

TRUCK PAC™

BY BOOSTER PAC

ES1224 User's Manual



WARNING



Failure to follow instructions may cause damage or explosion, always shield eyes. **Read entire instruction manual before use.**

Warning: This product contains chemicals, including lead, known to the State of California to cause cancer, birth defects and other reproductive harm.
Wash hands after handling.

WARNING












Never hook up a 12 Volt DC power source to a 24 Volt DC vehicle. This will grossly overcharge the 12 Volt power source and generate flammable gasses that may explode and cause property damage and/or bodily harm.

Congratulations! You have just purchased the finest quality portable power source and jump starter on the market. We have taken numerous measures in quality control and in our manufacturing processes to ensure that your product arrives in top condition, and that it will perform to your satisfaction.

This unit has a sealed lead-acid battery that should be kept at full charge. **Recharge when first received**, immediately after each use, and every three months if not used. Failure to perform maintenance charges may cause the battery life to be reduced greatly.

SAFETY SUMMARY

 WARNING	
	Never hook up a 12 Volt DC power source to a 24 Volt DC vehicle. This will grossly overcharge the 12 Volt power source and generate flammable gasses that may explode and cause property damage and/or bodily harm.
 WARNING	
	Read these instructions completely before using the Truck PAC and save them for future reference. Before using the Truck PAC to jump start a car, truck, boat or to power any equipment, read these instructions and the instruction manual/safety information provided by the car, truck, boat or equipment manufacturer. Following all manufacturers' instructions and safety procedures will reduce the risk of accident.
	Working around lead-acid batteries may be dangerous. Lead-acid batteries release explosive gases during normal operation, charging and jump starting. Carefully read and follow these instructions for safe use. Always follow the specific instructions in this manual and on the Truck PAC each time you jump start using the Truck PAC . All lead-acid batteries (car, truck and boat) produce hydrogen gas which may violently explode in the presence of fire or sparks. Do not smoke, use matches or a cigarette lighter while near batteries. Do not handle the battery while wearing vinyl clothing because static electricity sparks are generated when vinyl clothing is rubbed. Review all cautionary material on the Truck PAC and in the engine compartment.
	Always wear eye protection, appropriate protective clothing and other safety equipment when working near lead-acid batteries. Do not touch eyes while working on or around lead-acid batteries.
	Always store clamps in their holsters, away from each other or common conductors. Improper storage of clamps may cause the clamps to come in contact with each other, or a common conductor, causing the battery to short circuit and generate high enough heat to ignite most materials.
	Use extreme care while working within the engine compartment, because moving parts may cause severe injury. Read and follow all safety instructions published in the vehicle's Owner's Manual.
	While the battery in the Truck PAC is a sealed unit with no free liquid acid, batteries being jump started with the Truck PAC unit likely contain liquid acids which are hazardous if spilled.

PERSONAL PRECAUTIONS

Someone should always be within range of your voice or close enough to come to your aid when you work near a lead-acid battery.

Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing or eyes. Protective eyewear should always be worn when working near lead-acid batteries.

If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with running cold water for at least 10 minutes and get medical attention immediately.

Be extra cautious to reduce risk of dropping a metal tool onto a battery. It might spark or short circuit the battery or another electrical part that may cause explosion.

Remove personal metal items such as rings, bracelets, necklaces and watches when working with a lead-acid battery. A lead-acid battery can produce a short-circuit current high enough to weld a ring or the like to metal, causing a severe burn.

Use the Truck PAC for jump starting *lead-acid batteries only*. Do not use for jump starting dry-cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage to property.

NEVER charge or jump start a frozen battery.

To prevent arcing, **NEVER** allow clamps to touch together or to contact the same piece of metal.

IMPORTANT SAFETY INSTRUCTIONS

Use of an attachment not recommended or sold by the manufacturer may result in a risk of damage to the unit or injury to personnel. In addition, modifying or changing the Truck PAC can be dangerous and will void the warranty on this product.

When using the wall charger or power extension cord, pull on the plug and **never on the wire** when disconnecting.

Do not recharge the Truck PAC with a damaged wall charger or power extension cord. Replace them immediately.

The Truck PAC may be used under any weather condition – rain, snow, hot or cold temperatures.

Do not submerge in water.

Do not operate with flammables such as gasoline, etc.

