Parkwood Pellet Fires
Models Maxi Compact & Insert
Installation Operating & Service Manual

DO NOT INSTALL OR OPERATE THIS FIRE UNTIL THE INSTALLER AND OPERATORS HAVE ENTIRELY READ THIS MANUAL. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD VOID THE WARRANTY OR RESULT IN DAMAGE TO THE FIRE.

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TABLE OF CONTENTS

Keep this Manual and the Certificate of Compliance issued by the Installer / Council in a safe place for future reference or any future warranty claims.

Parkwood reserves the rights to any carbon credits associated with this product.

Pellet Fuel Facts

Because of their density, wood pellets require a vacuum to burn in and they will not combust outside of a vacuum chamber. Hence, pellets will only smoulder and create considerable amounts of smoke outside of a vacuum chamber.

During safety testing, accelerants such as methylated spirits or petrol accelerants are poured into a hopper full of pellets and ignited, once the accelerant has burned off, only smouldering pellets remain. The pellets will not spontaneously combust and burn like other solid fuels.

Wood pellets will not burn on an open fire; they will smother the fire, deprive the fire of oxygen and effectively put the flames out.

Pellet fires are acknowledged as being that safe that in some States of the US homeowners incur a lower insurance premium if they have a pellet fire. In addition, piles of firewood around dwellings are considered a fire risk. Insurance companies acknowledge that pellet fuel mitigates this risk.

INTRODUCTION

This is a detailed Manual that will ensure the safe and proper installation and operation of your Parkwood Pellet Fire. Please ensure that the Installer and all Operators:

1. Read and familiarise themselves with the Entire Manual and Safety Notes.
2. Follow the Installation, Precautions, Installation and Operating Instructions.
3. Follow the Pre-operation Notes, Starting, Operating and Shutdown Procedures.

WARNING: If the instructions in this manual are not followed exactly, a fire or electrocution may result causing property damage, personal injury or loss of life.

GLOSSARY

The following terms are used in this manual.

Hopper
This is the fuel storage area on the top of the Fire. Always keep the hopper at least ¼ full.

Auger
The fuel delivery mechanism.

Burn Pot Liner
The removable liner that the pellets burn in after being fed from the hopper.

Burn Pot
The receptacle that the Burn Pot Liner rests in.

Burn Pot Ash Slide
A device by which ash can be removed from the burn pot by sliding the plate in and out using a handle located on the left side panel

Ash
The spent residual product of combustion.

NOTE: The ash content of the fuel and operation of your Fire will directly determine the frequency of cleaning. The use of high ash content fuels may result in the fire needing to be frequently cleaned. A low ash content fuel will allow longer intervals between cleaning.

Clinker
Clinker is silica (sand) or other impurities in the fuel that will form a hard mass in the Burn Pot Liner during the burning process.

Fly ash
About one third of the ash produced is blown around the inside of the Firebox and exhaust system.

Creosote
Is a black tar like buildup produced by high water content pellets or incomplete combustion.

Carbon
A product of poor combustion visible as layer of fine black soot.

Safe Clearances
The distance required to maintain a safe operating distance from the fire to a combustible material.

Rating Label
A label inside the hopper lid that shows all ratings and certifications including the Serial Number and Model of the Fire.

Air Damper Rod
Is a device used to adjust the amount of combustion air supplied to the Fire to achieve an efficient heat output.

Flue
Is an approved pipe made of a stainless steel inside liner and galvanized outer pipe, which vents products of combustion to the atmosphere. It can also be a stainless flexible pipe for Fireplace Insert applications.

Magnehelic Pressure
This is the vacuum (Negative pressure) in the Firebox, which is created by the Exhaust Fan and regulated with the Air Damper Rod.

Pellet Fire Components
Refer to the detailed Pellet Fire Components on page 20.

SAFETY NOTES

PLEASE READ ALL OF THIS MANUAL AND THE SAFETY NOTES BEFORE INSTALLING AND OPERATING THE FIRE.

Parkwood Pellet Fires are different from conventional wood burning appliances. It is very important that you read and understand all of the instructions before installing and using the Fire. Follow the procedures and instructions outlined in this manual exactly. Failure to follow instructions may result in damage to the Fire, property damage, bodily injury, or even death. It is recommended that you have your Fire installed by an authorised Parkwood Pellet Fires Distributor or at least have them inspect the installation. A qualified installer must install this Pellet Fire.

1. Parkwood Pellet Fires assumes no responsibility for poor Fire performance or consequential damage resulting from installations that do not comply with the instructions detailed in this Manual.

2. Fill out the Warranty Registration Card included with your Fire. Send the Warranty Registration Card directly to Parkwood Pellet Fires within 30 days of purchase to register your Warranty.

3. This Fire will not operate using natural draft or without a power source for the blowers and fuel feeding system.

4. Never attempt to repair any part of the Fire unless following the instructions in this manual. A qualified installer or service technician must carry out installation and repairs. Any panels or parts removed for servicing must be replaced prior to operating the Fire.

5. Any modifications to the Fire, unless authorised by Parkwood Pellet Fires, could be dangerous and will void the warranty of the Fire.

6. This Fire must be connected to an earthed standard 240-volt 50 Hz electrical outlet. Parkwood Pellet Fires recommends that a power surge protector be fitted.

7. **NEVER** cut or remove the grounding prong from the power cord plug.

8. **ALWAYS** wait until the Fire has entirely cooled and disconnect the power before performing any maintenance.

9. **NEVER** place combustible objects (Clothing etc) on or near your Fire.

10. **NEVER** allow children near the Fire during operation, and do not allow anyone to operate the Fire who is unfamiliar with these instructions.

11. Children and adults should be alerted to the hazards of high surface temperatures and people should stay away to avoid burns or clothing ignition. Fit a Fire safety guard around the Fire if children are present.

12. **ALWAYS** keep the hopper at least ¼ full.

13. **NEVER** connect this Fire to a chimney or flue serving another appliance.

14. **ALWAYS** follow the Starting and Stopping instructions in this manual; short cuts of any kind can be dangerous.

15. Check your local Building and Fire codes, regulations and requirements before installing your Fire.

16. **NEVER** unplug the Fire when it is operating, always turn the fire off with the switch and allow the fire to complete the shutting down mode.

17. When disposing of ash accumulations from the Fire, always place them in a metal container with a tight fitting lid. The closed container must be placed on a noncombustible surface well away from all combustible materials, pending final disposal. The ashes should be retained in the closed container until all cinders have thoroughly cooled.

18. Any fireguard, safety screen or panel removed for servicing the Fire must be replaced prior to operating the Fire.

19. Your Fire is designed and approved for burning Premium Quality 6mm palletized wood pellet fuel, which meets or exceeds AS/NZS 4014.6 2007. Burning of any other fuel or materials is not permitted. Failure to comply with this

restriction will void all warranties and the safety listing of the Fire. Poor quality fuel will directly *(*and adversely*)* affect efficiency and cleanliness of your Fire's operation. Refer to Pellet Fuel Quality on page 30.

20. **NEVER** use petrol, petrol type fuel, kerosene, lighter fluid or similar liquids to start or "freshen up" this Fire. Do not store or use petrol or other flammable vapors and liquids in the vicinity of the Fire.

21. **INSTALL** a smoke detector within the proximity of your pellet Fire.

22. **NEVER** put foreign objects in the hopper. **NEVER** burn rubbish or unapproved fuel or material in this Fire.

23. **NEVER** obstruct free airflow through air vents or the flue.

24. Do not place unburned or raw pellet fuel in the ash pan. A Fire in the ash pan or excess emissions may occur.

25. This Fire's exhaust system works with a negative combustion chamber pressure (vacuum) and a low positive chimney pressure. It is very important that the exhaust system be completely airtight and properly installed. The chimney joints should overlap at least 40mm, be sealed with RTV 260 degrees Celsius (500 F) silicone sealant and secured with at least 3 sheet metal screws.

26. Never attempt to operate this Fire without the Burn Pot Liner in place.

27. CARBON AND FLY ASH: The products of combustion will contain small particles of fly ash. The fly ash will collect in the Firebox and exhaust system. Fly ash will restrict the flow of the flue gases. Incomplete combustion, such as occurs during start-up, stopping, or incorrect operation of the Fire will lead to some soot formation which will collect in the exhaust system. The exhaust system should be inspected at least once every year for any buildup of ash; soot or creosote to determine if cleaning is necessary.

28. The Burn Pot Ash Slide, Ash Pan and Firebox door must be closed securely for proper and safe operation of the Fire. Also ensure all gaskets checked annually and replaced when necessary.

29. Do not abuse the glass by striking it or slamming the door. Do not attempt to operate the Fire with broken glass. The Fire has 5mm Pyroceramic glass. Replacement glass must be purchased from a Parkwood Pellet Fires Distributor. To clean the glass, use a dampened, paper towel, or tissue. Always dampen with water only. For difficult to remove stains, dip the dampened cloth into some ash from the ash pan. NEVER use abrasive cleaning agents or chemicals on the glass.

30. Always unplug the Fire from the power supply when the Fire is not being used for prolonged periods.

31. Do not operate aerosol sprays or flammables in the vicinity of the Fire while it is in operation

32. Do not place hands at the bottom of the Hopper because moving parts may cause injury.

33. **ALWAYS** carry out annual maintenance.

FIRE DESCRIPTION

The Parkwood range of Pellet Fires is designed to sit on a Hearth Pad Pedestal (on combustible surfaces) as a freestanding Fire or can be installed as a Fireplace Insert with Surround Panels. A Control Panel is located at the top right rear of the Fire. The controls include 5 heat settings, On/Off Timers and an On/Off switch and lights to indicate proper operation. Above the glass Firebox front door are Heat Vanes through which hot room air is blown by the room air Convection Blower. The Heat-Setting switches will vary the speed of the room air convection blower and increase or decrease the amount of fuel delivered to the Fire. On the back of the Fire a 75mm exhaust pipe protrudes from the Combustion Air Blower, the Flue is connected to the exhaust pipe via a Cleanout Tee. The Air Damper Rod located on the lower right side panel regulates combustion airflow. The front top of the Fire lifts up for easy loading of fuel.

1. Parkwood Pellet Fires are simple and safe to use. A relatively small amount of fuel is burned in an extremely efficient firebox to provide a constant even heat.

2. The fuel is poured into the Hopper. After the Fire has been turned on (see “Starting” procedure) the Auger Motor delivers fuel down the Pellet Feed Chute a few pellets at a time, into the Burn Pot Liner at a controlled rate. Hot air from an electric element is blown onto the fuel until the fuel spontaneously combusts after 4-8 minutes. The Exhaust Fan delivers combustion air to the Burn Pot creating an efficient burn. The hot exhaust gases are drawn through Heat Exchangers, which extract heat from the gases as they are discharged to the exhaust flue.

3. The room air Convection Blower circulates room air through the Heat Exchangers located just above the Fire Box Door. The room air Convection Blower is intended to run continuously and is controlled by the Heat Up/Down switch; this ensures that constant temperatures can be maintained.

4. The Air Damper Rod is used to adjust the amount of combustion air supplied to the Fire to achieve an efficient heat output.

5. The Burn Pot Ash Slide is used to remove ash from the Burn Pot and deposit it in the Ash Pan.

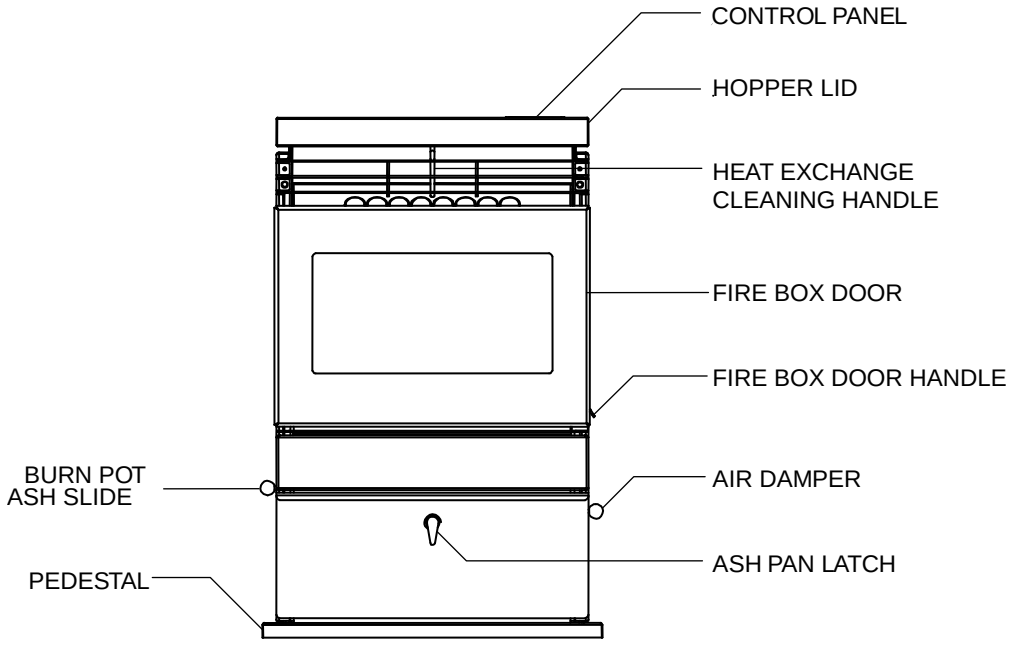
6. The Fire will deliver a constant amount of heat, which can be varied by adjusting the Heat “Up” & “Down” switches. Besides initial lighting of the Fire, the only regular attention needed will be to fill the Hopper with fuel; inspection of the Burn Pot Liner for “Build up of pellets” or “clinkering” and adjusting the Air Damper Rod as required. Refer to Combustion Air and Air Damper Rod adjustments on page 24.

