

# Sierra Products Pty Ltd

A.B.N 76078600450

A.C.N 078 600 450

P.O.Box 1168

Kangaroo Flat, Vic  
3555

Free Call: 1800 630116

Email: [sierra@bendigo.net.au](mailto:sierra@bendigo.net.au)

Website: [www.sierraproducts.com.au](http://www.sierraproducts.com.au)

**Sierra 11P Patio Heater  
(Propane only)**

**Sierra 13N Patio Heater  
(Natural Gas Only)**

**AGA Approval No. 4800**

Installation and servicing instructions  
(After installation, hand these instructions to the consumer.)

**Important** all installations must conform with relevant statutory regulations and the Australian Gas Association installation Code AG601. To be installed and serviced by an authorized person.

# Sierra Products Pty Ltd

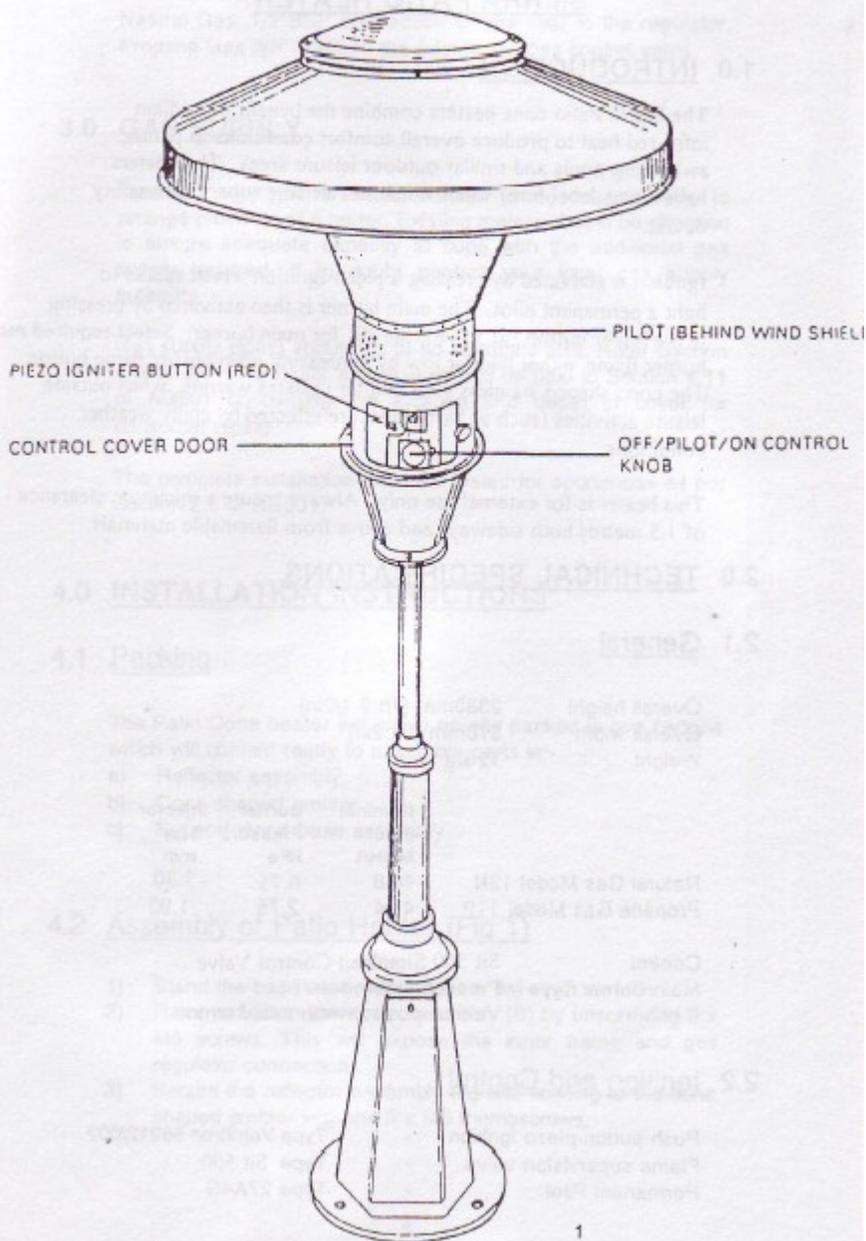
## **Contents:**

- 1.0 Introduction
- 2.0 Technical Specification
  - 2.1 General
  - 2.2 Ignition and Control
  - 2.3 Gas Inlet Connection
- 3.0 Gas Supply
- 4.0 Installation Instruction
  - 4.1 Packing
  - 4.2 Assembly of Patio Heaters (Fig. 1)
- 5.0 Installation and Commissioning
- 6.0 Installation Lighting Procedure
- 7.0 Fault Finding
  - 7.1 Control Valve and Pilot Burner
  - 7.2 Piezo Connection
- 8.0 Short Parts List
  - 8.0A Connection Details
- 9.0 Servicing
  - 9.1 General Servicing Procedure
  - 9.2 Replacement/ Exchange of Component

## **Warning-**

1. Do not place articles on or against this appliance.
2. Do not use or store flammable materials near this appliance.
3. Do not spray aerosols in this vicinity of this appliance while it is in operation.

TRADITIONAL MODEL



## Sierra Patio Heater

### 1.0 Introduction

The Sierra Cone Patio Heaters combine the benefits of radiant heat to produce overall comfort conditions to patios, swimming pools and similar outdoor leisure areas. The heaters have a manual control which combines a flame supervision safety device.

Ignition is activated by pressing a piezo ignition which sparks to light a permanent pilot.

The main burner is then activated by pressing in the lower button  to indicate  for main burner. Select required main burner flame, either high or low by depressing main burner flame button. The cone shaped stainless steel emitter radiates warmth, when outside leisure activities (such as barbeques) are effected by chilly weather conditions.

