



Belvac Production Machinery Technical Bulletin

Information for Customers Operating & Maintaining Belvac Machines

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CAM FOLLOWER PRELOAD ADJUSTMENT PROCEDURE

The following procedure demonstrates the proper procedure for preloading the cam follower during the main spindle rebuild process.

Preload Adjustment Procedure

1. As a starting point toward attaining proper preload, install .015" shims under the main follower bearing retainer and just snug the screws evenly. Measure each shim to confirm proper thickness prior to installing.
2. If there is a rough spot in the movement of the pivot arm (there should be no rough or snapping action), then correct by following these sub steps:
 - a) Loosen the screws for the main follower bearing retainer and wrap the pivot arm with a soft face hammer tap. This will force the bearing race away from the bearing.
 - b) Confirm if the rough spot still exists. If it does, then remove retainer plate and rotate the bearing roller cage 90° (*illustrated below*).

Reinstall the main follower bearing retainer and snug the screws evenly.





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4. Measure pull force required to move the pivot arm with Chatillon gauge. If the drag is not within the 3.0-5.5 pounds peak pull specification, then add or remove shims under the bearing retainer to achieve a proper drag and a smooth movement of the pivot arm. Measure each shim to confirm proper thickness prior to installing.
 - a) If the drag is too low, then remove the bearing retainer and reduce the shim stack thickness.
 - b) If the drag is too high, then remove the bearing retainer and increase the shim stack thickness.
 - c) Repeat this step until a proper drag of the pivot arm is achieved and confirming that no rough spots developed.
5. After pre-load has been established check if the retainer is fully tightened, reconfirm the drag with a Chatillon gauge (the pulling point is the center of the cam follower) to ensure the required pull force is between 3.0 - 5.5 pounds peak pull.
6. Assemble the eccentric bushing with the outer cam follower and clamp it to the main follower bracket. This mounting hardware needs only to be finger tight since it will need remounting at final assembly.

For additional information or to order the Chatillon gauge (Ref Part# 705291), please contact Belvac's Service department.