

VALOR - INSPIRE MK 2 SPACE HEATER

SERVICE INSTRUCTIONS - REV 1b

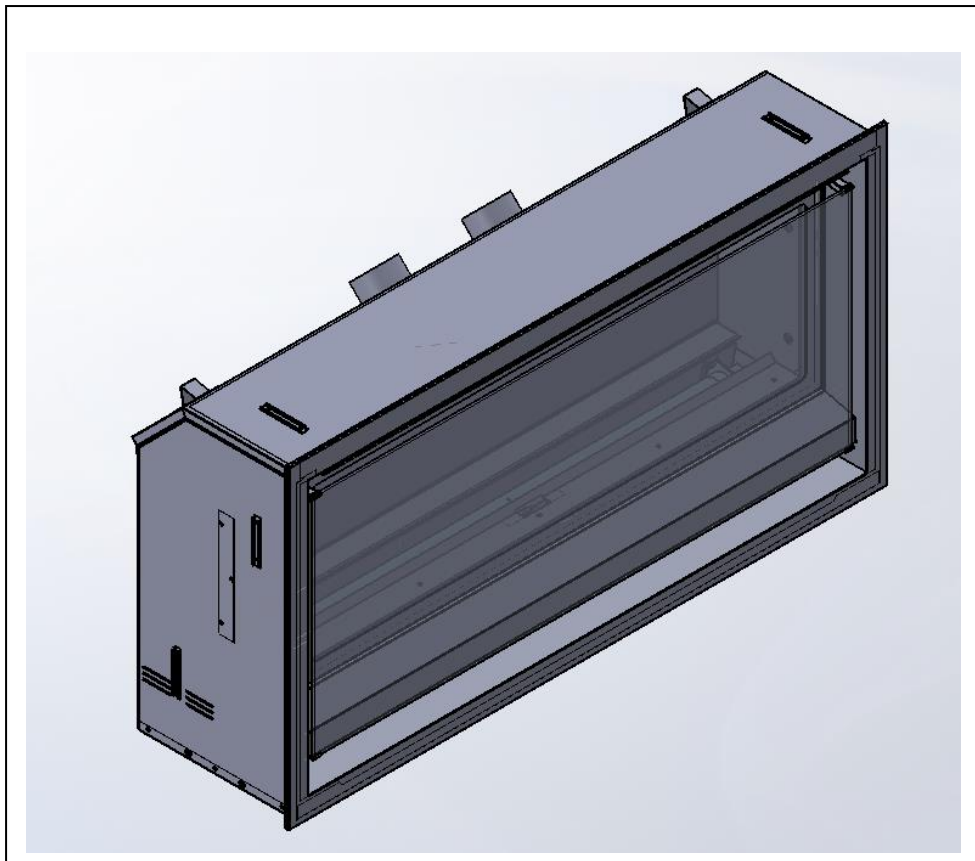
Do not modify this appliance.

The Inspire space heater is suitable to be installed into a frame out installation.

Natural gas and LPG gas.

Approval no.GMK 10528

Warning – Servicing shall be carried out only by authorized personnel.



WARNING

The Inspire space heater has a primary safety glass fitted in front of the glass door. This safety glass is fitted to this appliance to reduce the risk of injury from burns and at no time should this glass be permanently removed.

For protection of young children or the infirm, a secondary guard is required.

The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

WARNING

The outer glass panel gets extremely hot! Precaution should be taken and young children supervised at all times when heater is operating.

INSTALLATION NOTICE

- The installation of this appliance is only to be carried out by an authorised person in accordance with the Manufacturer's Instructions, local gas fitting regulations, AS/NZS5601.1-2013 installation code for gas burning appliances and any other relevant statutory regulations.
Do not modify this appliance.
- In all cases the installation of this appliance shall meet the requirements as set out in AS/NZS5601.1-2013.
- Do not install in a fireplace as a Type 1 installation.

- NOTE: A slight smell may be apparent for the first few hours of use. This is due to the heat resistant paint curing. It is recommended to open windows in the room for the first lighting of the fire. In some instances a slight discolouration may occur inside the firebox. This is a normal condition and is not covered by warranty.

IMPORTANT SAFETY NOTICE

- DO NOT PLACE ARTICLES ON OR AGAINST THIS APPLIANCE.
- DO NOT USE OR STORE FLAMMABLE MATERIALS IN OR NEAR THIS APPLIANCE.
- DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILST IT IS IN OPERATION.
- CARE MUST BE TAKEN TO ENSURE THAT ANY RETURN AIR REGISTER OR EXHAUST SYSTEM DOES NOT ADVERSLEY AFFECT THE OPERATION OF THE APPLIANCE OR DRAUGHT OF CHIMNEY OR FLUE.

SERVICING

It is recommended you service your gas fire every 2 years as a minimum.

CORD REPLACEMENT

Electrical cord replacement must be undertaken by qualified and trained personnel only.

- APPLIANCE IS DESIGNED TO OPERATE WITH LUMINOUS FLAMES.
MAY EXHIBIT SLIGHT CARBON DEPOSIT.

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DATAPLATE

Inspire 700 MK2

Gas	Injector Size (mm)	TPP	N.G.C. (Mj/hr)
Nat Gas Low	1 x 2.06mm (#46drill)	0.88kPa High / 0.40kPa Low	20.0 High / 14.0
LPG Low	1 x 1.25mm	2.48kPa High / 1.58kPa Low	20.0 High / 14.0

Inspire 900 MK2

Gas	Injector Size (mm)	TPP	N.G.C. (Mj/hr)
Nat Gas Low	1 x 2.30mm	0.88kPa High / 0.40kPa Low	25.0 High / 18.5
LPG Low	1 x 1.40mm (#54drill)	2.48kPa High / 1.58kPa Low	25.0 High / 18.0

Inspire 1100 MK2

Gas	Injector Size (mm)	TPP	N.G.C. (Mj/hr)
Nat Gas Low	1 x 2.49mm (#40drill)	0.88kPa High / 0.40kPa Low	29.0 High / 21.0
LPG Low	1 x 1.50mm	2.48kPa High / 1.58kPa Low	29.0 High / 21.0

Max – Min inlet pressure range

Natural gas 1.13kPa – 3.45kPa

LPG 2.75kPa – 3.45kPa

Aeration settings

MODEL	NAT GAS	LPG
Inspire 700 Driftwood	12+2 holes 4.0mm	16+6 holes 4.0mm
Inspire 700 Pebbles	10+2 holes 4.0mm	16+2 holes 4.0mm
Inspire 700 Snowgum	12+2 holes 4.0mm	16+6 holes 4.0mm
Inspire 900 Driftwood	16+6 holes 4.0mm	15+6 holes 4.0mm
Inspire 900 Pebbles	14+2 holes 4.0mm	15+2 holes 4.0mm
Inspire 900 Snowgum	15+6 holes 4.0mm	15+6 holes 4.0mm
Inspire 1100 Driftwood	20+2 holes 4.5mm	20+0 holes
Inspire 1100 Pebbles	14+4 holes 4.0mm	15+6 holes 4.0mm
Inspire 1100 Snowgum	16+4 holes 4.5mm	16+4 holes 4.5mm

GAS CONNECTION – 15mm (1/2") Compression union
ELECTRICAL CONNECTION – 3 Pin 10 Amp GPO plug
POWER RATING OF APPLIANCE – 230V 50Hz 0.80Amp

Installation must meet Australian gas codes AS/NZS 5601.

