

AREBOS

Solar Heating

AR-HE-SH300(T)



*Picture shows double set

Please follow all security measures in this user's manual to ensure a secure use.

Thank you for trusting in AREBOS.

Table of Contents

1. Safety Instructions..... 3
1.1 Explanation of the symbols 3
1.2 Safety Warnings..... 3
1.3 Frequently asked Questions 4

2. Fasteners List..... 4
2.1 Single Set 4
2.2 Double Set 4
2.3 Diverter Kit 5

3. System Layout 5
3.1 Single Set 5
3.2 Double Set 6
3.3 Setting with Diverter Kit 7

4. Operation and Maintenance 8

5. Winterization 8

6. Troubleshooting 8
6.1 What if a collector develops a leak?..... 8
6.2 Solar collector repair 8

7. Disposal instruction 9
7.1 Disposal of the packaging..... 9
7.2 Disposal of waste equipment 9
7.3 Meaning of the “dustbin” 9

Imprint..... 10

Please read and save these instructions. Read through this user's manual carefully before using this product. Protect yourself and others by observing all safety information, warnings and cautions. Failure to comply with instructions could result in personal injury and/or damage to product or property. Please retain instructions for future reference.

1. Safety Instructions

1.1 Explanation of the symbols



This product **must not** be disposed of with household waste!



Warning! Hot surface!



Warning! Read the safety instructions carefully. Failure to follow the safety precautions could result in serious injury or damage. Keep the operating instructions in a safe place.

1.2 Safety Warnings

- Fully read and understand the manual before getting started with the product.
- Caution – do not step on the heater! The hot surface can cause burnings and hurt your feet.
- Solar collectors are often installed on the roofs of buildings. Unless you are very familiar with working on roofs and have the proper ladders and safety equipment for such work, you should hire someone with the necessary experience to do the installation. Failure to observe safe practices on a roof or other elevated structure may result in falling, leading to serious injury to you.
- When installing collectors on the ground, do not build a rack support that could allow children to access into the pool.
- If mounting on a rack placed on the ground, position the rack so that it does not provide access to the pool for children.

1.3 Frequently asked Questions

How well does solar heating work?

- A properly sized and installed system will raise pool temperatures up to 38°C during the season. You will only want to circulate water through the solar collector when the sun is shining. When it's cloudy or rainy, solar won't work as well (and you probably won't be swimming during those times), but your water will be back up to temperature after one or two warm days.

Where can I put the solar collectors?

- Anywhere you get at least 6 hours of full sun during the day. The longer the collectors are in full sun, the better they will work. If you are mounting the solar on an angle (like a roof or rack), the collectors should face in a southerly direction.

What additional parts will I need to install the solar system on a roof?

- You have to choose different additional kit components for your systems installation, and buy the Diverter Kit and roof mounting kit.

How does a solar panel work?

- Using your pool pump, water is automatically pumped through the solar collectors. The water is then heated by the sun as it moves through the collectors. The heated water is returned back to the pool through your return lines. You enjoy your own heated pool with no fuel costs.

2. Fasteners List

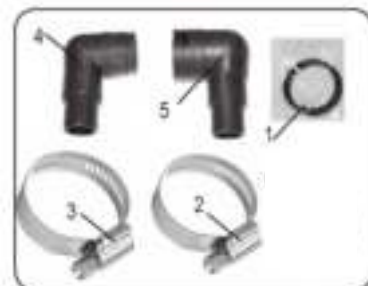
2.1 Single Set

4260627425884		
Position	Description	Qty
1	O – Ring	3
2	1-1/2"S.S Clamp	2
3	1-1/2"S.S Clamp	2
4	Small Elbow	1
5	Big Elbow	1



2.2 Double Set

4260627425891		
Position	Description	Qty
1	O – Ring	3
2	1-1/2"S.S CLAMP	2
3	1-1/2"S.S CLAMP	2
4	Small Elbow	1
5	Big Elbow	1



2.3 Diverter Kit

When you choose your solar panel, you have to know your pool and filtration systems well. When you use a pump greater than 0.5HP (ca. 370W), you have to use a diverter kit to shunt flow, or it will affect the product's life.

