

Santini Gas Fire Pit

Safety Instructions and Operation Manual



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Warning

Please carefully read all instructions provided before using this appliance. This heater must be installed in accordance with the instructions and local regulations. The use of this appliance in enclosed areas can be dangerous and is prohibited.

- Perform the 'leak test' after each changing gas cylinder.

Never check for leaks with a naked flame

- Do not store other flammable vapors or liquids near this appliance.

If you smell gas, follow the steps below:

1. Extinguish all naked flames; do not operate any electrical appliances
2. Close the valve of the regulator to stop gas running to the unit and turn the heater to the OFF position (full disk = ●)
3. Ensure the regulator is fixed to the bottle correctly.
4. Check the hose from the gas bottle to the unit has no splits - this can be done with soapy water to identify splits in the hose.
5. If odour persist contact Heat Outdoors or a gas supplier.

Leakage Test

Gas connections on the appliance are leak tested prior to shipment. Possible mishandling of the appliance during shipment can damage the integrity of some parts.

A complete gas leakage test must be performed again at the installation site. Please follow the procedure below for leakage test.

1. It is advised to make a soap / liquid detergent and water solution to identify any holes/splits or loose fittings in the tube.
2. Make sure the control tap is in the OFF position (full disk = ●) on the control panel.
3. Apply the solution to the hose using a brush or rag.
4. Turn ON the gas supply and check for bubbles from the hose. If the air bubbles appear this indicates a leak in the hose.
5. If a leak is present, turn OFF the gas supply immediately, tighten any leaking fitting carefully, turn gas ON again and recheck.

Location

The appliance is for outdoor use only.

- Do not use the heater indoors or in an enclosed area. Always ensure that adequate air ventilation is provided.
- Do not use the heater in a basement or below ground level.
- This appliance should only be used in an above ground open-air environment with natural ventilation, where gas leakage or combustible materials are dispersed.
- Any enclosure in which the appliance is used should comply with one of the following:
 - Within a partial enclosure that includes an overhead cover and more than two walls, the following shall apply:
 - At least 25% of the total wall area is completely open and at least 30% of the remaining wall area is open and unrestricted.
 - If being used on a balcony area, at least 20% of the total wall area should remain open and unrestricted.

This appliance should only be used in an outdoor area and should not be used in a building, garage or any other enclosed area.

Technical Specifications

Nominal HEAT INPUT	10 kW (727 g/hr)			
Appliance Category	I3+	I3B/P 30	I3B/P 37	I3B/P 50
Gas Reference	G30/G31	G30/G31	G30/G31	G30/G31
Normal Gas Pressure	28-30/37 mbar	30 mbar	37 mbar	50 mbar
Burner Injector	1.6mm	1.6mm	1.51mm	1.34mm
FOR USE OUTDOORS ONLY				
Use propane only. Burner pressure: 37 mbar - Burner injector: 1.9 mm - Pilot injector: 0.20 mm Close the valve of the gas cylinder or the regulator after use. The use of this appliance in closed areas can be dangerous and is PROHIBITED. Read the instructions before using this appliance. The appliance must be installed in accordance with the instructions and local regulations. Metal w/ powder coating 18 kg. Stainless Steel 17 kgs. Height: 2250 mm				
Countries of destination:				
AT-BE-BG-CH-CZ-CY-DE-DK-EE-ES-FI-FR-GB-GR-HU-IE-IS-IT-LU-LT-LV-MTNL- NO-PL-PT-RO-RU-SE-SI-SK-TR				

