## // HIGHLAND TRINITY SERIES

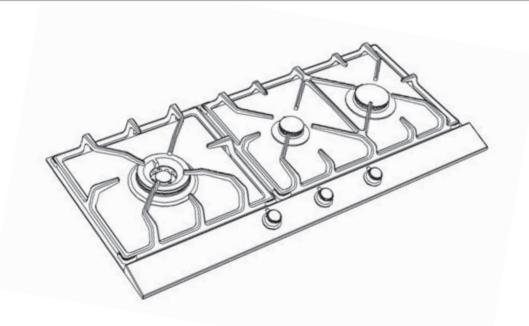
// MODELS: HT3CN/L & HT3SSN/L





## // HIGHLAND TRINITY SERIES

// MODELS: HT3CNL & HT3SSNI



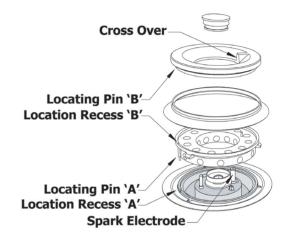
#### // GENERAL INFORMATION

Your HIGHLAND cooktop is a state of the art appliance featuring the latest in flame failure auto safety shut off. Should the flame on any of the three burners be extinguished accidentally then the gas flow to that burner will automatically cease to flow, thereby ensuring no hazardous build-up of flammable gas from the cooktop

The appliance features an easy to clean ceramic glass or stainless steel hob together with brass forged burners and cast iron pan supports.

The unit is available in Natural or L.P.G. PROPANE gas configurations.

- Ensure that the locating pin 'A' on the distributor ring is securely located in the recess hole of the WOK burner body. This is easily achieved by placing the distributor ring on the WOK burner body and then rotating the distributor until the locating pin 'A' drops into the recess with a firm, level fit being then accomplished.
- 2. The black dress ring should then be fitted over the top of the distributor ring.
- 3. The outer burner cap should then be placed onto the distributor ring with the locating pin 'B' securely locating in the location recess 'B' of the distributor ring. When correctly assembled the cross over on the outer burner cap should lie adjacent to the spark electrode protruding form the burner body.
- 4. Finally, gently place the inner burner cap into position in the centre of the WOK burner.



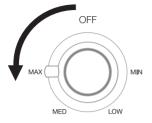
#### // OPERATION - GAS CONTROLS

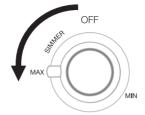
NOTE: ALWAYS ENSURE ALL PARTS ARE CLEAN AND DRY PRIOR TO OPERATING ANY BURNER. It is important that the burner assembly sequence, detailed on the previous page, is performed prior to initial operation of the cooktop.

WHEN INSTALLED IN A CARAVAN OR MARINE CRAFT DO NOT USE THIS APPLIANCE AS A SPACE HEATER. DO NOT PLACE COMBUSTIBLE MATERIAL OR PRODUCTS ON THIS APPLIANCE AT ANY TIME. DO NOT SPRAY AEROSOLS NEAR THIS APPLIANCE WHILST IT IS IN OPERATION.

1. Select the control knob corresponding to the burner you wish to use, press down and turn the knob to the position shown below.

NOTE: ALL THREE BURNERS WILL IMMEDIATELY BEGIN SPARKING VIA THE ELECTRONIC IGNITION PACK WHEN ANY OF THE GAS CONTROLS ARE DEPRESSED. IF THERE IS NO IGNITION SPARK THEN THE APPLIANCE MAY NOT HAVE THE POWER TURNED ON. CHECK THE POWER POINT AND CONFIRM THE UNIT HAS POWER.

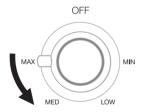




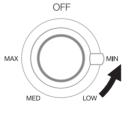
Maximum Position – WOK Burner Control

Maximum Position - A and C Burner Controls

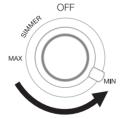
3. Press and hold the control knob down firmly for a full 3 seconds to ensure the flame failure device engages. If the flame goes out after you release the knob then the flame failure device did not engage – simple press down firmly again, turn to the max position and keep pressing down for a full 3 seconds.