Position	Description	Qty
1	3-Way Valve	1
2	1.5" Threaded Check Valve	1
3	1.5" Threaded Tee	1
4	1.5" Threaded Male Connector	1
5	1.5" Threaded fem. Connector	1
6	O-Ring	3



3. System Layout

3.1 Single Set

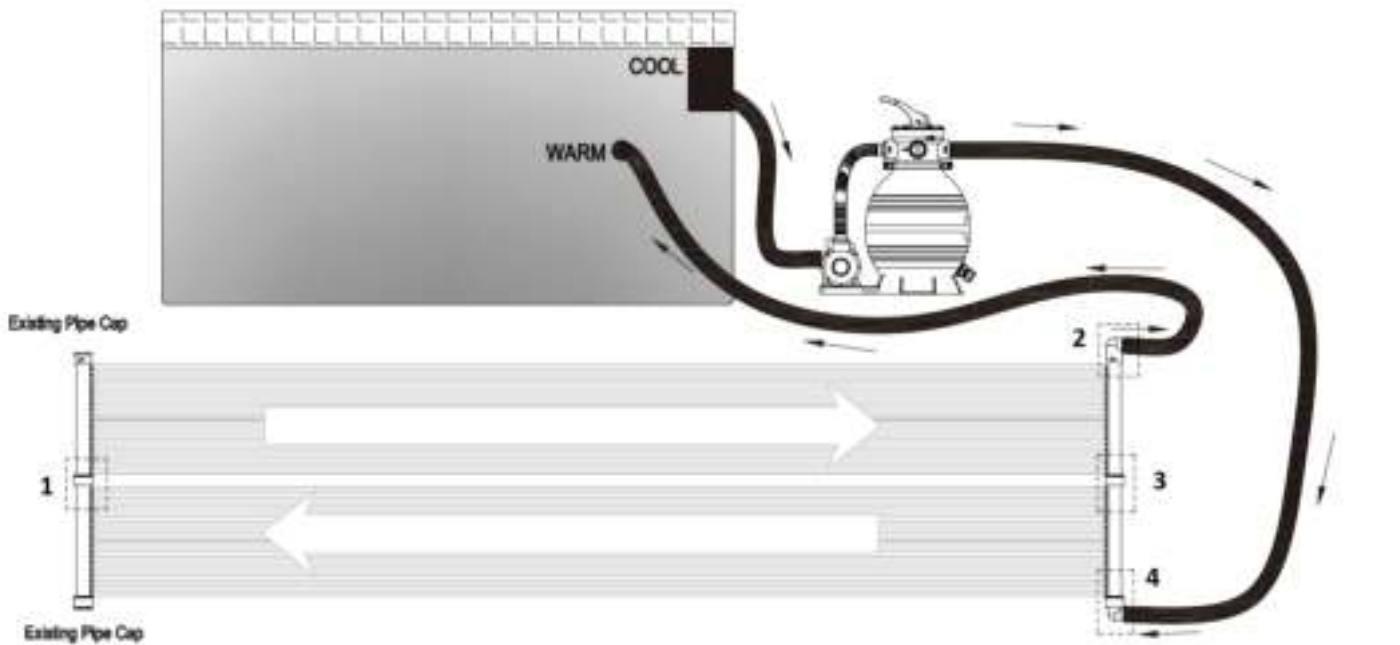


Figure 1: Connection

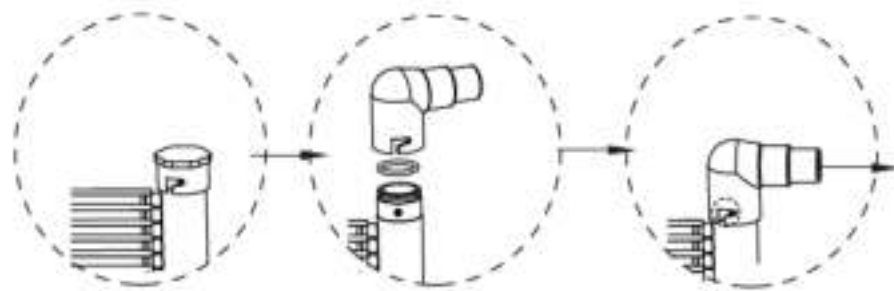


Figure 2: Elbow outlet towards pool (see next page)

1.5 – 1.25
inch
Connection

Figure 2:

1. Take off the protection cap.
2. Put the O-ring into the male ending (wipe the silicon lubricant).
3. Insert the mal end into the female end (match the slot).
4. Turn the main pipe and fix it.

Figure 3: baffled connection

Use this as shown in the picture below. Connection principle equals to figure 1.

