

*Fisher & Paykel*  
appliances

customer *care*™

# Service Manual

## IZONA CookSurface

**Models:**  
CG363ML  
CG363MLD



*care*

**599811A**



# PRODUCTS

**Brand** Fisher & Paykel  
**Voltage** 110 -120V, 60Hz

<b>Model Number</b>	<b>Description</b>	<b>Product Code</b>
CG363MLNGB1	Glass surface gas cooktop, 3 Aero burners, NG gas compatible	88543
CG363MLDNGB1	Glass surface gas cooktop, deep glass, 3 Aero burners, NG gas compatible	88544
CG363MLLPB1	Glass surface gas cooktop, 3 Aero burners, LP gas compatible	88546
CG363MLDLPB1	Glass surface gas cooktop, deep glass, 3 Aero burners, LP gas compatible	88547

The specifications and servicing procedures outlined in this manual are subject to change without notice.

The latest version is indicated by the reprint date, and replaces any earlier versions.

**Fisher & Paykel Appliances Inc**  
 5800 Skylab Rd,  
 Huntington Beach  
 California, CA92647  
 USA  
 Telephone: 888 936 7872

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# 1 SERVICING REQUIREMENTS

## 1.1 General Warning

Only qualified gas and electrical service people should service this product.

## 1.2 Health & Safety

When servicing the cooktop, health and safety issues must be considered at all times. Specific safety issues are listed below with their appropriate icon. These are illustrated in the service procedures to remind service people of the health and safety issues.



### Electrical Safety

Isolate the cooktop from the electrical supply before servicing. Failure to do so could result in an electrical shock. If the power is required to be on for electrical fault finding, then extreme care should be taken not to make contact with electrical components other than with testing probes. Ensure the cooktop is turned off when removing any electrical component or connection.



### Electrostatic Discharge

An anti-static strap is to be used as electrical static discharge (ESD) protection when servicing electronic components.



### Good Working Practices

Ensure the work area is clean and tidy at all times to avoid a hazard while service work is being carried out. Clean the cooktop and tidy the work area before and after service work is completed.



### Insulation Test

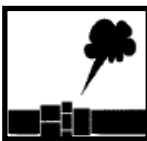
Use an Isolation Resistance tester to check insulation.

**Warning!** Short together the phase and neutral terminals to avoid damaging electronic circuitry.



### Sheet Metal Edges

Take care and use appropriate protection when handling sharp metal edges to avoid laceration.



### Gas Leak Hazard

Isolate the cooktop from the gas supply if necessary before servicing and leak test after all gas related repairs.



### Heat Hazard

Ensure wiring is correctly routed away from potentially hot metal parts.



### Torque Sensitive

Gas fittings are torque sensitive, over tightening could damage them and cause a gas leak.

## 1.3 Specialised Tools

### 1.3.1 Static Strap

The static strap is to be used as E.S.D. protection when replacing or handling electronic components.

## 2 DIMENSIONS & SPECIFICATIONS

### 2.1 Product Weight

- Max. 57.3 lb packed (26kg)

### 2.2 Gas Power Rating

GAS RATE SUMMARY (These products are supplied factory set for either LP or NG.)

US CA	Injector orifice (mm) Nominal rating (BTU)		Injector orifice (mm) Nominal rating (BTU)		Injector orifice (mm) Nominal rating (BTU)		Injector orifice (mm) Nominal rating (BTU)		Injector orifice (mm) Nominal rating (BTU)		Injector orifice (mm) Nominal rating (BTU)	
	SMALL				MEDIUM				WOK			
LP 11" H <sub>2</sub> O (0.41 psi)* NG 4" H <sub>2</sub> O (0.15 psi)*	NG		LP		NG		LP		NG		LP	
CG363ML	1.09	6000	0.70	5500	1.15	6800	0.80	7200	1.65	12000	0.95	10500
CG363MLD	1.09	6000	0.70	5500	1.15	6800	0.80	7200	1.65	12000	0.95	10500

\*Nominal pressure with the two smaller burners on High.

### 2.3 Compatible Gases and Pressures

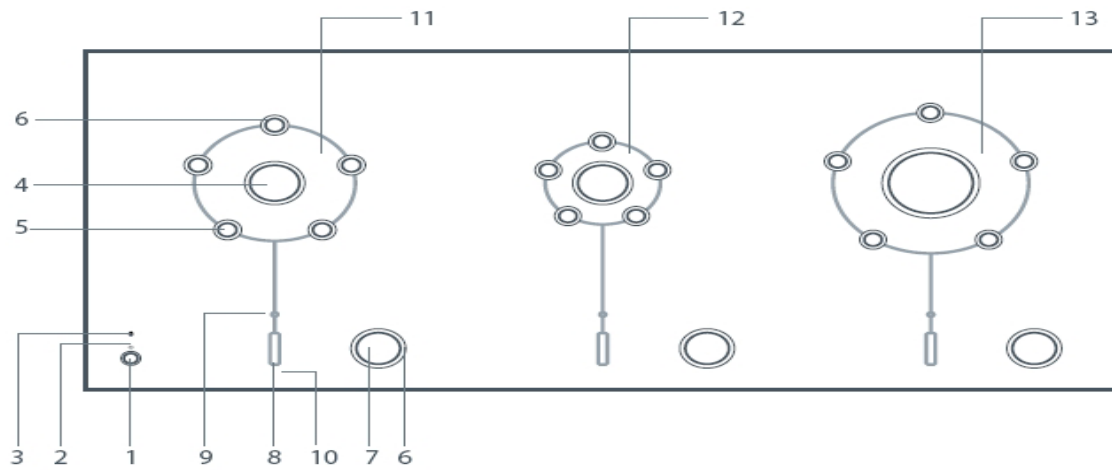
Product is supplied either as a NG gas product or as a LP gas product.

- Natural gas at 4" W.C.P
- LP Gas at 11" W.C.P
- The incoming line pressure must be 1" W.C.P higher than the manifold pressure in order to check the regulator.

### 2.4 Electrical Power Rating

	Single Phase Supply Voltage	Current	Plug
USA/CA	120V	0.7A	Type SJT

## 2.5 Surface Features



1 On/Off power button

2 On/Off light

3 Keylock light

*Pan supports:*

4 Burner head

5 Pan support pins

6 Trim rings

7 Control dial

8 Control display

9 Burner-ready light

10 Hot warning light

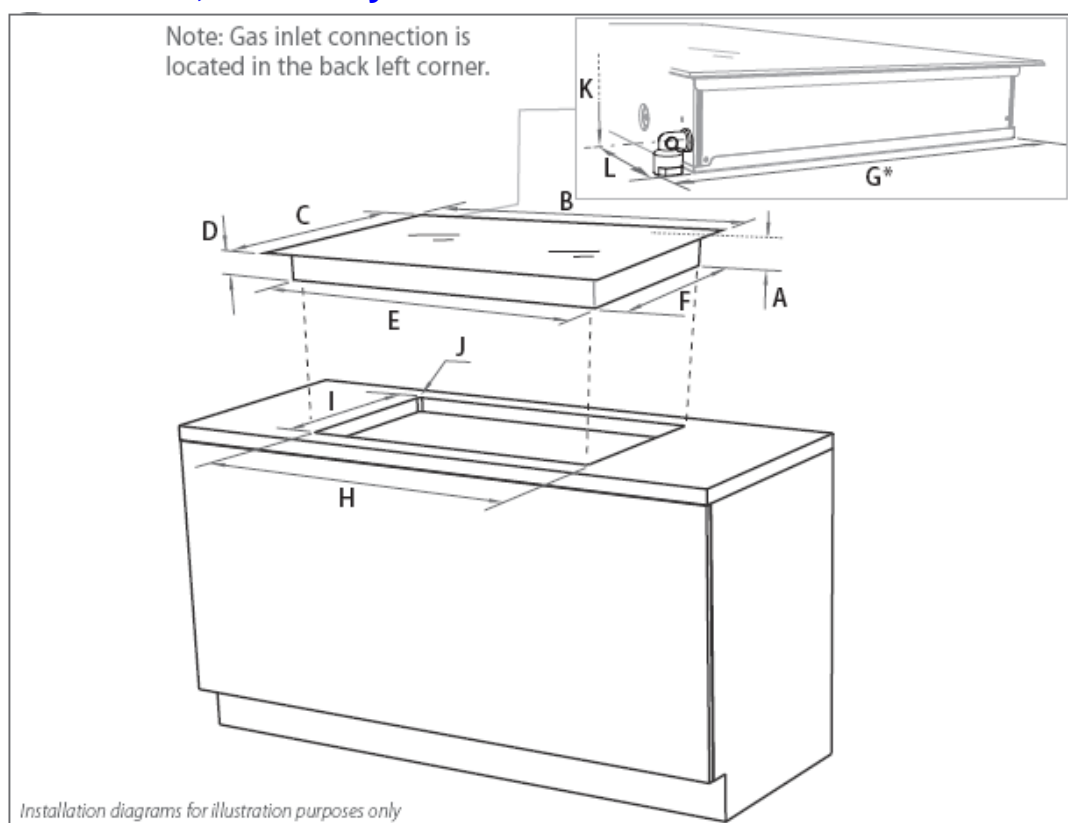
11 Medium Aero™ burner

12 Small Aero™ burner

13 Wok Aero™ burner



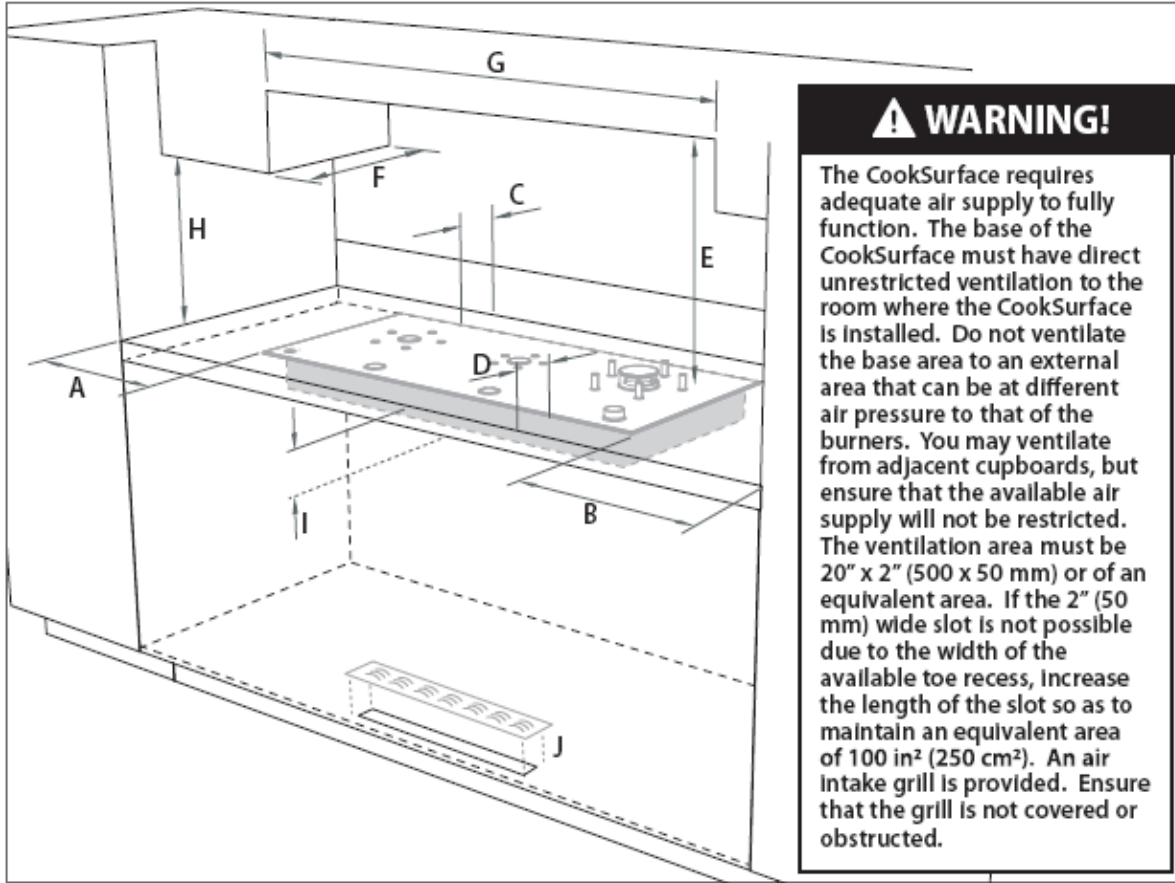
## 2.6 Product, Cabinetry & Clearance Dimensions



### Product and cutout dimensions (Inches (mm))

	CG363ML IZONA	CG363MLD IZONA DEEP	
A	overall height of product (including retracted dials/pan supports)	3¾" (96)	3¾" (96)
B	overall width of product	35½" (900)	35½" (900)
C	overall depth of product	16⅞" (410)	20⅞" (530)
D	height of chassis (below top of counter)	3½" (89)	3½" (89)
E	width of chassis	33⅛" (856)	33⅛" (856)
F	depth of chassis	15⅞" (384)	18⅞" (480)
G	depth of chassis (including fitted elbow*)	16⅛" (424)	18⅞" (480)
H	overall width of cutout	34⅛" (865)	34⅛" (865)
I	overall depth of cutout	15⅜" (390)	19⅛" (494)
J	corner radius of cutout	max. ⅜" (10)	max. ⅜" (10)
K	distance from top of counter to center of gas inlet on product	2½" (64)	2½" (64)
L	distance from edge of chassis to gas inlet on product	¾" (20)	¾" (20)

\* CG363ML models only: If countertop thickness exceeds 2" (50 mm), additional cutout space will be required to accommodate the fitted elbow.



Clearance and cabinetry dimensions (inches (mm))

		CG363ML IZONA	CG363MLD IZONA DEEP
A	minimum clearance from left edge of product to nearest vertical surface	2 3/8"(60)	2 3/8"(60)
B	minimum clearance from right edge of product to nearest vertical surface	3 1/8"(80)	3 1/8"(80)
C	minimum clearance from rear edge of product to: nearest combustible surface nearest non-combustible surface (see ①)	1 1/4"(32) less than 1 1/4"(32)	1/2"(13) less than 1/2"(13)
D	minimum distance from front edge of counter to front edge of product	1 1/4"(32)	1 1/4"(32)
E	minimum clearance from glass surface to combustible surface centered above the cooking surface	30"(762)	30"(762)
F	maximum overall depth of overhead cabinetry	13"(330)	13"(330)
G	minimum distance between overhead cabinets installed to either side of product	36"(915)	36"(915)
H	minimum vertical distance between counter and cabinet extending above the counter	18"(457)	18"(457)
I	minimum clearance below top of countertop to: nearest combustible surface Fisher & Paykel oven or nearest non-combustible surface	4 1/2"(115) 4"(100)	4 1/2"(115) 4"(100)
J	cutout measuring 2" x 20" (50 x 500mm) for air intake grill. Ensure air can easily enter the area around the base of the product from the room in which the product is installed.		

Note: Ensure there is a grounded power outlet within 35 1/2" (900 mm) of the center rear of the product. A suitable flexible hose must be used between the product gas inlet and the connector on the wall. The connector should be 25 1/2"-29 1/2" (650 - 750mm) above the floor and towards the left-hand end of the product. It should be accessible with the product installed.

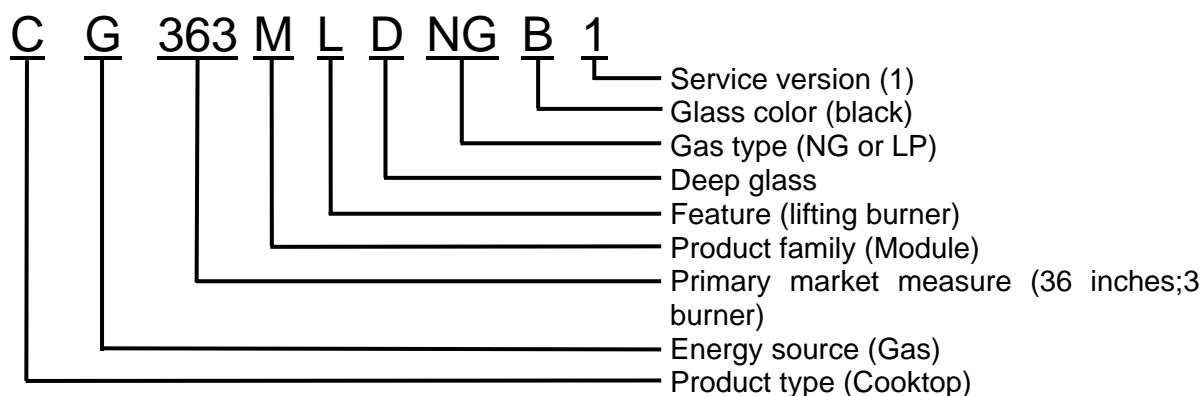
**Note:** For more detailed installation refer to the installation guide 599648A available from the fisher & Paykel website.

## 2.7 Location of Serial Plate

The product serial plate is located on the underside of the cooktop near the gas entry (left rear). There is also a plate on the front left of the chassis (visible in some installations).

## 2.8 Model Number

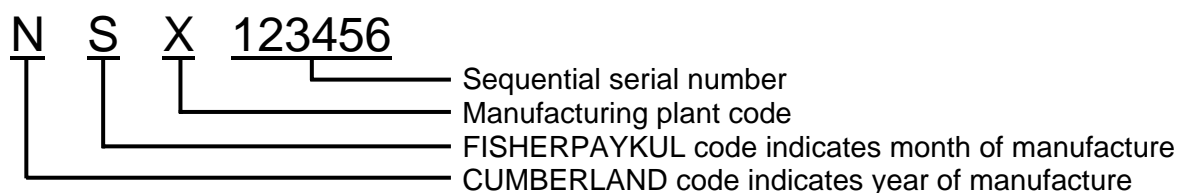
The model number contains the following information:



## 2.9 Serial Number

The serial number consists of three letters and six digits and contains the following information:

Example:



### Cumberland Code

Letter	C	U	M	B	E	R	L	A	N	D
Year	1	2	3	4	5	6	7	8	9	0

### Fisher Paykel Code

Letter	F	I	S	H	E	R	P	A	Y	K	U	L
Month	1	2	3	4	5	6	7	8	9	10	11	12

### Manufacturing Plant Code

A	Laundry – Australia
F	Refrigeration – New Zealand
M	Range & Dishwasher – New Zealand
N	Laundry – New Zealand
Q	Refrigeration – Australia
T	Thailand
X	Mexico

In the example above, the appliance was manufactured in the third month (March) of the ninth year (2009) at the Reynosa plant in Mexico.

## 3 TECHNICAL OVERVIEW

### 3.1 Glass

The hob surface of the cooktop is made from ceramic glass. Graphics are etched on.

### 3.2 Chassis (Frame)

The chassis is screwed on to flat panels, which are glued to the glass with two-part silicone glue. These incorporate a number of forms and cut-outs, to which most of the internal components are attached.

### 3.3 Burners

The burners use a fan-forced air supply drawn from air from within the cabinetry. The fan forces air up through the venturi, mixing with fuel gas from the jet, which combusts in a semi-turbulent manner above the mesh. The fan also supplies secondary air to the burner as it flows up the outside of the venturi.

### 3.4 Pot Support Pins

The pins are made from steel with protective coating. They clip into the lifting mechanism so can be removed for cleaning or fine adjustment to their heights. Note that the centre burner has smaller diameter pins than the outer burners.

### 3.5 Burner Lifting System

Each burner and its pot support pins are raised and lowered by a mechanism comprised of three annular rings separated by ball bearings in slots. The innermost ring moves axially and supports the burner head and pot support pins (via adjustment clips). The outer ring is fixed to the chassis and holds the actuator motor and the micro-switches. The middle ring rotates and is connected to the control knob lifter.

Lift height	- Wok burner	1¼" (30mm)
	- Medium burner	¾" (20mm)
	- Small burner	¾" (20mm)
Actuator motor voltage		25.5V
Actuator motor current (max.)		1A
Maximum pan lifting weight		13.2 lb (6kg) per burner
Maximum pan weight		66.1 lb (30kg) per burner

### 3.6 Micro Switches

The lifter micro-switches are attached to and activated by the burner lifting mechanism. They provide feedback to the electronics that the lifter position is either fully up or fully down. When the cooktop starts, the electronics check if either one of the switches is closed. If both switches are open then it drives the motor until the pins are retracted and the lower switch is closed. If the lifter fails to reach the end position (up or down), the electronics record an F2 Trivet Fault (refer to Section 7.1). This can take 3 to 6 seconds depending on the lifter position. If both switches are closed, it records an F10 fault (refer to Section 7.1). This is because the lifter cannot be at both the top and bottom position at the same time.

(For information on what a fault code looks like, refer to Section 6.13)

### 3.7 Hot Surface Igniter

Gas ignition is achieved using a small resistive heater called a hot surface igniter (HSI) mounted in the burner, in place of spark ignition. The electronics ensures that no more than one HSI is turned on at once. This is to avoid overloading the power supply.

### 3.7.1 Flame Detection

The hot surface igniter (HSI) is energised for 4.5 seconds to ignite; then it switches off to sense the flame. If the electronics detect that the flame has gone out, the HSI is energised for 4.5 seconds, then switches off to sense the flame. This happens three times before it reports an F4 fault (refer to Section 7.1). If the electronics detect a flame signal while the burner is shut off, then fault code F8 is registered.

Voltage 25.5V  
Current ~1A (5A peak)

## 3.8 Fan system

### 3.8.1 Fan

The fan is a brushless DC tangential blower type. It provides air to the burners at a number of fixed speeds, depending on the up/down status of the various burners.

Nominal Voltage 24V  
Current 0.24A

### 3.8.2 Fan Detector

The fan detector is an axial rotating vane anemometer. It contains a Hall-Effect sensor to provide the main PCB with an airflow reading.

The fan will start at a high speed until a signal is detected from the fan detector, then it slows back to the pre-set speed according to the number of burners raised. The fan speed is controlled to maintain a constant airflow rate at the burners, compensating for the number of burners that are up or down, and for airflow restriction due to the filter. If the fan detector cannot detect the correct speed range within 30 seconds, then fault code F7 (refer to Section 7.1) is recorded and the main gas solenoid will close.

## 3.9 Solenoid Valve

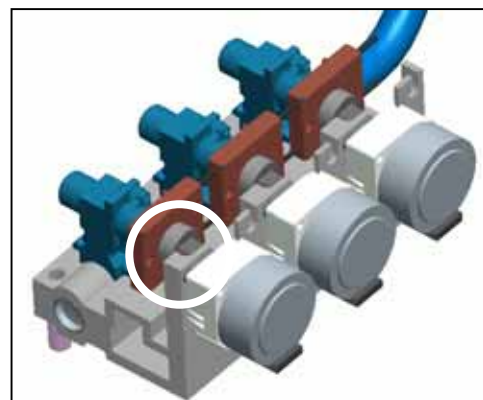
The solenoid valve is a normally-closed type, which is energised only when one or more burners are activated. The electronics are hard-wired such that if a burner is down and its valve is on, the solenoid valve cannot be energised. If this were to happen, fault F11 and sub-fault 3 (refer to Section 7.1 for more information) would be displayed.

The gas inlet to the product is by female 3/8" NPT thread machined into the solenoid valve body.

Voltage 120V  
Current 0.05A

## 3.10 Gas Manifold Assembly

Gas is supplied from the solenoid valve to the manifold through an aluminised steel tube, radially sealed by o-rings to the solenoid valve and to the aluminium extrusion manifold. The manifold has a frost plug pressed into the other end. The gas valves are screwed to this extrusion and driven by step motors held onto the extrusion by a bracket. Valve position sensing is achieved using cam-type switches mounted on the valve shafts. When the cooktop is turned on, the valve turns until it finds one side of the 'gas off' area. Once one of those points is found, it turns the valve to find the other end. Then the valve is positioned at the midpoint between the two points.



- If the electronics can't detect the switch opening, it faults with an F11 sub-fault 2 (valve fails to open).
- If the electronics can't detect the switch closing, it faults with an F11 sub-fault 1 (valve fails to close).

Gas valve closed = flat on shaft facing up (refer to picture above)  
Switch contacts closed = gas off  
Step motor voltage 24V  
Step motor current (max) 0.6A

### 3.11 Control Knob Lifter

The control knob raises and lowers with the burner and pot support pins, through a cam-and-follower mechanism actuated by the rotary part of the burner lifter. A wire rod connects the two mechanisms.

### 3.12 Power Button

The power button is mounted on the upper board of the main PCB and operates through a plunger, which has an o-ring seal against the power button bush. The power button bush is clipped into the chassis and also contains light-pipes for the 'on' and 'keylock' LEDs.

### 3.13 Display PCB

Each display PCB is clipped to its black light-pipe mask, which slots into the chassis. A display light-pipe is held between them. The display PCB has 14 LEDs; one to indicate 'surface hot', the 12 power levels and one for 'burner on'. The display PCB is connected to the burner PCB via a non-removable link.

### 3.14 Burner PCB

Each burner PCB takes inputs from its control knob encoder, gas switch, burner/pin lifter micro-switches and hot surface igniter (when flame sensing). It provides outputs to its gas valve motor, burner/pin lifter actuator motor, hot surface igniter (when igniting) and display PCB.

### 3.15 Main PCB

The main PCB assembly incorporates a switch-mode power supply on its lower board and control for the fan and speaker on its top board. It's attached by two screws to the power button bush, and by three stand-offs to the chassis.



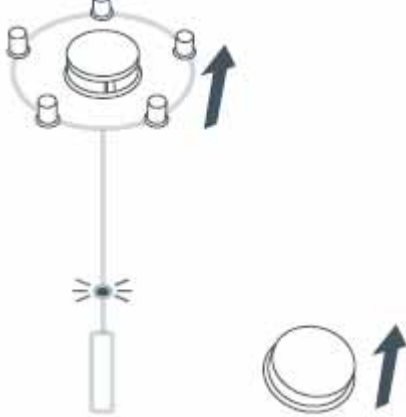
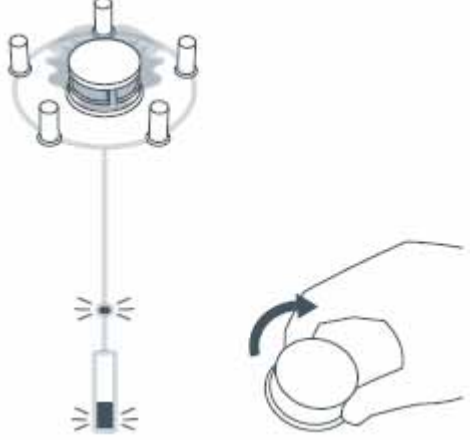
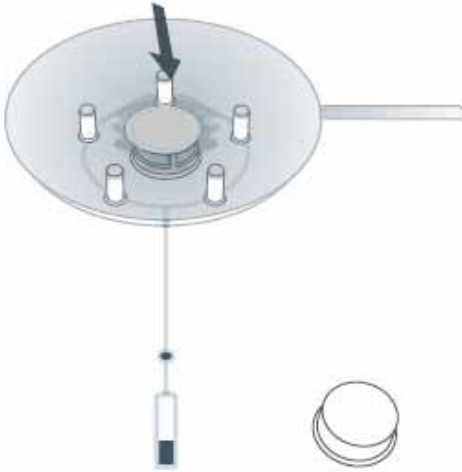
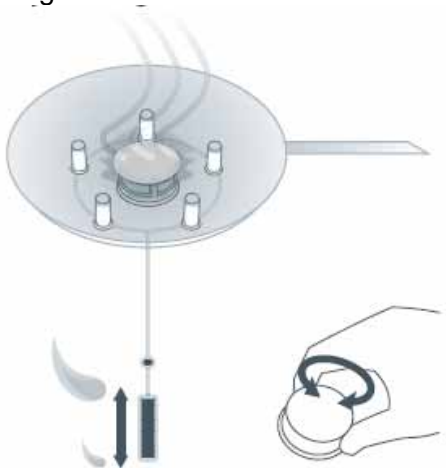
### 3.16 Speaker

The speaker is a moving coil, diaphragm type, attached to the chassis via a speaker enclosure.

Impedance	16Ω
Peak power input	0.6W

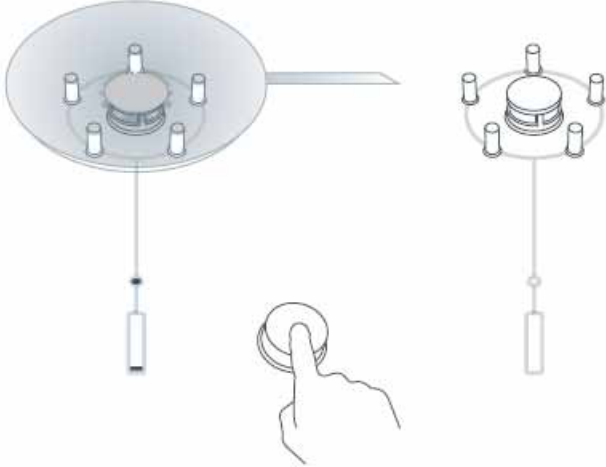
## 4 USE & CARE OF THE IZONA COOKSURFACE

### 4.1 Operating the CookSurface

<p>1. Press the on/off power button. A tone will sound.</p> 	<p>2. Press the control dial. A tone will sound.</p> 
<p>3. The dial and the pan supports will rise. The burner ready light will then glow for four seconds.</p> 	<p>4. While the burner-ready light is glowing, turn the dial clockwise to light the gas. Note: If the burner-ready light goes out before you light the gas, press the dial again.</p> 
<p>5. Place the pan on the pan supports.</p> 	<p>6. Turn the dial to accurately adjust the flame. Note: The flame will not go out if you keep turning the dial down.</p> 

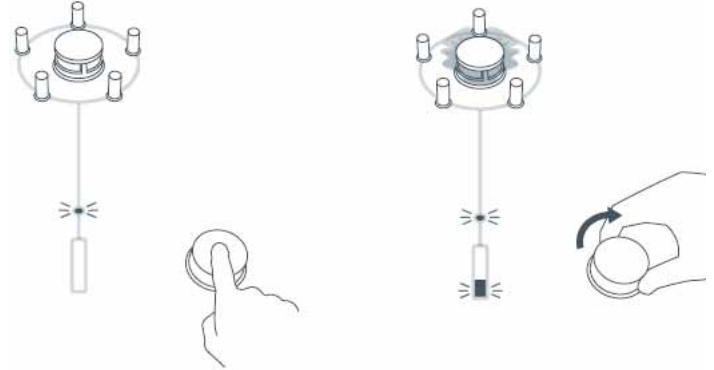


7. To stop cooking, press the dial. The gas will shut off, and the pan supports will stay raised. If they're hot, the hot warning light will glow.

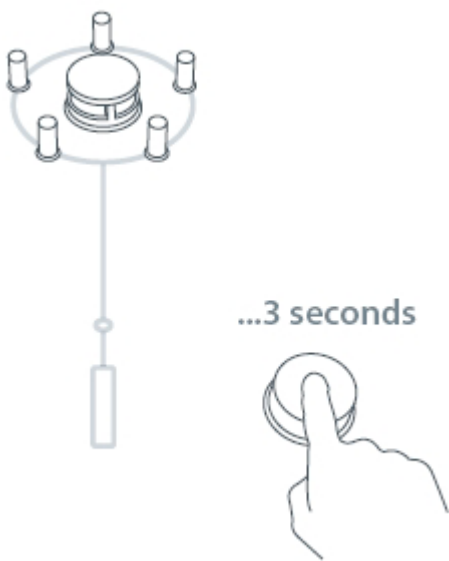


8a) To relight the burner when the pans supports are raised:

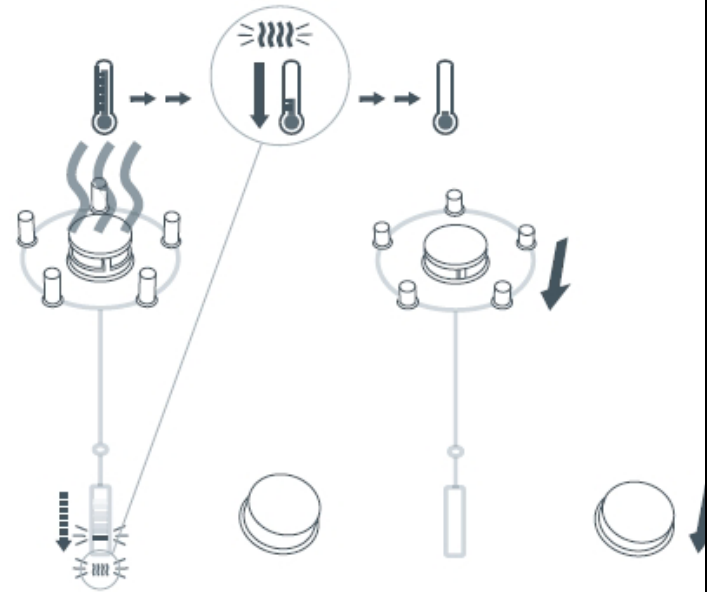
- Press the dial. The burner-ready light will glow for four seconds.
- While the burner-ready light is glowing, turn the dial clockwise to light the gas.



8b) To lower the pan supports automatically after you have finished cooking, press and hold the dial for three seconds while the burner is lit. The flame will go out and the pan supports, if cool enough, will lower.



8c) If the supports are hot, the hot warning light will glow and the control display will show a descending sequence of lights until the burner has cooled. This can take between 30 seconds and 30 minutes depending on the flame setting and how long the burner had been in use. Once cool, the pan supports will lower automatically.



9) To turn the CookSurface off, press the on/off power button. Note: If a burner is still cooling, the hot warning light will glow. Once cool, the burner will lower automatically and the CookSurface will turn off.





## 4.2 Key Lock

The keylock stops children from turning on the dials. The keylock can only be set when the burners are off. To set the keylock, press and hold the on/off power button for two seconds. A tone will sound and the keylock light will then glow. To turn the keylock light off, press and hold the on/off power button for two seconds. A tone will sound and the keylock light will go out.


