

# SEALEY

## SEALEY INFRARED SPACE HEATER KEROSENE/DIESEL 136,000BTU/HR SPACE WARMER WITH WHEELS®

MODEL NO: IR37.V6

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to  
Instruction  
Manual



Wear  
Protective gloves  
(refuelling)



Warning!  
Hot surface



DO NOT use  
petrol



Use heater in well  
ventilated areas



Always unplug  
heater before  
servicing and  
checking



Never use heater  
where highly  
flammable vapours  
are present



DO NOT  
cover



DO NOT use  
paraffin

**THIS HEATER IS NOT SUITABLE FOR USE AS A PRIMARY HEATING SOURCE**

### 1. SAFETY

#### 1.1. ELECTRICAL SAFETY

- ❑ **WARNING!** It is the user's responsibility to check the following:  
Check all electrical equipment and appliances to ensure that they are safe before using. Inspect power supply leads, plugs and all electrical connections for wear and damage. Sealey recommend that an RCD (Residual Current Device) is used with all electrical products.

If the product is used in the course of business duties, it must be maintained in a safe condition and routinely PAT (Portable Appliance Test) tested.

Electrical safety information, it is important that the following information is read and understood.

Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.

Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that they are secure.

**Important:** Ensure that the voltage rating on the appliance suits the power supply to be used and that the plug is fitted with the correct fuse - see fuse rating in these instructions.

- ✗ **DO NOT** pull or carry the appliance by the power cable.
- ✗ **DO NOT** pull the plug from the socket by the cable.
- ✗ **DO NOT** use worn or damaged cables, plugs or connectors. Ensure that any faulty item is repaired or is replaced immediately by a qualified electrician.

This product is fitted with a BS1363/A 3 pin plug.

If the cable or plug is damaged during use, switch off the electricity supply and remove from use.

Ensure that repairs are carried out by a qualified electrician.

Replace a damaged plug with a BS1363/A 3 pin plug. If in doubt contact a qualified electrician.

a) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.

b) Connect the BROWN live wire to the live terminal 'L'.

c) Connect the BLUE neutral wire to the neutral terminal 'N'.


Ensure that the cable outer sheath extends inside the cable restraint and that the restraint is tight.

Sealey recommend that repairs are carried out by a qualified electrician.

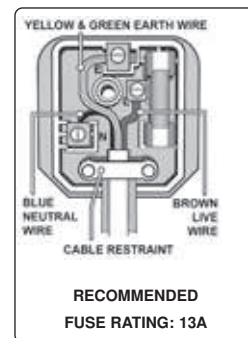
- 1.1.1. If an extension reel is used it should be fully unwound before connection. A reel with an RCD fitted is preferred since any appliance plugged into it will be protected. The cable core section is important and should be at least 1.5mm<sup>2</sup>, but to be absolutely sure that the capacity of the reel is suitable for this product and for others which may be used in the other output sockets, we recommend the use of 2.5mm<sup>2</sup> section cable.

- 1.1.2. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard.

#### 1.2. GENERAL SAFETY

- ▲  **DANGER!** Risk of carbon monoxide poisoning. Failure to provide proper ventilation could result in serious illness or death.
- ✓ Check that the heater is in sound condition and good working order. Take immediate action to repair or replace damaged parts.
- ✓ Use recommended parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- ✓ Only use clean diesel or kerosene (not bio-diesel, paraffin or petrol) to fuel this heater, in accordance with instructions contained in this manual.
- ✓ Locate heater on a level and stable surface.
- ✓ Switch off if any irregularities occur.

- ❑ **WARNING!** Only use heater in well ventilated areas. Ensure continuous ventilation is provided to the heater operating area via



windows and doors etc. If people are not required to be present in the heated area, the volume of air to be heated (mtr<sup>3</sup>)/heat output (kW) ratio must be at least 10:1 and people must be advised not to remain in the heated area for prolonged periods. If people are required to be present in the heated area, the volume of air to be heated (mtr<sup>3</sup>)/heat output (kW) ratio must be at least 30:1. Ventilation must be to the outside of the premises in which the heater is to be operated. The total open area (mtr<sup>2</sup>) must be at least 0.003 times the total heat output (kW). The volume concentration of oxygen (O<sub>2</sub>) in the heated room, must always remain above 17%.

