Professional

36 Dual Fuel

Owner's Guide

User & Installation Instructions

READ THESE INSTRUCTIONS FULLY BEFORE USE SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE



U110246 - 06

WARNING!

If the information in these instructions is not followed exactly, a fire or explosion may result, causing property damage, personal injury or death.

DO NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS

DO NOT try to light any appliance.

DO NOT touch any electrical switch.

DO NOT use any phone in your building.

Follow the gas supplier's instructions.

If you cannot reach your gas supplier, call the fire department.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

WARNING!

The anti-tip device supplied with this range must be installed when the appliance is installed. This will reduce the risk of tipping of the appliance from abnormal usage or by excessive loading of the oven door.

A CHILD OR ADULT CAN TIP THE RANGE AND BE KILLED. INSTALL ANTI-TIP BRACKET PACKED WITH RANGE - SEE INSTALLATION INSTRUCTIONS. A CHILD OR ADULT CAN TIP THE RANGE AND BE KILLED ENGAGE THE RANGE TO THE ANTI-TIP DEVICE - SEE INSTALLATION INSTRUCTIONS. RE-ENGAGE THE ANTI-TIP DEVICE IF THE RANGE IS MOVED. FAILURE TO DO SO CAN RESULT IN DEATH OR SERIOUS BURNS TO CHILDREN OR ADULTS.

The following symbols are related to safety and are used on the product and throughout this manual.

Meaning / Description	Symbol	Meaning / Description	Symbol
WARNING / CAUTION An appropriate safety instruction should be followed or caution taken if a potential hazard exists.	$\underline{\land}$	HEAVY This product is heavy and reference should be made to the safety instructions for provisions of lifting and moving.	
DANGEROUS VOLTAGE To indicate hazards arising from dangerous voltages.	4	DISCONNECT MAINS SUPPLY Disconnect incoming supply before inspection or maintenance.	
PROTECTIVE EARTH (GROUND) To identify any terminal which is intended for connection to an external conductor for protection against electric shock in case of a fault, or the terminal of a protective earth (ground) electrode.			

Contents

1. Important safety inform	mation
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1

2. Range overview	
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2.	Range overview	5
	Cooktop burners	5
	lgniting cooktop burners without el 6	ectricity
	Griddle (Optional Extra)	6
	Wok Cradle (Optional Extra)	7
	The Multi-function Oven	7
	Operating the oven	8
	Accessories	11
3.	Rotary clock	13
4.	Cooking tips	16
5.	Cooking table	17
6.	Cleaning your range	19
	Essential information	19
	Griddle (Optional Extra)	20
	Control panel and oven doors	20
	Self-clean oven	20
	Cleaning table (Table 6.1)	22
7.	Troubleshooting	23

Installation Instructions 8. 25 9. Service and parts 27 10. Installation safety instructions 28 **11. Installation** 30 31 Positioning the range Fitting the oven handle 32 Moving the range 32 Removing the oven door 32 Lowering the two rear rollers 33 Completing the move 33 Installing the flue grille 33 Leveling 33 Anti-tip device 34 Floor fixing 34 Wall fixing 34 Side panel extension kit 34 Gas connection 35 Seal the openings 37 Leveling 37 Final fitting 37 Range operational checks 38 Moving the range for servicing 38 Customer care 38 Fitting the drawer 39 Removing the drawer 39 12. Conversion to LP gas 40 40 Conversion to propane Orifices 41 Valve adjustment 42 Gas regulator 42 Stick on label 43 Pressure testing 43 13. Electrical connection 44 14. Circuit Diagram 49 15. Technical data 50

1. Important safety information

Read all instructions before using this appliance. Save these instructions for future reference.

Have your appliance properly installed and grounded by a qualified technician. The installation must conform with local codes, or in the absence of local codes, in accordance with the National Fuel Gas Code, ANSI Z223. 1/NFPA 54 or, in Canada, the Natural Gas and Propane Installation Code, CSA B149. 1 and in addition the National Electrical Code NFPA 70 or the Canadian Electric Code, CSA C22. 1.

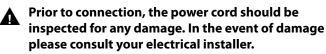
Install only as described in the installation section of this book.

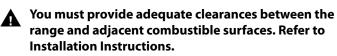
Ask your dealer to recommend a qualified technician and an authorized repair service. Know how to disconnect the power to the range at the circuit breaker or fuse box in case of an emergency.

The anti-tip device supplied with this range must be installed when the appliance is installed. This will reduce the risk of tipping of the appliance from abnormal usage or by excessive loading of the oven door or storage drawer.

Leaning, sitting or stepping on the doors or drawer of this range can result in serious injuries and also cause damage to the range. **DO NOT** allow anyone to climb, stand or hang on any part of the range.

Important safety notice and warning







Save the installation instructions for the local electrical inspector's use.

In case of fire

DO NOT use water on grease fires. NEVER pick up a flaming pan. Turn the controls off. Smother a flaming pan on a cooktop burner by covering the pan completely with a well fitting lid or baking tray. Isolate the power source, where it is safe to do so. If available, use a multipurpose dry chemical or foamtype fire extinguisher.

If the fire is in an oven pan, smother by closing the oven door. Open doors and windows, or if a hood is installed, turn it on to remove smoke and odor.

To prevent fire or smoke damage

Before using the range, make sure all the packing materials have been removed.

Always keep the area around the range free from combustible materials, gasoline, and other flammable vapors and liquids.

If the range is installed near a window, proper precautions should be taken to prevent curtains from blowing over the burners.

NEVER leave any items on the range cooktop. The hot air from an oven vent may ignite flammable items and may increase pressure in closed containers, which may cause them to burst. Many aerosol-type spray cans are EXPLOSIVE when exposed to heat and may be highly flammable. Avoid using or storing them near an appliance.

Many plastics will burn and most are damaged by heat. Keep plastic items away from parts of the range that may become warm or hot. **DO NOT** leave plastic items on the cooktop as they may burn, melt or soften if left too close to a vent or a lighted burner.

Storage should not be installed directly above a range. If anything is stored above the range, it should be limited to infrequently used items, which can be safely stored in an area subjected to heat from a range. Temperatures may be unsafe for some items such as volatile liquids, cleaners or aerosol sprays.

Destroy the carton and plastic bags after unpacking the range. **NEVER** allow children to play with packaging material.

NEVER use this appliance as a space heater to heat or warm the room. Doing so may result in carbon monoxide poisoning and overheating of the oven.

NEVER cover any slots, holes or passages in the oven bottom or cover an entire rack with materials such as aluminum foil. Doing so blocks airflow through the oven and may cause carbon monoxide poisoning. Aluminum foil linings may also trap heat, causing a fire hazard.

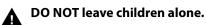


It is recommended that this appliance is serviced annually by a qualified service engineer.

DO NOT repair or replace any part of the appliance unless specifically recommended in this User Manual. Always consult a qualified service engineer.

All other servicing should be done only by a qualified technician, this may reduce the risk of personal injury and damage to the range.

NEVER modify or alter the construction of a range by removing leveling legs, panels, wire covers, anti-tip brackets/ screws, or any other part of the product.



Babies, toddlers and young children should not be allowed near the range at any time. They should **NEVER** be allowed to sit or stand on any part of the appliance.

DO NOT allow children to climb or play around the range. The weight of a child on an open door may cause the range to tip, resulting in serious burns or other injury. Teach them not to play with controls or any other part of the range.

NEVER store items of interest to children in the cabinets above a range or on the backguard of a range; children climbing on the range to reach them could be seriously injured.

DO NOT use the oven for storage.

This instruction is based on safety considerations.

Flammable materials should not be stored in an oven, the range storage drawer or near the cooktop burners. This includes paper, plastic and cloth items, such as cookbooks, plastic ware and towels, as well as flammable liquids. **DO NOT** store explosives, such as aerosol cans, on or near the appliance.

Flammable materials may explode and result in fire or property damage.

To avoid the risk of electrical shock, personal injury, or death, make sure your range has been properly grounded and always disconnect it from the main power supply before servicing.

DO NOT touch cooktop burners or areas near burners.

Gas burners may be hot even if they have been off for some time. Areas near the gas burners may become hot enough to cause burns. During and after use, **DO NOT** touch, or let clothing touch or other flammable materials contact the burners or areas near the burners until they have had enough time to cool. These areas include the cooktop and rear vent.

DO NOT touch heating elements or interior surfaces of ovens.

Oven heating elements may be hot though they are dark in color. Interior surfaces of an oven may become hot enough to cause burns. During and after use, **DO NOT** touch, or let clothing or other flammable materials touch heating elements or interior surfaces of oven until they have had enough time to cool.

Other range surfaces that may become hot enough to cause burns are the broiler compartment and oven vent at the rear of the range.

Wear suitable clothing

NEVER wear loose-fitting or hanging clothes while using the range. Be careful when reaching for items stored in cabinets over the cooktop. Flammable material could be ignited if brought into contact with a burner flame or hot surface and may cause severe burns.

Use only dry potholders or oven gloves

Moist or damp potholders on hot surfaces may result in burns from steam. **NEVER** let a potholder touch hot heating elements.

DO NOT use a towel or other bulky cloth in place of a glove.

They might catch fire if they touch a hot surface.

Use dry oven gloves when applicable – using damp gloves might result in steam burns when you touch a hot surface. **NEVER** operate the range with wet hands.

Important safety notice and warning

The California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) requires the Governor of California to publish a list of substances known to the State of California to cause cancer or reproductive harm, and requires businesses to warn customers of potential exposures to such substances.

This appliance contains or produces a chemical or chemicals which can cause death or serious illness and which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Users of this appliance are hereby warned that the burning of gas can result in low-level exposure to some of the listed substances, including benzene, formaldehyde and soot, due primarily to the incomplete combustion of natural gas or liquid petroleum (LP) fuels. Properly adjusted burners will minimize incomplete combustion.

Exposure to these substances can also be minimized by properly venting with an open window or using a ventilation fan or hood.

To reduce the risk from substances in the fuel or from fuel combustion, make sure this appliance is installed, operated, and maintained according to the instructions in this booklet.

Conversion

This appliance is supplied set for Natural gas. A conversion kit for Propane gas is supplied with the range.

Be sure your range is correctly adjusted by a qualified service technician or installer for the type of gas (Natural or LP) that is to be used. See the Installation section of these instructions.

WARNING!

These adjustments must be made by a qualified service technician in accordance with the manufacturer's instructions and all codes and requirements of the authority having jurisdiction. Failure to follow these instructions could result in serious injury or property damage. The qualified agency performing this work assumes responsibility for the conversion.

User servicing

DO NOT repair or replace any part of the appliance unless specifically recommended in the manual. All other servicing should be referred to a qualified technician.

Cooktop burners

Quality of flames

On Natural Gas, the burners' flames should be a blueish color with, at most, a slightly yellowish fringe.

On Propane gas, the flames may be "softer". The cooktop burner flames may have a slightly yellowish tip.

If the flame burns with a long white tip, you should call for service.

If the flame is distorted, check that the burner head is correctly placed over the burner.

MAKE SURE THE FLOW OF COMBUSTION AND VENTILATION AIR TO THE RANGE IS UNOBSTRUCTED.

Use the right size pan

This appliance is equipped with burners of different sizes. Use utensils with flat bottoms. **DO NOT** use unstable pans and position the handles away from the edge of the cooktop. Make sure the flames are under the pans. It is unsafe to let the flames burn up the sides of the pan; the handle may get too hot.

A proper relationship between the utensil and burner will also improve efficiency.

NEVER leave cooktop burners unattended at high settings. Pans boiling over can cause smoking and greasy spills may catch on fire.

Protective Liners - DO NOT use aluminum foil to А line cooktop bowls or oven bottoms. Foil liners may result in a risk of electric shock or fire and will damage the enamel finish. NEVER allow aluminum foil to contact the heating elements.

DO NOT use hotplate protectors, foil or hotplate covers of any description. These may affect the safe use of your hotplate burners and are potentially hazardous to health.

Glazed Cooking Utensils – Only certain types of glass, glass/ceramic, ceramic, earthenware, or other glazed utensils are suitable for range top use without breaking due to the sudden change in temperature.

Utensil handles should be turned inward and not positioned over adjacent burners. If handles are left over adjacent burners they will get hot and may burn.

Use of aluminum pans may cause metallic marking of the grates. This does not affect the durability of the enamel and may be cleaned off with a metal polish.

Ovens



Let hot air and steam escape before removing or replacing food.

NEVER heat unopened food containers. Pressure buildup may make the container burst and cause injury.

Keep oven vent ducts unobstructed.

Use care when opening the door.

Placement of oven racks



Always place oven racks in the desired location while the oven is cool. If the rack must be moved while the oven is hot, DO NOT let the potholder contact the hot heating element in the oven.



WARNING!THIS APPLIANCE IS PROVIDED WITH **ROLLERS TO FACILITATE MOVEMENT DURING** INSTALLATION. THE RANGE SHOULD NOT BE MOVED AFTER INSTALLATION.

General safety instructions

This appliance must be installed by a competent person in accordance with the installation instructions. The installation must comply with the relevant regulations and also the local electricity supply company requirements.

This appliance is designed for domestic cooking only. Use for any other purpose could invalidate any warranty or liability claim.

The use of a gas cooking appliance results in the production of heat and moisture in the room in which it is installed. Make sure that the kitchen is well ventilated: keep natural ventilation holes open or install a mechanical ventilation device, (mechanical extractor hood).

Prolonged intensive use of the appliance may call for additional ventilation, for example opening a window, or more effective ventilation, for example increasing the level of mechanical ventilation where present.

This appliance should not be installed with any ventilation system that blows air downward toward the gas cooking appliance. This type of ventilation system may cause ignition and combustion problems with the gas cooking appliance, resulting in personal injury or unintended operation. Ventilating systems that direct the air upwards can be used.

The range should be serviced by a qualified service engineer and only approved parts used. Have the installer show you the location of the range circuit breaker. Mark it for easy reference. Always allow the range to cool and then switch it off at the circuit breaker before cleaning or carrying out any maintenance work, unless specified otherwise in this guide.



All parts of the range become hot with use and will retain heat even after you have stopped cooking.

Take care when touching the range in order to minimize the possibility of burns; always be certain that the controls are in the OFF position and that it is cool before attempting to clean the range.

Clean with caution. If a wet sponge or cloth is used to wipe spills on a hot surface, be careful to avoid steam burns. Some cleaners can produce noxious fumes if applied to a hot surface.

Clean only parts listed in this guide.

In the interests of hygiene and safety, the range should be kept clean at all times as a build up of fats and other food stuff could result in a fire.

Always keep combustible wall coverings or curtains etc. a safe distance away from your range.

DO NOT spray aerosols in the vicinity of the range while it is in use.

DO NOT store or use combustible materials, or flammable liquids in the vicinity of this appliance.

Take great care when heating fats and oils, as they will ignite if they get too hot.

