



55 AMP PORTABLE MONSTER BATTERY CHARGER 12/24V

ITEM: 21523



TYPE: CLASS BOOST	
Serial No:	IP20
CHARGE (12V)	75A max/12V 95A eff P1 1400W U=+120V, 110V
CHARGE (24V)	75A max/24V 95A eff P1 2800W
START 12V (11Vmin)	55A max/12V 600A eff 3sec ON 120 s cycles
START 24V (11Vmin)	55A max/24V 600A eff 3sec ON 120 s cycles
FUSE	N°1 x 50AMP N°1 x 50AMP



OWNER'S MANUAL AND SAFETY INSTRUCTIONS

SAVE THIS MANUAL: KEEP THIS MANUAL FOR SAFETY WARNINGS, PRECAUTIONS, ASSEMBLY, OPERATING, INSPECTION, MAINTENANCE AND CLEANING PROCEDURES. WRITE THE PRODUCT'S SERIAL NUMBER ON THE BACK OF THE MANUAL NEAR THE ASSEMBLY DIAGRAM (OR MONTH AND YEAR OF PURCHASE IF PRODUCT HAS NO NUMBER).

FOR QUESTIONS PLEASE CALL OUR CUSTOMER SUPPORT: (909) 628 4900 MON-FRI 9AM TO 3PM PST

IMPORTANT SAFETY INFORMATION



GENERAL SAFETY WARNINGS

Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.

SAFETY

The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator. Read carefully and understand all **ASSEMBLY AND OPERATION INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

- **Read and understand all instructions.** Failure to follow all instructions may result in serious injury or property damage.
- **DO NOT** allow persons to operate or assemble the product until they have read this manual and have developed a thorough understanding of how it works.
- **DO NOT modify this product in any way.** Unauthorized modification may impair the function and/or safety and could affect the life of the product. There are specific applications for which the product was designed.
- **Use the right tool for the job. DO NOT** attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. This product will be safer and do a better job at the capacity for which it was intended. **DO NOT** use this equipment for a purpose for which it was not intended.
- **WORKING IN VICINITY OF A LEAD-ACID BATTERY IS DANGEROUS. BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT IS OF UTMOST IMPORTANCE THAT EACH TIME BEFORE USING YOUR CHARGER.**
- **To reduce risk of battery explosion, follow these instructions and those published by the battery manufacturer and the manufacturer of any equipment you intend to use in vicinity of battery. REVIEW CAUTIONARY MARKINGS ON THESE PRODUCTS AND ON ENGINE.**
- **Keep children and bystanders away from the work area while operating the charger. DO NOT** allow children to handle the product.
- Use charger for charging a LEAD-ACID battery only. It is not intended to supply power to a low voltage electrical system other than in an automotive application. Do not use battery charger for charging dry-cell batteries that are commonly used with home and portable appliances. These batteries may burst and cause injury to persons and damage to property.
- Stay alert, watch what you are doing, and use common sense when operating the tool. **DO NOT** use the tool while you are tired or under the influence of drugs, alcohol, or medication.
- Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.

IMPORTANT SAFETY INFORMATION

- To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
- **Check for damaged parts before each use.** Carefully check that the product will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the product with a damaged part.
- An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure the pins on plug of extension cord are the same number, size and shape as those of plug on charger B. That extension cord is properly wired and in good electrical condition; and C. That wire size is AWG #18 (18 gauge) to 100 feet and AWG #16 for distances over 100 feet.
- **DO NOT** operate charger with damaged cord or plug - replace the cord or plug immediately.
- **DO NOT** operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified service technician.
- **DO NOT** disassemble charger; take it to a qualified service technician when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.
- **DO NOT** expose charger to rain or snow.
- **NEVER** charge a frozen battery.
- **ALWAYS** turn off the power before taking off the collet of the battery.
- When charging the battery pay generate in a flammable gas. Keep away from sparks.
- The red collet goes to the positive terminal, while the black goes to the negative. **NEVER** reverse the collets when charging.
- **DO NOT** use if wires are damaged.
- Make sure the charger is kept on a level surface. **DO NOT** allow it to shake or vibrate while in use.
- Someone should 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.
- Wear complete eye protection and clothing protection. Avoid touching eyes while working with a battery acid. Acid particles or corrosion may get into eyes. Immediately flood eye with running cold water for at least 10 minutes and get medical attention immediately.
- If battery acid contacts skin or clothing, wash immediately with soap and water.
- **NEVER** smoke or allow a spark or flame in vicinity of battery or engine.
- Be extra cautious to reduce risk of dropping a metal tool onto battery. It might spark or short-circuit battery or other 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.

