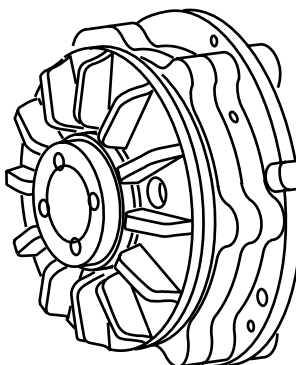


TSE-800 TO TSE-800-1 BRAKE CONVERSION KIT INSTRUCTIONS



Read this manual carefully, making full use of its explanations and instructions. The "Know How" of safe, continuous, trouble-free operation depends on the degree of your understanding of the system and your willingness to keep all components in proper operating condition. Pay particular attention to all **NOTES**, **CAUTIONS**, and **WARNINGS** to avoid the risk of personal injury or property damage. It is important to understand that these **NOTES**, **CAUTIONS**, and **WARNINGS** are not exhaustive. Nexen cannot possibly know or evaluate all conceivable methods in which service may be performed, or the possible hazardous consequences of each method. Accordingly, anyone who uses a procedure that is not recommended by Nexen must first satisfy themselves that neither their safety or the safety of the product will be jeopardized by the service method selected.

CAUTION

This unit has rotating parts. Nexen recommends using a guard that will not restrict the flow of cooling air around the unit. Contact your local Nexen Distributor for information about guards designed for "Air Champ" brakes.

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NOTE

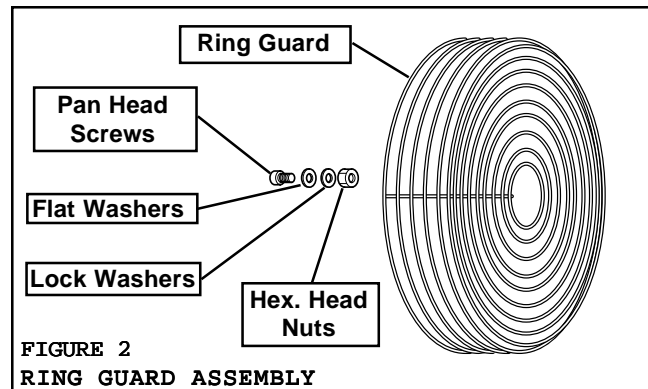
Reference L-20077 for installation, operation, and maintenance instructions.

RING GUARD INSTALLATION

WARNING

Always have a Ring Guard Assembly in place when operating Nexen Clutches or Brakes. Nexen recommends using Product No. 826300 with the TSE-800-1 Brake.

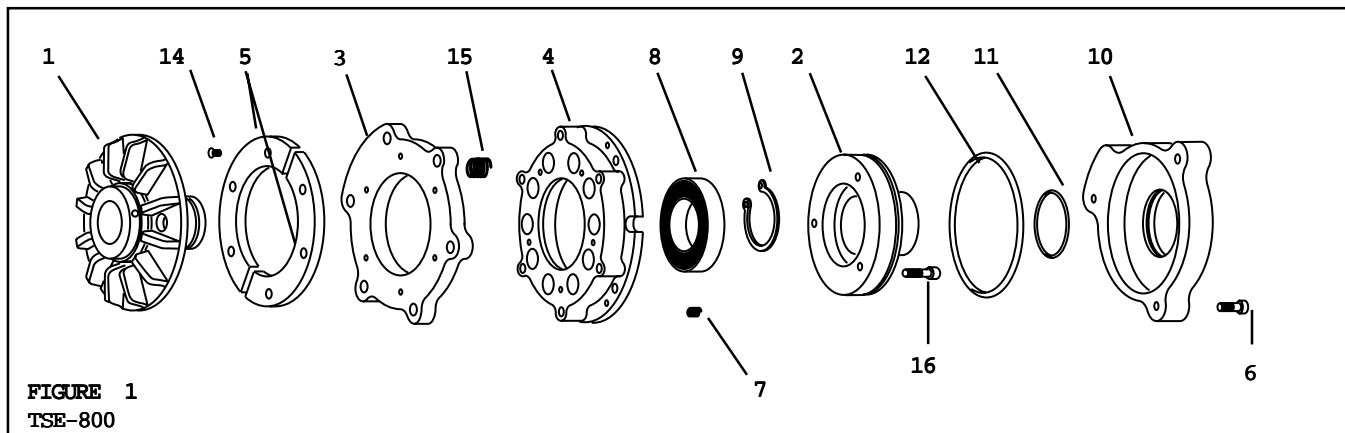
1. Slide the Ring Guard over the TSE Brake by aligning the Ring Guard attachment hook ends with the notches in the TSE Housing; then, turn the Ring Guard to the closest attachment hole.
2. Secure the Ring Guard to the Housing of the TSE Brake using the four Pan Head Screws, Flat Washers, Lock Washers, and Hex. Head Nuts provided with the Ring Guard (See Figure 2).



