



300-200-60-30-2 AMP • 6 & 12 VOLT • BATTERY CHARGER

# OWNER'S MANUAL

MANUAL OPERATION WITH ENGINE START



- 300A for Emergency Engine Start at 12V
- 200A for Emergency Engine Start at 6V
- 60A Rapid Charge
- 30A Fast Charge
- 2A Trickle Charge
- Fan Cooled
- Rotary Switch for Ease-of-Use & Accuracy
- Timer with Hold for Continuous Charging
- Reverse Hookup & Short Circuit Protection
- Overheat Protection
- ETL certified
- 5-3-1 Warranty with "Advanced Replacement"

**POWER TO GET THE JOB DONE**

## IMPORTANT: READ AND SAVE THIS SAFETY AND INSTRUCTION MANUAL

**SAVE THESE INSTRUCTIONS** – The Wheel Chargers offers a wide range of features to accommodate your needs. This manual will show you how to use your charger safely and effectively. Please read, understand and follow these instructions and precautions carefully, as this manual contains important safety and operating instructions.

**This product may contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm (CA. Prop 65). Wash hands after use.**

## IMPORTANT SAFETY INSTRUCTIONS

1. Keep out of reach of children.
2. Do not expose the charger to rain or snow.
3. Use only recommended attachments. Use of an attachment not recommended or sold by Forney Industries, Inc. may result in a risk of fire, electric shock or injury to persons or damage to property.
4. To reduce the risk of damage to the electric plug or cord, pull by the plug rather than the cord when disconnecting the charger.
5. 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 an extension cord must be used, make sure:
  - That the pins on the plug of the extension cord are the same number, size and shape as those of the plug on the charger.
  - That the extension cord is properly wired and in good electrical condition.
  - That the wire size is large enough for the A.C. ampere rating of the charger as specified in Section "BATTERY CHARGING – A.C. CONNECTIONS".
6. To reduce the risk of electric shock, unplug the charger from the outlet before attempting any maintenance or cleaning. Simply turning off the controls will not reduce this risk.
7. 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.
8. Do not operate the charger with a damaged cord or plug; take it to a qualified service person.
9. Do not operate the charger if it has received a sharp blow, been dropped or otherwise damaged in any way; take it to a qualified service person.
10. Do not disassemble the charger; take it to a qualified service person when service or repair is required. Incorrect reassembly may result in a risk of fire or electric shock.

## PERSONAL PRECAUTIONS

1. Working in the 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 you follow the instructions each time you use the charger.
2. To reduce the risk of a battery explosion, follow these instructions and those published by the battery manufacturer and the manufacturer of any equipment you intend to use in the vicinity of the battery. Review the cautionary markings on these products and on the engine.
3. NEVER smoke or allow a spark or flame in the vicinity of a battery or engine.
4. Be extra cautious to reduce the risk of dropping a metal tool onto the battery. It might spark or short-circuit the battery or other electrical part that may cause an explosion.
5. Use this charger for charging LEAD-ACID batteries only. It is not intended to supply power to a low voltage electrical system other than in a starter-motor application. Do not use this battery charger for charging dry-cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage to property.
6. NEVER charge a frozen battery.
7. NEVER overcharge a battery.

