

- **WARRANTY DOCUMENT** -
Vacustream Electrical



Xstream Solar Hot Water Cylinders (Pty) Ltd
(Reg: 2003 / 020396 / 07)



HEAD OFFICE
HUGUENOT STATION DISTILLERY RD
PAARL
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SERIAL NUMBER:

CONGRATULATIONS

You are now the proud owner of an Xstream Corrosion Free Hot Water Cylinder (HWC).

WARRANTY – Vacustream™ and Supplstream Tank

A SEVEN (7) YEAR WARRANTY COVERS ALL VACUSTREAM® WATER HEATERS, SUBJECT TO NORMAL AND CORRECT INSTALLATION AND USAGE. (**It is a time reducing warranty). THE WARRANTY IS AGAINST FAULTY MATERIALS AND/OR WORKMANSHIP IN MANUFACTURE AND IS APPLICABLE FROM THE DATE OF INVOICE, ALTERNATIVELY THE DATE OF DISPATCH WILL BE USED.

This warranty covers parts only, and labour will be charged out at rates applicable at the time. Xstream Solar Hot Water Cylinders (Pty) Ltd's obligations are specifically limited to the foregoing and this warranty expressly covers the Xstream range of water heaters only and does not cover any other parts of the installation which may, as a consequence of the failure or defect of Xstream water heaters, become damaged in any way whatsoever and in no circumstances shall Xstream be held liable for any direct or indirect or consequential loss suffered by the customer or any other party.

This warranty is the only warranty which is given and is expressly in lieu of all other warranties, expressed or implied in law, including any implied warranty of merchantability or fitness for a particular purpose. No amendments or additions to this warranty shall be binding on Xstream Solar Hot Water Cylinders (Pty) Ltd unless recorded in writing and signed by a duly authorised officer of the company.

This warranty shall be vitiated and rendered of no force and effect if any repairs or any work is undertaken by the customer or others on his behalf in an attempt to remedy an alleged fault unless authorised in writing by the manufacturer.

Float valve

The float valve carries no warranty.

Vacuum tubes

A separate warranty is attached (Sunscan).

**the extent of the cover provided by this warranty is reduced annually on the anniversary of the date of purchase, by an amount proportionate to the period of the warranty, e.g. purchase price R1 400.00, cover reduced in year two, to R1 200.00, in year three to R1 000.00, in year four to R800.00, in year five to R600.00 in year six to R400 in year seven to R200.

- WARRANTY DOCUMENT -

Vacustream Electrical

INSTALLER AND OWNER

All installers should follow the installation instructions carefully. The owners should check the final installation according to the instructions. Installers and owners should familiarize themselves with the contents of this Warranty. If there are any queries, please contact the factory. SANS 10254 installation code is accepted as standard to all installations. Any potential disputes will be addressed in terms of SANS 10254 installation code.

1. Before connecting the piping, the cold water supply line must be flushed clean.
2. All the fittings on an Xstream HWC are factory tested under normal working conditions. Do not remove these fittings, as this will render the warranty null and void.
3. Ensure that electricity is only connected once the cylinder has been filled with water.
4. All piping and brackets must be securely fixed.
5. Please refer to the installation guide included. If in doubt please contact our factory.
6. An isolator with at least 3mm contact separation must be incorporated in the fixed wiring.

ELECTRICIAN

1. All electrical installations must comply with the SABS Code for the wiring of premises and should be tested by the local electrical authority on completion.
2. All electrical terminals are plug-in and factory tested. It is nevertheless suggested that all terminals be rechecked.
3. The thermostat must be removed to facilitate the connection of the terminal, which is located in the centre of the element boss. Please handle the thermostat with care.
4. This HWC is fitted with a submerged element and a thermostat, which cannot operate in free air and, if commissioned without water, will not be covered by our warranty.
5. In the event of having to replace the thermostat, the same type of thermostat must be used.
6. This HWC must be filled with water before the electricity is switched on to the element, even for testing purposes.

MAINTENANCE INSTRUCTIONS

The Xstream Vacustream' HWC requires basically no maintenance. The float valve may be serviced from time to time by removing any dirt that might have formed in the float operating system.

ELEMENT REPLACEMENT

1. Switch electricity off.
2. Close cold water supply cock.
3. Drain water from HWC.
4. Disconnect supply wires at thermostat.
5. Remove thermostat.
6. Remove earth connection on element.
7. Unscrew element nut with an element spanner, remove and replace element.
8. Reverse procedure for recommissioning.