Use a deep fat thermometer whenever possible to prevent overheating fat beyond the smoking point.

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NEVER leave a deep fry pan unattended. Always heat fat slowly, and watch as it heats. Deep fry pans should be only a maximum of one third full of fat. Filling the pan too full of fat can cause overspill when food is added. If you use a combination of oils or fats in frying, stir them together before heating, or as the fats melt. Foods for frying should be as dry as possible. Frost on frozen foods or moisture on fresh foods can cause hot fat to bubble up and over the sides of the pan. Carefully watch for spills or overheating of foods when frying at high or medium high temperatures. **NEVER** try to move a pan of hot fat, especially a deep fry pan. Wait until the fat is cool.

When an oven is on, **DO NOT** use the top of the flue (the round holes along the back of the range) for warming plates, dishes, drying dish towels or softening butter.

When using an electrical appliance near the cooktop, be sure that the cord of the appliance does not come into contact with the cooktop.

Take care that no water seeps into the appliance.

Make sure that your kitchen is well ventilated at all times. Use extractor fans or hoods when installed.

The range is designed for cooking foods only and must not be used for any other purpose.

The oven should **NOT** be used for heating the kitchen, not only does this waste fuel but the control knobs may become overheated.

When the oven is on **DO NOT** leave the oven door open for longer than necessary.

The specification of this range should not be altered.

This appliance is heavy, take care when moving it.

When the range is not in use, ensure that the control knobs are in the OFF position.

2. Range overview



The dual fuel single cavity range (**Fig. 2.1**) has the following features:

- A. 5 hotplate burners
- B. A control panel incorporating a timer
- **C.** A multi-function oven
- **D.** A storage drawer

Cooktop burners

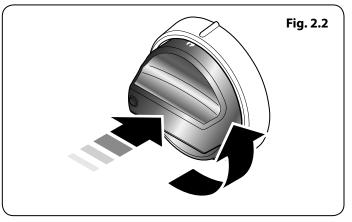
Note: Before using the cooktop make sure all burners are in place and all the grates on the range are properly placed.

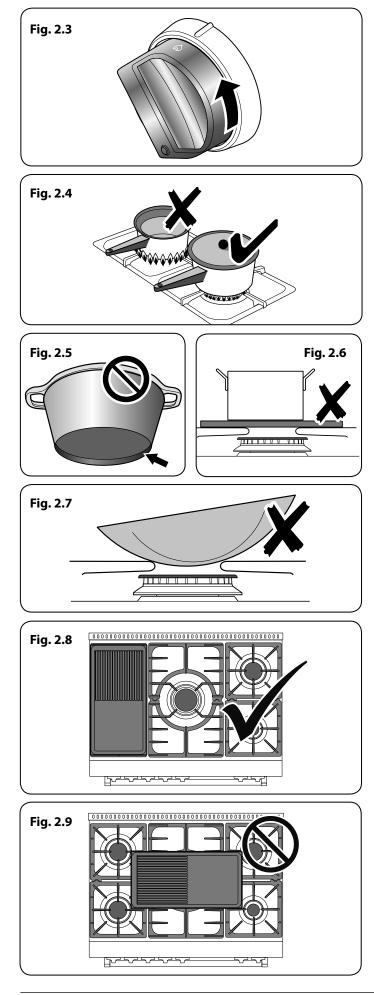
The drawing by each knob indicates which burner that knob controls.

Each burner has a special Flame Safety Device (FSD) that stops the flow of gas if the flame goes out.

When a hotplate control knob is pressed in, sparks will be made at every burner – this is normal. DO NOT attempt to disassemble or clean around any burner while another burner is on, otherwise an electric shock could result.

To light a burner, push in the selected burner control knob and turn it to the high position, as indicated by the large flame symbol (**h**) (**Fig. 2.2**).





The igniter should spark and light the gas. Keep holding the knob pressed in to let the gas through to the burner for about ten seconds.

If, when you let go of the control knob, the burner goes out, then the FSD has not been bypassed. Turn the control knob to the OFF position and wait for one minute before you try again, this time making sure to hold in the control knob for slightly longer.

Adjust the flame height to suit by turning the knob counterclockwise (**Fig. 2.3**). On this range the low position is beyond high, **NOT** between high and off. The '**\\$**' marks the low position.

If a burner flame goes out, turn off the control knob and leave it for one minute before relighting it.

Make sure flames are under the pans (**Fig. 2.4**). For safety reasons, adjust the flames so that they **DO NOT** extend beyond the edge of the cooking utensil. Using a lid will help the contents boil more quickly.

Large pans should be spaced well apart.

Pans and kettles with concave bases or down-turned base rims should not be used (**Fig. 2.5**).

Simmering aids, such as asbestos or mesh mats, are NOT recommended (**Fig. 2.6**). They will reduce burner performance and could damage the grates.

Avoid using unstable or misshapen pans that may tilt easily and pans with a very small base diameter e.g. milk pans, single egg poachers (**Fig. 2.7**).

The minimum pan diameter recommended is $6\frac{1}{4}$ " (16 cm) for the outer burners and 10" (26 cm) for the center burner.

DO NOT use cooking vessels on the burner that overlap the edges.

Igniting cooktop burners without electricity

If there is a power failure, the cooktop burners can be lit with a match.

- 1. Hold a burning match 1/2" from the burner head, keeping your hand as far horizontally away from the burner as possible.
- 2. Push and turn the burner control knob to HI/lighting position. As soon as the burner flame lights, move your hand away. With your other hand, keep holding the knob pressed for a few seconds so that the burner safety device can 'sense' the heat of the flame.
- **3.** Turn the burner control knob to the OFF position when you have finished using it.

Griddle (Optional Extra)

The griddle fits over the left-hand grates, front to back (**Fig. 2.8**). It is designed for cooking food on directly. **DO NOT** use pans of any kind on it. The griddle surface is non-stick and metal cooking utensils (e.g. spatulas) will damage the surface.

Use heat resistant plastic or wooden utensils.



DO NOT put it crossways – it will not fit properly and will be unstable (Fig.2.9).

DO NOT put it on any other burners – it is not designed to fit in any of the other grates.

Position the griddle over the hotplate burners resting on the grates (Fig. 2.9). Check that it is securely located.

The griddle can be lightly brushed with cooking oil before use. Light the hotplate burners. Adjust the flame heights to suit.

Preheat the griddle for **a maximum of 5 minutes** before adding food. Leaving it longer may cause damage. Turn the control knobs towards the low position, marked with the small flame symbol, to reduce the burner flames.

Always leave space around the griddle for the gases to escape.

NEVER fit two griddles side by side.

After cooking, allow the griddle to cool before cleaning.

Wok Burner

The wok burner is designed to provide even heat over a large area. Ideal for large pans and stir-frying (**Fig. 2.10**).

For heating smaller pans, the aforementioned burners may be more efficient.

You should wipe the enamel top surface of the range around the hotplate burners as soon as possible after spills occur. Try to wipe them off while the enamel is still warm.

NOTE: The use of aluminum pans may cause metallic marking on the burner grates. This does not affect the durability of the enameled cast iron and may be cleaned off with an appropriate metal cleaner.

Wok Cradle (Optional Extra)

The wok cradle is designed to fit a 13 ³/₄" (35cm wok).

If you use a different wok, make sure that it fits the cradle.

Woks vary very widely in size and shape. It is important that the wok sits down on the pan support – however, if the wok is too small, the cradle will not support it properly (**Fig. 2.11**).

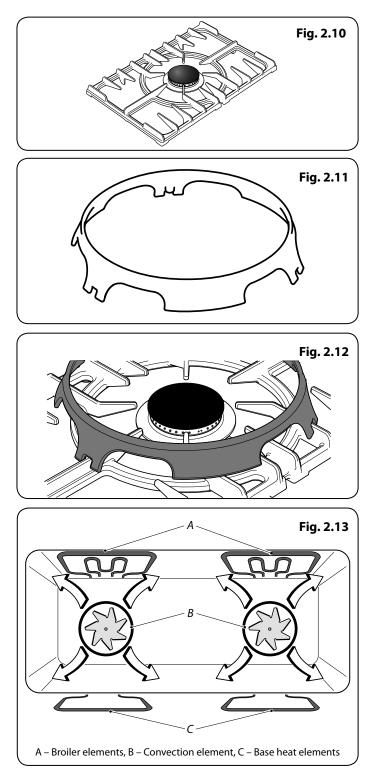
The cradle should be used on a wok burner only.

When you fit the cradle, check that it is supported properly on a pan support and that the wok is sitting level in the cradle (**Fig. 2.12**).

The wok cradle will get very hot in use – allow plenty of time for it to cool before you pick it up.

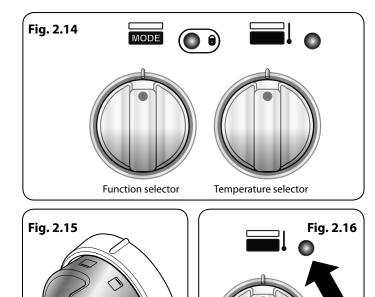
The Multi-function Oven

IMPORTANT: Before using the oven for the first time, to dispel manufacturing odors, turn the oven to 395°F (200°C) in fan assisted mode and run for one hour. To clear the smell make sure the room is well ventilated to the outside air, by opening windows or turning on your ventilation hood.



Function	Use
Thaw & serve	To thaw small items in the oven without heat
Convection oven	A full cooking function, even heat throughout, great for baking
Convection broiling	Broiling meat and fish with the door closed
Fan assisted	A full cooking function good for roasting and baking
Conventional oven	A full cooking function for roasting and baking in the lower half of the oven
Browning element	To brown and crisp cheese topped dishes
Warming	To crisp up the bases of quiche, pizza or pastry
Self Cleaning	To burn any cooking residue to ash

Table 2.1



DO NOT drop or rest objects on the door glass. Although the glass is very strong, a sharp blow or a sharp falling object might cause the glass surface to crack or break.

During use the appliance becomes hot. Care should be taken to avoid touching the heating elements inside the oven.

The oven is a multi-function oven (**Fig. 2.13**). In addition to convection elements around the fans, it is fitted with extra heating elements, in the top of the oven and under the oven base. Take care to avoid touching the top elements when placing or removing items from the oven.

DO NOT place aluminum foil on bottom of oven cavity. This will cause the oven bottom to overheat and void warranty.

The multifunction oven has 3 main cooking functions:

- 1. Convection,
- 2. Fan assisted
- 3. Conventional cooking.

These functions should be used to complete most of your cooking.

The **browning element** and **warming** can be used in the latter part of the cooking process to fine-tune the results to your particular requirements.

Use **convection broiling** for all your broiling needs and **thaw and serve** to safely thaw small items of frozen food.

 Table 2.1 gives a summary of the multi-function modes.

The multi-function oven has many varied uses. We suggest you keep a careful eye on your cooking until you are familiar with each function. Remember, not all functions will be suitable for all food types.

Please remember that all ranges vary – temperatures in your new ovens may differ to those in your previous range.

Operating the oven

The multi-function oven has two controls: a function selector and a temperature setting knob (**Fig. 2.14**).

Turn the function selector control to a cooking function. **Fig. 2.15** shows the control set for conventional oven cooking.

Turn the oven temperature knob to the temperature you need. The oven heating light will glow until the oven has reached the temperature you selected. It will then cycle on and off during cooking as the oven maintains the selected temperature (**Fig. 2.16**).

Multi-function oven modes (Fig. 2.17)

Thaw and serve



This function operates the fan(s) to circulate cold air only (**Fig. 2.18**). Make sure the temperature control is at 0° and that no heat is applied. This enables small

items such as desserts, cream cakes and pieces of meat, fish and poultry to be defrosted.

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Thawing in this way speeds up the process and protects the food from contamination. Pieces of meat, fish and poultry should be placed on a rack, over a tray to catch any drips. Be sure to wash the rack and tray after thawing.

NOTE: Thaw with the oven door closed and the oven light OFF.

Large items, such as whole chickens and meat roasts should not be thawed in this way. We recommend this be carried out in a refrigerator.

Thawing should not be carried out in a warm oven.

Ensure that dairy foods, meat and poultry are completely thawed before cooking.

Convection oven



This function operates the fans and the heating element around them (Fig. 2.19). An even heat is produced throughout the oven, allowing you to cook large amounts quickly.

Convection oven cooking is particularly suitable for multirack cooking and is a good 'all-round' function. It may be necessary to reduce the temperature by approximately 20°F (10°C) for recipes previously cooked in a conventional oven.

If you wish to preheat the oven, wait until the indicator light has gone out before inserting the food.

To cook on 3 levels, use racks 1, 3 and 5. Use your broiler pan and rack as an extra level.

Convection broiling



This function operates the fan while the top element is on (Fig. 2.20). It produces a more even, less fierce heat than a conventional broiler. For best results,

place the food to be grilled on the grid in the pan provided. Thick pieces of meat or fish are ideal for cooking in this way as the circulated air reduces the fierceness of the heat from the broiler. The oven door should be kept closed while cooking is in progress, so saving energy. You will also find that the food needs to be watched and turned less than for normal broiling.

Rack levels 5 and 6 should be used depending on the size of the food being cooked. For best results we recommend that the grill pan is not located on the uppermost shelf.

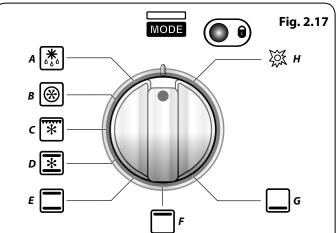
Fan assisted oven

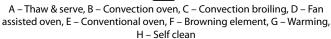


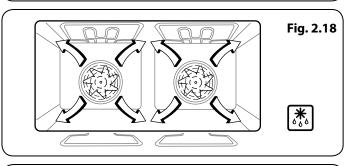
This function operates the fans, circulating air heated by the elements at the top and the base of the oven (Fig. 2.21). The combination of fan and conventional

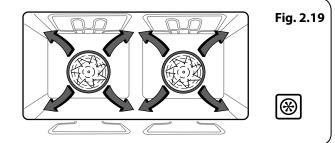
cooking (top and base heat) makes this function ideal for cooking large items that need thorough cooking, such as a large meat roast. It is also possible to bake on two racks at one time using racks 2 & 3, although they will need to be changed over during the cooking time, as the heat at the top of the oven is greater than at the base when using this function.

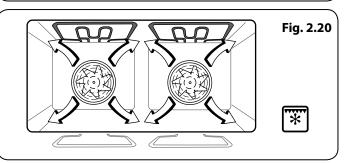
This is a fast, intensive form of cooking; keep an eye on the food cooking until you have become accustomed to this function.