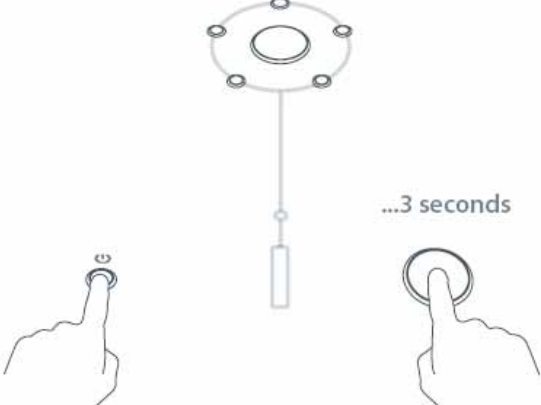
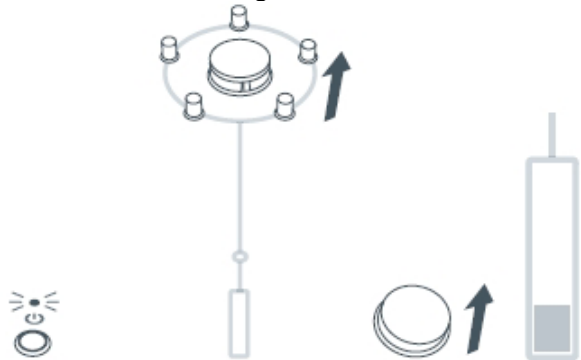
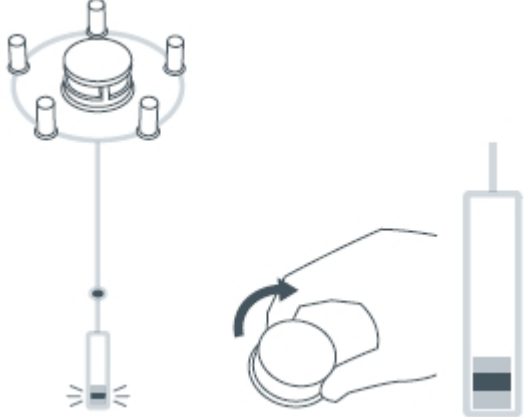


## 4.3 Sound Preference Settings

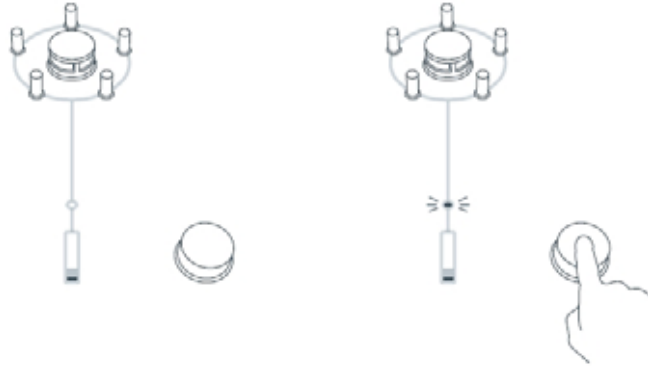
The CookSurface has three pre-set sound preference settings: Tones, Tone Volume, and Feedback Tones.

### 4.3.1 How to Access Sound Preference Mode

To change the sound preference settings follow these steps.

<p>1. Hold down the on/off power button for two seconds. This sets the keylock.</p> <p>...2 seconds</p> 	<p>2. Firmly press both the on/off power button and the nearest burner control dial for three seconds.</p> 
<p>3. Once in the sound preference mode, the on/off light will flash every second and the burners' pan supports will rise. The keylock light will go out. Turn the dial clockwise to highlight the first setting. The other two lights will be dimmed.</p> 	<p>4. Each setting has two options (see table following). Turn the dial to highlight each setting.</p> 
















5. Touch the dial to change the selected sound setting. The burner-ready light will go on or off, depending on which option you have chosen. To revert to the previous option, touch the dial again.



6. To store the setting selection(s) and turn the CookSurface off, press the on/off power button.



### 4.3.2 Sound Settings

Sound Settings	Default Option	Alternative Options
<p>1) TONES</p> <p>The CookSurface tones can be turned on or off.</p> 	<p>ON</p>  	<p>OFF</p>  
<p>2) TONE VOLUME</p> <p>The CookSurface tones' volume can be turned from normal to quiet.</p> 	<p>NORMAL</p>  	<p>QUIET</p>  
<p>3) FEEDBACK TONES</p> <p>The feedback tones for high/low flame settings and burner motion can be turned on/off.</p> 	<p>ON</p>  	<p>OFF</p>  

### 4.4 Cool Down Timer

The pins and burner head need to cool down before they are lowered. The electronics on each burner board calculate the total heat produced during the operation of that burner and uses this information to calculate a cool down time. The Hot LED is on while the timer is running. The burner cannot retract until the time expires. The maximum cool down timer value is 30 minutes. However, the timer cannot expire while the burner temperature sensor (refer to Section 4.5.1) is over the maximum touch-safe temperature (122°F ~ 50°C).

## 4.5 Temperature Sensors

### 4.5.1 Burner Board Sensors

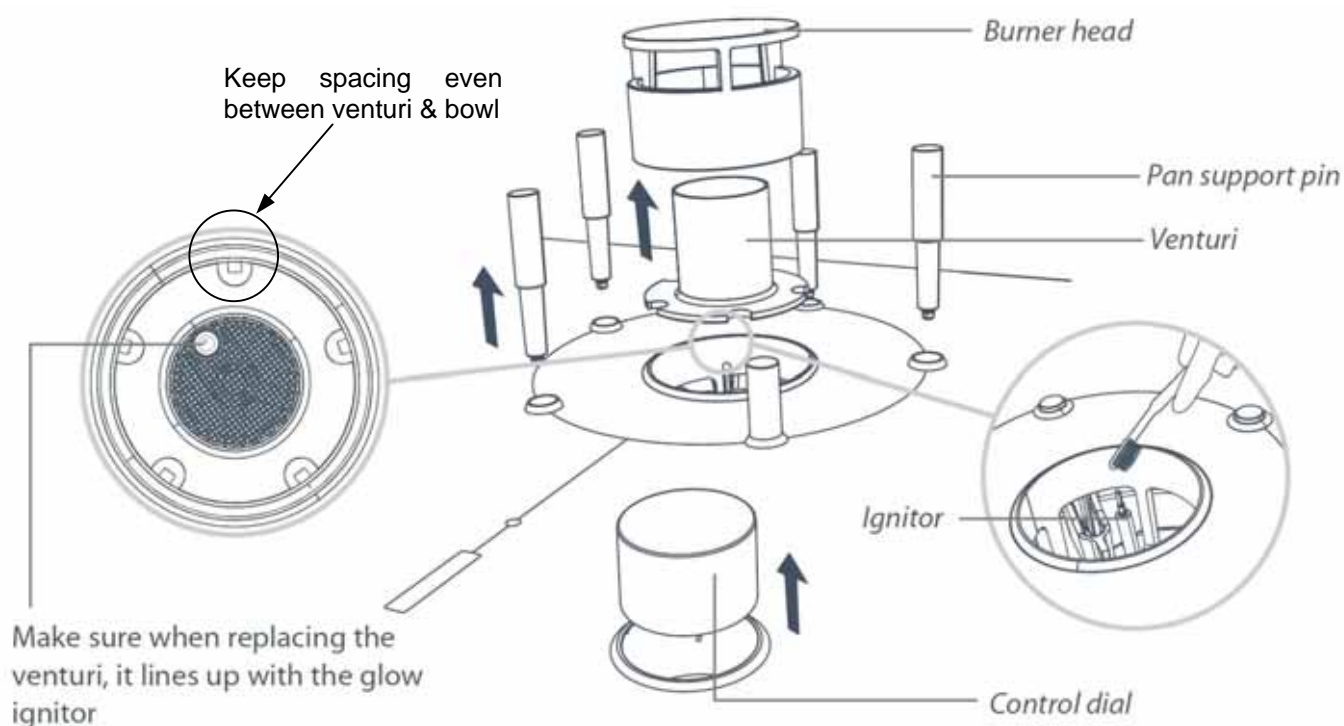
Each burner has a thermistor mounted on a small PCB located near the rear of the burner. If a thermistor detects a temperature exceeding its upper limit, the burner flame height is reduced to flame level 8 until the temperature falls to an acceptable limit. The display remains unchanged. If the temperature exceeds 221°F (105°C) an F3 fault is generated and the burner is turned off. An F3 is also generated if the temperature is less than -22°F (-30°C), which indicates a broken thermistor. Similarly, a thermistor on the main PCB will turn the product off. Burner board sensors are also used in conjunction with the cool down timer to ensure the pins and burner head are cool (refer to Section 4.4).

### 4.5.2 Master Board Sensor

A thermistor is also mounted on the master PCB. If this detects a temperature exceeding 185°F (85°C) an F12.4 fault is generated.

An F12.4 fault is also generated if the temperature is less than -22°F (-30°C), which can indicate a broken thermistor. An F12.4 fault is a “class A” fault (refer to Section 6.13.1), so the whole product is disabled.

## 4.6 Cleaning



### 4.6.1 Cleaning The Ceramic Glass

Wipe the CookSurface with a damp soft cloth and mild detergent. A ‘microfiber’ cloth is ideal for this task. Soften stubborn stains under a soapy cloth.

The ideal glass cleaner is the ‘Vileda PUR active’ cleaning sponge, included with the product. The abrasive surface is used for shifting burnt-on food and grime. The smooth microfiber surface is used for picking up grease and grime and wiping the glass clean with a streak-free finish. Ceramic cooktop cleaner may be used to spot-clean stubborn stains. Follow the instructions on the container. Combining ceramic cleaner with the ‘Vileda PUR active’ cleaning sponge is the most effective method for spot-cleaning ingrained and burnt on stains. If you must use a razor blade scraper, take care not to damage the trim rings.

**Important!** If cooktop cleaner residue is left on the trim rings, it can dry on and may cause the pan supports, control dials and power button to get stuck. Be careful and wipe around the trim rings and not over them.

#### **4.6.2 Cleaning The Pan Supports (The Pan Support Pins & Burner Heads)**

If food spills have burnt onto the pan supports, the supports may not lower when the control dial is pressed and held. This is not a fault. You need to remove and clean them.

#### **4.6.3 To Clean The Pan Support Pins:**

- Press the on/off power button to turn the CookSurface on.
- Press the control dial to raise the pan supports.
- Press the on/off power button to turn the CookSurface off.
- Gently pull the pan support pins up and out. If food has become burnt onto the pins and the surrounding ceramic glass, it may be necessary to gently twist the pin to remove it.
- Soak the pins in warm water with a little hand dishwashing (or other mild) detergent. The pins have an easy-clean coating. Harsh or abrasive cleaners should not be necessary and may damage the coating.
- Wipe with a soft cloth and dry thoroughly.
- Carefully replace all the pan support pins in the glass, so that they click into place.
- Press gently to clip into position.

#### **4.6.4 To Clean The Burner Head**

- Lift out the burner head and clean with a cloth or scourer. The burner head gets much hotter than the pan support pins and for this reason it is not finished with an easy-clean coating. If cooking splatter and spills get burnt onto the burner head, scrub with a mildly abrasive cleaner and a soft cloth. Ceramic cooktop cleaner is suitable for this.
- Replace the clean burner head.
- Press the on/off power button to turn the CookSurface on.
- Lower the pan supports before using to check they have been reassembled correctly.

If spilled or burnt food has stuck the pan supports in the 'down' position, soften the spill with a damp, soapy, soft cloth and remove the food.

#### **4.6.5 Cleaning The On/Off Button And The Control Dials**

Wipe these with a soft cloth and mild detergent. The control dials can be removed by pulling them up and out when they are raised.

#### **4.6.6 Cleaning The Venturi Mesh**

The venturi mesh should not need to be cleaned, but if the flame is irregular, it may be due to food spills on the mesh. Lift the venturi out, gently wash the mesh, dry and replace. The venturi mesh can also be cleaned in a dishwasher. When replacing the venturi, maintain an even spacing between it and where the lifter prongs come up.

#### **4.6.7 Cleaning The Igniter**

The igniter should not have to be cleaned regularly, but if a burner is not lighting, it may be due to food spills on the igniter. Clean it with a toothbrush and methylated spirits. Before handling the igniter, make sure it is cold to avoid burns. The igniter can still be hot even if the product is cold.

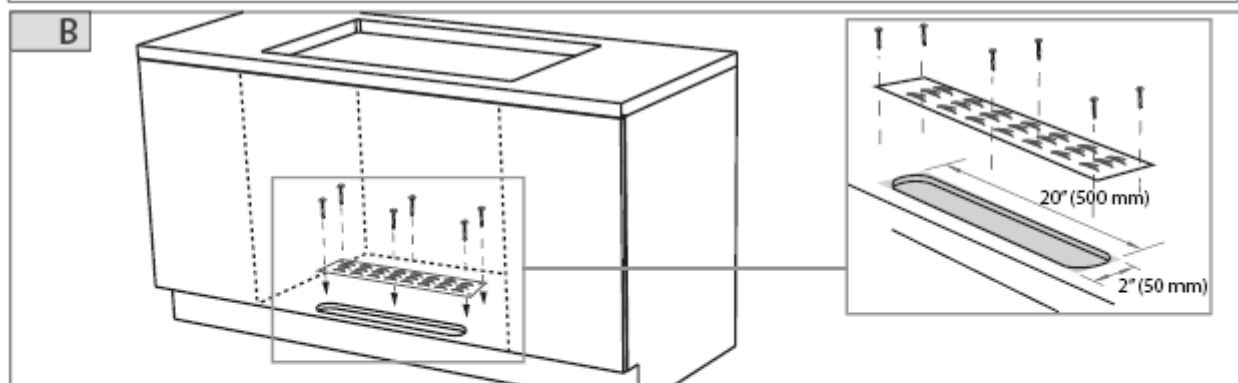
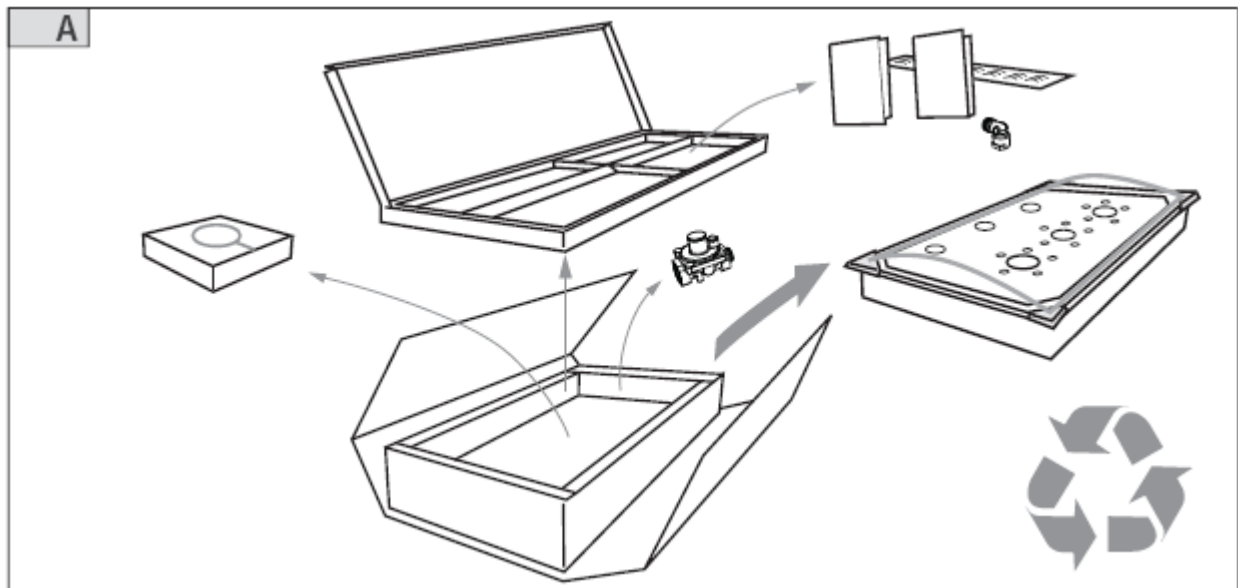
#### **4.6.8 Cleaning Tips**

- Do not use abrasive sponges, heavy-duty scourers or corrosive cleaners such as oven sprays and stain removers.
- Always clean soiled pan supports before lowering the burner.
- Do not wash pan supports in a dishwasher or use dishwashing machine detergents to clean these parts.
- After reassembling any burner, always lower the burner before using to check it has been reassembled correctly.
- Clean the CookSurface after every use. Do not let spills and stains become burnt onto the glass.
- The 'Vileda PUR active' cleaning sponge is the best non-scratch glass scourer and is available from Fisher & Paykel Genuine Spare Parts or through the Customer Care Center, part number 533295.

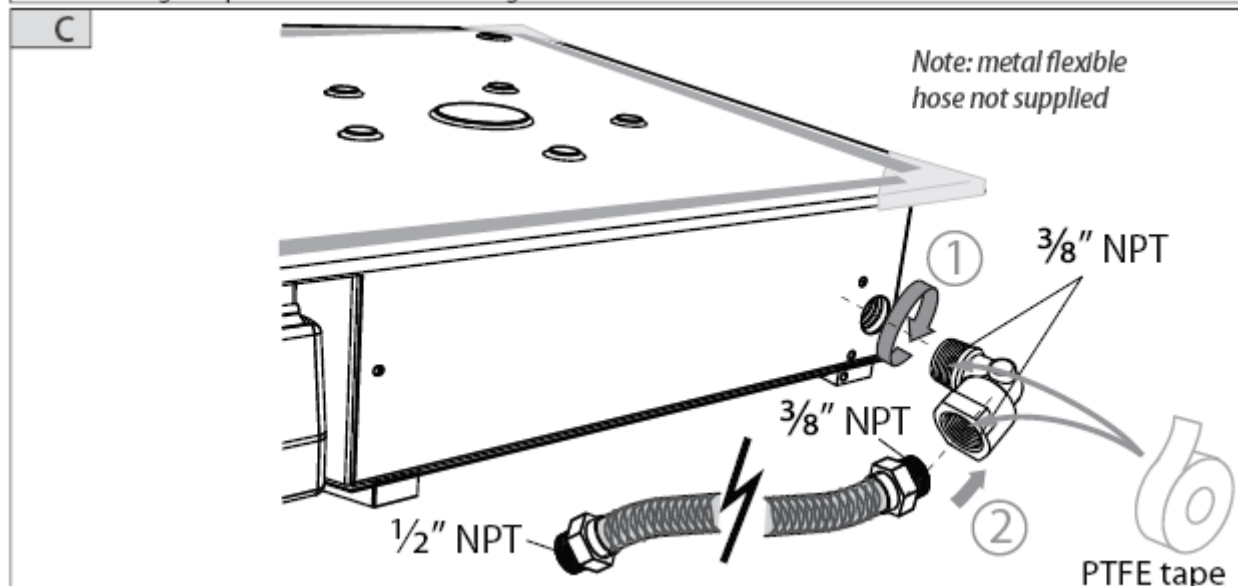
## 5 INSTALLATION & SERVICING

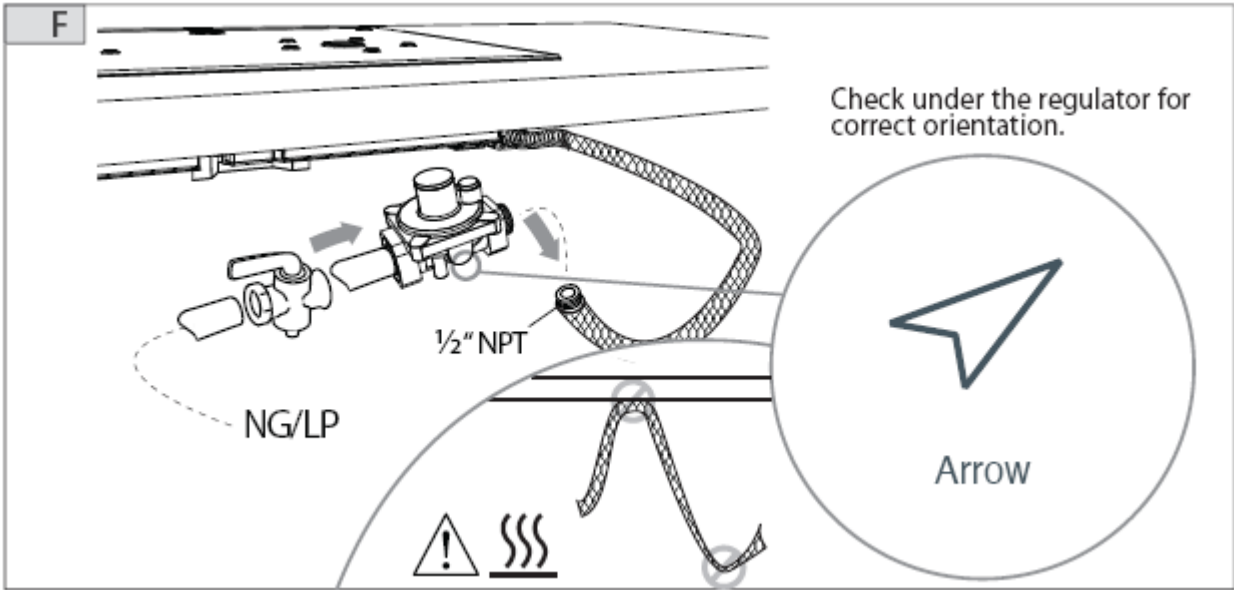
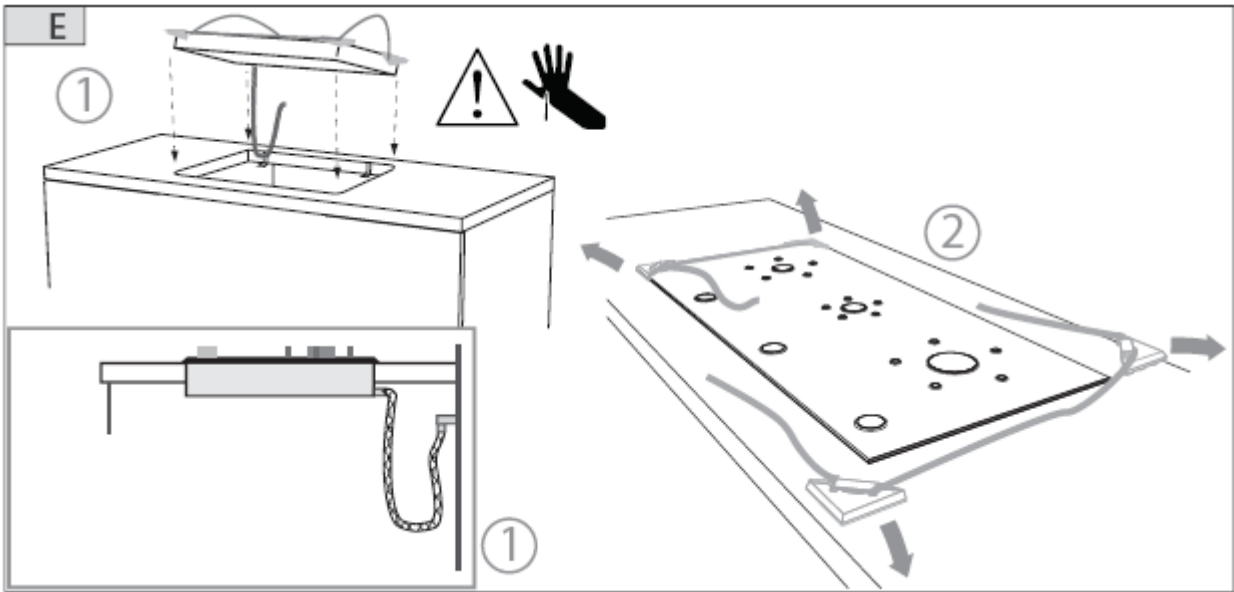
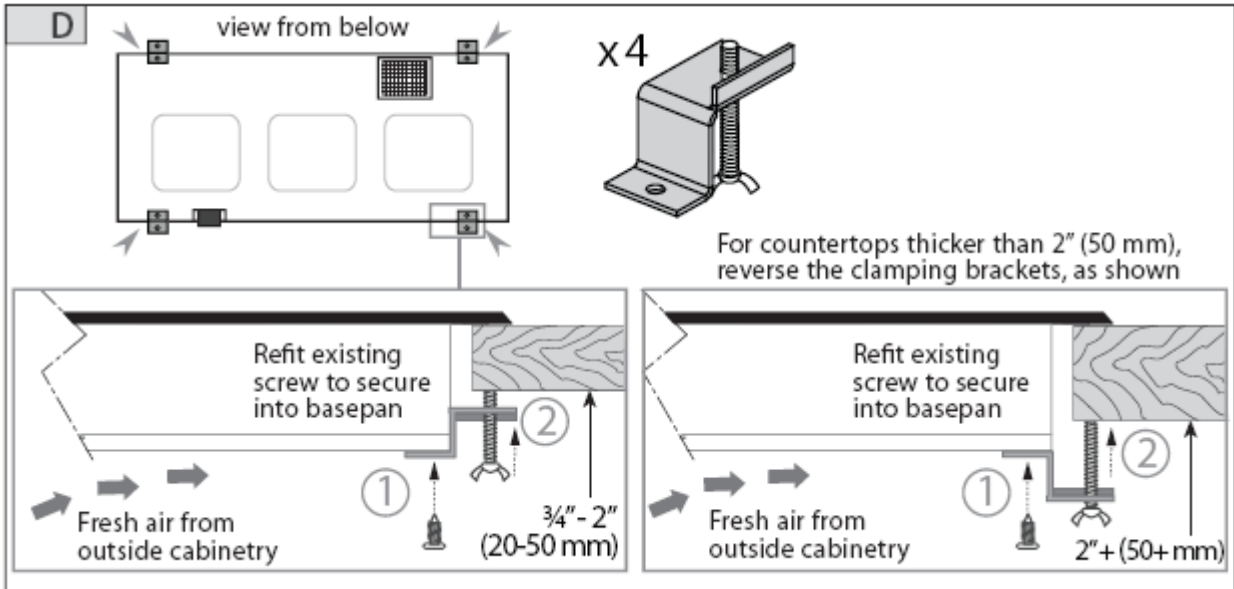
### 5.1 Standard Installation (On Top of Bench)

**Note:** Refer to Section 2.6 for Product, Cabinetry & Clearance Dimensions.



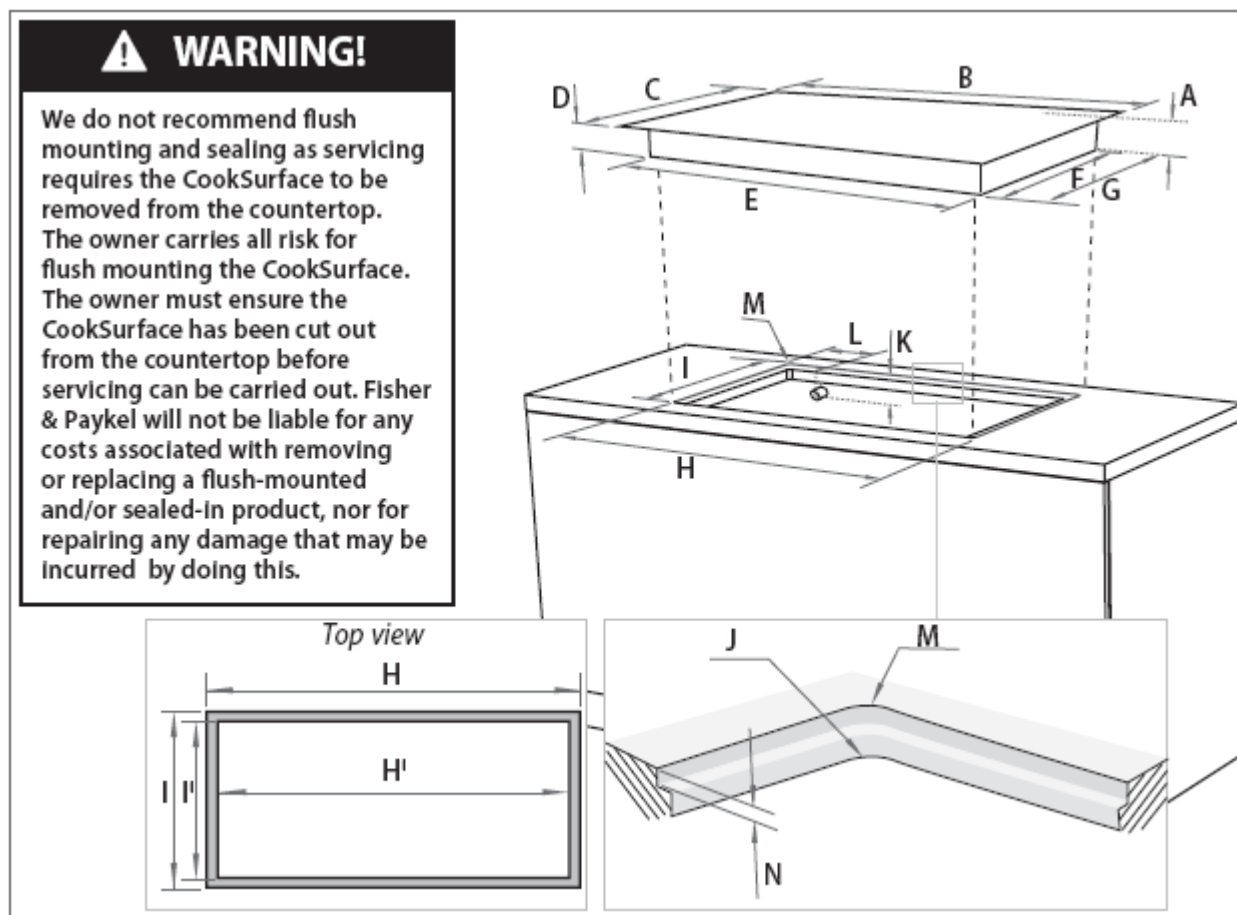
The CookSurface requires adequate air supply to fully function. The base of the CookSurface must have direct unrestricted ventilation to the room where the CookSurface is installed. Do not ventilate the base area to an external area that can be at different air pressure to that of the burners. You may ventilate from adjacent cupboards, but ensure that the available air supply will not be restricted. The ventilation area must be 20" x 2" (500 x 50 mm) or of an equivalent area. If the 2" (50 mm) wide slot is not possible due to the width of the available toe recess, increase the length of the slot so as to maintain an equivalent area of 100 in<sup>2</sup> (250 cm<sup>2</sup>). An air intake grill is provided. Ensure that the grill is not covered or obstructed.





