

AIR CHAMP® PRODUCTS

User Manual



High Speed Clutch Models MWHS and HWHS

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.

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DANGER

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.

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560 Oak Grove Parkway
Vadnais Heights, Minnesota 55127

ISO 9001 Certified



INTRODUCTION

The "Air Champ" High Speed Clutch is designed to handle high inertia load at high RPM and cycle at frequencies far beyond the operational range of ordinary clutches. The High Speed Series of clutches is easy to install and mount on motor shafts or on the end of driven shafts without special tooling or attachments. Simple design features only one bearing, minimum number of parts to reduce maintenance and extend operational life. All of these units operate on static air pressure.

WARNING

This clutch has rotating parts. If you install this clutch in an area where an operator could come into contact with the rotating parts and be injured, then use a guard that will not restrict the flow of cooling air around the clutch.

MOUNTING

A key of correct length is supplied with the clutch. Insert the key in your shaft keyway and slide the clutch over the key and to the end of the hub. (Part No. 1) Locate the clutch and tighten the set screws in the hub.

AIR CONNECTION

Connect the rotary air union (Part No. 8) to the hub (Part No. 1). There is a short piece of flexible hose supplied, for connection to the air union. **DO NOT USE RIGID PIPE OR TUBING** for this connection. Connect your air controls, keeping the controls as close as possible to the clutch for faster engagement and disengagement. Now your clutch is ready to operate.

LUBRICATION

The clutch requires no lubrication as the bearing(s) in the sheave are sealed and require no further lubrication. The only lubrication required is light oil periodically in the air union. When these units are used for high cycling, use an air line lubricator.

MAINTENANCE

Examine the friction facing (Part No. 3) occasionally and change when it is approximately 3/16 inch thick. To disassemble the unit, remove the rotary air union (Part No. 8), loosen the Set Screw (Part No. 13) and remove Cap Screw (Part No. 21), lockwasher (Part No. 22), threaded insert (Part No. 20) and piston (Part No. 6). Slide the friction disc assembly (Part No. 5) off from the hub and the friction facing (Part No. 3) is exposed for changing. To reassemble simply reverse this process.

Failure of the clutch to operate properly may be due to one or more of the following:

1. Air leakage from the air union (Part No. 8).
2. Faulty air controls.
3. Broken or worn O-Rings (Part Nos. 10, 11 & 12).
4. Broken or weak return spring (Part No. 4).
5. Worn or grease-laden friction facing (Part No. 3).
6. Bad bearing(s) in sheave (Part No. 7).

