

POWAKADDY SPORT

Motor Replacement PK3443

(For 'EBS Motor Replacement' follow 'EBS Gearbox Replacement' but change the motor.)



Approx fix time:
30min

Symptoms



Dead or Intermittent.



Dead, Connect your test handle to your test controller and plug into the motor, then plug into the controller a known good battery.



Intermittent, is likely to be either the controller to motor wire loose or a dead spot on the motor, follow the procedure for dead and run the motor slowly, by stopping and starting the motor you should be able to identify the dead spot.



Intermittent, before changing a motor inspect handle wiring (see Handle Replacement, check the controller, See Controller Replacement)

Tools Required



5mm & 4mm
Allen Key



Pin Punch



Flat Headed
Screw Driver



Hammer

Trolley Position



Upside Down

Removal

- 1 First remove both wheels and clutches. See 'Clutch Replacement' for guidance.
- 2 Pull back the gearbox covers (PK6897) either side of the gearbox, you may need to use a flat headed screwdriver to help you. See image 1.
- 3 Using your pin punch and hammer remove the drive pin (RK341A), you will then be able to pull the shaft (PK3460) out of the side arms and remove it. See image 2.
- 4 The large black bracket (SBox 0007-01) that is held between the motor and gearbox is held onto the rear cross tube and battery tray by four M5x14 hex bolts (4mm allen key) (PK3848), each has two washers (PK809 & PK996Black). The long bolts M5x16 are in the rear cross tube and the short into the battery tray. See image 3.

Image 1.

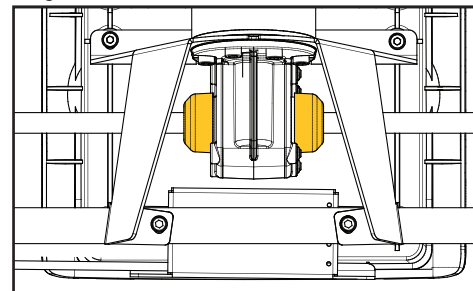


Image 2.

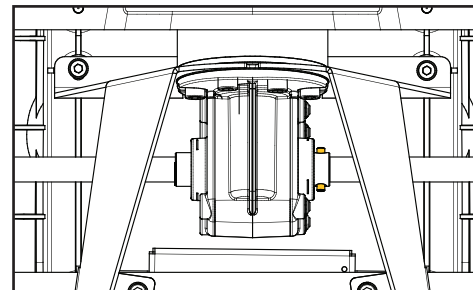
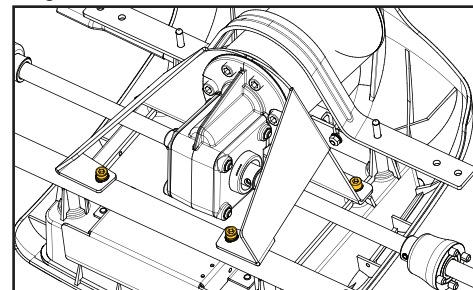


Image 3.



Removal

- 5 Remove all four bolts with their washers, next detach the controller to motor lead which is a grey connector. See image 4.
- 6 You will then be able to remove the motor, gearbox and bracket as a full assembly.
- 7 Remove the four M16x20 hex bolts (5mm allen key) (PK3694) and washers (PK299). See image 5.
- 8 To separate the motor and gearbox rotate the motor anti-clockwise, this will prevent damage to the gearbox, note there are two gaskets (PK3441A) one on the motor and one gearbox, retain these for fitting the new motor.

Image 4.

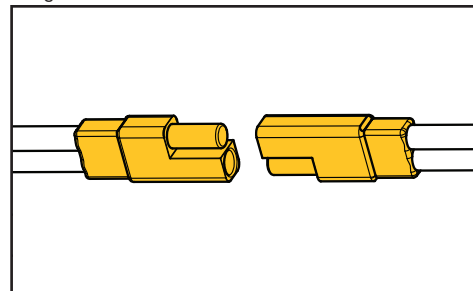
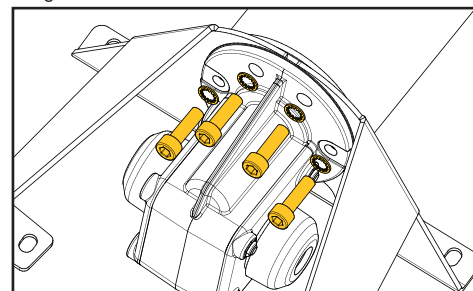


Image 5.

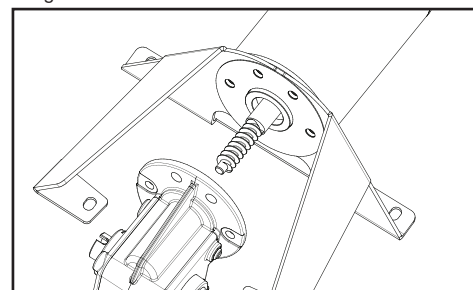


Replacement

- 1 Fit the new motor into the bracket with its gasket and align the screw holes, then put on the gearbox gasket, when fitting the gearbox lower the gearbox on gently if you feel any resistance gently rotate the gearbox left and right until it's in place. See image 1.
- 2 Refit the four bolts and washers hand tight (do not tighten yet).
- 3 Put the motor, gearbox and bracket assembly back onto the trolley, refit the four bolts and their washers hand tight (do not tighten yet)! The long bolts go into the rear cross tube and the short into the battery tray.
- 4 Once the bracket is on the rear cross brace and battery tray, reconnect the controller to motor cable.
- 5 Push the axle (PK3460) through the side arms and gearbox, you may find slight misalignment as you have not yet done up the bolts yet, do not put the drive pin back in yet.
- 6 Tighten the four gearbox to motor bolts first, then tighten the four bracket bolts.
- 7 Once done take the shaft back out and reinsert you should find the shaft goes straight through the side arms and gearbox with little or no resistance, if there is excessive resistance then loosen the bracket bolts and try again until you have alignment.
- 8 Before inserting the axle for the final time make sure you put the gearbox covers back on the axle.



Image 1.



Replacement

	9 Refit the drive pin. 10 Push the gearbox covers back onto the gearbox. 11 Finally refit the clutch you removed using a new pin and refit the wheel.	
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Checks

	1 Once fully assembled put a battery on the trolley and power up, create resistance on the wheels to ensure the trolley will power forward. 2 Bear in mind a new gearbox will be slightly noisier than one that has been used for a few rounds and that indoors a trolley can seem noisy, free running (no load and raised up) a trolley will tend to be noisier than when it's actually in use and under load. 3 Check all wiring connections and condition.
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