

## SWIFT HOT WATER

### INSTALLATION AND OPERATING INSTRUCTIONS

#### MODELS

GHW-GAS STORAGE HOT WATER, EHW- ELECTRIC STORAGE HOT WATER

GEHW- DUAL ELECTRIC HOT WATER

AUSTRALIAN MADE, DESIGNED AND OWNED

BUILT TO TRAVEL MADE TO LAST

This booklet contains important safety instructions and advice on operating the appliance for best performance. **Safety First – Read the instructions to ensure that you understand its operation. Always keep this booklet with the appliance for future reference.**

Do not use this appliance unless it is in a level position. Level your RV before using this appliance. Gas or Electricity can be used singularly or together to heat the hot water. (GEHW). Ensure that the gas is turned on when required and start the system using the wall mounted switch. The red led will flash. The ignition cycle incorporates three cycles before lockout if the gas flame is not established. It will spark for up to 5 seconds until a flame is established or stop for another 5 seconds before repeating and once more at the end of which it will shut off and needs to be manually turned off before any further attempts could be made. This is to assist bleeding gas through when a gas bottle has been changed. The LED (Gas only) will remain on when the unit is operating. This hot water system is designed so that hot water can be extracted even before it has reached full temperature. As a rule wait until the gas turns off automatically. It will cycle on and off depending on water usage and time. The unit will stop when the water reaches 78°C. This is then reduced in temperature using a water tempering valve for sanitary purposes.

The tank is made from stainless steel which resists corrosion with water above 60°C. This grade of stainless steel has been chosen because other materials can corrode when subjected to these higher temperatures. *In Australia bore water can harbor a bacteria that can eat through metals particularly in North Western Australia and across the top of Australia.* **DO NOT FILL YOUR TANKS DIRECTLY FROM BORE WATER THAT HAS NOT BEEN TREATED OR EXPOSED TO DIRECT SUN LIGHT FOR A NUMBER OF DAYS.** The appliance is fitted with an anode to protect against bacterial corrosion. It does not need to be changed like a traditional anode because it is only there if you accidentally fill up with unsafe bore water.

## **TO THE INSTALLER**

This product is to be installed by an authorized person.

The Swift Hot Water System must be installed in accordance with this instruction book, all the relevant clauses of AS/NZ5601, the National Installation Code for gas appliances and any other State or Regulatory requirements where applicable. Check AS/NZ 5601 for correct pipe sizing and flueing requirements.

The hot water is designed to operate at a maximum inlet pressure of 400kPa. A pressure limiting valve must be fitted in the supply line to the tank. All gas and water connections are made from the outside of the van. Refer to AS/NZ 5601 for clearances to window openings etc.

- Install in an RV or dwelling. To be installed on an exterior wall. The door must be open to the outside
- The tank must be supported to prevent movement.
- To be used with an approved two stage regulator 2.75kPa for LPG.
- All combustion air is supplied from the outside of the installation.
- Do not vent into an enclosed area.
- It is recommended to mount the appliance on the driver side of the vehicle.
- Do not modify the water heater in any way.
- Do not use a battery charger to supply power to the water heater.
- Do not Hi pot the water heater unless the electronic ignition has been disconnected

## **ELECTRICAL 240V AC**

**A switch GPO must be located in an adjacent area which is accessible when the appliance is installed. After installation leave the plug out of the GPO until hand over of the RV to the customer. If the plug is left in prior to hand over the power switch may be accidentally turned on by a prospective buyer or the switch could be turned on when the vans batteries are being recharged. This will result in the element being burnt out if there is no water in the tank.**

## **GAS CONTROL CONNECTION**

The gas system is controlled by a flame monitor which lights the gas and monitors the flame. In the event of a flame failure it will automatically shut off the gas until the system is reset. There are four wires located at the top right corner which should be connected as follows: Red is 12V DC Positive, Black is 12V DC Negative, Yellow is positive to LED and white is Negative to LED.

