## **AE28RK Install Instructions**

## DANGER: Be sure to disconnect power before attempting this upgrade.

Begin by removing the top cover and disconnecting the wires from the brush holders. Remove the 2 screws holding the brush holder assembly in place (Photo 1). Use a screwdriver to pry the brush holder assembly down (Photo 2). Rotate the brush holder assembly around the armature until it can be removed (Photo 3). Repeat for second brush holder.

Replace the push connect terminals with #6 eye or spade connectors (Photo 4). Test fit the insulator, brush holder, brass washer and clip on the long pin. If necessary, drive the pin through the plastic bushing until the brush holder has less than 1/16" sideways play with the clip installed.

Drive the short pin in the outermost hole with a hammer and punch. The plastic bushing should protrude from the bottom by 1/16" (Photo 5).

Install the insulator on the pin, and start the long pin through the second hole and the insulator. Set the spring on the brush holder (Photo 6) and start it on the long pin (Photo 7). (There is not enough clearance to install this after the pin is installed unless the field is removed.) Carefully drive the pin in, making sure the brush holder does not bind. Set this pin to the same depth as the first one (Photo 8).

Turn the edger over so that the brush holder will stay in place. Use a pair of tweezers to place the brass washer on the pin (Photo 9), and install the clip (Photo 10).

Using a hook or small pliers (Photo 11), pull the end of the spring into place on the short pin (Photo 12). Photo 13 shows how the parts go together.

Check that the brush holder can be pulled back and will return forward under spring pressure.

Attach the wire to the brush holder using the short screw provided (Photo 14). Install the brush using the long screw and oval washer (Photo 15).

Repeat the above procedure for the second brush assembly.

Turn the armature so that the brush lines up with one of the grooves (Photo 16). Check that the other brush lines up with a groove as well. If it is off, remove the brush, screw and washer. Use a pair of pliers to hold the tail of the brush holder against the short pin (Photo 17), and bend the brush holder slightly (Photo 18). Reinstall the brush and check it again. If both brushes do not line up evenly, repeat the above procedure until they do.

Make sure all the wires clear the armature, then test run the edger. It is recommended that the brushes be seated using a commutator stone.

After seating the brushes, check for excessive sparking when running. Excessive sparking is most commonly caused by the brushes not being lined up properly (as outlined above), or an out of round armature. If the armature is out of round, you will typically see a brush hopping as the motor slows down after being turned off.

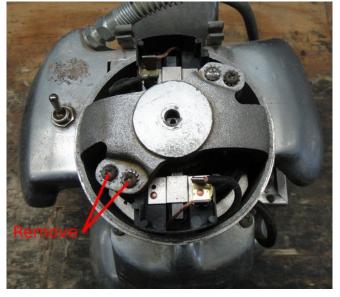


Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo7



Photo 8



Photo 9



Photo 10

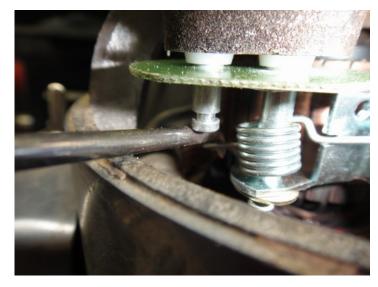


Photo 11



Photo 12



Photo 13



Photo 14



Photo 15

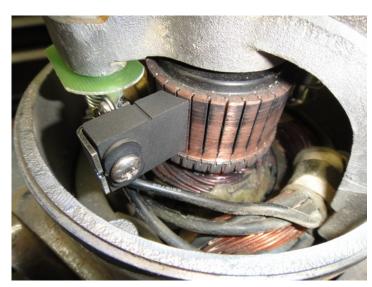


Photo 16



Photo 17



Photo 18