

# GENERATOR REPAIR STEPS

**Tools needed:** Torx T-15 • 7/16" wrench or ratchet/socket • 1/2" wrench or ratchet/socket • 10 mm wrench or ratchet/socket • 3/8" wrench or ratchet/socket • Needle Nose Pliers • Phillips Screwdriver • Rubber mallet Piece of 2 x 4 wood 12" to 14" long • Fluke 77 or 87 VOM( volt ohm meter) **NOTE:** If not using a Fluke 77 or 87VOM the readings described in these steps may differ.

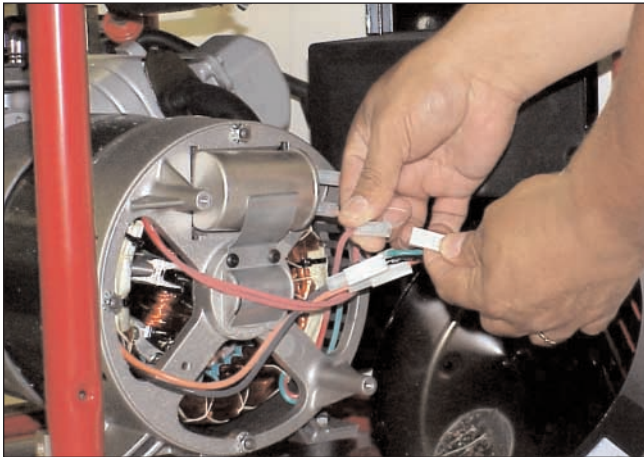
## Installation for the New Gen Head Assembly

### A- Removal of the old style Gen-Head

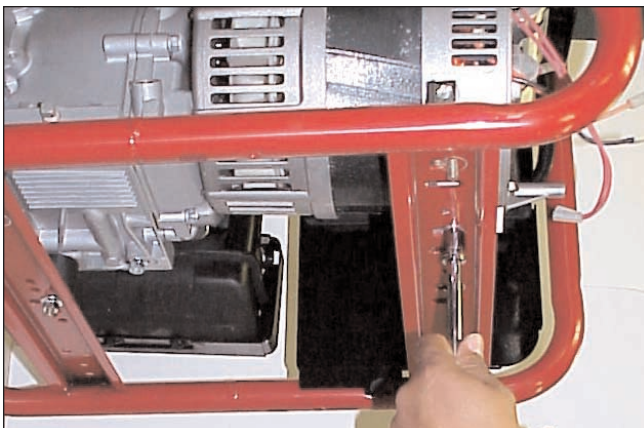
**Step 1** - Remove the end cover off the gen head using a T-20 Torx wrench.



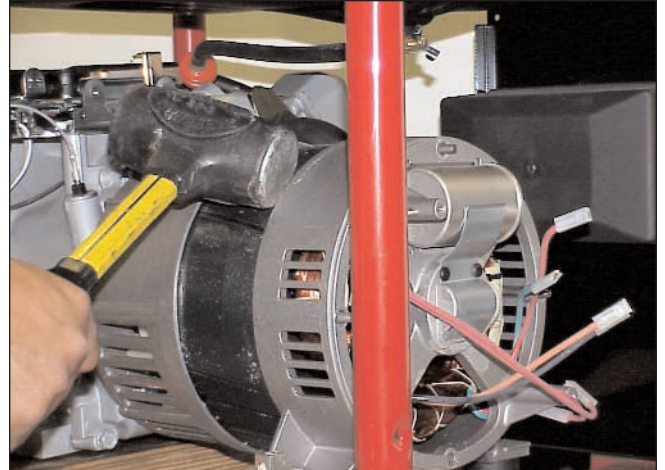
**Step 2** - Once the end cover is removed, disconnect the wires to the capacitor and the Stator.