- ❑ **WARNING! DO NOT** use the heater near flammable material, liquids, solids, gases or compressed gas cylinders etc.
- ✖ **DO NOT** switch the heater off by disconnecting it from the mains. **ALWAYS** set the switch on the burner to the 'OFF' position and allow the cooling cycle to finish, before disconnecting from the mains.
- ✖ **DO NOT** stand or place any object less than 3m from the heater output and keep the heater a minimum of 2m from any walls or objects.
- ✖ **DO NOT** use the heater in closed rooms, living areas, basements or below ground level.
- ✖ **DO NOT** allow untrained persons to operate the heater and **DO NOT** operate the heater without the safety guard.
- ✖ **DO NOT** move or handle the heater when hot, without wearing protective gloves. Never move the heater whilst it is operating.
- ✖ **DO NOT** leave the heater unattended for prolonged periods of time when in use. Switch the heater off and unplug from the mains before leaving work area.
- ✖ **DO NOT** fill the fuel tank whilst the heater is running or still hot. **DO NOT** overfill the fuel container. Wipe up any spilt fuel immediately.
- ✖ **DO NOT** obstruct the air inlet (rear) and air outlet (front) of the heater and **DO NOT** use duct work in front or at the rear of the heater.
- ✖ **DO NOT** allow children or animals near the heater when in use, or whilst still hot.
- ❑ **WARNING! RISK OF ELECTRIC SHOCK. DO NOT** expose the heater to water spray, rain, dripping water or wind.
- ✖ **DO NOT** operate the heater when you are tired or under the influence of alcohol, drugs or intoxicating medication.
- ✖ **DO NOT** touch the heater outlet or cone when in use, or for a period of time after it's switched off, as these are VERY hot and will take time to cool down.
- ✖ **DO NOT** use an external fuel tank. Only use the tank that is fitted to the heater, and only fill it when the heater has cooled down.
- ✓ Ensure that the heater is correctly turned off.
- ✓ When not in use for an extended period, store in a safe, dry area, out of reach of children.  
Children from age 8 years and above, persons with reduced physical, sensory, or mental capabilities those with lack of experience and knowledge can use the appliance, if they have been given supervision or instruction concerning use of the appliance in a safe way to understand the hazards involved.
- ✖ Children shall NOT play with the appliance.
- ✖ Cleaning and user maintenance on the appliance shall NOT be made by children without supervision.
- ✓ The appliance shall be disconnected from its power source during service and when replacing parts and, if that the removal of the plug is foreseen, it shall be clearly indicated that the removal of the plug has to be such that an operator can check from any of the points to which they have access that the plug remains removed.

## 2. INTRODUCTION

Versatile infrared multi-fuel heater designed to run on kerosene or diesel. Clean burning unit suitable for well-ventilated applications. 38L Tank allows approximately 10hrs running time, making this unit extremely economical. Safety features include: solenoid valve, automatic overheat safety shut-off and quiet operation.

## 3. SPECIFICATION

Model	IR37.V6
Automatic Shut-Off	Yes
Fuel Tank	38L
Fuel	Kerosene/Diesel
Fuse Rating	13A
Heat Input based on gross calorific value	34400 Kcal/h (1kW=860 kcal/hr)
Heated Area	320 - 420m <sup>2</sup>
IP Rating	IPX4
Maximum Electrical Input	230V 50Hz
Motor Power	80W
Nominal Heat Input	40kW
Output	136,000Btu/hr(40kW)
Plug Type	3-Pin BS
Power Supply Cable Length	1.1m
Running Time Per Filling (Maximum)	10 hours
Supply	230V 50Hz
Transport Wheels	Yes