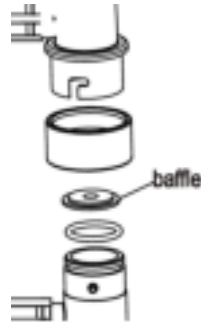
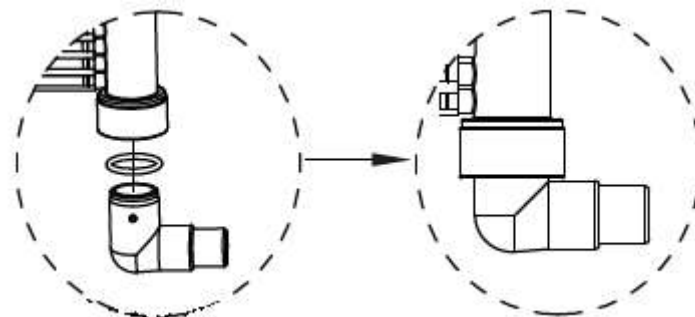


Figure 3: Baffled connection

Figure 4:

1. Put the O-ring into the male ending (wipe the silicon lubricant).
2. Insert the mal end into the female end (macht the slot).

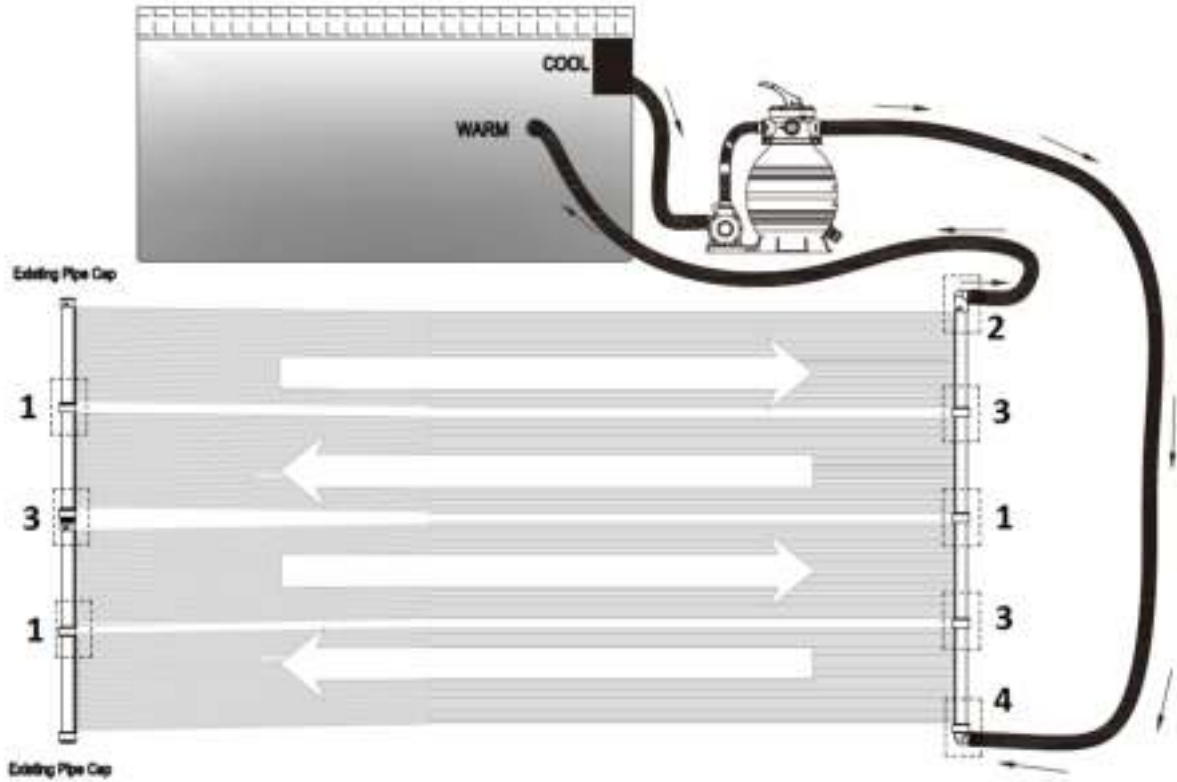


1.5 – 1.25 inch
Connection

3.2 Double Set

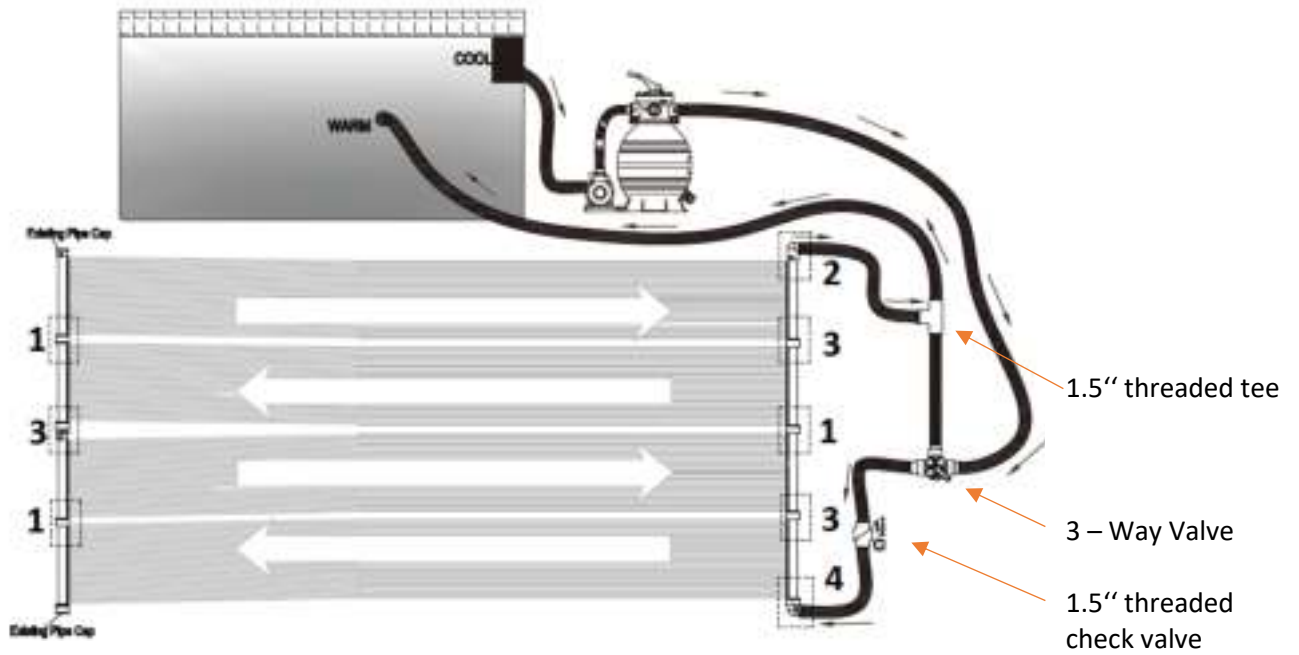
If your systems use the pump 0.5HP or less than 0.5HP please refer the following connection way. For the numbers in the following system picture please refer to 3.1. Make sure you assemble the baffles in the right spot for a well working circulation system.

1. Connection without baffle.
2. Connection elbow from the solar heater towards the pool
3. Connection with baffle.
4. Connection elbow from your pool pump towards the solar heater.



3.3 Setting with Diverter Kit

If your pump is greater than 0.5HP, please use the diverter kit (see page component kit) to shunt the flow.



For the explanation of numbers in the picture above see 3.1 and 3.2.

4. Operation and Maintenance

1. The collectors should feel cool to the touch when the sun is shining on them and water is passing through. This means that the heat is being transferred to the water.
2. The water returning to your pool will be a few degrees (3-5degrees) warmer than the pool itself. This is the most efficient way to heat a large body of water like a pool. Keep circulating the water, which adds a few degrees each pass.
3. Circulate water through the solar collectors at least 6 hours per day during the daylight hours on sunny days. If you circulate water through it at night, when it's overcast or on chilly days, you will cool your pool water rather than heat it. If you need to run your pump at night, divert the water directly back to the pool and bypass the solar system. An automatic controller will sense the water temperature and available radiation from the sun and automatically turn the 3-Way Valve to direct the flow of water accordingly.

5. Winterization

Your solar system must be drained for winterization! You must drain your solar collectors just like you drain the rest of your pool equipment.

Remove the vacuum relief valve at the top of the solar system. Remove the rubber end cap at the bottom and be sure **all** the water is drained out of the system. Replace end caps and blow compressed air in the reverse direction of normal water flow. This is the most effective way to drain your system. Storing the solar collectors inside a warm and dry place is highly recommended.

