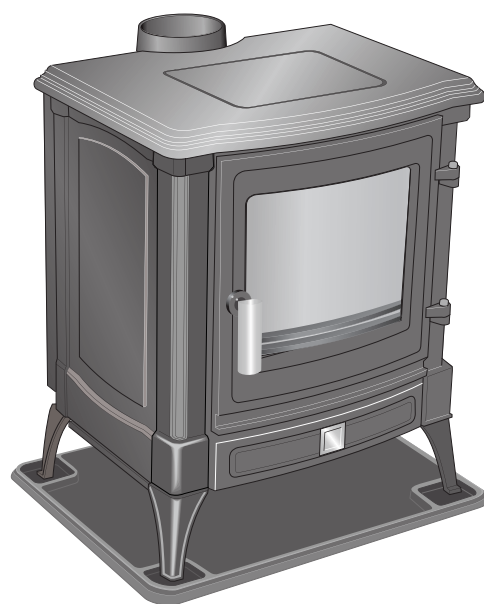




The Stove Company

Servicing Instructions for

Harmony & Stanford Oil Stoves



**Euroheat Distributors
(H.B.S.) Ltd.,
Unit 2, Court Farm
Business Park,
Bishops Cleeve,
Worcestershire,
WR6 5AY.**

This document may also be used when servicing the Nestor Martin Oxford oil stoves, C80 & C100, and the Nestor Martin Hearth oil stoves, A80 & A100.

INTRODUCTION

Servicing your stove should not be seen as a chore but rather the means to getting the most efficient use and increasing the life of the stove. A badly maintained stove will run inefficiently, so you will burn more fuel, and if left unmaintained for a period could seriously damage the component parts within the stove which will then need replacing.

This booklet details the aspects of servicing and routine maintenance required.

Other documents obtainable on request from Euroheat

IN1023 Operating Instructions Oil Stoves.

IN1026 Installation Instructions Oil Stoves.

IN1087 Technical Guide. The Flue.

TB179 Technical Bulletin Transformer Identification and Fitting Instructions.

TB115 Technical Bulletin Toby Oil valves.

TB138 Technical Bulletin BM Oil valves.

TB137 Technical Bulletin CI Oil valves.

These guides are available by post by from Euroheat or our web site

www.euroheat.co.uk

Spares may be purchased from:

Your local Euroheat supplier

The Euroheat web site: www.euroheat.co.uk

The service engineer is responsible under the health and safety at work act 1974 vi the caustic nature of fire cement and the possibility of disturbing asbestos and other materials such as ceramic in existing installations and to suggest appropriate protection to be given to the person (s) carrying out the servicing. The complete servicing must be carried out with due reference to the British Standards, Codes of Practice and Building Regulations relevant to the fuel type installed, and the manufacturers installation instructions.

This document is a General Service Guide only. It does not replace the installation instructions or building regulations. No servicing should be undertaken unless the engineer is suitably qualified.

Maintenance Schedule

1. Monthly

Every 2 weeks or monthly depending on how cleanly the stove is burning the decoke tool should be used to stop carbon building up in the oil inlet port. See pages 13 to 15.

2. Every 3 Months

Turn off the stove and remove the coal effect kit if fitted. Examine the catalyser, support rings and the burner for any build up of carbon and remove if necessary. See pages 16 and 17.

3. At the End of the Heating Season (Summer Shut Down)

A) Do all the above in the monthly and 3 monthly procedure.

B) Turn off the oil line isolation valve which should be at the rear of the stove. See page 23.

C) Lubricate all the handle shafts and latch blades with a lubricant such as WD40.

D) Arrange with your local engineer to have the stove serviced during the quieter summer period when the demand for the engineers time is less.

4. At the Start of the Heating Season

A) Check the door rope seals so as to ensure an airtight seal. See page 9.

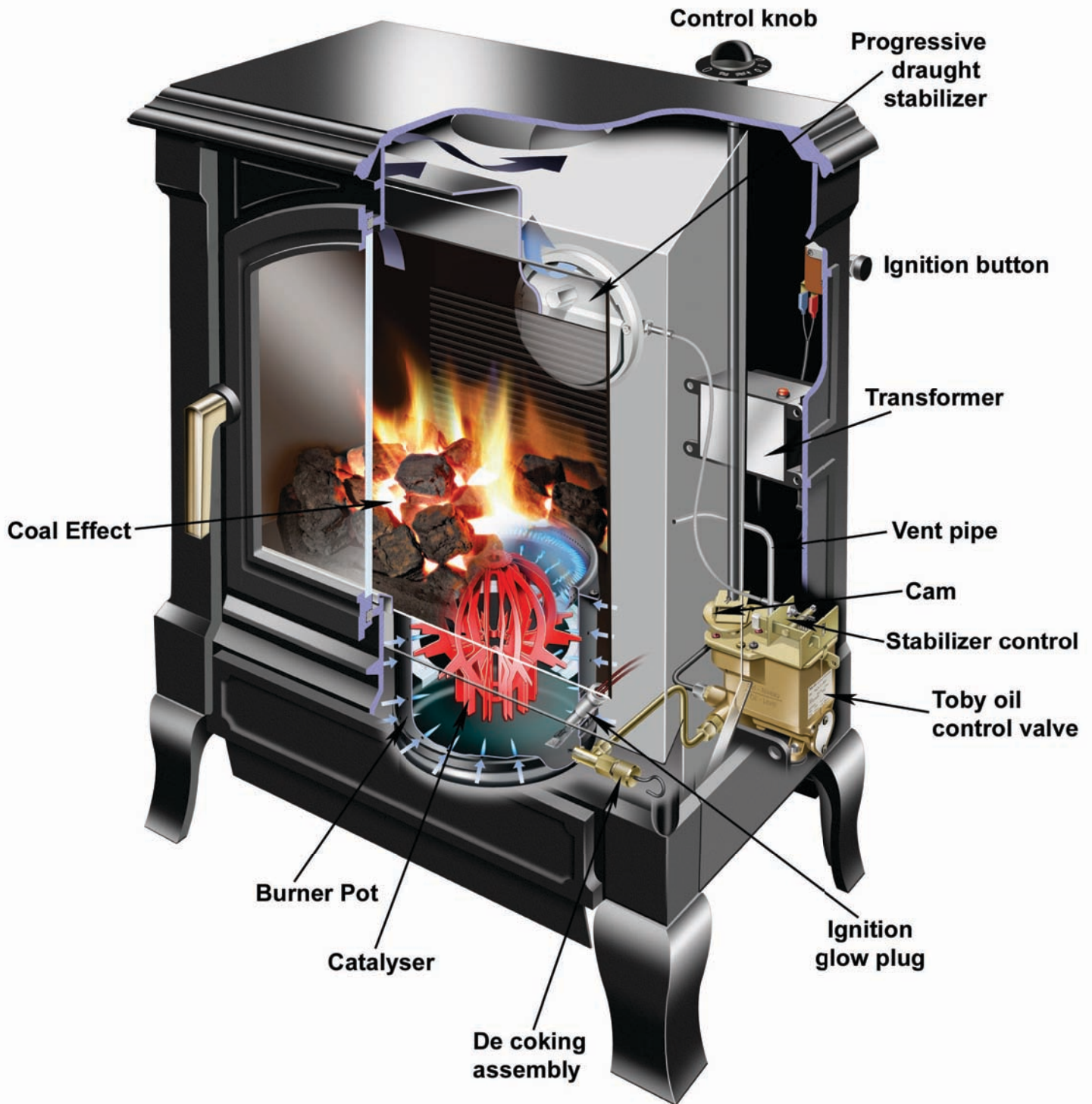
B) Turn on the oil line isolation valve which should be at the rear of the stove. See page 23.

C) Remove the coal effect kit, if fitted, and ensure that there is no oil in the burner pot. If there is, remove this before lighting the stove.

D) Ensure that the metering stem remote arm is moving up and down when the oil control knob is turned up and down. See page 18 to 21.

D) Light the stove as shown in the stove's operating instructions.

The Main Components of the Harmony and Stanford Oil Stoves



Cleaning the Stove

Cleaning the Glass

Properly operated, with the correct fuel, your glass will remain clean. Slight staining may appear when the stove is lit and below its operating temperature. This will normally clear as the stove's temperature rises. If it becomes necessary to clean the glass by hand do not attempt to do so unless the stove is cold. Proprietary glass cleaning agents are available but they must specifically state its suitability for ceramic stove glass before being used because the glass in your stove is not ordinary glass and may be damaged with an unsuitable cleaner.

Newspaper moistened with water to which a little vinegar has been added will normally remove most staining, but for really stubborn marks, gentle polishing with fine steel wool lubricated with a few drops of dish washing detergent will need to be employed. Great care must be taken not to clean the glass too vigorously as particles of grit may have adhered with the stain and these could cause scratching if dragged across the glass. However well the stove burns it will eventually become necessary to clean the glass, but if cleaning becomes necessary too often we advise you to review your operating procedures to determine whether cleaner and more efficient combustion can be achieved (only burn dry seasoned wood).

The Stove Body

Dusting the stove may be carried out when the stove is at its minimum heat output temperature, using light strokes of a real bristle paint brush. Thorough cleaning, or any attempt to remove marks on the stove body must only be done when the stove is cold. Stoves with an enamel finish should be cleaned with a damp cloth, or very gentle use of a cleaner recommended for enamel finishes. It should be noted that even approved cleaners will damage the highly polished finish of the stove if used too vigorously. All traces of the cleaner must be removed before the stove is lit and no finishing polishes must ever be used as these will leave unsightly streaks on the stove when it becomes hot.

Stoves with a cast black finish should never be cleaned with a cloth as the texture of the paint will abrade and collect lint from the cloth which will be almost impossible to remove. Vigorous brushing with a stiff real bristle paint brush will remove all dust, but where the paint is marked, the stains are better obliterated with a spray of suitable stove paint rather than attempts made to clean them off. Suitable paint may be purchased from a stove shop or direct from Euroheat.

Respraying the Stove Surface

Remove any dust and dirt with a stiff brush or vacuum with a brush attachment. Mask off any areas of the stove you do not wish to re-spray and the area surrounding the stove. The door handles and doors can be removed if required; see the section on hinge pin removal and door handle adjustment, page 6 and 9.

Shake the can vigorously for a minute to mix the contents and apply the paint thinly and evenly over the surface, avoid over application as this will produce unsightly runs on the surface. It is better to use a few thin coats than one thick one.



Order numbers for spray paint

Surface to be Sprayed	Part Number	Size of Can
Cast iron body	40785	200ml
Rear heat shield	60429	400ml

Repair of the Enamel Surface

The enamel surface of the stove may become chipped if it is hit with a hard object such as a coal shovel or operating tool. Suitable cold enamel touch up paint may be purchased.

To prepare the surface remove any loose or flaking enamel finish and brush or vacuum the area to remove any dust and dirt. If the touch up is supplied in a bottle shake vigorously for a minute to mix the contents. If supplied in a tube squeeze out some of the contents onto a clean sheet of paper and mix with a match stick as it may have become separated in the tube. Apply a thin layer of touch up to the surface allowing it to dry before applying further layers to build the surface up to the surrounding enamels height. Leave to dry before firing the stove.



If your stove has an enamel finish you will notice, after the stove has been used several times, it develops what is called a “crackle” pattern in the enamelling. This is caused by the different expansion rates between the enamel and the cast iron, it is normal and should not be regarded as a fault or indicating that the stove is beginning to shed its finish.

Order Numbers for Touch up Paint

Enamel colour	Part Number
Satin Black Enamel	27440
Bottle Green Enamel	27437
Majolica Brown Enamel	27441
Blue enamel	31272

Brass Fittings

Any proprietary brass cleaner may be used to clean the brass on the stove, but care must be taken to ensure the polish does not come into contact with the stove enamel or the black cast finish, where it will leave a stain.

Nickel and Black Haematite Fittings

Any proprietary chrome or aluminium cleaner may be used to clean the decorative fittings on the stove, but care must be taken to ensure the polish does not come into contact with the stove enamel or the black cast finish, where it will leave a stain.

The Flue

Even if your flue is correctly lined it is advisable to run your stove at a high setting to thoroughly warm the flue periodically and ensure it is swept regularly. If the stove has not been used for some time it will be necessary to ensure the flue has not been blocked with twigs from home building birds or blocked with other obstructions before the stove is lit. Lighting a small piece of paper within the stove will determine the flue’s ability to remove any products of combustion.

National Chimney Sweeps Association
Telephone: 01785 811732

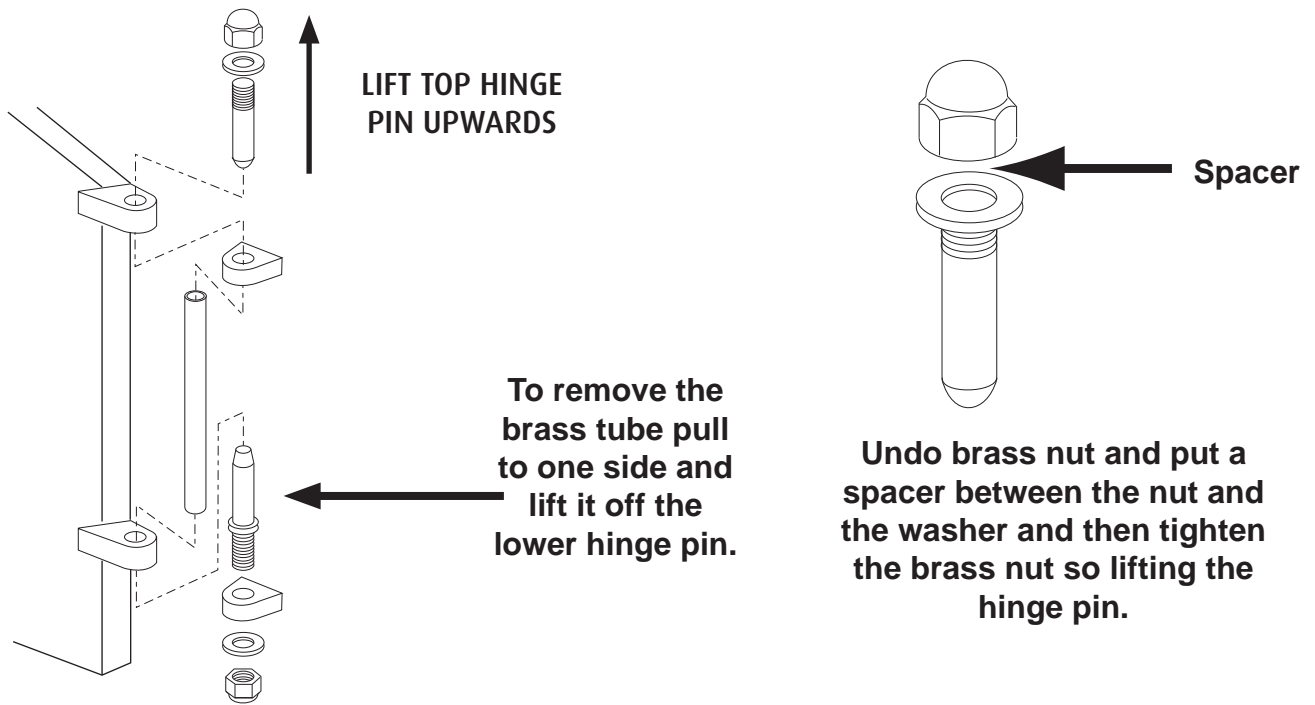
OFTEC
Foxwood House, Dobbs Lane, Kesgrave, Ipswich, IP5 2QQ.
Tel: 0845 65 85 080 Fax: 0845 65 85 181
Email: enquiries@oftec.org

Front Door Removal

Door Removal with Brass Hinge Tube

Upper Hinge Pin Removal

Open the door to the stove. To remove the top hinge pin lift it upwards, if it is found to be tight undo the brass nut and fit a spacer between the nut and the brass washer, if it has an enamel finish protect the door with a peice of cloth below the washer. Tighten the nut back down and in so doing this will lift the pin upwards. NEVER KNOCK THE HINGE PIN DOWN as this will force it into the casting and make its removal very difficult and result in the brass tube becoming damaged. If this has occurred the brass tube must be cut and removed and the pin tapped upwards, a new hinge pin and brass tube will be required.



Lower Hinge Pin Removal

If the lower pin needs to be removed, which is not necessary if you are only removing the door, undo the brass nut and lift up the pin.

Order Numbers for Brass Hinge Assembly

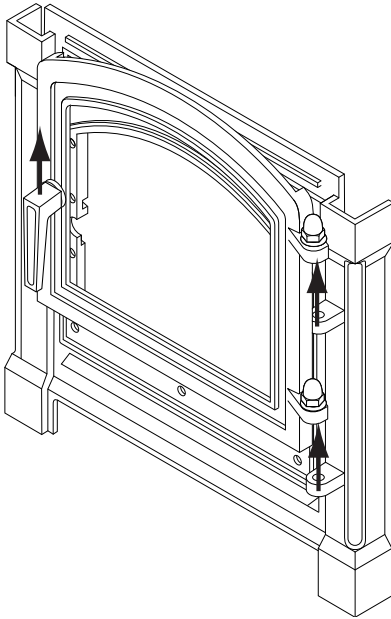
Description	Harmony 1	Harmony 2	Harmony 3	Coachman
Domed brass nut	12430	12430	12430	12430
Brass washer	17496	17496	17496	17496
Brass hinge tube	28285	28285	29351	29351
Upper hinge pin	26291	26291	18839	18839
Lower hinge pin	12427	12427	13219	13219

Door Removal without Brass Tube

To remove the door undo the handle and open the door.

Lift the door and hinge pins straight up holding the hinge side of the door and the handle.

Reverse the procedure to refit ensuring that if there were any washers fitted they are also fitted.



Open door and lift upwards holding hinge side of door and the handle.

Order numbers for Harmony 5,8,10,11,21,31,41 hinge pins

Description	Harmony 5 & 11	Harmony 21	Harmony 8 & 31	Harmony 10 & 41
Upper door	19915	18906	18906	18906
Domed brass nut	12430	12430	12430	12430
Brass washer	17496	17496	17496	17496

Order Numbers for Stanford Hinge Pins

Description	Stanford 50	Stanford 80
Upper door	31848	31848

Hinge Pins.

The hinge pins on the Stanford stoves may, over time, ride up with the opening and closing of the door. It is essential that you knock these back down so that they do not fall out. If one does fall out then there is a danger that the door will drop down and snap off the hinge still attached with a hinge pin. This would then require a new front panel fitting to the stove.

Using a dot punch on the side of the hinge pin in two places may help stop the hinge pins from riding up.

Glass and Glass Seal Set Replacement

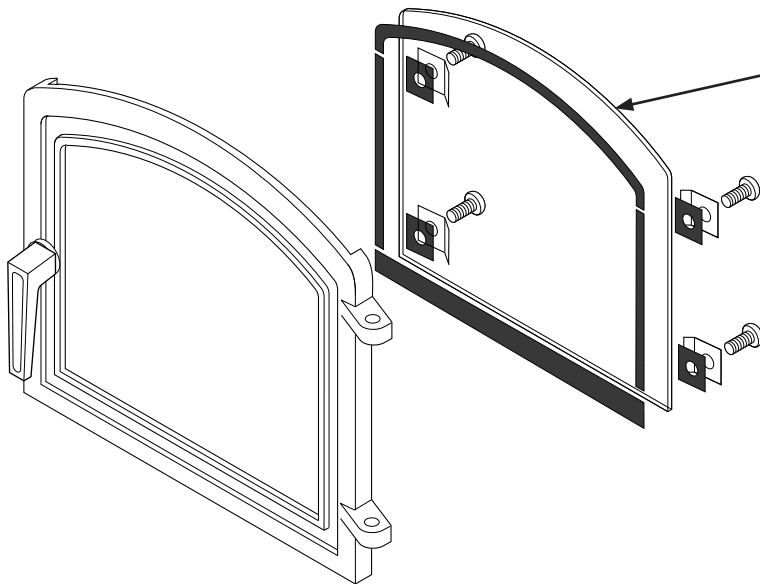
When replacing the glass on any of the stove models supplied by Euroheat the glass seal should also be replaced. Failure to do so could cause damage to the glass or allow air into the stove in an uncontrolled manner which may be detrimental to the performance of the stove.

