



# SHIMPO RK-3D

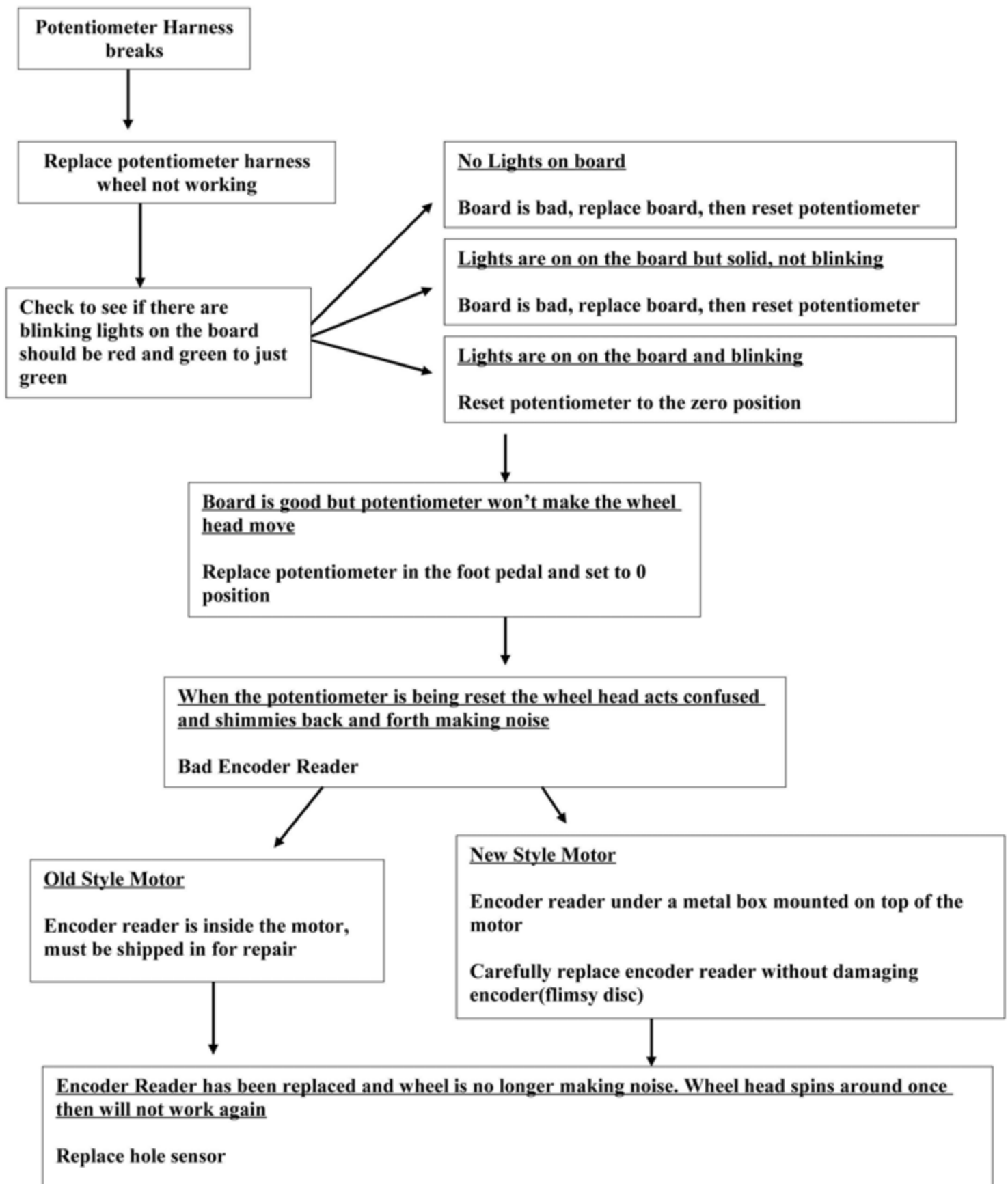
## Potter's Wheel Troubleshooting Manual



