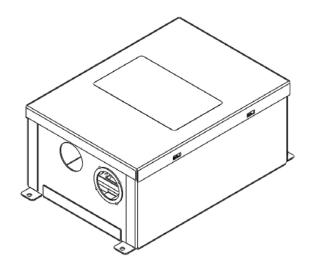
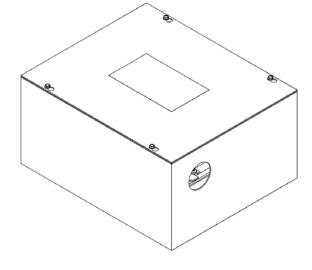


# Installation and Operation Guide for PD5200 and PD5300 Automatic Transfer Switch





PD5200 SERIES

PD5300 SERIES

Member



# Progressive Dynamics, Inc.

507 Industrial Rd Marshall, MI 49068 www.progressivedyn.com

### **Table of Contents**

Installation Instructions	1
<b>Mounting Configurations</b>	2
Troubleshooting	2-3

### LIMITED WARRANTY

- I. **LIMITED WARRANTY**: Progressive Dynamics, Inc. warrants its automatic transfer switch to be free from defects in material or workmanship under normal use and service; and limits the remedies to repair or replacement.
- II. **DURATION**: This warranty shall extend for a period of one year from the original date of purchase, and is valid only within the continental limits of the United States and Canada.
- III. WARRANTY EXCLUSIONS: This warranty specifically does not apply to:
  - A. Any product which has been repaired or altered in any way by an unauthorized person or service station;
  - B. Damage caused by excessive input voltage, misuse, negligence or accident; or an external force;
  - C. Any product which has been connected, installed or adjusted or used other than in accordance with the instructions furnished, or has had the serial number altered, defaced or removed;
  - D. Cost of all services performed in removing and re-installing the product; and
  - E. ANY LOST PROFITS, LOST SAVINGS, LOSS OF USE OF ENJOYMENT OR OTHER INCIDENTAL DAMAGES ARISING OUT OF THE USE OF, OR INABILITY TO USE, THE PRODUCT. THIS INCLUDES DAMAGES TO PROPERTY AND, TO THE EXTENT PERMITTED BY LAW, DAMAGES FOR PERSONAL INJURY. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
- IV.PROOF OF PURCHASE: A warranty claim must be accompanied by proof of the date of purchase.
- V. **CLAIM PROCEDURE**: Upon discovery of any defect, Progressive Dynamics, Inc. shall be supplied the following information:
  - A. Name and address of the claimant;
  - B. Model and serial number of the product;
  - C. Name, year and model of the vehicle in which the product was installed;
  - D. Copy of original bill of sale showing date of purchase;
  - E. Complete description of the claimed defect.

Upon determination that a warranty claim exists (a defect in material or workmanship occurring under normal use and service,) the product shall be shipped postage prepaid to Progressive Dynamics, Inc. together with proof of purchase. The product will be repaired or replaced and returned postage prepaid.

Progressive Dynamics, Inc. 507 Industrial Road Marshall, MI 49068 service@progressivedyn.com www.progressivedyn.com

For Warranty Service Call: (269) 781-4241 Ext. 159



**WARNING:** TORQUE ALL CONNECTIONS PER LABEL – EXCESSIVE TORQUE MAY CAUSE DAMAGE TO CONNECTIONS LEADING TO A FIRE CAUSING PROPERTY DAMAGE, SERIOUS INJURY OR DEATH.

WARNING: SHOCK HAZARD - DUE TO THE HIGH VOLTAGES ASSOCIATED WITH ITS OPERATION ONLY QUALIFIED SERVICE PERSONNEL SHOULD INSTALL OR TROUBLESHOOT THIS TRANSFER SWITCH! ALL APPLICABLE CODES AND STANDARDS MUST BE MET WHEN INSTALLING THIS DEVICE. SEE WIRING DIAGRAM INSIDE OF THE COVER AND ON THE BACK OF THIS PAGE. IMPROPER HANDLING OR INSTALLATION MAY CAUSE SERIOUS INJURY OR DEATH.

**WARNING:** THE 5200 & 5300 AUTOMATIC TRANSFER SWITCHES ARE NOT IGNITION PROTECTED AND SHOULD NOT BE MOUNTED IN THE SAME COMPARTMENT AS THE BATTERIES OR FLAMMABLE MATERIALS SUCH AS GASOLINE. DO NOT MOUNT THE TRANSFER SWITCH IN THE GENERATOR OR LP GAS COMPARTMENT. A FIRE CAUSING PROPERTY DAMAGE SERIOUS INJURY OR DEATH COULD RESULT!

THIS PRODUCT IS NOT DESIGNED FOR USE WITH A 240 VOLT SINGLE LEG SUPPLY. APPLICATION OF VOLTAGES IN EXCESS OF 130 VOLTS FROM HOT1 TO NEUTRAL WILL CAUSE PERMANENT DAMAGE TO THE UNIT.

DO NOT MOUNT THE UNIT VERTICALLY AS SHOWN IN FIGURE 3 AND 4. DOING SO WILL GREATLY SHORTEN THE SERVICE LIFE OF THE UNIT.

## **Installation Instructions**

The 5200 & 5300 Automatic Transfer Switches can be installed as shown in figures 1 and 2 provided there is room to route the shore power, generator, and distribution connection wires. The 5200 & 5300 Automatic Transfer Switches are not suitable for outdoor locations and should be mounted in a protected area. We recommend that the transfer switch be mounted as close to the shore power and generator power cords as practical to reduce voltage loss.

