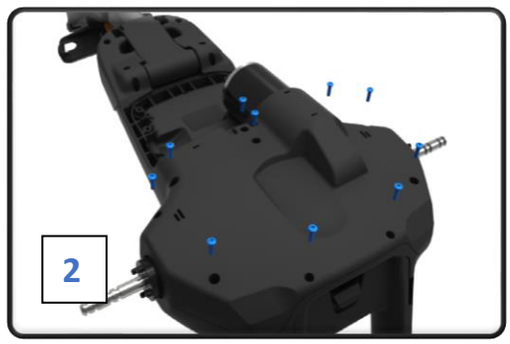
FX/CT

Motor Controller Replacement Instruction

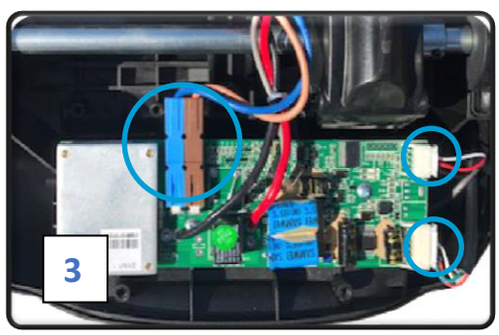
This following instruction applies to both Standard and EBS™ (Electronic Braking System) drive versions of the FX & CT PowaKaddy range electric trolleys.

This instruction details the method to replace the motor controller. There are some small differences in the drive assembly between the FX and CT models, but the assembly method is the same for both products.

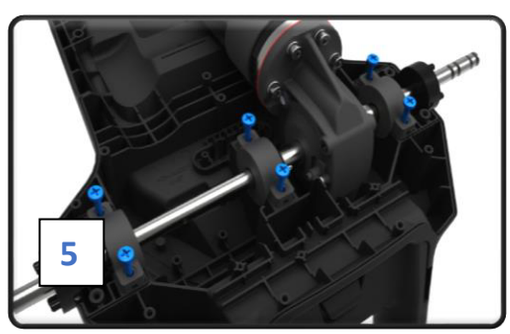


Repair As follows:

1. Place the trolley on a flat level surface or work bench. Fold the trolley down with the upper frame / handle folded over the front wheel. Turn over the frame to expose the lower frame cover. It is recommended to remove the rear wheels before starting.

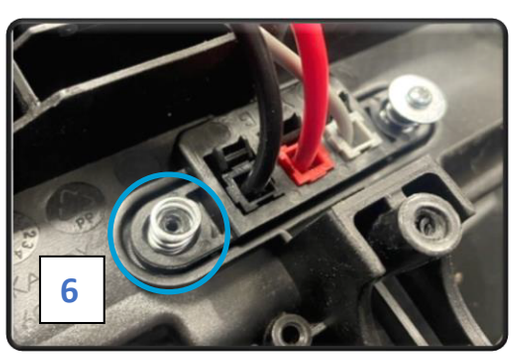


2. Remove the 10 x screws from the lower cover using PZ2 screwdriver. Pull the motor up towards you to help assist removing the lower cover.



3. Unplug the motor wires (brown & blue), handle wire and gear encoder wire from the motor controller.

4. Remove the 2 screws from the motor controller using a PZ1 screwdriver, cut the cable tie holding the motor and battery wires and lift the controller forward in front of the axle.



5. Remove the 6 screws securing the bearing housings on the rear axle using PZ2 screwdriver. Lift the drive assembly out of the frame to allow access the battery terminal housing.

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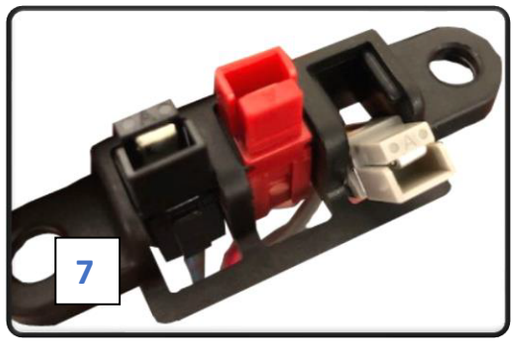
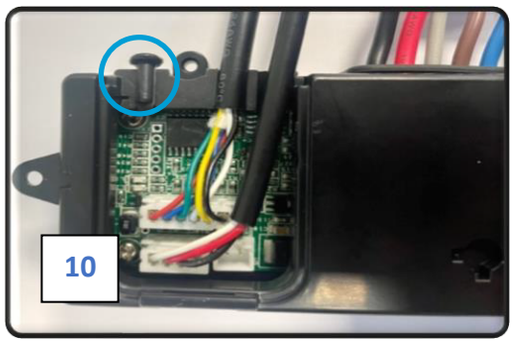
6. Remove the 2 x screws securing the battery terminal housing using a PZ1 screwdriver.



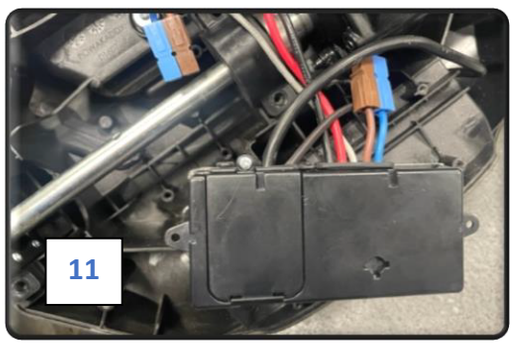
7. Remove the battery terminals from the housing and replace with the terminals from the new controller. Note the position and orientation as shown opposite.

8. Secure the terminal housing back into the upper frame as shown above. Add the spring followed by the screw and washer. Ensure the screw is only hand tight to prevent crushing the spring. (Torque- 1Nm)



9. With the new controller position out of the way, replace the drive assembly and 6 fixing screws using PZ2 screwdriver. Make sure the motor wires are not trapped under the motor after assembly to avoid damaging the wires. (Torque- 3Nm)

10. Remove the screw from the new controller hatch to expose the wire terminals underneath. Insert the 4way encoder wire and handle wire into position. Assemble the bung into the lower seal along with the 2 wires before refitting the hatch and screw.



11. Guide the handle wire and encoder wire behind the gearbox and up through the slot feature in the ribs at the centre of the frame. Secure the controller using the 2 screws removed from the old controller through the side tabs on the new controller. (Torque- 1Nm)

12. Insert the motor wire connections and add the cable tie to the motor/battery wires to hold together.

13. Before fitting the lower cover ensure no wires are trapped or touching the axle. Proceed to secure the lower cover using the 10 x screws using PZ2 screwdriver. (Torque – 1Nm)