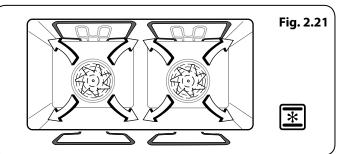


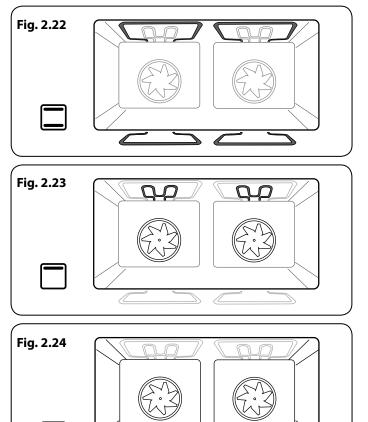












Conventional oven (Top and Base Heat)

This function combines the heat from the top and base elements (Fig. 2.22). It is particularly suitable for roasting and baking pastry, cakes and biscuits. Food cooked on the top rack will brown and crisp faster than on the lower rack, because the heat is greater at the top of the oven than at the base, as in 'fan assisted oven' function. Similar items being cooked will need to be changed around for even cooking (use racks 2 & 3). This also means that foods requiring different temperatures can be cooked together, using the cooler zone in the lower half of the oven and hotter area to the top.

Browning element



This function uses the element in the top of the oven only (Fig. 2.23). It is a useful function for the browning or finishing of pasta dishes, vegetables in sauce and lasagna, the item to be browned being already hot before switching to the top element.

Warming



This function uses the base element only (Fig. 2.24). It will crisp up your pizza or quiche base or finish off cooking the base of a pastry case on a lower rack. It is also a gentle heat, good for slow cooking of casseroles in the middle of the oven or for plate warming.

The Browning and Warming functions are useful additions to your oven, giving you flexibility to finish off items to perfection. With use, you will soon realize how these functions can combine to extend your cooking skills.

Self-cleaning



The oven has a self-cleaning function. The oven will run at a high temperature cycle to burn any cooking residue to ash that is easily cleaned away with a

damp cloth. For safety, the oven will lock during the cleaning cycle. See the 'Cleaning' section for further details on the self-cleaning operation.

Accessories

Oven Racks

Each range is supplied with the following:

- 1 broiler pan rack with telescopic runners (Fig. 2.25)
- 2 flat racks with telescopic runners (Fig. 2.26)
- 2 broiler pans with grids (Fig. 2.27)
- 2 sets of ladder rack supports (Fig. 2.28)

The oven shelves are retained when pulled forward but can be easily removed and refitted.

Shelves

To fit the telescopic shelf runners

Please note that it is not possible to fit telescopic runners to the bottom rack support location (**Fig. 2.29**)

With the runner arm in the closed position locate the opening of the upper rear slot on the side support (**Fig.2.30**). **DO NOT** locate any further than the opening at this point. Although not shown in (**Fig.2.30**), fitting is the same for the upper stud type supports.

Lift the front of the runner arm to locate the front slot against the side support (**Fig.2.30**).

Push the runner arm towards the rear of the oven. The catch at the front will lift and drop to secure the runner arm in place (**Fig.2.30**).

To fit a shelf to the telescopic shelf runners

Slide the telescopic runners forward until they stop. Holding the shelf above the runners, tilt the front downward and locate into the front of the runners. Lay the shelf flat. Press on the rear of the shelf to secure in place.

To remove a shelf from the Telescopic shelf runners

Slide the shelf out on the runners. While holding one of the runners securely, carefully lift the rear of the shelf upwards: the shelf will spring clear of the central restraining tab. Repeat for the opposite side of the shelf.

Note: To aid the removal of the shelf, you can insert a suitable flat tool through the opening in the side of the runners and lever the shelf clear (**Fig. 2.31**).

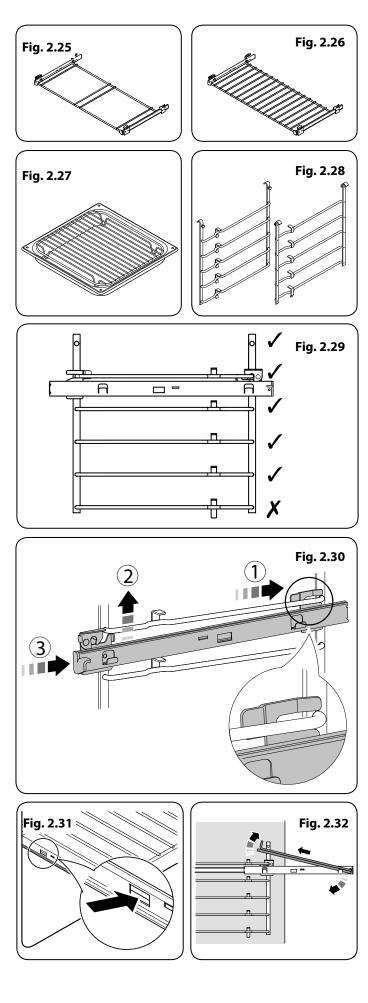
Tilt the front of the shelf downwards and then lift clear of the runners (**Fig. 2.32**).

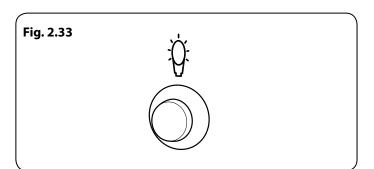
To remove the telescopic shelf runners

Firstly, remove the shelf as in the 'To Remove a Shelf from the Telescopic Shelf Runners' section.

Place a finger on the underside of the telescopic runner and lift.

Open the catch on top of the runner and pull the runner forward and down to remove.





To remove and refit the ladder rack supports

Lift the ladder support hooks out of the two locating holes in the oven side (or divider) before lifting the support clear of the bottom ladder restraint.

Refit by inserting the bottom of the ladder into the restraint before fitting the hooks through the locating holes.

Oven light

Press the button to turn on the oven lights (Fig. 2.33).

If one of the oven lights fail, turn off the range circuit breaker before you change the bulb. See the 'Troubleshooting' section for details on how to change an oven light bulb.

Storage

The bottom drawer is for storing oven trays and other cooking utensils. The drawer can be removed completely for cleaning, etc.



It can get very warm, DO NOT store anything in it that may melt or catch fire.

NEVER store flammable materials in the drawer. This includes paper, plastic and cloth items, such as cookbooks, plastic ware and towels, as well as flammable liquids.



DO NOT store explosives, such as aerosol cans, on or near the appliance.

Flammable materials may explode and result in fire or property damage.

3. Rotary clock

The clock must be set to the time of day before the oven will work.

Setting the clock

- 1. Once the range is connected and switched on, the display will start to flash.
- To set the time, turn the Timer (A) knob to the Clock (C) setting and back to the Manual (D) position. The center dot will flash, indicating the time can be set. Turn the Adjusting (B) knob either clockwise or counterclockwise (Fig. 3.1) to set the time.
- **3.** Once you have set the time, allow the center dot to stop flashing, the time is now set.

Setting the minute minder

A **Minute Minder** (**E**) is a feature that can be set for a number of minutes and sounds an alarm once the specified amount of time has elapsed.

- Turn the Timer (A) knob to the Minute Minder (E) setting – it should click into position (Fig. 3.2).
- 2. Turn the **Adjusting** (**B**) knob to set the amount of time required. Minimum time 1 minute (**Fig. 3.3**).
- 3. Turn the **Timer** (**A**) knob back to the **Manual** (**D**) setting to see the current time and the '**Bell**' symbol on the display.

Cancel the timer alarm

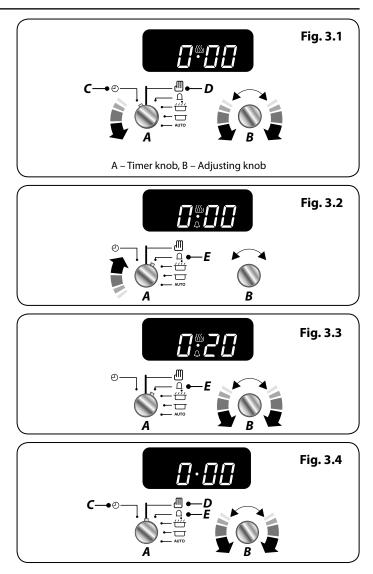
Once the specified time has elapsed, it will emit an alarm. There are two ways to cancel the alarm:

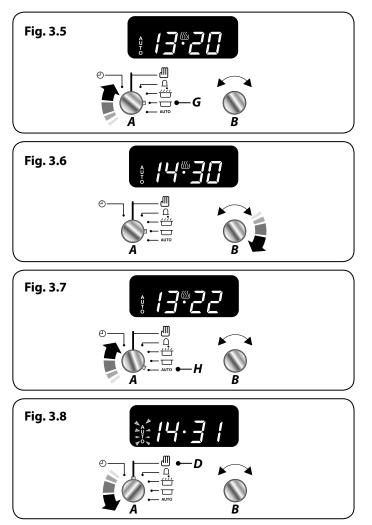
- 1. Turn the **Adjusting** (**B**) knob counter-clockwise or clockwise (**Fig. 3.4**).
- Turn the Timer (A) knob to the Clock (C) or the Minute Minder (E) setting, and back to the Manual (D) mode to return to normal cooking (Fig. 3.4).

NOTE

If the alarm is not manually switched off, it will stop after approximately 2 minutes.

When the Minute Minder is active, the clock will not dim between the hours of 10 pm and 6 am





To stop the oven at a specific time of day

You have set the required temperature and function mode and you would like the oven to automatically stop.

TOP TIP

Make a note of the current time so you do not forget.

- 1. Turn the **Timer** (**A**) knob to the **Stop Time** (**G**) setting: **AUTO**' will show in the display (**Fig. 3.5**).
- 2. Turn the **Adjusting** (**B**) knob to the amount of cooking time required. The display will show the current time plus the additional cooking time you have set (**Fig. 3.6**).
- **3.** Turn the **Timer** (**A**) knob to the **Auto** (**H**) setting. The display will show the current time, the cooking symbol and the word '**AUTO**' (**Fig. 3.7**).
- 4. Once the specified time has elapsed, it will emit an alarm and the oven will stop working. The cook pot symbol on the display will disappear and the word 'AUTO' will flash (Fig. 3.8).
- When you return, turn the Timer (A) knob to the Manual (D) setting to return to manual cooking (Fig. 3.8).

TOP TIP

You can check how much time you have left until the programmed stop time by turning the **Timer** (**A**) from **Auto** (**H**) to **Stop Time** (**G**) and back to **Auto** (**H**).

To start and stop the oven automatically

The timer allows you to automatically start and stop by a combination of the length of the cooking time and the stop time. Giving you the flexibility to cook casseroles etc. while you are out. You cannot set the actual start time.

- Turn the Timer (A) knob to the Cook Time (F) setting. Turn the Adjusting (B) knob clockwise to set the length of the cooking time required (Fig. 3.9).
- Turn the Timer (A) knob to the Stop Time (G) setting (Fig. 3.10). The display will show the current time of day plus the 'cook time' you just set.
- **3.** Turn the **Adjusting** (**B**) knob to set the time of day you want the oven to stop cooking (**Fig. 3.11**).
- **4.** Set the oven to the required cooking temperature and function mode.
- Turn the Timer (A) knob to the Auto (H) setting (Fig. 3.12). If the display shows the current time and the word 'AUTO' the oven is set to turn on and off.
- 6. When the program starts the oven, the cooking symbol will appear on the display. Once the specified time has elapsed, it will emit an alarm and the Multifunction Oven will stop working. The 'Cooking' symbol on the display will disappear and the word 'AUTO' will flash (Fig. 3.13).
- Once the specified time has elapsed, it will emit an alarm. There are two ways to cancel the alarm, refer to "Cancel the timer alarm" on page 13
 - The 'cook period', which is the length of time you want the oven to cook for.
 - The 'stop time', which is the time of day you want the oven to stop cooking.

Reset to manual cooking

To cancel any automatic settings, turn the **Timer** (**A**) knob to the **Manual** (**D**) setting and release (**Fig. 3.14**).

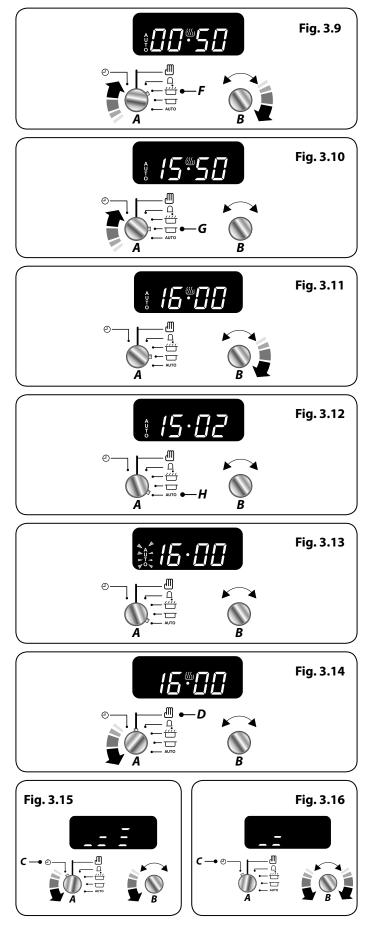
NOTE: Whilst this operation cancels all automatic program settings, it does not cancel the minute minder.

Beeper tone adjustment

The beeper tone can be adjusted to three different levels.

Turn the **Timer** (**A**) knob to the **Clock** (**C**) setting. Turn the **Adjusting** (**B**) knob counter clockwise until the tone bars are displayed (**Fig. 3.15**).

To adjust the tone of the alarm, release the **Adjusting** (**B**) knob and then turn counter clockwise again (**Fig. 3.16**). The tone of the alarm will change. Repeat these steps until the desired alarm tone is set.



4. Cooking tips

Δ

Cooking with a multi-function oven

Remember: not all modes are suitable for all food types. The oven cooking times given are intended as a guide only.

Tips on cooking with the timer

If you want to cook more than one dish, choose dishes that require approximately the same cooking time. However, dishes can be 'slowed down' slightly by using small containers and covering them with aluminum foil, or 'sped up' slightly by cooking smaller quantities or placing them in larger containers.

Very perishable foods such as pork or fish should be avoided if a long delay period is planned, especially in hot weather.

DO NOT place warm food in the oven to be timed.

DO NOT use a timed oven that is already warm.

If the oven light is left ON, the oven is so well insulated that the bulb can generate enough heat to cause bacterial growth on food.

Whole poultry must be thoroughly defrosted before being placed in the oven. Check that meat and poultry are fully cooked before serving.

General oven tips

The wire racks should always be pushed firmly to the back of the oven.

Baking trays with food cooking on them should be placed level with the front edge of the oven's wire racks. Other containers should be placed centrally. Keep all trays and containers away from the back of the oven as overbrowning of the food may occur.

When the oven is on, DO NOT leave the door open for longer than necessary, otherwise the knobs may get very hot.

