## INSTALLATION

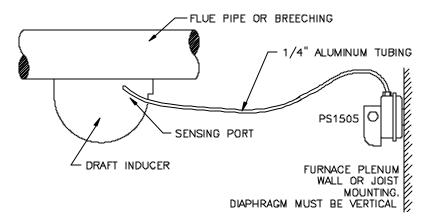
### Location:

The Tjernlund Fan Prover can be mounted on any vertical surface within five (5) feet of the draft inducer. It must not be mounted on the inducer or any other surface with a temperature in excess of 190° F. Similarly, the temperature of the surrounding air must be less than 190° F.

## Mounting:

1. Locate holes to be drilled using prover mounting foot as guide.

- 2. Drill two (2) 1/8" holes.
- 3. Use sheet metal screws enclosed to mount Fan Prover. **Diaphragm must be vertical** to ensure proper operation of switch, See Diagram.



4. Remove inducer from duct if previously installed.

## 5. FOR MODEL D-3 ONLY

The Model D-3 Draft Inducers have two pressure sensing location knockouts. Location "A" should be used when the D-3 Draft Inducer is mounted on 7" or 8" diameter pipe. Location "B" should be used when the D-3 Draft Inducer is mounted on 5" or 6" diameter pipe.

- 6. Remove Draft Inducer sensing port knockout using a blade screwdriver and a pliers. Push male brass fitting through hole from inside housing and lock into position with brass hex nut. Tighten nut with wrench.
- 7. Unroll tubing and cut to desired length, using a tubing cutter or hack saw to provide squared, finished cuts. Cut ends should be free of any burrs or foreign material.
- 8. Slide brass connecting nuts over tubing and tighten brass fittings.
- 9. See electrical schematic for application which best represents your system.
- 10. All wiring must be done in accordance with the NEC and applicable local codes.

## LIMITED WARRANTY

Tjernlund Products, Inc. warrants its components for one year from date of installation. This warranty covers defects in material and workmanship. This warranty does not cover normal maintenance, transportation or installation charges for replacement parts or any other service calls or repairs. Products that are tampered with, damaged, installed improperly, wired incorrectly or defective due to malfunctioning appliances are not covered under this warranty.

Tjernlund Products, Inc. will issue credit to the original distributor or provide a free part to replace one that becomes defective during the one year warranty period. If the part is over 18 months old, proof of date of the installation in the form of the contractor sales / installation receipt is necessary to prove the unit has been in service for under one year. All receipts should include the date code of the PS1505. This will help prevent possible credit refusal.

If the PS1505 is defective, return it to your Tjernlund distributor for replacement. If PS1505 date code is older than 18 months you will need to provide a copy of the original installation receipt to your distributor. Credit or replacement will only be issued to a Tjernlund distributor after the defective part has been returned prepaid to Tjernlund.

## 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 Tiernlund Products, Inc. 1601 9th Street, White Bear Lake, MN 55110-6794. Phone (651) 426-2993 • (800) 255-4208 • Fax (651) 426-9547.





PURPOSE

Voltage: 125VA pilot duty at 24 volts AC 300VA pilot duty at 115 to 277 volts AC 15 amps non-inductive to 277 volts AC

**Electric switch:** single pole, single throw, normally open, snap acting contacts

TJERNLUND PRODUCTS. INC.

PHONE (651) 426-2993 • (800) 255-4208 • FAX (651) 426-9547

1601 Ninth Street • White Bear Lake, MN 55110-6794

MODEL PS1505

**FAN PROVER SWITCH** 

**OWNERS INSTRUCTIONS** 

THESE MUST REMAIN WITH EQUIPMENT

DO NOT DESTROY

The Tjernlund Fan Prover has been designed to monitor the pressure within the fan housing only. A motor or wheel failure will decrease hous-

ing pressure and deactivate the pressure switch, thus preventing combustion. The Fan Prover is not a safety control designed to ensure proper

draft or to indicate chimney failure. It is the responsibility of the end user to properly maintain both the combustion equipment and its chimney or

vent. Yearly maintenance and inspection should be conducted by gualified

service personnel. Failure to follow such maintenance and inspection pro-

cedures may result in generation of toxic carbon monoxide gas.