INSTALLATION CLEARANCES – Clearances from combustible materials

Floor	0mm
Sides	5mm
Top	5mm
Flue outer	25mm (outlet flue only – hot side)
Flue outer	0mm (inlet flue only – air intake side)
Front	0mm (Plaster to sit behind trim)
Back	25mm
Mantle	3mm from edge of trim, maximum 200mm protrusion from wall

Objects placed directly in front of viewing area 600mm

WARNING - Transit material such as cardboard packaging, pallet, plastic wrap, glass packaging warning labels and burner media protection must be removed prior to use.

FLUE SIZES, COWLS AND FLUE RUNS

Only the supplied and approved flue and flue terminal system as supplied by Glen Dimplex is to be used. Use of other flues or cowls cannot be used.

Flue runs 5m or less (75mm dia Aluminium flexi flue)

Flue runs 5m to 8.5m (75mm dia Aluminium flexi flue insulated with 25mm pipe insulation)

Recommended bend radius 150mm or larger.

Bends must not form a P Trap.

Recommended Silicon – Non acetic, neutral cure 150degc or higher temperature rated.
Bostik RTV 926 or similar

Insulation requirements for flue runs

Flue length	Insulation Requirement
0 - 5 mts	Uninsulated flue run
5 – 8.5 mts	Insulated flue run *

* For 5 - 8.5-meter flue runs, only the supplied insulation must be used and only the exhaust pipe is to be insulated. The initial 300mm from the appliance exit and the last 700mm from the termination may remain uninsulated. **However, it is recommended to insulate as much of the total length as possible.**

Example: For a flue run of 8.5mts

Flue run length

$N = 8.5\text{mts}$

Minimum insulation required

$X = N - 1\text{ mts}$

$= 8.5 - 1 = 7.5\text{ mts}$

Insulation is supplied in lengths of 1000mm.

Initial 300mm from appliance exit may remain uninsulated (Refer image below)

Last 700mm from rooftop termination down may remain uninsulated.

Note: The insulation can be cut to shorter lengths to allow for bends.

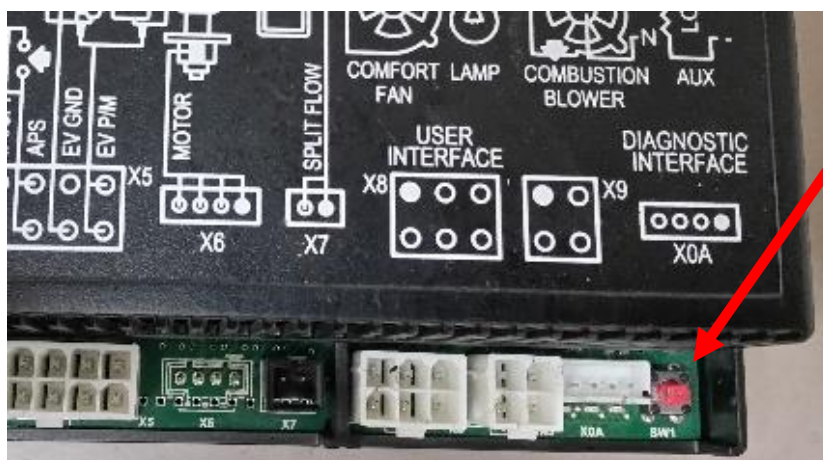
SEQUENCE OF OPERATION

1. Remote control calls for heat and sends signal.
2. Signal received by receiver. Beep sound should be audible from appliance.
3. Receiver performs internal safety check. 15seconds delay time
Checking of flame sensor, high limit circuit and pressure switch safety circuit.
4. Powerflue motor starts to operate.
5. 70 second prepurge time occurs.
6. Pressure switch activates proving combustion airflow.
7. Room air fan operates after 60 seconds.
8. Approximately 10seconds after room air fans operate the Sit gas control actuates the pilot gas and starts ignition of pilot.
9. Ignition may spark for upto 60 seconds.
10. Upon pilot lighting flame sensing occurs and sparking stops.
11. Main valve opens allowing main burner to cross ignite from pilot.
12. Room air fan starts.
13. Heater will operate as per remote settings.
14. Remote control sends signal to stop heat.
15. Signal received by receiver. Audible beep from appliance should be heard.
16. Sit gas control turns of main burner and pilot.
17. Powerflue fan runs for 20 seconds then turns off.
18. Room air fan operates for 12 minutes then fan turns off.

REMOTE CONTROL

TEACHING RF CODE – Reprogramming remote to heater

- a. Turn mains power off to appliance
- b. Remove front fascia – trim assembly (Remove earth wire carefully)
- c. Turn remote to off status, turn on mains power to appliance.
- d. Push and hold the red button on the ignition pack. Appliance will give 3 beeps release button
- e. Press the on button on the remote
- f. Appliance will beep to indicate signal received and locked.
- g. Turn off mains power.
- h. Refit fascia assembly including earth wire to fascia.



