

LOCKING ASSEMBLY MAV 2500

Installation and Removal Instructions



MAV 2500 Locking Assembly is supplied ready for installation. If the unit should be dismantled, make sure there are no threads behind taps in front thrust ring item [3]. The torque capacity of this device 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: h9 / H9

Recommended shaft / hub bore surface roughness: $Ra \leq 3.2 \mu\text{m}$

The rear thrust ring item [4] must be in contact with either shaft or hub shoulder (fig.1) to release the connection.

INSTALLATION

1. Make sure that locking screws, rings, shaft and hub contact surfaces are clean and lightly oiled.
2. After positioning Locking Assembly between shaft & hub, successively hand tighten the screws in a crosswise pattern, so that most of the play is taken up but still leaving Locking Assembly free to move.
3. After confirming correct hub position, successively hand tighten the screws following a crosswise pattern, until the assembly is locked.
4. Use torque wrench and set it approximately 5% higher than specified tightening torque (Ma). Torque screws in a crosswise pattern, using only 1/4 turns for several passes until 1/4 turns can no longer be achieved.
5. 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.
6. Reset torque wrench to specified torque (Ma) and check all locking screws. No screw should turn at this point, otherwise repeat step 5 for 1 or 2 more passes. It is not necessary to re-check tightening torque after equipment has been in operation.

NOTE: for installation subjected to extreme corrosion, the slits in inner and outer rings should be sealed with a suitable caulking compound or equivalent.

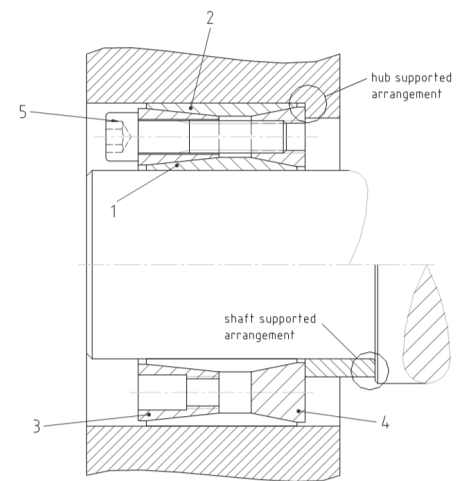


Fig. 1

REMOVAL (REFER TO FIG.2)

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. Loosen all locking screws in several stages. Rear thrust ring item [4] features self-releasing taper, meaning it should release automatically.
2. Remove and transfer some screws into all push-off threads located in the front thrust ring item [3].
3. Release front thrust ring item [3] by tightening all push-off screws in a crosswise pattern, not exceeding 1/4 turns for several passes.

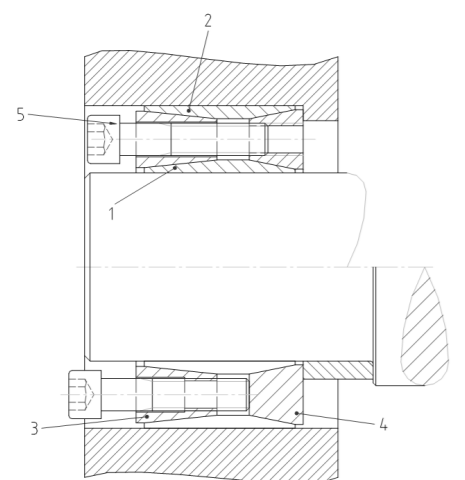


Fig. 2