IMPORTANT SAFETY INFORMATION

- If necessary to remove battery from vehicle to charge, always remove grounded terminal from battery first. Make sure all accessories in the vehicle are off, so as not to cause an arc.
- Be sure area around battery is well ventilated while battery is being charged. Gas can be forcefully blown away by using a piece of cardboard or other non-metallic material as a fan.
- Clean battery terminals with a mixture of baking soda and hot water. Be careful to keep corrosion from coming in contact with eyes.
- Study all battery manufacturer's specific precautions such as removing or not removing cell caps while charging and recommended rates of charge.
- Determine voltage of battery by referring to car owner's manual and make sure that output voltage selector switch is set at correct voltage.
- Locate the charger as far away from the battery as DC cables permit.
- **NEVER** place the charger directly above the battery being charged; gases from the battery will corrode and damage the charger.
- **NEVER** allow battery acid to drip on the charger when reading specific gravity or filling the battery.
- **DO NOT** operate the charger in a closed area or restrict ventilation in any way.
- **DO NOT** set a battery on top of the charger.
- Locate the charger at least 18" above the floor.
- **DO NOT** place the charger where rain, snow, or other moisture could drip on it.
- Charger should be grounded to reduce risk of electric shock. Charger is equipped with an electric cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- **DANGER** – Never alter AC cord or plug provided – if it will not fit outlet, have proper outlet installed by a qualified electrician. Improper connection can result in a risk of an electric shock.
- **CAUTION:** Connect and disconnect DC output clips only after setting any switches with an **OFF** position to off and removing AC power cord from electric outlet. Never allow clips to touch each other.
- To reduce explosion risk, never connect both clips directly to the battery. When making each connection, twist or rock clip back and forth several times to make a good connection and to reduce the risk of a clip slipping off and creating a spark. Do not twist or rock clip on the battery after the second clip connection is made.



SAVE THESE WARNINGS

PRODUCT INFORMATION



TYPE: CLASS BOOST STAR630			
Serial no:	IP20		
	1-50/60Hz	U _i = 120V , 110V	
CHARGE 12V	70A moy/arit 90A eff	P1 1400W	Min 50 Ah Max 800Ah
CHARGE 24V	70A moy/arit 90A eff	P1 2600W	Min 50 Ah Max 800 Ah
START 12V (1V/el)	350A moy/arit 600A eff	3 sec. ON: 120 sec. OFF@ 5 cycles	
START 24V (1V/el)	350A moy/arit 600A eff	3 sec. ON: 120 sec. OFF@ 5 cycles	
FUSE	N° 1 x 50AMP+ N° 1 x 50AMP		

FEATURES:

- 110V 60Hz Battery Charger For Lead-Acid Batteries
- AC Input: 12V = 1400W , 24V= 2600W
- Charger Voltage: 12V = 56A , 24V = 55A
- Max Charger Current: 90A , Battery Capacities 60-600Ah
- Starter Current: 600A
- Built In Fan for Cooling With Automatic Thermistor Protection
- Adjustable Timer For Quick Charge, Set & Forget
- CE, RoHS Certified, Perfect For Cars, Boats, Trailers, RV's 55 Amp Portable Monster Battery Charger 12/24 Volt Automatic Car Truck