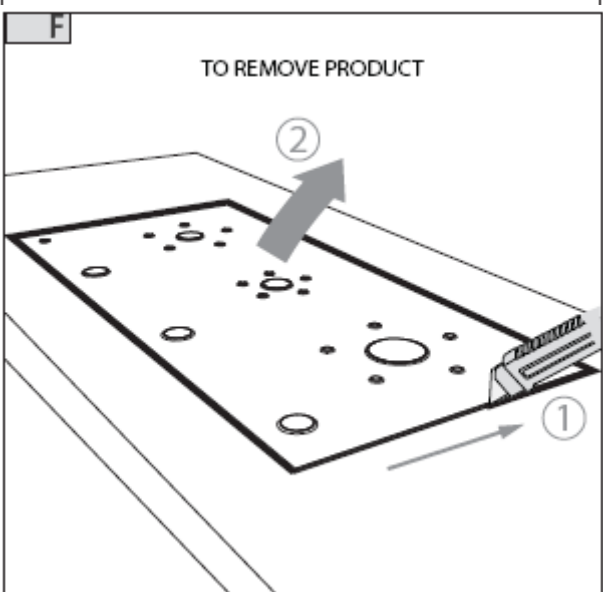
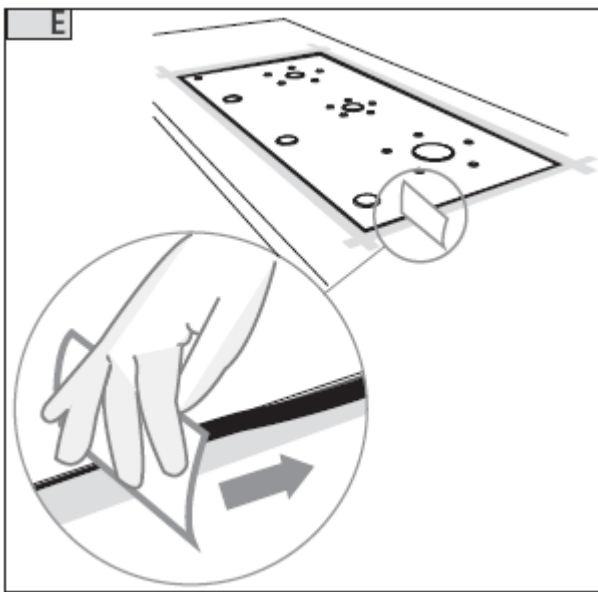
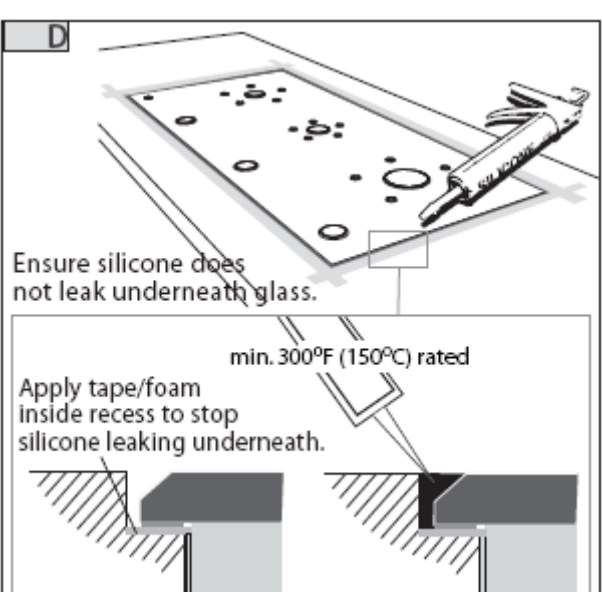
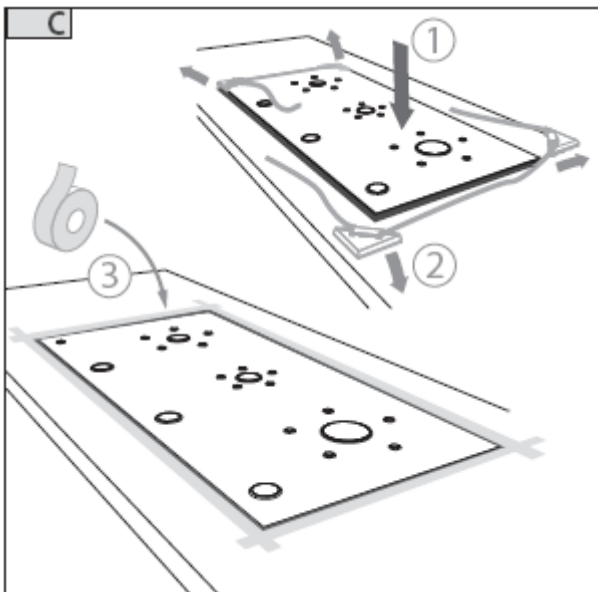
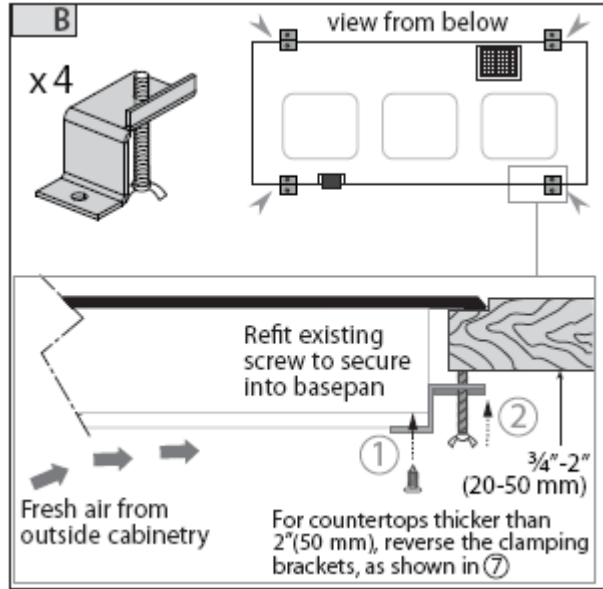
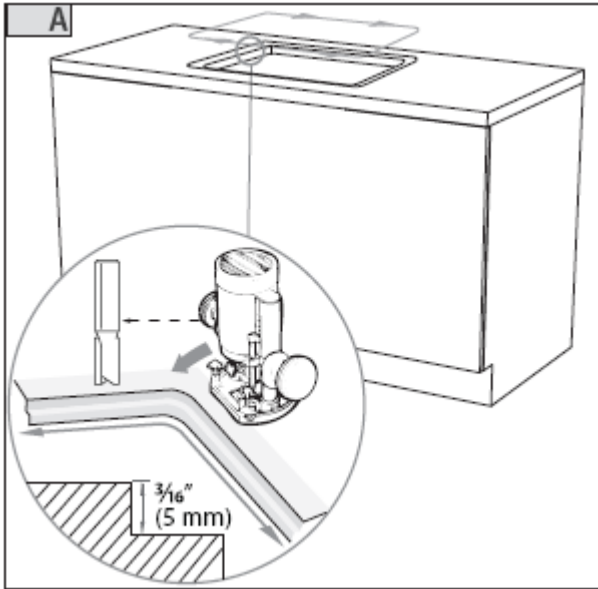


## 5.2 Flush Mounting Installation (Not Recommended)



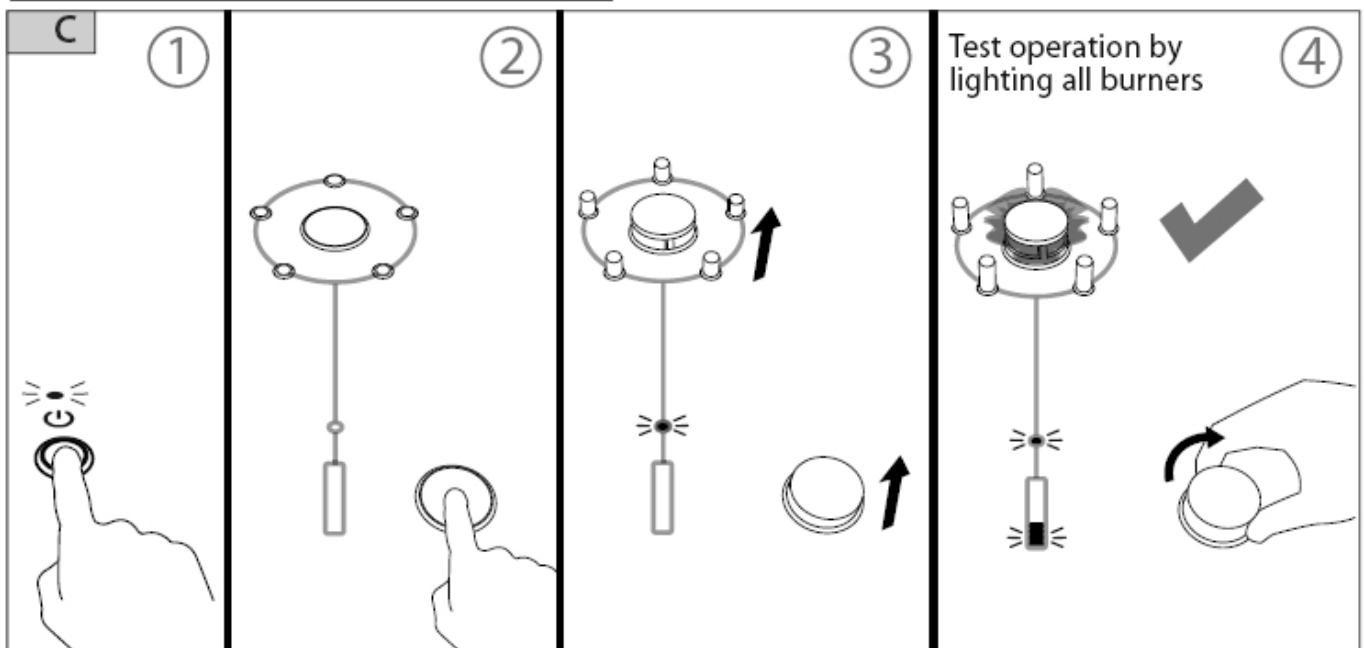
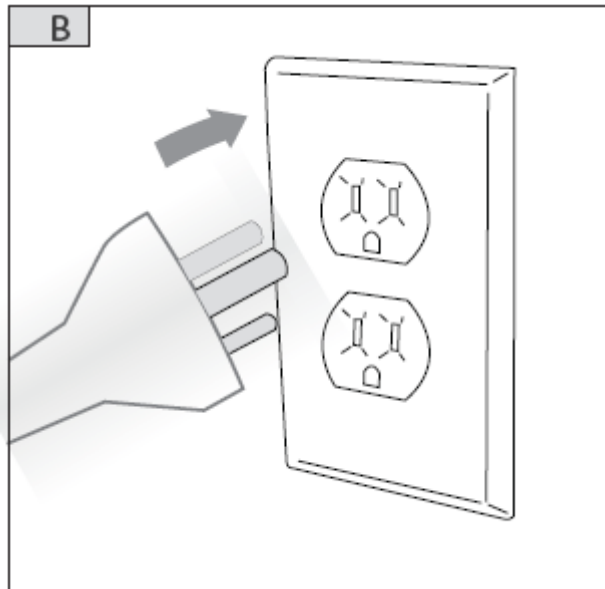
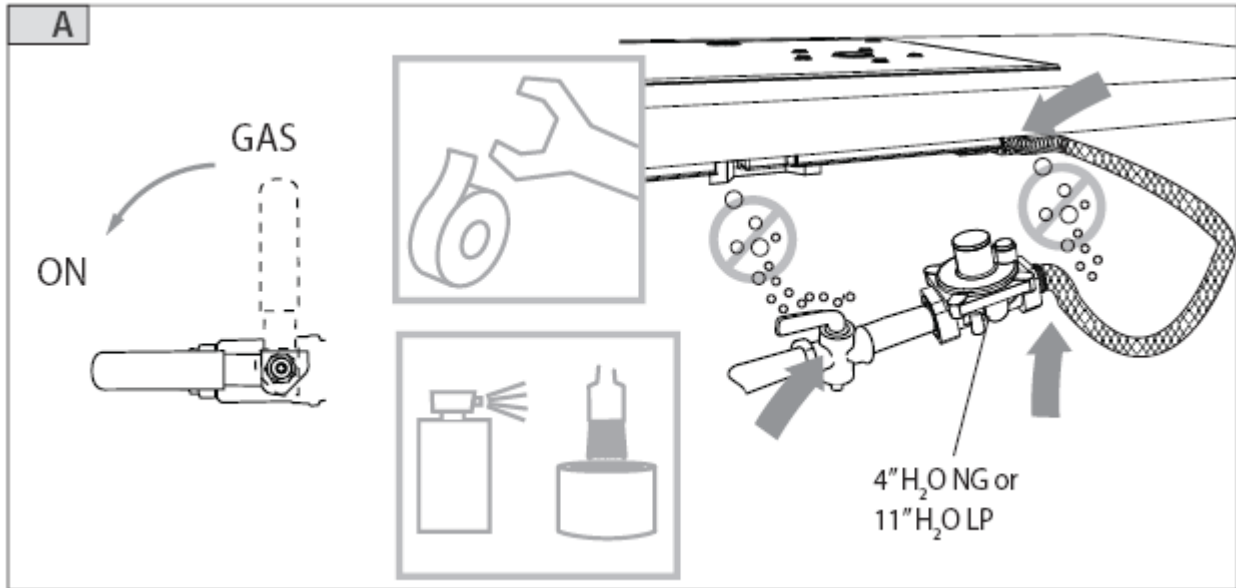
Product and cabinetry dimensions (inches (mm))

		CG363ML IZONA	CG363MLD IZONA DEEP
A	overall height of product (including dials/pan supports)	3¾"(96)	3¾"(96)
B	overall width of product	35½"(900)	35½"(900)
C	overall depth of product	16⅞"(410)	20⅞"(530)
D	height of chassis (below top of bench)	3⅛"(94)	3⅛"(94)
E	width of chassis	33⅛"(856)	33⅛"(856)
F	depth of chassis	15⅞"(384)	18⅞"(480)
G	depth of chassis (including fitted elbow)	16⅛"(424)	18⅞"(480)
H	overall width of routed recess	35⅞"(905)	35⅞"(905)
H'	width of cutout	34⅛"(865)	34⅛"(865)
I	overall depth of routed recess	16⅝"(415)	21⅛"(535)
I'	depth of cutout	15⅜"(390)	19⅛"(494)
J	corner radius of cutout	max. ⅜"(10)	max. ⅜"(10)
K	distance from top of bench to centre of gas inlet on product	2½"(64)	2½"(64)
L	distance from edge of chassis to gas inlet on product	¾"(20)	¾"(20)
M	corner radius of routed recess	max. ⅙"(2)	max. ⅙"(2)
N	height of routed recess	⅜"(5)	⅜"(5)





### 5.3 Check For Gas Leaks & Test



## 5.4 Parts Supplied

The following parts are supplied with the CookSurface.



Wok stand (1)



Elbow 3/8" NPT (1)



Clamping brackets (4) and screws (4)



Gas pressure regulator (1)



Air intake grill (1) and screws (6)

## 5.5 Final Checklist

This is to be completed by the installer, using the Installation Instruction's Checklist.

- Have the clamping brackets been fitted?  
(Refer to Section 5.1 subsection D.)
- Have adequate air supply to the product been allowed for?  
(Refer to Section 5.1 subsection B.)
- Have all connections been leak tested?  
(Refer to Section 5.3 subsection A.)
- Is the regulator set to the correct working pressure?  
(Refer to Section 2.3 for pressure specification.)
- Has the supplied duplicate data plate been placed on an adjacent surface?
- Is the CookSurface grounded?  
(Refer to National Electrical Code ANSI/NFPA70 or CSA C22.1)
- Check that the mains cable is NOT touching the CookSurface.  
(Refer to Section 5.1 subsection F.)

On Operation of the CookSurface:

(Refer to Section 5.3 subsection C.)

- Do all burners ignite both individually and in combination?
- Are the flames consistent and appropriately sized?
- Has the basic operation been demonstrated to the customer?

## 6 OPTION ADJUSTMENT MODES

### 6.1 Introduction

Beyond 'Operating the Cooktop', 'Keylock' & 'Sound Preference Mode' there are two other main modes for the CookSurface. They are:

- Advanced Mode
- Service Mode

Within Advanced Mode are the following sub-menu options:



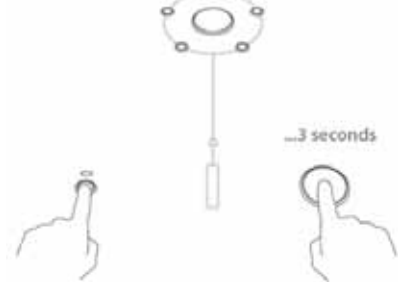
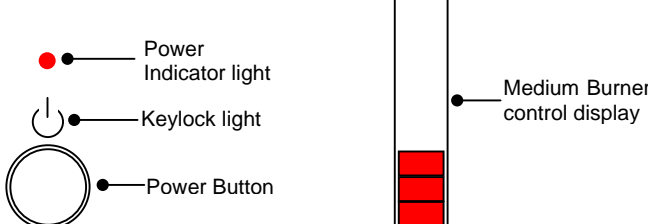
1. Showroom Mode
2. Installation Setting (Selecting Gas Type)
3. Service Mode
4. Gas Calibration (Low Flame Search)

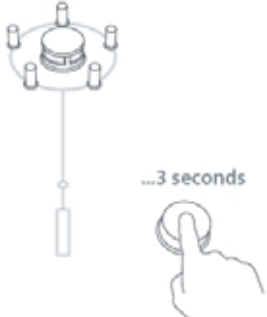

Within Service Mode are the following sub-menu options:

1. Display last fault
2. Display 'Burner ID'
3. Display 'Burners Up'
4. Move Trivet up/down
5. Open Gas Valve/Reset gas
6. Energise main solenoid
7. Air Flow calibration (Air flow detector spinning)

### 6.2 Advanced Mode

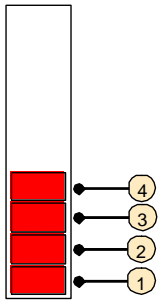
#### 6.2.1 How To Access Advanced Mode

1. Turn on the product by pressing the <b>POWER</b> button.	
2. Hold down the <b>POWER</b> button (~2 seconds) until the Keylock light comes on.	
3. Hold down the <b>POWER</b> button & the nearest (medium burner's) dial for 3 seconds until in Sound Settings Mode.	
<p><i>Sound Settings Mode:</i></p> <ul style="list-style-type: none"> <li>• All three burners &amp; control dials rise.</li> <li>• The Keylock light goes out.</li> <li>• The Power indicator light flashes once every second.</li> <li>• The medium burner's control display has 3 bars showing.</li> </ul>	

<p>4. Without turning it, hold down the medium burner dial (~ 3 seconds) until in Advanced Mode.</p>	
<p><i>Advanced Mode:</i></p> <ul style="list-style-type: none"> <li>• The Power indicator light flashes once every second.</li> <li>• The medium burner's control display has 4 bars showing. The first bar will be highlighted.</li> </ul>	

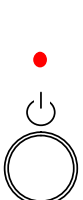
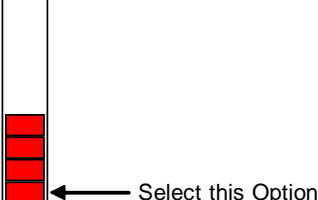
### 6.2.2 Advanced Mode Sub-Menu Options

- Rotate the medium burner dial to highlight the different options.
- Push on the medium burner dial to select the option wanted.



1. Showroom Mode
2. Installation Setting
3. Service Mode
4. Gas Calibration/Low Flame

### 6.3 Showroom Mode

<p>1. Enter Advanced Mode (refer to Section 6.2.1).</p>		
<p>2. <b>Select the first bar for Showroom Mode.</b></p>		

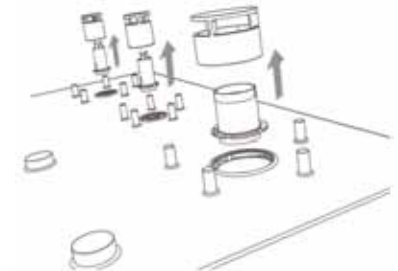
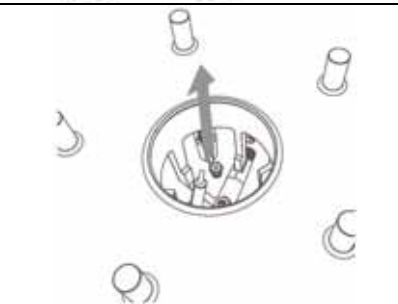
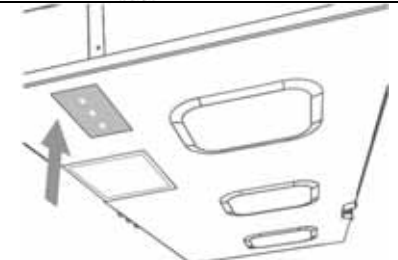
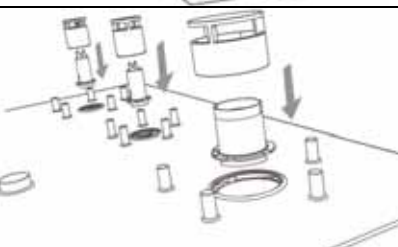

*Showroom Mode:*

- Indicated by the power indicator light flashing rapidly (3 times a second).
- The CookSurface will respond normally to controls, even when not connected to gas.
- If the CookSurface is connected to gas, it will not be possible to ignite the burners, as the solenoid and the gas valves have been disabled.
- Turning the product off & on with the **POWER** button will not disable Showroom Mode.
- The mode can only be cleared by turning the product off at the wall.

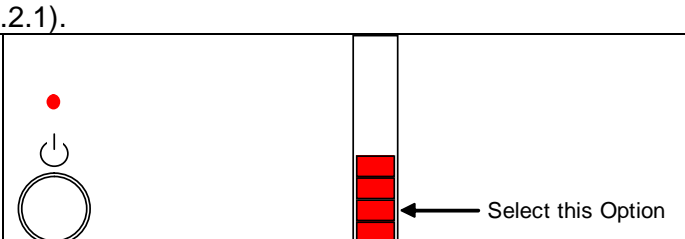
## 6.4 Changing The Installation Setting

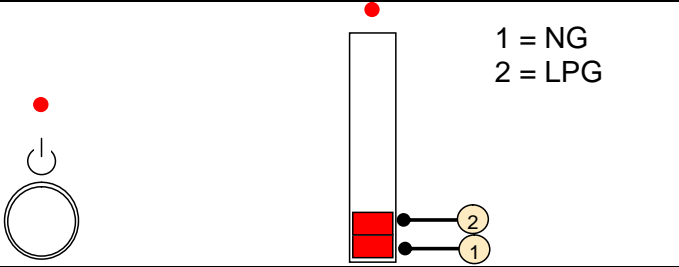
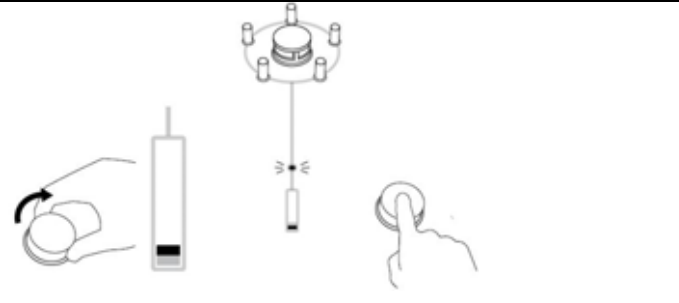
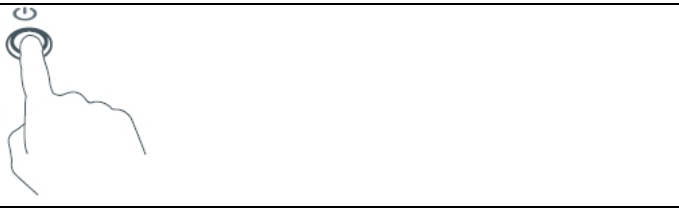
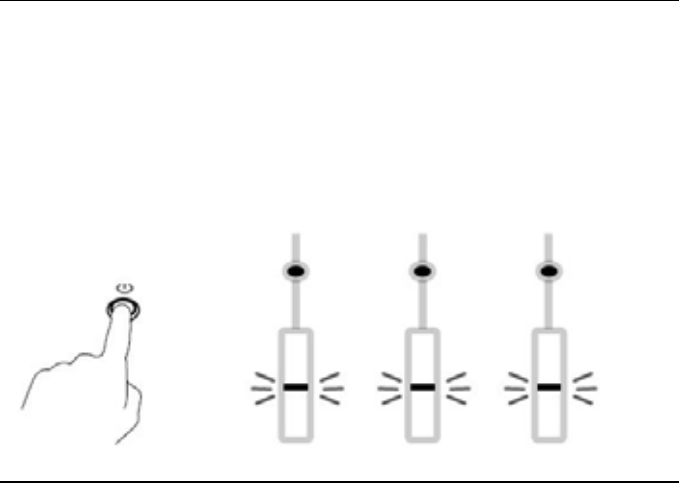
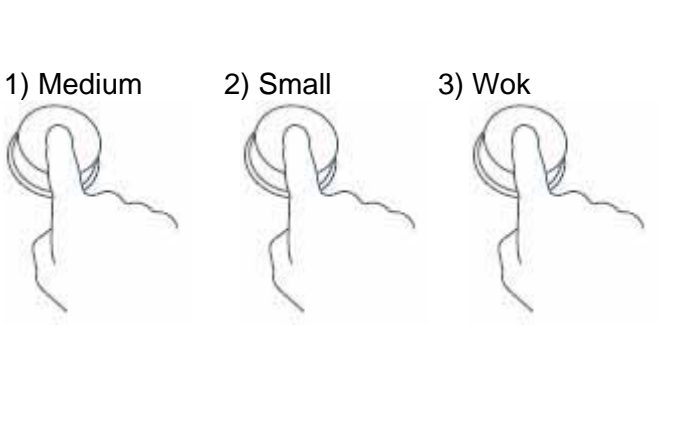

- **Warning!** Be careful when converting to NG from LP Gas. The flames may initially be very large while the remaining LPG in the line is burnt.

First:

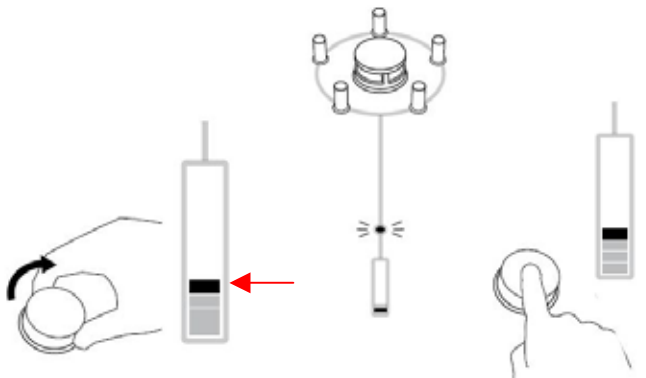
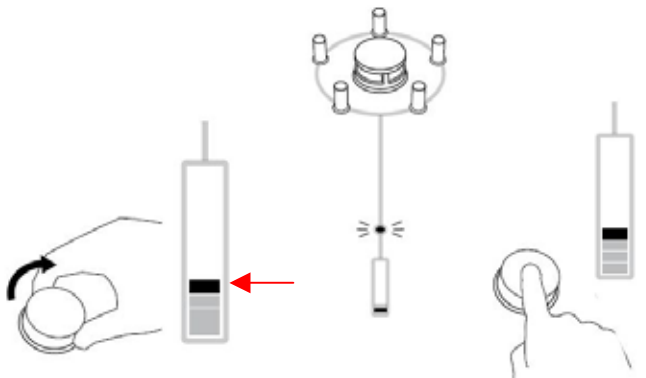

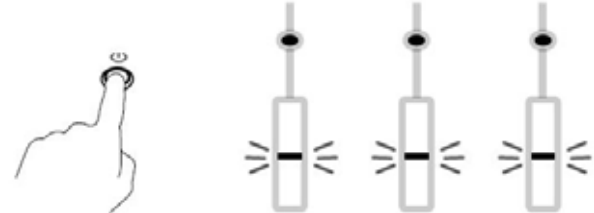
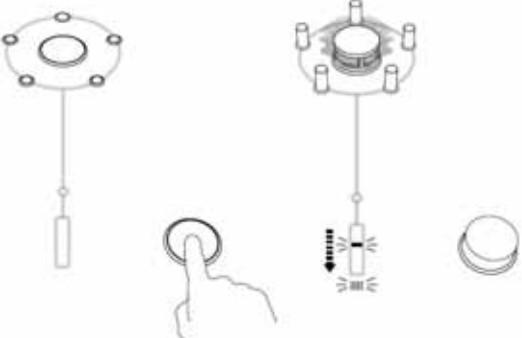

<p>1. Remove the burner heads and venturis.</p>	
<p>2a) Using the tool supplied, replace the fitted injectors in all the burners with the ones on the injector card. Save the injectors for future use.</p> <p>2b) Switch the gas over to the alternate type.</p>	
<p>3. Stick the used Injector Card on the underside of the CookSurface to indicate that it is set up for LPG.</p> <p>If converting back to NG, remove the injector card sticker.</p>	
<p>4. Replace the venturis and burner heads.</p>	
<p>5. Turn the CookSurface on. Test operation by lighting the Wok burner.</p> <p><b>Warning!</b> Be careful when converting to NG from LPG. The flames may initially be very large while the remaining LPG in the line is burnt.</p>	
<p>6. Run all of the burners at about level 8 until the old gas has been flushed out the line.</p>	

Then:

<p>1. Enter Advanced Mode (refer to Section 6.2.1).</p>	
<p>2. Select the second bar to enter the Installation Menu.</p>	

<p><b>When in Installation Menu:</b></p> <ul style="list-style-type: none"> <li>• The Power indicator light flashes once every second.</li> <li>• The medium burner's control display has 2 bars showing.</li> <li>• The burner ready light is on when the current gas type is highlighted.</li> </ul>	 <p>1 = NG 2 = LPG</p>
<p>3. Installation Menu Options:</p> <ol style="list-style-type: none"> <li>To select NG (Natural Gas) highlight the 1<sup>st</sup> bar and press the burner dial.</li> <li>To select LPG (Liquid Petroleum Gas) highlight the 2<sup>nd</sup> bar and press the burner dial.</li> </ol> <p>The burner-ready light will illuminate.</p>	
<p>4. Press the power button to save the selection. The product will turn off.</p>	
<p>5. Press the <b>POWER</b> button to turn the power back on.</p> <p>If the same gas type is selected as the one currently installed then:</p> <ul style="list-style-type: none"> <li>• The product doesn't go into the Autocalibrate menu.</li> <li>• The product returns to normal function.</li> </ul> <p>If a different gas type is selected to the currently installed version, then:</p> <ul style="list-style-type: none"> <li>• The sixth bar on the control display of each burner will flash (see picture).</li> <li>• The product is ready to re-Autocalibrate.</li> </ul>	
<p>6. For each burner:</p> <ul style="list-style-type: none"> <li>• Press the burner dial once (for only one burner at a time) to begin calibrating.</li> </ul> <p>The CookSurface will then retest and reset the low flame setting for the burner automatically. There will be a descending light sequence on the control display, and the hot warning light will glow. This process takes about two minutes for each burner. The process will end when the descending light sequence stops.</p> <ul style="list-style-type: none"> <li>• Wait until a burner has finished calibrating before starting the next one.</li> </ul>	<p>1) Medium      2) Small      3) Wok</p> 
<p>7. When the process is complete, press the <b>POWER</b> button to save the burner settings. The product will turn off.</p> <p><b>Note:</b> If a burner is hot, the CookSurface will wait for the burner to cool down before shutting down.</p>	

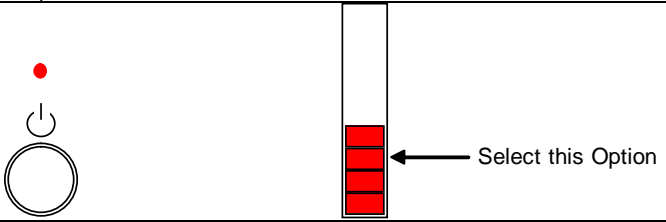
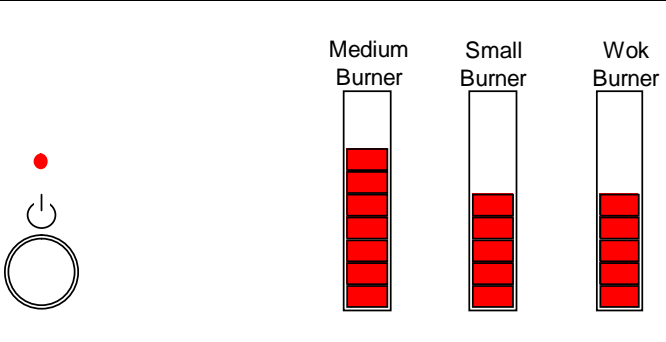
## 6.5 Gas Calibration (Low Flame Search)

1. Enter Advanced Mode (refer to Section 6.2.1).	
2. Turn the medium burner's dial to highlight the fourth bar. Press the dial. The burner ready light will illuminate.	
3. Press the on/off power button to turn the product off.	
4. To begin the low flame search, turn the CookSurface on again by pressing the <b>POWER</b> button. The sixth bar on the control display of each burner will flash.	
5. Press the dial(s) for the burner(s) to be reset. The CookSurface will then retest and reset the low flame setting for the selected burners automatically. There will be a descending light sequence on the control display, and the hot warning light will glow. This process takes about two minutes for each burner. The process will end when the descending light sequence stops.	
6. When the process is complete, press the <b>POWER</b> button to save the burner settings. The product will turn off.	

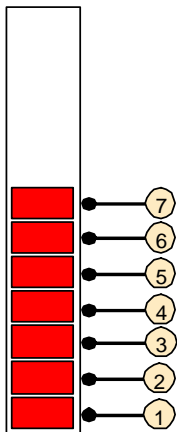
**Note:** If a burner is hot, the CookSurface will wait for the burner to cool down before shutting down.

## 6.6 Service Mode

### 6.6.1 How To Access Service Mode

1. Enter Advanced Mode (refer to Section 6.2.1).	
2. Select the third bar for Service Mode.	
<p><i>On entering Service Mode:</i></p> <ul style="list-style-type: none"> <li>The Power indicator light flashes rapidly (then pauses and starts flashing again).</li> <li>The medium burner's control display has 7 bars showing, with the first bar highlighted.</li> <li>The other two burner control displays have 5 bars showing with the first bar highlighted.</li> </ul>	

### 6.6.2 Service Mode Options



There are 7 Service Mode Options:

1. Display Last Fault
2. Display 'Burner ID'
3. Display 'Burners Up'
4. Move trivet up/down
5. Open/Close gas valve
6. Energise solenoid
7. Airflow Calibration (airflow detector spinning)

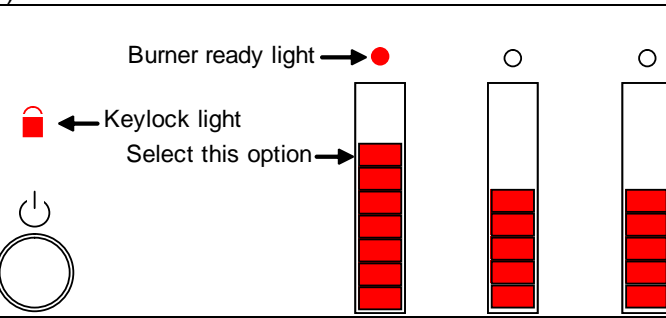
- Service mode options 1 to 5 can be selected from any of the three burner displays. These 5 options are burner independent.
- Service mode options 6 and 7 can only be selected from the medium burner's control display.

To access a Service mode option

- Rotate the burner dial to highlight the different options.
- Push on the burner dial to select the option wanted. Some options may require that the dial be held down for different periods of time (refer to instructions below for more detail).

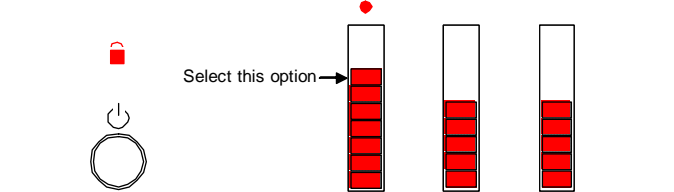
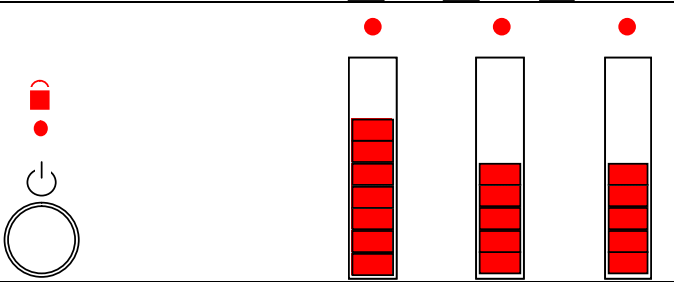
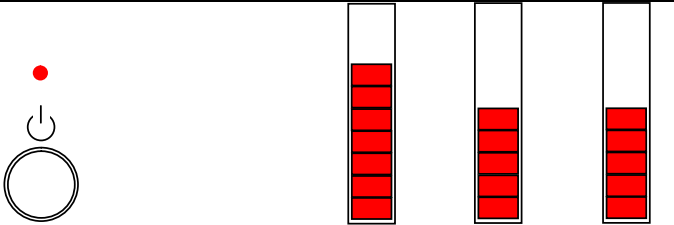

## 6.7 Airflow Calibration (Airflow Detector Spinning)

### 6.7.1 Airflow Detector Spinning

1. Enter Service Mode (refer to Section 6.6.1).	
<p>2. Using the medium burner's dial, select the 7<sup>th</sup> (top bar) option on the control display. Do not push the burner dial.</p> <ul style="list-style-type: none"> <li>If the burner ready light flashes, then the burner board is detecting that the fan detector is rotating.</li> <li>If the keylock light flashes, then the master board is detecting that the fan detector is rotating.</li> </ul>	
3. When the burner dial is rotated, it exits the 'Airflow calibration' function.	



