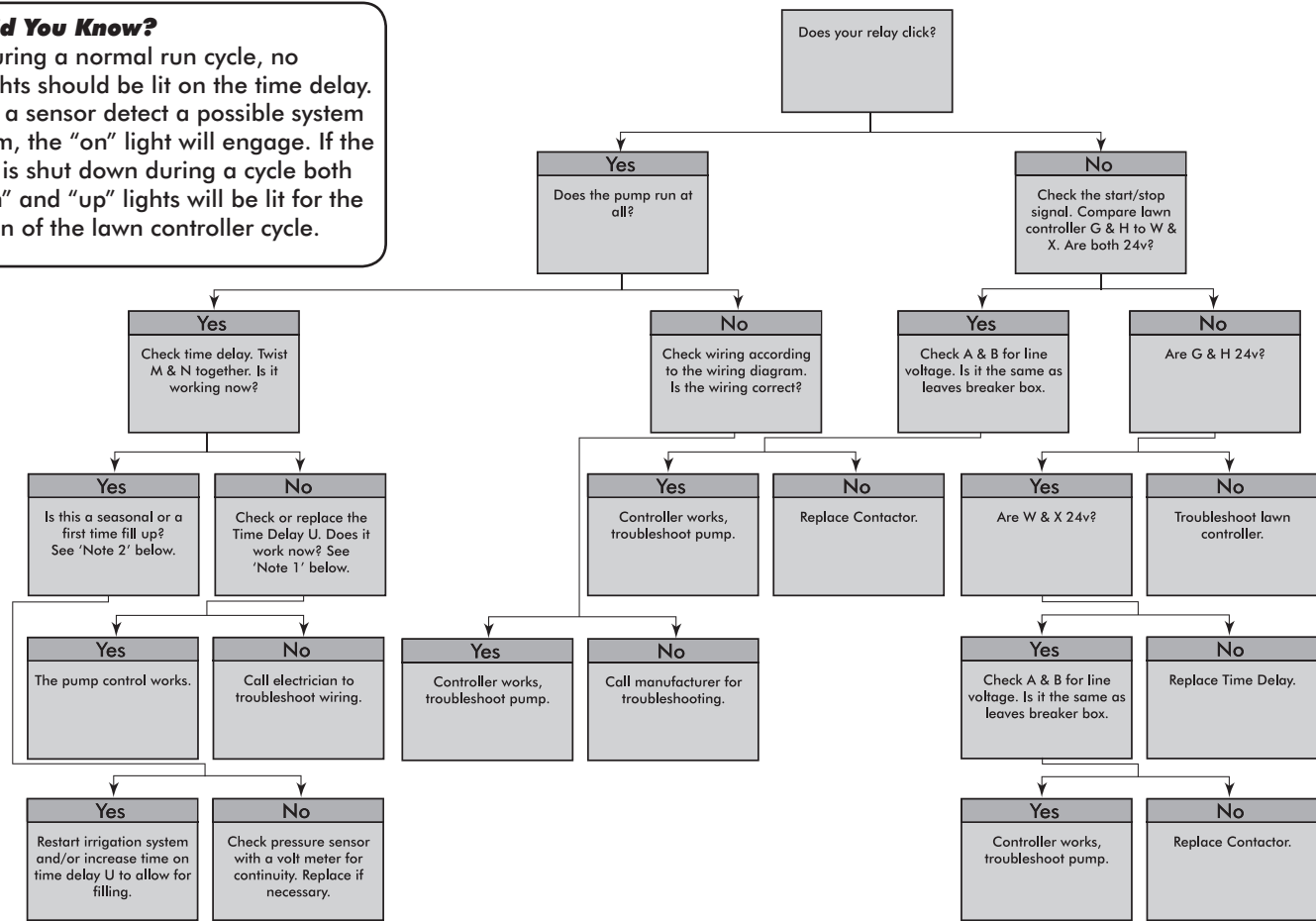


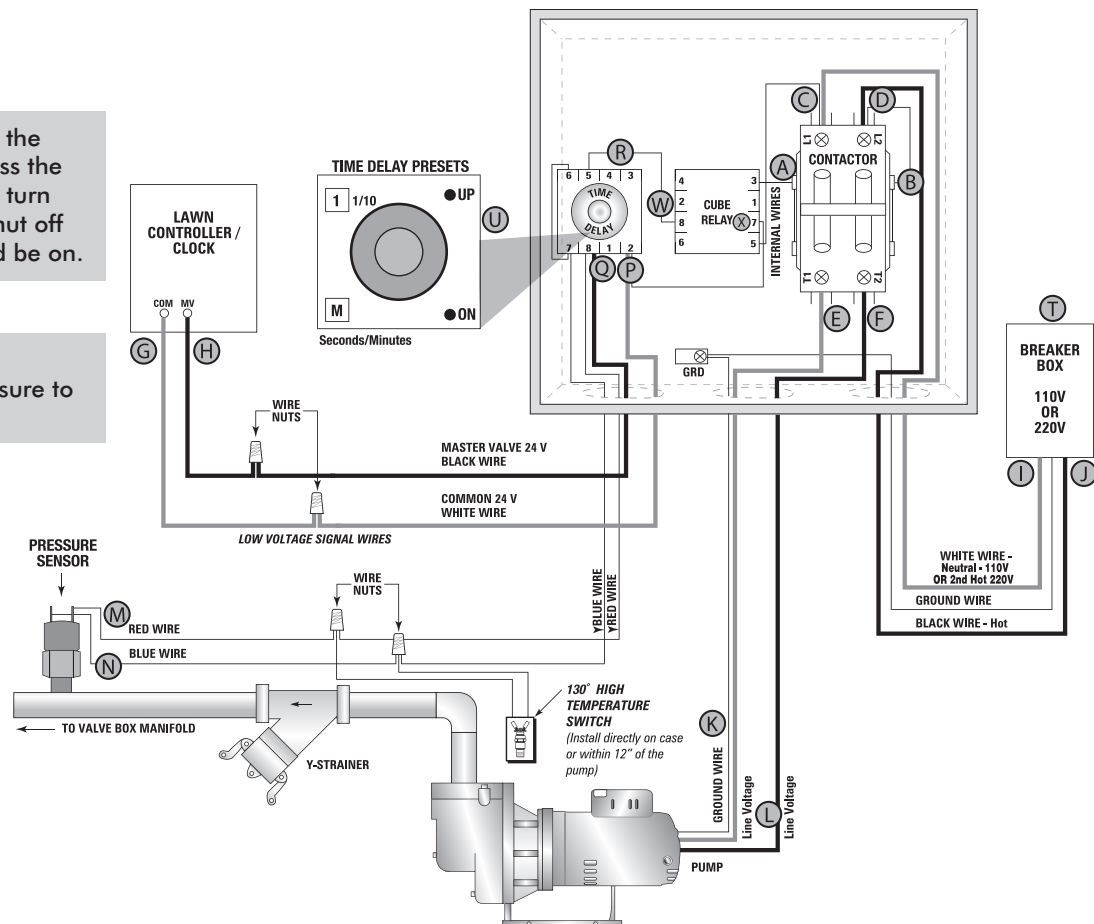
**Did You Know?**  
 During a normal run cycle, no lights should be lit on the time delay. Should a sensor detect a possible system problem, the "on" light will engage. If the system is shut down during a cycle both the "on" and "up" lights will be lit for the duration of the lawn controller cycle.



**Note 1:** Checking the Time Delay – Turn the time delay down to 5 seconds. Next, cross the red and blue wire. The "on" light should turn on. After 5 seconds the system should shut off and both the "on" and "up" lights should be on.

