

Troubleshooting Manual

THANK YOU FOR CHOOSING EURO FIREPLACES

Please refer to this booklet if your fireplace is not operating as it should.


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Troubleshooting

About this booklet

Most issues with fireplaces are caused by environmental, installation or operational factors. This document is designed to help you determine the cause of any issues you may have with your fireplace.
If after consulting this document, you are still unsure of the cause of the issues you are experiencing, please do not hesitate to get in touch with us via phone or email.

Getting in touch

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First Burn

- Ensure all the packaging materials inside the firebox are removed, including any material in the ash pan.
- Your fireplace must be broken in through a series of small burns. Please read the operation manual to find out more.
- A chemical/paint smell and visible vapours are normal during the first few burns, ventilate the area.



General Burning

- Avoid opening the door while flames are still visibly burning.
- Make sure any gaps under external doors are blocked and cool air cannot access the house.
- When starting up, the door can be left slightly ajar to allow extra airflow.
- Only reload onto coals, not whilst there are flames still present in the firebox.
- Empty the ash tray every few days to avoid blocking airflow through the grate.
- Never close air regulator fully while flames are still present.
- Never leave the primary air fully open except during the start-up phase.
- When reloading, slightly open the door for 30 seconds or so to allow the difference in air pressure inside and outside the firebox to equalize before slowly opening the door fully.
- A clean glass is a sign that your fireplace is operating correctly (please note that some ashy build up is normal and can be cleaned with a damp paper towel).

Diagnosing Problems

If your heater is not operating as expected, there are several simple tests you can do yourself to help diagnose any issues. These tests will determine if the seals on your heater are tight and working effectively.





The Paper Test

The paper test should only be performed on a cold heater. Place a piece of paper between the door seal and the body of the heater and close the door, then gently tug the paper. If its firm, that part of the box is sealing. If it easily pulls out, there is a leak in that spot.

The Smoke Test

This test can only be performed on a heater that is burning, ideally when there are active flames. Whilst the fire is in operation, run a naked flame or smoking incense stick around the glass where it meets the door frame. If the flame/smoke is sucked into the firebox, there is a leak in that spot.

Not Enough Heat

Usually this is caused by the first two dot points.

1. Air gaps under external doors

This interferes with the convection process by introducing cold air from outside into the home.
Solution: Make sure the heater cannot draw cold air from gaps under outside doors. This can be done in several ways, usually using a draft stopper or foam tape around the doorway. Something as simple as a rolled up towel over the gap will make a significant difference.

2. Ceiling Vents

Warm air must not be allowed to escape into open ceiling vents (such as vents that lead to an evaporative cooler) as this also interferes with the natural convection process. Even closed vents do not create an airtight seal.
Solution: Go online and get some vent covers either premade if they will fit or custom made if you need to.

3. Moist Firewood (not well seasoned)

Firewood needs to be less than 20% in moisture content with the ideal level being under 18%. Australian hardwood will take approximately 18 months to dry. Firewood with a moisture content of above 25% will lower the temperatures in the firebox dramatically, resulting in inefficient burning.
Solution: Check your wood with a moisture meter. If the moisture content is over 20% stop using it and stack it undercover for use later in the season or next season. Get new wood.

4. Firewood too large

Larger pieces need more primary air (air through bottom grate) to burn. Too much primary air results in heat loss through the flue. Natural convection works best with primary air shut down. Please refer to the air control specific to your heater
Solution: Split your wood smaller.

5. Incorrect burning

If the heater is being run with primary air, much of the heat created is lost through the flue before heating up the fireplace itself.
Solution: Once the fire is established (approximately 40 minutes after start up) the primary air intake must be shut down. Now secondary air (from the top of the firebox) will establish a slow burn with lots of embers. This is achieved differently depending on the model of heater. See the appropriate "how to burn" card for instructions.

6. Heater undersized

The heater may be undersized or inappropriate for the area you are trying to heat. Getting a full picture of the space and its insulation/venting/ ceiling heights etc is important to ensure that this does not happen.
Solution: Add heat bank if possible, upgrade the heater to a higher output model or use a secondary heating system in conjunction with the heater.

7. Incorrect Draw

Several different factors can interfere with the flue's ability to draw properly.

7a. Flue Obstruction

This may happen through a buildup of ash or creosote at the flue entry inside the firebox (above the vermiculite baffle) or at the cowl, or by foreign objects in the flue itself (birds' nests etc).
Solution: Get the flue professionally cleaned. This should happen once a year as a normal part of the heater's maintenance.

