

## INSTALLATION & REMOVAL INSTRUCTIONS FOR CLIMAX SERIES C733, C732, C731

### \*\*IMPORTANT NOTICE\*\*

When installing or removing any Climax Keyless Locking Device (KLD), please follow these important safety standards:

1. Check to ensure that power switches are off & locked out.
2. Always wear safety glasses & appropriate protective clothing.

### INSTALLATION

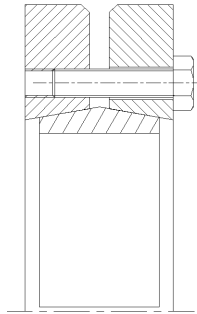


Figure 1

CLIMAX Series C733, C732 & C731 Shrink Discs are supplied with mating tapers, locking screw threads and locking screw head contact areas lubricated with Dow Corning® Molykote®, G-n Metal Assembly Paste or equivalent. This lubricant contains Molybdenum Disulfide and must not be removed.

1. CLIMAX calculates and publishes rated torque capacities for Shrink Discs assuming a CLEAN & DRY interface between shaft and component hub bore to achieve a coefficient of friction of 0.15. Therefore it is important to thoroughly solvent clean and dry these surfaces prior to commencing this installation procedure. A light coating of machine oil can be applied to the component hub OD to ease positioning of the Shrink Disc.
2. Mount CLIMAX Series C733, C732 or C731 Shrink Disc onto component hub OD, then insert shaft (Note: locking screws should never be tightened prior to installing shaft as component hub can be permanently deformed). In installations with hub bores machined using a non-toleranced relief, the CLIMAX Shrink Disc should be positioned directly above the toleranced shaft/hub contact area.
3. Once all components are properly positioned, tighten three or four equally spaced locking screws by hand, then check to ensure that outer thrust collars are parallel to one another. Now hand-tighten remaining locking screws.
4. Use a properly calibrated torque wrench (we recommend the CCM Series from Sturtevant Richmond) and set it approximately 5% higher than our specified tightening torque  $M_a$ . Starting with a locking screw adjacent to the slit and, moving in the direction away from the slit, tighten the screws in a circular pattern, using quarter turns for each screw, several times around until quarter turns can no longer be achieved. At this point, apply the 5% overtorque for 2 more complete times around.
5. Reset the torque wrench to our specified tightening torque  $M_a$ . Check to ensure that none of the locking screws turn at this torque value, otherwise reset the wrench to the 5% higher value and repeat Step 4 for 1 or 2 more complete passes.

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### REMOVAL

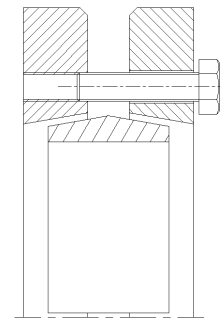


Figure 2

1. Ensure that axial movement of both KLD outer rings is not restricted, as this is necessary for proper removal.
2. Loosen – BUT DO NOT REMOVE – all locking screws gradually and sequentially in a circular pattern using quarter turns for each screw. The outer rings will back off the tapers and both the Shrink Disc and component hub will return to their original clearance fit dimensions.

### ⚠ WARNING ⚠

DO NOT completely remove locking screws during the removal procedure until it can be verified that thrust collars are fully disengaged from tapers. Doing so could result in serious permanent injury or death.

### Locking Screw Tightening Torque $M_a$

Screw Size	M5	M6	M8	M10	M12	M16	M20	M24
Tightening Torque $M_a$ (ft-lbs)	3	9	22	44	74	184	361	620