

INSTRUCTION MANUAL

56V MAX LITHIUM-ION BATTERY CHARGER - T56730 SERIES

Definitions: Safety Alert Symbols and Words

This instruction manual uses the following safety alert symbols and words to alert you to hazardous situations and your risk of personal injury or property damage.



DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



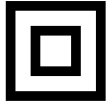
CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

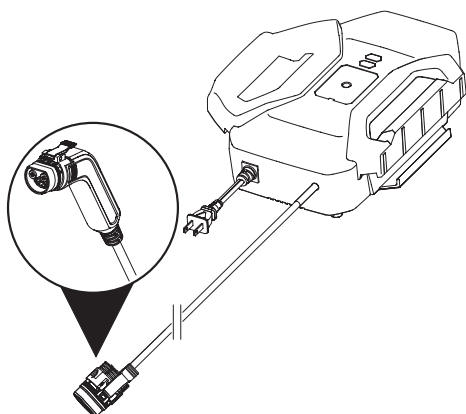


(Used without word) Indicates a safety related message.

NOTE: Indicates a practice not related to personal injury which, if not avoided, may result in property damage.

Symbol	Description
	WARNING – READ OPERATOR'S MANUAL Read, understand, and follow all instructions in the manual(s) before attempting to assemble and operate.
	WARNING – DOUBLE INSULATION The charger is double insulated; therefore no ground wire is required. Always check that the mains voltage corresponds to the voltage on the rating plate. Never attempt to replace the charger unit with a regular mains plug.
	WARNING – INDOOR USE ONLY This charger is intended for indoor use only.
	WARNING – ELECTRONIC ITEMS DISPOSAL Electrical and electronic items should not be disposed of with other household waste, but should be recycled.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE



SAVE THESE INSTRUCTIONS: This manual contains important safety and operating instructions for battery chargers.

Charger is engaged when charger connection is securely connected to the charger port on the machine and the charger connection latch is in the closed position.

Important Safety Instructions for All Battery Chargers



WARNING

Read all safety warnings, instructions, and cautionary markings for the battery pack, charger, and machine. Failure to follow the warnings and instructions may result in electric shock, fire, and/or serious injury.

- This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they DO NOT play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a hazard.
- DO NOT attempt to recharge non-rechargeable batteries.**
- DO NOT attempt to charge the battery pack with any chargers other than the ones in this manual.** The charger and battery pack are specifically designed to work together.
- These chargers are not intended for any uses other than charging original manufacturer rechargeable batteries.** Any other uses may result in risk of fire, electric shock or electrocution.
- DO NOT expose the charger to rain or snow.**
- Pull by the plug rather than the cord when disconnecting the charger.** This will reduce the risk of damage to the electric plug and cord.
- Make sure that the cord is located so that it will not be stepped on, tripped over or otherwise subjected to damage or stress.**
- DO NOT use an extension cord unless it is absolutely necessary.** Use of improper extension cord could result in risk of fire, electric shock or electrocution.
- An extension cord must have adequate wire size (mm²) for safety.** The larger the size of the wire, the greater the capacity of the cable. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next larger cord.

Minimum Gauge for Extension Cord Sets

Volts		Total Length of Cord in Feet (Meters)			
220V		25 (7.6)	50 (15.2)	100 (30.5)	150 (45.7)
240V		50 (15.2)	100 (30.5)	200 (61.0)	300 (91.4)
Ampere Rating		mm²			
More Than	Not More Than				
0	6	0.82	1.31	1.31	2.08
6	10	0.82	1.31	2.08	3.31
10	12	1.31	1.31	2.08	3.31
12	16	2.08	3.31	Not Recommended	

- DO NOT place any object on top of the charger or place the charger on a soft surface that might block the ventilation slots and result in excessive internal heat.** Place the charger in a position away from any heat source. The charger is ventilated through slots on the side of the housing.
- DO NOT operate the charger with a damaged cord or plug.**
- DO NOT operate the charger if it has received a sharp blow, been dropped or otherwise damaged in any way.** Take it to an authorized service center.
- DO NOT disassemble the charger; take it to an authorized service center when service or repair is required.** Incorrect reassembly may result in a risk of electric shock, electrocution or fire.
- Disconnect the charger from the outlet before attempting any cleaning. This will reduce the risk of electric shock.** Removing the battery pack will not reduce this risk.



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- **NEVER** attempt to connect two (2) chargers together.
- **The charger is designed to operate on standard 220-240V household electrical power. DO NOT attempt to use it on any other voltage.**

⚠ WARNING

Shock hazard. DO NOT allow any liquid to get inside the charger. Electric shock may result.

