C. E. Niehoff & Co.
BRUSHLESS ALTERNATORS

N1381 Alternator
Using N7300 Conversion Kit
Conversion Instructions

The following term is used to bring attention to the presence of hazards of various risk levels or to important information concerning product life.

DANGER Indicates the presence of hazards that will cause severe personal injury, death, or substantial property damage if ignored.

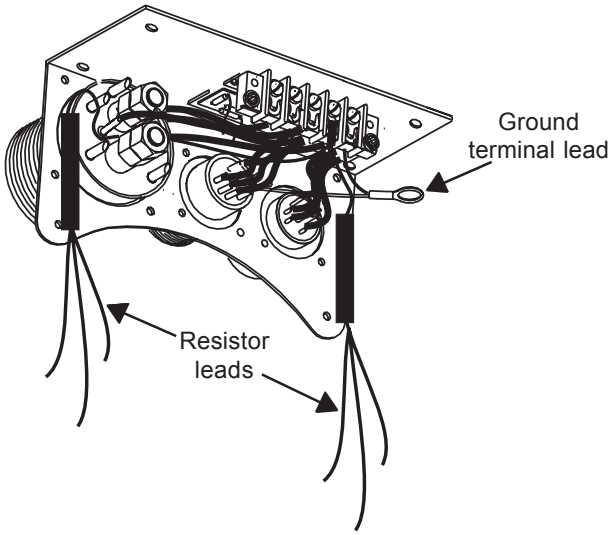

Figure 1—New Control Unit Assembly

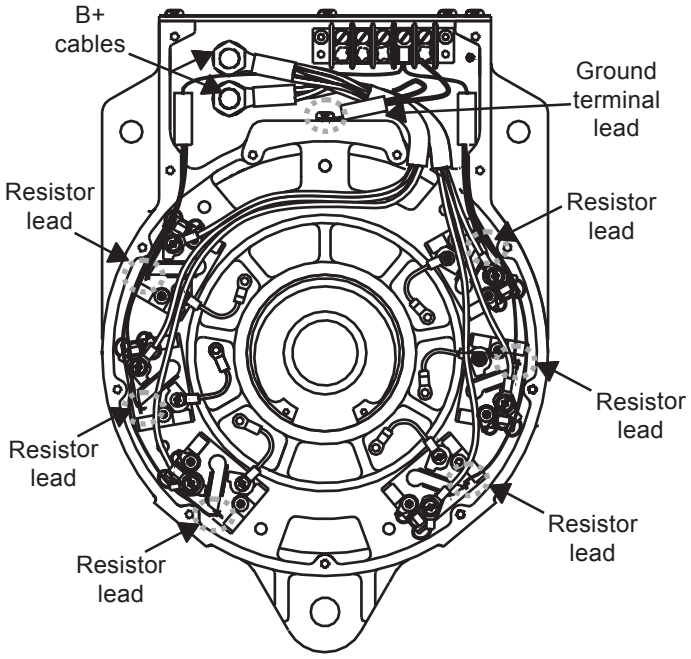

Figure 2—Drive End (DE) Housing Connections

DANGER Do not allow hardware to drop inside alternator. Loose hardware inside alternator cavity or stator windings or field coil will cause substantial equipment damage.

Disassembly

1. Disconnect B+ cables from inside the control unit.
2. Unsolder resistor wires from modules.
3. Remove potting from control unit.
4. Remove screws holding control unit assembly to housing.
5. Remove and discard control unit assembly.
6. Clean old potting from inside control unit.

Assembly

1. Attach new control unit assembly (see Figure 1) to housing. Use suitable adhesive, such as Loctite® 222. Follow manufacturer's instructions. Torque new hardware to 5 Nm/45 lb. in.
2. Connect B+ cables inside the control unit. Torque hardware to 15 Nm/135 lb. in.
3. Using hardware provided in kit, attach ground terminal lead from control unit terminal strip to threaded hole in top of casting. See Figure 2. Torque new hardware to 5 Nm/45 lb. in.
4. Using standard solder, connect the six resistor leads to the points shown in Figure 2.

5. Fill the cavity inside control unit with GE Silicones® RTV11® silicone (2 part) or equivalent (see Figures 3 and 4):
   a. Mix 74 drops of cure per 1/2 cup of RTV. Blend well to prevent incomplete deep-set. At this point, there is a half hour before mixture thickens and two hours until mixture deep-sets.
   b. Make sure resistor assemblies are pressed into bottom of cavity. Resistors and their sleeves must be completely covered with new silicone. See Figure 3.
   c. Pour mixture into cavity until it reaches the bottom of the screws in the terminal strip. See Figure 4.
6. Continue assembling DE housing.

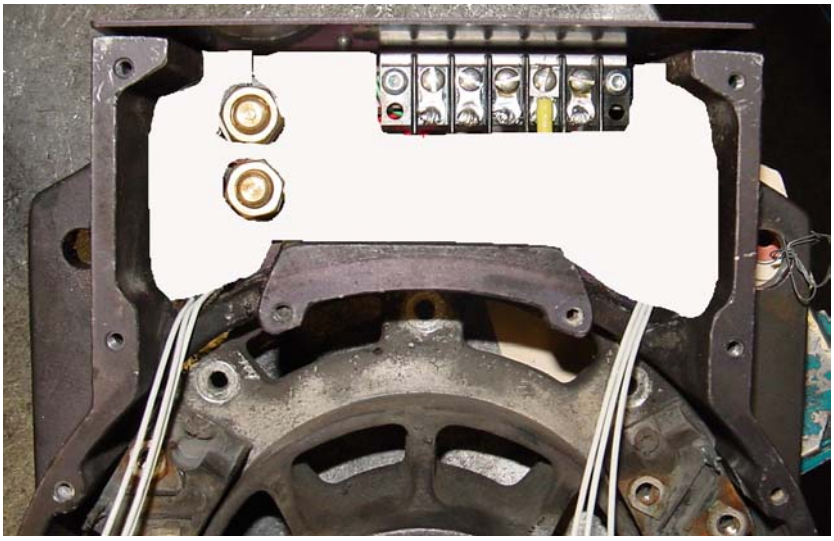

Figure 3—Fill Area of Control Unit

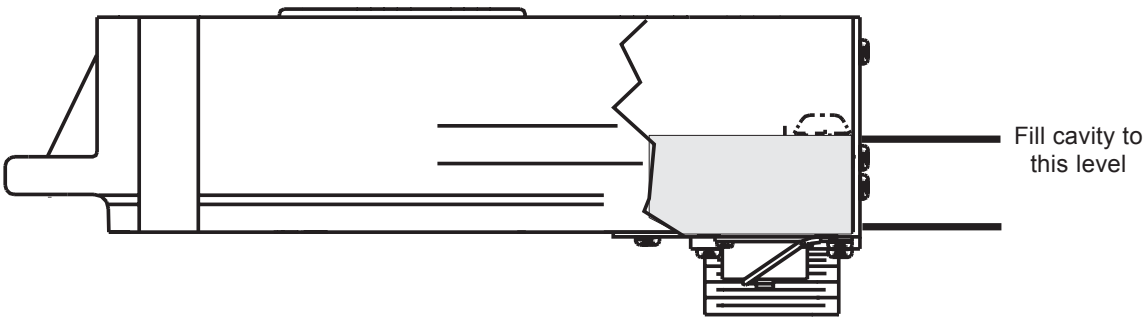

Figure 4—Fill Level of Control Unit