Safety Precautions

- Performance and safety service of this heater should be performed annually by a qualified gas engineer.
- Do not use the heater in a combustible atmosphere.
- Do not store or use petrol or other flammable liquids in or near the heater unit.
- Before using the unit check the whole gas system ie. hoses for splits, twists which may cause gas to leak or prevent flow.
- The recommended frequency of checking the tubing or the flexible hose is at least once per month and each time the cylinder is changed. If it shows signs of cracking, splitting or other deterioration it should be changed for new hose of the same length and of the equivalent quality.
- Disconnect gas cylinder before moving the heater.
- Do not attempt to modify any parts of the heater.
- The appliance is not recommended to be used in basements, below ground level or in areas with limited / no ventilation.
- Ensure the heater is placed on a solid and level surface.
- It is recommended that you change the regulator annually to avoid blockages.
- Do not clean the heater with cleaners that are combustible or corrosive.
- Do not paint any part of the heater.
- The gas cylinder valve should be turned off when the heater is not in use.
- Avoid using the heater when it is raining to prevent water ingress.
- Keep children and vulnerable people away from the heater when in use.
- Do not move the heater when it is in use.
- Check the heater immediately if any of the following exists:
 - There is smell of gas.
 - The heater performance of the heater seems to be reduced.
 - The burner makes popping noise during use (a slight popping noise is normal when the flame is extinguished after use).
- When the heater is in use the surface of the grills, reflector and glass will reach a high temperature. Do not touch these parts.
- Do not obstruct the ventilation holes of the cylinder housing.
- Only use the gas specified - 6 kg Propane patio gas.
- In adverse weather conditions it is advised the heater is stored undercover or inside where possible.
- The gas cylinder should be turned off when the heater is not in use.

Gas Requirements

- Use propane or LPG only.
- The heater is designed for use with 6 kg cylinder. Maximum size of cylinder suitable for the appliance, w/ regulator attached, is 33 cm x 50 cm.
- The appliance requires approved gas hose in 60 cm length and a regulator, or a gas hose in 140 cm length and a regulator if no gas pipe (approx. 84 cm) is used.
- Regulator maximum inlet pressure must not exceed 690 kPa (100 PSI).
- Regulator outlet pressure to be 37 mbar.
- The hose and regulator assembly must conform to local standard codes.
- The installation must conform to local codes, or in the absence of local codes, to the standard for the storage and handling of liquid petroleum gases.
- A dented, rusted or damaged gas cylinder may be hazardous and should be checked by your gas supplier. Never use a gas cylinder with a damaged valve connection.
- The gas cylinder must be arranged to provide for vapor withdrawal from the operating cylinder.
- Avoid twisting the flexible tubes and hoses.
- Never connect an unregulated gas cylinder to the heater.
- Disconnect the gas cylinder when the heater is not use.

Assembly Instructions

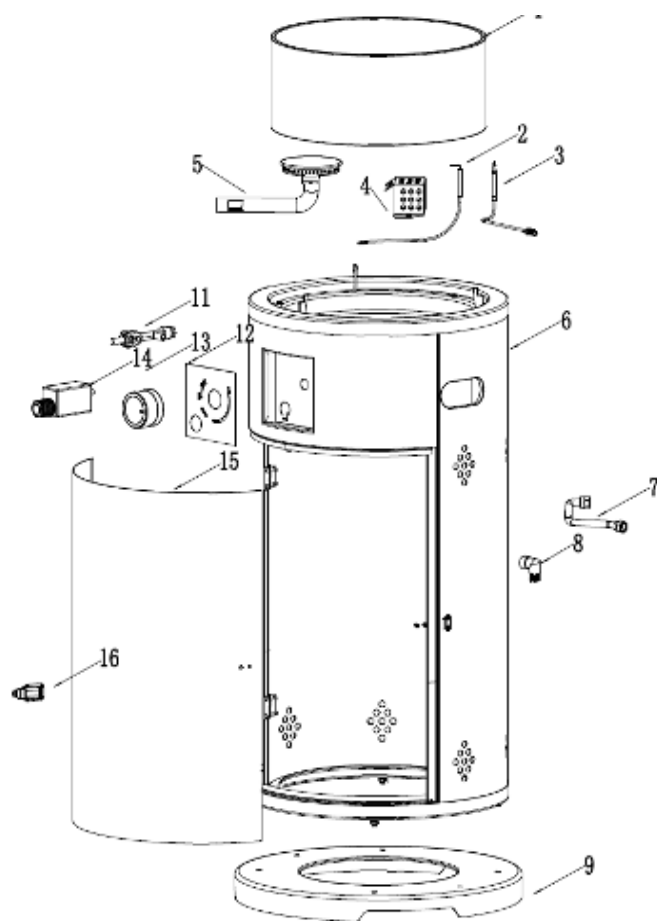
Tools you will need:

- Open end wrench 10 & 13 mm
- Adjustable opening wrench (2) 20 cm long
- Slip joint pliers 23 cm long
- Philips screwdriver w/ medium blade
- Spray bottle of soap solution for leakage test

Parts supplied:

- Stand with tank housing
- Assembly post with 3 pcs post brackets
- 10 mm x 84.5 cm (L) galvanized steel pipe + 60 cm gas hose conforming to local standard codes (pressure regulator not included), or 140 cm gas hose only (if no gas pipe is used)
- Reflector 813 mm with 6 pcs washers Ø8 mm and 3 pcs M8 castle nuts
- 3 pcs 90 mm pins for reflector support
- 4 pcs bolts M6 x 10 mm for assembly post and burner
- 6 pcs bolts & nuts M6 x 35 mm for post and post brackets
- 3 pcs bolts M8 x 16 mm for post brackets and base
- 3 pcs ground fixture kit
- 6 pcs M6 x 10 mm ground fixer bolts & nuts

Parts & Operation



MINIMUM CLEARANCE TO COMBUSTIBLES		
	INCHES	MM
Side Walls	18	460
Top of unit to ceiling	36	914

Assembly Procedure

Step 1

Put the Lava Rocks into the fire pan

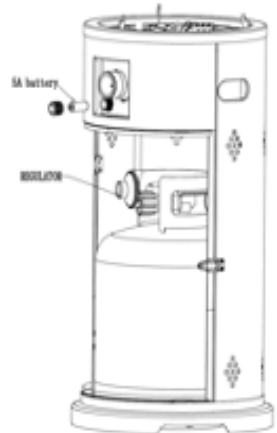


Step 2

Install the AA battery (not included) to the ignition.

Open the fire pit door to put the gas cylinder into the tank.

Connect the regulator to the cylinder and tighten it.



Step 3

Put the glass tube on the supports as pictured.

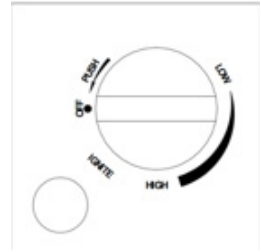
**DO NOT TOUCH THE GLASS TUBE
WHEN HEATER IS IN OPERATION OR
WITHIN 30 MINUTES OF TURNING IT OFF.**



Operation

To turn on the heater

1. Ensure that unit valve dial is in the “off” position by pushing and turning clockwise until the dial.
2. Securely attach regulator (large end of hose) to your cylinder.
3. Extend hose to full length and ensure that the propane tank is as far as safely possible from the Fire Bowl.
4. Slowly turn cylinder valve to “HIGH” position, push the IGNITE to light the fire pit.
5. After fire pit lights, release control knob. Push in and turn the control knob to the “HIGH”, then release control knob. If you want a lower temperature, push in the control knob and turn counter-clockwise to “LOW” .



Note

- If a new tank has just been connected, please allow at least one minute for the air in the gas pipeline to release through the pilot hole, or simply continue with step 3.
- When lighting the pilot flame make sure that the variable control knob is continuously depressed while pressing the igniter button.
- Variable control knob can be released after the pilot flame is lit for 20-30 seconds.
- Inspect your hose for any signs of wear and tear, cuts, leaks or openings. If any are visible or appear - replace your hose as soon as possible.

To turn off the heater

1. Turn the variable control knob to OFF position.
2. Leave heater to turn off and glass tube to cool down in temperature. Glass tube should not be touched for 30 minutes after OFF switch has been engaged.
3. Remove lava rocks once heater has cooled down.
4. Turn off the valve of the gas cylinder and disconnect the cylinder.

Replacing the gas cylinder

1. Close the valve of the gas cylinder.
2. Disconnect the regulator from the cylinder.
3. Replace the cylinder.
4. In the absence of any flame, remove the plug or seal cap from the cylinder valve.
5. Check for the presence and good state of the gasket before connecting the regulator.
6. Perform leak test using soapy water solution. (page 3)

Cleaning & maintenance

To enjoy outstanding performance of your heater for years make sure you perform the following maintenance activities on a regular basis:

- Keep exterior surfaces clean.
- Use warm soapy water for cleaning. Never use flammable, corrosive or abrasive cleaners.
- While washing your unit, be sure to keep the area around the burner and pilot assembly dry at all time. If the gas control is exposed to water in any way, do NOT try to use it. It must be replaced.
- After a long break from operation, the unit should be inspected for spiders, spider webs or other insects.
- Air flow must be unobstructed. Keep controls. Burner and circulating air passageways clean.