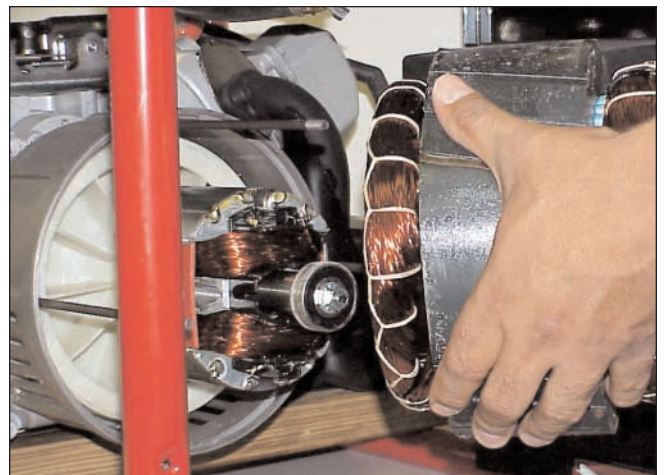
**Step 3** - Remove the grounding lug and the nuts from the isolators underneath the support bar on the frame.



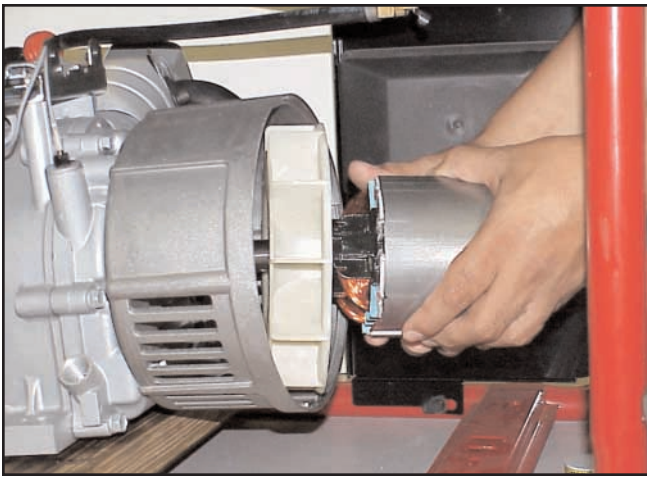
**Step 4** - Before remove the bearing support, slides a 2x4 between the engine and the frame to support the weight while working on the gen head.



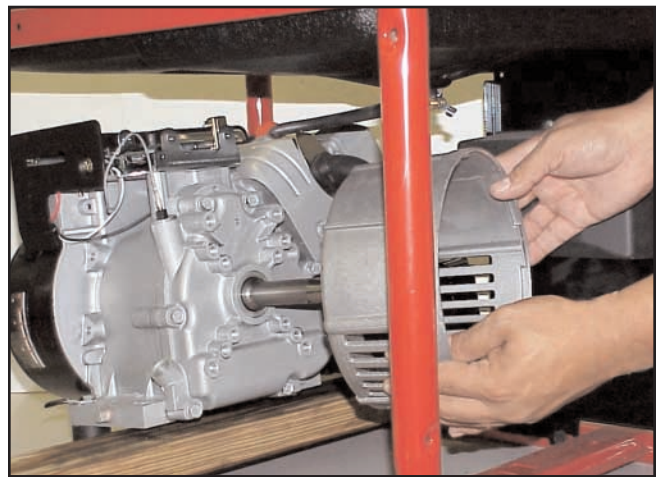
**Step 5** - Remove the stator.



