

## INSTALLATION AND REMOVAL INSTRUCTIONS FOR MAV LOCKING ASSEMBLY SERIES 6002

Rev. 1/2010

MAV 6002 Locking Assemblies are supplied ready for installation. If the units should be dismantled, make sure that all slits are aligned. The torque capacity of these devices is based on a coefficient of friction of  $\mu$ =0.12 for lightly oiled screws, tapers, shaft and hub contact areas. Therefore, it is important NOT to use Molybdenum Disulfide (e.g., Molykote, Never-Seeze or similar lubricants) in any Locking Assembly installation.

Recommended shaft / hub bore tolerances: h8 / H8

Recommended shaft / hub bore surface roughness:  $Ra \le 3.2 \,\mu m$ 

## INSTALLATION

- 1. Make sure that locking screws, rings, shaft and hub contact surfaces are clean and lightly oiled and that all collar slits are aligned.
- 2. Loosen all screws by minimum 2 turns and transfer at least 2 screws item [4] (larger size) to push-off threads in the collar item [1] in order to disengage tapers for easy installation of locking assembly (see fig. 1).
- 3. After installation of locking assembly, relocate locking screws used for separation of collars.
- 4. Hand tighten locking screws and confirm that collar item [1] is parallel and in full contact with face of part to be attached to the shaft.
- 5. Use torque wrench and set it approximately 5% higher than specified tightening torque (Ma). Torque screws item [4] (larger size) in a crosswise pattern, using only 1/4 turns for several passes until 1/4 turns can no longer be achieved.
- 6. Still apply overtorque for 1-2 more passes. This is required to compensate for a system-related relaxation of locking screws since tightening of a given screw will always relax adjacent screws. Without overtorquing an infinite number of passes would be needed to reach specified tightening torque.
- 7. Repeat steps 5 and 6 for screws item [5] (smaller size).
- 8. Reset torque wrench to specified torques (Ma) and check all locking screws. No screw should turn at this point, otherwise repeat the procedure from step 6 for 1 or 2 more passes. It is not necessary to re-check tightening torque after equipment has been in operation.

## REMOVAL

## Prior to initiating the following removal procedure, check to ensure that no torque or thrust loads are acting on the Locking Assembly, shaft or any mounted components.

**IMPORTANT!** The final user must ensure that ends of locking screws used for removal are ground flat and slightly chamfered to prevent damage to screws and collar threads during push-off. Screws with ground flat and chamfered end are not supplied by MAV. The final user has to take charge of machining of end of screws.

- 1. Check to ensure that axial movement of collars necessary for release of connection is not restricted. Likewise, ensure that push-off threads are in good conditions.
- 2. Loosen all screws item [4] and transfer an adeguate number of screws item [4] into all push-off threads located in flange of collar item [1].
- 3. Release collar item [2] by tightening all push-off screws in a crosswise pattern, not exceeding 1/4 turns for several passes (see fig. 2).
- 4. Loosen all screws item [5] and release collar item [3] by re-tightening all push-off screws (see fig. 1) in a crosswise pattern, not exceeding 1/4 turns for several passes.