- Always leave a 'finger's width' between dishes on the same rack. This allows the heat to circulate freely around them.
- To reduce fat splashing when you add vegetables to hot fat around a roast, dry them thoroughly or brush lightly with cooking oil.
- Where dishes may boil and spill over during cooking, place them on a baking tray.
- If you want to brown the base of a pastry dish, preheat the baking tray for 15 minutes before placing the dish in the center of the tray.

5. Cooking table

The oven control settings and cooking times given in the table below are intended to be used **as a guide only**. Individual tastes may require the temperature to be altered to provide a preferred result.

Food is cooked at lower temperature in a convection oven than in a conventional oven. When using recipes, reduce the convection oven temperature by 25°F (10 °C) and the cooking time by 5-10 minutes. The temperature in the convection oven does not vary with height in the oven so you can use any rack.

Food	Conventional Oven		Conventional Oven	Approximate Cooking Time
	Temperature °F (°C)	Rack position	Temperature °F (°C)	
Meat	l	1		
Beef (no bone)	325 (160)	2-3	300 (150)	30-35 minutes per 1lb +30-35 minutes.*
	400 (200)	2-3	375 (190)	20-25 minutes per 1lb +20-25 minutes.*
Lamb	325 (160)	2-3	300 (150)	30-35 minutes per 1lb +30-35 minutes.*
	400 (200)	2-3	375 (190)	20-25 minutes per 1lb +20-25 minutes.*
Pork	325 (160)	2-3	300 (150)	35-40 minutes per 1lb +35-40 minutes.*
	400 (200)	2-3	375 (190)	25-30 minutes per 1lb +25-30 minutes.*
Poultry				
Chicken	325 (160)	2-3	300 (150)	20-25 minutes per 1lb +20-25 minutes.**
	400 (200)	2-3	375 (190)	15-20 minutes per 1lb +15-20 minutes.**
Turkey	325 (160)	2-3	300 (150)	20 minutes per 1lb +20 minutes.**
	400 (200)	2-3	375 (190)	15 minutes per 1lb +15 minutes.**
Duck	325 (160)	2-3	300 (150)	25-30 minutes per 1lb.**
	400 (200)	2-3	375 (190)	20 minutes per 1lb.**
Casserole	300-325	2-3	300 (150)	2-4 hours according to recipe.
	(150-160)			
Fish				1
Fillet	375 (190)	3	350 (180)	15-20 minutes.
Whole	375 (190)	3	350 (180)	15-20 minutes per 1lb.
Cake & dessert			L	
Very rich fruit - Christmas, wedding, etc.	300 (150)	2	275 (140)	45-50 minutes per 1lb of mixture.***
Fruit 7" tin	300 (150)	2	275 (140)	2-21/2 hours.***
Fruit 9" tin	325 (160)	2 or 3	300 (150)	Up to 3½ hours.***
Madeira 7" tin	325 (160)	2 or 3	300 (150)	80-90 minutes.***
Cup cakes	350 (175)	2	325 (165)	15-25 minutes
Scones	400 (200)	2	375 (190)	10-15 minutes.****
Deep apple pie	375 (190)	2	350 (180)	45 minutes; interchange after 25 minutes.****
Plate tart	375 (190)	3	350 (180)	45 minutes; interchange after 25 minutes.****
Fruit cake 8" x 3.5"	300 (150)	3	275 (140)	1 hour 45 minutes - 2 hours.
Puff pastry	450 (230)	3	425 (220)	15-40 minutes according to size; interchange
				2/3rds through the cooking time.
Angel food cake	350 (175)	3	325 (165)	50-60 minutes

Food	Conventional Oven		Conventional Oven	Approximate Cooking Time
	Temperature °F (°C)	Rack position	Temperature °F (°C)	
Brownies	375 (190)	2	350 (180)	25-30 minutes; interchange after 15 minutes.
Muffins	375 (190)	2	350 (180)	25-30 minutes; interchange after 15 minutes.
Cookies	375 (190)	2	350 (180)	10-15 minutes; interchange after 15 minutes.
Pound cakes	375 (190	3	350 (180)	40-60 minutes.
Bread	425 (220)	2-3	400 (200)	20-30 minutes.

*Thoroughly thaw frozen joints before cooking. Meat may be roasted at 425°F (220°C) and the cooking time adjusted accordingly. For stuffed and rolled meats, add approximately 10 minutes per lb, or cook at 400°F (200°C) for 20 minutes then 325°F (160°C) for the remainder.

** For stuffed poultry, you could cook at 400°F (200°C) for 20 minutes then 325°F (160°C) for remainder. DO NOT forget to include the weight of the stuffing. For fresh or frozen prepacked poultry, follow instructions on the pack. Thoroughly thaw frozen poultry before cooking.

*** Using the conventional oven: when two tier cooking leave at least one runner space between racks. Position the baking tray with the front edge along the front of the oven rack.

**** Up to three tiers can be cooked in a convection oven, at the same time, but make sure to leave at least one runner space between each rack being cooked on.

6. Cleaning your range

Essential information

Before thorough cleaning, turn off the circuit breaker. Allow the range to cool.

After cleaning, remember to switch on the circuit breaker and reset the clock before re-using the range.



NEVER use paint solvents, caustic cleaners, biological powders, bleach, chlorine-based bleach cleaners, coarse abrasives or salt.



DO NOT mix different cleaning products – they may react together with hazardous results.

Daily care

Cleaning the range is not a welcomed chore, but it has to be done to maintain efficiency and appearance. Remember it is better to wipe up any spills as they occur, this will prevent them burning on and becoming more difficult to remove later.



Make sure the flow of combustion and ventilation air to the range is unobstructed – for example by buildup of fats or grease.

If the flame is distorted, check that the burner head is correctly placed over the burner base.

If the flame burns with a long white tip you should call for service.

Cleaning for spills

For spills and boil-overs that occur while cooking, as soon as possible turn off the burner and allow it to cool. **DO NOT** clean until the area is completely cooled down. Wipe up spills as soon as possible.

DO NOT allow surplus water to seep into the range.

Cooktop burners

The burner heads and caps can be removed for cleaning. Make sure they are absolutely dry before replacing (**Fig. 6.1**).

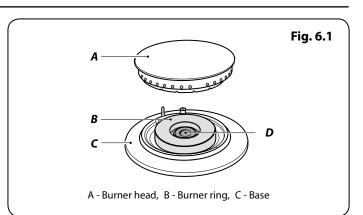
When replacing the burner head, ensure this locates properly within the base (**Fig. 6.2**).

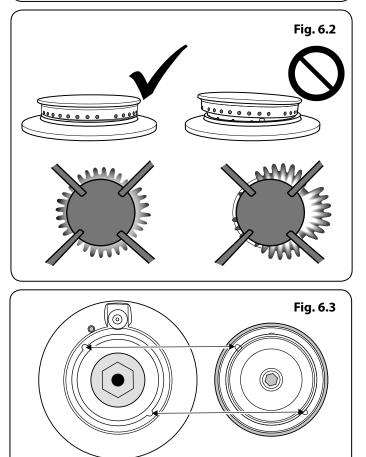
If you look at the bottom of the burner head you will see two 'pips'; these fit into the two notches in the burner base (**Fig. 6.3**).

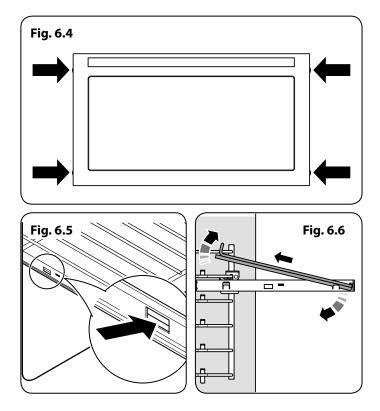
Check burner ports are not blocked. If blockage occurs, remove stubborn particles using a piece of fuse wire.

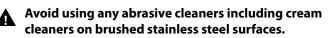
Stainless steel main top

Lift away pots or pans from main top. Remove grates from spillage area and carefully place in a sink of warm soapy water. Wipe loose debris from main top. Avoid using any abrasive cleaners including cream cleaners on brushed stainless steel surfaces. For best results use a liquid detergent cleaner. Rinse with cold water and thoroughly dry with a clean, soft cloth. Ensure all parts are dry before repositioning.









Never use caustic or abrasive cleaners as these will damage the surface.

Griddle (Optional Extra)

Always clean the griddle after use. Allow to cool completely before removing. Immerse the griddle plate in hot soapy water. Use a soft cloth or, for stubborn stains, a nylon washing up brush.

NOTE: If the griddle is washed in a dishwasher then some dishwasher residue may appear on the back. This is normal and will not affect the performance of your griddle.

Control panel and oven doors

The control panel and control knobs should only be cleaned with a soft cloth wrung out in clean hot soapy water - but take care that no surplus water seeps into the appliance. Wipe with a clean dampened cloth then polish with a dry cloth. The oven doors should only be cleaned with a soft cloth wrung out in clean, hot, soapy water.

Removing the oven door outer panel

The outer door panel can be removed so that the inside of the glass can be cleaned. Undo the 4 screws (2 each side) in the door (Fig. 6.4). Open the door slightly and, using the handle, carefully lift the door outer upwards.

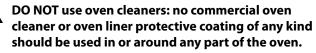
Refit in reverse.

Self-clean oven

WARNING! Remove all cookware, racks, and the rack supports from the oven before using the self-clean function. If the racks and supports are left in the oven they will discolor and become rough.



DO NOT clean the door gasket: the door gasket is essential for a good seal. Care should be taken not to rub, damage or move the gasket.



Clean only parts listed in this User Guide.

DO NOT use the oven light while in self-cleaning mode.

To remove and refit the telescopic rack and runners

Slide the rack out on the runners. While holding one of the runners securely, carefully lift the rear of the rack upwards: the rack will spring clear of the central restraining tab. Repeat for the opposite side of the rack.

NOTE: To aid the removal of the rack, you can insert a suitable flat tool through the opening in the side of the runners and lever the rack clear (Fig. 6.5).

Tilt the front of the rack downwards and then lift clear of the runners (Fig. 6.6).

Refit in the reverse order, making sure to push the rack down onto the runner arms.

To remove and refit the ladder rack supports

Lift the ladder support hooks out of the two locating holes in the oven side (or divider) before lifting the support clear of the bottom ladder restraint.

Refit by inserting the bottom of the ladder into the restraint before fitting the hooks through the locating holes.

Before using the self-clean function

Pre-clean any areas that are not reached by the self-clean cycle, such as the outer edges of the oven door. Wipe up any excess fat or liquids.

Before operating the self-clean cycle, use hot water and detergent or a paste of water and baking soda to remove any difficult spots. Rinse off all residue with vinegar water. This will prevent this soil from being baked on by the high heat of the self-cleaning cycle.

Self-clean operation

Set the oven function control to self-clean (**Fig. 6.7**). The timer display will now show a 'P' (**Fig. 6.8**).

The Timer knob and Adjusting knob are shown in Fig. 6.9.

Turn the Timer knob to the [#] position (**Fig. 6.10**) to set the default cleaning time (2 hours). To adjust the cleaning cycle duration, rotate the adjusting knob.

Note that the maximum time for the self-cleaning operation is 2 hours.

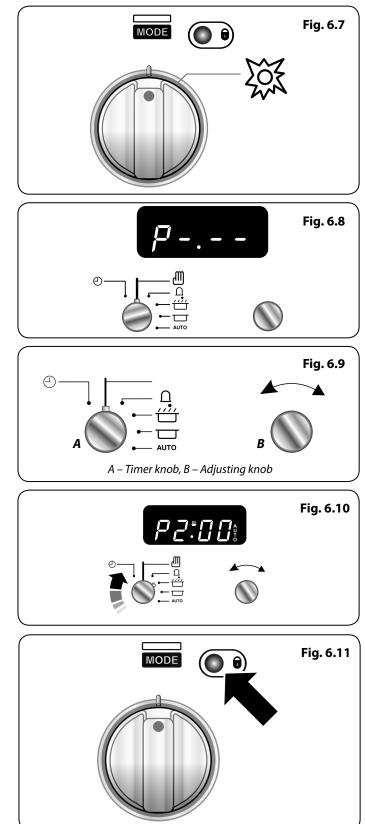
The cooling fan will switch to high speed and as soon as a certain temperature is reached, the oven door will lock as indicated by the illuminated interlock neon (**Fig. 6.11**).

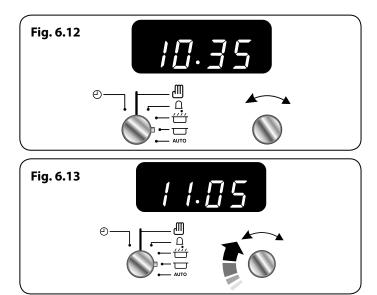
NOTE: Because of the high temperatures generated during the self-cleaning, the door will remain locked for some time after the cleaning cycle has finished. When the oven temperature has fallen sufficiently, the interlock neon will go out and the door will unlock.

WARNING!The oven will still be hot!

When the door has unlocked, turn the oven function control back to OFF.

When the door has unlocked and the oven has cooled, use a damp cloth the clean the debris and ash.





		,,
Part	Finish	Recommended Cleaning Method
Burner grates & top of burner heads	Porcelain enamel	Mildly abrasive cleaner such as Bon Ami® or Soft Scrub®. Dishwasher.
Burner base	Aluminum	As above.
Maintop top	Stainless steel	Hot soapy water, non- abrasive cleaner, soft cloth.
Griddle (Optional Extra)	Non-stick surface	Allow to cool. Wash in hot soapy water. Do not use abrasive cleaners/scourers. Dishwasher.
Sides, toe-kick	Painted enamel	Hot soapy water and soft cloth.
Control panel	Painted enamel or stainless steel	Non-abrasive cleaner, soft cloth.
Oven interior	Porcelain enamel	Branded oven cleaner suitable for enamel surfaces. Take care not to damage the oven door seals.
Door handles	Chrome plated aluminum	Non-abrasive cleaner, hot soapy water, soft cloth.
Oven racks & supports	Chrome	Dishwasher. Hot soapy water and scouring pad.
Door inner	Glass	Hot soapy water and soft cloth. Mildly abrasive cleaner with a soft cloth.
Outer door and drawer	Painted enamel or stainless steel	Multi-surface cleaner, soft cloth.

Table 6.1

To cancel the self-cleaning cycle

To cancel the self-clean function, turn the Timer knob to the [#] button and then rotate the adjusting knob counterclockwise to set the timer back to (0.00). The heating part of the cycle will end and the cooling part of the cycle will start. When the oven temperature has fallen sufficiently, the interlock neon will go out and the door will unlock.

When the door has unlocked, turn the oven function control back to OFF.

WARNING!DO NOT attempt to stop the self-clean cycle by turning the oven function control to OFF. While this will stop the heating part of the cleaning cycle, it will also stop the ventilation fans from running and cause the oven thermal cut-out to trip.