The seals should be checked annually and replaced if they have become damaged or show signs of leakage. The seals may be either a rope seal or a ceramic fibre gasket. In all cases these are interchangeable.

It may be easier to replace the glass by removal of the door and lying it down on a stable flat surface.

Glass and Seal Set Removal Single Panel Glass

Undo the four glass clip screws and carefully lift off the glass panel from the door frame. With a blunt instrument such as a screwdriver scrape away the old ceramic glass seal from the door frame. If it has a rope seal which needs to be renewed pull out the old rope seal and with a blunt instrument such as a screwdriver scrape away the old rope glue and any dirt. Clean away any remaining residue with a wire brush.



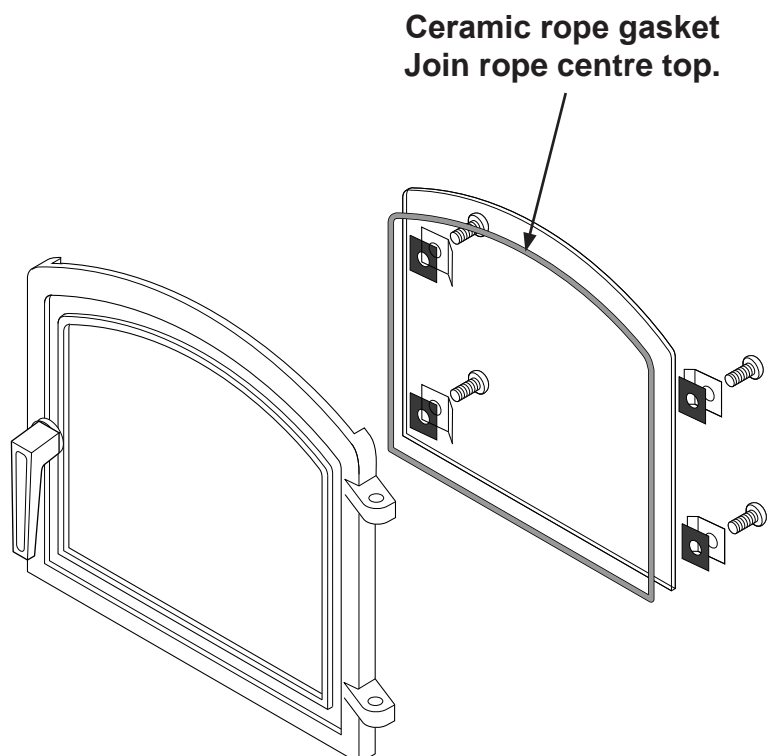
Ceramic fibre gasket

The ceramic fibre gasket set

This comprises of precut shaped ceramic fibre strips which fit the shape of the glass and pads which fit behind the glass retaining clips.

The ceramic rope gasket set

This comprises of a length of self adhesive ceramic rope which fits into the groove on the door frame, the shape of the glass, and pads which fit behind the glass retaining clips.



**Ceramic rope gasket
Join rope centre top.**

Order Numbers for Glass and Glass Seal Sets

Stove Model	Seal Set	Glass
Harmony 1	MS078	30730
Harmony 2	MS078	30732
Harmony 3 & Coachman	30729	31589
Stanford 50	MS078	MS0774 Flat glass/ 37941 Bowed glass
Stanford 80	MS078	37942

Replacement of Ceramic Strip Gaskets and Glass

Lay the ceramic strips around the door frame in the shape of the door. Lay the glass panel onto the ceramic strips. Push the screws through the glass clips and glass clip seals and then screw into the threaded holes in the door frame.

It is very important that although the glass clips should hold the glass panel in place there should be some movement when the glass is pushed down onto the ceramic seal. This will allow for expansion and contraction of the glass and the door frame when the stove heats and cools, which could cause the glass to break.

Replacement of Ceramic Rope Gasket and Glass

Remove the adhesive strip cover paper from the ceramic rope and place this side downwards into the groove around the window in the door, cut off any excess rope. Push the ceramic rope down into the groove to ensure that the adhesive comes into contact with the door frame, the rope starting and finishing top centre. Lay the glass panel onto the ceramic rope seal. Push the screws through the glass clips and glass clip seals and then screw into the threaded holes in the door frame.

It is very important that although the glass clips should hold the glass panel in place there should be some movement when the glass is pushed down onto the ceramic rope seal. This will allow for expansion and contraction of the glass and the door frame when the stove heats and cools, which could cause the glass to break.

NEVER CLAMP THE GLASS CLIPS DOWN TIGHT ONTO THE GLASS OR FIT THE GLASS CLIPS WITHOUT THE CERAMIC PADS UNDERNEATH AS THIS MAY LEAD TO THE GLASS BREAKING.

Rope Seal Replacement Kits

The ceramic rope seals on the three doors need inspecting regularly and replacing when they become damaged or when the adjustment of the door handles will not maintain an air tight seal. To check if the seals are tight is to get a piece of standard A4 copier paper, cut it in half and then fold it in half. Shut it into the door in various places with the door handle closed. If the seal holds the paper tight and it is difficult to withdraw it then the seal is good. If when it is pulled it slides out easily then the door handles will need adjustment or the rope seal will require replacement.

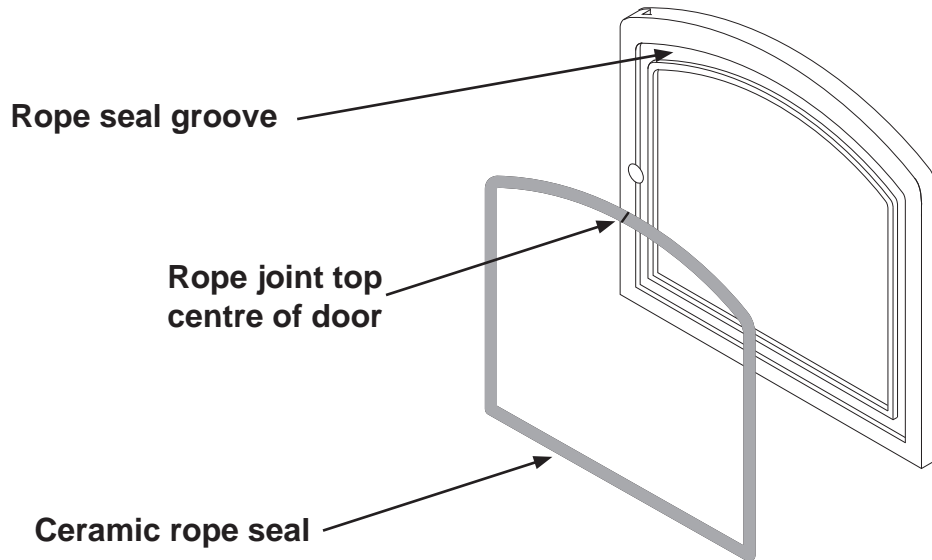
Failure to maintain a good seal will allow uncontrolled air enter the stove. This can cause over firing, excess heat, which can damage the internal components of the stove. Symptoms of this are a stove burning uncontrollably even when the air inlets are shut down.

Order Numbers for Door Rope Seal Kits

Stove Model	Seal Set	Stove Model	Seal Set
Harmony 5	R0141	Harmony 8	R0138
Harmony 1	R0135	Harmony 10	R0138
Harmony 2	R0136	Harmony 11	R0141
Harmony 3 & Coachman	R0138	Harmony 21	R0138
Stanford 50	R0141	Harmony 31	R0138
Stanford 80	R0138	Harmony 41	R0138

Removal of Old Seal

Pull the old rope seal from the rope groove, it may require a flat bladed screw driver to lift it from the groove. Clean the groove of all accumulated dirt and old rope glue, a flat bladed screw driver and wire brush are recommended to clean the groove.



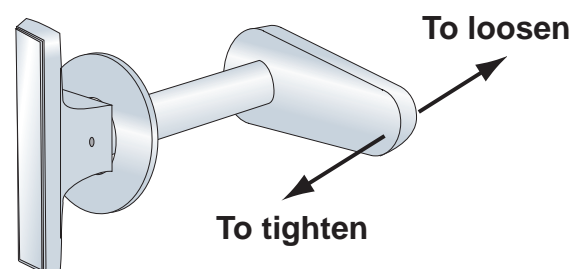
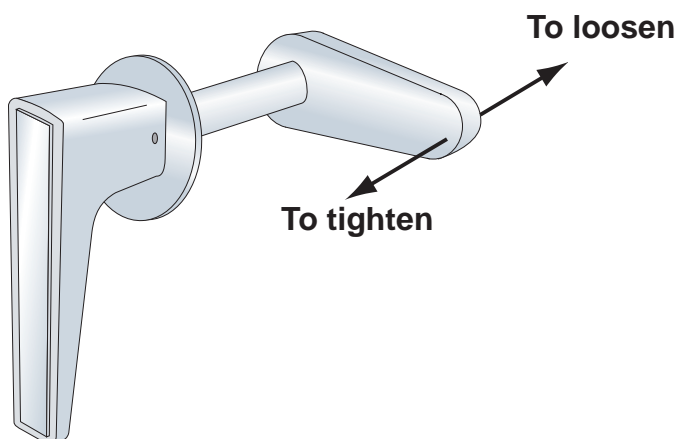
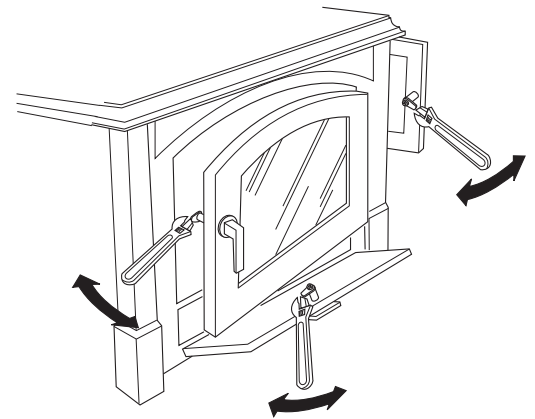
Fitting New Seal

The ceramic rope in the seal set kits is cut to an approximate length, as the kits fit various stoves. Run the rope around the rope groove and cut it to the required length. Remove it from the groove and apply a bead of rope glue into the rope groove. Push the rope back into the groove ensuring that the joint is at the top and fitting tightly together. Close the door and adjust the handle latch accordingly.

Door Handle Adjustment

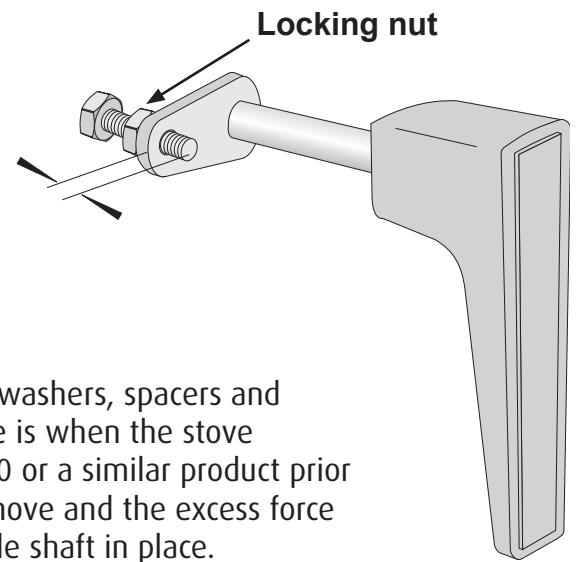
It is very important for correct operation that all the doors (glass door, side door and ash pan door) when closed are air tight. Your stove is provided with an adjustable door latch.

The flat latch blades can be bent using an adjustable spanner. Bent towards the handle to tighten and away from the handle to loosen.



Handle latch with adjusting bolt

To adjust the furnace door handle latch, loosen the locking nut and adjust the bolt as required. Retighten the locking nut. The adjustment should be made so that when the handle is in its closed position the door is air tight.



Door Handle Replacement

The door handles are supplied in a complete kit form, with handle washers, spacers and latching blade. The most common reason for a handle to be replaced is when the stove has stood idle over the summer and not been lubricated with WD40 or a similar product prior to the summer shut down period. The latch becomes very stiff to move and the excess force needed to move the latch breaks the roll pin which holds the handle shaft in place. If this has broken the whole handle assembly will need replacing.

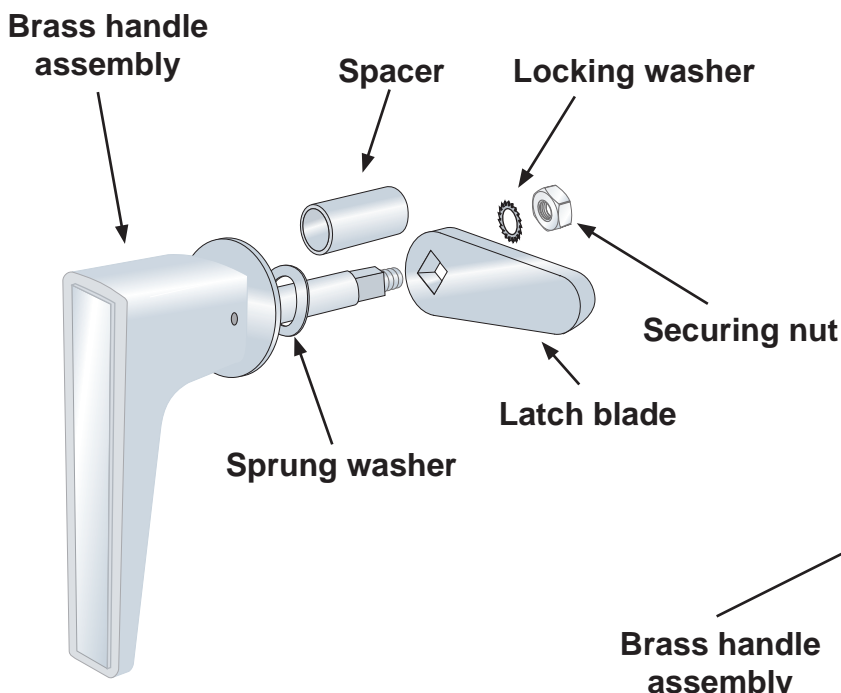
Order Numbers for Handles

Model	Furnace Door	Lower Door	Model	Furnace Door
Harmony 5 & 11	32828	No handle	Harmony 21	44227
Harmony 1	19917	28130	Harmony 31	43812
Harmony 2	19924	19925	Harmony 41	43812
Harmony 3	28999	No handle	Stanford 50	39649
Coachman	28999	No handle	Stanford 80	39654

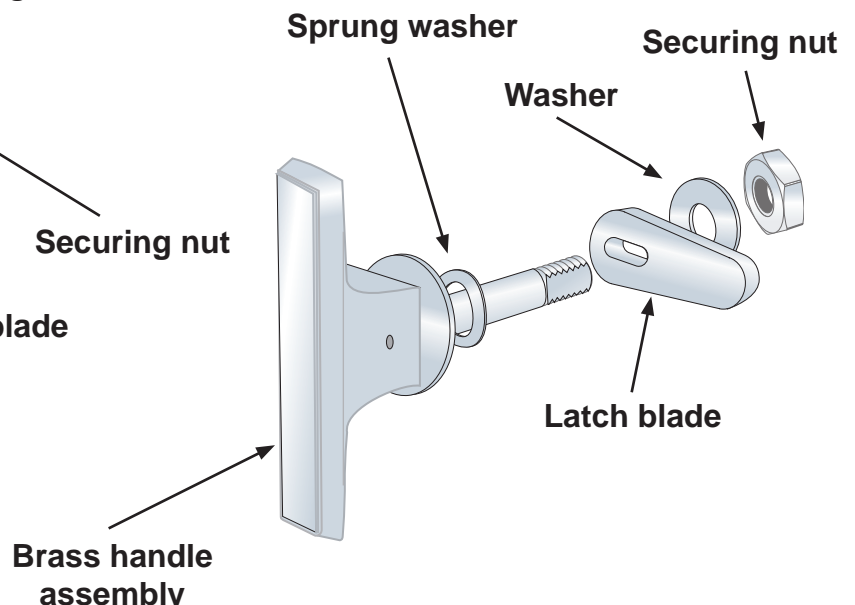
If the handle shaft has seized into the door frame, and the door is closed, then the shaft will have to be sprayed with WD40 or a similar penetrating oil. Leave this to soak for some time. Then with a pair of mole grips or similar type of spanner turn the shaft to open the door. Once the door is open, spray the inside of the shaft and the outside again with WD40 and leave to soak. The shaft can then be gently knocked through the frame of the door, taking care as the door frame is cast iron and can crack.

Examples of Handle Kits

Harmony 1 Firebox Door Handle



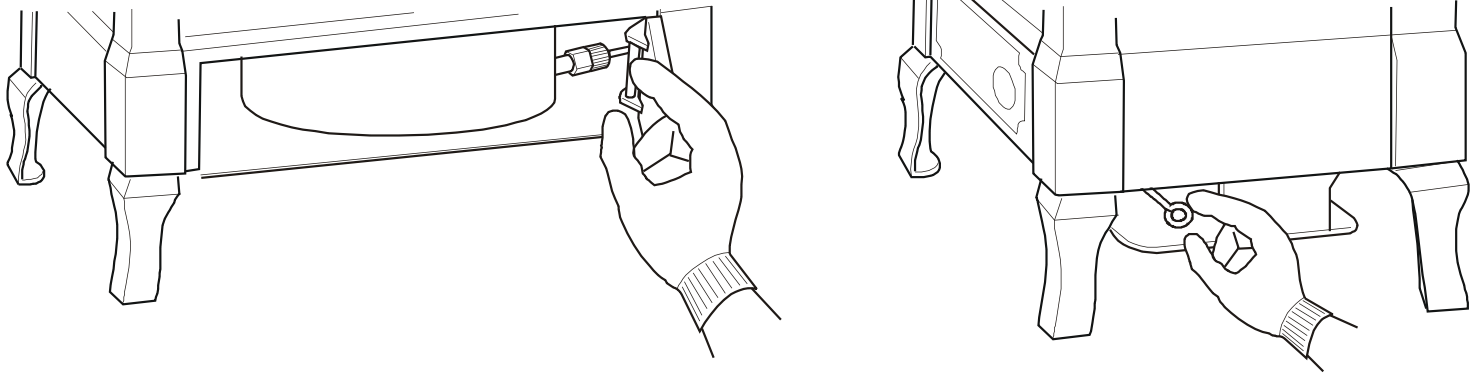
Harmony 1 & 2 Lower Door Handle



De-coke Procedure for Oil Stoves

To ensure the burner is operating efficiently and capable of its maximum output the fuel inlet to the burner will need to be kept free of carbon deposits by operating the decoking lever at least monthly. Use the glove supplied with the stove and take great care if this procedure is to be undertaken with the stove running.