SPECIFICATIONS

	Maxi	**Compact**	**Insert**
FUEL CAPACITY	50 Kg	23Kg	23Kg
WEIGHT OF COMPLETE UNIT	121Kg	99Kg	99Kg
MAXIMUM HEAT OUTPUT	10.5Kw	10Kw	10Kw
AREA HEATED*	190m^2	185m^2	185m^2
FIRE HEIGHT ON PEDESTAL	895mm	630mm	630mm
FIRE HEIGHT OFF PEDESTAL	870mm	605mm	605mm
FIRE WIDTH	535mm	535mm	535mm
FIRE DEPTH	610mm	610mm	610mm
HEARTH PEDESTAL**	25 x 585 x 795mm (H x W x D)		
INSERT SURROUND	-750 x 1000 x 20mm (H x W x D)		
OVERSIZE SURROUND	850 x 1198 x 20mm (H x W x D)		
FLUE OUTLET HEIGHT***	270mm	240mm	240mm
THERMOSTAT COMPATIBLE	Optional on all Parkwood Fires		
FLUE TYPE	100mm outer flue with 75mm stainless steel inner liner		
ELECTRICAL	240 Volts, 5 Amps, 50 Hz		
SAFE CLEARANCES to combustibles:			
SIDES	200mm	200mm	200mm
BACK	75mm	75mm	75mm
TOP TO COMBUSTIBLE	290mm	290mm	325mm
FLOOR PROTECTION**	150mm	150mm	150mm
DOUBLE SKIN FLUE	25mm	25mm	25mm
SINGLE SKIN FLUE	75mm	75mm	75mm
INSERT CAVITY CLEARANCES	610 x 600 x 500mm (H x W x D)		

*Area Heated will vary considerably with the floor plan, house layout & construction and heat loss of the house.
** A Hearth Pedestal or other hearth/floor protection is not required if the Fire is positioned on a non-combustible surface (Tiles/slate) protruding 150mm forward of the Firebox door opening.
*** Note: Flue Outlet Heights are to the centre of the 75mm outlet. Add 25mm for a hearth pedestal if fitted. Flue Outlets are off set to the left of the Fire (looking from the front) 148mm.

The floor protection on the sides of the Fire only has to extend to the vertical side panels of the Fire.



FRONT VIEW

FUEL SPECIFICATIONS

Pellet quality is very important for the efficient operation of your Fire, please read the following information:

This Fire has been designed to burn 6mm Premium Quality Wood Pellets only. Do not use any other type of fuel, as this will void any warranties stated in this manual. The performance of your Fire is greatly affected by the type and quality of wood pellets being burned. Because the heat output and ash content of various quality wood pellet fuel differs, this will considerably affect the performance and heat output of Fire. Parkwood Pellet Fires recommend that you burn only premium quality wood pellet fuel. Poor quality pellet fuel will result in excessive amounts of ash in the Burn Pot Liner, less than normal heat output and the firebox becoming black with carbon. Refer to Pellet Fuel Quality on page 30 for proper fire operation when poor quality fuel is being used.

It is important to select and use only pellets that are dry and free of dirt or any impurities such as high salt or silica content. Dirty fuel will adversely affect the operation and performance of the unit and will void the warranty.

We recommend the use of pellets that meet or exceed AS/NZS 4014.6 2007 as listed below.

FUEL TYPE:	Premium Grade Residential Fuel:
Heat Content:	18 to 21 MJ/kg (8200 BTU/lb. Min)
Bulk Density:	Not less than 0.64kg / L (40 lb /cubic ft. min)
Moisture Content:	4 - 8% max
Ash Content:	Not greater than 0.8% (oven dry basis)
Size:	6mm diameter
Fines:	1% max through 3.2mm screen

NOTE: Pellet Fuel is hydroscopic and it will absorb moisture from the air. Pellet Fuel bags are not airtight or waterproof. Pellet Fuel should be stored off the ground (on a pallet or plastic sheet) in a dry area that is not exposed to the elements.

SAFETY & RATING LABEL LOCATIONS

The Rating Label is located inside the Hopper lid.
1. Each Fire has a serial number fixed to the Rating Label attached to the inside of the Hopper Lid. Record the serial number and the Installers Registration Number on the Warranty Registration Card and post it to Parkwood Pellet Fires within 30 days of the installation to register your warranty.
2. A label inside the Hopper Lid warns that the Fire is hot. See the safety section of this Manual for more safe operating tips.
3. Information and warning labels are located inside the hopper lid. These labels provide information on operation and maintenance that the operator should always follow when operating the Fire. Keep the Hopper Lid closed during operation.
4. There are electrical warning labels inside the Fire that warn the Operator and Service Technicians, to disconnect the Fire from the power before servicing. Also, the warning labels inform the Operator and Service Technicians that the Fire should not be operated with the panels removed.

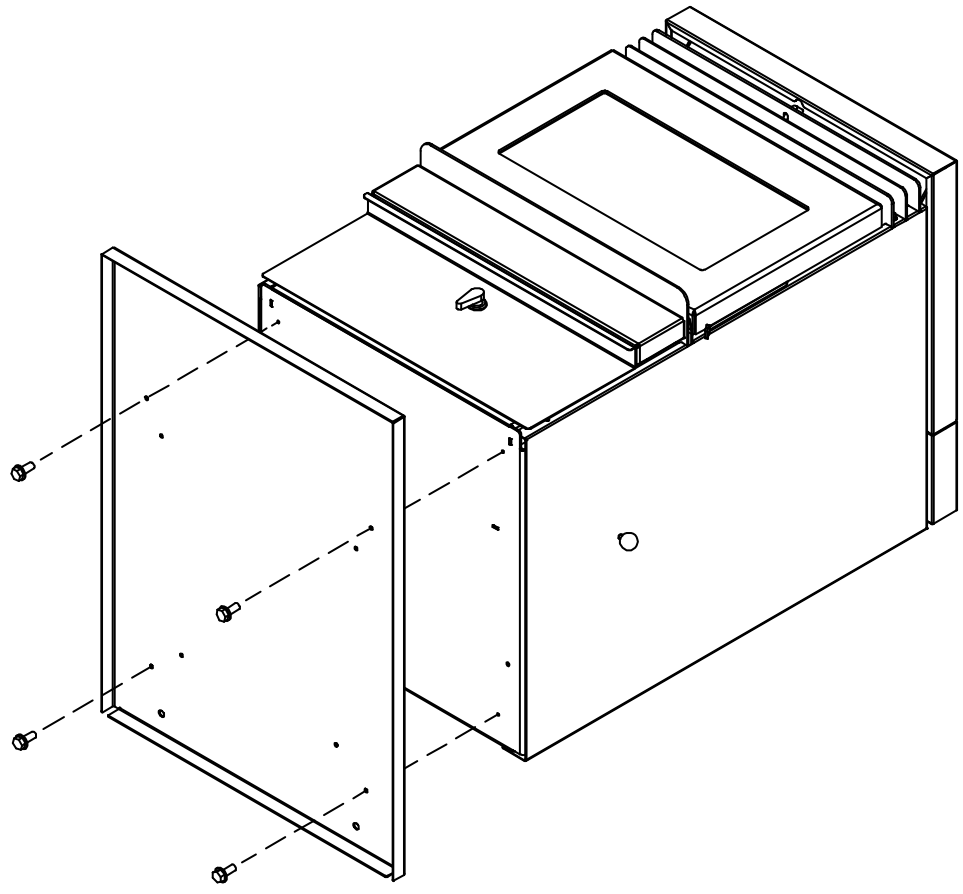
PELLET FIRE ASSEMBLY

REMOVING THE FIRE FROM THE PALLET

1. Remove all packaging.
2. There are 2 brackets fixing the Fire to the pallet. Use an 8mm socket to remove the brackets. These brackets may be used as seismic restraints.
3. Clean and remove all marks from any plated Door Covers or Ash Sills before initial firing or they will permanently mark the plated surface.

PEDESTAL HEARTH ASSEMBLY

1. Carefully place the back of the Fire on the wood pallet that the fire was supplied on.
2. Using an 8mm socket, install the four (4) bolts supplied with the Pedestal Hearth in the holes on the bottom of the Fire Base plate. Ensure that the supplied lock washers are fitted and leave the bolt heads about 5mm out.
3. Drop the Hearth Pad Pedestal onto the bolts and lock into the correct keyhole position before tightening the bolts.
4. Taking care not to damage the rear of the Pedestal Hearth (or the floor surface), stand the Fire upright and place the fire in position. An upside down carpet mat is helpful to shift the fire and prevent damage to floor surfaces.



NOTE: Parkwood Fires can be installed on a combustible floor using the Pedestal Hearth Pad (for example, linoleum or wooden flooring). A Pedestal Hearth Pad is not required if a non-combustible surface (Tiles/Slate) protrudes 150mm forward of the Fire Box Door opening. A non combustible pad (Available from Parkwood) may be used to extend and existing hearth to the required 150mm.

DOOR COVER ASSEMBLY

1. Lay the Plated Door Cover face down on a soft surface.

2. Remove the door by lifting it straight up and off of its hinge pins.

3. Use a M5 tap to thread the 4 holes on the firebox door (where illustrated – SCREW x 4) and fit the M5 Allen head screws that are supplied with the Door Cover. Ensure they do not protrude through the firebox door.

4. Run a thin bead of high temp silicone on the inside of the Door Cover about 20mm from the inside corner edge.

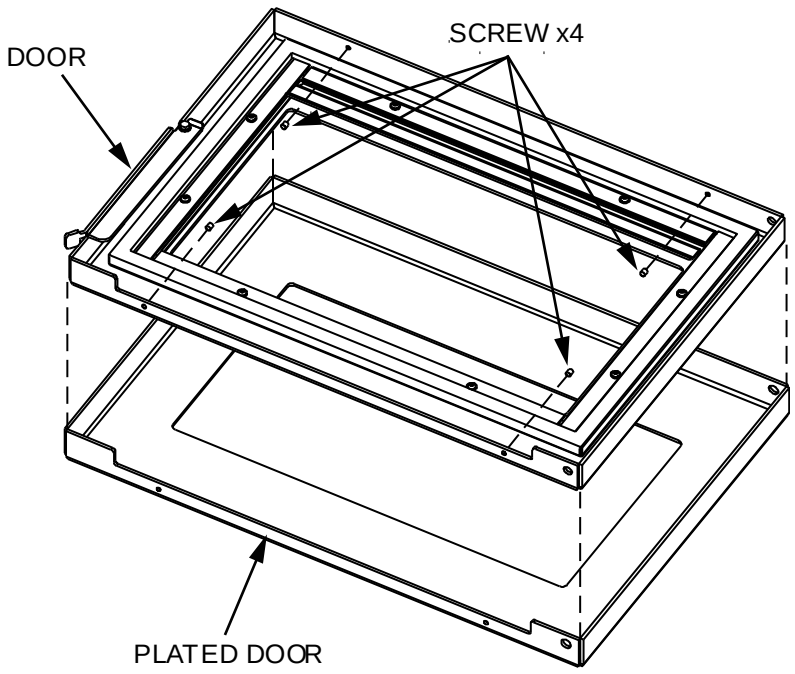
5. Orientate the Door facedown above the Plated Door Cover so that the Door Hinge cutouts align with the Door Hinge holes then gently lower the Door inside the Plated Door Cover.

6. Ensure that the Door is firmly home and correctly positioned firmly inside the Plated Door Cover by inspecting the clearance between the mating surfaces when viewing from the front of the Door. There should be no gaps visible between the mating surfaces.

7. Use an Allen key to tighten the Allen screws to firmly fix the Plated Door Cover to the Firebox Door.

8. The Ash Sill which is located on the fire beneath the firebox door has a ramp on the right side which assists the firebox door to correctly locate when closing. This ramp must be lowered 3mm by using a shifter/crescent before the firebox door is fitted to the fire.

9. Fit the Door assembly to the Fire and clean off any marks and fingerprints using a soft cloth to prevent the plating from becoming permanently marked on initial firing.



INSTALLATIONS

INSTALLATION PRECAUTIONS

IMPORTANT: Read all instructions carefully before starting the installation. Failure to follow instructions may result in damage to the Fire, property damage, bodily injury, or even death.

1. Look at the Instruction Label inside the hopper lid to find the serial number. Write the serial number of the Fire and the Installers Registration Number on the Warranty Registration Card and post it to Parkwood Pellet Fires within 30 days of the installation. Failure to do so may void your Warranty and will make servicing and maintenance questions difficult to answer, this could result in needless inconvenience in the future.

2. When installing the Fire:

    1. The correct safe clearances must be strictly adhered to.
    2. Allow for adequate accessibility for servicing and proper operations.
    3. When establishing clearances, measure from any combustible projection, such as; shelves, windowsills, Fireplace mantles above the appliance, etc.
    4. Proper Flue installation is required for safe, reliable operation.
    5. Use an upside down carpet mat to slide the fire into position and to prevent floor damage.

    - DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST FLUEING SYSTEM OF THIS FIRE.
    - DO NOT CONNECT THIS FIRE TO A CHIMNEY OR FLUE SERVING ANOTHER APPLIANCE.
    - THIS FIRE MUST BE CONNECTED TO A PROPER FLUE SYSTEM WHILE IN USE.

Electrical Information

The use of a power surge protector is strongly recommended.

If a power point needs to be installed, a qualified Electrician must carry this task out.

Parkwood Pellet Fires are supplied with a three-prong (earthed) plug. The Fire will not operate properly in a non-compliant improperly earthed electrical outlet. Contact a local electrician to ensure proper electrical power is provided to the Fire. To avoid any shock hazard, the Fire should be plugged directly into a properly earthed three-prong receptacle, preferably, a power surge device. Do not cut or remove the earth prong from the plug.
Ensure that the electrical cord is in good condition and is not (or has not been) trapped under the Fire and that it is clear of any hot surfaces or sharp edges. Inspect the power cord for damage before plugging into a mains supply. If the power cord becomes damaged, a replacement power cord must be purchased from your Parkwood Pellet Fires Distributor.

The power cord must remain accessible at all times. To avoid the risk of electric shock, always disconnect the power cord before servicing the Fire. Never service the Fire with wet hands and replace all panels and components before operating the Fire. Only qualified technicians should repair possible internal electrical failures.

Seismic Restraints

Check with your local Building Inspectors / Code to determine whether the Fire is required to be bolted to the floor.

Parkwood recommends that all Free Standing Fires are bolted to the floor to prevent accidental movement which may result in flue seal damage. This is particularly important when fires are positioned on tiles or other smooth surfaces.

Parkwood recommends that Fireplace Insert Fires do not need to be seismically restrained.

Fires mounted on pedestal hearths can be restrained by using the two (2) 10mm holes at the rear of the fire. The brackets which fixed the Fire to the wood pallet (Fixing Brackets) may be used as seismic restraints. On Insert models, Fixing Brackets can also be attached to the sides of the Fire Base Plate by using the holes located behind the FPI Surround Panels or a chain can be attached to the fire using a “D” shackle in one of the redundant Fuse Holders on the rear of the Fire Base Plate.

Air Supply Consideration

1 Parkwood fires draw air from the room to provide oxygen to the fire. Due consideration must be given to where the air will come from. Many old houses are draughty with gaps round windows or doors etc. Air flow with such houses is not usually a problem. Modern newer homes however can be tightly sealed and the heater can be starved of air if all the windows and doors are closed and there are no other vents. This can be exacerbated if there is an extractor fan running in the house at the same time so that the heater is fighting for air.

