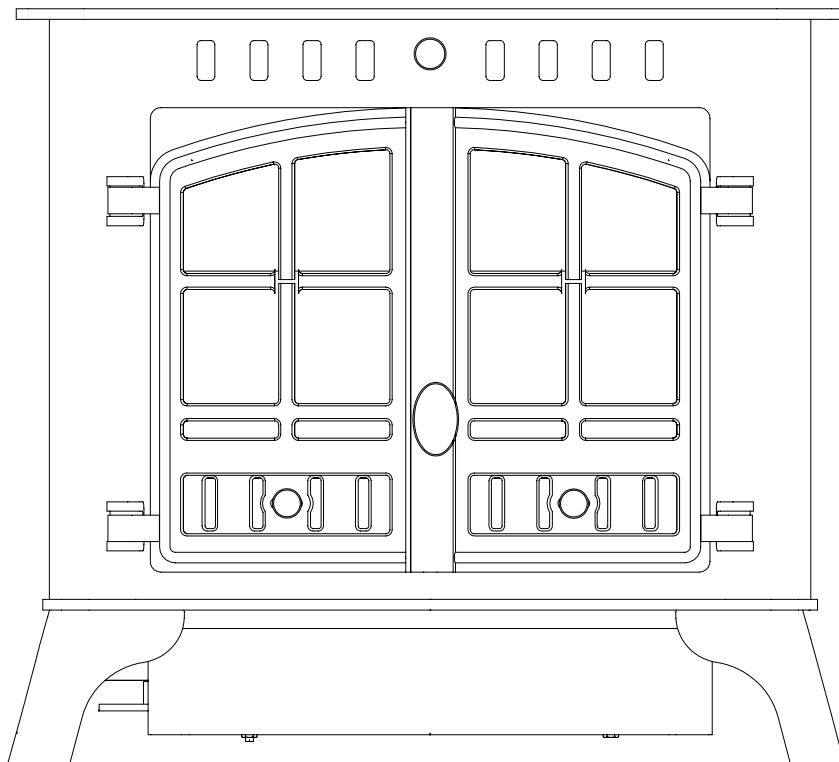




Hunter Herald 7 Oil. Installation, commissioning and servicing instructions.



Please hand these instructions to the stove user when the installation is complete. Leave the system ready for operation and instruct the user on the correct use of the appliance and operation of its controls.

SPECIFICATIONS

Model	Herald 7 Oil
Fuel	Kerosene to BS 2869: Part 2: Class C2
Flow Rate	5-11cc/min (0.24 – 0.52 kg/h @ 15°C)
Minimum Flue Diameter	125mm (5")
Draught requirement	0.06-0.12mbar
Output	2-4.6kW
Maximum Flue Gas Temperature (at nominal output)	248°C
Supply Voltage	220-240 volts a.c. 50Hz

INSTALLATION AND SERVICING INSTRUCTIONS

Always read the instructions before installation or servicing. Also please complete the Commissioners Checklist along with the Product Registration for the guarantee to be valid.

SAFETY

The installation of this appliance must only be carried out by a suitably competent (i.e. OFTEC registered) engineer.

This stove is designed to burn Kerosene to B.S 2869: Part 2. Under no circumstances should incorrect grades of fuel, solid fuels or household waste be burnt in this appliance.

THE STOVE MUST NOT BE USED WITH THE DOORS OPEN OR IF THE GLASS IS CRACKED OR BROKEN

Failure to meet the relevant requirements can be hazardous and could negate the guarantee.

The newness of the stove may cause a slight smell to be given off for a short period after commissioning. This is quite normal and will disappear after several hours operation. Open windows and doors if required.

All parts of the stove other than the controls will become VERY HOT during use. It is recommended that a fireguard be used in the presence of children, the elderly or infirm.

DO NOT ATTEMPT TO RELIGHT A HOT BURNER. Always allow the burner to cool for at least two hours before relighting. A sensor in the electric ignition will prevent the glow plug from energising until the stove is cool, but will not prevent oil entry into the burner.

FLUE SYSTEM

The stove is designed to operate with a Class 2 oil flue and, dependant on correct commissioning, has a maximum flue gas temperature of 248°C at nominal output.

The internal diameter of the flue **MUST NEVER BE LESS THAN** 125mm (5”).

The chimney must be inspected and tested prior to installation to ensure that it is clean, sound and free from obstructions.

Provision must be made to allow the flue to be inspected and cleaned, with airtight seals.

If a brick chimney is used it **MUST** be lined prior to installation.

For correct performance the flue should be greater than 4.6m high, with a minimum draught of 0.1mbar and a maximum of 0.15mbar with the stove running at maximum output.