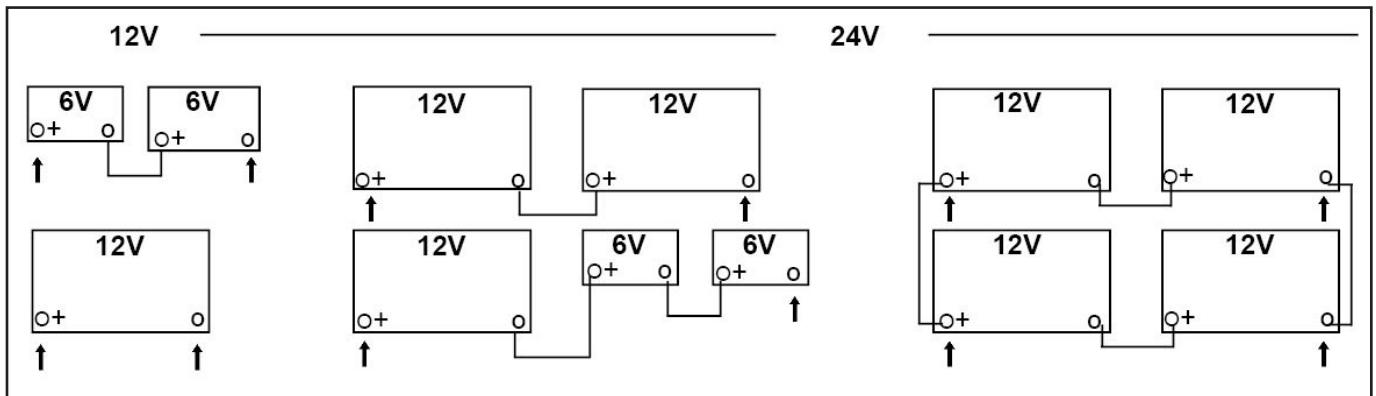
OPERATION

PRINCIPLE OPERATION

1. Before charging, clear the storage battery and carefully check its initial voltage.
2. When charging, the current lies on the type of storage battery which is generally about 10% of the max current of the battery.

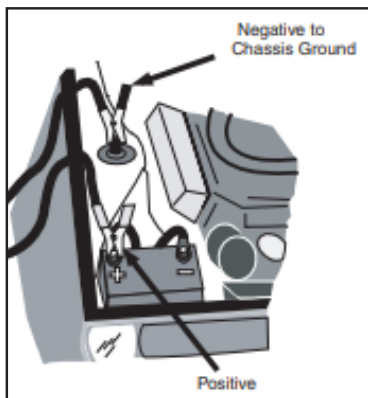
TIME: Upon the type of storage battery, the formula is: Charging Time = Battery Current / Charging Current

Additionally, when the charging times go by, the charging current will drop so the actual charging time should be 1/4 times longer than theoretical. This machine can refresh one or more batteries simultaneously as shown below. The charging time will then expand.



CHARGING A BATTERY THAT IS INSTALLED IN A VEHICLE

1. Position AC and DC cords to reduce risk of damage by hood, door, or moving engine part.
2. Stay clear of fan blades, belts, pulleys, and other parts that can cause injury to persons.
3. Check polarity of battery posts. POSITIVE (POS, P, +) battery post usually has larger diameter than NEGATIVE (NEG, N, -) post.
4. Determine which post of battery is grounded (connected) to the chassis. If the negative post is grounded to the chassis (as in most vehicles), see Figure 1 and instruction 5a. If the positive post is grounded to the chassis.



5a. For **NEGATIVE GROUNDED** vehicle, connect POSITIVE (Red) clip from the battery charger to the **POSITIVE** (POS, P,+) ungrounded post of the battery.

5b. For **POSITIVE GROUNDED** vehicle, connect the NEGATIVE (Black) clip from the battery charger to the **NEGATIVE** (NEG, N, -) ungrounded post of the battery.