7b. Incorrect Installation

The flue may have been incorrectly installed, ie. less than 4 metres long, not clearing the ridge of the roof, leaking at a join, cowl not connected properly.
Solution: Have a plumber who specialises in wood heating installations inspect the installation.

7c. Heater not achieving correct burning temperature

This can happen if the heater is not being operated correctly
Solution: See the appropriate "how to burn" card and ensure appropriate fuel is being used.

Flue Clogging too quickly

Some build up in the flue is unavoidable. Every wood heater's flue should be cleaned once a year as part of normal maintenance; ideally just prior to winter. Certain products can be used to assist in keeping the flue clean but does not replace a professional flue clean. If your flue is clogging faster than normal, refer to the below points.

1. Treated Timber

Burning treated timber is illegal and can damage your heater, clog your flue and release toxic fumes into the atmosphere.
Solution: Use only appropriately sized, well-seasoned hardwood that has been felled, split and dried for the purpose of burning in a wood heater

2. Green Firewood

Green firewood should never be used. The moisture content of firewood must be below 20%.
Solution: A moisture meter is the best way to check on your wood's moisture content. If its over 20%, stack it in a crosshatch and leave it till next season.

3. Inefficient Operation

If the heater is consistently being operated incorrectly (air shut down too much or too early) this will create lots of build-up in the flue.
Solution: Please refer to the appropriate "how to burn" card.

4. Low quality firewood

Low quality fuel burns dirty and will cause the flue to clog much more quickly than with high quality fuel.
Solution: Use only appropriately sized, well-seasoned hardwood.

Firewood burning out too quickly

Using appropriately sized, seasoned hardwood and secondary air only a burn cycle (after the startup cycle) should take 2-3 hours. You only need to reload the fire once all of the flames have burned out and you are left with a bed of glowing embers.

1. Too much primary air

Primary air is fed into the fireplace from below the grate and moves very fast. This is important when you are lighting the fire but once the fire has been established and the flue is hot and drawing correctly the primary air just accelerates the burn of the wood and transfers most of the heat out through the flue.
Solution: Please refer to your specific heater manual or how to burn card for air control instructions.

2. Low quality firewood

The denser the species of fuel, the longer it will burn. If you're burning mountain ash, it won't burn for as long as redgum. This is due to the amount of energy contained in the wood itself.
Solution: Use only appropriately sized, well-seasoned hardwood.

3. Treated Timber

Burning treated timber can damage your heater and release toxic fumes into the atmosphere. It's also illegal and depending on what the wood has been treated with, the residue may act as an accelerant.
Solution: Use only appropriately sized, well-seasoned hardwood.

4. Leak in the heater's seals

If the heater's seals have worn or compressed, they can let air into the firebox which interferes and accelerates the burn cycle (either a little or a lot depending on the location and size of the leak).
Solution: Check your seals (both door and glass) the paper test and flame/smoke test are good for this. Change any seals that are no longer doing their job.

Too much flaky ash

Euro fireplaces are designed to burn fuel completely. The ash created under normal circumstances with good quality firewood is fine and powdery. Ash that floats out of the box like snowflakes when you open the door is usually avoidable by opening the door a couple of centimetres for 30 seconds before opening it fully.

1. Incorrect burning

In most cases, flaky ash is the result of burning your heater incorrectly. Using too much primary air can result in a range of issues, including flaky ash.
Solution: Refer to the "how to burn" card for your specific heater line.

2. Low quality firewood

Poor quality firewood is not appropriate fuel and will cause excess ash and poor heating performance.
Solution: Use good quality, appropriately sized, well-seasoned hardwood.

3. Firewood moisture content too high

Unseasoned firewood is not appropriate fuel. The moisture must be evaporated off before the fuel itself can burn. This vapour is corrosive and can damage your fireplace and the wood then does not combust properly due to the temperature drop created by the moisture.
Solution: Check your wood with a moisture meter, if the moisture content is over 20% stop using it and stack it undercover for use later in the season or next season. Get new wood.

4. Overloading

Euro Fireplaces are finely tuned machines; they only require a small amount of wood to operate correctly. More wood creates more kw than the heater can discharge through natural convection and radiant heat, and is lost up the flue where you gain no benefit from it.
Solution: See your heaters "how to burn card". Only use 2 x the heaters "wood usage per hour" per load, and only reload once there are no flames left in the firebox.