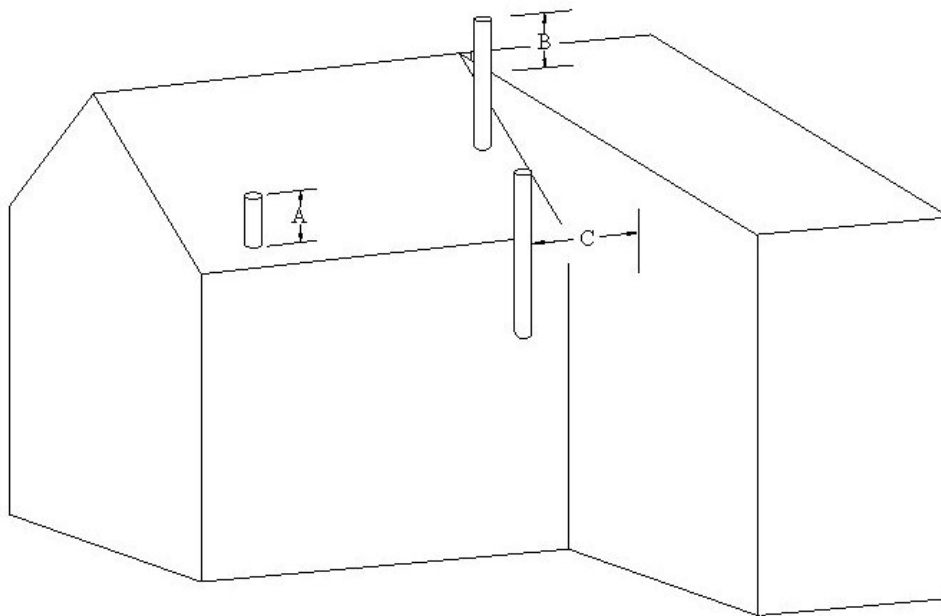
If the flue draught is greater than 0.15mbar then a secondary stabiliser should be fitted.

The flue pipe should be made of stainless steel or acid resistant vitreous enamelled.

There must be no horizontal runs over 150mm and all joints must be permanently gas tight.

The chimney should be fitted with an anti-downdraught cowl and should terminate in accordance with Building Regulations. See diagram 1.

Diagram 1: Terminal position



A	ABOVE THE HIGHEST POINT OF AN INTERSECTION WITH THE ROOF	1000mm min
B	ABOVE A VERTICAL STRUCTURE LESS THAN 2300mm FROM SIDE OF THE TERMINAL	1000mm min
C	FROM A VERTICAL STRUCTURE TO THE SIDE OF THE TERMINAL	2300mm min

OIL STORAGE AND SUPPLY

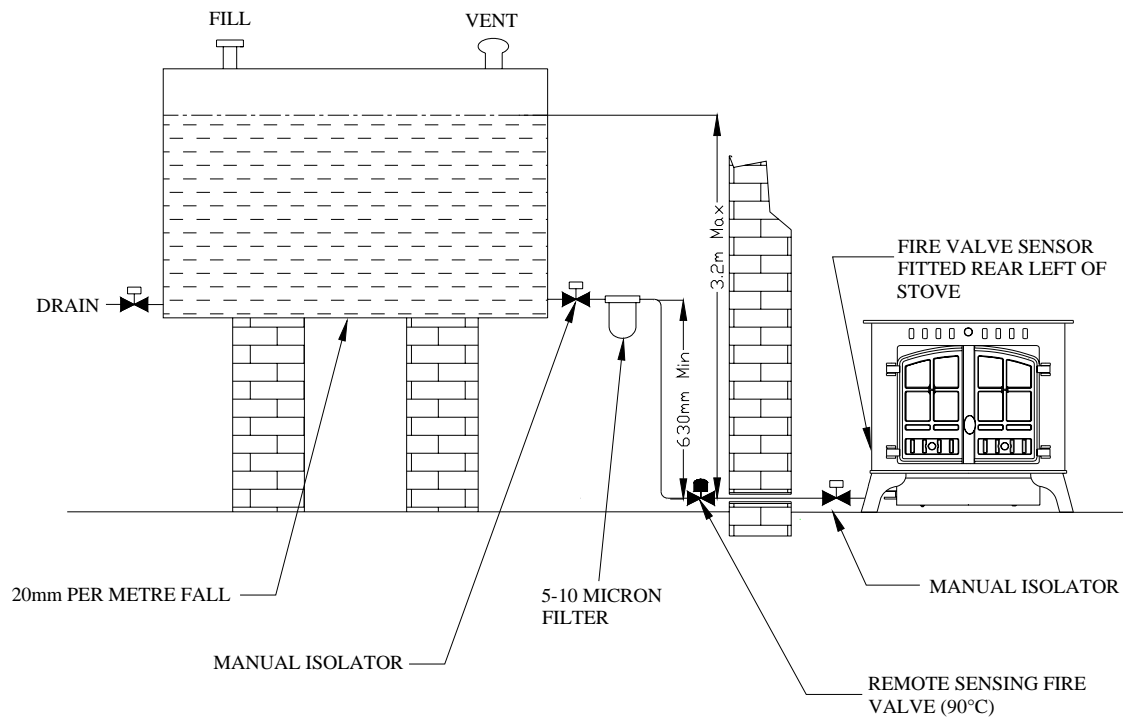
Steel oil storage tanks should be manufactured to BS 799 Part 5. Plastic oil tanks should be compliant with the OFTEC standard OFST 100. The minimum recommended oil tank size is 1400 litres (300 gallons). BS 5410 Part 1 covers the codes of practice governing installation of oil tanks.

The oil supply to the stove must not be teed into a pipe supplying an appliance fitted with a pressure jet burner (e.g. central heating boiler). A separate supply pipe should be provided.

