Basic

Installation Manual

READ THIS MANUAL BEFORE INSTALLATION

READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

1. Select a flat area for your solar system. It may be laid flat on the ground, on a sloping roof or a rack. Performance will be best with the system sloped at an angle 20 degrees less than latitude, facing between southwest and southeast. The inlet connection to solar system must be at the bottom of the slope for best performance and to allow drainage. Be sure the system will be exposed to full sun all day. It should be as close to the pool as practical.

There are three EZ Heat Basic solar system models. All are 4 feet wide. Basic 12 is twelve feet long, Basic 20 is twenty feet long and Basic 25 is twenty five feet long.

Figure 1

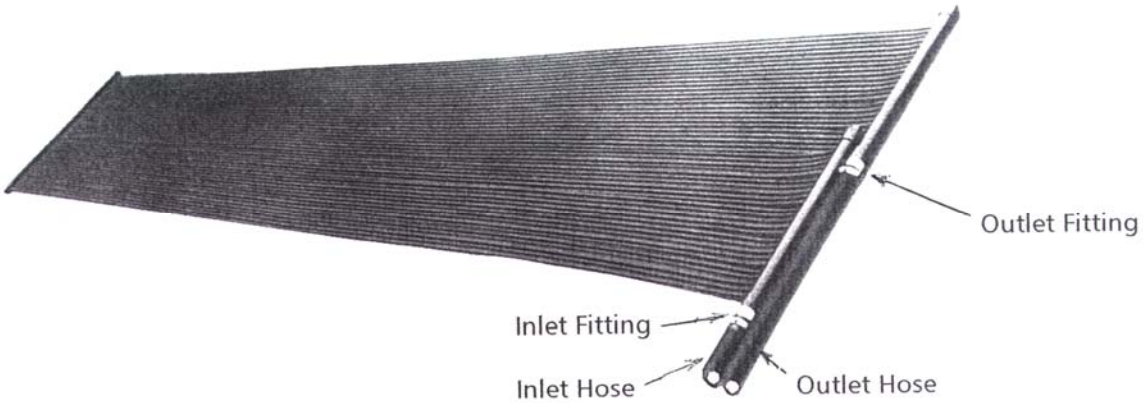


Figure 1

2. Unroll the solar system, keeping the sections straight and close together. If you are mounting your solar system flat on the ground or any flat surface it may be held down with stainless steel clamps part #2022. If on the ground, be sure to take steps to prevent weeds from growing up through it.

If you are mounting your solar system on a roof or a sloping rack, you will need a Roof or Rack Hold-Down Kit Part #1019. It has the necessary clamps and adhesive to secure the system to a sloping surface. Follow the instructions enclosed with the kit.

3. You must be able to turn off your solar system in bad weather and at night to prevent cooling the pool. You may control it either by turning off the filter pump or by using a control valve as shown in Figure 3. A third option is to use the optional Automatic Control System, Part #5006. Automatic control will give you the most heat to the pool by making sure your system in on whenever there is enough sun to heat the pool and shutting off the system in bad weather or when pool is up to the temperature you have selected.

Follow figure 2 or figure 3 in making the water connections to the pool, depending on whether or not using a control valve. Connections to the pool filter system may be made either with 1 ½ inch filter hoses or 1 ½ inch schedule 40 PVC pipe and fittings.

Your solar system is shipped with the connections as shown in figure 1. If it is more convenient to have the connections at the opposite end of the system, simply remove the two plugs in the short header pipes and install them at the opposite ends of the header pipes. Remember, if the solar system is on a slope, the inlet connections to the solar system must be lower than the outlet connection.

If you are connection together two solar systems you will need a Coupling kit Part #1006.