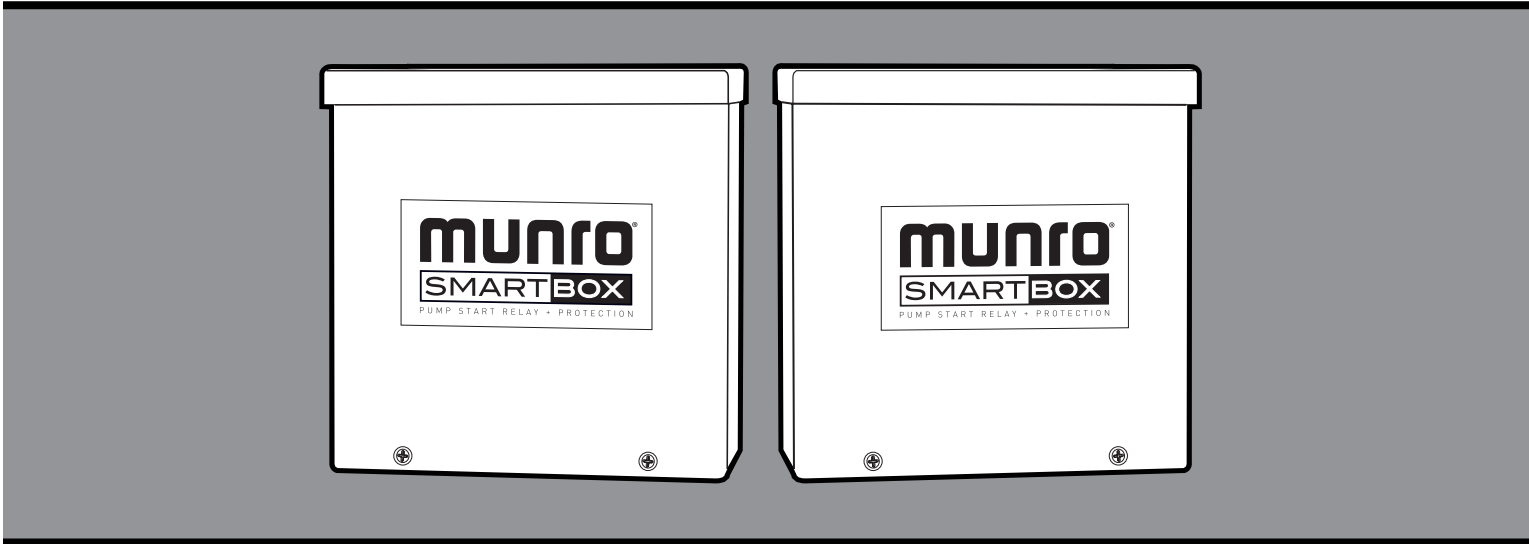
**Note 2:** Filling system lines may require multiple run cycles to build enough pressure to initiate the sensor.

Call Munro technical support for any questions relating to this product.  
 Toll Free: 1.800.942.4270



# OWNER'S MANUAL

## SMARTBOX – REDUCED INCOMING AMPERAGE 2-WIRE DECODER SYSTEM COMPATIBLE



Installation - Operation - Parts

Part Number	Description	External Packaged Components
MPLC242W22T	Pump protection from low pressure, run dry and high temperature due to dead head. Compatible with 2-wire decoder systems and other low-amp irrigation controllers, 220v, powder-coated steel	20 PSI sensor and 130° temperature sensor
MPLC242W22TS	Pump protection from low pressure, run dry and high temperature due to dead head. Compatible with 2-wire decoder systems and other low-amp irrigation controllers, 220v, stainless steel	20 PSI sensor and 130° temperature sensor
MPLC242W11T	Pump protection from low pressure, run dry and high temperature due to dead head. Compatible with 2-wire decoder systems and other low-amp irrigation controllers, 110v, powder-coated steel	20 PSI sensor and 130° temperature sensor
MPLC242W11TS	Pump protection from low pressure, run dry and high temperature due to dead head. Compatible with 2-wire decoder systems and other low-amp irrigation controllers, 110v, stainless steel	20 PSI sensor and 130° temperature sensor

1.800.942.4270  
 www.munropump.com



# Typical SmartBox Installation

**NOTE:**

Refer to specific wiring diagram located on inside cover of enclosure.

**Step 1**

**Turn Breaker "OFF"**

- Never work with electrical wiring on a live circuit.



**Step 2**

**Plumb for Sensors**

- Pressure Sensor - 1/4" NPT
  - Install on discharge side of the pump, as close to the pump as is practical, making sure the sensor is installed before a check valve.
- High Temperature Sensor - 1/4" NPT
  - Install directly on pump case or within 12" of the pump.

**Step 3**

**Wire Sensor(s)**

- Wire sensor(s) to RED & BLUE leads in the SmartBox, secure with wire nuts.

\*Temperature sensor is wired in parallel with pressure sensor.

*NOTE - RED & BLUE lead wires can be placed on either terminal of the pressure sensor and high temperature sensor.*

**Step 4**

**Wire Lawn Controller**

- Locate the Master Valve (MV) and Common (COM) inside Lawn Controller.
  - Wire MV to BLACK wire lead in SmartBox, secure with wire nuts.
  - Wire COM to WHITE wire lead in SmartBox, secure with wire nuts.

**Step 5**

**Wire Contactor to Pump**

- Refer to wiring diagram on motor plate for proper voltage and wire placement.
- Refer to NEC wire cable chart for proper size of wire. Undersized wire can affect pump performance.

