



Service Bulletin

Bulletin No: SB-0011-19-217-SW Effective Date: 08-05-2019

Type: Instructional

Subject: Superwind 350 Main Bearing Replacement

Scope

This service bulletin provides instructions for removal and replacement of the Superwind 350 main bearing.

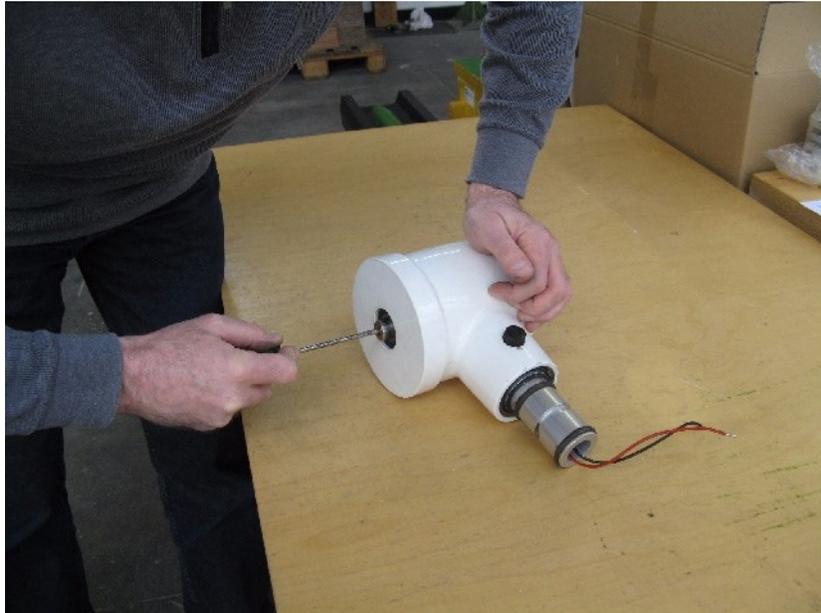
Technician note: Read these instructions in their entirety prior to bearing removal and installation.

Removing the old bearing

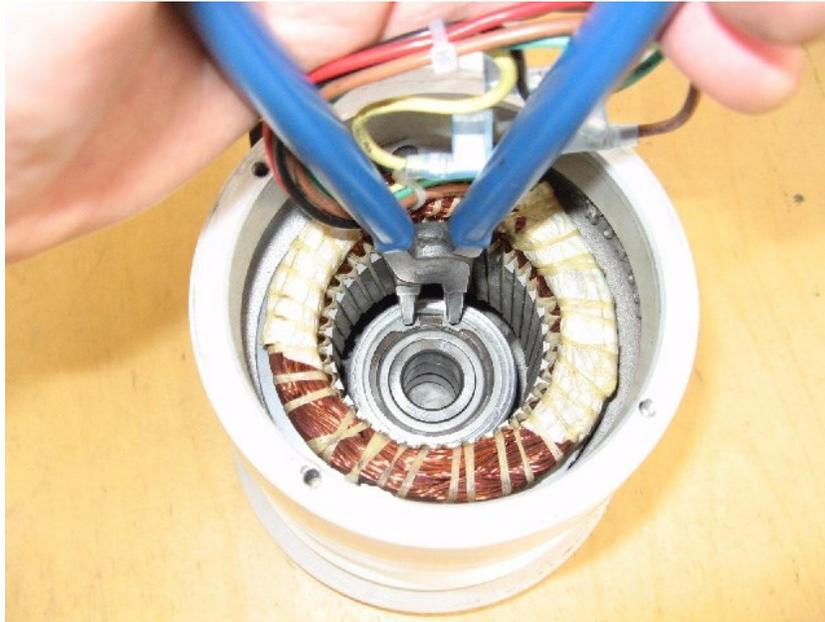
1. Remove the rear cover, then disconnect the 6-pulse bridge rectifier from the wires and set the rear assembly aside.



2. Press out the generator main shaft along with the magnet rotor. Keep fingers clear of the opening at the rear of the unit.