**WARNING** This appliance is not suitable for use as a pool heater.

**The gas system is suitable for Propane or ULP**

Gas connection is 5/16 tube nut (1/2 UNF – 20TPI) compression located along the bottom edge close to the right hand corner. Bring the copper tube along the left hand side of the tank and pass through the rubber grommet. Bend tube to suit the inlet connection and tighten using a 5/16 Tube nut.

**GAS PRESSURE** Connect to the gas bottle using an approved two stage regulator set to supply 2.75kPa to the appliance inlet. Check pressure using pressure point mounted on regulator.

**WATER CONNECTION** This appliance has been tested and is fitted with Desto and/or Norgen 12mm push fit connectors for use with LLDPE pipe 12mm OD x 9mmID or 12mm OD x 8mm ID hose connected to the inlet and the outlet of the appliance. Code type CS9X1.5LLDPE

It is recommended that the pipes be color coded for hot and cold. I.e Red to top hot connection and black to the bottom cold connection. Bring the two pipes along the left hand side of tank passing through the rubber grommet and then fit to 12mm swivel connectors. Ensure that the release ring is pulled away from the elbow.

**GAS INPUT** 7Mj. Inlet connection 5/16 tube nut (1/2UNF x 20TPI) compression 2.75kPa.

**LOCATION** Choose a location to allow the body of the Hot water tank to sit on the floor of the RV with the cut out to allow the appliance to slide in from the outside. Ensure that it is clear of windows and openings into the RV and that the clearances are permitted in AS/NZ5601-2 Fit a strap or rear fixing bracket to prevent the tank moving during travel.

**INSTALLING** Push the unit in from the outside engaging the copper supply pipe and the hot and cold water lines through the rubber grommet. Connect the 12V DC supply with the switch provided to the positive wire. Connect the yellow and white wires to the LED mounted on the switch.

Use foam tape or other suitable flexible material to caulk around the perimeter of the body. Connect the hot water line (Red) to the top connection. The cold water line (black) is connected to the lower connection. For the customer's convenience it is recommended that a TEE fitting be placed in the inlet pipe with a stop cock so that the tank can be easily drained when the van is in storage. Place the two lugs on the door through the two slots in the flange of the body on the left side. The door must be screwed shut for travelling.

Carry out gas and water leak tests

Turn on the gas supply and check the unit for correct operation as follows:

1. Turn on gas supply at bottle
2. Turn on 12V DC supply
3. Turn on isolating valve in cupboard adjacent to the water heater.
4. Turn on the gas ignition switch on the wall. Appliance will light automatically.

### **INSTALLING THE ELECTRIC STORAGE HOT WATER UNIT (MODEL EHW)**

This unit is not suitable for outside installation. Position the appliance in a cupboard or under a bed where there is easy access for future service. Fix in position through the bottom flange. Provide a drain point for customer purging of the PTR valve. Install a TEE fitting in the inlet pipe with a stop cock on the outlet and connect its outlet to outside the van.

### **TO THE CUSTOMER**

Thank you for choosing an Australian made hot water system and of course we thank you once again if you have chosen any of the Swift cookers, range hoods and BBQ's. We have continued to offer quality product designed for the purpose of travel yet functioning like the appliance in your other home.

Very little maintenance is required for this appliance but you should as a matter of course always familiarize yourself with any appliance so that you can identify any change in operation or condition.

You should check your appliance to ensure that there has been no damage or movement to its installation before starting and at the completion of any trip. In any case have your appliance should be checked by a service agent as recommended by the Safety Regulators every 2 years and refer to the Swift Web site for any notices or changes that may occur from time to time. The appliance has been designed so that all water connections are on the outside of the vehicle. This means that if a leak occurs in the connections it will drain outside of the van.

When you are about to use your RV after a prolonged period check inside the cover of the appliance to ensure that it is clean and that no foreign matter has been posted into the unit through the flue outlets.

If the water has not been used in the van for some time turn on the pump and flush out the water and then replace with fresh water.

Never operate the appliance before filling the tank with water and checking that water flows from one of the hot taps. In freezing conditions check that water flows from the hot tap before turning the appliance on. Failure to ensure that the water tank is full may cause the element to burn out which would not be covered by warranty.