The heater is for external use only. Always ensure a minimum clearance of 1.5 meters both sideways and 400mm above from flammable materials.

### 2.0 Technical Specifications

#### 2.1 General

Overall Height	2380mm (7ft 9-1/2in)		
Overall Width	970mm (3ft 2in)		
Weight	32 kg		
	Nominal Input	Burner Pressure	Injector Size
	MJ/HR	kPa	MM
Natural Gas Model 13N	46.8	0.75	3.30
Propane Gas Model 11P	41.4	2.75	1.90
Control	Sit 500 Simploit Control Valve		
Main Burner Type	Pressed steel venturi; vertical position with cast iron top.		

#### 2.2 Ignition and Control

Push button piezo ignition	type Vernitron 66212/002
Flame supervision valve	type Sit 500
Permanent pilot	type 27A4G

#### 2.3 Gas Inlet Connection

Natural Gas. 1/2" BSP connection on the inlet to the regulator.  
Propane Gas. 3/8" BSP on the inlet to the gas control valve.

### 3.0 Gas Supply

If no gas supply is available, contact your local gas utility to arrange provision of a meter. Existing meters should be checked to ensure adequate capacity to cope with the additional gas supply required. If in doubt contact your local gas supply authority.

### **3.0 Gas Supply continued.**

Gas supply piping should be of an adequate size. Refer section 4 of AG601. Particular attention should be paid to section 4.11 of AG601 concerning the location and depth of cover for consumer piping.

The complete installation must be tested for soundness as per section 2.6 of AG601.

### **4.0 Installation Instructions**

#### **4.1 Packing**

The patio heater will arrive packed in two cartons which will contain ready to assemble parts i.e.:-

- a. Reflector
- b. Cone shaped emitter
- c. Support stand base assembly

#### **4.2 Assembly of Patio Heater (Fig. 1)**

1. Stand the base assembly (e) on a flat even surface.
2. Remove bottom cover on assembly (b) by unscrewing 3 x M5 screws. This will expose the inner frame and gas regulator connection.
3. Secure the reflector assembly (a) and cowling to the cone shaped emitter with the 3 x M8 thumbscrew.

