



## 100 SERIES ENGINE HEATER

The P1 Engine heater is designed to create cooling system temperature prior to starting the engine. It is not designed to heat the engine to normal operating temperature. The heater will circulate coolant continually whilst applied to the power source, although the internal thermostat will control the heating element allowing it to “cycle” on/off as temperature is achieved.

### **INSTALLATION PRECAUTIONS**

The P1 Engine heater must be installed 20-40cm below the highest point in the cooling system.

The P1 engine heater can be installed inline or parallel in the cooling system.

Ideally the P1 Engine heater should be installed vertically as this will aid bleeding air from the cooling system. The engine heater can also be installed horizontally as long as any air is evacuated from the cooling system.

### **INSTALLATION INSTRUCTIONS**

1. Select the location where you want to install the P1 Engine heater. (ideally vertically mounted)
2. Connect hose to the inlet side of the engine heater.
3. If you have air bleeds in the system OPEN them now to assist filling.
4. Add anti-freeze liquid slowly until anti-freeze liquid flows out from the P1 Engine heater outlet.
5. Connect the outlet hose to the engine heater and fill the cooling system to the desired level with anti-freeze.
6. Close any air bleeds fitted to the cooling system once all the air has been evacuated.
7. Check for any leaks in the cooling system.  
**\*\*Any leaks in the cooling system will cause engine heater failure!\*\***
8. Now the P1 engine heater is ready to use.

### **WEEKLY MAINTENANCE**

1. When washing the car ensure that the heater is “bagged” (like you would a magneto) to ensure that no water enters the electrics of the heater.
2. When checking the coolant level briefly turn the heater on to ensure correct operation. Remember that under racing conditions water can be pushed out of the cooling system causing air pockets.

### **GENERAL TIPS**

- Ensure that the P1 engine heater has a stable power supply source. Unstable power supply can cause internal damage to the unit.
- If the heater gets hot very quickly after start up, switch off immediately to prevent further damage. The possible cause is air in the system.
- Ensure that the P1 engine heater is protected from water. This is an electrical device and any external water entering the unit may cause failure.