### ❑ WARNING!

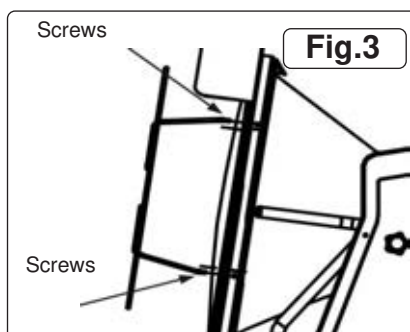
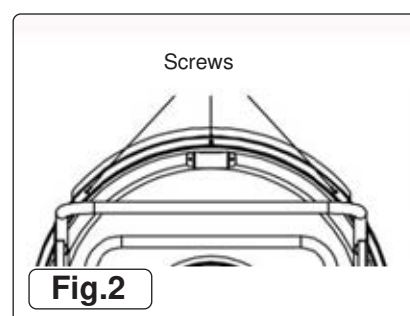
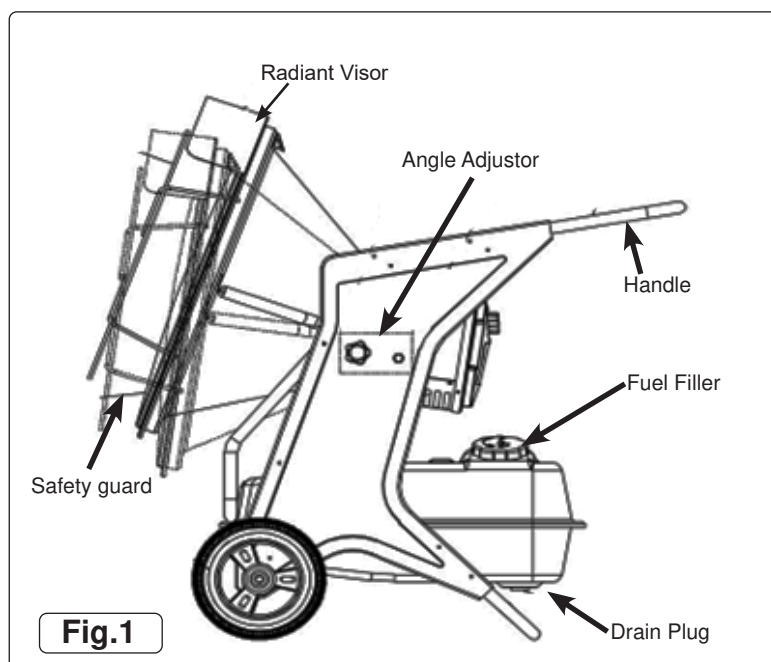
This heater is not suitable for use with paraffin, petrol or Bio-Diesel.

Use of Bio-Diesel will damage the filter and seals. Damage caused by use of Paraffin, Petrol or Bio-Diesel will not be covered by warranty.



## 4. ASSEMBLY

- 4.1. Remove front guard from packed/transit position.
- 4.2. Assembly Radiant Visor to the top rear of the Radiant Cone Assembly using 3 included screws (fig.2).
- 4.3. Attach Safety Guard to front of heater with screws provided (fig.3).
- 4.4. Place handle on main structure and fasten with screws provided.

