



ROPER PUMP CO. PRODUCT MANUAL

PM:003

Revised
02/27/04

Subject: Garlock® DSA Packing

By: Laney Seabolt

Introduction

The 3600 Series pumps in sizes 11, 17, 22, 32, 43, 48 and 58 may be equipped with special dry running packing (Garlock® DSA packing). This packing is used primarily on truck mounted pumps that are used to pump clean, low viscosity fluids like gasoline and fuel oil.

When installed properly, adjustments to reduce shaft/packing leakage are usually minor and much less often than with standard shaft packing.



DO NOT work on or adjust packing while the pump is running.

If truck mounted, DISENGAGE the PTO or hydraulic drive and shut off the engine.

If motor driven, TURN OFF motor and lock out the energy source.

CLOSE VALVES on the inlet and discharge while working on the pump.

INSTALLATION AND INITIAL ADJUSTMENT

1. An installation tool for the DSA packing may be made as described in the following pages. The installation tool may only be used prior to the installation of the outboard ball bearing or when the outboard ball bearing has been removed from the pump.
2. Lubricate the inside diameter of the braided rings with a thin film of supplied break-in lubricant.
3. Install the packing rings one at a time, in the order shown in the following drawing with the joints of adjacent rings staggered 90°.
4. Push each ring firmly in place before installing the next ring.
5. The packing nuts should first be evenly tightened with a wrench to compress the packing 1/16" to 1/8" [1.59 to 3.18 mm].
6. Loosen the gland and wait several minutes.
7. Tighten the gland to a finger-tight condition, then tighten the gland nuts one additional flat. Tighten the locking nuts against the gland nuts.



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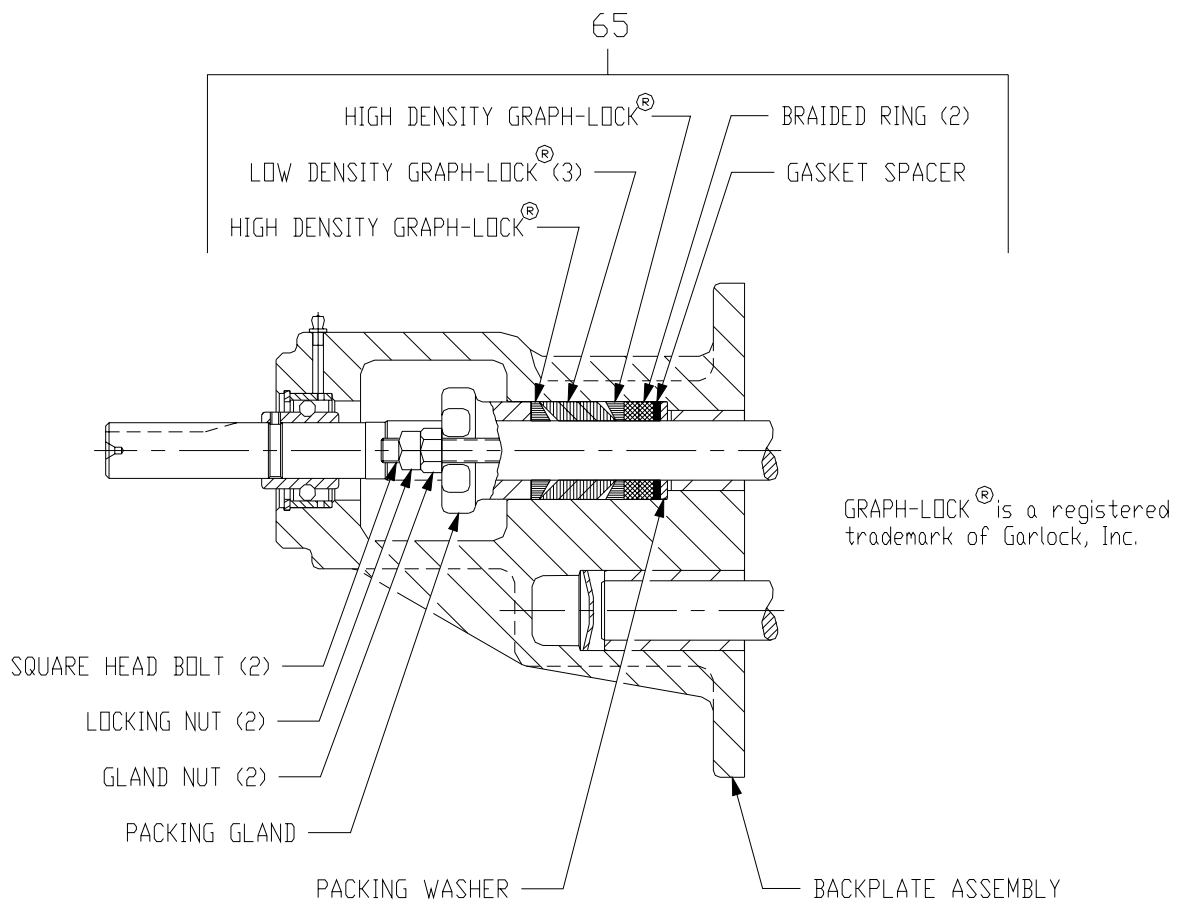
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8. After installing the guards and following all other safety precautions, start the pump and check for leakage. Leakage should be no more than an occasional drop.
9. If leakage is noted, stop the pump, follow all safety precautions, loosen the locking nuts and tighten the gland nuts one additional flat. Tighten the locking nut against the gland nuts.
10. After installing guards and following all other safety precautions, start the pump and check for leakage. Leakage should be no more than an occasional drop. Repeat steps 8 through 10 as necessary to initially adjust the packing. Follow up adjustments during the life of the packing should be infrequent.



