



1. Remove hardware and cover plates from:
 - a. top of control unit
 - b. front of control unit
 - c. drive end housing
2. Remove and save voltage adjust plug from control unit assembly (this step is not necessary when replacing B+ terminal).
3. Carefully remove potting in front of terminal strip in control unit to expose six terminals.
4. Disconnect from terminal strip: two field coil wires, B+ wire, ground wire, two stator Y-tap wires, and phase (AC) wire.
5. Remove and save the hardware attaching the control unit assembly.
6. Carefully dig out all of the potting inside the control unit cavity. DO NOT DESTROY ANY INTERNAL WIRING.
7. Remove control unit assembly from cavity.
8. Clean out any loose debris in exposed cavity hole and from wire terminals that will be reattached to the control unit assembly.
9. **Replacing control unit assembly ONLY—proceed to step 19 on page 2.**

Replacing B+ terminal—proceed to step 10 at right.

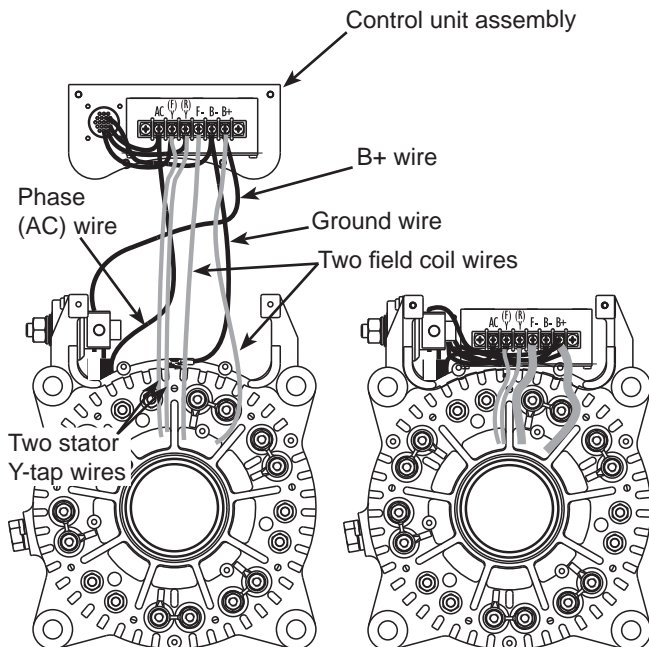


Figure 1 – Replacing Control Unit Assembly and/or B+ Terminal on N1388 Alternator

- Follow steps 10-18 below to complete B+ terminal replacement:
10. Remove and save hardware and stud on external B+ terminal.
 11. From internal B+ stack, disconnect hardware, B+ wire, and rectifier wire.
 12. Remove and save hardware attaching the defective B+ terminal to the housing.
 13. Remove defective B+ terminal.
 14. Apply bead of Dow Corning® SE9186L RTV coating or equivalent on mating surfaces between new B+ terminal plate and drive end housing.
 15. Install new B+ terminal in cavity. Use a suitable adhesive such as Loctite® 222 on three mounting screws. Torque mounting screws to 4.8 Nm/40 lb. in.
 16. Using sandpaper and a cloth, remove all potting debris from both rectifier wire terminals and B+ wire terminal to ensure the mating faces make clean contact with each other.
 17. Reconnect wiring removed from internal B+ stack in step 11 according to the stacking order shown in Figure 2. Torque to 28-29 Nm/20.8-21.6 lb. ft.
 18. Proceed to step 19 on page 2 to complete assembly.