Adjustment Range for Outer Burner Operation – WOK Burner



Adjustment Range for Inner Burner Operation – WOK Burner



Adjustment Range for Burner Operation – A and C Burners

#### // LEGEND - GAS CONTROL GRAPHICS - WOK BURNER

MAX Both inner and outer burners are operating at maximum out	ıtput
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MED The inner burner remains on full output, but the outer burner is on minimum output

LOW The inner burner is on full output and the outer burner is extinguished

MIN The inner burner is on minimum output and the outer burner remains extinguished

#### // LEGEND - GAS CONTROL GRAPHICS - 'A' AND 'C' BURNERS

MAX The burner is operating at maximum output

MED

SIMMER

The burner is operating at minimum output

The burner is operating at lowest output possible

#### // MANUAL IGNITION

If there is no power to the appliance or your area is experiencing a power 'black-out' simply strike a match or spark igniter next to the required burner and follow steps 1 and 2 (above).

NOTE: THE FLAME FAILURE SAFETY SYSTEM IS INDEPENDENT OF POWER AND WILL STILL OPERATE WITHOUT A POWER SOURCE.

Should your cooktop fail to ignite after the manual procedure has been followed then check to see that the gas supply to the appliance has not been shut off.

#### // CARE & MAINTENANCE:

- 1. Do not use excessively large or heavy vessels on your cooktop as damage and/or hazard may occur.
- 2. Always remove food spills, dirt and grease spatters from your cooktop (see cleaning instructions).

Should you experience any problems with you appliance please call Think Customer Care 1800 444 357

#### // CLEANING

- Pan Supports/Trivets: These are made from cast iron and coated in a vitreous enamel to provide a resilient matt finish.
   These can be placed in the dishwasher (on a gentle cycle) or alternately cleaned with a soft bristled brush in warm soapy water.
- 2. Burners: The burner caps are solid brass forgings with a black chrome finish to avoid discolouration of the brass. Note: The black chrome will eventually 'burn off' with time however this will not effect the performance of the burners. The burners can be re-chromed as required, with Highland's exchange program, for a nominal fee. The burner cap can be removed and cleaned with a soft bristled brush and warm/hot soapy water or they can be placed in the dishwasher.

NOTE: AFTER CLEANING (ESPECIALLY IN A DISHWASHER) PLEASE ENSURE THAT THE PORTS (BURNER HOLES) ARE FREE OF ANY FOOD, WATER OR DEBRIS. THESE ARE EASILY CLEARED WITH A TOOTHPICK OR NEEDLE.

NOTE: DO NOT UNSCREW ANY PART OF THE BURNER SYSTEM.

3. Stainless Steel: Should be cleaned with a commercial stainless cleaner.

NOTE: DO NOT USE ABRASIVE POWDERS OR SCOURER PADS AS THESE WILL SCRATCH THE SURFACE OF THE STAINLESS STEEL.

NOTE: DO NOT USE AGGRESSIVE CHEMICAL CLEANERS LIKE AMMONIA OR OVEN CLEANERS AS THESE MAY ETCH OR DISCOLOUR THE SURFACE.

4. Ceramic Glass: After cooking it is recommended that the ceramic glass be cleaned with a commercial glass cleaner (eg Windex) to remove any light spills or grease.

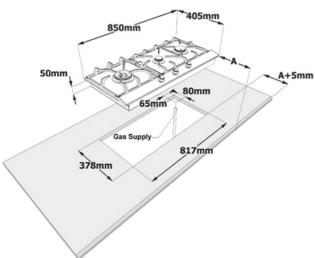
NOTE: STUBBORN STAINS AND BURNT FOOD SHOULD BE CLEANED WITH A CERAMIC GLASS CREAM AND REMOVED WITH A RAZOR SCRAPER (A SAMPLE IS ENCLOSED WITH YOUR APPLIANCE). DO NOT USE SCOURING PADS OF ANY KIND. WE RECOMMEND APPLYING THE CREAM WITH A DRY CLOTH AND APPLYING A CIRCULAR RUBBING MOTION TO REMOVE THE STAIN/FOOD.

## // FAULT FINDING/ABNORMAL OPERATION

FAULT	POSSIBLE SOLUTION(S)		
Burner lights, but goes out when control knob is released	<ul> <li>Control knob is to be pressed down firmly, and held firmly, during ignition procedure for 3 full seconds</li> <li>Control knob is 'bottoming out' on the control panel and not engaging the flame failure device – call your service agent.</li> <li>If this fault is present on the wok burner, refer to correct assembly instructions</li> </ul>		
Unit 'occasionally' emits a spark even when not being operated	- This usually means some moisture is present on the switching mechanism from 'over zealous' cleaning or spillage from a boil over - To rectify – remove the control knobs and use a hair dyer to blow hot air (5 minutes on each control) to dry out the switches - If the problem still persists call your service agent.		
Flame on wok burner present under skirt and large billowing flame in middle of burner	<ul> <li>Wok burner is incorrectly assembled – refer to correct assembly instructions</li> <li>Food or some other foreign body is caught between distributor ring and wok body.</li> <li>Remove burner parts, clean and re-assemble</li> <li>If the problem persists call your service agent.</li> </ul>		

