cover to the combustion chamber and using a vacuum cleaner, clean the inside part being careful to vacuum in the internal corners. After cleaning, reposition the cover (replacing the old seal with a new one), and fit the below-the-door cover back on by simply fastening it onto the combustion chamber.

Fig.12



We suggest you carry out this operation after the cold season has finished.

CLEANING THE FLUE

Whenever this is found to be necessary (and at least once a year) vacuum and clean all flue ducts to prevent the build up of particulate matter. It is important not to obstruct the passage of the flue gasses.

IMPORTANT: Ensure that the flue pipe gaskets are gas tight. Where they are not in good condition replace them immediately. Do not use flexible flue pipe.

FAILURE TO CLEAN THE FLUE MAY AFFECT THE SAFE OPERATION OF THE STOVE.

END OF SEASON

We advise using up all pellets remaining in the tank in order to prevent condensation from forming and thus clogging and blocking the feeder motor.

Pellets and sawdust remaining at the bottom of the tank should be removed using a vacuum cleaner. If there are substantial amounts of sawdust, we recommend checking the quality of the pellets used to fuel the stove.

This operation is carried out with the stove off and cool, and the power supply plug disconnected.

CAUTION: Do not vacuum hot cinders as they may cause a fire in the vacuum cleaner.

ANNUAL SERVICING

When conducting the annual service it is advisable to have the main flue and chimney system swept and cleaned at the same time.

Isolate the electrical supply to the stove and ensure that the unit is cold.

Remove the top access panel and essence bowl and clean out the top airway. See Fig. 11.

Lift out the ashpan and burn pot.

Unfasten and lift out the firebox lining (3 screws). See Fig. 13.

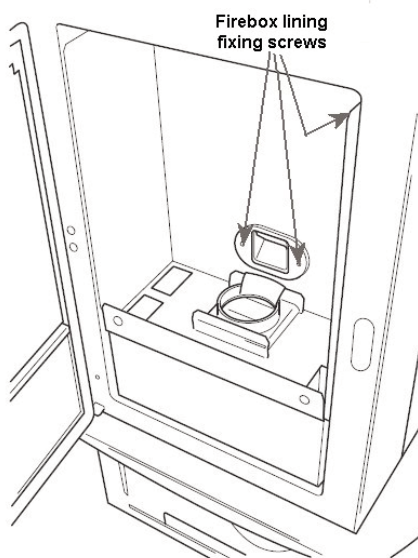


Fig. 13

Thoroughly brush the heat exchanger to remove deposits and clean out the firebox.

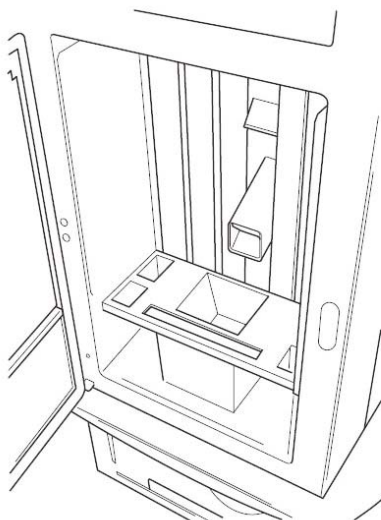


Fig. 14

Re-fit lining.

Remove the left hand base panel to gain access to the flue fan.

Unfasten the motor and fan assembly (4 screws on flange) and clean out the fan and pipework. See Fig. 15.

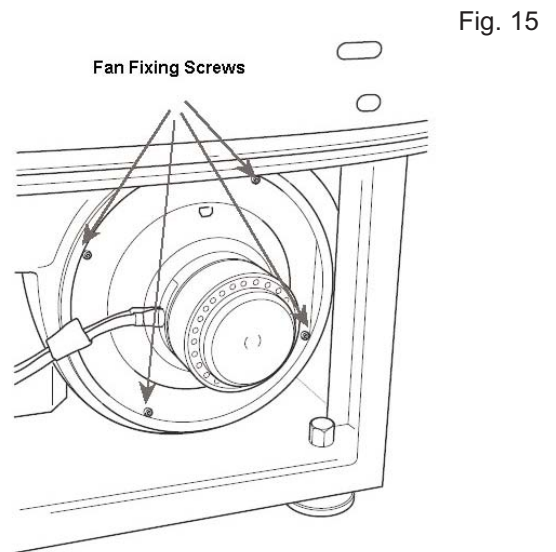


Fig. 15

Re-assemble using a new flange gasket if required.