Solder pipe fittings should not be used. Bends should be used instead of elbows wherever practicable.

See diagram 2 for a suitable oil supply system.

Diagram 2: Oil supply system



LOCATION

The stove must be mounted on a non-combustible solid, level hearth with a minimum depth of 12mm, extending at least 225mm in front of the stove and 150mm either side.

There should be no combustible material within 500mm of the appliance.

The hearth on which the stove is placed should not be less than 125mm thick if the floor is made of combustible material.

See diagrams 3 and 4 for minimum clearance dimensions. N.B. Allowances must be made for access to the rear of the appliance for the purposes of commissioning and servicing.

Diagram 3

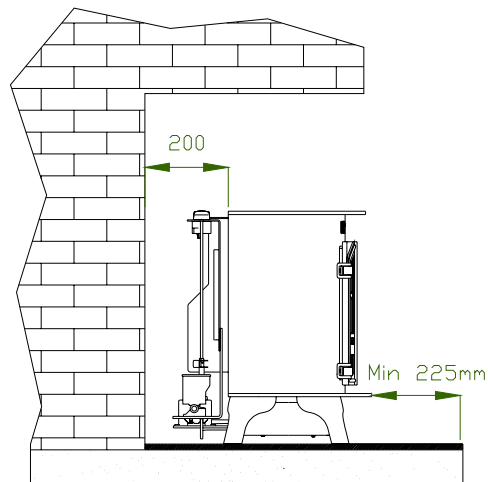


Diagram 4



STOVE INSTALLATION

1. Using a 10mm spanner undo the four nuts securing the ceramic support tray in place. See diagrams 13 & 14.
2. Remove the ceramic support tray leaving the washers and spacers in place.
3. Remove the catch bar from inside the door aperture.
4. Remove the shells from the top of the burner. The outer shell with the glow plug fitted should be placed to one side near the door aperture.
5. Using the bolts supplied fit the flue blanking plate and flue collar in the required positions.

6. Move the stove into place and adjust the four levelling feet until the top plate of the stove is level.
7. Turn on the oil supply and bleed all air from the pipe work.
8. Connect the oil supply and flue pipe using suitable jointing compounds.

Fitting the Baffle plates (See Diagram 5 for baffle plate identification.)

N.B. It is recommended that a careful study of the inside of the stove and the following instructions be carried out before attempting to fit the baffle plates.

Diagram 5

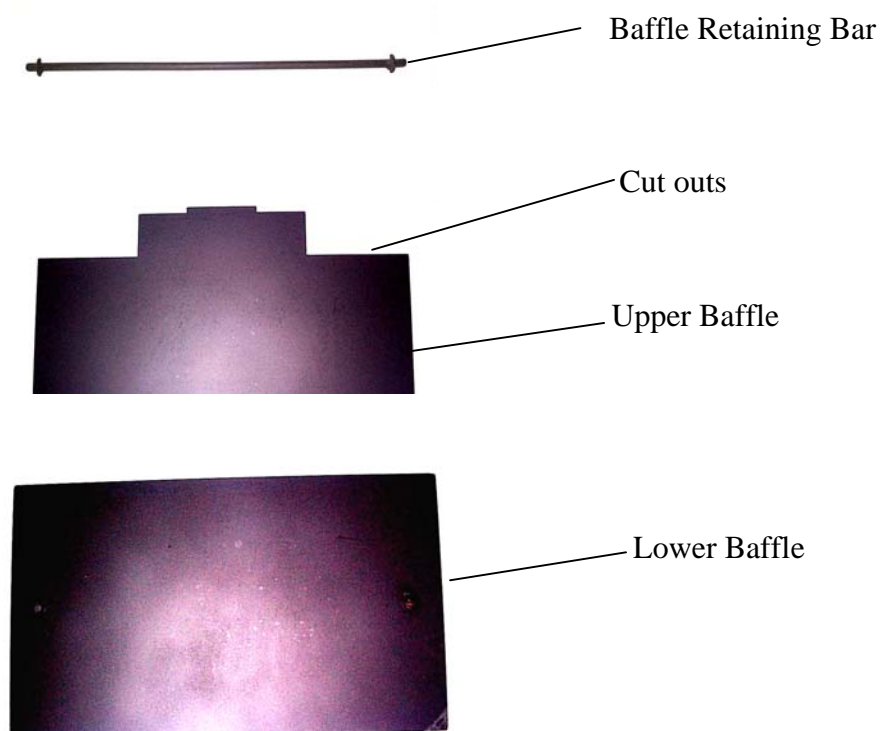
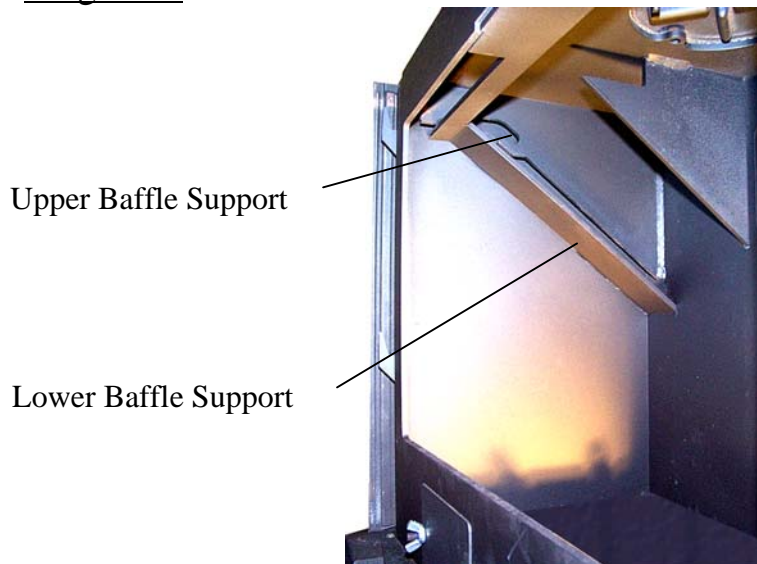
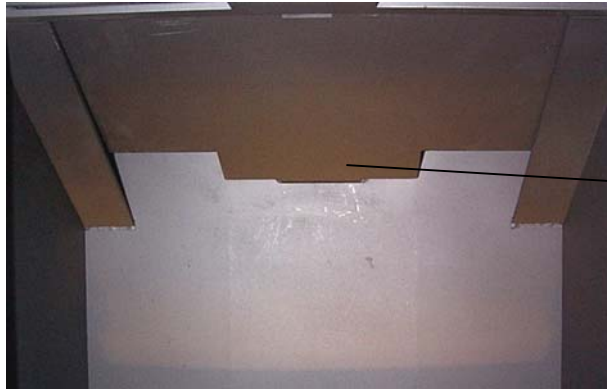


