

## Electrical

### Motor Springs

Type of motor springs, fig. 1. You can change the tension of the spring by changing the angle of its two ends (by squeezing them closer together or pushing them farther apart). The tension of the spring affects the pressure of the brush against the armature. In general, the more tension, the more torque; the less tension, the more rpm.

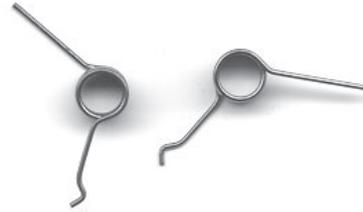
#### On setup sheet

You note which springs you used.

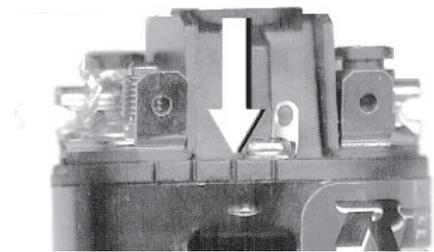
#### Other performance enhancements:

Motor timing is accomplished by loosening (but not removing) the two top screws of the endbell (not the brush hood screws) and turning the endbell slightly. Then the screws are tightened again. Turning the endbell to the right on Reedy motors gives you more rpm and less torque, to the left results in less rpm and more torque. The timing has already been set optimally by the factory, so carefully mark a tick mark on the can aligned to a tick mark on the endbell, fig. 2, (arrow points to one such tick mark) so you can later return it to its original position. Reedy strongly recommends you keep the factory setting. Do not turn your endbell to the left beyond the timing point on the can.

*Explanatory note:* There is usually a dent or stamp mark on motor cans to indicate the zero timing point. When the first notch on the endbell (the notch nearest the clamping screw) is aligned with the zero mark on the can, this is called zero timing. Zero timing means that the motor brushes are sitting directly in the center of the magnets.



**fig. 1** Motor springs. When the two ends are in a straight line rather than angled, tension is greater.



**fig. 2** Note the tick mark alignment before you change your timing.