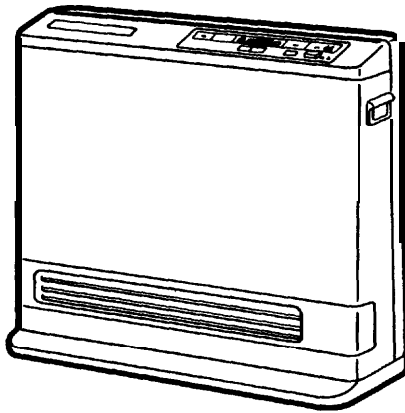


Rinnai

Convactor 412/314 Unflued Room Heater



CUSTOMER'S OPERATING INFORMATION AND INSTALLATION INSTRUCTIONS

This appliance shall be installed in accordance with:

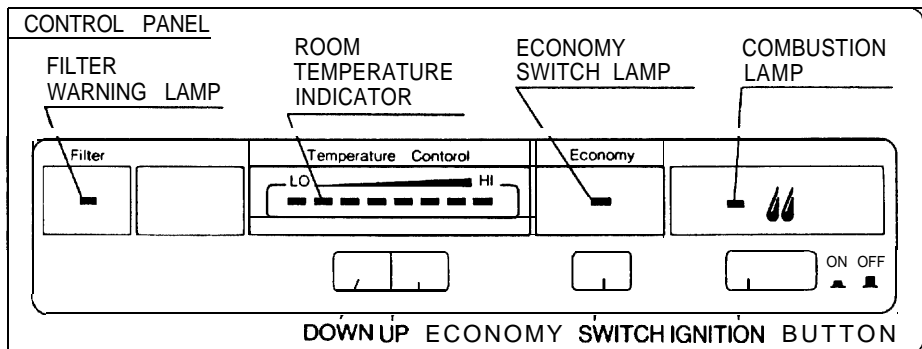
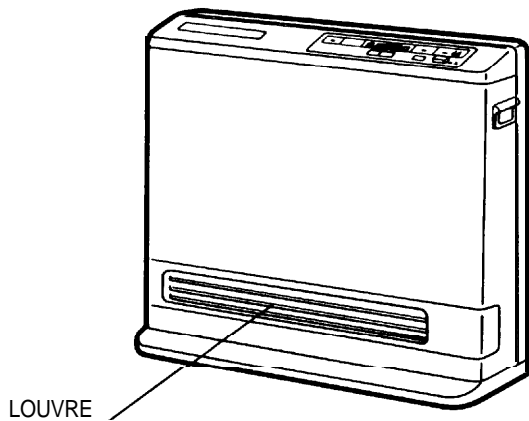
- Manufacturer's Instructions
 - Local Gas Fitting Regulations.
 - Municipal Building Codes
 - A.G.A. Installation Code for Gas Burning Equipment.
 - Any other Relevant Statutory Regulation.
- This appliance should be installed, serviced and removed by an authorised person

R i n n a i
GAS SPACE HEATERS

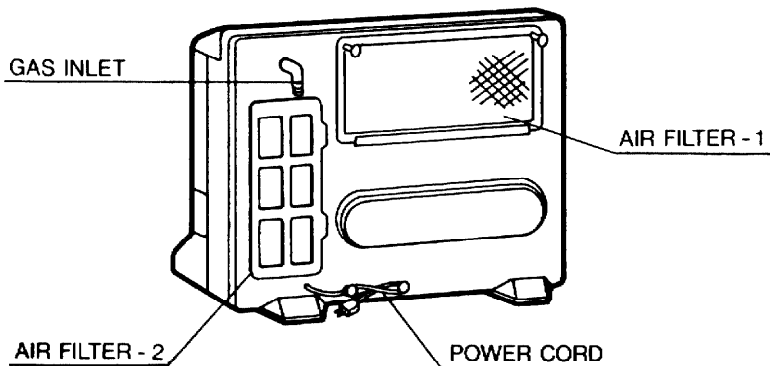


PARTS DESCRIPTION

FRONT



REAR



IMPORTANT POINTS

Unpack heater:

Check for damage. If heater is damaged, contact your supplier for advice. Before installing the heater, check it is labelled for the correct gas type. Refer to local gas authority for confirmation of gas type if you are in doubt.