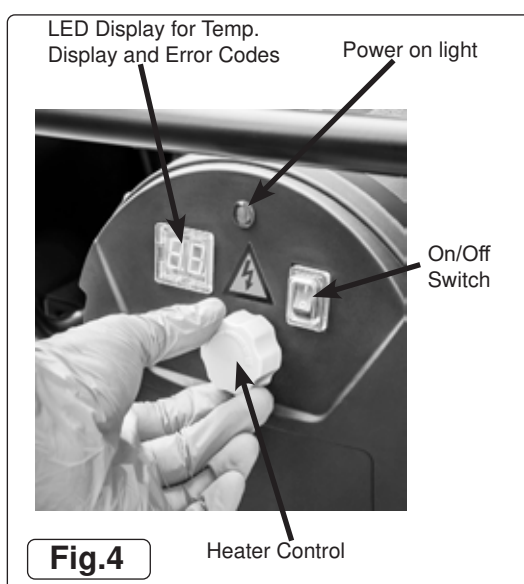


## 5. OPERATION

- ❑ **WARNING!** This heater is not suitable for use with petrol, paraffin or Bio-Diesel; use of Bio-Diesel will damage the filter and seals.  
**Damage caused by use of Paraffin, Petrol or Bio-Diesel will not be covered by warranty.**
- 5.1. **PRINCIPLES OF OPERATION**
  - 5.1.1. **Fuel system:** This heater is equipped with a high-pressure pump. The pump draws fuel up from the fuel tank to the nozzle in the burner head. It is sprayed into the combustion chamber in a fine mist where it is mixed with air for combustion.
  - 5.1.2. **Quick-Fire Ignition:** A transformer sends high voltage to a two-pronged spark plug. The spark ignites the fuel/air mixture as it is sprayed into the combustion chamber.
  - 5.1.3. **Air System:** A blower motor assembly forces air around the combustion chamber, where it is super-heated and up and around the chamber during operation and also runs during the cool-down period.
  - 5.1.4. **Electrical System Protection:** The heater's electrical system is protected by a circuit breaker that protects the system components from damage. If the heater fails, check the fuse first, and replace if necessary.
- ❑ **WARNING! Air contaminants taken into the heater may affect the heat output, damage the unit and may cause health problems.**  
**Example: Bodyshop filler dust/paint overspray will damage the motor bearing, clog the filter and compressor and contaminate the combustion chamber causing flame flutter and health hazards. Please note that any parts damaged by filler dust/paint overspray will not be covered by warranty. Additionally, a cleaning charge will be made for any heaters damaged by filler dust/paint over spray.**
- 5.2. **VENTILATION:**
  - ❑ **WARNING! Only use the heater in well ventilated areas.** Careful consideration must be given to the placing of the heater to provide safe and comfortable heating. Ensure continuous ventilation is provided to the heater operating area. A ventilation opening must run to the outside of the premises in which the heater is to be operated.  
**The heater requires a fresh air opening of at least 3030cm<sup>2</sup>.**  
For Example:
    - A two car garage door should be open at least 13cm.
    - A single car garage door should be open at least 18cm.
    - Two 76cm windows should both be open at least 22cm.
- 5.3. **STARTING THE HEATER**

**NOTE: If air has entered the fuel line; possible when new, when left standing for a long period or when the tank level has fallen too low, priming may be necessary. It is preferable to start the heater outdoors for the first time, to allow any oils left over from the manufacturing process and transporting to be burnt off in a safe environment. Run it for 10 minutes on this first burn.**

  - 5.3.1. Carefully fill the fuel tank with clean approved fuel until full.
  - 5.3.2. Ensure the fuel cap is secure.
  - 5.3.3. Plug the power cord into a suitable power socket. If using an extension lead see Electrical Safety section 1.1
  - 5.3.4. Turn the "ON/OFF" Switch "ON" (fig.4). The unit should be online in a few seconds. If it is not, please refer to troubleshooting section.  
**NOTE: In the event of unit being turned off due to running out of fuel, turn the unit off, allow to cool for at least 5 minutes refuel and turn it back on.**
- ❑ **WARNING:** When turning the unit off, **DO NOT** switch off the power or