If the Truck PAC receives a sharp blow or is otherwise damaged in any way, have it checked by a qualified service person. If the Truck PAC is leaking battery acid, do not ship it. Take it to the closest battery recycler in your area.

Do not disassemble the Truck PAC. Have it checked by a qualified service person.

The Truck PAC should never be left in a completely discharged state for any period of time. Damage to the battery could be permanent, with poor performance as a result. When not in use, leave your Truck PAC connected to the wall charger or recharge every three (3) months.

OPERATION AND MAINTENANCE

Portable Power Source Features

The Truck PAC provides plenty of power for starting vehicles – more than enough to start most cars, vans, SUVs, light trucks and delivery vehicles.

The Truck PAC will power most 12VDC accessories equipped with a male 12 Volt outlet plug. The DC outlet features automatic overload protection.

The unit features a test switch and LED lights. State of the art circuitry allows the unit to remain continuously connected to the charger without the risk of overcharging.

Safety Features

The Truck PAC ES1224 features our exclusive AWS - Advanced Warning System™ enhancement to alert the operator to unsafe jump starting conditions. For more information regarding AWS, please see the Operating Instructions section of this manual.

Safety storage holsters prevent accidental sparking of clamps and rotate 90° for easy clamp removal and replacement. Always re-wrap cables and properly secure clamps in holsters after each use.

The Truck PAC contains the latest technology with its 12 Volt sealed, non-spillable battery and may be stored in any position.

Recharging Procedures

Note: Upon initial purchase, your Truck PAC should be charged for a minimum of 24 hours.



Figure 2. Test Button, Charging, Power Levels and Charge Complete LEDs

There are two ways to charge your Truck PAC. The recommended method is automatic charging using the supplied wall charger. An alternative method is through the DC power outlet using the provided 12 Volt Male-Male Extension Cord. This second method is not automatic and must be monitored because the Truck PAC could be damaged due to overcharging, plus the Voltage Selector Switch must be in the 12V position when using this charging method.

Charging using the supplied wall charger (recommended method). This is the recommended charging method because it features automatic charging, eliminating the possibility of overcharging. With this method, the wall charger is connected to the Truck PAC through a small charging jack (pin jack), located on the rear of the unit. Recharging takes approximately 4 to 6 hours for each light that does not come on when the Test Button is pressed. With this method, your Truck PAC can be left connected to the wall charger indefinitely.

1. Insert the wall charger pin into the CHARGING JACK (located in the front of the Truck PAC).
2. Connect the wall charger AC/DC ADAPTOR to the AC outlet (the yellow CHARGING light will light). (See Figure 2.)
3. Allow the Truck PAC to charge until the CHARGE COMPLETE light comes on (you can monitor the progress by checking the red POWER LEVEL lights – after all three POWER LEVEL lights are lit the CHARGE COMPLETE light should come on).
4. Once the CHARGE COMPLETE light comes on, charge another three to six hours (three hours is acceptable, but to ensure maximum output capability, six hours is preferred).


Note: The CHARGE COMPLETE LED indicates that the charging process is complete. It may illuminate for a short period after the charger is unplugged from the unit due to the surface charge, but this will only occur for a short time, which is normal. To assess the unit's readiness, monitor the Power Level LED's.

5. If you are not planning to use your Truck PAC right away, you may leave it connected to the wall charger. We recommend that the wall charger remain connected to the Truck PAC when not in use.

Charging using the supplied 12 Volt Male-Male Extension Cord. This alternative charging method may be used when access to an AC outlet is unavailable.

1. Start the vehicle's engine.
2. Plug one end of the 12 Volt Male-Male Extension Cord into the Truck PAC 12 Volt outlet and the other end into a vehicle 12 Volt outlet. Set the Voltage Selector Switch to 12V mode.
3. Press the Test Button once every hour to check the POWER LEVEL. When all of the red lights come on, charge the Truck PAC another 1 to 2 hours to ensure a complete recharge.

Note: DO NOT OVERCHARGE! This is not an automatic method of charging the Truck PAC. You must frequently monitor the charging process to ensure the unit is not overcharged.

 **WARNING: Overcharging the Truck PAC when using this charging method can create explosive gasses which could result in property damage and personal injury. DO NOT OVERCHARGE!**

OPERATING INSTRUCTIONS

WARNING



Never hook up a 12 Volt DC power source to a 24 Volt DC vehicle. This will grossly overcharge the 12 Volt power source and generate flammable gasses that may explode and cause property damage and/or bodily harm.

