

## Installing A New Motor In An AP-1



After the removal of the old motor assembly, complete with mounting hardware, the chassis should look like this. The new motor is inserted from the bottom so therefore has to run in the CW direction. The flange on the top of the motor fits into the old shaft hole for perfect alignment. The motor can use 5mm screws to mount it to the chassis, or, Epoxy which I prefer. If the screw holes are not perfect, mounting is difficult. Epoxy works great and allows you to twist the motor for best positioning of the wiring and speed control. Even though it doesn't show here, I put a very small shrink tubing on the shaft after removing the brass belt drive fitted to it. This gives better traction to the idler. Speed will be adjusted later to compensate.



This is how I like to mount it so the wiring terminals are facing the front of the chassis. This one I use Gorilla Glue which is strong enough to fix a gate hinge on a metal post. Its not going anywere.

The 150 ohm trimmer goes across these two terminals to adjust the speed of the motor

The hot or 12v + wire goes here. (marked on motor as +)

The ground wire is on the far left (marked with a -)

If you remove the fuse lamp from the circuit, you will get more torque to the motor. On the old motor that drew a lot of current, it was a safety factor. On the new one, it does not draw enough current to light it. If you want the interior light, simply wire it to the 12v post.

If your idler is in poor condition, I have the dimensions so you can turn one on a small lath using nylon or brass and a rubber tire available at most hardware stores.

**Courtesy of [www.all-unique.com](http://www.all-unique.com)**

