

1) INSTALLATION:

A. Mounting:

Use (4) 1/4" mounting holes on back plate. (1)

B. Liquid Connections:

1. Attach discharge line(s) to 1/8" Female NPT liquid outlet(s). Use pipe sealant on all NPT connections. (2)

2) OPERATION:

A. Start up procedure (must be done in a clean environment):

1. Fill reservoir with fluid to be pumped. (3)
2. For liquid output set Cycle timer per instruction (see revise side) (4)
3. Pump shipped at full volume .009 in³ setting. (It is recommended to prime system at full volume).
4. For faster start up, prefill lines or motor may be removed & the pump cycled w/screw driver.
 - Slot in PurgeX® camshaft accepts standard flat head screwdriver.
5. Pump will automatically fill lines upon operation.

B. Liquid Output Adjustment: (5)

1. Use 3/4" wrench to remove feed from body.
2. Use retaining ring pliers to turn back adjustment nut. Do not push on cam follower or pump may be damaged.
3. Each clockwise turn of the adjustment nut reduces output by:
 - .002 in³/.03 cc/.001 oz./1.78 (1/8 dia.) drops
4. Max output, per cycle, per feed, with adjustment nut flush with top of sleeve:
 - .009in³/.147 cc/.005 oz./9 (1/8 dia) drops
5. Reassemble and test. Allow sufficient time to purge all air before measuring output.

Installation Instructions

TR-6 Programmable Plug-In Time Delay Relays



READ INSTRUCTIONS BEFORE INSTALLING OR OPERATING THIS DEVICE. KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE.

WARNING

Potentially hazardous voltages are present. Turn off all power supplying this equipment before connecting or disconnecting wiring.

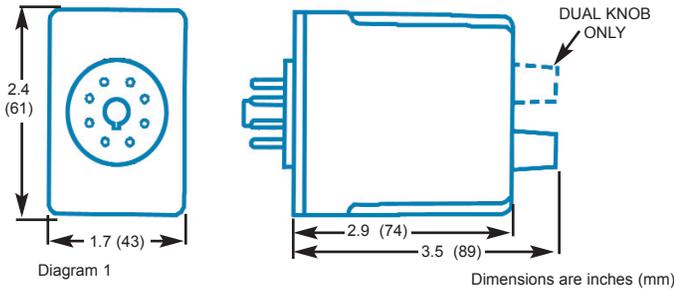
SPECIFICATIONS

Input Voltage: See Product Nameplate for actual voltage.
 AC: +10/-15%, 50/60Hz. DC: +10/-15%.
 Output Contact Rating: 10A Resistive @ 240VAC/28DC
 1/2 HP @ 240VAC, 1/3 HP @ 120VAC
 Temperature Range: 12-120V Input: -28° to 65°C (-20° to 150° F)
 240V Input: -28° to 50°C (-20° to 122° F)
 Reset Time: Off Delay/Single Shot/Watchdog: 40ms minimum
 All other Functions: 100ms minimum

DUAL KNOB UNITS

Dial Setting	Timing Range
A	0.6 - 2.5 Sec.
B	1.5 - 5 Sec
C	2.5 - 10.5 Sec.
D	5 - 21 Sec.
E	10 - 42 Sec.
F	0.4 - 1.4 Min.
G	0.7 - 2.8 Min.
H	1.5 - 5.5 Min.
I	3 - 11 Min.
J	5.5 - 22.5 Min.
K	11 - 45 Min.
L	0.4 - 1.5 Hr.
M	0.8 - 3 Hr.
N	1.5 - 6 Hr.
O	3 - 12 Hr.
P	6 - 24 Hr.

DIMENSIONS

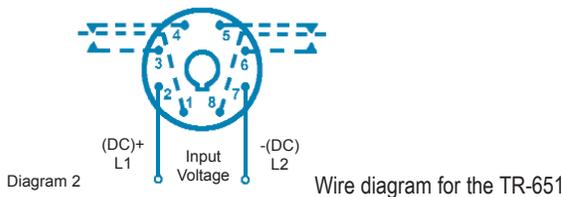


INSTALLATION

Mount the appropriate 8 pin (Product Number 70169-D) or 11 pin (Product Number 70170_D) octal socket in a suitable enclosure. Use one or two #12-22 solid or stranded wire with sockets, with a recommended terminal tightening torque of 6-7 in-lbs (maximum of 12 in-lbs). Set the time delay as described at right. Wire the socket per below or as shown on the side of the timer. Plug unit into socket.

WIRING

A wiring diagram is provided on the side of the time delay relay. Or use the wiring diagram below:



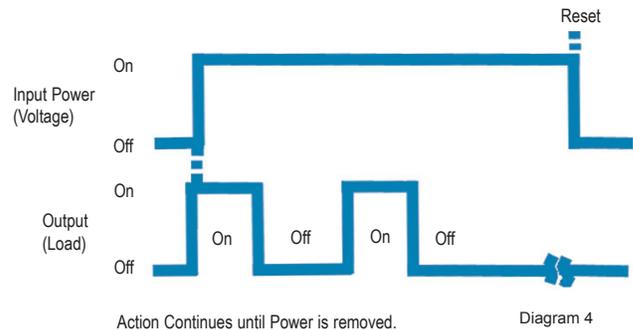
SETTING THE TIME DELAY

Programmable Products (Product Number begins with TR-6)
 All TR-6 Series programmable products have one or two 16-position rotary switches for selecting one of the 16 built-in time ranges (see diagram 3). First, determine the desired time range from the Timing Range Chart located on the tip of the case (single knob units) or on the side of the case (dual knob units), or from the tables below. Position the rotary switch to the letter that matches the desired time range. Those products with two rotary switches (dual knob units) can have different ON & OFF time ranges selected. **DO NOT CHANGE THE SETTING OF THESE SWITCHES WITH POWER APPLIED TO THE UNIT.** Finally, adjust the time delay within the programmed time range by rotating the knob located on the tip of the unit. Note: the tick marks are for reference only.

TROUBLESHOOTING

If the unit fails to operate properly, check that all connections are correct per diagram 2. For DC Input Voltages, make sure the polarity matches diagram 2. Use the descriptions of how each function operates on back of this sheet as a guide to determine if the unit is operating properly. If problems continue, contact Oil-Rite at 920-682-6173 for assistance.

REPEAT CYCLE STANDARD TR-651 ON/OFF DELAY



Upon application of input voltage, the relay contacts transfer and a preset delay begins. At the end of the preset delay, the relay contacts drop out and remain in that condition for a second, independently adjustable preset time. At the end of this time, the relay contacts pull in and the sequence repeats until input voltage is removed.