Diagram 6



1. Fit the upper baffle plate in position with the cut outs at the back and the tab located in the slot in the back plate of the stove as shown in diagram 7.

Diagram 7



Tab located in slot at rear of stove

2. Rest the baffle retaining bar on top of the lower baffle supports with the flat section of the washers sitting on the supports as shown in diagram 8.

Diagram 8



Baffle Retaining Bar

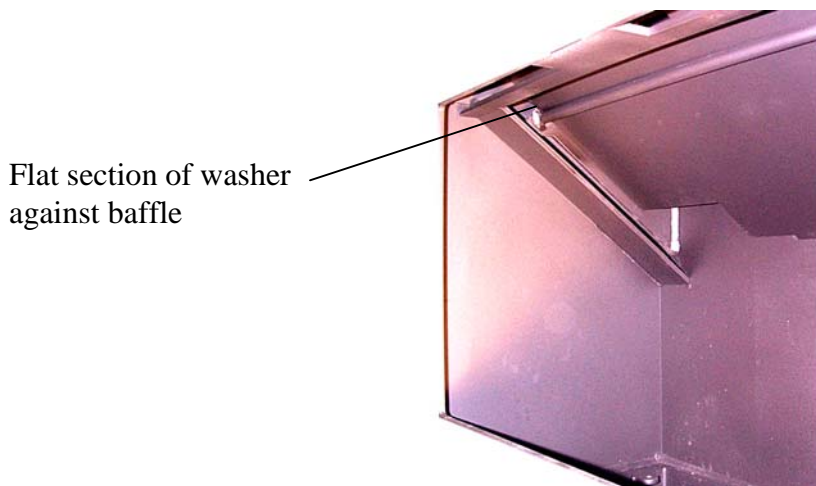
3. Lift the upper baffle and slide the retaining bar up the lower baffle supports towards the front of the stove as shown in diagram 9.

Diagram 9



4. Turn the baffle retaining bar through 180° and slot it into the two cut outs in the upper baffle supports as shown in diagram 10.

Diagram 10

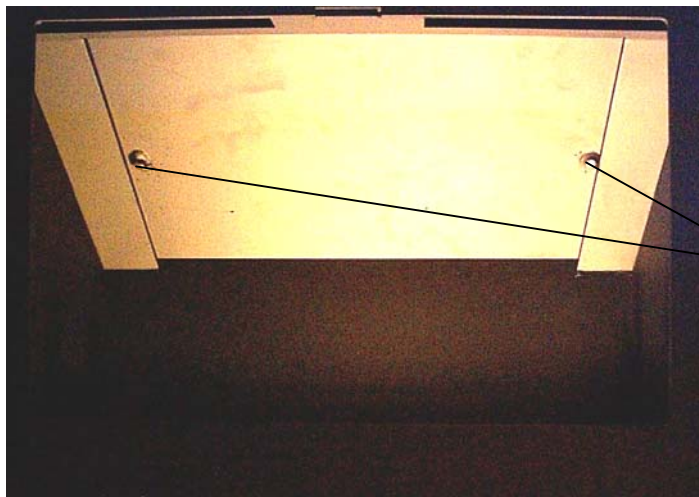


5. Fit the lower baffle into position by lifting the left hand edge up and over the left hand support (as shown in diagram 11), sliding the baffle as far to the left as possible and then lifting and sliding the right hand edge of the baffle over the right hand support and finally positioning the baffle with the two pins holding it centrally against the two supports as shown in diagram 12.