3. Remove the snap-ring.



4. Remove the crinkle washer.



5. Place the generator in a heating furnace (oven) and heat to 80°C/176 deg F.



6. Once the generator has reached temperature, remove the generator from the furnace and place on a suitable work surface. Remove the two roller bearings and the spacer bushing; push slightly if required to remove.



Technician note: Installation of the new bearing must be done while the generator housing is still hot. Otherwise, the generator will need to be reheated to 80°C/176 deg F.

Installing the new bearing

1. Insert the front bearing with the black seal to the front position. In our example a special tool is used to press the bearing into place. An 8" section of 1 1/4" schedule 40 PVC pipe can also be used to center and press in the bearing.



Pressing in the bearing



2. Insert the spacer bushing.



3. Insert the rear bearing and press slightly.



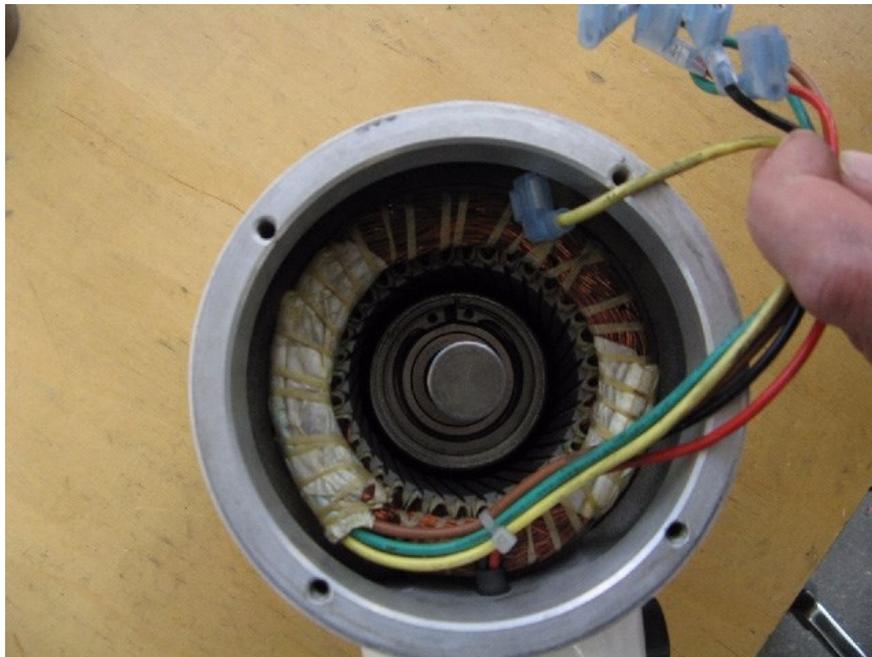
4. Use the PVC pipe to press the bearing in.



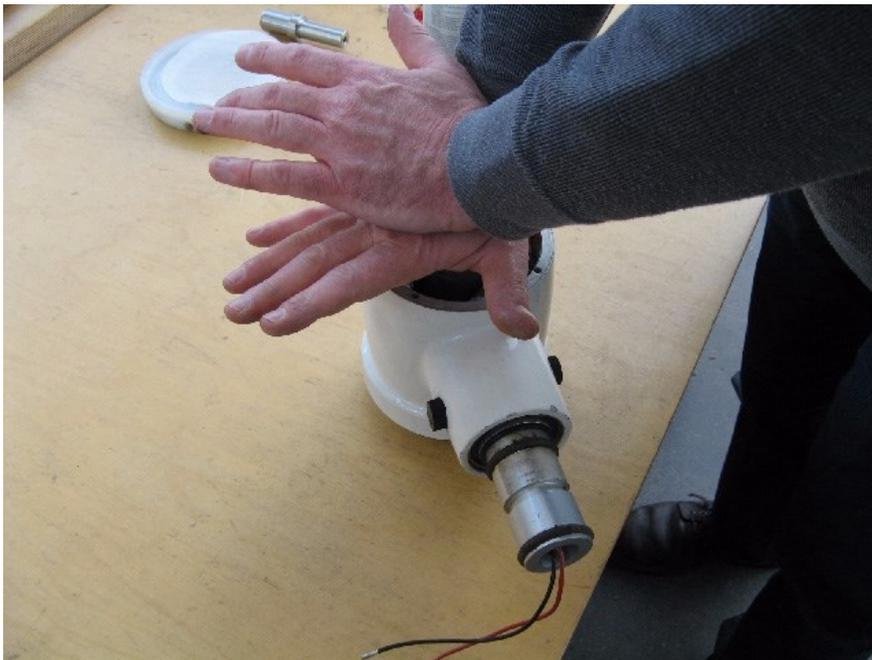
5. Insert the crinkle washer.