To start the self-cleaning cycle automatically

By using the timer, the self-clean cycle can be programmed to turn on and off automatically.

NOTE: You cannot set the start time directly – this is set automatically by setting the 'Cleaning period' and the 'Stop time'.

Set the oven function control to self-clean (**Fig. 6.7**). Turn the Timer knob to the [<u>"</u>] position to set the default cleaning time (**Fig. 6.10**). To adjust the cleaning cycle duration, rotate the Adjustment knob and set the time as required.

Now turn the Timer knob to the $[\Box]$ position to bring up the minimum 'Stop time' (**Fig. 6.12**) on the display. Rotate the Adjustment knob clockwise until the required 'Stop time' shows (**Fig. 6.13**).

The self-clean cycle will now start automatically.

To cancel the automatic self-cleaning cycle

To return to manual operation, the 'Cleaning period' must be cancelled. Turn the Timer knob to the $[_]$ position and rotate the Adjustment knob counter-clockwise until the timer display reads (0.00).

Cleaning table (Table 6.1)

Cleaners listed are available from supermarkets or electrical retailers as stated. For enameled surfaces, use a cleaner that is approved for use on vitreous enamel.

Regular cleaning is recommended. For easier cleaning, wipe up any spillages immediately.

7. Troubleshooting

Cooktop ignition or cooktop burners faulty

Is the power on?

Are the sparker (ignition electrode) or burner holes blocked by debris?

Are the burner heads correctly located?See the section entitled 'Cleaning'.

Remember that each cooktop burner has a special safety device that stops the flow of gas if the flame goes out. When lighting a cooktop burner, the safety device has to be overridden by holding in the control knob so that the gas can flow. This allows the flame sensor to heat up and operate the safety device. Keep holding the knob pressed in to let the gas through to the burner for a few seconds. The igniter should spark and light the gas.

If, when you let go of the control knob, the burner goes out, the safety device has not held in. Turn the control to the off position and wait one minute, then try again this time holding in the control knob for slightly longer.

Cooktop burners will not light

If only one or all the cooktop burners will not light, make sure that the parts have been replaced correctly after wiping or removing for cleaning.

Check that there is not a problem with your gas supply. You can do this by making sure that other gas appliances you may have are working.

Do the burners spark when you push in the control knob?If not check the power is on.

Steam is coming from the oven

When cooking foods with a high water content (e.g. oven fries), there may be some steam visible at the rear grille. Take care when opening the oven door as there may be a momentary puff of steam when the oven door is opened. Stand well back and allow any steam to disperse.

An oven fan is noisy

The sound of the oven fan may change as the oven heats up – this is perfectly normal.

What cleaning materials are recommended for the range?

See the 'Cleaning' section for a full list of recommended cleaning materials.

We DO NOT recommend corrosive or caustic cleaners as these may damage your range.

The knobs get hot when I use the oven, can I avoid this?

Yes, this is caused by heat rising from the oven and heating them up. **DO NOT** leave the oven door open.

If there is an installation problem and I don't get my original installer to come back to fix it, who pays?

You do. Service organizations will charge for their service if they are correcting work carried out by your original installer. It is in your interest to track down your original installer.

Current operated ground fault circuit breaker

The combined use of your cooker and other domestic appliances may cause nuisance tripping, so we recommend that the cooker is protected on an individual RCD (Residual Current Device) or RCBO (Residual Current Breaker with Overload).

Food is cooking too slowly, too quickly, or burning

Cooking times may differ from your previous oven. Check that you are using the recommended temperatures and rack positions. See the oven cooking guide section of the instructions. The oven control settings and cooking times are intended to be used only as a guide. Individual tastes may require the temperature to be altered either way to get the results you want. Try cooking at a higher temperature setting.

The oven is not cooking evenly

If you are cooking a large item, be prepared to turn it round during cooking.

If two racks are used, check that space has been left for the heat to circulate. When a baking sheet is put into the oven, make sure it is placed centrally on the rack.

Check that the door seal is not damaged.

A dish of water when placed on the rack should be the same depth all over.(For example, if it is deeper at the back, then the back of the range should be raised up or the front lowered).

If the range is not level, arrange for your supplier to level it for you.

Oven not coming on

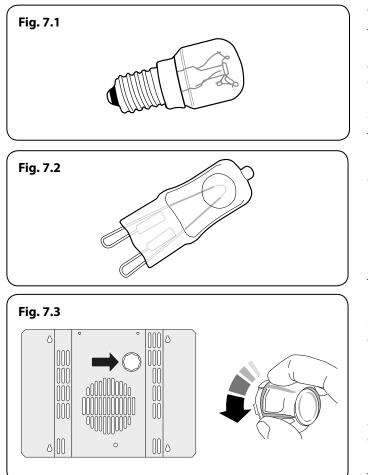
Is the power on?

If not, there may be something wrong with the power supply. Is the range supply on at the circuit breaker?

Have you set a cooking function?

Oven temperature getting hotter as the range gets older

If turning the knob down has not worked, or only worked for a short time, then you may need a new thermostat. This should be installed by a service technician (see the 'Service and Parts' section of the instructions).



Oven light is not working

The bulb has probably burnt out. You can buy a replacement bulb (which is not covered under the warranty) from a good electrical store. Depending on the type of bulb, ask for a 15W – 110V / 130V lamp (**Fig. 7.1**) or a 40W - 110V / 130V halogen lamp (G9) (**Fig. 7.2**). **Note:** For bulb type 1, it **MUST** be a special bulb, heat resistant to $300 \,^{\circ}$ C.

Turn off the power at the circuit breaker.

Before removing the existing bulb, turn off the power supply and make sure that the oven is cool. Open the oven door and remove the oven shelves.

Unscrew the bulb cover by turning counter-clockwise. It may be very stiff (**Fig. 7.3**).

For bulb type 1

Taking care to protect your fingers with a glove in case the bulb should shatter, unscrew the old bulb.

Screw in the new bulb; screw back the bulb cover. Turn on the circuit breaker and check that the bulb now lights.

For bulb type 2

Pull the existing bulb to remove it. When handling the replacement bulb, avoid touching the glass with your fingers as oils from your hands can cause premature failure. Push, click in the replacement bulb.

Replace the bulb cover by turning it a quarter turn, clockwise. Turn on the circuit breaker and check that the bulb now lights.

8. Installation Instructions

WARNING!

If the information in these instructions is not followed exactly, a fire or explosion may result, causing property damage, personal injury or death.

DO NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS

DO NOT try to light any appliance.

DO NOT touch any electrical switch.

DO NOT use any phone in your building.

Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

If you cannot reach your gas supplier, call the fire department.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

WARNING!

The anti-tip device supplied with this range must be installed when the appliance is installed. This will reduce the risk of tipping of the appliance from abnormal usage or by excessive loading of the oven door.

AWARNING!

- ALL RANGES CAN TIP. A CHILD OR ADULT CAN TIP THE RANGE AND BE KILLED.
- INSTALL ANTI-TIP BRACKET PACKED WITH RANGE SEE INSTALLATION
 INSTRUCTIONS.
- A CHILD OR ADULT CAN TIP THE RANGE AND BE KILLED
- ENGAGE THE RANGE TO THE ANTI-TIP DEVICE SEE INSTALLATION INSTRUCTIONS.
- RE-ENGAGE THE ANTI-TIP DEVICE IF THE RANGE IS MOVED.
- FAILURE TO DO SO CAN RESULT IN DEATH OR SERIOUS BURNS TO CHILDREN OR ADULTS.

The following symbols are related to safety and are used on the product and throughout this manual.

Meaning / Description	Symbol	Meaning / Description	Symbol
WARNING / CAUTION An appropriate safety instruction should be followed or caution taken if a potential hazard exists.	\triangle	HEAVY This product is heavy and reference should be made to the safety instructions for provisions of lifting and moving.	
DANGEROUS VOLTAGE To indicate hazards arising from dangerous voltages.		DISCONNECT MAINS SUPPLY Disconnect incoming supply before inspection or maintenance.	
PROTECTIVE EARTH (GROUND)			
To identify any terminal which is intended for connection to an external conductor for protection against electric shock in case of a fault, or the terminal of a protective earth (ground) electrode.			

INSTALLATION

Check the appliance is electrically safe and gas sound when you have finished.

9. Service and parts

Firstly, please complete the appliance details below and keep them safe for future reference – this information will enable us to accurately identify the particular appliance and help us to help you. Filling this in now will save time and inconvenience if you later have a problem with the appliance. It may also be of benefit to keep your purchase receipt with this leaflet. You may be required to produce the receipt to validate a warranty field visit.

Dealer's Name and Address	
Name of Appliance	
Appliance Serial Number*	
Fuel Type	
Date of Purchase	
Installer's Name, Address and Telephone No.	
Date of Installation	

* This information is on the appliance data badge.

If you have a problem

In the unlikely event that you have a problem with your appliance, please refer to rest of this booklet, especially the problem solving section, first to check that you are using the appliance correctly.

If you are still having difficulty, please contact Tech Support at 800-223-3900 or email techsupport@agamarvel. com.

Please note

For warranty information or to register your AGA range, go to www.aga-ranges.com. You may also refer to the warranty document provided with the appliance or contact Customer Service at 800-223-3900.

Out of warranty

We recommend that our appliances are serviced regularly throughout their life to maintain the best performance and efficiency. The frequency of service will depend on usage – for normal usage once a year should suffice. Service work should only be carried out by a suitably Authorized Person.

Spare parts

To maintain optimum and safe performance, we recommend that only genuine spare parts are used. **DO NOT** use reconditioned or unauthorized controls. Contact Order Desk at 800-223-3900 to order AGA spare parts or email orderdesk@ agamarvel. com.

INSTALLATION Check the appliance is electrically safe when you have finished.

10. Installation safety instructions

Regulations

- Installation of this range must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA.54, latest edition.
- In Canada, installation must conform with the current Natural Gas Installation Code, CAN/ CGA-B149. 1 or the current Propane Installation Code, CAN/CGA-B149.2, and with local codes where applicable.
- In Canada, electrical grounding must be in accordance with the current CSA C22.1 Canadian Electrical Code Part 1 and/or local codes. See 'Electrical Connection' in this section.

CSA 1.1, latest edition and CAN/CGA-22.2 latest edition.

This range becomes hot in use, the cooktop burners produce exhaust gases.

IMPORTANT





The range must be properly grounded.

This appliance is heavy. Ensure you have the correct facilities to complete the move. To find the weight of the appliance, refer to the "Technical data".



Refer to "Positioning the range".

Save these instructions for the local electrical inspector's use.

For your safety

DO NOT store or use combustible materials, gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

If you smell gas,

- open windows.
- DO NOT touch electrical switches.
- Extinguish any open flame.
- Immediately call your gas supplier.

- Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information, consult a qualified engineer.
- NEVER reuse old flexible connectors. The use of old flexible connectors can cause gas leaks and personal injury. Always use NEW flexible connectors when installing a gas appliance.

IMPORTANT!

- Remove all packing material and literature from oven before connecting gas and electrical supply to range.
- Have your range installed by a qualified installer.
- **DO NOT** install your range on a substrate that cannot withstand 180°F (82°C).
- **DO NOT** install your range directly onto carpeting. Ensure an appropriate, non-combustible, substrate is installed prior to installing the range.
- Make sure the wall coverings around the range can withstand heat generated by the range up to 200 °F (93 °C).
- There must be a gap of at least 30" (762 mm) between the top of the range and any combustible surface above it.
- If a ventilating hood is installed above the range follow the installation instructions supplied with the hood.



This type of ventilation system may cause ignition and combustion problems with the gas cooking appliance, resulting in personal injury or unintended operation. Ventilating systems that direct the air upwards can be used.



Items of interest to children should not be stored above a range – children climbing on the range to reach items could be seriously injured.

INSTALLATION Check the appliance is electrically safe when you have finished.

Converting to propane gas

This appliance is supplied set for natural gas.

A conversion kit for Propane gas is supplied with the range.

The conversion must be performed by a qualified LP gas installer. See the 'Conversion' section at the back of this installation manual for more details.



For installation 5000 ft above sea level, the appliance must be converted using high altitude kit A065744. Contact your distributor.

Location of the range

The range may be installed in a kitchen/kitchen dining area but **NOT** in a room containing a bath or shower.

The range is freestanding and should not be placed on a separate base.

DO NOT locate the range where it may be subject to strong drafts. Any openings beneath the range or behind the range should be sealed.

The range should be positioned on a solid substrate.



Your range is heavy DO NOT place on soft floor coverings, such as cushioned vinyl or carpeting.

Use care when moving the range on cushioned vinyl or carpeted flooring.

When the floor covering ends at the front of the range, the area that the range will rest on should be built up to the same level or higher than the floor covering.



Also, make sure your floor covering will withstand 180°F. (See the Installation Safety Instructions section).



(See the Installation Safety Instructions section).

INSTALLATION

Check the appliance is electrically safe and gas sound when you have finished.

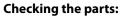
11. Installation

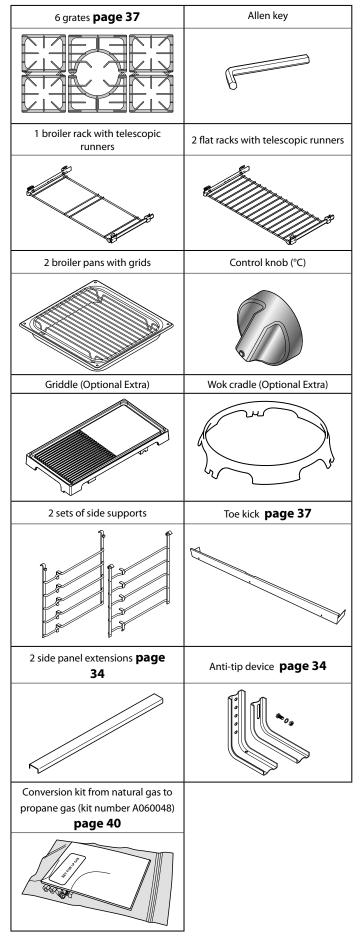
You will also need the following tools:

- 1. Electric drill
- 2. Masonry drill bit & anchors (only required if installing the range on a stone or concrete floor)
- 3. Steel tape measure
- 4. Phillips head screwdriver
- 5. Flat head screwdriver
- 6. 2.5 mm Allen key (supplied with the range)
- 7. Spirit level
- 8. Open-end or adjustable wrench
- 9. Pencil and ruler
- 10. Pipe wrenches

Additional materials you may need:

- Gas line shut-off valve.
- Pipe joint sealant or UL-approved pipe thread tape with Teflon* that resists action of natural and LP gases.
- Flexible metal appliance connector (1/2" I.D.). A 5 foot length is recommended for ease of installation but other lengths are acceptable. **NEVER** use an old connector when installing a new range.
- Flare union adapter for connection to gas supply line (3/4" or 1/2" NPT x 1/2" I.D.).
- Flare union adapter for connection to pressure regulator on range (1/2" NPT x 1/2" I.D.).
- To protect any floor covering under the range, use a sheet of ¼" thick plywood or equivalent large enough to stand the range on.





