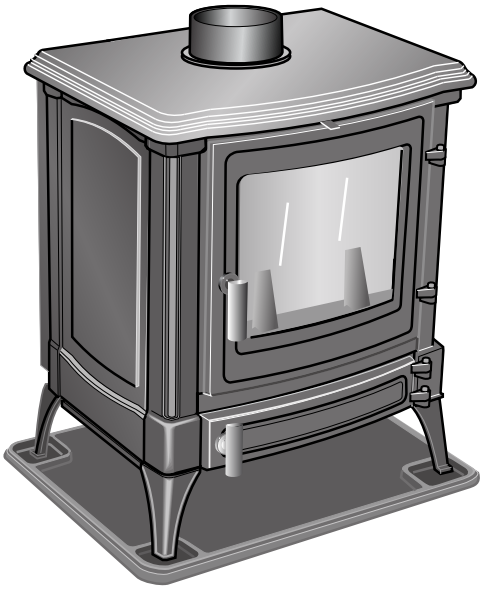
Servicing Instructions for

Harmony 1 & 3

Stanford 80 & 140

Stanford 9 & 12

Multifuel Stoves



E& OE Instructions Part number IN1188 Edition A

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 poorly maintained for a period could seriously damage the component parts within the stove which will then need replacing.

Spares may be purchased from:

Your local Nestor Martin supplier

The Eurostove web site: www.eurostove.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 and competent.

Maintenance schedule

1. Weekly

A) Remove any ash that may have fallen from the ash pan in the stove under the grate. If this is allowed to build up it can foul the ash pan which may make closing the ash pan door difficult and allow air to leak into the stove from the ash pan door seal.

B) Check the operation of the riddle mechanism to ensure that it has not become jammed. If it has become hard to riddle, remove all ash from the fire bed and ensure that there is no clinker or nails or screws, which may have been in wood burned, obstructing the movement of the grate.

2. Monthly

A) Visually check the condition of the door rope seals, and if they have become frayed or are coming loose from their channel they may need replacing.

B) Check that the doors are sealing properly when shut and adjust the handle latches accordingly. See pages 10 and 11.

3. Every 3 Months

A) Remove the top two baffles, see page 12, and remove any soot and debris that may have accumulated above them. This may have to be done more regularly if wet wood has been burned or poor quality smokeless fuel or anthracite.

B) Check the operation of the direct draught slide and lubricate if necessary.

C) Check the operation of the thermostatic damper on the rear of the stove, clear any ash that may be fouling its operation and adjust the gap when the stove is cold. See page 18

4. At the end of the Heating Season(Summer Shut Down)

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

B) Clean the inside of the stove of all ash and inspect the internal cast iron parts of the stove and replace if
necessary.

C) Lubricate the door handle shafts with a lubricant such as WD40.

D) Spray the cast iron inside of the stove with a water repellent lubricant such as WD40.

5. At the start of the Heating Season

A) Have the chimney swept and inspected by an approved (NACS) chimney sweep. The chimney may need sweeping more regularly dependant upon the fuel used and how often the stove is used.

B) Check the door rope seals so as to ensure an air tight seal. See page 9.

C) Check the operation of the riddle mechanism and direct draught slide assembly.

D) Light a small fire and ensure all the smoke is being vented up the chimney.

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 you 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 the Eurostove website.

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 require, 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 used to be available, we can no longer supply this.
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.

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 Association of Chimney Sweeps
Telephone: 01785 336555

The Solid Fuel Association
Telephone: 01773 835400

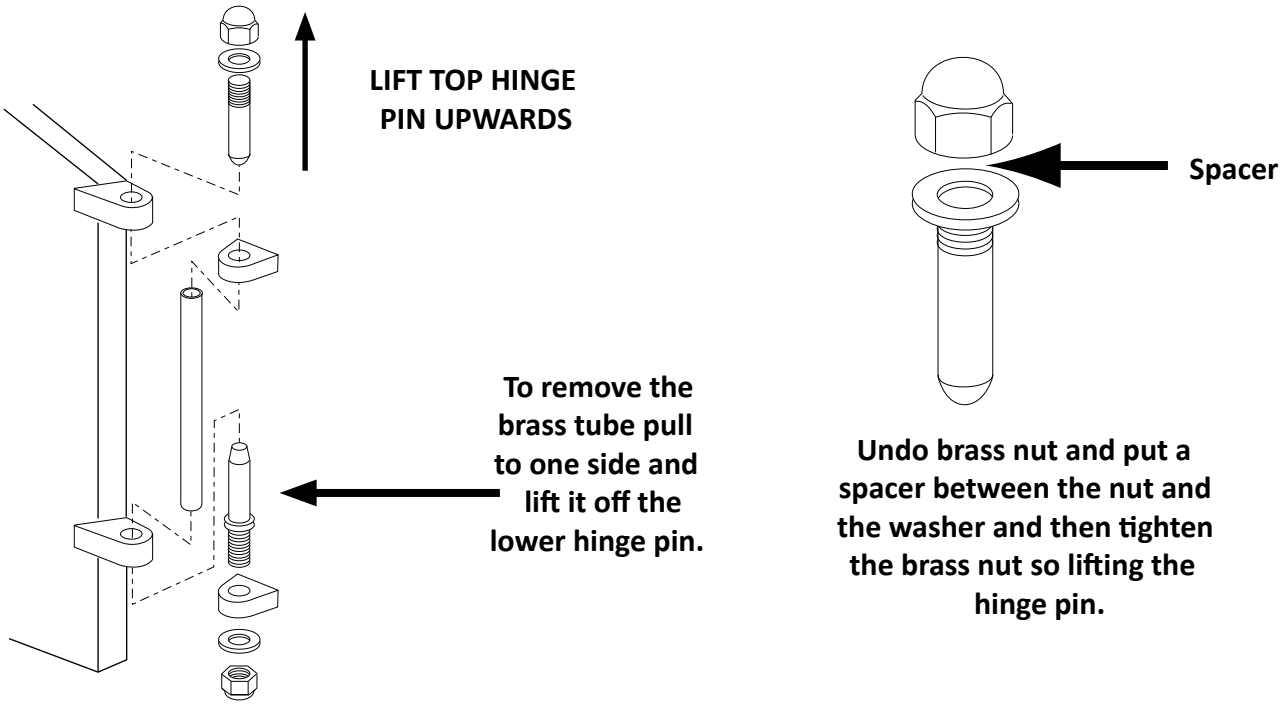
Front and Side Door Removal

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 piece 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