THERMOSTAT REPLACEMENT

1. Switch off electricity.
2. Disconnect supply wires to thermostat.
3. Remove the thermostat by pulling it out of the element pocket.
4. Push new thermostat into the pocket and ensure that the lugs are properly aligned. Push in the thermostat fully.
5. Set thermostat on 50C.

All service calls and correspondence are to be addressed to:

THE SERVICE MANAGER:

The Service Department
Xstream Solar Hot Water Cylinders (Pty) Ltd
PO BOX 3132
Paarl
7620
021 872 0900
021 872 8604
info@xstream.co.za
www.xstream.co.za

Telephone:

Facsimile:

E-mail:

Website:

- **WARRANTY DOCUMENT** -
Vacustream Electrical



International Patent Holder

Prov ZA Pat: 2009/02514

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E-mail: info@xstream.co.za

Website: www.xstream.co.za

Distillery Road

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7646

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7620

WARRANTY MANUAL

Refer to installation manual for installation procedure

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 °C 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
Aperture area:	1m ² (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!**

INSTALLING THE



International Patent Holder

Prov ZA Pat: 2009/02514

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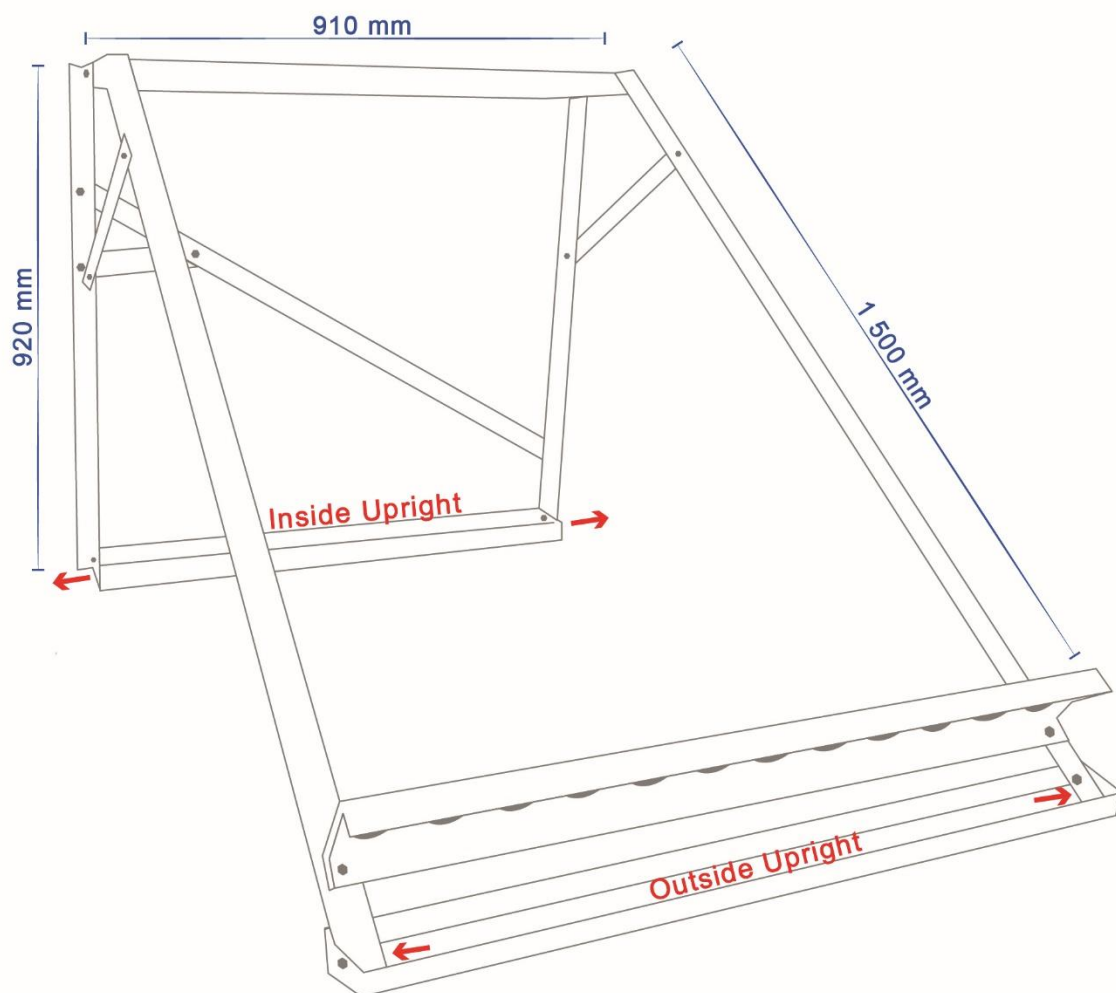
Fax: +27 21 872 8604