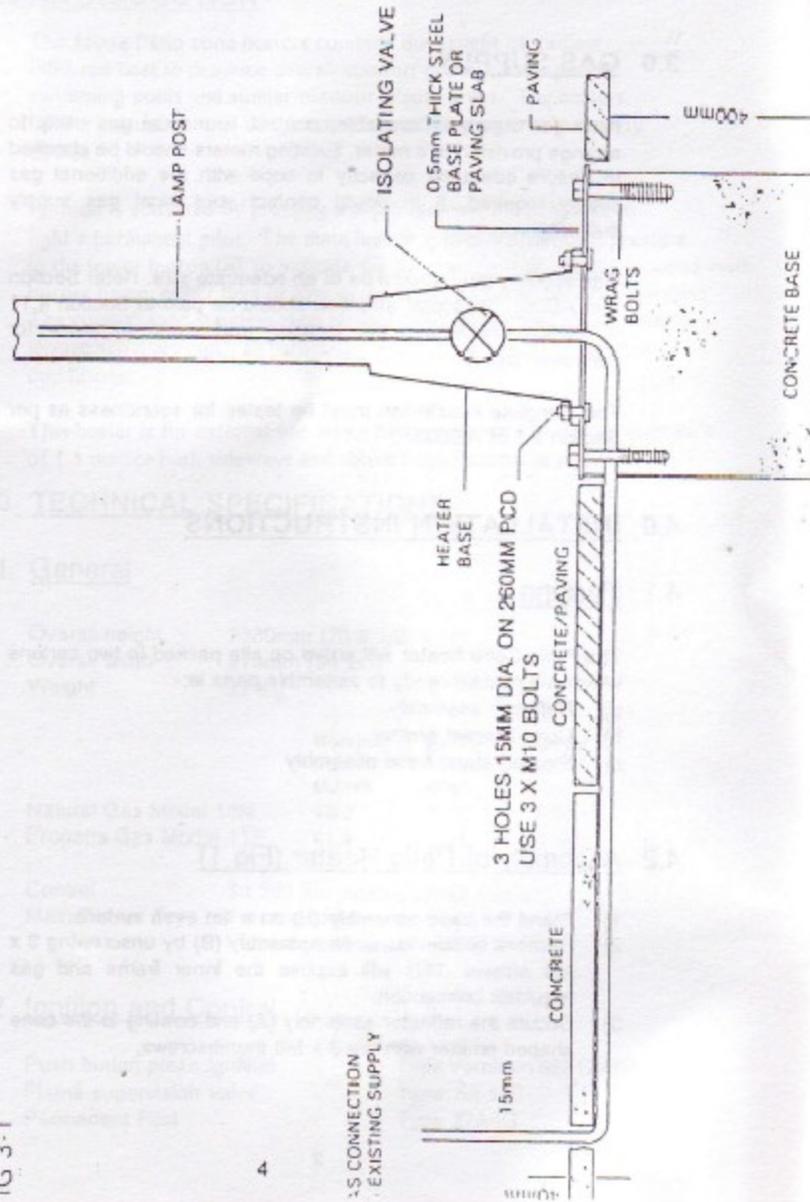
### 3.3 Instructions on How to Run the Gas Supply to the Outside Connection Point

GAS INSTALLATION INSTRUCTION FOR SIERRA PATIO HEATER USING  
15mm PLASTIC COATED SOFT COPPER UNDER CONCRETE/PAVING  
(UNSLEEVED SINGLE LENGTH COPPER PIPE PREFERRED)