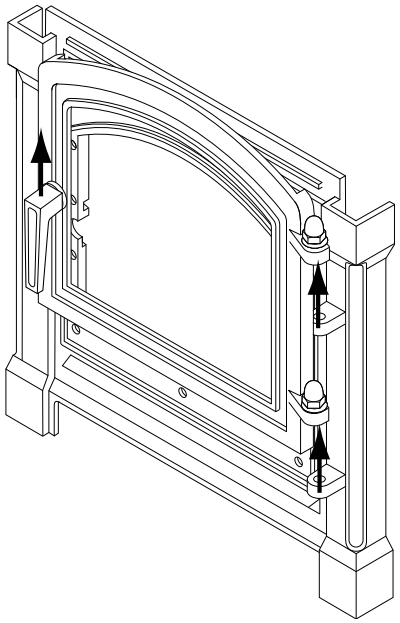
Description	Harmony 1	Harmony 3
Upper door		
Domed brass nut	12430	12430
Brass washer	17496	17496
Brass hinge tube	29354	29352
Upper hinge pin	12428	12428
Lower hinge pin	13219	13219
Side door		
Domed brass nut side door	12429	12429
Brass washer upper door	15760	15760
Brass hinge tube side door	28286	29353
Upper hinge pin	12426	12426
Lower hinge pin	12425	12425

Door Removal without Brass Tube

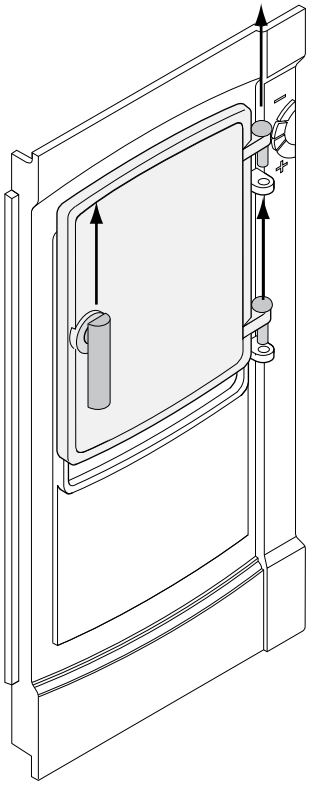
To remove the door undo the handle and open the door.

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 Stanford hinge pins

Description	Stanford 80 (9)	Stanford 140 (12)
Upper door	31848	31848
Lower door	39934	39934
Side door	31846	31846

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 Nestor Martin 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 manor which may be detrimental to the performance of the stove.

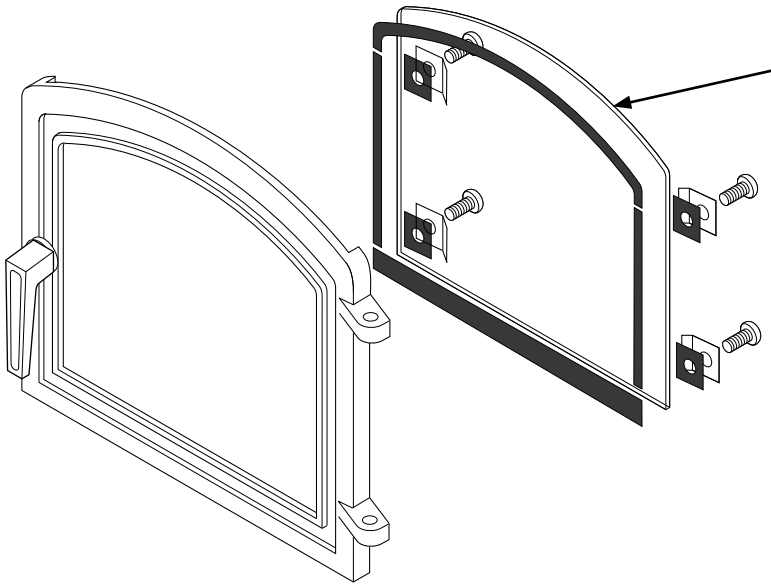
The seals should be checked annually and replaced if they have become damaged or show signs of leakage.

The seals may be either a rope seal or a ceramic fibre gasket. In all cases these are interchangeable.

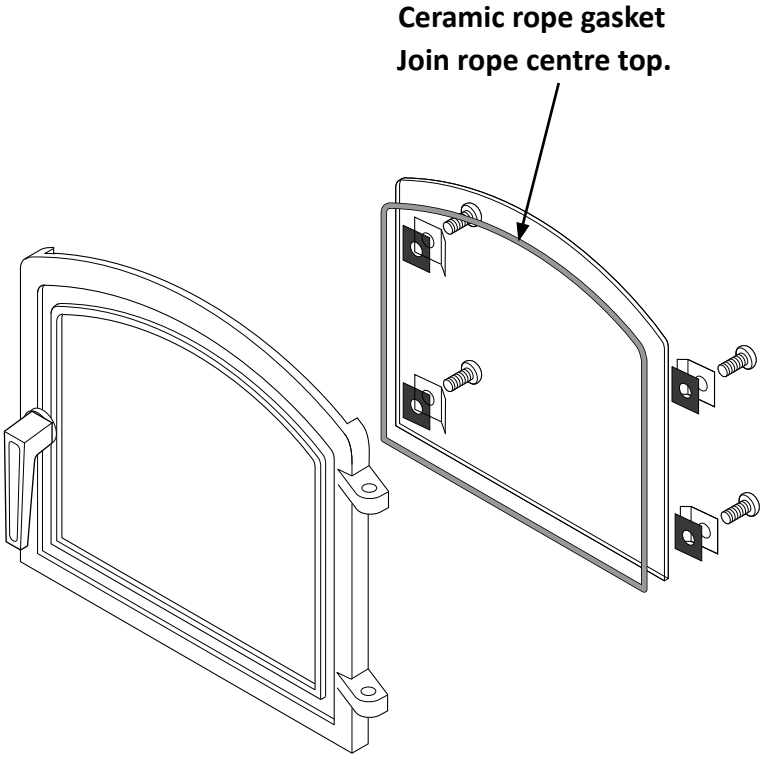
It may be easier to replace the glass by removal of the door and lying it down on a stable flat surface.

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.



The ceramic fibre gasket set comprises of pre-cut 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 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.

Order numbers for Glass and Glass Seal sets

Stove model	Seal set	Glass
Harmony 1	MS078	MS077
Harmony 3	31593	MS061
Stanford 80 (9)	MS078	41771 Flat glass/ 39822 Bowed glass not available
Stanford 140 (12)	31593	41772 Flat glass/ 40082 Bowed glass

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 for Front, Ash pan and Side doors

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.