## PREPARING TO CHARGE

1. Consider having someone close enough by to come to your aid when you work near a lead-acid battery.
2. Have plenty of fresh water and soap nearby in case battery acid contacts your skin, clothing or eyes.
3. Wear complete eye and body protection, including safety goggles and protective clothing. Avoid touching your eyes while working near the battery.
4. If battery acid contacts your skin or clothing, immediately wash the area with soap and water. If acid enters your eye, immediately flood the eye with cold running water for at least 10 minutes and get medical attention right away.
5. If battery acid is accidentally swallowed, drink milk, the whites of eggs or water. DO NOT induce vomiting. Seek medical attention immediately.
6. If it is necessary to remove the battery from the vehicle to charge it, always remove the grounded terminal first. Make sure all of the accessories in the vehicle are off to prevent arcing.
7. Be sure the area around the battery is well ventilated while the battery is being charged.
8. Clean the battery terminals before charging the battery. During cleaning, keep airborne corrosion from coming into contact with your eyes, nose and mouth. Use baking soda and water to neutralize the battery acid and help eliminate airborne corrosion. Do not touch your eyes, nose or mouth.
9. Add distilled water to each cell until the battery acid reaches the level specified by the battery manufacturer. Do not overfill. For a battery without removable cell caps, such as valve regulated lead acid batteries (VRLA), carefully follow the manufacturer's recharging instructions.
10. Read, understand and follow all instructions for the charger, battery, vehicle and any equipment used near the battery and charger. Study all of the battery manufacturer's specific precautions while charging and recommended rates of charge.
11. Determine the voltage of the battery by referring to the vehicle owner's manual and make sure that the output voltage selector switch is set to the correct voltage. If the charger has an adjustable charge rate, charge the battery in the lowest rate first.
12. Make sure that the charger cable clips make tight connections.

## CHARGER LOCATION

1. Locate the charger as far away from the battery as the DC cables permit.
2. Never place the charger directly above the battery being charged; gases from the battery will corrode and damage the charger.
3. Do not set the battery on top of the charger.
4. Never allow battery acid to drip onto the charger when reading the electrolyte specific gravity or filling the battery.
5. Do not operate the charger in a closed-in area or restrict the ventilation in any way.

## CHARGER LOCATION

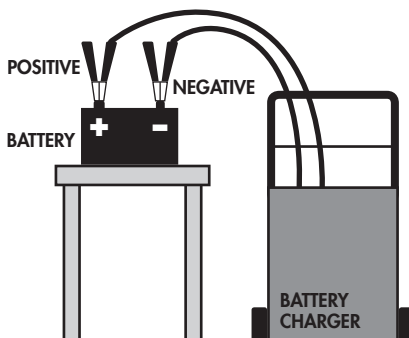
1. Connect and disconnect the DC output clips only after setting all of the charger switches to the “off” position and removing the A.C. plug from the electrical outlet. Never allow the clips to touch each other.
2. Attach the clips to the battery and chassis.

## FOLLOW THESE STEPS WHEN BATTERY IS INSTALLED IN VEHICLE

1. Position the A.C. and D.C. cables to reduce the risk of damage by the hood, door and moving or hot engine parts. NOTE: If it is necessary to close the hood during the charging process, ensure that the hood does not touch the metal part of the battery clips or cut the insulation of the cables.
2. Stay clear of fan blades, belts, pulleys and other parts that can cause injury.
3. Check the polarity of the battery posts. The POSITIVE (POS, P, +) battery post usually has a larger diameter than the NEGATIVE (NEG, N, -) post.
4. Determine which post of the battery is grounded (connected) to the chassis. If the negative post is grounded to the chassis (as in most vehicles). If the positive post is grounded to the chassis.
5. For a negative-grounded vehicle, connect the POSITIVE (RED) clip from the battery charger to the POSITIVE (POS, P, +) ungrounded post of the battery. Connect the NEGATIVE (BLACK) clip to the vehicle chassis or engine block away from the battery. Do not connect the clip to the carburetor, fuel lines or sheet-metal body parts. Connect to a heavy gauge metal part of the frame or engine block.
6. For a positive-grounded vehicle, connect the NEGATIVE (BLACK) clip from the battery charger to the NEGATIVE (NEG, N, -) ungrounded post of the battery. Connect the POSITIVE (RED) clip to the vehicle chassis or engine block away from the battery. Do not connect the clip to the carburetor, fuel lines or sheet-metal body parts. Connect to a heavy gauge metal part of the frame or engine block.
7. When disconnecting the charger, turn all switches to off, disconnect the A.C. cord, remove the clip from the vehicle chassis and then remove the clip from the battery terminal.
8. See CALCULATING CHARGE TIME for length of charge information.