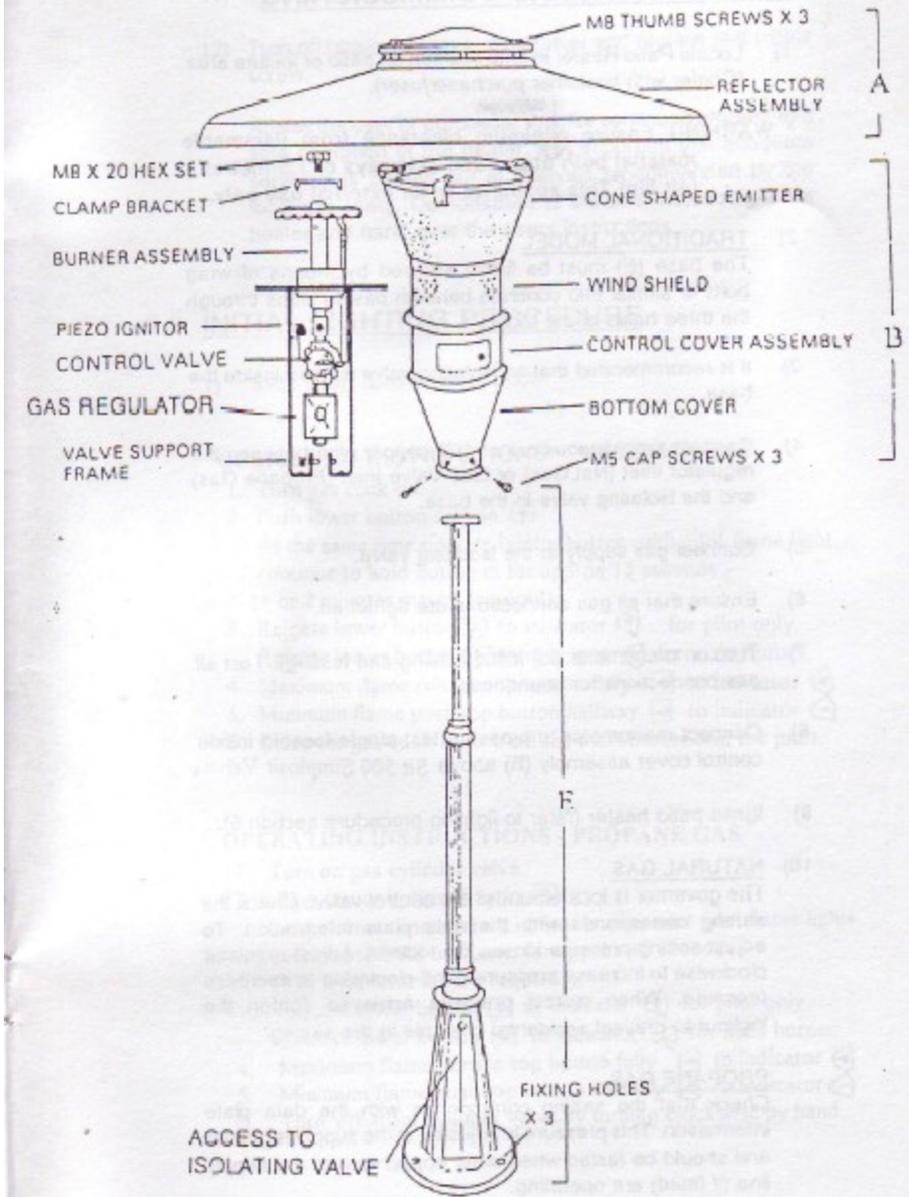
IG 3-1

4

AS CONNECTION  
EXISTING SUPPLY



## 4.2 ASSEMBLY OF PATIO HEATER (FIG 1)



## 5.0 Installation and Commissioning

1. Locate patio heater in final position on patio or leisure area. (Confer with customer, purchaser or user.

**Warning- ensure minimum clearance from flammable material both 400mm above and sideways of 1.5 meters (4ft 6in) this appliance is for external use only.**

### 2. Traditional Model

The base (e) must be firmly secured by means of wrag bolts or similar into concrete beneath paving slabs through the three holes in the base.

3. It is recommended that an isolating valve is fitted inside the base.
4. Connect a continuous run or 1/2" copper pipe between the regulator inlet (Natural Gas) or gas valve inlet (Propane Gas) and the isolating valve in the base.
5. Connect gas supply to the isolating valve.
6. Ensure that all gas connections are tightened.
7. Turn on manometer (for initial lighting and testing). Test all gas connections for soundness.
8. Connect manometer to pressure test nipple located inside control cover assembly (b) above Sit 500 Simposit Valve.
9. Ignite patio heater (refer to lighting procedure section 6)

### 10. Natural Gas

The governor is located under the control valve. Check the setting corresponds with the data plate information. To adjust setting pressure loosen the locknut. Adjust regulator clockwise to increase pressure- anticlockwise to decrease pressure. When correct pressure is achieved tighten the locknut to prevent accidental changes in the settings.

### Propane Gas

Check that the setting corresponds with the data plate information. This pressure is adjusted at the supply regulator and should be tested when other appliances on the supply line (if fitted) are operating.

11. Test all gas connections for soundness.
12. Turn off heater, remove manometer and replace test nipple screw.

Advise the user, or purchaser that for continued efficient and safe operation of the heater, it is important that adequate servicing is carried out at intervals recommended by the local gas utility. Demonstrate to the user how to light the heater and then hand over the users instructions.