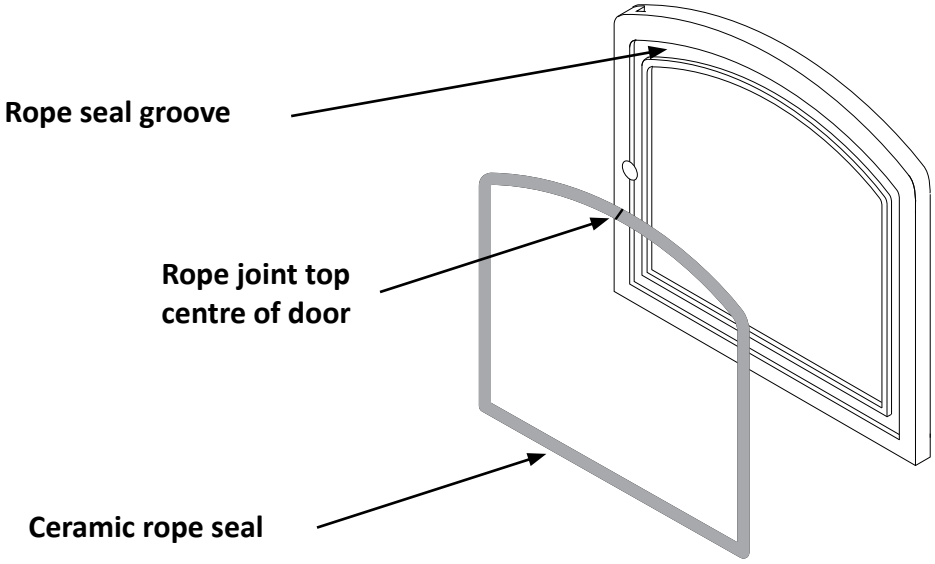
Failure to maintain a good seal will allow uncontrolled air enter the stove. This can cause over firing, excess heat, which can damage the internal components of the stove. Symptoms of this are a stove burning uncontrollably even when the air inlets are shut down.

Order numbers for Door Rope Seal Kits

Stove	Part No.
Harmony 1	RO134
Harmony 3	RO137
Stanford 80 (9)	RO134
Stanford 140 (12)	RO137

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.



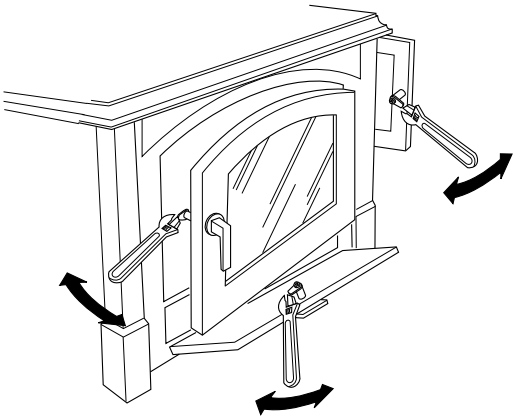
Fitting New Seal

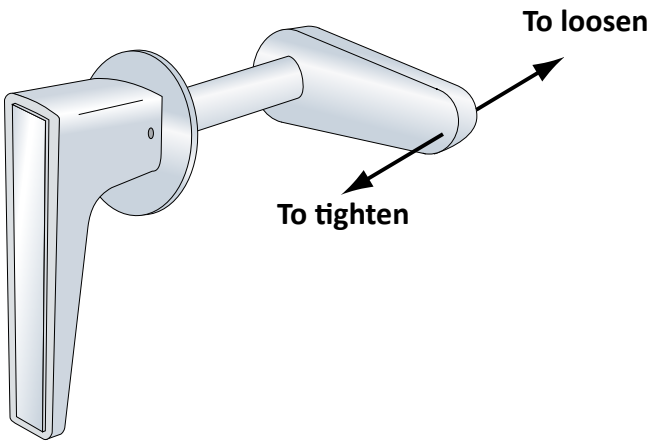
The ceramic rope in the seal set kits it cut to an approximate length, as the kits fit various stoves. Run the rope around the rope groove and cut it to the required length. Remove it from the groove and apply a bead of rope glue into the rope groove. Push the rope back into the groove ensuring that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

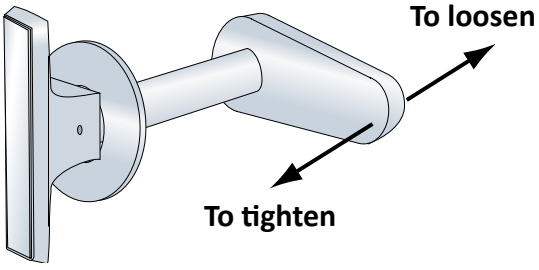
Door Handle Adjustment

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.

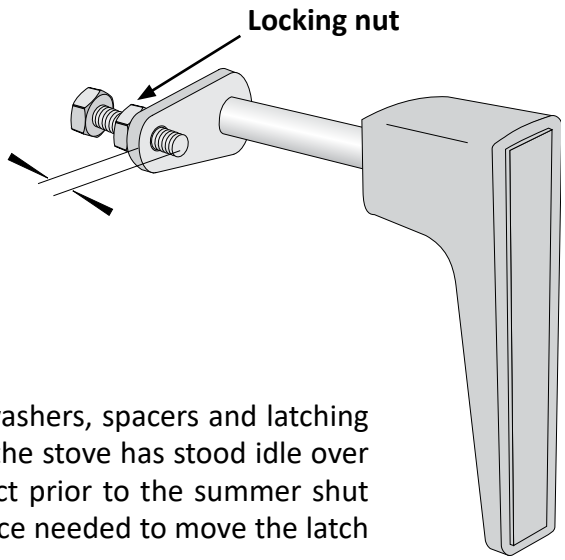
The flat latch blades can be bent using an adjustable spanner. Bent towards the handle to tighten and away from the handle to loosen.







Handle latch with adjusting bolt



To adjust the furnace door handle latch, loosen the locking nut and adjust the bolt as required. Re-tighten 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 replace 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.

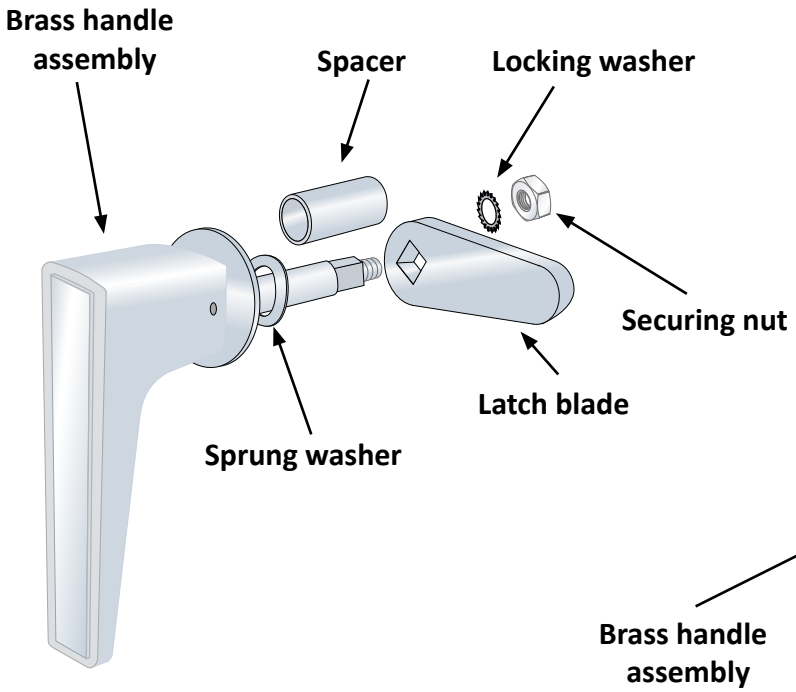
Order numbers for Handles

Model	Furnace door	Side door	Ash pan door
Harmony 1	31028	31029	28130
Harmony 3	30940	28428	30941
Stanford 80 (9)	39653	39988	44958
Stanford 140 (12)	39656	39988	44958