Safety Check List

Always Perform this Step Before Use to Ensure Safe Operation

1. Check that the 2 vent plugs in the rear case are in good condition, are fully seated and the white GORE-TEX® material has not previously been dislodged.



WARNING: if the plugs are out of position or the white material is missing or loose, this means that the venting system has been activated and the batteries are damaged. IMMEDIATELY take the unit out of service, and send it to Clore Automotive for repair. See Warranty Section for details.

2. Check to make sure that the Voltage Selector Switch is in the OFF position.
3. Check to make sure that the clamps and cables are in good working order. Signs that the clamps may be damaged include, but are not limited to the following:
 - Burn Marks on the Jaws
 - Damaged clamp handles
 - Damaged clamp springs
 - Damaged cables where copper wiring may be exposed (insulation jacket deteriorated, cut or missing)
4. Check to make sure the case is not swollen (a sign of damaged batteries).
5. Check to make sure the holsters (where the clamps should be stored) are in good condition. These are designed to ensure that the clamps cannot come in contact with each other, or come in contact with a common conductor.

Verifying these 5 simple check points before every use will keep your Truck PAC safe to use and increase its service life.

Used as an Emergency Jump Starter

Note: For optimum performance, do not store your Truck PAC below 50° when using as a jump starter. Never charge or jump start a frozen battery.

Advanced Warning System (AWS)™ – HAZARD WARNING FEATURE

Your Truck PAC is equipped with our AWS – Advanced Warning System – designed to provide an advanced alert to common jump starting mistakes. Your Truck PAC contains a buzzer which will sound an audible alarm if the Advanced Warning System detects specific undesirable conditions during the jump starting process.

If the AWS Detection Alarm sounds at any time during the jump starting process, disconnect the Truck PAC from the vehicle immediately! Always remember to practice jump starting safety and disconnect the ground clamp first.

Jump Starting Instructions

See details on next page for conditions that activate the AWS Detection Alarm.

1. Use in a well ventilated area.
2. Shield eyes. Always wear protective eyewear when working near batteries.
3. Prior to jump starting, review this entire instruction manual and the instruction/safety manual provided by the manufacturer of the vehicle being jump started.
4. Turn vehicle ignition OFF before connecting jump starter to vehicle.
5. Confirm vehicle voltage.
6. Ensure that the Truck PAC's Voltage Selector Switch is in the **OFF** position prior to connecting to the vehicle. Connect to vehicle.
7. With the Truck PAC's Selector Switch in the **OFF** position, clamp the positive (red +) clamp to the positive terminal on the vehicle battery (for negative ground system), or an alternate vehicle starting point as recommended by vehicle manufacturer.
8. Clamp the negative (black -) clamp to vehicle frame (ground).
9. Choose Truck PAC Voltage, by turning the Selector Switch to the desired mode, to match vehicle voltage.



WARNING: Failure to properly match Truck PAC voltage and vehicle voltage may result in explosion, product damage and bodily harm.

If AWS audible alarm sounds upon selecting Truck PAC Voltage, ***DISCONNECT FROM VEHICLE IMMEDIATELY*** (remove negative clamp from vehicle ground).

10. Make sure the cables are not in the path of moving engine parts (belts, fans, etc.)
11. Stay clear of batteries while jump starting.
12. Start the vehicle (turn on the vehicle ignition).

Note: If the vehicle doesn't start within 6 seconds, let the Truck PAC cool for 3 minutes before attempting to start the vehicle again or you may damage the Truck PAC.

13. When the vehicle is started, disconnect from vehicle, first disconnecting the negative (-) battery clamp from the vehicle frame and return it to its holster, then disconnecting the positive (+) clamp and return it to its holster. Then, turn Voltage Selector Switch to the **OFF** position.

