OPL5 TS-515PB

OPL5 15A Manual Generator Transfer Switch User Manual

Model: TS-515PB

Important Safety Information

WARNING: Electrical shock hazard. Read all instructions carefully before installation and operation. Installation should be performed by a qualified electrician and must comply with all local and national electrical codes.

- Always disconnect power from the main electrical panel before installing or servicing the transfer switch.
- Ensure the generator is properly grounded.
- Do not operate the transfer switch if it is damaged.
- This device is ETL Listed, indicating compliance with recognized safety standards.

Product Overview

The OPL5 15A Manual Generator Transfer Switch (Model TS-515PB) provides a safe and reliable method to connect a portable generator to your household wiring during a power outage. This unit allows you to manually switch a designated circuit from utility power to generator power, ensuring essential appliances remain operational.

Key features include a NEMA 5-15P inlet for generator connection, an integrated circuit breaker for overload protection, a manual transfer switch lever, a green safety indicator light, and pre-punched knockouts for easy installation.

Figure 1: Product Details - Highlighting the green safety indicator light, reset button, NEMA 5-15P inlet, and pre-punched knockouts.

Specifications

Brand	OPL5
Model Name	TS-515PB
Current Rating	15 Amps
Voltage	125 Volts
Wattage	3000 Watts (Starting)
Product Dimensions	5.5 x 3.8 x 2.8 inches
Item Weight	2.27 pounds
Material	Aluminum
Certification	ETL Listed

Figure 2: Product Dimensions - Showing the unit's measurements: 5.5 inches (height), 2.86 inches (depth), and 3.8 inches (width).

Setup and Installation

Pre-Installation Checklist:

- Ensure you have the necessary tools: screwdriver, wire strippers, wire nuts or Wago-type connectors, conduit fittings.
- Verify that the generator's neutral and ground are bonded, or use a bonding plug if required by your generator and local codes.
- Confirm the circuit you intend to power does not exceed the 15 Amp rating of this transfer switch.

Mounting:

Select a suitable location for mounting the transfer switch, typically near your main electrical panel or the appliance it will power. The unit features pre-punched knockouts for conduit entry, eliminating the need for drilling.

Figure 3: Pre-Punched Knockouts - Illustrating the removable knockouts for easy conduit installation without drilling.

Wiring Instructions:

IMPORTANT: All wiring must be performed with the main power supply disconnected. Consult the wiring diagram below and ensure all connections are secure and correct.

- Identify the existing circuit's **Line** (hot), **Neutral**, and **Ground** wires from your electrical panel.
- Connect the incoming **Line** (hot) wire from the electrical panel to the designated 'Line' terminal on the transfer switch.
- Connect the existing circuit's **Load** (hot) wire (leading to the appliance/outlet) to the designated 'Load' terminal on the transfer switch.
- Connect the **Neutral** wire from the electrical panel to the neutral bus bar within the transfer switch, and then connect the neutral wire leading to the appliance/outlet to the same neutral bus bar.
- Connect the **Ground** wire from the electrical panel to the ground bus bar within the transfer switch, and then connect the ground wire leading to the appliance/outlet to the same ground bus bar.
- Ensure the existing neutral and feed in your panel are disconnected and reconnected to the transfer switch as shown in the diagram.