E-mail: info@xstream.co.za

Website: www.xstream.co.za

**Distillery Road
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The assembly manual of the Vacustream DIY Frame



Step 1

You should have the following parts:
12 Galvanised Steel Parts for the frame in total.

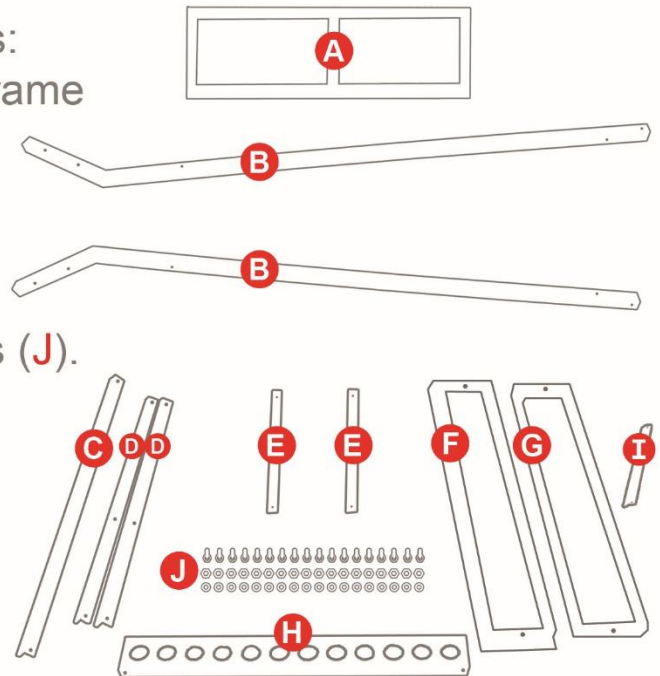
A,B,B,C,D,D,E,E,F,G,H,I

You will need two 13mm spanners/wrenches to fasten the screws (**J**).

18 M8 Screws

18 M8 Nuts

18 M8 Washers



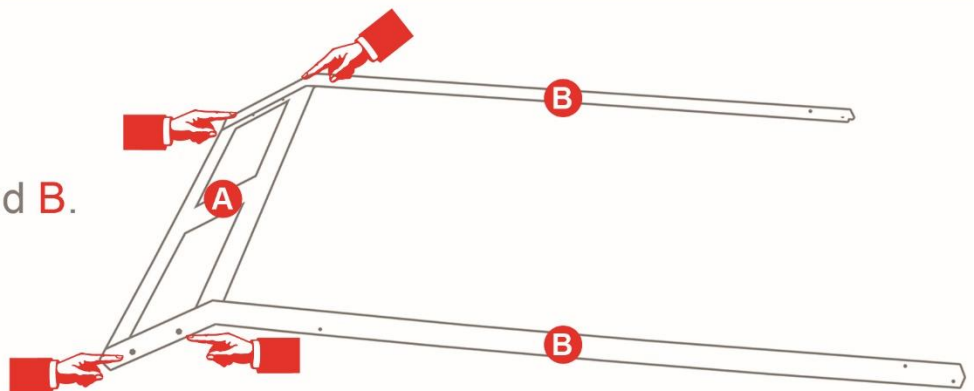
Step 2

Assemble the top of the frame with **A,B** and **B**.

4 Screws

4 Nuts

4 Washers



Step 3

Assemble the rear uprights and base of the frame with **D, D** and **G**.

