

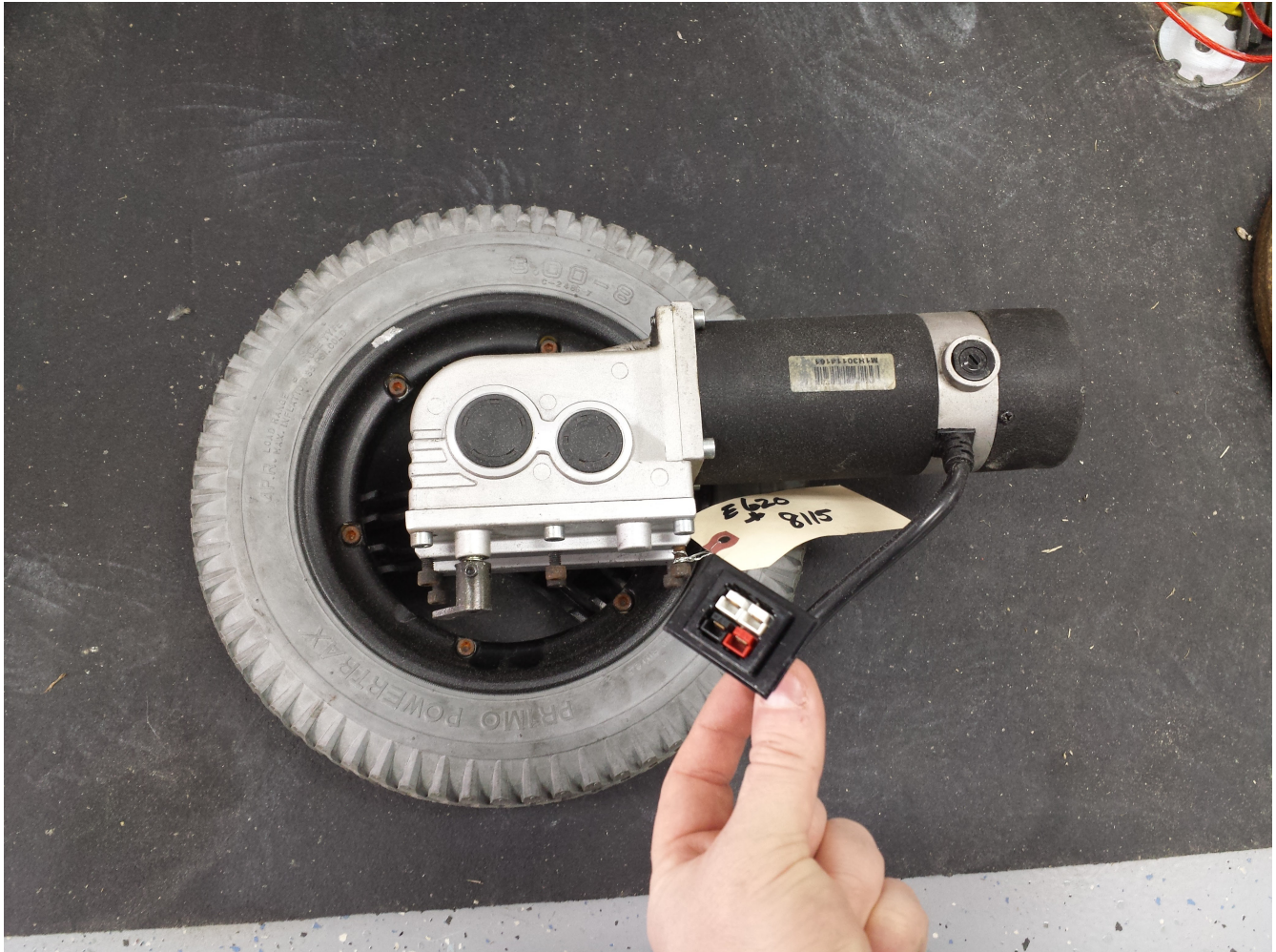


# Uninstalling Motor Brakes

Many models of electric wheelchair motors feature an electromagnetic brake at one end of the motor. The brake must have power applied to it or else it will keep the motor from spinning. In most cases where a prop will be used, hills and elevation changes are not an issue, and the EM brakes get in our way. The following steps detail the removal of an electromagnetic brake from a Pride Jazzy 1133 E620 Motor.