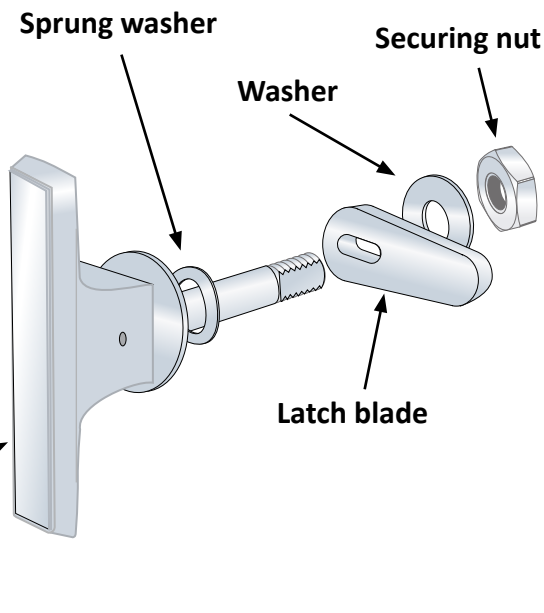
If the handle shaft has seized into the door frame, and the door is closed, then the shaft will have to be sprayed with WD40 or a similar penetrating oil. Leave this to soak for some time. Then with a pair of mole grips or similar type of spanner turn the shaft to open the door. Once the door is open 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 could crack.

Examples of Handle Kits

Harmony 3 Firebox Door Handle

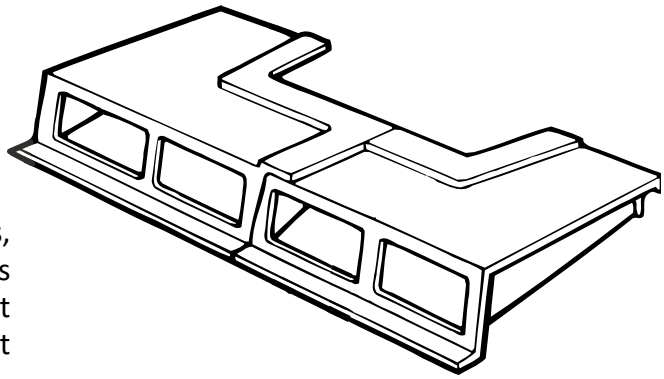


Harmony 1 & 3 Lower Door Handle



Firebox Components

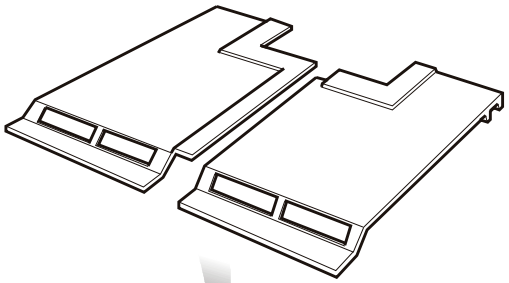
Top Baffles

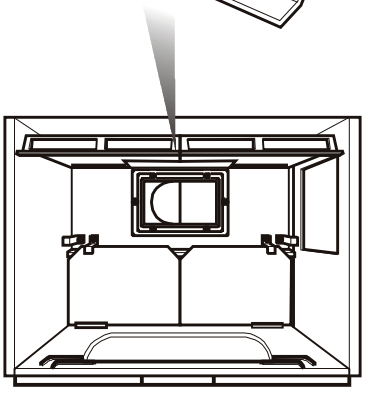


The cast iron top baffles will need removing at regular intervals, dependant upon the stoves use, to remove any soot and debris which may have accumulated on top of them. If this is not done the flue way will become choked and the stove will not operate efficiently.

Order numbers for Top Baffles

Model	Left baffle	Right baffle
Harmony 1	20162	20163
Harmony 3	19137	19138
Stanford 80 (9)	20162	20163
Stanford 140 (12)	19137	19138

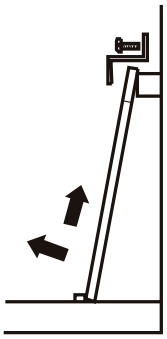




Removing Top Baffles

Lift the right hand baffle upwards, lifting the rear more than the front. Move the baffle towards the stove back to allow the front edge to clear the supporting ledge and pull forward. The left baffle removes similarly. To replace the baffles reverse the procedure, ensuring the front edges of the baffles are pulled to the front of the stove and the baffles are as close together as possible.

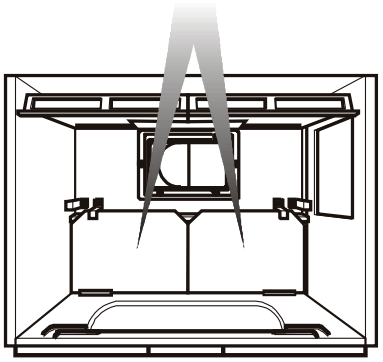
If the baffles were difficult to get out or have a build up of rust on them running an angle grinder over them and removing 1mm from the edges will help in refitting them.



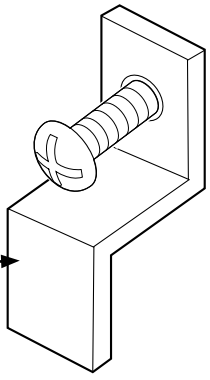
Removing Rear Protection Plates

The rear protection plates will need removing if you are replacing the grate system or side protection plates.

Remove retaining bracket retaining screws and bracket, lift out the two protection plates. If the screws have seized in place then the stainless steel brackets can be eased out of the way by bending them upwards. They can then be knocked back down into place with a small hammer.



Retaining bracket

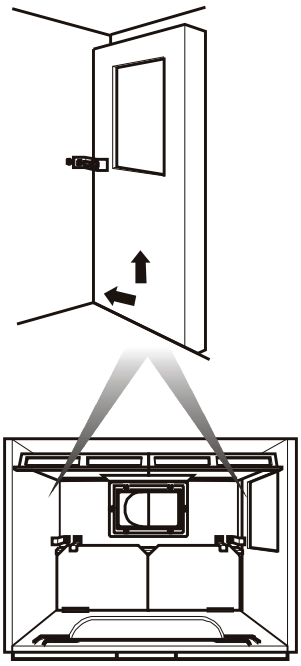


Order numbers for Rear Protection Plates

Model	Rear protection plate	
Harmony 1	20219	2 required per stove
Harmony 3	19085	
Stanford 80 (9)	20219	
Stanford 140 (12)	19085	

Removing Side Protection Plates

Remove retaining bracket retaining screws and brackets and lift out protection plates. If the screws have seized in place then the stainless steel brackets can be eased out of the way by bending them backwards away from the plate.