Included in Carton:

Customers Operating Information/ Guarantee

IMPORTANT

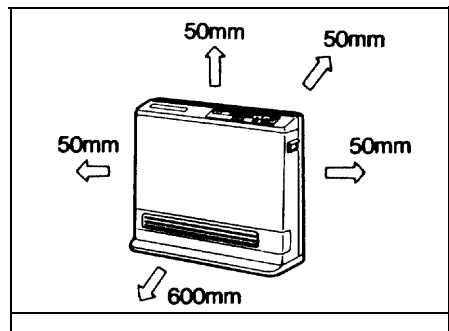
1. The appliance must be installed to the requirements of the local gas authority.
2. For information on gas rate, see data plate on the appliance.
3. When installing this appliance, ensure that the room is correctly ventilated. Check AG 601 or the Local Authority for information on ventilation requirements.
4. DO NOT install in bedroom or bathroom.
5. This appliance must not be installed in close proximity to flammable materials, e.g. curtains, and must be 50mm clear of side walls.
6. This appliance is not designed to be built in.
7. If you move house, check the gas type in the area where you are moving to. The Local Authority will be able to advise on local regulations.
8. This heater discharges a large volume of warm air at low level to provide even heat distribution. If the air in the room contains cooking vapour or cigarette smoke, and the heater is used on a carpet, the surface of the carpet may become discoloured.

In addition, some nylon carpets contain dyes which may be affected by the warm air flow.

Some soft vinyl surfaces are also subject to discolouration by warm air.

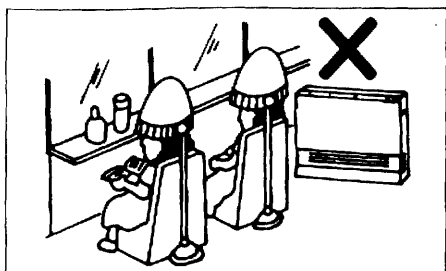
To prevent discolouration of carpets etc., a mat should be placed under the appliance, extending about 750 mm in front of it.

Diagram 1 shows clearances required around this unit whilst it is in operation.



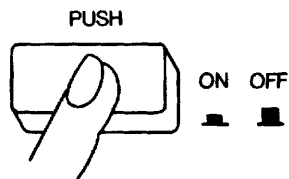
Do not install this unit in areas where spray painting or plating is taking place or in places such as hair dressers where there may be a lot of fluff and dust, and where aerosols are used.

Use of aerosols, paint, polishes etc whilst this heater is in use may cause unpleasant smells.

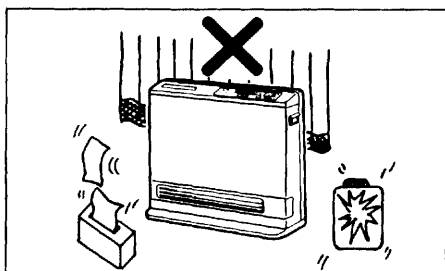


Turn off unit after use and disconnect gas hose (where fitted).

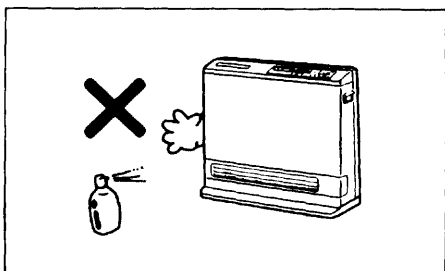
Ignition Button



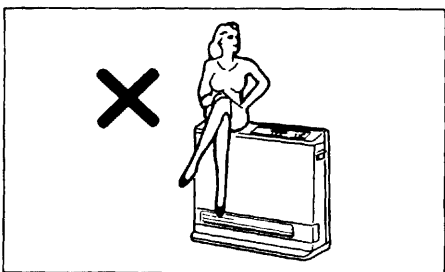
Keep away from flammable materials.



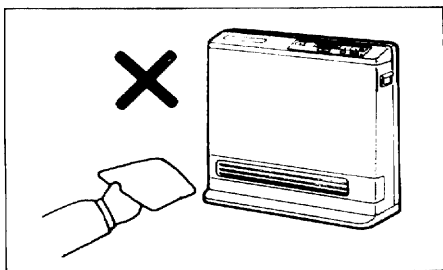
Do not spray aerosols near this unit while it is in use.



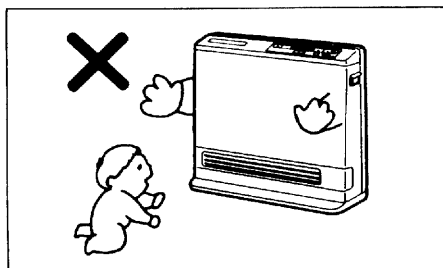
Do not sit on this unit.



