## The Campbell Group

## Campbell Hausfeld • Wayne • Powerwinch

From: Generators

Concerning: Tolerance ring for Rotor bearing

r .	. •	/ 4	1 1	_
Instri	actions	:/ Affa	chi	LO

(INSERT BOOK PLACEMENT HERE)

#\_\_\_\_\_

Date: \_1/25/01\_\_\_\_\_

Page: \_\_1\_\_\_ of \_\_1\_\_\_\_

Models covered: Any Campbell Head (brush) generator with a date code from: June 1999 to 2000 Brush generators have a model number with 2 as the 8<sup>th</sup> digit. I.e. (GN503102AV)

We have discovered cases in which the end-user of the generator is operating the unit with an unbalanced load causing the rotor bearing force to enlarge the cast aluminum bearing housing opening. This can cause the brushes to wear out prematurely, and can cause the rotor to strike the stator, which results in premature failure of the rotor and or stator.

We have developed a new bearing housing that includes a spring steel tolerance ring. Our lab tests indicate that this tolerance ring eliminates the problem caused by an unbalanced load.

Please replace the end bell casting under warranty using kit GN006460SJ on any brush Campbell Hausfeld generators.

## **Instructions**

- 1. Slightly compress the Tolerance Ring and insert it into the bored hole in the End Bell Casting. The Tolerance Ring should be aligned flush with the outer surface of the casting bore area as shown in the diagram.
- 2. Place the End Bell Casting with the Tolerance Ring over the bearing on the generator shaft and align the casting such that the mounting holes and alignment pins in the casting are in line with their respective holes in the generator stator.
- 3. Place a flat block of hard material (such as a piece of wood) over the bearing bore of the End Bell Casting and use a hammer to drive the bearing bore onto the bearing. The block will keep the tolerance ring and the casting aligned while being driven.
- 4. Take care to keep the End Bell Casting properly aligned so that as the bearing bore comes onto the bearing, the mounting holes and alignment pins in the casting align with the holes in the stator, and keep the casting perpendicular to the rotor shaft so the bearing goes in straight.
- 5. If the bearing moves on the rotor shaft during this assembly, then remove the bearing from the rotor shaft with a suitable puller and press it into the End Bell Casting with the Tolerance Ring and then drive this assembly on the rotor shaft.