Accessing the De-coking Assembly

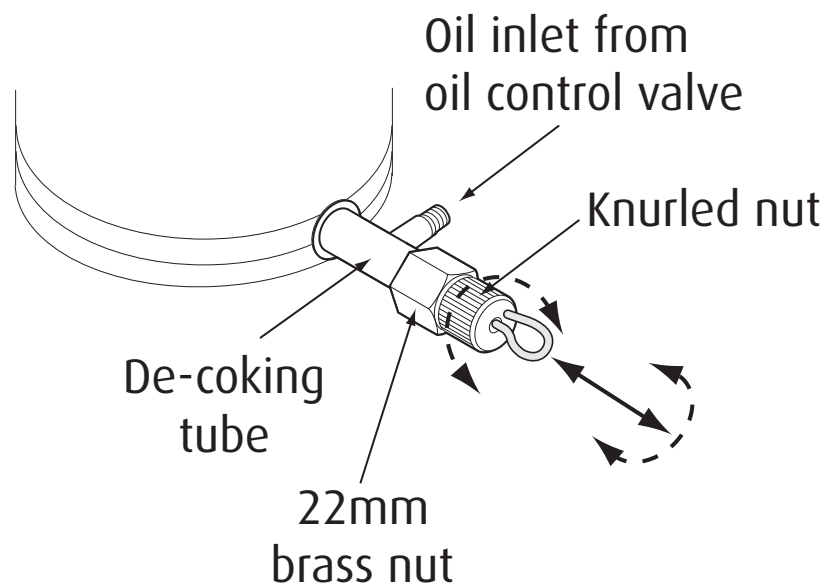


On most Harmony and Stanford stoves the decoking assembly can be accessed by opening the lower door, the example above shows the Harmony 5 and Stanford 50 where it can be accessed from the side. The Harmony 3 and Harmony Coachman stoves; the access is through the side door of the stove.

Mark 1: De-coking Assembly

This is accomplished by slackening the knurled brass nut a half-a-turn and withdrawing the rod no more than 35mm (1½inches). Then while rotating the rod, insert it fully, repeat until there is no grinding felt when it is rotated, then retighten the brass knurled nut.

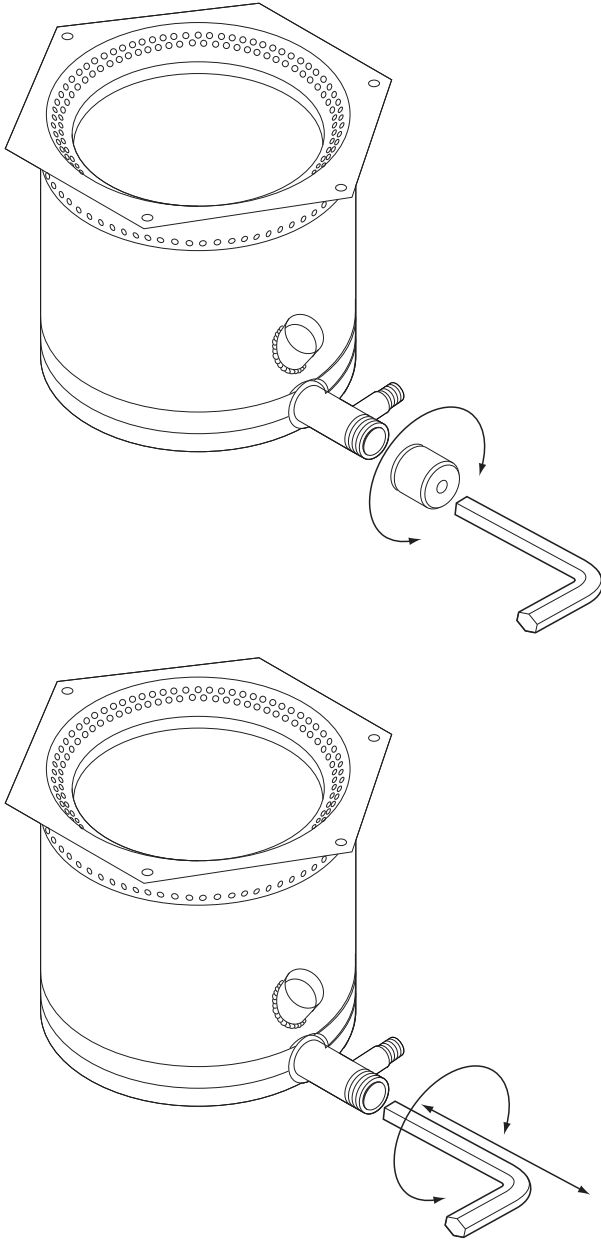
De-coking Assembly



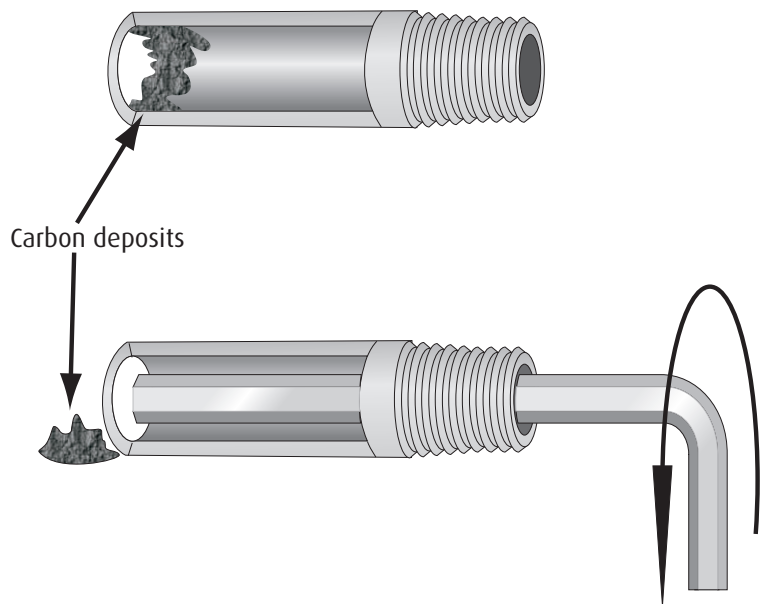
On stoves over 4 to 5 years old carbon deposits may have built up higher up the de-coking tube than the de-coking blade can reach, thus restricting the oil flow to the burner. This requires the de-coking assembly and oil inlet pipe being removed from the de-coking tube. Unscrew the oil feed pipe from the de-coking tube with a 10mm spanner and pull the pipe out of the de-coking tube. To remove the 22mm brass nut hold the de-coking tube with an adjustable spanner, so it does not turn and unscrew the de-coking tube from the body of the burner pot. Unscrew the whole assembly and remove from the end of the de-coking tube. Clear out any carbon which has built up within the de-coking tube. Replace both the oil feed pipe and the de-coking assembly.

Mark 2: De-coking using the Allen Key Tool

This operation must only be carried out with the stove **TURNED OFF** and **COLD**. The de-coking and inlet pipe are located behind the lower door and to the right hand or left hand side of the burner pot. Remove the end cap with the tool supplied with the stove, making sure not to loose the sealing gasket from within the cap. The tool is then inserted into the inlet pipe rotating it as it is pushed in towards the burner, until the carbon deposits have been scraped clear of the inlet.



Unscrew the de-coke port end cap with the tool supplied with the stove.

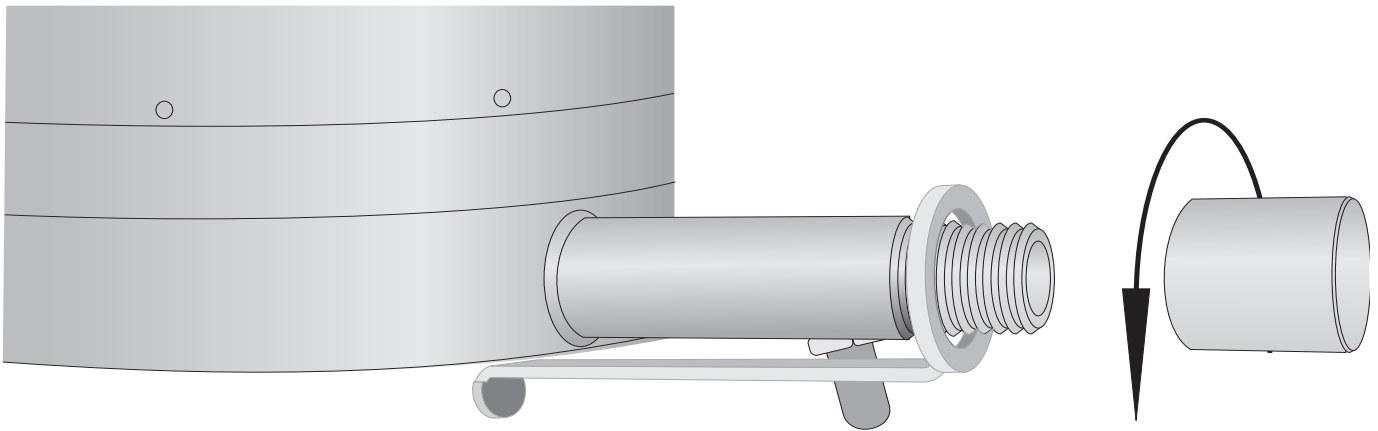


Insert the tool into the inlet pipe and rotate the tool whilst pushing in towards the burner, until the carbon has been scraped clear.

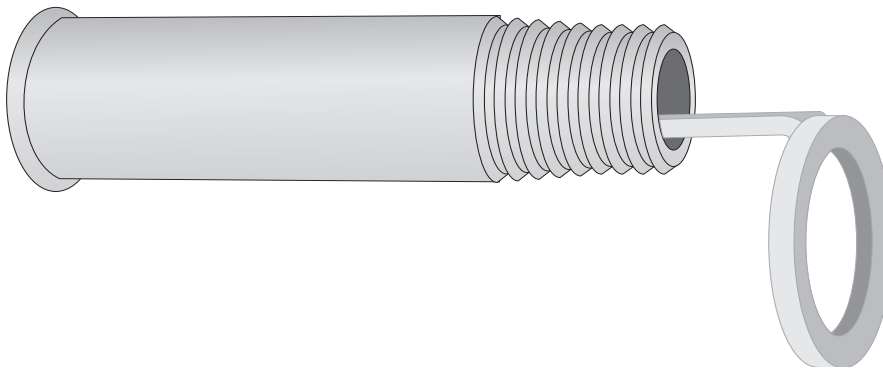
Replacement gasket seal Part No: MS1029

De-coking using the De-coking Tool

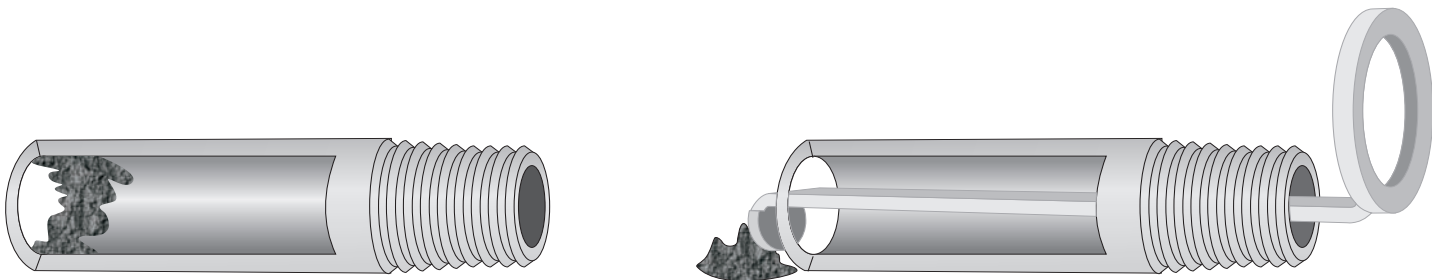
This operation must only be carried out with the stove **TURNED OFF** and **COLD**. The decoking and inlet pipe are located behind the lower door and to the right hand or left hand side of the burner pot. Unscrew the end cap of the inlet pipe, making sure not to loose the sealing gasket from within the cap. The tool is then inserted into the inlet pipe and is pushed in towards the burner, until the carbon deposits have been scraped clear of the inner surfaces of the inlet pipe.



Remove the cap from the inlet pipe.



Push the tool into the pipe.



Scrape the carbon deposits from the inner surfaces.

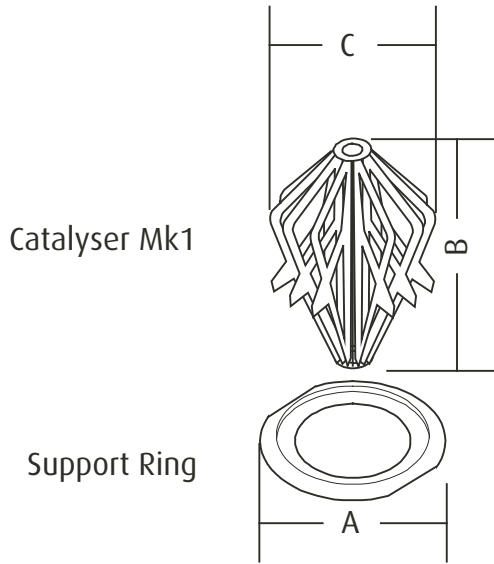
Replace the tool onto the outside of the de-coke tube and replace the end cap.

Replacement gasket seal Part No: MS1029

Catalyser Identification.

Mk1 Catalyser - Twin Skin Burner.

Catalyser is supported by a one piece ring



Catalyser Mk1			
Burner Size	B	C	Part No.
6"	130mm	105mm	337
8"	170mm	135mm	339
10"	170mm	135mm	339

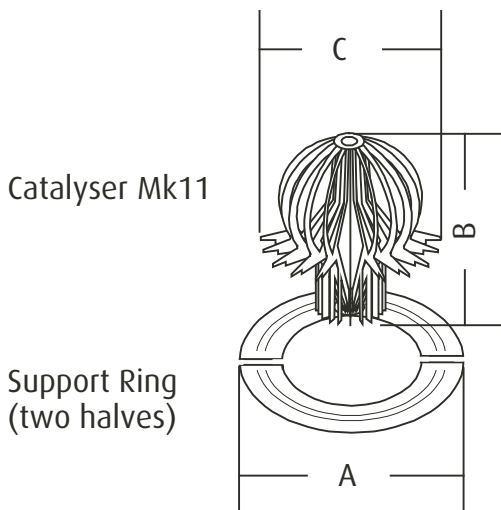
Catalyser Support Ring Mk1		
Burner Size	A	Part No.
6"	142mm	3113
8"	171mm	3112
10"	206mm	3111

Mk 11 Catalyser - Single Skin Burner

Catalyser is supported by a two piece split ring.

Catalyser shape may not be as shown, shape changes between burner sizes.

For accurate identification use measurements.



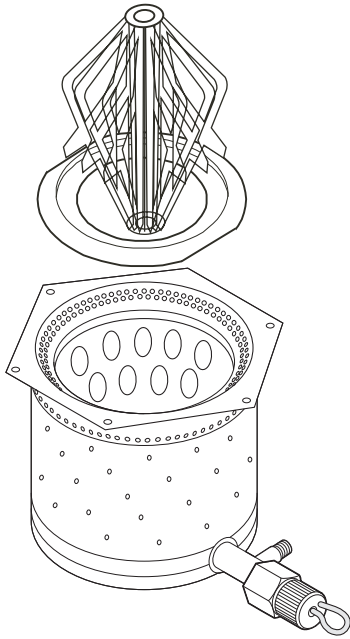
Catalyser Mk11			
Burner Size	B	C	Part No.
6"	125mm	130mm	32824
8"	150mm	146mm	26428
10"	155mm	181mm	26429

Catalyser Support Ring Mk11		
Burner Size	A	Part No.
6"	172mm	32822 2 required per stove
8"	195mm	23908 2 required per stove
10"	225mm	23920 2 required per stove

Position within the Burner.

The catalyser support ring or two half rings sit on pegs halfway down inside the burner. The catalyser then sits centrally on the support ring.

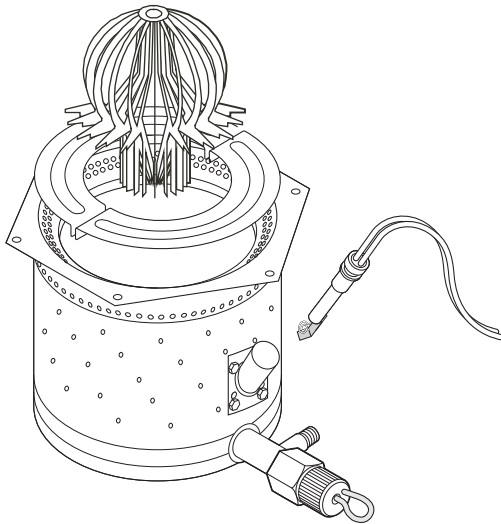
Burner Identification.



Mk1 Burner

The Mk1 burner comprises of a twin skin with smaller holes on the outer surface and larger holes on the inner surface. There is also no entry port (swan neck) for an igniter to be fitted.

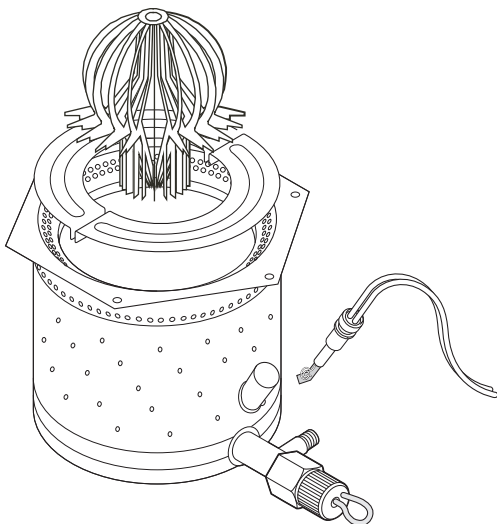
Oil Burner Mk1	
Burner Size	Part No.
6"	199
8"	201
10"	192



Mk2 Burner with fitted Swan Neck

The Mk2 burner is only a single skin and the entry port (swan neck) for an igniter is attached to the side of the burner by four small nuts and bolts.

Oil Burner Mk1	
Burner Size	Part No.
6"	33522
8"	33523
10"	33524



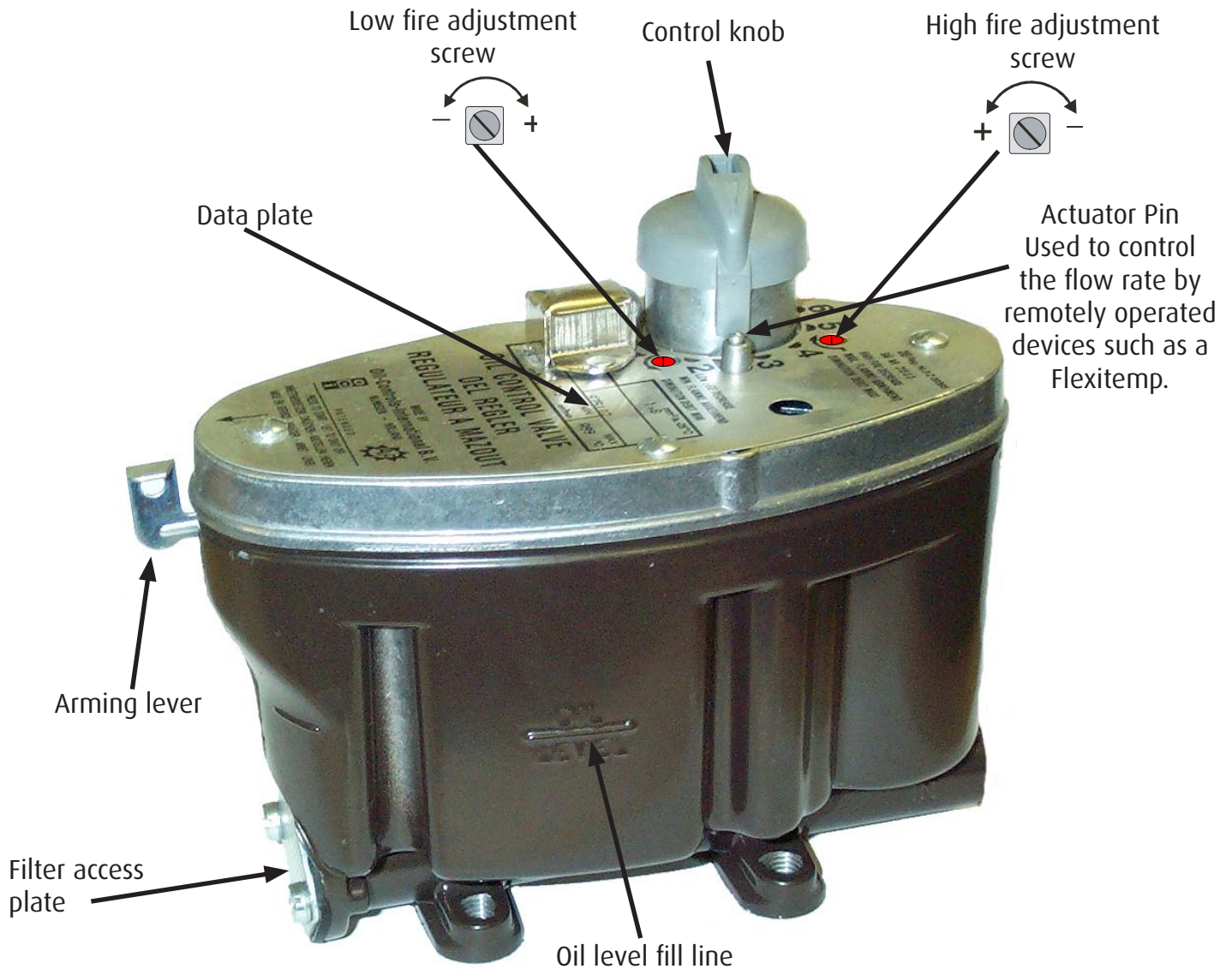
Mk2 Burner with Braised Swan Neck

The Mk2 burner is only a single skin and the entry port (swan neck) for an igniter is braised to the side of the burner.