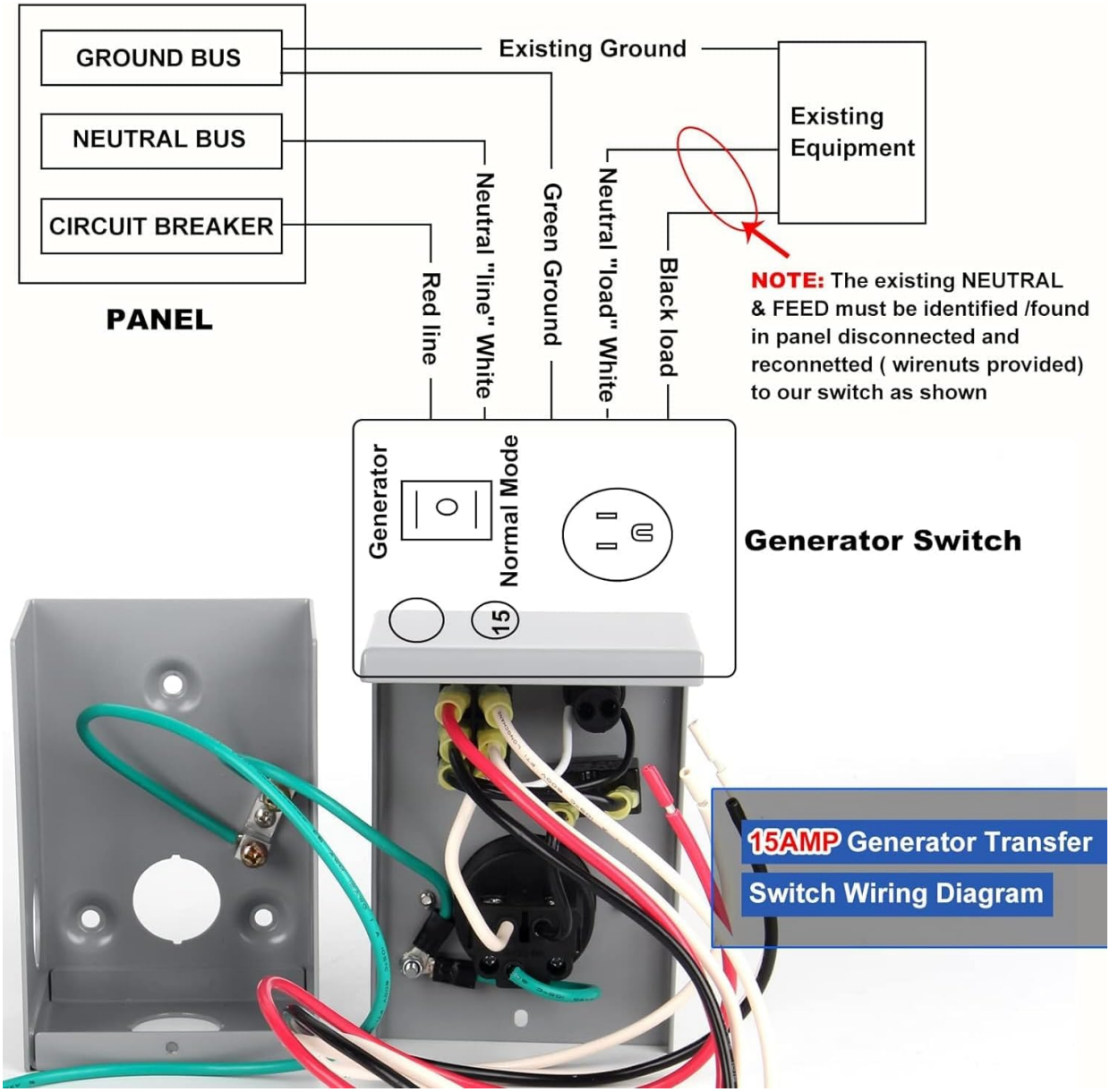

Figure 4: Wiring Diagram - Illustrates the connections for Line, Load, Neutral, and Ground, and how to integrate the transfer switch with existing electrical equipment.

Operating Instructions

Connecting the Generator:

1. Ensure the generator is off and the transfer switch is in the 'NORMAL' position.
2. Plug your generator's power cord into the NEMA 5-15P inlet on the transfer switch.
3. Start your generator according to its manufacturer's instructions.

Transferring Power:

1. Once the generator is running and stable, observe the green 'GENERATOR POWER ON' indicator light on the transfer switch. This light will illuminate when the generator is providing power to the inlet.
2. Move the transfer switch lever from the 'NORMAL' position to the 'GENERATOR' position. This will disconnect the selected circuit from utility power and connect it to generator power.
3. To return to utility power, first turn off the generator. Then, move the transfer switch lever from 'GENERATOR' to 'NORMAL'.

Reset Button:

The transfer switch includes a 'PUSH TO RESET' button, which is a circuit breaker. If an overload occurs on

the connected circuit, the breaker will trip, interrupting power. To restore power, reduce the load on the circuit and press the 'PUSH TO RESET' button.

Figure 5: Outdoor Setup - Demonstrates the transfer switch installed on an exterior wall, connected to a portable generator.

Figure 6: Typical Applications - Illustrates various household appliances such as electric ovens, heating systems, washing machines, lighting, and refrigerators that can be powered by the transfer switch.

Maintenance

The OPL5 Manual Generator Transfer Switch is designed for durability with a rugged, anti-corrosive metal body. Regular maintenance helps ensure its longevity and reliable operation:

- **Periodic Inspection:** Annually inspect the unit for any signs of physical damage, corrosion, or loose connections.
- **Cleaning:** Keep the exterior of the unit clean and free from dust and debris. Use a dry cloth for cleaning. Do not use abrasive cleaners or solvents.
- **Inlet Cover:** Ensure the NEMA 5-15P inlet cover is securely closed when not in use to protect against moisture and debris.

Troubleshooting

Problem	Possible Cause	Solution

No power to connected circuit when on 'GENERATOR' mode.	Generator not running or not producing power. Generator cord not fully plugged in. Transfer switch not fully in 'GENERATOR' position. Circuit breaker tripped.	Check generator operation and fuel. Ensure generator cord is securely connected. Confirm switch is firmly in 'GENERATOR' position. Press the 'PUSH TO RESET' button.
Green 'GENERATOR POWER ON' light does not illuminate.	Generator not running or not producing power. Generator cord not fully plugged in.	Check generator operation and fuel. Ensure generator cord is securely connected.
Circuit breaker trips repeatedly.	Overload on the connected circuit. Short circuit in the connected wiring or appliance.	Reduce the number of appliances or total wattage connected to the circuit. Inspect wiring and appliances for damage. Consult a qualified electrician if the problem persists.

Warranty and Customer Support

For warranty information, technical assistance, or customer support regarding your OPL5 15A Manual Generator Transfer Switch, please contact the manufacturer or your point of purchase. Keep your purchase receipt as proof of purchase.