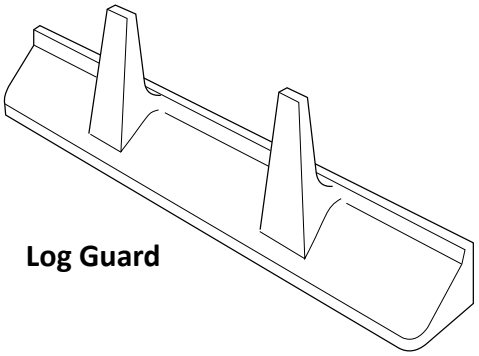
Model	Left hand protection plate	Right hand protection plate
Harmony 1	20160	20161
Harmony 3	19135	19136
Stanford 80 (9)	20160	20161
Stanford 140 (12)	19135	19136

Grate and Grate Frame Removal and Replacement

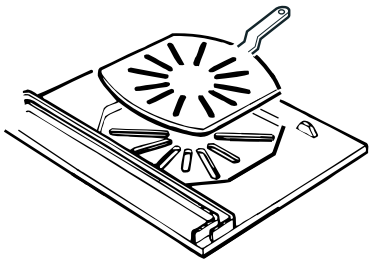
There have been a number of grate systems used in the Harmony and Stanford range of multifuel stoves.

Harmony 1 and Stanford 80 Grate Systems

The Mark 3 is the only complete grate system left and can be fitted in place of the two older grate systems.

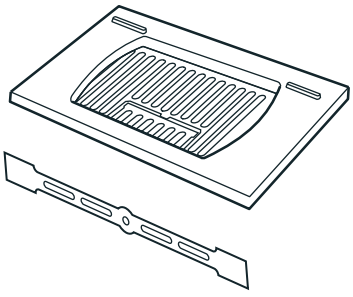


Log Guard



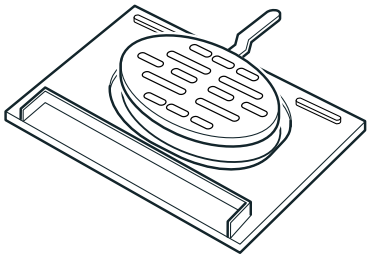
Mark 1 grate system

Mark 1 Grate System	
Grate	20159
Grate frame	20158
Log guard	20220



Mark 2 grate system

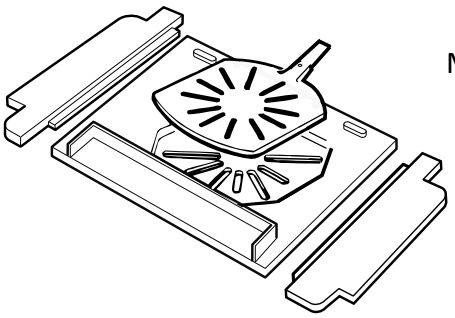
Mark 2 Grate System	
Grate	6130
Small ash grate	19777
Grate frame	30863
Grate support bar	32045
Log guard	20220



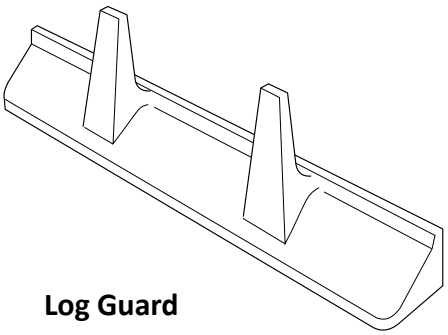
Mark 3 grate system

Mark 3 Grate System	
Grate	41497
Grate frame	41494
Log guard	20220

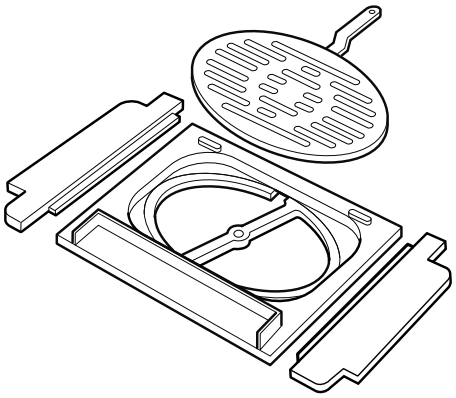
Harmony 3 and Stanford 140 (12) Grate Systems



Mark 1 grate system



Log Guard



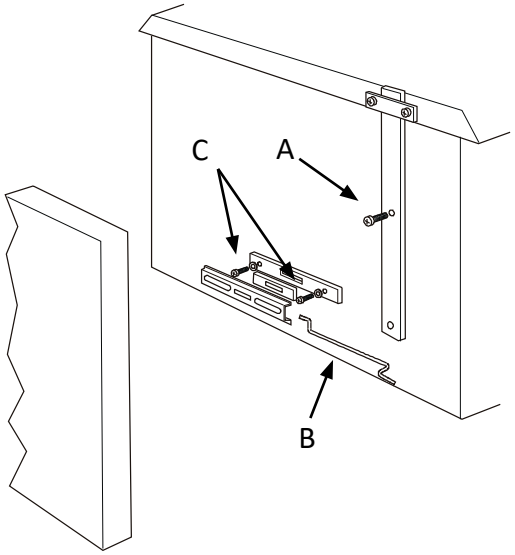
Mark 2 grate system

Mark 1 Grate System	
Grate	19134
Grate frame	19133
Left grate cheek	13467
Right grate cheek	13468
Log guard	19113

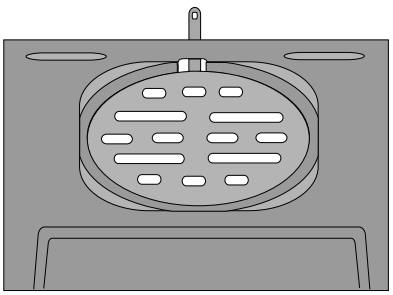
Mark 2 Grate System	
Grate	38268
Grate frame	38270
Left grate cheek	38274
Right grate cheek	38272
Log guard	19113

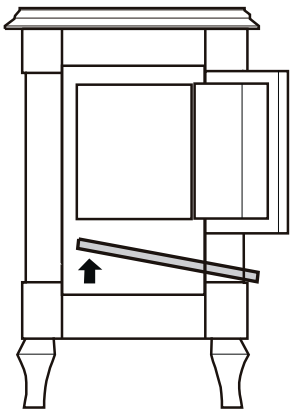
Grate removal procedure:

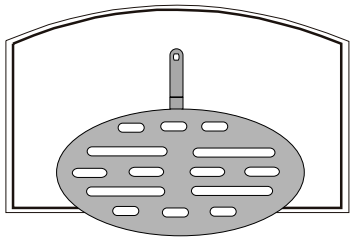
Harmony 1 Mk1 and Mk3 grate system
Stanford 80 (9) with Mk3 grate system
Harmony 3 Mk1 and Mk2 grate system



Step 1. Removing Riddling Links.
Remove or loosen the rear heat shield, held in place by four screws.
Remove screw “A”
Remove riddling link bar “B”
Remove Screws “C” and riddler guide seals.
Step 2. Removing the grate
Lift Front of Grate and remove through front door.