FAULT GUIDE

FAULT	POSSIBLE CAUSE
Appliance will not turn on	<ul style="list-style-type: none"> • Is power supply to heater turned on and connected. • Is remote control working. • Does the remote need to be reprogrammed to talk to the heater. – are beeps heard from appliance when remote pressed. – SEE BELOW – No beep means no signal received at appliance.
Remote control will not work	<ul style="list-style-type: none"> • Have new batteries been installed. • Is the display and buttons working. • Does the remote need to be reprogrammed to talk to the heater.
Beeps heard but heater does not operate (Refer sequence of operation to identify which stage appliance is reaching)	<ul style="list-style-type: none"> • Does powerflue fan run?. – if no then look at pressure switch and ignition pack connections • Is the flame sensing rod free of pebbles/ coals and insulation. • Is the spark rod free of pebbles/ coals and insulation. • Is the air pressure switch activated. – Check wires are connected. • Is the high limit tripped. Check wires are connected – SEE BELOW • Confirm power fan is operating – check for 240V to fan
Combustion fan runs but no ignition	<ul style="list-style-type: none"> • Combustion air proving pressure switch fault. • Check pressure switch connections – SEE BELOW • Check pressure switch silicon hoses are not kinked • Is the flue connected and sealed. • Is the flue installed correctly. (Checked flues has not been crossed over) . • Has flue a broken join or break. • Is the powerflue module correct (Combustion fan must be flat face, cast aluminium constructed, painted black with 3 mounting flanges. Incorrect fan will not supply adequate airflow for pressure switch engagement. • Is the powerflue fan outlet blocked – may occur on units approx. 1 year or older. -remove fan and check powerflue outlet. • Confirm powerflue fan is running, lose connection on fan terminal?

Combustion fan does not operate	<ul style="list-style-type: none"> • Is fan loom connected. • Is power getting to the fan loom – check for voltage at each end of loom. • Is air pressure switch already activated when appliance is off. • Is fan jammed, seized or faulty. – Is there power at the fan • Has a terminal connection become disconnected from the powerflue fan motor.
Pilot sparks but will not ignite.	<ul style="list-style-type: none"> • Is gas turned on. • Is valve supplying gas to pilot. SEE BELOW – Replace valve. • Is pilot injector blocked or dirty. • Is gas supply pressure correct • Is pilot sparking at pilot, an intermitant or no spark check spark wire is not broken or a cracked ceramic on spark rod at pilot.
Pilot ignites and keeps sparking for 60 seconds then goes out.	<ul style="list-style-type: none"> • Incorrect wiring (Polarity) to appliance, A – N wires reversed prior to connection to heater. Refer to electrician for correction al wall socket. • Flame sensing wire disconnected or broken • Appliance is not flame sensing – Gas controller failure. • Pilot flame is to small to contact flame sensing rod. Clean pilot and adjust if required. SEE BELOW • Burner is not adequately earthed. • Earth wire missing or broken from earth to ignition pack.
No spark visible but can hear sparking	<ul style="list-style-type: none"> • Is spark wire connected • Is spark wire free and not touching other wires and surfaces creating a short. • Is ceramic at sparker cracked or chipped. • Is sparker connection at pilot shorting out • Is sparker end and pilot clean.
Pilot is small or uneven	<ul style="list-style-type: none"> • Main gas supply pressure is to low – check inlet gas pressure with manometer at inlet TPP connection. • Pilot pressure set to low. – Adjust to setting listed below. • Pilot injector blocked or dirty. • Soot build up on pilot – clean pilot head.

Pilot flame is yellow – orange in colour	<ul style="list-style-type: none"> • Pilot injector blocked or dirty. • Soot build up on pilot – clean pilot head. • Incorrect gas type.
Pilot lights but main burner does not ignite	<ul style="list-style-type: none"> • Check burner pressure - Does gas valve open to supply gas to main burner - Faulty gas valve. • Is low gas pressure setting incorrect. • Pilot has flame failed 3 times and gone into lockout mode – pilot may remain on if established. • Confirm with manometer by testing burner pressure. • Turn off appliance using remote and wait 2 mins before retrying. • Turn off mains power to appliance for 20seconds for a full reset.
Pilot lights, burner tries / ignites then pilot extinguishes, may repeat or lockout after 3 times.	<ul style="list-style-type: none"> • Check supply pressure is remaining above 1.1kPa Nat gas and 2.5kPa LPG. Dropping pressure below a threshold will cause appliance to shutdown. • Pilot adjustment screw requires adjustment to increase pilot supply pressure, Adjust pilot screw anticlockwise 1/8 turn outwards. Recheck ignition.
Main burner flames are uneven in height	<ul style="list-style-type: none"> • Remove burner and clean, replace if faulty - damaged. • Check media arrangement is installed as per instructions. • Check aeration cap is correct. • Replace burner, aeration cap and injector
Main burner flames are very yellow	<ul style="list-style-type: none"> • Aeration is set incorrectly/blocked – Refer to manufacturer. • Dirty / blocked injectors. • Appliance burner pressures are incorrect. • Incorrect gas type.
Main burner flames are very blue, clear and lifting	<ul style="list-style-type: none"> • Aeration is set incorrectly – refer dataplate. • Aeration cap is loose on burner with gaps around perimeter. • Check injector sizing. • Incorrect gas type.
Burner flames are highly distorted towards or away front glass	<ul style="list-style-type: none"> • Door is not correctly sealed – remove and reseal. • Check door seal is correctly located. • Missing or removed screws in firebox.

Soot at pilot causing flame sensing issues	<ul style="list-style-type: none"> • Clean soot, adjust media to keep away from pilot cutout area. • Check pilot injector is correctly fitted and not blocked.
No heat exiting from appliance or inadequate heat from appliance	<ul style="list-style-type: none"> • Is fan operating. • Are burner pressures correct. • Is gas supply correct to maintain correct burner pressures. • Is room oversized for the heater. • Is airflow blocked. • Does fan need cleaning
Rattling noise from cabinet	<ul style="list-style-type: none"> • Fan loose on mount screws. Tighten wingnuts. • Fan out of balance. • Fan wheels require cleaning. • Ensure fan outlet is not touching panels inside heater • Pilot tube touching trim / fan mount bracket.
Combustion spillage from around door.	<ul style="list-style-type: none"> • Check door is correctly fitted. • Door rope seal broken or over. Replace door rope seal
Flames appear small	<ul style="list-style-type: none"> • Gas pressure incorrectly set. • Gas supply or supply pipe size issue.
Fire operates for approx. 30 mins then switches off.	<ul style="list-style-type: none"> • Overtemp disc has been activated • Is fan discharge blocked. • Are fans operating • Do fans need cleaning • Is the discharge air being redirected to the lower part of the appliance by other devices such as an airconditioner or cooler fan? • Has the powerflue fan 240V power. Possible fan motor overheating.
Pilot stays on after burner goes out and remains on	<ul style="list-style-type: none"> • Remote control set to CPI - change mode to IPI on remote
Fan noise higher than expected	<ul style="list-style-type: none"> • Check supply voltage to appliance • Fan noise levels vary subject to model, approx. sound level 44- 47dBa at 1m at 240VAC Fan noise levels may vary due to the installation type and the supply voltage. Voltages above 240VAC will increase the fan speed/ noise levels.