## STEP 1: Check to see if your motor has an EM brake

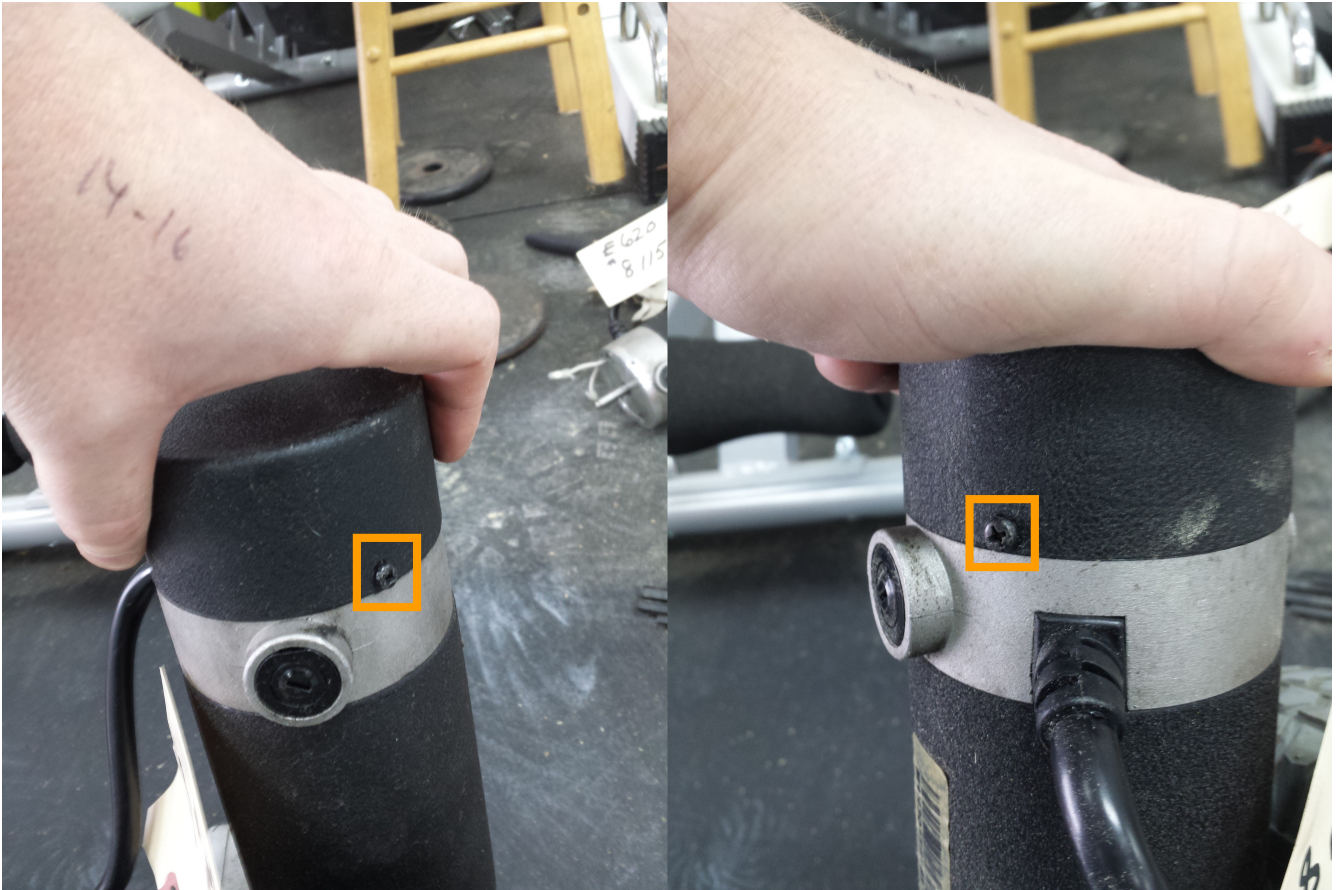
As stated above, an EM brake must have power applied to it to keep it open, so the motor will have some kind of connector in order to apply power. In the photo below, you can see we have 4 connectors to the motor. The RED and BLACK connectors are to the motor itself (we don't want to change those). The two WHITE connectors go to the brake. In the following steps we will be cutting the connection of these wires to the brake so we can remove it.



*Illustration 1: WHITE connectors go to the brake*

## STEP 2: Remove the EM Brake Cover

The brake on this motor was covered by a black metal cap held in place by two Phillips head screws. Not all motors will have the brake covered.