This appliance is fitted with a type of anode designed to protect the tank from Bacterial attack should untreated bore water enter the tank. (Search Bacterial corrosion on the internet for information regarding this). The anode does not need to be changed on a regular basis.

### **ROOM HEATER**

The Swift Ecotherm Heater has been designed to connect to the Swift Hot Water unit so that it can utilize the heat from the tank while still giving hot water for showering or washing. There is no flue required for the heater and you have the added bonus that it can operate off the gas or the electric system. The heater increases the capacity of the hot water unit because it constantly circulates the water within the hot water unit.

## **TECHNICAL SPECIFICATIONS**

Capacity 28 litres

Dimensions Overall length 545mm, width 375mm, height 363mm

Voltage for electric element 240V AC 50Hz

Voltage for gas burner 12V DC

Weight 5.0 kg (Dry)

Heating element 1000Watt

Pressure Relief Valve. 500 Or 700kPa

Maximum inlet water pressure 400kPa

Cut out Dimensions. 330- 340mm wide, 320 – 325 mm high

Gas connection location. 5/16 Tube Nut (1/2 UNF – 20TPI) 200mm from left hand side 20mm up

Water connection location. Hot 260mm up and 80mm from left, Cold 50mm up and 130mm from left

Pipe Access. Lower left corner along side of tank.

NOTE 1 COLD WATER INLET FROM STORAGE WATER TANK AND OR SEPARATE CONNECTION. FIT PUMP WITH REVERSE FLOW VALVE BETWEEN TANK AND COLD WATER INLET

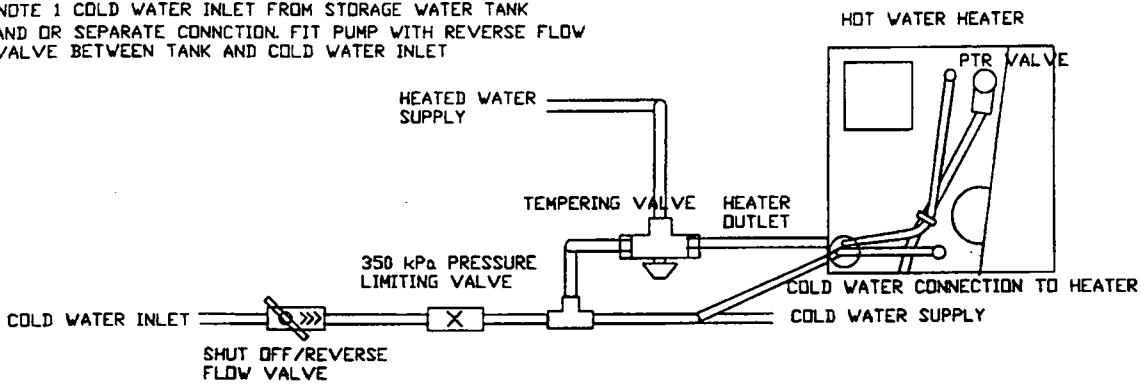


DIAGRAM 1 12mm TO 1/2 BSP APPLIANCE CONNECTION TO TEMPERING VALVE WITH REVERSE FLOW SHUT OFF AND 350kPa PRESSURE LIMITING VALVE