FAULT GUIDE SUPPLEMENT CHECKS - HOW TO

CHECKING REMOTE IS WORKING AND RECEIVED BY APPLIANCE

With power to the appliance on. Press the on-off button on the remote. The appliance should make a single beep each time the on-off button is pressed.

When the remote is turned on check the operation mode is calling for heat. E.g. – an ideal mode for servicing is Manual (thermostat off) mode and temperature set to high.

Should the appliance not make a beep sound resync as per above instructions. Note – when changing settings such as temperature no beep will occur.

CHECKING HIGH LIMIT IS WORKING

The high limit is located on the upper RHS of the appliance.

The high limit is a normally closed circuit that opens should the appliance exceed the safe working temperature.

Voltage at High limit 6V DC

The voltage is detected only when there is a call for heat.

Using a multimeter set to VDC, turn appliance on, voltage can be measured at the air pressure switch and return wire to the ignition control.

CHECKING PRESSURE SWITCH IS WORKING

The pressure switch is located in the lower front area of the appliance.

The pressure switch is a normally open circuit that closes when the powerflue fan operates.

Should the pressure switch be a closed circuit during the safety precheck the appliance will not operate.

Voltage at Pressure switch 6V DC

The pressure switch has 6vDC supplied to the pressure switch at all times the mains power to the appliance is on (regardless of remote control on-off state). The circuit is only closed when the powerflue fan activates and closes the pressure switch.

The pressure switch has 2 pressure hoses to activate the switch and sense a differential pressure across the appliance.

This will only occur when the powerflue fan is operating.

Black side of switch = low pressure side

Cold approx. -10pa / Hot approx. – 8pa

White side of switch = high pressure side

Cold approx. -230pa / Hot approx. –210pa

The pressure switch is set at approx. 150pa.

CHECKING POWER TO GAS VALVE

The gas valve has 2 connections – Green solenoid and orange solenoid.

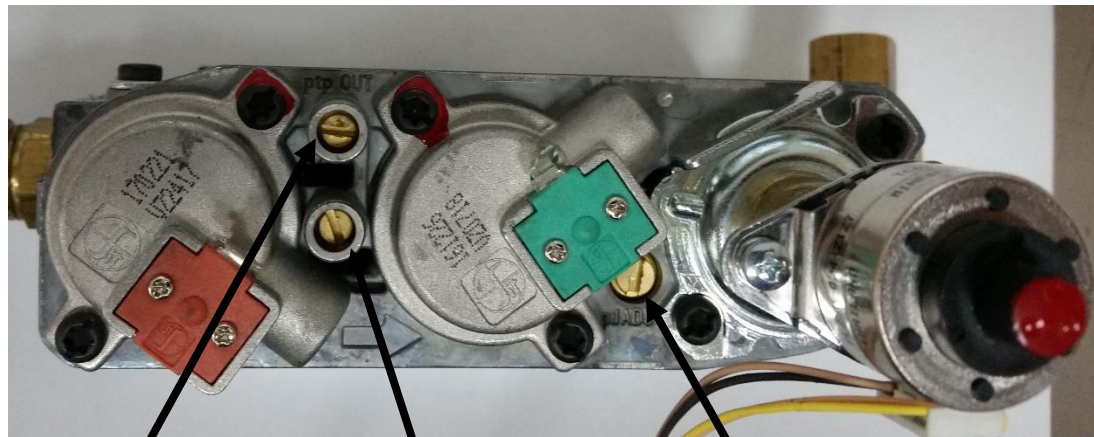
The orange solenoid powers the pilot valve

The green solenoid powers the main valve. (note the orange solenoid must also be powered for the main valve to supply gas to the burner)

Voltage to gas solenoids OFF = 0VDC ON = 0.9VDC to 6 VDC

BURNER PRESSURE ADJUSTMENT

Burner test point pressures must be checked whilst appliance is running. Pressures are not adjustable
Pilot pressure is adjustable.