*Illustration 2: Remove these two screws to pop the cover off*



*Illustration 3: Cover Removed*

### STEP 3: Remove center retaining washer

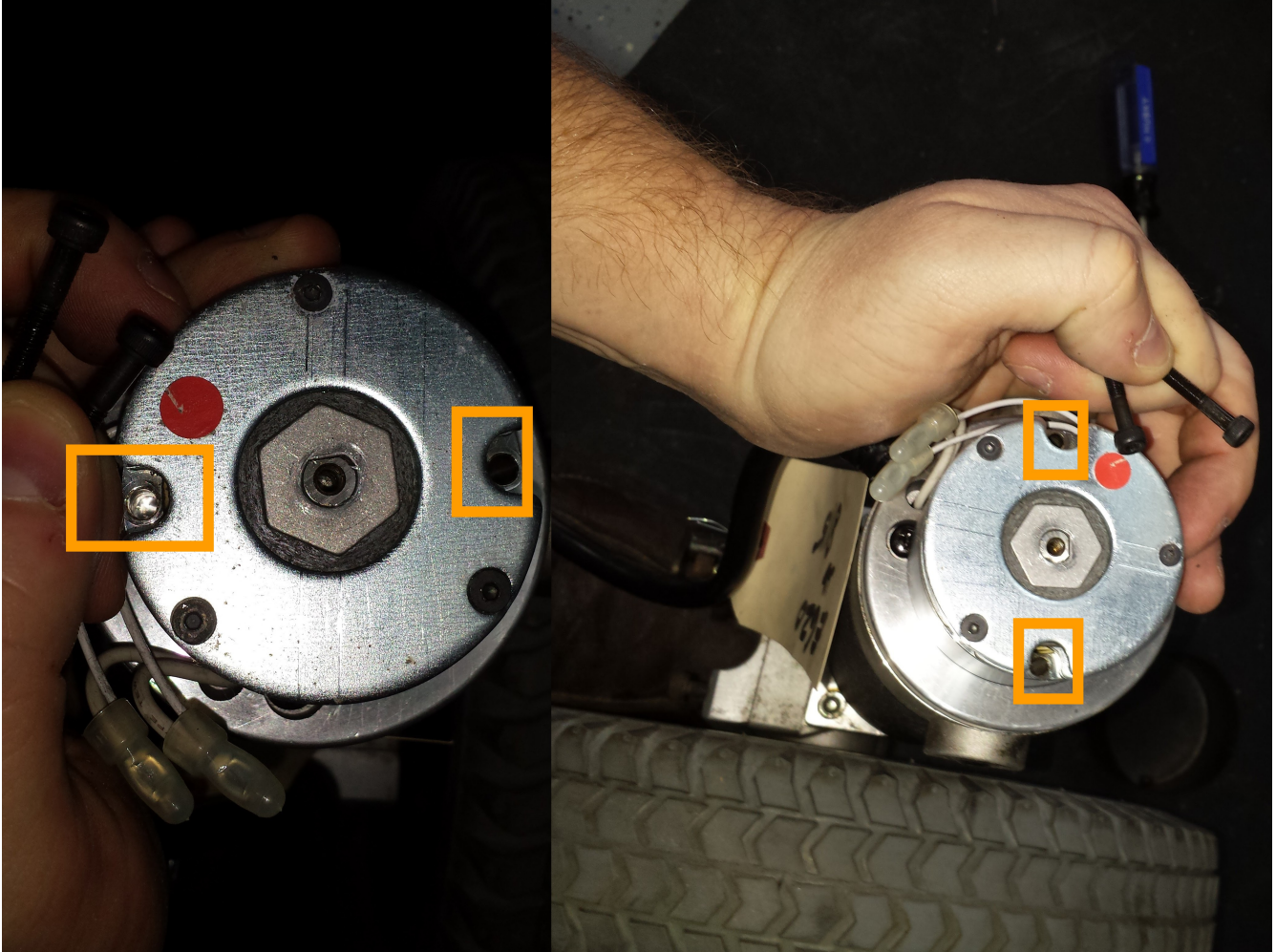
With the cover removed, we can now unscrew the center retaining washer. It is held in place by an allen head bolt. Use an appropriately sized wrench to remove this bolt. You may have to wedge the motor with something to keep it from spinning while you unscrew the bolt.



*Illustration 4: Remove the center retaining washer by unscrewing the center bolt*

#### STEP 4: Remove side bolts

There are two bolts that hold the EM brake to the frame of the motor (highlighted below). Remove these two bolts with an allen wrench.



*Illustration 5: Remove the side bolts holding the EM brake to the motor frame*

STEP 5: Gently pry the EM brake loose from the motor with a flathead screwdriver

At least for the motors demoed here, that should be all that's holding the brake onto the motor aside from the wires. Gently insert a flathead screwdriver between the brake and the motor and lift the brake away from the motor. Lastly, snip the two white wires going to the brake and remove it completely. Replace the cover and your motor should spin with no issues.



*Illustration 6: Pry and lift off the EM brake*