

NECTRE Gas Flame Coal Fire

Operating, Installation and Servicing Instructions

TO THE CUSTOMER...

Congratulations on your purchase of a Nectre Gas Flame Coal Fire. This attractive and authentic looking gas coal fire has been designed and built with care to give a realistic fire look.

Safety First !

- The appliance is designed to simulate a coal fire and as such working surfaces can become quite hot. **Do not touch them.**
- TO REDUCE THE RISK OF FIRE OR INJURY FROM BURNS AND FOR THE PROTECTION OF YOUNG CHILDREN OR THE INFIRM, A SECONDARY GUARD IS RECOMMENDED.
- **DO NOT** PLACE ARTICLES ON OR AGAINST THIS APPLIANCE.
- **DO NOT** USE OR STORE FLAMMABLE MATERIALS NEAR THIS APPLIANCE.
- **DO NOT** SPRAY AEROSOLS IN THE VICINITY OF YOUR FIRE WHILST IT IS IN USE.
- **DO NOT** OPERATE WITH PANEL COVERS, OR GUARDS REMOVED FROM THIS APPLIANCE.
- **DO NOT** MODIFY THIS APPLIANCE
- Primarily a decorative appliance - not certified as a space heater.
- The unit must be installed and serviced by a qualified person.
- Wash hands after handling coals and/or logs and ensure children do not handle them as the colouring may contain toxic dyes.

Caring for Your Nectre Gas Flame Coal Fire

Your Nectre Gas Flame Coal Fire has been designed for ease of use and is very easy to maintain. The fire is a sealed unit and there is no user serviceable components inside.

To clean:

- Metal surfaces; simply wipe over with a damp cloth. Do not use harsh cleaning agents or solvents.
- Ceramic coals; Lightly vacuum with a soft brush attachment.
- Pilot Light; check for lint and dust, vacuum as necessary.
- For units with a fan, check the air intake at the front of the fire is free of lint and dust, vacuum and clean as necessary.
- **Do not** attempt to clean the unit whilst it is operating (including Pilot Light) or whilst it is hot.

After a number of hours of use of the fire, there may be a slight blackening of some parts the coals. This is normal and helps enhance the realistic fire look.

If Your Fire Needs Servicing

Your Fire is reliably designed and built to a fully tested design.

If the fire has been only recently installed and fails to operate, you should call the installer to solve any problems. Check with the installer that installation has been carried out correctly, that the gas lines have been bled and gas cocks are turned on.

If the problem is not related to the installation, please call your place of purchase and let them know what model you have installed and a description of the problem. If necessary they will refer back to the manufacturer. If after some use the appliance fails to operate, you can telephone us direct:

Pecan Engineering P/L on 08 83498332.

OPERATING INSTRUCTIONS

Before trying to turn on your fire for the first time check that it has been properly installed and tested by a qualified installer. Do Not attempt light the fire if there is a smell of gas. If there is a smell of gas, turn off the gas supply at the meter and call for a gas fitter.

Operating Your Nectre Gas Flame Coal Fire

Turning The Fire ON

1. Check that the gas is turned on.
2. Turn the Valve Knob to the star position.
3. Light the pilot light by:
 - Keeping the Valve Knob in the star position, push the Knob in as far as it will go.
 - Whilst holding the Valve Knob in, repeatedly press and release the Piezo button until the Pilot Light ignites (The Piezo button is located just to the left of Valve Knob and the Pilot Light is located at left hand end of the main burner.)
 - Once the Pilot light is lit, hold the Valve Knob in for a further 5 seconds and then release it.
 - The Pilot Light should remain lit. If the Pilot light goes out, repeat the steps above. (See also Fault Finding Table).
3. To light the main burner turn the Valve knob counter clockwise to “7” on the dial.
4. If the room becomes too hot the fire can be turned down (and back up) simply turning the Valve Knob to a lower setting.

Turning The Fire OFF

To turn the Fire off:

- Turn the Valve Knob to the spark symbol. This will leave the pilot light on. (Recommended if you are going to reuse the fire in the near future).

OR

- Turn the Valve Knob fully clockwise to the white disk symbol. This will extinguish the Main Burner and Pilot Light. (Recommended if the fire is not going to be reused for some time e.g. over Summer).

Note: If the pilot light is accidentally turned off, do not try to re-light the pilot light for about a minute as a safety interlock turns off all gas off until the unit has cooled down.

Maintenance / Fault finding:

- Depending on the amount of use it is recommended that the unit be checked and serviced by a qualified gas fitter at the beginning of the heating season.
- Please refer to the fault finding table as a trouble shooting guide.
- Please refer to the section “Caring for Your Nectre Gas Flame Coal Fire” for user maintenance.

TO THE INSTALLER...

