

**TJERNLUND PRODUCTS, INC.**

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**24/115 VAC TIMER  
INSTALLATION INSTRUCTIONS  
Timer Part Number 950-1067**

**OWNERS INSTRUCTIONS  
THESE INSTRUCTIONS MUST REMAIN  
WITH EQUIPMENT  
DO NOT DESTROY**

**ALWAYS FOLLOW HEATER  
MANUFACTURER'S INSTRUCTION  
FOR PROPER OPERATION OF  
HEATER AND RELIGHTING OF PILOT**

**READ INSTRUCTIONS CAREFULLY**

**TJERNLUND LIMITED ONE YEAR WARRANTY**

Tjernlund Products, Inc. warrants to the original purchaser of this product that the product will be free from defects due to faulty material or workmanship for a period of (1) year from the date of original purchase or delivery to the original purchaser, whichever is earlier. Remedies under this warranty are limited to repairing or replacing, at our option, any product which shall, within the above stated warranty period, be returned to Tjernlund Products, Inc. at the address listed below, postage prepaid. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, AND TJERNLUND PRODUCTS, INC. EXPRESSLY DISCLAIMS LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF THIS PRODUCT. THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES AND NO AGENT IS AUTHORIZED TO ASSUME FOR US ANY LIABILITY ADDITIONAL TO THOSE SET FORTH IN THIS LIMITED WARRANTY. IMPLIED WARRANTIES ARE LIMITED TO THE STATED DURATION OF THIS LIMITED WARRANTY. Some states do not allow limitation on how long an implied warranty lasts, so that limitation may not apply to you. In addition, some states do not allow the exclusion or limitation of incidental or consequential damages, so that above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which may vary from State to State. Send all inquiries regarding warranty work to Tjernlund Products, Inc. 1601 9th Street, White Bear Lake, MN 55110-6794. Phone (651) 426-2993 • (800) 255-4208 • Fax (651) 426-9547.

## PART #950-1067 INSTALLATION INSTRUCTIONS

### 24/115 VAC INPUT ADJUSTABLE POST-PURGE TIMER/RELAY

<u>COMPONENT #</u>	<u>DESCRIPTION</u>	<u>REPLACEMENT KIT #</u>
860-0345	24 VAC Input Post-Purge Timer/Relay	950-1067
860-0346	115 VAC Input Post-Purge Timer/Relay	950-1067
860-0349	24/115 VAC Input Post-Purge Timer/Relay	950-1067

**NOTE:** The Tjernlund Timer/Relay Part #950-1067 is used both as a replacement part and as an accessory to Tjernlund Draft Inducers. Please refer to Section A of these instructions if installing it as a replacement part and Section B if installing it as an accessory part.

### **WARNING**

- Disconnect 115 VAC Power from the Power Venter/ Draft Inducer before continuing.
- All wiring from the Power Venter/Draft Inducer to the appliance must be appropriate class 1 wiring as follows: installed in rigid-metal conduit, intermediate metal conduit, rigid non-metallic conduit, electrical metallic tubing, Type MI Cable, Type MC Cable or be otherwise suitably protected from physical damage.

## SECTION A (REPLACEMENT OF DEFECTIVE TIMER)

- Remove the electrical box cover of the Power Venter.
- Place the replacement Timer next to the defective Timer located in the Power Venter electrical box.
- One by one, remove the wires from the defective Timer and connect them to the corresponding number on the replacement Timer.  
**NOTE:** Terminals 1 and 2 may be positioned differently on this Timer/Relay than on the Timer/Relay you are replacing. For further details refer to wiring instructions.
- Remove the defective Timer from the electrical box by removing the nut/screw.
- Install the replacement Timer in the electrical box and secure it with the nut/screw removed in step 4.
- Adjust the timer to its desired setting by turning the set screw. This Timer can be adjusted from approximately 1 minute to approximately 10 minutes. (Clockwise minimum, Counter Clockwise maximum). **CAUTION:** Overturning adjustment screw will damage Timer and void warranty.
- If the defective Timer failed within the 1 year warranty period, you may return it along with proof of purchase to the Tjernlund Distributor it was originally purchased from for a full refund.

## SECTION B

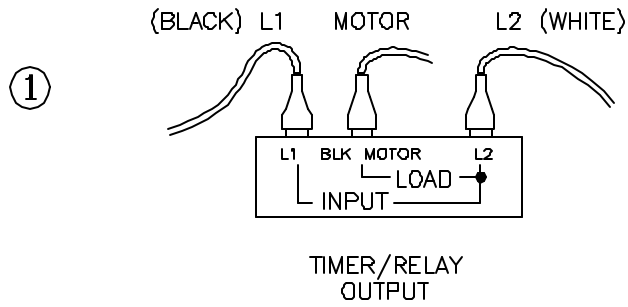
- Remove the electrical box cover from the Power Venter/Draft Inducer.
- Secure the Timer to the inside of the electrical box using the nut/screw provided. It is important that the time delay adjustment pot face upward.