**Step 6** - Remove the rotor bolt.

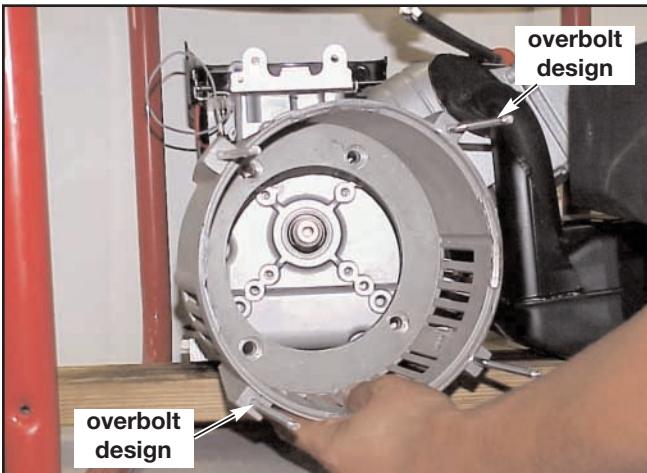


**Step 7** - Remove the rotor.

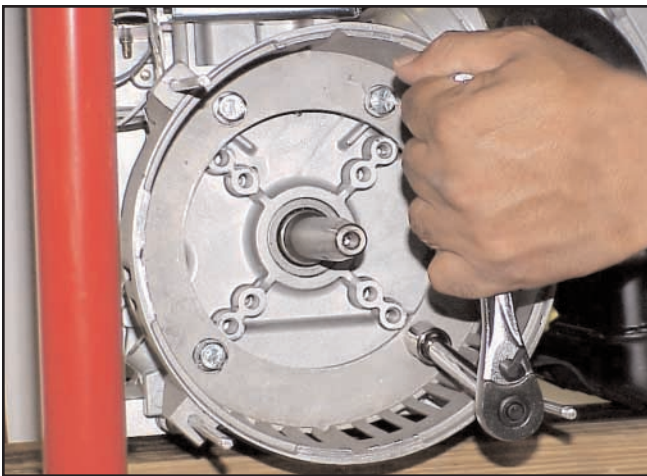


## **B- Installation of the new style Gen-Head For 2500kw - 3500kw generators**

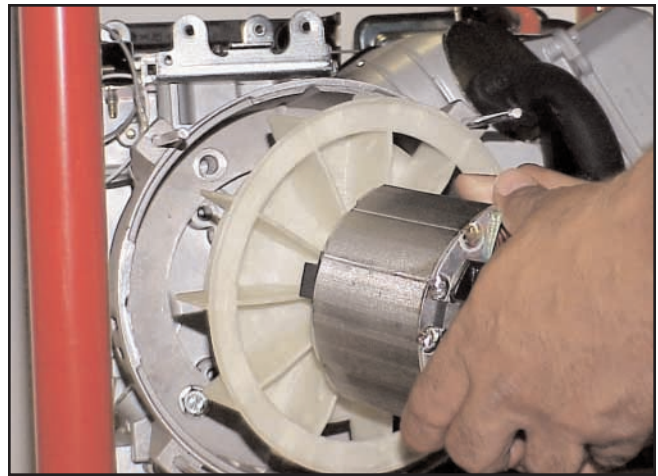
**Step 1** - Install the new style End Drive Adapter with the over bolt design



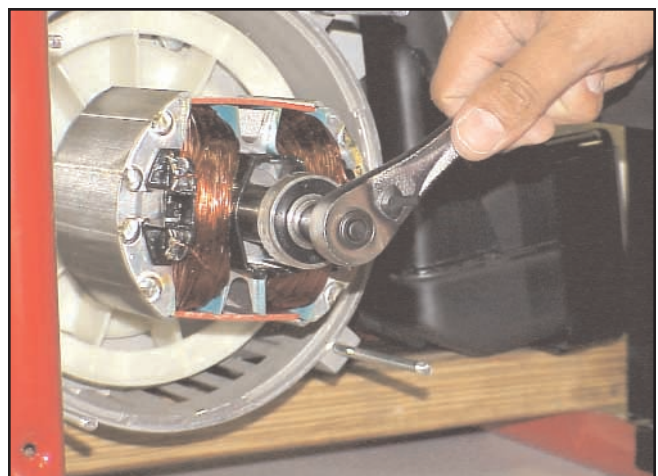
**Step 2** - Install washer, lock washer and bolt using a 9/16 socket. The four bolts generators will be torqued at 204-264 in lbs.