Oil Burner Mk1	
Burner Size	Part No.
6"	39672
8"	38685
10"	46261

Oil Valve Identification - CI Oil Control Valve

For more detailed fitting instructions down load Technical Bulletin TB137 from our web site. It will also be supplied with the oil valve you order.



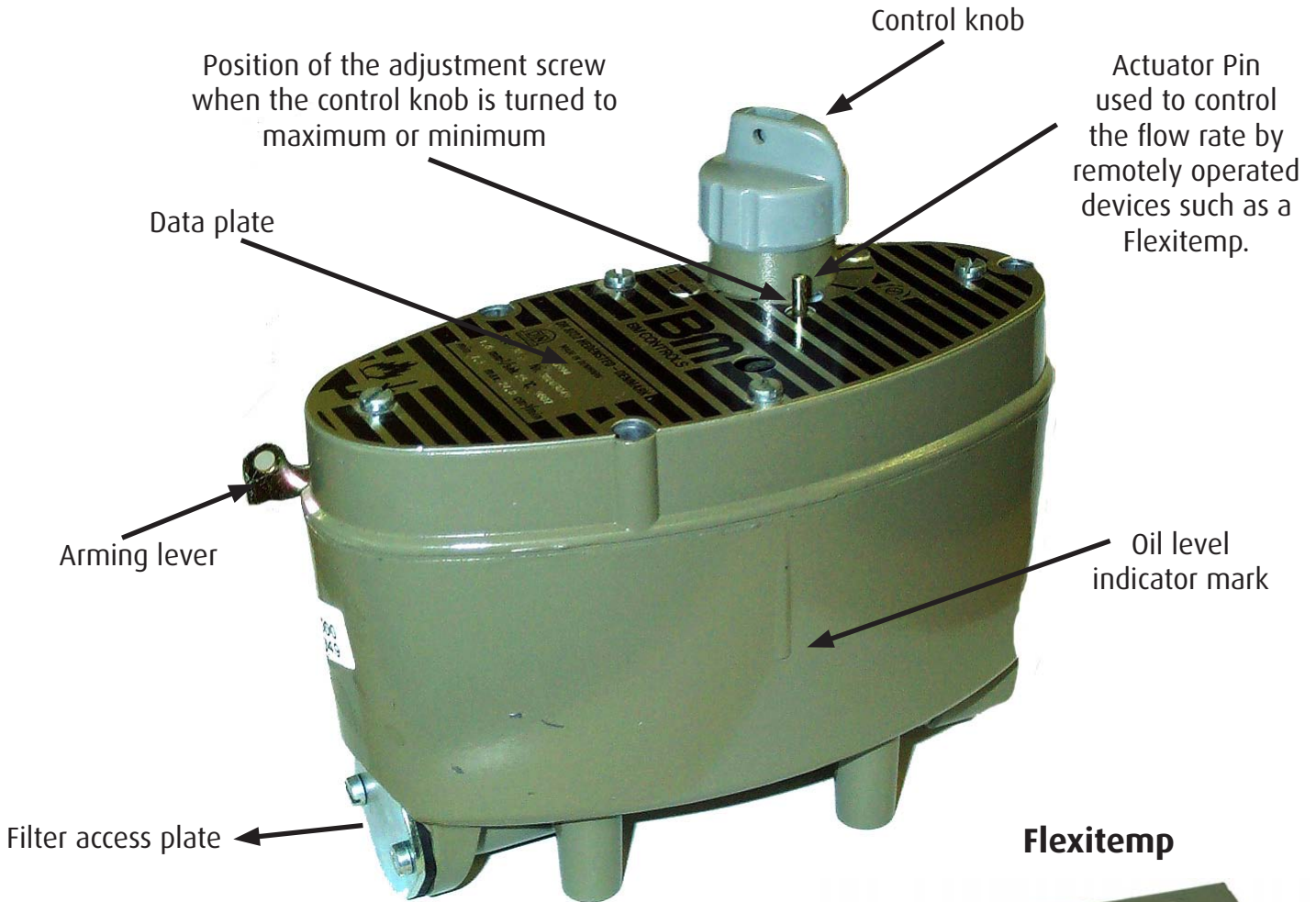
Flexitemp

Flow Rate	Part No.
4 to 12cc	26452
5.5 to 17.5cc	18995
7.5 to 24cc	18745
Flexitemp	MS9036



Oil Valve Identification - BM Oil Control Valve

For more detailed fitting instructions download Technical Bulletin TB138 from our web site. It will also be supplied with the oil valve you order.

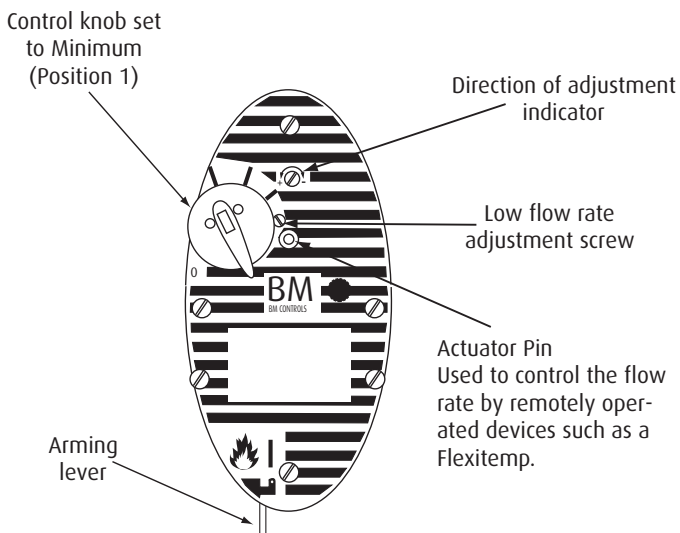


Flexitemp

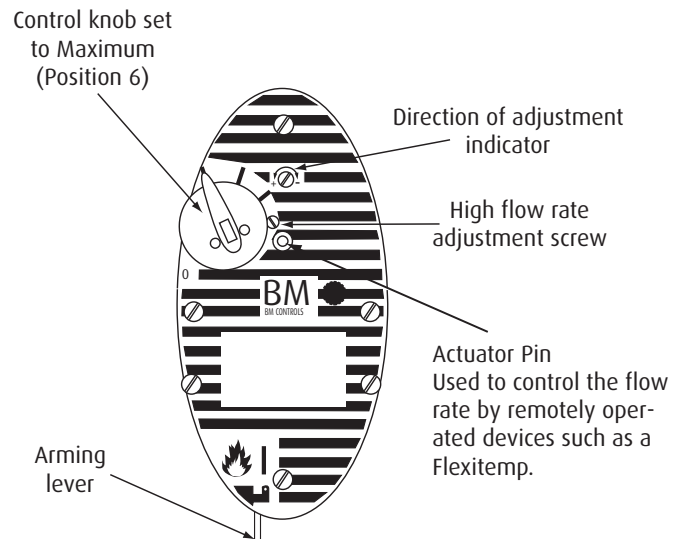
Flow Rate	Part No.
4 to 12cc	26449
5.5 to 17.5cc	29927
7.5 to 24cc	29928
Flexitemp	MS9036



Low Flow Rate Adjustment

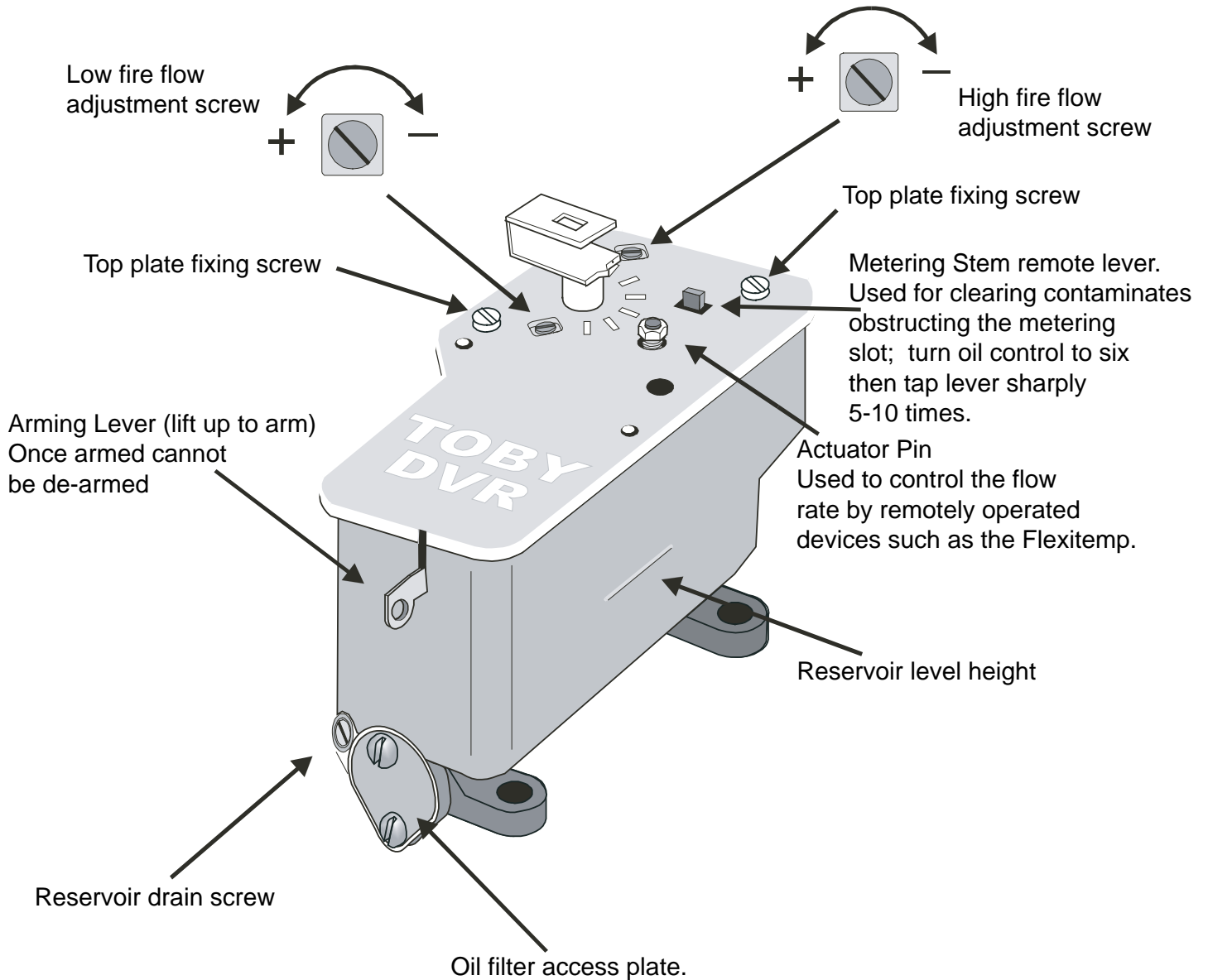


High Flow Rate Adjustment



Oil Valve Identification - Toby Oil Control Valve

For more detailed fitting instructions download Technical Bulletin TB115 from our web site. It will also be supplied with the oil valve you order.



Flow Rate	Part No.
3 to 11cc	32807
5.5 to 15cc	46204
5.5 to 17.5cc	18995
6.8 to 20.5cc	46205
7.5 to 24cc	32327
Flexitemp	MS10040

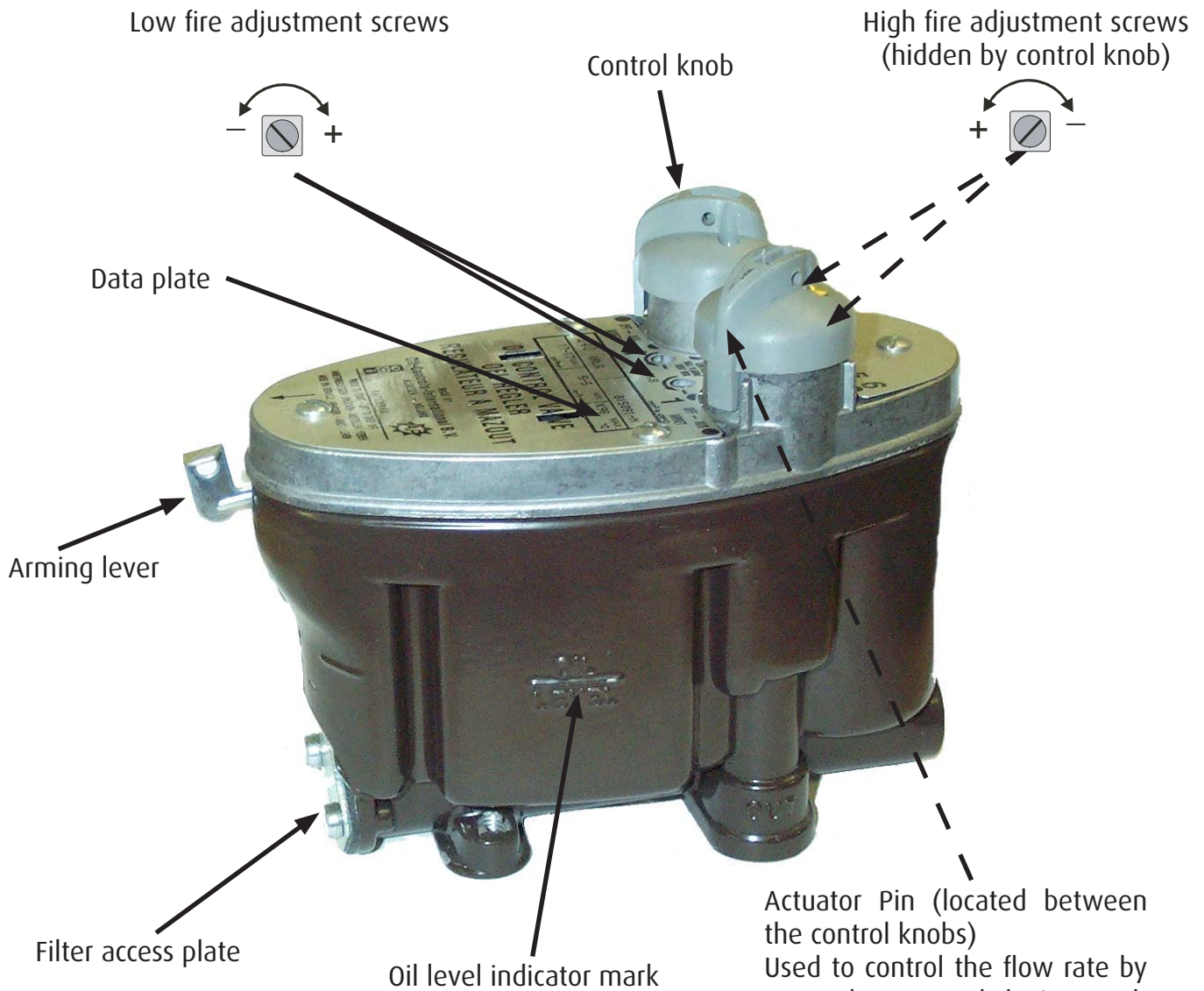
Flexitemp



Oil Valve Identification - CI Twin Top Oil Control Valve

Fitted to the Harmony 3 and Coachman Thermal twin burner stoves.

For more detailed fitting instructions download Technical Bulletin TB139 from our web site. It will also be supplied with the oil valve you order.



Flow Rate	Part No.
5.5 to 17.5cc	18805
Flexitemp	MS9036
Aquastat	29761

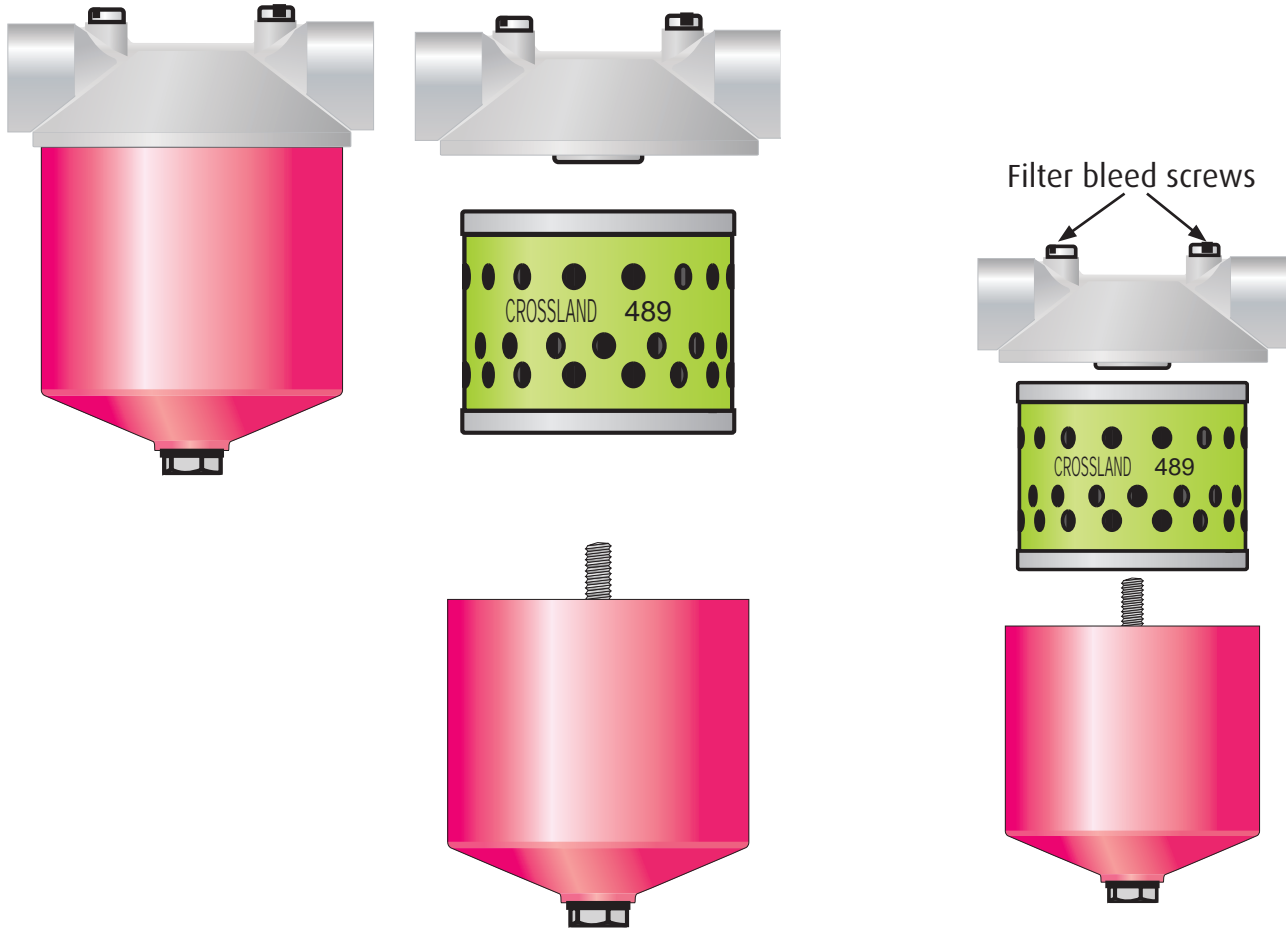
Flexitemp



Aquastat



Oil Filter Replacement



When replacing the oil filter, which should be done annually, the new “O” rings supplied with the replacement filter must be used.