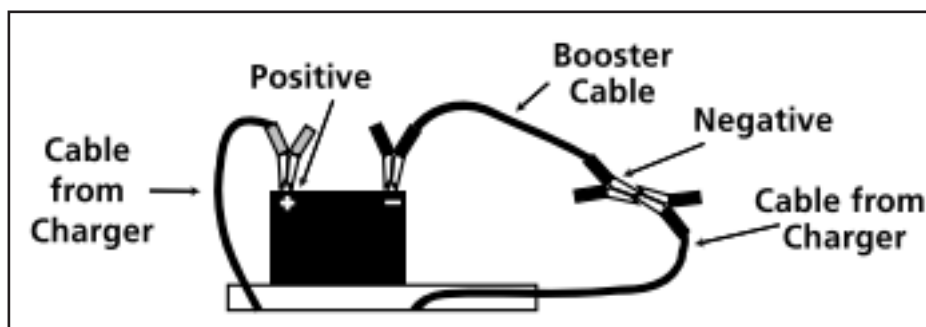
6. Connect the remaining battery charger clip to the vehicle chassis or engine block, as far away from the battery as possible. Do not connect the clip to carburetor, fuel lines, or sheet metal body parts. Connect to a heavy gauge metal part of the frame or engine block.

7. When disconnecting charger, turn all switches with an OFF position to off, disconnect AC cord, remove clip from vehicle chassis, and then remove **clip from** battery terminal.
8. Refer to the Operating Instructions for information on setting selector switches. Be sure to refer to the instructions for your model of charger.

OPERATION

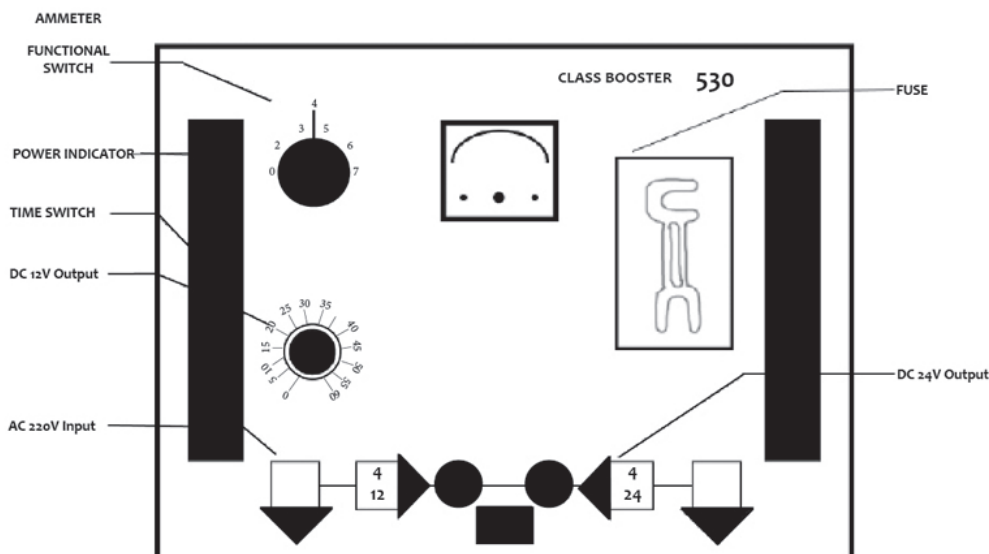
CHARGING A BATTERY OUTSIDE OF THE VEHICLE

1. Check polarity of battery posts. POSITIVE (POS, P,+) battery post usually has a larger diameter than NEGATIVE (NEG, N,-) post.
2. Attach a cable (not provided) to the **NEGATIVE** (NEG, N, -) battery post. This cable must be a minimum of 24" long, and of a wire gauge that is no lighter than the wire gauge of the charger's output cables (battery cables and booster cables work well).
3. Connect **POSITIVE** (RED) charger clip to **POSITIVE**(POS, P, +) post of battery.
4. Position yourself and the free end of the cable (installed in step #2) as FAR away from the battery as possible. **FACING AWAY FROM THE BATTERY**, connect the **NEGATIVE** (Black) charger clip to the free end of the cable.
5. When disconnecting charger, always do so in reverse sequence of connecting procedure and break first connection while as far away from battery as practical.

