



your fire place

UL200

FREESTANDING WOOD FIRE

INSTALLATION & OPERATION INSTRUCTIONS

Please leave this information with the appliance

Congratulations on the purchase of your UL200 Ultra Low Emission Burner, by Jayline.

UL200 Ultra Low Emission Burner is not a conventional wood fire, it is a 'wood gasification stove', developed for the optimal burning of air dried natural wood.

The principle of the wood gasification stove & double combustion and its advantages

Generally: In a wood burning stove, a correctly burning flame emits the same amount of carbon dioxide (CO²) as would be emitted through the natural decomposition of the wood itself.

The quantity of CO² produced by combustion or decomposition of a tree is equal to the quantity of CO² that the tree would have extracted from the environment, releasing oxygen into the air whilst utilising the carbon for growth during its lifetime.

Unlike wood, when fossil fuels are burned (which are not renewable), like coal, diesel oil & gas, a huge amount of CO² accumulated in the course of millions of years is emitted into the atmosphere, increasing the green-house effect. Consequently, the use of wood as fuel maintains the perfect equilibrium of nature because it is a renewable fuel of which burning is comparable with nature's life cycle.

The principle of clean combustion is in perfect harmony with these characteristics.

Double combustion: What exactly do we mean by clean double combustion and how does it work? By controlling the flow of primary air and by adding secondary air, secondary combustion, or post-combustion, takes place. This is indicated by a second characteristically clearer and stronger flame below the main flame. By adding new oxygen, this flame consumes the unburned gasses, remarkably improving heat production and reducing the harmful emission of CO (carbon monoxide) caused by incomplete combustion. This is a unique feature of the UL200 stove.



Simply by burning your UL200 fire correctly, you can improve efficiency, reduce fuel consumption and minimise air pollution.

Please read this installation and operation manual carefully.

The installation of this fire must comply with the Installation Standard AS/NZS 2918:2001 as well as any additional local requirements. Please ensure you have all relevant permits prior to installation.

Keep this booklet as a reference guide.

Items supplied with the fire

- Installation / Owners Manual
- Fire Lighter Cubes

INSTALLATION OF YOUR UL200 ULTRA LOW EMISSION BURNER

Jayline recommend you use a suitably qualified installation technician to install your fire. Your dealer or heating specialist will be able to help with recommendations as well as advise on permits/consents required for the installation in your area.

Please follow carefully all dimensions and recommendations provided on the individual specification sheet for your model of heater as these dimensions comply with the required New Zealand standard (AS/NZS 2918:2001).

As safety and emissions performance can be affected by altering the appliance, no modifications are allowed without the written permission from the manufacturer.

Installation

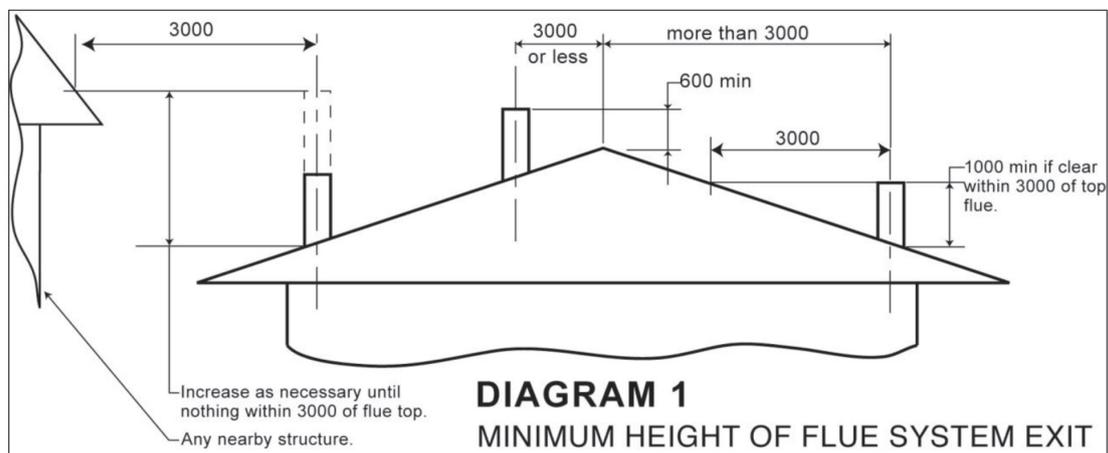
1. Unpack the heater and check that there is no damage.
2. Ascertain the position of the roof penetration for the flue system.

