

AVR, DC Diode, Brush Assembly installation

This bulletin covers the following Champion Power Equipment models:

196cc – 439cc Engine Powered Generators

Note: Read instructions completely before performing service.

1. Remove trim cover over generator end opposite the Engine. This is the cover with the cooling vents made on it. There are (2) 5mm bolts holding the cover on.
2. After removal of the cover, you will be able to view the electrical components as you can see in the picture attachment I have enclosed.
3. The largest black box at the lower left hand is the AVR and is held by (2) 5mm bolts. Remove these bolts and then remove the two wires attached to the Brush assembly and release the Nylok plug-in. The Nylok plug has a finger lock you must depress before pulling the male and female connectors apart.
4. If you are replacing the Brush assembly (A) or DC Diode (B) assembly you will need to remove the (1) 5mm bolt holding the assembly in the end cover housing. A) The brush assembly will remove by rotating upward and off the alignment pin. There is a small amount of spring tension on the assembly and you will have to place the new brush assembly over the pin and then pull downward toward the attaching bolt hole for installation of the bolt. Do not over tighten this assembly since is made of a plastic material and will not stand that extra tightening without breaking it. B) The Diode assembly is simple removal and alignment of all wires positioned from the positive terminal on the old one to the new one. Make sure all wires are firmly in place before putting the cover back on. Make sure the wires are not going to pinch when the cover is tightened down.
5. Now you can install the AVR assembly with the two 5mm bolts removed earlier. Snap the Nylock plug together and place the wires with the press on terminals on to the Brush assembly Pink (+) which is positive on the left hand terminal on the brush assembly as you look directly at the end of the generator. Brown (-) which is the negative on the right hand terminal. Press the terminals firmly until they full are seated.
6. Do a final inspection to make sure the wires will not be pinched when installing the outer cover. Then install the outer trim cover with the 2 (5mm) bolts that hold it in place. Fingers tighten the bolts to be sure the cover is seated properly against the End cover housing before finally tightening them.
7. Start your generator and confirm your Voltmeter is reading properly. Normal reading will be 240v – 250v (volts) at all times. This only reads highest voltage.

If you have any questions, please contact Champion Power Equipment:

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