



## OPERATING INSTRUCTIONS

### ‘Super Star’ Series – High Efficiency: non-condensing

(Internal & External Indirect Fired Gas Ducted Heaters)

With electronic ignition- All SS and HB series models are in single gas rate as a standard

#### **Note: The servicing of this appliance shall be carried out only by authorized personnel**

Although Eco Pacific endeavours to provide appliances of a high standard it is important that you be aware that problems can occur if the equipment is not professionally installed. Installers of this appliance should be aware of the installation requirements as set out in AS/NZ5601 code for Gas ducted heater installation for the operation as set out in this booklet. Only a qualified person can install the equipment according to the installation guidelines provided by Eco Pacific. The company will not be able to accept any responsibility for any problems, if occurs due to faulty installation. Installers should hand over this booklet to the customer upon installation with verbal instructions to the user on how to operate the thermostat.



**Models: ss512, ss516, ss520, ss525, ss530, HB412, HB416, HB420, HB425, HB430**

#### INSTALLER’S DECLARATION

This system has been installed in accordance with Gas standards and Eco Pacific specifications. Your ‘Super Star’ heater has been installed & commissioned with all connections checked.

INSTALLER’S NAME----- ADDRESS-----

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Licence No-----Contact No.-----

SIGNATURE:-----DATE OF INSTALLATION:-----

Heater Model .....

SERIAL NO:----- Date of Purchase-----

**Eco Pacific Pty. Ltd.**, Australian Manufacturer of Energy Efficient Ducted Gas Heaters, Evap. Coolers & Fresh Air Heat Recovery Ventilators

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## **ECO PACIFIC High Efficiency GAS DUCTED HEATING UNIT-**

**Congratulations** for being a proud owner of a '**Super Star**' standard high efficiency fast response compact gas Ducted Heater.

Please read carefully so that you may be properly acquainted with the heater's features, operating procedures, and the express Eco Pacific **warranty**. The company has endeavoured to include in this extremely popular heater those features, which its market research suggests, will best meet the needs of its customers. It includes a fail-safe Electronic Ignition which provides ignition only when the unit requires it (no burning pilot flame).

### **Warning:**

**Do not** operate this appliance before reading the operating instructions.

**Do not** place articles on or against this appliance.

**Do not** store chemicals or flammable materials, or spray aerosols near this appliance.

**Do not** operate with panels, covers or guards removed from this appliance.

**Do not** operate this appliance if you smell gas around it.

**Do not** enclose this appliance.

**Servicing shall be carried out only by authorized personnel.**

### **General:**

The '**Super Star**' is an Australian designed and manufactured high energy efficiency gas ducted heater that provides a trouble-free fast response comfort in your home through an effective source of heat. Before you start to enjoy your new heating system, we recommend that you familiarise yourself with the operation of the system, so please read the instructions that follow. After that, store these instructions in a safe place for future reference. If you have any concerns about your new system, contact your installer or Eco Pacific Pty. Ltd., the manufacturers.

### **Electronic Ignition:**

Your heater does not have a standing pilot, so does not waste energy. It is equipped with an energy saving electronic ignition device which automatically lights the burner on demand when the thermostat calls for heat.

**Note: Do not manually light the burners with a match or other source of flame.**

### **Operating Instructions:**

Before proceeding with Step 1, make certain that the gas line has been purged at the heater prior to turning the power on.

1. Turn gas valve to ON position.
2. Turn thermostat to OFF position.
3. Turn power ON at unit.
4. Turn thermostat to ON and raise the pre-set temperature higher than the room temperature. Unit should fire up after 20 seconds followed by the room air supply fan after 20 sec. If the unit does not ignite, please follow steps 5-6.
5. Turn thermostat OFF for 5 seconds.
6. Turn thermostat ON. Unit should ignite after 20 seconds. If the unit does not ignite, please check the battery, and repeat steps 5-6, if still does not start, please call the installer, if newly installed, or the service man from Eco Pacific on **Tel 03- 9706 6228**.