A correctly installed flue system will normally prevent down draught problems during windy weather and eliminate smoke spillage problems due to lack of draught.
3. Ascertain suitable position for appliance and size of floor protector and check the ceiling to ensure that no major structural members will be affected by the path of the flue.
4. Check measurements of the heater to combustibles.
5. Locate the heater in the required position (also see 'Fitting Seismic Restraint' after installation instruction #10).
6. Using a plumb line fastened to the ceiling, mark the centre of the flue penetration position and cut the ceiling hole to the required size and frame out.
7. Install the flue system (see flue installation instructions supplied with flue system).

Remember:

- The flue system should rise vertically from the appliance with as few offsets as possible. Offsets should be limited as each change in direction creates a resistance to airflow and makes flue cleaning difficult.
- The flue system must be well sealed using flue sealant with a minimum of 3 fixings at each joint.
- The flue pipe penetrating the chimney must continue to the minimum length of 4.6m from the top of the floor protector to the cowl.
- The Ø200mm liner must be fitted from the ceiling plate (as per the flue kit instructions) 1 x 1200mm length is supplied in the MKIII Flue Kit.

- Flue exiting more than 3 metres from the ridgeline must terminate no less than 1 metre above the roof penetration (see diagram 1 below).
- Where the top of the flue pipe is more than 2 metres above its highest fixing point, it must be stayed against high winds.



9. Drill and fix flue system into flue spigot with stainless steel self-tapping screws.
10. Drill and secure the appliance to the floor protector using the two holes in the rear bracket of the appliance.

FITTING SEISMIC RESTRAINT

The Floor Protector must be mechanically fixed to the floor by bolting or screwing. *Note: Floor Protector to be fixed by gluing when on a concrete floor that may have water pipes or electrical wires present. The appliance can then be bolted to the floor protector with two 6mm x 50mm dynabolts or equivalent.*

REDUCING CLEARANCES TO COMBUSTIBLE WALLS

In the event it is necessary to reduce the clearances to combustible surfaces, it must always be done in accordance with the safety standard AS/NZS2918:2001 Section 3, Tables 3.1 and 3.2

The shielding shall be constructed from a heat resistant material. The shield must be fixed to the surface that requires protection and NOT the heater.

The standard allows three options to reduce the stated clearances:

Single Layer of continuous material with minimum Air Gap of 12mm to achieve a clearance factor of 0.40

Single layer of continuous material with minimum Air Gap of 25mm to achieve a clearance factor of 0.30

Two spaced Layers of continuous material with minimum Air Gap of 12mm + 12mm to achieve a clearance factor of 0.20

The shielding must be open at the top and bottom (vented) to allow a continuous air flow. It is this flow that keeps the surface requiring protection cool. Fixings should not impede this air flow.

The shielding needs to go far enough along and up the wall so that the original side and rear required clearances are not compromised. As the flue is now closer to the wall the shielding should also protect the wall from the flue pipe.

Example:

- Side wall clearance for the Jayline FR300 is 290mm
- A 12mm gapped shield on the wall with a factor of 0.40
- Calculate: $290\text{mm} \times 0.40 = 116\text{mm}$ (This is the new sidewall minimum clearance)
- The shielding needs to be large enough that none of the original clearances of 290mm are compromised.

CORRECT OPERATION OF YOUR UL200 WOOD FIRE

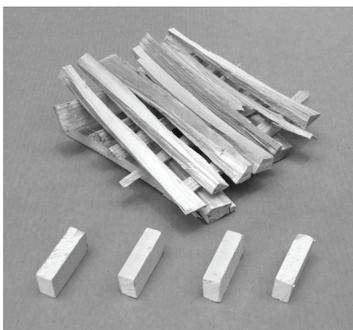
Simply by burning your UL200 fire correctly, you can improve efficiency, reduce fuel consumption and minimise air pollution.