2 It is important to realise that the flue for the fire is a vent to the outside and problems may occur if extractor fans are used in a kitchen or bathroom in a tightly sealed house if there is no other access point for air. Such extractor fans can cause damp air from outside the home to be drawn through the fire when the fire is not in use. Outside air can be damp or salt laden if the property is near the sea and can cause corrosion in the firebox if drawn down the flue. **Failure to prevent back venting through the heater will void the warranty on the firebox**.

POSITIONING OF THE PELLET FIRE

1. Position the Fire in a large open room that is centrally located in the home. Direct the Fire so that the Convection Fan will blow hot air into the area that requires heating. For example:

   Try not to position the Fire so that the Convection Fan blows air into a wall or opposite an exterior door.

   If possible, position the Fire on an exterior wall and direct the Fire to an interior door so that the Fire will firstly heat the principal room, then fan force centrally heat other areas of the home when the interior door is opened.

2. Check clearances from combustibles.

3. Check the location of the power point.

4. You can flue the Fire internally (check for structural beams and trusses where the proposed flue passes through the ceiling), externally behind the Fire or flue an existing masonry chimney with a 75mm stainless steel inner flue.

5. All single skin Flue Components must have 75mm safe clearance to combustibles. Double skin flue components must have 25mm safe clearance to combustibles.

DESIGNING A FLUE

Pellet Fires have more installation options than any other solid fuel appliance. Standard installations are illustrated below. Variations to the standard installations are perfectly acceptable when considering the following;

All Parkwood Pellet Fires must have a minimum vertical flue length of 1.2m to prevent poor performance of the fire or smoke entering the room during a power failure.

Once the positioning of the Pellet Fire and the installation type has been established it is important that you design a flue system that ensures gas velocity and temperatures are maintained. If the flue system is too long, contains excessive horizontal sections or several elbows, the exhaust fan may not be able to overcome the resistance offered by the 75mm system and the gasses may cool and form creosote in the flue system before they are vented. The fire may perform poorly as a consequence of this.

Parkwood strongly recommends that the installation configurations illustrated in this manual are adhered to.

Restrictive Flue Designs

Gas leakage is more likely where the system design or other problems cause high pressure in the flue. Short flue systems may produce low pressures and less likelihood of leakage. One of the most restrictive aspects of a pellet flueing system is a horizontal section. Horizontal runs of pellet flue should not exceed 1.2m. Where the flue system incorporates several elbows or is very long, it may be advisable to increase the diameter irrespective of the equivalent length calculation. The larger flue will allow the same amount of gas to flow, but at a lower pressure. Also, keep in mind, that a relatively long system that is all vertical may not be restrictive because of the natural draft assistance.

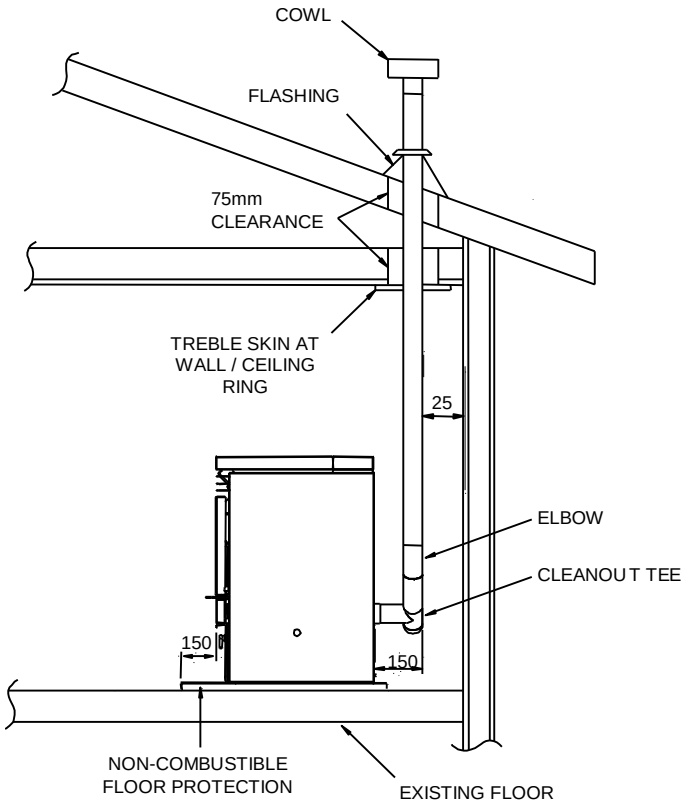
Refer to an authorised Parkwood Distributor for advanced restrictive flue designs.

INSTALLATION CONFIGURATIONS

FREE STANDING INTERNAL VERTICAL INSTALLATION

Parkwood recommends an internal vertical installation as the preferred installation. The vertical rise assists the Exhaust Fan with natural draft, wind induced flueing failure will not occur and extreme cold cannot cool the gasses before they are flued or cause condensation to form as can be the situation with some external installations. In addition, radiant heat from the flueing is retained within the home.

Free Standing Internal Vertical Installation Diagram



Free Standing Internal Vertical Installation Instructions

Refer to the Diagram and installers Flue Instructions

1. Choose a Fire location that is suitable. See the section “Positioning the Pellet Fire” on page 12.
2. Place a non-combustible Hearth Pad where / if necessary.
3. Install the Clean Out Tee and Elbow, place the Wall / Ceiling Ring over the Elbow.
Place the Fire on the Pedestal Hearth Pad (if installed on a combustible surface) and place the Fire in position so that when the Flue is installed vertically, it will be 25mm away from a combustible wall.
4. Use a Plumb Bob to establish the center of the flue on the ceiling. Ensure that there are no obstacles in the roof space where the flues is to pass, Use a divider set at a radius of 85mm to scribe a 170mm circle on the ceiling. Use a plaster panel hole saw to cut the hole out.
5. Use a Plumb Bob to establish the center of the flue on the roof.
6. Install the Flue upward from there. When you reach the ceiling, make sure that the Inner & Outer Flue goes through the Wall / Ceiling Ring.
7. Fit a 100mm Clamp Support Bracket on the Cleanout Tee if there are more than six (6) 1.2m lengths of flue to support the weight of the flue.
8. When using double skin flue components a 25mm clearance is required from all combustibles. Single skin flue components must have a 75mm safe clearance from combustibles. For wall and ceiling penetrations; additional safe

clearance (75mm from the inner flue) is met by installing a Parkwood supplied Wall / Ceiling Ring. Fit a non combustible shield (12mm from the combustible surface) if safe clearances for flue components cannot be achieved.
9. Finally, extend the Flue to go through the roof and flash the roof penetration.
10. Do not sit the Cowl on the outer flue; ensure that there is a minimum of 20mm gap to allow natural upward draft. A Spacer (Spider) or three (3) screws can be used to centralize the inner flue to the outer flue beneath the Cowl.

NOTE: The 150mm distance between the rear of the Fire and the rear of the Clean Out Tee illustrated on the Diagram above is only to indicate the approximate distance that Installers should allow for Flue at the rear of the Fire.

FREE STANDING EXTERNAL VERTICAL INSTALLATION

An external installation is often used when the customer does not want the Flue to be visible or if the Pellet Fire will sit too far forward in the room for an internal installation to be practical.

Free Standing External Vertical Installation Instructions

Refer to the Diagram and Installers Flue Instructions

1. Choose a Fire location that is suitable. See the section “Positioning the Pellet Fire” on page 12.

2. Place a non-combustible Hearth Pad where / if necessary.

3. Determine the centre point of where the flues is to exit the wall of the dwelling and use a divider set at a radius of 85mm to scribe a 170mm circle on the wall. Drill a hole through the wall to establish the centre point on the exterior of the wall and scribe a 170 mm circle on the exterior of the house, cut the hole in the dwelling wall.

4. Connect a 75mm and 100mm Flue to the fire and pass them through the dwelling wall ensuring that the Wall / Ceiling Rings are sealed vermin and waterproof with silicone. Connect a Clean Out Tee in a position so that when the Flue is installed vertically, it will be 25mm away from a combustible wall.

5. Use a Plumb Bob to establish the center of the flue on the soffit and use a divider set at a radius of 85mm to scribe a 170mm circle on the soffit and cut the hole in the soffit.

6. Use a Plumb Bob to establish the center of the flue on the roof, cut the hole in the roof.

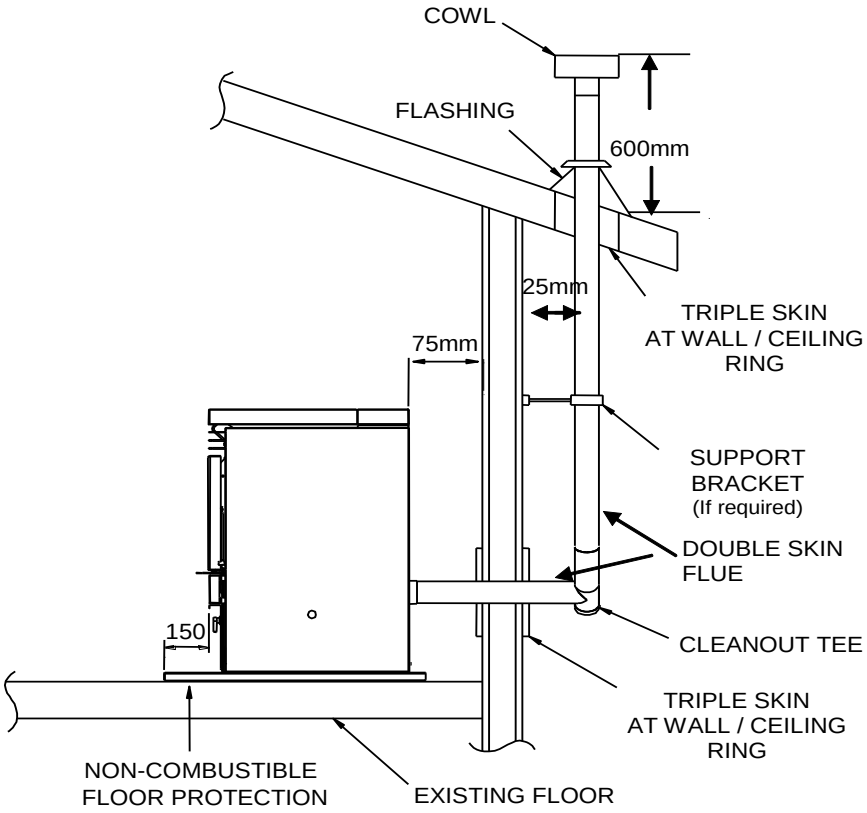
7. Install the Flue upward from there. When you reach the soffit, make sure that the Inner & Outer Flue goes through a Wall / Ceiling Ring to provide adequate safe clearance.

8. When using double skin flue components a 25mm clearance is required from all combustibles. Single skin flue components must have a 75mm safe clearance from combustibles. For wall and ceiling penetrations; additional safe clearance (75mm from the inner flue) is met by installing a Parkwood supplied Wall / Ceiling Ring. Fit a non combustible shield if safe clearances for flue components cannot be achieved.

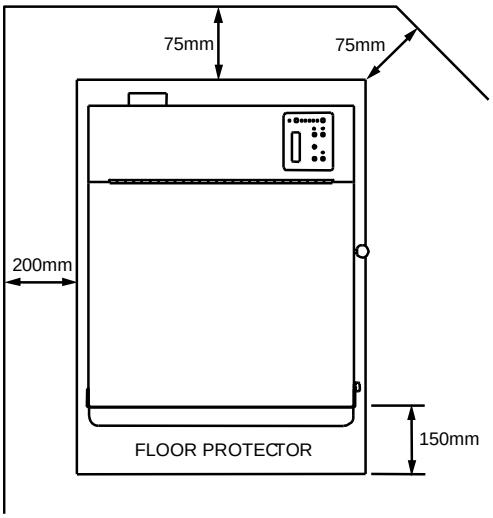
9. Finally, extend the Flue to go through the roof and flash the roof penetration.

10. Do not sit the Cowl on the outer flue; ensure that there is a minimum of 20mm gap to allow natural upward draft. A Spacer (Spider) or three (3) screws can be used to centralize the inner flue to the outer flue beneath the Cowl.

Free Standing External Vertical Installation Diagram



Free Standing Safe Clearances



Note: The 75mm clearance at the rear of this fire is recommended for ease of maintenance. The fire may be installed within 25mm of a combustible material as the rear of the fire remains cold. In this event we suggest that the fuses are relocated to the same position as in the fireplace Insert. Be aware that this installation will make removing the side panels difficult during maintenance procedures. Ensure that combustibles are kept at 75mm clearance from single skin flue and 25mm from double skin flue.