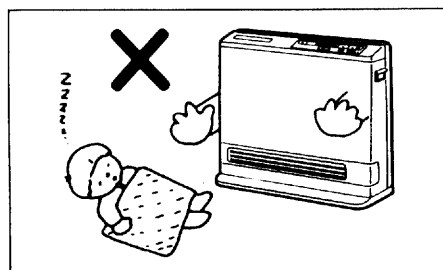
Do not allow children to post articles in the louvres.



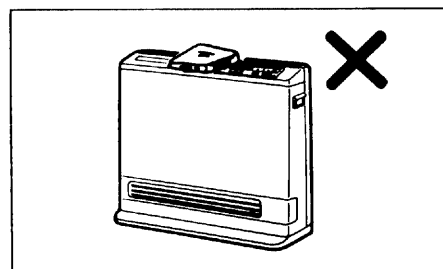
Supervise children playing near this unit.



Do not allow children or elderly persons to sleep in the warm air discharge from the unit.

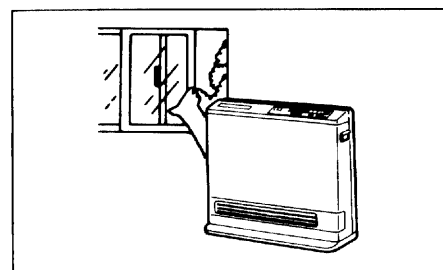


Do not place wet articles on this unit, the water may drip into the electrical parts.

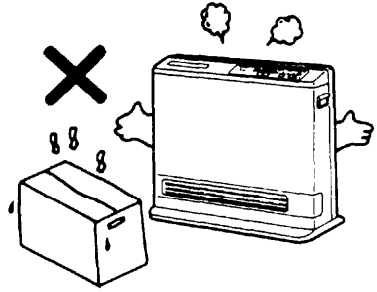


Ventilate the room when this heater is in use.

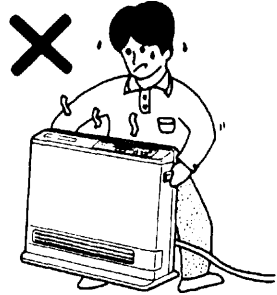
Correct, fixed ventilation is usually sufficient, consult your local gas authority for local regulations.



Do not place articles in front of the louvres.

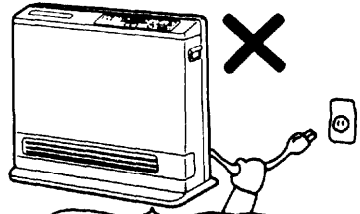


Do not move the unit whilst it is turned on.



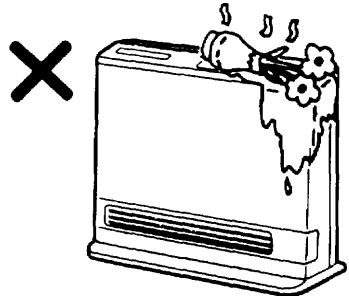
Do not turn the unit off by unplugging it from the wall, or whilst the fan is cooling the unit off.

This unit is not suitable for use with a plug in type timer.



Do not unplug during operation.

Do not place containers of liquid on top of the unit. Water in the unit can cause extensive damage.



CUSTOMERS OPERATING INFORMATION

INSTALLATION

Check room size: This heater must not be installed in a room smaller than 30 m³.
Your Convector 314 is fitted with a flexible lead and bayonet type plug in fitting, simply plug into your bayonet floor fitting.

Check room size: This heater must not be installed in a room smaller than 42.5 m³.
Your Convector 412 is fitted with a flexible lead and bayonet type plug in fitting, simply plug into your bayonet floor fitting.

CUSTOMERS OPERATING INFORMATION

INSTALLATION

Check room size: This heater must not be installed in a room smaller than 30 m³. Your Convector 314 is fitted with a flexible lead and bayonet type plug in fitting, simply plug into your bayonet floor fitting.

IGNITION

Plug the heater into both the gas and the power points. Room must be ventilated when using this heater.

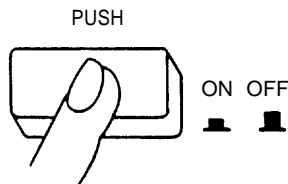
Depress the ignition button slowly and firmly.

When you release the ignition button the 'Temperature Level' lamps will illuminate, the spark will ignite the main burner and the convection fan will begin to run. If the unit does not ignite in 15 seconds the spark will stop and the display will flash. Turn off and repeat ignition operation. (See page 7).

