



RECORD THIS INFORMATION FOR FUTURE REFERENCE  
BEFORE INSTALLING THE UNIT:

Model Number \_\_\_\_\_  
Serial Number \_\_\_\_\_  
Date Purchased \_\_\_\_\_  
Place of Purchase \_\_\_\_\_

# Kwyatt<sup>®</sup> POWER

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## Kwyatt Power 1

3108124.003  
3108124.029  
3108124.037

## Kwyatt Power 2

3108124.011      3108124.06X  
3108124.045      3108124.07X  
3108124.052      3108124.08X

**THIS UNIT IS DESIGNED FOR OEM AND AFTERMARKET INSTALLATION  
ALL INITIAL INSTALLATIONS MUST BE APPROVED BY DOMETIC'S SALES DEPT.**

### **WARNING**

This manual must be read and understood before installation, adjustment, service or maintenance is performed. This unit must be installed by a qualified installer. Modification of this product can be extremely hazardous and could result in personal injury or property damage.

### **AVERTISSEMENT**

Lire et comprendre ce manuel avant de procéder à l'installation, à des réglages, de l'entretien ou des réparations. L'installation de cet appareil doit être effectuée par un réparateur qualifié. Toute modification de cet appareil peut être extrêmement dangereuse et entraîner des blessures ou dommages matériels.

## INSTALLATION & OPERATING INSTRUCTIONS

## Kwyatt Power 1 & 2

### REVISION

Form No. 3108052.022 1/00  
(Replaces 3108052.014)  
(French 3108887.005)  
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LaGrange, IN 46761

**Important:** These instructions must stay with unit.  
Owner read carefully.

## SAFETY INSTRUCTIONS

This manual has safety information and instructions to help users eliminate or reduce the risk of accidents and injuries.

## RECOGNIZE SAFETY INFORMATION



This is the safety-alert symbol. When you see this symbol in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating instructions.

## UNDERSTAND SIGNAL WORDS

A signal word, **WARNING** OR **CAUTION** is used with the safety-alert symbol. They give the level of risk for potential injury.

**WARNING:** means if the safety information is not followed someone could be injured or killed and/or damage to equipment could occur.

**CAUTION:** means if the safety information is not followed someone might be injured and/or damage to equipment might occur.

Read and follow all safety information and instructions.

## SPECIFICATIONS

|                                    | Kwyatt Power 1 | Kwyatt Power 2 |
|------------------------------------|----------------|----------------|
| AMP Hour                           | 255            | 510            |
| Voltage (DC)                       | 12.0           | 12.0           |
| DC Cir. Protection (Amps)          | 150            | 150            |
| Installed Weight (Lbs.)            | 200            | 370            |
| Inverter Output Watts (Continuous) | 1500           | 1500           |
| Recommend Min. Alt.                | 125 Amp        | 125 Amp        |

## GENERAL INFORMATION

Kwyatt Power provides the over the road truck driver with some of the conveniences of home.

- 120 V A/C Power to operate:
  - Cab Comfort Air Conditioner/Heat Pump unit
  - Color Television
  - Coffee Maker
  - Electric Refrigerator up to 1.5 Amp Max.
  - Crock Pot
  - Microwave (up to 800 Watts)
  - VCR
  - Power Drill
- The Kwyatt Power 1 pack is maintenance free. No water to add, no oil to change, and no belts to keep tight. Quick and easy to install with common, everyday tools; a drill, combination wrench set and drill bits.

The Kwyatt Power 1 comes with one "8D lifeline" battery and a power inverter that will operate 120 V AC appliances. The Kwyatt Power 2 has 2 "8D lifeline" batteries and doubles power available and operation time.

## INSTALLATION INSTRUCTIONS



**Failure to follow these instructions may result in improper installation which could endanger life, cause serious injury and/or property damage.**

**Important:** Ensure the vehicle alternator is large enough to charge the battery pack (125 Amp/12 V or greater).

- Remove the Kwyatt Power pack from its shipping carton.
- Select the area where the power pack will be installed.
  - Storage compartment i.e.; under a bunk or in an outside storage area.
  - Mounted to the outside of the frame rail.
  - Between the rails in a special battery box.
  - Catwalk - as close to cab as possible.

**Important:** Check the clearance between the nose of the trailer and the back of the cab during tight turns with the 5th wheel adjusted fully forward on the rig. The nose of the trailer may be too far forward, allowing contact with the Kwyatt Power Pack. See FIG. 1.

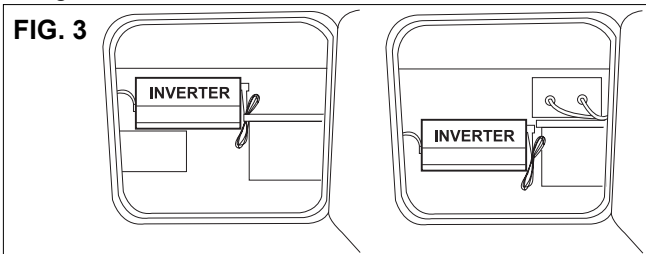
FIG. 1



3. Position the power pack in the selected location and secure in place.
4. The inverter may be installed up to 10 feet from the Power Pack inside the truck. Connect the remote power switch to the inverter if being used and install the inverter with screws or bolts as needed.

**Note:** If inverter location selected has carpet, a board or sheet metal must be installed to protect the bottom air opening.