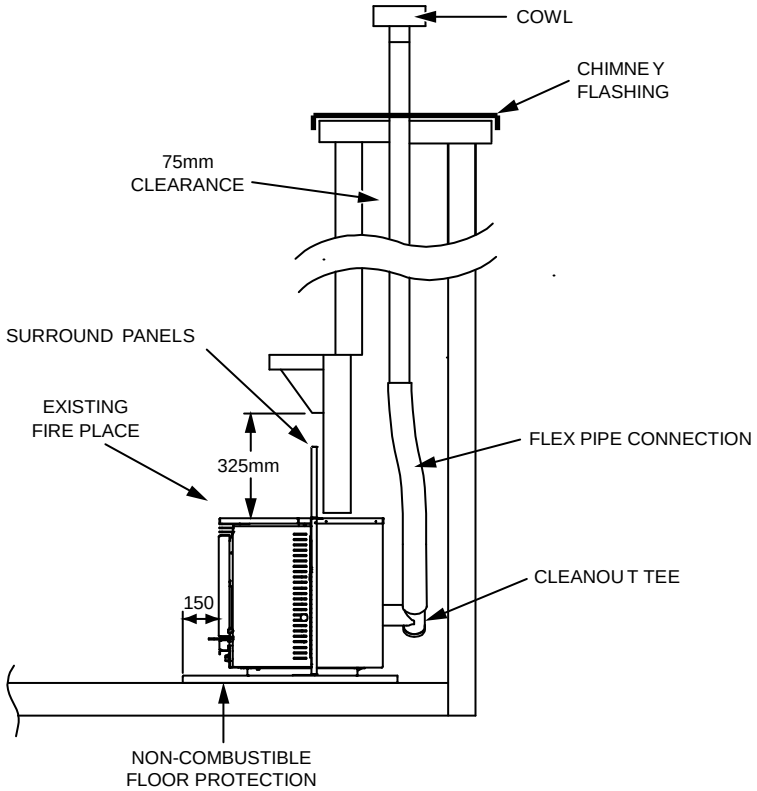
FIREPLACE INSERT INSTALLATION

1. Parkwood Pellet Fires are designed to be inserted into existing fireplaces or zero clearance boxes minimum depth 450mm, minimum width of the cavity is 600mm. Minimum height of the cavity is 605mm (add 25mm if a pedestal hearth is fitted).
2. The outer rear panels of the Fire (The Pellet Fuel Hopper) that are contained in the fireplace or zero clearance box remains at ambient temperature (cold to touch) and are not affected by combustion (that is contained in the fire box) or the passage of exhaust gasses.
3. Parkwood recommends that zero clearance boxes are lined with Gib Board Fireline. For ease of servicing, Parkwood suggests that, where possible, a minimum of 75mm clearance is maintained around the inserted portion (rear 250mm) of the Fire for ease of maintenance.
4. The Fire requires adequate airflow to operate properly. While installing the Fire, verify that the location will not interfere with adequate air supply. A 25mm diameter goose neck pipe may need to be fitted to the chimney flashing if there is inadequate air supply or a grill may need to be fitted to a zero clearance box.
5. The Fire should be installed in such a manner that the Surround Panels of the Fire remain accessible. This provides for ease of service and maintenance to the Fire

Fire Place Insert Installation Instructions

Refer to the Diagram and Installers Flue Instructions
1. Ensure that the hearth, where the Fire and Surround Panels sit is level. Plaster or shim as necessary to make the Fire level.
2. Assemble the Surround Panels to the Fire (ensure that the earth wire is connected to the PCB mounting screw with the nut provided), connect a Cleanout Tee to the Exhaust Pipe on the Fire and check that the Fire fits in the cavity. Check that the safe clearances are achieved and pull the fire forward.
3. Connect 75mm Stainless Steel Inner Flue to the flexible Stainless Steel Flue and run the flue to the top of the chimney. Ensure that a 75mm safe clearance between single skin flue components and combustibles is maintained.
4. Fit a 75mm Clamp Support Bracket on the Cleanout Tee if there are more than five 1.2m lengths of 75mm flue used in the installation.
5. Place the Fire in position and connect the Flexible Flue to the Clean Out Tee. Close the Surround Panels.
5. If an Aquadapt (Rubber Boot) flashing is to be used, ensure a section of 100mm Flue is used to pass through the flashing. The 100mm Flue must run to within 20mm of the Cowl. Do not sit the Cowl on the 100mm flue. A Spacer (Spider) or three (3) screws can be used to centralize the inner flue to the outer flue beneath the Cowl.

Fire Place Insert Installation Diagram



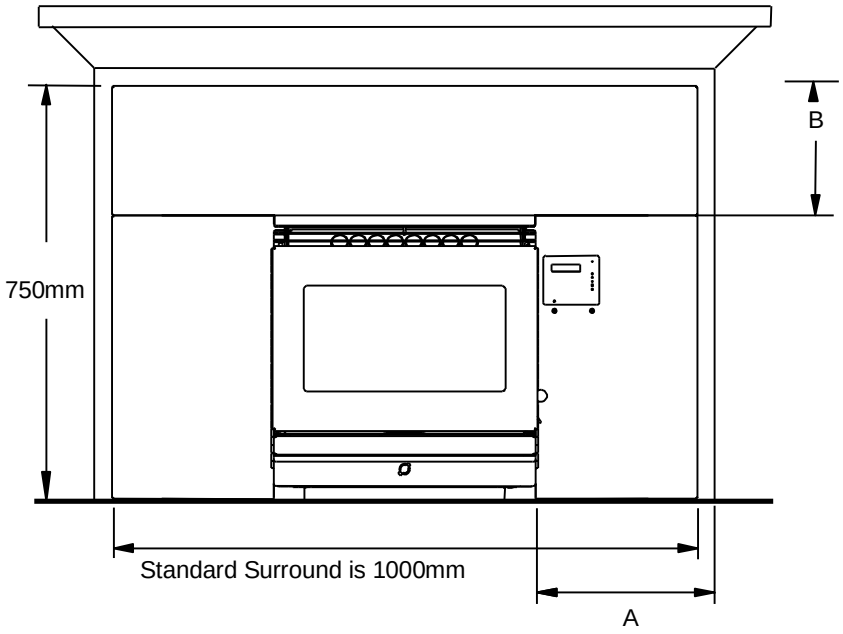
Fire Place Insert Safe Clearances

Minimum clearances to combustible materials:

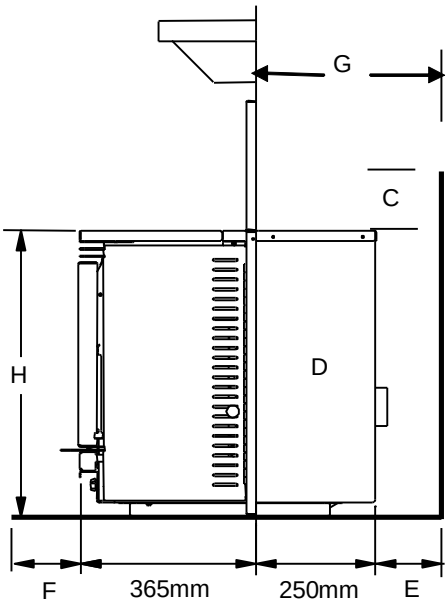
A	Side Wall to front side of Unit	200mm
B	Mantel to front top of Unit	325mm (Requires 290mm to allow hopper lid to fully open)
C	Top Rear of Unit	0mm
D	Side Rear of Unit	25mm
E	Rear of Unit	200mm
F	Floor Protector	150mm
G	Depth	450mm
H	Height	605mm

Notes:
1. Other dimensions illustrated are for installation purposes.
2. Ensure single skin flue has 75mm safe clearance to combustibles.
3. Clearances shown in the side view below are minimum clearances, it is suggested that for ease of maintenance, clearances of around 75mm or greater should be achieved where possible

FRONT VIEW

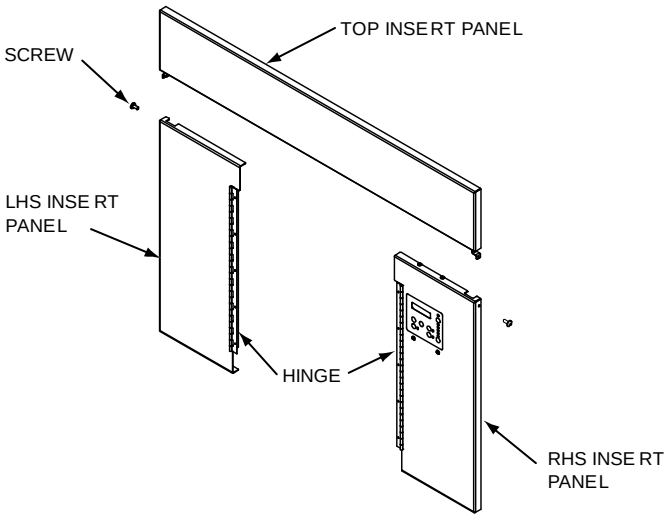


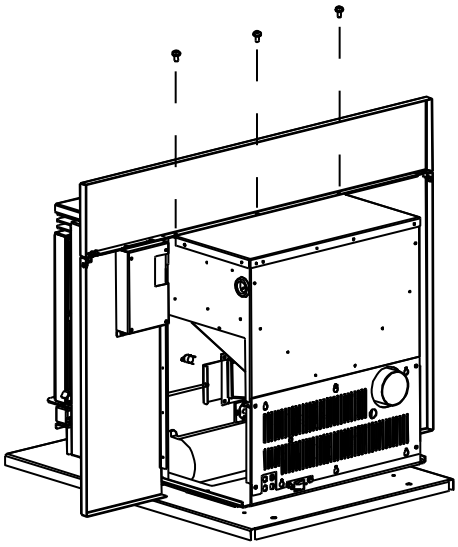
SIDE VIEW



Installing the Surround Panels

1. After leveling and locating the Fire and installing flueing and power, pull the Fire out from the Fireplace to allow the Surround Panels to be installed.
2. The Insert Surround Panels are designed to mount 365mm back from the front of the Fire just behind the Side Panel air vents.
3. To mount the Side Surround Panels, position the left and right Side Panels on their respective sides positioned 365mm back from the face of the Fire and attach to the hinges with the self tapping screws provided.
4. Position the Top Surround Panel piece on top of the Fire and attach it with the self-tapping screws provided.
5. Ensure the earth lead from the main earth is connected to a PCB mounting screw with the nut supplied.
5. Swing the Side Surround Panels rearward so that they line up with the Top Surround Panel and fix them to the ends of the Top Surround Panel with the screws provided
6. Push Insert back against the face of the Fireplace ensuring the rear edges seal up against the Fireplace facing.





INSTALLERS FLUE INSTRUCTIONS

NOTE: You will require a tube of high temperature silicone (260ºC) for this installation.

Pellet Fires differ from most other wood burning appliances in that they do not rely on natural draft produced by a chimney. Instead the flows of combustion air and exhaust gasses are forced with a fan. A Pellet Fire Flue operates under positive internal pressure, a condition that does not occur with natural draft systems. Another important difference is that Pellet Fire exhaust temperatures are much lower than traditional wood heaters; you can touch an operating Pellet Fire Flue without burning yourself.

These two characteristics mean that Pellet Fire flue is very different from those used for traditional wood heaters.

All Pellet Fires must be installed on a non-combustible surface i.e. tiles/slate or the Hearth Pad Pedestal. The non-combustible surface must protrude 150mm forward of the door opening. If not, fit the Hearth Pad Pedestal.

The Fire will perform poorly without adequate air supply. For insert installations ensure that there is adequate air supply or fit a 25mm gooseneck air intake to the flashing on the chimney.

Unlike conventional flue, Pellet Fire flue is exposed to positive pressure. Each seam and joint must be sealed airtight. Installers must seal all joints and cleanout tees with high temperature silicone to prevent any products of combustion from leaking. The need to seal the joints increases the importance to design a flue that can be cleaned with little or no dismantling.

NOTE: IF THE FLUE LEAKS, A THIN LAYER OF CARBON WILL DEPOSIT THROUGHOUT THE DWELLING;
In this event the owner may not necessarily smell anything unusual.

The Fire must have a minimum of 1.2m vertical rise on the Flue, this assists the natural draft necessary to clear smoke from the Fire box in the event of the Exhaust Fan or power failing. Failure to do so may result in smoke entering the room during a power outage or Exhaust Fan failure.

The 76mm Flue, Clean out Tee and Offset Elbows are manufactured from 304-2B Stainless Steel. Stainless Steel is necessary to withstand the high temperatures incurred in the event of a flue fire, which is generally caused by a creosote build up in the Flue. Creosote is a black tar like build up produced by high water content pellets or incomplete combustion. Painted 100mm steel outer flue is fitted to all internal freestanding installations. An external freestanding installation ordinarily uses galvanized outer flue.

A Clean Out Tee must be fitted to all installations. The Cleanout Tee is fitted directly onto the Exhaust Fan exhaust pipe, which protrudes from the rear of the Fire for all installations except an external installation (flue runs up the exterior of the house). In an external installation a length of flue (double skin) is fitted to the Exhaust Fan manifold and passes through the exterior wall directly behind the Fire (flash both sides of the wall with a ceiling ring) and the Cleanout Tee is fitted to the double skin horizontal flue. The Cleanout Tee and Elbow can be painted with a high temperature black paint if they are visible. Vermin and water proof the Wall / Ceiling Rings with silicone on External Installations.

The safe clearance for all double skin flue components is 25mm from a combustible surface. The safe clearance for all single skin flue components is 75mm from a combustible surface. Fit a shield 12mm off the combustible surface if safe clearances cannot be achieved.

All Parkwood Pellet Fires supplied flue is 1200mm long and crimped at one end so that it fits into the receiving flue component. All joins on all stainless steel flue components must be sealed with a minimum of 260º Celsius heat resistant silicone sealant, they must overlap a minimum of 40mm and be fixed in place with three (3) sheet metal screws. Use black rivets for internal installations with painted outer flue.

To centre the Inner flue from the Outer Flue a spacer (Spider) may be used or tabs may be cut on the small end of the Outer Flue and folded into the Inner Flue to centralise the Inner Flue.

Where practical, the flue should be supported every 2 meters of vertical rise.

Ensure the top edge of the end cap on the Clean Out Tee is sealed with heat resistant sealant (on the top outside edge only) and one screw is used to conveniently retain the End Cap in position. The End Cap is removed annually for maintenance. DO NOT RIVET THE CAP ON or place silicone on the inside of the cap.

Do not terminate the flue in any enclosed or semi-enclosed areas such as a carport, garage, attic, crawlspace, narrow walkway, closely fenced area, under a sundeck or porch, or any location that can build up a concentration of fumes and carbon such as stairwells, covered breezeway, etc.

Once the installation is complete, turn the Fire on and test for flue joint leeks by placing a handful of pellets in the Burn Pot Liner. This will create an excessive amount of smoke. Leeks can easily be detected with a torch in a light dimmed room.

WALL THERMOSTAT INSTALLATION

1. Follow the Instructions that are included with Parkwood supplied Thermostats to wire the Thermostat and mount it on the wall. **Note:** Parkwood does not supply Thermostat wire. For Parkwood supplied Thermostats, ensure that the wires are fitted to terminals numbered 1 and 2. The wires may go either way around.
2. Keep the Thermostat wire away from appliances that emit electrical interference. **Never run Thermostat cable with mains power wires.**
3. Ensure that the Wall Thermostat is installed in a location that is not less than 4 meters from the fire and out of direct sunlight. Do not mount the Thermostat in a draughty location.
4. Remove the right side panel from the Fire. Fit the Thermostat Wire (24 volt figure 8 speaker wire 0.8mm) into the 2x2 Terminal Block on the wiring harness (hanging beneath the hopper).
5. To activate the Thermostat Control press both the “Heat/Time” switches until a “**T**” is displayed. This indicates the Thermostat mode is active. In this mode the Thermostat controls the fire and the “Heat/Time” arrows are inactive. The Thermostat will call for more or less heat depending on the Thermostat setting and the fire will deliver more or less fuel as required. The Thermostat will not turn the Fire on or off, if there is excess room temperature the Fire will continue to run at the lowest heat setting.
6. To return to manual control over the fire press both the “Heat/Time” switches until the “**T**” is no longer displayed. The “Heat/Time” switches will now control the fire when pressed.

PELLET FIRE COMPONENTS

Control Panel: is located on the top right of the Fire. The Control Panel contains all the switches necessary to operate the Fire by controlling all electrical components with a microprocessor.

Exhaust Fan: is connected to the flue system. The Exhaust Fan provides combustion air from the air intake pipe into the Burn Pot before venting the combustion air into the atmosphere through the Flue. The Control Panel turns the motor on and off; however, the airflow is regulated by a manually controlled Air Damper Rod from the lower right side of the Fire.