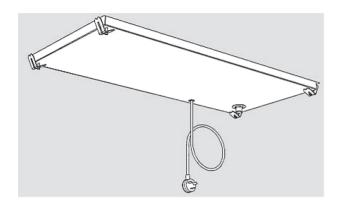
## // INSTALLATION INSTRUCTIONS

Your HIGHLAND cooktop must be installed in accordance with the installation requirements of the local gas and electrical authorities or the appropriate installation guide issued by the A.L.P.G.A. and A.G.A. (Reference Code AS5601), or the Building Authorities requirements.



- 1. Determine the position where your HIGHLAND cooktop is to be mounted, ensuring no structural members interfere with the space requirements. Note: Ensure that there is at least 630mm clearance between the benchtop and any overhead downward facing surface located over the cooktop (such as a rangehood or cupboard), or at least 780mm between the benchtop and an overhead exhaust fan. Ensure that there is a minimum gap of at least 100mm from the outer edge of the installed cooktop to any nearby combustible surface.
- 2. Ensure that both gas and electrical outlets are accessible, paying particular attention to the routing of the gas supply line. Ensure that there will be a minimum of 20mm clearance around the underside of the installed cooktop for ventilation.
- 3. Mark out the required opening in your benchtop using the dimensions shown in the previous diagram. Ensure that there is a minimum 630mm clearance above the cooktop. Once the opening has been cut out install the appliance and fix into position using the supplied clamping brackets as shown in the following diagram.

NOTE: DO NOT OVER TIGHTEN BRACKETS AS THIS MAY DISTORT THE APPLIANCE.



NOTE: CONNECTION OF THE APPLIANCE TO THE GAS SUPPLY MUST BE IN ACCORDANCE WITH THE REQUIREMENTS OF AS5601. A \_ INCH BPS CONNECTOR AT THE INLET IS RECOMMENDED AND THE GAS SUPPLY LINE TO THE APPLIANCE MUST BE OF ADEQUATE LENGTH TO ALLOW SUFFICIENT WITHDRAWAL OF APPLIANCE FOR SERVICE OR DISCONNECTION AND BE:

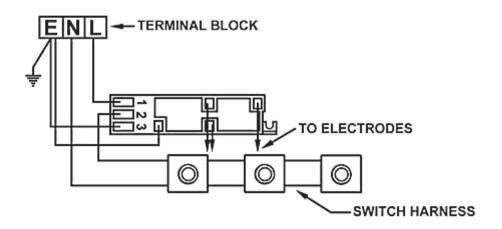
a) annealed copper pipe; or b) a flexible hose assembly if acceptable by the local authority and complying with requirements of AS 1869 – class B or equivalent, with the length of the hose being kept to a minimum.

NOTE: THE COOKER MUST BE INSTALLED WITH PROVISION TO ALLOW THE GAS TO BE TURNED OFF AND DISCONNECTED FOR SERVICING AND REMOVAL OF THE APPLIANCE AS REQUIRED FROM THE GAS SUPPLY.

- 4. For the L.P.G. PROPANE model the gas supply must be regulated to 2.75kPa (11" W.G), for the Natural gas model the gas supply must be regulated to 1kPa (4" W.G) using the supplied regulator. A manual shut off valve must be installed in the gas supply line in an accessible position so that the gas supply can be turned off, thereby isolating the appliance in the event of an emergency, or during servicing. The cooktop data plate gives details of injector sizes and gas consumption.
- 5. After installing the gas supply ensure that all gas controls are in the 'OFF' position, then check all connections thoroughly for leaks by turning the gas supply on and brushing a little soap and water mixture over each connection. If the mixture bubbles up there is a leak present, re-tighten the connection or replace the fittings and check it again for leaks. UNDER NO CIRCUMSTANCES USE MATCHES OR FLAME TO CHECK FOR LEAKS.
- 6. Plug the electrical connection in.
- 7. Turn each gas control on and check and adjust pressure to obtain a clear blue flame with no yellow tipping. For adjustments refer to the attached servicing instructions. The first time you ignite the burners they may not ignite immediately. This is due to air in the gas lines that should clear within a few seconds. If satisfactory performance can not be obtained contact the local gas authority for advice and assistance.
- 8. A duplicate data plate has been included with this appliance and should be attached to an 'adjacent surface' (as per the AGA code 101) such as inside a cupboard door for future reference by an authorised plumber.