NOTE 2 12mm PUSH IN FITTINGS AND LLDPE HOSE HAS BEEN TESTED AND CERTIFIED AS PART OF THE APPLIANCE

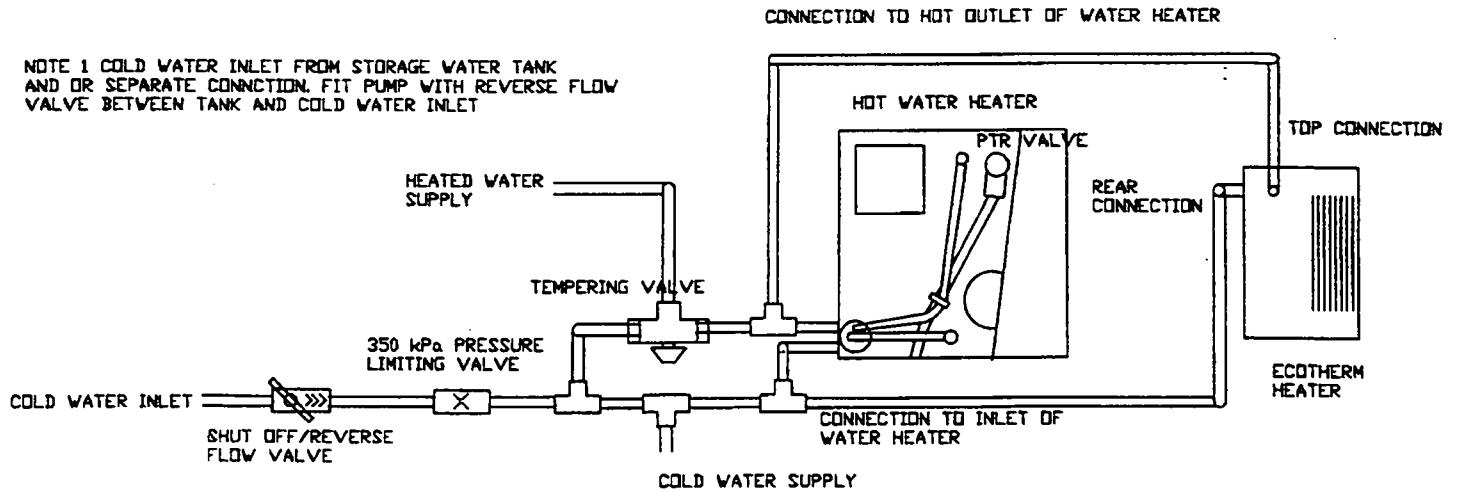
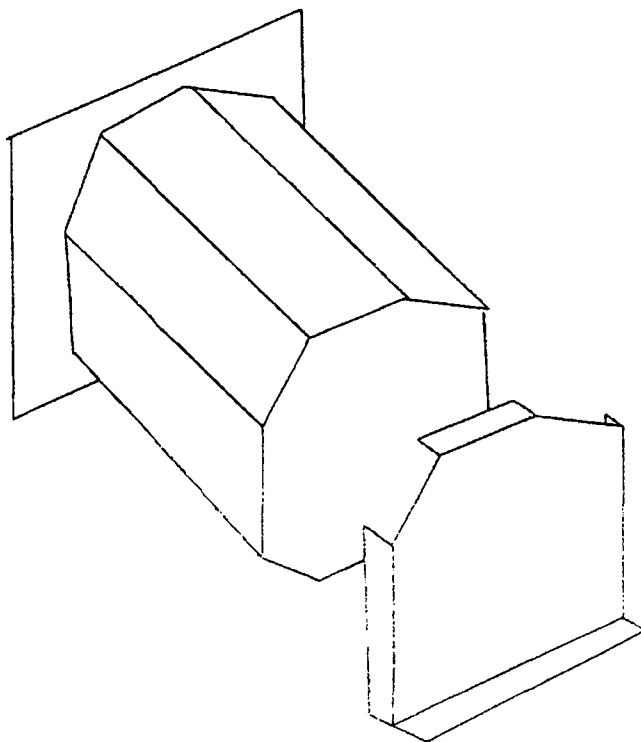


DIAGRAM 2 OPTIONAL ECOTHERM HEATER - CONNECTIONS TO BE MADE CLOSE TO WATER HEATER

NOTE 2 12mm PUSH IN FITTINGS AND LLDPE HOSE HAS BEEN TESTED AND CERTIFIED AS PART OF THE APPLIANCE

## INSTALLING SWIFT HOT WATER WITH STRAP OR REAR FIXING BRACKET

Push the unit in from the outside engaging the copper supply pipe and the hot and cold water lines through the rubber grommet. Connect the 12V DC supply with the switch provided to the positive wire. Connect the yellow and white wires to the LED mounted on the switch. Strap or place blocks at the rear of tank to prevent movement when travelling over rough roads. Or A metal rear fixing plate is available from swift to prevent movement.