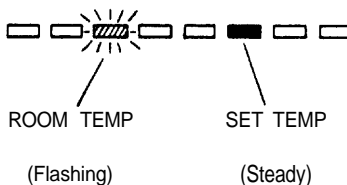
This heater has an automatic ignition system, when the main burner has lit, the combustion indicator will glow, and the spark will stop.

There may be a smell of burning dust the first time the heater is lit or when the heater has been out of operation for a long time, this is normal. You may need to repeat the ignition operation the first time the heater is plugged in, due to air in the hose.

Ignition Button



Temperature Level



Combustion Indicator



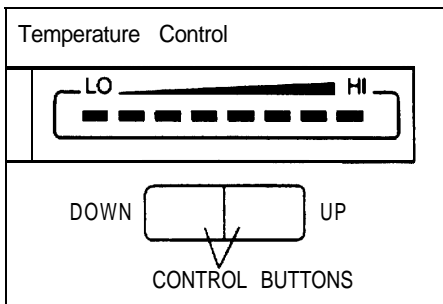
TEMPERATURE CONTROL

The thermostat automatically modulates the burner and the fan to maintain the room temperature which you have selected.

To change the room temperature, simply adjust the temperature control knob to the desired setting.

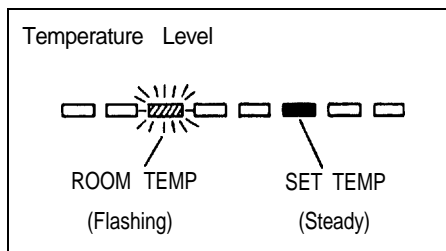
The heater will run on high for 1 to 2 minutes after ignition no matter where the temperature control is set.

The temperature range from LO to HI is about 12°C to 36°C. Temperature control may be affected by the positioning of the heater.



ROOM TEMPERATURE DISPLAY

Temperature is indicated by the L.E.D. display on the control panel. The room temperature is indicated by the flashing L.E.D., and the set temperature by the steady L.E.D. When the set room temperature is reached, the flashing L.E.D. disappears and the temperature is indicated by the steady L.E.D. You will notice the fan speed changing as the heater modulates to match the room temperature.



TO TURN UNIT OFF

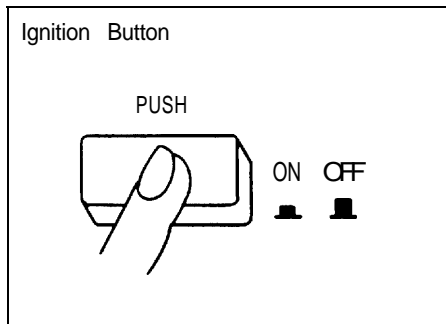
Depress ignition button again.

The switch will return to the "off" position.

Disconnect hose after use.

Do not turn off by unplugging at the power-point. Convection fan continues to run until heater is cool.

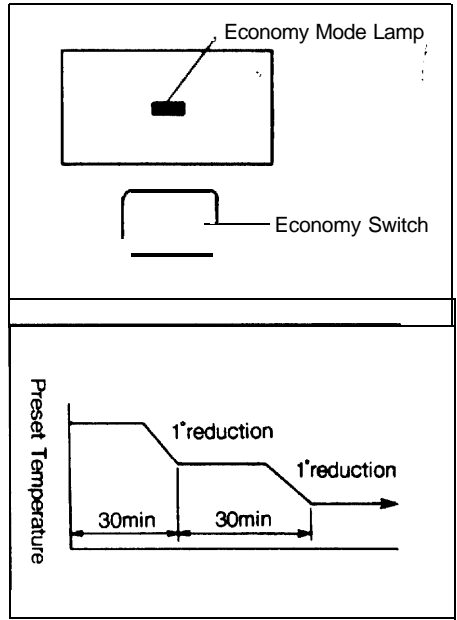
The convection fan may start again after a few minutes to remove residual heat.



ECONOMY SWITCH

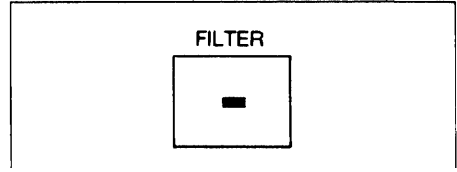
To change to “Economy Mode”, push the “Economy” switch, the green lamp will glow.

30 min after the room temperature reaches the preset temperature (set with the thermostat), the Economy Mode, if set, reduces the temperature by 1°C, after another 30 min it reduces the temperature by a further 1°C, this is an energy saving feature. When the heater is running only on low, the “Economy Mode” does not operate. It does not operate if the unit is under capacity for the room size.