6. Troubleshooting

6.1 What if a collector develops a leak?

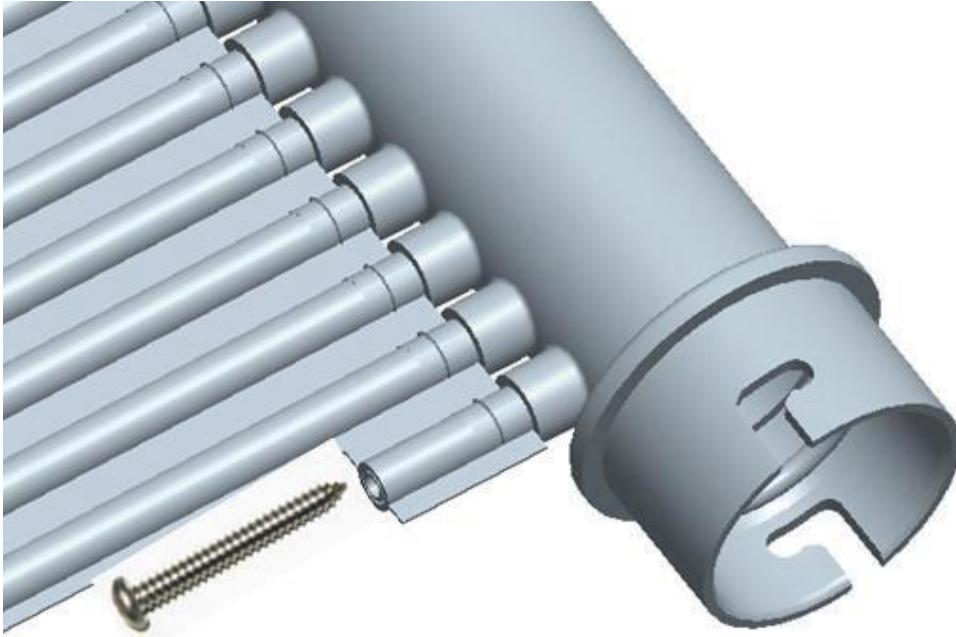
Your solar collectors are warranted against defects in materials and workmanship. If a leak develops for any other reason, you may use the repair method shown. The collectors are not warranted against freeze damage.

Another reason can be a not proper working circulation system. Check the baffled and non-baffled spots being placed in the right spot.

6.2 Solar collector repair

This method allows for an easy and permanent, on-site repair of a collector by isolating the leaking tube. Referring to the figure at the next page, locate the tube to be isolated. (End tube has been shown for clarity). Using a sharp utility knife, very carefully cut away approximately 1" of the tube at both headers. Drive a 3/16" sheet metal screw, preferably stainless, into the hole in the header. The screw must be between 1/2" and 3/4" long. Do not overtighten the screw. If the screw strips out, or if the repair leaks, use a bigger screw. You can also wrap nylon tape around the screw for sealing.

With proper care and winterization, you will enjoy your solar collectors for many years.



7. Disposal instruction

7.1 Disposal of the packaging

- Please make reference to the guidelines and standards for appropriate disposal of the packaging valid in your region. In part, the package may consist of plastic bags - watch this respect, with special care to ensure that this is not out of the reach of children. There is a risk of suffocation!

7.2 Disposal of waste equipment

- Equipment must be disposed of in accordance with the rules and regulations of the local waste disposal.
- At the end of the long life of your article, please dispose of the valuable raw materials for proper disposal so that proper recycling can take place. If you are not sure how to proceed, the local waste disposal companies or recycling centers are happy to help.

7.3 Meaning of the “dustbin”



Protect our environment; electrical appliances do not belong in household waste. Use the provided for the disposal of electrical equipment collection points and enter your electrical and electronic equipment that you no longer use. They help ensure that the potential effects of incorrect disposal on the environment and human health to be avoided. So, do your part to recycle, recycling and other forms of recovery of waste electrical and electronic equipment. Information on where the device is disposed of, please contact your local authorities or local Governments.

Our customer service number: +49 (0) 931-45232700

Canbolat Vertriebs GmbH • Gneisenaustraße 10-11 • 97074 Würzburg

Imprint

Name of the product: Solar heating
Model Nr.: AR-HE-SH300(T)
Art. Nr.: 4260627425884 (single)/ 4260627425891 (double)
Measurements: 66cm x 300cm / 2 x 66cm x 300cm

If the product has any modification not allowed by us, this declaration loses its validity.

Date/Manufacturer Signature/Location:
2022

Würzburg, 14 February



Identification of the signatory:
Korhan Canbolat, head of the company

Authorised representative for the technical documentation:
Korhan Canbolat

Office address:
Canbolat Vertriebs GmbH
Gneisenaustraße 10-11
D-97074 Würzburg

Return address can be found in the imprint: <https://www.arebos.de/impressum/>

VAT identification number: DE 263752326
Court of the Commercial Register is Würzburg, HRB 10082
WEEE Reg.-No. DE 61617071