



AIR CHAMP® PRODUCTS

User Manual



Burke E. Porter Double Flex Coupling Model 5H50P

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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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.

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INTRODUCTION

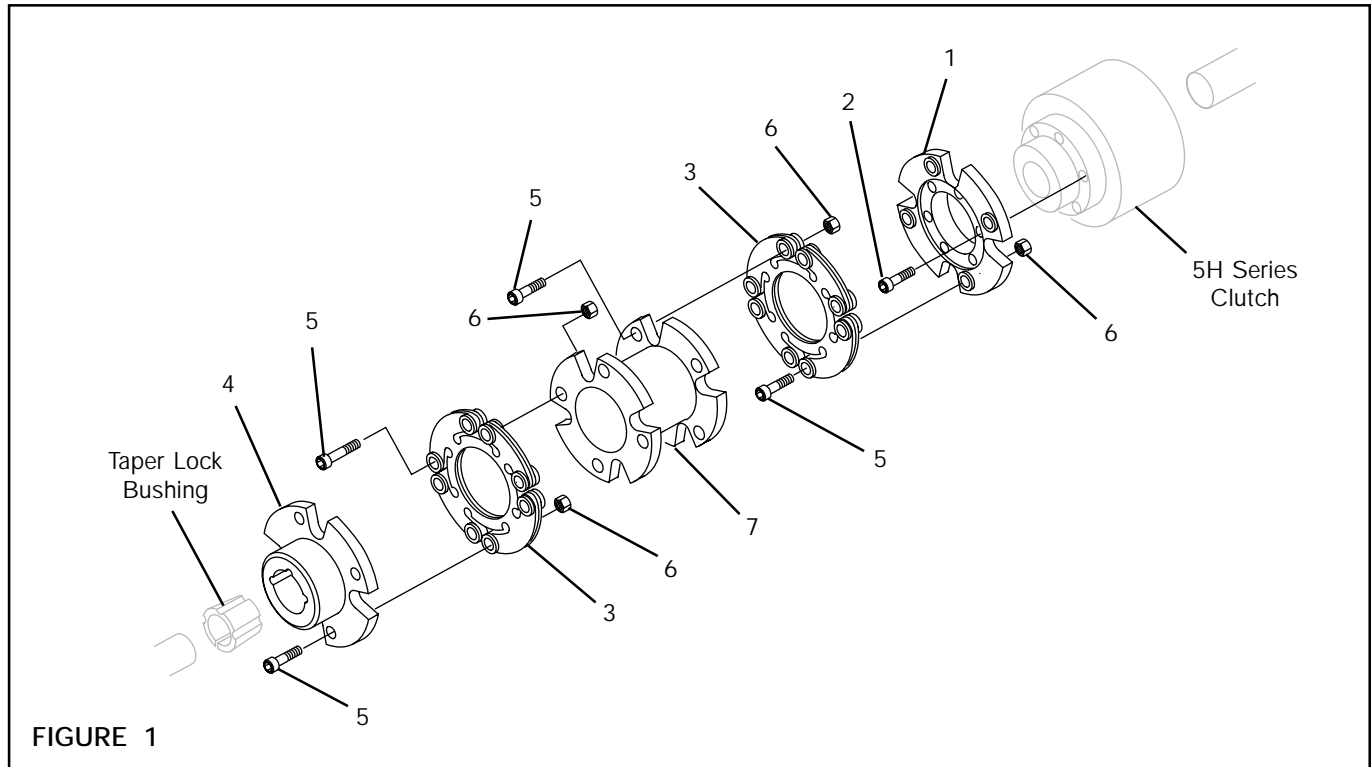
Read this manual carefully, making full use of its explanations and instructions. The “Know How” of safe, continuous, trouble-free operation depends on the degree of your understanding of the system and your willingness to keep all components in proper operating condition. Pay particular attention to 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 or the safety of the product will be jeopardized by the service method selected.

Nexen’s Single and Double Flex, universally designed coupling’s combine with Nexen’s Open or Enclosed 5H Series Tooth Clutches, 4H Series Clutches, and Torque Limiters.

The Open 5H Series Tooth Clutches have four mounting holes; The Enclosed 5H Series and Torque Limiters have six mounting holes.

Use the four standard cap screws when combining the Coupling with the Open 5H Series Tooth Clutch. Use the six stainless steel cap screws when combining the Coupling with the Enclosed Nickel Plated 5H Series Tooth Clutch, or Torque Limiters.

INSTALLATION



1. Insert the Taper Lock Bushing into the Coupling Hub (Item 4) (See Fig. 1).
2. Slide the Coupling Hub (Item 4), with the Taper Lock Bushing, onto one shaft, and install the set screws provided with the Taper Lock Bushing (See Fig. 1).

NOTE: Make sure that there are no burrs on the shafts or keys.

NOTE: Do not tighten the set screws provided with the Taper Lock Bushing at this time.

3. Using the Hex. Head Cap Screws (Item 2), attach the Coupling Adapter (Item 1) to the Clutch (See Fig. 1).
4. Tighten the Hex. Head Cap Screws (Item 2) to the recommended torque (See Table 1).
5. Slide the Coupling Adapter with the Clutch onto the other shaft (See Fig. 1).
6. Tighten the Taper Lock Bushing Set Screws to the recommended torque.

7. Adjust the Hub separation to within the limits for parallel and angular misalignment (See Table 1).

NOTE: For best results, Nexen recommends the use of a dial indicator, and always rotate the Hub on which the dial indicator is mounted.