Convection Blowers: are located at the bottom rear of the Firebox. The Convection Blower is a 5-speed blower that is controlled by the heat up and down switches on the Controller. The Control Board controls the time an AC voltage is pulsed to the Convection Blower. The frequency of the pulses controls the 5-speeds of the Convection Blower and thus the amount of room air passing through the Heat Exchanger Tubes and the amount of heat delivered to the living areas.

Auger Feed Motor: is located on the end of the Auger Shaft. The Fights on the Auger Shaft deliver fuel from the Hopper to the Burn Pot Liner inside the Firebox. By using the heat up and down switches, the Control Panel controls the amount of time that the Auger Feed Motor is turned on and thereby controls the amount of fuel fed to the Burn Pot Liner. The 1-second power pulses sent to the Auger Feed Motor can be seen flashing on the Control Panel. On the highest setting the motor pulses every second and on low the motor pulses about every 4 seconds. Fuel delivery will vary depending on the bulk density, quality and length of the pellets.

Igniter: protrudes through the Firebox and onto the Burn Pot Liner. The Igniter is a 250W electric cartridge element that lights the Fire from the hot air drawn off the Igniter by the Exhaust Fan. The On/Off switch on the Control Panel controls the Igniter. The Igniter turns off when the Exhaust Temperature Sensor detects a significant sustained temperature rise or after 20 minutes. For ease of relighting the Fire, the Igniter will always turn on each time the Fire is turned on.

Exhaust Temperature Sensor (Thermisistor): is located on the Exhaust Fan. This sensor monitors the temperature at the Exhaust Fan and sends data back to the Control Panel.

Over Temperature Sensor: is located on the rear of the Firebox above the left Convection Blower. This sensor is a mechanical, normally closed, bi metallic snap disk operating at 90ºC. When the Bi Metallic sensor opens, power to the Auger Motor is terminated. The Fire will go into Stopping Mode once the combustion temperature drops below that reached during the lowest heat setting (Approximately 35ºC). The purpose of this Sensor is to shut the entire system down (after allowing it to cool and vent combustion gasses for 20 minutes) in the event that the Firebox overheats. This is usually attributed to a Convection Blower failure.

Incoming Mains Filter: is located at the lower right rear of the fire.

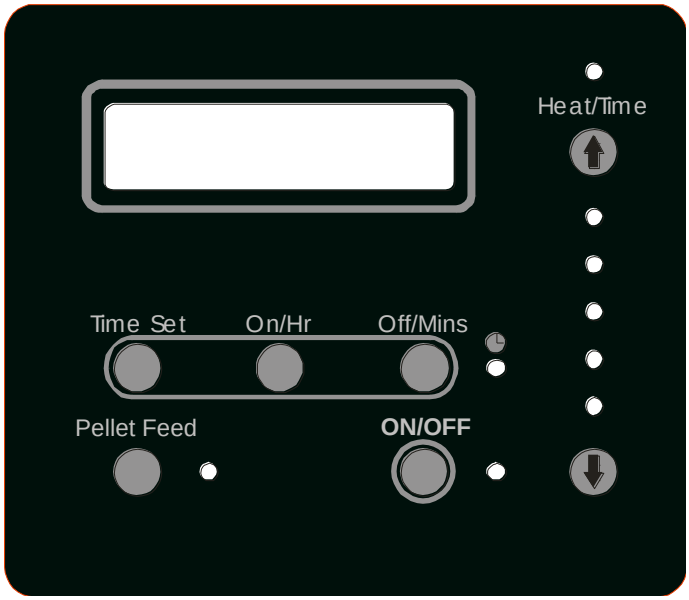
Fuses: All electrical components are individually fused. The fuses are accessible to the owner at the bottom right rear of the fire beside the incoming mains power supply. These fuses are rated at 5 amperes. The recommended fuse is a M205 Fast Blow Fuse.

Wall Thermostat: A wall-mounted thermostat can be hard wired into the wiring loom of all Parkwood Pellet Fires. The thermostat will call for more or less heat depending on the thermostat temperature setting and the Control Panel will deliver more or less fuel as required. The Thermostat will not turn the Fire on or off, if there is excess heat the Fire will continue to run at the lowest setting.

Timer: is located on the Control Panel and is controlled by the TIME SET, ON & OFF switches. The timer is a one shot timer operating on a 24-hour clock that has a one time on and off capability. For ease and speed of programming the minutes can only be set at 15-minute intervals. The Timer has to be reset after each time it has turned the Fire on and off, this ensures that the Burn Pot Liner has been cleaned before use and therefore ensuring that the Fire will light.

CONTROL PANEL DISPLAY

Below is an illustration of the Parkwood Pellet Fires Control Board Panel. Each function of the Control Board is identified.



CONTROL PANEL DISPLAY FUNCTIONS

ON/OFF SWITCH The ON/OFF Switch serves to turn the system on and off by pressing the switch.

PELLET FEED SWITCH If the Fire runs out of fuel; this switch can be used to prime the Auger System. It is used to fill the Auger. The Pellet Feed switch supplies constant power to the Auger Motor until the switch is released.

PELLET FEED LIGHT is on when power is sent to the Auger Feed Motor.

HEAT UP/ HEAT DOWN SWITCHES These switches raise or lower the room temperature. This is achieved by increasing or decreasing the electric pulses sent to the Auger Motor. These switches also control the 4-speed Convection Blower. These switches are also used to set the clock and timers.

HEAT SETTING 1 THROUGH 5 Each Heat Setting, controlled by the Fire Heat Up or Heat Down switch, provides as much fuel as is required for that Heat Setting. The Heat Setting also controls the Convection Blower in similar 4 speed increments. NOTE: Fuel feed rates will vary with different types of fuel.

STARTING & STOPPING MODE In these modes the red LED will light to indicate what state the Fire is in. During STARTING the LED remains on, during STOPPING mode the LED flashes. During the RUNNING mode the red LED is off.

LCD Displays the correct time of day, “On & Off” times and the operating modes.

TIME SET The Time Set switch allows the correct time to be set by pressing the “Time Set” then the “On/Hr” (hour) and “Off/Min” (minute) switches at the same time while setting the desired times using the “Heat/Time” arrows.

ON & OFF SWITCHES The switches allow the STARTING and STOPPING MODES to be activated at the programmed times.

OPERATING MODES

There are three distinct operating modes that control the Fire.

STARTING MODE

When the fire is not operating the Controller has all outputs turned off. It is monitoring for either a manual command for starting or the internal time clock checks for auto startup time. When it is time to start, the Fire commences the STARTING MODE. During the STARTING MODE the "On/Off" LED remains on. The Igniter is activated, the Exhaust Fan is activated and the Auger is activated on the lowest heat setting. In the STARTING MODE the Pellet Feed switch is permitted to function to provide more pellets into the Burn Pot Liner. The Controller then waits for a temperature rise at the Exhaust Temperature Sensor (Approximately 50ºC). Once the temperature rise is detected the Ignitor is switched off, there is a four (4) minute waiting period to allow the pellets to achieve an even burn across the Burn Pot Liner before the Convection Blower is activated and the Fire goes to the RUNNING MODE. The Convection Blower will track the exhaust temperature to prevent cold air from being blown into the room. As the Fire heats up the Convection Blower will move up through the Heat Settings until it arrives at the selected Heat Setting. If a temperature rise is not detected, the Fire goes to the STOPPING MODE after 20-minutes and IGN FAIL will display.

NOTE: If no temperature rise is detected the Convection Blower remains off.

RUNNING MODE

During the RUNNING MODE all switches function during normal operation of the Fire.

STOPPING MODE

When a manual or Timer "Off" command is received, or the exhaust temperature drops below 35ºC, the Fire enters STOPPING MODE. During the STOPPING MODE the Auger Feed Motor is turned off immediately, 20 minutes later the Exhaust Fan and the Convection blowers are turned off. During STOPPING MODE, as the Fire cools down the Convection Blower will move down through the Heat Settings until it the Fire turns off. During this mode the "On/Off" LED flashes. The damper should be fully opened when the fire is turned off.

PRE-OPERATION NOTES

1. Thoroughly read and understand this Manual. Pay particular attention to the maintenance and safety sections of this Manual. Failure to familiarise yourself with the Fire and understand these instructions may cause unsatisfactory performance or damage the fire.

2. Plug the fire in to the mains supply at least five minutes before turning the fire on, this enables the super capacitor to commence charging and enables the display.

3. Check to see that the Flue is properly sealed, tight and correctly installed.

4. Remove protective materials such as plastic coverings, plastic bags, and other material shipped with the Fire.

5. Ensure that the Fire is connected to an electrically compliant earthed 240volt AC power source. Ensure that the power provided is stable and not varying. Parkwood Pellet Fires recommends that a surge protector is fitted between the Fire and power supply to minimise any power supply problems with the Fire.

6. Open the Hopper Lid and inspect the Hopper for foreign objects before filling with fuel. ENSURE THAT NO FOREIGN OBJECTS ARE LEFT IN THE HOPPER BEFORE LOADING WITH APPROVED PELLET FUEL. Always keep the hopper at least ¼ full.

7. The first time the Parkwood Pellet Fire is fired up, an odor and smoke may emanate from the Fire. This is oil from the metal and the paint burning off and is quite normal. Once the Fire is "burnt in" (after first firing) no more smoke should appear. The odor will remain for a little while.

8. Use premium quality fuel for best results. Poor quality fuel will adversely affect the performance of the Fire.

9. Use a soft damp cloth, followed by a soft dry cloth using a gentle wiping action to clean the Plated Door / Ash Sill. DO NOT use abrasive materials or chemicals as they will harm the finish. Oil left from fingerprints will permanently mark the plating.

OPERATING PROCEDURES - DAMPER MODELS

When the fire is operating, the only regular attention that proper operation of the fire requires is to inspect the Burn Pot Liner for “Build up of pellets” or “clinkering”, (The frequency of these inspections is dependent on fuel quality – refer to Pellet Fuel Quality on page 30), adjusting the Air Damper Rod as required (Refer to Combustion Air and Air Damper Rod adjustments on page 24) and to fill the Hopper with fuel.

STARTING PROCEDURE –

The Burn Pot Liner must be placed properly against the Igniter Housing (Push down on the front edge of the Burn Pot Liner after placing it in the Burn Pot) and the Burn Pot Liner holes must be clear of any ash or clinker to ensure ignition occurs. The **Parkwood Pellet Fire** has been designed so that the Burn Pot Liner can be cleaned while the fire is still operating so that the pellets can be maintained at the recommended depth of 10-15mm.

Do not allow the pellets to exceed this depth. If you suspect you are using a poor quality fuel check the level of pellets in the Burn Pot Liner on a regular basis.

As a guide, make sure the pellets do not get above the row of holes on the front and rear of the Burn Pot Liner. To remove excess ash / clinker from the Burn Pot Liner:

1. Pull the Air Damper Rod (On the right side of the fire) fully out.
2. Open the Firebox Door and use a poker to dislodge / scrape the ash so that it falls through the holes in the bottom of the Burn Pot Liner.
3. Close the Firebox Door and return the Air Damper Rod to the correct position.
4. Open the Ash Slide by pulling the knob on the left side of the fire fully out to allow the ash to drop into the ash pan. Close the Ash Slide.

Ordinarily, cleaning the Burn Pot Liner once a day is adequate, however if very poor quality fuel is used, this procedure may need to be carried out up to every two hours or so.

Ordering a second Burn Pot Liner from your Distributor is also helpful if you burn your pellet fire for extended periods.

1. Read the Pre-Operation Notes (Page 22).

2. Open the Hopper Lid and fill the Hopper with premium grade wood pellet fuel. Always ensure that the hopper is kept at least ¼ full to prevent vacuum loss.

3. The Fire now needs to be “Primed”, this will fill the Auger with pellets. This normally needs to be done when the Fire is new or the Auger has been run empty. To prime the Fire press the “Pellet Feed” switch on the control and hold it in until pellets are delivered from the Pellet Feed Chute into the Burn Pot Liner.

4. Position the Air Damper Rod about 15mm out (About a finger width). This distance may vary with different installation types and fuel quality.

5. Ensure the Burn Pot Ash Slide Knob on the left side of the fire is fully closed (Hard against the side panel) or the fire will not light.

6. Ensure the Fire Box Door and the Ash pan are firmly closed or the Fire will not light.

7. Press the “ON/OFF” switch on the Control Board. The red “Starting/Stopping” light next to the “ON/OFF” switch turns on. “STARTING” will display and the green Auger Light will begin to pulse to indicate that fuel is being delivered to the Burn Pot Liner.

8. Select your desired heat setting using the “Heat/Time” arrows.

9. The Fire will automatically light and complete the STARTING MODE. Adjustment of the Air Damper Control may be necessary depending on the cleanliness of the Fire, fuel quality and the selected Heat Setting.

10. If the Thermostat is enabled a “T” will be displayed and the fuel feed rate will be controlled by the Thermostat.

11. The Room Convection Air Blower will activate once the sensor detects a heat rise at the Exhaust Fan. This may take up to 12 minutes. As the Fire heats up the Convection Fan will continue to increase R.P.M. until the correct convection airflow is achieved for the selected heat setting.

12. If for any reason the Igniter should fail, you may use a Little Lucifer, Hexamine Tablet or similar to light the pellets and the Fire will continue to operate normally. Ensure the Burn Pot Liner is clear of any ash or clinker and that it is correctly positioned against the Igniter Housing. Refer to the illustration on page 38 for correct positioning.

NORMAL OPERATING PROCEDURE

1. During normal operation it is necessary to occasionally monitor the Fire to ensure that there is an even burn of pellets about 10-15mm deep in the Burn Pot Liner. Ensure that the pellets are not "getting ahead" (unburnt pellets building up in the Burn Pot Liner) of combustion. This is particularly important if using poor quality pellet fuel. Refer to Combustion Air and Damper Rod adjustments below. Adjust the Air Damper Rod accordingly.
2. Ensure the Hopper is always kept at least ¼ full.
3. On low heat settings the Air Damper Rod should be approximately 5-10mm out, medium heat setting 20-30mm out and for high heat settings the Air Damper Rod should be approximately 50mm + out. Please be aware that these settings may vary for different installation types, different fuel types and different altitudes.

STOPPING PROCEDURE

1. Press the "ON/OFF" switch on the Control Board. The red Starting/Stopping light next to the "ON/OFF" switch will start flashing and "STOPPING" will display.
2. Pull the Air Damper Rod fully out to allow air to blow as much ash from the Burn Pot Liner as possible. Remember to return the Air Damper Rod to the correct position before next using the Fire.