#### // SERVICING INSTRUCTIONS

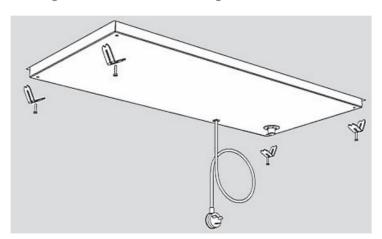
NOTE: SERVICING IS ONLY TO BE CONDUCTED BY AN AUTHORISED AGENT.



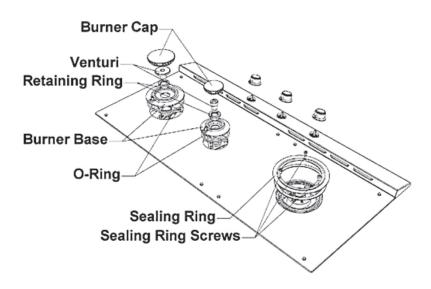
The gascocks, injectors, venturis, ignition system and burners are accessed by removing the hob from the appliance. TO DO THIS THE CERAMIC APPLIANCE MUST BE REMOVED FROM THE BENCHTOP.

After disconnecting the power and shutting off the gas flow at the safety valve remove the pan supports and burner caps and bases. Remove the fixing clamps that secure the appliance to the bench as shown in the following diagram. Be sure not to over tighten these fixing brackets when re-installing.

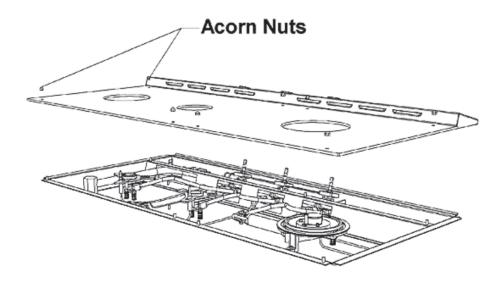
Stainless steel hob can be serviced without removing from benchtop.



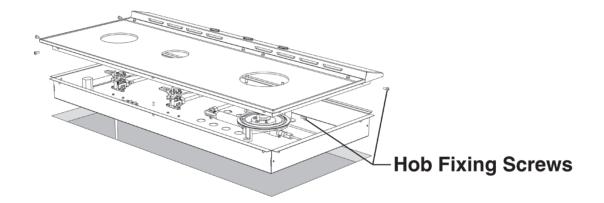
Remove the burner caps and venturi's as shown in the following image. Unscrew the retaining rings in the 'A' and 'C' burners and then remove the burner bases, disconnecting the spark electrode leads in the process. Remove the three screws that hold the WOK sealing ring in place, and remove the sealing ring.



For models with a stainless steel hob, the hob can be removed by unscrewing six acorn nuts from the top, the two middle front acorn nuts do not need to be removed. Lift the hob off the appliance as shown in the following diagram. (The black sealing tape may present some resistance).



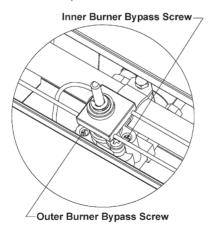
For models with the ceramic glass hob, unscrew the seven hob fixing screws as shown in the following diagram. (The black sealing tape may present some resistance and care should be taken not to overstress the ceramic glass).



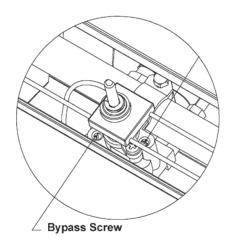
### // GASCOCK ADJUSTMENT AND MINIMUM SETTINGS

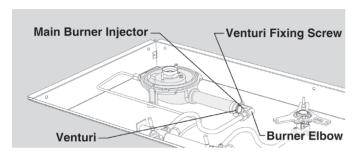
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This large (wok) burner is fitted with 2 x bypass screws that are accessed by removing the switch harness retaining clip and then removing the switch harness. There are two separate bypass screws – these screws are not adjustable and are supplied with specific orifices for each gas. The left hand screw operates the minimum setting of the main valve outlet (outer burner ring on the burner), whereas the right hand screw operates the minimum setting of the auxiliary outlet (inner burner ring).



The other 2 x valves feature a single adjustable bypass screw which can only be accessed by removing the switch harness retaining clip and thenremoving the switch harness.





The outer burner (main burner) and inner burner injectors for the WOK burner can only be accessed by removing the hob from the appliance. Adjustment of the main burner venturi can be effected by loosening the fixing screw shown below. Ensure that the fixing screw is re-tightened following adjustment.