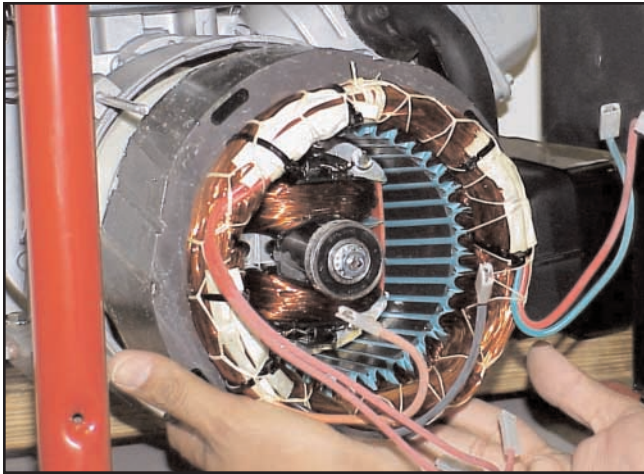
**Step 3** - Install rotor.



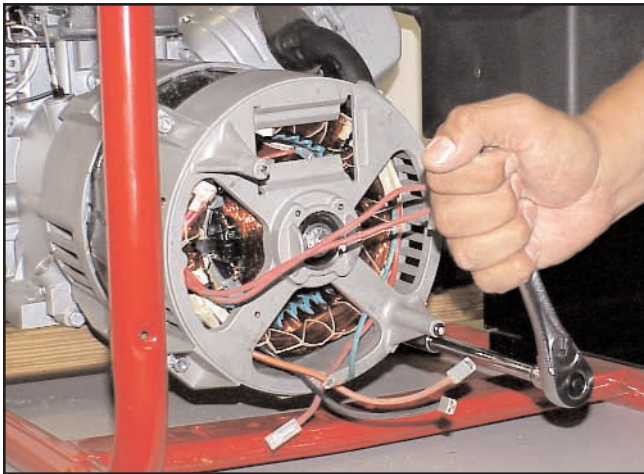
**Step 4** - Install rotor thru bolt (install short threaded end of rotor thru bolt in engine shaft until threads run out), washer and nut, using a 1/2 socket. Torqued at 120-144 in lbs



