



## INSTALLATION INSTRUCTIONS

<b>PART NUMBER</b>	<b>158-8670</b>
<b>PART DESCRIPTION</b>	<b>CHARGER HANGING KIT</b>
<b>REV DATE</b>	<b>8/14/2012</b>
<b>MACHINE MODELS</b>	<b>ION / KW WITH EXTERNAL BATTERY CHARGERS</b>



Basic knowledge of the operation of the lane machine

### TOOLS NEEDED:

Phillips Screwdriver      11/32" Wrench      Scissors      Ruler

### PARTS INCLUDED:

(1) 158-6990 Charger Hanging Plate	(3) 153-2806 8-32 x 5/8" FHMS	(5) 153-2019 8-32 Lock Nut
(2) 153-1049C 3/4" Harness Clamp	(1) 158-8426 Charger Cord Assy	(4) 153-2086 8-32 x 5/8" MS
(8") 153-0036 Lid Vibration Foam	(2) 153-2003 #10 Flat Washer	(1) 153-2984 #10 x 3/8" Pan Head MS
(5) 153-2002 #8 Flat Washer	(2) 154-0006 Rubber Bumper	(2) 153-2087 8-32 x 3/4" MS
(2) 153-2001 #6 Flat Washer	(1) 153-2013 #10 Lock Washer	(6) 153-1047 4" Wire Tie



### TECHNICAL NOTE

**Please thoroughly read the instructions prior to performing the installation of this assembly.**

**To avoid any potential problems, if at any time during the process you have a question, stop and contact our Tech Support department at the numbers listed below.**

Please visit our growing library of videos to see if these instructions are available!



[www.youtube.com/user/KegelBowling81](http://www.youtube.com/user/KegelBowling81)



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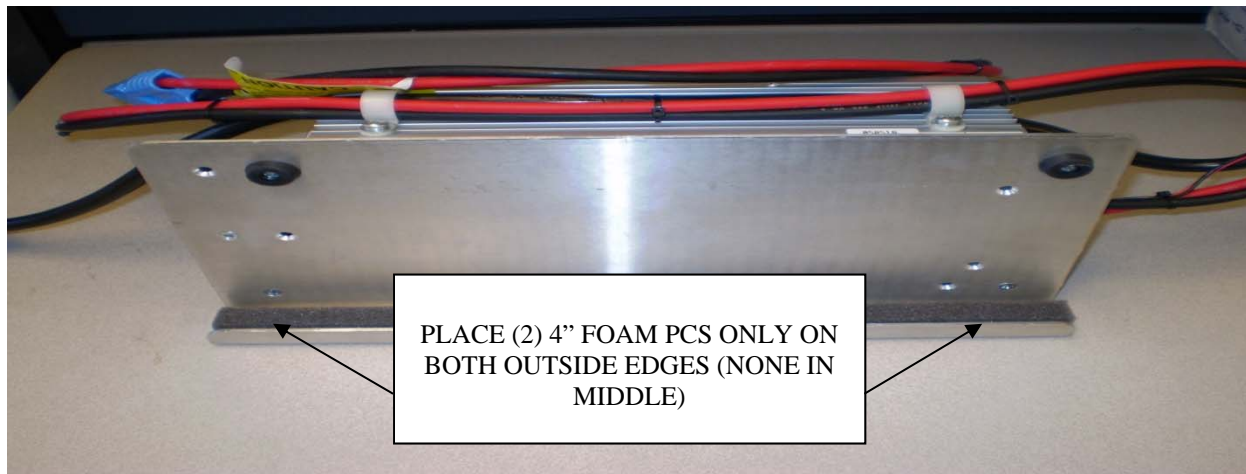
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**NOTE: THIS KIT IS DESIGNED TO WORK FOR ALL IOTA, ZIVAN AND PRO-TECH BATTERY CHARGER APPLICATIONS. PLEASE SEE DESIGNATED INSTRUCTIONS FOR THE PARTICULAR TYPE OF CHARGER YOU ARE MOUNTING.**

## **SECTION #1: IOTA BATTERY CHARGERS (Pgs. 2-4)**

1) Cut (2) 4" pieces of the 153-0036 Lid Vibration Foam. Stick a piece on the outside edges of the short leg on the underside of the 158-6990 Charger Hanging Plate.