Starting A New Fire

Please note: If lighting the fire for the first time, dust the fire, glass, trim and flue before firing to avoid particles sticking or discolouring. Once fired, some smoke and vapour will be released as the VHT painted surfaces enter the final curing process. Open all windows and doors while running the fire for up to 5 hours. People with respiratory, heart or other relevant medical conditions should avoid inhaling vapours during the curing process. All VHT paint will cure at the highest temperature achieved and will produce smoke again if this temperature is exceeded.

To start and maintain a good fire you will need the following items:

1. Approximately 16 pieces of kindling at 1kg in weight total.
2. Intermediate Load #1: 4 pieces of wood approximately 300mm in length at 1.2kg total weight
3. Intermediate Load#2: 4 pieces of wood approximately 300mm in length weighing approximately 2.5kg in total
4. 4 x Fire Lighter Cubes (supplied) or fire lighters.
5. 1 x long reach lighter



1

Kindling and 4 x Fire Lighters



2

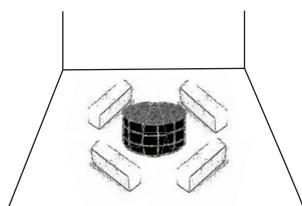
Intermediate Load #1



3

Intermediate Load #2

Lighting Instructions

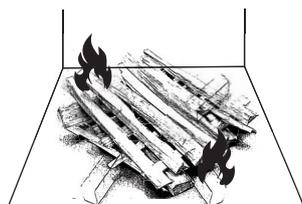


(Fig 1.)

Place the fire lighter cubes at even intervals around the circular down draught cylinder. (Fig 1.)

Stack the kindling in a cross stack manner (Fig 2.)

Light the fire lighters using the long reach lighter then close and lock the door.

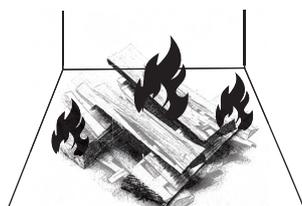


(Fig 2.)

Once the kindling fuel is well-alight (approximately 6-8mins) then the Intermediate #1 fuel loading can be added on top of the fuel bed. Again close and lock the door.

After another 6-8 minutes add the Intermediate #2 fuel load. Close and lock the door.

Ensure fuel is placed into the firebox - never thrown. This will preserve the life of your components, and avoid your fuel load toppling.



(Fig 3.)

At this time the automatic bypass damper may engage, this will happen automatically between 14-20 minutes after the fire is started. This is dependent upon wood condition, heating of the firebox and ambient (room) temperature.

Once the initial fuel loads have burned down to an ember bed, the main loads can be applied (approximately 3kg of wood in two pieces). Apply further fuel as required. (Fig 3.)

General Operational Guidelines

DO:

When opening the door, unlatch the handle, slowly open the door approximately 25mm ajar, pause for 5-10 seconds then slowly draw the door fully open (this allows for smoke to exit correctly through the flue). From this time forward, the UL200 can be operated much like a traditional wood fire due to its automatic functions.

Ensure the entire fuel load fits inside the firebox before closing the door. The optimum fuel length is 300mm pieces.

Use well-seasoned wood with a moisture content of 10% up to 25% moisture. Kiln dried fuel is not recommended. Treated timbers of any kind should not be burned due to the release of harmful gases. Keep the lower chamber closed during operation and keep it free of any foreign material. Small pieces of charcoal may fall into the lower chamber, these will burn away in a short time. Maintain the exterior surfaces of your fire using only a damp cotton cloth, your glass should remain clear when the UL200 is operated correctly.

DON'T:

Be cold this winter



Important points to remember

- *Do not attempt to add fuel (or any objects) into the lower chamber.*
- *Keep the lower door closed at all times during operation*
- *Because of the high temperatures achieved, surface colour may change*

PURCHASING THE FIREWOOD

The quality of the firewood you burn can have a dramatic effect on the efficiency and operation of the heater. The main factors that affect the burning characteristics of firewood are moisture content, tree species and piece size.

The moisture content of the wood affects the rate at which it burns and the efficiency of combustion. When trees are cut, the wood moisture content ranges between 35% and 60% by weight. If you attempt to burn wood this wet it will be hard to ignite, slow to burn and will hiss and sizzle in the firebox. So much energy will be consumed in boiling off the excess water that the efficiency of combustion and the heat to your home will be low, condensation and corrosion may be occurring in the flue and smoke may be causing problems to your neighbours. Properly seasoned wood ignites readily and burns efficiently.