Figure 2

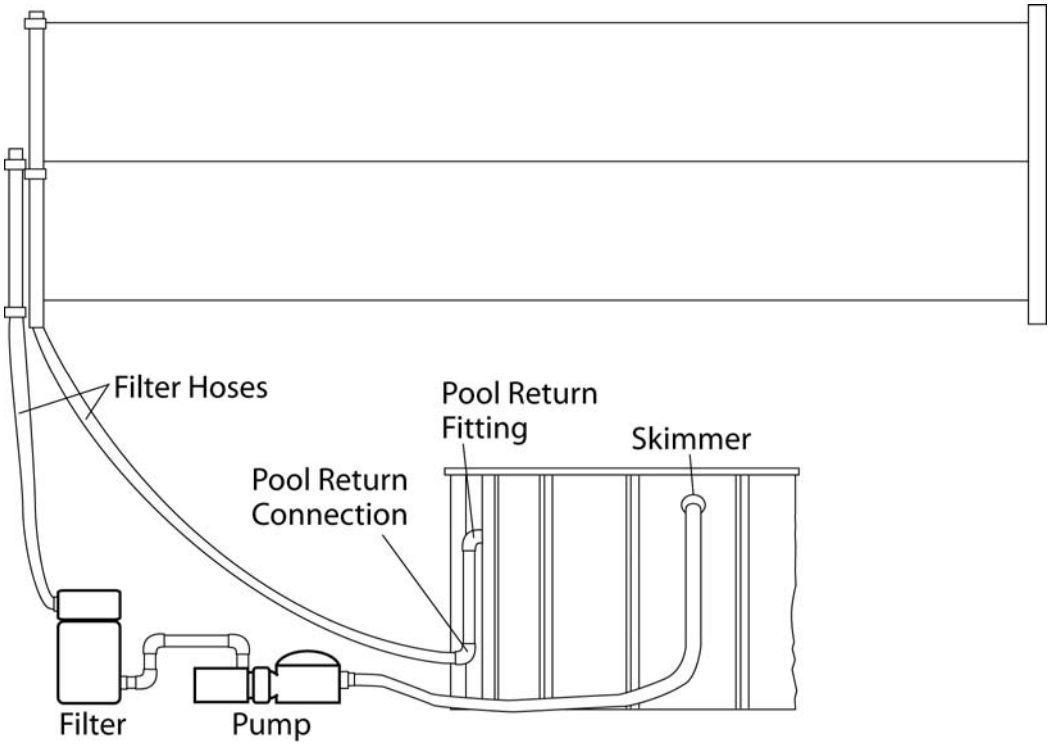
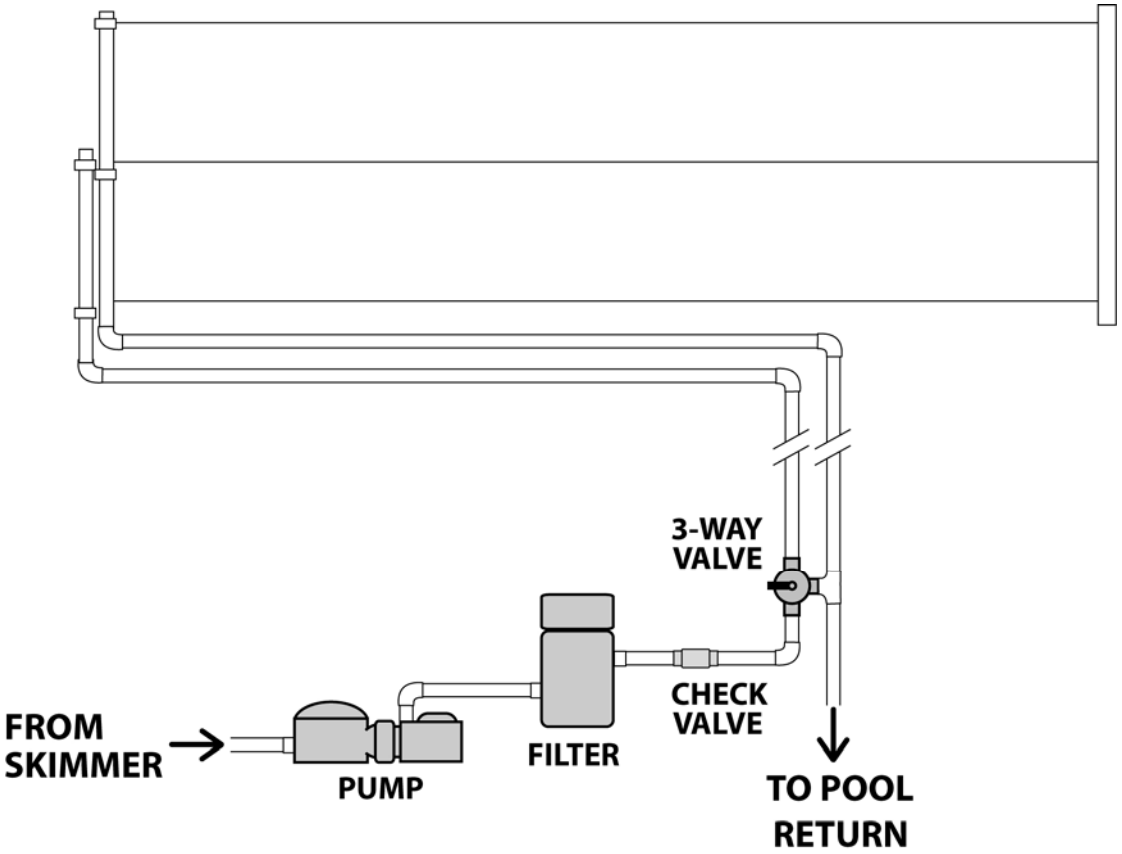