## 6.0 Initial Lighting Procedure.

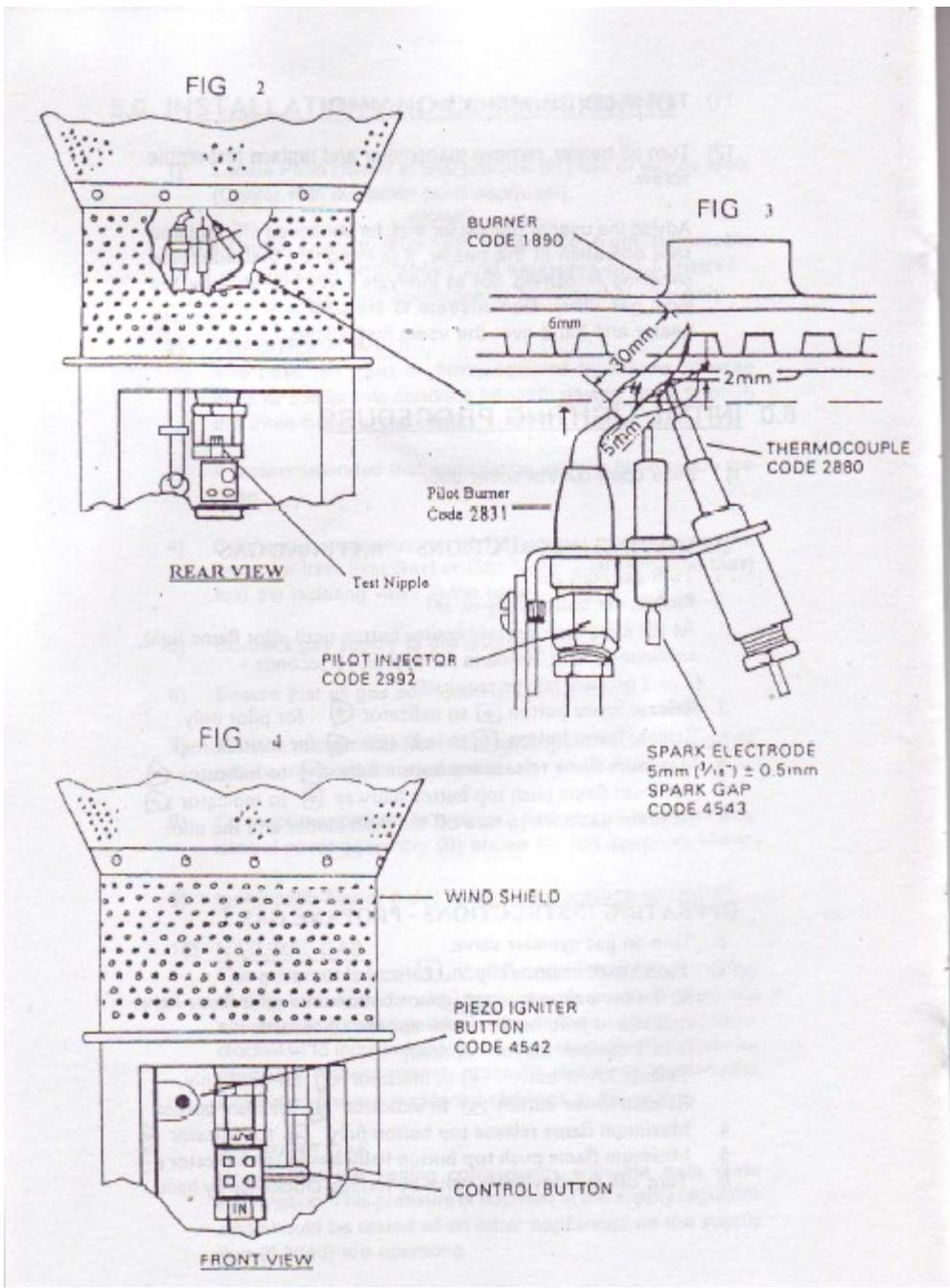
1. Slide open control cover door.

### Operating instruction- Natural Gas

1. Turn gas cock on.
2. Push lower button fully in  at the same time operate igniter button, until pilot flame lights, continue to hold button in for approximately 15 seconds. (1-2 minutes may be required.)
3. Release lower button  to indicate  for pilot only.  
Release lower button  to indicate  for main burner.
4. Maximum flame release top button fully  to indicate .
5. Minimum flame release top button halfway  to indicate .
6. Close the gas cock to turn off the main burner and the pilot.