2) Lay the 158-6990 Charger Hanging Plate on the bench so the shorter leg is down & away from you. With the fan towards the left, line the mounting tab holes of the Battery Charger up with the holes in the plate. Secure the (2) rear locations using a 153-2806 8-32 x 5/8" FHMS pushed up from underneath the plate through the countersunk holes. Secure on the topside w/ a 153-2002 #8 Flat Washer & 153-2019 8-32 Lock Nut. Tighten completely.

3) Push the (2) 153-2086 8-32 x 5/8" MS through the (2) 154-0006 Bumper Guards. Push the screws up through the bottom of the plate & secure on the topside w/ a 153-2002 #8 Flat Washer & 153-2019 8-32 Lock Nut. Tighten completely, but do not over-tighten or the screws will pull through the rubber bumper.

4) Remove the black or silver (see below) smart charger from the battery charger. Mount the smart charger on the left side of the plate using a 153-2806 8-32 x 5/8" FHMS pushed up from underneath the plate through the countersunk hole. Secure on the topside w/ a 153-2002 #8 Flat Washer & 153-2019 8-32 Lock Nut. Tighten completely.



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NOTE: IF SMART CHARGER IS SILVER: Mount the smart charger on the left side of the plate using a 153-2806 8-32 x 5/8" FHMS pushed up from underneath the plate through the countersunk hole. Secure on the topside w/ a 153-2002 #8 Flat Washer & 153-2019 8-32 Lock Nut. Drill and countersink a second mounting hole to secure the opposite end of the smart charger using the same fasteners. Tighten completely.



5) Place a 153-2013 #10 Lock Washer, 153-2003 #10 Flat Washer on the 153-2984 #10 x 3/8" Pan Head MS. Bend the two 6AWG wires & the power cord around the front side of the charger and place a 153-1049C 3/4" Harness Clamp over the wires . Using the very bottom slot in the side of the charger, secure the harness clamps to the charger so the clamps are positioned approx. 1" in from both ends of the charger. Neatly, wire tie cord to 6AWG wires. Due to possible longer screws used to secure smart charger to the side of the battery charger (1/2" instead of 3/8"), additional 153-2003 #10 flat washers are needed as spacers