PARTS REPLACEMENT

NOTE

This conversion kit requires complete disassembly of the TSE-800. In addition to the following procedure, it is recommended to replace the friction facings, compression springs, and hardware during rebuild (reference PARTS LIST information in maintenance manual L-20077 for facing and repair kit numbers). If friction facings, compression springs, and hardware are not replaced during rebuild, retain components for reinstallation.



WARNING

Shoulder Screws are spring loaded. Always wear safety goggles when working with spring or tension loaded fasteners or devices.

1. Alternately and evenly remove and discard old Shoulder Screws (Item 6) (See Figure 1).
2. Remove and discard old Cylinder (Item 10) (See Figure 1).
3. Remove Compression Springs (Item 7) (See Figure 1).
4. Remove and discard the old O-ring Seals (Items 11 and 12) (See Figure 1).

WARNING

Spring Housing and Plate are spring loaded and can spring apart and cause personal injury if they are not clamped together.

5. Using 'C'-clamps, compress Spring Housing (Item 4) against Plate (Item 3) (See Figure 1).
6. Remove and discard the three Socket Head Cap Screws (Item 16) (See Figure 1).
7. Remove the Piston (Item 2) (See Figure 1).

WARNING

Special attention should be exercised when working with Retaining Rings. Always wear safety goggles when working with spring or tension loaded fasteners or devices.

8. Remove the Retaining Ring (Item 9) (See Figure 1).
9. Press Friction Disc Hub (Item 1) out of the old Bearing (Item 8) (See Figure 1).
10. Slowly unclamp Spring Housing (Item 4) from Plate (Item 3) and discard these items. Retain Compression Springs (Item 15) for reinstallation.

NOTE

Machine Screws (Item 14) on some older TSE Brakes are installed with a red anaerobic thread locking compound. If removal is difficult, strike the end of the screwdriver with a hammer to break the crystalline structure of this compound before attempting to remove the machine screws.

Inspect Friction Facing (Item 5) for wear or damage and order new replacement kit if necessary. Otherwise, retain Friction Facing for reinstallation.

11. Remove old Machine Screws (Item 14) and Friction Facings (Item 5).

NOTE

Do not reuse these Machine Screws (Item 14).

12. Using a bearing puller, remove old Bearing (Item 8) from Spring Housing (Item 4) and discard these items (See Figure 1).
13. Apply an adequate amount of Loctite® 680 to evenly coat O.D. of the new Bearing (Item 8) and press the new Bearing into new Spring Housing Assembly (Item 4).
14. Equally space Compression Springs (Item 15) in the spring pockets of the new Spring Housing Assembly (Item 4).
15. Using new Machine Screws (Item 14), install the Friction Facing (Item 5) onto new Plate (Item 3).
16. Tighten the Machine Screws (Item 14) to 5 Ft. Lbs. [6.77 N•m] torque.

17. Slide the new Plate (Item 3) onto the pins of the Spring Housing Assembly (Item 4).
18. Using 'C'-clamps, compress the Plate (Item 3) against the Compression Springs (Item 15) and Spring Housing Assembly (Item 4).
19. Press the Friction Disc Hub (Item 1) into the new Bearing (Item 8).
20. Reinstall the Retaining Ring (Item 9).
21. Press the Piston (Item 2) into the Spring Housing Assembly (Item 4).
22. Apply Loctite® 242 to entire length and under heads of the new Socket Head Cap Screw (Item 16). Alternately and evenly tighten Socket Head Cap Screws to 13.0 Ft. Lbs. [17.6 N•m] torque.

NOTE

Loctite® must seal all air gaps between Socket Head Cap Screws and clearance holes.

23. Install Spacers (Item 24) inside of the Compression Springs (Item 7) and place these items into the pockets of the Spring Housing Assembly (Item 24) (See Figure 3).
24. Clean the O-ring grooves of the Piston (Item 2).
25. Lubricate the new O-rings and O-ring contact surfaces with a thin film of fresh O-ring lubricant.

NOTE

Avoid pinching of O-ring Seals when assembling Piston and Cylinder.