PLEASE NOTE: WOOD WITH A MOISTURE CONTENT OF 10% - 20% IS THE RECOMMENDED WOOD TO USE IN CLEAN AIR ZONES

Firewood should be cut and split in the early spring and stacked under cover, with good ventilation, to be ready for burning when required.

Look for cracks in the end grain as a sign of dry wood. Stacks of firewood should be in an open area so that air can circulate through them. During the summer, as warm breezes flow through the stacks, carrying away the evaporating water, the moisture content of the wood will fall to around 20%. At this moisture content the wood is ready for burning. This can be checked with a moisture meter.

Although the energy content of dry wood per kilogram is almost the same regardless of species, some burn differently because of differences in density e.g pine is less dense than woods like Gum, Manuka or Black Wattle. A denser wood will produce a longer-lasting burn, while a less dense wood will bring a fire to an optimum burning temperature more quickly.

In general, commercial firewood dealers supply firewood in thicker pieces than modern wood-burning heaters can handle. It is often necessary to split some of the wood again before using it. The thickest piece size for high-efficiency and use in the UL200 fire should not exceed about 150mm (6 in.) across the largest dimension, or weigh no more than approximately 1.3kg. A range of smaller pieces will be needed for effective starting as described in the lighting instructions. Maximum log length should be no more than 300mm.

BURNING COAL, TREATED TIMBER, DRIFTWOOD, PLASTICS OR WASTE PRODUCTS

Due to the design and use of this product, the burning of coal, treated timber, driftwood, plastics or waste products is forbidden and will void the warranty.

CLEANING & MAINTENANCE: Perform only when unit has cooled.

Removing Ash from the Fire:

Residual ash in the upper firebox can still be burned in the next firing.

Remnants will burn away with each firing.

Removing the Downdraught cylinder:

Lift the cylinder out of the unit, and brush remaining ashes into the lower chamber for removal.

Replace the downdraught cylinder correctly. Open the lower door and sweep out residual ashes, then close and lock the door.

Safety precautions

The following precautions must be taken prior to cleaning:

- a) Make sure all parts of the fire are cold.
- b) Make sure the ashes are completely cold and not burning.
- c) Always use the most appropriate tools and items supplied.

Cleaning the glass

DO NOT CLEAN THE OUTSIDE OF THE GLASS AS IT IS SPECIALLY TREATED.

Clean the inside of the glass with a damp cloth, newsprint, or damp paper rubbed in ashes. Do not clean the glass while the fire is working and do not use abrasive sponges or abrasive chemicals.

Clean all other external parts with a damp cloth. Never use alcohol or cleaning liquids.

GENERAL SEASONAL INSPECTION:

Jayline recommend all appliances are checked and serviced at least once every season by an NZHHA certified technician. This ensures safe operation of your appliance, and the opportunity to replace any consumables should it be necessary. A service record is included in this manual to retain proof of servicing should a warranty claim be required.

CHIMNEY CLEANING AND CHECKING FLUES

For all wood fires, flue cleaning must be done regularly to avoid serious flue fires. Frequently used fires should be cleaned at least once a year (some sooner). The cleaning rate, however, depends on the burning habits of the individual operating the wood fire and the fuel used.

It is recommended that flue sweeping be done by a professional chimney sweep. Chimney sweeping is a specialist task and competent professional sweeps are available throughout the country. When the flue is cleaned it is recommended that other parts, such as baffles and ceramic insulation materials are checked. Flue systems should be checked at least once or twice a heating season and may require checking more often if the fuel or operation of the appliance is incorrect. When a flue system becomes excessively blocked or requires frequent cleaning, advice should be sought to investigate the installation and the operation of the fire. Flue pipes can deteriorate very quickly with incorrect firing.

