



INSTALLATION INSTRUCTIONS

PART NUMBER	158-8650, 158-8651, 158-8652
PART DESCRIPTION	ODYSSEY BATTERY – PROPER CHARGING
REV DATE	1/6/2012
MACHINE MODELS	ALL BATTERY OPERATED MACHINE USING ODYSSEY



Basic knowledge of the operation of the lane machine

TOOLS NEEDED:

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



- Place orders with Distributor
- Maintenance reminders on phone
- Software updates
- How to videos

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Rev. 3.14

To obtain optimum life and performance out of your batteries, it is best to operate your lane machine so that the battery voltage falls below 23.5V before recharging the batteries! This allows the charger to go through all 3 stages of charging right away. If the batteries do not fall below 23.5V, the charger will not go through all 3 charging stages and will reduce the battery life.

It is VERY important to fully understand the proper charging sequence for the specific battery charger you have (IOTA – SECTION #1 or PRO TECH – SECTION #2). Read the appropriate section completely before re-charging the batteries

SECTION #1 – IOTA BATTERY CHARGER

925 Odyssey Batteries ~ ION model A and B machines

- The IQ smart charger (115v only) mounted to the charger that has a small green light should always be plugged into the top of the charger at ALL times unless you are running the machine with the power cord.

*** NOTE: ***for external charging situations only***, it is important to plug the charger into the machine first. When you plug the charger into the machine the green indicator light on the IQ smart charger will then blink 12 times to indicate that you are connected to the 24v circuit. Once you see this now you can apply power to the charger and the light should stay flashing as long as the machine voltage is below 24 volts. ***

- When the charger is plugged in, the IQ smart charger will go through 3 stages of charging. The green light on the smart charger is an indicator light notifying the user as to what stage the charging cycle is in. The first stage is the **BULK** charge and will flash at a rapid rate producing an output voltage of around 29.0 volts. This process will take approximately around 1 hour or so, depending on beginning voltage.
- After the initial BULK charge, the charger will go into the second stage of the cycle, also called the **ABSORPTION** charge. During this stage the green indicator light will still flash but at a much slower pace and the output voltage will drop to around 28 volts during this time. This process will take approximately around 4 or so hours to complete.
- The last stage of the charging cycle is the **FLOAT** charge. Once the IQ smart charger has gone through the first two stages it will enter the float charge where the green will stay



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solid. This is an indication that the battery charging process is complete and the output voltage will once again drop to around 27.0 volts.

- Once the machine has been on charge for 6 plus hours you can safely remove the plug from the lane machine. If you allow the batteries to settle for about 15 minutes plus the voltage on the machine should be around 25.6 volts.
- How far you discharge the batteries will have an impact on how long it will take to fully charge the batteries!

Note: Just having the red light on above the twist lock does not mean the charger is working. This just indicates power is present at the twist lock!

1200 Odyssey Batteries ~ ION & Walker Sport machines

- The IQ smart charger (115v only) mounted to the charger that has a small green light should always be plugged into the top of the charger.
- It is important to plug the charger into the machine first. When you plug the charger into the machine the green indicator light on the IQ smart charger will then blink 12 times to indicate that you are connected to the 24v circuit. Once you see this now you can apply power to the charger and the light should stay flashing as long as the machine voltage is below 24 volts.
- The IQ Smart charger will go through the same process on the 1200 model series battery described above in the 925 series battery. The difference is in the time that it takes for the batteries to receive a full charge. It will take approximately 2 hours to complete the initial BULK charge, 8 hours to complete the ABSORBTION charge and around 2 hours to complete the FLOAT charge. This will give you a total of 10–12 hours to complete the entire charging process.
- Once the machine has been on charge for 10-12 hours you can now safely remove the plug from the lane machine. If you allow the batteries to settle for about 15 minutes plus the voltage on the machine should be around 25.6 volts.



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680 Odyssey Batteries ~ Battery Pack

- Proceed w/ the normal machine battery charging steps noted above.
- Once charging process has begun, plug the battery pack plug into the blue battery disconnect housing plug mounted on the leftside plate, next to the Splash Guard
- This will allow the batteries in the battery pack to go through the proper stages of charging at the same time as the batteries in the machine.