Diagram 11



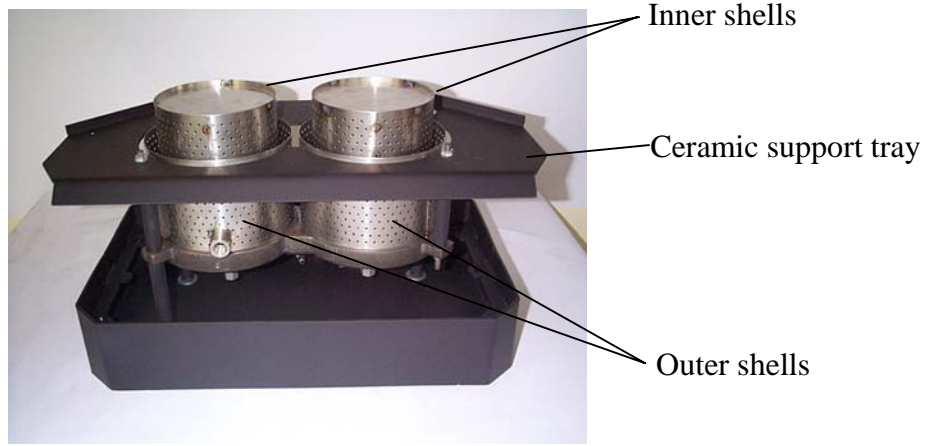
Diagram 12



Locating pins holding
lower baffle central in
supports

COMMISSIONING

Diagram 13: Burner components



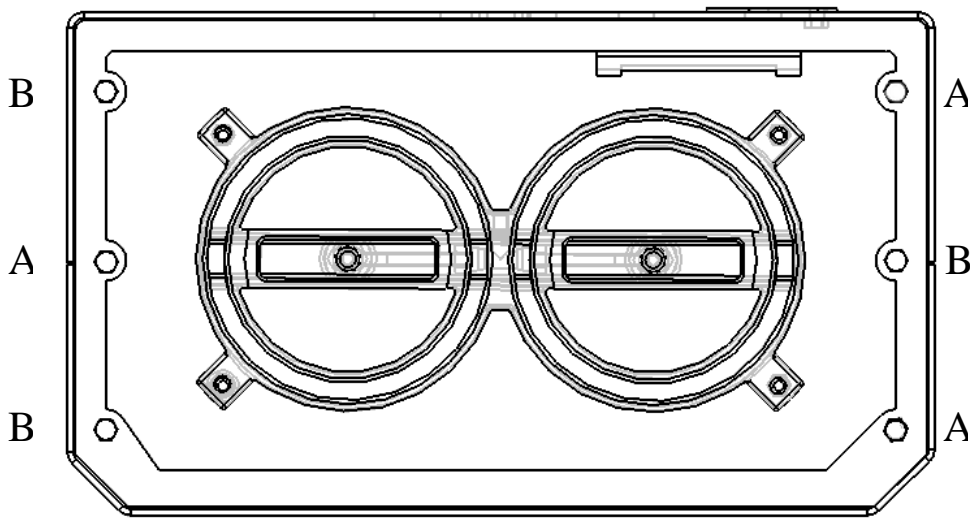
1. With the ceramic support tray removed, refit and tighten the four nuts, making sure that the burner base is clamped down in the correct position as shown in diagram 14.

Diagram 14



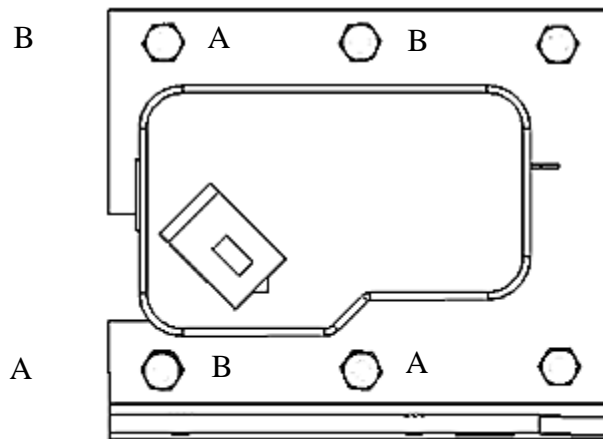
2. Remove the two vapour chamber lids.
3. Place a spirit level on the top of the burner base and check that it is perfectly level in all directions.
4. If adjustment is required slacken off the 3 x clamping bolts (A) around the perimeter of the burner tray and adjust using a 10mm socket or spanner on the three levelling bolts (B) as shown in diagram 15.

Diagram 15



5. Retighten the 3 x clamping bolts and double check the burner for level.
6. Check that the oil control valve fitted on the rear of the stove is also level in all directions.
7. Lift up the arming lever on the end of the oil control valve and turn the oil control knob to maximum (No. 6).
8. Allow fifteen minutes for the oil to enter the burner and check that the cold oil depth in the burner rings is 4-5mm.
9. If adjustment is necessary slacken off the 3 x M6 locking screws (A) on the oil control valve bracket and adjust the oil depth using the three levelling screws (B) as shown in Diagram 16. Once the adjustment has been carried out retighten the three locking screws and check that the valve is level in all directions. Wait a further ten minutes for the level to settle before re-checking. If the oil level was initially too high, the burner will need to be drained before carrying out any adjustment.