Step 3. Replacing the grate
Reverse the above procedure.

Grate frame removal

Follow the procedure on page 15. Steps 1 to 3 and step 5.

Grate removal procedure Harmony 1 and Stanford 80 (9) with Mk 2 grate system

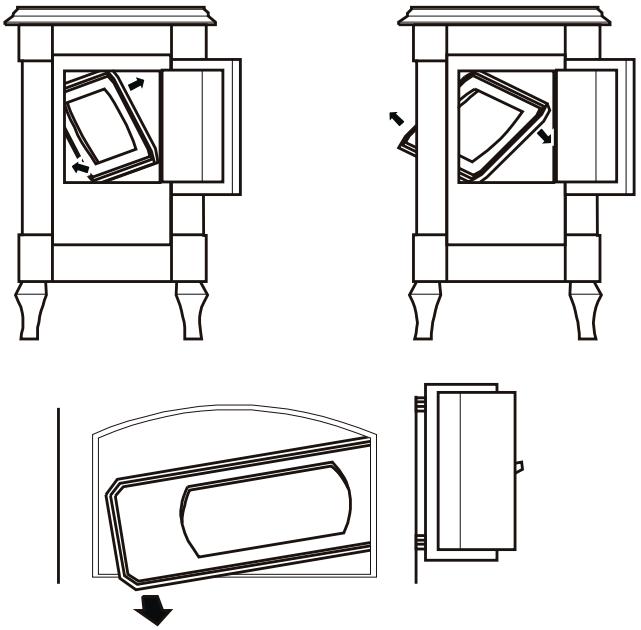
Step 1. Remove the two top baffles. Page 12.

Step 2. Remove the two rear protection plates. Page 12.

Step 3. Remove the two side protection plates. Page 12.

Step 4. Removing Riddling Links.
Remove or loosen the rear heat shield, held in place by four screws.
Remove screw “A”
Remove riddling link bar “B”
Remove Screws “C” and riddler guide seals.

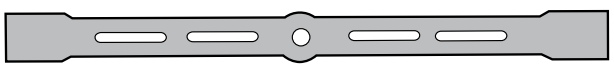
Step 5. Removing the Grate Frame.
Remove the grate frame by lifting and rotating the grate frame as illustrated below.

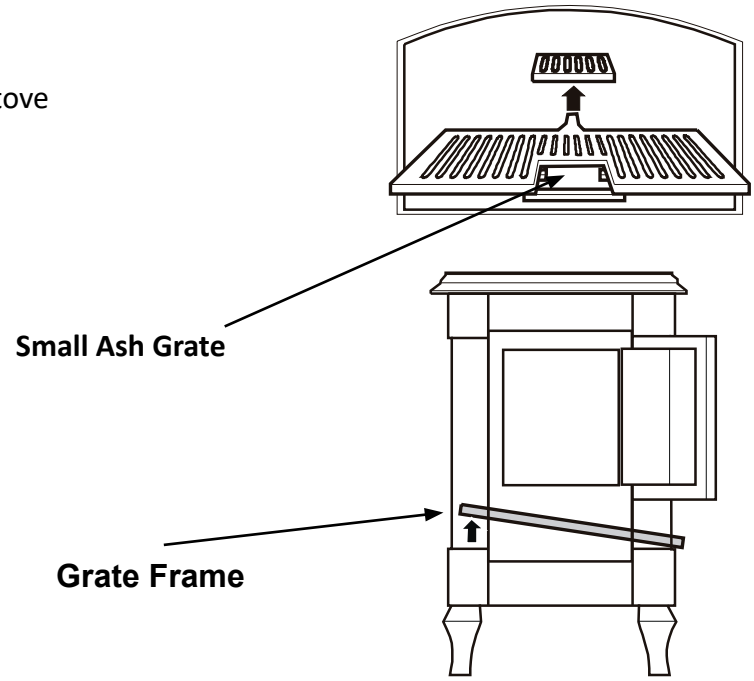


Step 6. Removing the grate.
Lift out the small ash grate and lift front of the grate and remove through front door.

The grate support bar can then be removed from the stove through the front door.

Grate Support Bar

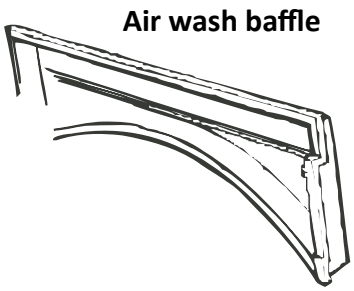




Step7. Refitting the parts to the stove.
Refitting the parts is a case of reversing the procedure used to remove them.

Removing Mk 2 Grate from Harmony 1 with a 3kW boiler

Follow the procedure as discussed earlier removing the top baffles. The rear protection plates have been replaced by the boiler so to remove the side protection plates the air wash baffle above the door must be removed. Undo the two nuts (10mm) and withdraw the baffle through the front door. The side protection plates can then be rotated to pull the rear edge from behind the side of the boiler. They can then be removed through the front door.



The grate frame and grate can then be removed, see page 15.

If only the grate support bar needs to be replaced the grate and grate frame need not be removed, only the protection plates.

1. Lower the ash pan door and remove the ash pan.

2. Remove the small ash grate.

3. Lift up the front of the grate and grate frame at the same time so the grate lifts off the support bar.

4. Grip the grate support bar, through the ash pan door, and rotate it towards the front of the stove so it comes
free of the support lugs on which it sits.

