Scooter Service & Support

Rev Maintenance & Service

Removing Standing Platform
Hand Brake Assembly Replacement
Handlebar Assembly Replacement
Grips Replacement
Bell Replacement
Stem Catch Replacement
Secondary Lock Replacement
Brake Maintenance Instructions
Cleaning the Charging Port
Front Fender Replacement
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Tire & Tube Replacement
Motor Assembly Replacement
Skid Rail Replacement
Battery Replacement
Headlight Replacement

Motor Assembly Replacement

Difficulty

Rating: 2–3

Estimated Time: 60–90 minutes

Tools you will need:

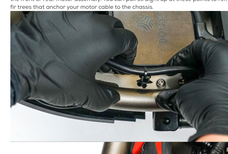
- 21mm open-end wrench, or 8-10" adjustable crescent wrench
- 4mm hex key
- 3mm hex key
- T10 Torx screwdriver

If you are working on the rear wheel, avoid touching the brake rotor during the entire process. If you accidentally touch the brake rotor, it can be cleaned with isopropyl alcohol. Any oil from your skin on the brake rotor can negatively affect the performance of the brake.

1. Remove the standing platform (hyperlink to Deck Replacement)

2. On the left-hand side of the scooter you will find a plastic cap protecting the motor cable on both the front and rear wheels. In order to remove a wheel you will need to first remove this cap, which can be accomplished using a 3mm hex key.

3. Following the motor cable from the wheel to the red and silver motor cable connection, you will see two or three securing points in the chassis depending on if you are working on the front or rear motor assembly. You can pull straight up at these points to remove the fir trees that anchor your motor cable to the chassis.



4. Disconnect the motor cable by unscrewing the the silver barrel in the middle of the connector and pulling the two halves straight apart. If working on the rear motor assembly, this will be the connection on the rider's right of the scooter. If working on the front wheel, this will be the connection on the rider's left.

5. If you are working on the front wheel, remove the motor cable by passing it through the holes in the chassis and the front cover.

6. If your new motor assembly already has a tire and innertube, skip to step 24.
7. Let all of the air out of the tire by pressing the needle inside the valve stem with anything small, such as a 4mm hex key, while simultaneously putting pressure on the tire in order to squeeze as much air out of the tire as possible.

8. Remove the tire retention ring from the side of the wheel opposite the motor cable by removing the seven screws and washers on the side of the wheel using your 4mm hex key. Keep the seven screws and washers in a safe place as they will be needed when reassembling your wheel. The tire retention ring can now be lifted off of the wheel.

9. Remove the rear wheel from the scooter in two steps. First, loosen the axle nuts on both sides with a 21mm open end wrench or 8-10" adjustable crescent wrench. Do not fully remove the nuts.

10. If you are working on your front motor assembly, you will need to remove the front cover to work with some of the wiring.
11. Remove the tire and innertube. Make sure the valve stem is pushed all the way up and out of the rim. If you are having trouble getting the valve stem all the way out of the rim, try to remove more air from your tire.

12. You should now be able to slide the tire off the rim. If you are having trouble removing the tire, check that the valve stem is not at all extending through the slot in the rim.

13. If you are working on the rear wheel, remove the brake rotor. Avoid touching the braking surface of the rotor during the entire process. If you accidentally touch the braking surface, it can be cleaned with isopropyl alcohol.
    1. Begin removing the brake rotor by removing the six screws with a 4mm hex key. You can reach around the edge of the brake rotor or reach your fingers through the holes in the brake rotor to only touch the center of it as you lift it off of the wheel and lay it on a clean rag.

14. You have successfully removed your motor assembly. Now attach a new motor assembly.
15. Make sure the innertube is properly positioned in the tire.

16. As you slide the tire back onto the rim, feed the valve stem through the slot in the rim making sure that the bend in the valve stem allows it to extend away from the wheel. Check that the tube is not being pinched under either tire bead.

17. Re-install the tire retention ring with the seven screws and washers from earlier. The notch in the ring lines up with the opening for the valve stem. Follow a star-shaped pattern when installing the screws, and tighten them gradually in order to ensure that they are tightened evenly. Tighten one screw, skip two screws, and tighten the third. Continue skipping two screws until all of the screws have been made snug.

18. If you are working on the rear motor assembly, reinstall the brake rotor. Continuing to only touch the center of the brake rotor and making sure that the rotation arrow is facing away from the wheel, thread the motor cable through the center of the brake rotor and line up the rotor with the holes on the side of the motor assembly. Install the screws similarly to how you installed the tire retention ring screws by tightening them gradually and following a star pattern.

19. If working on the front wheel, the motor cable should be reinserted through the holes in the front cover and chassis. The motor cable should lay all the way to the rider's left of the other wires.

20. Once the wheel is completely seated in the fork, slide the outside washers into the indentation on the fork to lock the wheel in place. Now tighten the nuts on either side of the axel using your 25mm open end wrench. Make these as tight as possible.

21. Reattach the plastic cap to protect the axle and motor cable using a 3mm hex key.

22. Use the valve extender to re-inflate the tire with a bike pump.

23. **Re-attach the standing platform by re-installing the four screws from earlier. Do not overtighten these screws. It is only necessary to tighten them until they are snug.**
24.
25. When reinstalling the arch shaped piece, make sure the pins at the bottom are fully inserted into the corresponding holes in the front cover.

26. Slide the tabs of the front cover back under the bottom cover of the scooter until the holes for the screws line up. If you are having trouble getting the front cover into place, make sure the wires on the rider's left of the scooter are not getting in the way and that the part extending from the back of the charger jack is going through its hole in the chassis.

27. Attach the motor cable connection by first pushing the two halves together according to the grooves and pins and then tightening the silver barrel.

28. Now secure the motor cable in place with the fir trees. Simply insert them into the holes in the chassis.

29. Separate the washers on both sides of the wheel, and begin sliding the wheel into the fork. Make sure the flat edges of the axle line up with the slot in the fork and that the cable is exiting the axle forward. On each side of the wheel, one washer should go on the inside of the fork, and the other should stay on the outside. If you are working on the rear wheel, the brake rotor will need to be inserted into the brake caliper.

30. (hyperlinke to platform replacement article)

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2 out of 7 found this helpful

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