Diagram 16



10. Check for oil leaks.
11. Turn off the oil control.
12. Fit the wicks in the burner base with the cut outs facing downwards and lining up with the oil ways. N.B. The join in the left hand wick should be at the rear and the join in the right hand wick should be at the front.
13. Fit the vapour chamber lids sliding them side to side to ensure a good fit.
14. Fit the two outer shells with the manual lighting port on the left hand shell, at the front of the stove and the glow plug connected to the right hand shell above the oil inlet pipe at the rear of the burner.
15. Refit the catch bar.
16. Remove the four nuts from the top of the burner supports, refit the ceramic support tray with the large 45° cut outs at the rear of the stove, refit and tighten the four nuts.
17. Refit the two inner shells with the seams towards the front of the stove.
18. Place the four parts of the ceramic base matrix on top of the ceramic support tray, making sure that they are pushed up tight against the inner shells and that there are no gaps between them as shown in diagram 17.

Diagram 17



19. Place the four large diamond shaped coals on the burner as shown in diagram 18. N.B For Log effect kits see the separate section entitled 'Fitting the optional Log Effect'.

Diagram 18



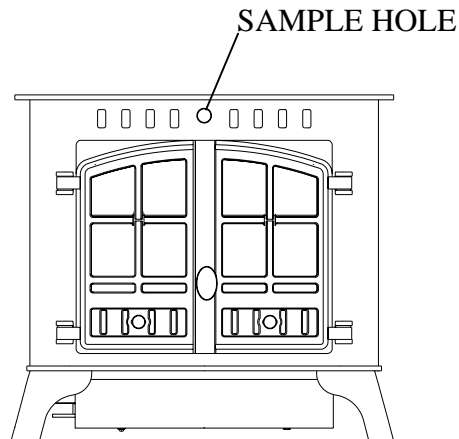
20. Place the eight remaining coals around the burner. The coals should cover half of each flame port with the four front coals sat partly on the base and partly on the inner shells as shown in diagram 19.

Diagram 19



21. Unscrew the sample hole plug from the top of the stove.

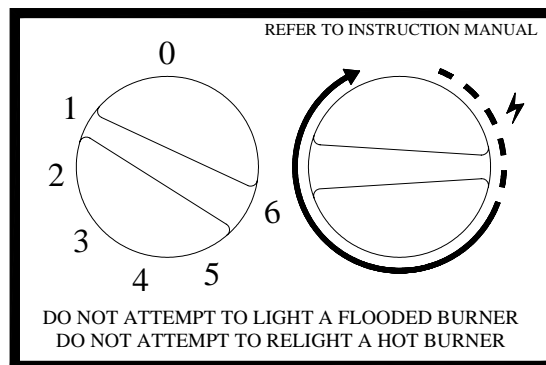
Diagram 20



22. Close the stove doors and switch on the electricity supply.

23. Turn the oil control to (1) and turn the ignition control to the energised position as shown in diagram 21. N.B. This procedure is for commissioning only. Refer to users instructions for normal lighting procedure.

Diagram 21



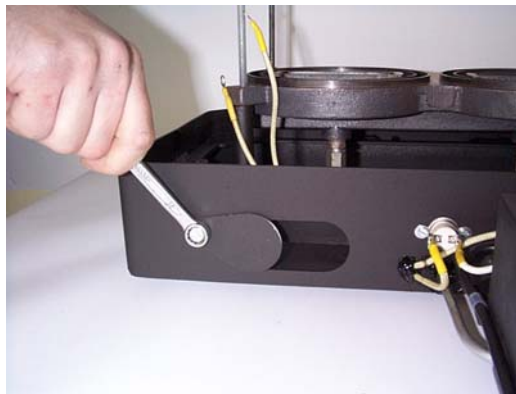
24. The glow plug should become energised, lighting the wick within 2 minutes.

25. Leave the oil control set to minimum and allow the burner to cross light and warm up for approximately 30 minutes.

26. Once warmed up the oil control can be set to high and the burner performance checked. There should be plenty of blue/yellow flames

- evenly scattered over the burner with little or no impingement on the baffle. Should adjustment of the coals be necessary, the stove should be turned down to (1) and allowed to cool before opening the doors.
27. Check the flue draught using a suitable gauge in the sample hole in the top of the stove. The pressure measured at this point should be - 0.06–0.12mbar.
 28. Adjust the draught stabiliser as necessary.
 29. Check the smoke figure using a smoke pump inserted into the sample hole.
 30. Adjust the primary air, as shown in diagram 22, until a smoke number less than two is achieved.

Diagram 22



31. Turn the oil control to minimum and check that the burner responds correctly, with a blue flame inside the burner shells at low fire.
32. Replace the sample hole screw.
33. Instruct the user on correct operation and servicing requirements of the stove, flue and oil supply system.

Fitting the optional Log Effect

- 1) Fit the four parts of the ceramic base matrix as for the coal effect kit.
- 2) Place one large branchless log at the centre of the burner as shown.



- 3) Place one large branchless log either side of the burner with the end of the log positioned over the flame ports either end of the burner and the two rear centre flame ports as shown below.



- 4) Place the small branch logs on top of the burner inner shells.