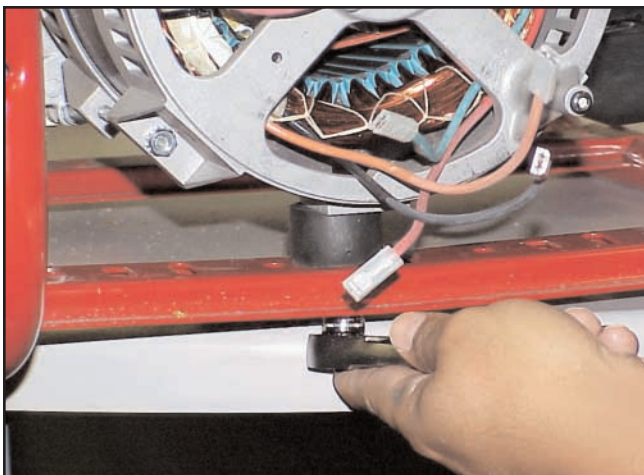
**Step 5 - Install stator**



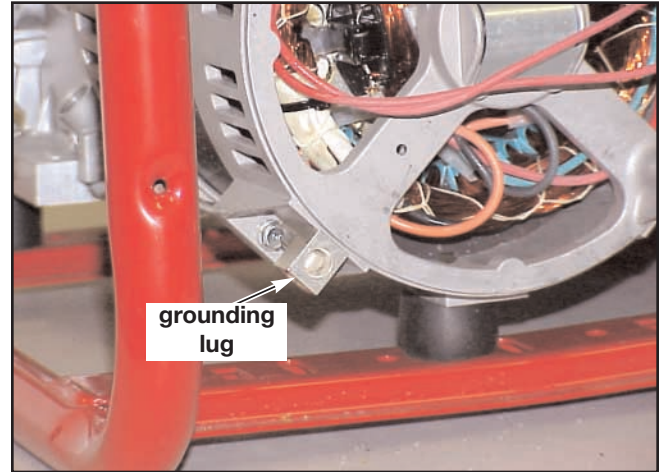
**Step 6 -** Install bearing support. Larger tabs on the new style bearing support should be located at the bottom. The over bolts should be torqued at 60-70 in lbs. Using a deep well 3/8 socket 3/8's drive.



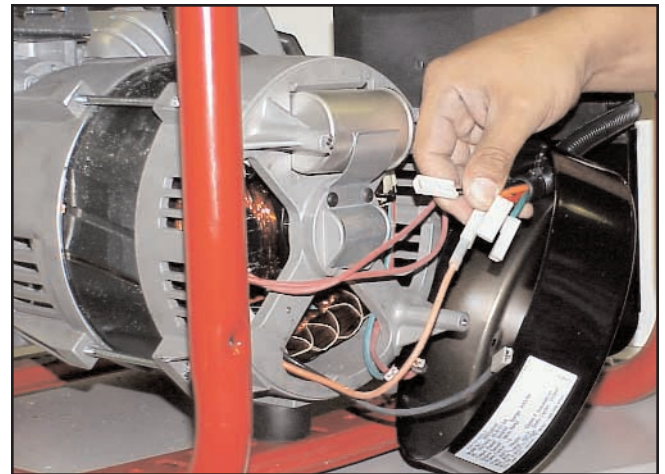
**Step 7 -** Remove one isolator and washer and bolt from the old style bearing support. Install the washer and isolator in the center of new style bearing support. Remove the 2x4, which was supporting the gen head, Line up the isolator with the hole in the frame which best centers the gen head and bolt the isolator to the frame. Torqued at 96-120 in lbs.



**Step 8 -** The ground lug removed from the old bearing support needs to be attached to the threaded hole in the center of the lower left tab. With a 1/2 in wrench torqued the ground lug at 96-120 in lbs.

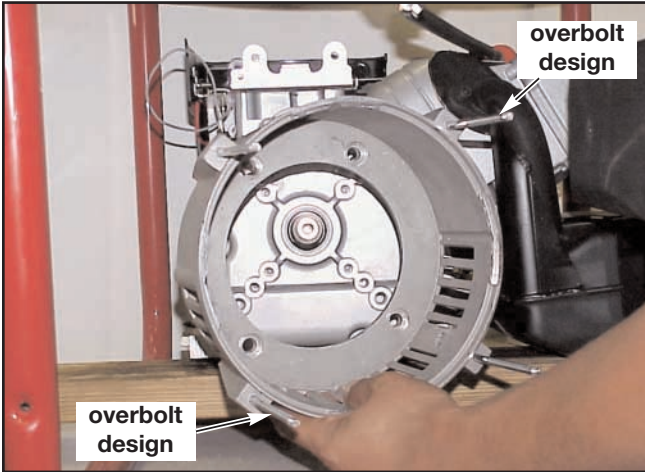


**Step 9 -** Reconnect the wires. 2 pink wires to the capacitor. Connect the remaining wires by color. Install the end cover.