Figure 3



Before you start, be sure you have the following:

a. Two flexible filter hoses: One long enough to reach between the return fitting at the pool and the outlet fitting on the solar system and the second long enough to reach between the filter outlet fitting and the solar system inlet fitting. (Or sufficient pipe and fittings.)

b. An EZ Heat Hose Connection Kit or adapter fittings. Use part #1005 for connecting to 1-1/2" hoses. If you are using rigid pipe connections, connect to the piping with 1½ inch male pipe thread to slip adapters, available from pool dealers or plumbing supply stores.

c. A plug for the pool return fitting

Next, make a note of the pressure reading on the filter gauge with the pump running and a clean filter. Shut off the power to the pump and plug the return fitting at the pool to prevent loss of water from the pool.

Install the Hose Connection Kit. Wrap one layer of the supplied pipe joint sealant tape around the threads, starting at the end and wrapping clockwise. Tighten the fitting firmly, but do not over tighten. Connect the

other hose from the other solar system fitting to the return fitting at the pool. Use the stainless steel hose clamps in the Hose Connection Kit and tighten them securely.

If the solar system is mounted on a roof higher than the pool, a check valve part #3039 must be installed as shown in Figure 3 to prevent filter back-washing when the water in the system drains back to the pool.

4. Check all connections and remove the plug from the return fitting. Start the pump. After bubbles stop coming from the return fitting compare the pressure on the filter gauge with the pressure reading you took before you installed the system. The pressure may be 1 to 5 pounds higher than it was before installation.

The surface of the solar collector will feel cool to the touch when it is operating properly. If it feels warm, not enough water is flowing through the system and very little heat is reaching the pool. Check the valve setting.

5. The solar collector surface used on your solar system is made from a very tough and durable thermoplastic rubber. It is resistant to damage, but can be cut or punctured with sharp objects. Repair splice part #3013 is available at www.shop.solardirect.com. Cut the tube at the point of damage and insert a splice between the two halves. Coat the splice with liquid soap to make it easier to insert.

6. At the end of the season the system piping must be drained to prevent freeze damage. The flexible absorber will not be damaged if water is left in it but no water should be left in headers or piping.

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