**Note:** The appliance communicates with the thermostat through the low voltage (24 volt) connections. The installer is obligated to educate the user on how to operate the thermostat with the normal sequence of the heater operation.

**Please Note: It is important that any troubleshooting or any repair to this appliance be performed only by a qualified technician, not by the user, otherwise the warranty will be void and the manufacturers will not be responsible for any consequences, whatsoever.**

**Sequence of operation:**

1. When thermostat is turned on and pre-set temp is raised above the room temp, it calls for heat.
2. The appliance-control enters a pre-purge period of 15 seconds with combustion fan on.
3. The Direct Spark Ignitor (DSI) will be energised and will ignite the gas at one end of the burner.
4. All the burners will cross-light each-other and the flame sensor will detect the presence of burner flame at the far end of the burner. The ignitor will de-energise after the flame is sensed.
5. The fan will come on after approximately 20 seconds after the flame is established.
6. The heater will remain in operation until the pre-set temperature on the thermostat is reached.
7. Once thermostat is satisfied the gas valve will close, with the fan turning off after approximately 60 seconds to cool the heat exchanger.
8. If the flame sensor does not detect the presence of the burner flame the gas valve will close.

**Diagnostic Conditions (for service man only):** In normal operation, the LED on the control board fitted on the heater will flash fast continuously. If the unit fails to light, remove the access panel, and observe the Ignition board LED indicator light to diagnose the fault as follows-

2 flashes = system lock out- failed to detect or sustain flame. Check that the flame sensor is connected on to the board and positioned properly above the burner port.

4 flashes = High limit or manual overheat switch opened, wait until the auto switch closes, or if manual cut off- see if there is obstruction in the duct, open more registers, manually reset the manual switch, and try the ignition from the thermostat again.

5 flashes = Flame sensed, and Gas valve not energised, check the gas valve.

Steady light on = internal failure (microcontroller failure and power on self check).

If the system still fails to operate, please contact Eco Pacific on **(03) 9706 6228**.

Once the unit is operating, set the thermostat to the temperature which satisfies your comfort requirements.

**Shutdown procedure (if heater is not to be used for an extended period):**

1. Turn thermostat to **OFF**.
2. Turn off gas shut off cock (all units must have a gas cock installed upstream before the gas valve external to the unit).
3. Turn off electrical power supply to the appliance (ensure the blower has switched off before turning power off).

**Power failure:**

Should power failure occur while the appliance is in operation, the gas control will automatically switch off the main burners. No heating will be available until power is restored.

On restoration of power, it will automatically re-start the heater if the thermostat is calling for heat, and the desired temperature has not reached. Better switch off the thermostat if there is no power in the house and no one is home for a long time.

**Thermostat operation:**

Once the heating system has been initially started up as per the above procedure, it is simply a matter of controlling the unit from the thermostat to set the unit for heat or to shut down as required.

**Thermostat:**

To turn the heating system on, **simply**

**set the comfort temperature higher than the room temperature;** it will cycle the unit (burners and fan) to keep the area heated at a constant temperature. For a digital thermostat set the temperature higher than the room temperature to call for heat. For programmable thermostats follow the instructions provided with the thermostat to set the program of your choice to switch on and switch off the unit automatically at the pre-set day, time, and temperature. For mounting the thermostats, the following instruction could be helpful-

The thermostat should be mounted on a draught free internal wall, out of direct sunlight for best operation.

Because the thermostat is sensitive to heat, devices such as electrical equipment, lamps and TV should not be placed near it.

The thermostat may accumulate lint and dust which may affect its accuracy and therefore should be checked and cleaned annually.