## FOLLOW THESE STEPS WHEN BATTERY IS OUTSIDE VEHICLE

1. Check the polarity of the battery posts. The POSITIVE (POS, P, +) battery post usually has a larger diameter than the NEGATIVE (NEG, N, -) post.
2. Attach at least a 24-inch (61 cm) long 6-gauge (AWG) insulated battery cable to the NEGATIVE (NEG, N, -) battery post.
3. Connect the POSITIVE (RED) charger clip to the POSITIVE (POS, P, +) post of the battery.
4. Position yourself and the free end of the cable you previously attached to the NEGATIVE (NEG, N, -) battery post as far away from the battery as possible – then connect the NEGATIVE (BLACK) charger clip to the free end of the cable.
5. Do not face the battery when making the final connection.
6. When disconnecting the charger, always do so in the reverse order of the connecting procedure and break the first connection while as far away from the battery as practical.
7. A marine (boat) battery must be removed and charged on shore. To charge it onboard requires equipment specially designed for marine use.

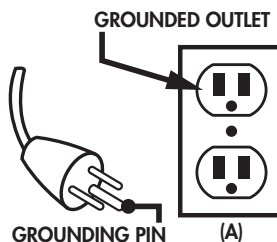


## BATTERY CHARGING – A.C. CONNECTIONS

1. This battery charger is for use on a nominal 120-volt circuit and has a grounded plug that looks like the plug illustrated. The charger must be grounded to reduce the risk of electric shock. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances. The plug pins must fit the receptacle (outlet). Do not use with an ungrounded system.
2. Never alter the A.C. cord or plug provided – if it does not fit the outlet, have a proper grounded outlet installed by a qualified electrician. An improper connection can result in a risk of an electric shock or electrocution.
3. NOTE: Pursuant to Canadian Regulations, use of an adapter plug is not allowed in Canada. Use

of an adapter plug in the United States is not recommended.

4. Recommended minimum AWG size for extension cord:



A.C. Input Rating, Amperes*		Awg Size of Cord Length of Cord, Feet (m)			
At Least	But Less Than	25 (7.6)	50 (15.2)	100 (30.5)	150 (45.6)
0	2	18	18	18	16
2	3	18	18	16	14
3	4	18	18	16	14
4	5	18	18	14	12
5	6	18	16	14	12
6	8	18	16	12	10
8	10	18	14	12	10
10	12	16	14	10	8
12	14	16	12	10	8
14	16	16	12	8	8
16	18	14	12	8	8
18	20	14	12	8	6

\*If the input rating of a charger is given in watts rather than in amperes, the corresponding ampere rating is to be determined by dividing the wattage rating by the voltage rating - for example:

$$1200 \text{ watts} / 120 \text{ volts} = 10 \text{ amperes}$$

## ASSEMBLY INSTRUCTIONS

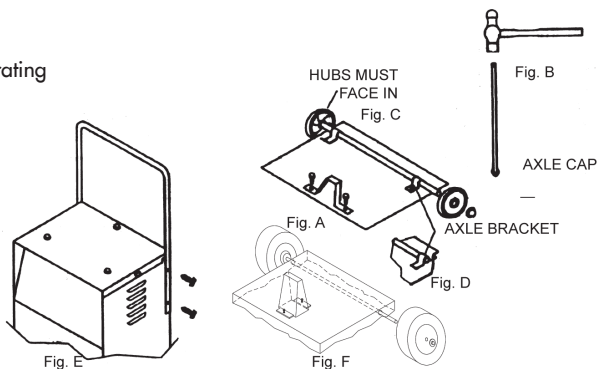
### Wheel Charger Assembly Instructions:

**NOTE:** Charger must be assembled before operating

Parts	Tools
(2) 10-32 screws	5/16" wrench
(2) 1/4-20 screws	3/8" wrench
(2) wheels	Hammer
(2) axle caps	Screwdriver
(1) handle	
(1) mounting foot	
(1) axle	

### Tools necessary

1. First place the charger on its side.
2. Next mount the mounting foot FIG. A with (2) 1/4-20 screws, or FIG. F with (2) 10-32 screws.
3. Next pound the axle firmly into an axle cap using a hammer FIG. B.
4. Slide one wheel onto the axle with hub facing in, as shown in FIG. C.
5. Poke above assembly thru holes in charger back until axle sticks out of the other end.
6. Turn charger on its other side.
7. Slide wheel and pound cap onto the axle end.
8. Next turn the charger right side up onto its foot and wheels.
9. Remove the (2) top screws from each side of the charger, line up the handle and reinstall the screws FIG. E.



