

OPERATION & CHECKOUT PROCEDURES (CONTINUED)

MANUAL SYSTEMS: TURNING THE SYSTEM ON

1. Turn the pool pump off.
2. Turn the three-way diverter valve so the “closed” indicator points toward the pool return side of the valve.
3. Be sure that the isolation valves on the feed and return lines are open.
4. Turn the pool pump on.
5. If using a pool pump timer, set the timer so that the pump will run when the solar collectors receive solar radiation, usually 10:00 AM to 4:00 PM, but this will vary with geographical location and time of year.
6. When the solar pool heating system is running, you should notice:
 - ***A slightly higher pressure reading on the filter pressure gauge.***
 - ***If the sun is out warmer water should be coming into the pool. This water should be 3-5 °F warmer than the surrounding pool temperature.***
 - ***All the collectors should feel cool to the touch when the sun is on them.***
7. During the cooler months of the year, it is essential that the pool surface be covered at night with a “pool blanket” to maintain a comfortable water temperature. Low nighttime temperatures can lower the water temperature more than the solar can recover during the day.

OPERATION & CHECKOUT PROCEDURES (CONTINUED)

MANUAL SYSTEMS: TURNING THE SYSTEM OFF

1. Turn the pool pump off.
2. Turn the three-way diverter valve so the “closed” indicator points toward the solar feed side of the valve.
3. If isolating the collectors, close the isolation valve on the feed & return lines after you are sure all the water has drained out of the collectors and plumbing.
4. Turn the pool pump on to filter the pool as needed.

AUTOMATIC SYSTEMS

1. Follow controller manufacturer operating instructions.
2. Set the desired temperature setpoint in the controller.
3. Turn the control mode to “auto”.
4. The controller will now control the operation of the solar pool heating system by turning the three-way diverter valve via the actuator motor depending on the temperature sensor readings.
 - ***The controller will send water to the solar loop when the roof sensor is some number of degree warmer than the pool water sensor and when the pool water is below the desire setpoint.***
 - ***The controller will cease sending water to the solar loop when the setpoint has been met or when the roof sensor reads a temperature lower than the pool water sensor.***
5. When the controller is in “auto” mode ensure that that all isolation valves are open. During service or winterization make sure the controller’s solar function is set to “off”, the system is drained,