### Operating instructions- Propane Gas

1. Turn on gas cylinder valve.
2. Push lower button fully in  at the same time operate igniter button until pilot flame lights, continue to hold button in for approximately 15 seconds. (1-2 minutes may be required.)
3. Release lower button  to indicate  for pilot only.  
Release lower button  to indicate .
4. Maximum flame release top button fully  to indicate .
5. Minimum flame push top button halfway  to indicate .
6. Turn "off" from cylinder valve by turning clockwise by hand.



## 7.0 Fault Finding

### 7.1 Control Valve and Pilot Burner.

Pilot Flame goes out.

1. Check gas supply has not been turned “off”
2. Check pilot flame adjustment on the side of control valve. Remove cover screw, adjust inner screw anti clockwise to give 30mm long flame (see Fig. 3 and 4) whilst holding control knob depressed in pilot position if necessary).
3. Check thermocouple connections on control valve.

Remedy:

Replace	Part Number
Thermocouple	2894
Thermo- mag assembly for Sit 500 Valve.	2787

### 7.2 Piezo Ignition

No spark.

1. Check that connections are sound on lead ends.
2. Check that piezo igniter is creating sufficient spark when “red” button is pushed and that spark gap is 5mm +/- 0.5mm (3/16in.) (See Fig. 3)

Remedy

Replace	Part Number
Lead	4540
Peizo	4542
Electrode	4543

**Note:** If heater cannot be adjusted to perform satisfactorily, contact your state service agent or Sierra Product Pty Ltd.

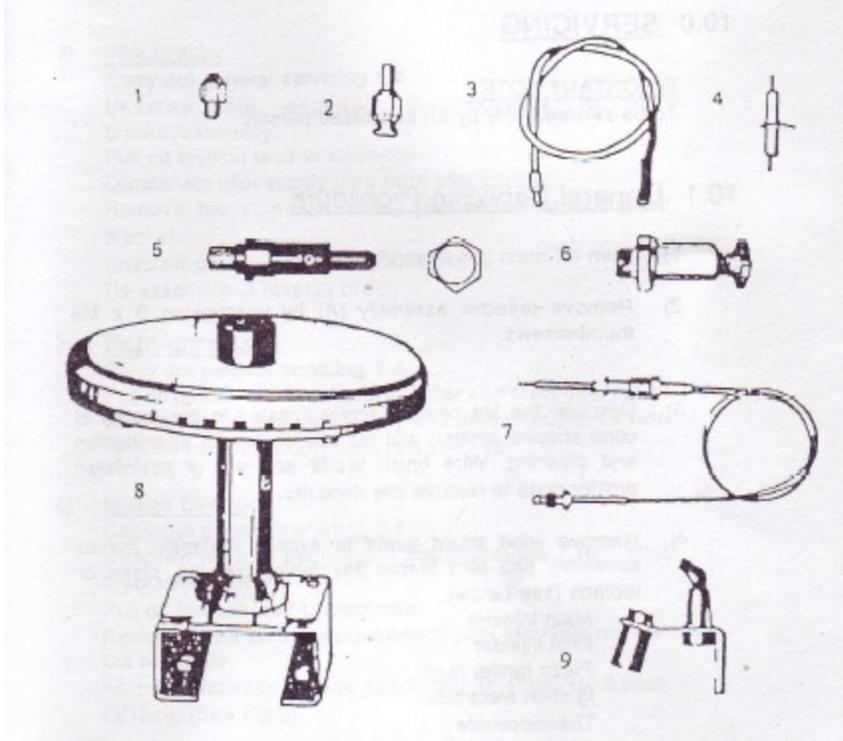
## 8.0 Short Parts List

Appliance name and model Sierra Patio Heater 13N  
Appliance name and model Sierra Patio Heater 11P

Manufacturer: Sierra Space Heating Ltd

Australian Agent: Sierra Products Pty Ltd  
P.O.Box 1168  
Kangaroo Flat Vic 3555  
A.C.N No. 078600450

Key No.	Description	No. Off	Code No.
1	Main injector Natural Gas 3.30mm	1	1896
1	Main injector Propane Gas 1.90mm	1	1895
2	Pilot injector Natural Gas No. 7215	1	2993
2	Pilot injector Propane Gas No. 4209	1	2992
3	Piezo Electrode Lead 400mm	1	4540
4	Ignition Electrode	1	4543
5	Piezo Igniter 66212/002	1	4542
6	Thermomag for Sit 500 Valve	1	2787
7	Thermocouple 2800B060	1	2894
8	Burner Complete	1	1890
9	Pilot Burner 27 Series	1	2831