OPERATING PROCEDURES – DAMPERLESS MODELS

When the fire is operating, the only regular attention that proper operation of the fire requires is to inspect the Burn Pot Liner for "Build up of pellets" or "clinkering", (The frequency of these inspections is dependant on fuel quality – refer to Pellet Fuel Quality on page 30), and to fill the Hopper with fuel.

STARTING PROCEDURE

The Burn Pot Liner must be placed properly against the Igniter Housing (Push down on the front edge of the Burn Pot Liner after placing it in the Burn Pot) and the Burn Pot Liner holes must be clear of any ash or clinker to ensure ignition occurs. The **Pellet Fire** has been designed so that the Burn Pot Liner is maintained at the recommended depth of 10-15mm.

Do not allow the pellets to exceed this depth. If you suspect you are using a poor quality fuel check the level of pellets in the Burn Pot Liner on a regular basis.

As a guide, make sure the pellets do not get above the row of holes on the front and rear of the Burn Pot Liner.

Ordinarily, cleaning the Burn Pot Liner once a day is adequate, however if very poor quality fuel is used, this procedure may need to be carried out up to every two hours or so.

Ordering a second Burn Pot Liner from your Distributor is also helpful if you burn your pellet fire for extended periods.

1. Read the Pre-Operation Notes (above).

2. Open the Hopper Lid and fill the Hopper with premium grade wood pellet fuel. Always ensure that the hopper is kept at least ¼ full to prevent vacuum loss.

3. The Fire now needs to be "Primed", this will fill the Auger with pellets. This normally needs to be done when the Fire is new or the Auger has been run empty. To prime the Fire press the "Pellet Feed" switch on the control and hold it in until pellets are delivered from the Pellet Feed Chute into the Burn Pot Liner.

4. Ensure the Fire Box Door is firmly closed or the Fire will not light.

5. Press the "ON/OFF" switch on the Control Board. The red "Starting/Stopping" light next to the "ON/OFF" switch turns on. "STARTING" will display and the green Auger Light will begin to pulse to indicate that fuel is being delivered to the Burn Pot Liner.

6. Select your desired heat setting using the "Heat/Time" arrows.

7. The Fire will automatically light and complete the STARTING MODE.

8. If the Thermostat is enabled a “T” will be displayed and the fuel feed rate will be controlled by the Thermostat.

9. The Room Convection Air Blower will activate once the sensor detects a heat rise at the Exhaust Fan. This may take up to 12 minutes. As the Fire heats up the Convection Fan will continue to increase R.P.M. until the correct convection airflow is achieved for the selected heat setting.

10. If for any reason the Igniter should fail, you may use a Little Lucifer, Hexamine Tablet or similar to light the pellets and the Fire will continue to operate normally. Ensure the Burn Pot Liner is clear of any ash or clinker and that it is correctly positioned against the Igniter Housing. Refer to the illustration on page 38 for correct positioning.

NORMAL OPERATING PROCEDURE

1. During normal operation it is necessary to occasionally monitor the Fire to ensure that there is an even burn of pellets about 10-15mm deep in the Burn Pot Liner. Ensure that the pellets are not “getting ahead” (unburnt pellets building up in the Burn Pot Liner) of combustion. This is particularly important if using poor quality pellet fuel
2. Ensure the Hopper is always kept at least ¼ full.

STOPPING PROCEDURE

1. Press the “ON/OFF” switch on the Control Board. The red Starting/Stopping light next to the “ON/OFF” switch will start flashing and “STOPPING” will display the fans will continue to run for approximately 20 minutes and will turn off automatically.

COMBUSTION AIR AND AIR DAMPER ROD ADJUSTMENTS (not required with Damperless models)

Parkwood Pellet Fires recommends that fuel is purchased in 1 ton quantities so that you can maintain consistent Damper settings. Always keep the hopper at least ¼ full.

Parkwood Pellet Fires have a manual Air Damper Rod that adjusts the combustion air to the Fire. Sufficient combustion air is required to enable efficient combustion of the fuel and maintain maximum heat output of the Fire. Excessive combustion air will vent heat into the Flue that should have been used by the Heat Exchangers to heat room air; this will reduce the heat output of the Fire irrespective of the amount of fuel being consumed. The Air Damper Rod is located on the lower right side of the pellet Fire. As different operating conditions present, such as fuel, altitude, and customer usage preferences, there will be a requirement to adjust the air damper for more or less combustion air to the Fire.

To reduce the combustion air, slide the Air Damper Rod in. To increase the combustion air, slide the Air Damper Rod out.

During Starting the Air Damper Rod should be about 15mm out. To achieve a rapid even burn after ignition the Air Damper Rod can be pulled out further.

DO NOT operate the Pellet Fire with the Air Damper Rod out any more than is necessary to achieve a good burn and providing sufficient air to prevent the pellets from “getting ahead” (un-burnt pellets building up in the Burn Pot Liner). This ensures that you do not waste heat and the Pellet Fire operates at maximum efficiency.

Ensure that pellets do not build up in the Burn Pot Liner (not more than 10-15mm deep). Decrease the fuel or increase the air (Pull the Air Damper Rod out) or clean the Burn Pot Liner to prevent this from occurring by following the steps below.

The holes in the Burn Pot Liner must be kept clean; Parkwood Pellet Fires recommends that the Burn Pot Liner be cleaned daily unless poor quality fuel is being used in which case the Burn Pot Liner will have to be cleaned more frequently. From time to time it will be necessary to clean the Burn Pot Liner with a wire brush to allow sufficient combustion air to easily pass through the holes in the Burn Pot Liner. If high ash content fuel presents, follow the procedures detailed below.

The **Parkwood Pellet Fire** has been designed so that the Burn Pot Liner can be cleaned while the fire is still operating so that the pellets can be maintained at the recommended depth of 10-15mm.

Do not allow the pellets to exceed this depth. If you suspect you are using a poor quality fuel check the level of pellets in the Burn Pot Liner on a regular basis.

As a guide, make sure the pellets do not get above the row of holes on the front and rear of the Burn Pot Liner. To remove excess ash / clinker from the Burn Pot Liner:

- Pull the Air Damper Rod (On the right side of the fire) fully out.
- Open the Firebox Door and use a poker to dislodge / scrape the ash so that it falls through the holes in the bottom of the Burn Pot Liner.
- Close the Firebox Door and return the Air Damper Rod to the correct position.
- Open the Ash Slide by pulling the knob on the left side of the fire fully out to allow the ash to drop into the ash pan. Close the Ash Slide.

Ordinarily, cleaning the Burn Pot Liner once a day is adequate, however if very poor quality fuel is used, this procedure may need to be carried out up to every two hours or so.

Ordering a second Burn Pot Liner from your Distributor is also helpful if you burn your pellet fire for extended periods.

INSUFFICIENT AIR

If the Fire has insufficient air there will be tall lazy flames with dark orange tips. You will see wisps of black smoke at the tips of the flames. Black and dirty conditions will present in the Firebox and on the Glass Door. Pellets will build up in the Burn Pot Liner. If the Fire does build up with too much unburnt fuel in the Burn Pot Liner, turn the heat down to a low setting and open the manual Damper by pulling the Air Damper Rod fully out until the excess pellets have been burnt away. If there is a buildup of clinker or ash, you may need to use a poker/scraper to dislodge it, poor quality fuel may necessitate this every 2-hours or so. This buildup / clinker will prevent optimum combustion and cause carbon to form in the Firebox, on the Glass and cause automatic ignition failures. Always keep the hopper at least ¼ full.

TOO MUCH AIR

If the Pellet Fire has too much air the flames will be short brisk flames like a blowtorch. In this instance the Flue will become hotter than usual because too much heat is being vented into the Flue instead of being converted into room heat by the Heat Exchangers. The pellets will burn away quickly and the flames will reduce quickly. The flames may disappear and the Fire may blow out if poor quality fuel is being used. Always keep the hopper at least ¼ full.

The optimum flame is an active bright yellow/orange flame.

CLINKER & ASH BUILD UP

Clinker is silica (sand) or other impurities (Ash) in the fuel that will form a hard mass in the Burn Pot Liner during the burning process. This hard mass will block the airflow through the Burn Pot Liner and adversely affect the performance of the Fire. Any fuel, even approved types of fuel may tend to clinker.

The **Parkwood Pellet Fire** has been designed so that the Burn Pot Liner can be cleaned while the fire is still operating so that the pellets can be maintained at the recommended depth of 10-15mm.

Do not allow the pellets to exceed this depth. If you suspect you are using a poor quality fuel check the level of pellets in the Burn Pot Liner on a regular basis.

As a guide, make sure the pellets do not get above the row of holes on the front and rear of the Burn Pot Liner. To remove excess ash / clinker from the Burn Pot Liner:

5. Pull the Air Damper Rod (On the right side of the fire) fully out.
6. Open the Firebox Door and use a poker to dislodge / scrape the ash so that it falls through the holes in the bottom of the Burn Pot Liner.
7. Close the Firebox Door and return the Air Damper Rod to the correct position.
8. Open the Ash Slide by pulling the knob on the left side of the fire fully out to allow the ash to drop into the ash pan. Close the Ash Slide.

Ordinarily, cleaning the Burn Pot Liner once a day is adequate, however if very poor quality fuel is used, this procedure may need to be carried out up to every two hours or so.

Ordering a second Burn Pot Liner from your Distributor is also helpful if you burn your pellet fire for extended periods.

Clean Burn Pot Liner with a metal scraper, a wire brush or a small pointed object if necessary. Refer to item 2 in Daily Maintenance on page 27 for additional information.

Note: Once you have determined the correct Air Damper Rod settings for the pellet fuel being used, heat setting and installation conditions, the Air Damper Rod will only need occasional adjustment. Remember that any change of operating conditions and fuel, will require adjustment of the Air Damper Rod. Poor quality fuel will require that the Air Damper Rod is kept out more than usual.

SETTING THE TIME AND USING THE CONTROL SWITCHES

Parkwood Pellet Fires are fitted with a One Shot Timer that enables the Fire to turn on or off at pre set times. The Timer must be reset each time you want the Fire to turn on or off. This one shot feature ensures the Fire does not operate when not intended and it enables the Burn Pot Liner to be cleaned before use. This ensures proper automatic ignition during timer operations.

The Heat Setting Switches are only enabled in specific circumstances. This is to avoid inadvertent changes to the owner's preferred setting. The Heat Setting is only displayed when the Fire is operating or a change is being made.

1. The Heat Setting will default to Heat Setting 1 if it has not been set.
2. The Heat Setting may be changed any time after the fire has been started. **The new setting will be automatically retained as the default Heat Setting for subsequent starts unless it is reset.**
3. The Heat Setting may be changed during a period of one minute immediately after the "ON TIME" has been set.

SETTING THE TIME

1. The clock uses 24-hour notation. The time will be displayed at all times unless there is no power to the Fire or during programming.

2. The TIME SET switch must be pressed while setting the Hours and Minutes.

3. To set the time, press the TIME SET switch on the Control Panel, at the same time press the ON/HR switch to set the hours using the HEAT/TIME Arrows then use the OFF/MIN switch to set the minutes using the HEAT/TIME Arrows.

SETTING THE ON TIME

1. Press the "ON/HR" switch, at the same time toggle the "HEAT/TIME" arrows up or down to set the ON time in 15 minute increments.

2. After programming the "ON/HR" time the Clock Icon on the control panel will flash green. Once the "ON" time has activated the Clock Icon will stop flashing. Press the "ON" switch at any time after programming to confirm the ON time.

3. To cancel an ON time; press the "ON" switch and the "ON/OFF" switch at the same time. The Clock Icon will turn off to indicate that the timer is no longer set

4. Select the Heat Setting that you want the fire to automatically start on by using the Heat up and down switches. You have 1-minute to select the Heat Setting after setting the on time. After fifteen seconds the display will go blank but the setting will be saved and will become active after the ON time is reached. Repeat this entire process if you wish to change the ON time.

Note: To prevent the consequences of the damper not being set correctly at higher heat settings, the fire will not automatically start on heat settings 4 or 5, even if these settings have been selected. The Heat Setting will default back to setting 3 if Heat Settings 4 or 5 have been selected or if no heat setting has been selected. If a Heat Setting has been pre-selected the fire will continue to default to that setting until changed.

SETTING THE OFF TIME

1. Press the "OFF/MIN" switch, at the same time toggle the "HEAT/TIME" arrows up or down to set the OFF time in 15-minute increments.

2. After programming the OFF time the Clock Icon on the control panel will flash green. Once the OFF time has activated the Clock Icon will stop flashing. Press the “OFF/MINS” switch at any time after programming to confirm the OFF time.

3. To cancel an OFF time; press the “OFF/MIN” switch and the “ON/OFF” switch at the same time. The Clock Icon will turn off to indicate the timer is no longer set.

PELLET FEED

The “PELLET FEED” switch primes the auger full of fuel. When commissioning the fire, or when the fire runs out of fuel, press the “PELLET FEED” switch until pellets are delivered into the Burn Pot Liner.

THERMOSTAT

1. If a Thermostat is fitted; it may be enabled by pressing both the “HEAT/TIME” arrows at the same time. A “**T**” will display when the Thermostat is enabled. In Thermostat mode the “HEAT/TIME” arrows are inactive because the Thermostat is controlling the heat settings.

2. To disable the Thermostat, press both “HEAT/TIME” arrows until the “**T**” disappears from the display. When the “**T**” is not displayed the “HEAT/TIME” switches control the heat settings.

Note: The thermostat will not turn the fire on or off.

DAILY MAINTENANCE

The cleaner your Fire is kept the more efficiently and cleaner burning it will operate.

The frequency of cleaning your Fire will depend on the particular installation, fuel quality, and usage of your Fire. You will know your Fire needs cleaning either by inspection or by a decrease in performance. If soot forms on the glass door it is an indication that the Burn Pot Liner needs to be cleaned (or more air is required during operation).

1. With the exception of the Burn Pot Liner, always clean the Fire when the Fire is cold. Carefully check that the Fire and all ashes are cooled completely before commencing any cleaning. DO NOT Vacuum the Fire if any hot, partially burnt pellet fuel or embers are present. DO NOT put any unburnt pellet fuel in the Ash Pan or a fire may occur in the ash pan.

2. Parkwood recommends that you clean your Burn Pot Liner daily. Poor quality or high ash content fuel will increase cleaning frequency (Refer to item 4 below).Open the Burn Pot Ash Slide and remove the Burn Pot Liner from the Fire and clean it by tapping it on the Burn Pot. Allow the ash to fall directly into the Ash Pan. Clinker may be removed from the Burn Pot Liner with a metal scraper or a wire brush. Occasionally it may be necessary to drill the holes in the Burn Pot Liner back out to their original size using a 6mm drill.