INSTALLATION Check the appliance is electrically safe and gas sound when you have finished.

Positioning the range

Fig. 11.1 shows the minimum recommended distances and clearances from the range to nearby surfaces.

You **must** provide adequate clearances between the range and adjacent combustible surfaces. These dimensions must be met for safe use of your range.

The location of the electrical outlet and pipe opening (see Gas Pipe and Electric Outlet Locations) may be adjusted to meet specific requirements.

A gap of at least 3" (7.5 cm) should be left between each side of the range **above** the cooktop level and any adjacent vertical surface.

The cooktop surround should be level with, or above, any adjacent work surface.

For non-combustible surfaces (such as unpainted metal or ceramic tiles), the gap each side can be reduced from 3" to 1" (2.5 cm).

A minimum space of 31½" (80 cm) is required between the top of the cooktop and a horizontal combustible surface. The maximum depth for cabinets installed above cooktops is 24" (61 cm).

The depth of the range is $28\frac{3}{2}$ " (71.36 cm) overall (**Fig. 11.2**).

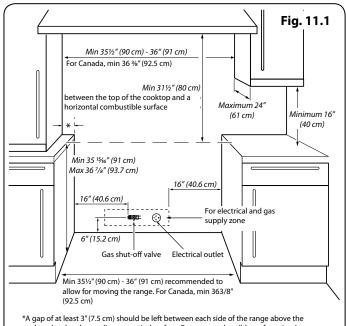
Any range hood should be installed in accordance with the hood manufacturer's instructions.

Any splashback must be fitted in accordance with the manufacturers instructions. Allowance should be made for the additional height of the flue trim, which is fitted to the cooker hob.

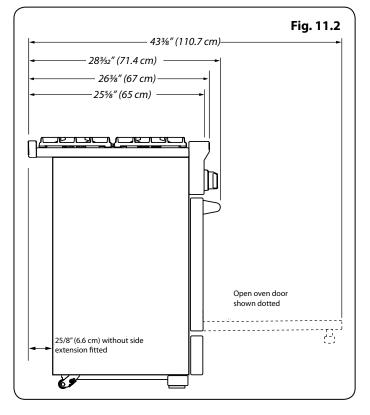
For safety reasons, curtains must not be sited immediately behind the range.

We recommend a gap of $35\frac{1}{2}$ " (90 cm) – 36" (91 cm (for Canada $36\frac{3}{2}$ " (92.5 cm)) between cupboards to allow for moving the range.

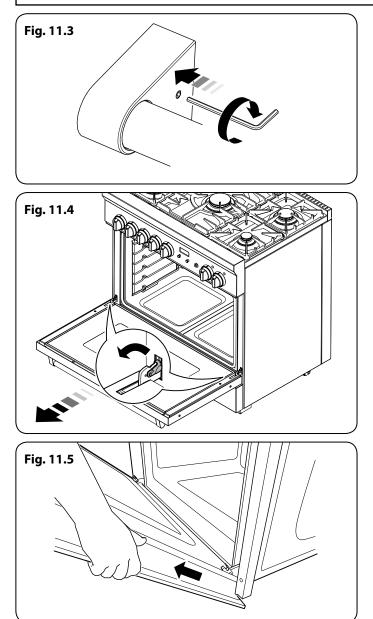
USA only: If a flush fit is required, install the range up to the cupboard on one side, then install the cupboard on the other side.



cooktop level and any adjacent vertical surface. For non-combustible surfaces (such as unpainted metal or ceramic tiles), the gap each side can be reduced from 3" to 1" (2.5 cm).



INSTALLATION Check the appliance is electrically safe and gas sound when you have finished.



Fitting the oven handle

The handle is supplied as a handle assembly, 2 grub screws (supplied fitted to handle assembly) and an Allen key.

Fit the assembled handle to the projecting mounting studs on the upper oven door and fix it in place by tightening the grub screws (**Fig. 11.3**).

Moving the range

- On no account try and move the range while it is plugged into the electricity supply.
- This appliance is heavy. Ensure you have the correct facilities to complete the move. To find the weight of the appliance, refer to the "Technical data".

We recommend two people maneuver the range. Ensure that the floor covering is firmly attached or removed to prevent it being disturbed when moving the range around.

To help you, there are two leveling rollers at the back, and two screw-down levelling feet at the front.

Removing the oven door

To remove the door, open the door fully. Swivel the locking 'U' clips forward to the locking position (**Fig. 11.4**). Grip the sides of the door, lift upwards and then slide the door forwards (**Fig. 11.5**) and remove.

Lowering the two rear rollers

To adjust the height of the rear of the range, first fit a 13 mm spanner or socket wrench onto the hexagonal adjusting nut (**Fig. 11.6**).

Make 10 complete (360°) turns clockwise.

Make sure you lower BOTH REAR ROLLERS.

NOTE that the rollers are only intended to aid installation – the range should not be moved once it is installed.

Completing the move

Grip under the fascia panel and lift the front of the range slightly. Carefully position the range close to its final position, leaving just enough space to get behind it (**Fig. 11.7**).

DO NOT use the door handles or control knobs to maneuver the range.

IMPORTANT: Remove all tape and packaging. Make sure the burner heads are properly seated and level. Take the accessory pack out of the oven. Check to be sure that no range parts have come loose during shipping.

Recheck that the appliance is level.

Installing the flue grille

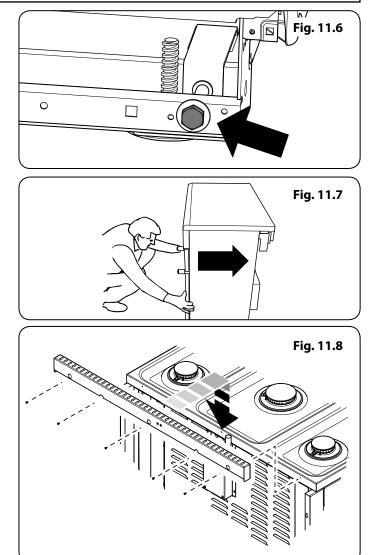
The flue grille is packed separately. Locate the grille onto the flue and secure to the cooktop with the 5 screws supplied (**Fig. 11.8**).

Leveling

It is recommended that you use a spirit level on a rack in the oven to check the level.

Place the range in its intended position, taking care not to twist it, within the gap between the kitchen units as damage may occur to the range or the units.

The front feet and rear rollers can be adjusted to level the range. To adjust the height of the rear of the cooker, use a $\frac{1}{2}$ " (13 mm) spanner or socket wrench to turn the adjusting nuts at the front bottom corners of the cooker. To set the front feet, turn the bases to raise or lower.



A

Anti-tip device

the range itself.

Floor fixing

the back of the range.

range (Fig. 11.10).

Wall fixing

Procedure

panel.

1.

use suitable screws and fixings.

Side panel extension kit

WARNING: The range must be secured using the

When fitting an anti-tip device, please refer to the instructions

Using the screw supplied, assemble the anti-tip bracket base

Using suitable screws and fixings, attach the assembled antitip bracket to the floor to ensure sufficient engagement with

Adjust and lock the inner anti-tip bracket to give a ¹/₈" (3 mm) clearance above the engagement edge in the back of the

Where floor fixing is impractical and provided that the outer

Two side extension panels are supplied with the range. These

Loosen the 2 screws in the rear edge of the range side

can be installed where the side of the range is exposed, preferably during the installation of the appliance.

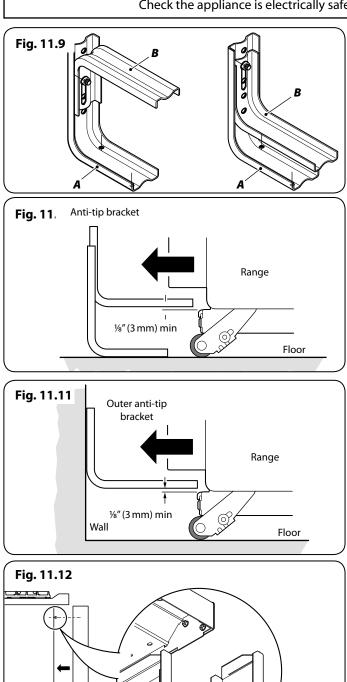
anti-tip bracket can be attached to a solid wall, the anti-tip device may be attached to a wall (**Fig. 11.11**). Make sure to

supplied with the device for further details on fitting. **NOTE**: The range must be set to the correct height and

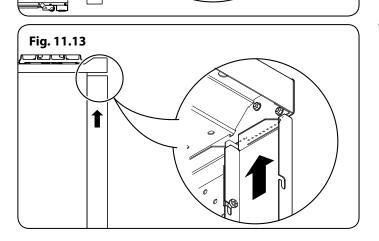
leveled before the anti-tip bracket is installed.

and anti-tip bracket extension (Fig. 11.9).

anti-tip bracket supplied. Unless properly installed, the range could be tipped by leaning on the door. Injury might result from spilled hot liquids or from



- Using the cut-outs, site the side extension onto the protruding screw heads (Fig. 11.12).
 Push the side extension up so that the tab in the bo
 - Push the side extension up so that the tab in the bottom of the flue extension fits into the slot at the top (Fig. 11.13).
- **4.** Hold the side extension in place and tighten the screws to secure.



Gas connection

Installation of this range **MUST** conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1-latest edition.

In Canada

The range **MUST** be installed in accordance with the current CGA Standard CAN/CGA-B149 – Installation Codes for Gas Burning Appliances and Equipment and/or local codes.

In the Commonwealth of Massachusetts

When installed within the Commonwealth of Massachusetts, this product **MUST** be installed by a licensed plumber or gas fitter.

A 'T' handle type manual gas valve **MUST** be installed in the gas supply line to this appliance.

Gas supply requirements

The recommended gas pipe outlet locations are shown in **Fig. 11.14**, **Fig. 11.15** and **Fig. 11.16**.

Provide adequate gas supply

Before installation, ensure that the local distribution conditions (nature of the gas and gas pressure) and the adjustment of the appliance are compatible.

The range is designed to operate at a manifold pressure of 4" of the water column (1 kPa) on natural gas. A conversion kit for LP gas (Propane) is supplied with the range. When converted to LP gas, a pressure of 10" of the water column (2.49 kPa) is required.

Make sure you are supplying your range with the correct type of gas.

If the range is to be used on LP gas, a qualified LP installer **MUST** convert it. We recommend that the range be converted before installation. This must be done before the range can be used on LP gas.

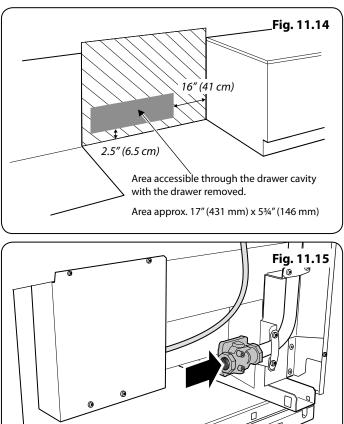
For proper operation, the pressure of natural gas supplied to the regulator must be between $4\frac{1}{2}$ and 13 of the water column (1.12-3.24 kPa).

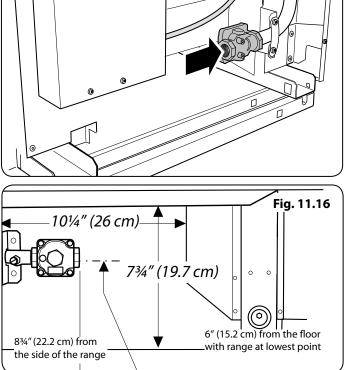
For LP gas, the pressure supplied must be between 10" and 13" of the water column (2.49-3.24 kPa).

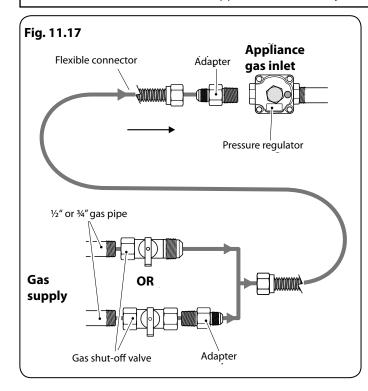
When checking for proper operation of the regulator, the inlet pressure must be at least 1" (0.25 kPa) greater than the operating (manifold) pressure as given above.

The pressure regulator located at the inlet of the range manifold must remain in the supply line regardless of whether natural or LP gas is being used.

A flexible metal appliance connector used to connect the range to the gas supply line should have an I.D. of $\frac{1}{2}$ " and be 5' in length for ease of installation.







Connect the range to the gas supply

Shut off the main gas supply valve before disconnecting the old range and leave it off until the new hookup has been completed. **DO NOT** forget to relight the pilot on other gas appliances when you turn the gas back on.

Because hard piping restricts movement of the range, the use of a CSA International-certified flexible metal appliance connector is recommended unless local codes require a hardpiped connection.

If disconnection of the restraint chain is necessary, ensure the restraint is reconnected when the appliance is returned to its original installed position.

NEVER use an old connector when installing a new range. If the hard piping method is used, you must carefully align the pipe. **The range cannot be moved after the connection is made**.

To prevent gas leaks, put pipe joint compound on, or wrap pipe thread tape with Teflon* around, all male (external) pipe threads.

- A. Install a manual gas line shut-off valve in the gas line in an easily accessed location outside of the range. Make sure everyone operating the range knows where and how to shut off the gas supply to the range.
- **B.** Install a male ½" flare union adapter on the ½" NPT internal thread elbow at the regulator inlet. Use a backup wrench on the regulator fitting to avoid damage. When installing the range from the front, remove the 90° elbow for easier installation.
- **C.** Install a male 1/2" or 3/4" flare union adapter on the NPT internal thread of the manual shut-off valve, taking care to back up the shut-off valve to keep it from turning.
- **D.** Connect a flexible metal appliance connector to the adapter on the range. Position the range to permit connection at the shut-off valve.
- E. When all connections have been made, make sure all range controls are in the OFF position. Turn on the main gas supply valve and use a liquid leak detector at all joints and connections to check for leaks in the system. Use a product specifically manufactured for leak detection. Leak testing of the appliance must be conducted in accordance to the local codes.

Caution: DO NOT use a flame to check for gas leaks.

When using test pressures greater than ½ psig (3.5 kPa) to pressure test the gas supply system of the residence, disconnect the range and individual shut-off valve from the gas supply piping.

When using test pressures of ½ psig (3.5 kPa) or less to test the gas supply system, simply isolate the range from the gas supply system by closing the individual shut-off valve.

Flexible connector

Installer: Inform the consumer of the location of the gas shut-off valve (**Fig. 11.17**).

