Rev. 0/2010

INSTALLATION AND REMOVAL INSTRUCTION FOR MAV SHRINK DISC SERIES 2008/2108/2208 STAINLESS STEEL

MAV 2008/2108/2208 stainless steel Shrink Discs are supplied ready for installation. However, prior to tightening of locking screws it necessary to remove wooden spacers that may have been used during shipping.

INSTALLATION

Important: Never tighten locking screws prior to shaft installation, as inner ring of Shrink Disc and/or hub can be permanently contracted even at relatively low tightening torques.

1. Clean hub OD and Shrink Disc bore. Lightly lubricate hub OD before assembling Shrink Disc on hub.

2. Carefully solvent clean and dry shaft and hub bore of any lubricant prior to mounting hub onto shaft. This step is critical, as any lubricant on the shaft/hub bore interface will greatly reduce the torque transmitting capacity of the Shrink Disc connection.

3. Insert shaft into hub, then position Shrink Disc onto hub. After confirming correct position of hub and Shrink Disc, hand-tighten three (3) or four (4) evenly spaced locking screws and make sure that outer collars of Shrink Disc are parallel. Hand-tighten remaining locking screws.

4. Use torque wrench and set it approximately 5% higher than specified locking screw tightening torque M_A. Tighten locking screws in either a clockwise or counterclockwise sequence, using approx. ¼ (i.e., 90°) turns (even if initially some locking screws require a very low tightening torque to achieve ¼ turns) for several passes until ¼ turns can no longer be achieved.

5. Continue to apply overtorque for 1 or 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 (M_A) and check all locking screws. No screw should turn at this point, otherwise repeat Step 5 for 1 or 2 more passes. Once the screws are tightened, check the parallelism of the outer collars, considering that the maximum allowed error is 0.35% of the outer diameter of Shrink Disc. A larger error could cause a loss of pressure and, as a consequence, reduced performances.
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 Shrink Disc, shaft or any mounted components.

Loosen all locking screws in several stages by using approx. ½ turns, following either a clockwise or counterclockwise sequence, until Shrink Disc can be moved on hub. The Shrink Disc, hub and shaft will return to their original fit clearances.

WARNING

DO NOT completely remove locking screws before locking rings are disengaged. A sudden separation of locking rings could involve high separation forces that may result in permanent injury or death. Be certain that locking rings are disengaged before completely removing locking screws.

REINSTALLATION OF SHRINK DISCS

In relatively clean operating conditions, Shrink Discs may be reused without prior cleaning. In all other cases, Shrink Discs require thorough cleaning and abundant re-lubrication of screws (under-head and threads) and tapers with Dow Corning® *Molykote P-1900.*