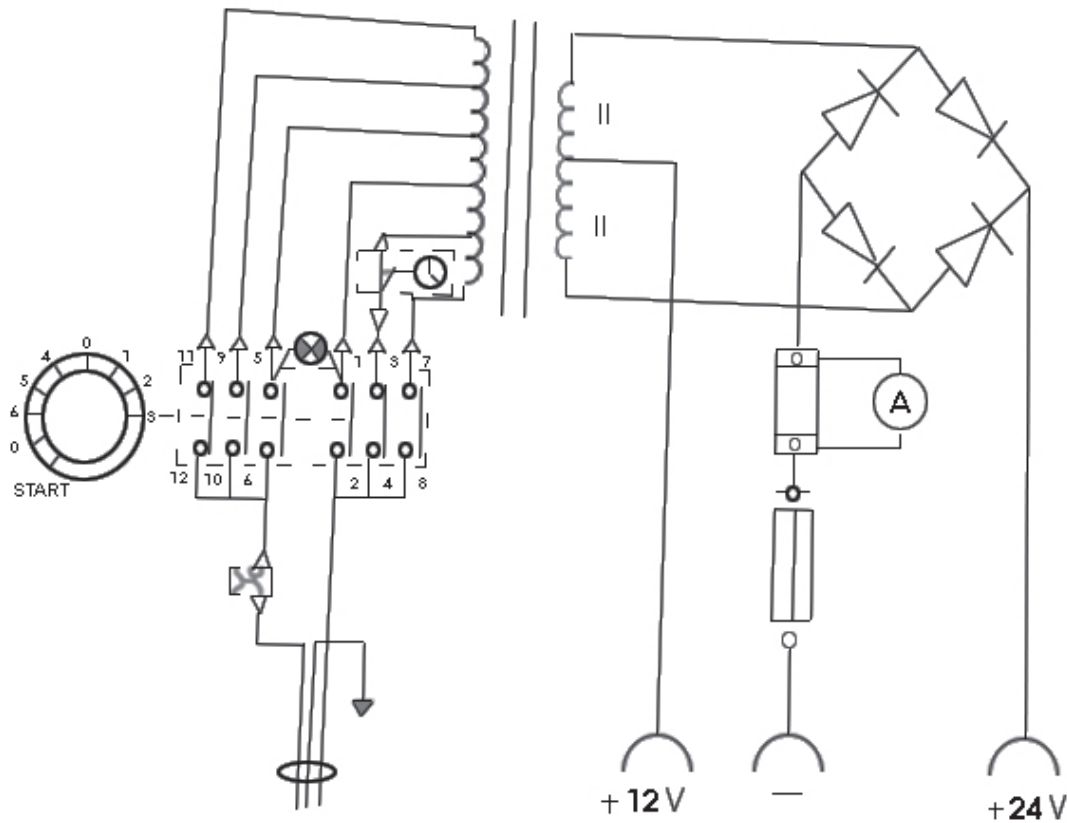
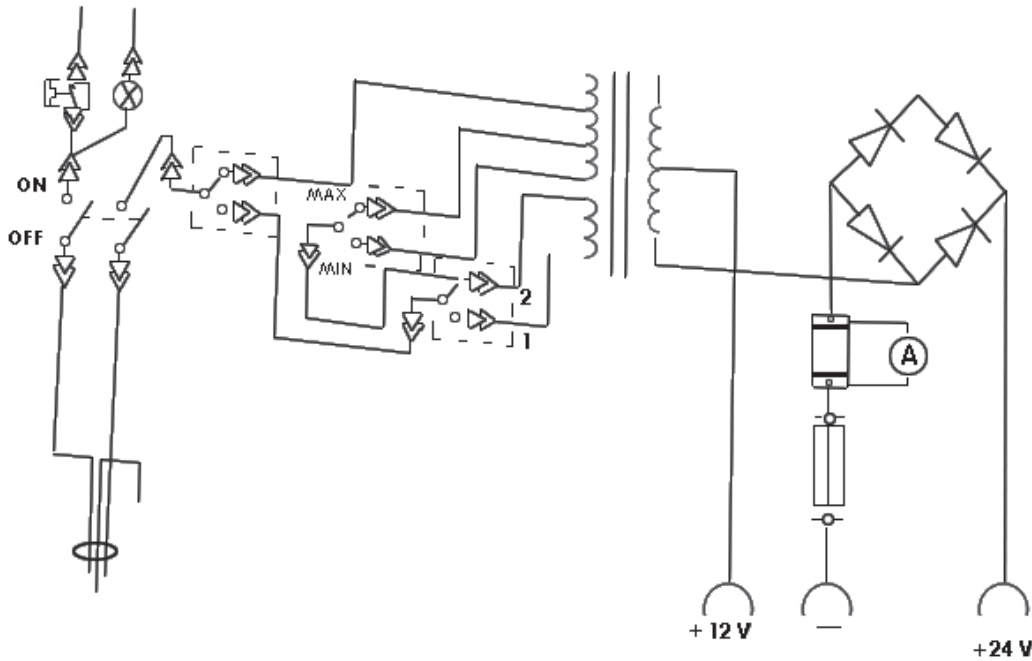