Burner pressure test point

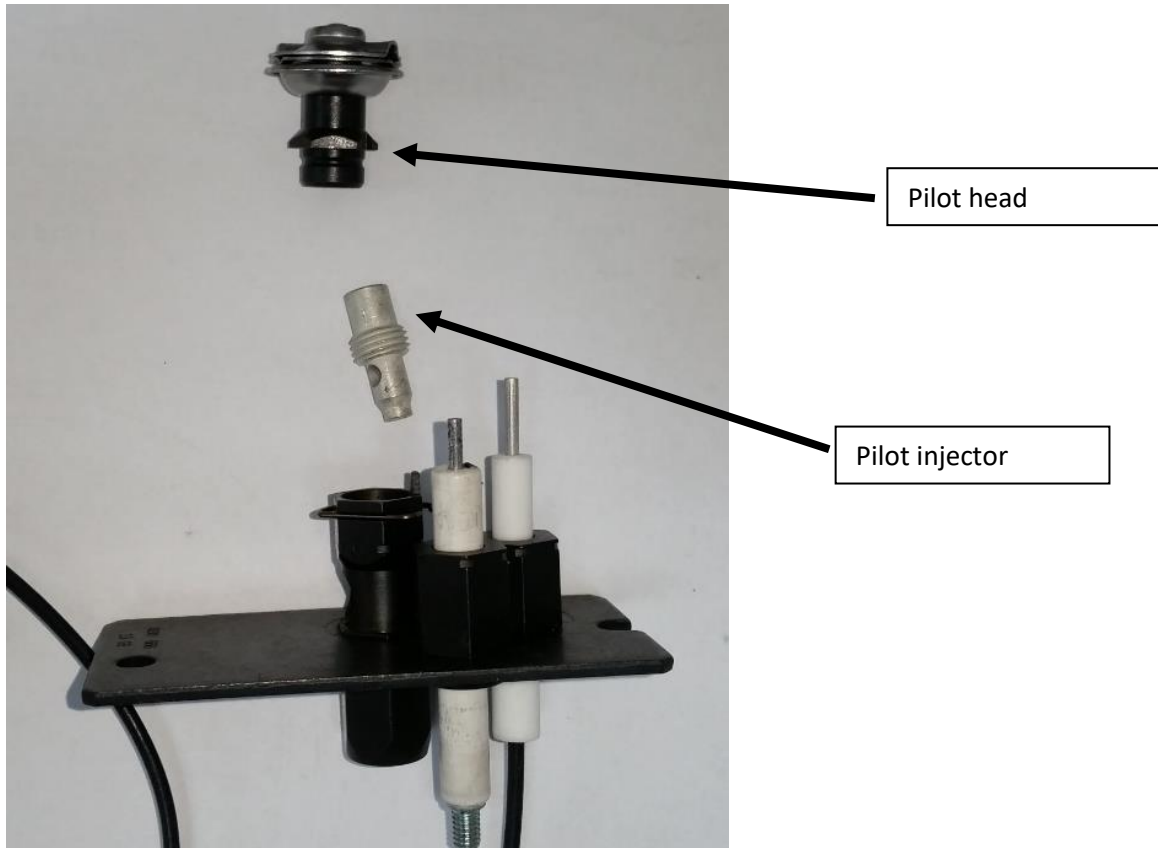
Inlet gas pressure
test point

Pilot pressure adjustment screw

1. Turn appliance off at remote control.
 2. Loosen burner pressure test point screw and fit manometer to barb.
 3. Turn on appliance and set remote control at least 3 deg C above room temperature or on high. Heater will run, ensure remote is on high gas rate. Check pressure.
 4. Confirm maximum and minimum pressures are correct. Turn down remote temperature or burner control to select between high and low burner.
 5. Turn appliance off at remote control.
 6. Remove manometer and tighten test point screw.
 7. Start appliance and check test point for gas leaks where necessary.
- NOTE - An incorrect pressure (low pressure) will indicate a low supply gas pressure.

IGNITION ADJUSTMENTS (SPARK GAPS)

1. The ignition gap is factory set and fixed on all burners and should not be adjusted.
2. In the event of a gas type conversion the correct pilot and pilot orifice must be used.



PILOT GAS PRESSURE ADJUSTMENT

The pilot adjustment screw is factory pre-set and normally should not be adjusted, the appliance is designed to shut down should the pressure drop below a minimum gas pressure point as per below.

Adjustment should be done in 1/8 turn steps

Anticlockwise = increase pressure

Clockwise = decrease pilot pressure

Nat gas – Set range 0.57 to 0.65 kPa - below this pressure pilot will fail to operate. (approx. ¾ to 1 turn out from fully wound in)

LPG - Set Range 1.25 – 1.6kPa below this pressure pilot will fail to operate. (approx. 1 turn out from fully wound in)

Where a replacement valve is supplied or adjustment occurs the pilot should be set to minimum possible that will maintain flame sensing.

Turn appliance off.

Screw pilot adjustment fully in.

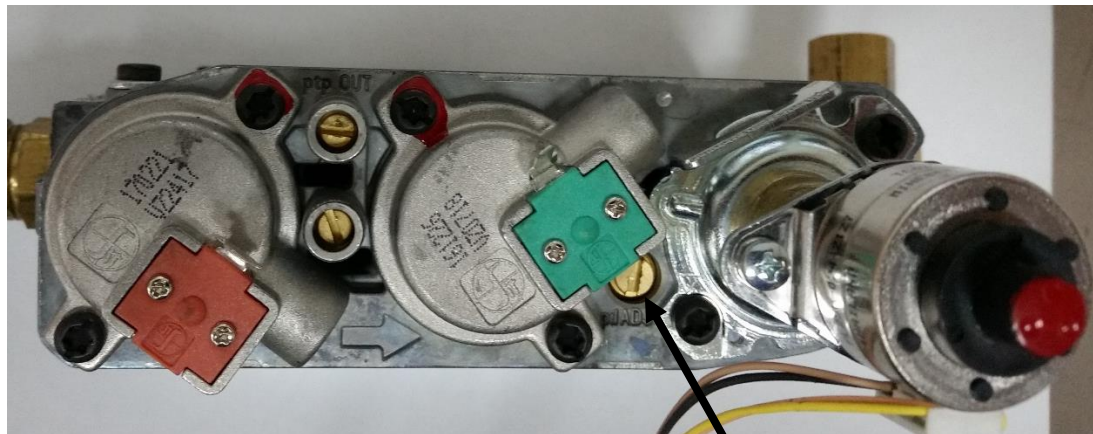
Remove green wire from gas valve.

Turn on appliance and whilst sparking occur, slowly open adjustment screw until flame sensing occurs on the pilot. (Sparking will stop).

Wind screw out approx. 1/8 turn further.

Reconnect green valve wire.

Turn appliance on and check ignition.



Pilot pressure adjustment screw

UNEVEN FLAME HEIGHT OR FLAME TALL AT ONE END

Check media is not sitting on the burner.

In area where flame is tall, move media slightly to create more free gaps and less flame impingement.

In event this is unsatisfactory

Burner injector, aeration cap and burner should be checked and replaced.

Aeration cap fitment (must be tight fit onto burner with no gaps.)



PILOT FITMENT & BURNER SHUTDOWN DUE TO PILOT SENSOR SHORTING ON BURNER 1100 MODELS

1100 Inspire models may have nuisance shutdowns where the pilot has been incorrectly installed and burner has excessive movement. When running the burner may bow slightly and the burner may touch or almost touch the flame rod sensor causing flame shutdown. (May occur on 1100 models only)

To correct – loosen screws holding burner mount bracket at LH end of burner and mover bracket back slightly increasing the gap between sensor and burner. Where move movement is needed the mounting holes may need to be filed or drilled out to allow more movement.

Gap should be set as follows

Flame sensing probe should be 3mm away from burner, finishing same height as the ports and at the RH end of the port block.

Adjust pilot assembly where required.



Gap between burner and flame sensor is crucial. Must be at least 3mm

DOOR GLASS & GLASS SEAL REPLACEMENT

Glass and seal replacement - Refer directly to Glen Dimplex Australia Pty Ltd.
Refer to door fitment for checking of seals and glass

ROOM AIR FAN REPLACEMENT

1. Isolate power supply from appliance.
2. Remove trim as per above instructions.
3. Remove gas valve and electrical tray as per valve replacement instructions
4. Disconnect fan wire loom from fan – NOTE THE CONNECTIONS USED.
5. Remove holding bolts for fan.
6. Slide out fan assembly
7. To replace fan – drill out rivets
8. Motor orientation to be corrected where required. Hold fan housing firmly (DO NOT HOLD FAN WHEEL) and twist motor to unclip. Rotate to correct position and reclip motor into position
9. Attach fan to fan plate using 4mm rivets
10. Slide fan assembly into location
11. Refit fan holding bolts
12. Check fan position, check fan for rattles and correct location.
13. Refit fan wires.
14. Refit cap on unused fan terminal.
15. Refit valve tray assembly as per above instructions.
16. Check for correct operation as per above instructions.
17. Refit trim assembly and trim earth wire.