⚠ WARNING

Burn hazard. DO NOT submerge the battery pack in any liquid or allow any liquid to enter the battery pack. Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, return to a service center for recycling.

⚠ CAUTION

Burn hazard. To reduce the risk of injury, charge only original manufacturer rechargeable battery packs. Other types of batteries may overheat and burst resulting in personal injury and property damage.

NOTE: Under certain conditions, with the charger plugged into the power supply, the charger can be shorted by foreign material. Foreign materials of a conductive nature, such as, but not limited to, grinding dust, metal chips, steel wool, aluminum foil or any buildup of metallic particles should be kept away from the charger cavities. Always unplug the charger from the power supply when not charging the machine. Unplug the charger before attempting to clean.

Charging a Battery

NOTE: To ensure maximum performance and life of lithium-ion battery packs, charge the battery pack fully before first use.

Battery module is charged using the supplied charging unit, which is plugged into a main power supply. See Figure 1.

To charge battery module:

1. Lift charge port cover.
2. Insert charging cord into charging port.
3. Plug charger power cord into wall receptacle (outlet).
4. Check indicator lights on side of charging unit (see table below).

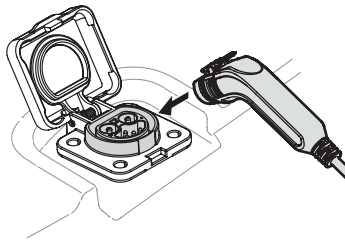


Figure 1

Indicators

	Charging	
	Fully Charged	
	Hot/Cold Pack*	
	Hot/Cold Pack*	
	Not Charging	
	Charging Error	

*Charger will automatically shut down when these indicators are displayed. Unplug machine to reset battery. Plug machine back in to resume charging.

The compatible charger(s) will not charge a faulty battery pack. The charger will indicate faulty battery pack by refusing to light.

NOTE: This could also mean a problem with the charger. If the charger indicates a problem, take the charger and machine to be tested at an authorized service center.

Hot/Cold Pack

When the charger detects a battery pack that is too hot or too cold to charge, it will display one of the Hot/Cold Pack indicators and shut down. To resume charging, unplug the machine, allow the charger to reset, then plug the machine back in following the instructions provided earlier in this manual.

Important Charging Notes

1. Longest life and best performance can be obtained if the machine is charged when the air temperature is between 18° C - 24° C (65° F - 75° F). Charger will only charge when battery pack temperature is between +4.5° C (+40° F) and +40° C (+104° F).
NOTE: Charger will not allow charging when battery pack temperature is below +4.5° C (+40° F), or above +40° C (+104° F).
2. The charger and machine may become warm to the touch while charging. This is a normal condition, and does not indicate a problem. To facilitate the cooling of the machine after use, avoid placing the charger or machine in a warm environment such as in a metal shed or an uninsulated trailer.
3. If the machine does not charge properly:
 - a. Check operation of receptacle by plugging in a lamp or other appliance;
 - b. Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights;
 - c. Move the charger and machine to a location where the surrounding air temperature is approximately 18° C - 24° C (65° F - 75° F);
 - d. If charging problems persist, take the charger and machine to your local service center.
4. The machine should be recharged when it fails to produce sufficient power on jobs which were easily done previously. DO NOT CONTINUE to use under these conditions. Follow the charging procedure. You may also charge a partially used machine whenever you desire with no adverse effect on the battery pack.
5. Foreign materials of a conductive nature such as, but not limited to, grinding dust, metal chips, steel wool, aluminum foil or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when not charging the machine. Unplug the charger before attempting to clean.
6. DO NOT freeze or immerse the charger in water or any other liquid.

Charger Cleaning Instructions

⚠ WARNING

Shock hazard. Disconnect the charger from the AC outlet before cleaning. Dirt and grease may be removed from the exterior of the charger using a cloth or soft non-metallic brush. DO NOT use water or any cleaning solutions.

Storage Recommendations

1. The best storage place is one that is cool and dry, away from direct sunlight and excess heat or cold.
2. For long storage, it is recommended to store a fully charged machine in a cool dry place with the charger disconnected for optimal results.

NOTE: Machine should not be stored completely depleted of charge. The machine will need to be recharged before use.

Maintenance

Repairs

The charger and battery pack are not serviceable. There are no serviceable parts inside the charger or battery pack.

⚠ WARNING

To assure product SAFETY and RELIABILITY, repairs, maintenance, and adjustment (including motor brush inspection and replacement, when applicable) should be performed by a factory authorized service center. Always use Original Equipment Manufacturer (OEM) replacement parts.