FOR CLASS BOOSTER

1. Choose appropriate voltage (12V or 24V) and connect the charging collets.
2. Turning on switch 1 to 1, 2 or 3 is slow charge, while to 4, 5 or 6 is quick charge. Quick charging time usually is 1 hour, controlled by a timer.
3. When starting the engine of a vehicle, first turn on the switch 1 to "start", wait for 2 minutes and start the engine for 4-5 seconds. If the engine will not start for 3-4 times, wait for 10 minutes and repeat the operation mentioned above.



OPERATION



CHARGER CARE & MAINTENANCE

1. Clean the clamps after each use. Wipe off any battery fluid that may have come in contact with the clamps to prevent corrosion. Battery fluid may be neutralized with a solution of water and baking soda.
2. Once a year, apply some grease to the exposed wires on the ends of the cables where the clamp is connected to prevent corrosion.
3. If needed, the case may be wiped clean with a soft cloth.



SAVE THESE INSTRUCTIONS.

TROUBLESHOOTING

NO AMMETER READING and NO INDICATOR LIGHTS	Make sure charger is plugged into a LIVE ac outlet
	After unplugging unit, check connections at battery. Make sure the battery posts are clean and the clamps are making good contact with the battery terminal and other point of connection
	Check to see that battery is capable of being charged. It may be damaged, sulfated, or have an open circuit
	Make sure you have selected the proper charge voltage for the battery being charged
	The battery may already be fully charged
LOW AMMETER READING and NO INDICATOR LIGHTS	Verify that the vehicle's battery cables are in good condition and properly connected to the battery, especially the ground terminal
	Battery is nearing full charge, green light will eventually turn on
	The 2 amp setting has been selected for charging a larger 12 volt battery. In this mode, full charge may never be reached to allow the CHARGE COMPLETE light to turn on. Switch to 10 amp, 12 amp, or 15 amp - 12 volt setting

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.



Questions, problems, missing parts?

Before returning to your retailer, our exceptional customer service is available.

Call us Tel: 909 628 4900

Hour : 9am To 3pm PST (Monday to Friday)

Email : info@starktoolsusa.com

PRODUCT MADE IN CHINA