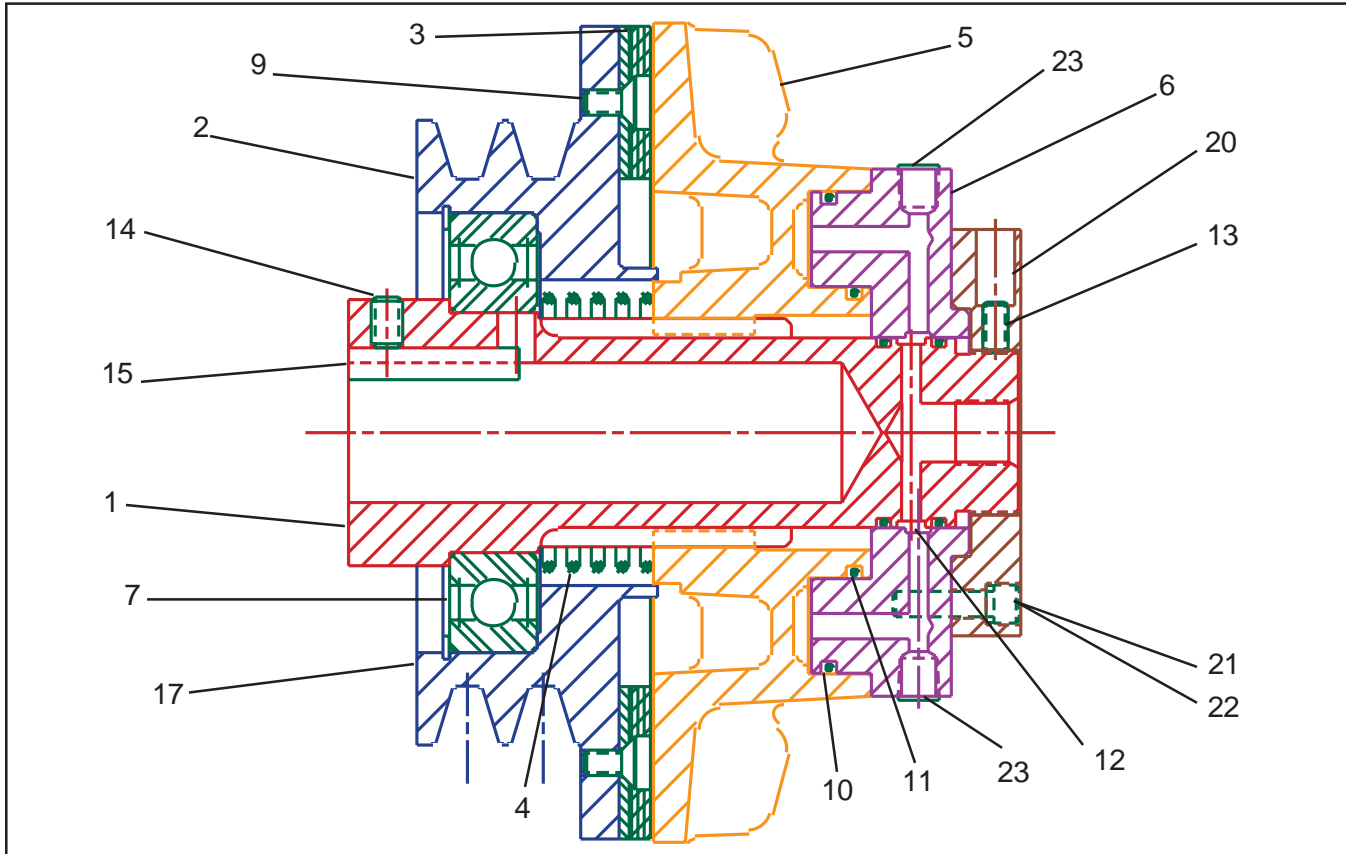
REPAIR KITS

The repair kits listed below include a friction facing, friction facing screws, spring and o-rings.

Order Replacement Bearings separately. Specify model size and type (Sheave or Drive Disc).

Model	Product Number
MWHS	848400
HWHS	848500

PARTS LIST



ITEM NO.	DESCRIPTION	MWHS	HWHS
1	Hub	1	1
* 2	Sheave	1	1
■ 3	Facing, Friction	1	1
■ 4	Spring	1	1
5	Disc, Assembly, Friction	1	1
6	Piston	1	1
7	Bearing	1	1
8	Rotary Air Union(not shown)	1	1
■ 9	Screw, Machine	6	6
■ 10	O-Ring (large)	1	1
■ 11	O-Ring (small)	1	1

ITEM NO.	DESCRIPTION	MWHS	HWHS
■ 12	O-Ring (hub)	2	2
13	Screw, Set	2	2
14	Screw, Set	2	2
15	Key	1	1
17	Ring, Retainer	1	1
20	Insert, Threaded	1	1
21	Screw, Cap	4	4
22	Lockwasher	4	4
23	Plug, Pipe	2	2
25	Hose Assembly	1	1

* Used in place of drive disc - sheave models

■ Repair kit items

NOTE: Bearings are not included as Repair Kit items. To order new bearings specify model size and type (Sheave or Drive Disc).

FOR REPLACEMENT PARTS CONTACT YOUR LOCAL NEXEN DISTRIBUTOR

NOTE: When ordering any parts, specify clutch model, part number, description, and quantity for prompt and accurate delivery.

**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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