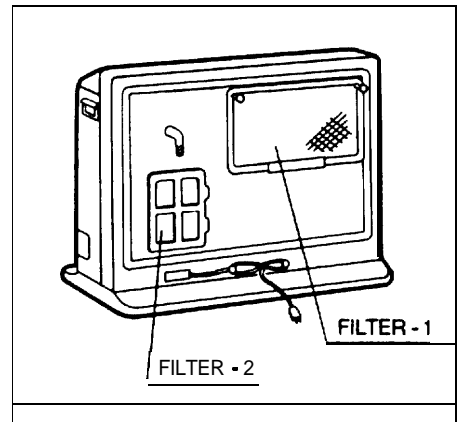
FILTER LAMP

If filter lamp glows during operation check both air filters for dust. If there is dust present, clean filters. See section on care of unit. Turn heater off before cleaning filters.



Check Both Filters

The filter lamp is not a safety cut off, so the heater will continue to run with the light on. Left in this condition the heater may overheat and shut off automatically.



SAFETY DEVICES

■ Over Heat Switch

When the heater gets too hot during operation (for example when the filters or air outlet louvres are blocked) this device turns the gas off automatically. Remove cause of overheat (clean filters) allow heater to cool, then re-ignite.

■ Fuse

The electrical circuits are protected by a fuse. When the fuse blows, the heater will not operate at all. The fuse must be replaced by an authorised person.

■ Flame Failure Device

This device automatically cuts the gas supply to the heater in the event of a gas failure. To restore the gas supply to the heater, turn it off, then follow the ignition procedure.

■ Oxygen Depletion Safety Device

If the oxygen level in the room drops below a pre-set limit, this device cuts the gas supply to the heater. If the oxygen depletion device operates, turn the heater off, ventilate the room, then follow the ignition procedure to relight. Heater will not relight until room is fully ventilated.

■ Tilt Switch

If the heater is knocked over, the tilt switch will cut the gas supply. The fan keeps running. To restore the gas supply, stand the heater up and follow the ignition procedure. The tilt switch may also operate if the heater is jolted or picked up whilst in operation.

CARE OF HEATER

- Your Convactor needs very little maintenance, but the following information will help you to keep it looking good, and working efficiently.

Unplug unit before cleaning.

All parts of the heater can be cleaned using a soft, damp cloth.

Do not use solvents to clean any parts.

Do not spray aerosols in the vicinity of this appliance while it is in operation.

Do not place articles on or against this appliance.

Do not store flammable materials near this appliance.

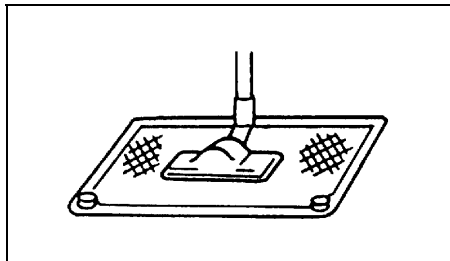
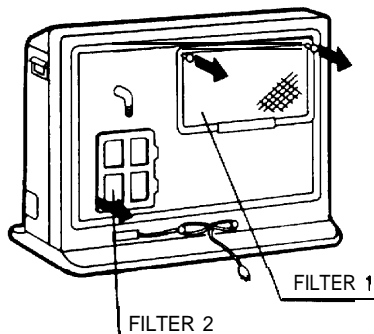
AIR FILTERS

- Clean both air filters at least once a week.

Do not wait for filter warning lamp to come on before cleaning filters.

Dusty filters reduce the air flow through the heater and reduce the heater's effectiveness.

Do not use the heater with the filter warning lamp on, it may cause the unit to overheat.



Clean both air filters with vacuum cleaner at least once a week.

RINNAI GUARANTEE OF QUALITY

As a purchaser of a high quality Rinnai product, we provide you with the following guarantee on your new Convector RCE-412.

	FREE LABOUR PERIOD	FREE PARTS PERIOD
FAN	1 Year	2 Years
All other parts	1 Year	1 Year

The benefits conferred by this guarantee are in addition to all other rights and remedies in respect of the product which you have under the Trade Practices Act and other State and Territory Laws.

The unit must be installed correctly by an authorised person, and the installation must conform to all local regulations.

The installation must also comply with the instructions supplied by Rinnai.

The unit must be serviced, installed or removed by an authorised person.

No parts or functions should be modified or permanently removed from the unit.

Please Note: general cleaning, maintenance and wear and tear are not necessarily covered by the guarantee. Calls of this nature may be chargeable.