5. Not emptying the ash pan regularly

Will result in incorrect airflow and therefore incorrect burning, as well as excess ash present in the box. This will mean ash can float or spill out when the door is opened to reload.
Solution: As per our operation instructions, the heaters ash tray should be emptied every 2-3 days if running constantly. If the heater is only operated intermittently, its good practice to empty the ash tray before lighting the fire.

6. Primary air leak

If the heater has developed a leak below the grate, this can cause excess ash.
Solution: Check your seals (both door and glass) the paper test and flame/smoke test are good for this. Change any seals that are no longer doing their job.

Distortion in firebox grate or grill

The grates and log retainers in most Euro Fireplaces are made of cast iron, and will wear through normal use, particularly if the heater is burned 24/7 over winter where the grate never gets an opportunity to cool. The higher the average temp inside the box, the more quickly the grate will wear.

1. Not emptying the ash pan regularly

Will result in no airflow through the grate and therefore a build up of intense heat around the cast iron grate resulting in distortion.
Solution: If the fireplace is in use for most of winter, ensure that you empty the ash tray every 2-3 days minimum and once a week, let the fire go out and clear ash from the firebox. If the heater in only used intermittently, brush out the firebox and empty the ash tray when you light the heater.

Smokiness inside the house

Usually the best way to stop this occurring is to connect the fresh air intake if your model of heater allows. Though often this is just treating the symptom, the cause will still need to be found and addressed. Occasional puffs of smoke coming out of the door when you open it is usually avoidable by opening the door a couple of centimeters for 30 seconds before opening it fully.

1. Curing Paint

The heaters are coated with a heat resistant paint that only cures once the heater gets hot. This is normal for the first few burns and traces of the smell may be present for the first week of operation.
Solution: Ventilate the area. There is nothing that can be done about this process, it will go away with use of the heater.

2. Incorrect draw

If the smoke inside the firebox cannot get out through the flue because of a lack of draw or blockage, it will find its way out somewhere else, usually via the fresh air intake.
Solution: Have your flue cleaned and inspected. A Euro fireplace needs 4m MINIMUM of flue.

3. Incorrect burning

Wet/green or oversized logs will burn poorly and interfere with proper operation, as will incorrect or poorly timed use of the air control.
Solution: Refer to your operation guide for correct wood sizes and burning practices.

4. Internal exhaust fans

Bathroom or kitchen exhaust fans can create a back draft.
Solution: Ensure that these are turned off when the fire is lit. Intermittent use once the fireplace has reached its correct operation temperature shouldn't be a problem. Alternatively, the fresh air intake can be connected. Once the fresh air intake has been connected, internal air movement will no longer influence the fireplace unless you open the door.

5. Leak in the flue

The active flue should be sealed from the spigot (the point where it connects to the heater) all the way to the cowl. If this is not the case smoke may come out into your home environment.
Solution: See your installer.

6. Incorrect draw combined with worn seals

See point 2 but the smoke will come out of the firebox from around the door or the glass.
Solution: Get your flue cleaned professionally and change the seals on your fireplace.



The external air intake is located at the bottom of the rear of the heater

Discolouration on heater or ceiling from smoke

A Euro Fireplace that has been installed and used correctly, will not cause smoke stains inside a home. There are some best practise suggestions that can help if the heater gives an occasional puff of smoke when the door is opened (ie, opening the door only a couple of centimetres for 30 seconds before opening it fully) but persistent smoke leakage when you are loading the heater is a sign of a problem.



Example of Thermal Tracking

1. Fresh air intake blocked

The mesh at the outside of the fresh air intake may have become blocked by debris.
Solution: Clear the debris.

2. Insufficient oxygen

This should only be an issue in very well sealed homes with no fresh air intake connected.
Solution: Connect the fresh air intake.

3. Incorrect wood

Green or oversized pieces of wood smoke a lot when they burn, so they should not be used at all.
Solution: Use correctly sized, well-seasoned firewood.

4. Running the heater on too little air

Closing the heater down too much will result in a cold smoky burn, this is pointless as the costs (very little heat, high emissions and damage to the heater) outweigh the benefits (extending the burn).
Solution: It is possible to extend the burn time of your heater without doing this. See our operation guide.

5. Short flue

A short flue cannot draw correctly, a Euro Fireplace needs 4m MINIMUM, some installations require more.
Solution: Extend the flue.

6. Dirty flue

If the flue is blocked by creosote or ash, it cannot draw correctly.
Solution: Clean the flue; flues should be professionally cleaned once a year.