## WIRING

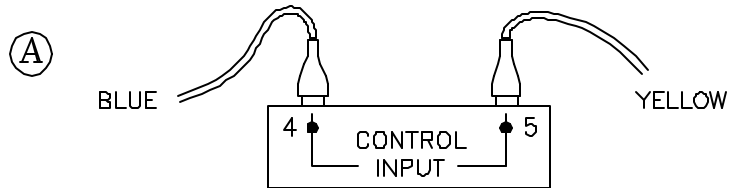
The #950-1067 Timer/Relay may be used to replace either the 24 VAC input #950-1060 or the 115 VAC input #950-1065 Timer/Relays. The #950-1067 is designed to accept either 24 VAC or 115 VAC control input signals. The control inputs are non-polarity sensitive, meaning that the "hot" and the "neutral/return" can be connected to either side of the control input.

The output or motor switching side of the #950-1067 has three terminals. Viewing the Timer/Relay as depicted in diagram "1", L1 or the "hot" power lead is attached to terminal L1. L2 or the neutral/return lead is attached to terminal L2 and the Black or "hot" motor lead is attached to terminal BLK. MOTOR. **NOTE:** In order for the timer to operate after appliance shutdown, terminals L1 and L2 must be powered continuously with 115 VAC.

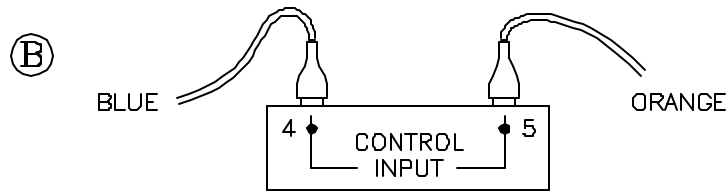
The Timer/Relay kit is supplied with quick-connect leads for when it is installed as an accessory control. In most cases it will be easier to use the existing wire leads when installing it as a replacement for a defective Timer/Relay.



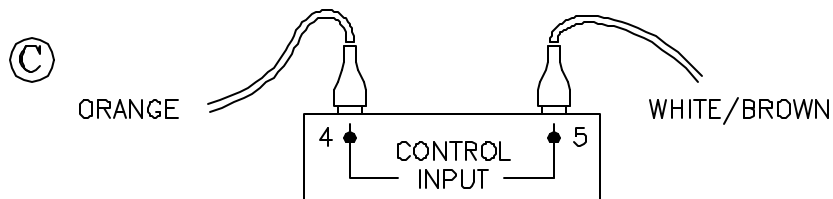
If you are replacing the Timer/Relay of a **VP-2**, **WHK-2** or a **VP-3**, connect the control input voltage as shown in diagram "A".



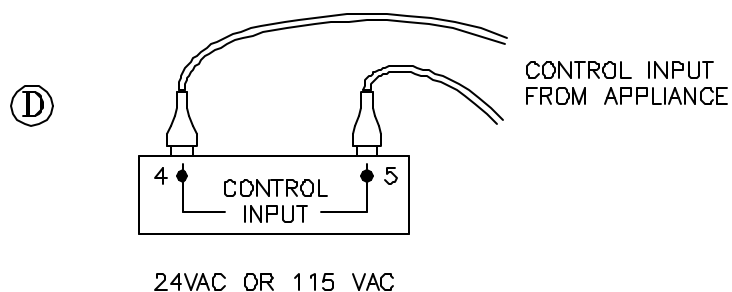
If you are replacing the Timer/Relay of an **HST** manufactured before August 1st 1992, or any **GPAK-JT/GPAK-1T**, connect the control input voltage as shown in diagram "B". **NOTE:** Terminal 4 of the Timer/Relay is Blue in the **GPAK-T** Series and Orange in the **HST-Series**. Terminal 5 of the Timer/Relay is White/Brown in the **HST-Series** and Orange in the **GPAK-T** Series.



If you are replacing the Timer/Relay of an **HST** manufactured after August 1st 1992, or any **HST120**, connect the control input voltage as shown in diagram "C".