This appliance must only be installed by an authorized person in accordance with these instructions and with the gas installation code AS 5601. If you have any questions please call us: PECAN Engineering P/L on 08 83498332

INSTALLATION INSTRUCTIONS

Preliminary

- This appliance must be installed by an Authorised person.
- This appliance must be installed in accordance with the Gas Installation Code AS5601 Clauses 5.12.13.2 to 5.12.13.5.
- This appliance must be installed in accordance with; the manufactures installation instructions, municipal Building codes, and any other relevant statutory regulations
- The Nectre Gas Flame Coal Fire is only to be used with the gas type specified for the unit. Please refer to the “Servicing Details” section of these instructions.
- It is recommended that a secondary guard complying with AS 2286 be installed.
- As always, ensure that loose fabrics such as curtains and furniture cannot touch the appliance. It is recommended that a fire guard be used with the appliance.
- The overall dimensions of the fire(s) are:
 - Model 290: 305mm wide x 170mm Deep x 245mm high.
 - Model 290C: 280mm wide x 170mm Deep x 245mm high.
 - Model 420: 435mm wide x 170mm Deep x 245mm high.
 - Model 420c: 415mm wide x 170mm Deep x 245mm high.
- The minimum fire place dimensions are:
 - Model 290: 310mm wide x 175mm Deep x 350mm high.
 - Model 290C: 285mm wide x 175mm Deep x 350mm high.
 - Model 420: 440mm wide x 175mm Deep x 350mm high.
 - Model 420c: 420mm wide x 175mm Deep x 350mm high.
- The maximum fireplace opening at front 900mm.

FITTING TO AN EXISTING OPEN FIREPLACE

Before installing in an existing open fireplace:

- The Nectre Gas Flame Coal Fire must be installed in a fire resistive fire place with a proved draught.
- The chimney must be swept and inspected to see if it is in sound condition.
- The chimney must be a minimum area of 22 000mm² (e.g. 150x150mm if masonry or 150mm diameter if round metal flue).
- Minimum (steel) flue height 0.6m, minimum (brick/masonry) chimney height 2.7m.
- An AGA approved 150mm diameter Gas Cowl must be fitted.
- The flue or chimney of an open gas fire must be kept clear at all times. Devices which close or temporarily close the flue or chimney are not permitted. (e.g. a damper must be removed or securely disabled in the fully open position.)
- If these conditions are met the chimney should usually provide satisfactory draw. In any event, the chimney and final installation must be tested for spillage into the room. This can be done by lighting a paper fire in the fireplace (before the appliance is installed) and holding a smoking twist of paper or a smoking match by the front of the fireplace. (Note: Air conditioning vents near the fireplace may cause spillage.)
- The room must have fixed ventilation in accordance with AS5601 “Gas Installations”.

Fitting the unit

- The unit should be fixed to the base of the fireplace with a fastener to each foot of the burner.

Gas

- Gas connection is to a ½" BSP(m) fitting on the right hand side of the valve, 60mm up from the base and 80mm from the front of the valve.
- Thoroughly blow out the supply pipe to clear any dust and debris.
- Ensure all connections are gas tight.
- Note: Do not bring the gas supply down the active chimney.

Coals

The Nectre Gas Flame Coal Fire has ceramic coals and a burner designed to appear like a coal fire.

- When the unit is unpacked check that no damage has occurred in transport.
- Coals should be placed loosely and in a random orientation on the burner tray (on the coal "shelf") in the positions and quantities set out below:
- 290 / 290c: Place four (4) coals on the front lower shelf and three (3) on the rear upper shelf of the burner.
- 420 / 420c: Place six (6) coals on the front lower shelf and five (5) on the rear upper shelf of the burner.
- No other logs or coals should be added to the burner as this will adversely affect the performance of the fire.
- If there is a need to fill in space around the burner, a custom made support may be made, if needed and additional coals may be used however the pilot light and burner air intakes must be kept clear.
- Wash hands after handling coals and/or logs as the colouring may contain toxic dyes.

Comissioning

- Once the fire is fitted and connected to the gas, test the unit's operation.
- After 10 minutes operation from cold, test for fireplace spillage, i.e. all products of combustion are entering the flue / chimney, by traversing the perimeter of the opening or canopy, using a smoke generator (E.g. a smoking twist of paper or smoke match).
- Ensure that the customer receives this instruction booklet.

SERVICING DETAILS

- The following notes are to assist a serviceman in the event of a malfunction.
- **Servicing must only be carried out by authorised personnel.**
- Spare parts and advice are available from PECAN Engineering Ph 08 8349 8332.
- See also the Fault Finding chart.

