INSTRUCTIONS FOR 423-378-001A

ZENITH TIMER REPLACEMENT KIT

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Introduction

A motor driven timer (E-5032-01) was first incorporated into Shivvers' control panels starting in 1974. It is commonly referred to as a "Zenith" timer. The first panels also had a relay (E-5033-01) attached to the top of the timer. These panels were built until approximately 1977. The same procedure applies for replacing the timer in a "74-77" panel as it does in a more recent panel, except it will be required to mount the relay (E-5033-01) somewhere in the panel (or keep the relay where it is and mount the new timer in a different location).

From 1978 until about 2005 the timer was used in Deluxe Circuitrol Panels. This would be the most common place to find the old motor driven timer, and replacement is pretty straightforward, as it didn't incorporate a separate relay.

The timer may also be found in the 296 series Small Circuitrols and various add-on kits, but these are not very common.

The "Zenith" timer became unavailable in the fall of 2008. It was replaced by this kit (423-378-001A). Contact the factory if assistance is needed wiring in the new timer.

In November of 2013 the OMRON H2C motor timers became obsolete. They were replaced with the OMRON H3CR-A8 solid state timer. The replacement timer has the same Shivvers part number and will interchange with the OMRON motor driven timer without any problems.
Unscrew the old motor driven timer and let it hang, or label the wires and disconnect them to completely remove the timer. Drill two 0.140" diameter (9/64") holes and mount the new timer socket as shown. The screws are self tapping.

Remove the wires that went to the microswitch of the old timer. Wires from one terminal of the old microswitch go to terminal #8 on the new socket. Wires from the other terminal of the old microswitch go to terminal #5 on the new socket.

The two wires that go to the motor of the old timer go to terminals 7 and 2 of the new socket.
Set-Up

The selectors are changed by turning them with a small screwdriver. First turn power OFF to the timer. Normally, the timer is set as shown below.

The timer configured as shown will give a delay period of 0 to 1.2 minutes (or 0 to 72 seconds) at full scale. With the pointer as shown the delay period will be 0.5 minutes (30 seconds).

This timer will not show the elapsed time delay as it is timing down, but the green Power Indicator will flash. It will flash about every second at first, then rapidly flash just before the end of delay period. At the end of the delay period, the orange Output Indicator will light, and the green Power Indicator will also be on.

<table>
<thead>
<tr>
<th>Available Time Scales:</th>
<th>Available Time Units:</th>
<th>Available Modes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 1.2</td>
<td>sec</td>
<td>A : ON - Delay</td>
</tr>
<tr>
<td>0 - 3</td>
<td>10s</td>
<td>B2 : Flicker ON Start</td>
</tr>
<tr>
<td>0 - 12</td>
<td>min</td>
<td>E : Interval</td>
</tr>
<tr>
<td>0 - 30</td>
<td>10m</td>
<td>J : One Shot</td>
</tr>
<tr>
<td></td>
<td>hrs</td>
<td>B : Flicker OFF Start</td>
</tr>
<tr>
<td></td>
<td>10h</td>
<td></td>
</tr>
</tbody>
</table>
Once the new timer is configured, insert it into the socket and engage the yellow socket hooks into the bottom of the timer.

Rotate the clear plastic knob until the red pointer is at the desired time delay.

Make sure everyone is clear of all drying and transferring equipment and re-apply power to test the timer.

If contact points on terminals 5 and 8 go bad, switch to terminals 4 and 1.

**295 Deluxe Circuitrol Wiring**

To Middle of Cont. Flow #1 Switch

To Top Right of Cont. Flow #1 Switch

Goes either to "B" on Grain Thermostat, or NC contact of added relay for G2 Compudry, whichever was used for old Zenith timer.

**Timer Internal Wiring**

(Bottom View)

120 VAC SOURCE