3. Open the Burn Pot Ash Slide by pulling the black knob on the right side of the fire to empty the Burn Pot of ash. Do not put unburnt pellets on top of the ash slide or the pellets will burn and distort the ash slide preventing it from sliding freely. Do not put any unburnt pellets in the Ash Pan.

4. The **Parkwood Pellet Fire** has been designed so that the Burn Pot Liner can be cleaned while the fire is still operating so that the pellets can be maintained at the recommended depth of 10-15mm.

Do not allow the pellets to exceed this depth. If you suspect you are using a poor quality fuel check the level of pellets in the Burn Pot Liner on a regular basis.

As a guide, make sure the pellets do not get above the row of holes on the front and rear of the Burn Pot Liner. To remove excess ash / clinker from the Burn Pot Liner:

- Pull the Air Damper Rod (On the right side of the fire) fully out.
- Open the Firebox Door and use a poker to dislodge / scrape the ash so that it falls through the holes in the bottom of the Burn Pot Liner.
- Close the Firebox Door and return the Air Damper Rod to the correct position.
- Open the Ash Slide by pulling the knob on the left side of the fire fully out to allow the ash to drop into the ash pan. Close the Ash Slide.

Ordinarily, cleaning the Burn Pot Liner once a day is adequate, however if very poor quality fuel is used, this procedure may need to be carried out up to every two hours or so.

NOTE: The Burn Pot Ash Slide must remain fully closed at all other times or the fire will not light or perform properly.

WEEKLY MAINTENANCE

1. Carry out daily maintenance.
2. The **Heat Exchangers** have a simple but very important cleaning feature. A Sliding Plate is fitted over the seven tubes of the Heat Exchanger. The Sliding Plate is attached to a rod. Lifting the Hopper Lid accesses the rod; the Cleaning Rod protrudes from the centre of the top Heat Vane in the top centre of the Fire. When the Fire is cold and with the Firebox Door closed, gently pull the rod **fully** out and then push it home, repeat this several times. This will remove ash and buildup from the surface of the Heat Exchangers and clear exhaust airways. Parkwood recommends that you clean your Heat Exchangers daily.

WARNING: It is essential that the Heat Exchangers are only cleaned when the Fire is cold to prevent the sliding Cleaning Plate from becoming permanently stuck.

3. When the Burn Pot Liner is removed, vacuum the Burn Pot. Always ensure that there is no build up of ash in the burn pot or combustion airflow will be restricted and adversely affect the performance of the fire.
4. Using the brush attachment of your vacuum cleaner vacuum the **Firebox Door, Door Glass** and the **Brick Firebox Liner**. Remove the brush, and vacuum surplus ash from within the firebox floor areas.

5. Use a damp paper towel, toilet paper or soft cloth to **clean the glass**. ONLY USE WATER to dampen the tissue. If necessary, dip the damp tissue into the ash to clean difficult areas on the glass. Use a dry tissue to polish the glass and remove any streaks. Be aware that carbon forms on the glass when there is insufficient combustion air or if the Burn Pot Liner requires cleaning.

Warning: Do not use chemicals or abrasive cleaning compounds on the glass or any other part of the Fire.

6. Empty the **Ash Pan** as required. When disposing of ash accumulations from your Fire, always place ash in a metal container with a tight fitting lid. The closed container must be placed on a noncombustible surface well away from all combustible materials, pending final disposal. The ashes should be retained in the closed container until all cinders have thoroughly cooled.
7. From serial No 100956 onward the Maxi has a modified ash pan to prevent it from being left partly open.
8. There is a slot at the bottom of each side of the fire box for the ashpan to lock into. Slide the ashpan in until it stops , lift the front and tilt it back at the top slightly to slot it in at the bottom. The ashpan will then drop slightly and lock into place. Make sure the ashpan is fully in at both sides and level with the sill. The ashpan must seal for the fire to burn properly.

ANNUAL MAINTENANCE

Annual maintenance should be carried out either annually, after burning a ton of fuel or if a noticeable deterioration in the Fire's performance occurs.

WARNING: DISCONNECT THE POWER BEFORE COMMENCING ANY MAINTENANCE OR SERVICING

To prevent bolts from shearing, use a penetrating lubricant (WD40) on bolts before removing them. When replacing the bolts, lubricate them using hi temperature "Never seize" grease or similar

1. Observe the safety precautions detailed in item 1 of Daily Maintenance. Place a drop sheet around the Fire to protect floor coverings from carbon and ash.

2. Carry out the tasks detailed in Daily Maintenance.

3. From inside the Firebox, loosen the two (2) bolts retaining the Fire Deflector immediately beneath the Heat Exchanger Tubes with a 13mm socket and slide it toward you until it clears the keyhole slots.

4. For Compact and Insert Models, using an 8mm socket, remove the side panels and the two (2) bolts on either side of the firebox chassis that retain the Fire Box Liner (this is the part that the Enamel Brick Liner is fixed to). Remove the Fire Box Liner and the Brick Liner. Remove the Exhaust Manifold Inspection Port from the centre rear of the Firebox to

expose the Exhaust Fan Mount and the ends of the Exhaust Manifolds. Use a bottle cleaning brush (or similar) to clean the Exhaust Manifolds. Note: On Maxi Models, the Exhaust Manifold Inspection Port is accessed by removing the Ash pan.

5. Ensure that the Heat Exchange Housing, heat exchange tubes, the Air Intake Pipe and Exhaust Manifolds are thoroughly cleaned before vacuuming the remaining interior of the Fire Box.
6. Assemble the Firebox components. Remove the Exhaust Fan Motor by backing off the six (6) retaining screws. Place the motor on the Fire Base Plate with the fan blades uppermost. Do not damage the fan blades or excessive motor noise will result.

7. Place a suitable receptacle under the Cleanout Tee and remove end cap and clean the Flue with a 75mm wire brush attached to chimney sweep rods. When replacing the clean out tee cap, ensure it is fully re-sealed with Hi-temperature silicone

8. Thoroughly Vacuum the inside of the Fire, Exhaust Fan Housing and Cleanout Tee. Put the brush attachment on to vacuum all fan blades.

9. Inspect the Firebox Door Handle and ensure that it is tight. Use a 10mm socket and 10mm spanner to tighten the lock nut.
10. Inspect the Firebox Door fiberglass rope seal by taking a 50mm wide strip of paper and shutting the Fire Box door on it. Then pull the paper to test the gasket pressure. Check all around the fiberglass rope seal, particularly the left (hinge) side of the door. If the paper slides out easily or falls out, replace the fiberglass rope seal. To replace the fiberglass rope seal, remove the door by lifting it straight up, off of its hinge pins and lay it face down on a soft surface. Remove the fiberglass rope seal (you may need to use pliers). Clean out the old silicone from the track. Apply a generous bead of or hi temperature silicone into the track. Position NEW 14mm round fiberglass rope seal into the track and gently press into the door. Trim off any excess fiberglass rope and wipe away excess high temp silicone. Fiberglass rope seal and high temperature silicone may be obtained from your Parkwood Distributor.

Warning: Use care not to slam or strike door, this could result in glass breakage. If the glass in your Fire is broken or cracked, DO NOT operate your Fire until the glass has been replaced.

11. From the inside of the Firebox Door, use a business card (or similar cardboard) to clear the airways around the glass; this is the edges of the glass that are not supported by fiberglass tape.
12. Use the same paper test detailed in item 10 above to check the Ash Pan Gasket Seal. Bend the Ash Pan Locking Latch to achieve a firm and sealed close and / or replace the Gasket as necessary.
13. Use a piece of cardboard to clean any dust away from between the edge of the Firebox Door glass and the plates that retain the glass. This air way helps keep the inside of the glass free of carbon.
14. Use a soft brush to clean the Convection Fan impellers then blow the resulting dust out.
15. Reassemble the Fire and apply Stove Bright Charcoal touch up paint to any marks or scratches.

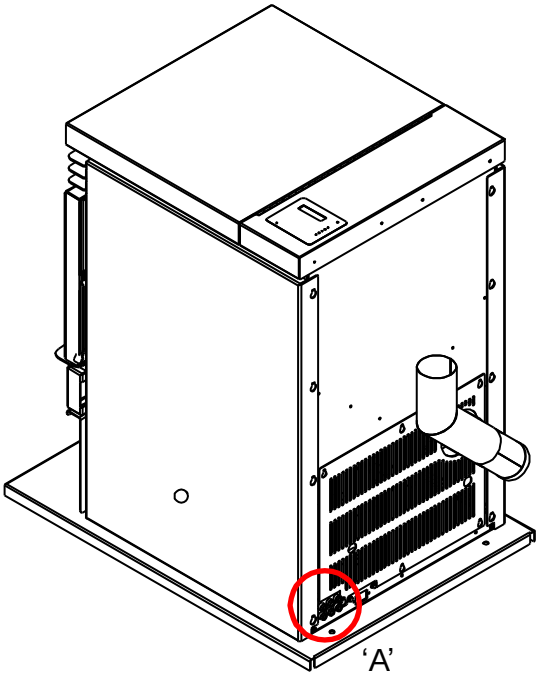
TROUBLE SHOOTING

FUSES

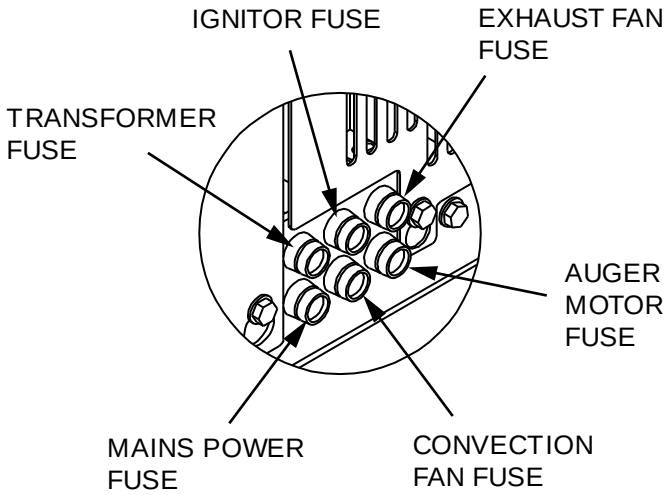
Note: Spare fuses are attached to the rear page of this Manual.

1. To prevent excessive electrical loads or power spikes on components each electrical component is fused. On Free-Standing models, the fuses are located at the bottom right rear of the Fire near the incoming mains power supply.
2. On the Fireplace Insert models, the fuses are accessible by removing the T20 screw retaining the right surround panel and swinging the side panel forward. The fuses are located on the side of the Fire at the right rear.
3. The fuses are 5 amp (M205 Fast Blow) and may blow from time to time. Fuses should be checked first if the Fire fails to operate normally.
4. If the earth leakage device trips at the switch board; remove the igniter fuse and light the fire manually. Call a technician for a replacement Igniter.

FUSE LOCATION DIAGRAM



REAR VIEW



VIEW 'A'

PELLET FUEL QUALITY

Only premium quality 6mm wood pellets should be burnt in this Fire. Pellet fuel quality is a major factor in how well your Fire performs. Pellets will vary from manufacturer to manufacturer and batch-to-batch from the same manufacturer; this may significantly affect the heat out put and reliability of the Fire. To compensate for this you may have to clean your Burn Pot Liner more regularly and have your Air Damper Rod set to provide more or less air than usual. Parkwood Pellet Fires recommends that pellet fuel is purchased in 1 ton quantities to reduce any inconvenience caused by different quality batches of pellet fuel.

When using new or different fuel, keep an eye on the level of the pellets in the Burn Pot Liner, make sure there is an even burn across the bottom of the Burn Pot Liner about 10-15mm deep and ensure that the pellets are not "filling up" in the Burn Pot Liner. Adjust the Air Damper Rod and heat switches accordingly until you have the desired flame and heat output.

The holes in the Burn Pot Liner must be kept clean; Parkwood Pellet Fires recommends that the Burn Pot Liner be cleaned daily. From time to time it will be necessary to clean the Burn Pot Liner with a wire brush or scraper to allow sufficient combustion air to easily pass through the holes in the Burn Pot Liner. The holes may also need to be drilled out to return them to their original size.

The **Parkwood Pellet Fire** has been designed so that the Burn Pot Liner can be cleaned while the fire is still operating so that the pellets can be maintained at the recommended depth of 10-15mm.

Do not allow the pellets to exceed this depth. If you suspect you are using a poor quality fuel check the level of pellets in the Burn Pot Liner on a regular basis.

As a guide, make sure the pellets do not get above the row of holes on the front and rear of the Burn Pot Liner. To remove excess ash / clinker from the Burn Pot Liner:

- Pull the Air Damper Rod (On the right side of the fire) fully out.
- Open the Firebox Door and use a poker to dislodge / scrape the ash so that it falls through the holes in the bottom of the Burn Pot Liner.
- Close the Firebox Door and return the Air Damper Rod to the correct position.
- Open the Ash Slide by pulling the knob on the left side of the fire fully out to allow the ash to drop into the ash pan. Close the Ash Slide.

Ordinarily, cleaning the Burn Pot Liner once a day is adequate, however if poor quality fuel is used, this procedure may need to be carried out up to every two hours or so.

Ordering a second Burn Pot Liner from your Distributor is also helpful if you burn your pellet fire for extended periods.

NOTE: PARKWOOD ACCEPTS NO RESPONIBILITY OR LIABILITY FOR THE PERFORMANCE OR RELIABILITY OF THE FIRE IF SUB STANDARD PELLET FUEL IS USED.

FUEL FEED PROBLEMS

Check the Auger Motor fuse, if the Auger motor doesn't appear to operate:

Ensure there is sufficient combustion air for the amount of pellets being delivered. Adjust the Air Damper Control Rod accordingly. Insufficient combustion air will result in pellets building up in the Burn Pot Liner. Ensure pellets are maintained at 10-15mm deep at all times.

If the Auger becomes jammed because of foreign objects or long pellets, the top cover of the Auger Housing inside the Hopper may be removed to clear the obstruction. Empty the pellets from the Hopper and back off the top six (6) bolts retaining the Auger Housing top cover with an 8mm socket; slide the cover downward until the bolt heads are clear of the key holes then remove the Auger Housing top cover. Clear the obstruction and assemble in the reverse order. Ensure that the top edge of the Auger Housing top cover is resealed air-tight with silicone or the fire will not operate properly.

POOR PERFORMANCE OF THE FIRE

1. If the Fire performs poorly and you are unable to achieve adequate combustion air, clean the Heat Exchangers with the Cleaning Rod (When the fire is cold) and ensure that the Burn Pot Liner is clean.

