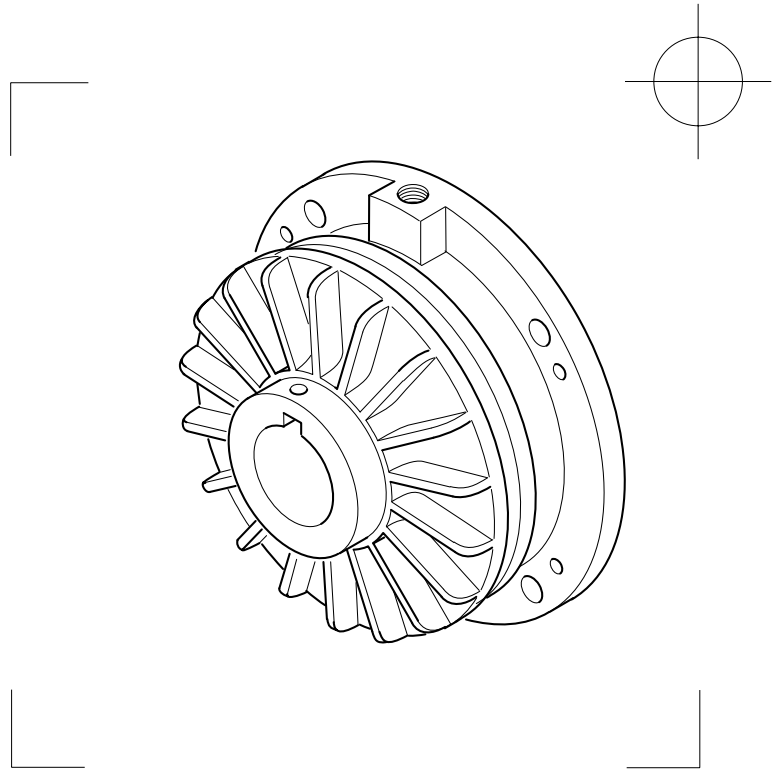


AIR CHAMP® PRODUCTS

User Manual



Models FWB, LWB, MWB and HWB Brakes

In accordance with Nexen's established policy of constant product improvement, the specifications contained in this manual are subject to change without notice. Technical data listed in this manual are based on the latest information available at the time of printing and are also subject to change without notice.

Technical Support:
800-843-7445
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www.nexengroup.com



WARNING

Read this manual carefully before installation and operation.

Follow Nexen's instructions and integrate this unit into your system with care.

This unit should be installed, operated and maintained by qualified personnel **ONLY**.

Improper installation can damage your system or cause injury or death.

Comply with all applicable codes.

Nexen Group, Inc.
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Vadnais Heights, Minnesota 55127

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INTRODUCTION

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 nor the safety of the product will be jeopardized by the service method selected.

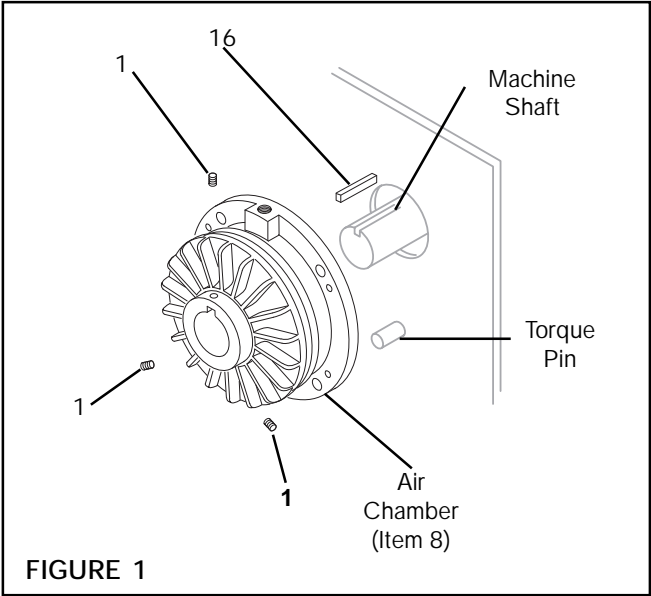
INSTALLATION

WARNING

This unit has rotating parts. Nexen recommends installing a guard if the unit is used in an area where injury to an operator could occur. Contact your local Nexen Distributor for information regarding guards specifically designed for use with "Air Champ" brakes.