Advanced Warning System (AWS) – Causes for Detection Alarm Activation

1. *Improper connection causing a reverse polarity condition.* If your Truck PAC is connected improperly, such that a reverse polarity condition exists, the AWS Detection Buzzer will sound immediately upon completing the connection to the vehicle.
2. *Improper Truck PAC Voltage Selection when connected to a 24 Volt Vehicle.* If your Truck PAC is connected to a 24 Volt vehicle and you turn the Truck PAC Voltage Selector Switch to 12 Volt mode, the AWS Detection Buzzer will sound.
3. *Connecting to a completely drained battery while there is still a load on the vehicle's electrical system.* If this condition occurs, remove the load that is on the vehicle's electrical system (headlights, dome light, radio, etc.) and set the Truck PAC's Voltage Selector Switch to match vehicle's voltage.

Used as an Alternative Power Supply for Vehicles - In 12V Mode Only

Your Truck PAC is an essential tool for all who replace automobile batteries. Most vehicles have electronic components with memory, such as alarm systems, computers, radios, phones, etc. and when the vehicle's battery is replaced, the memory is lost. However, if the Male-Male extension cord is plugged from the Truck PAC to the 12 Volt outlet on the vehicle, the memories can be saved.

Note: *To use the Truck PAC for this purpose, the chosen outlet must be live when the vehicle is turned OFF. On some vehicles, 12 Volt outlets are deactivated when the vehicle is turned OFF.*

Used as a Multipurpose Power Supply

Your Truck PAC is also a portable power source for all 12VDC accessories equipped with a male 12 Volt plug. The DC outlet on the Truck PAC has automatic overload protection.

When your Truck PAC is used with a DC to AC power inverter, it can operate appliances normally powered by 120 Vac or 220 Vac. Recommended inverter for the portable power source is 300 watts maximum. For more information, contact your nearest Truck PAC dealer.

TROUBLESHOOTING

- Problem:** 1 or 2 red lights come on, charger is plugged in for 24 hours and there is no change in status of lights.
- Answer:** Check charger to see if it is charging. Charger should be warm.
- Problem:** Charger works well but still no change in status of lights when the wall charger is connected to the Truck PAC (yellow light is on).
- Answer:** Possible defective battery or faulty breaker. Try using a device (light, TV, etc.) with a 12V plug on it to see if it works. If it operates, the Truck PAC breaker is OK and the battery is the problem.
- Problem:** All of the lights come on when the charger is plugged into the Truck PAC, but when the charger is unplugged and the test button pressed, no lights come on.
- Answer:** Your Truck PAC has a defective battery which must be replaced.
- Problem:** The Truck PAC is fully charged but has no power.
- Answer:** Check where the wire meets the jaw on the Truck PAC clamp. Make sure they are well crimped.
- Problem:** When trying to use an accessory through the 12 Volt outlet on the Truck PAC, I heard a clicking sound coming from inside the Truck PAC.
- Answer:** The accessory is drawing too many amps, causing the internal circuit breaker to cycle ON and OFF. There may be a problem with the accessory (such as a short circuit) that is causing the overload condition.

QUESTIONS & ANSWERS

- Question:** How many jump starts can a fully charged Truck PAC perform before needing to be recharged?
- Answer:** 1 to 30. Factors impacting this are temperature, general condition of the vehicle being jump started, engine type and size.
- Question:** Can the Truck PAC be recycled?
- Answer:** Yes, the environment was one of our main concerns in the development and design of the Truck PAC. Most battery outlets can dispose of this product at its life's end. In fact, your Truck PAC contains a sealed, non-spillable lead acid battery and **proper disposal is required by law**. See *Battery Removal and Disposal Instructions*.
- Question:** What is the ideal in-use temperature of the Truck PAC?
- Answer:** Room temperature. The Truck PAC will also operate at below zero temperatures, however its power will be reduced. Intense heat will accelerate self discharge of the Truck PAC battery.