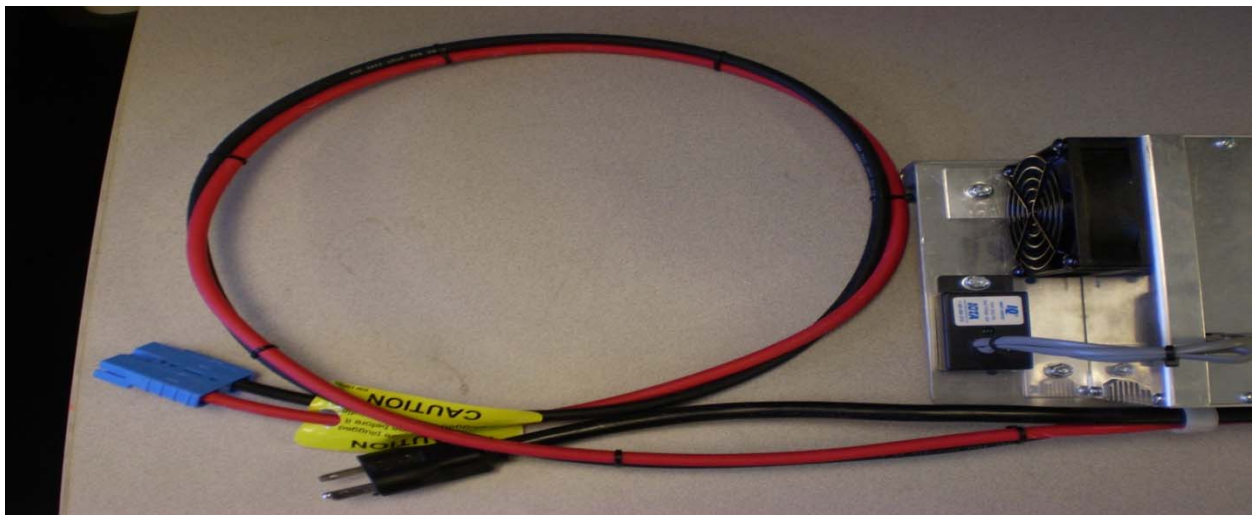
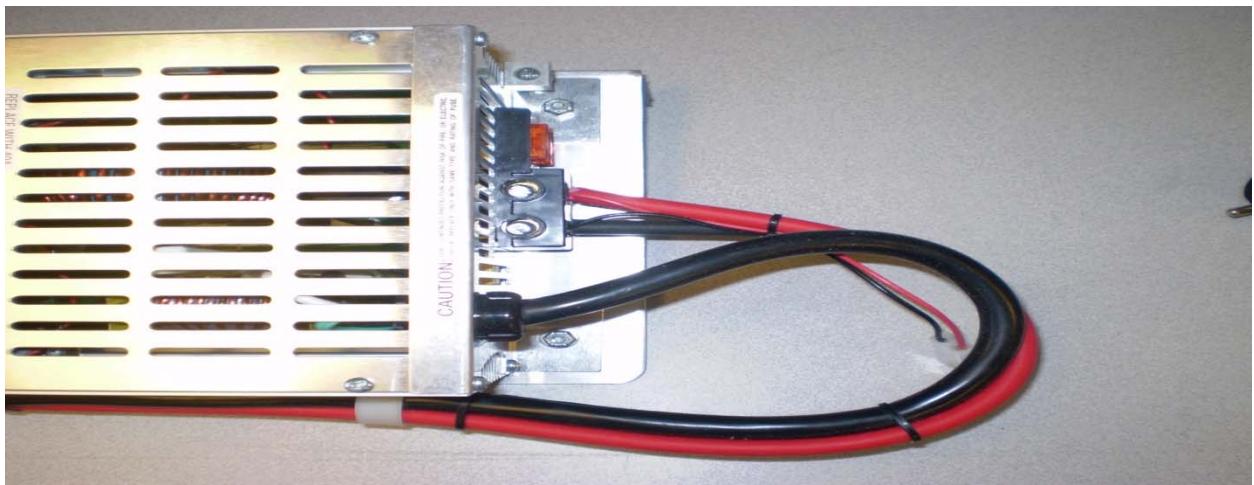


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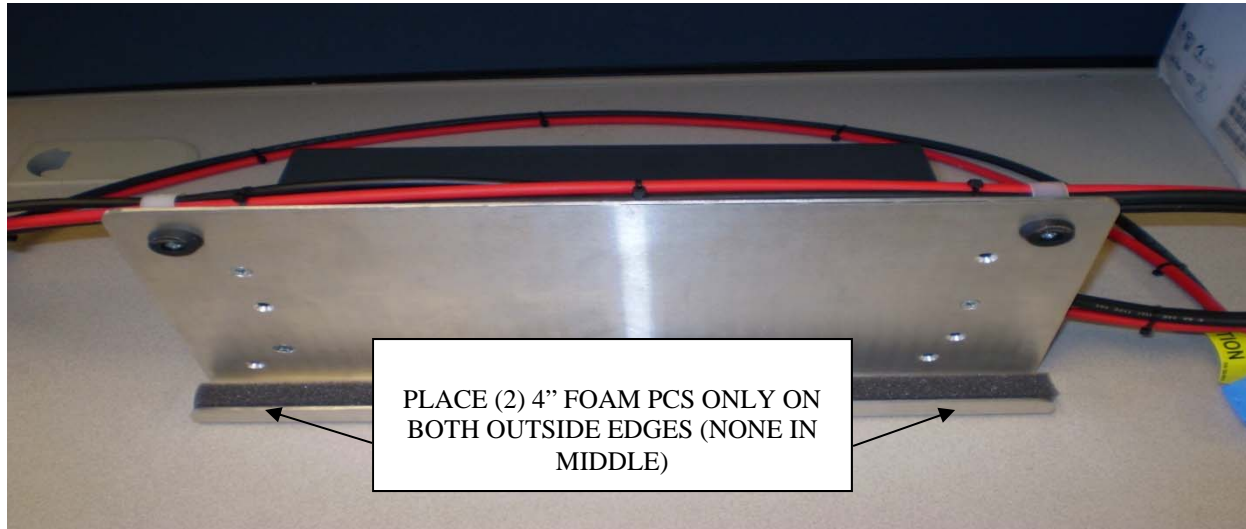
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## SECTION #2: ZIVAN BATTERY CHARGERS (Pgs. 5-6)

