



# Parts4Marx Tech Tips

003

## Motor Tune Up

For a motor tune up:

1. Spray the reversing unit with **electronic** cleaner. Avoid **electrical** cleaner; some are harsh and can melt plastics.
2. Clean the wheels and the center pickup. Use lighter fluid to remove any oil or grease.
3. Use 3 in 1 oil on the gears and bushings. Oil both sides of the armature as well.
4. Take small needle nose pliers and move the brush spring to the side of the tube.
5. Unbolt the brush plate and remove the bottom screw.
6. Remove the brushes, discard, and replace with RG Part No. 14 available online at: [www.trainpartsformarx.com](http://www.trainpartsformarx.com).
7. Clean the brush plate and use a Q-Tip with some lighter fluid and clean the inside of the tubes.
8. Clean where the bottom screw goes and replace the screw if it is rusted with RG Part No. 146 or 148B.
  - RG Part No. 146 is for 666/1666 and brush plates that have a center bushing.
  - RG Part No. 148B is for earlier brush plates with just a hole and may have a felt oiler.
9. Clean the armature with a wire brush on a Dremel tool, and then clean with lighter fluid.
10. Reassemble and make sure that the motor is turning freely, if not oil the gears and posts again.

**Note:** If the wheels are hard to turn, the motor will run sluggish, or not at all.

Other small motor part that are available online are RG Part No.217 Motor Nuts and RG Part No. 15 springs.