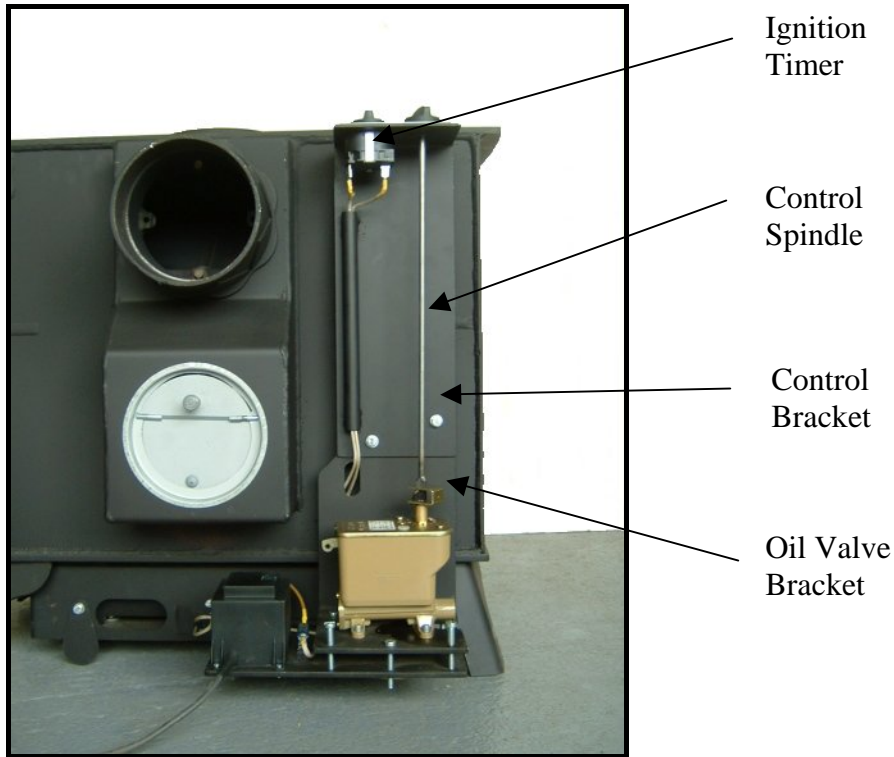
- 5) Cut the remaining branchless log in half and place as shown with the front of each log covering the front centre flame port of each half of the burner.



- 6) Once fired the logs can be adjusted as necessary to produce an even, realistic flame effect.



Fitting the optional Canopy Kit.



- 1) Remove the control knob and split pin and remove the control spindle.
- 2) Disconnect the electric supply and remove the two wires from the base of the ignition timer.
- 3) Using a 10mm socket or spanner undo the two M6 set screws securing the Control Bracket to the up stand of the Oil Valve Bracket. **DO NOT UNDO OR ADJUST THE SIX SLOTTED SCREWS IN THE BASE OF THE OIL VALVE BRACKET.**
- 4) Place the Control Bracket to one side, taking care not to damage the wiring.
- 5) Fix the extension plate to the base of the Control Bracket using the M6 bolts, nuts and washers supplied.
- 6) Refit the extended control bracket making sure that it is vertical and that the instruction plate is level.
- 7) Extend the wires to their full length and connect to the timer unit (the connections can be reversed).
- 8) Fit the new spindle supplied by passing through the hole in the control bracket and lowering into the slot on the oil valve (the flat part of the 'D' section on the top of the spindle should be facing away from the stove).
- 9) Fit the split pin supplied taking care to not subject the oil valve to excessive force.

- 10) Refit the control knob making sure that there is a small gap between the surface of the instruction plate and the bottom of the control knob when in the 'OFF' position.
- 11) Check that the two screws in the base of the canopy are slack and not protruding through the tabs.
- 12) Slide the canopy onto the top of the stove making sure that the securing tabs are under the edge of the top plate of the stove.
- 13) Slide the canopy back until the rear edge of the canopy is in line with the rear edge of the stove top plate and tighten the two grub screws.
- 14) For rear flue models only fit the blanking plate in the cut out in the top of the canopy.

SERVICING

1. Open the stove doors and carefully remove the coals from the top of the burner followed by the four parts of the base matrix.
2. Remove the four nuts securing the ceramic support tray to the burner supports and remove the tray, washers and four spacers.
3. Remove the catch bar.
4. Remove the four burner shells, leaving the right hand outer shell inside the stove with the glow plug connected.
5. Remove the wicks and the vapour chamber lids noting their orientation and marking if necessary.
6. Using a 14mm spanner disconnect the oil feed pipe from the 6mm tee under the burner and tilt the burner backwards to disengage the pipe.
7. Lift the burner clear of the stove taking care not to spill any oil left in the pipework.
8. Remove the lower baffle plate by lifting slightly, sliding to the right and dropping the left hand side clear of its support.
9. Remove the top baffle retaining bar by pulling it forwards to remove it from its locating slots and then moving to one side and dropping clear of the support.
10. Remove the top baffle by pulling it forwards and then repeating the procedure set out in (7).
11. Remove any soot deposits from the inside of the stove and flue using a soft brush and vacuum cleaner.
12. Remove any deposits from the coals and ceramic matrix.
13. Scrape any carbon deposits from the burner oil ways and vapour chamber and if necessary disassemble the inlet pipework and clean.
14. Clean the two baffle plates and retaining bar and refit.
15. Reassemble and refit the burner in its original position.
16. Reconnect the oil feed pipe taking care not to over tighten the fitting.
17. Check that the burner is level in all directions.
18. Follow the procedures set out in the COMMISSIONING section of these instructions.