6. Install the snap-ring into the bore of the bearing.

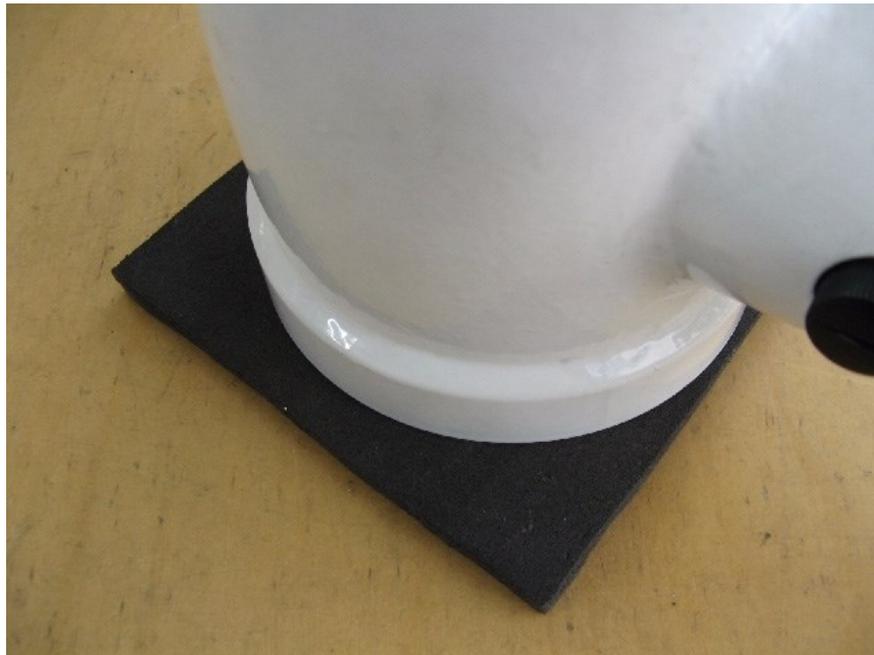


7. Press the snap-ring into the groove using the PVC pipe.





8. Let generator cool down, then place it with the back end facing up, on a rubber underlay.

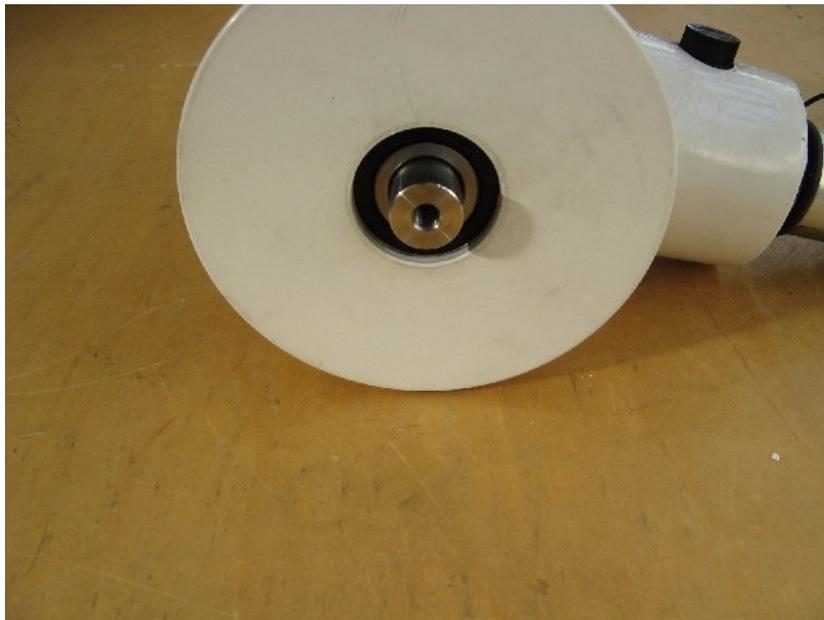


CAUTION: When installing the rotor within the stator, approximately 200 lbs. of magnetic force will pull the rotor assembly into position within the unit. **PAY CLOSE ATTENTION TO WHERE THE SHAFT WILL COME OUT!** Pointing it at an object could result in damage to the object or shaft. Keep fingers clear of the front of the rotor as the magnetic forces pull it into position.