# SWIFT HOT WATER SWITCHES

12V DC

240V AC

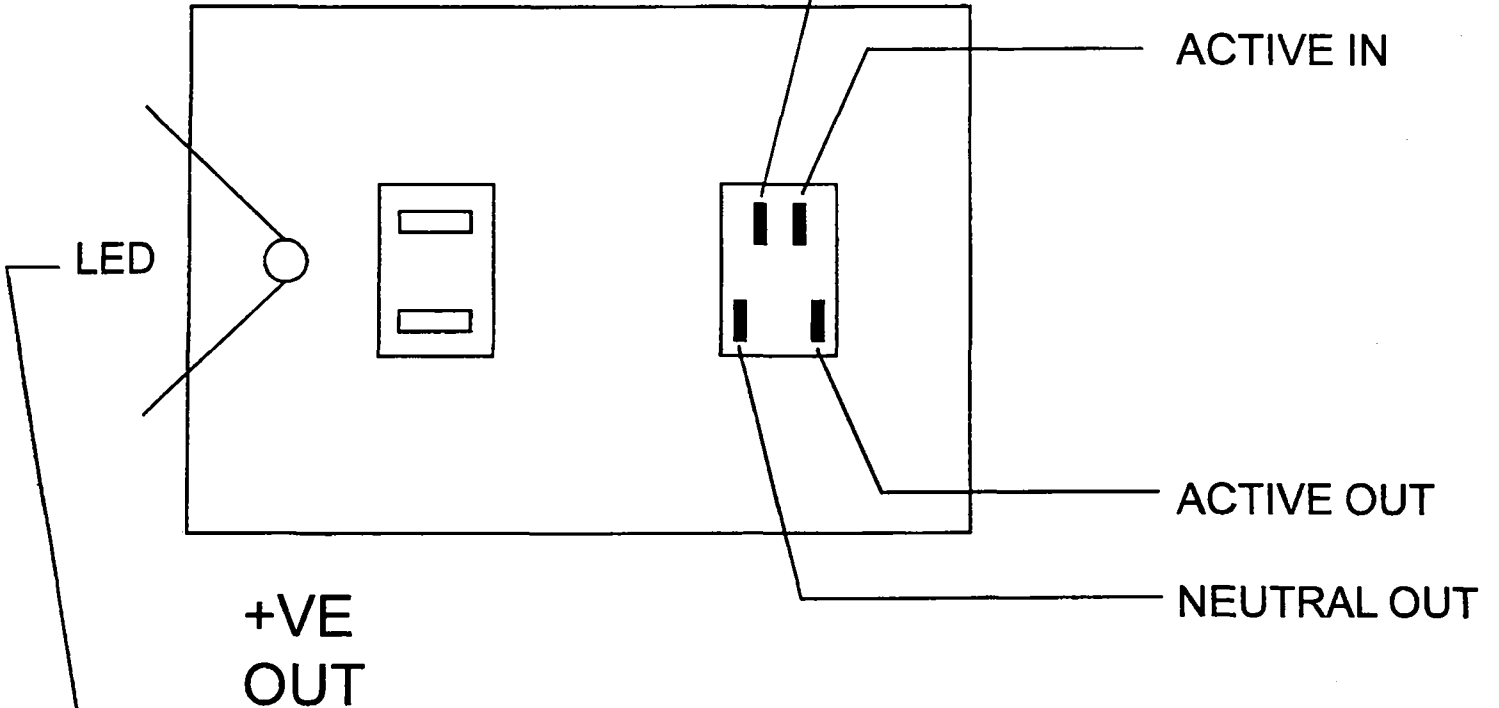
+VE  
IN

NEUTRAL IN

ACTIVE IN

ACTIVE OUT

NEUTRAL OUT



CONNECT LED  
HOT WATER WHITE TO BLACK  
HOT WATER YELLOW TO RED