## 6.7.2 Airflow Calibration

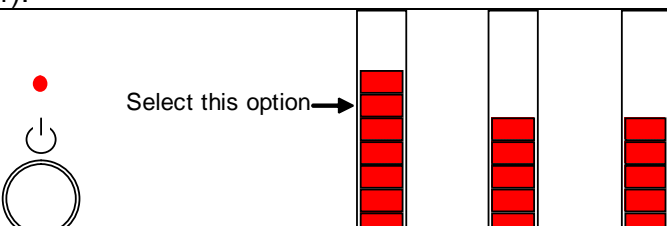
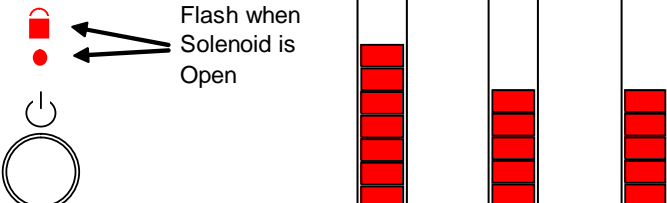
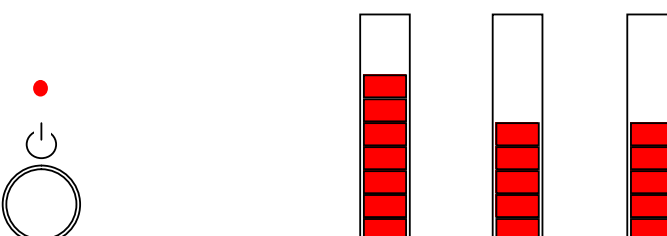
1. Enter Service Mode (refer to Section 6.6.1).	
2. Using the medium burner's dial, select and hold the 7 <sup>th</sup> (top bar) option on the control display for 4 seconds. On releasing the dial, the CookSurface will begin calibrating.	
<p><i>While calibrating:</i></p> <ul style="list-style-type: none"> <li>• There are no highlighted menu items in the three burner control displays.</li> <li>• The Keylock and power button lights will flash rapidly out of sequence.</li> <li>• The burner ready lights flash rapidly.</li> <li>• The burners will rise and lower in the CookSurface.</li> </ul>	
<p><i>When the CookSurface has finished calibrating the airflow:</i></p> <ul style="list-style-type: none"> <li>• The burners will all lower back into the cooktop.</li> <li>• The control displays return back to Service Mode.</li> </ul>	
3. Turn the product off to save the settings.	

### Notes:

- The flashing Keylock light during calibration indicates that the master can detect a signal from the air detector, indicating that it is spinning.
- The flashing burner ready light on the medium burner flashes if this burner board is able to detect a signal from the air detector, indicating that it is spinning.
- These flashing lights allow the technician to check that both the master and burner boards are able to see the air detector signal.

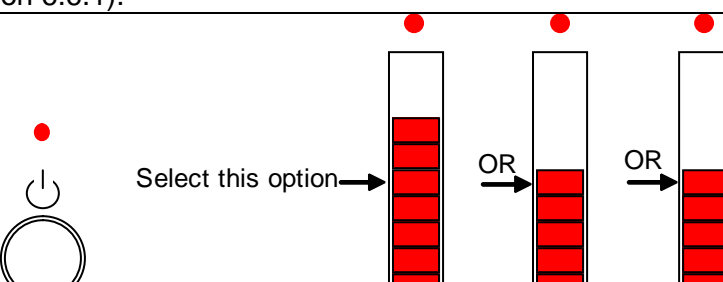
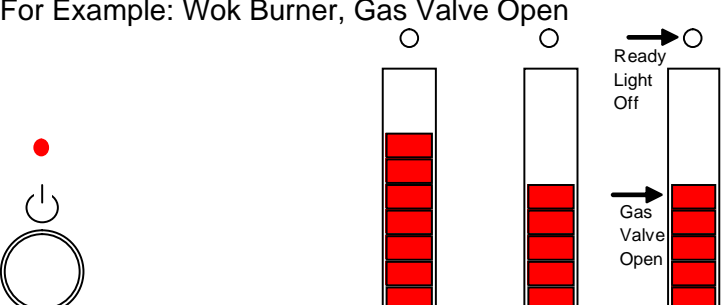
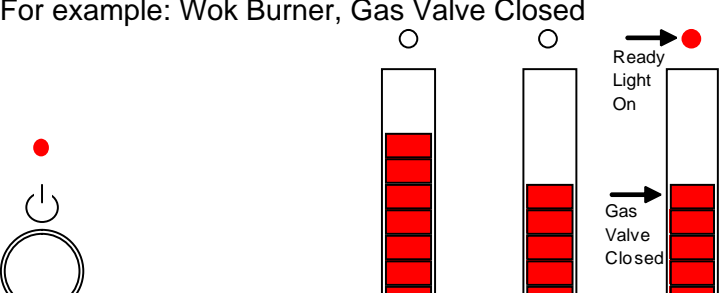
## 6.8 Energise Solenoid


This function opens or closes the solenoid, independent of the gas valves.

<p>1. Enter Service Mode (refer to Section 6.6.1).</p> <p>2. Using the medium burner dial, select the 6<sup>th</sup> bar, and push the dial once to energise the solenoid.</p>	
<p>The following will occur:</p> <ul style="list-style-type: none"> <li>The solenoid will click (open) audibly.</li> <li>The power and keylock lights flash in time together, indicating the solenoid is open.</li> </ul>	
<p>If the medium burner dial is rotated or pressed again, the solenoid will de-energise. In which case:</p> <ul style="list-style-type: none"> <li>The keylock light will stop flashing.</li> <li>After a small delay the solenoid will audibly click (closed).</li> <li>The control display returns to the Service Mode menu.</li> </ul>	

## 6.9 Open/Close Gas Valve

This function opens and closes the individual burner gas valves.

<p>1. Enter Service Mode (refer to Section 6.6.1).</p> <p>2. For any burner dial: Select the 5<sup>th</sup> bar and press the dial once.</p>	
<p>For the selected burner, the gas valve will open fully (i.e. to the flame level 12 position).</p> <ul style="list-style-type: none"> <li>A faint whirring noise will be heard as the valve motor opens the valve.</li> <li>When the burner valve is OPEN the burner ready light is OFF.</li> </ul>	<p>For Example: Wok Burner, Gas Valve Open</p> 
<p>3. Pushing the burner dial again will close the valve.</p> <ul style="list-style-type: none"> <li>A faint whirring noise will be heard as the valve motor closes the valve.</li> <li>When the burner valve is CLOSED the burner ready light is ON.</li> </ul>	<p>For example: Wok Burner, Gas Valve Closed</p> 

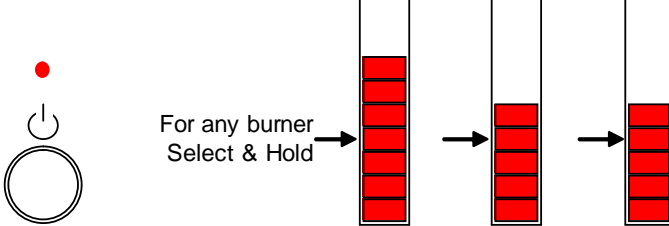
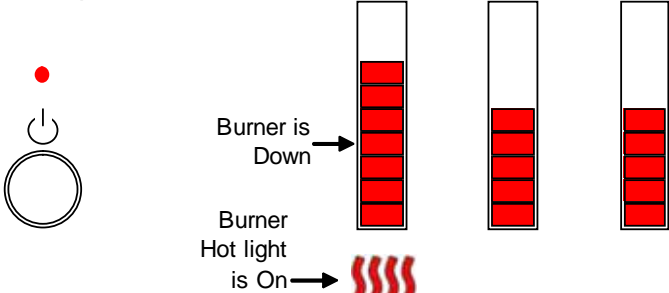
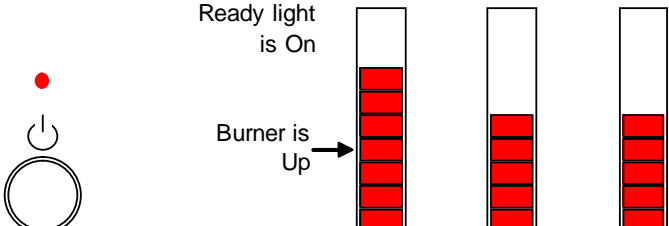
<p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• If the trivets are in the down position, then a safety feature prevents the gas valves from opening.</li> <li>• Until the trivets are raised the 'Open/Close Gas Valve' function will not work.</li> </ul>	<p>Example: Product with all burner trivets down.</p> 
<p>4. When the burner dial is rotated, it exits the 'Open/Close Gas Valve' function.</p>	

**6.9.1 Leak Testing Suggestion**

1. Set the desired valves open/closed using the Open/Close Gas Valve function (refer to Section 6.9).
2. Open the solenoid (refer to Section 6.8).
3. Check for leaks using a soapy water solution as per gas code.
4. Close the solenoid (refer to Section 6.8).
5. If unsuccessful go back to step 1. Repeat the process until all required leak testing is complete.



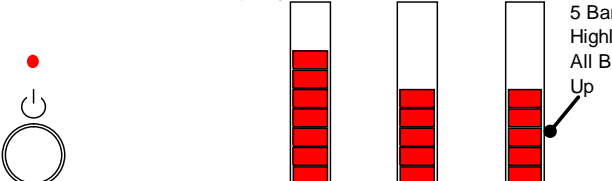

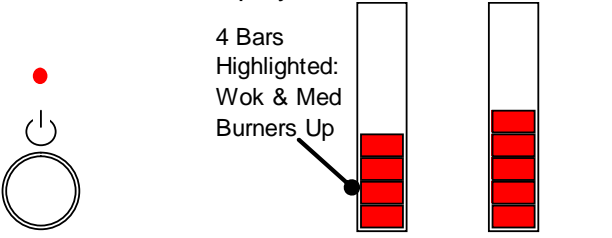
**6.10 Move Trivet Up/Down**

This function moves the individual burners, and the associated trivets and burner dial up and down.

<p>1. Enter Service Mode (refer to Section 6.6.1).</p> <p>2. For any burner dial: Select the fourth bar and press the dial once.</p> <ul style="list-style-type: none"> <li>• If the burner was up, it will go down.</li> <li>• If the burner was down, it will go up.</li> </ul> <p><b>Note:</b> If the valve is open, a safety lock prevents the burner being lowered.</p>	
<p>When the burner is down:</p> <ul style="list-style-type: none"> <li>• The burner hot light is on.</li> </ul>	<p>Example: Medium Burner is Down</p> 
<p>When the burner is up:</p> <ul style="list-style-type: none"> <li>• The burner ready light is on.</li> </ul>	
<p>3. When the burner dial is rotated, it exits the 'Move Trivet up/down' function.</p>	

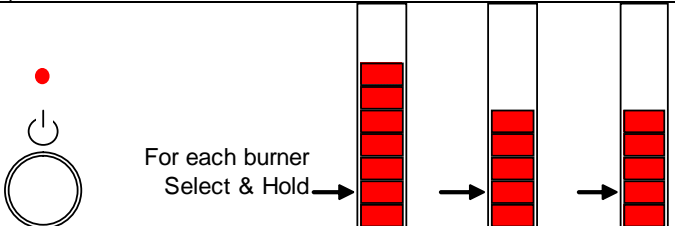
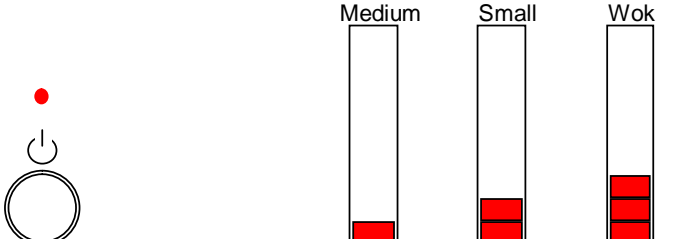
## 6.11 Display Burners Up

This function verifies that the CookSurface correctly knows what combination of burners are raised or lowered.

<p>1. Enter Service Mode (refer to Section 6.6.1).</p>	
<p>2. For any burner dial, select the third bar &amp; hold down the dial.</p>	
<p>The display should show either:          5 bars = All burners are up.          4 bars = EITHER small &amp; wok burners are up                    OR medium &amp; wok burners are up.          3 bars = Medium &amp; small burners are up.          2 bars = Only the wok burner is up.          1 bar = EITHER the small burner is up                    OR the medium burner is up.</p>	
<p>Example 1: All burners are up.</p> 	<p><u>Using the Wok Dial:</u>          On selecting the third bar &amp; holding down the dial the control display will show:</p> 
<p>Example 2: Small burner down, wok &amp; medium burners up.</p> 	<p><u>Using the Medium Dial:</u>          On selecting the third bar &amp; holding down the dial the control display will show:</p> 
<p>3. Releasing the dial returns to the Service Mode Menu.</p>	

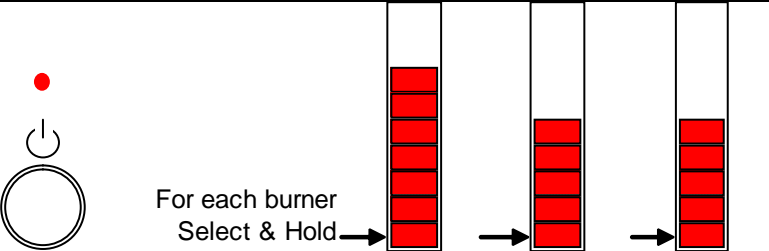
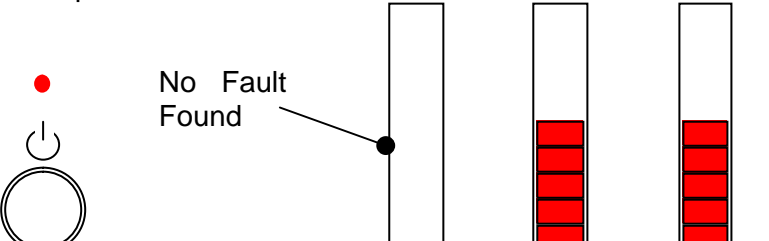
## 6.12 Display Burner ID

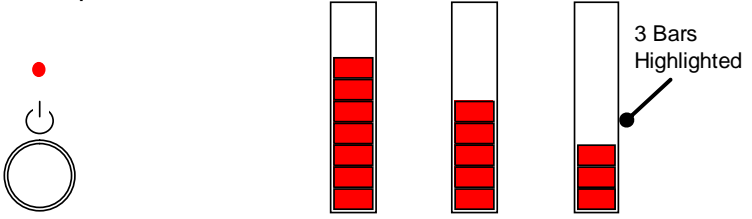
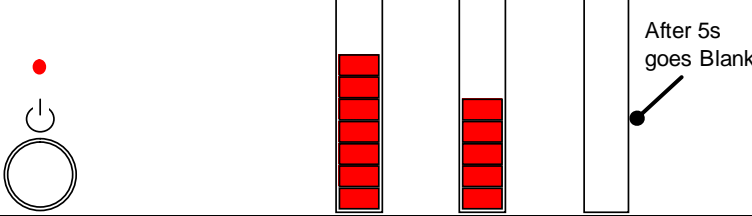


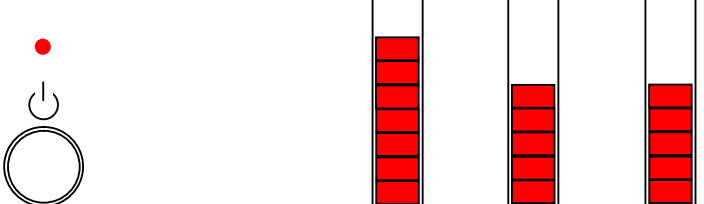
This function verifies the burner harness is wired correctly.

<ol style="list-style-type: none"> <li>1. Enter Service Mode (refer to Section 6.6.1).</li> <li>2. For any burner dial select the second bar, &amp; hold down the dial.</li> </ol>	
<p>The burner control display will highlight a number of bars that correspond with the identification of the burner.</p> <p>These are:</p> <ul style="list-style-type: none"> <li>• 1<sup>st</sup> bar highlighted = medium burner</li> <li>• 2 bars highlighted = small burner</li> <li>• 3 bars highlighted = wok burner</li> </ul>	
<ol style="list-style-type: none"> <li>3. Releasing the dial returns to the Service Mode Menu.</li> </ol>	

## 6.13 Display Last Fault

If the CookSurface faults then a Fault Code is generated. This is retained in the CookSurface's memory for later diagnosis.

<ol style="list-style-type: none"> <li>1. Enter Service Mode (refer to Section 6.6.1).</li> <li>2. For each burner dial in turn, select the 1<sup>st</sup> option (bottom bar) and hold down the dial.</li> </ol> <p>The control display for the burner will show the fault code for the previous fault.</p> <ul style="list-style-type: none"> <li>• For the first 5 seconds the primary fault code is shown.</li> <li>• After 5 seconds the sub-fault code is shown.</li> </ul>	
<p>Example 1: The medium burner was selected to check the previous fault code. If there was no fault, then the burner display will be blank.</p>	<p>Example 1.</p> 

<p><b>Example 2:</b> The wok burner (display on the far right) was selected to check the previous fault code.</p> <p>a) Initially the display shows 3 bars. b) Then after 5 seconds the wok's control display goes blank.</p> <p><b>Diagnosis:</b></p> <ul style="list-style-type: none"> <li>The primary fault is an F3 (temperature related) fault. There is no sub-fault code.</li> </ul>	<p><b>Example 2a.</b></p>  <p><b>Example 2b.</b></p> 
<p><b>Example 3:</b> The small (middle) burner was selected to check the previous fault code.</p> <p>a) Initially the small burner's display shows 11 bars. b) Then after 5 seconds the control display shows 3 bars.</p> <p><b>Diagnosis:</b></p> <ul style="list-style-type: none"> <li>The primary fault code is 11 bars, and the sub-fault code is 3 bars.</li> <li>This is an F11.3 (Trivet/Valve) fault for the small burner.</li> </ul>	<p><b>Example 3a.</b></p>  <p><b>Example 3b.</b></p> 
<p>3. Releasing the burner dial returns the control display back to the Service Mode menu.</p>	

### 6.13.1 Fault Classes

The fault class generated depends on the level of danger posed to the user/product. There are three fault classes:

- A - Worst case fault, the customer cannot use the CookSurface.
- B - Burner malfunction, the customer cannot use the CookSurface.
- C - Burner fault, the customer can still use non-affected CookSurface burners.

If a fault occurs, the CookSurface starts beeping every 3 seconds and does the following:

#### Class A fault:

- All burners shut off, (gas valves are reset) and burner dials are disabled.
- All burners show the fault code on their control panel displays. E.g. 7 LED's lit = F7 fault.
- The burner ready light flashes. If the product is hot, then the burner hot light is on, otherwise it is off.
- The gas solenoid is shut off.
- The Keylock light flashes to indicate a product fault.
- The CookSurface is not usable.

#### Class B fault:

- All burners shut off, (gas valves are reset), and the burner dials are disabled.
- The malfunctioning burner shows the fault code on its control panel display. The other burners do not show a fault code. E.g. 8 LED's lit on the wok panel display = F8 fault.
- The burner ready light flashes. The burner hot light is off.
- The gas solenoid is shut off.
- The CookSurface is not usable.

#### Class C fault:


- The faulty burner shuts off (its gas valve is reset), and its burner dial is disabled.
- The burner displays the fault code on its control panel display. Eg. 2 LEDs lit = F2 fault.
- The burner ready light flashes. If the product is hot, then the burner hot light is on, otherwise it is off.
- The other burners are still active and usable.

### 6.13.2 Muting The Beeping Sound:

For Class B & C faults, give the burner dial a short press. To reset the fault, give the dial a long press. Alternatively, for all faults (including Class A), turn the CookSurface off and on again at the wall.

### 6.13.3 Clearing Fault Codes

To clear the fault codes from the CookSurface, refer to the below procedure:

1. Enter Service Mode (refer to Section 6.6.1).	
2. In Service Mode, hold down the <b>POWER</b> button for 3 seconds. <ul style="list-style-type: none"> <li>• After 3 seconds there will be a faint beep.</li> <li>• This indicates that the faults codes have been cleared from the CookSurface.</li> </ul>	 <p style="text-align: right;">3 seconds, then beeps</p>
3. Releasing the <b>POWER</b> button returns to Service Mode. <ul style="list-style-type: none"> <li>• If unsure that the fault code(s) were cleared, check by going back into 'Display Last Fault'.</li> </ul>	

#### Note:

An alternative method, though less reliable, is to turn the CookSurface off at the wall, and leave it turned off for half a minute to clear the fault code.

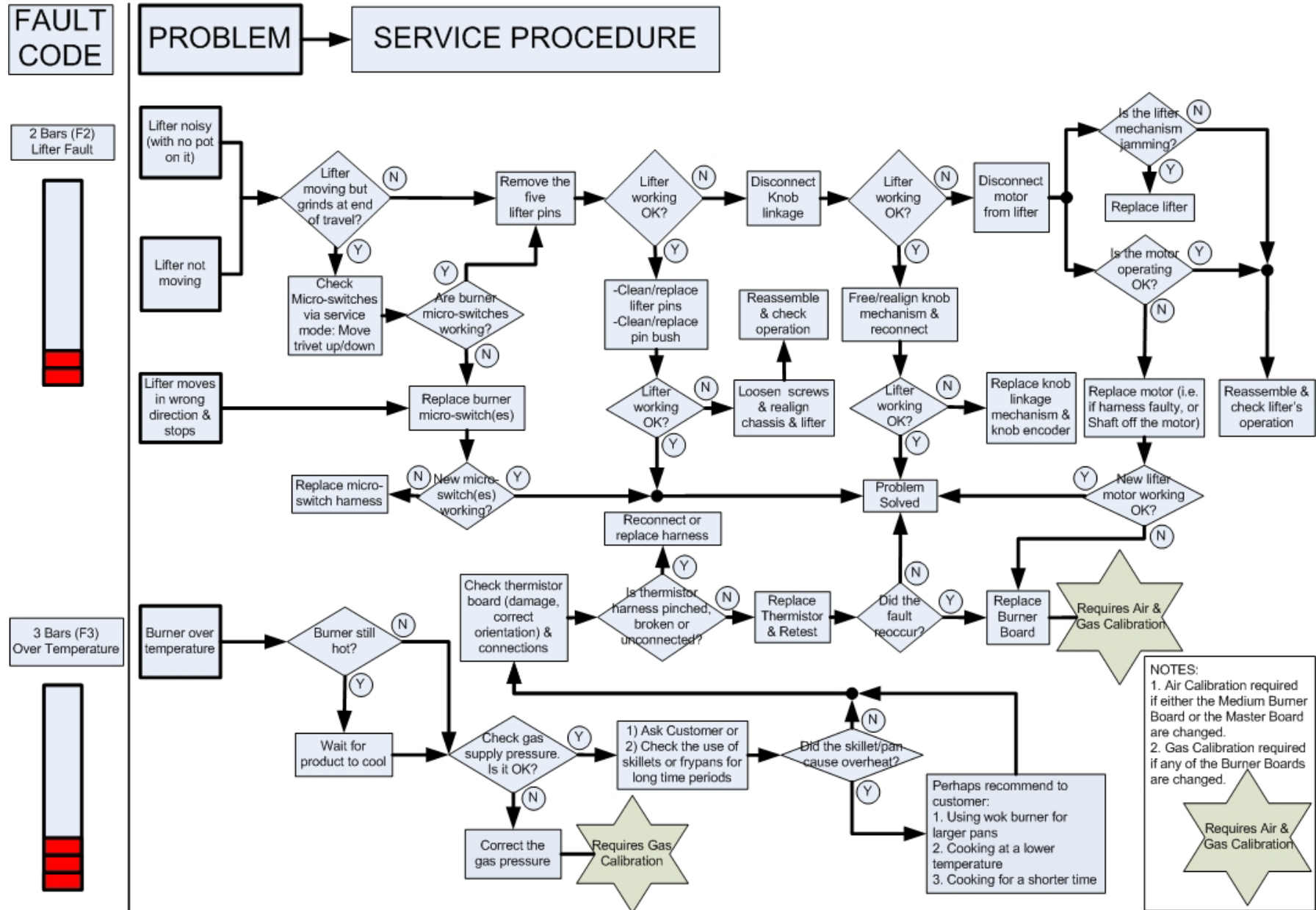
## 7 FAULT DIAGNOSTICS

### 7.1 IZONA COOKSURFACE FAULT CODES

Fault Code	Fault Class	Name	Description
F2	C	TRIVET FAULT	Trivet motors have been driving up or down for 10 seconds without the appropriate limit switch closing.
F3	C	TEMP FAULT	The burner thermistor reports a reading outside a maximum or minimum limit.
F4	C	IGNITION FAULT / NO FLAME FAULT	Flame detection has failed three times (2 re-lights) within 40 seconds. Either the burner is not igniting, OR flame detection is not working.
F5	C	GAS CALIBRATION FAULT	The burner is gas calibrating and either flame sense is not working, OR the burner is not igniting, OR the valve is jammed and not rotating.
F7	A	WRONG AIRFLOW	Airflow check from either the master or rapid burner indicates airflow out of acceptable range.
F8	B	WRONG FLAME	Flame detection indicates a flame is present for 20 seconds, on a burner that is not operating.
F9	A	POWER BUTTON FAULT	Power button switch is closed for 15 seconds.
F10	C	TRIVET SWITCHES FAULT	Both trivet micro-switches have been closed for 6 seconds.
F11.1	B	VALVE CLOSED FAULT	Valve drive software says the valve should be closed but the valve switch is open (valve open).
F11.2	B	VALVE OPEN FAULT	Valve drive software says the valve should be open but the valve switch is closed (valve closed).
F11.3	B	TRIVET / VALVE FAULT	Valve switch is open and the upper trivet switch says the trivets are not fully up, for more than 6 seconds.
F12.4	A	MASTER TEMP BAD	Thermistor on the master reports out of range temp for 5 seconds. Either: Temp >185°F (85°C), or Temp <-22°F (-30°C).
F12.5	A	SMPS NOT TURNING OFF	Power supply is still on 10 seconds after it has been switched off.
F12.6	A	FAN VOLTAGE OUT OF RANGE	ADC on master indicates fan voltage is either over or under allowable limits. For 10 seconds either fan voltage >28V, or fan voltage <2V.
F12.7	A	NO COMMS	Communications between master and any of the three burner boards not working.
F12.8	A	VOLTAGE OUT OF RANGE	ADC on master indicates voltage supply is either over or under allowable limits. For 2 seconds either supply >32V, or supply <20.4V.
F12.9	A	MASTER SOLENOID FAULT	Master solenoid is being driven open/closed for 10 seconds but feedback indicates it is still closed/open.
F12.10	A	ABSOLUTE MAX OVERVOLTAGE	ADC on master indicates voltage supply is either over or under the absolute maximum/minimum allowable limits. For 1 second either supply >36V, or supply <16V.
F12.11	A	BURNERS UP SIGNAL FAULT	Burner board detects a burners-up-signal voltage that does not correspond to the combination of burners up supplied by the master via comms (for 25 seconds).



