SWIFT HOT WATER

INSTALLATION AND OPERATING INSTRUCTIONS

MODELS:

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

GEHW- DUAL GAS 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.

Do not use this appliance unless it is in a level position. Level your RV before using this appliance. Either or both Gas and Electricity can be used to heat the water if you have the GEHW model. Open the gas supply bottle when required. Turn on using the wall mounted switch. When using Gas the LED flashes slow to indicate start up. Ignition incorporates three cycles to start up, it will spark for approximately 5 seconds until the gas lights, if it does not light it will wait 5 seconds then repeat the process three times before lock out occurs. This is to assist bleeding gas through when changing to a new bottle. The LED (Gas only) will turn on when the unit is in operation. This hot water system is designed so that hot water can be extracted even before it has reached full temperature. As a general rule wait until the gas turns off automatically. It will cycle on and off depending on water usage and time. If you want hot water quickly from cold then wait for 30 minutes before extracting water. The unit will stop when the water exceeds 78°C. This is then reduced in temperature using the water tempering valve.

The tank is made from stainless steel which can resist corrosion with hot water above 60 °C. This grade of stainless steel was chosen because other materials have limitations for higher temperatures for example Enamel tanks are limited to around 60 °C because many enamels begins to dissolve above this temperature. There are many types of corrosion that can occur in hot water systems. This stainless steel is a premium class designed to resist electrolytic corrosion which is the most common form of damage to tanks unless protected with an anode. Water with high iron content or water from rusting pipes can also introduce corrosion in the tank. This is why we have developed a patented anode tube where all the water passes through before entering the tank, acting like a filter to iron particles so the anode can electrolyze to the iron. 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 YQUR TANKS DIRECTLY FROM BORE WATER THAT HAS NOT BEEN EXPOSED TO DIRECT SUN LIGHT FOR A NUMBER OF DAYS. As a general rule ground water either from a reservoir or stream is best for use in all water systems. If you do find that bore water has entered the system empty or flush the tank as soon as possible. Bacterial corrosion will affect the life of your tank even with this special grade of stainless steel used in the tank. Remember to change the anode tube regularly if using very hard water in the northern regions of Australia. Recommend changing after two years.

TO THE INSTALLER

This product is to be installed by an authorized person only.

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/NZ5601 for correct pipe sizing and fluing requirements

The hot water system 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. This ensures that if any fittings should leak then the water will flow out side of the Recreational Vehicle (RV) or dwelling. The balanced flue is sealed from the inside of the van so the fumes pass outside. Refer to AS/NZ5601 for clearances to window openings etc.

- Install in an RV or on site dwelling. To be installed on an exterior wall. The door must open to the outside.
- 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 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 switched 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 accidently 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 single wires located at the top right corner which should be connected as follows: Red-12V DC Positive; Black-12V Negative; Yellow & White connect to switch LED.

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

The gas system is suitable for Propane or ULP only. (Models GEHW & GHW)

Gas connection is 5/16BSP 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 5/16BSP Nut.

<u>Gas Pressure</u>. Connect to the gas bottle using an approved two stage regulator set to supply 2.75 kPa to the appliance inlet. Check pressure using pressure point mounted on regulator.

Water Connection. It is recommended that the Hot and Cold inlet connections be made using 12mm diameter poly pipe color coded red for the Hot top connection and black for the Cold bottom connection. Bring the two pipes along the left hand side passing through the rubber grommet and then fit to the quick connect swivel elbows. It is recommended the hot tube should be fitted with an internal bush to prevent the tube releasing from the fittings 'grab teeth'. Ensure that the release ring is pulled the fitting. into pushed the tube is after elbow from the back away Or

Fit two ½ BSP M to 3/8 BSP F Compression elbows to the tank and connect as above using 3/8 annealed copper.

Water capacity The tank is has a volume of approximately 28Litres

Gas input. 7.0MJ. Inlet connection 5/16 BSP Compression Gas Operating Pressure 2.75kPa

<u>Location</u> Choose a location to allow the body of the Hot Water unit to sit on the floor of the RV with 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 Cut an opening 338mm high x 323mm wide.

<u>Installing</u> 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 supply with the switch provided in series 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 customers 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 hand side. The door must be screwed shut for travelling

Carry out a test for gas leaks and rectify or notify the manufacturer or dealer for any assistance with the appliance. Check and test the water lines to ensure the connections are sound and there are no leaks.

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

- 1. Turn on Gas supply at bottle.
- 2. Turn on 12Volt DC supply.
- 3. Turn on isolating valve in cupboard adjacent to the water heater.
- 4. Turn on the gas ignition switch mounted 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 of 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 used the Swift Cookers, Range Hoods Heaters and BBQs. We have continued to offer quality product designed for the purpose of travel yet functioning like the appliances in your other home. In a market dominated by giant overseas companies it is important to all of us that we keep jobs in Australia.

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 any new trip. In any case have your appliance checked by a service agent every three years. 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 to the outside of the van.

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

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

This appliance is fitted with a patented anode flow tube designed to give added protection to the tank above that affected by the use of a premium grade of stainless steel tank. It should be checked at least every two years and the tank flushed out every year to prevent calcium build up in the tank. The anode replacement kit includes a special spanner that enables the cold water elbow to be removed without disconnecting the inlet hose.

Room Heater (Optional Product)

The Swift Room Heater (ECOTHERM) 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 electric system. The Stainless Steel tank is heated to higher temperatures than conventional storage hot water systems so you can operate the heater while using the water for showers or doing the dishes. In addition it increases the water tank capacity due to the circulating pump removing any stratification.

Technical Specifications

Capacity 28 litres;

Dimensions - O/all length 545mm, Width 375mm, Height 363mm

Voltage for Electric Model – 240Volt AC 50Hz.

Voltage Gas Ignition - 12Volt DC

Weight - 5.0Kg. (Dry)

Heating Element - 1000Watt 4.2Amp

Pressure Relief Valve - 700kPa

Maximum Inlet Water Pressure - 400kPa

Cut Out Dimensions - 340-345mm wide x 325-330mm High

Gas connection location - 5/16 BSP Compression 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.

Operating Instructions

Electric Heating. Turn on the switch at the GPO. The heater will bring the water to the preset temperature and automatically cut off. The heater will then automatically switch on and off to maintain that temperature. Because this is a high temperature system it will take approximately 1 hour to reach the maximum temperature. The water will reach 60 degrees in approximately 30 minutes if you require to use hot water before it has reached full temperature. Running both the gas and the electric supply will bring the tank to full temperature more quickly.

Gas Heating. Turn on the gas switch and the LED light will flash rapidly until the gas lights. The light will then remain constant. If the gas fails to light or the gas bottle has been changed the system may have air in the line so the system is designed to repeat three times to ensure that the flame sensor monitors the gas correctly. If the gas fails to light or it senses a fault in the system it will turn off the gas and the LED will flash at a constant rate until the switch is turned off to reset the system.

<u>Care and Maintenance</u> When storing your van it is recommended that you drain the tank as this can significantly increase the life of your storage tank. The procedure for draining is the same as for the replacement of the Anode. Turn off the electrical supply to the appliance and unplug the power lead. Turn off the gas and turn off the water pump/Water supply. Open a hot water tap in the van then open the stop cock.

To remove the anode the spanne supplied with the anode placement. Remove the inlet connection elbow and withdraw the anode using a wire hook. When using the spanner the hose does not need to be disconnected as the elbow itself is disconnected. Withdraw the anode tube to allow any calcification paste to be washed out.

For parts and service contact Swift on (03) 93572264 or an authorized service agent.

INSTALL THIS WAY UP

