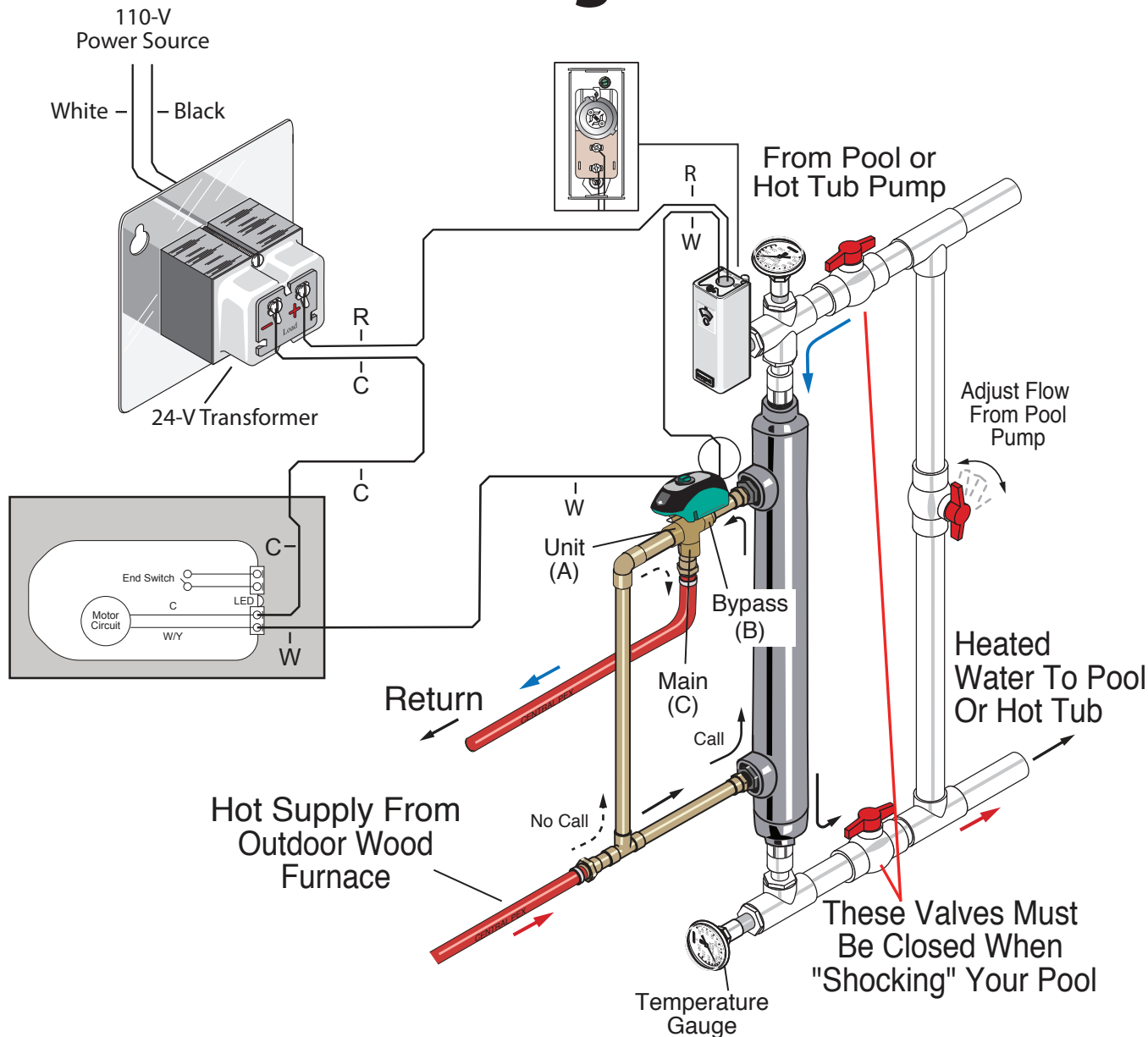


# Swimming Pool/Hot Tub Installation



**NOTE**  
Outdoor furnace water temperature setpoint should be set at 185°F minimum.

**NOTE**  
A pump must be installed in the hot supply line between the outdoor furnace and thermostatic valve.

Pools and hot tubs typically have high water flow rates, from 30 to 50 gpm. Because the high efficiency of the heat exchanger does not require the full pool gpm flow, a bypass balancing valve must be used to bypass a portion of the pool water. There should be a shut-off valve installed on the supply and return line to and from the pool. Close these valves and fully open the bypass balancing valve when chemically treating ("shocking") the pool or hot tub to stop the flow of the low pH water to the heat exchanger. These valves can be opened only after the pH has reached the safe level as recommended by the pool or hot tub manufacturer. Return the bypass balancing valve to the previously adjusted position.

## Shell & Tube