Your Rinnai Convector 412 has been approved by the Australian Gas Association. A.G.A. Approval Number 4589.

Please keep these instructions in a safe place for future reference.

Please record below:

Your Retailer:

NAME _____

ADDRESS _____

TELEPHONE _____

Date of Purchase:

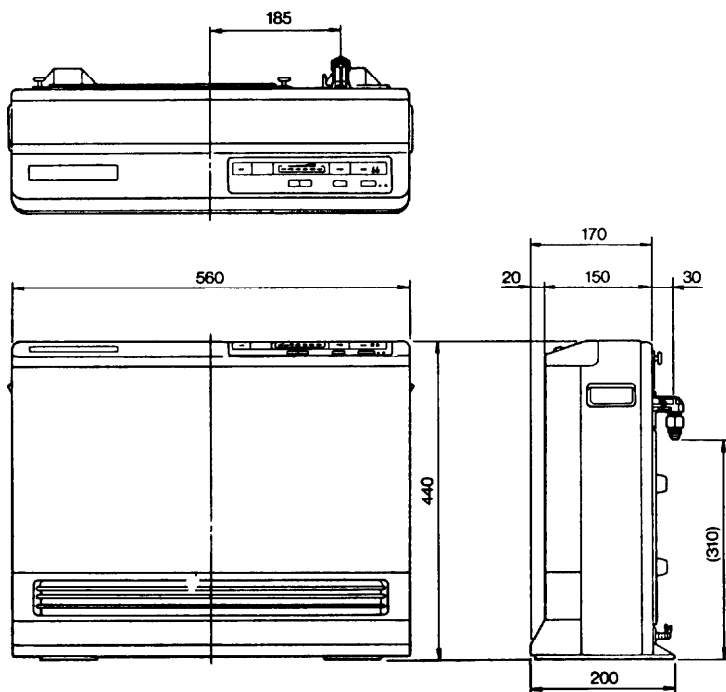
FAULT FINDING CHART

<div style="display: flex; justify-content: space-between;"> CAUSE PROBLEM </div>		OPERATION LAMP DOES NOT GLOW	BURNER DOES NOT IGNITE (NO COMBUSTION LAMP)	BURNER GOES OUT WHEN YOU RELEASE IGNITION BUTTON	YELLOW FLAME	ROOM TEMP DOES NOT INCREASE	BURNER GOES OUT	FILTER WARNING LAMP GLOWS	REMEDY
NOT PLUGGED IN		●	●						PLUG THE HEATER IN
AIR IN THE HOSE			●						REPEAT IGNITION PROCEDURE
WRONG GAS TYPE			●						SERVICE CALL
OPERATION INCORRECT		●	●	●					SEE THE CUSTOMER'S OPERATING INFORMATION
LOUVRE IS BLOCKED							●	●	REMOVE OBSTRUCTION
DUST ON THE AIR FILTERS						●	●	●	CLEAN THE AIR FILTERS
DUST INSIDE THE HEATER					●		●		SERVICE CALL
ROOM TOO LARGE						●			CHECK WITH RETAILER

If you need service on your convector please contact the Rinnai office in your state or your local agent for information.

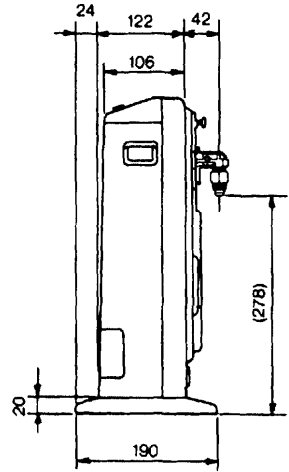
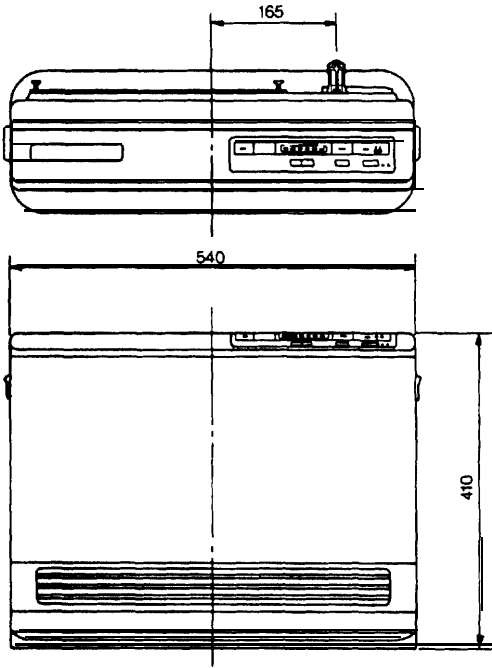
Specification Dimensions

