INSTALLING THE

Electrical

Congratulations with your purchase of our high quality, corrosion-free hot water cylinder (HWC).

Please follow the installation instructions carefully, AND check the final installation according to the instructions. The Xstream VACUSTREAM™ HWC is a cistern-fed (open to air) dual-tank hot water system.

These dual-tank systems consist of a cistern tank ("Supplystream") which is a feeder tank that is positioned on top of the hot water storage tank ("Vacustream"). This system is protected under Provisional Patent number 2009/02514.

"Vacu" in this context refers to the solar heating, or absorption component - in this case low pressure, 47 mm diameter vacuum tubes. These low pressure tubes work on a convection principle - the tubes are connected directly to the hot water storage tank and through convection transfer the heat that builds up inside the tubes to the storage tank. From here the hottest (lightest) molecule rises to the top. This process repeats itself.

These tubes are freeze protected to -6 ºC and therefore ideally suited for frost-prone areas. The Vacustream™ tank is made of a corrosion free material. For ease of maintenance no sacrificial anodes are used. The tubes used with the Vacustream™ solar system are hail resistant.

Model: Vacustream™ (Electrical) ZAR Prov Patent # 2009/02514

Installation procedure:

- Position the frame on a flat surface, facing north. (Photo 1: completed installation).
- Lift the rear end of the frame and fasten the uprights onto rear flat frame. Secure with supplied bolts and nuts. Install the rear support. Attach the four swivel feet. (Photo 2).
- Should the installation be done on a sloped roof, the rear legs of the frame can be shortened, and the swivel feet re-positioned (8 mm holes are to be drilled in the new position). Ensure that the Vacustream is in all instances installed at 90 degrees to horizontal to ensure the proper operation of the hot water draw-off and the float valve in the Supplystream.
- Place the Vacustream on the flat area of the erected frame.
- Secure the tank by fastening the stainless steel straps, positioned as shown in photo 3. Line up the straps to be centrally located between holes 2 and 3 on both ends of the Vacustream tank. (Photo 3)
- Position the tube-end piece at the bottom of the frame and hand tighten bolts - do not fasten - just keep the end frame in position. (Photo 4)
- Place the tube-end caps into the tube-end piece. (Photo 5).

- Insert the silicon rubbers into the Vacustream tank, tapered end facing outwards. (Photo 6)
- Insert the tubes into the silicon rubbers inside the tank – immerse the tube in a soapy solution before it is pushed into the rubber. Push the tube deeper into the Vacustream, lifting the bottom over the end piece at the bottom, and then slide it back, securing it into the end cap holder. (Photo 7).
- Ensure that the bottom piece of the tube rests securely inside the end cap. (Photo 8)
- Position the cistern tank (Supplystream) on top of the Vacustream tank. (Photo 9).
- Connect the supplied plumbing between the cistern tank (Supplystream) and the Vacustream, using two spanners to keep the rear end in position.
- Connect the incoming cold line to the cistern tank inlet - support the pipe.
- Connect the Supplystream tank-outlet to the Vacustream inlet. Do not remove these fittings, simply apply the necessary torque to ensure a proper seal on the supplied compression ring. (These fittings are factory fitted and no provision is made for their removal.)
- Connect the hot water supply line to the outlet of the Vacustream.
- Place the Supplystream cover over the cistern tank and connect the expansion overflow pipe from the Vacustream to the Supplystream.
- Check all fittings for leaks, and ensure all supply lines are properly fastened and secured to fastening points; thereby minimizing strain on the fittings attached to the Supplystream tank and Vacustream. Fasten all the joining points on the frame. Fasten the supply cover using the stainless steel screws supplied.
- Proceed by connecting the electrical supply. Ensure a suitable qualified artisan performs this function. Open the electrical box and connect the electricity line. Always ensure the electricity line is dead when working with electricity.
- Install a suitable isolator switch within easy reach of the HWC.
- **ALWAYS ensure that the HWC is filled with water BEFORE the electrical supply is commissioned.** Failing this the HWC and submersible element might be damaged, and warranty will be null and void.
- Never remove the supplied copper fittings from the Vacustream.
- Keep the tubes cool by shading them from the sun before the cold (main) supply is opened to prevent damage to the tubes (thermal shock).