CAUTION

Coupling and shaft alignment should be checked periodically, due to equipment shifting, etc. Alignment should be rechecked after the first forty hours of operation.

8. Secure the Clutch with the Coupling Adapter to the shaft according to the instruction provided with the Clutch.
9. Using Hex. Head Cap Screws (Item 8)) and Hex. Nuts (Item 6), secure the Disc Packs (Item 3), to the Flange (Item 7) (See Fig. 1).

NOTE: To prevent galling or seizing, check the Hex. Nuts (Item 6) for lubricant. If lubricant is not found on Hex. Nut, apply Molycote to the Hex. head Cap Screws (Item 8) to insure proper clamping torque.

NOTE: Do not rotate Hex. Head Cap Screw (Item 8) while applying clamping torque.

10. In a cross pattern tighten the Hex. Nuts (Item 6) to one-half of the recommended torque (See Table 1).

11. In a cross pattern tighten the Hex. Nuts (Item 6) to the recommended torque (See Table 1).

12. Insert the Disc Pack, and Flange Assembly between the Coupling Adapter (Item 1), and the Coupling Hub (Item 4) (See Fig. 1).

13. Using Hex. Head Cap Screws (Item 5) and Hex. Nuts (Item 6), secure Disc Pack and Flange Assembly to the Coupling Adapter (Item 1) and Coupling Hub (Item 4) (See Fig. 1).

NOTE: To prevent galling or seizing, check the Hex. Nuts (Item 6) for lubricant. If lubricant is not found on Hex. Nut, apply Molycote to the Hex. head Cap Screws (Item 5) to insure proper clamping torque.

NOTE: Do not rotate Hex. Head Cap Screw (Item 5) while applying clamping torque.

14. In a cross pattern tighten the Hex. Nuts (Item 6) to one-half of the recommended torque (See Table 1).

15. In a cross pattern tighten the Hex. Nuts (Item 6) to the recommended torque (See Table 1).

TABLE 1

DOUBLE FLEX COUPLING ADAPTOR ASSEMBLY							
MODEL	Coupling Adaptor Assembly	Misalignment Capacity			Hex Head Cap Screw Clamping Torque (Item 2) (Qty 4) Open Units only	Hex. Head Cap Screw Clamping Torque (Item 2) (Qty 6) Enclosed Units only	Hex. Nut Clamping Torque (Item 6)
		ANG.	AXIAL	PARA			
5H50	910381	3 Deg.	.180	.091	300 in. lbs.	407 in. lbs.	336 in. lbs.

NOTE: If parallel, angular, and axial misalignment are all required, make sure that the combined percentage of each does not exceed 100%.

EXAMPLE: If 100% of the parallel misalignment rating is required, no angular or axial misalignment is allowed. If 50% of the parallel misalignment rating is required, only 1.5 degrees angular misalignment, or 50% of the axial rating will be available.

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.

PARTS LIST

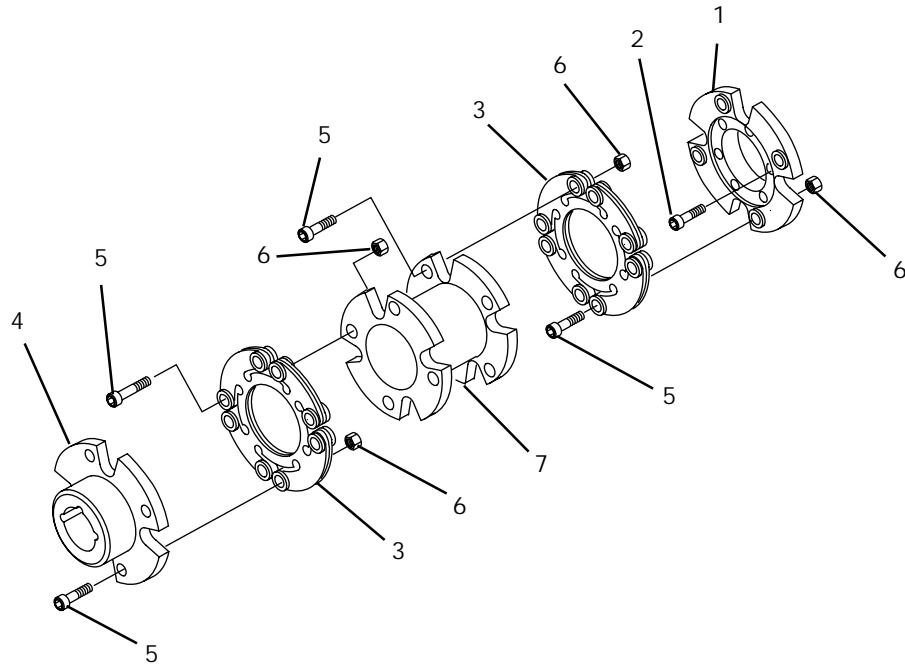


FIGURE 2

DOUBLE FLEX COUPLING			
ITEM	DESCRIPTION	P/N	QTY
1	Coupling Adaptor	10080	1
2	Hex. Head Cap Screw	3565	4
3	Disc Pack (Flexible)	9870	2
4	Coupling Hub	10076	1
5	Hex. Head Cap Screw	3836	16
6	Hex Nut (Torque)	3563	16
7	Flange (Double-Flex)	10075	1

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 damages, 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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