2. Ensure the Hopper is at least ¼ full because vacuum can be lost through the Pellet Hopper.

3. Ensure the Ash Pan; Burn Pot Ash Slide and Firebox Door are firmly closed.

4. Carry out Daily, Weekly and Annual Maintenance to remove excessive ash build up if poor performance of the Fire occurs. Pay particular attention to the Fire Box Door and Ash Pan gasket seals. If poor performance persists, the problem is most likely to be poor quality fuel.

5. In very highly insulated dwellings a door may need to be left ajar or poor performance of the Fire may result due to insufficient combustion air.

IGNITION PROBLEMS

If the fire fails to ignite within 20 minutes "IGN FAIL" will display on the Controller. Pressing the "ON / OFF" switch will remove this display. The following procedures will identify the fault.

1. Check all the fuses. Replace as required.

2. Refer to items 1-4 in "Poor Performance" above and ensure that the Burn Pot Liner is clean and correctly positioned against the Igniter (push down on the front edge of the Burn Pot Liner to achieve this).

3. Establish whether the Igniter is working by turning the Fire on. Remove the Burn Pot Liner after allowing sufficient time for the Igniter to heat up (three or four minutes), you should see an orange glow coming from the Igniter Housing or you can place your finger 20mm from the Igniter Tube opening. If the Igniter is working you will feel heat coming from the Igniter Housing. **CAUTION: Never touch the Igniter Housing when the Igniter is operating.**

4. Refer to the illustrations on page 38 of this manual for the correct Igniter and Burn Pot Liner alignment as the Ignition Port on the Burn Pot Liner may have dropped beneath the Igniter Housing. Repair as required or order a replacement Burn Pot Liner.

5. If the Igniter is not working, place a handful of pellets in the Burn Pot Liner and manually light the Fire using a little Lucifer, Hexamine Tablet or similar. Close the Firebox Door and turn the Fire on. Nurse the Fire with the Air Damper Rod as necessary to achieve an even burn across the Burn Pot Liner. Call a service technician to replace the Igniter at

your convenience. The Igniter is easily replaced by removing the right panel using an 8mm socket. The same 8mm socket can be used to remove the Igniter which is located at the centre of the Fire on the back of the Firebox.

6. If the Fire lights and appears to operate normally then goes out after 20 minutes the Fire has timed out because the Exhaust Temperature Sensor did not detect a temperature rise within the 20 minutes provided for ignition. This symptom presents when hard (slow ignition) occurs. If the Fire fails to light again, check the Exhaust Temperature Sensor which is located on the side of the Exhaust Fan. Ensure that the Exhaust Temperature Sensor is correctly positioned under the retaining clamp.

7. Summary of remedial actions:

- Clean the Burn Pot Liner
- Ensure that the Burn Pot Liner is correctly positioned (Refer to page 38)
- Ensure that the Burn Pot Ash Slide is closed
- Ensure that the Ash Pan is firmly closed.
- Ensure that the Firebox Door is firmly closed
- Ensure that the Hopper is at least ¼ full
- Carry out weekly maintenance
- Check that the igniter is functioning
- Check the Thermisistor position
- Carry out annual maintenance

NOTE: Every now and again a pellet will block the Burn Pot Liner Ignition Port; this is a random event and may account for the occasional ignition failure.

PCB. CONTROLLER

When the display is powered up, “PARKWOOD” then the firmware revision number displays, ie. “1.12”

If the display fails on initial starting ensure that the fire was plugged in to the mains supply at least five minutes before turning the fire on; this enables the super capacitor to commence charging and enables the Display (See pre-operation note 2 on page 22).

MASTER RESET

If at any time the PCB Controller becomes unresponsive, performs unusually or appears to lock up at any time; press the “Off” switch until “RESET OK” displays, this takes 15 seconds, this function will clear the memory (RAM) and reset the Controller to factory default settings. When this reset is successfully carried out, the display will show “Reset OK”. The fire will resume in standby mode. Keeping the switch pressed after 8 seconds will enable the diagnostic routine and display information about the controller.

If there is no display on the controller, check the transformer fuse

FREQUENTLY ASKED QUESTIONS

NO FUEL

After I turn the fire on, “No Fuel” displays on the Control Panel.
The Exhaust Temperature Sensor (Thermisistor) has not detected a temperature rise. Pressing the “ON / OFF” switch will remove this display. Check that there is fuel in the hopper.

If the fire did not ignite: This could be because the Burn Pot Liner Ignition Port was not correctly aligned (Refer to the instructions on the page 38), the Ash pan is not sealed closed, the Burn Pot Ash Slide is not closed, the Firebox Door Seal is not providing a good seal or the Ignitor is not working (Check the fuses).

Did the fire ignite then go out?
The Exhaust Temperature Sensor (Thermisistor) located on the side of the Exhaust Fan may not be correctly positioned under the locating tab on the exhaust fan.

E FAIL

When I turn the power on "E Fail" displays on the Control Panel.
There is no power to the Exhaust Fan. Pressing the "ON / OFF" switch will remove this display. Check the Exhaust Fan fuse or repair the Exhaust Fan or wiring as required.

The Fire doesn't appear to operate and the Auger light on the Control Panel remains off
Check all the fuses.

Turn the Fire off then on. If the Auger Motor does not work there may be no power to the Fire. Test that the plug is working by plugging another electrical appliance into the plug. Reset the earth leakage or fuse at your switchboard or have an electrician repair the plug accordingly. Run an extension lead to the Pellet Fire. If the Auger motor is working or there is power to the Fire call a technician.

If there is power to the fire and the Control Panel remains unresponsive check that the Exhaust Temperature Sensor (Thermisistor) is serviceable. Ensure that the Exhaust Temperature Sensor is correctly positioned under the retaining clamp on the Exhaust Fan. Call a technician to replace the PCB if no fuse, Exhaust Temperature Sensor, Transformer or wiring fault can be found.

The Exhaust Fan turns on but there are no pellets being fed into the Burn Pot Liner
Check the fuses (See "Fuses" in Trouble Shooting page 29)

Ensure there are pellets in the Hopper, you can lose vacuum through the Hopper so keep it at least ¼ full at all times. Fill the Hopper if necessary. Remember that the pellets will take longer to come through if the Hopper has been completely emptied because the Auger has to refill before it can deliver pellets. Press the Pellet Feed Switch until Pellets are delivered to the Burn Pot Liner.

Ensure there are no foreign objects obstructing the Auger. Clear the obstruction by removing the bolts retaining the Auger cover inside the Hopper with an 8mm socket. Ensure the top of the Auger Cover is resealed with black RTV Silicone when replacing the Auger Cover.

Ensure there are no foreign objects obstructing the Flue. Clear the obstruction.

Ensure that the Fire Box Door, Burn Pot Ash Slide and the Ash Pan are closed tightly. Restart the Fire by turning the Fire on. If the problem persists, call a technician at your convenience.

The pellets do not ignite and they fill the Burn Pot Liner
Check the fuses.

Refer to Ignition Problems on page 31.

A pellet may have become lodged in the Ignition Port of the Burn Pot Liner thus preventing the Fire from lighting automatically. Clear the Burn Pot Liner and restart the Fire. If the Fire blows out, you may have poor quality pellets, nurse the Fire until there is an even burn by adjusting the Air Damper Rod. Generally, poor quality fuel requires more air however too much air may blow the flame out during initial combustion.

NOTE: Irrespective of any ignition failures, provided there are pellets being fed into the Burn Pot Liner you may light the Fire manually with a solid Firelighter product (Little Lucifer, Hexamine Tablet or similar) and your Fire will continue to operate normally.

If the pellets fail to ignite for any of the above reasons the Pellet Fire will automatically stop after 20 minutes. To restart the Fire, empty the fuel from the Burn Pot Liner and turn the Fire on again.

CAUTION: Only use solid Firelighters; never pour any flammable liquid onto the pellets to try to light the Fire.

A vibrating noise is coming from the Convection Blower
One or more of the 4 bolts fixing the Convection Blower may have worked loose. Nip the bolts up using an 8mm socket. Ensure that the rubber mounting grommets are serviceable, replace required. Check that each Impeller is free to rotate and doesn't rub on the Housing. If an Impeller is rubbing on the Housing, use a drift to move the Impeller along the Drive Shaft so that the Impeller clears the Housing.

A white coating forms inside the glass
This is normal for pellet Fires, it is the unburnt minerals in the fuel. Follow the glass cleaning instructions under Weekly Maintenance on page 28.

Warning: Do not use chemicals or abrasive cleaning compounds on the glass. ONLY USE WATER. For difficult to remove stains, dip the cloth/tissue into the ash.

Black carbon forms inside the Firebox and glass
Continued use of pellet fires will result in carbon forming on the Fire Box Door Glass, this is normal for pellet fires. Excessive amounts forming too quickly is caused by poor quality fuel or the Fire operating with insufficient combustion air for the amount of pellets delivered to the Burn Pot Liner. Clean the Burn Pot Liner with a wire brush and/or adjust the Air Damper Rod to provide more combustion air. Refer to Combustion Air and Air Damper Rod Adjustments on page 24. Use a business card (or similar cardboard) to clear the airways around the glass, this is the edges of the glass that are not supported by fiberglass tape. Follow the Firebox/glass cleaning instructions under Weekly Maintenance on page 28.

Qualified technicians should carry out all other servicing and preventative maintenance.

WARRANTY

The enclosed Warranty Registration Card must be forwarded to Parkwood within 30 days of installation. If your fire is not registered with Parkwood no parts will be supplied under warranty. Failing to adhere to the operating instructions will void the Warranty and may damage the fire. Keep the Certificate of Compliance issued by the Installer / Council in a safe place as you may be required to produce this for any future warranty claims

1. Parkwood warrants the Fire to the original retail purchaser only.

2. Parkwood makes the following warranties regarding the Pellet Fire.

STEEL COMPONENTS: Parkwood warrants its Pellet Fires to be free from defects in materials and workmanship for a period of five (5) years from date of purchase subject to terms, conditions, and restrictions set forth below:

ELECTRICAL COMPONENTS: Parkwood warrants the Electrical Components of its Pellet Fire to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase, subject to the terms, conditions, and restrictions set forth below.

3. **Terms, Conditions, and Restrictions**

a. **Components Not Covered**. The above warranties do not apply to Glass, Burn Pot Liner, Brick Firebox Liner, Firebox Deflector, Burn Pot Ash Slide, gaskets, paint, fuses and plating.

b. **Exclusions**. The above warranties do not apply in the following conditions or circumstances:

i. To conditions resulting from Parkwood Pellet Fires that are installed other than in accordance with specifications, including air supply matters referred to on pg 12.

ii. To conditions resulting from failure to provide reasonable and necessary maintenance for the Parkwood Pellet Fire in accordance with operating and maintenance instructions.

iii. To conditions resulting from the alteration or modification of any Parkwood Pellet Fire by anyone other than Parkwood Pellet Fires or a person duly authorised by Parkwood Pellet Fires to complete such alteration or modification.

iv. To conditions resulting from failure to use and operate the Parkwood Pellet Fire in accordance with Parkwood Pellet Fires operating and maintenance instructions or as a result of other misuse of the product.

v. To conditions not involving defects in materials or workmanship.

vi. To conditions resulting from improper firing or burning of materials in any Parkwood Pellet Fire.

vii. To any Parkwood Pellet Fire that is not installed by a Parkwood qualified installer.

viii. To any Parkwood Pellet Fire that has been installed without complying with any Local Government or Authority requirements.

c. **Warranty Registration Card**. The above warranties are void and will not apply unless the enclosed attached Warranty Registration Card is filled out by the original retail purchaser and returned to Parkwood Pellet Fires within thirty (30) days subsequent to the date of purchase. If you are unable to find the Warranty Registration Card, please call your Distributor or Parkwood to arrange a replacement.

4. **Remedies in the Event of Failure**. In the event a Parkwood Pellet Fire fails to perform as warranted, the following terms and conditions will apply:

a. **Steel Components:** If the steel components of the Parkwood Pellet Fire fail to perform as warranted for five (5) year subsequent to the date of purchase, Parkwood Pellet Fires will supply the parts to affect the repair free of charge to the original retail purchaser, subject to the terms, conditions, and restrictions set forth herein.

b. **Electrical Components:** If the electrical components of the Parkwood Pellet Fire fail to perform as warranted for one (1) year subsequent to the date of purchase, Parkwood Pellet Fires will supply the parts to affect the repair free of charge to the original retail purchaser, subject to the terms, conditions, and restrictions set forth herein.

c. **Warranty Service and Freight Costs**. Service on Parkwood Pellet Fires will be provided by any Parkwood Pellet Fires Distributor. If there is no Parkwood Pellet Fires Distributor in the original retail purchaser's area, the original retail purchaser may notify Parkwood Pellet Fires Private Bag 9038, Wanaka, New Zealand 9034 of any defect by providing the following information:

i. Serial Number of the Model Pellet Fire:
ii. The original purchasers name and date of purchase
iii. The date of installation
iv. The Registration Number of the qualified Installer
v. A description of the nature of the defect of problem
vi. A Copy of the Code of Compliance

If service is required, the original purchaser must send the Fire or component freight or postage prepaid to Parkwood or a designee of their choice. Parkwood will not pay freight or postage costs relating to products or components returned for warranty service.

d. **Cost of Replacement Parts**. Parkwood will supply the parts required for the Warranty repair. The original retail purchaser is responsible for payment of any costs, freight and expenses of disassembly, removal and reinstallation of any defective product or component and any other services involved. None of these costs or expenses is covered by this warranty and Parkwood is not liable for any of these costs.

5. **Limit on Damages**. In no event shall Parkwood be liable for damage to property, lost profits, injury to goodwill, or any other special, incidental or consequential damages resulting from any defective Parkwood Pellet Fire or any breach of the above Express Warranties.

6. **Limitation of Implied Warranties**. Parkwood expressly limits all implied warranties. INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE TO ONE YEAR FROM THE DATE OF PURCHASE.

7. **Legal Rights**. This warranty gives you specific legal rights, and you may also have other rights, which vary in Australia and New Zealand

8. **No Other Warranty – These Remedies are Exclusive**. Unless otherwise explicitly agreed in writing, it is understood that this is the only warranty given by Parkwood, and Parkwood neither assumes nor authorises anyone to assume for it any other obligations or liability in connection with this Parkwood Pellet Fire product.

9. **Additional Information**. If you wish to obtain additional information or resolve questions concerning the interpretation of any warranties of Parkwood Pellet Fires, please contact:

Parkwood Pellet Fires
Firemakers Limited
Private Bag 9038, Wanaka
NEW ZEALAND 9343

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Email: info@parkwood.co.nz
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