Video 1 – Checking the Batteries are connected & fully charged

* Set both the key and handlebar switches to ON.
* Check connections to all battery terminals are secure.
* Set your multimeter to measure DC Voltage, on a setting of at least 100V. This is indicated by a V symbol with a straight solid or dashed line.

(See the instructions for your specific multimeter for how to do this)

* Connect the black multimeter probe to the negative battery terminal, which is connected to the black battery wire.
* Touch the red multimeter lead to the positive battery terminal, which is connected to the bike by a red battery wire.
* Check the multimeter reading for the total battery voltage (See battery voltage table).
* Repeat this process for each battery individually (See battery voltage table).
* Connect and turn on mains charger. Check for an orange or green light.
* Connect black multimeter probe to the negative battery terminal connected to a black battery wire.
* Touch red multimeter probe to the positive battery terminal which is connected to the bike by a red battery wire.
* Check that the total voltage across the batteries increases.

Video 2 – Checking the Fuse

* Set both the key and handlebar switches to ON.
* Open fuse cover.
* Connect black multimeter probe to the negative battery terminal connected to a black battery wire.
* Touch the red multimeter probe to either side of the fuse, checking for the original total battery voltage at both sides of the fuse.
* Replace fuse cover.

Video 3 – Checking power to Key switch

* Remove the tank cover.
* Set both the key and handlebar switches to ON.
* Slide back the clear plastic cover on the red wire connected to the key switch.
* Connect black multimeter probe to the negative battery terminal connected to a black battery wire.
* Touch the red multimeter probe to this red wire, checking for your original battery voltage value.
* Replace plastic cover on wire.

Video 4 – Checking power from Key switch

* Remove the tank cover.
* Set both the key and handlebar switches to ON.
* Slide back the clear plastic cover of the blue wire which is connected to the key switch.
* Connect black multimeter probe to the negative battery terminal connected to a black battery wire.
* Touch red multimeter probe to this blue wire, checking for your original battery voltage value.
* Replace plastic cover on wire.

Video 5 – Check power to controller

* Remove the tank cover.
* Lift up dial plate.
* Set both the key and handlebar switches to ON.
* Slide back clear plastic cover on yellow wire which enters the controller.
* Connect black multimeter probe to the negative battery terminal connected to a black battery wire.
* Touch red multimeter probe to this yellow wire, checking for your original battery voltage value.
* Replace clear plastic cover on wire.

Video 6 – Checking the handlebar switch

* Set the key switch to ON.
* Identify the black plug for the handlebar switch and disconnect it.
* Bridge the two contacts in the plug connected to the wiring harness with a small wire.
* Check for throttle lights turning on.
* Reconnect plug.

Video 7 – Checking the throttle battery lights

* Set both the key and handlebar switches to ON.
* Identify the black plug with orange and grey wires leading from it and disconnect it.
* Connect the black multimeter probe to the negative battery terminal connected to a black battery wire.
* Touch red multimeter probe to the orange wire, checking for your original battery voltage value.
* Reconnect plug.

Video 8 – Checking voltage to the relay

* Set both the key and handlebar switches to ON.
* Connect the black multimeter probe to the negative battery terminal connected to a black battery wire.
* Touch red multimeter probe to the spade connector of the thin red wire on the relay, checking for your original battery voltage value.

Video 9 – Checking the resettable fuse

* Switch handlebar switch to OFF.
* Disconnect black battery wire from the terminal.
* Undo nut & bolt connecting red wires from the motor and controller & separate the wires.
* Reconnect the black negative battery wire to the battery.
* Switch handlebar switch to ON.
* Connect black multimeter probe to the negative battery terminal connected to a black battery wire.
* Touch red multimeter probe to the end of the free, thin red wire containing the resettable fuse, checking for original battery voltage value.
* Switch handlebar switch to OFF.
* Disconnect black battery wire.
* Reconnect the red wires and tighten the nut and bolt fastening.

Video 10 – Checking the motor

* Switch handlebar switch to OFF.
* Disconnect black battery wire from the battery terminal.
* Undo the nut and bolt fastening & disconnect the blue motor cable.
* Disconnect the thick red wire running to the relay.
* Reconnect the black battery wire to the negative battery terminal.
* Switch handlebar switch to ON.
* Connect black multimeter probe to the negative battery terminal connected to a black battery wire.
* Touch red multimeter probe to the blue motor wire, checking for your original battery voltage value.
* Switch handlebar switch to OFF.
* Disconnect black battery wire from the battery terminal.
* Reconnect the thicker red relay link wire to the relay.
* Reconnect the two blue motor wires together & tighten the nut & bolt fastening.

Video 11 – Checking the relay function

* Switch handlebar switch to OFF.
* Disconnect thin black wire from relay.
* Connect fly wire between this contact and the negative terminal on the battery.
* Switch handlebar switch to ON.
* Check relay for clicking.