Visit our web site • www.tjernlund.com

Electric connectors: #6-32 screw terminals with cup washer

Control set point: non-adjustable

**Operating pressure:** on increasing vacuum pressure rise,  $.05 \pm .02$ " W.C. with diaphragm in vertical position.

Maximum pressure: 1/2 psi

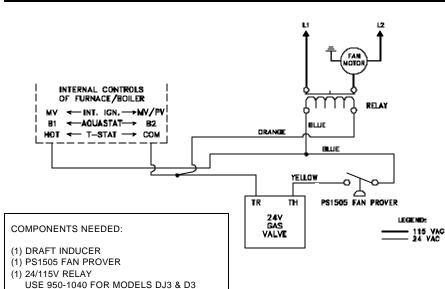
Operating temperature range: -40 to  $190^\circ$  F.

Operating position: diaphragm mounted vertical

**Sample line connector:** Integral compression-type with nut and ferrule suitable for 1/4" O.D. aluminum or copper tubing.

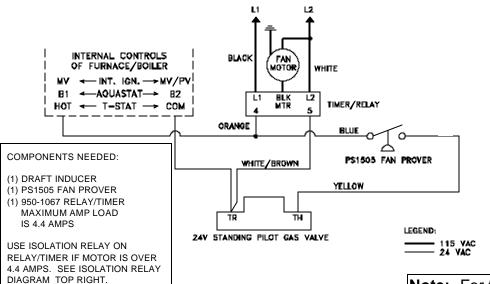
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#### GAS WIRING TO ANY APPLIANCE EQUIPPED WITH 24V CONTROLS NO POST-PURGE RELAY/TIMER ON DRAFT INDUCER



USE 950-1016 FOR MODELS I. IL. XL

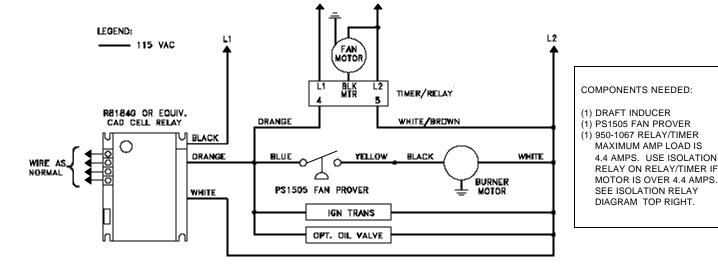
GAS WIRING TO ANY APPLIANCE EQUIPPED WITH 24V CONTROLS POST-PURGE RELAY/TIMER ON DRAFT INDUCER (DRAFT INDUCER MOTOR LESS THAN 4.4 AMPS) MODELS I. IL. XL MUST USE 950-0483 ISOLATION RELAY



**Note:** For further assistance call Tjernlund Products, Inc. Technical Customer Service Department at 1-800-255-4208.

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(1) WHK-I KIT



# DRAFT INDUCER CONNECTED TO OIL BURNER WITH R8184G CONTROLS (DRAFT INDUCER MOTOR LESS THAN 4.4 AMPS) MODELS I, IL, XL MUST USE 950-0483 ISOLATION RELAY

LEGEND

115 VAC FAN - NILLIVOLT MOTOR L1 < BLK L1 L2 TIMER/RELAY WIRE SPILL SWITCHES IN SERIES WITH ECO, OR 950-0470 THERMOCOUPLE  $\sim$ JUNCTION ADAPTER WHK-I GAS PRESSURE SWITCH COMPONENTS NEEDED: (1) DRAFT INDUCER (1) RELAY/TIMER 950-1067 MAXIMUM AMP LOAD IS 4.4 AMPS. USE ISOLATION RELAY ON RELAY/TIMER IF MOTOR IS OVER 4.4

AMPS. SEE ISOLATION RELAY DIAGRAM TOP RIGHT.

ADAPTER (FOR RESIDENTIAL WATER HEATERS ONLY)

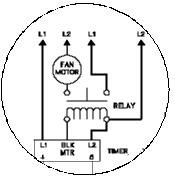
(1) 950-0470 THERMOCOUPLE JUNCTION

GAS WIRING TO ANY APPLIANCE WITH MILLIVOLT CONTROLS

REQUIRES POST-PURGE RELAY/TIMER ON DRAFT INDUCER

(DRAFT INDUCER MOTOR LESS THAN 4.4 AMPS)

MODELS I, IL, XL MUST USE 950-0483 ISOLATION RELAY



IF DRAFT INDUCER MOTOR IS OVER 4.4 AMPS, WIRE 950-0483 ISOLATION RELAY AS SHOWN IN THIS DIAGRAM.

RELAY/TIMER ISOLATION RELAY WIRING DRAFT INDUCER MOTORS GREATER THAN 4.4 AMPS INCLUDES MODELS I, IL, XL