7. Heater not cleaned regularly

Ash or debris from the flue can fall onto the baffle or below the ash tray which interferes with the heaters ability to draw.
Solution: Clean out the firebox once a week and empty the ash draw at least 3 times a week. Ash below the ash drawer can block off the air intake and stop the heater from breathing, this should be removed also.

8. Incorrect burning practices

See points 3, 4 and 7.

Rust on external parts of the heater

Rust inside your heater is generally caused by incorrect installations. It will need to be sanded back and repainted after the cause of the leak has been addressed.

1. Incorrect installation: Upside down flue

The active flue must be installed crimp down into the heater's spigot (or adaptor). If its installed over the spigot, creosote and other materials from the flue will spill out onto the heaters top plate and cause damage to the paintwork, if left untreated, this will cause rust.
Solution: Contact your installer.

2. Incorrect installation: Leaking

The flue may occasionally leak in extreme weather (sideways rain etc) but under normal circumstances should not allow any water into your flue or roof cavity. If it leaks outside of extreme weather circumstances, it has either been installed incorrectly or the installation has been compromised.
Solution: Contact your installer.

3. Environmental factors

Just like cars, heaters that find their homes in coastal areas are more prone to rust, than heaters that are located away from the ocean. They will also rust in a damp environment.
Solution: Unfortunately there isn't really a way to address this. You can keep a tin of touch up paint handy to address any rusting issues as they happen, and never burn driftwood as fuel as the salt content will do damage to the internal firebox. If the room that the heater is in gets damp, a dehumidifier may assist, but burning the heater will also dry the area so over the winter (when the damp would be most severe) running the heater will help.

Excessive rust inside firebox

Some rust inside the firebox is unavoidable and completely normal. It does not compromise the safety or efficiency of your fireplace and if it bothers you it can be sanded back and recoated with heatproof fireplace and flue paint (we use stovebrite). If there is excessive rust inside your heater (send us a photo if you're not sure what would be classed as excessive) it may be due to.

1. Burning green firewood

Burning green wood creates excess moisture within the firebox as the heat must evaporate the moisture within a new log before it will catch fire. The steam contains not only water (which will create rust on its own) but also water-soluble chemicals from the wood itself which can be corrosive.
Solution: Check your wood with a moisture meter. If the moisture content is over 20% stop using it and stack it undercover for use later in the season or next season. Get new wood.

2. Incorrect flue installation

An incorrect installation can cause many common issues. There may be water coming in through the flue.
Solution: Contact your installer.

3. High wind or high air moisture areas

Rust is more likely in humid and coastal areas.
Solution: Always ensure that the air intake is closed when the heater is not in use. This may not stop the issue entirely, but it can help. Unfortunately, there is not a proper solution to combat environmental issues.

4. Overloading combined with hot/ cold burning

Extreme variations in temperature is caused by overloading and burning hot and cold all the time (creating a roaring fire before closing the air intake) is not correct operation and interferes with the fireplace burn cycle, creating higher emissions.
Solution: Use only the correct amount of wood and run the heater according to the operating instructions.

5. Burning treated timber

Treated or painted timber causes toxic fumes which can pollute the air and corrode the firebox and flue. This also applies to driftwood and teatree.
Solution: Use only appropriately sized, well-seasoned hardwood that has been felled, split, and dried for the purpose of burning in a fireplace.

6. Not emptying the ash pan often enough

This will result in a build-up of heat which can cause rust, this will also result in warping of the grate and ash spillage.
Solution: As per our operation instructions, the heaters ash tray should be emptied every 2-3 days if running constantly. If the heater is only operated intermittently, its good practice to empty the ash tray before lighting the fire.

7. Heater not being used

This is most relevant in holiday houses where the heater sits unused most of the time. The temperature in the wood-burning stove's combustion chamber (when the heater sits unused) can drop so low that stagnant air condenses, leaving water on the stove's metal surface. This water can cause rust.
Solution: This is an environmental factor and unfortunately cannot really be resolved other than treating the symptom (sanding and repainting the fireplace) every so often. Ensuring that the heaters air control is closed when the heater is not in operation can help.

Paint Smell

A paint smell and visible vapor for most of the first 3 burns and occasionally being present during the first week of operation is perfectly normal and cannot be avoided as the paint on the heater and flue needs to be burned in to harden properly. Please keep the house well ventilated during that time (this also applies

if you have had the heater or flue painted or touched up).