Failure to do so can cause oil leaks and may allow air into the oil line which can affect the function of the oil control valve.

The filter must then be bled of air by first loosening the inlet bleed screw and then the outlet bleed screw.

Description	Part No.
Oil filter kit	MS9195
Replacement cartridge	MS9166
Pressure reducing valve	MS10041

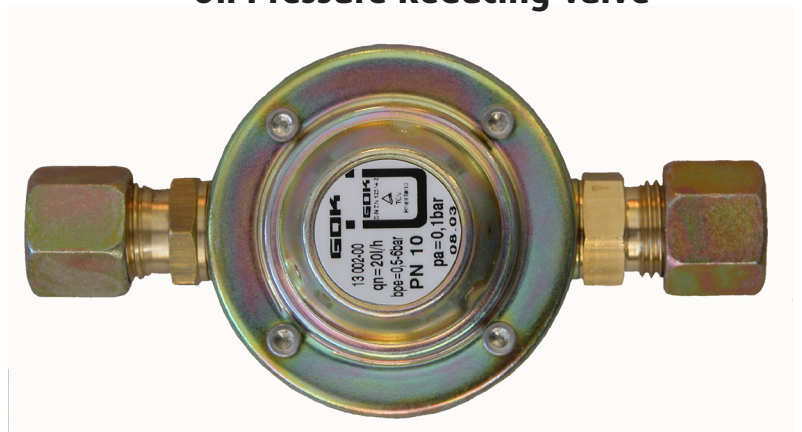
For more detailed fitting instructions download Technical Bulletin TB177 from our web site. It will also be supplied with the oil filter kit you order.

Oil Pressure Reducing Valve.

Used on installations where the oil tank outlet is situated more than 3m above the top of the stove’s oil control valve inlet.

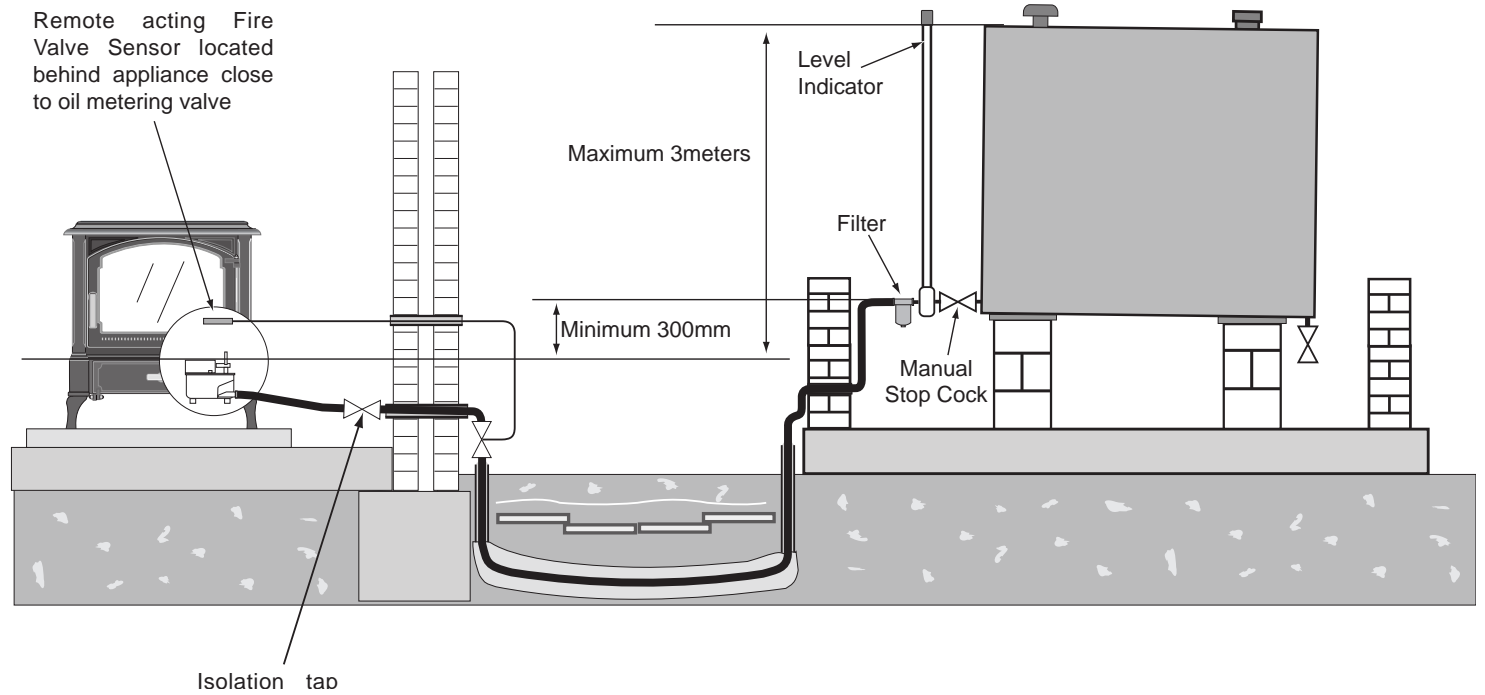
Inlet pressure 0.5bar to 6bar, Outlet 100mb.

Oil Pressure Reducing Valve



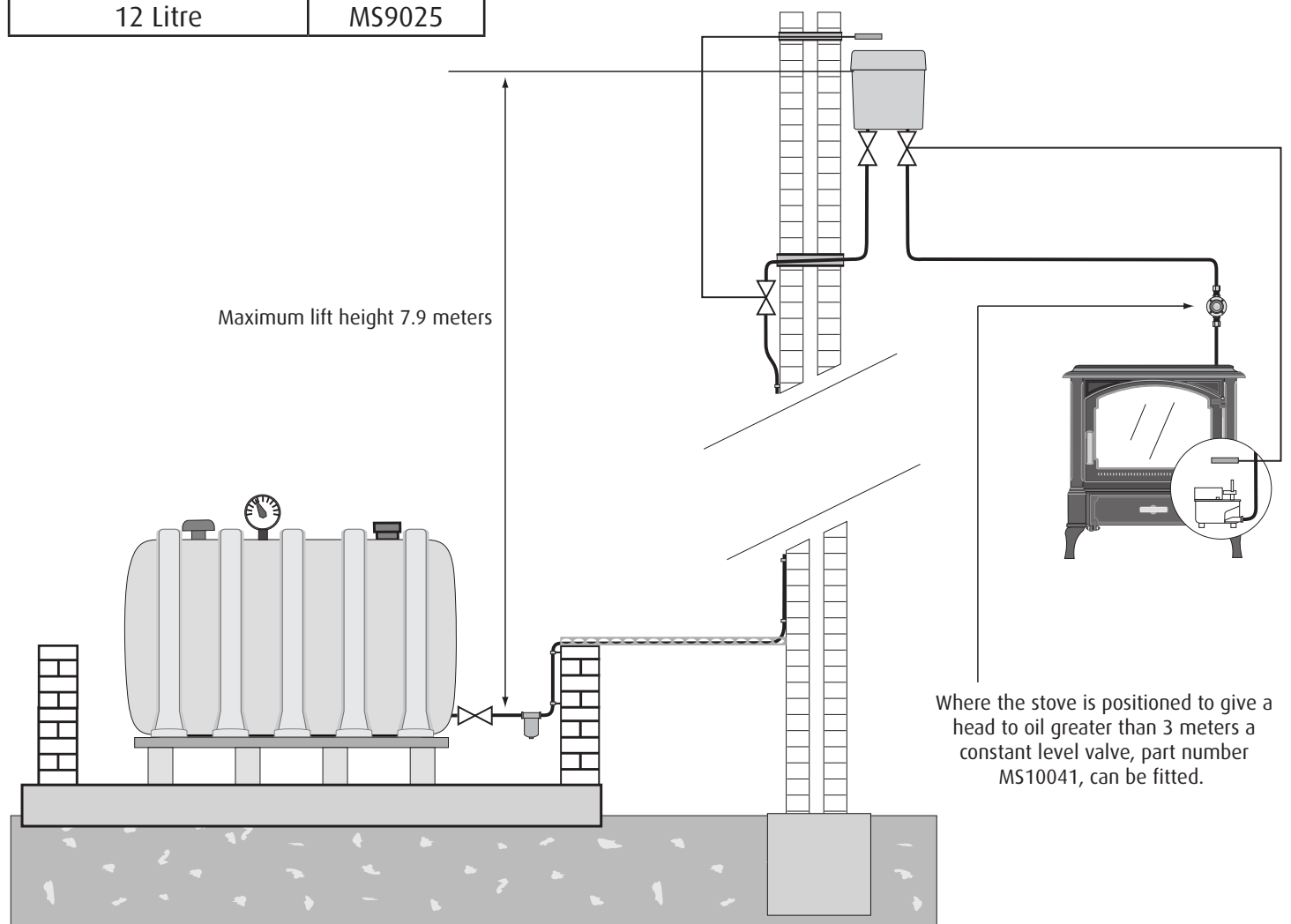
Typical Oil Tank Installations

Gravity fed to the stove



Using an oil lifter pump where tank level is below the height of the stoves oil inlet

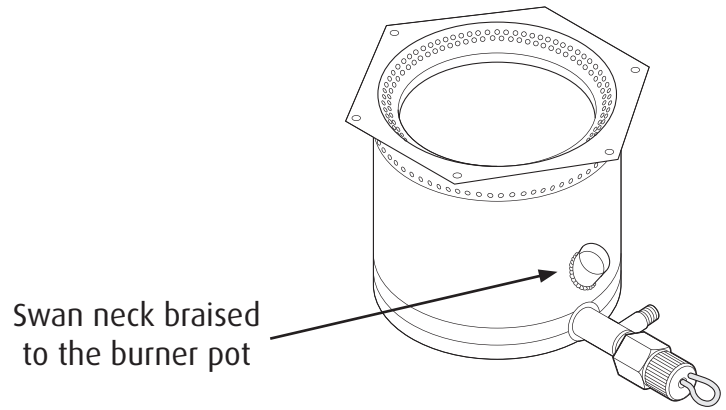
Capacity of lifter pump	Part No.
3 Litre	MS042
12 Litre	MS9025



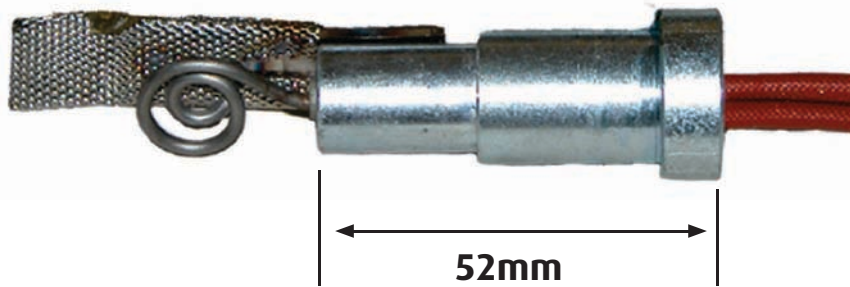
Igniter Identification.

Short Igniter

The short igniter is fitted to stoves in which the igniter mounting tube (swan neck) is braised to the burner. The length of the igniter body is 52mm.



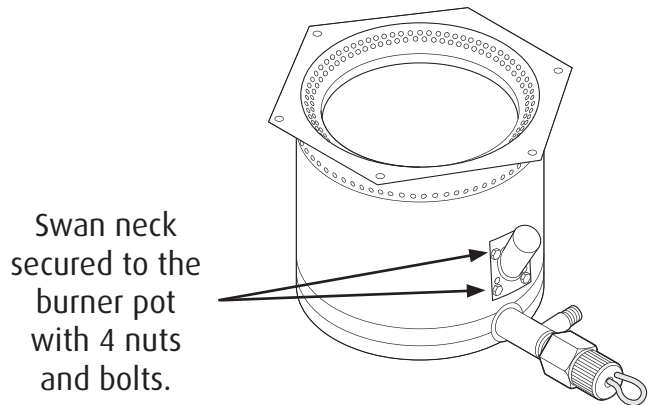
Part No. 38500C



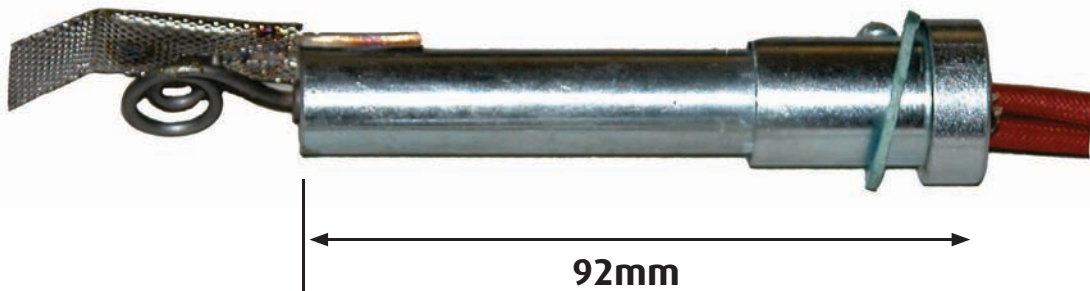
Long Igniter

The long igniter is fitted to stoves in which the igniter mounting tube (swan neck) is fixed in position by four nuts and bolts.

The length of the igniter body is 92mm.

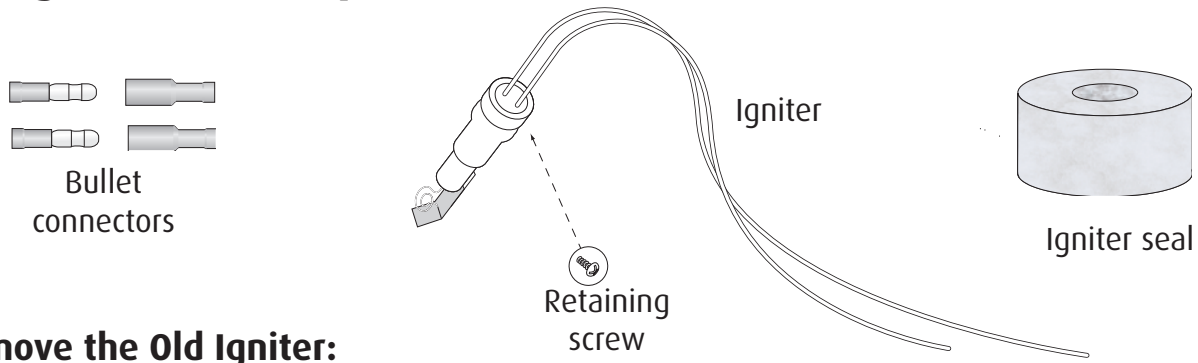


Part No. 26796C



For more detailed fitting instructions down load Technical Bulletin TB072 for the long igniter and TB188 for the short igniter from our web site. It will also be supplied with the igniter kit you order.

Short Igniter Kit Components 38500C



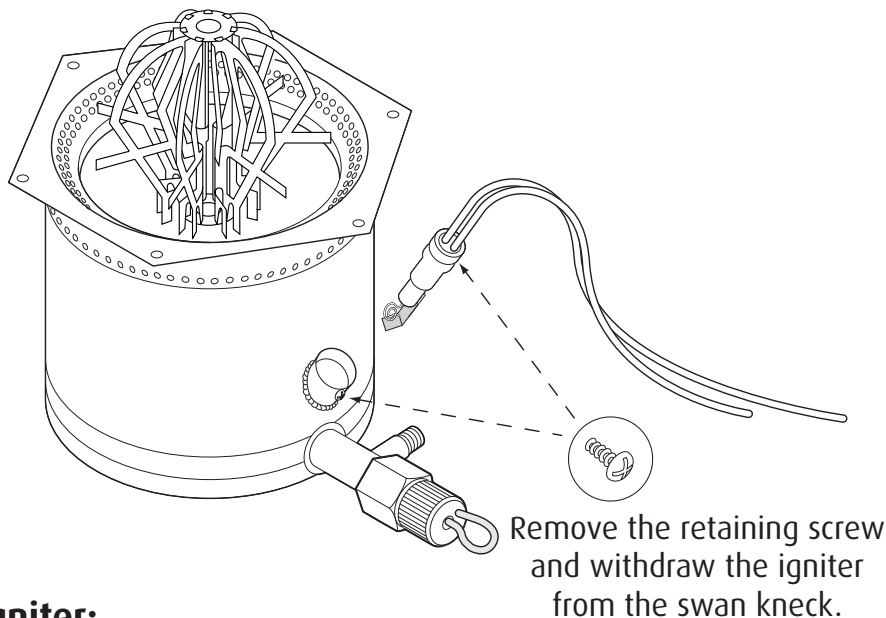
To Remove the Old Igniter:

Remove the power cord from the power supply to the transformer and remove the two wires from the transformer, which is fitted to the rear heat shield of the stove.

If there is limited access to the transformer the wires may be cut at a convenient point near to the igniter and the bullet connectors, supplied with the kit, used when fitting the new igniter.

Open the lower door of the stove to access the burner.

Unscrew the retaining screw on the side of the swan neck and withdraw the igniter.



To Fit the New Igniter:

Using emery board, clean any lacquer from the ends of the wires of the new igniter, to ensure a good contact at the transformer or bullet connectors.

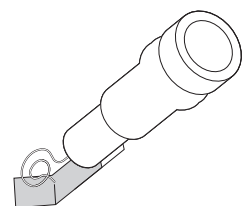
Slide the ceramic igniter seal down the wires to the body of the igniter and if there is a fibre gasket on the body of the igniter this must be removed.

Fit the two wires to the transformer, if you have cut the wires, because access to the transformer is difficult, the bullet connectors need crimping onto the wires using a crimping tool and the two ends joining.