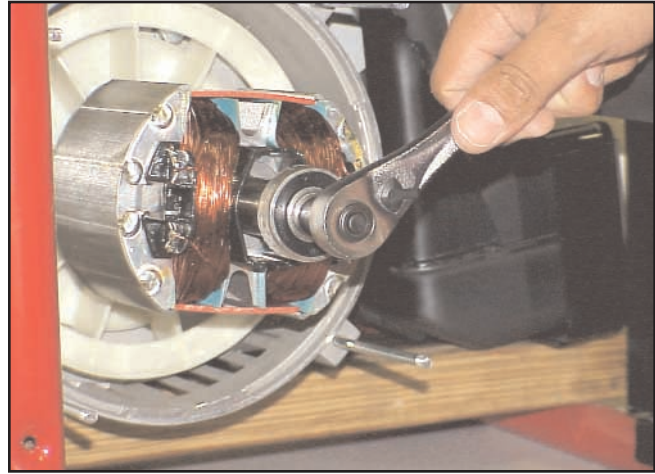


**C- Installation of the new style Gen-Head For 4000kw - 8000kw**  
**An adapter kit is required to install the new gen head on this size generator**

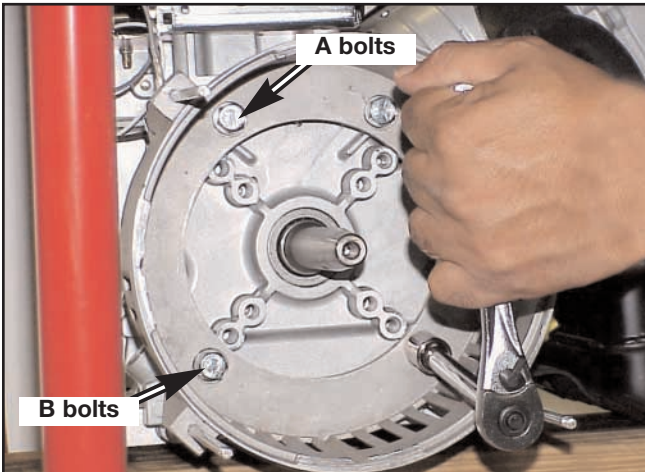
**Step 1 -** Install the new style End Drive Adapter with the over bolt design



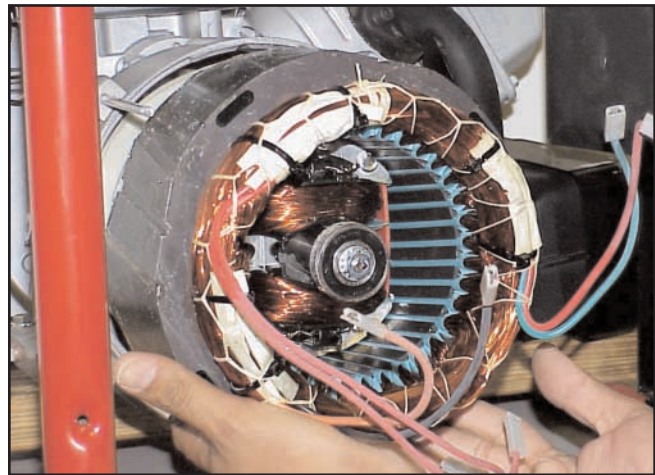
**Step 4 -** Install rotor thru bolt (install short threaded end of rotor thru bolt in engine shaft until threads run out), washer and nut, using a 1/2 socket. Torqued at 120-144 in lbs



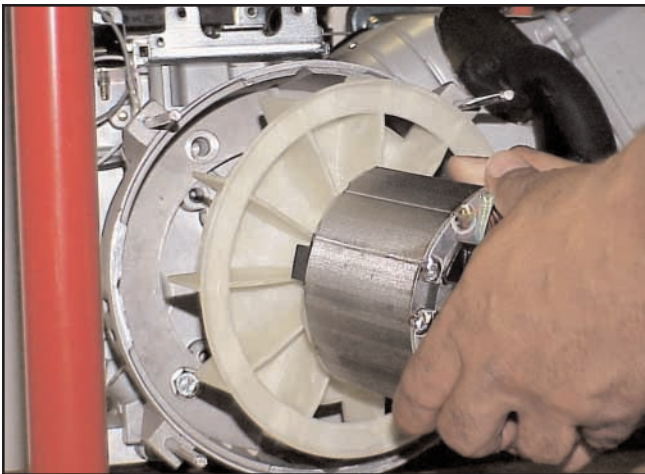
**Step 2 -** Torqued A bolts 204-264 in lbs. Torqued B bolts 180-220 in lbs.