### 8.0A Conversion Detail.

Sierra Traditional and Standard Model Patio Heaters may be converted between natural gas and propane operation. Conversion involves changing to the correct injector and pilot injector. (Refer to part numbers)

#### Part numbers traditional and standard patio heaters.

Conversion to	11P	13N
For Use on	Propane (G31)	Natural (G20)
Injector	1895	1896
Pilot injector	2992	2993
Data badge	3346	3347
Injector Dia (mm)	1.90	3.30
G.C. MJ/HR	41.4	46.8
Gas Pressure (KPA)	2.75	0.75

## **9.0 Servicing**

### **Important Note:**

To be serviced only by an authorized person.

## **9.1 General Servicing Procedure**

1. Turn off main gas at service cock.
2. Remove reflector assembly (a) by unscrewing 3 x M8 thumbscrews.
3. Unscrew the M8 hex set screw (located in the center of the cone shaped emitter) and remove emitter for examination and cleaning. Wire brush inside and out of perforated emitter cone to remove any deposits.
4. Remove wind shield guard to expose the main burner assembly and pilot burner assembly examine, clean, or replace (see below).

Main Injector

Pilot Burner

Piezo Igniter lead

Ignition Electrode

Thermocouple

5. Refer to 8.0 spares list for part codes.

Reassembly is a reverse of the above procedure.

**The Sierra Heater must be tested and commissioned for operation and soundness as described in 5.0 Installation and commissioning**

## 9.2 Replacement/ Exchange of components

### 1. Main injector

Carry out general servicing 1-4  
Unscrew injector from adaptor/ burner

### 2. Pilot Injector

Carry out general servicing 1-4.  
Unscrew nut securing thermocouple to pilot bracket/ assembly.  
Pull off ignition lead to electrode.  
Disconnect pilot supply pipe from pilot injector.  
Remove two screws securing pilot assembly to support bracket.  
Unscrew pilot injector from pilot burner.  
Reassemble in reverse order.

### 3. Piezo Igniter Lead.

Carry out general servicing 1-4  
Pull off ignition lead from Piezo igniter and electrode, cut off tie securing lead to pilot supply and thermocouple. Fit new ignition lead and secure with new cable tie.

### 4. Ignition Electrode

Carry out general servicing 1-4.  
Unscrew nut securing thermocouple to pilot bracket/ assembly.  
Pull off ignition lead to electrode.  
Remove screw securing electrode to pilot assembly and lift out electrode.  
Fit new electrode, check spark gap is 5mm +/- 0.5mm (3/16in)/ (See Fig. 3)

### 5. Thermocouple

Carry out general servicing 1-4.  
Unscrew nut securing thermocouple to pilot bracket/ assembly and F.S.D  
Cut off cable tie securing ignition lead to thermocouple.

**Note:** on reassembly fit new cable tie.

### 6. Thermomag Unit for Sit 500 F.S.D

Unscrew nut securing thermocouple to rear of unit.  
Unscrew thermomag unit from Sit 500 valve.  
After reassembly check Sit 500 for gas soundness.

### 7. Piezo Igniter

Pull off ignition lead from rear of igniter.  
Unscrew nut securing piezo igniter to support bracket.

### 8. Main Burner

Carry out general servicing 1-4.  
Remove two screws securing burner to injector assembly and burner pan.

## Warranty

# Sierra space heating

Guarantees all products supplied against any manufacturing defect for a twelve month period from date of sale.

*The Warranty **does not** cover the following:*

1. Faults/ Failure caused by misuse, neglect or faulty adjustments by the user.
2. Failures resulting from not using the product in accordance with the operating instruction manual.
3. Failure as a result of sudden impact.
4. Failure which had occurred from normal fair, wear and tear.
5. Any unit which has been serviced or repaired, taken apart or tampered with by any person not being a qualified installer.
6. The benefits conferred by this warranty and guarantee are in addition to all other rights and remedies in respect of such appliance has under the Trade Practices Act (Commonwealth) and other state and territory laws.

## Warning

This Emitter is coated with a protective oil.

Upon lighting this will burn off and there will be some initial smoke.

Ensure adequate ventilation.