Maintenance:
Float valve

The float valve used in the system may require cleaning of the inline sieve from time to time, depending on the water quality. Remove the top lid from the Supplystream, and inspect the water inlet from the float valve. If needs be, remove the sleeve (located inside the inlet connection of the valve) clean it and replace. Re-connect the water supply.

Tubes

The tubes may form a scale built-up over time depending on water quality. Remove the tubes, and using an extended bottle brush and a 10% white vinegar solution in water, clean the inside of each tube. Rinse with clean water and replace.

Plumbing

Inspect the plumbing connections from time to time to ensure no dripping from fittings. Fasten if required.

Safety issues

The hot water supply from these systems may reach very high temperatures and it is therefore advisable to connect an inline tempering valve, securing a constant temperature at preset temperatures.

Working components

Float valve: A valve regulating the flow and water level inside the Supplystream feeder tank.
Drain valve: Situated at the bottom of the Vacustream™ storage tank to allow for draining of the tank.

Refer to various pictures included.
Other information supplied with the system

FREEZE RESISTANT

HAIL RESISTANT

System Information	
Manufacturer of geyser:	Xstream Solar Hot Water Cylinders (Pty) Ltd
Trade name:	Xstream
Trade mark:	Vacustream Electrical
Working pressure:	0 kPa – Vented
Model:	Vacustream 12/47/1500
Hail resistant:	YES
Freeze resistant:	YES
Tube material:	Glass 2mm thickness
Energy rating:	Q-factor: 12.983
Aperature area:	1m² (1.75m x 0.047m x 12)

Please contact our Service Desk on +27 21 872 0900 if any further assistance is required.

Think Energy Think Energy Saving Think Xstream Hot Water Cylinders
ENJOY THE HOT WATER SUPPLIED BY YOUR XSTREAM VACUSTREAM HOT WATER CYLINDER!

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International Patent Holder

Prov ZA Pat: 2009/02514

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Installation manual Vacustream 291015
Revision 2
ED by MT 12/09/2012
PROC 10
REC 008

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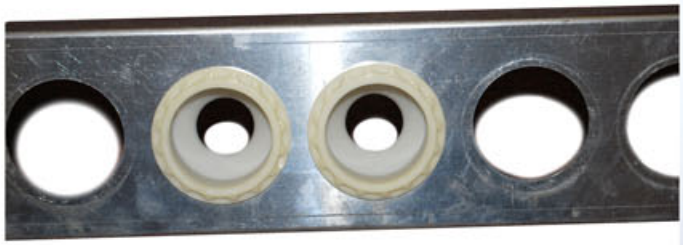

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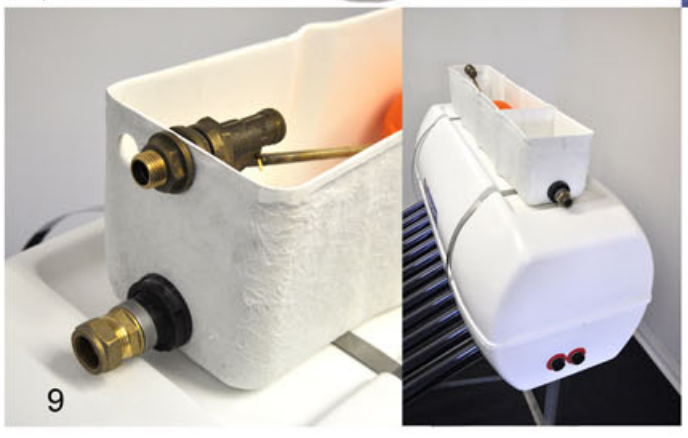

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