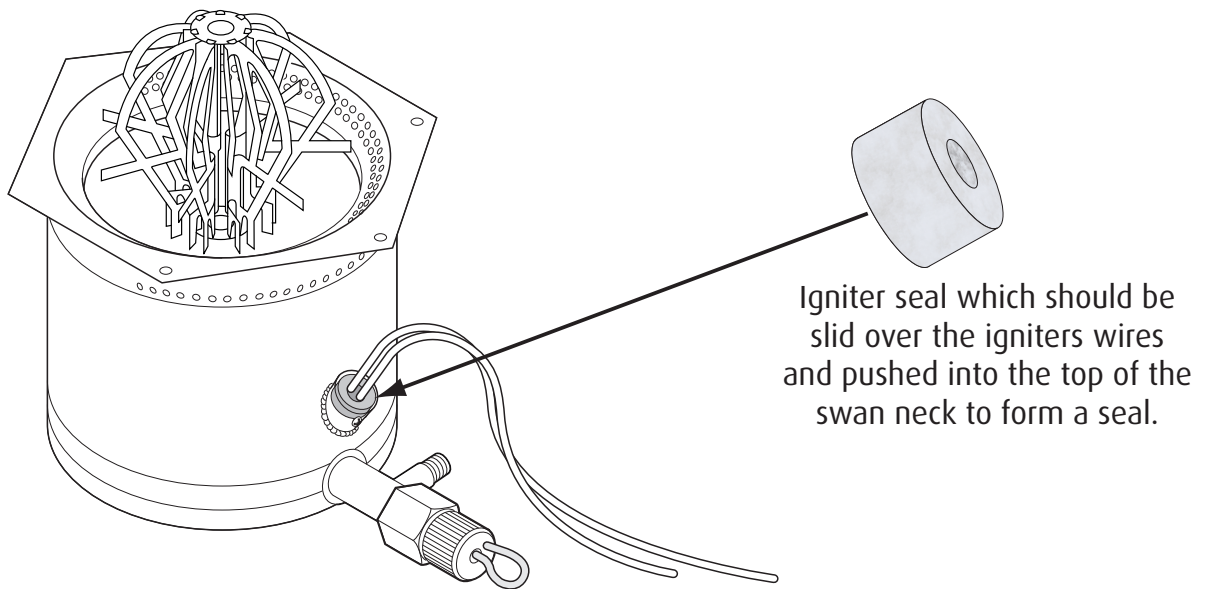
Insert the igniter into the swan neck, line up the holes and refit the retaining screw.

For clean and rapid ignition to be achieved the tip of the igniter's stainless steel gauze must rest on the pot bottom to allow oil to be attracted towards the ignition coil by capillary action with the minimum amount of oil having entered the burner.

Push the igniter seal into the top of the swan neck to form a seal. Failure to do this will allow air to leak past the igniter and cause poor combustion to occur. Once fitted light the stove and check the flame pattern to ensure that the seal is not letting air past which would cause a yellow flame to appear in the area of the igniter port.



The igniter gauze with one side or the tip only touching the burner base.

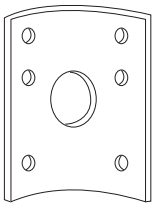


Igniter seal which should be slid over the igniters wires and pushed into the top of the swan neck to form a seal.

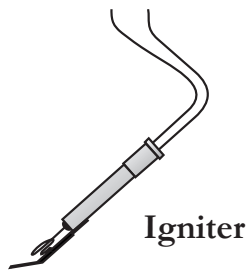
Long Igniter Kit Components 26796C

Tools required

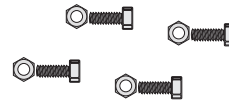
Small screw driver, 7mm socket (1/4 inch drive) and 7mm spanner. (Electricians pliers if required to cut cables).



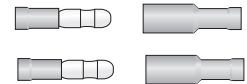
Gasket



Igniter



4 x Nut & Bolts



Bullet Connectors

To Remove the Old Igniter:

Turn off the electrical supply to the stove and remove the power cord before any work is undertaken on the electric ignition.

Remove the coal kit from the stove carefully, it is fragile.

Remove the catalyser and 2 support rings.

Undo the 4 nuts and bolts that hold the swan neck to the burner and remove, withdrawing the igniter from the burner at the same time. Undo the screw retaining the igniter in the swan neck and withdraw.

Undo the 2 leads at the transformer and withdraw the whole igniter. If this is not possible due to the stoves installation the cables may be cut and bullet connectors (supplied) used to join to the new igniter cables.

To Fit the New Igniter:

Feed the new igniter cables through the stove back up to the transformer and reconnect to either terminal, the cables are not polarised. Or join to original cables using bullet connectors.

Insert the igniter into the swan neck and secure with the retaining screw.

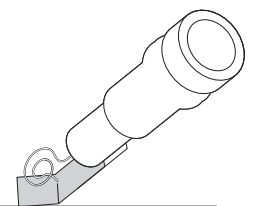
Using the new gasket insert the igniter attached to the swan neck back into the burner and refit using the 4 new nuts and bolts supplied.

Check that the metal gauze is touching the bottom of the burner.

Reconnect power cord and test (it will be seen to glow red after a few seconds).

Replace catalyser support rings, catalyser and coal kit.

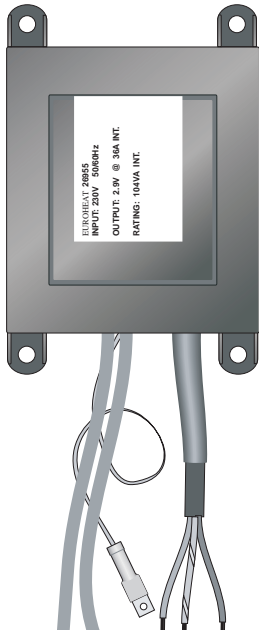
Light the stove.



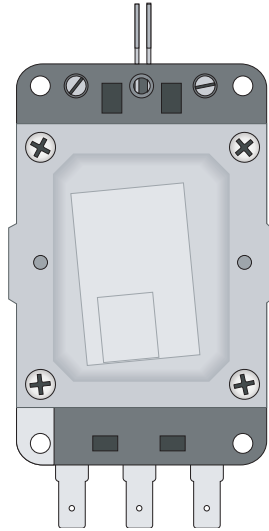
The igniter gauge with one side or the tip only touching the burner base.

Transformer Identification

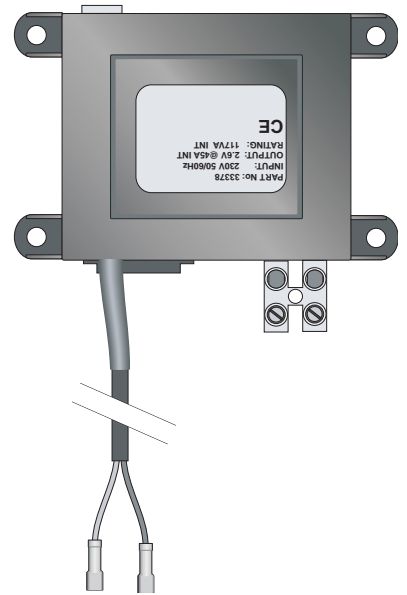
Since the introduction of electric ignition to the Efel Harmony and Nestor Martin Range of vaporising oil burning stoves there have been three types of transformers used. They are now no longer available and have been replaced by two transformer kits, dependant on the original transformer or the stove model. These kits have a new transformer and the relevant brackets, leads and connectors to enable them to be fitted.



Transformer: Mark 1
Part No: MS0115
Replacement Kit: MS1120



Transformer: Mark 2
Part No: 30721
Replacement Kit: MS1121



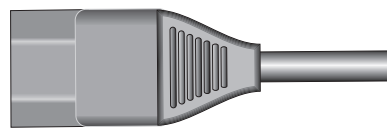
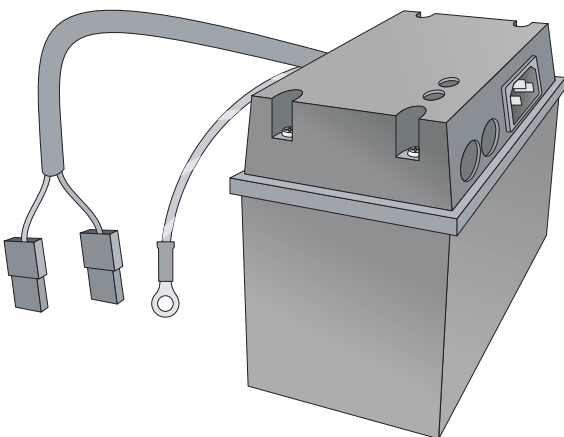
Transformer: Mark 3
Part No: 38759
Replacement Kit: MS1121

Replacement Kit

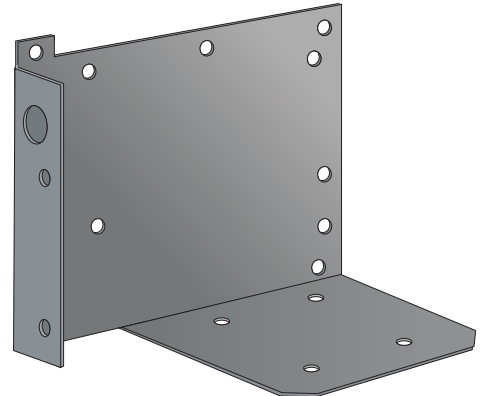
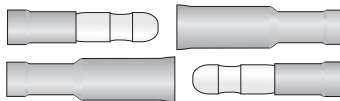
Transformer

Kettle Lead Power Cord

Transformer mounting bracket



Bullet Connectors & Screws



WARNING: The stove must be disconnected from any power supply before any work is undertaken on the appliance. Any work should only be undertaken by a suitably qualified engineer.

For more detailed fitting instructions down load Technical Bulletin TB179 from our web site. It will also be supplied with the transformer kit you order.

Servicing of the Stove

- 1) Check you have oil in the tank and that any in line filters are clean, replace cartridge type annually. If one is not fitted it would be advisable to recommend to the customer that one should be fitted. See Pages 22
- 2) Remove the coal kit from the stove carefully and put it somewhere safe. Replace if necessary.
- 3) Remove the catalyser and support ring, or half rings. Inspect and replace if necessary. See pages 16
- 4) Clean the glass if sooted up and check that there is no oil in the pot. If there is clean it out with absorbent paper towel.
- 5) Remove any hard carbon from within the burner using a blunt scraper or screwdriver and the burner inlet port using the decoking tool. See pages 13 and 14.



6) Replace and check that the catalyser and support rings are correctly positioned in the burner pot. The 2 half rings supported by the pins inside the pot and the catalyser sitting centrally to the rings.

7) Attach the draught gauge to the draught test point, found on most stoves hidden behind the front left leg when the lower door is opened.

5) Turn the oil control to the lighting setting, or number 2 position, check that oil is entering the burner pot, and press the igniter button until oil ignites.

6) Leave the stove and flue to warm up. Anything from 20 mins to 2 hours dependant upon the type of flue and when the stove was last used.

7) Turn the stove down to its minimum, this is the point where you feel resistance just before the oil valve goes "click" off.

8) Open the door and clean the glass again if dirty.

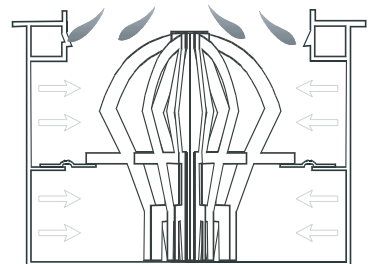
9) Take a flue draught reading. Compare this with the graphs on pages 32 and 33, dependant upon the burner size of the stove.

a) If the reading is too high then the draught stabilizer will need to be altered to reduce the air flow through the burner. By winding the counter balanced nut out, anti clockwise, until it the draught drops to the required reading for the size of burner.

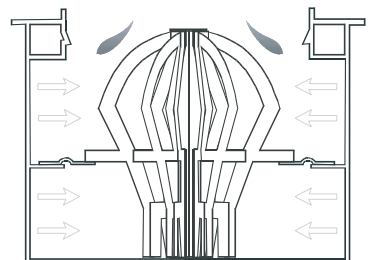
b) If the flue draught is too low close the stabiliser by winding the counter balanced nut in, clockwise, until the air flow rises to the required reading for the size of burner.

10) Look at the flame pattern through the glass, it should be blue flames flickering around the burner somewhere between the catalyser support ring and the ring of holes at the top of the pot.

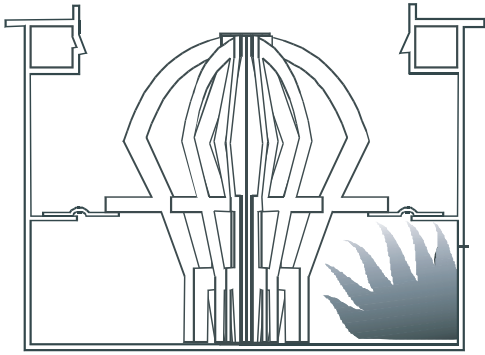
Low fire maximum setting



Low fire minimum setting



Low Fire Candles by Inlet Port



11) If you have yellow flames candling from the bottom of the pot then the flow rate will need increasing, by turning the low fire screw 1/4 of a turn at a time until it reaches the correct height within the burner pot, see installation instructions for correct position. Once this is achieved check that the flue draught is still correct, if not alter stabilizer to return it to the correct setting.

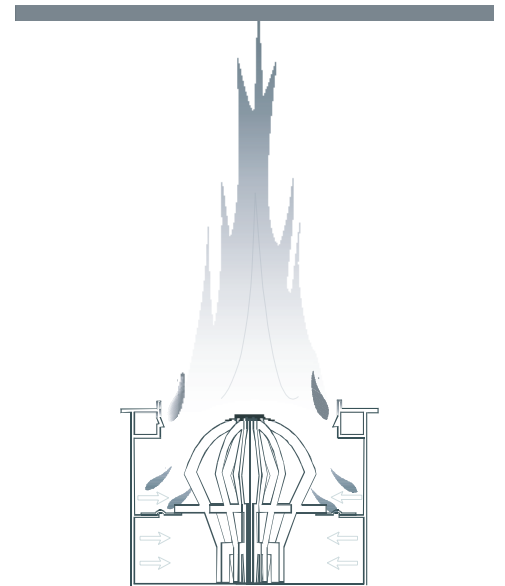
12) Turn the stove up gradually over a period of 5 minutes to number the maximum, or number 6, setting. Then wait for the flue to heat up for 15 minutes.

13) Check the flue draught against the graph in the graphs on pages 32 and 33, if a progressive draught stabilizer is fitted this cannot be altered. If it is below the ideal, adjust the oil flow to give the flame pattern, see 14 a) and b)

14) Check the flame pattern. It should be to the height of the top of the curve on the door. With only the very odd flame just touching the top of the stove.

a) If it is touching the top of the stove this is too high and should be reduced by lowering the oil flow on high fire. This is done by turning the high fire screw 1/4 of a turn at a time until it reaches the desired height.

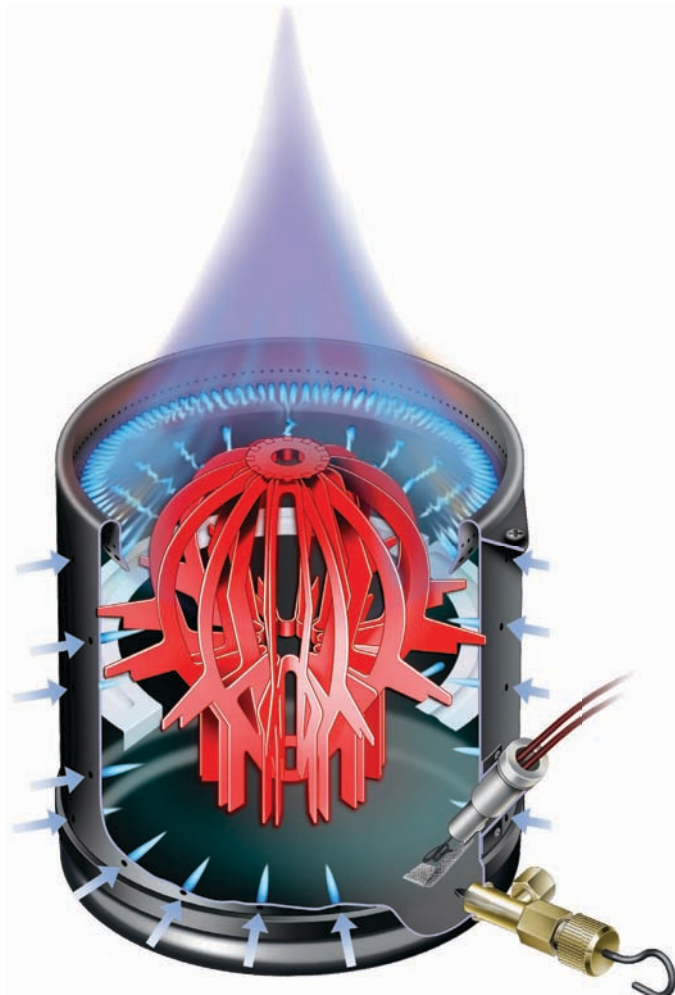
b) If it is too low then adjust the high fire screw 1/4 of a turn at a time until the desired flame height is reached.



15) Return the fire to its low setting and leave to settle for about 5 mins.

16) Check the flue draught and flame pattern to ensure any alterations have not effected this setting.

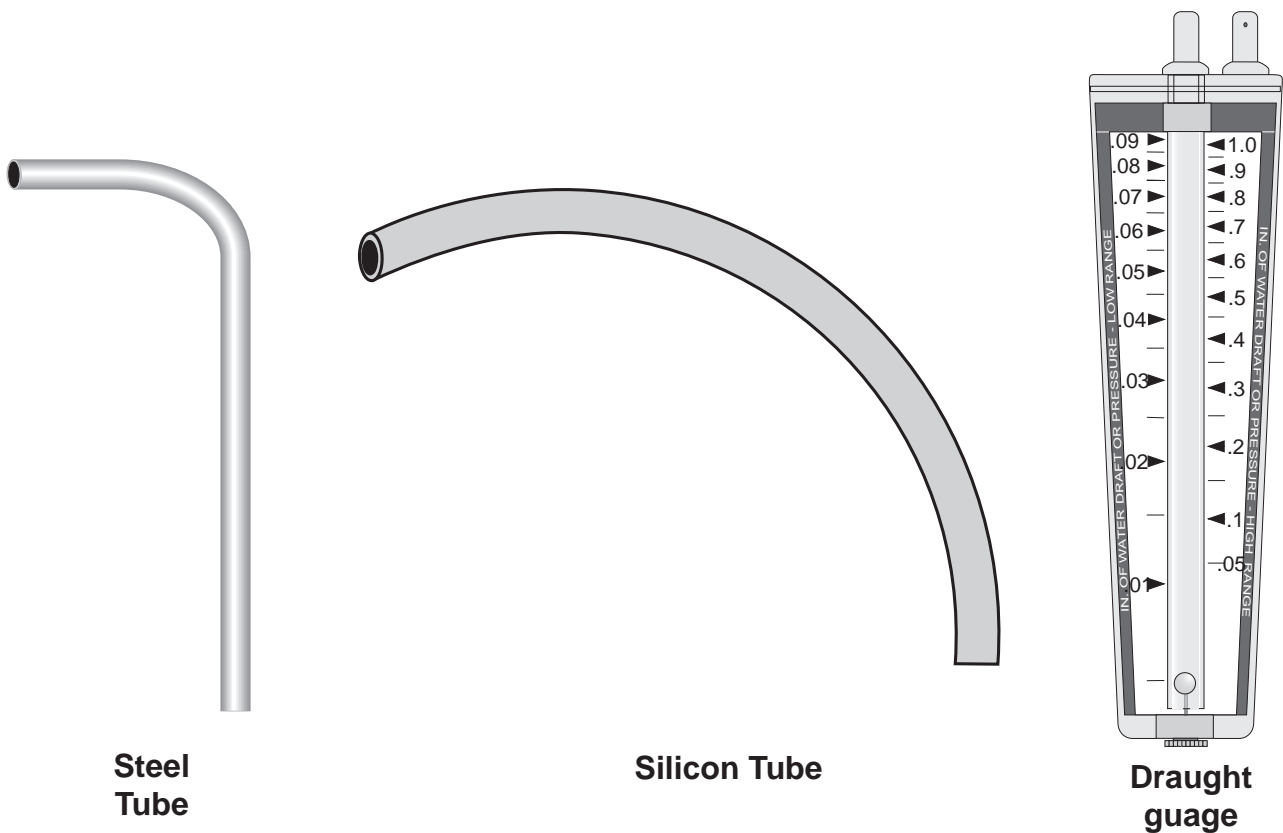
17) Replace the coal effect kit, if it comprises of loose coals, check the layout to ensure there are no long lazy flames, flames touching the sides of the stove or impinging on the glass. Reposition the coals if necessary.