Dimensions in mm

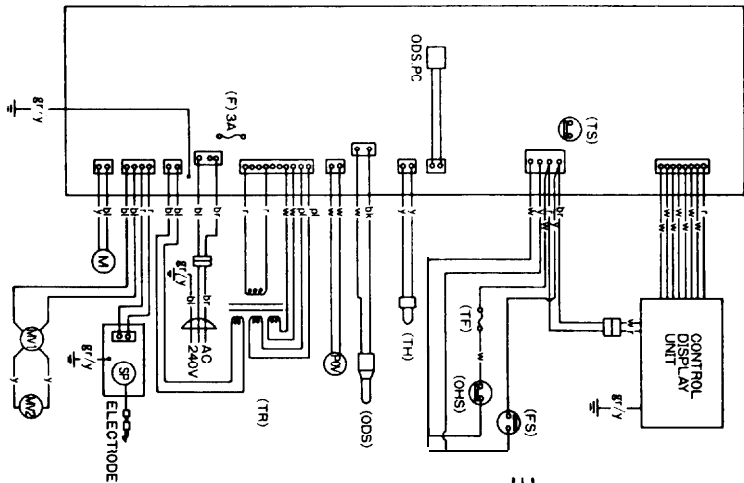


Specification Dimensions

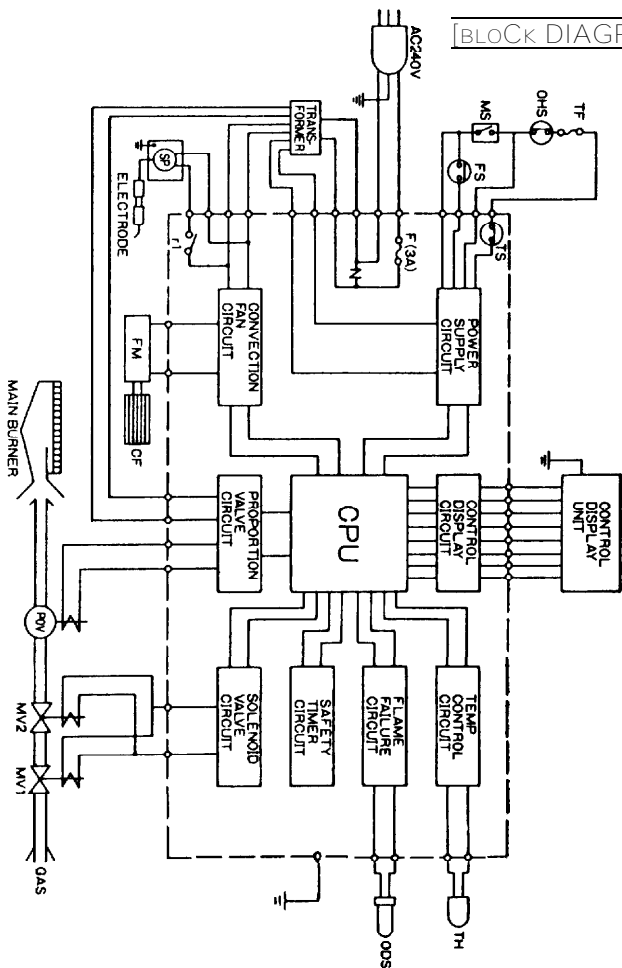
Dimensions in mm



WIRING DIAGRAM



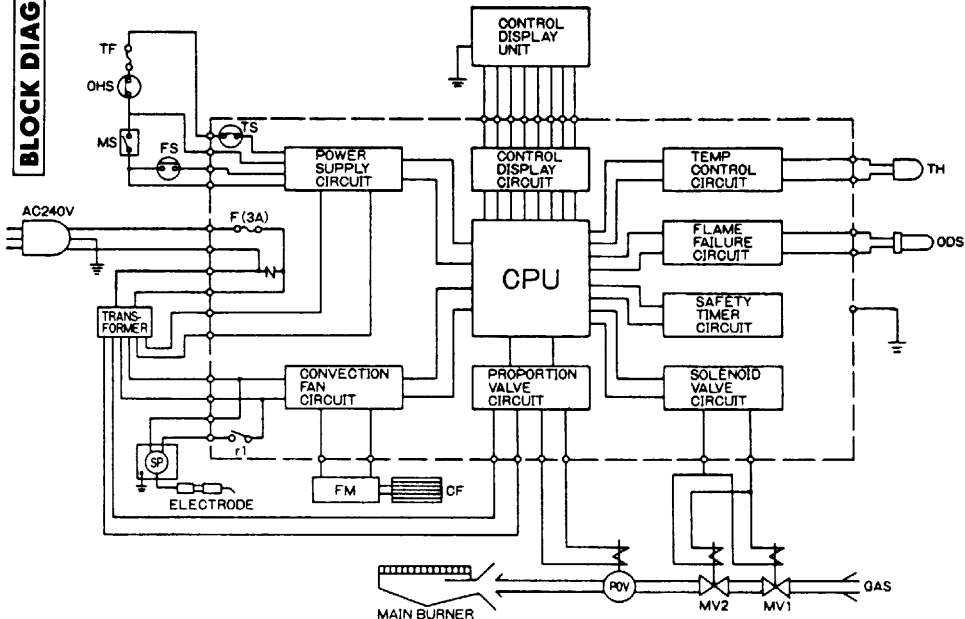
BLOCK DIAGRAM



CODE	COLOR
BK	Black
Bl	Blue
br	Brown
gr/y	Green/Yellow
pl	Purple
r	Red
w	White
y	Yellow

MARK	PART NAME	MARK	PART NAME
TR	TRANSFORMER	FM	MOTOR
MV1-2	MAIN SOLENOID VALVE - 2	CF	CONNECTION FAN
POV	MODULATION SOLENOID VALVE	SP	SPARKER
MS	MAIN SWITCH	F	FUSE
FS	FILTER SWITCH	ODS	OXYGEN DEFLECTION SENSOR
OHS	OVER HEAT SWITCH	ODS PC	O.D.S POWER CHECK
TF	THERMAL FUSE	TH	THERMISTOR
TS	TIP OVER SWITCH	CPU	CENTRAL PROCESSING UNIT

BLOCK DIAGRAM



CODE	COLOUR
bk	black
bl	blue
br	brown
gr/y	green/yellow
pl	purple
r	red
w	white
y	yellow

MARK	PART NAME	MARK	PART NAME
TR	TRANSFORMER	FM	MOTOR
MV1~2	MAIN SOLENOID VALVE1~2	CF	CONVECTION FAN
PQV	MODULATION SOLENOID VALVE	SP	SPARKER
MS	MAIN SWITCH	F	FUSE
FS	FILTER SWITCH	ODS	OXYGEN DEPLETION SENSOR
OHS	OVER HEAT SWITCH	ODSPC	O.D.S POWER CHECK
TF	THERMAL FUSE	TH	THERMISTOR
TS	TIP OVER SWITCH	CPU	CENTRAL PROCESSING UNIT

SPECIFICATIONS

Description :	Convector 412 (RCE-412).
Type:	Forced convection unflued space heater.