## CONTROL PANEL

### Charge Rate Selector Switch

Use the Charge Rate selector switch to select the charge rate or engine starting setting you require.

- **2A Slow Charge Rate** – Intended for charging small batteries such as those commonly used in garden tractors, snow mobiles and motorcycles.
- **30A Fast and 60A Rapid Charge Rate** – Use for charging automotive, marine and deep-cycle batteries. Not intended for industrial applications.
- **200A and 300A Engine Start** – Provides 200 or 300 amps for cranking an engine with a weak or run down battery. Always use in combination with a battery.

### Timer

- **Timer Setting:** The timer allows you to set a specified time for charging. After the timer expires, the charger stops charging your battery. The main function of the timer is to prevent over charging while allowing a battery time to obtain a satisfactory charge. To properly set the timer, you must know the size of the battery in ampere hours or reserve capacity in minutes and the state of charge. It is important that

you determine the appropriate state of charge of your battery as specified in Section "CALCULATING CHARGE TIME" and set the timer accordingly.

- **Hold:** This position defeats the timer function, allowing for continuous operation. Be sure to monitor the charging progress and stop it when the battery is charged. Not doing so may cause damage to your battery or may cause other personal property damage or personal injury.

### Ammeter

The Ammeter indicates the amount of current, measured in amps, that is being drawn by the battery. As a battery takes on a charge, it draws less current from the charger. Correspondingly, the meter will show less current being drawn by the battery. When the current stops decreasing, the battery is charged. The start area of the meter indicates a high rate of current being drawn from the charger. When cranking an engine, the meter needle will be at the extreme right side of the start area. The 2 amp charge rate may indicate some activity on the meter, although the meter does not have the resolution to display this low rate.

## OPERATING INSTRUCTIONS

### Charging

1. Ensure that all of the charger components are in place and in good working condition, including the plastic boots on the battery clips.
2. Connect the battery following the precautions listed in sections "FOLLOW THESE STEPS WHEN BATTERY IS INSTALLED IN VEHICLE" and "FOLLOW THESE STEPS WHEN BATTERY IS OUTSIDE VEHICLE".
3. Select the appropriate settings for your battery.
4. Connect the A.C. power following the precautions listed in section "BATTERY CHARGING – A.C. CONNECTIONS".
5. Turn the charger on. (If necessary)

### Using the Engine Start feature

Your battery charger can be used to jump start your car if the battery is low. Follow these instructions on how to use the ENGINE START feature. **WARNING:** Follow all safety instructions and precautions for charging your battery. Wear complete eye protection and clothing protection. Charge your battery in a well-ventilated area. **IMPORTANT:** Using the ENGINE START feature WITHOUT a battery installed in the vehicle could cause damage to the vehicle's electrical system. **NOTE:** If you have charged the battery and it still will not start your car, do not use the engine start feature, or it could damage the vehicle's electrical system.

1. Set the charge rate switch and the timer to the OFF position.
2. With the charger unplugged from the A.C. outlet, connect the charger to the battery following the instructions given in Section "FOLLOW THESE STEPS WHEN THE BATTERY IS INSTALLED IN A VEHICLE".

3. Plug the charger A.C. power cord into the A.C. outlet, and then move the timer switch from OFF to the HOLD position.
4. With the charger plugged in and connected to the battery of the vehicle, set the charge rate selector switch to the engine start position.
5. Crank the engine until it starts or 5 seconds pass. If the engine does not start, wait 3 minutes before cranking again. This allows the charger and battery to cool down.