BATTERY WARRANTY POLICY (03/11)

ODYSSEY 925

158-8651 PAIR OF BALANCED ODYSSEY BATTERY (PC925)

1-90 days @ 100% & Kegel pays freight

91-365 days; Pro-rated by day after 90 days w/ customer responsible for freight costs

ODYSSEY 1200

158-8652 PAIR OF BALANCED ODYSSEY BATTERY (PC1200)

1-90 days @ 100% & Kegel pays freight

91-365 days; Pro-rated by day after 90 days w/ customer responsible for freight costs

ODYSSEY 680

158-8650 PAIR OF BALANCED ODYSSEY BATTERY (PC680)

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SECTION #2 – PRO TECH BATTERY CHARGER

925 Odyssey Batteries ~ ION model A and B machines

- When the charger is plugged in, it will go through 3 stages of charging (**CHARGING, CONDITIONING & READY**). The green light on the charger is an indicator light notifying the user as to what stage the charging cycle is in. The first stage is the **CHARGING** stage, producing an output voltage of around 29.0 volts. This process will take approximately around 1 hour or so, depending on beginning voltage.
- After the initial Charging stage, the charger will go into the second stage of the cycle, also called the **CONDITIONING** charge. During this stage the output voltage will drop to around 28 volts during this time. This process will take approximately around 4 or so hours to complete.
- The last stage of the charging cycle is the **READY** stage. Once the charger has gone through the first two stages it will enter the Ready stage where the output voltage stays at a consistent 27V to maintain the maximum voltage charge. At this point, the battery charging process is complete.
- Once the machine has been on charge for 6 plus hours you can safely remove the plug from the lane machine. If you allow the batteries to settle for about 15 minutes and the voltage on the machine should be around 25.6 volts.
- How far you discharge the batteries will have an impact on how long it will take to fully charge the batteries!

Note: Just having the red light on above the twist lock does not mean the charger is working. This just indicates power is present at the twist lock!

1200 Odyssey Batteries ~ ION & Walker Sport machines

- After the machine has been in use and then is plugged in for charging, the charger will go through 3 stages of charging (**CHARGING, CONDITIONING & READY**). The green light on the charger is an indicator light notifying the user as to what stage the charging cycle is in. The first stage is the **CHARGING** stage, producing an output voltage of around 29.0 volts. This process will take approximately 1-2 hours depending on the beginning voltage.
- After the initial Charging stage, the charger will go into the second stage of the cycle, also called the **CONDITIONING** charge. During this stage the output voltage will drop



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to around 28 volts during this time. This process will take approximately around 6-8 hours to complete.

- The last stage of the charging cycle is the **READY** stage. Once the charger has gone through the first two stages it will enter the Ready stage where the output voltage stays at a consistent 27V to maintain the maximum voltage charge. At this point, the battery charging process is complete.
- Once the machine has been on charge for 6-8 hours you can safely remove the plug from the lane machine. If you allow the batteries to settle for about 15 minutes and the voltage on the machine should be around 25.6 volts.
- How far you discharge the batteries will have an impact on how long it will take to fully charge the batteries!

680 Odyssey Batteries ~ Battery Pack

- Proceed w/ the normal machine battery charging steps noted above.
- Once charging process has begun, plug the battery pack plug into the blue battery disconnect housing plug mounted on the leftside plate, next to the Splash Guard
- This will allow the batteries in the battery pack to go through the proper stages of charging at the same time as the batteries in the machine.

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91-365 days; Pro-rated by day after 90 days w/ customer responsible for freight costs

ODYSSEY 1200

158-8652 PAIR OF BALANCED ODYSSEY BATTERY (PC1200)

1-90 days @ 100% & Kegel pays freight

91-365 days; Pro-rated by day after 90 days w/ customer responsible for freight costs

ODYSSEY 680

158-8650 PAIR OF BALANCED ODYSSEY BATTERY (PC680)

1-90 days @ 100% & Kegel pays freight

91-365 days; Pro-rated by day after 90 days w/ customer responsible for freight costs



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