Input:	N.G. - 17 MJ/h Propane - 17 MJ/h (15 MJ/h (Vic.))
Gas Control :	Integrated electronic.
Burner :	Rinnai Ceramic plate burner.
Test Point Pressure:	N.G. - 0.82kPa Propane - 17 MJ/h 1.82kPa
Gas Inlet:	Supplied with hose and plug.
Ignition:	Electronic.
Power Supply:	240V 50 Hz unit is fitted with a supply lead and 3 pin plug, replace only with Rinnai part number 548206.
Injectors & Gas Type:	Please see data plate.
Dimensions:	Width 560 mm, Height 440 mm, Depth 200 mm.
15 MJ/h	Version for Victoria only (Propane)
Input:	15 MJ/h
Test Point Pressure:	1.57 kPa
Inlet:	Hose Fitted.

You can rely on

R i n n a i

SPECIFICATIONS

Description :	Convector 314 (RCE-314).
Type:	Forced convection unflued space heater.
Input:	N.G. · 12 MJ/h Propane · 12 MJ/h
Gas Control :	Integrated electronic.
Burner:	Rinnai Ceramic plate burner.
Test Point Pressure:	N.G. · 0.87 kPa. Propane · 1.41 kPa.
Gas Inlet:	Supplied with hose and plug.
Ignition :	Electronic.
Power Supply:	240V 50 Hz unit is fitted with a supply lead and 3 pin plug, replace only with Rinnai part number 548206.
Injectors & Gas Type:	Please see data plate.
Dimensions:	Width 540 mm, Height 410 mm, Depth 190 mm.

You can rely on

R i n n a i