9. Insert the magnetic rotor.

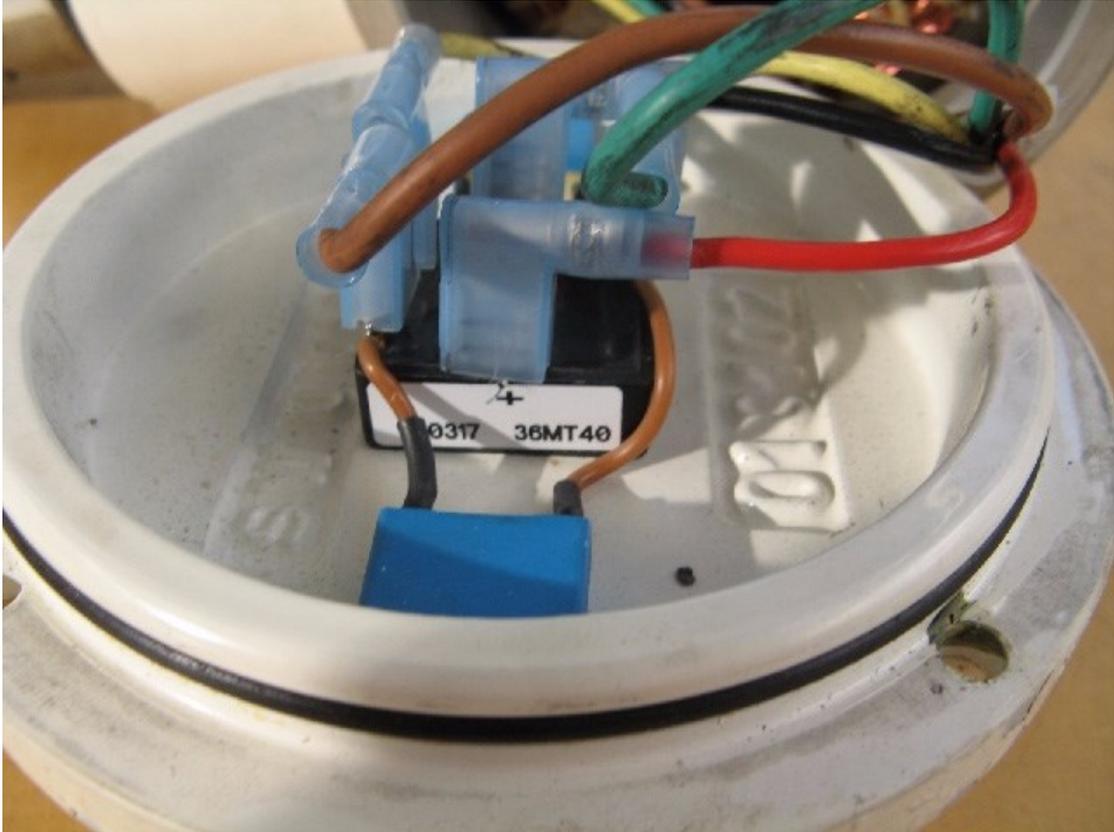


The rotor in position after proper installation.



10. Connect the 5 female connectors to the rectifier.

CAUTION: RED to PLUS and BLACK to MINUS. The other three cables can be installed in any order.



11. Mount the rear cover and tighten the four screws to 8 Nm / 5.90 ft-lb.

For additional information or assistance, please contact Mission Critical Energy at (716) 276-8465 or visit us at www.missioncriticalenergy.com.



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