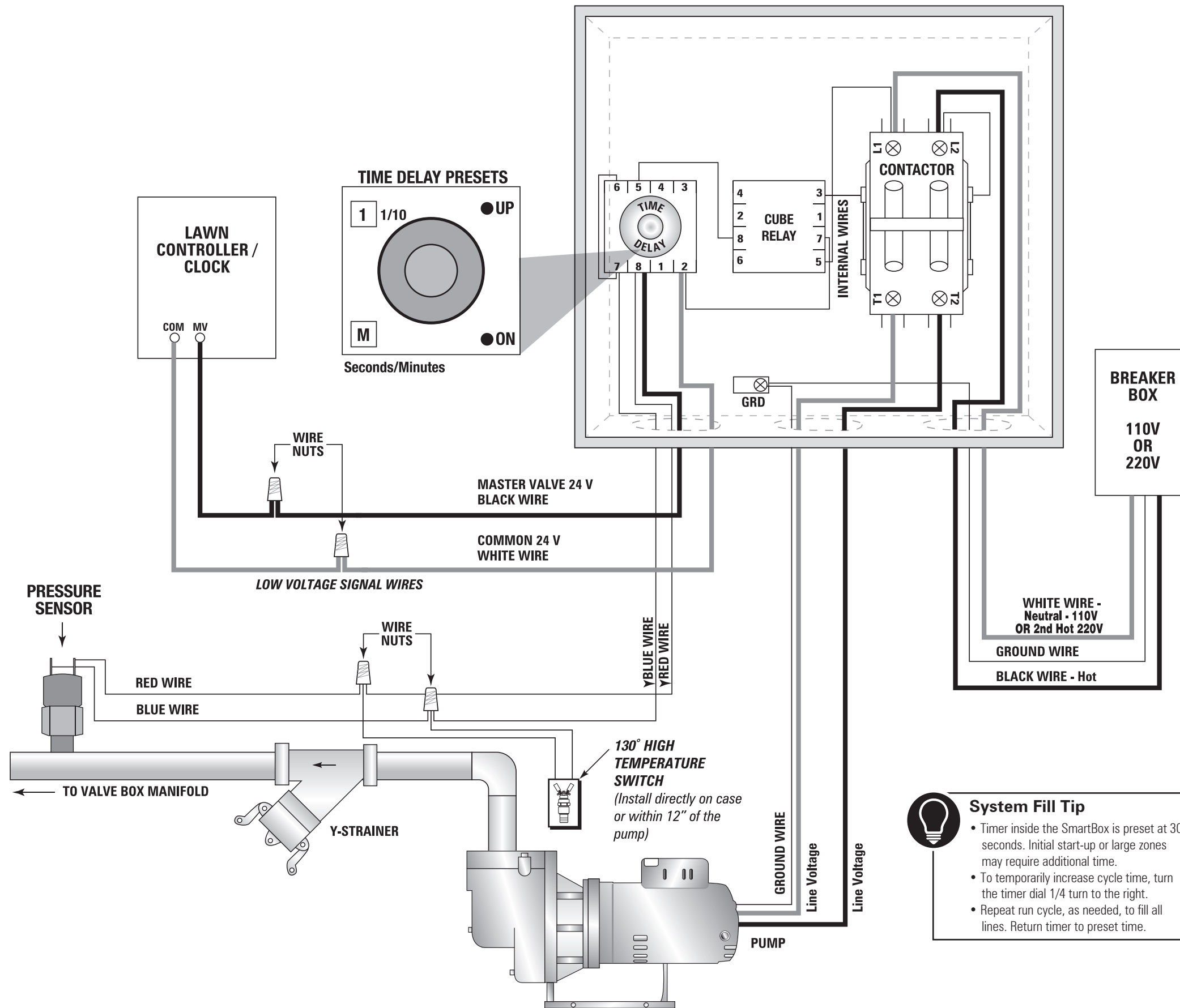
**Step 6**

**Wire Power Supply**

- Run power supply wires from breaker box (110 v or 220 v).
  - Attach GREEN grounding wire to grounding screw.
  - Attach BLACK HOT to L2 on contactor.
  - Attach WHITE Neutral (110 v) / second HOT (220 v) to L1 on contactor.

**Step 7**

**Turn Breaker "On"**



**System Fill Tip**

- Timer inside the SmartBox is preset at 30 seconds. Initial start-up or large zones may require additional time.
- To temporarily increase cycle time, turn the timer dial 1/4 turn to the right.
- Repeat run cycle, as needed, to fill all lines. Return timer to preset time.

**WARNING** DO NOT ATTEMPT TO REWIRE OR ALTER WIRING IN THE SMARTBOX OR WARRANTY WILL BE VOIDED. DO NOT WIRE POWER DIRECTLY TO THE PRESSURE OR TEMPERATURE SENSOR. PRESSURE SENSOR WILL WORK WITH 24 VOLT ONLY.