#### **INJECTOR SIZES:**

BURNER	NATURAL GAS	UNIVERSAL LPG
Wok (main inner)	2.20mm 0.63mm	1.22mm 0.46mm
'A' (centre)	1.15mm	0.72mm
'C' (right hand)	1.45mm	1.00mm

# // PROCEDURE FOR CONVERTING YOUR HIGHLAND COOKTOP FROM NATURAL GAS TO LPG PROPANE GAS

- 1. Ensure that the correct Universal LPG test point has been fitted and that there is a ready supply of Universal LPG gas to enable you to correctly set the flames on each of the 3 burners.
- 2. Follow the instructions for removal of the hob as detailed in the servicing instructions. Ensure the Natural gas regulator (1.0 kPa) is replaced with an Universal LPG regulator (2.75 kPa) (usually supplied at the bottled gas connection).
- 3. To convert the burner you will need to replace the main injector, auxiliary injector and the bypass screw. Firstly remove the 2.2mm main injector and replace with a 1.22mm injector and tighten into position. Then remove the auxiliary (inner) burner injector (0.63mm) and replace with the correct Universal LPG injector which is 0.46mm.

The bypass screws will also require replacing to achieve the correct minimum settings. Remove the main bypass screw (0.90mm) and replace with the correct Universal LPG bypass screw which is 0.52mm. Then remove the 0.45mm bypass screw and replace with the correct auxiliary burner bypass for Universal LPG, which is 0.30mm.

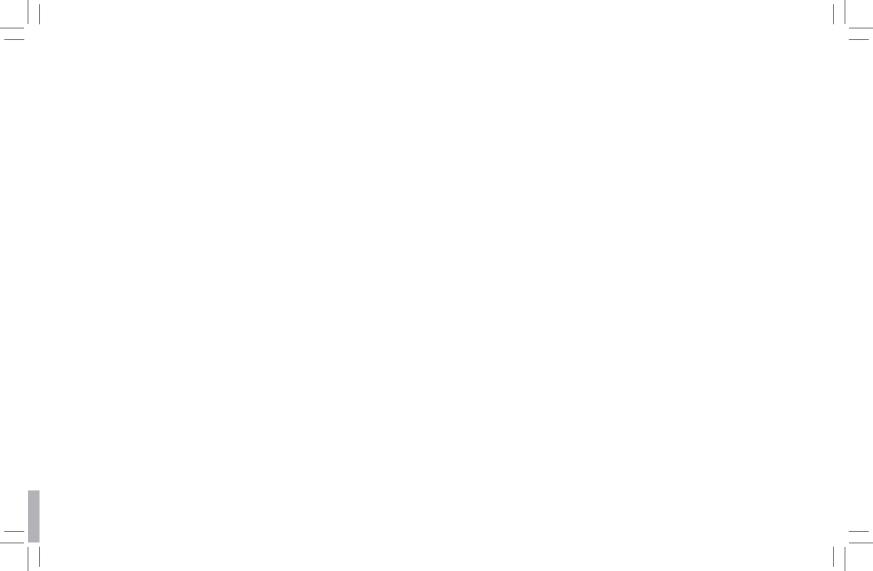
Next, the main (outer) burner venturi will need to be adjusted for Universal LPG. Loosen the venturi fixing screw located on the wok burner elbow - this will enable the venturi to slide in or out to achieve optimum flame.

NOTE - WHEN CONVERTING TO UNIVERSAL LPG THE VENTURI WILL NEED TO SLIDE CLOSER TO THE INJECTOR.

Re-assemble the wok burner and ignite in the maximum position - slide the venturi to achieve optimum flame control and then lock into position by re-tightening the venturi fixing screw.

- 4. Next you will need to convert the 'A' and 'C' size burners. Firstly remove the 1.15mm injector from the centre burner ('A' size burner) and replace with the correct Universal LPG injector which is 0.72mm.
- 5. Remove the 1.45mm injector from the 'C' size burner located on the right hand side of the appliance. Replace with the correct Universal LPG injector, which is 1.00mm.
- 6. Re-assemble the 'A' and 'C' size burners and check that optimum flame has been achieved in the maximum position.
- 7. The minimum settings for these two burners will need to be set via the adjustable bypass screws located on the top of the valve.
- 8. Extinguish all flames and carefully re-essemble the appliance.







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Highland Appliances operate a policy of continuous improvement and reserve the right to adjust and modify its products and prices without prior notification.

All Highland appliances are suitable for domestic or household use only and come with a full 2 year parts and labour warranty for your piece of mind. 0471\_HI. Printed 2009.