FIG. 3



5. A 1.50" diameter hole must be drilled in the sleeper cab close to the inverter terminals.
6. Route the 1 gauge wires marked "Inverter" through the 1.50" diameter hole.

### **! WARNING**

**Do not remove protective sleeve from wire connectors until ready to connect. Do not allow 12 volt positive (+) red wire to be grounded. This creates a shock and fire hazard, and can endanger life, cause serious injury and/or property damage.**

**Note:** The wires to the truck run battery must not be cut shorter than 10 feet. The wires to the inverter can be adjusted to any length under 10 feet.

7. With the inverter, power pack, and wires in place the unit is ready to be wired.

**Important:** Make sure that the switch, located on the inverter, is in the "Off" position.

8. Connect the positive 12 volt (+ red wire) to the inverter red post. Next connect negative 12 volt (- black wire) to the black post on the inverter.
  - A. Connect the inverter ground lead to a metal panel that is a suitable grounding surface.
9. Connect the small black wire that is connected to the 8D battery negative terminal to the bottom terminal of the battery separator.
10. Route the 4 gauge wires marked "Truck battery" to the truck run batteries.

11. Next connect the positive (+ red wire) to the positive terminal on the truck run batteries. Then connect the negative (- black wire) to the negative terminal on the truck run batteries.
12. Secure the wires to the truck frame using wire ties.
13. Turn the inverter switch to the on position. You now have 115 volt AC power.
14. Start the vehicle engine and confirm the separator connects the vehicle and power pack batteries when the vehicle is running.

If a Cab Comfort/Heat Pump is to be installed, please follow the instructions that came with the Heat Pump.

## INVERTER OPERATION

To operate the inverter, turn it on using the ON/OFF switch on the front panel. The inverter is now ready to deliver AC power to your loads. If you are operating several loads from the inverter, turn them on separately after the inverter has been turned on. This will ensure that the inverter does not have to deliver the starting current for all the loads at once.

### 1. Controls and Indicators

- A. **ON/OFF Switch** - turns the inverter on and off. It **DOES NOT** disconnect power from the inverter. When the switch is OFF, the inverter draws no current from the battery. When the switch is ON, but no appliances are on, the inverter draws less than 1/2 amp from the battery. It would take more than a week to discharge a 100 amp hour battery at this current. Switch the inverter off if you are not planning to recharge your battery within a week.
- B. **OVERTEMP Indicator** - light and alarm sound indicates that the inverter has overheated and shut itself down. The inverter may overheat because it has been operated at power levels above its continuous output rating, or because it has been installed in a location which does not allow it to dissipate heat properly. The inverter will restart automatically once it has cooled off.
- C. **OVERLOAD Indicator** - shows that the inverter has shut down because of severe overload. Do not turn the inverter back on unless the load is removed/unplugged. Switch the ON/OFF switch to OFF, remove the load and then switch the ON/OFF switch back to ON.

## 2. Troubleshooting

### A. Common problems

1. Buzz in audio systems - Some inexpensive stereo systems and "boom boxes" will emit a buzzing noise from their speakers when operated from the inverter. This is because the power supply in the device does not adequately filter the modified sine wave produced by the inverter. The only solution is to use a sound system that incorporates a higher quality power supply.
2. Television interference - Operation of the inverter can interfere with television reception on some channels. If this situation occurs, the following steps may help to alleviate the problem:
  - a. Make sure that the chassis ground lug on the back of the inverter is solidly connected to the ground system of your vehicle.

- b. Do not operate high power loads with the inverter while watching television.
- c. Make sure that the antenna feeding your television provides an adequate "snow free" signal and that you are using good quality cable between the antenna and the television.
- d. Move the television as far away from the inverter as possible.
- e. Keep the cables between the battery and the inverter as short as possible and twist them together with about 2 to 3 twists per foot. This minimizes radiated interference from the cables.

3. **Maintenance** - Very little maintenance is required to keep your inverter operating properly. You should clean the exterior of the unit periodically with a damp cloth to prevent accumulation of dust and dirt. At the same time, insure the screws on the DC input terminals are still tight.

## 3. Troubleshooting Guide

| Problem & Symptoms                                                                                         | Possible Cause                                                      | Solution                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Low output voltage<br>(96VAC to 104VAC)                                                                    | Using standard reading voltmeter                                    | Use true RMS reading meter                                                                                                                                                                                                                                         |
| No output voltage,<br>no voltage indication                                                                | Inverter switched off<br>No power to inverter<br>Internal fuse open | Turn inverter on<br>Check wiring to inverter<br>Have qualified service technician check and replace fuse.                                                                                                                                                          |
| Low battery alarm on all the time,<br>voltage indicator below 11V                                          | Poor DC wiring<br>Poor battery condition                            | Use proper cable and insure solid connections<br>Use new battery                                                                                                                                                                                                   |
| No output voltage, OVERTEMP<br>indicator on, load in excess of 1500<br>watts/150 amp battery input current | Thermal Shutdown                                                    | Allow inverter to cool off and <ol style="list-style-type: none"><li>1. Reduce load if continuous operation required</li><li>2. Improve ventilation, make sure ventilation openings in inverter aren't obstructed</li><li>3. Reduce ambient temperature.</li></ol> |
| No output voltage, OVERLOAD<br>indicator on                                                                | Very high power load<br><br>Short circuit or wiring error           | Check appliances wiring for short circuit or improper polarity (hot and neutral reversed)<br>Remove load i.e.; microwave, coffee pots, toaster and A/C on at same time.                                                                                            |

## Wiring Diagram

