

24V Universal Charger for Ride-on Toys

OWNERS MANUAL



LISTED

1-2

(E165653 BFP)

PLEASE SAVE THIS OWNERS MANUAL AND READ BEFORE EACH USE.

This manual will explain how to use the charger safely and effectively.

Please read and follow these instructions and precautions carefully.

1. IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS

- 1.1 **SAVE THESE INSTRUCTIONS** – This manual contains important safety and operating instructions.
- 1.2 Keep out of reach of children.
- 1.3 Do not expose the charger to rain or snow.
- 1.4 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.
- 1.5 To reduce the risk of damage to electric plug and cord, pull by the plug rather than the cord when disconnecting charger.
- 1.6 An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire and electric shock. If an 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.
 - The extension cord is properly wired and in good electrical condition.
 - The wire size is large enough for AC ampere rating of charger as specified in section 6.
- 1.7 Do not operate charger with damaged cord or plug – replace the cord or plug immediately.
- 1.8 Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman.
- 1.9 Do not disassemble charger; take it to a qualified serviceman when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- 1.10 To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.
- 1.11 **WARNING: RISK OF EXPLOSIVE GASES.**
 - a. 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 YOU FOLLOW THE INSTRUCTIONS EACH TIME YOU USE THE CHARGER.
 - b. To reduce risk of battery explosion, follow these instructions and those published by battery manufacturer and manufacturer of any equipment you intend to use in vicinity of battery. Review cautionary markings on these products and on engine.

2. PERSONAL SAFETY PRECAUTIONS

- 2.1 Consider having someone close enough by to come to your aid when you work near a lead-acid battery.
- 2.2 Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes.
- 2.3 Wear complete eye protection and clothing protection. Avoid touching eyes while working near battery.
- 2.4 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.
- 2.5 NEVER smoke or allow a spark or flame in vicinity of battery or engine.
- 2.6 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.
- 2.7 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.
- 2.8 Use this charger for charging 24V 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 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.
- 2.9 NEVER charge a frozen battery.
- 2.10 Changes or modifications not expressly approved by Schumacher Electric could void the user's authority to operate this device.

- 2.11 NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.

3. PREPARING TO CHARGE

- 3.1 Remove the battery from the vehicle to charge. Make sure all accessories in the vehicle are off, to prevent arcing.
- 3.2 Clean the battery and examine for excessive wear, cracks, bulging or damage. If damage is detected, do not charge – replace immediately. If the battery is hot, allow it to cool before charging.
- 3.3 Study all battery manufacturer's specific precautions.
- 3.4 Make sure area around battery is well ventilated while the battery is being charged. Gas can be forcefully blown away by using a piece of cardboard or other non-metallic material as a fan.

4. CHARGER LOCATION

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

5. DC CONNECTION PRECAUTIONS

- 5.1 Connect and disconnect DC output connectors only after removing AC cord from electric outlet.
- 5.2 Never connect the output cable assemblies together for use in other applications, such as external battery or other power source charging, or to extend the output cable length, as reverse polarity and/or overcharge conditions will occur.

6. GROUNDING AND AC POWER CORD CONNECTIONS

- 6.1 This battery charger is for use on a nominal 120 volt circuit. 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.
- 6.2 **DANGER:** Never alter the AC 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.
- 6.3 **USING AN EXTENSION CORD**

The use of an extension cord is not recommended. If you must use an extension cord, follow these guidelines:

- Pins on plug of extension cord must be the same number, size, and shape as those of plug on charger.
- Ensure that the extension cord is properly wired and in good electrical condition.
- Wire size must be large enough for the AC ampere rating of charger, as specified:

Length of cord (feet)	25	50	100	150
AWG* size of cord	18	18	16	16

*AWG-American Wire Gauge

7. CONTROL PANEL

LED INDICATORS

POWER (green) LED solid – There is AC power supplied to the charger.

CHARGING/CHARGED (green) LED solid – The charger is charging the battery.

CHARGING/CHARGED (green) LED flashing – The battery is 80% charged and may be used.

CHARGING/CHARGED (green) LED off – The battery is fully charged.

BAD BATTERY (red) LED solid – The battery is bad.

NOTE: See *Operating Instructions* for a complete description of the charger modes.

8. ASSEMBLY INSTRUCTIONS

- 8.1 Remove all cord wraps and uncoil the cables prior to using the battery charger.

9. OPERATING INSTRUCTIONS

BATTERY INFORMATION

This charger can be used with 24V batteries.

CHARGING

NOTE: Examine the battery for excessive wear, cracks, bulging or damage each time you charge it. If damage is detected, do not charge the battery; replace it immediately. If the battery is hot, allow it to cool before charging.

1. Cable Connectors (included) are necessary in order to charge ride-on toys. See *Replacement Parts* for more information. Select the proper output cable by matching the cable connector to the vehicle's battery connector.
2. Connect the battery, following the *Using the Cable Connectors* section.
3. Connect the charger to an electrical outlet. The Power LED will light.
4. If you've connected everything correctly, the Charging/Charged LED should light, indicating that the charger is charging. The Power LED will remain lit.
5. When the Charging/Charged LED begins to flash, the battery is 80% charged and can be used.
6. When the battery is fully charged, the Charging/Charged LED will turn off.

IMPORTANT: This charger does not have an ON/OFF switch. ON and OFF are controlled by plugging in the charger to the AC wall outlet. The charger will not supply current to the connector until a battery is properly connected.

USING THE CABLE CONNECTORS

1. Connect the cable connector to the charger. Make sure to place the charger on a dry, non-flammable surface.
2. With the charger disconnected from the wall outlet, connect the cable connector by connecting the yellow connector to the yellow connector on the end of the charger cable. Connect the other end of the cable connector to the battery or ride-on toy charging outlet.

NOTE: Never connect the cable connectors together for use in other applications, such as external battery or other power source charging, or to extend the output cable length, as reverse polarity and/or overcharge conditions will occur.

QUICK CHARGE

When the Charging/Charged LED begins to flash, the battery is ready to use. Unplug the charger from the wall outlet and then disconnect the charger from the battery.

COMPLETE CHARGE

When the Charging/Charged LED turns off, the charger has switched to the maintain mode of operation. When ready to use, unplug the charger from the wall outlet and then disconnect the charger from the battery.

CHARGING TIMES

APPLICATION	BATTERY SIZE	CHARGING TIME (hours)	
		80% charged	100% charged
RIDE-ON TOY	5 Ah	2	4
	15Ah	5	9

Times will vary, depending on the battery's level of discharge.

NOTE: For longer battery life, the battery must be completely charged after two consecutive quick charges (example: quick-quick-complete).

MAINTAIN MODE (FLOAT MODE MONITORING)

When the Charging/Charged LED turns off, the charger has started maintain mode. In this mode, the charger keeps the battery fully charged by delivering a small current when necessary.

ABORTED CHARGE

If charging cannot be completed normally, charging will abort. When charging aborts, the charger's output is shut off, and the Bad Battery LED will light. Do not continue attempting to charge the battery. Have the battery checked and replace, if necessary.

10. MAINTENANCE AND CARE

- 10.1 After use and before performing maintenance, unplug and disconnect the battery charger.
- 10.2 Use a dry cloth to wipe all battery corrosion and other dirt or oil from the connector, cords and the charger case.
- 10.3 Store inside, in a cool, dry place.

11. TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	REASON/SOLUTION
Charging/Charged LED is flashing.	The battery's charge is 80% or higher.	No problem; this is normal.
Bad Battery LED is lit.	Charger is in abort mode.	Do not continue trying to charge the battery. Have the battery checked or replaced.
The charger will not turn on when properly connected.	AC outlet is dead.	Check for open fuse or circuit breaker supplying the AC outlet.
	Poor electrical connection.	Check power cord and extension cord for a loose fitting plug.
	Battery is defective.	Have the battery checked.

12. REPLACEMENT PARTS

To purchase additional connectors, please contact Customer Service.



TAD24V

Dynacraft® 24V battery cable connector94500802Z



TAR24V

Razor® 24V battery cable connector94500786Z

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13. BEFORE RETURNING FOR REPAIRS

For REPAIRS OR RETURNS, visit 365rma.com

Visit schumacherelectric.com for Replacement Parts.

14. LIMITED WARRANTY

For information on our one-year limited warranty, please visit schumacherelectric.com or call 1-800-621-5485 to request a copy.

Go to schumacherelectric.com to register your product online.