

# Troubleshooting Masters Wheel

## **Chirping/High Squeak Noise**

1. Double-check the tightness of all bolts and the non-vibration rubbers. If noise still exists check motor and bearing holder.
2. Remove V-belt and slowly depress foot pedal to the fastest speed. If there is no noise then the motor is good.
3. Spin the large pulley by hand. If you hear a squeaking noise then the bearings are bad. Remove and replace the bearing holder assembly by taking the four bolts on top of the bearing holder (just below the wheel head).

## **Wheel head spins fast regardless of foot pedal position**

1. Wiring of potentiometer in foot pedal not crimped/soldered properly or pulled out by pedal cord. Repair soldering of potentiometer or replace entire pedal assembly with cord
2. If the wiring in the foot pedal is fine then replace the controller.
3. To find out whether it's the potentiometer or the controller check the voltage between S1 and S2. The voltage should run between 0 and 6 volts DC or higher while depressing the pedal. If the voltage change happens, but the wheel doesn't turn replace the controller. If the voltage change doesn't happen check the voltage between L and H. This should be a constant 6 volts DC or higher. If it is then the potentiometer or wiring to the potentiometer needs replacing.

## **Wheel head not smooth at low speed or stops and starts**

1. If at the same pedal position (at low speed), but the wheel head changes speeds then it may be at the controller. Adjust IR COMP counterclockwise on the controller using a small eyeglass size screwdriver. Overcompensation causes the motor to oscillate or increase speed when fully loaded. If this occurs turn IR Comp clockwise until symptoms stop.
2. If the speed of the wheel head changes quickly while only depressing the foot pedal slightly then it may be the potentiometer in the foot pedal. Check the wiring/soldering of the potentiometer in the pedal. Replace potentiometer or return entire foot pedal with cord for replacement.
3. If the pedal is slightly depressed and the wheel head catches stops/starts then it may be the metal not contacting the potentiometer in the foot pedal in the off position. Loosen the bolt on the side of the pedal (the bolt that the pedal pivots on). While the pedal is in the off position, the metal tab should just touch the spring-loaded projection of the potentiometer. Tighten side bolt.

## **Wheel head will not stop while pedal is in the off position**

1. Adjust the lever against the potentiometer. Loosen the bolt on side of pedal (the bolt that the pedal pivots on). While the pedal is in the off position the metal tab should just touch the spring-loaded projection of the potentiometer. Tighten side bolt.