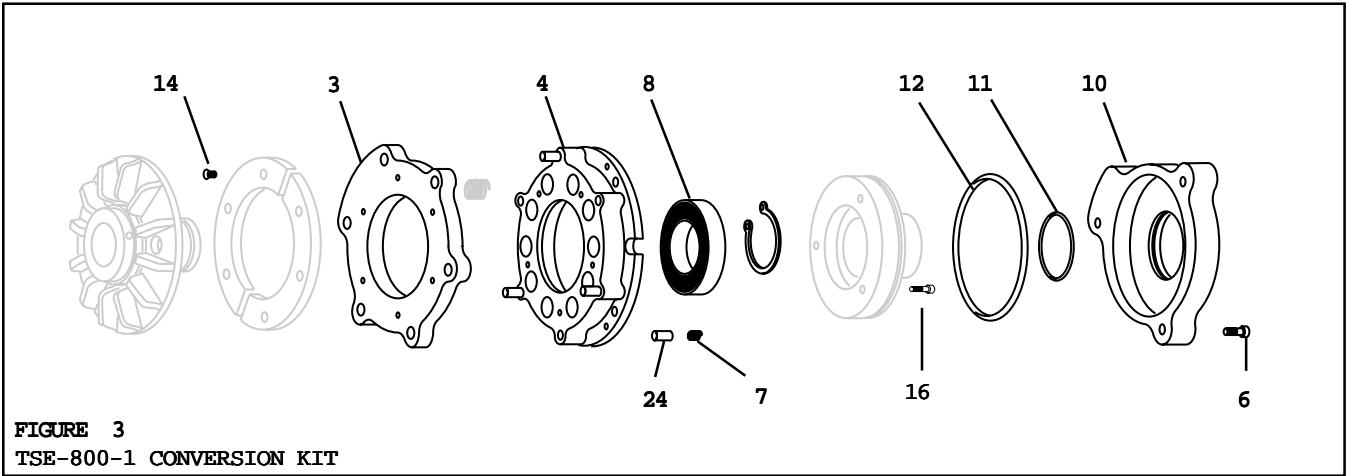
26. Install the new O-ring Seals (Items 11 and 12).
27. Align Cylinder clearance holes and slide the Cylinder (Item 10) onto the Piston (Item 2).
28. Apply Loctite® 242 to the threads of new Socket Head Cap Screws (Item 6). Alternately and evenly tighten screws to 19 Ft. Lbs. [25.8 N•m] torque.
29. Remove 'C'-clamps securing Spring Housing Assembly against Plate.

REPLACEMENT PARTS

The item number or balloon number for all Nexen products is used for part identification on all product parts lists, product price lists, unit assembly drawings, bills of material, and instruction manuals.

When ordering replacement parts, specify the model designation, item number, part description, and quantity. Purchase replacement parts through your local Nexen Distributor.

PARTS LIST



ITEM	DESCRIPTION	QTY
3	Plate	1
4	Spring Housing Assembly	1
6	Socket Head Cap Screw	3
7	Compression Spring	3
8	Bearing	1
10	Cylinder	1
11	O-ring Seal (Small)	1
12	O-ring Seal (Large)	1
14	Machine Screw	6
16	Socket Head Cap Screw	3
24	Spacer	3

WARRANTY

Nexen Group, Inc. (Nexen) warrants its product(s) [the Product(s)] will be free from defects in materials and workmanship under normal use and service conditions for a period of 12 months from the date of shipment. NO OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, OR OF FITNESS FOR A PARTICULAR PURPOSE, ARE GIVEN, AND ALL SUCH OTHER WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED.

Conditions

This warranty applies only if: (a) the Product has been installed, used, and maintained in accordance with any applicable Nexen installation or maintenance manual for the Product; (b) the alleged defect is not attributable to normal wear and tear; (c) the Product has not been altered, misused, or used for purposes other than those for which it was intended; and (d) the claimant has complied with the warranty claim procedures set out below in Warranty Claim Procedures.

Exclusive Remedy

The sole and exclusive remedy for a breach of this warrant shall be, at Nexen's sole election, repair or replacement with new, serviceably used or reconditioned Product, or issuance of a credit in the amount of the current Nexen discounted price for the Product.

Limitation of Damages

In no event shall Nexen be liable for any consequential, indirect, incidental, or special damages of any nature whatsoever, including without limitation, lost profits arising from the sale or use of the Products.

Warranty Claim Procedures

To make a claim under this warranty, the claimant must give written notice of the alleged defect to Nexen and deliver the Product to Nexen within one year of the date on which the alleged defect first became apparent.

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