5. Withdraw the support bar through the ash pan door.

6. Reverse the procedure to replace.

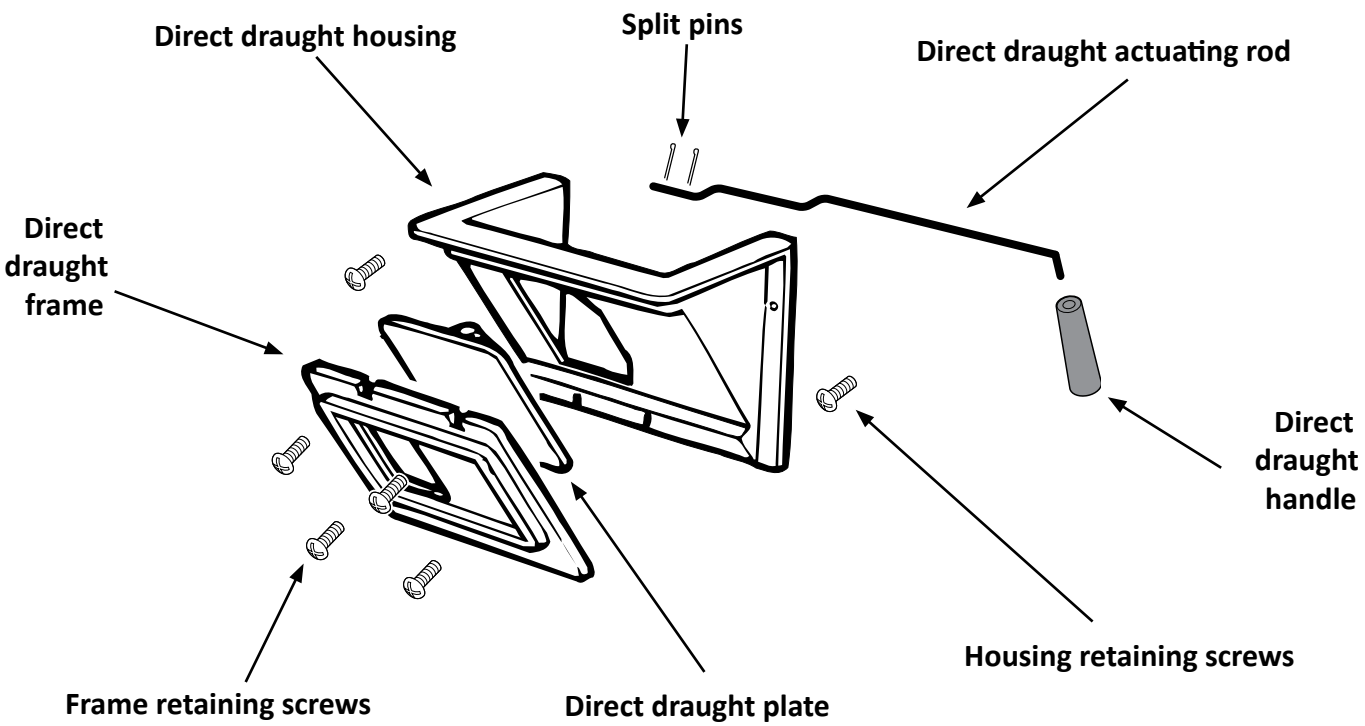
Direct Draught Assembly Removal and Replacement

The direct draught slide allows flue gases to pass directly into the flue, bypassing the baffle system in the top of the stove. This means that the flue warms up quickly, so that the flue draught is established drawing away the flue gases.

It should only be opened on lighting or reviving a slumbering stove and closed as soon as the fire has established. Failure to do this can cause damage to the direct draught assembly.

Another reason for failure is not following the summer shut down procedure where moisture in the air within the chimney causes the cast iron component parts of the assembly to rust together so that they will not operate. The moving parts of the assembly should be sprayed with a moisture repellent oil to stop rusting occurring. The assembly would then need dismantling, cleaning and refitting and any damaged parts replaced.

If the retaining screws have seized into either the direct draught housing or the back cast body of the stove they will need drilling out with a 5mm drill and then the holes re-tapping. If it is the screws securing the housing in place then it is easier to then drill the holes with a larger drill and use a M5 by 30mm (FF5008) screw and an M5 (FF5000) nut securing the housing to the back of the stove. This saves having to re tap the screw holes in the back of the stove. The housing should be sealed to the back of the stove using a sealant such as a pliable fire cement.



Description	Harmony 1 & Stanford 80 (9)	Harmony 3 & Stanford 140 (12)
Direct draught frame	15999	15999
Frame retaining screws	FF5003 x 4	FF5003 x 4
Direct draught plate	20164	14029
Direct draught housing	19139	19139
Housing retaining screws	FF5005 x 2	FF5005 x 2
Direct draught actuating rod	20167	19140
Split pins	MS2110	MS2110
Direct draught handle	2321	2321

