

## INSTRUCTIONS FOR THE RELIANCE PREWIRED *Panel/Link*<sup>®</sup> - TR Series

THIS RELIANCE TRANSFER PANEL IS NOT FOR "DO-IT-YOURSELF" INSTALLATION. It must be installed by a qualified electrician thoroughly familiar with all applicable electrical and building codes.

The Reliance **Panel/Link**<sup>®</sup> transfer panel is designed to provide, in the event of a utility power outage, a safe and simple method of powering designated branch circuits from a portable generator. The unique mechanical interlock between the "GENERATOR SUPPLY" and "UTILITY SUPPLY" circuit breakers, which supply power to the panel bus, prevents feedback by prohibiting these breakers from being in the "ON" position at the same time.

Generally, a small portable generator will not have sufficient capacity to power a large number of circuits at the same time. Reliance transfer panels allow you to power selectively any number or combination of branch circuits wired into the panel, up to the capacity of the generator.

### INSTALLING THE PANEL/LINK<sup>®</sup> TRANSFER PANEL

**WARNING: Be sure the power from both the main panel or load center and the generator is turned off before starting this procedure. Failure to do so could result in serious injury or death.**

1. Loosen the four screws and remove the front cover of the transfer panel.
2. Mount the transfer panel next to the load center (circuit breaker or fuse box) containing the branch circuits to be transfer to generator power. Remove the cover from the load center.
3. A section of conduit and two fittings have been included in the package. Determine knockout openings to be used and cut the conduit to a convenient length, if necessary, and install between the two enclosures. Run all wires from the transfer panel through the conduit to the load center.
4. Connect the neutral wire from the transfer panel to the neutral bar in the load center.
5. Connect the green ground wire from the transfer panel to the ground bar in the load center. This may be the same bar as the neutral bar if the load center is the service entrance where the ground and the neutral are bonded together.
6. Select the circuits to be powered by the generator.
  - a. For 120-volt circuits, remove the branch circuit conductor from the first selected circuit breaker in the load center, and attach it with a wire connector to the selected branch circuit breaker wire from the transfer panel. Wires coming from the branch circuit breakers in the transfer panel are marked with letters that correspond to the circuits in the transfer panel. Refer to the circuit label on the transfer panel dead front.
  - b. For 240-volt circuits, remove the two branch circuit conductors from the selected circuit breaker in the load center, and attach both of these wires with wire connectors to the two selected double-pole branch circuit breaker wires from the transfer panel.
  - c. Repeat for each of the selected circuits. **Be sure that the circuit breaker rating in the transfer panel matches the rating of the circuit breaker that it replaces.**
7. Install a double-pole circuit breaker (to be furnished by the installer) in the load center that is the same ampacity as the Utility Supply breaker in the transfer panel. Note that the circuit breakers in the load center that were disconnected in Step 6 above can be removed to make room for this double pole breaker if necessary. Connect the Utility Supply breaker wires coming from the transfer panel to this breaker.

If your transfer panel has an optional power inlet, skip Steps 8, 9, and 10, and proceed to Step 11.

8. For transfer panel models without the optional power inlet or watt meters, connect the two 240-volt hot feeds from the generator directly to the Generator Supply circuit breaker in the transfer panel. Skip Step 9 and proceed to Step 10.
9. For transfer panel models with the optional watt meters, but no power inlet, locate the current transformers (small black donut-shaped devices with wire leads) attached to each of the two meters in the panel. Run one of the two hot wires coming from the generator through the hole in the current transformer connected to the left meter, and run the other one through the hole in the current

transformer connected to the right meter. The meters will now register whenever the wires carry sufficient current from the generator.

10. Connect the neutral wire from the generator to the neutral bar in the transfer panel and the ground wire from the generator to the grounding bar in the transfer panel.
11. Replace the transfer panel cover using the four screws removed in Step 1 and replace the load center cover. Turn on both the main breaker in the load center and the utility breaker in the transfer panel.

## **KEY COMPONENTS OF THE PANEL/LINK®**

**POWER INPUT SELECTOR (MAIN) BREAKERS.** These breakers select either utility line (UTILITY SUPPLY) or generator (GENERATOR SUPPLY) as the power source for all branch circuits that have been wired into the transfer panel.

**BRANCH CIRCUIT BREAKERS.** For overcurrent protection of each branch circuit wired into the transfer panel. These breakers may all be in the "ON" position when on utility power, and selectively "ON" or "OFF" when on generator power.

**WATTMETERS.** Certain models are furnished with wattmeters to indicate the circuit loads when the generator is supplying power. Left meter measures load on left panel bus, which are circuits A, G, C, I, E, and K. Right meter measures load on right panel bus, which are circuits B, H, D, J, F, and L.

To insure that your generator will always be ready when you need it, it is very important to run it under load on a regular basis and to keep the tank filled with fresh fuel. Perform the following steps at least once a month to keep the generator properly exercised.

## **TRANSFERRING FROM UTILITY POWER TO GENERATOR POWER**

1. Move "UTILITY SUPPLY" circuit breaker handle to the "OFF" position.
2. Move all branch circuit breaker handles to the "OFF" position.
3. Move "GENERATOR SUPPLY" circuit breaker handle to the "ON" position.
4. Insert the male power cord connector plug into the appropriate outlet on the generator. If a locking connector, rotate to lock.
5. Plug the female end of the power cord from the generator into the power inlet that is either located on the face of the Transfer panel™ or, depending upon the model, remotely from the Transfer panel™. Rotate to lock.
6. Start the generator, following the procedures described in the generator owner's manual furnished by the generator manufacturer.
7. Select the circuits to be powered by the generator by moving the corresponding branch circuit breaker handles to the "ON" position. Alternate use of larger loads such as furnace motors, well pumps, freezers, etc., so that the capacity of the generator is not exceeded. Do not attempt to operate any loads in excess of the capacity of the generator.

## **TRANSFERRING FROM GENERATOR POWER BACK TO UTILITY POWER**

1. Follow the procedures in the generator owner's manual to turn off the generator.
2. Unplug the power cord.
3. Move "GENERATOR SUPPLY" circuit breaker handles to the "OFF" position.
4. Move "UTILITY SUPPLY" circuit breaker handles to the "ON" position.
5. Return all branch circuit breaker handles to the "ON" position.