Overloading the Fireplace

Putting too much fuel in the fireplace creates more kilowatts than it is designed to deal with and this is first visible through warping of the cast iron parts. Consistent overloading will void our extended warranty.
Solution: Only use the recommended amount of wood for your heater. This amount is 2x the fires hourly burn rate (for Milano this is 2.6 kg). And only reload the fire when there are no flames left in the box.

Burning treated timber or fuel other than wood

Treated or painted timber generates too many kilowatts, causes toxic fumes and is illegal.
Solution: Use only appropriately sized, well-seasoned hardwood that has been felled, split and dried for the purpose of burning in a fireplace.

Burning treated timber (or fuel other than wood)

This pollutes the air, voids your warranty, and is illegal.
Solution: Don't burn anything in the fireplace that wasn't felled, split and dried for the purpose of firewood (firelighters can be used for ignition).

Build up on glass

There are several different kinds of build up that can present on the door glass, each indicating different issues.

Creosote

This shiny black or brown build up is caused by either too large or unseasoned firewood, insufficient oxygen or insufficient heat.
Solution: Ensure you are using dry wood and operating the fireplace as per the instructions.

Carbon

Black and powdery, carbon builds up when there is air entering the firebox from somewhere it shouldn't. The site of the carbon build up will be close to the leak.
Solution: Change the seals in this part of the firebox.

Scorched Glass

Cloudy grey or white build up that disappears when wet, but returns when dry. This is scorching of the ceramic layer of the fire door glass. This is caused by overheating either by overloading, burning treated timber or using accelerants.
Solution: Replace the glass.

Normal Build Up

Either ashy or powdery in appearance this grey or white build up will wipe off. Small amounts of this kind of buildup is unavoidable, due to the air movement in the firebox.
Solution: The normal build up is easily removable with a damp cloth. Excessive ashy build up that leaves a thick layer on the glass is not normal. This can be caused by a combination of scorched glass and burning treated wood or fuel other than wood.

Banging sounds from the heater

Metal when it expands and contracts as it heats and cools, will make some ticking/cracking sounds. These are relatively quiet and shouldn't stand out against the ambient sounds in your home (fridge/split system/ exhaust fans etc). Some louder banging from the heater is normal as the heater settles into its place. For the first week of operation these louder noises are nothing to be concerned about. If there are loud bangs coming from your heater after the first week of operation, there are a few potential causes.

1. Incorrect pressure

Incorrect pressure on the rear gal heat shield.
Solution: Loosen the screws on the heaters back heat shield.

2. Incorrect installation

Incorrectly installed heat bank.
Solution: Check that the top heat bank brackets are sitting INSIDE the small round holes in the top of the heatbank. If they're not, contact your installer and have them fit the heatbank correctly.

3. Banging from the flue

Flues are more likely to create banging sounds when heating and cooling than heaters as there are more separate parts.
Solution: Have your installer inspect and fix any movement issues with the flue installation.

Early deterioration of the lining

Cracks in the lining can appear within a month of use but does not affect the operation of the heater. The Lining can last up to 5 years, with premature deterioration often due to overloading, overheating, green firewood, roughness while loading or not cleaning the heater regularly. Distortion or discoloration of the lining is a sign of incorrect operation.
Solution: Use the correct size and amount of wood, do not throw wood into the heater and clean/empty the ash pan once or twice a week.

How to Burn

Every Euro Fireplace comes with a **How to Burn** card that will walk you through, step by step, how to burn your heater effectively. Euro fireplaces are designed to be highly efficient, and therefore must be operated properly. It is highly recommended that you read this booklet carefully and familiarise yourself with the specific operation of your heater to achieve the best results from your heater.





Operating your fireplace correctly

Unlike traditional fan forced wood heaters, a Euro Fireplace is designed to maximise your heat output while using the smallest amount of wood possible. Achieved through a natural convection system that gently moves warm air throughout your house, Euro Fireplaces are highly efficient with low emissions. Utilising the latest in European heating technology, these heaters must be operated correctly in order to achieve a clean burn. If you have experience operating a fan forced heater, we recommend you carefully read our provided information regarding best burning practices.

This booklet will help to identify specific problems which can arise when your fireplace is not working correctly. Many issues can often be simply solved by learning the best burning practices for your Euro Fireplace. If a problem does arise, we highly recommend using the resources provided here as well as the How to Burn card also provided with your fireplaces.

If you do not have one of these cards, or our more comprehensive Operation Manual, then we recommend visiting our website to access the latest versions of all of our documentation.

Please refer to your Operation Manual for more information

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