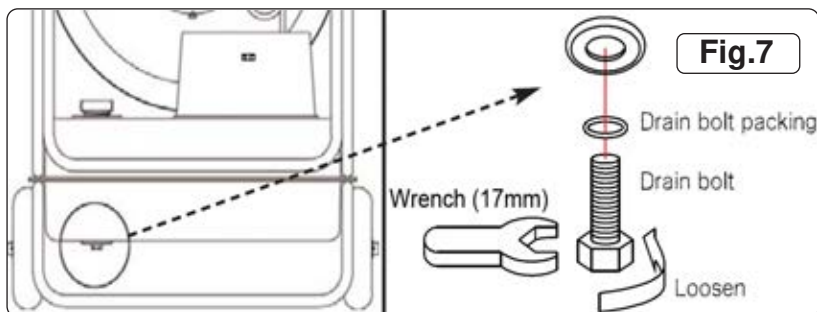
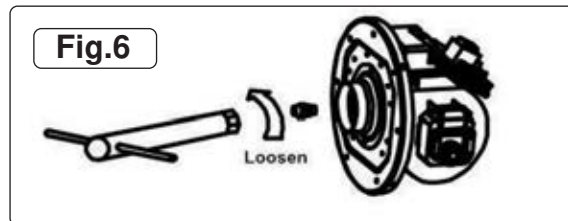
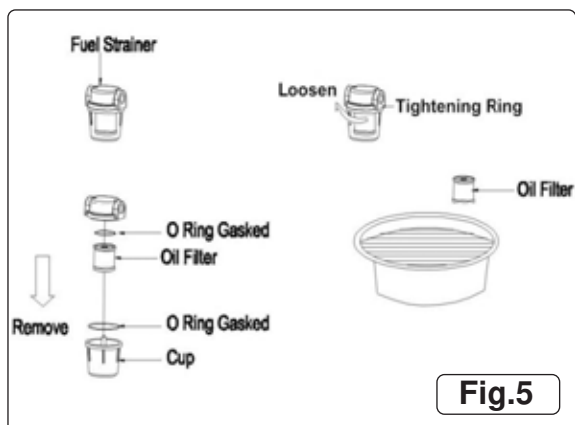
disconnect the power cable before the unit cools down completely (minimum of 5 minutes required).

## 6. MAINTENANCE

- ❑ **WARNING!** Allow unit to cool down for a minimum of 5 minutes before attempting any maintenance.

**Use only original equipment replacement parts. Isolate power before any maintenance. The use of alternate or third party components can cause unsafe operating conditions, and will invalidate the warranty. We suggest following a maintenance schedule as follows.**

- 6.1. FUEL/FUEL TANK** - Flush every 200 hours of operation or as needed. **DO NOT** use water to flush the tank. Use fresh kerosene/diesel only (see fig.7).
- 6.2. FILTERS** - The Fuel Filter should be cleaned at least twice per heating season by rinsing them in clean kerosene/diesel. This procedure should also be followed if the fuel is found to be contaminated (fig.5).
- 6.3. NOZZLE** - Nozzles should be cleaned or replaced at least once per heating season (fig.6). This procedure should also be followed if the fuel is found to be contaminated. To clean dirt from nozzle, blow compressed air through nozzle front. It may be necessary to soak the nozzle in clean kerosene/diesel to help loosen any particles.
- 6.3.1. LONG TERM STORAGE**
- 6.3.2. Unscrew the Drain Plug and drain fuel into a suitable container (fig.1, fig.7).
- 6.3.3. Using a small amount of kerosene/diesel, rinse and swirl the fuel around the fuel tank. Empty the tank completely.
- 6.3.4. **Never store leftover kerosene/diesel over the summer. Using old fuel can damage the heater.**
- 6.3.5. Store heater in a dry, well ventilated area.
- 6.3.6. Be sure that the storage area is free of dust and corrosive vapours. Repack the heater in the original shipping material. **Keep this User's Manual in an easily accessible place.**