**NOTE:** During extremely cold weather, or if the battery is under 2 volts, charge the battery for 5 minutes before cranking the engine.

6. If the engine fails to start, charge the battery for 5 more minutes before attempting to crank the engine again.
7. After the engine starts, move the charge rate selector switch and timer to the off position and unplug the A.C. power cord before disconnecting the battery clips from the vehicle.
8. Clean and store the charger in a dry location.

**NOTE:** If the engine does turn over but never starts, there is not a problem with the starting system; there is a problem somewhere else with the vehicle. STOP cranking the engine until the other problem has been diagnosed and corrected.

### General Charging Notes

**Fan:** It is normal for the fan to be on all the time. Keep the area near the charger clear of obstructions to allow the fan to operate efficiently.

## CALCULATING CHARGE TIME

### The Hydrometer or Electronic Method

To find the time needed to fully charge your battery, determine the battery's charge level with a hydrometer or electronic Percent-of-Charge Tester. The following table will help you convert hydrometer readings to percent of charge values.

SPECIFIC GRAVITY	PERCENT OF CHARGE	PERCENT OF CHARGE NEEDED
1.265	100%	0%
1.225	75%	25%
1.155	25%	75%
1.120	0%	100%

When you know the percent of charge and the Amp Hour (AH) rating of your battery, you can calculate the approximate time needed to bring your battery to a full charge.

To convert Reserve Capacity to Amp Hours, divide Reserve Capacity by 2, and add 16:

#### Example:

Amp Hour Rating = Reserve Capacity/2 + 16

**NOTE:** The Reserve Capacity can be obtained from the battery specification sheet or the owner's manual.

#### To calculate the time needed for a charge:

1. Find the percent of charge needed. (A battery at 50 percent charge that will be charged to 100 percent needs another 50 percent (.50)).
2. Multiply the Amp Hour Rating by the charge needed (.50) and divide by the charge rate.
3. Multiply the results by 1.25 and you will have the total time needed, in hours, to bring the battery to full charge.
4. Add an additional hour for a deep-cycle battery.

#### Example:

(Amp Hour Rating x % of charge needed)/Charger Setting x 1.25 = hours of charge

(100 (Ah Rating) x .50 (charge needed))/20 (Charger Setting) x 1.25 = 3.125 hours

(100 x .50)/20 x 1.25 = 3.125

You would need to charge your 100-Ampere Hour Battery for a little more than 3 hours at the 20-Amp charge rate using the above example.

### The Chart Method

Use the following table to more accurately determine the time it will take to bring a battery to full charge. First, identify where your battery fits into the chart.

NR means that the charger setting is NOT RECOMMENDED.

Find your battery's rating on the chart below, and note the charge time given for each charger setting. The times given are for batteries with a 50% charge prior to recharging. Add more time for severely discharged batteries.