# **Description of Operation**

- When power is applied to the shore side, the contactor activates and supplies power to the panel.
- When power is applied to the Gen side there is a 20-45 second delay then the Gen side contact will activate, power will go to the panel from the Gen side and the shore side will be locked out.
- If shore power returns while the Gen power is present, nothing will happen. When the Gen power is removed the contactor will drop out and allow the shore side to supply power.
- Generator overrides shore power.
- In a single leg application the HOT1 side must be used for the control circuitry to work.

# PD5200 / 5300 mounting configuration options

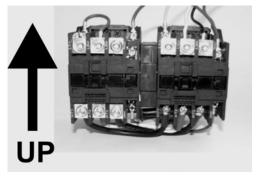


Figure 1- Horizontal Wall Mount

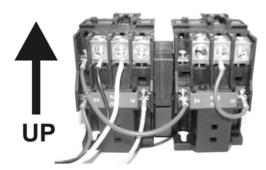


Figure 2 - Floor Mount

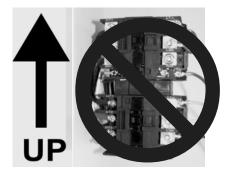


Figure 3– Vertical Wall



Figure 4 - Vertical Wall Mount

Specifications (Specifications subject to change without notice)			
Model	PD5200	PD5300	
Electrical rating	120/240VAC 60Hz @ 50A	120/240VAC 60Hz @ 100A	
Dimensions	7.25"L x 6.75"W x 4.50"H	12"L x 10"W x 6"H	
Weight	7 lbs	17 lbs	

## PD5200 & PD5300 TROUBLE SHOOTING GUIDE

#### No power to loads when plugged into shore power:

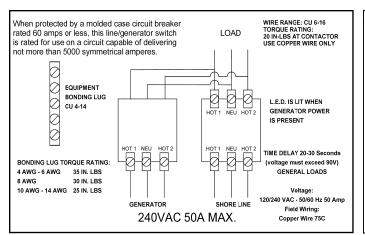
- 1. Measure AC Volts between HOT1 and NEU on the shore line connections, there must be voltage between 105 and 130VAC to energize the contactor. If the proper voltage is not present then there is a wiring error between the shore cord and the transfer switch or a shore power problem.
- 2. If proper voltage is present at HOT1 and NEU on the shore side measure AC Volts on the load side between HOT1 and NEU, should read between 105 and 130VAC. If the voltage is not present and there is proper voltage on the SHORE side the transfer switch is defective. If the proper voltage is present on the LOAD side there is a wiring error between the transfer switch and the distribution panel.

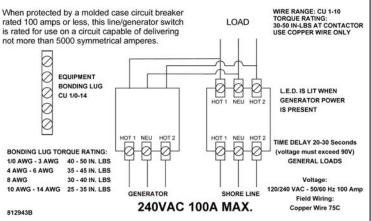
#### No power to loads when generator is running:

- 1. Disconnect Shore Power.
- 2. Start the generator, measure AC Volts between HOT1 and NEU on the GEN connections, there needs to be voltage between 105 and 130VAC to energize the contactor. NOTE: there is a 20-45 second delay before the generator transfer contacts engage. When voltage is present between HOT1 and NEU the green LED on the control board will be illuminated. If the proper voltage is not present then there is a wiring error between the generator and the transfer switch or a generator problem.
- 3. If proper voltage is present at HOT1 and NEU on the GEN side wait 20-45 seconds then measure AC Volts on the load side between HOT1 and NEU, it should read between 105 and 130VAC. If the voltage is not present and there is proper voltage on the GEN side the transfer switch is defective.

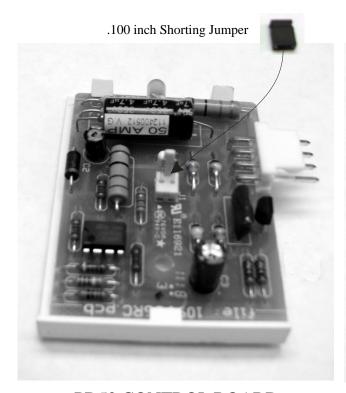
#### Hi-pot Procedure: (OEM INSTALALTIONS ONLY)

- 1. On shore Power Connections connect HOT1, HOT2 and NEU together.
- 2. Connect one lead of Hi-pot tester to the HOT1, HOT2 and NEU junction.
- 3. Connect other lead of Hi-pot tester to Chassis Ground.
- 4. Apply power to Hi-pot Tester and perform test.
- 5. Perform steps 1-4 for the LOAD and GENERATOR side to complete Hi-pot testing of the coach.



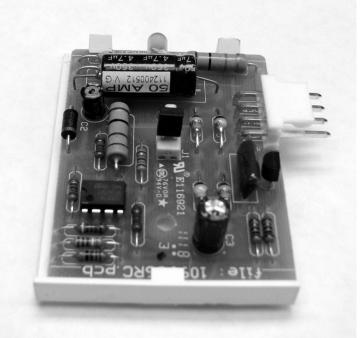


## **PD52 Time-Out Disable**

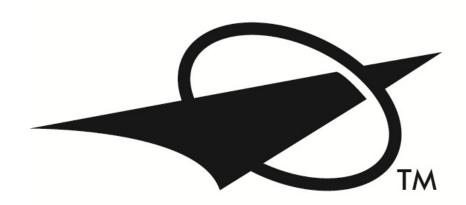




To disable the time-out function of the control board install a .100 inch shorting jumper over the connector marked J1.



PD52 CONTROL BOARD With Jumper Installed



# Progressive Dynamics, Inc.

507 Industrial Rd Marshall, MI 49068

Visit us on the web for other great products. www.progressivedyn.com