**NIDEC-SHIMPO CORPORATION**

# SHIMPO RK-WHISPER Repair Flow Chart

Created 12/10

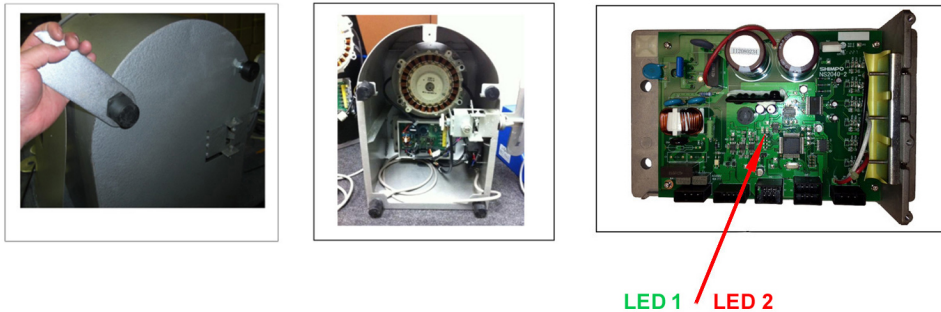


# Troubleshooting your Whisper wheel

Before starting, look over your wheel. Are there any broken or damaged parts? If so, please contact Nidec-Shimpo for replacement parts.

## If the wheel head does not spin after the power has been turned on

1) Remove the 4 feet off the bottom of the wheel, then remove the metal cover.



2) Turn the wheel off then on again while watching the control board.

- If you do not see ANY lights on the board, your board is bad, and needs replacing.

Please contact Nidec-Shimpo to order a replacement board, and follow the, "How to Replace the Whisper Controller" instruction guide.

- If you see both a **GREEN** blinking light, and a **RED** blinking light, this is normal. After a minute or so, the **RED** blinking light should turn off, and ONLY the **GREEN** light is left blinking.

In this case, follow the, "Resetting the Potentiometer" instruction guide.

**\*Note:** If the wheel head does not spin after resetting the potentiometer, then you may need to replace the potentiometer. Please contact Nidec-Shimpo to order a replacement potentiometer, and follow the, "How to Replace the Potentiometer" instruction guide.

- If the **RED** blinking light does not turn off, you may have a bad board, or a bad HOL sensor, or a bad encoder reader. Contact Nide-Shimpo for more assistance on which part may need replacing.

- If you see both a solid **GREEN**, and a solid **RED** light, then the board is bad, and needs to be replaced.

Please contact Nidec-Shimpo to order a replacement board, and follow the, "How to Replace the Whisper Controller" instruction guide.

# How to Adjust the RK-Whisper Pedal Tension



## Tools Required:

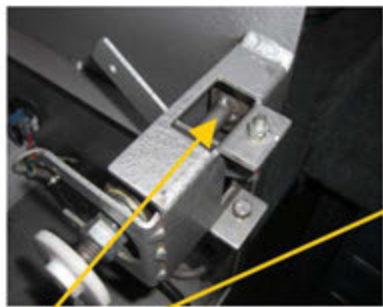
WD-40

RK-Whisper tool

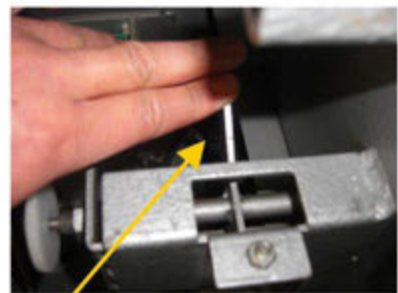
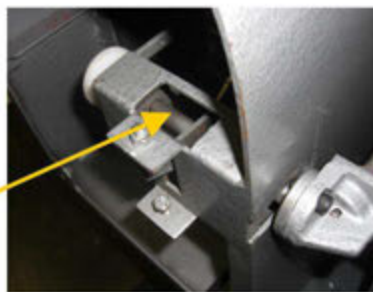
M-19 Wrench



1. Remove the four feet off bottom of the wheel using the RK-Wrench (spanner). Then remove the metal cover plate.



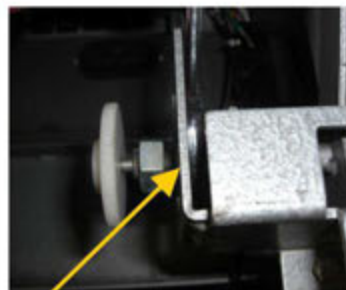
2. Use WD-40 to spray the two spots where metal touches metal.



