

CHARGING THE BATTERY

1. We recommend using a 12V 130mAh Overnight Charger (HAN166) for charging your PowerPro™ Starter Source. Normal charge time is approximately 10 hours.

NOTE: When using another charger source, be sure to consult the instruction manual so you charge the battery at the correct charge rate, including fast charges. Charging the battery incorrectly can result in damage to the battery and serious injury and fire may also result.

REPAIR AND WARRANTY INFORMATION

Your Hangar 9 PowerPro Starter Source is guaranteed against workmanship and manufacturing defects for a period of 2 years from the original date of purchase. This warranty excludes batteries, is limited to the original purchaser of the product and is not transferable. Warranty repair will not cover units that have been modified, misused, serviced by an unauthorized service center or everyday wear incurred in normal use. Under no circumstances is the buyer entitled to consequential or incidental damages.

REPAIR PROCEDURE

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Providing that warranty conditions have been met, your Starter Source will be repaired free of charge. To speak to a service technician, call (217) 355-9511.

For non-warranty repairs, should your repair cost exceed 50% of the retail purchase cost, you will be provided with an estimate advising you of your options. Any return freight for non-warranty repairs will be billed to the customer. Please advise us of the credit card that you prefer to use. Horizon Service Center accepts Visa or MasterCard. Include your card number and the expiration date. Horizon Service Center also accepts money orders.

WARRANTY PROCEDURE

If your Starter Source needs to be repaired, ship the product in its original box (freight prepaid) to:

Horizon Service Center
4105 Fieldstone Rd.
Champaign, IL 61822

Include your complete name and address information inside the carton, as well as clearly writing it on the outer label/return address area. Include a brief summary of the difficulty. Date your correspondence and be sure that your name and address appear on this enclosure. Also, please include a phone number where you can be reached during the business day.



PowerPro™ Starter Source



Instruction Manual

Thank you for purchasing the Hangar 9 PowerPro™ Starter Source. The Starter Source is a convenient and portable power source for starting the Hangar 9 PowerPro 12V Starters. This is not a universal unit; it was specifically designed to fit the mounting holes on the Hangar 9 PowerPro Starters.

For your convenience, we have made the Starter Source available in three different options: (1) with an included 12V 130mA gel cell (HAN163), (2) with an included 10-cell 12V Ni-Cd battery pack (HAN164), (3) separately with no battery included (HAN165).

The charger and replacement batteries are available separately.
HAN167 – 12V 1.3Ah Gel Cell
HAN168 – 10-cell 12V Ni-Cd
HAN166 – 12V 130mA Overnight Charger: Starter Source



WE GET PEOPLE FLYING

PowerPro™ Starter Source

ATTACHING THE STARTER

1. Locate the following hardware:
3x10mm flat washers (8)
3x15mm Phillips machine screws (4)
3mm lock nuts (4)
2. Attach the starter to the upper half of the case, using the above hardware. The front mounting holes of the starter should be attached to the front section of the upper case. This is considered to be the side with the two individual holes and not the side with the four slotted holes. The screw with a washer should be inserted from inside the case and secured with the washer and nut on the starter's mounting holes. This will be a tight area to work in, and it may be best to use needle-nose pliers to hold the washer and nut in place while using a screwdriver to secure the hardware.
3. Repeat this step for the other three mounting holes.

INSTALLING THE BATTERY

1. Locate the included double-sided tape.
2. Peel the protective cover from one side and apply in the center of the lower half of the case. Remove the other side of the protective cover when you are ready to mount the battery.
3. The lower case is molded to accept the gel cell battery and should be placed into the lower case according to Diagram #1. The included wire with the female Tamiya connector should be connected to the terminal on the gel cell battery. Be sure red is attached to the positive (+) and black is attached to the negative (-). The female Tamiya connector is used for connection with the starter and for charging the battery. The Tamiya connector fits into the molded slot at the end of the lower case.
4. If you are using the 10-cell 12V Ni-Cd battery, it also fits conveniently in the lower case. We have included an insert to help secure the battery in place along with the tape. Please refer to Diagram #2 for proper placement.



Diagram #1



Diagram #2

COMPLETING FINAL ASSEMBLY

1. Locate the following hardware:
4 – 3x18mm pan head Phillips self-taping screws (black)
2. Place the upper half of the case onto the lower half. Be sure the rear of the starter lines up with the Tamiya connector protruding through the rear of the lower case. There is a molded piece on the inside of the upper case that helps to secure the Tamiya connector in place on the lower case.
3. While holding the entire unit in place, screw one 3x18mm pan head screw into each of the four holes on the bottom of the lower case, making sure a secure attachment has been made with the upper case.
4. Tighten all four holes securely.

HOOING UP THE STARTER WIRES

1. It will be necessary to attach a male Tamiya connector to the starter wires. We have included this wire and connector with the Starter Source for your convenience.
2. It will be necessary to cut back the starter wires to your desired length to attach to the Starter Source.
3. Keep in mind when attaching to the male Tamiya connector and wire that the black wire with the white stripe is positive (+) and the solid black wire is negative (-).
4. After cutting the starter wires to the desired length, strip back each wire 3/8".
5. Slide one rubber battery terminal insulator over each wire.
6. Tin the starter wires, using a soldering iron.
7. Crimp the red lead wire attached to the male Tamiya connector to the white striped starter wire, then solder.
8. Crimp the black lead wire to the solid black starter wire, then solder.
9. After the solder joint cools, slide the rubber terminal insulator over the terminal.
10. Once you have completed assembly of the Starter Source, connect the male Tamiya connector from the starter to the female Tamiya connector in the rear of the case.
11. After the battery has been charged (see below), attach together the Tamiya connectors. Push the *Starter* button and the starter should engage and rotate in a clockwise direction when viewed from the cone end.