

End Cover Assembly Installation Instructions

This bulletin covers the following Champion Power Equipment models:

C46535	3500/4450w. Generator
C46540	3500/4450w. RV Generator

Note: Read instructions completely before performing service. A small amount of fuel may be present when the hose is detached from fuel valve. Do not try this installation until all presence of fuel has dissipated. A few minutes will evaporate any fuel present.

1. Remove the handle (2 – 8mm bolts) for mobile movement from the main frame.
2. Turn fuel valve to off position and relax hose clip at fuel valve and remove the fuel hose with a firm pull.
3. Remove the fuel tank and gently remove through the top of the main frame. Find a secure place for the tank while the rest of the installation is being done.
4. Remove the muffler guard with mounting bolts; remove the muffler with the two nuts on the engine end of the muffler. Remove the two mounting bolts on the opposite end and remove muffler from the chassis.
5. Remove the generator end cover bolts and remove cover.
6. Loosen 8mm nuts on end cover assembly mounting lugs and loose two nuts underneath rubber isolator attaching to main frame. Do not remove rubber isolator at this time, just loosen the fastening nuts.
7. With a 7mm or 8mm socket “loosen only” the electrical components mounting bolts. (See figure 1 for locations). 1 bolt through the middle of the DC rectifier diode, 2 bolts through the AVR, 2 bolts through the terminal block and 1 bolt holding the brush assembly.
8. Now you need to remove the wires from the brush assembly (wire with positive tag installs on the left-hand brush contact and nylok connector plug attached to the AVR. Remove the AVR and place in a safe location.
9. Remove the remaining bolts previously loosened for the electrical components. DO NOT remove anymore wires at this time.
10. With a piece of paper make a note on the colors and terminal location for the generators field winding connectors. Drawing a picture with colors of the wires and locations 1-4 on the terminal block will allow reassembly to be simple. Upon removing the holding nuts (8mm socket) and washers, the terminals will lift off the stud bolts all at the same time. You will remove these wires through the cover opening after following the next few steps first.
11. There are 4 bolts to remove holding the end cover in place. They can be removed with a 100mm socket with an extension on a ratchet.
12. Now it is time to remove the loosened nuts from the rubber isolators on the frame side of the end cover you are replacing. Place a support underneath the generator to keep its end from hitting the frame when you remove the end cover. You could also place the generator on the frame vertically with the engine facing down. This will give you plenty of stability too, your

- choice. Lift the generator end cover upward and remove the isolators from the frame. Lower generator on a support a pile of rags, a 2x4 about 18" long or equivalent across the lower frame member. This provides temporary support only.
13. The end cover can now be removed with just a slight tap on the side of the end cover with a wooden hammer handle, do not use a steel handle, and a pulling motion from the end cover in the direction of the removal outwardly. It will remove without difficulty with a few taps. Do not aggressively hit with the steel end of a hammer please. If you have any difficulty with its removal at this stage, please call for further instructions. When the cover removes, carefully remove all electrical components through the opening at the top side of the end cover.
 14. You are now ready to reassemble with the new end cover.
 15. Place the wiring harness through the new end cover. With the cover in hand, carefully center the cover over the end bearing and tap with wood hammer handle carefully being sure to cover centers on the bearing. Once you are sure the cover has centered on the bearing safely, then position the end cover to align with the securing bolt holes. Place the long bolts through the cover and finger tighten till they just begin to pull the end cover down. If you use a cross tightening sequence on these bolts, the cover will draw down evenly and squarely. Do not firmly tighten until cover appears to be fully against the generator housing.
 16. You can locate the isolator rubbers in the end cover feet at this time. Place both in the holes of the end cover before lowering into the frame holes. Place the four nuts on the mounting studs on all sides of the isolator rubbers. Tighten all of these nuts at this time.
 17. Place all the electrical components in their appropriate place in the end cover and carefully tighten, but not too tight, all these bolts. Since they are plastic holders you must not over tighten or they might break. Just a firm tightening will do.
 18. After the electrical components are back in place, you can put the trim cover on with the two 5mm bolts that hold the cover. Be careful not to pinch any wires when placing the trim cover on the end cover housing.
 19. Now is the time to connect the wires previously cut. Strip the ends of the cut wires about ¼" of insulation. Place a piece of shrink tubing provided over the longest end of each of the wires. You may choose to solder the connection if you have a soldering gun or use the provided butt connectors and crimp the wires on to these connectors. If you use the butt connectors, use the large shrink tubing. If you use the soldering method, then use the smaller shrink tubing. Once the connection is made you can slide the shrink tubing over the connection and by using the heat of a soldering gun or a cigarette lighter on the tubing, this will shrink the tubing tightly over the connection. This is a professional method for not having to put electrical tape around such a tight location.
 20. Using the wire tie wraps enclosed, pull excess slack of wire up inside of the panel assembly and secure as shown in picture 4. This will keep the wire from lying against anything that might wear through it.
 21. Install the black panel cover with the three long holding screws. Position the panel assembly in its location on the corner mounts on the frame and install the four 6mm attaching bolts.

22. Place the muffler assembly over the cylinders exhausts studs and loosely tighten the 8mm nuts that attach to the studs. Place the bolts through the muffler end mounting locations and then loosely tighten. Continue the final tightening at the cylinder exhaust studs and finish with the rear muffler mounting bolts. Install the muffler heat shield and attach with the five 6mm bolts and tighten.
23. Place the fuel tank in place with the fuel valve facing the air cleaner side of the engine. Install the four 6mm mounting bolts loosely and then tighten after all have been started. Finish by placing the hose with clip onto the fitting at the fuel valve.
24. Install the handle for moving the generator using the two 8mm bolts.
25. Your installation should be complete now. Start the generator as you would normally and confirm the volt meter is showing voltage. This will confirm your generator is working properly.

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

Champion Power Equipment, Inc.
10006 Santa Fe Springs Rd.
Santa Fe Springs, CA 90670

Phone: 1-877-338-0999

Email: tech@championpowerequipment.com