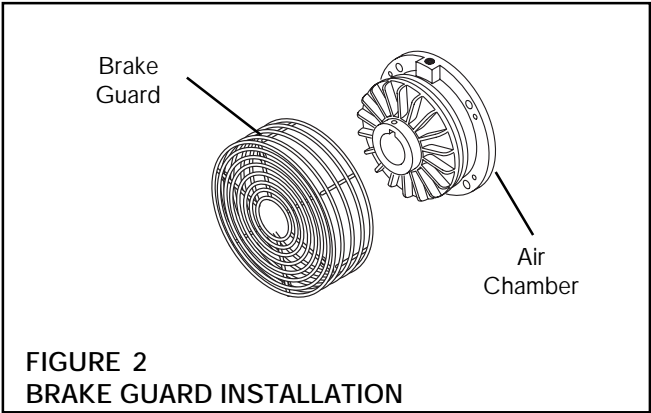
NOTE: The brake may be secured to the machine surface by using either the four holes in the Air Chamber (Item 8) and bolting the brake to the machine housing or by using a torque pin through the slot in the bottom of the Air Chamber (See Figure 1).

1. Insert the Key (Item 16) into the machine shaft and, slide the brake over the machine shaft and Key (See Figure 1).
2. Install and tighten the three Set Screws (Item 1) to secure the brake to the machine shaft (See Figure 1).



BRAKE GUARD INSTALLATION

1. Align the mounting holes of the Brake Guard with the four tapped holes in the Air Chamber or the brake (See Figure 2).
2. Using the four 10-24 X 3/8 Phillips Head Pan Screws and Internal Tooth Lock Washers, secure the Brake Guard to the brake.



LUBRICATION

NOTE: Pneumatically actuated devices require clean, pressure regulated, and lubricated air for maximum performance and long life. The most effective and economical way to lubricate Nexen Brakes is with an Air Line Lubricator, which injects oil into the pressurized air, forcing an oil mist into the air chamber.

Locate the lubricator above and within ten feet of the Brake, and use a low viscosity oil such as SAE-10.

Synthetic lubricants are not recommended.

LUBRICATOR DRIP RATE SETTINGS

NOTE: These settings are for Nexen supplied lubricators. If you are not using a Nexen lubricator, calibration must replicate the following procedure.

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Close and disconnect the air line from the unit. 2. Turn the Lubricator Adjustment Knob counterclockwise three complete turns. 3. Open the air line. 4. Close the air line to the unit when a drop of oil forms in the Lubricator Sight Gage. | <ol style="list-style-type: none"> 5. Connect the air line to the unit. 6. Turn the Lubricator Adjustment Knob clockwise until closed. 7. Turn the Lubricator Adjustment Knob counterclockwise one-third turn. 8. Open the air line to the unit. |
|---|--|

PARTS REPLACEMENT

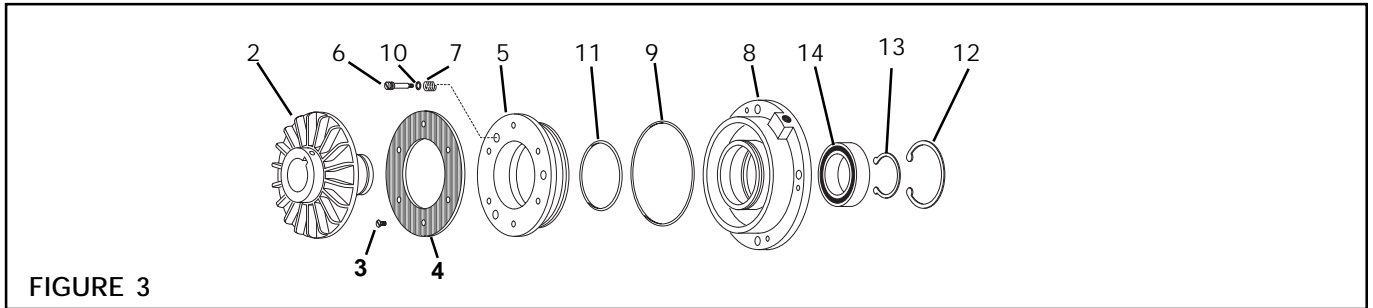


FIGURE 3

WARNING

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

Facing (See Figure 3).

NOTE: The LWB, MWB, and HWB have six Shoulder Bolts (Item 6), Compression Springs (Item 7), and O-ring Seals (Item 10). The FWB has three Shoulder Bolts (Item 6), Compression Springs (Item 7), and O-ring Seals (Item 10).