*Teflon: Registered trademark of DuPont

Seal the openings

Seal any openings in the wall behind the range and in the floor under the range when hookups are completed.

IMPORTANT: When all connections are completed, make sure the flow of combustion and ventilation air to the range is unobstructed.

Leveling

Place the range in its intended position, taking care not to twist it, within the gap between the kitchen units as damage may occur to the range or the units. Install the oven racks in the oven. Check for levelness by placing a level or a cup, partially filled with water, on one of the oven grids. If using a spirit level, take two readings with the level placed diagonally first in one direction and then the other.

The front feet and rear rollers can be adjusted to level the range. To adjust the height of the rear of the cooker, use a $\frac{1}{2}$ " (13 mm) spanner or socket wrench to turn the adjusting nuts at the front bottom corners of the cooker. To set the front feet, turn the bases to raise or lower.

Final fitting

Installing the toe kick

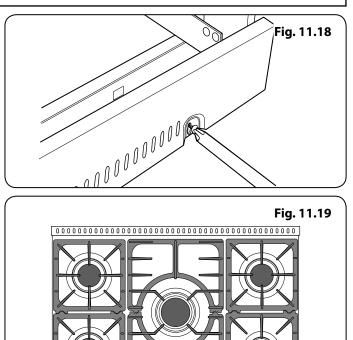
Remove the 3 screws for the toe kick mounts along the front bottom edge of the range (**Fig. 11.18**). Fasten the toe kick using these screws (alternative color screws can be found in the loose parts pack).

Fitting the grates

Make sure that the grates are in the correct position and seated properly (**Fig. 11.19**).

Refitting the oven door

To refit the door, slide the hinges back into their slots. Rotate the locking 'U' clips back to fit onto the hinges.



Range operational checks

Oven check

Turn on the oven and check that the oven fans start to turn and that the oven starts to heat up. Turn off the oven.

Oven light check

Press the oven light switch and check that the lights are working.

NOTE: The oven light bulbs are not included in the warranty.

Ignition of the cooktop burners check

Operation of all cooktop burners should be checked after the range and gas supply lines have been carefully checked for leaks.

Check each burner in turn. There is a flame safety device that stops the flow of gas to the burner if the flame goes out. There is also a spark ignition system that works when the knob is pressed in.

For each burner, push in and turn a knob to the lighting position.

The igniter should spark and light the gas. Keep holding the knob pressed in to let the gas through to the burner for a few seconds.

If, when you let go of the control knob, the burner goes out, the safety device has not held in. Turn the control to the off position and wait one minute, then try again this time holding in the control knob for slightly longer.

Quality of flames

If the flame is distorted, check that the burner head is correctly placed over the burner base.

MAKE SURE THE FLOW OF COMBUSTION AND VENTILATION AIR TO THE RANGE IS UNOBSTRUCTED.

MAKE SURE ALL CONTROLS ARE LEFT IN THE OFF POSITION.

Moving the range for servicing

Follow these procedures to remove appliance for servicing:

Shut off the gas supply and turn off the circuit breaker. Disconnect gas supply tubing to the appliance and unplug the electrical supply cord.

NOTE: A suitably qualified person should disconnect and reconnect the gas supply.

The range is very heavy, so take great care. We recommend two people maneuver the range. Ensure that the floor covering is firmly attached, or removed to prevent it being disturbed when moving the range around. You will need the leveling tool.

Before attempting to move the range, see 'Moving the range'.

Refitting the range

Reverse the above procedure to refit. If the gas line has been disconnected, check for gas leaks after reconnection.

NOTE: A suitably qualified person should disconnect and reconnect the gas supply.

The service engineer **MUST** follow the installation instructions provided with the gas appliance connector and the warning label attached to the connector.

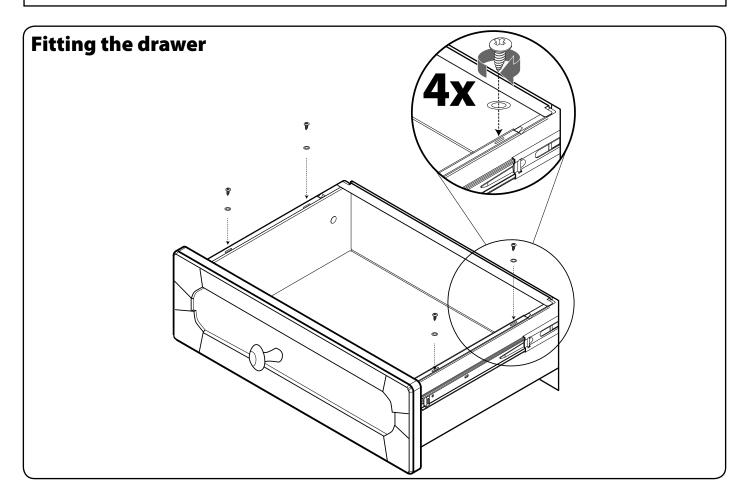
If the range is removed for any reason, make sure that the anti-tip device is re-engaged properly when the range is replaced. Failure to take this precaution could result in tipping of the range and may cause injury.

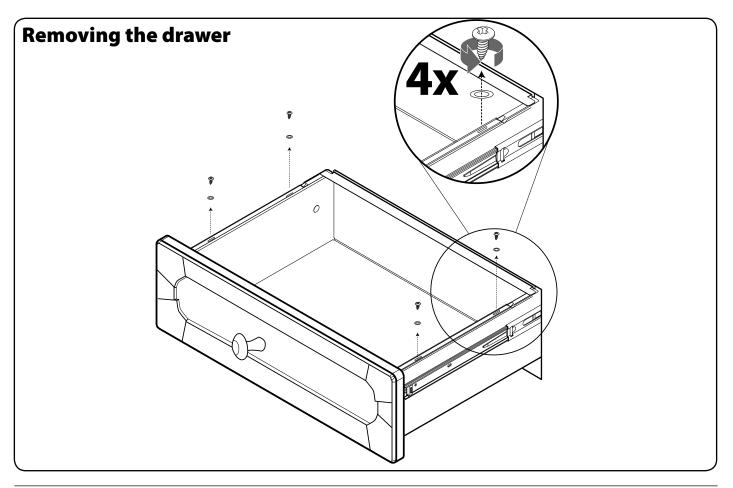
Customer care

Please complete your details in this guide, inform the user how to operate the range and hand over the Instructions.

Thank you

INSTALLATION Check the appliance is electrically safe and gas sound when you have finished.





12. Conversion to LP gas

Important!

- Observe all governing codes and ordinances.
- The range must be properly grounded.
- Save these instructions for the local electrical inspector's use.

When servicing or replacing gas carrying components disconnect from the gas supply before commencing operation and check the appliance is gas sound after completion. When checking for gas leaks use a liquid leak detector at all joints and connections to check for leaks in the system. Use a product specifically manufactured for leak detection. Leak testing of the appliance shall be conducted in accordance to the manufacturer's instructions.

For your safety

DO NOT store or use combustible materials, gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

Conversion to propane

This appliance is supplied set for Natural gas. A conversion kit for Propane gas is supplied with the range (kit number A060048).

If the appliance is to be converted this must be done before installation. The conversion must be performed by a qualified LP gas installer. After conversion the installation must comply with the relevant regulations and also the local electricity supply company requirements. Read the instructions before converting this appliance.

Failure to convert the appliance correctly could invalidate any warranty or liability claims and lead to prosecution.

This instruction must be used in conjunction with the rest of the appliance instruction, in particular for information on Standards, range positioning, connection hose suitability etc.

When servicing or replacing gas-carrying components disconnect from gas before commencing operation and check appliance is gas sound after completion.

DO NOT use reconditioned or unauthorized gas controls.

Orifices

Remove the burner heads. Undo the large brass nuts and remove the brass venturis and ring, if fitted (**Fig. 12.1**).

Using a long socket wrench slacken off each of the orifices, **no more than one full turn**.

Using the rubber tubing, provided in the conversion kit, fit over the end of the socket wrench (**Fig. 12.2**).

Carefully push the open end of the tubing onto the orifice (**Fig. 12.3**). Unscrew the orifice fully and lift clear of the cooktop.

Save the orifices removed from the appliance for future use.

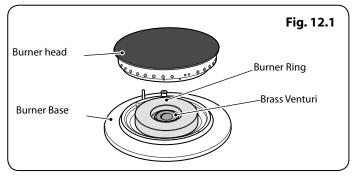
To Install the new orifices; see **Table 12.1** for orifice details.

Insert the new orifice into the open end of the rubber tube which is attached to the socket wrench. Screw into the orifice carrier as far as possible and lift the socket wrench away (**Fig. 12.4**).

Remove the rubber tubing from the socket wrench and tighten all of the orifices.

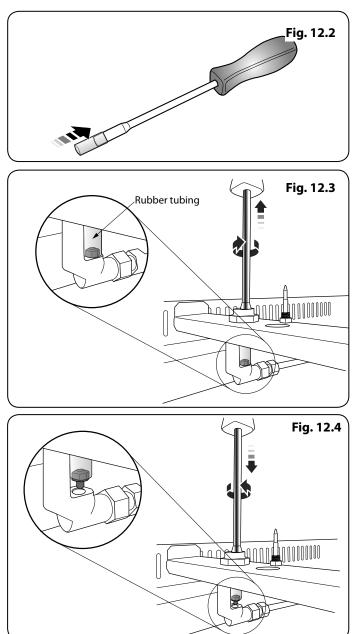
Fit the ring on the burner if fitted. Screw in the hexagon headed venturi to make fitting the burners easier. **DO NOT** tighten yet.

When all the venturis have been fitted tighten the venturi nuts.



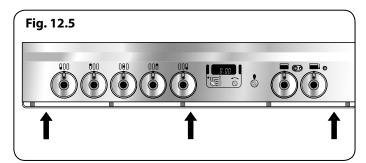
	Natural Gas	Propane Gas	
Center burner	205	118	
Large Burners	150	99	
Right front burner	112	68	

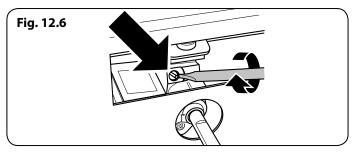
Table 12.1

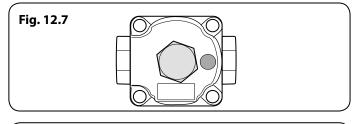


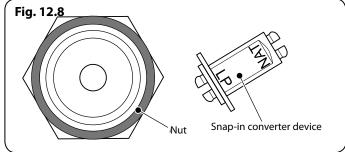
CONVERSION

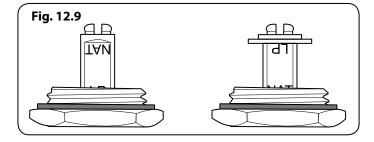
Check the appliance is electrically safe and gas sound when you have finished.











Valve adjustment

Disconnect from the electricity supply.

Pull off all the control knobs.

Open the oven door and remove the 3 fixing screws underneath the control panel (**Fig. 12.5**).

Remove 3 screws from the upper rear of the control panel

Pull the bottom of the control panel forward and lift clear. Remove the electrical connections from the rear. Taking care not to damage the control panel, and protecting it with cloth for example, rest it on the open oven door.

Turn the bypass screw on each control clockwise to the stop (**Fig. 12.6**). Connect the electrical connectors to the rear of the control panel and locate it over the front lip of the hob. Fit the 6 fixing screws and control knobs.

Gas regulator

NOTE: To avoid exterior damage to the storage drawer. Place a soft cushioned mat on the floor.

To access the gas regulator remove the storage drawer (see **Removing the drawer**). Once the drawer has been removed the regulator is now visible **(Fig. 12.7)**.

For safety reasons slide the drawer runners back into the cavity.

- Unscrew the hexagonal nut in the front of the regulator. The regulator nut has a plastic snap-in converter device on the underside (Fig. 12.8). To convert the regulator snap the device out of the nut and replace the other way up.
- 2. The snap-in converter device is marked to show which gas it is set for (**Fig. 12.9**). Make sure the device is secure in the base of the nut and replace the nut to the regulator.

Stick on label

Complete the conversion label (kit number A060048) and stick it next to the ratings label inside the drawer cavity to indicate the gas the appliance is now set for (**Fig. 12.10**).

Also, stick the **"NOW ADJUSTED FOR LP GAS"** label in a similar position (**Fig. 12.11**).

Pressure testing

Connect the appliance to the gas supply. Check the appliance is gas sound.

The gas pressure can be measured at the pressure test point on the appliance side of the pressure regulator (**Fig. 12.12**).

For proper operation, the pressure of LP supplied to the regulator must be between 10" and 13" of water column (2.49 - 3.24 kPa).

When checking for proper operation of the regulator, the inlet pressure must be at least 1" (0.25 kPa) greater than the operating (manifold) pressure as given above.

The pressure regulator located at the inlet of the range manifold must remain in the supply line regardless of whether natural or LP gas is being used.

Fitting the drawer

NOTE: To avoid exterior damage to the storage drawer. Place a soft cushioned mat on the floor.

To fit the drawer, refer to "Fitting the drawer".



Check the appliance is gas sound.

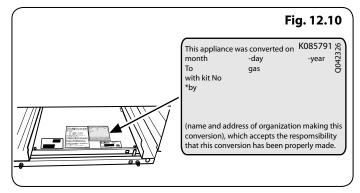
DO NOT use a flame to check for gas leaks.

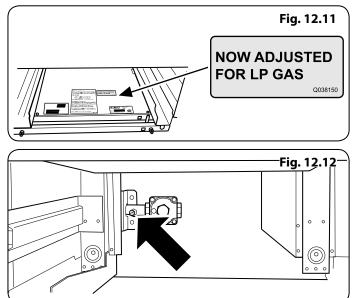
When using test pressures greater than ½ psi (3.5 kPa) to pressure test the gas supply system of the residence, disconnect the range and individual shut-off valve from the gas supply piping.

When using test pressures of ½ psi (3.5 kPa) or less to test the gas supply system, simply isolate the range from the gas supply system by closing the individual shut-off valve.



Check the operation of all the burners.





13. Electrical connection

Have your appliance properly installed and grounded by a qualified technician. The installation must conform with local codes, or in the absence of local codes, in accordance with the National Fuel Gas Code, ANSI Z223.1/NFPA 54 or, in Canada, the Natural Gas and Propane Installation Code, CSA B149.1 and in addition the National Electrical Code NFPA 70 or the Canadian Electric Code, CSA C22.1.

Electrical requirements

For personal safety, DO NOT use an extension cord with this appliance. Remove the house fuse or open the circuit breaker before beginning installation.

WARNING Electrical Grounding Instructions. This appliance is shipped with a (four-prong) grounding plug for your protection against shock hazard and should be plugged directly into a properly grounded receptacle. DO NOT cut or remove the grounding prong from this plug.