1) Cut (2) 4" pieces of the 153-0036 Lid Vibration Foam. Stick a piece on the outside edges of the short leg on the underside of the 158-6990 Charger Hanging Plate.



2) Lay the 158-6990 Charger Hanging Plate on the bench so the shorter leg is down & away from you. With the beveled / angled side of the charger away from you, line the mounting tab holes of the Battery Charger up with the holes in the plate. Secure the (3) locations using a 153-2806 8-32 x 5/8" FHMS pushed up from underneath the plate through the countersunk holes. Secure on the topside w/ a 153-2002 #8 Flat Washer & 153-2019 8-32 Lock Nut. Tighten completely.

3) Bend the 6AWG wires & run them around the front side of the charger. Bend the power cord back over itself (Ref picture below) & run together w/ the 6AWG wires in front of the charger. Push the (2) 153-2086 8-32 x 5/8" MS through the (2) 154-0006 Bumper Guards. Push the screws up through the two locations from the bottom side of the plate (Ref picture #1 for correct location). Place the (2) 153-1049C 3/4" Harness Clamp on the wires & secure the clamps on the topside of the plate using a 153-2002 #8 Flat Washer & 153-2019 8-32 Lock Nut. Tighten completely, but do not over-tighten or the screws will pull through the rubber bumpers. Neatly, wire tie cord to 6AWG wires.