PROBLEMS - CAUSES - SOLUTIONS

| PROBLEM / CAUSE | SOLUTION |
|------------------|--|
| Problem | Pellets not delivered into burn pot |
| Causes | <ul style="list-style-type: none"> * Tank is empty * Flue gas extractor fan is not working * Auger blocked by foreign objects * No electrical power to control panel * Flue obstructed causing differential pressure switch lock out |
| Solutions | <ul style="list-style-type: none"> * Re-fill the tank * Call technical support service * Call technical support service * Check that the power plug s correctly inserted and that the fuse is good * Clean all the smoke outlet pipe and flue |
| Problem | When switched on, the stove functions for a few minutes then is switched off by a safety device. |
| Cause | The outlet fumes are not reaching the minimum temperature required to switch off the igniter. |
| Solution | Check that the burn pot is clean |
| Problem | Flame is too smoky |
| Causes | <ul style="list-style-type: none"> * Insufficient combustion air as the air holes in the burn pot are obstructed * Flue obstructed or clogged. * Stove and exchanger dirty * Pellets are poor quality or contain too much moisture. |
| Solutions | <ul style="list-style-type: none"> * Clean the burn pot * Clean the flue gas outlet pipe and flue * Clean the exchanger * Replace the pellets |
| Problem | Flame does not ignite |
| Causes | <ul style="list-style-type: none"> * Air inlet clogged * Ash present in the burn pot * Pellets used up * Differential pressure switch activated |
| Solutions | <ul style="list-style-type: none"> * Check that the air inlet is clean and not obstructed * Clean the burn pot * Re-fill the tank * Clean the flue gas outlet pipe and flue or close main door |

| PROBLEM / CAUSE | SOLUTION |
|------------------|---|
| | |
| Problem | Pellet loader blocked |
| | |
| Causes | Poor quality pellets, sawdust included accidentally or pellet stuck and obstructing the feeder slide to the burner, possibly causing the loading auger to become blocked. |
| | |
| Solutions | The problem can often be resolved without calling technical support, simply by inserting a flexible steel rod inside the pellet loading tube once the stove is off and has cooled. In this way, the blocked pellet can be made to fall into the burn pot, thus unblocking the auger. This operation is carried out with the stove off and the power supply plug disconnected. |
| | |
| Problem | While the stove is in operation, the pellet loading indicator light comes on, but no pellets fall into the burn pot. |
| | |
| Cause | <ul style="list-style-type: none"> * Air exchanger ventilator dirty * Air exchanger ventilator broken * Stove overheating and safety thermostat was activated * Flue obstructed or draught diverter grill clogged |
| | |
| Solution | <ul style="list-style-type: none"> * Call technical support service * Call technical support service * Call technical support service * Clean the whole flue - remove draught diverter and grill |

If the problem cannot be resolved, please contact the Installer.

| FUSION PELLET STOVE TECHNICAL DETAILS | | | |
|--|---------------|-------------------|--------|
| Max. fuel consumption per hour | | kg/h | 2.9 |
| Maximum input | | kW | 14.4 |
| Minimum input | | kW | 4.4 |
| Maximum output | | kW | 13.0 |
| Minimum output | | kW | 4.1 |
| Efficiency | | % | 90.4 |
| Minimum air requirement for combustion | | m ³ /h | 33 |
| Flue gas mass flow rate | | gr/s | 9.4 |
| Flue gas temperature | maximum power | °C | 155 |
| | minimum power | °C | 75 |
| Minimum draught of fireplace | | mbar | 0.1 |
| | | pascal | 10 |
| Elect. power consumption during ignition* | | W | 260 |
| Elect. power consumption during operation | | W | 91 |
| Power Supply | | V/Hz | 230/50 |
| Width | | mm | 590 |
| Height | | mm | 1050 |
| Depth | | mm | 540 |
| Net weight | | kg | 115 |
| Pellet tank capacity | | kg | 25 |
| Total Weight | | kg | 140 |
| Diameter of flue gas outlet | | mm | 80 |
| Diameter of combustion air inlet pipe | | mm | 30 |
| Features | | | |
| Flue outlet pressure switch | | | |
| Ashpan | | | |
| Self-cleaning glass | | | |
| Forced ventilation | | | |
| Adjustable feet | | | |
| Pre-equipped for connection to room thermostat | | | |
| | | | |
| | | | |
| * Power consumption during first 10 minutes of operation | | | |

With AGA's policy of continuous product improvement, the Company reserves the right to change specifications and make modifications to the appliance described and illustrated at any time



AGA
Station Road,
Ketley, Telford,
Shropshire, TF1 5AQ,
UK.