Prior to connecting the power cord to the wall socket, inspect the cable for any damage that may have occurred. In the event of damage, please consult your electrical installer.

Ensure that the power cord is routed so that it cannot become damaged during the installation.

This appliance must be supplied with the proper voltage and frequency, and connected to an individual, properly grounded branch circuit, protected by a circuit breaker or time-delay fuse, as noted on the rating plate.

Wiring must conform to National Electric Codes. If the electric service provided does not meet the above specifications, have a licensed electrician install an approved outlet.

Because range terminals are not accessible after the range is in position, flexible service conduit or cord must be used.

Provide proper electrical supply

This range must be supplied with 240 V 60 Hz, and connected to an individual, properly grounded branch circuit protected by a circuit breaker or time-delay fuse. If the electrical service provided does not meet the above specifications, it is recommended that a licensed electrician install an approved outlet.

Recommended electrical outlet locations

Locate the electric supply as illustrated (Fig. 13.1).

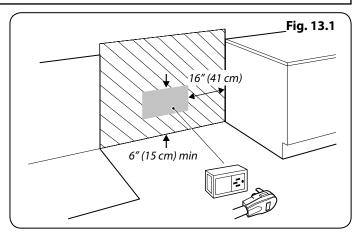
When connecting using a NEMA 14-50R receptacle, if possible position it so that it can be accessed through the opening at the rear of the drawer cavity. The range can then be easily disconnected for servicing, etc.

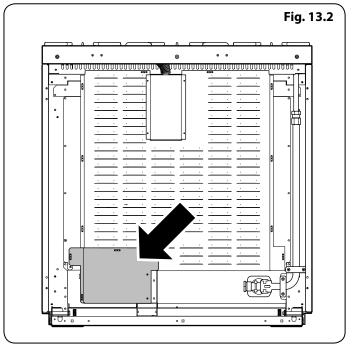
Plug the range power cord into a properly grounded wall receptacle.

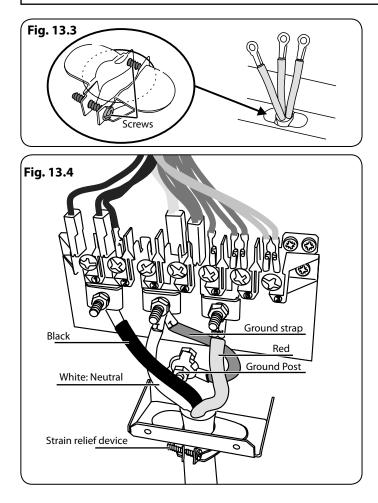
Connecting if the supplied cord and plug is not suitable

To access the electrical connections, undo the screws and remove the electrical cover (**Fig. 13.2**).

Disconnect the electrical supply before servicing.







Fitting a 3-Wire Power Cord

Disconnect the supplied power cord from the terminal block and ground post. Keep the terminal block parts; you will need them. Slacken the strain relief clamp from the power cord, untighten the 2 screws (**Fig. 13.3**) and remove the power cord.

Insert the new power cord through the strain relief device but do not tighten the device yet.

Your range is supplied with a ground strap that can be used when connecting to a three wire cord. Consult your electrician before changing the supplied cord kit (Fig. 13.7).

Fit the Ground strap to the ground and center terminal of the connector block (**Fig. 13.4**).

The neutral or ground wire of the power cord must be connected to the neutral terminal located in the center of the connector block. The power leads must be connected to the outside terminals (**Fig. 13.4**).

Make sure the connections are tight. Now tighten the strain relief device to clamp the power cord.

Refit the electrical connection cover.

3-Wire Conduit Installation

Disconnect the supplied power cord from the terminal block and ground post. Keep the terminal block parts; you will need them. Remove the strain relief clamp from the power cord and remove the power cord and strain relief clamp from the mounting bracket.

The range is shipped with reducer plates to give a 1 ¹/₈" diameter opening for conduit connection (**Fig. 13.5**). Find the reducer plates (**Fig. 13.6**) in the conversion kit and fit them to the mounting bracket.

Fit a squeeze connector (not supplied with the range), to your conduit. Insert the conduit through the reducer plates on the mounting bracket. Allow enough slack to easily attach the wires to the terminal block (**Fig. 13.5**).

NOTE: Do not install the conduit without a squeeze connector.

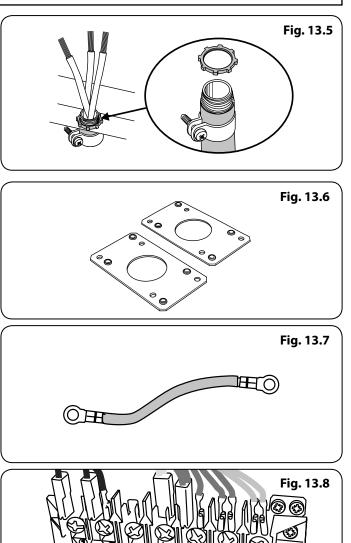
A Ground strap is supplied in the conversion pack (**Fig. 13.7**). Fit the Ground strap to the ground and center terminal of the connector block.

The neutral or ground wire of the power cord must be connected to the neutral terminal located in the center of the connector block. The power leads must be connected to the outside terminals (**Fig. 13.8**).

NOTE: Make sure the wires are completely inserted into the terminals and secure connections are made.

Secure the squeeze connector in place in the bracket by tightening the squeeze connector screws.

Refit the electrical connection cover.

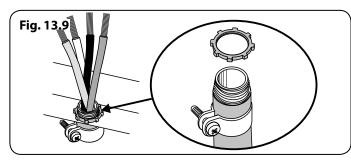


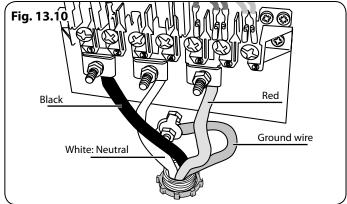
Ground strap

Red

Black

White: Neutral





4-Wire Conduit Installation

Disconnect the supplied power cord from the terminal block and ground post. Keep the terminal block parts; you will need them. Remove the strain relief clamp from the power cord and remove the power cord and strain relief clamp from the mounting bracket (**Fig. 13.9**).

The range is shipped with reducer plates to give a 1 ¹/₈" diameter opening for conduit connection (**Fig. 13.9**). Find the reducer plates (**Fig. 13.6**) in the conversion kit and fit them to the mounting bracket.

Fit a squeeze connector (not supplied with the range), to your conduit. Insert the conduit through the reducer plates on the mounting bracket. Allow enough slack to easily attach the wires to the terminal block.

NOTE: Do not install the conduit without a squeeze connector.

Fit the wires to the ground post and terminal block (**Fig. 13.10**)

NOTE: Make sure the wires are completely inserted into the terminals and secure connections are made.

Secure the squeeze connector in place in the bracket by tightening the squeeze connector screws.

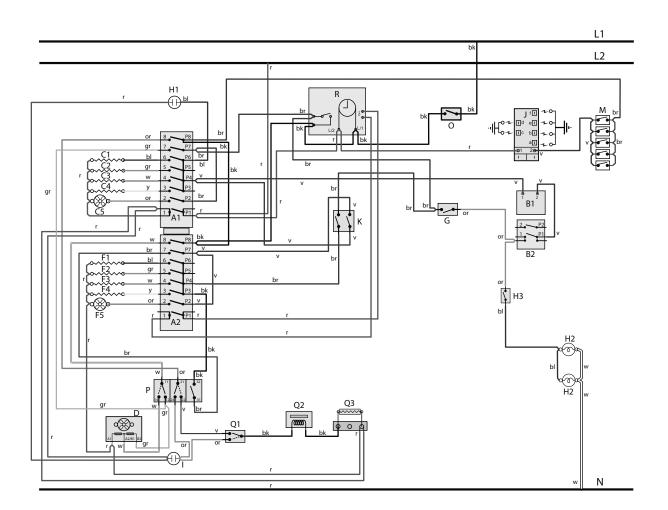
Refit the electrical connection cover.

Seal the Openings

Seal any openings in the wall behind the range and in the floor under the range when hookups are completed.

When all Connections are Completed

MAKE SURE THE FLOW OF COMBUSTION AND VENTILATION AIR TO THE RANGE IS UNOBSTRUCTED.



Code	Description	Code	Description	Cod	le	Color
A1	Multi-function oven master switch	G	Oven protect thermostat	b		Blue
A2	Multi-function oven drone switch	H1	Oven neon	b	r	Brown
B1	Oven thermostat	H2	Oven light	b	k	Black
B2	Oven front switch	НЗ	Oven light switch	0	r	Orange
C1	Right-hand oven base element	1	Door lock neon	•	•	Red
C2	Right-hand oven top outer element	J	Ignition spark generator	``	/	Violet
С3	Right-hand oven top inner element	К	Oven divider switch (In)	v	v	White
C4	Right-hand oven fan element	м	Ignition switches	3	/	Yellow
C5	Right-hand oven fan	0	Cooling fan fail cut-out	g	/y	Green/yellow
D	Cooling fan (2 speed)	Р	Pyrolytic thermostat	g	r	Grey
F1	Left-hand oven base element	Q1	Lock cam switch	r(f)	Red (flag)
F2	Left-hand oven top outer element	Q2	Lock motor			
F3	Left-hand oven top inner element	Q3	Lock motor resistor			
F4	Left-hand oven fan element	R	Clock / oven timer			
F5	Left-hand oven fan					

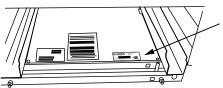
15. Technical data

INSTALLER: Please leave these instructions with the user.

RATING PLATE LOCATION: Inside base drawer of cavity.

COUNTRY OF DESTINATION: USA, Canada.

Connections



Connections			
Electric	240 V 60 Hz		
Gas	1/2" NPT at rear left-hand side		
Maximum total electric load 240V: (including oven fans, lights, etc.)	3.95 kW, 16.5 A		
Note: The maximum input at any time is given as the convection broil, which is all top elements and the fan.			

Dimensions

Overall height	minimum 37¾" (95 cm)	maximum 38¾″ (97.5 cm)	
Overall width	357/16" (90 cm); see 'Positioning of Range'.		
Overall depth	28 1⁄8″ (714 mm)		
Minimum space for cooktop	31½" (800 mm)		
Weight (unpacked)	400 lbs (177 kg)		

Oven ratings

Fan element (x2)	1.8 kW each
Top element (x2)	0.75 kW each
Browning element (x2)	1.15 kW each
Bottom element (x2)	0.75 kW each

Gas Hob Bypass Screw*		Natural gas 4" WC		Propane gas 10" WC	
		Input	Orifice	Input	Orifice
Large burner	49	17,000 btu/hr	205	17,000 btu/hr	118
Medium burner	38	12,000 btu/hr	150	12,000 btu/hr	99
Small burner	31	6,000 btu/hr	112	6,000 btu/hr	68

* The valves in this range are fitted with adjustable bypass screws. The range is supplied with the bypass screws set for Natural gas. For LPG conversion, the bypass screws must be screwed all the way down.

Oven efficiencies

Energy consumption based on standard load	0.99 kWh
Usable volume (cubic feet)	3.8
Size	Large
Time to cook standard load	44 minutes



ENTIRE PRODUCT – LIMITED ONE YEAR WARRANTY

OVEN ELEMENTS - LIMITED SECOND THROUGH THIRD YEAR WARRANTY

TERMS AND CONDITIONS

Warranty applies to product only in the country in which it was purchased. 2.

- 3. AGA is not liable for any claims or damages resulting from any failure of the range or from service delays beyond their reasonable control.
- 4. To obtain warranty service, the original purchaser **must** present the original Bill of Sale, Model and Serial number. Components repaired or replaced are warranted through the remainder of the original warranty period only.
- 5. The warranty does not cover expenses involved in making this appliance readily accessible for servicing.
- This warranty gives you specific legal rights. Additional warranty rights may be provided by law in some areas. 6.
- 7. Adjustments such as calibrations, leveling, tightening of fasteners, or utility connections normally associated with original installation are the responsibility of the dealer or installer and not that of the Company.

TO ENSURE PROMPT WARRANTY SERVICE, SEND IN YOUR WARRANTY CARD WITHIN 10 DAYS OF PURCHASE.

X							
	AGA						
×	CONSUMER WARR	RANTY					
X	ENTIRE PRODUCT – LIMITED ONE YEAR WARRANTY						
	AGA warrants the replacement or repair of all parts, including gas of to be defective in material or workmanship, with the exception of t surfaces, for one year from the date of original purchase. Such part AGA without charge, subject to the terms and conditions set out b	the painted or porcelain enamel finish or plate is will be repaired or replaced at the option of					
XX	The warranty period against defects in the painted or porcelain entry the date of original purchase. The warranty does not include rep						
X	OVEN ELEMENTS - LIMITED SECOND THROUGH THIRD YE	AR WARRANTY					
	AGA warrants the oven heating elements against defects in material or workmanship for an additional two years. These parts will be repaired or replaced at the discretion of AGA without charge, but you pay for labor and transportation subject to the terms and conditions set out below.						
×.	TERMS AND CONDITIONS						
	 This warranty applies only for single family domestic use wher according to the instructions supplied by AGA and is connected 						
	Damage due to faulty installation, improper usage and care, abuse business or rental use, and alteration, or the removal or defacing o warranty. Service during this warranty must be performed by a fac	f the serial plate, cancels all obligations of this					
8	2. Warranty applies to product only in the country in which it	t was purchased.					
	3. AGA is not liable for any claims or damages resulting from any failure of the range or from service delay beyond their reasonable control.						
	 To obtain warranty service, the original purchaser must present the original Bill of Sale, Model and Serial number. Components repaired or replaced are warranted through the remainder of the original warranty period only. 						
X	5. The warranty does not cover expenses involved in making this appliance readily accessible for servicing.						
	6. This warranty gives you specific legal rights. Additional warranty rights may be provided by law in some are						
X	7. Adjustments such as calibrations, leveling, tightening of fasteners, or utility connections normally associate with original installation are the responsibility of the dealer or installer and not that of the Company.						
×	TO ENSURE PROMPT WARRANTY SERVICE, SEND IN YOUR WAR	RANTY CARD WITHIN 10 DAYS OF PURCHAS					
X							
×.	If further help is needed concerning this warranty, contact:	Customer Service					
×	PLACE OF PURCHASE	AGA Marvel					
×		1260 E. VanDeinse St.					
X	DATE OF PURCHASE	Greenville, MI 48838 – Business (616) 754-5601					
X		Fax (616) 754-9690					
×	SERIAL NUMBER	- Toll Free Telephone 800-223-3900					
	MODEL NUMBER						

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#### AGA Marvel

1260 E. VanDeinse St. Greenville, MI 48838 Business (616) 754-5601 Fax (616) 754-9690 Toll Free Telephone 800-223-3900

### **Middleby Residential**

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