FAN CLEANING

1. Isolate power supply to appliance
2. Remove trim and trim earth wire.
3. Using vacuum, brush remove dust / lint from fan
4. Fan and heat exchanger may be blown out using compressed air.
5. Check fan wheel spins freely and unrestricted.
6. Refit trim and trim earth wire.

HEAT EXCHANGER CLEANING

Under normal operation the heater exchanger requires minimal cleaning. Excessive dust, fibres pet / animal hair may reduce the heat exchangers performance.

The room air side of the heat exchanger can be cleaned by compressed air and vacuuming around the entry / exit points.

The flue gas side of the heat exchanger under normal operation should not require cleaning. Where cleaning or blockage removal is required, the door and upper baffle will need to be removed. In extreme cases, the flue system may need to be removed. Compressed air and brushes can be used to remove the restriction.

POWERFLUE FAN RESTRICTOR REPLACEMENT

Where appliance shutdown occurs due to non activation of the air pressure switch (appliance has been operating for several months prior) the restrictor in the powerflue fan may have deteriorated. This will only occur on short flue runs, usually wall mounted fan modules only.

1. Isolate mains power from appliance
2. Remove cover from wall mount fan
3. Remove wire connectors from fan
4. Remove fan assembly (4 screws)
5. Lift out fan and outlet tube assembly
6. Loosen hose clamp and remove outlet tube assembly
7. Drill out rivet and remove restrictor. (note tapered end of restrictor is towards the fan)
8. Replace restrictor – ensure tapered end is towards the fan
9. Refit rivet to hold restrictor
10. Fit restrictor tube into silicon sleeve and push firmly hard against the fan, tighten hose clamp
Ensure tapered end of restrictor is towards the fan, ensure the s/steel tube is firmly against the fan, failure to do this (steel tube dropping and sitting lower) will result in air pressure switch issues. The steel tube should just penetrate through the bottom plate by approx. 5mm
11. Refit fan assembly into housing and tighten screws.
12. Reseal silicon around base.
13. Connect electrical connections
14. Fit cover
15. Turn on mains power.



Tapered end

GAS CONVERSION – appliance to be supplied as correct gas type.

Conversion instructions below

Refer to the detailed steps shown in each section relevant to gas conversion

Trim removal

Inner door removal

Gas valve replacement (Fitment of correct gas valve to suit gas type)

Pilot injector replacement (Fitment of correct pilot injector to suit gas type)

Burner removal / replacement (Fitment of correct aeration cap to suit gas type)

Burner injector removal / replacement (Fitment of correct burner injector to suit gas type)

1. Turn off and isolate mains power supply to the appliance
2. Remove trim.
3. Remove earth wire from trim
4. Remove inner door
5. Replace gas valve with correct gas type valve
6. Replace pilot injector with correct gas type
7. Replace burner aeration cap to suit gas type and media type
8. Replace main burner injector to suit correct gas type
9. Replace Nat gas sticker with LPG
10. Remark the dataplate with the correct gas type.
11. Refit media as per instructions
12. Refit componentry including inner door.
13. Test appliance for gas leaks
14. Test appliance for correct operation.
15. Fit trim (connect earth wire to trim when fitting trim)
16. Check appliance for correct operation.

Part A - TRIM AND DOOR REMOVAL & REPLACEMENT

1. Turn off mains power to appliance.
2. Remove trim.
3. Remove earth wire from trim
4. Remove door screws.
5. Remove door

REFITTING DOOR

6. Ensure glass seal is fully bonded to metal frame (check entire perimeter of glass).
7. Ensure door seal is sitting on glass and held in place.
8. Ensure glass is sitting firm against seal with no gaps or bows.
9. Refit door.
10. Slightly lift door -Refit door screws. Note – tighten screws hand tight
11. Refit earth wire to trim and refit trim to appliance.



Part B - GAS VALVE REMOVAL (Refer IOM for photo steps)

1. Turn main power supply off to appliance. (Isolate appliance)
2. Remove trim (4 screws) – NOTE EARTH WIRE STILL TO BE DISCONNECTED – TRIM MAY NOT BE ABLE TO BE FULLY LOWERED
3. Disconnect earth wire (Lower LH corner of trim)
4. Turn gas isolation valve to off
5. Remove spark wire from ignitor
6. Disconnect gas tube from isolation valve (main valve side)
7. Remove pilot tube from pilot assembly (undo 10mm brass nut) – CARE MUST BE TAKEN TO PREVENT DAMAGE TO SPARK ROD
8. Mark air pressure switch hoses to enable correct connection, disconnect hoses from air pressure switch
9. Disconnect flame rod sensor from ignition pack
10. Disconnect electrical tray earth eyelet
11. Undo tray holding wingnuts (2 off)
12. Disconnect gas pipe from valve outlet.
13. Disconnect valve wires from valve
14. Remove valve from electrical tray (3 retaining screws)
15. Remove gas pipe connections from valve and fit to correct gas type valve.
16. Reattach valve to mounting plate.
17. Reconnect valve wires from ignition pack.
18. Refit tray assembly and holding wingnuts
19. Reconnect burner gas pipe to the valve outlet and tighten
20. Connect gas pipe to isolation valve and tighten.
21. Connect pilot tube and tighten
22. Ensure all connections are tight.
23. Connect gas and leak test connections upto the gas valve.
24. Connect flame rod sensor
25. Connect air pressure switch hoses
26. Connect sparker wire
27. Adjust pilot pressure adjustment screw as per the specific instructions above
28. Perform correct operation check

Part C - PILOT AND PILOT INJECTOR CHANGE

1. Remove trim and door as per above instructions
2. Remove media from firebox.
3. Remove burner side covers.
4. Remove front media support
5. Remove lower front media support (screws / nuts from underneath firebox)
6. Remove pilot shield
7. Pilot assembly can now be removed. – If removed a bead of silicon is to be applied to base of pilot assembly when refitting to ensure airtight seal.

FOR CONVERSION - PILOT ASSY DOES NOT NEED TO BE REMOVED

8. Remove clip from pilot head assembly



9. Lift out pilot head
10. Using 4mm Allen key unscrew pilot injector



11. Replace injector with correct gas type and tighten
NAT GAS (No groove) LPG (groove on lower area)



12. Refit pilot head – NOTE location notch on pilot head
13. Refit clip
14. Refit pilot shield (to sit flush against burner)
15. Fit front media supports back into place.
16. Fit burner side covers.