Signs of possible blockage include:

- Gas odour with extreme yellow tipping of flame.
- Heater does NOT reach the desired temperature.
- Heater glow is excessively uneven.
- Heater makes popping noises.
- Spider and insects can nest in burner or orifices. This dangerous condition can damage the heater and render it unsafe for use. Clean burner holes by using a heavy-duty pipe cleaner. Compressed air may help clear away smaller particles.

Warning

FOR YOUR SAFETY:

- DO NOT touch or move heater for at least 30 minutes after use.
- Allow all burner elements to cool before touching.

NOTE

- In a salt-air environment (such as near an Ocean) corrosion occurs more quickly than normal.
- Wait until heater is cool before covering.

Storage

Between uses:

- Turn the control knob to “OFF” position.
- Turn LPG cylinder to “OFF” position.
- Store heater upright in an area sheltered away from weather conditions (such as rain, sleet, hail, snow).
- If desired, cover heater to protect exterior surfaces and to help prevent dust and debris collecting in air passages.

During periods of extended inactivity or when transporting:

- Turn the control knob to “OFF” position.
- Disconnect LPG Cylinder and move to a secure, well-ventilated location outdoors.
- DO NOT store in a location that will exceed 50 degrees C.
- Store heater upright in a sheltered area away from weather conditions (such as rain, sleet, hail, snow).
- If desired, cover heater to protect exterior surfaces and to help prevent dust and debris collecting in air passages.

Disposal

In accordance with European Directive 2001/96/EG concerning used electrical and electronic appliances (waste electrical and electronic equipment – WEEE), please return any electrical equipment that you will no longer use to the collection points provided for their disposal.

This symbol indicates that the appliance cannot be treated as normal domestic trash, but must be handed to a collection point for recycling electric and electronic appliances.

Information concerning where the equipment can be disposed of can be obtained from your local authority.

Servicing

It is recommended that before using the heater after a period of 3 months or before using the heater:

- Check the condition of the gas cylinder.
- Check the hose assembly for any wear or damage. If the hose and regulator assembly is damaged or more than 1.5 years old replace with an approved hose and regulator.
- Frequently checking the tubing or the flexible hose at least once per month and each time the cylinder is changed. If it shows signs of cracking, splitting or other deterioration it should be exchanged for a new hose of the same length and off the equivalent quality.
- The tubing or the flexible hose must be change within the recommended time frame.
- Check for leaks.

Solving Common Problems

The 3 most common problems associated with any gas heater are gas leaks, wrong gas pressure and dirt.

DO NOT USE YOUR HEATER WITHOUT CHECKING FOR LEAKS. Leaks can occur during shipment and installation. A simple solution of soap and water dabbed on the fittings will bubble if a gas leak is present. (page 3)

WRONG GAS PRESSURE. Too much gas pressure may severely damage your heater. Too little gas pressure and your heater will not burn correctly.

DUST AND DIRT. This heater requires some cleaning. If the pilot light will not stay lit, your heater is probably in need of cleaning and servicing. Replacement of thermocouple or pilot assembly is generally not needed. Refer to **CLEANING AND MAINTENANCE** in this manual.



Problem Checklist

Problem	Cause	Solution
No spark at pilot when the control knob is engaged and turned counter clockwise to the pilot position	<ul style="list-style-type: none"> • Ignition positioned incorrectly • Ignition electrode broken • Ignition cable bent or broken 	<ul style="list-style-type: none"> • Replace the ignition • Free ignition cable. If damaged, replace this part

Warning

Servicing should be carried out by a qualified gas engineer only.