Burner Pressures and Gas consuptions

Model	Gas type	Main Burner Injector	Front Burner Injector	Gas consumption	Burner pressure "high"	Burner pressure "low"
290	NG	2.65	1.0	30Mj/Hr	0.7kPa	0.3kPa
290	LPG	1.45	N/A	30Mj/Hr	2.68kPa	1.30kPa
290c	NG	2.65	1.0	30Mj/Hr	0.7kPa	0.3kPa
290c	LPG	1.45	N/A	30Mj/Hr	2.68kPa	1.30kPa
420	NG	2.95	1.5	40Mj/Hr	0.7kPa	0.3kPa
420	LPG	1.60	N/A	36Mj/Hr	2.68kPa	1.30kPa
420c	NG	2.95	1.5	40Mj/Hr	0.7kPa	0.3kPa
420c	LPG	1.60	N/A	36Mj/Hr	2.68kPa	1.30kPa

GAS CONTROL

- The valve is a SIT Eurosit 630.
- Pilot Light is a SIT NG 9002 (NG) or a PG 9202 (LPG)
- Ignition is by a Piezo Igniter.

To Expose The Valve and Piezo

- Remove the Valve cover by undoing the screw to the right of the valve knob and sliding the Valve cover forward.

To Check Input Pressure

- The input pressure test point is on the right side of the valve casting, the rear most of the two test points.
- Turn gas off to the appliance. Loosen test point plug and connect manometer. Switch the gas and appliance on. Take pressure reading once unit is running and it should be within tolerance. Turn unit and gas off, disconnect manometer and tighten test point plug.

To Check Burner Pressure

- Gas consumption and Test point pressures; see table above.
- The burner pressure test point is on the left hand side of the valve casting, the front most of the two test points.
- Remove the test point plug and connect manometer. Switch the gas and appliance on. Take pressure reading once unit is running and it should be within tolerance. Check both high and low settings. Turn unit and gas off, disconnect manometer and replace and tighten test point plug.

To Make Pressure Adjustments

- The 'high' setting adjustment screw is located on the valve on the RHS, behind the plastic front cover.
- The 'low' setting adjustment screw is located on the front of the valve behind the plastic front cover and to the lower right of the control knob.

Pilot light

- The pilot is located at the right hand side of the burner.
- The spark gap should be 2 to 3mm.
- When servicing the fire, be sure to clean the air intake hole of the pilot light.

Gas conversion

- For Gas conversion, please return the burner to the manufacturer.
- Gas conversion of the Nectre Gas Flame Coal Fire in the field is not possible due to significant differences in the configuration of the burner.

FAN (if fitted)

- To remove the fan, ensure that the fan has been unplugged from the power supply, unscrew the 4 screws holding the fan to the front of the fire box. Carefully lift the fan assembly forward.
- The fan's wiring diagram is located next to the terminal block. The fuse is a 1 amp fuse.

FAULT FINDING CHART

Fault	Cause	Remedy
Fan does not run. (Where fan is fitted)	Electricity not on. Fuse blown. Fault in wiring.	Check electricity supply. Replace fuse (check why fuse blew). Check wiring (broken wire) .
Igniter does not spark.	Spark rod at pilot light shorting. Faulty spark cable. Spark cable disconnected at pilot or piezo.	Clean Insulator or replace If damaged. Replace (with genuine part only). Reconnect.
Igniter sparks but No ignition at pilot light.	No Gas. Air in line. Pilot light injector blocked.	Check supply. Purge gas line. Clear blockage or replace pilot light.
Gas ignites at Pilot light but goes out after valve knob released	Valve knob released too quickly . Pilot light air intake blocked (yellow pilot flame) Thermocouple connection at valve lose Thermocouple connection at valve too tight Faulty thermocouple Thermocouple wires shorted	Wait 30 seconds and then retry to light pilot. Clear Pilot Light air intake hole(s) Tighten with fingers, then ¼ of a turn only with a spanner. Remove connection and inspect insulator for damage. If OK, re-fit connection: Tighten with fingers, then ¼ of a turn only with a spanner. If damaged, replace Pilot light assembly Replace pilot light assembly. Inspect wires and re-insulate wires.
Gas ignites at main burner but goes out.	Problem with the pilot light Gas supply line too long and / or too small. Gas supply line partly blocked.	See above. Check gas pipe size against AGA code for the Mjoule rating of appliance Clear blockage.
Flame abnormality	Incorrect Pressure Dirt in jet or burner Coals positioned incorrectly. Burner set up for different gas type	Check gas pressures High and low. Clean jet and venturi. Check set up are as per instructions. Replace whole unit with one built for correct gas
No High / Low	Gas valve High / Low not adjusted. Gas input pressure low	Adjust as per instructions. Check supply pressure with the unit off and running. (see also “main burner goes out”)