

Installation & Removal Instructions-Locking Assembly - Model N7015.0 / N7015.1



Features:

Very high transmissible torque. Wide double self releasing taper design for enhanced bending moment capacity. Fixed axial hub position during assembly. No demand of high quality surface finish of shaft & hub. Easy installation & removal. Overload protection effect but not advised to use as slipping device. A frictional locking connection, have No play. Due to centering wed (guide) & relatively large (taper) guides, locking assembly center according to shaft / hub manufacturing accuracy.

Since Torque (Force) is transmitted by contact pressure & friction between contact surfaces; condition of contact surfaces and proper tightening of screws is great importance.

Installation:

Locking Assemblies are supplied ready for installation. Before installing shaft and bore contact area(s), screw threads, are to be clean and slightly oiled. Loosen all screws by minimum 2 turns and transfer some [2 to 4] screws in to push off threads in front thrust nut [2] and middle ring[3], in order to disengage tapers for easy installation. After insertion of assembly on to shaft & into hub, relocate locking screws used for releasing assembly. Hand tighten screws slightly and adjust assembly as required. Use torque wrench and set it approximately 5% higher than specified tightening torque (Ma). Tighten screws (F) in diametrically opposite sequence, using only 1/4 turns for several

passes, til no screw turn more. Since tightening of a screw will always relax adjacent screws, apply over torque for 1 to 2 more passes to compensate for a system-related relaxation of locking screws. Reset torque wrench to specified torque and check all locking screws. No screw should turn at this point, otherwise repeat step(F) for one or more time.

Note: The transmission torque & axial force are in fact directly proportional to the sum of of the pull of the tightening screws and as a consequence, the tightening torque of screw i.e.Ma of screw.

Note: The tightening torque values indicated is valid only in case of slight oil lubricated assembly installation. Do not use any oil with molybdenum bisulphide or high pressure additives and grease.

Removal:

IMPORTANT:- Make sure end of removal screws are ground flat & chamfered to eliminate damage to removal threads during push-off.

Assure that necessary space for axial movement of front & rear thrust nut is available. Loosen all screws, in opposite sequence. Remove & transfer some screws [A] into threads in front thrust nut(2) & some screws [B] into threads, in middle of outer ring(3). Release front(2) & rear nut(4) by progressively tightening screws alternate, in diametrically opposite sequence. On several round of tightening screws, complete removal will be achieved. Remove locking assembly from hub & shaft. Remove all screws from removal threads & reassemble as was. Oil & store assembly.

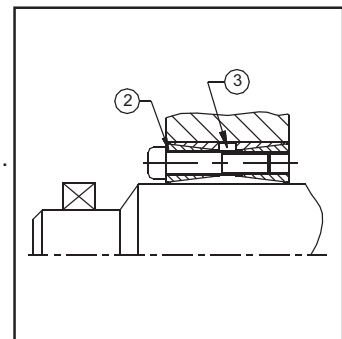


Fig 1

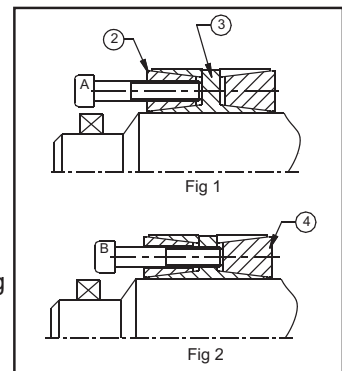


Fig 2

Tolerances, surface finish:

A good surface finish by machine tool is sufficient. Maximum allowable surface finish : $R_a \leq 3.2\mu m$
Maximum permissible tolerances for hub H8 & for shaft h8.