

LOCKING ASSEMBLY MAV 6002

Installation and Removal Instructions



GENERAL RECOMMENDATIONS AND WARNINGS

- Before installing or handling this product, read instructions carefully and completely. Due to possible danger to persons or machinery resulting from improper use of this product, it is very important to follow correct procedures. Proper installation, maintenance, and operation procedures must be observed. All instructions included in this manual must be followed carefully. Handling, installation, and removal of this product must be done by skilled personnel, familiar with the product, the application and all hazards involved.
- Suitable safety devices should be provided and applicable safety rules should be observed as specified in safety codes. Those are neither the responsibility of MAV S.p.A., nor are provided by MAV S.p.A.
- Contravention of install and safety instructions will void all claims under warranty.
- During storage or handling operations, use only tested and approved handling and/or lifting tools. Make always sure that components of Locking Assembly are secured against slipping, falling or rolling.
- Prior to initiating installation or removal procedures, check to ensure that no loads are acting on Locking Assembly, shaft or any connected component. Motor and drive train must be switched off and secured against accidental activation.

INSTALLATION

SAFETY NOTICE

Prior to initiating the installation procedure, check to ensure that no loads are acting on Locking Assembly, shaft or any connected component. Motor and drive train must be switched off and secured against accidental activation.

Locking Assemblies MAV 6002 are supplied ready for installation. Should the unit be disassembled and re-assembled, make sure that the slits in all rings are aligned. The unit is assembled correctly if there are no holes in the outer ring item [2] behind threaded holes in the inner ring item [1]. During tightening of Locking Assembly, no axial displacement of hub respect to shaft will occur.

1. Make sure that screws, locking rings, shaft and hub contact areas are clean and coated with a film of oil.
2. For ease of installation, locking rings shall be disengaged (fig. 1). Loosen all screws by two/three turns; then transfer and hand-tighten at least two screws item [4] (larger size) into the push-off threaded holes in the inner ring item [1].
3. Insert Locking Assembly into the hub bore and make it slide onto the shaft, making sure that connected components are positioned as required. **Inner and outer rings shall be completely supported by shaft respectively hub bore. The flange of inner ring shall be in full contact with the face of the hub.** At this point, relocate the screws used to disengage the locking rings. Installation into hubs with shoulder requires a few mm's gap between outer ring and shoulder.
4. Tighten the screws by hand in a crosswise pattern, starting with a screw located at 90° approx. respect to slit (fig. 2), until fitting clearances with shaft and hub bore are bridged and connected components are slightly locked, while making sure that hub is aligned as required using a dial indicator. **Better centering of hub from the beginning of installation is essential for better centering when installation is completed.**
5. Use a torque wrench set approx. 5% higher than specified tightening torque (Ma), or reduced within admissible value. **Progressively tighten the screws item [5] (smaller size) in a crosswise pattern (fig. 2), using approx. ¼ turns for several passes until ¼ turns can no longer be achieved. Start with a screw located at 90° approx. respect to slit; screws adjacent to slit shall be tightened in a row.**

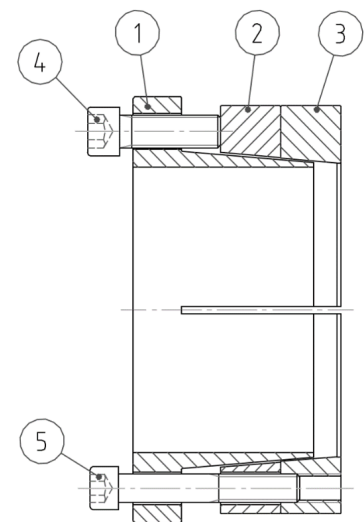


Fig. 1
Disengagement of locking rings

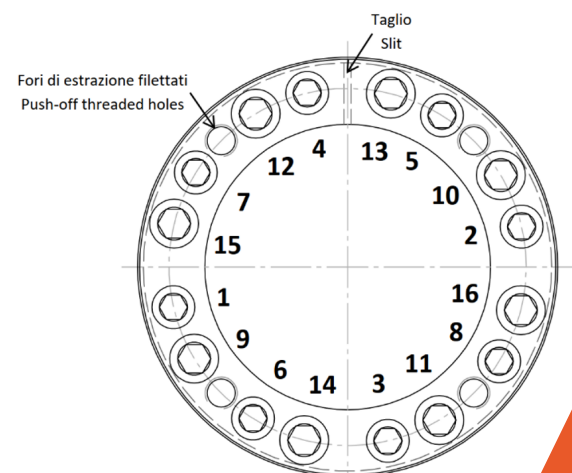


Fig. 2
Example of tightening pattern

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6. Still apply overtorque for a few more passes. This is required to compensate for a system-related relaxation of the screws since tightening of a given screw will always relax adjacent screws. Without overtorquing, a very large number of passes would be needed to reach specified tightening torque.
7. Repeat steps 5 and 6 for screws item [4] (larger size).
8. Reset the torque wrench to specified tightening torques (Ma), or reduced within admissible value, and check all screws in either a clockwise or counterclockwise sequence. The installation is completed if no screw can be turned further, otherwise repeat step 6.

REMOVAL

SAFETY NOTICE

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 adequate 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 $\frac{1}{4}$ turns for several passes (see fig. 3).
4. Loosen all screws item [5] and release collar item [3] by re-tightening all push-off screws (see fig. 4) in a crosswise pattern, not exceeding $\frac{1}{4}$ turns for several passes.

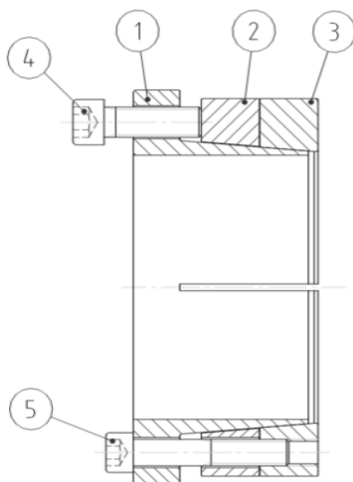


Fig. 3
Release of outer ring item [2]

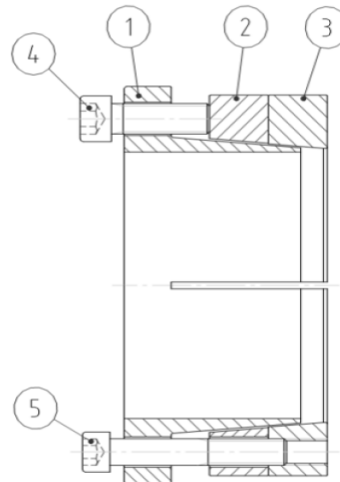


Fig. 4
Release of outer ring item [3]

Information for proper disposal:



Dispose MAV
product as metal