3. Move the pedal or lever back and forth to ensure parts are fully lubricated with the WD-40.



4. Loosen the first bolt (double nut)

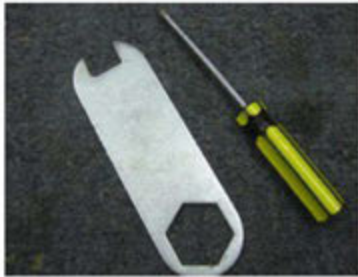


5. Loosen the second bolt to adjust the lever to make heavier or lighter tension.



6. Once you have set the tension, place the wrench to secure the bolt to the right and hold it there while tighten the bolt to the left in an upward motion.

# Resetting the Potentiometer

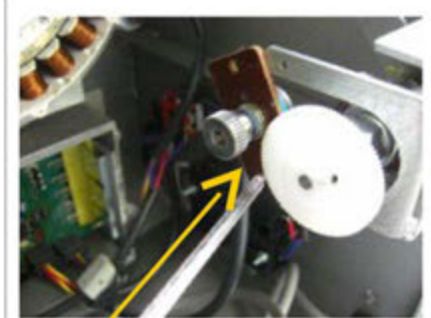


## REQUIRED TOOLS

- 1.RK-Wrench
- 2.Phillips screw driver



1. Remove the four feet off the bottom of the wheel using the RK-Wrench, (spanner). Then remove the metal cover plate.



2. Unscrew the top set screw then loosen the bottom screw. Separate the potentiometer (silver gear) from the white plastic gear.



3. Make sure the foot pedal is in the STOP position, then turn the power on.



4. Turn the potentiometer until the wheel head starts to turn. Then turn it in the opposite direction until the wheel head stops.



5. Screw the potentiometer back in place.



# How To Replace The Whisper Controller



## REQUIRED TOOLS

1. Wire cutter (to cut zip tie)
2. Zip tie
3. Phillips screw driver
4. Allen wrench
5. Spanner wrench

**Make sure your wheel is Unplugged before you start any repairs!**



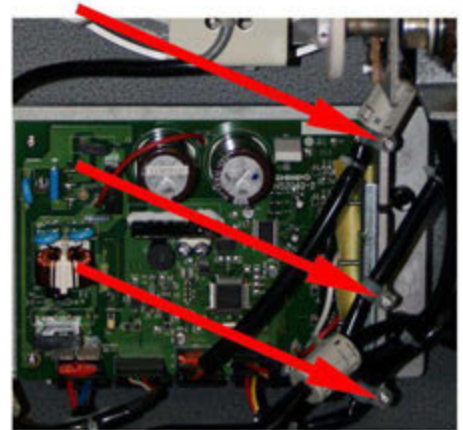
**Part #: ARKA3400130  
Whisper Controller**



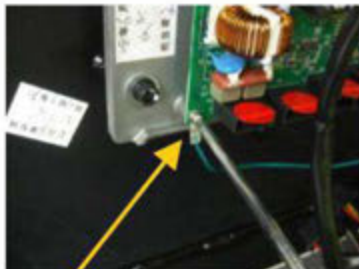
1. Remove the four feet off bottom of the wheel using the RK-Wrench (spanner). Then remove the metal cover plate.



2. Cut the zip tie to release cables that are zip tied together.



3. Unscrew the 3 cable holders.



4. Unscrew the green ground wire.



5. Un-clip all 5 cables from the control board by squeezing the sides of the clip and pulling.



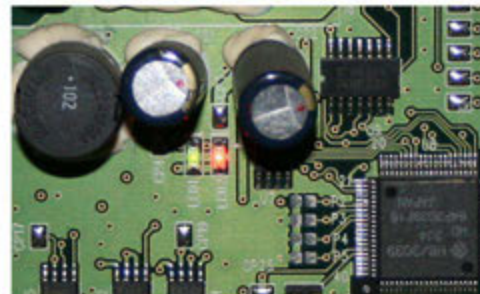
6. Unscrew the 4 mounting bolts as well as the green ground wire to take off the controller.



7. Install the new controller by mounting back onto the wheel. Remember to clip on all the wire harnesses and re-attach the ground wire.



