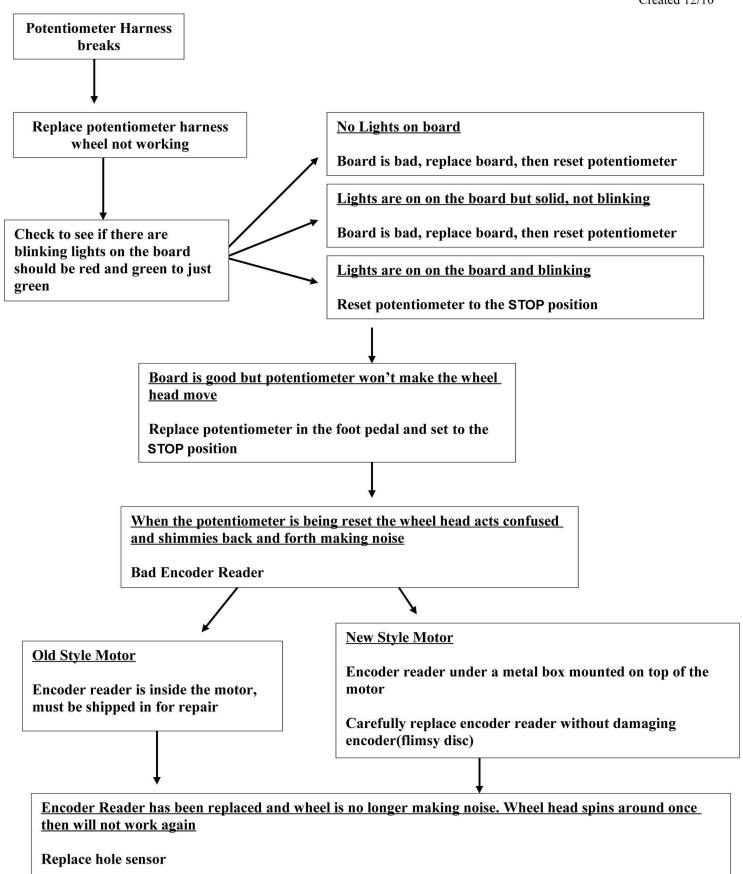
VL Whisper Repair Flow Chart

Created 12/10



Troubleshooting your Whisper wheel

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

If the wheel does not turn

1) Remove the blue under cover, by unscrewing all screws and then sliding the under cover off





2) Turn the wheel off and then on again while watching the control board. If the controller is in good condition, you should see lights (red and green, then green blinking). If there are no lights on the control board, you have a bad board. Please notify Shimpo your need to order a new board and have your wheel's serial number ready.

Replace the control board by following the, "How to Replace the Whisper Controller" instructions.

If the lights are now on at the control board and the wheel still doesn't turn follow the next set of instructions

If lights come on at the control board

- 1) Follow the, "Resetting the Potentiometer" instructions.
- 2) If while you are trying to adjust the foot pedal, the wheel head does not turn, the potentiometer is bad. Please notify Shimpo to order this part and have your serial number ready.

Replace the potentiometer by following, "How to replace the Potentiometer" instructions.

How To Prevent The Foot Pedal Cord From Being Pulled Out



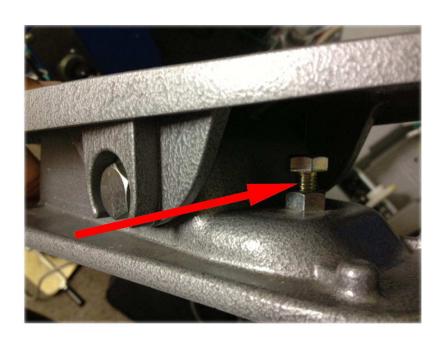
ATTACH A ZIP TIE TO THE OUTSIDE OF THE BLUE PANEL SECUREING THE FOOT PEDAL CORD



WRAP THE PEDAL CORD SEVERAL TIMES AROUND ONE OF THE FRONT LEGS AND SECURE WITH A ZIP TIE.

How To Adjust The Foot Pedal's Range of Motion

- 1. To increase the range of motion in the foot pedal, lower the set bolt. THEN reset your potentiometer to the new "stop" position.
- 2. To decrease the range of motion in the foot pedal, raise the set bolt. THEN reset your potentiometer to the new "stop" position.



How To Adjust The VL-WHISPER's Foot Pedal Tension



Tool Required: M-13 Wrench



New Type Pedal
Part# ARKA3600121
[Permanent]
Part# ARKA3500120
[Detachable]



Old Type Pedal Discontinued

New Type Pedal



1. Use an M-13 wrench on the right side of the foot pedal.



2. Adjust the U-nut to change the tension of the foot pedal.



Caution /
Do not try to unscrew the bolt on the left side (M17 bolt)

Old Type Pedal



1. On the right side of the foot pedal, loosen the outer bolt first, then loosen the inner bolt.



2. Loosen the inner bolt until the proper tension is achieved. Lightly tighten the outer bolt to meet up with the inner bolt.



Do not try to unscrew the bolt on the left side (M17 bolt)

PAGE VLW-009

Resetting the Potentiometer



REQUIRED TOOLS

- 1. Allen Wrench 5/32"
- 2. Phillips screw driver

Adjusting Potentiometer:



1. Unscrew the 4 feet using a Philips screwdriver



2. Remove the plastic cover and make sure the foot pedal is in the STOP position. Turn the power on the wheel.



3. Loosen the two screws connecting the potentiometer bracket to the foot pedal housing.



4. Move the potentiometer (silver gear) away from the white plastic gear so they are not touching.



5. Turn the silver gear until the wheel head starts to turn. Next turn the gear in the opposite direction until the wheel head stops.



6. When the wheel head stops, slide the potentiometer up against the white gear, then tighten the screws that mount the bracket to the foot pedal housing. Replace the plastic cover and the 4 screws. Your wheel should now run from 0/STOP to 250 rpm.

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

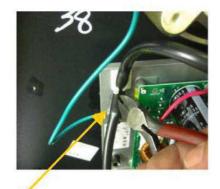




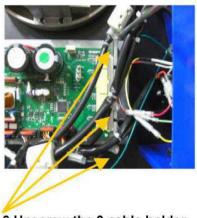
Part #: ARKA3400130 Whisper Controller



1.Remove the undercover by removing all undercover screws then sliding the undercover off.



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



3.Unscrew the 3 cable holder.



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 all the mounting bolts, including the green ground wire to take off the controller

PAGE VLW-019



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 shorthly 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 blue undercover.

MOTOR FOR VL & RK WHISPER

NEW STYLE MOTOR

OLD STYLE MOTOR

