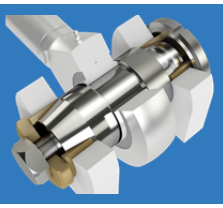
Please go to this link to find the latest version https://www.nord-lock.com/services/manuals/expander/stepped-pin-spanner-nut-secured/

INSTALLATION INSTRUCTIONS

Stepped Pin, Spanner Nut Secured

v4-2

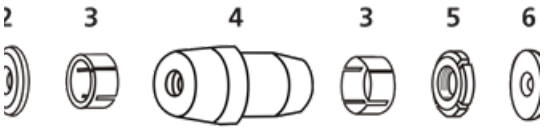
ENGLISH (ENGLISH)



Following these instructions will ensure that the Expander System is installed correctly and the pivot life is prolonged.

Congratulations! You have purchased a custom engineered solution to the pivot wear problem on your machine. Contact your dealer or Expander before proceeding if you have any questions.

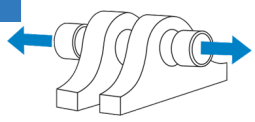
1 Bolt. **2** Washer. **3** Sleeve. **4** Axle (Pin). **5** Securing spanner nut. **6** Threaded washer.



The picture shows a female axle but the principle is the same for other designs.

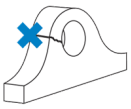
PREPARATION

1



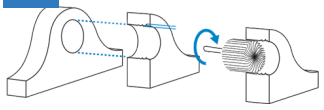
Remove any bushings to eliminate future wear between the bushing and the mounting lug.

2



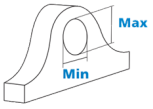
Repair any structural damage i.e. cracks or bent lug ears before installation.

3



Smooth out irregularities in the bore surfaces.

4

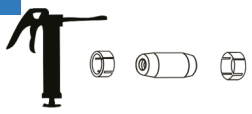


The difference between min and max diameter in the worn lugs must be within .06" (1.5 mm) for the sleeves to fit correctly.

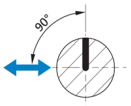
ATTENTION! If the worn lugs diameter at any point is 2 mm (.080") or more over original lug diameter contact your dealer or Expander System. You will need oversized sleeves.

INSTALLATION

5

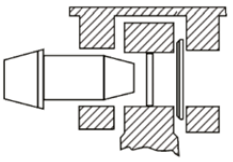


Grease the sleeves and axle with grease available, preferably graphite grease. Do not grease the threads!



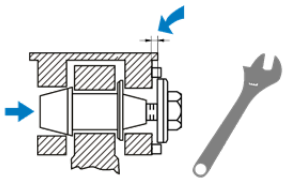
NOTE! If applicable: position greasing outlet 90 degrees to force direction to minimize stress concentration at outlet.

6



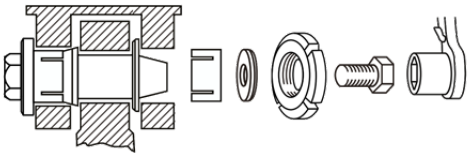
The spacer is always positioned on the opposite side of the stepped part of the axle. If the pivot already has a spacer, leave it in its position. If the Expander System includes a spacer, place it between the inner sphere of the bearing and the lug ear, with the bevel facing the bearing.

7



Insert the axle. Install securing spanner nut and threaded washer on the side with small axle diameter. Position to achieve a gap between the threaded washer and the lug. Mount and tighten the fastener until the axial play is eliminated.

8



Install sleeve, washer and fastener on the side with the large axel diameter. Tighten the fastener with torque as specified. Remove fastener, securing spanner nut and remove fastener, securing spanner nut and threaded washer. Install sleeve. Reinstall securing spanner nut, threaded washer and fastener. Keep the securing spanner nut loose and tighten the fastener with torque as specified. Tighten the securing spanner nut.

TORQUE RECOMMENDATIONS

9



Hex Bolts

Torques M12-M24 ± 10%, M30... +30/-0%

	M12	M14	M16	M20	M24	M30	M36	M42
Nm	70	115	175	350	500	600	700	900
lb-ft	52	85	129	258	369	443	516	664



Hex Nuts: Standard Height

Torques M12-M24 ± 10%, M30... +30/-0%

	M12	M14	M16	M20	M24	M30	M36	M42
Nm	65	115	175	250	350	500	600	700
lb-ft	48	85	129	184	258	369	443	516



Hex Nuts: Low Height

All Torques ± 10%

	M12		M16	M20	M24	M30		
Nm	60		125	200	275	350		
lb-ft	44		92	148	203	258		



Spanner Nuts

All Torques ± 10%

	M17	M25	M35	M45	M55	M65	M75	M85
Nm	50	120	250	500	600	700	800	900
lb-ft	37	89	184	369	443	516	590	664

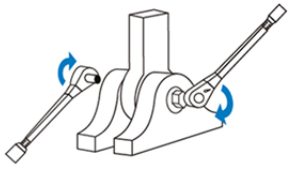


Securing Spanner Nut

Max Torque

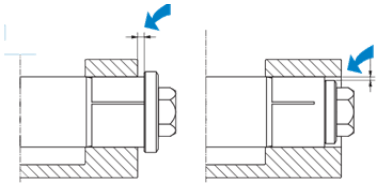
	....M100	M100....						
Nm	50	80						
lb-ft	37	59						

10



After initial torque move machine through full range of motion several times. Loosen the securing spanner nut and recheck the torques. Check the torque with this procedure after 10 hours, 40 hours and at regular service intervals to ensure proper seating of the sleeves.

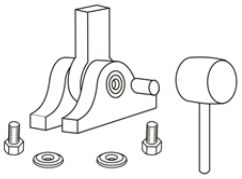
11



Ensure that there is a minimum distance of 0,5 mm (.02”) between the washer and the lug. **ATTENTION!** If the washer is in contact with the lug contact your dealer or Expander System.

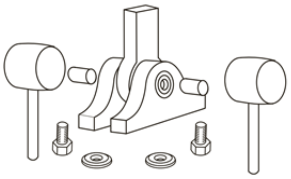
DISMOUNTING

12



Unscrew the fasteners on both sides and remove the washers. Tap the axel end with small diameter until the tension on the sleeves is released. Use a piece of pipe between the axle and the mallet/hammer not to damage the threads.

13



Tap the axle alternatively on left and right side until the tension on the sleeves is released (use a piece of pipe between the axle and the mallet/hammer not to damage the threads). Remove the sleeves and axle. Do not damage the threads.