### **Maintaining your heating system:**

The **Super Star** ducted heating system has been designed for low maintenance throughout its life. Untrained personnel can perform basic maintenance functions, like cleaning and replacing return air filters, if fitted. Filters should be removed for cleaning at regular intervals, preferably each month during heating season. A blocked filter will restrict airflow and possibly overheat the heat exchanger and motor windings, thus greatly affecting your heater's life span and performance, and may void warranty. **Any servicing or repairs to the heater must be performed only by a qualified or by an Eco Pacific factory trained service technician.**

### **Outlet registers:**

It is important to keep the following minimum number of registers or ceiling diffusers open all the time to prevent overheating of the appliance:

| Models                  | keep open minimum no. of outlets. |
|-------------------------|-----------------------------------|
| Super Star, SS512/HB412 | 2                                 |
| Super Star, SS516/HB416 | 3                                 |
| Super Star, SS520/HB420 | 4                                 |
| Super Star, SS525/HB425 | 5                                 |
| Super Star, SS530/HB430 | 6                                 |

Inadequate return air due to dirty filters, placement of furniture over circulating air registers or restricting the circulating air passageway can cause excessive heat exchanger temperatures and reduce the heater's life span.

**Note: The use of filters on the supply air registers/diffusers are not allowed as these will restrict the supply air ducting and will overheat the heat exchanger leading to a reduced life of the heater. Please be aware that using filters on supply air registers would void the warranty. However, you can put a filter in the return air grill and make sure it is regularly cleaned.**

### **Abnormal operation:**

Should any of the following characteristics occur, do not use the heating, contact your local service agent or the gas authority immediately:

- Smell of gas,
- Unusual odours from outlet registers,
- Smoke or fumes from outlet registers,
- Excessive or unusual noise emanating from the appliance.

Please ensure that where the heater is in the roof space the blow-in loose fill insulation material is

clear of the unit's support platform or flue.

### **Warranty Service:**

Should any problems arise under the warranty period, they must be referred to Eco Pacific or an authorised service agent through email, at [sales@ecopacific.com.au](mailto:sales@ecopacific.com.au), or fax through 03-9706 6089, and Tel 03-9706 6228.

### **Maintenance:**

It is recommended that this unit be serviced at least once every two years. This service is not covered by the warranty and is chargeable.

Eco Pacific or its authorised service agent should be contacted to carry out preventive maintenance on your system.

The service technician will attend to matters such as inspection of all flue product passages, combustion, ventilation air passages, air openings, clean burners, fan, filters, and ensure that the system is operating to its design/peak performance.

**Replacement Parts:** If you have trouble contacting your local service agent, or parts dealer please ring Eco Pacific on-  
**(03) 9706 6228**

### **Add-on cooling:**

Refrigerated air conditioning (add on unit) can be added to Super Star heating system at any stage as per model specifications and recommendations, providing your ducting is suitable and is correctly sized. Contact Eco Pacific for details.

### **Warranty:**

This product is warranted to be free from defects of material and workmanship under normal use with periodic maintenance for a period of **five years** from the recorded date of original installation in Melbourne metro areas, regardless of whether actual use begins at that date. This warranty includes labour in the Melbourne Metropolitan area only, but in other areas parts supply only.

The warranty is conditional upon appliance being installed in accordance with the manufacturer's installation instructions, the installation Code- AS/NZ5601, and any other relevant statutory requirements and is operated in accordance with these Operating Instructions.

Eco Pacific reserves the right to determine whether fault is caused by faulty workmanship or material or that any part is defective.

The heat exchanger and burner carry a **10-year** parts prorate warranty under normal operating conditions. Eco Pacific will, in the event of a failure of the heat exchanger or burner during warranty period, either provide a new burner or heat exchanger free of charge or allow credit in the amount of the then current retail selling price of an equivalent burner or heat exchanger towards the purchase price of a new Eco Pacific heater. This warranty is the only expressed warranty given by Eco Pacific. No person must alter, enlarge, or change these obligations and liabilities. All work under the terms of this warranty shall be performed during normal working hours. All replacement parts assume their warranty period only for the remaining time of the first warranty. Nothing in this warranty, however, shall be construed as affecting any rights you may have under the Trade Practises Act or Commonwealth or State Legislation.

### **ECO PACIFIC WILL NOT BE RESPONSIBLE FOR:**

1. Normal maintenance as outlined in the installation and operating instructions including filter cleaning and or replacement and lubrication.
2. Damage or repairs because of faulty installation or application by others.