## 7.2 Flow Diagrams of Fault Code Service Procedures



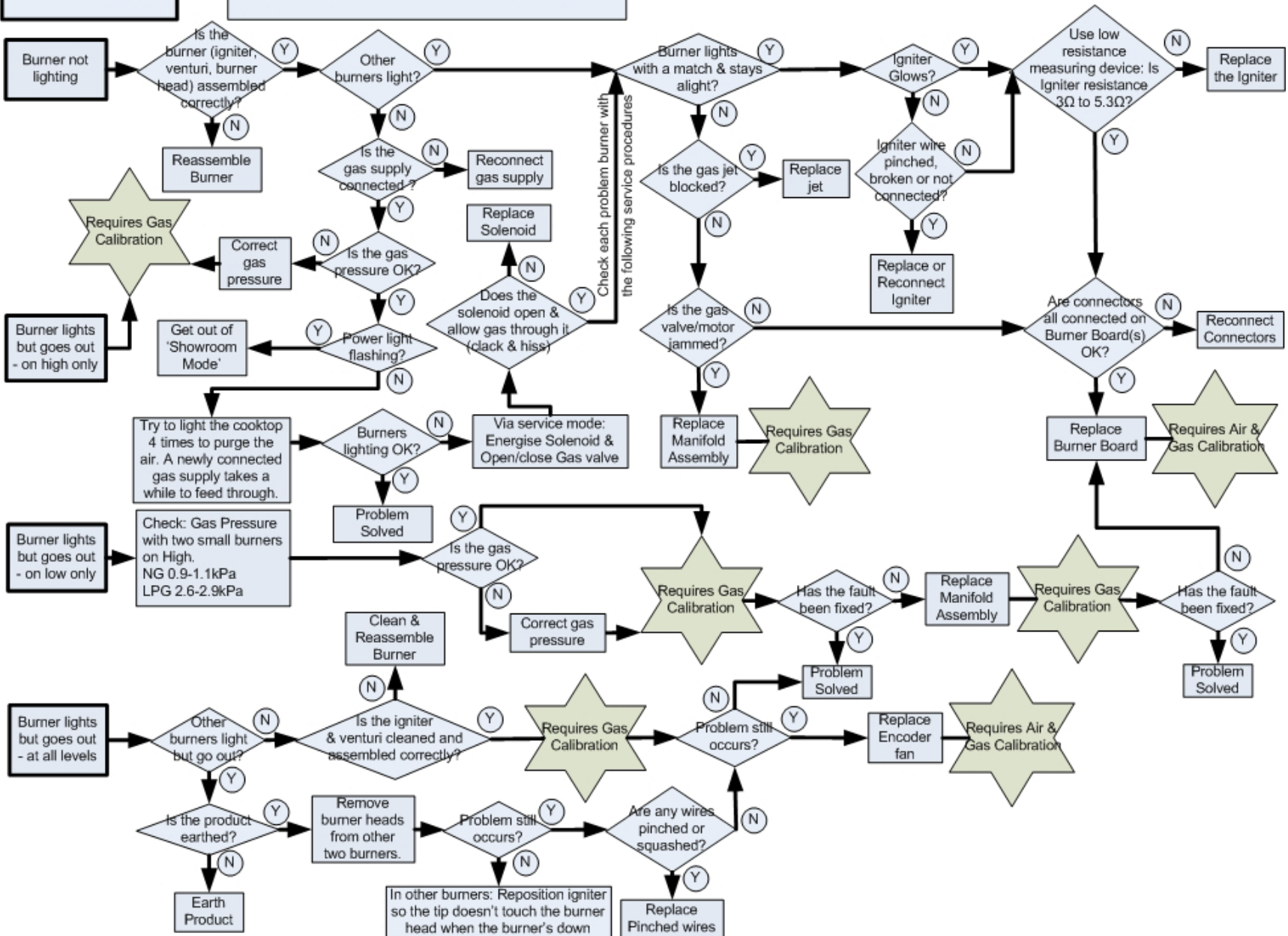
**FAULT CODE**

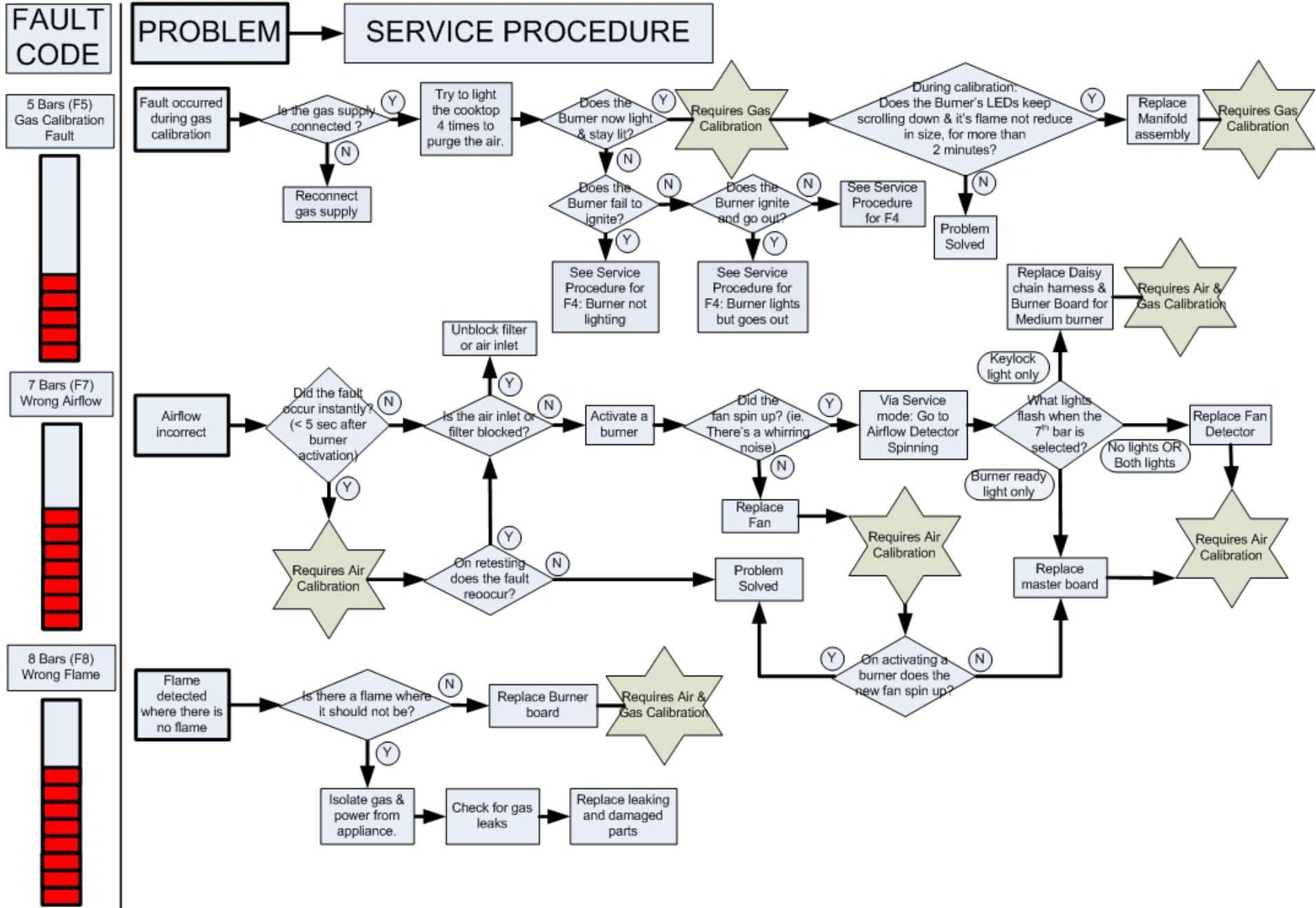
**PROBLEM → SERVICE PROCEDURE**

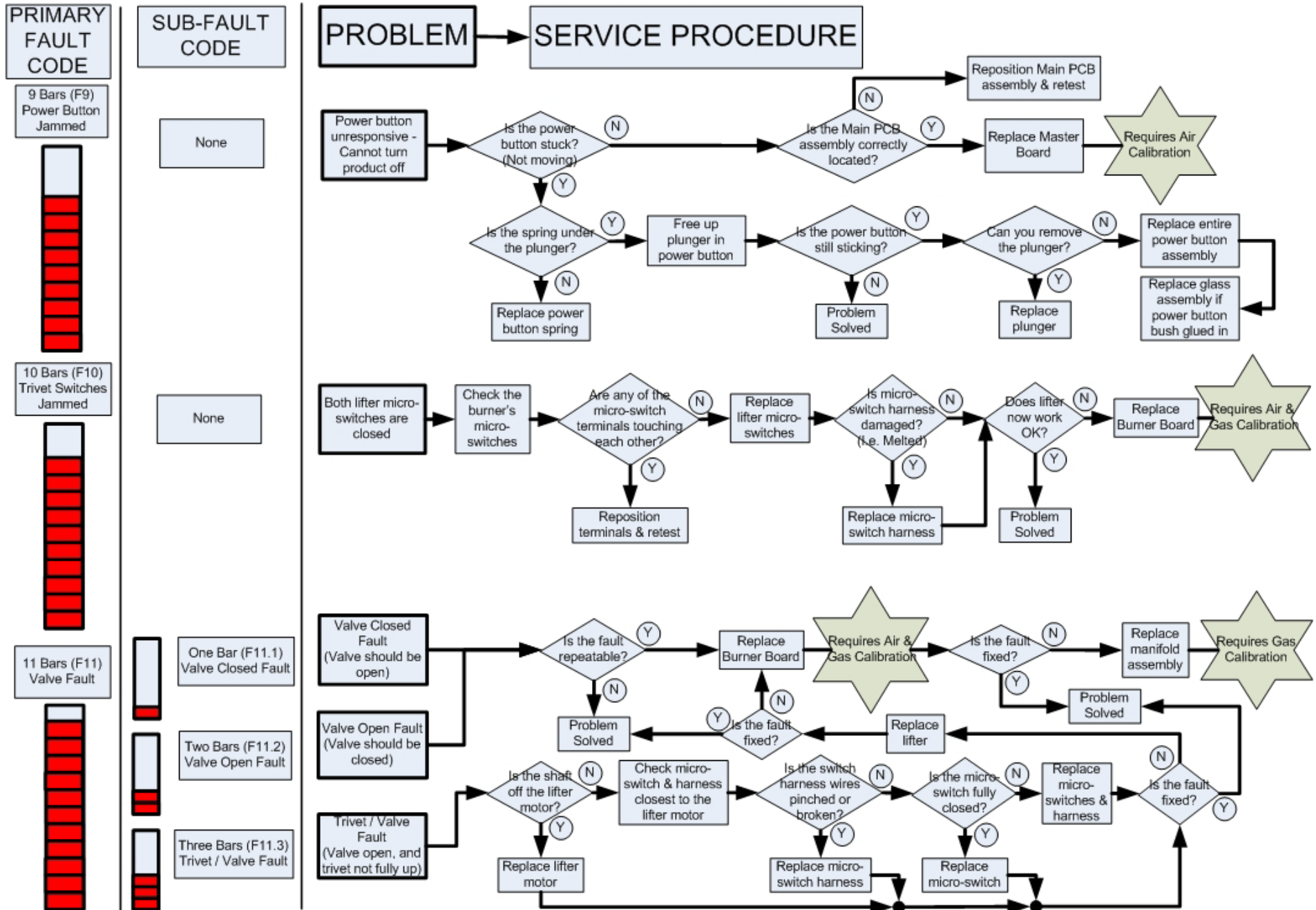
4 Bars (F4) Ignition/Gas Supply Fault



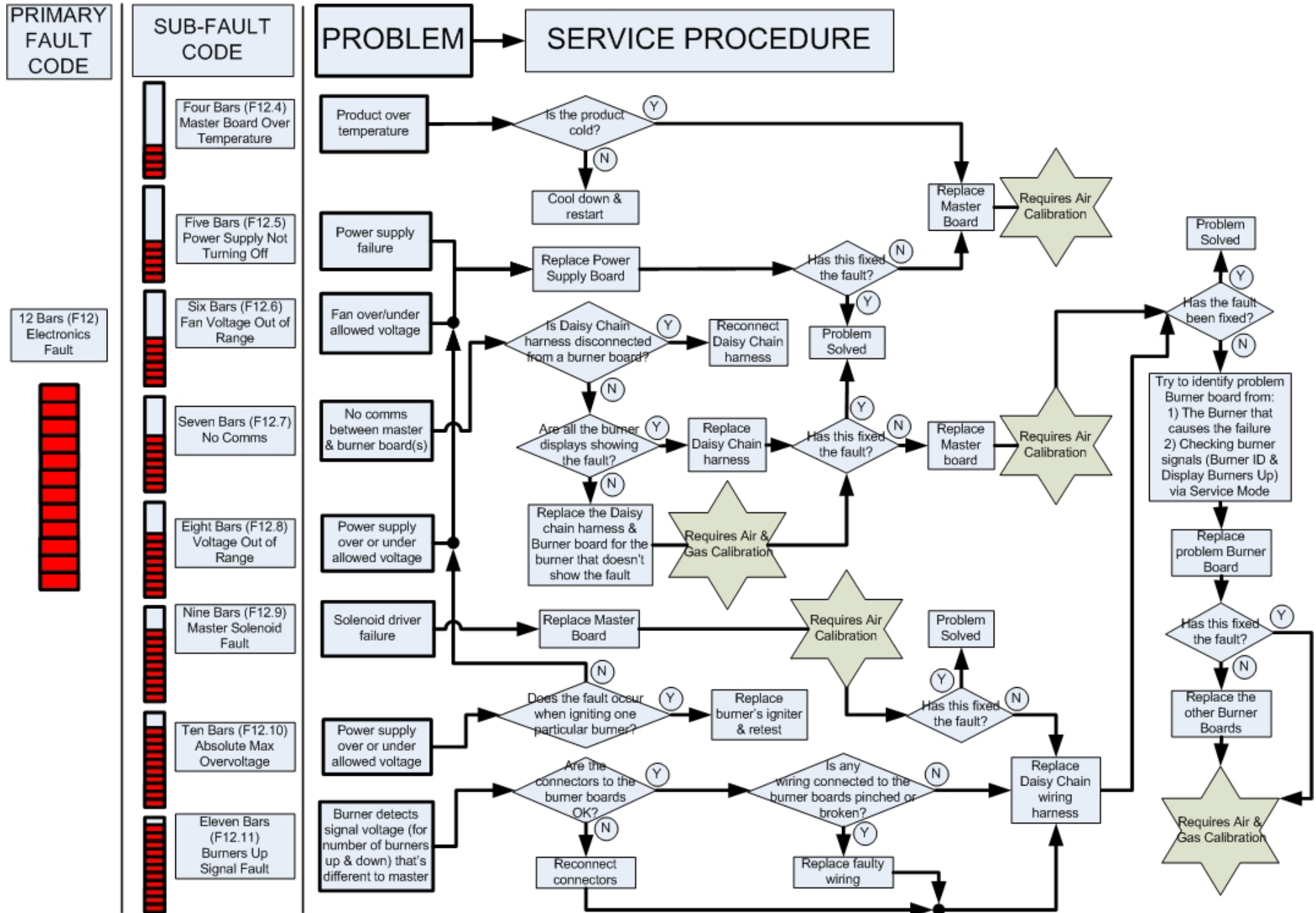
**PRE-TEST TO DETERMINE PROBLEM:**  
Turn the burner on at Level 8. Leave for 5 seconds. Turn the burner power to High, and then to Low.



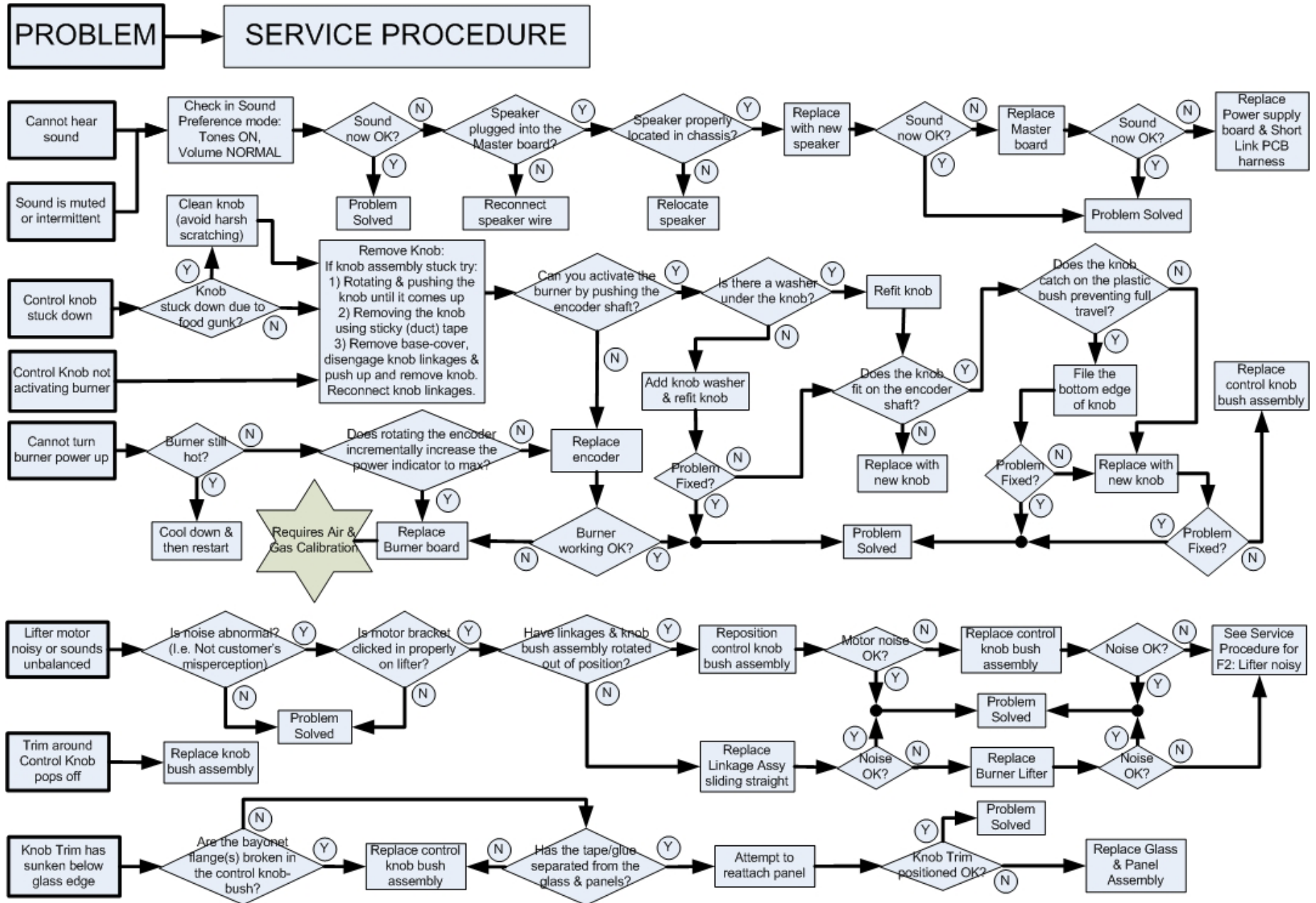


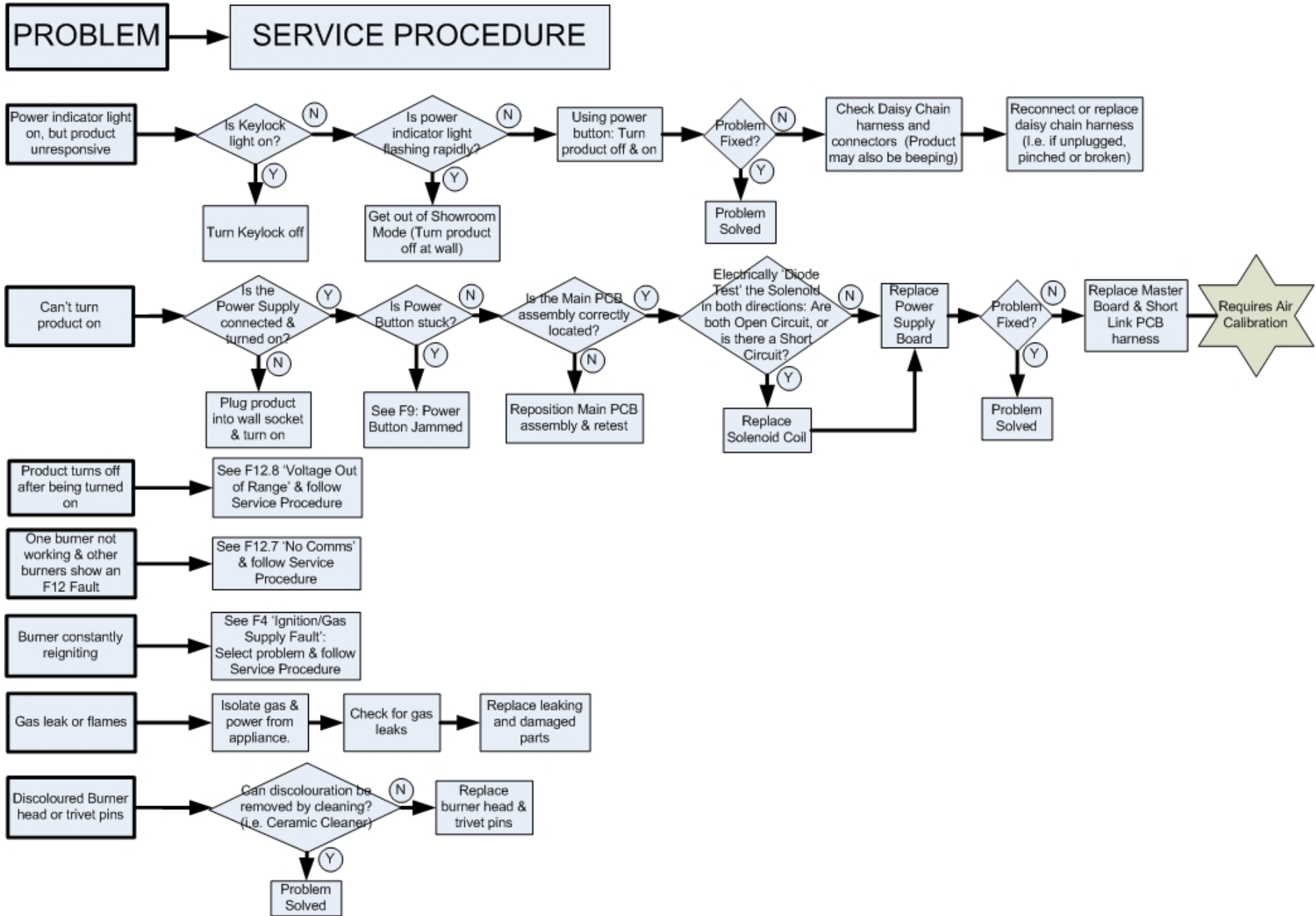









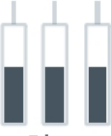





### 7.3 Flow Diagrams of Miscellaneous Service Procedures





## 7.4 Fault Diagnosis Instructions From The User Guide

The following information was given in the User Guide to allow the customer to diagnose, and for minor problems correct, a fault. However this information is not as detailed (or as useful) as the flow diagrams given in the previous section. Please refer to the flow diagrams for detailed instruction for repairing faults.

Alert Code	Possible Causes	What to Do (Customer)
 2 bars	1. The pan is too heavy for the pan supports to lift.	Remove the pan, let the pan supports rise up, and then place the pan back on the pan supports.
	2. The pan support pins are stuck in the down position because of spilled food.	Try to remove the food with a damp, soapy, soft cloth.*
	3. The pan supports are stuck in the up position.	Clean the pan supports as described in the 'Care and cleaning' section.*
 3 bars	4. The burner has extremely overheated. (This only happens after very long use at maximum temperatures.)	Wait for the CookSurface to cool down. Once the code has disappeared, you can use your burner again.
 4 bars	1. No gas.	Check your gas supply, and then turn the CookSurface off and on again.*
	2. You have just changed your gas bottle.	Try relighting the wok burner a few times (to make sure gas fills the piping).
	3. Draughts from an open window or other ventilation are causing the burner to go out on low settings.	The CookSurface continuously monitors each burner to make sure the flame does not go out, and relights it if it does.*
	4. Food on the igniter.	Call your Authorized Service Center or Customer Care.
 7 bars	There is not enough air getting to the burners.	Check that the air intake grill installed in the base of your cabinet has been fitted correctly by the installer and that nothing is obstructing the air vent underneath the CookSurface.
 8 bars	Flame has been detected on a burner that is not going.	Shut the CookSurface off and call your Authorized Service Center or Customer Care.
 9 bars	The on/off power button is stuck.	Call your Authorized Service Center or Customer Care.
 10 bars	There is a pan support malfunction	Call your Authorized Service Center or Customer Care.
 11 bars	There is a gas valve control malfunction.	Call your Authorized Service Center or Customer Care.
 12 bars	Electronics malfunction for the whole CookSurface.	Call your Authorized Service Center or Customer Care.

\* = If the fix doesn't work then call your Authorised Service Centre or Customer Care.



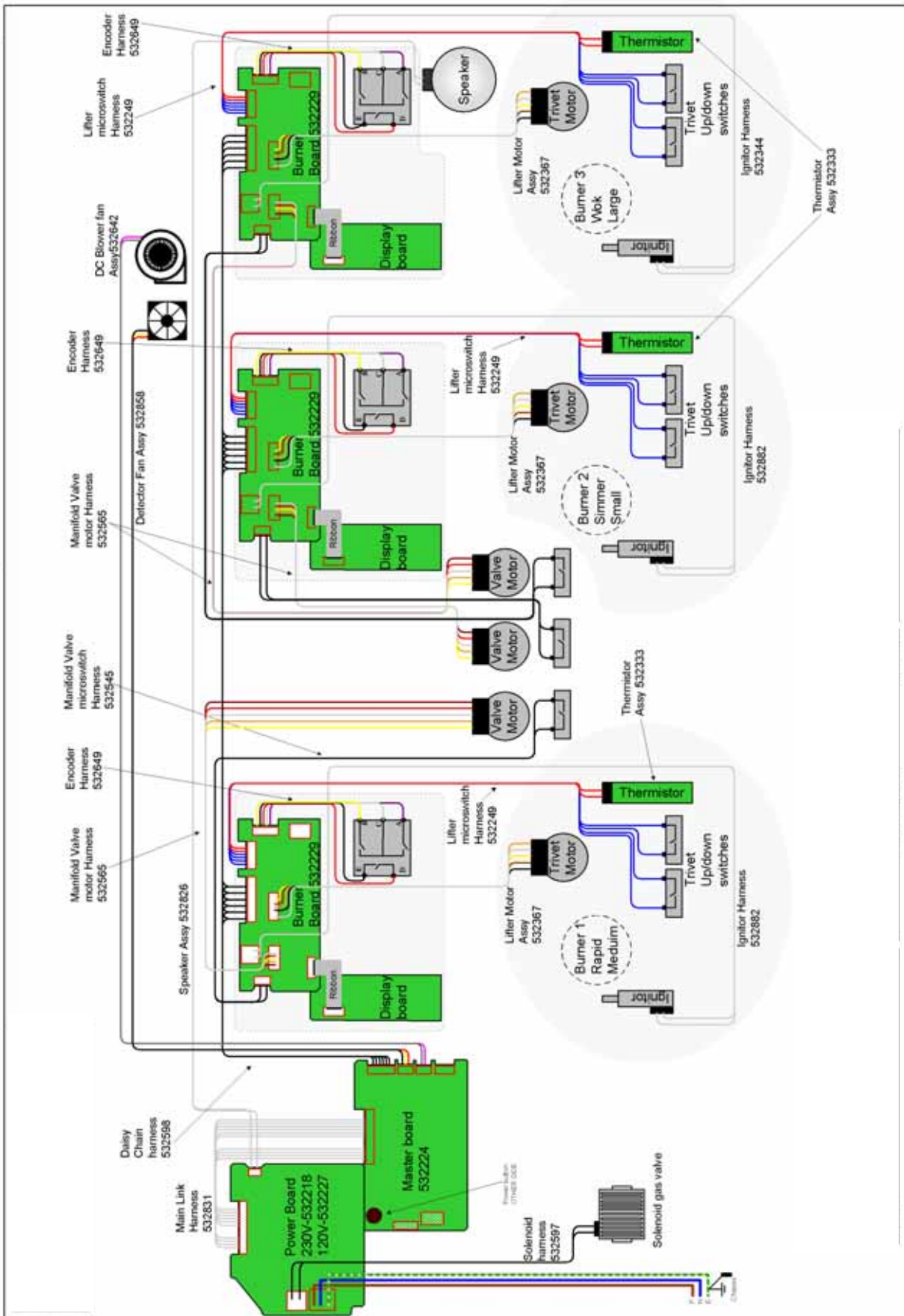
## 7.5 Troubleshooting Chart From The User Guide

The following information was included in the User Guide to help answer common customer questions about possible problems.

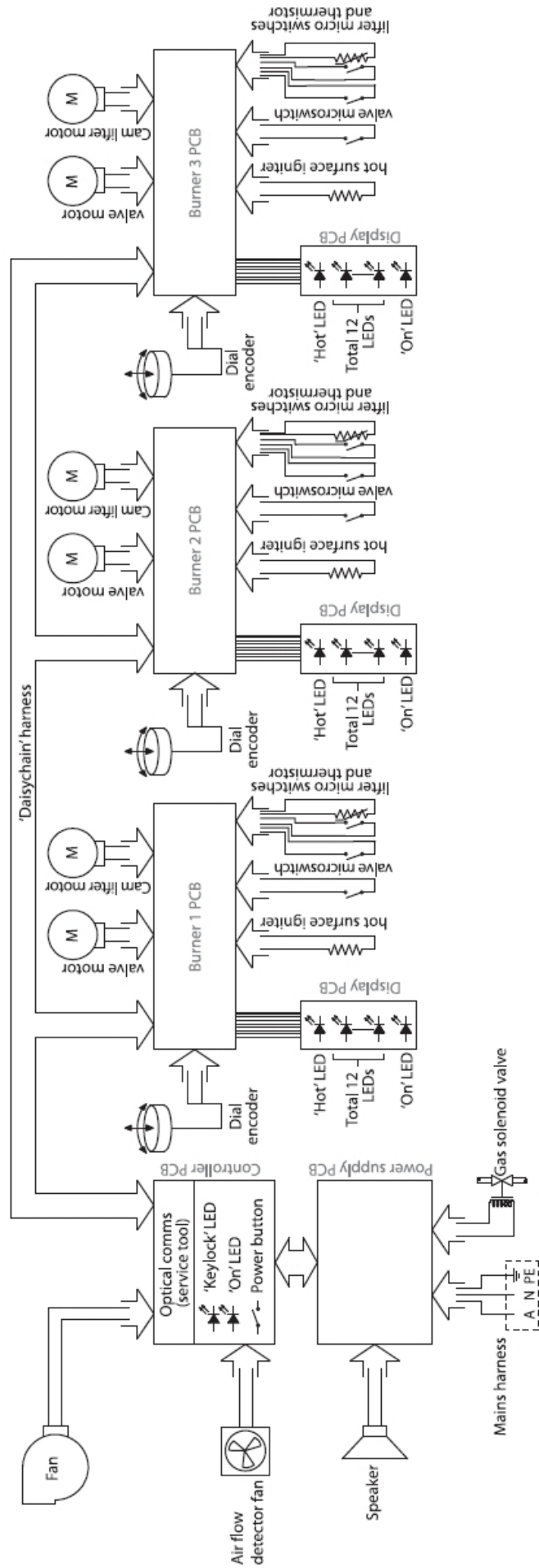
<b>Problem</b>	<b>Possible Causes</b>	<b>What to do</b>
<b>The pan supports will not rise.</b>	Power is not turned on.	Turn on the CookSurface.
<b>The pan supports, on/off power button, or control dials are stuck.</b>	Food has been spilled on these parts.	See 'Care and cleaning.'
<b>A flame is extremely yellow or uneven.</b>	1. The burner has been incorrectly reassembled after cleaning.	Reassemble the burner correctly (See Care and cleaning').
	2. Food has been spilled on the venturi mesh.	Call your Authorized Service Center or Customer Care.
	3. If you are using bottled gas, this may be an indication that the bottle is nearly empty.	Check the level of your gas bottle or check that the gas supply is going.
<b>A burner is not lighting.</b>	1. You are out of gas.	Refill your gas bottle or check the gas connection.
	2. Food has been spilled on the igniter.	Call your Authorized Service Center or Customer Care.
	3. The burner has been incorrectly reassembled after cleaning.	Re-assemble the burner correctly (see 'Care and Cleaning').
<b>The flame goes out on the low setting</b>	1. You are out of gas.	Refill your gas bottle or check the gas connection.
	2. Draughts are blowing out the flame.	Eliminate the draught. If the problem persists, then call your Authorized Service Center or Customer Care.
	3. The low flame setting is too low.	Call your Authorized Service Center or Customer Care.
<b>Pan supports rise or lower slowly and noisily.</b>	Food has been spilled on these parts.	Clean the pan supports (see 'Care and Cleaning').
<b>There is an unpleasant (gas) smell.</b>	The CookSurface is not functioning correctly or gas could be leaking.	Shut off the gas and electricity supply, ventilate the room and call your Authorized Service Center or Customer Care.
<b>There is an electricity failure.</b>	There is an electricity failure.	The CookSurface cannot be used without an electricity supply. If the electricity has failed while the CookSurface was on, the gas supply will automatically shut off. The CookSurface will return to the 'off' state when the electricity is restored and will be ready to use.
<b>The CookSurface shuts down suddenly. (Some alert codes may not have had time to display.)</b>	1. The CookSurface has shut itself down to prevent damage.	Call your Authorized Service Center or Customer Care. For more information, and if fault codes were displayed, see 'Fault Codes'.
	2. There has been an electricity failure.	See above problem.
<b>My CookSurface is beeping and flashing.</b>	It is asking you to do something.	See the 'Fault Codes'. If the problem fails to clear after repeated attempts, then call your Authorized Service Center or Customer Care.
<b>The on/off light is flashing three times repeatedly and the CookSurface appears useable but there is no flame.</b>	The CookSurface is in 'Showroom' mode.	Turn the power to the CookSurface off at the wall. Wait a few seconds and then turn the power back on again.
<b>Flame height reduces after period of cooking time.</b>	Large pan on the burner for long periods of time.	Use another burner or wait until the burner cools down.

# 8 WIRING DIAGRAMS

## 8.1 Detailed Wiring Diagram



## 8.2 Overview of Wiring Diagram



## 9 SERVICE PROCEDURES

In order to service components of the cooktop, certain procedures must be followed. These procedures are as follows:

- To avoid stripping screws, do not over tighten when reassembling parts. A screw gun is not recommended, but if using a screw gun, have the torque setting on low.
- Take extra care not to damage wire terminals on removal, as some have release clips.
- Discharge the product by switching off at the wall while the product is still on.

### 9.1 Removal From Joinery Cavity



- Remove all venturis, burner heads and pins (so these parts don't fall out) before shutting off the product and removing it from the cutout.
- Whenever the cooktop is removed from the cavity, the filter should be inspected and cleaned or replaced if necessary.

### 9.2 Reassembly Procedure

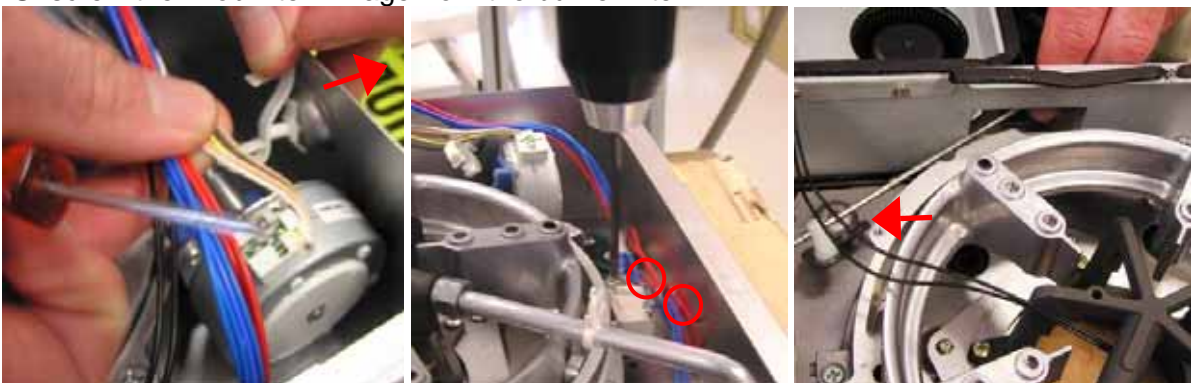
Reassembly procedure should be the reverse of disassembly, except where noted.

### 9.3 Burner Lifter

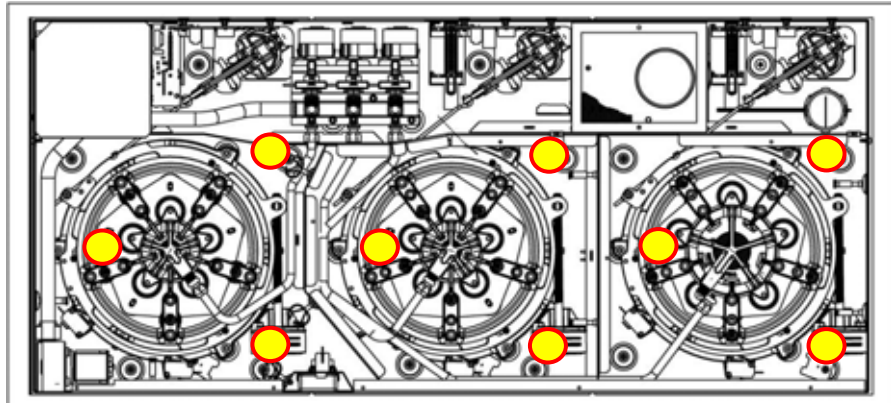
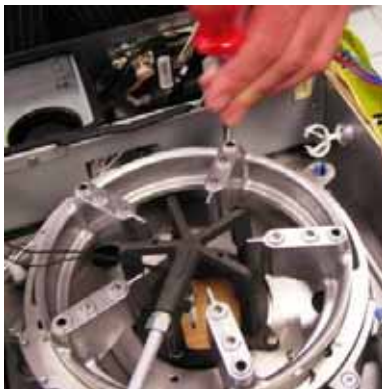


#### Removal

1. Remove the pan support pins.
2. Remove the base cover to access underside.
3. Remove cable ties from actuator motor and knob lifter.
4. Unclip wires from clips on baffle.
5. Unplug the hot surface igniter from the burner PCB.
6. Unclip igniter wires from gas pipe.
7. Unscrew the micro-switches from the lifter. Note the orientation.
8. Unscrew the knob lifter linkage from the burner lifter.



9. Unscrew and remove the three countersunk screws holding the lifter to the chassis. Note the orientation of the lifter to the chassis.

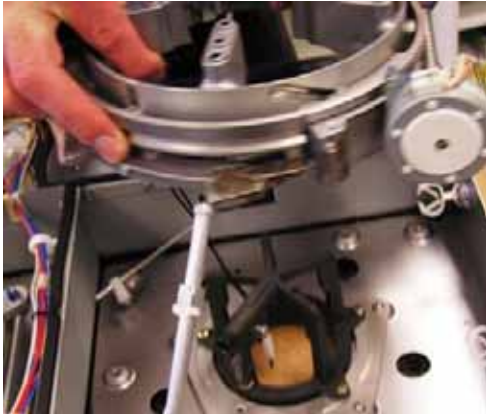




10. Disconnect the gas pipe from the burner bowl & the manifold assembly. The small burner lifter may need the wok's gas pipe removed in addition to the small burner's gas pipe. Also remove the baffle attachment bracket before removing the wok pipe.



11. Remove the lifter from the product, slipping the hot surface igniter wires out through the middle.



12. Make sure the actuator lead-screw nut is at the far end of the screw from the motor. Unclip the actuator nut, then the motor bracket (using pliers to compress the spring clips) from the cast aluminium parts (ring cam assembly).



**Replacement**

Replacement is the same as removal, but in reverse.

1. Attach the actuator motor onto the replacement ring cam (lifter) assembly. First connect the motor bracket and then the nut. Be careful not to bend the lead screw.
2. Thread the hot surface igniter wires up through the middle of the lifter.
3. Reposition and screw the lifter to the chassis.
4. Reconnect the gas pipe to the burner bowl and manifold. Leak test this gas connection.
5. Screw the micro-switches to the lifter.
6. Screw the knob lifter link back on.
7. Connect the hot surface igniter to the burner PCB.
8. All wires should be restrained, using the clip(s) on the cross baffle and three wire ties: 1 at the knob lifter, 1 behind the knob assembly and 1 by the actuator motor. Make sure wires are constrained from falling onto the motor nut & lead screw.

After turning the product over and checking the operation of the lifter, the pin heights may need to be adjusted so that they are the same height. The pin clip is adjusted from beneath the burner with a No.2 square drive. In the burner down position, the pin heights should be 3/32" to 1/8" (2.3 to 3mm) above the glass.