DRY RUNNING PACKING ASSEMBLY
(GARLOCK® DSA PACKING)

Garlock® is a registered trademark of Garlock Inc.
Graph-Lock® is a registered trademark of Garlock Inc.



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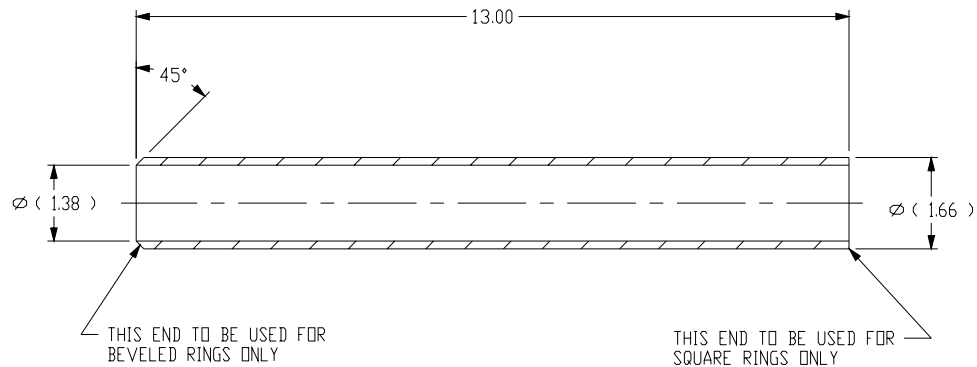
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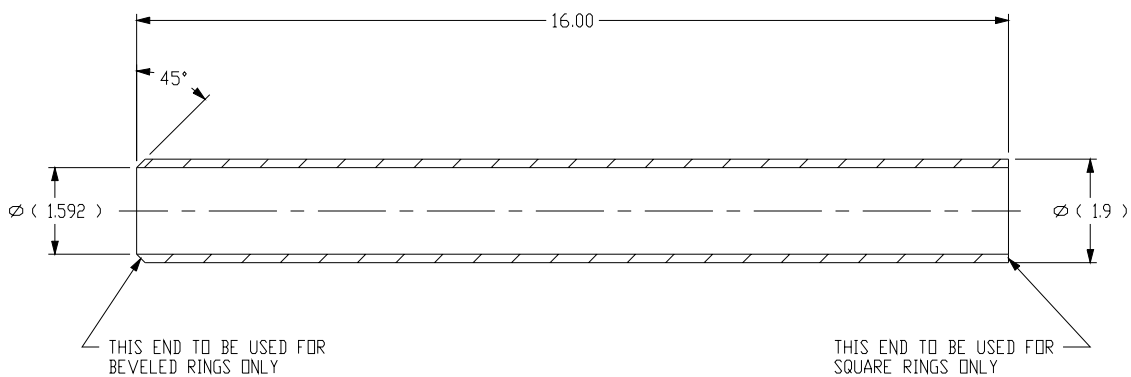
DSA PACKING INSTALLATION TOOL FOR THE 3611 THROUGH 3622



NOTES:

1. MATERIAL: 1-1/4" PVC PIPE (SCHEDULE 40)
2. INSTALLATION TOOL MAY ONLY BE USED PRIOR TO INSTALLATION OF OUTBOARD BALL BEARING OR WHEN BALL BEARING IS REMOVED.
3. USE ONLY TO PUSH PACKING RINGS IN PLACE.\ DO NOT HAMMER.

DSA PACKING INSTALLATION TOOL FOR THE 3632 THROUGH 3658



1. MATERIAL: 1-1/2" PVC PIPE (SCHEDULE 40)
2. INSTALLATION TOOL MAY ONLY BE USED PRIOR TO INSTALLATION OF OUTBOARD BALL BEARING OR WHEN BALL BEARING IS REMOVED.
3. USE ONLY TO PUSH PACKING RINGS IN PLACE.\ DO NOT HAMMER.