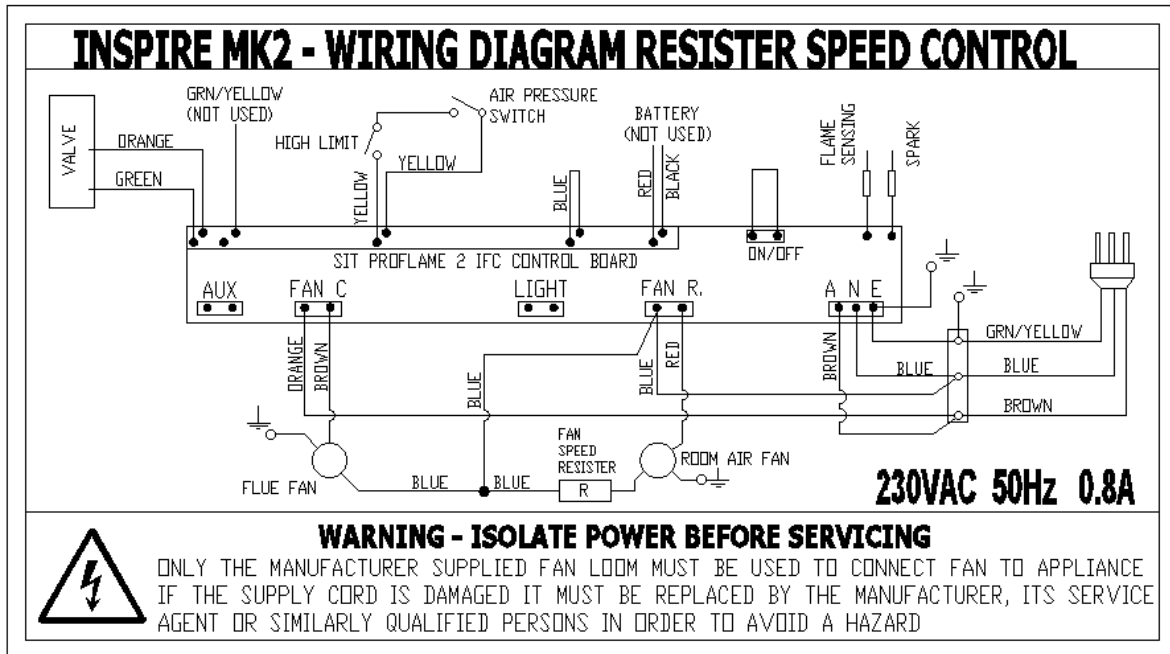
Part D - BURNER, BURNER AERATION AND MAIN INJECTOR REPLACEMENT

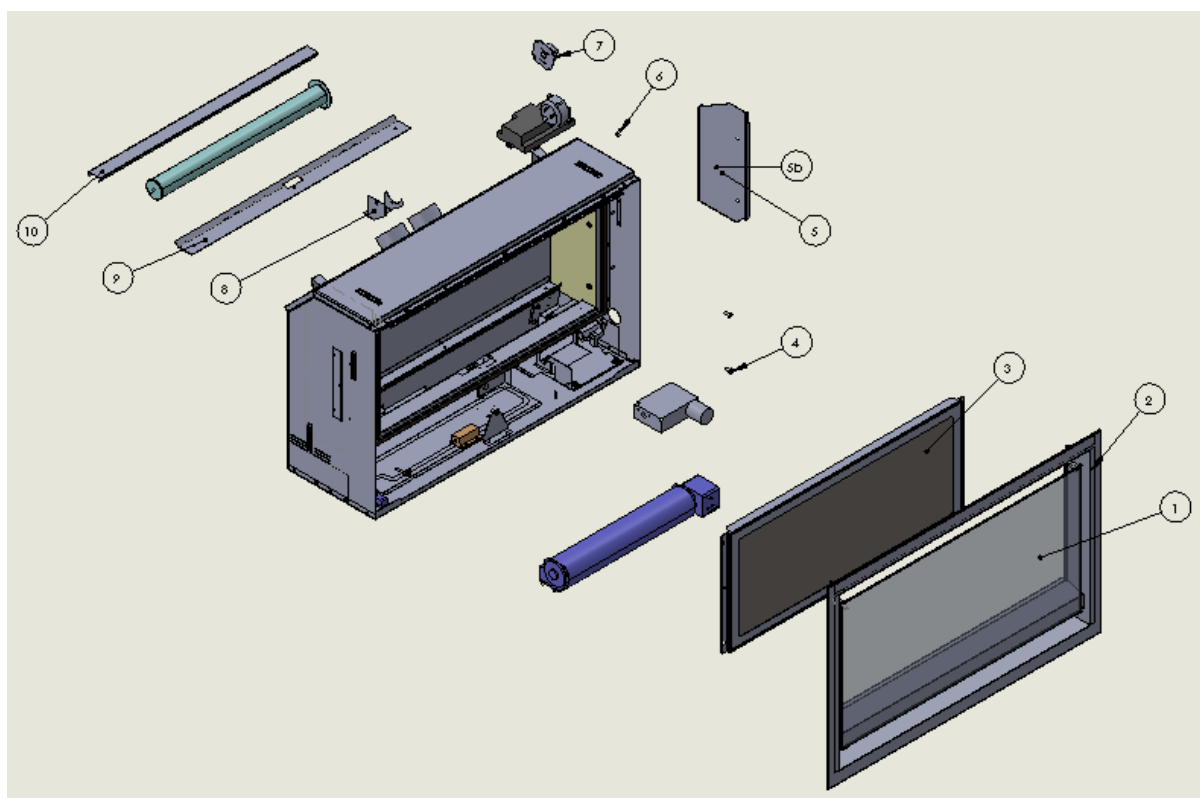
1. Remove trim and door as per above instructions
2. Remove media from firebox.
3. Remove burner side covers.
4. Remove front media support
5. Loosen retaining nut from end of burner
6. Remove bracket retaining screws and lift / slide burner out.
7. Replace aeration cap with correct cap to suit gas type and media type.
8. Remove injector from holder.
9. Fit new injector – push firmly fully into holder.
10. Fit olive onto injector, fit nut and tighten. Injector should protrude from nut by approx. 7mm
11. Unclip pilot head and lift off.
12. Refit burner – Rotate burner to ensure burner is in its location slot. Replace holding nut at end of burner and tighten to secure the burner. Burner sits on and approximate angle of 15deg tilted forward.
13. Burner aeration cap to sit against injector brass nut.
14. Refit burner end bracket and tighten screws.
15. Tighten end burner nut
16. Refit front media support
17. Refit burner side covers.
18. Refit media as per media setup (refer instructions)
19. Refit firebox door.