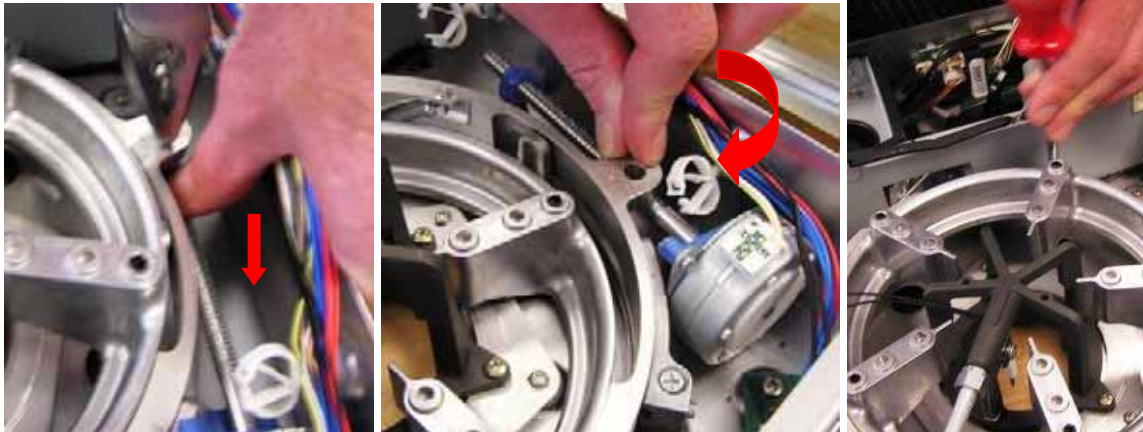
**9.4 Burner Lifter Motor**



**Removal & Replacement**

The removal & replacement of the burner lifter motor is the same as the burner lifter (refer to Section 9.3), with the following exceptions:

1. On removal, unclip the motor actuator nut from the drive screw.

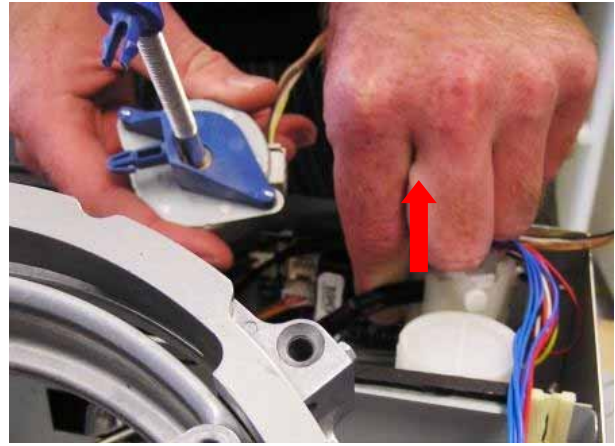


2. Rotate the drive screw by hand until the motor is in the up position.
3. Remove the three screws holding the lifter to the chassis. The burner lifter can be angled up so that the motor bracket can be accessed without breaking the gas connection at the burner bowl.



4. Unplug the actuator motor from the burner board. Unclip the motor bracket from the lifter. The micro-switches can be left on the lifter.





## 9.5 Burner Lifter Micro-Switches

### Removal & replacement

The procedure for removal and replacement of the micro-switches is the same as for the burner lifter (refer to Section 9.3) with the following exceptions:

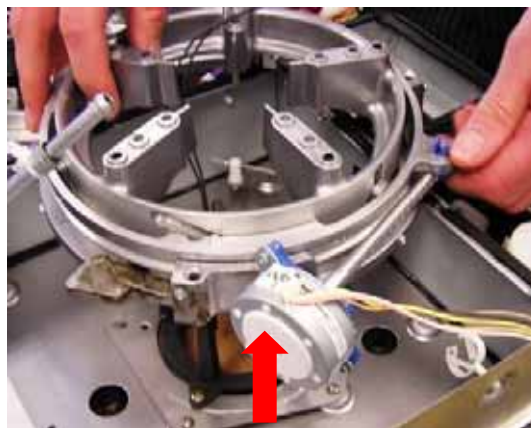
1. The lifter and associated parts need not be removed.
2. After unclipping the wires, unplug only the micro-switch harness.
3. Unscrew the micro-switches from the burners.
4. When replacing the micro-switches ensure that the terminals are clear, so they are not touching each other. An F10 fault could occur if the terminals are bent against each other.



## 9.6 Burner Bowls

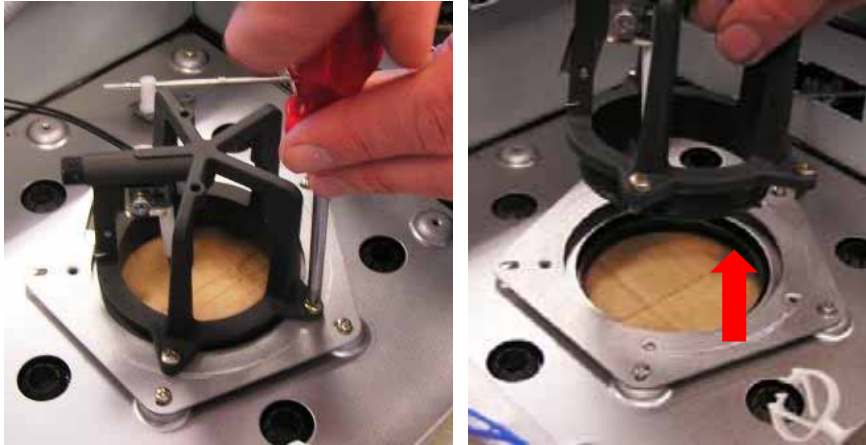
### Removal

1. Remove the burner lifter (refer to Section 9.3). The micro-switches and motor can remain attached to the lifter.



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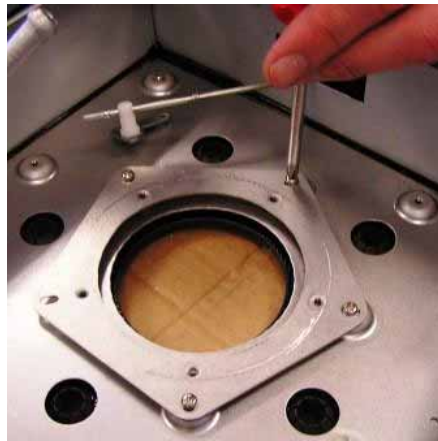
2. Unscrew the four screws holding the bowl to the thermal bracket (attached to the chassis) and lift the bowl out.



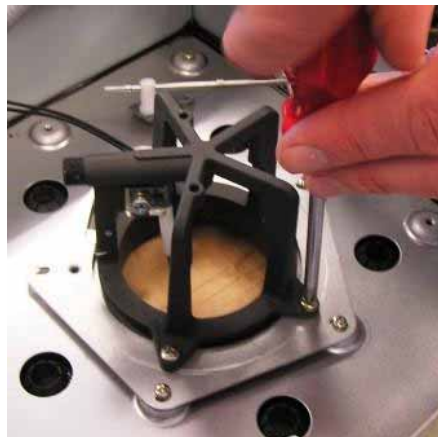
3. Unscrew the hot surface igniter from the side of the bowl.

### Replacement

1. Loosen the thermal bracket screws from the chassis.

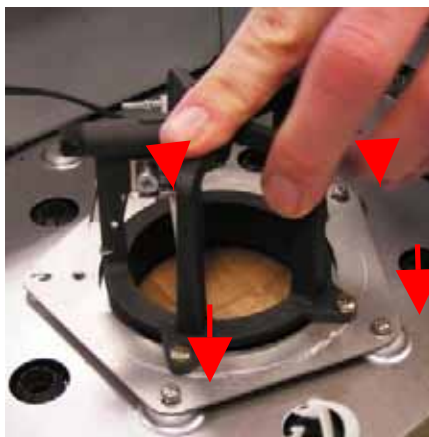


2. Ensuring that the bowl is sticking through the glass, screw the burner bowl to the loosened thermal bracket.





3. While holding the bowl so that it sticks through the glass and is level against the chassis forms, retighten the thermal bracket screws onto the chassis. This attachment method keeps the burner bowl properly aligned and level on the glass surface. (To replace the burner lifter, refer to Section 9.3.)



### Replacing The Bowl Seal

If the O-Ring seal disintegrates when the bowl is removed, remove the remainder of the seal from the top shoulder of the bowl and replace it.

## 9.7 Replacing a Hot Surface Igniter

### Removal

1. Ideally, have the burner in the 'up position' before service.
2. Turn the product off.
3. Unscrew and remove the back panel from the product.
4. Snip off the wire-ties from the problem igniter wire.
5. Remove the igniter wires from the wire holders.
6. The lifter and bowl can be left in place within the chassis. With a Phillips head screwdriver, unscrew the igniter from the burner.

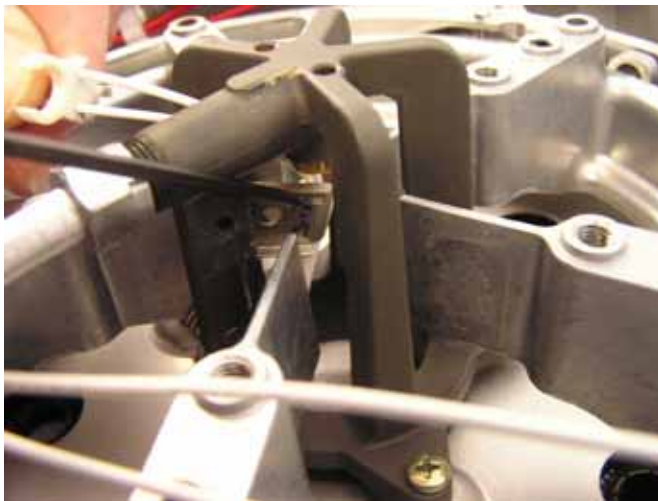


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7. If the burner is in the 'down position', rotate the motor's lead screw by hand until the igniter is accessible (or remove motor nut clip and rotate burner up).



8. Move the igniter so that its attachment bracket can be rotated past the burner flanges. Pull the igniter out from the burner head.



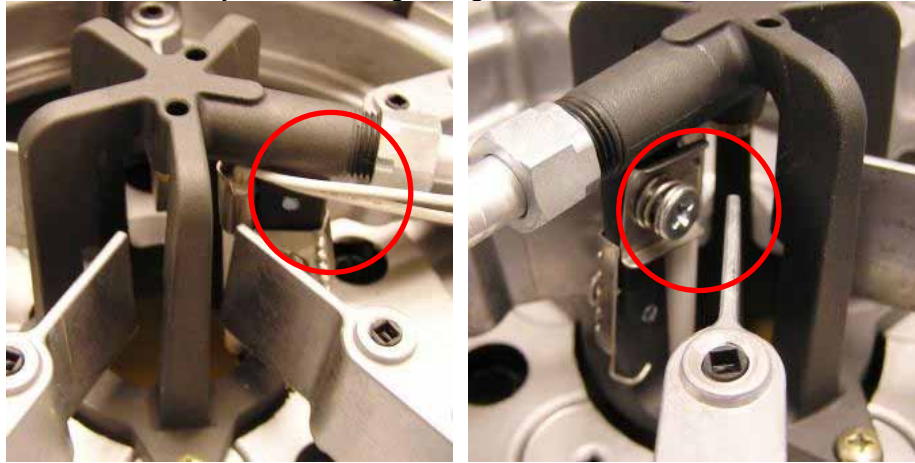
9. Remove the problem igniter connector from the burner board.

### Replacement

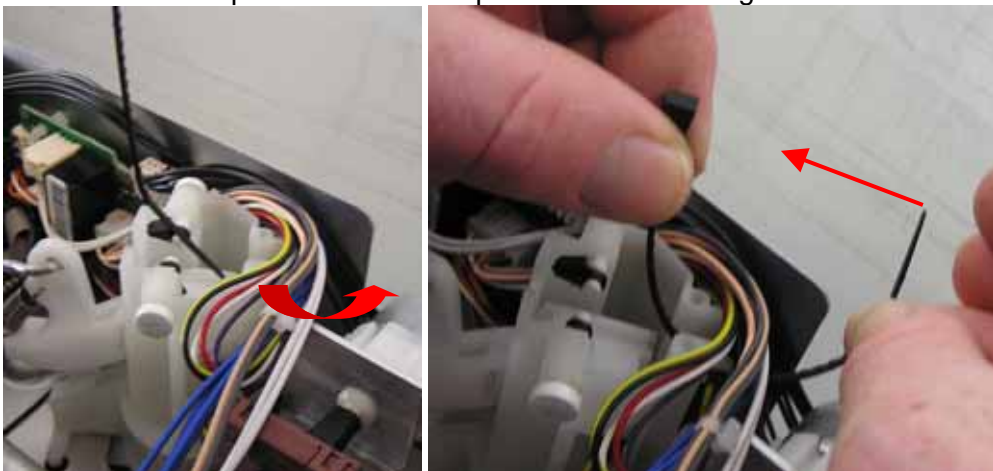
1. Place the replacement igniter in the burner head, and position its bracket for attachment.



2. Using the Phillips head screwdriver, attach the igniter loosely to the burner head with the countersunk screw and spring. To keep the igniter attachment loose, do not fully fasten the screw. Instead fasten it only until the bottom thread of the screw is flush with the side of the burner flange. **Note:** The lifter can be unscrewed (refer to Section 9.3) and rotated to one side to increase the accessibility for attaching the igniter screw.



3. Clip the igniter into the wire-holders on the baffle and gas pipe. If needed, loop the igniter in the baffle's wire stand-off to prevent looseness.
4. Attach the igniter connector to the burner PCB.
5. Bundle the wires and igniter together using wire-ties.
6. Special attention is needed to bundle the wires behind the encoder assembly. First bend the wire tie to form a hook. Thread the wire tie through the encoder assembly and under the wires. Pull the wire tie up and around to capture all the wires together.



7. Check that the bundled wires cannot be pulled into the burner assembly.
8. Snip the tails off the wire-ties and replace the back panel onto the product.
9. Turn the product on and check that the replacement igniter works.

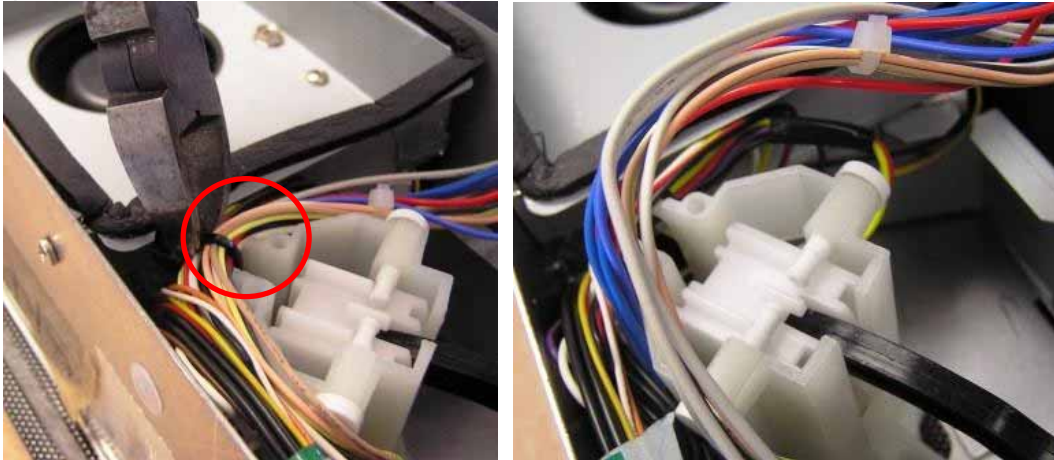


## 9.8 Control Knob Lifter



### Removal

1. Turn product upside down and remove base cover.
2. Unclip the bundle of wires from the knob lifter.

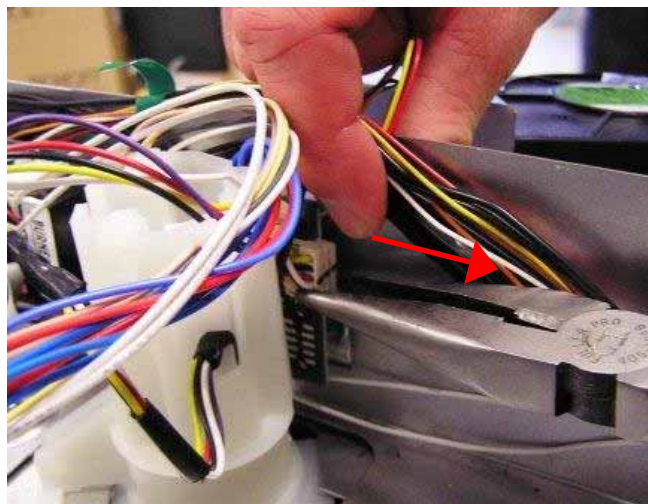


3. To give greater access for the control knob assembly for the small (centre) burner, it is best to remove the fan assembly from behind it first. For more information, refer to the fan detector removal Section 9.19.

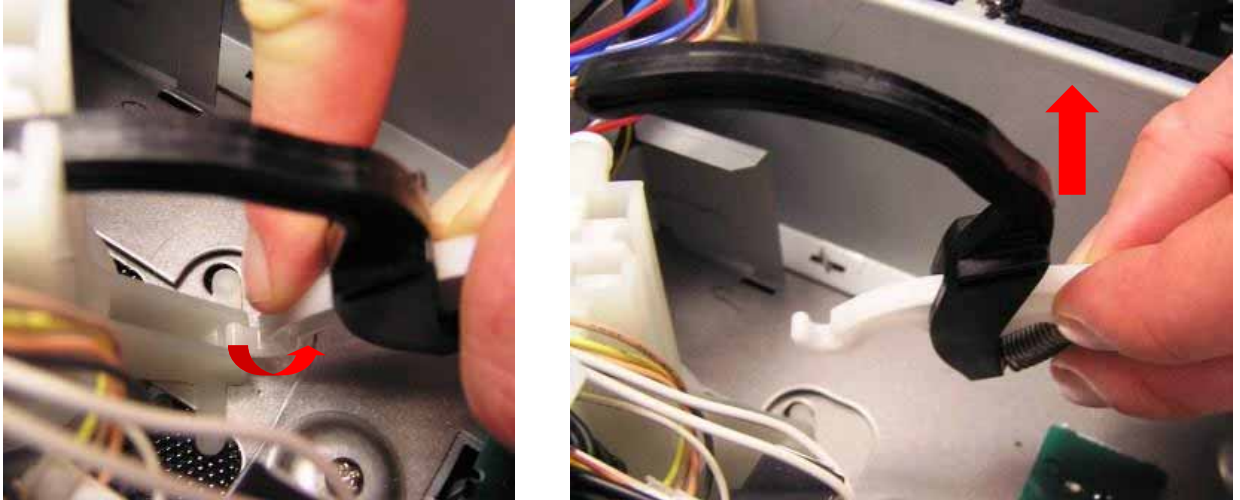


4. Unplug the encoder harness from the burner PCB. Move the wires aside to access it with the needle nose pliers.

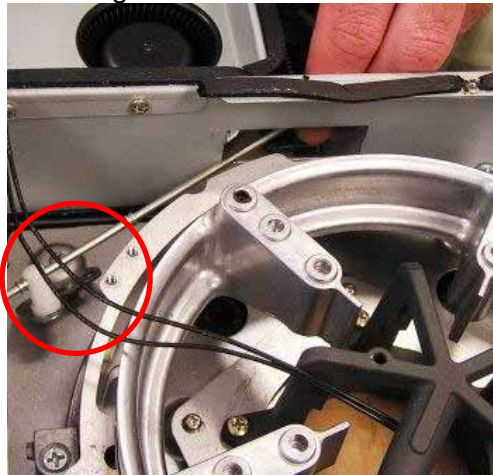
**Tip:** Alternatively, the harness connector can be removed at the end of the process if access is too tight for the pliers.



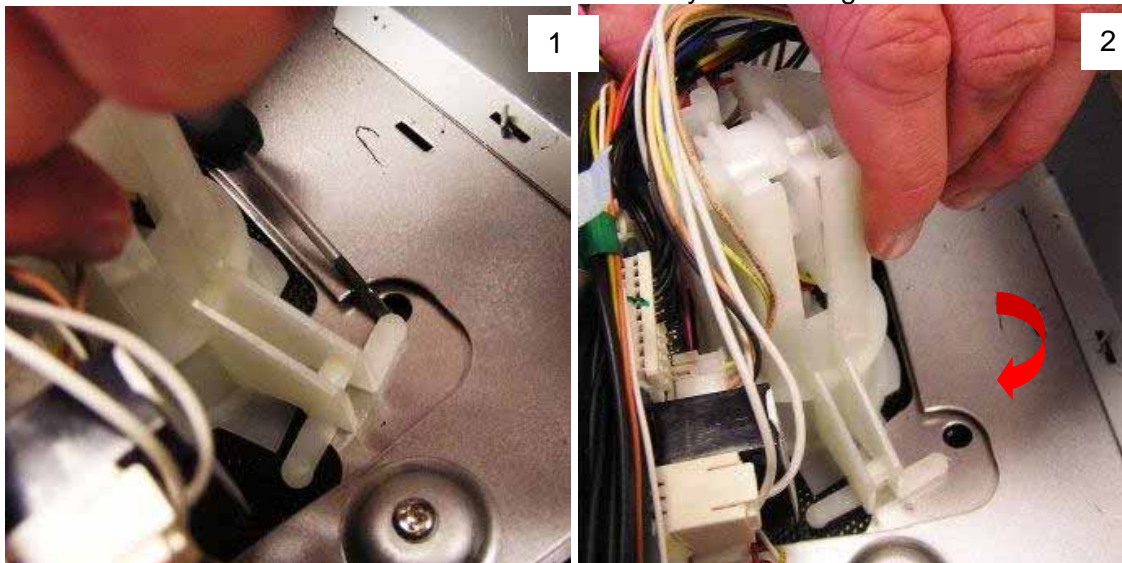
5. The linkage hooks under the end of knob bush (the plastic housing). Unclip the white 'knob lever' linkage from the knob bush. To do this, push the lever towards the sheet metal and away from the rest of the knob mechanism.



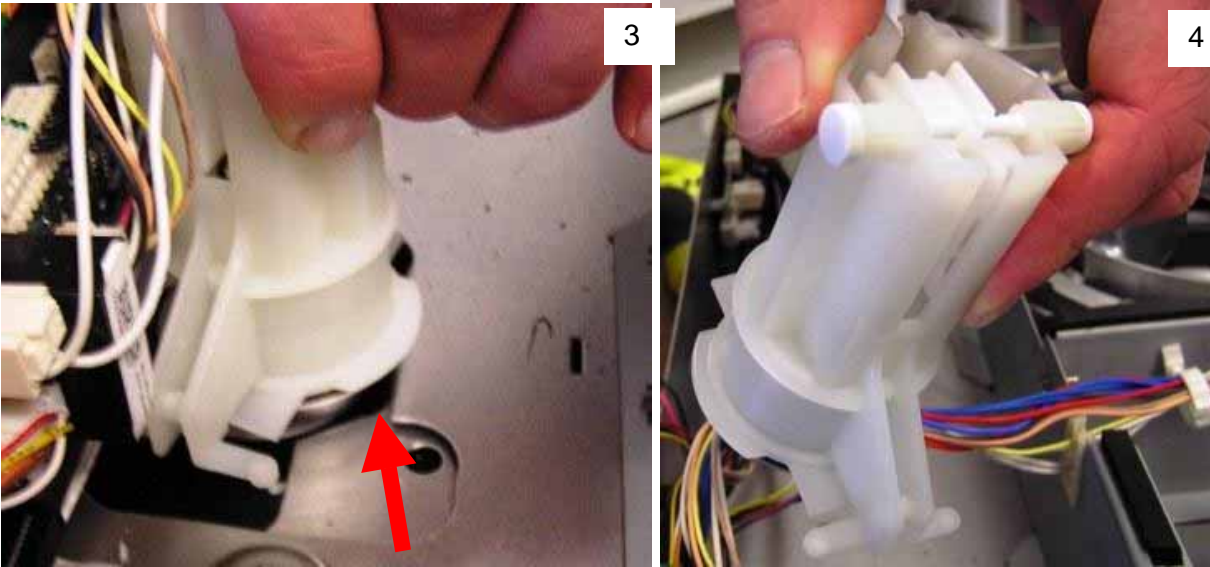
**Tip:** This may be easier if the rod linkage is first unscrewed from the burner lifter.



6. Rotate the knob bush and lift the control knob assembly out of the glass.





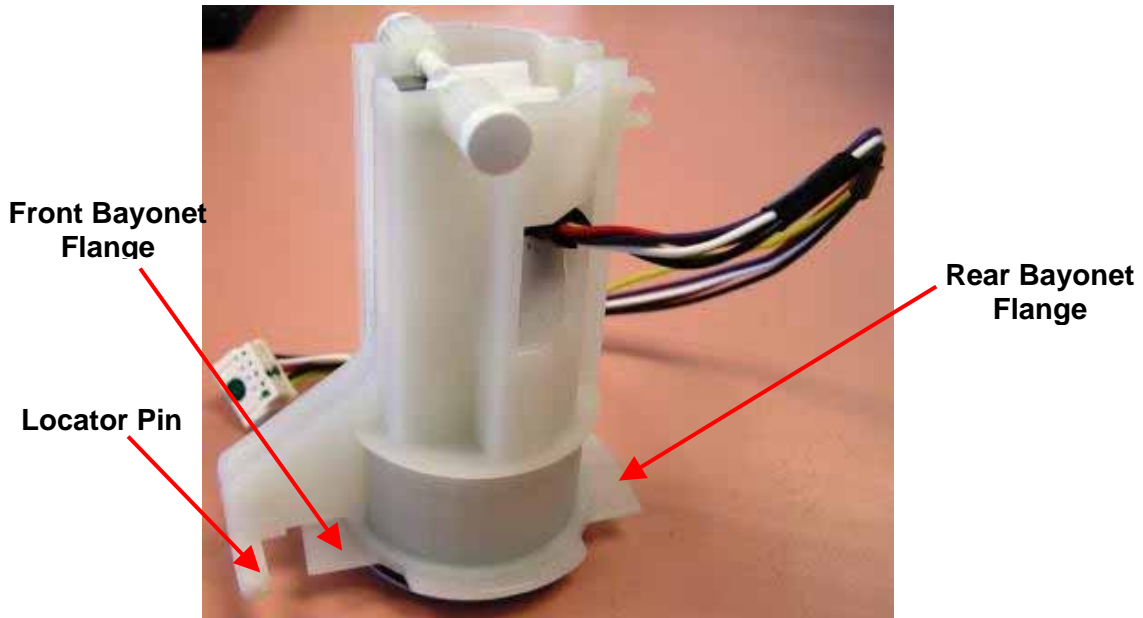


**Replacement**

In general, reverse the removal procedure for replacement. To aid re-assembly, refer to the following procedures for reattaching the knob bush assembly and the knob linkage assembly.

**Reattaching The Knob Bush Assembly**

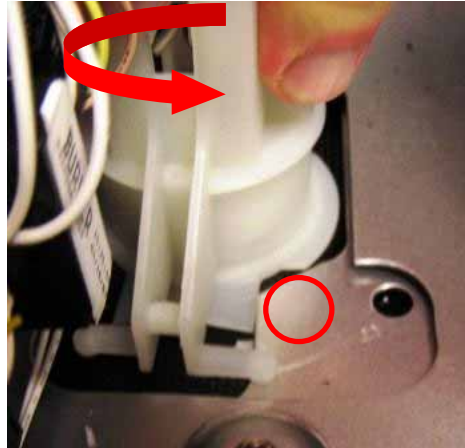
1. Special care is needed when reattaching and slotting the knob bush back into place in the glass assembly.
2. The bayonet flanges (on the front and rear) of the knob bush are used to hold the knob assembly between the chassis panels and the glass.
3. The locator pin is used to slot into a hole in the chassis panel, preventing the knob assembly from further rotation.



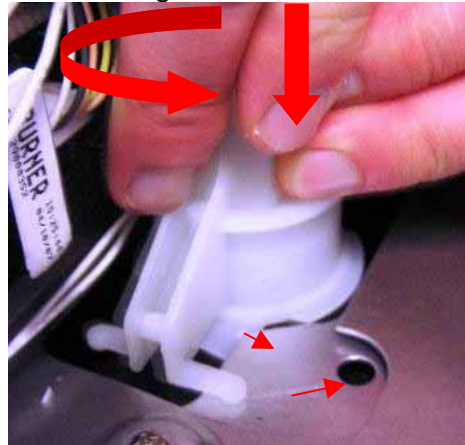
**Control Knob Bush Assembly**

4. First locate the control knob assembly in the knob hole in the glass. Position the bayonet flanges clear of the sheet-metal edges, so they can be rotated into place.

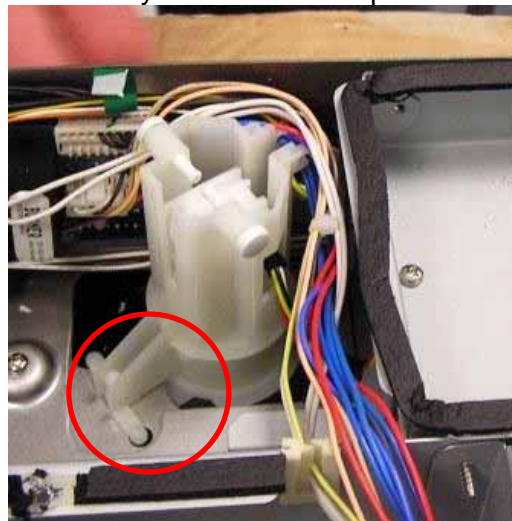
5. Rotate the bush until the bush pin locates over the sheet-metal.  
**Tip:** Use a small screwdriver to move the locator pin on the bush so it can rotate over the panel surface.
6. Continue rotating the bush assembly until the bayonet flanges come into contact with the sheet-metal.



7. Press firmly down on the knob assembly, and rotate it so both the front & rear bayonet flanges go between the chassis panel and the glass.



8. Continue rotating the knob assembly until the locator pin slots into the panel hole.



**Notes:**

- Make sure both the front & rear flanges rotate under the panel, otherwise the knob will be tilted.
- Take care not to apply too much force otherwise the flanges will break.
- If the process is taking too much force, then the bayonet flanges haven't been located correctly and the sheet-metal panel is probably digging into them.

### Reassembling the Knob Lever Linkages

The knob lever linkage assembly is made up of three parts:

- Cam Knob (Black)
- Lever Knob (White)
- Spring Knob



If the knob lever linkage assembly is disassembled, it can be put back together.



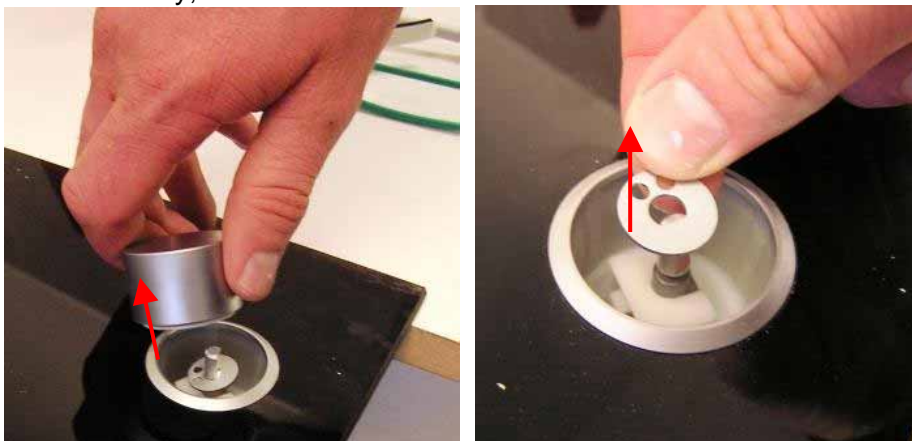
1. Locate the lever knob so that it slides within the cam knob. Loosely fit the spring over the flange at the end of the lever knob. Don't yet click the lever knob into place.
2. Angle the cam knob so that the spring slips over the rounded head at the top.
3. Click the lever knob into place within the cam knob

### 9.9 Control Knob Encoder



#### Removal

1. Remove knob assembly, and washer.

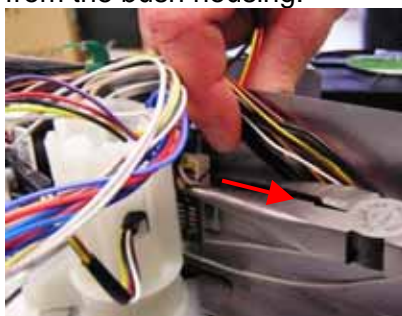




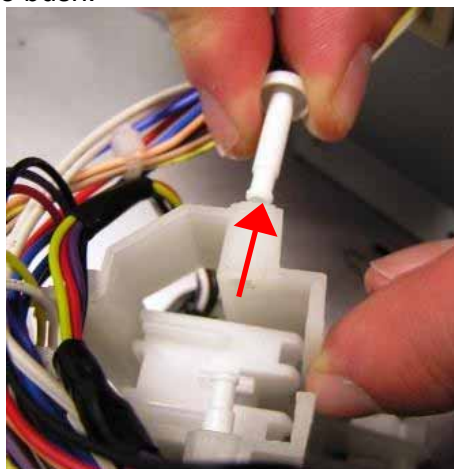
**Tips:** If the white plastic insert inside doesn't come out with the knob, use needle nose pliers to pull it off the encoder shaft. Take care removing the washer, to avoid dropping it back in.



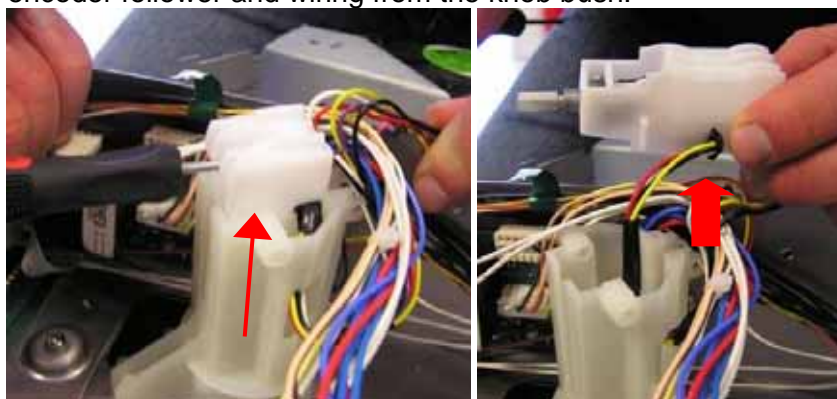
2. Remove base cover.
3. Referring to the control knob lifter removal procedure (refer to Section 9.8):
  - Unclip the bundle of wires from the knob lifter.
  - Unplug the encoder harness from the burner PCB.
  - Unclip the knob lifter lever from the bush housing.