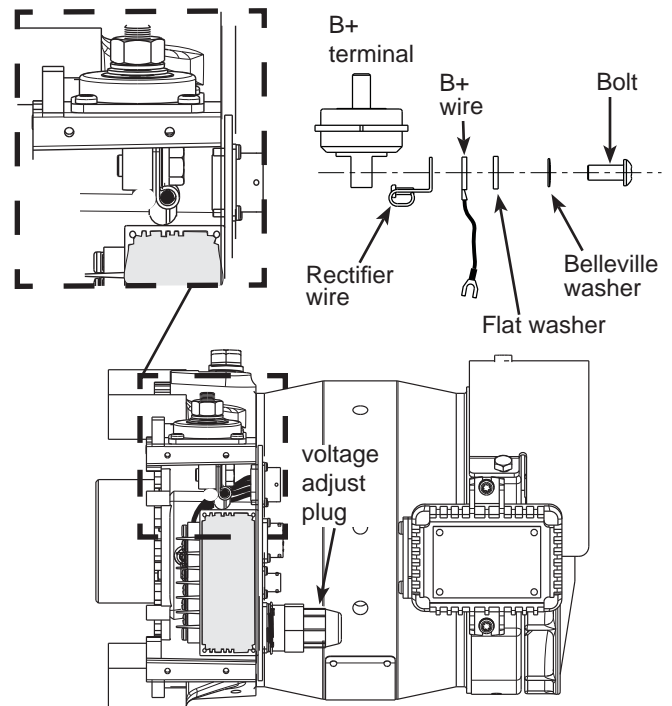


Figure 2 – Internal B+ Stacking Order

19. Apply bead of Dow Corning® SE9186L RTV coating or equivalent on mating surfaces between control unit assembly and drive end housing.
20. Install control unit assembly in cavity. Use a suitable adhesive such as Loctite® 222 on screws. Torque mounting screws to 2.3 Nm/20 lb. in.
21. Reconnect wiring removed from terminal strip. See Figure 1 on page 1 and Figure 3 below. Torque screws to 1.2 Nm/10 lb. in.
22. Apply bead of Dow Corning® SE9186L RTV coating or equivalent on mating surfaces between top control unit cover plate and drive end housing.
23. Re-install top control unit cover plate. Use a suitable adhesive such as Loctite® 222 on screws. Torque mounting screws to 2.3 Nm/20 lb. in.
24. Turn alternator on anti-drive end and brace to prevent movement. Press down all exposed wiring so they will be covered by replacement potting.
25. Fill the cavity inside the control housing with GE Silicones® RTV11® silicone 2-part system:
 - a. Mix 148 drops (0.1 ounce) of cure per 1 cup of RTV. Mix well to prevent incomplete deep-set. At this point, there will be a half hour before mixture thickens and two hours until mixture deep-sets.
 - b. Pour mixture into cavity until it covers the terminal screws on the terminal strip. Make sure all screws are covered with new potting material.

WARNING

Product warranty will be void if cavity is not filled as indicated in step 25.

26. When new potting is dry, re-install control unit cover plate and drive end housing cover plate. Use a suitable adhesive such as Loctite® 222 on screws. Torque mounting screws to 2.3 Nm/20 lb. in.
27. Re-install voltage adjust plug in appropriate position for use.
28. If B+ terminal was replaced, re-install external hardware. Use a suitable adhesive such as Loctite® 222 on the middle of stud threads. Screw stud into terminal until only 11/16" is protruding from surface of terminal. See Figure 4.

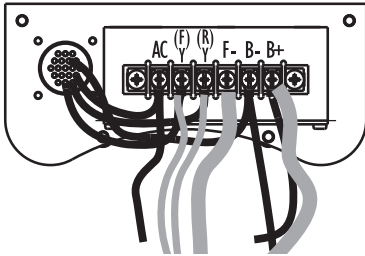


Figure 3 – Reattaching Wiring to Terminal Strip

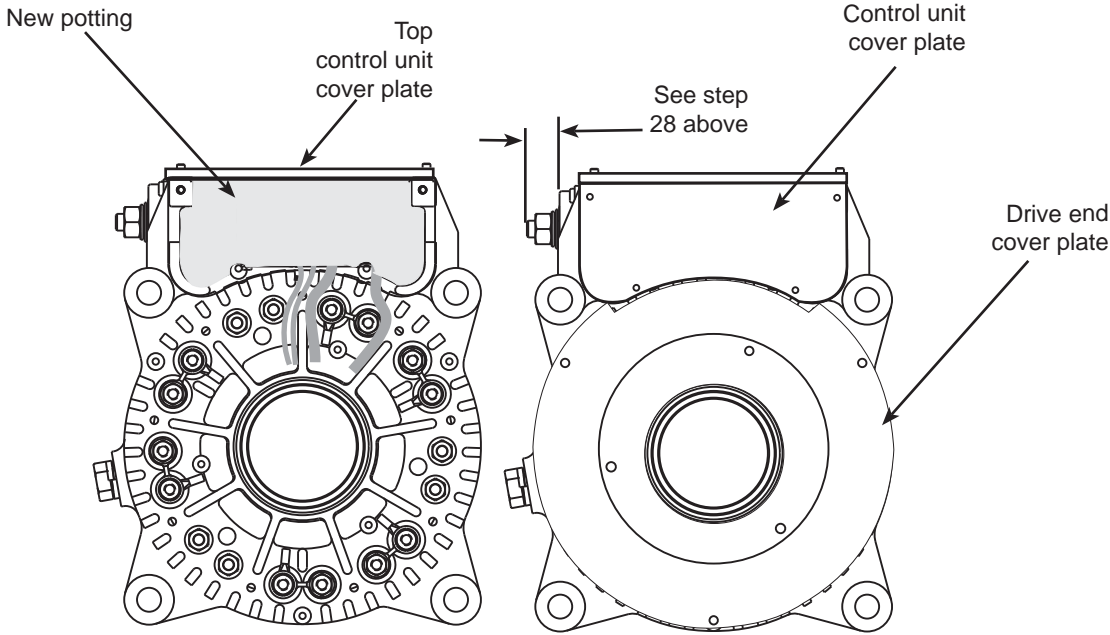


Figure 4 – Replacing Control Unit Assembly and/or B+ Terminal on N1388 Alternator

If you have questions about your alternator or any of these instructions, or if you need to locate a Factory Authorized Service Dealer, please contact us at:
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