There is spark but the heater will not light	<ul style="list-style-type: none"> • Gas supply turned off • Control knob not in the pilot position • Control knob not pressed in while in pilot position • Pilot is clogged • Air in gas pipe 	<ul style="list-style-type: none"> • Turn on the gas supply • Turn the variable knob to the pilot position • Press the control knob while in the pilot position • Call qualified gas engineer • Air will disperse from the pipe by pressing the control knob continuously until there is a slight smell of gas
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Pilot light present but flame goes out when the control knob is released	<ul style="list-style-type: none"> • Control knob not being held in for long enough • Pilot flame not touching the thermocouple. Problem could be a result of one or both of the following: • Partially clogged pilot injector • Low gas pressure • Thermocouple damaged • Thermocouple connection is loose at gas control valve • Gas control valve damaged 	<ul style="list-style-type: none"> • After pilot lights keep control knob pressed in for a further 30 seconds. • Contact a qualified gas engineer • Replace thermocouple • Tighten by hand then a further ¼ with a wrench • Replace gas control
Burner does not light after pilot is lit	<ul style="list-style-type: none"> • Main burner injector clogged • Low gas supply pressure 	<ul style="list-style-type: none"> • Ensure the main burner is clean • Call gas supplier
Burner flame goes off immediately after ignition	<ul style="list-style-type: none"> • Low gas pressure 	<ul style="list-style-type: none"> • Keep the pilot flame lit for 10 minutes before turning down to LO setting
Delayed ignition	<ul style="list-style-type: none"> • Main burner ports may be blocked • Low gas pressure 	<ul style="list-style-type: none"> • Ensure that the burner is clean • Call your gas supplier
Inadequate combustion on burner	<ul style="list-style-type: none"> • Not enough air within the unit 	<ul style="list-style-type: none"> • Check air passageways and burners for dirt and debris. Clean with compressed air
Burner flame is low	<ul style="list-style-type: none"> • Hose may be bent or twisted • Low gas supply pressure 	<ul style="list-style-type: none"> • Straighten out the hose and ensure there are no splits, perform leakage test to ensure that there is no splits or damage to the hose. • Check gas bottle level and call gas supplier
Emitter glows unevenly	<ul style="list-style-type: none"> • Blockage in the burner • Base is not on a level surface • Low gas pressure 	<ul style="list-style-type: none"> • Clean or replace the burner injector • Place heater on level surface • Check level of gas in the bottle. Replace where required
Slight smoke and order during initial operation	<ul style="list-style-type: none"> • Residue from manufacturing process 	<ul style="list-style-type: none"> • Will burn away after 30 minutes of operation
Black smoke	<ul style="list-style-type: none"> • Blockage in burner 	<ul style="list-style-type: none"> • Turn off the heater and let it cool. Remove blockage and clean burner and outside

<p>Heater produces whistling noise when burner is lit</p>	<ul style="list-style-type: none"> • Air passageways maybe blocked • Air in the gas line 	<ul style="list-style-type: none"> • Check minimum installation clearances and air passageways for debris. • Continue to operate the heater the air will disperse slowly
<p>Heater produces a clicking noise just after burner it lit or turned off</p>	<ul style="list-style-type: none"> • Metal expanding and contracting 	<ul style="list-style-type: none"> • This is common with heaters. If the noise is excessive contact manufacturer
<p>Gas odour during use</p>	<ul style="list-style-type: none"> • Foreign element in gas or burner ports • Heater burning vapors from paint • Gas leakage from: <ul style="list-style-type: none"> • Regulator and hose connection • Valve and pipe connection • Pipe split/ damage 	<ul style="list-style-type: none"> • Check gas passageways and burner. • Stop storing or using paint products near the heater • Locate and correct leaks, replace parts where necessary or contact a gas engineer to locate the problem for you
<p>Carbon build up</p>	<ul style="list-style-type: none"> • Dirt or film on reflector and flame screen 	<ul style="list-style-type: none"> • Clean reflector and flame screen to eliminate any debris build up

Customer Service

- Repairs must be carried out by authorized specialists, thus ensuring electrical safety.
- Please contact with the service agent or a suitably qualified electrician.
- Improper repairs could lead to danger to the user.

Warranty does not cover damage of failure which results from alteration, accident, misuse, abuse, neglect, commercial use or improper maintenance. In line with our policy of continuous product development we reserve the right to change the product and documentation specifications without notice.



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