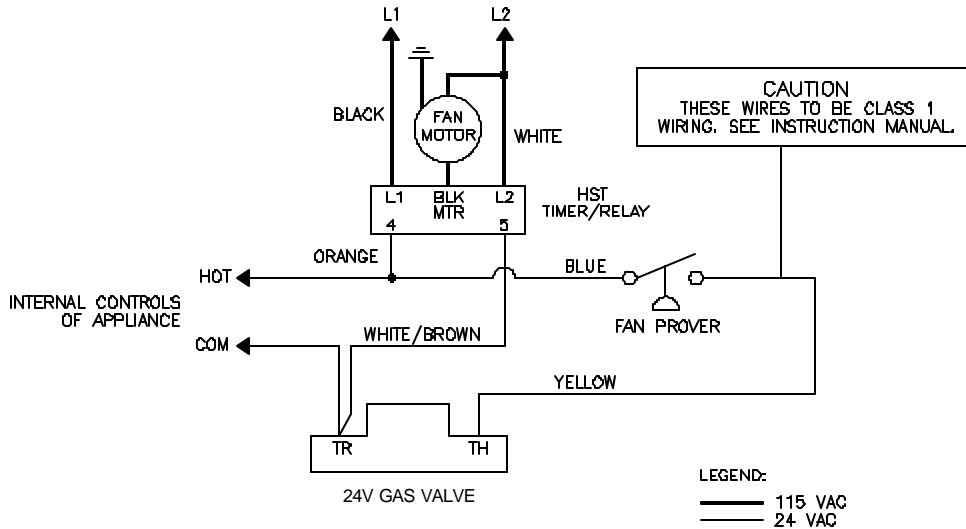
If you are adding the Timer/Relay to an existing Draft Inducer/Power Venter, connect the control input voltage as shown in diagram "D".



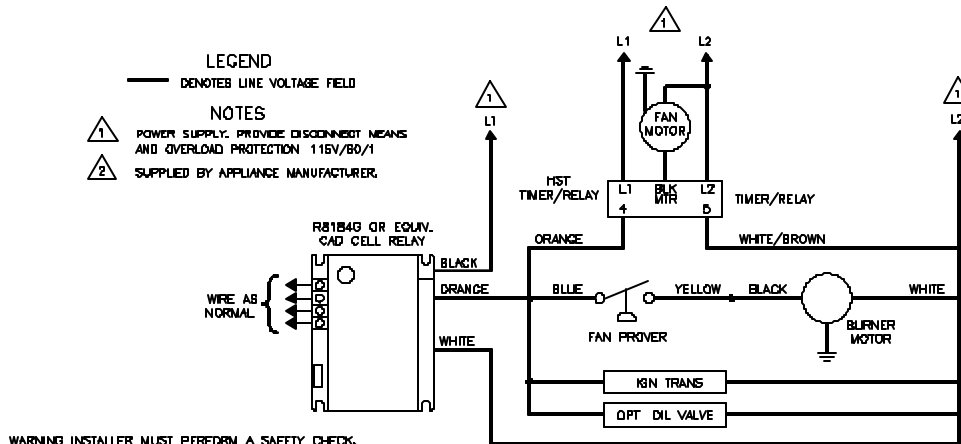
## COMMON WIRING DIAGRAMS

**NOTE:** When power is first established to the Relay/Timer, it will automatically reset into post purge. After the venter operates from 1 to 10 minutes, it will shut off and be ready for normal operation.

### TYPICAL 950-1067 WIRING WHEN CONNECTED TO A 24 VAC GAS VALVE



### TYPICAL 950-1067 WIRING WHEN CONNECTED TO A 115 VAC OIL FIRED APPLIANCE WITH FAN MOTOR LESS THAN 6 AMPS (BURNER MOTOR NOT TO EXCEED FAN PROVER AMP RATINGS)



**WARNING** INSTALLER MUST PERFORM A SAFETY CHECK.

1. DISABLE THE POWER VENTER WITH THE APPLIANCE(S) CALLING FOR HEAT
2. IF UTILIZING DRAFT HOOD SPILL SWITCHES AS THE SAFETY, THE APPLIANCE(S) MUST SHUT DOWN WITHIN 3 MIN.
3. IF UTILIZING THE FAN PROVING SWITCH AS THE SAFETY THE APPLIANCE(S) MUST SHUT DOWN IMMEDIATELY IF THE APPLIANCE(S) DO NOT SHUT DOWN, CONTACT TJERNLUND PRODUCTS, INC. FOR ASSISTANCE AT 1-800-255-4208

If you have any questions regarding installation, please contact our Customer Service Department by calling: 1-800-255-4208, Monday-Friday, 7:30-4:30 CST.