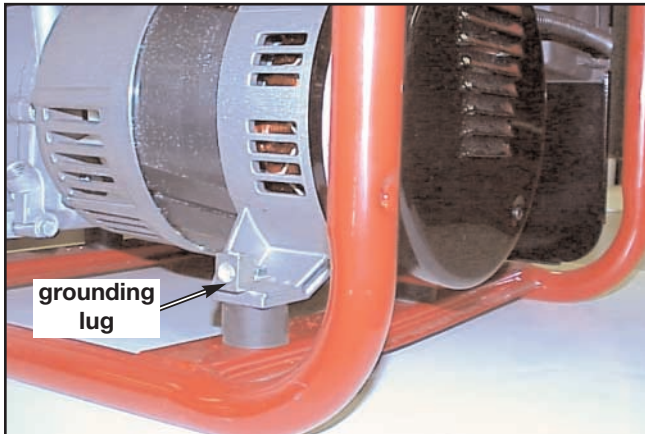
**Step 5 -** Install stator



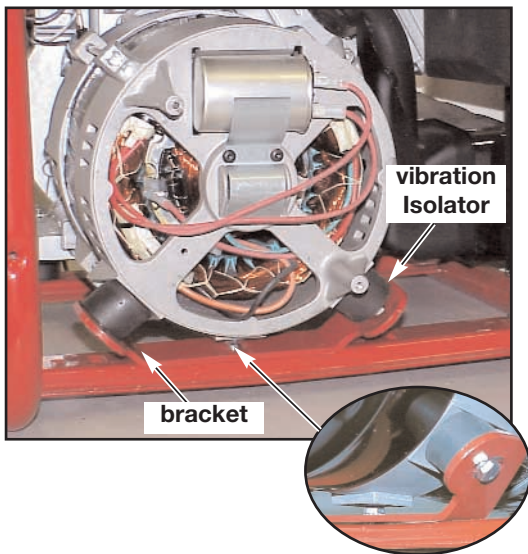
**Step 3 -** Install rotor.



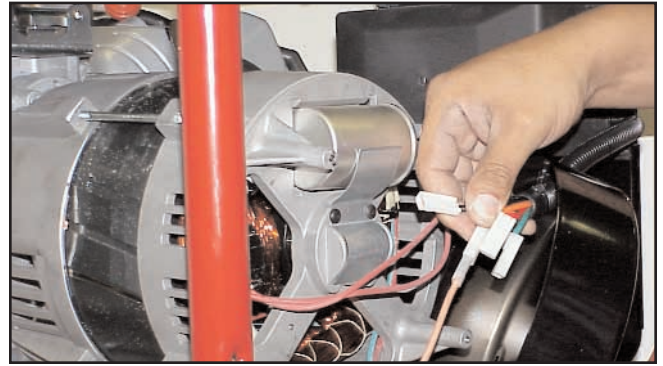
**Step 6** - Before installing the bearing support. Remove the vibration isolators off of the old style bearing support. Install them in the threaded holes in front of the two lower tabs. Install the bracket to the lower support bar on the frame and torqued at 90-120 in lbs.



**Step 7** - Install the new style bearing support and torqued the over bolts at 60-70 in lbs. Using a deep well 3/8 socket. Remove the 2x4 that is supporting the weight of the gen head and bolt the vibration isolators to the bracket. Torqued at 90-120 in lbs. Refer to step 9.



**Step 8** - Reconnect the wires. 2 pink wires to the capacitor. Connect the remaining wires by color. Install the end cover.



**Step 9** - The ground lug will need to be bolted to a hole on the support bar to the right of the gen head. Torqued at 90-120 in lbs.