Correct Procedure for the use of a Dwyer Flue Draught Gauge

The Dwyer flue draught gauge is a very simple yet accurate method of measuring the flue draught passing through a stove, however, there are certain rules for the correct use of the draught gauge.

1. The gauge should be clean and dry inside or the ball will not float in the tube accurately. It is not a water gauge and should not be filled with water.
2. The ball should be undamaged as damage will cause the ball not to float accurately. Never touch the replacement ball with your fingers, pour it directly in from its protective tube.
3. The silicon tube should be undamaged and of the correct length, 360 mm, as this will affect the accuracy. It should be fitted to the nipple directly above the ball.
4. The flue should be allowed to reach its normal operating temperature, this may take, in some instances, a few hours especially if the stove has not been used for a time.



5. The draught gauge should be held upright when the readings are taken. Taking the reading on the black side using the left hand side scale, 0.01 in to 0.09 in water gauge.

An oil stove will have a test point tube or hole dependant upon the model and age of the stove, the position of which will be found in the installation instructions for the stove. If no test point can be found then a 7mm hole should be drilled into the combustion chamber of the stove. If there is a test point tube the silicon tube should be attached to this and with the gauge held vertically the readings taken at both high and low fire settings. If a hole has been drilled into the combustion chamber then the steel pipe should be attached to the other end of the silicon tube and this inserted into the hole. The readings then taken with the gauge held vertically. These should be then compared to the requirements set out in the installation instructions and the required adjustments made.

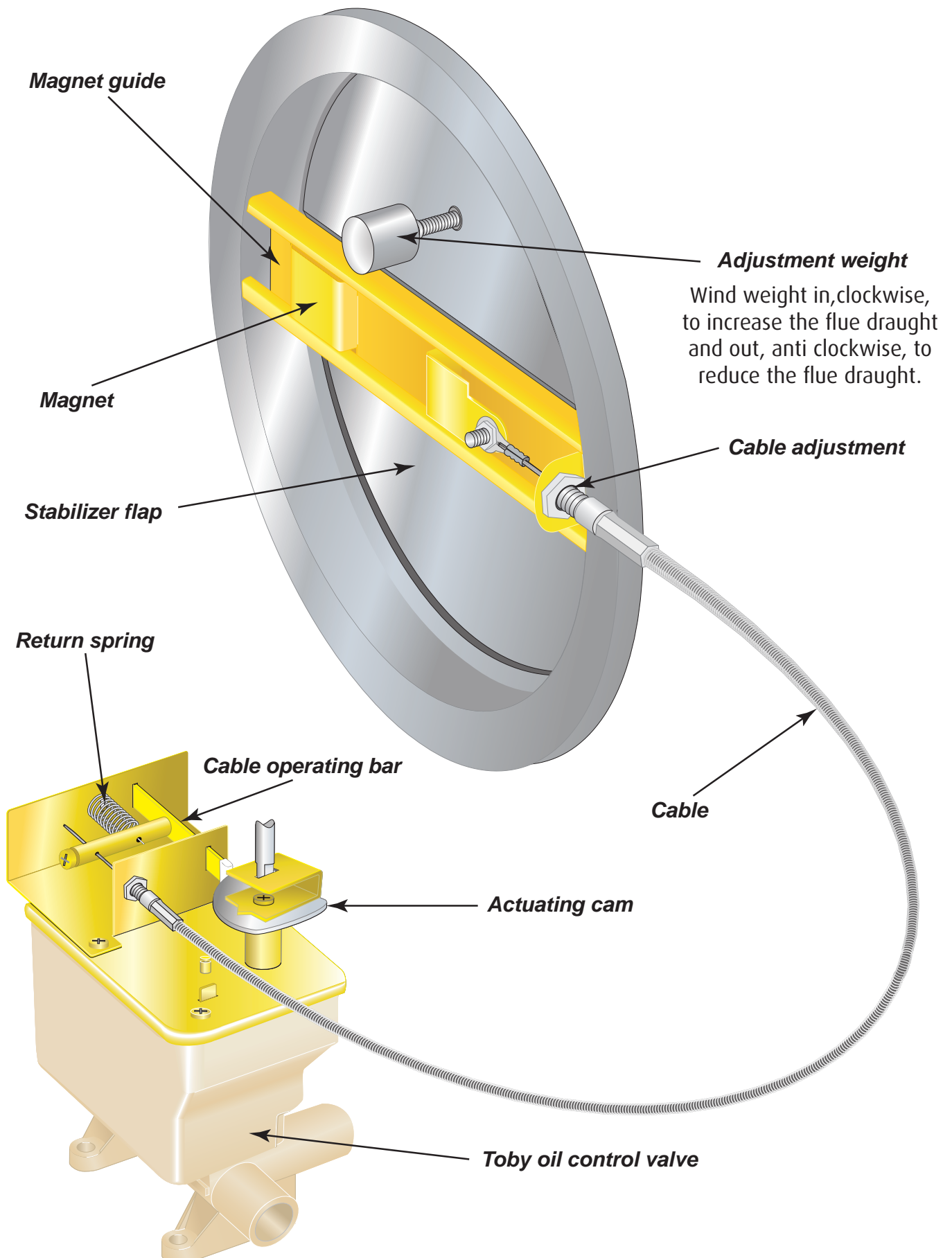
Caution:

When using a flue draught gauge extreme care should be exercised to prevent contact with hot surfaces and flue gasses.

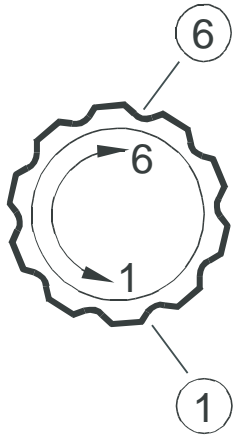
Progressive Draught Stabilizer

Fitted to Harmony and Stanford oil stoves with the Toby oil control valve from March 2000. Prior to that the stabilizer could only be set at one setting and only consisted of the stabilizer flap and counter balanced weight.

For more detailed fitting instructions download Technical Bulletin TB90 from our web site.



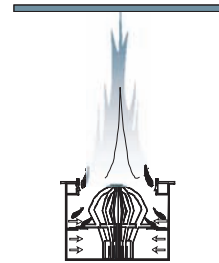
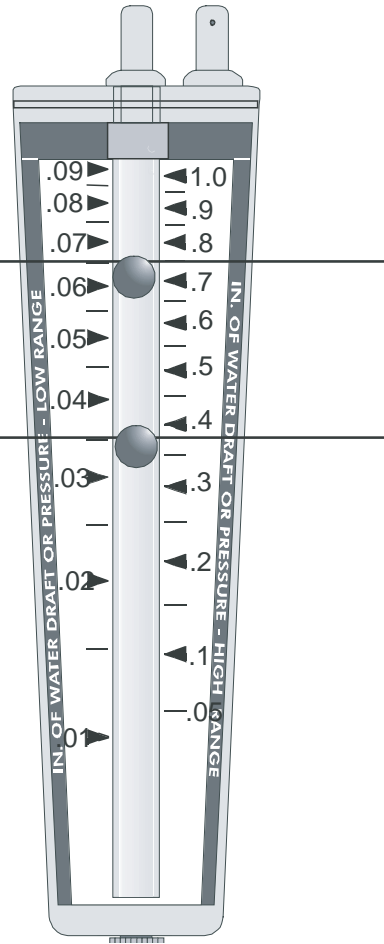
Ideal Flue Draught Readings for 6 inch Burner Models



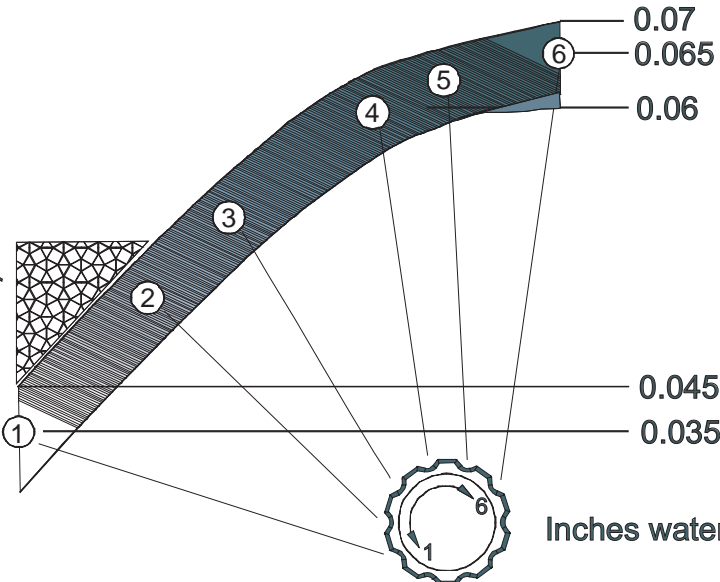
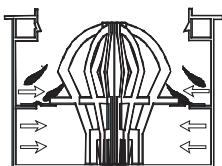
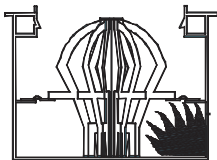
0.065

0.035

Measurements
in Inches W.G.

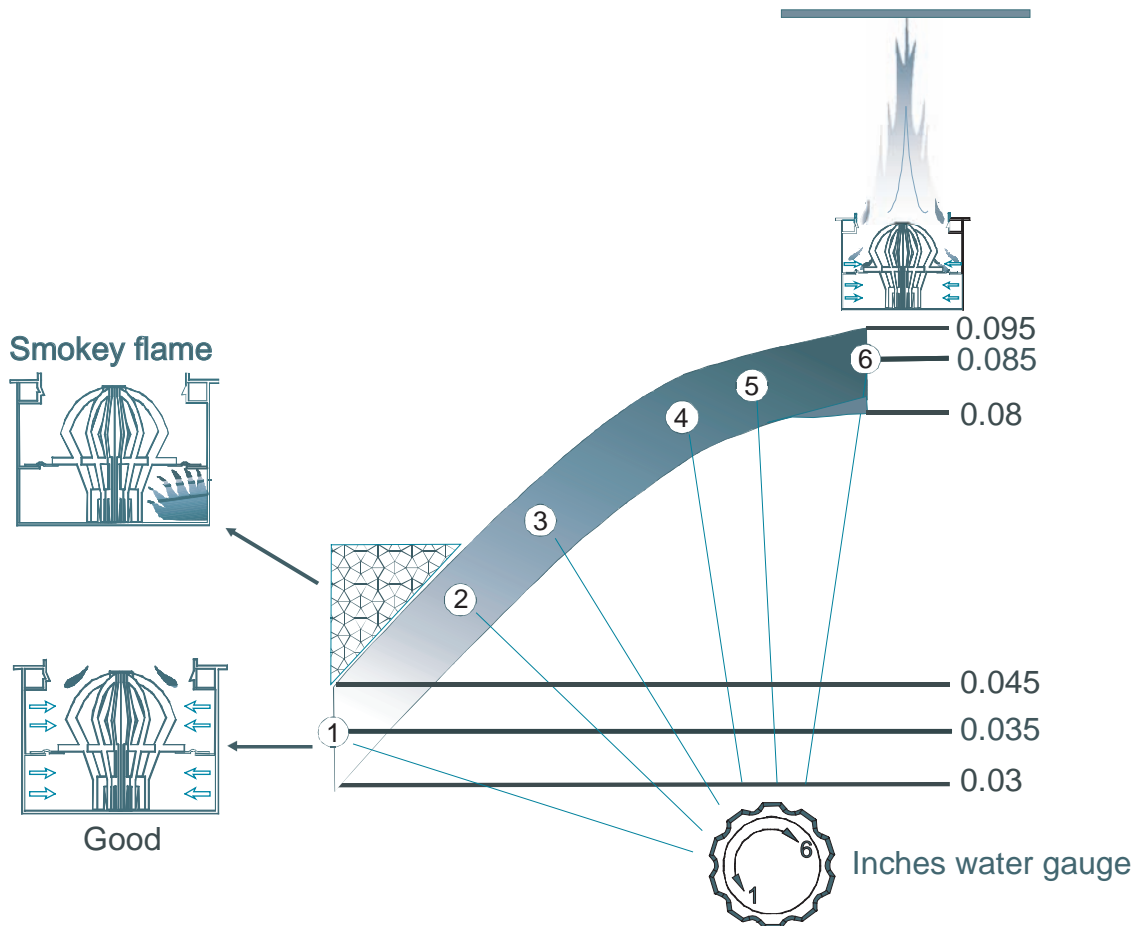
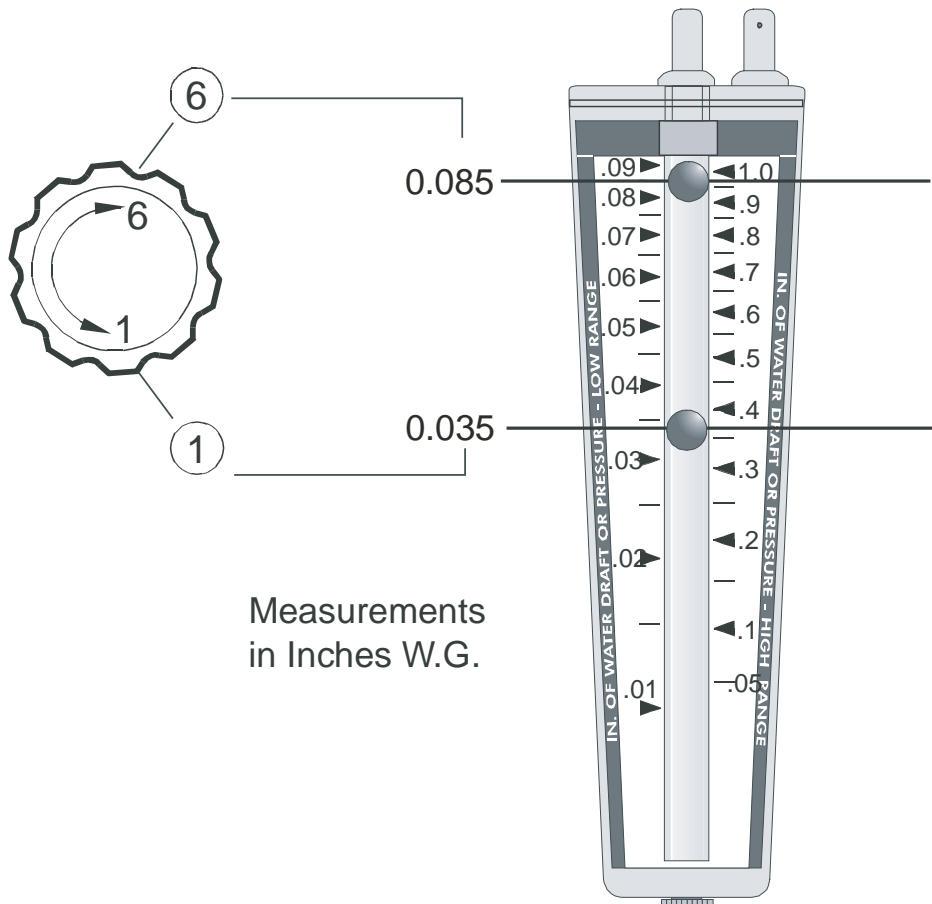