- Question:** I have a regular 10 amp battery charger, can I use it to recharge the Truck PAC?
- Answer:** No, only the supplied wall charger should be used.
- Question:** Is the Truck PAC goof proof?
- Answer:** No, jump starting instructions must be followed. Read and understand all safety and operating instructions in this manual and those found in the owner's manual of any vehicle being jump started before using your Truck PAC.
- Question:** I'm recharging my Truck PAC. Should the green CHARGE COMPLETE light immediately come on?
- Answer:** No. First the yellow CHARGING light will come on to indicate the charging process is beginning. Then, the red POWER LEVEL lights come on in sequence as the level of charge increases. Finally, the green CHARGE COMPLETE light will come on, but only when the Truck PAC approaches full charge.
- Question:** How long should I charge the Truck PAC?
- Answer:** It should be charged for a minimum of 24 hours when new. Your Truck PAC can be left on the wall charger continuously. When recharging with the wall charger, the Truck PAC should be charged for 4 to 6 hours per light that remains unlit when the TEST button is pressed.
- Question:** How do I know when the Truck PAC is fully charged?
- Answer:** Follow all charging instructions. Remove the Truck PAC from the wall charger and press the TEST button. If all power indicator lights come on, it is fully charged.
- Question:** How can I test the battery in my Truck PAC to see if it needs to be replaced?
- Answer:** We recommend that you use a 100 amp battery load tester. Load the Truck PAC battery for 6 seconds with a 100 amp load and it should maintain at least 9.5 VDC.

TESTING THE BATTERY

After fully charging the battery so all red lights come on, power the Truck Pac in 12V mode and apply a 100 amp load to the vehicle charging plug (on the Truck PAC), for a period of 6 seconds, while monitoring the battery voltage (at the vehicle charging plug). The battery is good if the voltage is 9.5 VDC or higher.

BATTERY REMOVAL AND DISPOSAL INSTRUCTIONS



**CONTAINS SEALED LEAD-ACID BATTERY.
BATTERY MUST BE RECYCLED.**

The battery inside this product is a sealed lead-acid battery. It is **required by law** to be removed and recycled or disposed of properly. While there are federal regulations that must be complied with throughout the United States, your individual state or local governments may have additional regulations to be followed.

When the battery in this product is in need of replacement, remove it according to the instructions provided below and take it to your local recycling center for proper recycling or disposal. If you don't have a local recycling center that handles sealed lead-acid batteries, contact your local environmental agency for instructions.

Removal Instructions

Begin by making sure that both clamps are securely stowed in their holsters on each side of the Truck PAC.

1. Lay the Truck PAC down on its front. Locate the 13 screws that hold the case together (four on the left edge, four on the right edge, four along the bottom and one under the front label).
2. Remove the 13 screws, then lift off the back half of the case.
3. On the top of each battery are two terminals, each with wires connected to them. Disconnect these wires from the top battery first, by removing the bolts that hold them to the battery terminals. Disconnect these wires from the bottom battery by removing the bolts that hold them to the battery terminals. To prevent accidental arcing, be careful not to touch both battery terminals with the tools being used to remove the bolts.
4. Lift the batteries out of the front half of the case.

WARRANTY, PRODUCT REGISTRATION AND REPAIR

Clore Automotive warrants this product to be free from defects in material or workmanship for a period of one year from the date of original end user purchase.

This warranty extends to each person who acquires lawful ownership within one year of the original retail purchase, but is void if the product has been abused, altered, misused or improperly packaged and damaged when returned for repair.

This warranty applies to the product only and does not apply to any accessory items included with the product which are subject to wear from usage; the replacement or repair of these items shall be at the expense of the owner.

THE TERMS OF THE CLORE AUTOMOTIVE LIMITED WARRANTY CONSTITUTE THE BUYER'S SOLE AND EXCLUSIVE REMEDY. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THIS EXPRESS WARRANTY. AFTER 1 YEAR FROM DATE OF PURCHASE, ALL RISK OF LOSS FROM WHATEVER REASON SHALL BE PUT UPON THE PURCHASER.

CLORE AUTOMOTIVE SHALL NOT BE LIABLE FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES UNDER ANY CIRCUMSTANCES: CLORE AUTOMOTIVE'S LIABILITY, IF ANY, SHALL NEVER EXCEED THE PURCHASE PRICE OF THIS MACHINE REGARDLESS OF WHETHER LIABILITY IS PREDICATED UPON BREACH OF WARRANTY (EXPRESS OR IMPLIED), NEGLIGENCE, STRICT TORT OR ANY OTHER THEORY.

Some states do not permit the limitation of warranties or limitation of consequential or incidental damages, so the above disclaimer and limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Instructions for obtaining service under this warranty:

If this product fails within the first 30 days after retail purchase due to a defect in material or workmanship, return it to your place of purchase for an exchange. From day 31 to day 365 after retail purchase, contact Clore Automotive Technical Service at the number below for warranty service. A valid, dated sales receipt is required to obtain service under this warranty.

Registering Your Purchase