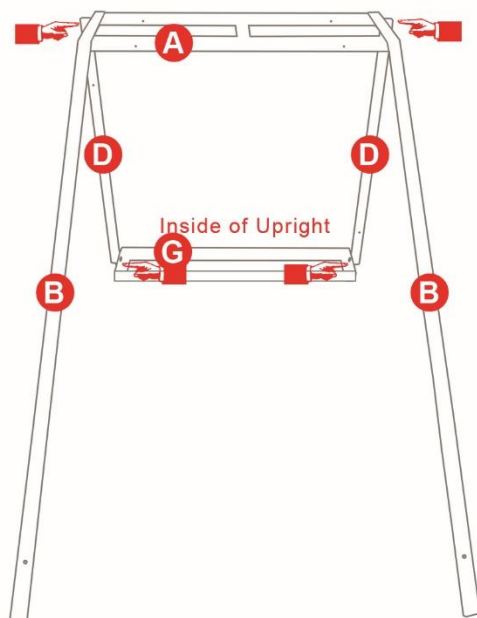
G = Inside upright

D - On the back Screw as **A** on **B**.

2 Screws

2 Nuts

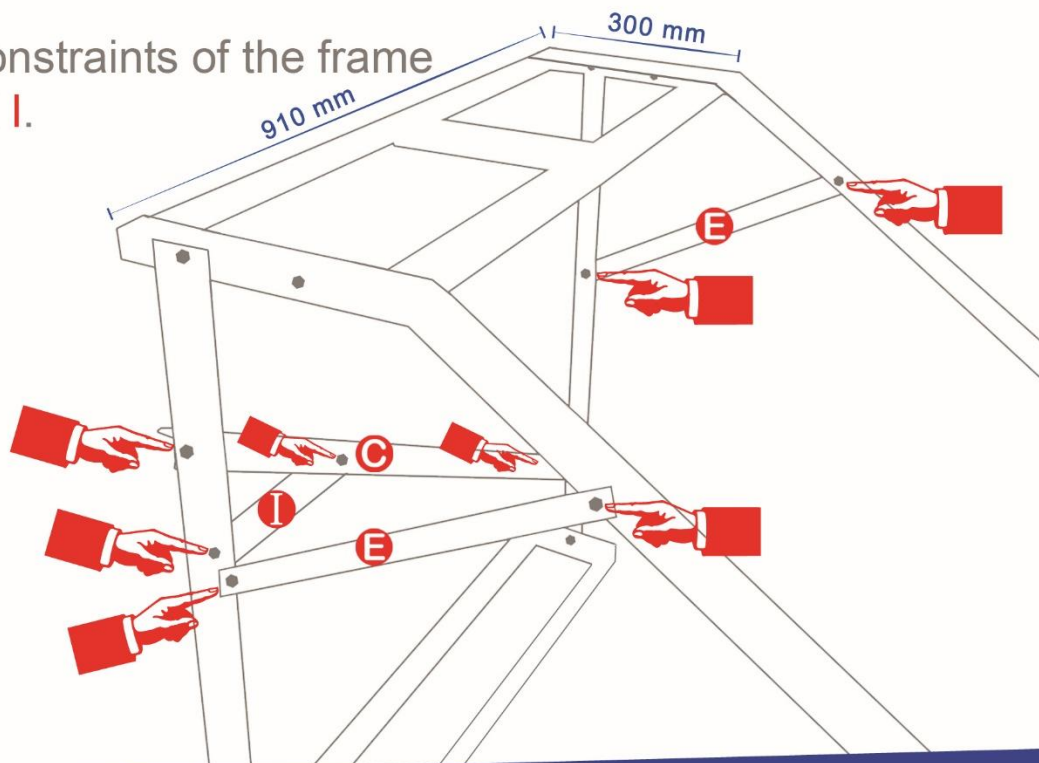
2 Washers



Step 4

Assemble the constraints of the frame with **E**, **E**, **C** and **I**.