1. Remove the Retaining Ring (Item 13) and press the Hub Assembly (Item 2) out of the Ball Bearing (Item 14) and Air Chamber (Item 8) (See Figure 3).
2. Remove the Retaining Ring (Item 12) from the Air Chamber (Item 8); then, press the old Ball Bearing (Item 14) out of the Air Chamber (See Figure 3).
3. Remove the six old Flat Head Machine Screws (Item 3) securing the old Friction Facing (Item 4) to the Piston (Item 5); then, remove the Friction Facing (See Figure 3).
4. Remove the old Shoulder Bolts (Item 6), O-ring Seals (Item 10), and Compression Springs (Item 7) from the Piston (Item 5) (See Figure 3).
5. Slide the Piston (Item 5) out of the Air Chamber (Item 8) and remove the O-ring Seals (Item 9 and 11) from the Piston and Air Chamber (See Figure 3).
6. Clean the bearing bore of the Air Chamber (Item 8) with fresh solvent, making sure all old Loctite®

7. Apply an adequate amount of Loctite® 680 to evenly coat the outer race of the new Ball Bearing (Item 14) and press the new Ball Bearing into the Air Chamber (Item 8) (See Figure 3).
8. Reinstall the Retaining Ring (Item 12) (See Figure 3).
9. Apply a thin film of o-ring lubricant to the new O-ring Seals (Items 9, 10, and 11) and the o-ring contact surfaces of the Piston (Item 5), Air Chamber (Item 8), and new Shoulder Bolts (Item 6) (See Figure 3).
10. Install the new O-ring Seals (Items 9, 10, and 11) (See Figure 3).
11. Slide the Piston into the Air Chamber, aligning the holes in the Piston with the holes in the Air Chamber (See Figure 3).
12. Slide a new Compression Spring (Item 7) onto each new Shoulder Bolt (Item 6) (See Figure 3).
13. Install the new Shoulder Bolts (Item 6), Compression Springs (Item 7), and O-ring Seals (Item 10) through the Piston (Item 5) and into the Air Chamber (Item 8) (See Figure 3).
14. Alternately and evenly tighten the new Shoulder Bolts (Item 6) to 66 In. Lbs. [7.45 N•m] torque (See Figure 3).
15. Using six new Flat Head Machine Screws (Item 3), secure the new Friction Facing (Item 4) to the Piston (Item 5) (See Figure 3).
16. Tighten the six Flat Head Machine Screws (Item 3) to 22 In. Lbs. [2.50 N•m] torque.
17. While supporting the inner race of the new Ball Bearing (Item 14), press the Hub Assembly (Item 2) into the new Ball Bearing and Air Chamber (Item 8) (See Figure 3).
18. Reinstall the Retaining Ring (Item 13) (See Figure 3).

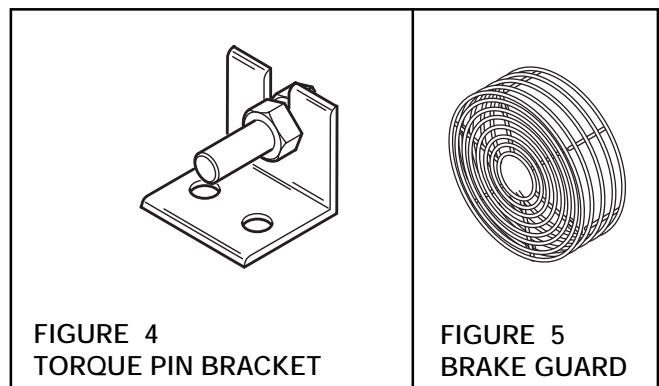
REPLACEMENT PARTS

The item 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 materials, and instruction manuals.

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

ACCESSORIES

MODEL	TORQUE PIN BRACKET PRODUCT NO.	BRAKE GUARD PRODUCT NO.
FWB	819900	817700
LWB	821400	818300
MWB	823400	826300
HWB	825500	828200