Frame

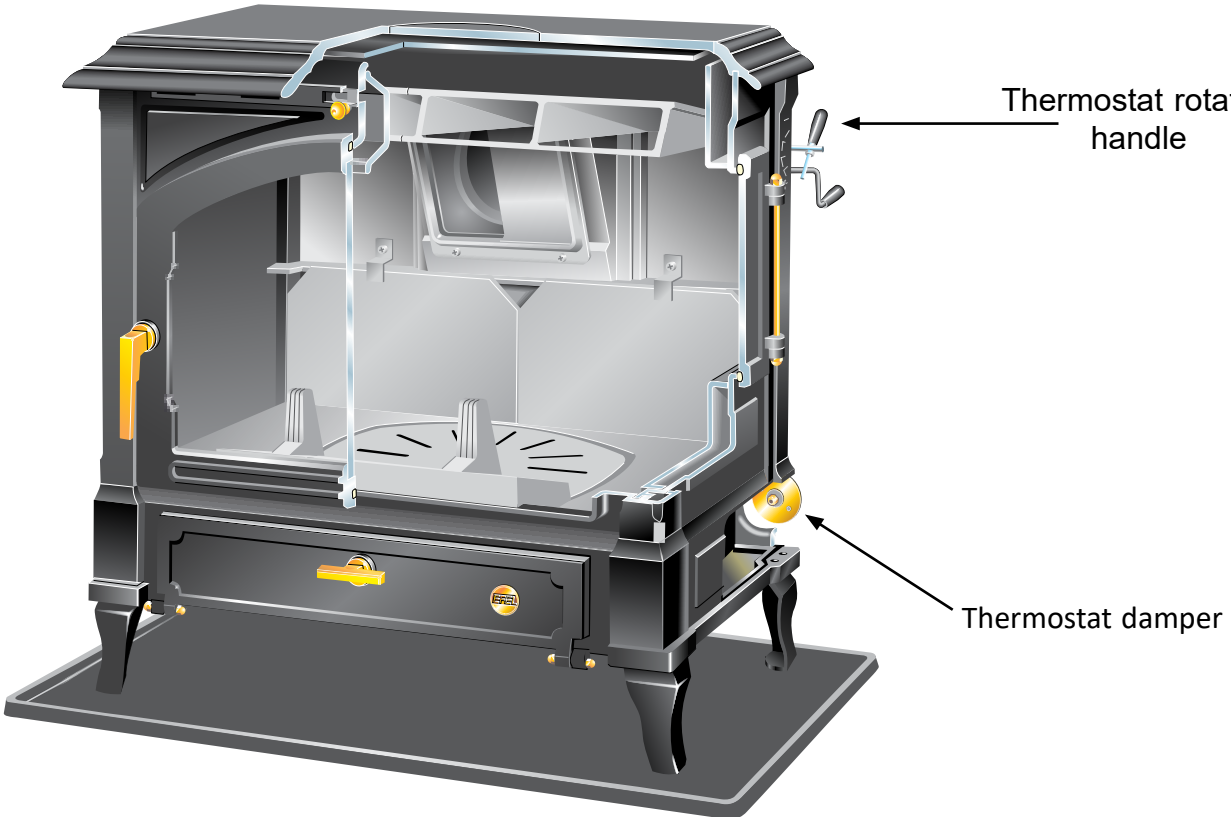
Plate

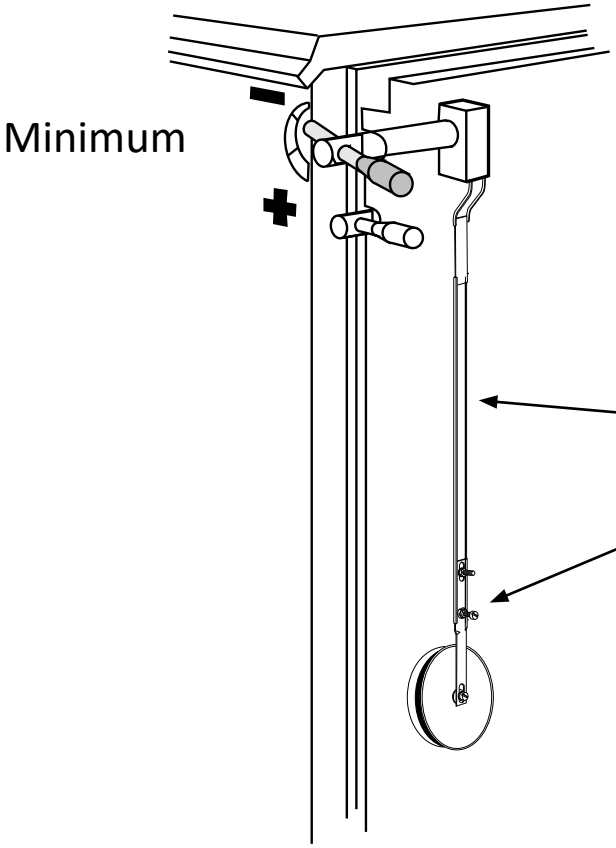
Housing

Handle

Actuating rod

Adjusting Thermostat Setting





The cold setting of the thermostat must be checked before the stove is operated for the first time.
The thermostat can be adjusted in two places. **A** may be bent for course adjustment and **B** for fine adjustment.

With the stove cold the gap between the inside left of the thermostat disc and the cast iron body of the stove should be 0-1 mm at normal room temperature.

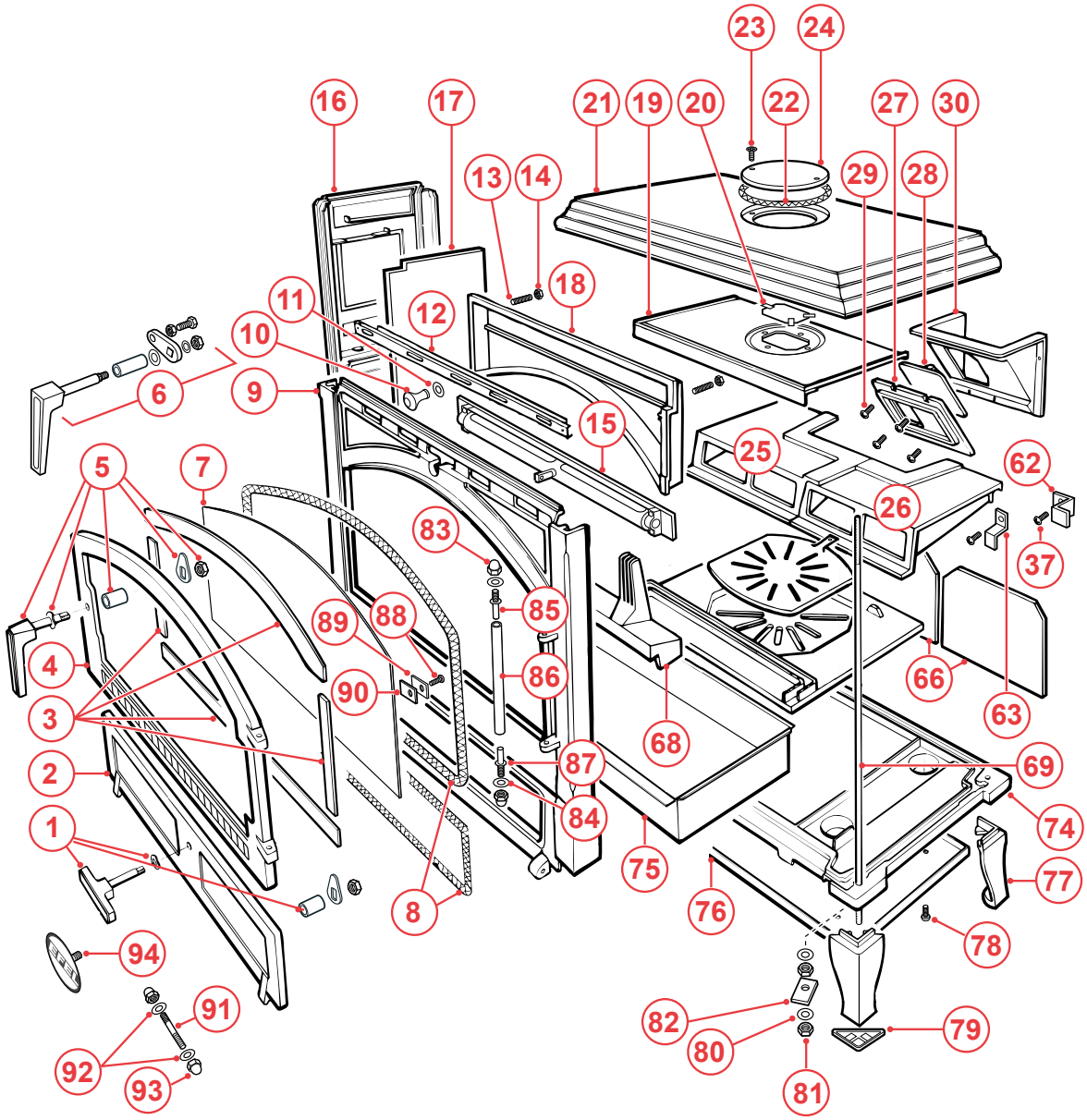
Note: the thermostat disc is designed to close at an angle.

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 click on the numbers within the circles 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.

If you are unsure about the part you require our trained team of technical experts will help you. They may ask you to email a picture of the part you require to ensure that the correct part is identified.

Harmony 1 Multifuel



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www.eurostove.co.uk.

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