BATTERY SIZE/RATING			CHARGE RATE /CHARGING TIME - HOURS												
			2 AMP	5 AMP	10 AMP	15 AMP	20 AMP	30 AMP	35 AMP	40 AMP	50 AMP	60 AMP	80 AMP		
SMALL BATTERIES	Motorcycle, Garden Tractor, etc.	6 - 12 AH	2 - 3¾ hrs.	¾ - 1½ hrs.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
		12 - 32 AH	3¾ - 10 hrs.	1½ - 4 hrs.	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
CAR/TRUCKS	200 - 315 CCA	40 - 60 RC	11¼ - 14½ hrs.	4½ - 5¾ hrs.	2¼ - 3 hrs.	1½ - 2 hrs.	1 - 1½ hrs.	¾ - 1 hrs.	½ - ¾ hrs.	25 - 35 min.	23 - 29 min.	17 - 22 min.			
		60 - 85 RC	14½ - 18¼ hrs.	5¾ - 7½ hrs.	3 - 3¾ hrs.	2 - 2½ hrs.	1½ - 2 hrs.	1 - 1¼ hrs.	¾ - 1 hrs.	½ - ¾ hrs.	29 - 37 min.	22 - 28 min.			
		85 - 190 RC	18¼ - 34¾ hrs.	7½ - 14 hrs.	3¾ - 7 hrs.	2½ - 4½ hrs.	2 - 3½ hrs.	1¼ - 2¼ hrs.	1 - 2 hrs.	1 - 1¾ hrs.	¾ - 1½ hrs.	37 - 70 min.	28 - 52 min.		
MARINE/ DEEP CYCLE		80 RC	17½ hrs	7 hrs.	3½ hrs.	2¼ hrs.	1¾ hrs.	NR	NR	NR	NR	NR	NR	NR	
		140 RC	27 hrs.	10¾ hrs.	5½ hrs.	3½ hrs.	2¾ hrs.	NR	NR	NR	NR	NR	NR	NR	
		160 RC	30 hrs.	12 hrs.	6 hrs.	4 hrs.	3 hrs.	NR	NR	NR	NR	NR	NR	NR	NR
		180 RC	33 hrs.	13¼ hrs.	6½ hrs.	4½ hrs.	3¼ hrs.	NR	NR	NR	NR	NR	NR	NR	NR

## MAINTENANCE INSTRUCTIONS

1. After use and before performing maintenance, unplug and disconnect the battery charger.
2. Use a dry cloth to wipe all battery corrosion and other dirt or oil from the terminals, cords, and the charger case.
3. Ensure that all of the charger components are in place and in good working condition, including the plastic boots on the battery clips.
4. Servicing does not require opening the unit, as there are no user-serviceable parts.

## STORAGE INSTRUCTIONS

1. Store the charger unplugged, in an upright position. The cord will still conduct electricity until it is unplugged from the outlet.
2. Store inside, in a cool, dry place.
3. Do not store the clips on the handle, clipped together, on or around metal, or clipped to cables.

## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
No reading on the ammeter.	Charger is not plugged in. No power at the receptacle. Clips are not making a good connection to the battery. Connections are reversed. Battery is defective (will not accept a charge). 2 amp charge rate is being used.	Plug the charger into an A.C. outlet. Check for open fuse or circuit breaker supplying A.C. outlet. Check for poor connection to battery and frame. Make sure connection points are clean. Rock clips back and forth for a better connection. Unplug the charger and reverse the clips. Have battery checked. Ammeter may show no activity at the 2A charge rate.
Ammeter reading stays high.	Battery is severely discharged. Wrong battery voltage.	Continue charging battery for two more hours. If problem continues have the battery checked. Verify the voltage settings or output ratings on the charger are correct.
Ammeter reads less than selected charge rate when charging a discharged battery	Extension cord is too long or wire gauge is too small. Weak cell or sulfated plate in battery. Battery is only partially discharged.	Use a shorter or heavier gauge extension cord. A sulfated battery will eventually take a normal charge if left connected. If the battery will not take a charge, have it checked. Continue to charge the battery.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The charger is making an audible clicking sound.	<p>Circuit breaker is cycling.</p> <p>Battery is defective.</p> <p>Shorted battery cables or clips.</p> <p>Severely discharged battery, but otherwise it is a good battery.</p> <p>Reverse connections at battery.</p>	<p>The settings may be wrong. Check the charger settings.</p> <p>Have the battery checked.</p> <p>Circuit breaker cycles when current draw is too high. Check for shorted cables or clips and replace if necessary.</p> <p>The battery may not want to accept a charge due to a run-down state. Allow charging to continue until battery has a chance to recover sufficiently to take a charge. If more than 20 minutes, stop charging and have the battery checked.</p> <p>Shut the charger off and correct the lead connections.</p>
Charger makes a loud buzz or hum.	<p>Transformer laminations vibrate (buzz).</p> <p>Shorted Diode Assembly or Output Rectifier Assembly (hum).</p>	<p>No problem, this is a normal condition.</p> <p>Have charger checked by a qualified technician.</p>
Short or no start cycle when cranking engine.	<p>Drawing more than the engine start rate</p> <p>Failure to wait 3 minutes (180 seconds) between cranks.</p> <p>Clips are not making a good connection.</p> <p>AC cord and/or extension cord is loose.</p> <p>No power at receptacle.</p> <p>The charger may be overheated.</p> <p>Battery may be severely discharged.</p>	<p>Crank time varies with the amount of current drawn. If cranking draws more than the engine start rate, crank time may be less than 3 seconds.</p> <p>Wait 3 minutes of rest time before the next crank.</p> <p>Check for poor connection at battery and frame.</p> <p>Check power cord and extension cord for loose fitting plug.</p> <p>Check for open fuse or circuit breaker supplying A.C. outlet.</p> <p>The thermal protector may have tripped and needs a little longer to reset. Make sure the charger vents are not blocked. Wait and try again.</p> <p>On a severely discharged battery, charge for 10 to 15 minutes in the manual charge rate to help assist in cranking.</p>
Charger will not turn on when properly connected.	<p>A.C. outlet is dead.</p> <p>Poor electrical connection.</p>	<p>Check for open fuse or circuit breaker supplying A.C. outlet.</p> <p>Check power cord and extension cord for loose fitting plug.</p>
The battery is connected and the charger is on, but is not charging.	<p>Clips are not making a good connection.</p>	<p>Check for poor connection at battery and frame. Make sure connecting points are clean. Rock clips back and forth for a better connection.</p>
The measured current is much lower than what was selected.	<p>The charger reached the maximum voltage and is reducing the current.</p>	<p>No problem, this is a normal condition.</p>