CONSUMABLES

Some parts of your UL200 fire are considered consumable. They are designed to be replaced as they will degrade over time. The life of the consumables will vary depending on;

- How often the fire is used
- Type of fuel. Some woods are much harsher than others

General items that are considered consumables:

- Baffles
- Fire Bricks
- Glass and door ropes
- Downdraft cylinder and downdraft cassette

It is very important that you replace these parts when they show signs of wear. They effect how the fire runs and you may increase your fuel consumption or lower your efficiency if not replaced and can in some cases, damage the firebox. It is generally obvious once a part is in need of replacement. Steel components may split or large holes may appear, fire bricks may crack and disintegrate. We recommend you check your fire visually several times a year for damaged components.

JAYLINE WARRANTY SERVICE INTERVALS

Jayline UL200 comes with an initial 5 year firebox warranty. This warranty is validated every 5 years to a maximum 15 year firebox warranty subject to a technicians service pack update. This ensures all consumable items have been inspected and replaced if required, and also notifies Jayline that your service records are current. Evidence of service pack update will be required in the event of a claim.

To order your service pack or for more information see www.jayline.co.nz or your local Jayline retailer.

See Page 12 for warranty details.

Recognising errors and taking measures against faults

ERROR	POSSIBLE CAUSE	MEASURE
Smell/stench in the room	Leaking seals	Check the sealing of the doors and replace seals if necessary
Smell/stench in the room	Flue too short/poor draught	Check the flue system is not blocked and is clean. Have the fire maintenance & cleaning procedures been done?
The flame in the upper combustion chamber continuously goes out	Flue too short/poor draught Excess moisture in fuel	Check the flue system is not blocked and is clean. Have the fire maintenance & cleaning procedures been done? Change fuel for moisture level 10-25% only.

WARNINGS

Below is a list of warnings to ensure efficient and safe operation of your UL200 wood fire:

- **WARNING:** DO NOT USE FLAMMABLE LIQUIDS OR AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHEN IT IS OPERATING.
- **WARNING:** DO NOT STORE FUEL OR COMBUSTIBLES WITHIN APPLIANCE INSTALLATION CLEARANCES.
- **WARNING:** NEVER OPEN THE LOWER DOOR WHEN IN USE.
- **WARNING:** DO NOT TOUCH ANY PART OF THE FIRE OTHER THAN THE DOOR HANDLE WHEN IN USE, AS ALL PARTS ARE EXTREMELY HOT.
- **WARNING:** SUPERVISE CHILDREN AT ALL TIMES WHEN NEAR THE FIRE.
- **WARNING:** DO NOT ATTEMPT ANY CLEANING OF THE FIRE WHEN IN USE. WAIT FOR THE APPLIANCE TO COOL DOWN BEFORE CLEANING
- **WARNING:** DO NOT REMOVE ASH FROM THE FIRE WHEN IN USE.
- **CAUTION:** THIS APPLIANCE SHOULD NOT BE OPERATED WITH CRACKED GLASS.
- **CAUTION:** DO NOT USE THE FIRE IF THERE IS A MALFUNCTION, A SUSPICION OF BREAKAGE OR UNUSUAL NOISES.
- **CAUTION:** NEVER THROW WATER ON THE FIRE WHEN IN USE, OR USE WATER TO EXTINGUISH THE FIRE UNDER NORMAL CONDITIONS.
- **CAUTION:** THIS APPLIANCE SHOULD BE MAINTAINED AND OPERATED AT ALL TIMES IN ACCORDANCE WITH THESE INSTRUCTIONS.
- **CAUTION:** THE USE OF PRESERVATIVE-TREATED WOOD, COAL, PLASTICS, DRIFTWOOD AND/OR WASTE PRODUCTS AS A FUEL CAN BE HAZARDOUS.

UL200 WARRANTY

THIS IS AN IMPORTANT DOCUMENT – KEEP IT IN A SAFE PLACE

Congratulations!

We appreciate your decision to invest in our product. Your fire will become an integral part of your lifestyle, heating your home during the colder months and at the same time maintaining its appearance as a quality appliance. We want you to get the best possible performance from your fire and for this reason ask that you read this booklet carefully to take full advantage of your warranty.

In particular we urge you to have your fire and flue inspected annually and the flue swept if necessary. At the same time any other minor potential problems can be detected and corrected before they turn into major ones.

We think this is a small price to pay to ensure your heater is kept in peak condition. There is no doubt in our minds that you will extend the life of your fire.