3. Failure to start due to voltage conditions, blown fuses, open circuit breakers or other damages due to the inadequacy or interruption of electrical service.
4. Damage or repairs needed because of any misapplication, abuse, improper servicing, unauthorised alteration, or improper alteration.
5. Damage because of floods, winds, fires, lightening, accidents, corrosive atmosphere, or other conditions beyond the control of Eco Pacific.
6. Parts not supplied or designated by Eco Pacific.
7. Electricity or fuel costs or increases in electricity or fuel costs from any reasons whatsoever including additional or unusual use of supplementary electric heat.
8. Any special, indirect, or consequential property or commercial damage of any nature whatsoever by the appliance.
9. To ensure that service either under warranty or otherwise is readily available contact Eco Pacific or its Authorised Service Dealer. For prompt attention, please specify unit model, serial number, date installed, and the trouble experienced.

**The following checks should be undertaken before making a request for service:**

- a) Unit is plugged into power point with correct polarity and is switched on.
- b) Manual shut off valve on gas pipeline leading to the heater is open.
- c) Be sure all air-register-grilles/vents are open and free of obstructions.
- d) A thermostat with charged batteries is connected to the heater and is preset to a temperature at least one degree higher than the room temperature (19-22 °C)

However, please bear in mind that if a service call reveals no fault with the unit, you may be charged for the call, even during the warranty period.

Please fill in the enclosed warranty registration card and return to Eco Pacific to uphold warranty.

**MAINTENANCE SCHEDULE:**

Serviceman, please note: The heater should be normally serviced after every two years. All work carried out on this heater should be detailed in the maintenance schedule in the format given below. It is a requirement that all systems have the following information thoroughly documented.

**Keep a record of SERVICE CALLS:**

| Date  | Problem | Action taken | Serviceman /Service Co. |
|-------|---------|--------------|-------------------------|
| ..... |         |              |                         |
| 1.    |         |              |                         |
| 2.    |         |              |                         |
| 3.    |         |              |                         |
| 4.    |         |              |                         |
| 5.    |         |              |                         |
| 6.    |         |              |                         |
| 7.    |         |              |                         |
| 8.    |         |              |                         |
| 9.    |         |              |                         |
| 10.   |         |              |                         |

## **USEFUL HINTS for cost savings**

### **A high efficiency gas heater saves you money on operating cost.**

Uninsulated ceilings, walls and even floors can account for up to 75 percent of total heat loss from a home. A fully insulated home can save up to \$300 a year in heating and cooling costs.

Air leak can account for 15-20 percent of heat loss from an uninsulated home.

Close-fitting, heavy drapes or blinds, or double-glazed windows are effective in reducing these heat losses.

Use the thermostat correctly. For every degree, you increase the thermostat setting your bill can increase by 15-20 percent. So, set your thermostat to a reasonable temperature-19-20 degrees C is usually adequate during the day.

Don't leave your heating running on low overnight or while you are out during the day. It is cheaper to turn the heater off while you are out or sleeping, and on again when you return or wake up in the morning.

Install a time switch or programmable thermostat to turn your heater on and off automatically, say 20-30 minutes before rising in the morning or getting home in the evening. And of course, don't forget to turn the entire system completely off if you are going away on holidays.

Close windows and doors in heated areas while the heater is on.

Close drapes or blinds when you are heating, especially at night.

Open curtains to north facing windows on sunny winter days to let in the free, natural **solar energy** to warm your home.

Wear appropriate clothing. Wearing warm clothing is free, easy and will let you turn down your heater just those few degrees more. Throw an extra blanket on the bed and you can turn off your electric blanket too.

Central heating systems also present larger potential savings. Correct and efficient use can minimise their running costs and help you get the most benefit for your heating dollars.

Protect the return air grille in central heating systems from cold draughts as this needs more energy to warm up than does previously heated room air.

Keep curtain and furniture clear of outlets and return grille so that they do not restrict the flow of air from the outlet and around the home.

Check for air leaks from the ducting. Escaping heat will only serve to heat under your home instead of inside.

Thank you very much for taking time to read this booklet.

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