## 5/3/1 LIMITED WARRANTY

FORNEY INDUSTRIES, INC. 1830 LAPORTE AVENUE, FORT COLLINS CO 80521 MAKES THIS LIMITED WARRANTY TO THE ORIGINAL RETAIL PURCHASER OF THIS PRODUCT. THIS LIMITED WARRANTY IS NOT TRANSFERABLE OR ASSIGNABLE.

Subject to the terms and conditions below, Forney Industries, Inc. of Fort Collins, Colorado warrants this product to the original retail purchaser, to be free from defects in material and workmanship for a period of one, three or five years (as specified below) from the date of sale. Within the warranty periods listed below, Forney will replace or repair any warranted parts or components that fail due to defects in material or workmanship. Proof of purchase is required.

For warranty service, return the product, with proof of purchase to Forney Industries, Inc., 3900 Canal Drive, Fort Collins, CO 80524 or contact customer service at 1-800-521-6038. "Advanced Replacement", at Forney's option, requires the product must be registered within thirty (30) days of the date of purchase. Registration on line is available at [www.forneyind.com](http://www.forneyind.com).

Forney Industries must be notified in writing within thirty (30) days of any equipment failure that begins within the warranty time periods. All implied warranties begin on the delivery date of the equipment to the original retail purchaser.

1. 5 Years – Parts & Labor or Full Replacement: Transformer
2. 3 Years – Parts & Labor or Full Replacement: All components and parts inside the battery charger cover with the exception of the transformer
3. 1 Year – Parts & Labor (90 days for industrial use): All components and parts outside the battery charger cover, Included but not limited to cables, clamps. Knobs, wheels and axle are not covered.
4. Consumable components that fail due to normal wear are not covered under this warranty.
5. Equipment that has been modified or changed by any one other than Forney Industries or their authorized repair station, or equipment that has been improperly installed or operated or misused based on industry standards, or equipment that has not had reasonable and necessary maintenance or equipment which has been used for purposes outside of the specifications or the original intended use is not covered by this warranty.

Forney makes no other warranties, including warranty for any accessories used with this product that are not manufactured by Forney Industries and/or approved for use with this product. This "Limited Warranty" is void if the product is misused, subjected to abuse or is repaired or modified by anyone other than Forney or its authorized repair station. It is the purchaser's obligation to read and follow the instructions provided in the owner's manual. Using this product in any other way than its original intended use will void the warranty.



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