PARTS LIST

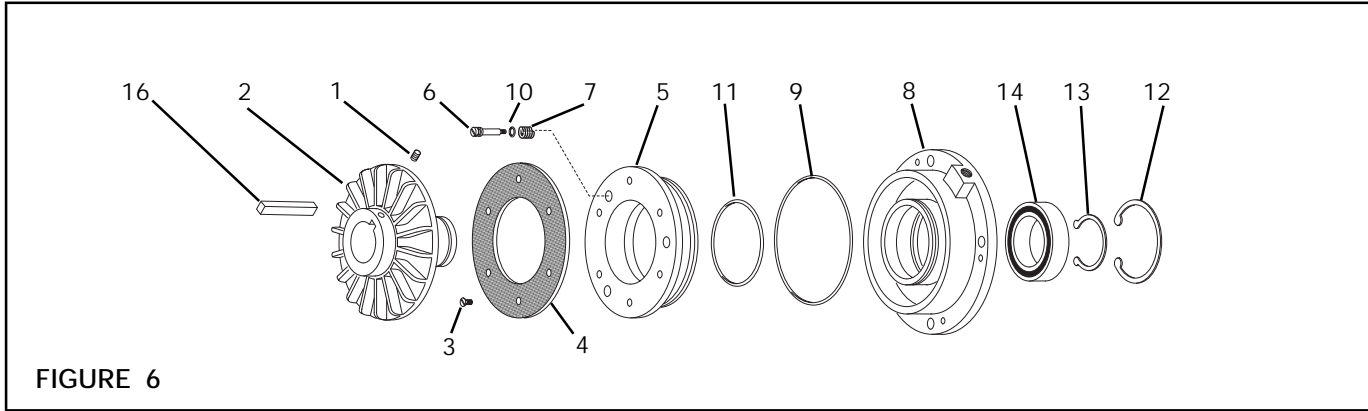


FIGURE 6

ITEM	DESCRIPTION	QTY
1	Set Screw	3
2	Hub Assembly	1
3 ¹	Flat Head Machine Screw	6
4 ¹	Friction Facing	1
5	Piston	1
6 ¹	Shoulder Bolt	*
7 ¹	Compression Spring	*
8	Air Chamber	1

ITEM	DESCRIPTION	QTY
9 ¹	O-ring Seal	1
10 ¹	O-ring Seal	*
11 ¹	O-ring Seal	1
12	Retaining Ring	1
13	Retaining Ring	1
14 ¹	Ball Bearing	1
16 ²	Key	1

¹ Denotes Repair Kit item.

² When ordering Bushing (Item 15), state the Model Number and required bore size.

* QTY. 3 on FWB and QTY. 6 on LWB, MWB, and HWB

REPAIR KITS	
MODEL	PRODUCT NO.
FWB	847300
LWB	847400
MWB	847500
HWB	847600

WARRANTIES

Warranties

Nexen warrants that the Products will be free from any defects in material or workmanship for a period of 12 months from the date of shipment. NEXEN MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. 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) Buyer has given written notice of the alleged defect to Nexen, and delivered the allegedly defective Product to Nexen, within one year of the date of shipment.

Exclusive Remedy

The exclusive remedy of the Buyer for any breach of the warranties set out above will be, at the sole discretion of Nexen, a repair or replacement with new, serviceably used or reconditioned Product, or issuance of credit in the amount of the purchase price paid to Nexen by the Buyer for the Products.

Limitation of Nexen's Liability

TO THE EXTENT PERMITTED BY LAW NEXEN SHALL HAVE NO LIABILITY TO BUYER OR ANY OTHER PERSON FOR INCIDENTAL DAMAGES, SPECIAL DAMAGES, CONSEQUENTIAL DAMAGES OR OTHER DAMAGES OF ANY KIND OR NATURE WHATSOEVER, WHETHER ARISING OUT OF BREACH OF WARRANTY OR OTHER BREACH OF CONTRACT, NEGLIGENCE OR OTHER TORT, OR OTHERWISE, EVEN IF NEXEN SHALL HAVE BEEN ADVISED OF THE POSSIBILITY OR LIKELIHOOD OF SUCH POTENTIAL LOSS OR DAMAGE. For all of the purposes hereof, the term "consequential damages" shall include lost profits, penalties, delay images, liquidated damages or other damages and liabilities which Buyer shall be obligated to pay or which Buyer may incur based upon, related to or arising out of its contracts with its customers or other third parties. In no event shall Nexen be liable for any amount of damages in excess of amounts paid by Buyer for Products or services as to which a breach of contract has been determined to exist. The parties expressly agree that the price for the Products and the services was determined in consideration of the limitation on damages set forth herein and such limitation has been specifically bargained for and constitutes an agreed allocation of risk which shall survive the determination of any court of competent jurisdiction that any remedy herein fails of its essential purpose.

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 whom the Product was purchased from and deliver the Product to same within one year of the date on which the alleged defect first became apparent.

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