Part E - CHECKING FOR CORRECT OPERATION

1. Check appliance for correct flame operation
2. Fit manometer to burner test point.
3. Check all gas connections for leaks
4. Run appliance and check for upstream gas leaks.
5. Check burner pressure is correct
6. Check pilot flame is clean and stable.
7. Check main burner cross lights smoothly and flame is clean with a yellow / orange flame colour
8. Check flame pattern is consistent along burner.
9. Remove manometer and tighten gas test point.
10. Check fan operation is smooth
11. Check wires are clipped and away from fan wheel.
12. Check wiring for loose or damaged wires.
13. Check door and appliance for spillage and CO leakage.
14. Turn appliance off.
15. Refit front trim and earth wire to trim.
16. Recheck appliance operation.
17. Turn off.

WIRING DIAGRAM





Item	P/N 700 Model	900 Model	1100 Model	Description	Qty per unit
1	994045	995045	996045	Outer glass only	1
2	994018	995018	996018	Outer Trim assembly	1
3	994002	995002	996002	Inner door +glass and rope seal	1
4	M6 x 30MTS	M6 x 30MTS	M6 x 30MTS	Inner door bolt	6
5	993092	993092	993092	RH inner firebox side	1
5b	993093	993093	993093	LH inner firebox side	1
5c	994089	995089	996089	Rear firebox liner (not shown)	1
6	M5 x 16MTS Black	M5 x 16MTS Black	M5 x 16MTS Black	Trim screw black	3
7	994011	995024	996024	Aeration cap Nat gas Driftwood	1
7a	994021	995021	996021	Aeration cap Nat gas Pebbles	1
7b	994011	995012	996012	Aeration cap Nat gas Snowgum	1
7c	994012	995012	996022	Aeration cap LPG Driftwood	1
7d	994024	995022	996023	Aeration cap LPG Pebbles	1
7e	994012	995012	996012	Aeration cap LPG Snowgum	1
8	993043	993043	993043	Burner LH end mount bracket	1
9	994051	995051	996051	Front media blade	1
10	994052	995052	996052	Rear media / pebble plate	1

PARTS LIST

Valve



Pilot with bracket, hood, injector,spark and flame sensor



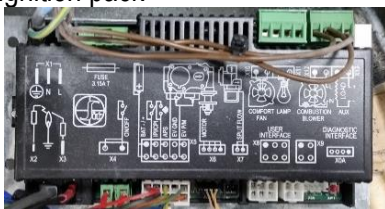
Injector



Burner



Ignition pack



Remote



700 MODEL MK2		QTY
PART NO	ITEM	
RFG-INS07MK2	INSPIRE FAN LOOM 700 MK2	1
RF-51615-33-206	2.06MM INJECTOR NG	1
RF-51615-33-125	1.25MM INJECTOR LPG	1
NUTOL516	5/16" NUT AND OLIVE SET (REQUIRED FOR INJECTOR CHANGE)	1
CB-16S-MES-01	TANGI 16" FAN	1
885001	SIT PROFLAME NG VALVE	1
885002	SIT PROFLAME LPG VALVE	1
584319	SIT PROFLAME MODULE	1
584050	SIT REMOTE CONTROL	1
915903	FLAME SENSOR WITH LEAD	1
915024	SPARK ELECTRODE	1
977165	SIT PILOT INJECTOR NG	1
977167	SIT PILOT INJECTOR LPG	1
190668	PILOT BRACKET	1
975063	SIT PILOT HOOD	1
RFG-A800SPKR-RW	SPARK LEAD	1
W02029RF150	150PA AIR PRESSURE SWITCH	1
TSFFNCR-100	100DEGC HIGH LIMIT	1
FU 430.500.029	435MM LONG BURNER	1
4-GD-2	DOOR ROPE TAPE	2.4M

NOTE – when ordering an injector, a 5/16 nut and olive must also be ordered.

900 MODEL MK2		QTY
PART NO	ITEM	
RFG-INS09MK2	INSPIRE FAN LOOM 900 MK2	1
RF-51615-33-230	2.30MM INJECTOR NG	1
RF-51615-33-140	1.40MM INJECTOR LPG	1
NUTOL516	5/16" NUT AND OLIVE SET (REQUIRED FOR INJECTOR CHANGE)	1
CB-16S-MES-01	TANGI 16" FAN	1
885001	SIT PROFLAME NG VALVE	1
885002	SIT PROFLAME LPG VALVE	1
584319	SIT PROFLAME MODULE	1
584050	SIT REMOTE CONTROL	1
915903	FLAME SENSOR WITH LEAD	1
915024	SPARK ELECTRODE	1
977165	SIT PILOT INJECTOR NG	1
977167	SIT PILOT INJECTOR LPG	1
190668	PILOT BRACKET	1
975063	SIT PILOT HOOD	1
RFG-A800SPKR-RW	SPARK LEAD	1
W02029RF150	150PA AIR PRESSURE SWITCH	1
TSFFNCR-110	110DEGC HIGH LIMIT	1
FU 430.500.028	555MM LONG BURNER LPG	1
4-GD-2	DOOR ROPE TAPE	3.0M

NOTE – when ordering an injector, a 5/16 nut and olive must also be ordered.

1100 MODEL MK2		QTY
PART NO	ITEM	
RFG-INS11MK2	INSPIRE FAN LOOM 1100 MK2	1
RF-51615-33-249	2.49MM INJECTOR NG	1
RF-51615-33-150	1.50MM INJECTOR LPG	1
NUTOL516	5/16" NUT AND OLIVE SET (REQUIRED FOR INJECTOR CHANGE)	1
CB-165-MES-01	TANGI 16" FAN	1
885001	SIT PROFLAME NG VALVE	1
885002	SIT PROFLAME LPG VALVE	1
584319	SIT PROFLAME MODULE	1
584050	SIT REMOTE CONTROL	1
915903	FLAME SENSOR WITH LEAD	1
915024	SPARK ELECTRODE	1
977165	SIT PILOT INJECTOR NG	1
977167	SIT PILOT INJECTOR LPG	1
190668	PILOT BRACKET	1
975063	SIT PILOT HOOD	1
RFG-A800SPKR-RW	SPARK LEAD	1
W02029RF150	150PA AIR PRESSURE SWITCH	1
TSFFNCR-100	100DEGC HIGH LIMIT	1
BESS800770WFN5	800MM LONG BURNER NAT GAS	1
4-GD-2	DOOR ROPE TAPE	3.2M

NOTE – when ordering an injector, a 5/16 nut and olive must also be ordered.

END OF DOCUMENT