Smokey Flame

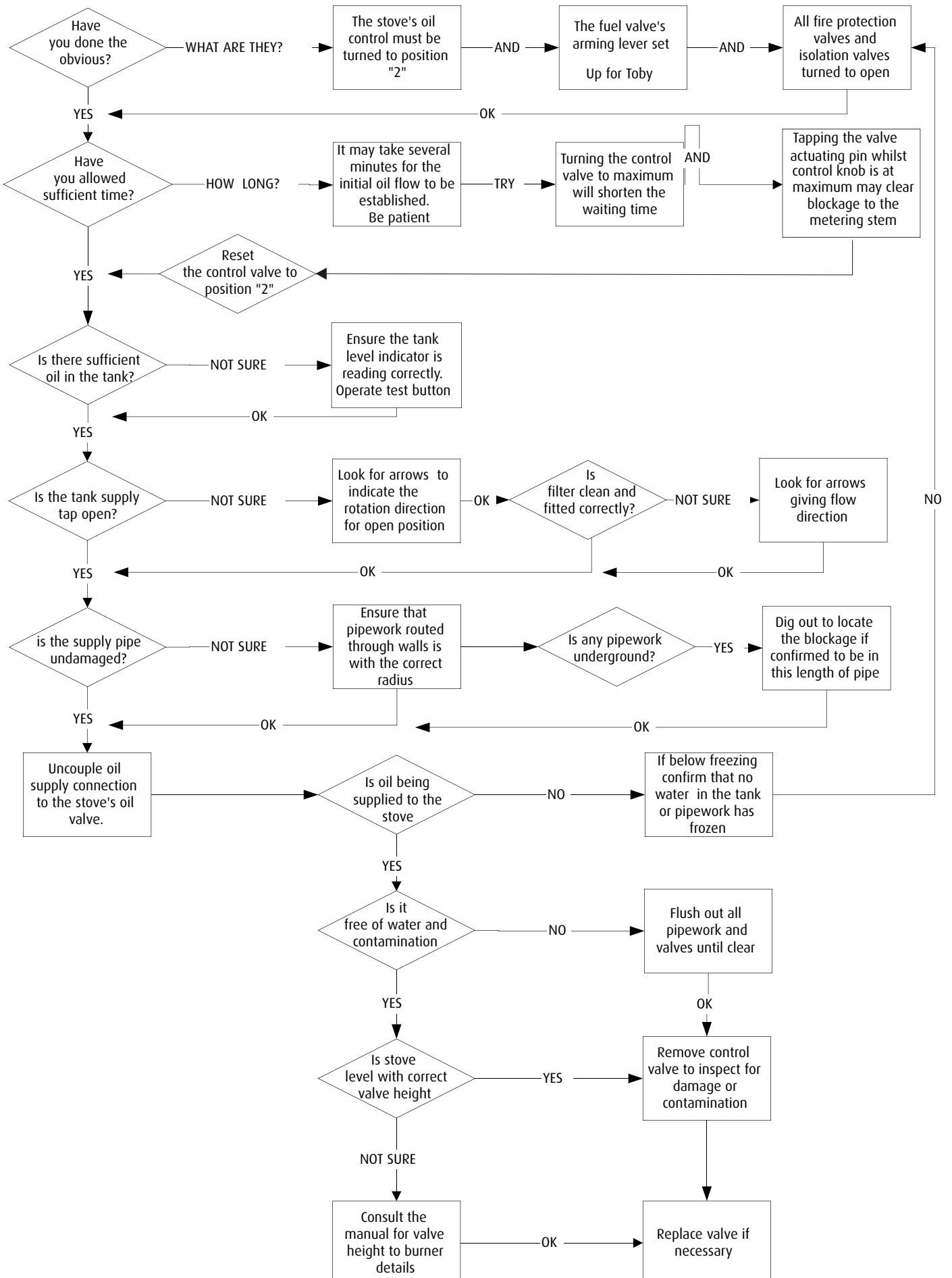


Inches water gauge

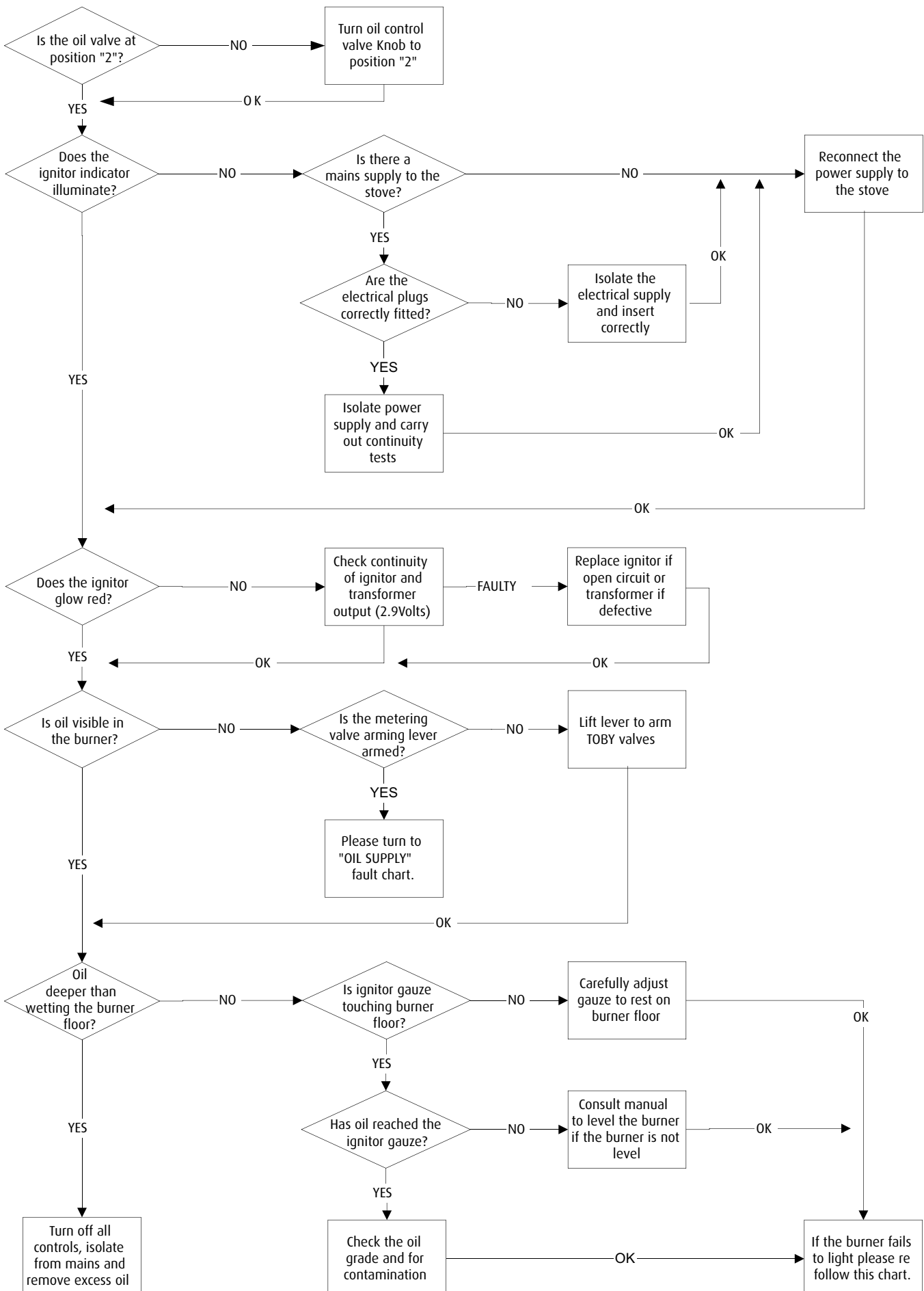
Ideal Flue Draught Readings for 8 and 10 inch Burner Models



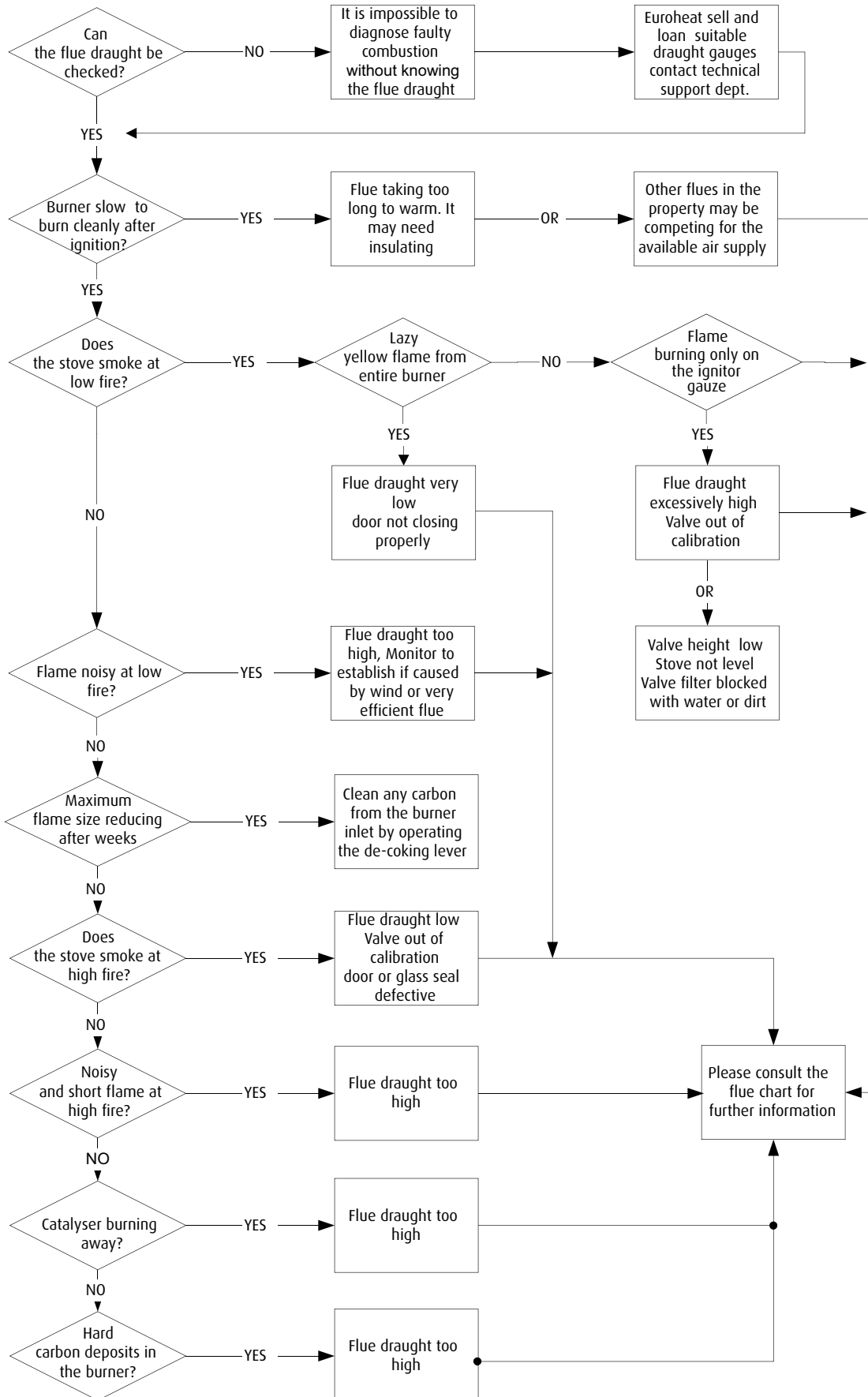
OIL SUPPLY



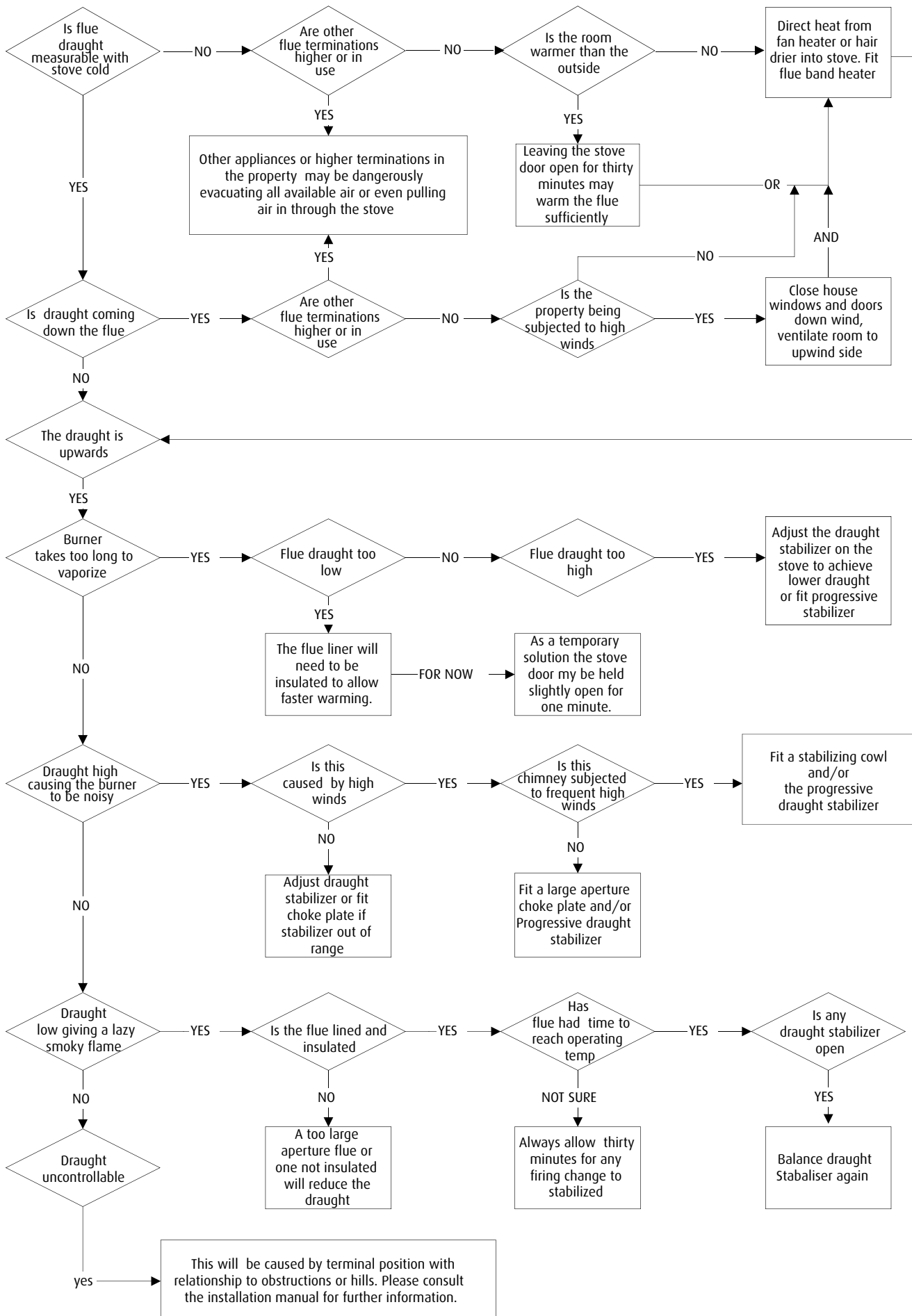
BURNER FAILS TO IGNITE



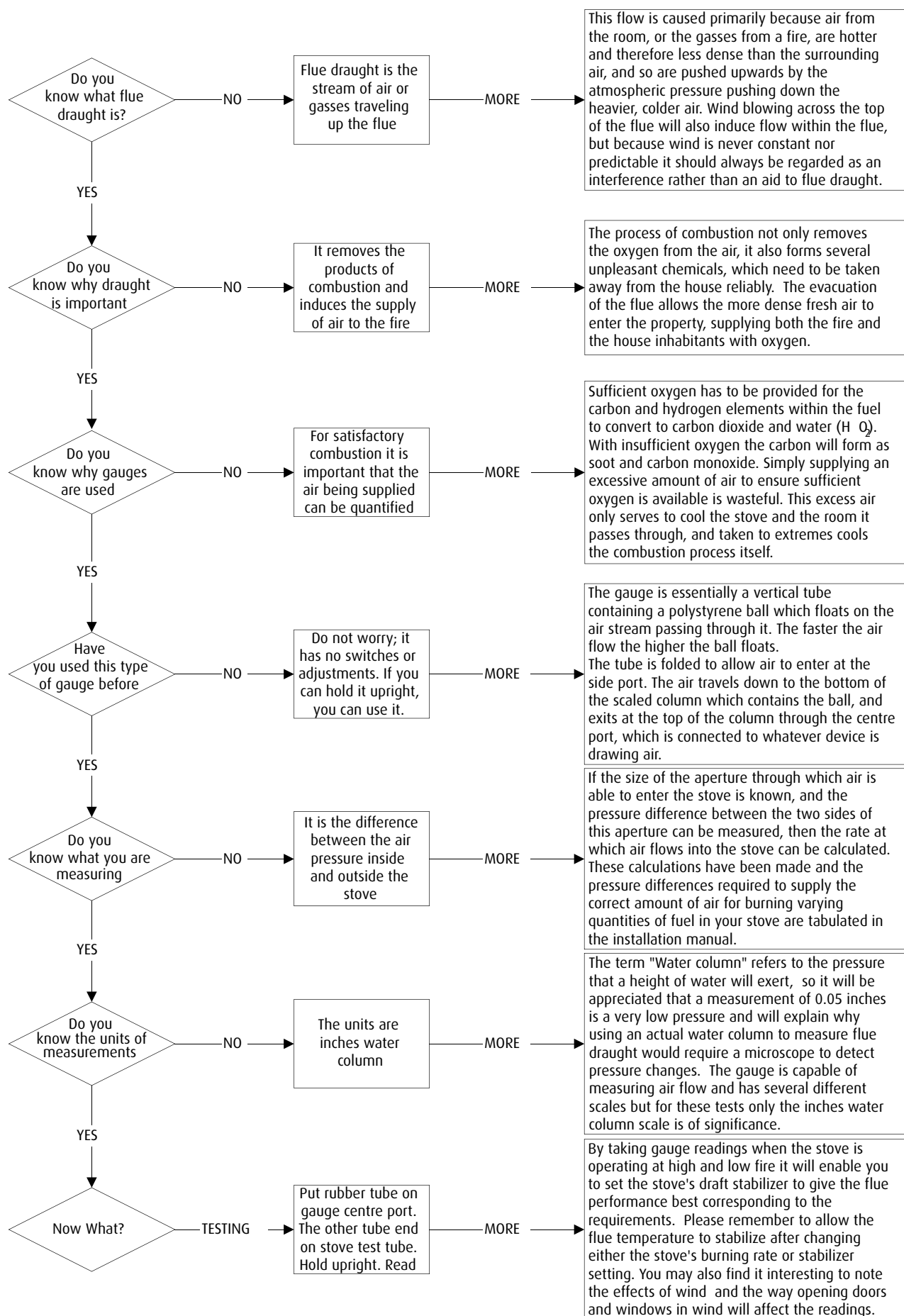
BURNER NOT OPERATING SATISFACTORILY



FLUE DRAUGHT



THE DRAUGHT GAUGE

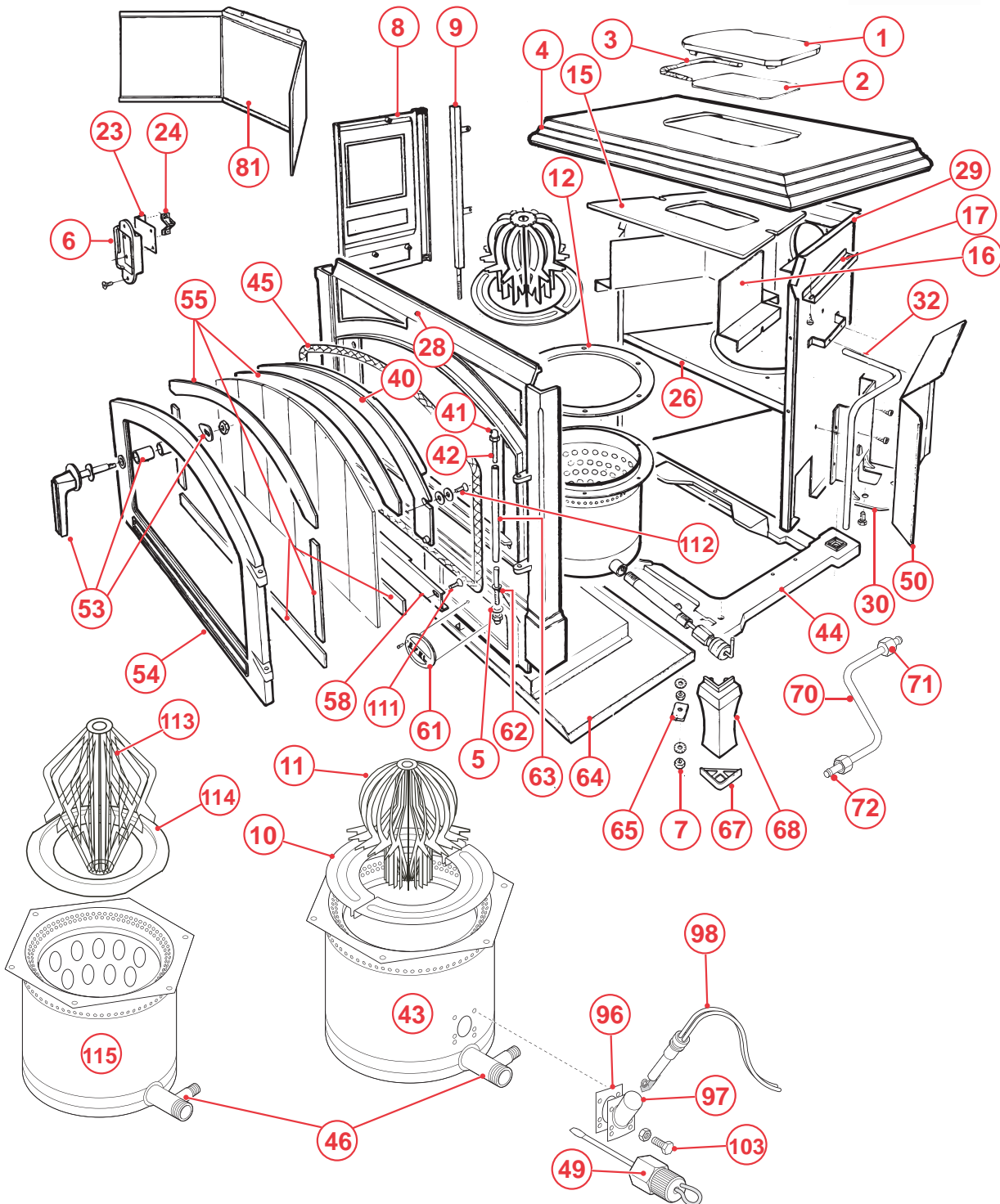


Spare Parts on the web.

Below is an example of one the pages of spare parts diagrams you will find on our web site. These detailed drawings allow you to identify all the component parts of the stove. If you follow the instructions on the web site it will give you the part number and the price of each item. These can then be ordered through your nearest retail outlet or online.



Euroheat Spare Parts System Harmony 8" & 10" Oil 194 96, 186 68, 186 69



Euroheat Distributors (HBS) Ltd., Unit 2, Court Farm Business Park, Bishops Frome, Worcestershire, WR6 5AY United Kingdom
Telephone Technical Support 01885 491117 Facsimile 01885 491101 Reception 01885 490100 Email tech@euroheat.co.uk
Latest Technical Information www.euroheat.co.uk

www.euroheat.co.uk

Euroheat and Nestor Martin have a policy of continual research and development and reserve the right to modify its appliances without prior notice.

We make every effort to ensure that the information provided in this document is correct and accurate at the time of printing. Continued updates occur to adapt documents to customer requirements and appliance changes. For the latest editions of all Euroheat documentation visit our web site

www.euroheat.co.uk

We would request that you inform Euroheat of information which you feel is not provided in this document which would assist other users in the future.

The Euroheat Technical Team