SOLAR
HEATING SYSTEM

<u>Optional Diverter Valve Kit (part # ESDK-1) Installation</u>

ecoSAVER Diverter Valve Kit (#ESDK-1) OPTIONAL		
Item Number	Description	Quantity
1	Diverter Valve	1
2	Panel Spacer	1
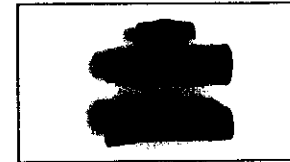
1. **A Diverter Valve is used in place of a Water Baffle** (A Diverter Valve and a Water Baffle are **NEVER** used in the same system.) The Diverter Valve allows some or all of the water to bypass the small tubes of the ecoSAVER solar heating system. The small tubes are where the heat collected from the sun is transferred to the water. Water that does not flow through these tubes will not be heated.

2. a.) You may wish to use a Diverter Valve in mid-summer to prevent the water from becoming too warm.
   b.) You may wish to use a Diverter Valve if you run your filter at night or on cool cloudy days. Water passing through the panels at these times will be cooled.
   c.) You may need to use a Diverter Valve if you have a very powerful pump to prevent damage to the tubes in the panels.

3. A Diverter Valve Kit consists of the actual valve that is installed inline in the panel end pipe and a Twist-Connect) Panel Spacer that is installed in the End Pipe at the opposite side from the Diverter Valve.

4. Please examine the Diverter Valve and note the location of the valve handle when it is in a closed position, in an open position, and in a partially open position.

5. A <u>closed</u> Diverter Valve directs all of the water through the tubes for **maximum heating.**
   An <u>open</u> Diverter Valve allows all of the water to bypass the tubes and **no heating takes place.**
   A <u>partially open</u> Diverter Valve directs some of the water through the tubes and allows some of the water to bypass the tubes to control the rate of heating of the water or to control the pressure that is put on the tubes from an oversized pump.

6. **On a <u>Single 20' System:</u>** the 2 panel halves are disconnected at the center of the end pipes at the twist connect points. The Water Baffle is REMOVED from the filter hookup side. Place the Diverter Valve between the panel halves at the side where the filter and pool hoses connect. Place the Panel Spacer between the panel halves at <u>the opposite side</u>. **Make sure the "O" Rings are in place on the male ends of both the Valve and the Spacer.** Make sure the support collar stays in place on the female End Pipe fitting. Insert and twist-connect the Valve and the Spacer into the 2 panels. You are now ready to control the flow of water through the many small tubes of the ecoSAVER system. (see Diagram D (a))

7. **On a _Double 20' System_:** 2 factory-installed Water Baffles <u>MUST be removed</u> as described above in the instructions for "Connecting 2 Panel Systems Together". Place the Diverter Valve between the panels at the side where the filter and pool hoses connect. Place the Panel Spacer between the panels at the opposite side. Make sure the "O" Rings are in place on the male ends of both the Valve and the Spacer. Make sure the support collar stays in place on the female End Pipe fitting. Insert and twist-connect the Valve and the Spacer into the 2 panels. You are now ready to control the flow of water through the many small tubes of the ecoSAVER system. (see Diagram D (b))

8. **On a _Single 10' System_:** The Diverter Valve and the Panel Spacer are installed between the 2 panels. When installing a Diverter Valve and Panel Spacer on a 10' system **NO** Water Baffle is installed. Place the Diverter Valve between the panels at the side where the filter and pool hoses connect. Place the Panel Spacer between the panels at the opposite side. Make sure the "O" Rings are in place on the male ends of both the Valve and the Spacer. Make sure the support collar stays in place on the female End Pipe fitting. Insert and twist-connect the Valve and the Spacer into the 2 panels. (see Diagram D (b))

9. **On a _Double 10' System_:** The Diverter Valve and the Panel Spacer are placed in the middle of the system with an equal number of panels on either side. Do **NOT** install a Water Baffle. Twist-connect all panels together as described above. (see Diagram D (c))

Diagram D (a)
(1) 20' System Diverter Valve Kit Installation

Diagram D (b)
(1) 10' or (2) 20' Panel System Diverter Valve Kit Installation

Diagram D (c)
(2) 10' Panel System Diverter Valve Kit