4. Pull the white pins out of the bush.



5. Remove the encoder follower and wiring from the knob bush.



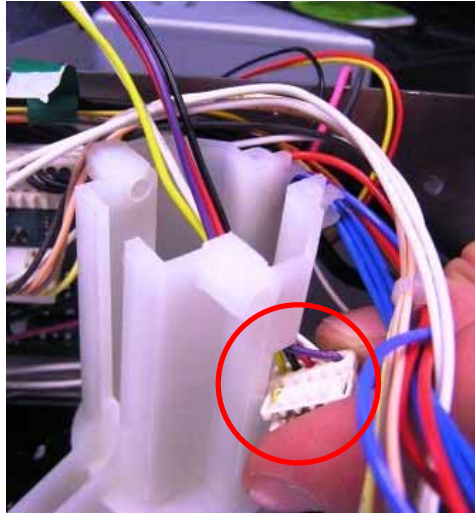
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### Replacement

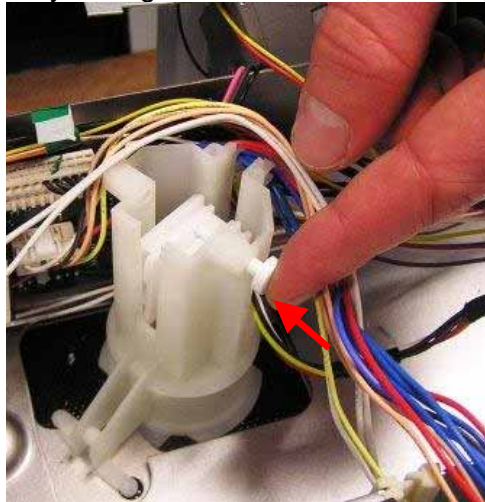
Replacement is the opposite of removal.

The encoder, harness and follower are supplied as an assembly.

1. Thread the encoder wire connector through the hole in the knob bush first, before pushing the encoder follower through.



2. Push the white pins all the way through the knob bush, until they click into place.



When bundling and tying the wires, make sure they are not in a position to foul on the movable linkage parts.

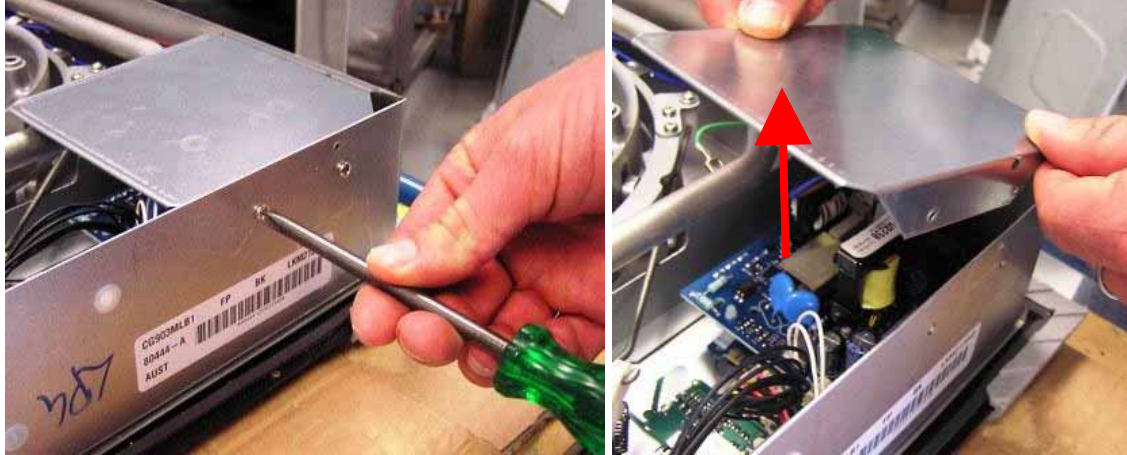
## 9.10 Main PCB

The main PCB assembly can be removed as a unit. It is easier to separate the two boards (if necessary) once they are out of the product.



### Removal

1. Remove the safety cover by unscrewing the two screws holding it to the chassis.



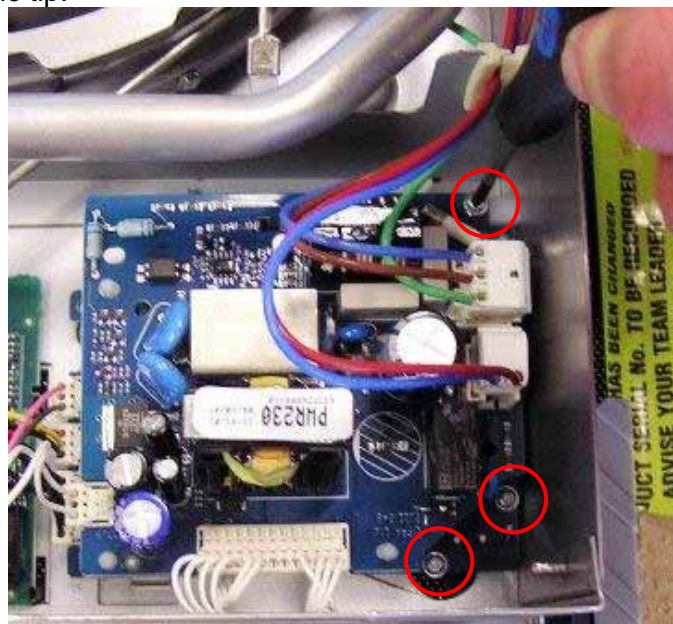
### Electrical Safety

The safety cover is provided to reduce the likelihood of electric shock if the cooktop needs to be powered on with the base cover removed.

If the discharge procedure was followed and the cooktop is unplugged, there is no risk of shock.

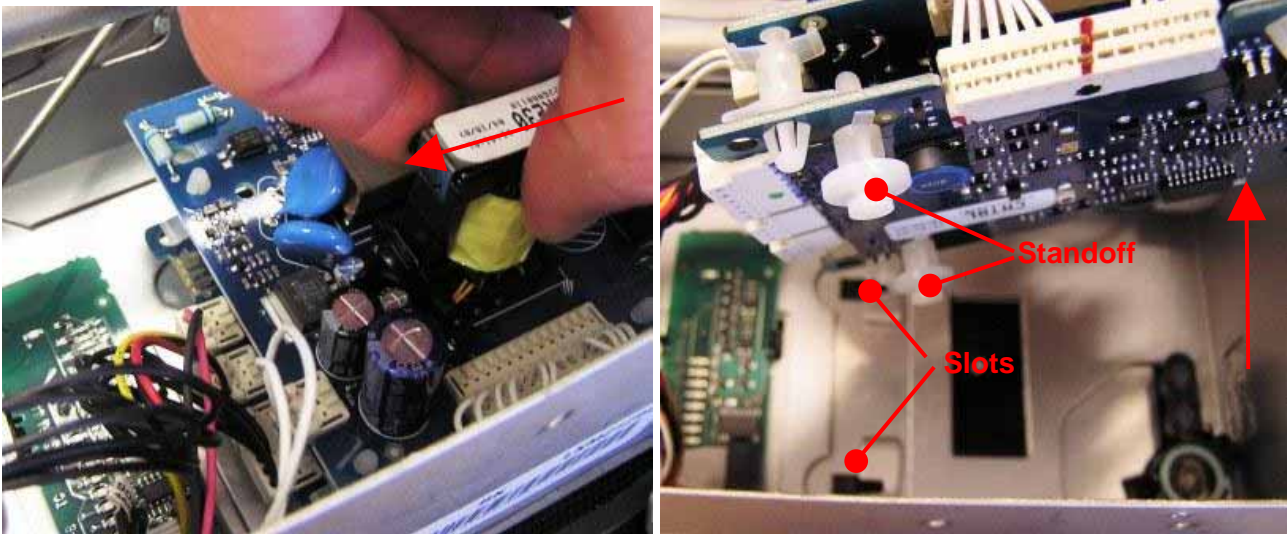
2. Unscrew the three screws holding the Main PCB assembly:
  - There are two screws holding the (bottom) controller PCB board to the power button (lower right hand corner).
  - There is one screw holding the (top) power PCB to the plastic block (on the upper right-hand edge).

**Tips:** These screws may be left in the PCB to avoid losing them. Use a #1 Pozi screwdriver, preferably with magnetic tip.



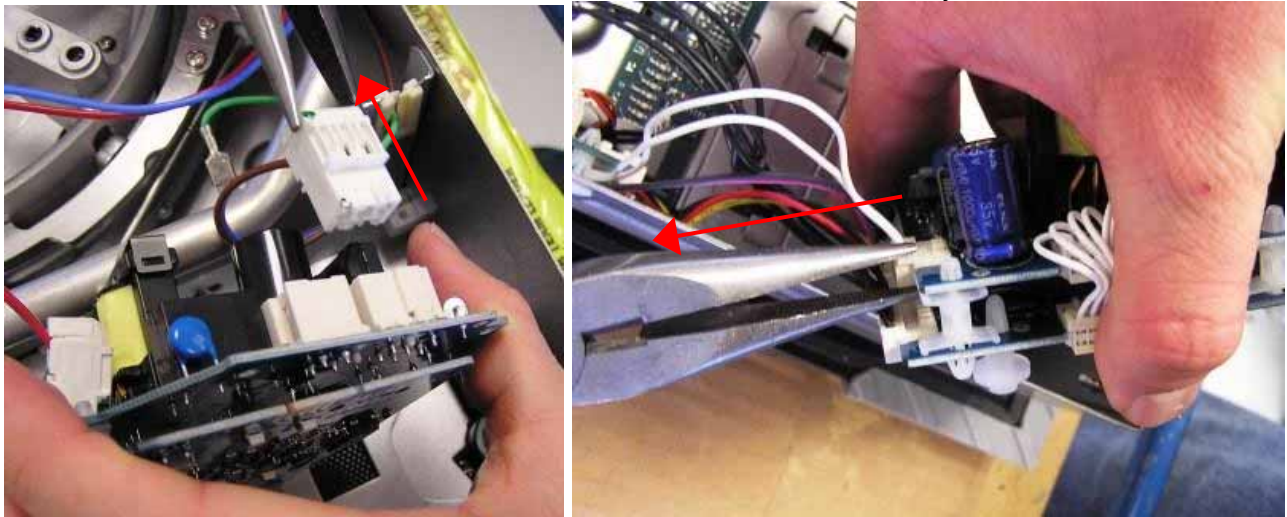


- The PCB assembly is slotted into the chassis with two standoffs on the left of the bottom board. Hinge the PCB assembly up so that the end with the screws are raised approx.  $\frac{3}{4}$ " (20mm) and slide the assembly to the left. With a small amount of wiggling it should lift out.

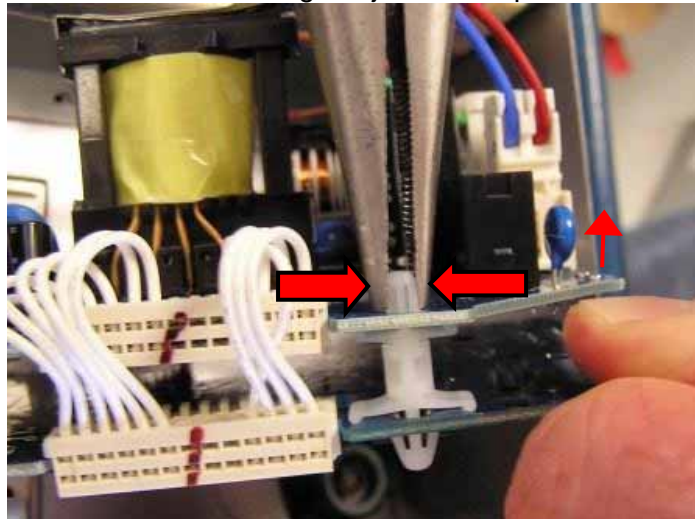


**Note:** It may be easier to remove some of the board connections before doing this.

- Disconnect the various wire connectors from the main PCB assembly.



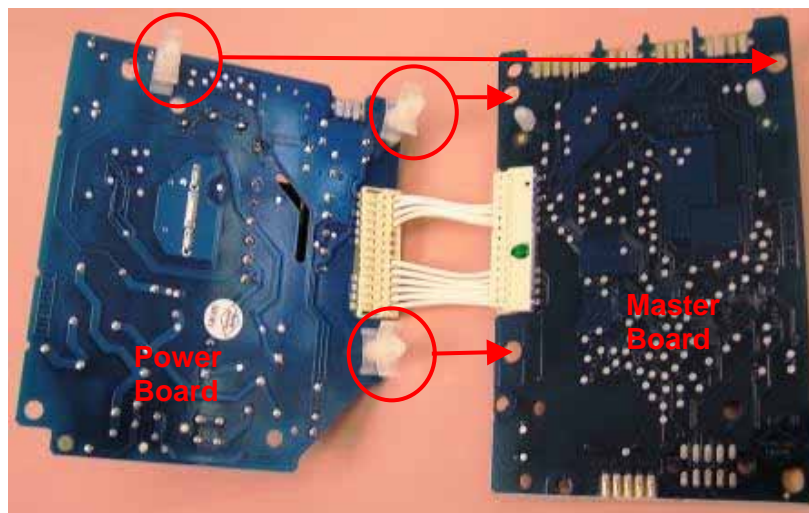
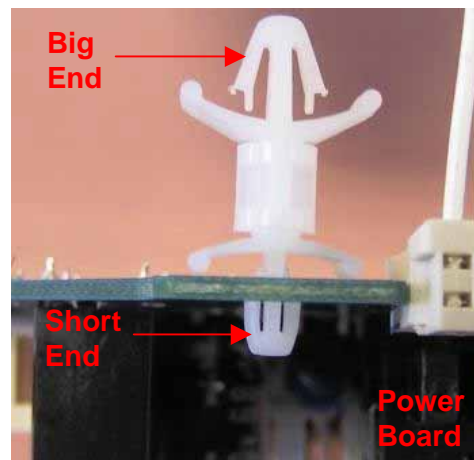
- If necessary, separate the two boards by easing the four plastic pillars between them with long-nose pliers. Take care not to dislodge adjacent components on the boards.



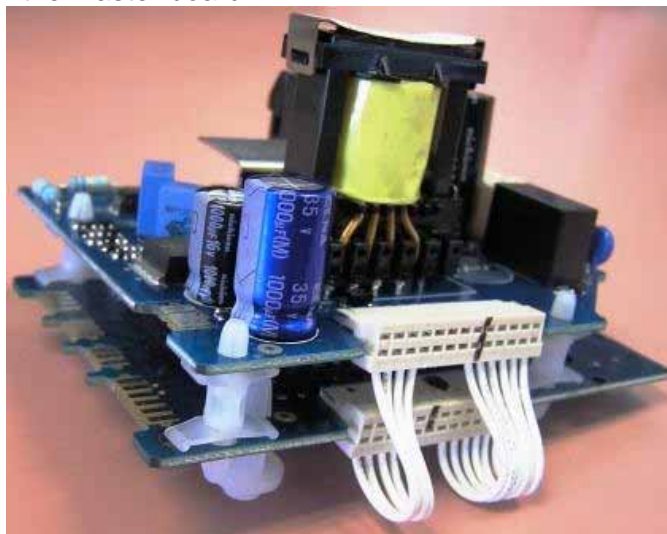
## Replacement

Make sure the two boards are connected together (three plastic pillars and the short wire harness).

1. Connect the two boards together with the short harness.
2. The plastic pillars have a short and a large end. Connect the three plastic pillars to the power board (by the short end).

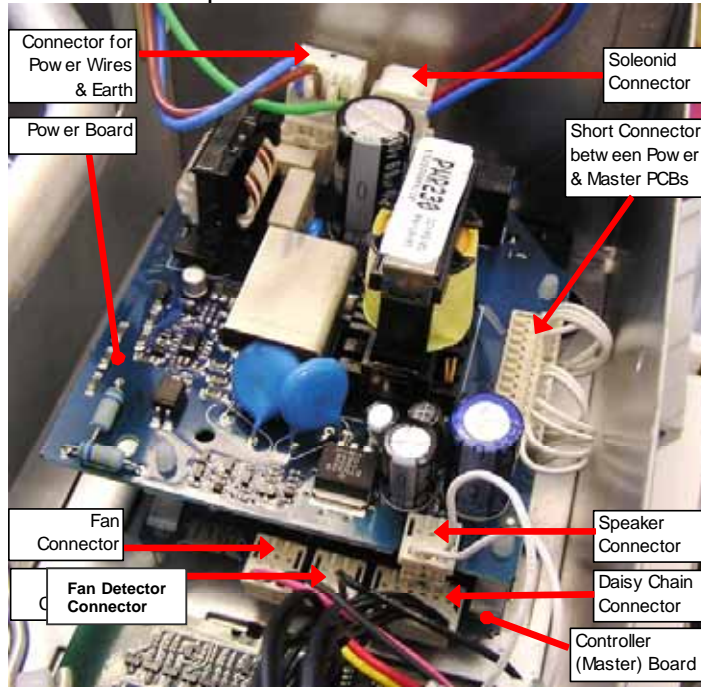


3. Connect the two PCB boards together by pushing the big ends of the three plastic pillars through the holes in the master board.

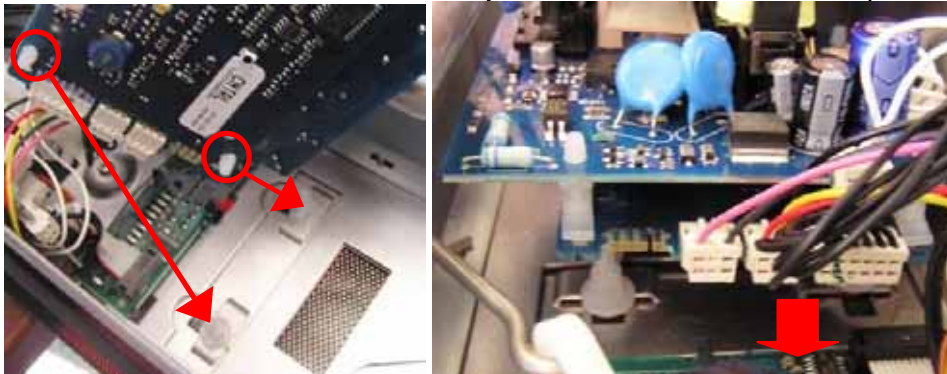




It may be easier to connect other harness connectors onto the boards at this stage. The locations for the connectors can be seen in the photo below.

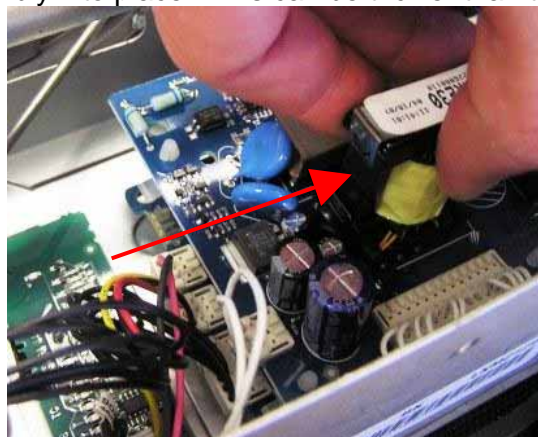


- 4. Attach the two 'keyhole' standoffs to the keyhole slots in the chassis. This can be done either by:
  - Removing the standoffs from the controller PCB. Position the holes in the controller PCB over the 'keyhole' standoffs and lower the assembly onto them until it clicks into place.



OR

- Leaving the standoffs in the controller PCB, insert the standoffs into the slots, by wiggling the entire mains PCB assembly into place. This can be trickier than the previous method.



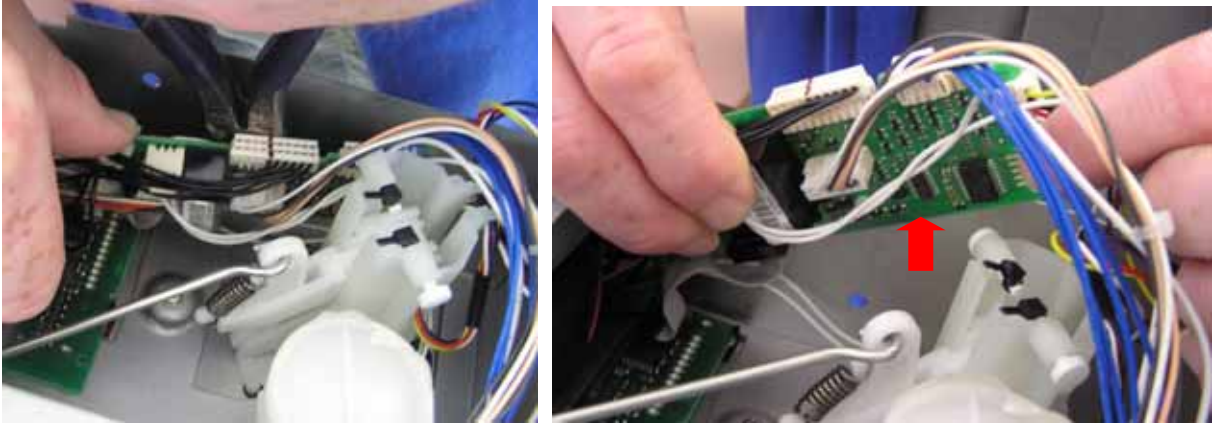
- 5. Screw the controller PCB to the power button housing. Screw the power PCB back onto the plastic block. Reattach the safety cover onto the chassis.

## 9.11 Replacing a Burner PCB



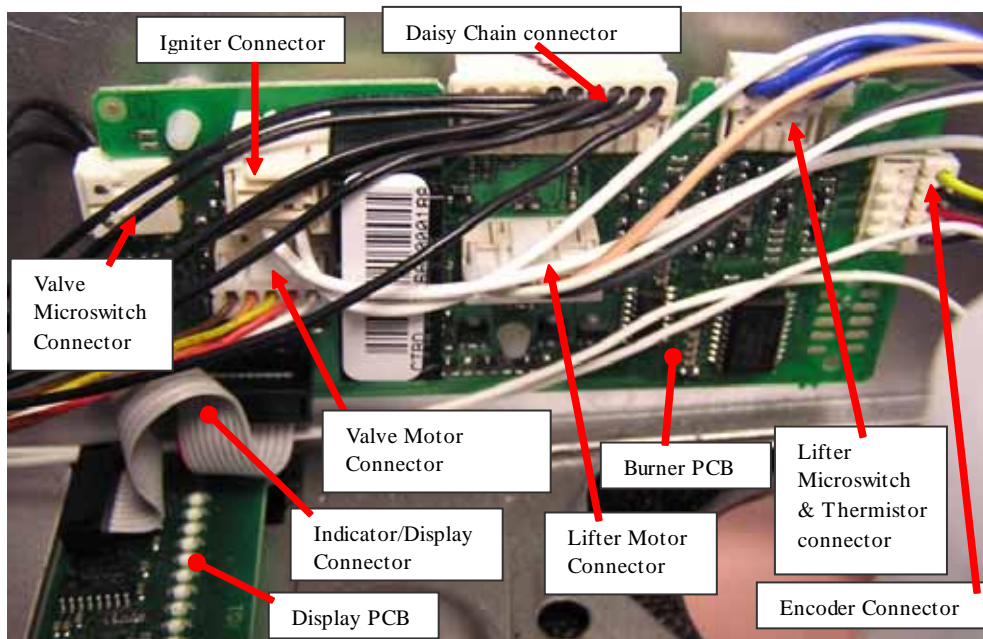
### Removal

1. Turn the product off. Unscrew and remove the back panel from the product.
2. For the selected burner PCB, snip off the wire-tie from the wires bundled behind the encoder assembly. Pull the wires out so that they hang loose.
3. Cut off the white plastic stand-offs that hold the burner PCB to the chassis.
4. Remove the top two PCB stand-offs with a wire cutter.
5. Angle the board away from the chassis so that the third PCB stand-off can be cut off.



**Note:** Alternatively, long nose pliers could be used to unclip the standoffs from the PCB and chassis. However this is more difficult than just cutting them off.

6. Pull the burner PCB out from the chassis for easy access.
7. Detach the harnesses from the burner PCB. See diagram below for suggested order, i.e. remove encoder connector first.



Suggested Order	Connector (Assembly/Disassembly) Order
1 (start)	Encoder
2	Lifter Micro-switch & Thermistor
3	Daisy Chain
4	Lifter Motor
5	Igniter
6	Valve Micro-switch
7 (end)	Valve Motor



**Note:**

The Indicator/Display connection between the burner PCB and the display PCB is permanent. Do not try to remove it.

8. Unclip the smaller display PCB board from the black plastic light-pipe mask (refer to the display PCB procedure). Remove the burner PCB and display PCB from the chassis as one part.

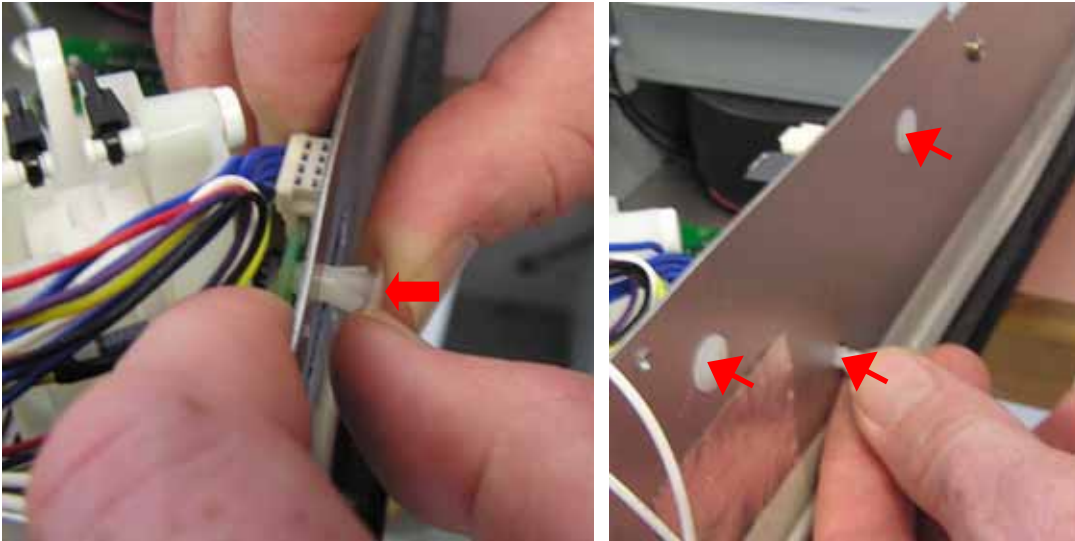
**Replacement**

The replacement procedure is the same as the removal procedure in reverse.

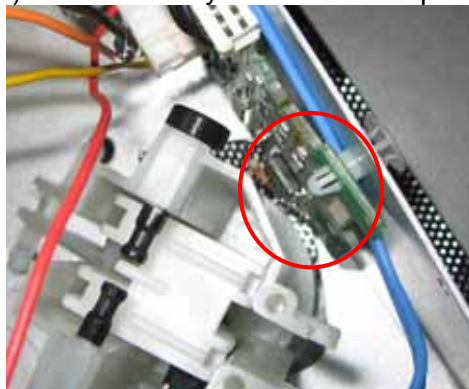
1. Ensure the light pipes are in the correct position.
2. With the replacement burner PCB, clip the display PCB into the light pipe holder.



3. Reattach the wire connectors to the burner PCB. Attach the wires in the order according to the diagram previous, i.e. start by attaching the encoder connector.
4. Clip the white plastic stand-offs back into the chassis and burner PCB. Attach the top two stand-offs first and then attach the bottom stand-off.



Optional: When replacing the standoffs, it is recommended that they are placed in a vertical orientation (refer to photo below) otherwise they are difficult for pliers to remove unless cut.



5. With a wire-tie, bundle the wires behind the encoder assembly.



6. Snip the tails off the wire-ties, and refit the back panel onto the product.
7. When fully assembled, turn the product on and check that the replacement burner PCB works.
8. Re-gas calibrate the product (refer to Section 0).

## 9.12 Power Button



The power button is glued directly to the glass panel assembly. The recommended procedure for replacing the power button and bush is to replace the glass panel assembly (refer to Section 9.22).

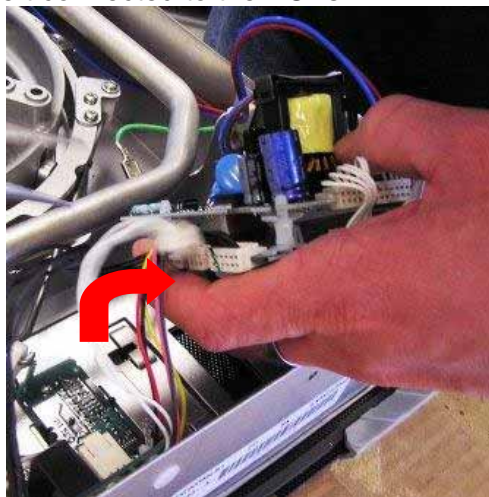
### **Warning!**

The following procedure was developed as an alternative method. **Be Warned!** Once the power button is removed and replaced, it loses its glue seal to the glass. Water may then leak into the product and onto the main PCB.

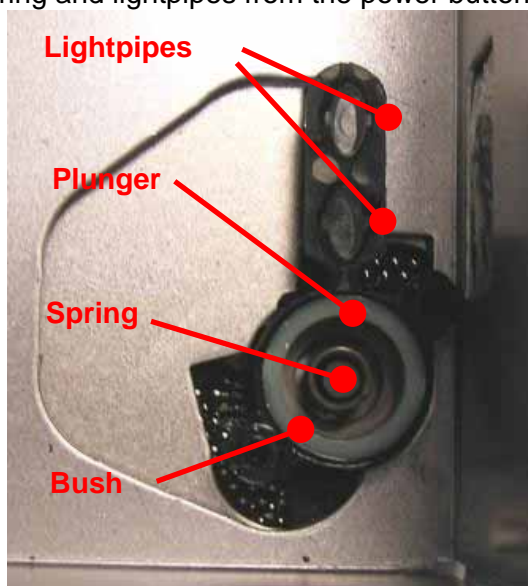
### 9.12.1 Removal – Not Recommended

This procedure will only become standard when the seal for the power button is redesigned (without using a glue seal). It is recommended that the glass panel assembly instead be replaced if there is a fault with the power button assembly.

1. Remove the main PCB from the chassis (refer to Section 9.10).  
**Note:** Harnesses can be left connected to the PCBs.



2. Remove the plunger, spring and lightpipes from the power button bush.

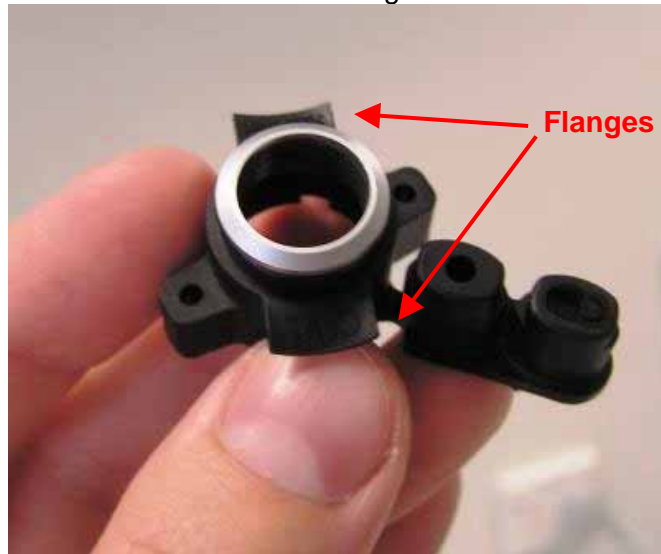


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3. Push the tips of a pair of long-nose pliers into the screw holes of the bush. While lifting the light pipe end (to avoid interference), rotate the bush anti-clockwise 90°.



4. Pull the power button bush out of the hole in the glass.



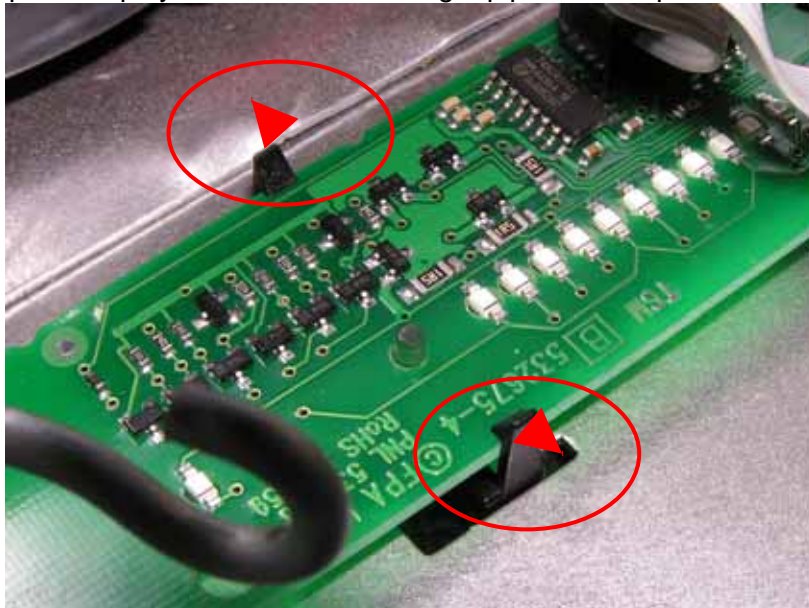
### Replacement – Not Recommended

1. Locate the power button bush in the glass hole. Position the flanges clear of the sheet metal edges, so they can be rotated into place.  
**Note:** The trim ring and O-ring should be fitted to the power button bush before it is installed in the glass.  
**Tip:** Heating up the power button bush flanges helps to ease insertion and reduces the risk of the flanges breaking.
2. Rotate the bush clockwise 90 degrees until the light pipe end clips into the sheet metal gap (above the glass hole). Take care when rotating the power bush flanges under the sheet metal. The bush will need to be pressed firmly against the glass so the flanges can flex enough to rotate under the sheet metal edges.
3. Replace the power button plunger, spring and light pipes.
4. Replace power board PCB, wiring safety cover and base cover as per removal.