We select only certain companies to act as our UL200 dealers. They must have high standards and be able to provide a total service both pre and post sale to you the customer. Therefore we have every confidence that our dealers will be able to answer your questions or fix any problem that may occur.

If you have any further queries, please contact us at:

RETAIL LINKS

PO BOX 9056
ANNESBROOK, NELSON
NEW ZEALAND, 7044
FAX: 03 547 0780
EMAIL: heating@retaillinks.co.nz

*Thanks again for choosing a UL200 wood fire.
We wish you many warm winters to come!*

JAYLINE WOOD FIRE WARRANTY

15 YEARS (conditional)

Congratulations on the purchase of your Jayline Wood fire. You must register your fire by email or post within 30 days of installation to validate the guarantee (this registration card is in your install/operation guide).

Your firebox is guaranteed for domestic application against faults and defects in workmanship for 5 years up to a maximum of fifteen years (except for door seals, glass, glass seals, fire bricks, secondary air systems and baffle - which have 12 months parts only cover). This firebox cover is subject to proof of annual inspection and servicing by a suitably qualified fire technician. Evidence of Jayline service pack at each 5 year interval enables your warranty for a further 5 years, up to a maximum 15 years.

Your fire must be installed in accordance with the manufacturer's instructions, any relevant bylaws, standards and regulations. Jayline are not responsible for consequential damage by a failure or defect covered in this guarantee. All claims (in the first instance) should be directed to the store of purchase. Any repairs undertaken without the manufacturer's authority will render the guarantee void. Water boosters must be a Jayline model specified with the fire to be covered; this guarantee applies to the original purchaser only.

Any damage caused by mishandling, misuse, abuse or alteration is not covered by this guarantee neither is normal wear and tear. Accessories such as flues, non-genuine parts or any third-party service are not covered by this manufacturer guarantee.

In the event of an approved claim; Jayline will complete repairs or replacement (at their discretion) and return the product to the owner. Any claim which can be remedied by on-site repair will be solely at Jayline's discretion and arrangement. Jayline are not responsible for site conditions such as draughts, cleaning or environmental conditions affecting performance.

For easy support on best use, troubleshooting and optional accessories; please see www.jayline.co.nz for further details and online product registration.

Jayline Fires
PO Box 9056
Annesbrook – 7044
Nelson
heating@retaillinks.co.nz

JAYLINE WOOD FIRE - SERVICE REGISTER

Jayline recommends NZHHA registered service technicians

To ensure many years of performance and safety with your Jayline Fire, we have outlined the key servicing requirements that form part of routine annual servicing. Maintenance of parts that protect your firebox will extend the life of your fire, ensuring it burns clean and correctly. In the event the firebox is not maintained regularly, this will void the warranty and compromise future claims.

Every season following your fire installation, ensure your fire service technician checks the following points and performs a sweep. In the event you need to claim on your warranty; this evidence of your routine servicing will be requested to validate your claim

- sweep the chimney
- check the condition of the fire box
- check or replace the firebricks if necessary
- check combustion plates and replace if necessary
- check and replace air tubes if fitted/required
- check and replace glass and door seals if necessary
- check door seal and alter if not sealing correctly
- check installation if necessary, correct length of flue, flashing for weather tightness, flue being riveted correctly, flue joins sealed and fixed to appliance, overall operation of appliance with homeowner
- order parts and fit to appliance
- notify homeowner of all findings and invoice accurately for all work carried out

I confirm that the appliance has been checked and repaired to a safe and correct operating standard as per the manufacturer’s best practise recommendations above:

Interval	Service Agent	Signature	Phone	Date
1.				
2.				
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15.				



PRODUCT REGISTRATION

TO ACTIVATE YOUR EXTENDED WARRANTY COVER, PLEASE COMPLETE AND RETURN WITHIN 30 DAYS OF INSTALLATION TO:

RETAIL LINKS LTD
PO BOX 9056
ANNESBROOK, 7044
NELSON

OR ONLINE AT:
WWW.JAYLINE.CO.NZ

NAME: _____

ADDRESS: _____

EMAIL: _____ PHONE: _____

MODEL: _____

SERIAL NUMBER: _____

DATE PURCHASED: _____

PURCHASED FROM: _____

DATE INSTALLED: _____

INSTALLED BY: _____



your fire place