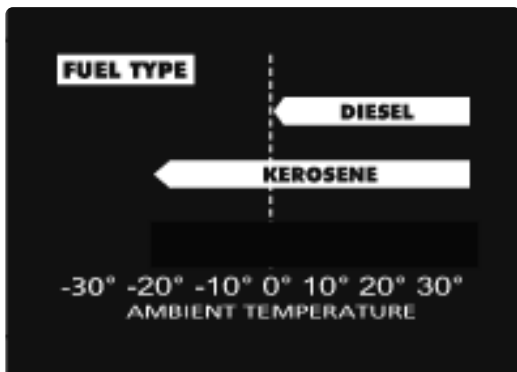
Component	Maintenance frequency	Procedure
Fuel tank	Clean every 150-200 hours of operation or when necessary	Empty and rinse with fresh fuel
Nozzle	Clean or replace once per season or when necessary	Contact Sealey for Technical support
Photocell	Clean or replace once per season or when necessary	Contact Sealey for Technical support
Fuel filter	Clean or replace twice per season or when necessary	Clean the fuel filter with clean fuel
Ignition device	Clean or replace every 1.000 hours of operation, or when necessary	Contact Sealey for Technical support
Fan blades	Clean when necessary	Contact Sealey for Technical support

## 7. TROUBLESHOOTING

Heater doesn't run	1. Heater blocked	1. Restart the Heater
	2. The power switch is in the "(O) OFF" position	2. Turn the switch "(I) ON"
	3. No power	3. 1) Plug the feeder cable properly into the socket
		2) Check the power supply network.
	4. Feeder cable unplugged	4) Contact the technical service centre
	5. Blocked control card	1) Restart the generator
		2) Identify the display error
		3) Contact the technical service centre
Motor/Pump runs but the flame does not start	6. Wrong thermostat setting	6) Calibrate the thermostat by setting it higher than ambient temperature
	7. Temperature sensor override	1) Wait at least ten minutes then try to run ignition again
		2) Contact the technical service centre
	8. Fuse damaged	8. Contact the technical service centre
	1. No fuel	1. Turn off the generator, refill the fuel tank then restart the generator
	2. Ignition device is dirty	2. Contact the technical service centre
	3. Fuel filter is dirty	3. Clean the filter using clean fuel
	4. Nozzle is dirty	Contact the technical service centre
Fan blocked or spins too slowly	5. Photocell is dirty, damaged or installed improperly	
	6. Foreign substances present in the tank	
	7. Electrodes are used up or placed at an improper distance	
	1. Engine damaged	

## 8. ERROR CODES

Error Code	Cause	Solution
OPERATION ERROR		
<b>FO</b>	1. The "ON / OFF" switch is turned "(ON)" when the generator is plugged	1. After disconnecting the generator, see that the switch is in the "O (OFF)" position, plug the generator in and turn the switch "ON".
PHOTOCELL ERROR		
<b>F1</b>	No fuel	Turn power off, allow unit to cool (see Section X) and refill tank
	Fuel is contaminated	Turn power off, allow unit to cool (see Section X). Clean fuel filter and refill tank (see Section Y)
	Photocell is dirty or damaged	Contact Sealey for Technical support
	Fuel filter is dirty	Turn power off, allow unit to cool (see Section X). Clean fuel filter (see Section Y)
	Ignition failure	Contact Sealey for Technical support
TEMPERATURE CONTROL SENSOR ERROR		
<b>F2</b>	Damaged cable	Contact Sealey for Technical support
	Damaged sensor	Contact Sealey for Technical support
THERMOSTAT ERROR		
<b>F3</b>	Internal generator over heating	Turn power off, allow unit to cool (see Section X).
	Anti-tilt sensor active	Turn power off, allow unit to cool (see Section X). Move unit to level surface.
<b>LO</b>	External temperature below -9°C	Normal condition
<b>CH</b>	Continuous operation (55°C)	Normal condition



Although this heater operates with diesel fuel, when the temperatures are below 0°C, diesel additives are required to maintain the diesel's viscosity. Typically diesel can cloud in freezing conditions and will start to gel. You will need additives for your fuel in these conditions. Kerosene does not start to gel until the ambient temperature is around -40°C.



#### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



REGISTER YOUR PURCHASE HERE



#### WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

**Note:** It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. If you require documentation for alternative versions, please email or call our technical team on [technical@sealey.co.uk](mailto:technical@sealey.co.uk) or 01284 757505.

**Important:** No Liability is accepted for incorrect use of this product.

**Warranty:** Guarantee is 12 months from purchase date, proof of which is required for any claim.

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