8 Screws
8 Nuts
8 Washers

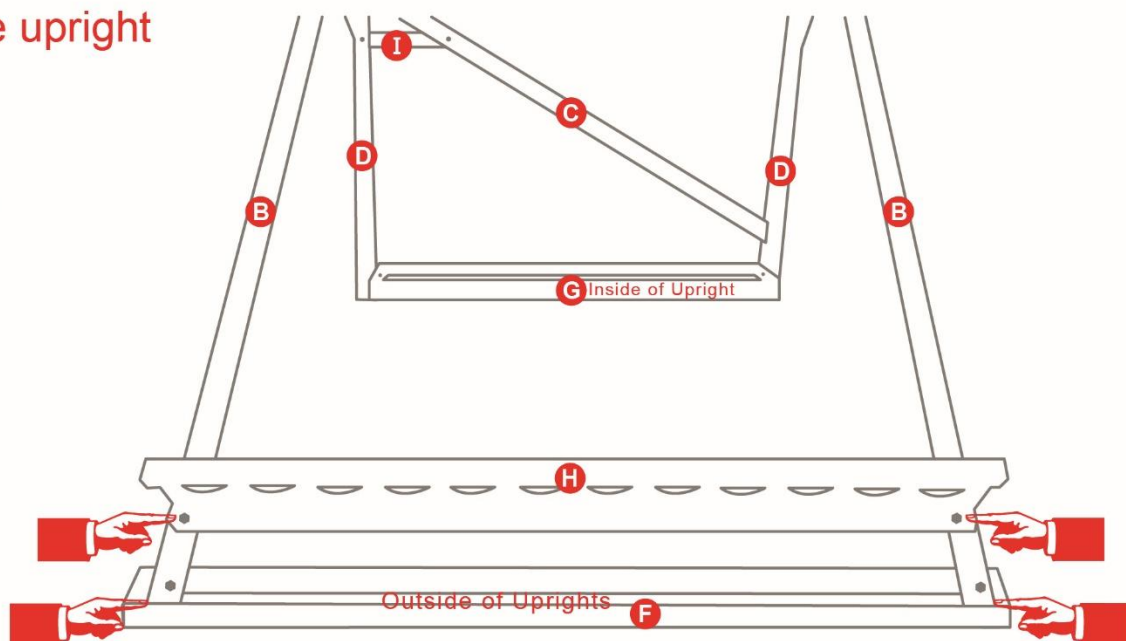


Step 5

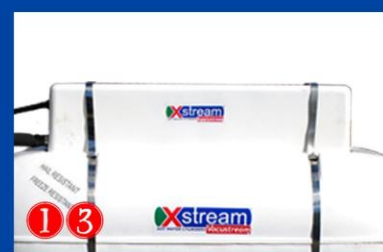
Assemble the foot and the tube mount of the frame with **H**, and **F**.

H = Outside upright

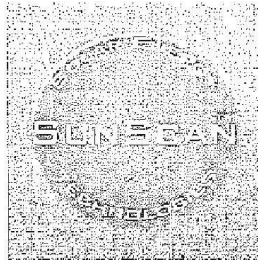
4 Screws
4 Nuts
4 Washers



Now for the installation of your new Xstream Vacustream®. See Vacustream® installation guide.



Unit 17
Spemhesd Business Park
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Gardens
Cape Town
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SunScan Technologies is a Solar Lifestyle brand

WARRANTY CERTIFICATE

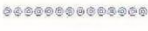
Solar Lifestyle warrants the functionality of their SunScan product as follows:

SunScan Low Pressure 47mm X 1500mm Tubes

5 years

These evacuated tubes are covered for the indicated period from the date of invoice and is provided under the following conditions:

- The system is not left standing uncovered, with no water supply for longer than 24 hours, during installation and thereafter.
- " This warranty only applies to the solar system product parts listed above and does not apply to any additional electrical and/or plumbing parts supplied by any other party
- e Should a tube or tubes be replaced during the warranty period, only the balance of the original warranty will continue to remain effective.
- " Solar Lifestyle is excluded from responsibility from any consequential loss including injury to persons, damage to property, economic loss, any legal or other damages due to manufacturing defects.
- o The warranty does not include damage caused by freezing or instantaneous boiling due to the system being filled when the tubes have been standing empty in the baking sun. Accidental breakage is not covered by this warranty, and should be added to your general household insurance policy,
- o SunScan reserves the right to replace the tubes with a product of similar function.
- c Replacement or repair excludes all transport and labour costs.

Quantity	Item	Photo	Checked
1	Vacustream geyser		
1	Supplystream, fitted with ballvalve		
4	Stainless steel strapping with 4 Stainless steel seals		
12	Grommets		
12	Dust covers		
12	End caps		
1	Frame: part A		
2	Frame: part B		
1	Frame: part C		
2	Frame: Part D		
2	Frame: Part E		
1	Frame: Part F		
1	Frame: Part G		
1	Frame: Part H		
1	Frame: Part I		
18	Bolts		
18	Washers		
18	Nuts		
1	Pipework pieces		
12	Tubes		
4	4 x self drilling screws		



Boxing checklist per system



**Also make sure that the
correct Warranty and Installation
papers are accompanied by the
geyser.**