THE CONMET CONNECTION



Fall 2004 Volume 1

PROPER INSPECTION, REPAIR AND REPLACEMENT OF BEARING CUPS AND CONES ON ALUMINUM HUBS

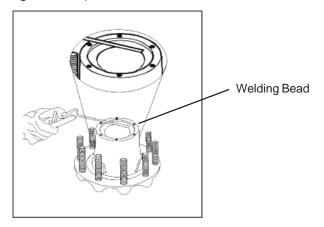
In general, there's no need to replace bearing cups and cones on ConMet aluminum hubs unless there is visible physical damage to the existing bearing components. Unless there are obvious problems with the bearing cups, don't replace them.

In the event you must replace the bearing cups and cones, we recommend replacing them as a set following the proper procedures outlined below. These procedures can also be found in ConMet's Hub Service Manual and PreSet Hub Service Manual.



If a bearing cup or cone shows signs of deterioration, replace the suspect part along with the mating component. When reinstalling cups, be certain they are pressed fully against their seats. Use appropriate replacement parts to ensure proper bearing adjustment.. See table 4 in the ConMet Hub Service Manual for manually adjusted bearings or table 5 in the ConMet Hub Service Manual for pre-adjusted bearings.

- 1. Thoroughly clean and degrease all components with a nonflammable solvent.
- 2. If required, remove the bearing cup by welding a large bead around the bearing surface of the steel cup, letting the assembly cool, and removing the bearing cup (see figure below).

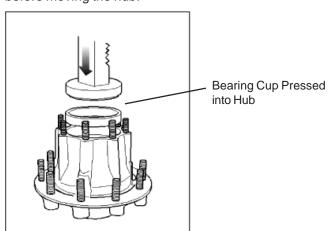


- 3. Inspect the bearing cup bore for evidence of cup rotation (spun cups). If noted, replace the hub.
- 4. To install a new cup in an aluminum hub, it is recommended that the hub be heated evenly throughout to 175 215° F. This can be accomplished by placing the hub in an oven at 300° F for 2 1/2 3 hours or by submersing it in boiling water for about 10 minutes. Cooling the cup in a freezer will further ease the installation, if desired.



Do not overheat the hub.

5. Remove the aluminum hub from the oven or water and carefully drop in the new bearing cup being certain it is fully seated. Variations within tolerances of materials and oven temperatures may require the bearing cup to be pressed in to the hub (see figure below) using the appropriate assembly aids, as listed in the back of the Hub Service Manual (see table 5 for manually adjusted bearings or table 6 for pre-adjusted bearings). If the cup is loose, allow a few seconds for it to heat up and secure itself before moving the hub.



For additional information on inspecting, repairing and replacing bearing cups and cones on ConMet's aluminum hubs, contact our Customer Service Department at 800-547-9473.

Consolidated Metco, Inc. • PO Box 83201 • Portland, OR 97283 • 800-547-9473 • www.conmet.com