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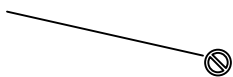
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Diagram 23

HIGH FIRE
ADJUSTMENT
SCREW



LOW FIRE
ADJUSTMENT
SCREW



Spares Short List

Description	Part No.
Rear ceramic	HOL05049A
Left ceramic	HOL05049B
Right ceramic	HOL05049C
Front ceramic	HOL05049D
Small coal	HG06045
Large Coal	HOL05074
Wick set	HOL05991
Glow plug	HOL05998
Fuse	HOL05993
Thermal cut out	HOL05895
Control knob	HOL05992
Ignition Timer	HOL05999
Glass panel	HHO6060
Lighting port plug	HOL05889
Outer Shell (Manual)	HOL05008A
Outer Shell (Electric)	HOL05008B
Inner Shell	HOLASSY11

Fault finding

Fault	Possible cause	Remedy
Burner fails to light (manual ignition)	<ul style="list-style-type: none"> a) Oil Starvation b) Insufficient oil depth c) Excessive carbon formation in burner 	<ul style="list-style-type: none"> a) Check Oil Supply to control valve, check manual trip. b) Recommission burner c) Service burner
Burner fails to light (electric ignition)	<ul style="list-style-type: none"> a) Any of the above b) Mains supply disconnected c) Stove body hot d) Wick touching glow plug e) Faulty Thermal Cut Out 	<ul style="list-style-type: none"> a) See above b) Connect mains supply c) Allow stove to cool for 2 hours before relighting d) Reposition wick 3-4mm from glow plug e) Replace Thermal Cut Out
Stove goes out after approximately one hour	<ul style="list-style-type: none"> a) Air lock in burner pipe work b) Fire valve sensor incorrectly placed c) Insufficient flue draught/down draught 	<ul style="list-style-type: none"> a) Remove any high points from oil feed pipe work b) Reposition fire valve sensor c) Check suitability of flue and carry out any necessary remedial work
Flames on one side of burner only	<ul style="list-style-type: none"> a) Excessive oil depth b) Excessive carbon formation in burner c) Wicks incorrectly positioned 	<ul style="list-style-type: none"> a) Recommission burner b) Service burner c) Fit wicks as shown in commissioning instructions
Yellow flame on low fire	<ul style="list-style-type: none"> a) Low fire flow rate incorrect b) Excessive flue draught c) Excess primary air d) Burner shells incorrectly seated 	<ul style="list-style-type: none"> a) Adjust low fire flow rate b) Adjust draught stabiliser/fit secondary draught stabiliser c) Adjust primary air d) Reassemble burner
Tall sooty flames on high fire	<ul style="list-style-type: none"> a) Coals/ceramic matrix incorrectly positioned b) High fire flow rate incorrect c) Insufficient primary air d) Insufficient flue draught 	<ul style="list-style-type: none"> a) Fit coals/ceramic matrix as per instruction manual b) Adjust high fire flow rate c) Adjust primary air to give a smoke figure of 0-2 d) Adjust draught stabiliser/check suitability of flue and carry out necessary remedial work
Burner surging	<ul style="list-style-type: none"> a) Insufficient primary air b) Control turned up during warm up period 	<ul style="list-style-type: none"> a) Adjust primary air b) Turn control to low fire and allow the burner to settle for 30mins .

COMMISSIONING CHECKLIST

	I can confirm that I have checked the following items	Yes	No
A	The stove is fitted to a sound chimney of the correct specification.		
B	The correct cowl is fitted to the chimney.		
C	There is suitable access around the stove.		
D	The incoming oil supply is the correct size and fitted with a remote sensing fire valve.		
E	The burner base is level in all directions.		
F	The oil control valve is working correctly.		
G	The cold oil depth in the base is at the correct level (4-5mm).		
H	The two wicks are fitted correctly.		
I	The two vapour chamber lids are fitted correctly.		
J	The four shells are fitted and seated correctly.		
K	The ceramic matrix and coals are assembled as per the diagrams.		
L	The manual lighting port plug is in place.		
M	The flue draught is correct.		
N	The smoke figure on high fire is 0-2.		

Name	
Company	
Date	
Qualification details	
Signature	

Comments:



OIL STOVE REGISTRATION

CUSTOMER DETAILS

Name:
Address:
Telephone No:
Date of purchase:
Date of installation:

SUPPLIERS DETAILS

Name:
Address:
Telephone No:

INSTALLERS DETAILS

Name:
Address:
Telephone No:

COMMISSIONING ENGINEERS DETAILS

Name:
Address:
Telephone No:

Send this completed form to:

*Oil Stove Registration Department, Hunter Stoves Ltd, Unit 6, Old Mill
Industrial Estate, Stoke Canon, Exeter, Devon. EX5 4RJ*