8. Plug the wheel back in and turn the power ON.



9. The controller should flash both lights at start up.

LED1 = **Green** LED2 = **Red**



10. Very shortly after, the LED2 **Red** will turn off and only LED1 **Green** will be flashing.



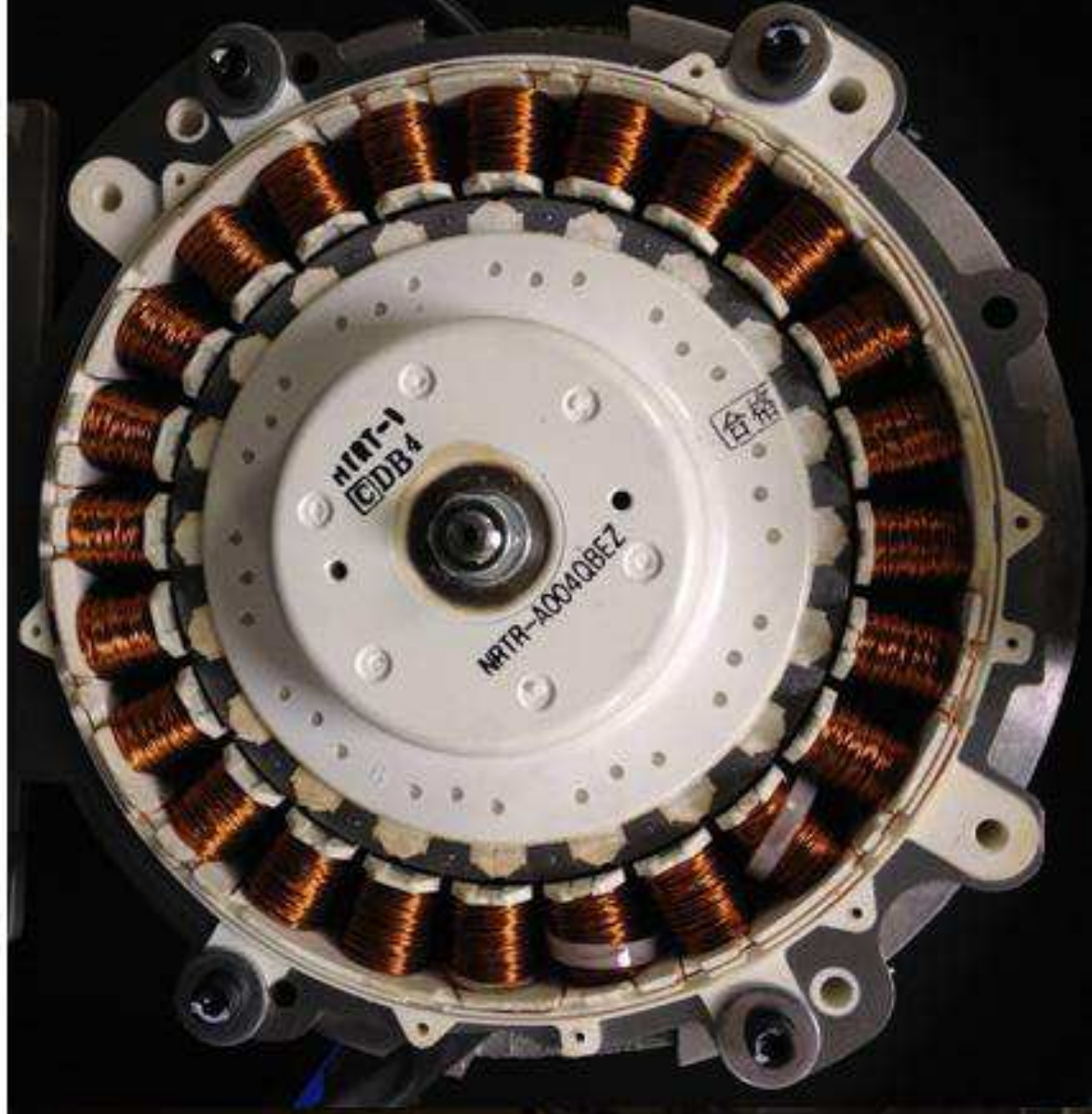
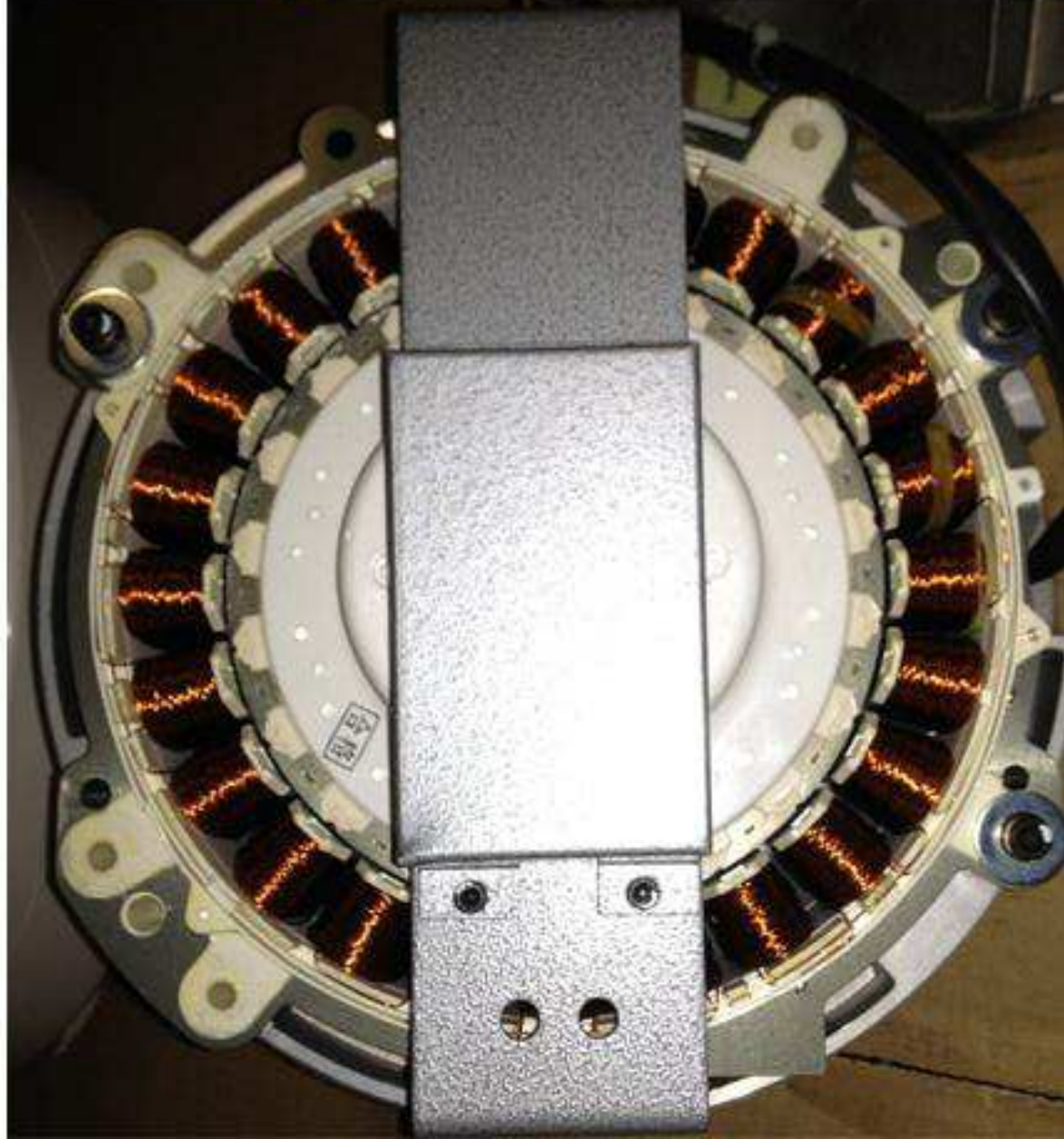
11. Make sure that all the parts are back in place. all wire harnesses are securely clipped in, the ground wire is fastened and the new controller is firmly screwed on. Finally, replace the metal cover.



# MOTOR FOR VL & RK WHISPER

NEW STYLE MOTOR

OLD STYLE MOTOR







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