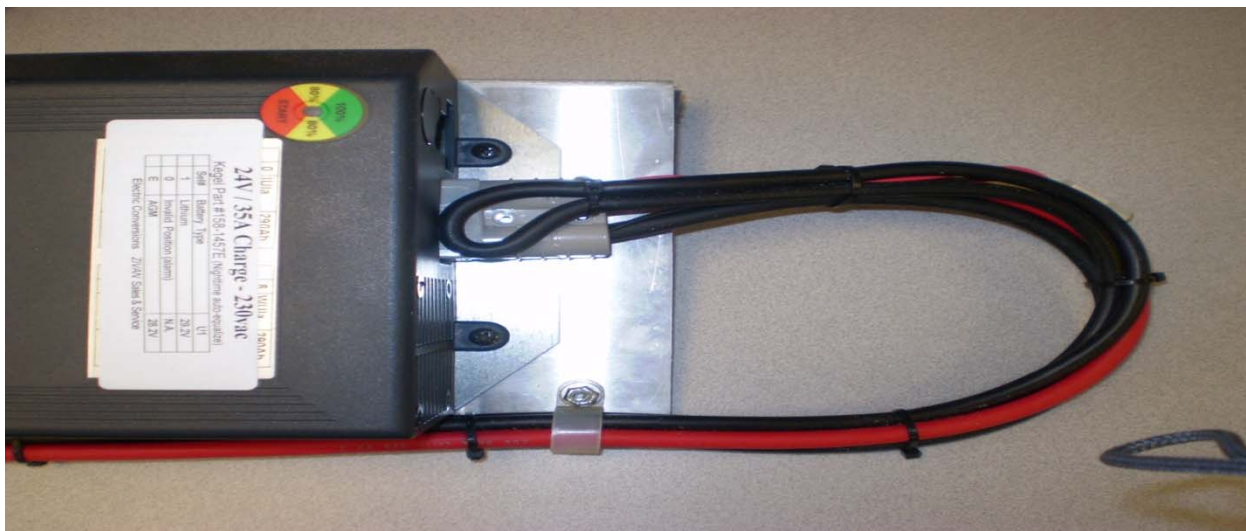


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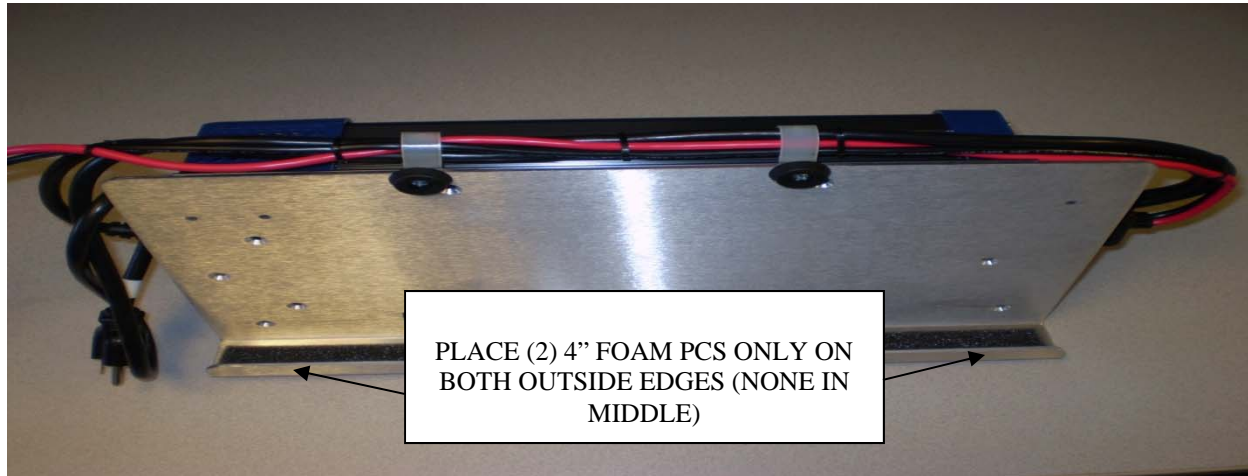
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## SECTION #3: PRO-TECH BATTERY CHARGERS (Pgs. 7-8)

- 1) Cut (2) 4" pieces of the 153-0036 Lid Vibration Foam. Stick a piece on the outside edges of the short leg on the underside of the 158-6990 Charger Hanging Plate.



- 2) Lay the 158-6990 Charger Hanging Plate on the bench so the shorter leg is down & away from you. With the larger plug w/ (red & black wires) towards the right, line the mounting slots in the Battery Charger Assy up with the holes in the plate. Secure the (2) rear locations using a 153-2806 8-32 x 5/8" FHMS pushed up from underneath the plate through the countersunk holes. Secure on the topside w/ a 153-2002 #8 Flat Washer & 153-2019 8-32 Lock Nut. Tighten completely.



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- 3) Bend the 6' DC Connector cable & the power cord around the front side of the charger as shown in the picture below & neatly wire tie together. Place (2) 153-1049C 3/4" Harness Clamps on over the cables/wires and secure to the plate as follows: Place a 153-2001 #6 Flat washer onto each 153-2087 8-32 x 3/4" MS & push through the (2) 154-0006 Bumper Guards. Push the screws up through the bottom of the plate & secure on the topside w/ a 153-2002 #8 Flat Washer & 153-2019 8-32 Lock Nut. Tighten completely.



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