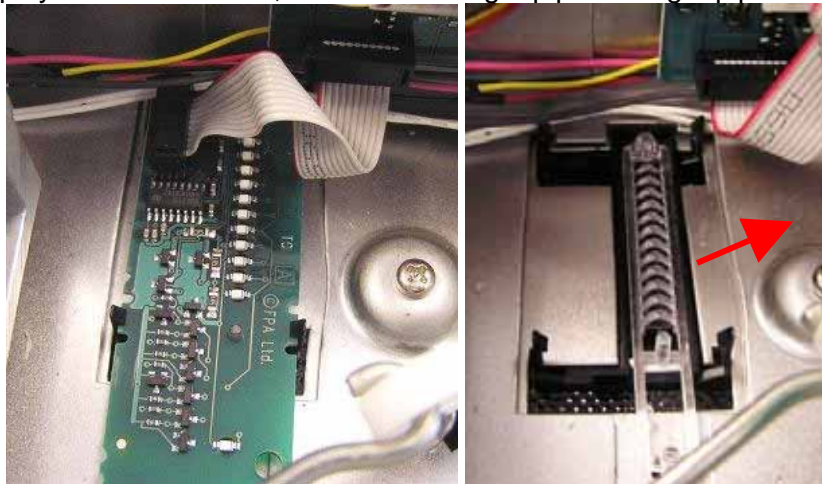
## 9.13 Display Light Pipe And Mask

### Removal

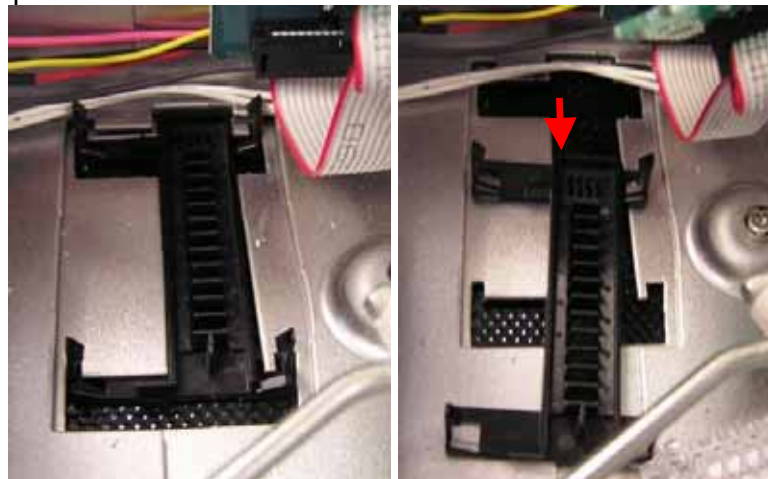
1. Remove base cover.
2. Carefully unclip the display PCB from the four light pipe mask clips.



3. Move the display PCB to one side, to access the light pipe and light pipe mask.



4. Lift the light pipe out.
5. Slide the light pipe mask towards the baffle and lift out.





**Replacement**

Reverse the above removal procedure to replace. In particular:

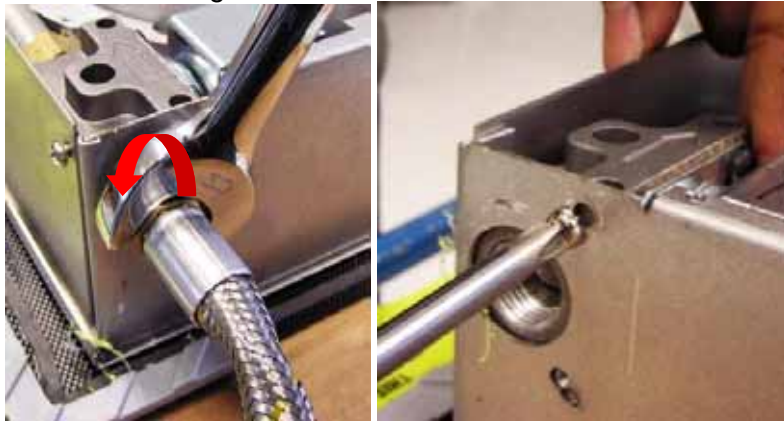
- Lower the display PCB onto the locating pin (on the light pipe).
- Clip into the four clips on the light pipe mask.
- Make sure no wires are caught in the PCB's front edge.

**9.14 Solenoid Valve**



**Removal**

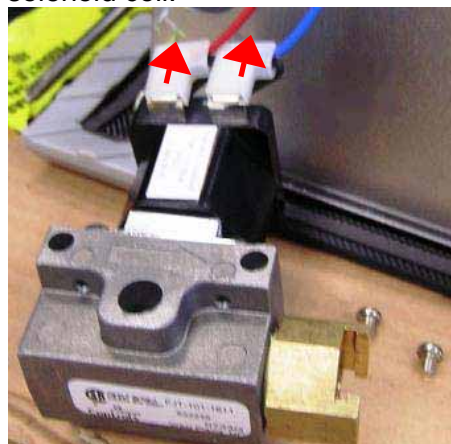
1. Remove the base cover.
2. Remove the flexible hose from the solenoid entry.
3. Remove the two screws holding the solenoid to the chassis.



4. Rotate the solenoid away from the chassis.
5. Remove the retaining clip from the brass adaptor.



6. Separate the solenoid and adaptor from the manifold pipe.
7. Remove the wires from the solenoid coil.



## Reassembly

Reverse the removal procedure to reassemble.

### 9.15 Solenoid Coil

Symptoms of a faulty solenoid are:

- No gas going into the product, or Noisy clicking, chattering or buzzing sound.

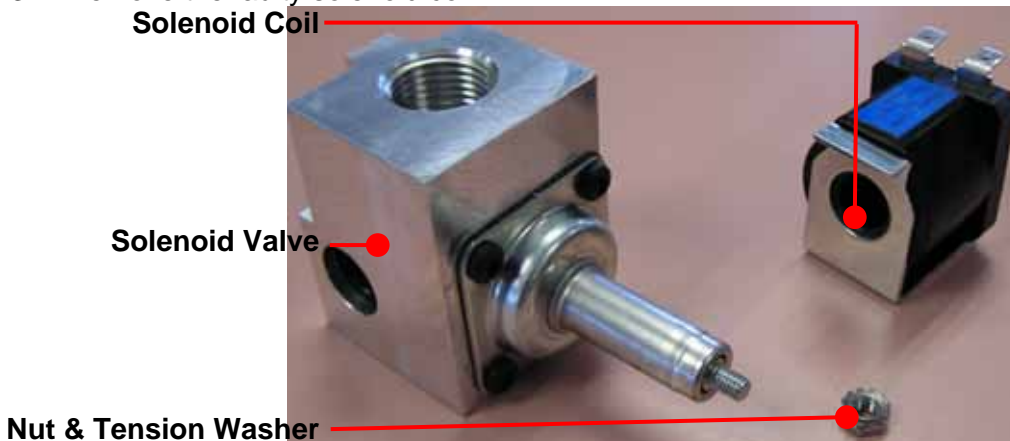


#### Removal

1. Remove the base cover.
2. With a 3/8" socket head, remove the nut and tension washer from the solenoid coil.



3. Remove the faulty solenoid coil.



#### Replacement

1. Fit the new solenoid coil onto the solenoid valve's shaft.
  - Use the same voltage type.
  - Coil orientation doesn't matter - it just has to fit within the product.





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2. Replace the nut and washer, and tighten until firm (approximately 2.5Nm).
3. Replace the base cover.

**Notes:**

- Tightening the nut can reduce solenoid coil noise.
- Do not over tighten the nut.

## 9.16 Gas Manifold Assembly

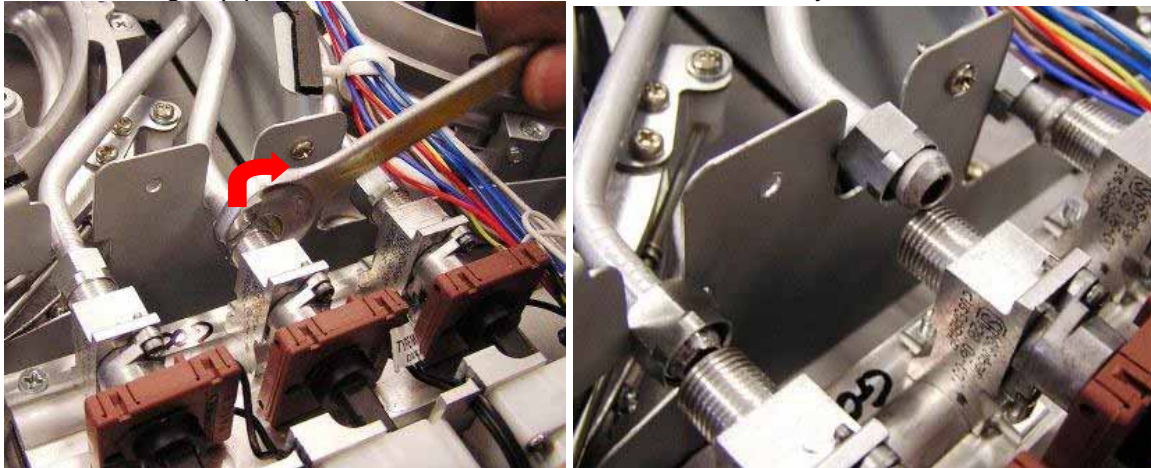


**Removal**

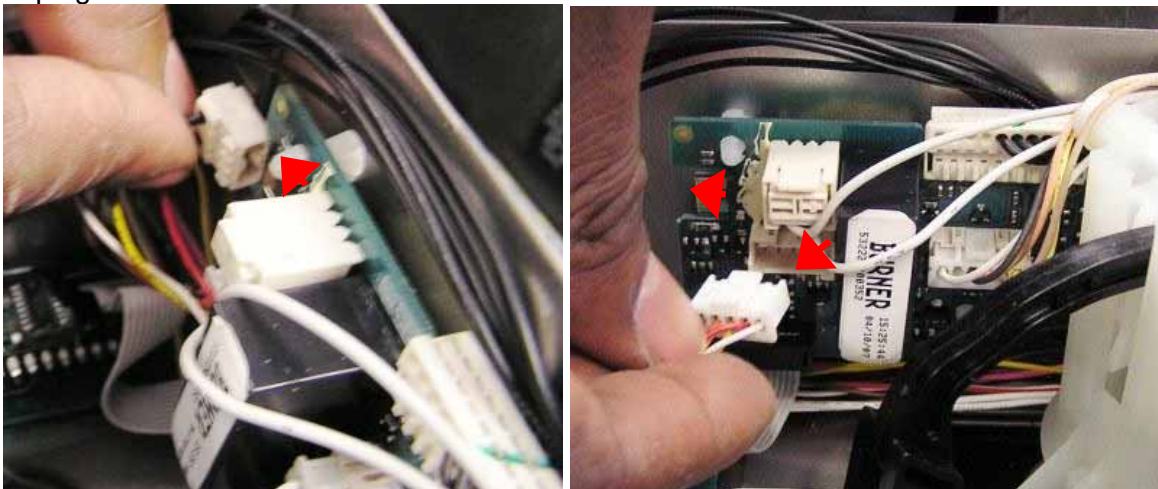
1. Remove the safety wire cover above the main PCB.



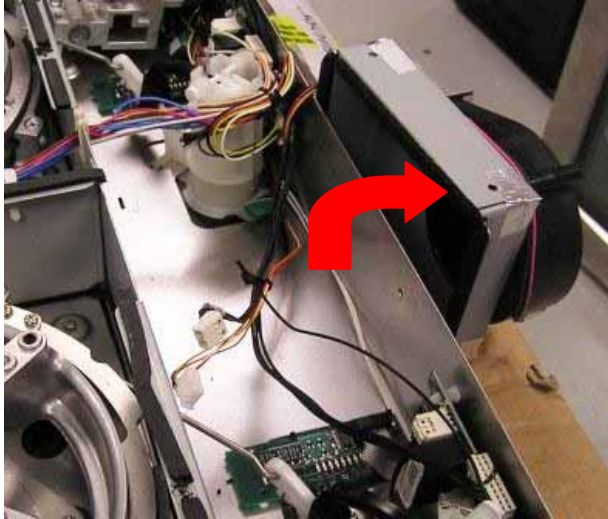
2. Unscrew the gas pipes from the valves in the manifold assembly.



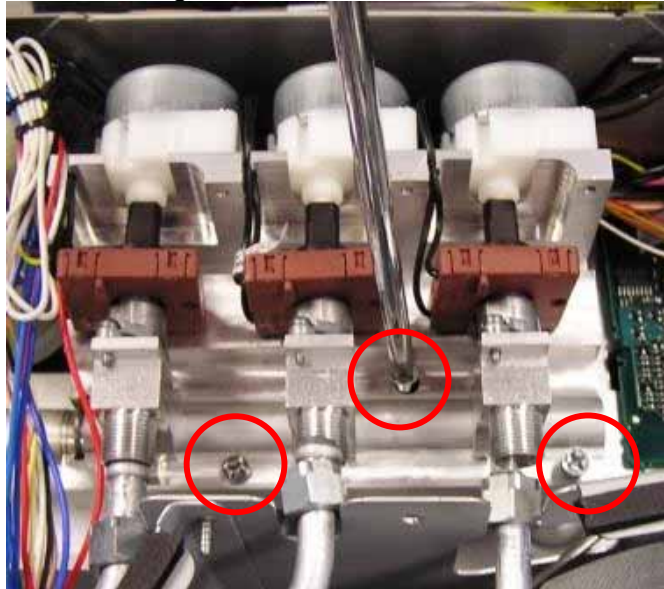
3. Unplug the valve motors and valve switch connectors from each of the three burner boards.



- 4. Remove the fan box assembly.
- 5. Cut the wire ties and remove the valve wires.



- 6. Remove the three screws holding the manifold block onto the chassis.



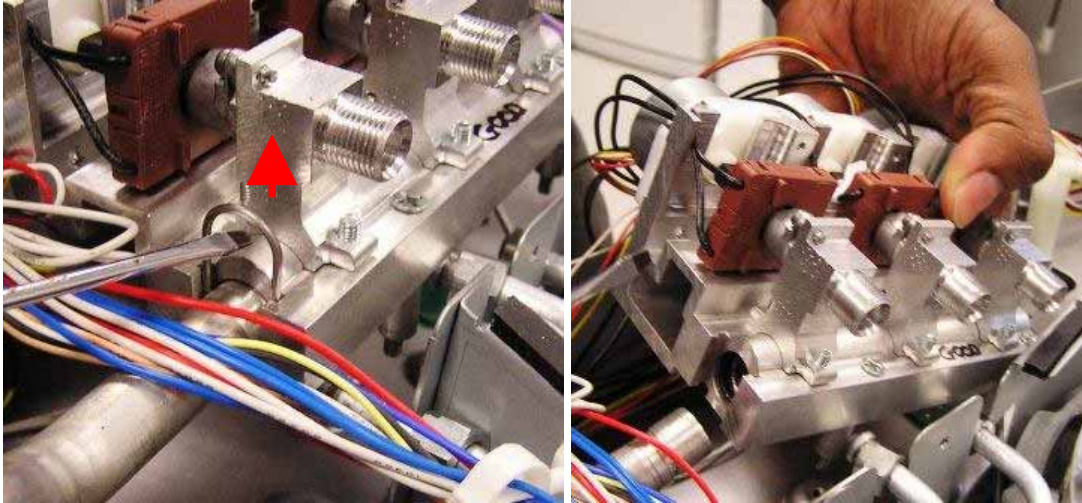
- 7. Rotate the manifold assembly away from the chassis.





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8. Remove the retaining clip from the manifold block. Separate the manifold assembly from the manifold pipe.



**Reassembly**

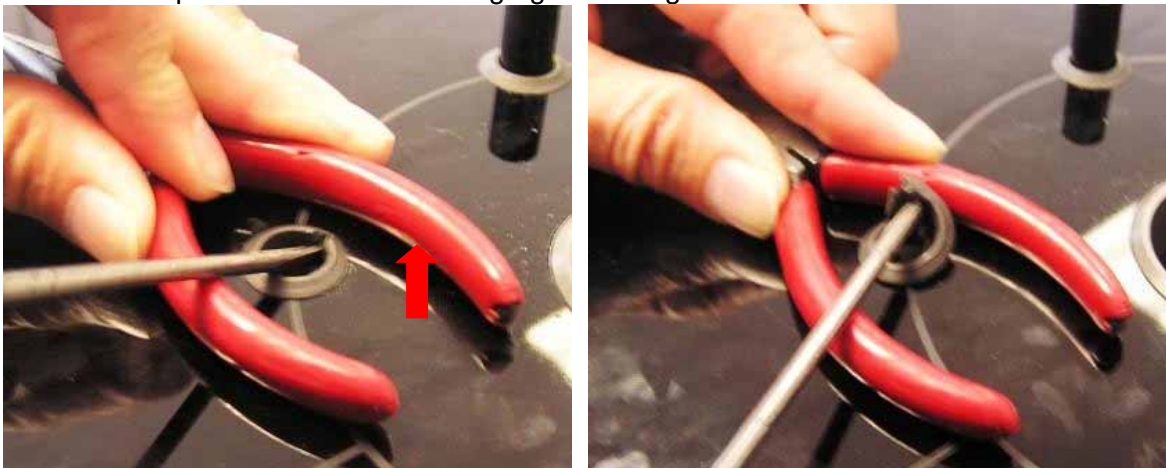
Reverse the removal procedure to reassemble.

**9.17 Pot Support Pin Bushes**



**Removal**

1. Remove the pot support pin.
2. Gently lever the bushes from the glass using a small screw driver (see photos below). Note the insulated pliers used as cushioning against the glass.



**Replacement**

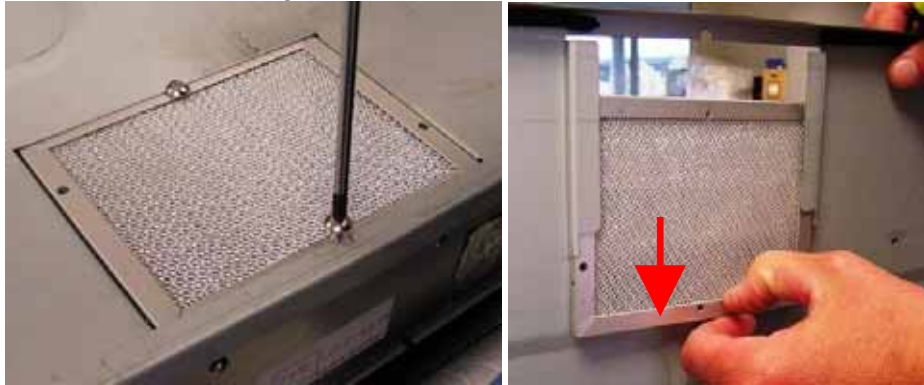
1. Squarely press the bushes into the glass.
2. Replace the pot support pin.
3. Check that the operation of the burner won't lever out the newly replaced bush.

## 9.18 Air Filter



### Removal

1. Remove the base cover.
2. Remove the two screws holding the filter to the base cover.



3. Lever and slide the filter inwards towards the chassis wall until it is removed.

### Replacement

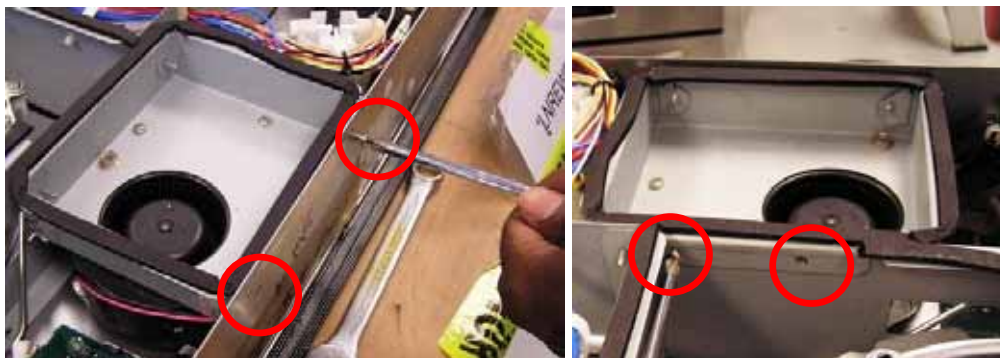
Reverse the above procedure to reassemble.

## 9.19 Fan Detector



### Removal

1. Remove the base cover.
2. Remove the two screws from the chassis to the fan box.
3. Remove the two screws from the main baffle to the fan box.

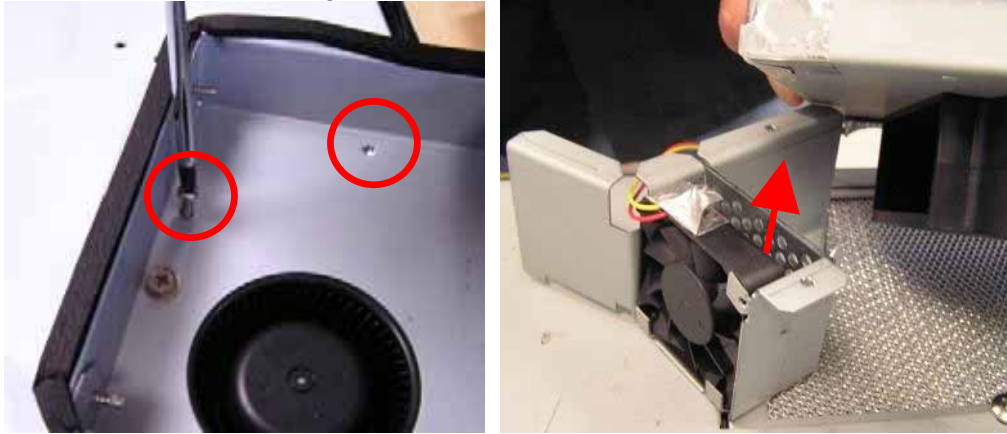


4. Remove the fan assembly from the chassis.
5. Unplug the fan detector (red, yellow and black wires) from the master board.

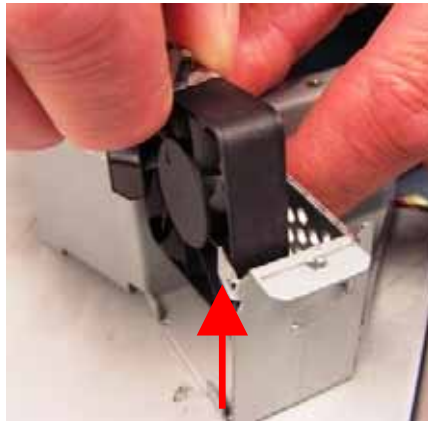




6. Remove the two screws holding the outlet duct to the fan box.



7. Slide the fan detector out of the outlet duct.



**Reassembly**

Reverse the above procedure to reassemble.

When fully reassembled, re-air calibrate the product with no air restrictions (cabinetry). Refer to Section 6.7.

**9.20 Fan**

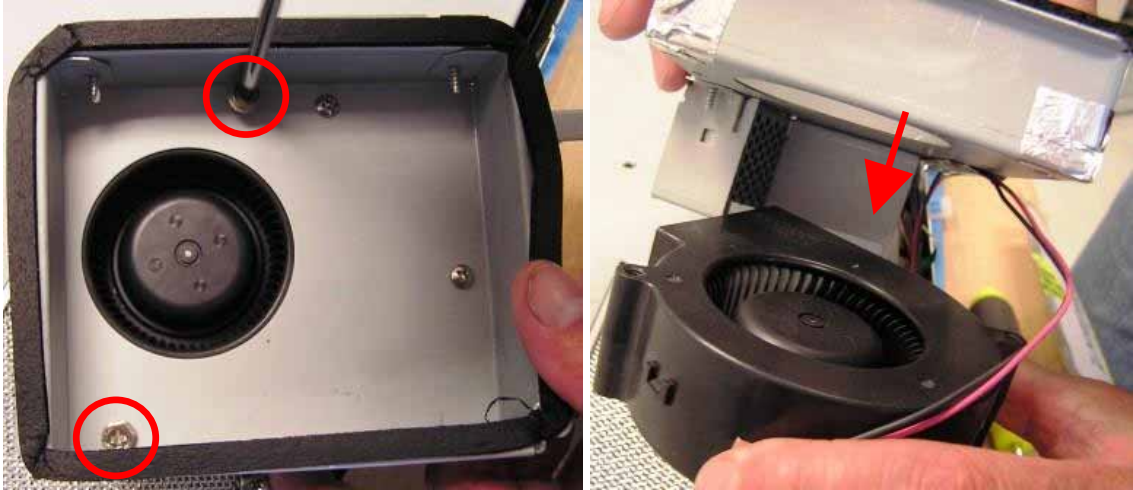
**Removal**

1. Remove the base cover.
2. Remove the two screws from the chassis to the fan box
3. Remove the two screws from the main baffle to the fan box.
4. Remove the fan assembly from the chassis.
5. Unplug the fan from the master board (connector with black and pink wires).





6. Remove the two screws holding the fan to the fan box. Remove the fan.



### Reassembly

Reverse the above procedure to reassemble.

When fully reassembled, re-air calibrate the product with no air restrictions (cabinetry). Refer to Section 6.7.

## 9.21 Speaker Housing



### Removal

1. Remove the base cover.
2. Remove the fan box assembly so that wires can be accessed.
3. Push the clips inwards at the speaking housing base.
4. Lean speaker housing over and remove.



5. Unplug the speaker connector from the master board. It has two white wires out the back.

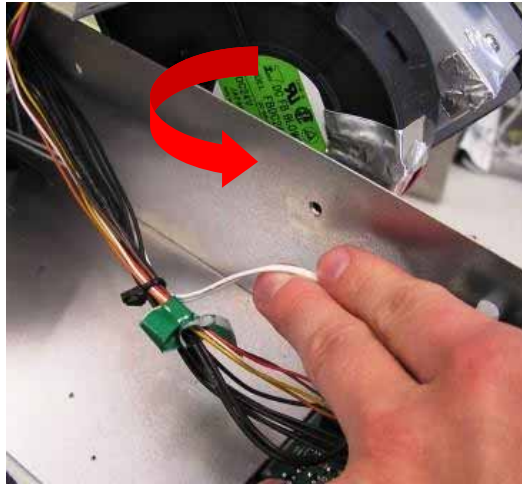


6. Cut the speaker wire with a wire-cutter and pull the speaker and wire out.

**Reassembly**

Reverse the above procedure to reassemble, except:

- Attach the speaker wires to the daisy chain harness wires (located above the burner boards) with wire ties.
- Take care that the speaker wires do not interfere with any moving parts, i.e. control knob lifter linkages.
- Locate the speaker wire so that it runs under the fan box assembly with the other wiring.



**9.22 Glass**

If the glass is damaged (chipped, cracked or completely broken) it can be replaced without completely disassembling the product. Prepare two work surfaces, as you will need somewhere to put the chassis while swapping the glass panels.



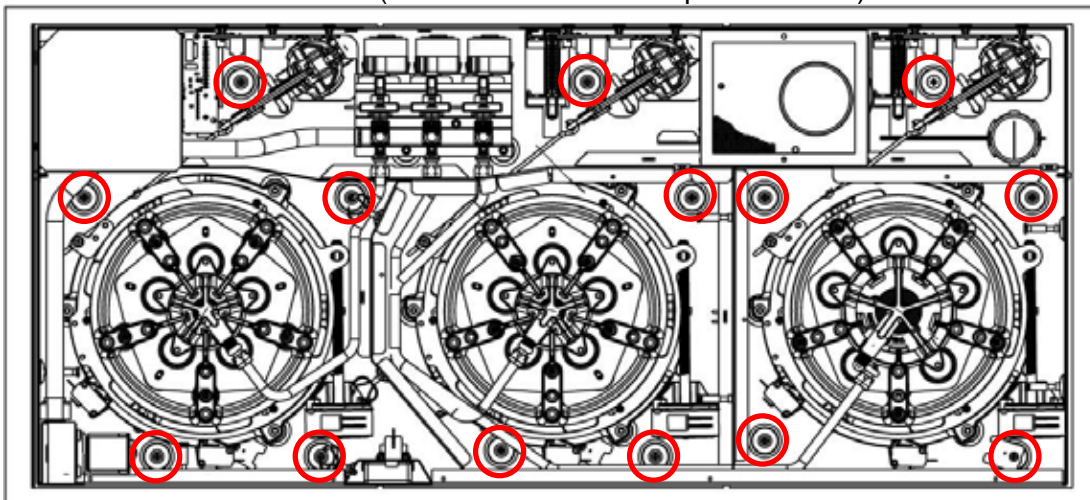
chassis while swapping the glass panels.

**Removal Of Chassis From Glass**

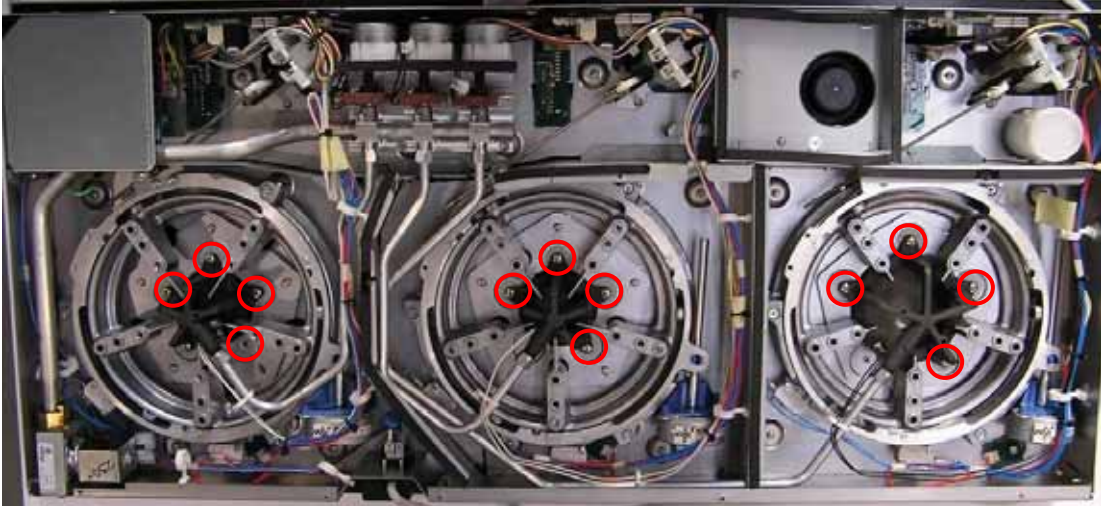
1. Push the **POWER** button to turn the product on.
2. Raise all burners and remove the burner heads, venturis and pins.
3. Press the knobs down to lower the lifters and knobs.
4. Switch off at the wall, while the product is still on. This will ensure the product is discharged.
5. Remove the product from the bench cut-out.
6. Disconnect the gas line; preferably at the floating nut on the flexible hose.
7. Unplug the power cord.
8. Turn the product over, and support it on one of the work surfaces.
9. Remove the base cover.

**Warning!** Do not loosen or remove any gas pipes or nuts during the transplant. If any of the gas connections are loosened or opened, the product needs to be leak tested.

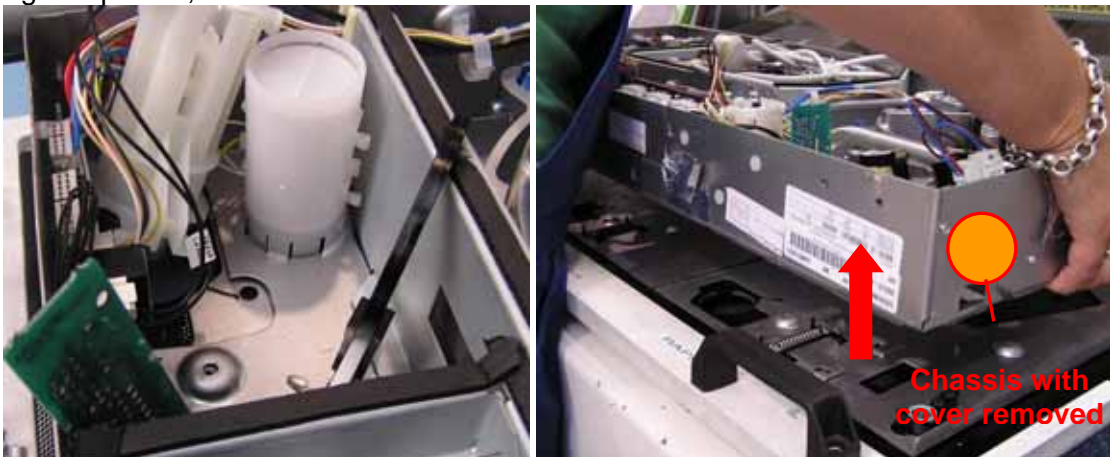
10. Remove the 14 chassis screws (locations shown in the picture below).



11. Unclip the levers from the knob bushes (refer to Section 9.8).
12. Rotate and remove the knob lifter assemblies from the chassis (refer to Section 9.8). These can be left assembled and plugged into the burner PCBs.
13. Remove the main PCB (refer to Section 9.10). It can be left connected to the harnesses. Leave the power button in the glass.
14. Unclip the display PCBs. Remove the light-pipes and light-pipe masks (refer to Section 9.13).
15. Remove the burner bowl screws so that the burner bowls can be easily removed and later repositioned. Screw locations are shown below.



16. Lift the chassis carefully off the glass, checking that no other components are still attached to the glued panels, and set down on the other work surface.



### Replacement Of Chassis Onto Glass

1. Remove the old (damaged) glass from the first work surface and replace it with the new one. The new glass assembly will have the replacement power button pre-glued into it, as well as new pin bushes attached.
2. Replace the display light pipe masks onto the new glass panel assembly.
3. Remove the square sheet metal cover (see below) from the chassis beside the power button. This prevents it catching with the panels on the glass.





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4. Carefully lower the chassis onto the glass, ensuring no components (i.e. power button bush) are caught between the chassis and glass, and that the top edges of the burner bowls pass through the holes in the glass.
5. Replace the sheet metal cover over the chassis hole.
6. Replace the display light pipes and display PCBs (refer to Section 9.13).
7. Replace the main PCB (refer to Section 9.10). Make sure to locate it correctly on both two plastic lugs of the power button assembly.
8. Push the knob lifter assemblies into the knob holes and rotate them to lock between the chassis panels & the glass (refer to Section 9.8). Reconnect the levers (and rod linkages if they were unscrewed). Replace the cable ties.
9. Replace the 14 chassis screws.
10. Refasten the burner bowls to the chassis. Take care to keep the bowls level and poking fully through the glass.
11. Replace the base cover. Check that the filter is clean. Turn the product over and replace the venturis, burner heads and pot support pins.
12. Plug the power cord in and check that the burners move up and down correctly.
13. Reconnect the gas line and replace the product in the bench cut-out. Test each burner for correct operation.

# 10 COMPONENT LOCATION GUIDE

Product shown upside down, with base cover and wiring safety cover removed:

