

Amigo Mobility Electrical Troubleshooting Guide

- 1.0** Verify all wiring connections and turn the key switch, does the display light up?
A Yes – Unit does not have a problem that could be diagnosed by this guide.
- 1.1** No – Disconnect 4 pin charge cable from charger, and measure voltage between pins 1 and 4 of cable.
See fig. A. Is voltage 17V or higher? Reconnect when finished.
A Yes – Continue diagnostics w/ 2.0
- 1.2** No – Disconnect 4 pin charger connector at controller, and measure voltage between pins 1 and 4 of controller.
See fig. B. Is voltage 17V or higher? Reconnect when finished.
A Yes – Replace 4 pin charger cable and start over.
- 1.3** No – Disconnect battery harness cable from controller, and measure voltage inside female part of connector.
See fig. C. Is voltage 17V or higher? Reconnect when finished.
A Yes – Replace controller and start over.
- 1.4** No – Measure voltage across both batteries. Is voltage 17V or higher?
A Yes – Replace battery harness and start over.
- 1.5** No – Charge batteries and repeat test. If you find this to be the problem more than once, replace batteries.
- 2.0** Continued from Section 1.1 – With all cables connected properly, plug charger to wall outlet and observe display. Does the display light up?
- 2.1** No – Measure voltage at wall outlet, **as shown in fig. F.** Is AC voltage 90 VAC or higher?
A No – Relocate to another wall outlet and start over.
- 2.2** Yes – Disconnect 8 pin cable from controller. Measure voltage from M1+ to Neg (-) on batteries with charger plugged in. Is the voltage 17V or higher?
A Yes – See 3.1
- 2.3** No – For all tests hereafter, the 8 pin shall stay disconnected. Remove EM brake, Drive Motor, Seat Motor, H/T, and LED strip connectors one at a time, measuring M1+ after each part is removed. Is the voltage 17V or higher?
A Yes – Determine which connector/part influenced the change in behavior. Inspect this part for possible shorts to the chassis or Batteries of the unit, and replace if appropriate. Start over.
- 2.4** No – Plug in charger, then disconnect 4-pin charge cable from charger. Measure voltage from pin 1 to pin 4 on charger. **See fig. D.** Is voltage 27V or higher?
A Yes – See 3.4
- 2.5** No – Disconnect 3-pin cable from charger, measure AC voltage on the outside pins of the 3-pin cable. Is AC voltage 90 VAC or higher?
A Yes – Replace charger and start over.
- 2.6** No – Replace 3-pin charger cable and start over
- 3.0** Connect new 8-pin cable from controller to Enclosure. Activate key switch, does the unit power up?
A Yes – Replace existing 8-pin cable with new cable and start over.
B NO – See 3.1
- 3.1** Connect new Enclosure to 8-pin cable (from previous step). Activate key switch, does the unit power up?
A Yes – Replace Enclosure and start over.
- 3.2** No - Replace controller and start over.
- 3.3** With charge cable still disconnected and charger still plugged in, Measure voltage from pin 2 to 4 on charger.
See fig. E. Is voltage 20V or higher?
A No – Go back to step 2.5
- 3.4** Yes - With charger still plugged in, reconnect 4-pin connector to charger and disconnect 4-pin connector at controller. Measure voltage from pins 2 to 4 at end of cable. **See fig. G.** Is voltage 20V or higher?
A Yes – Replace controller and start
B No – Replace 4-pin charger cable and start over

Figure A

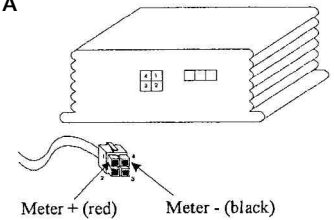


Figure B

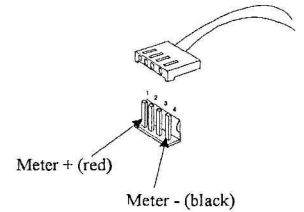


Figure C

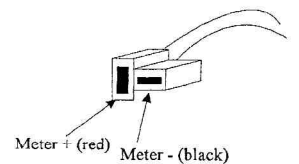


Figure D

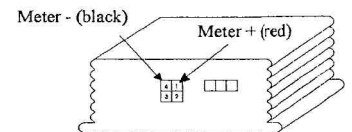


Figure E

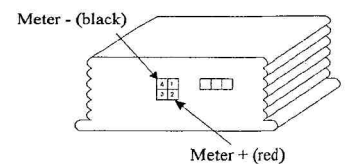


Figure F

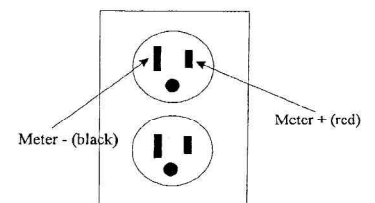
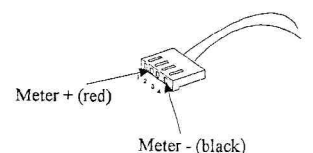


Figure G



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