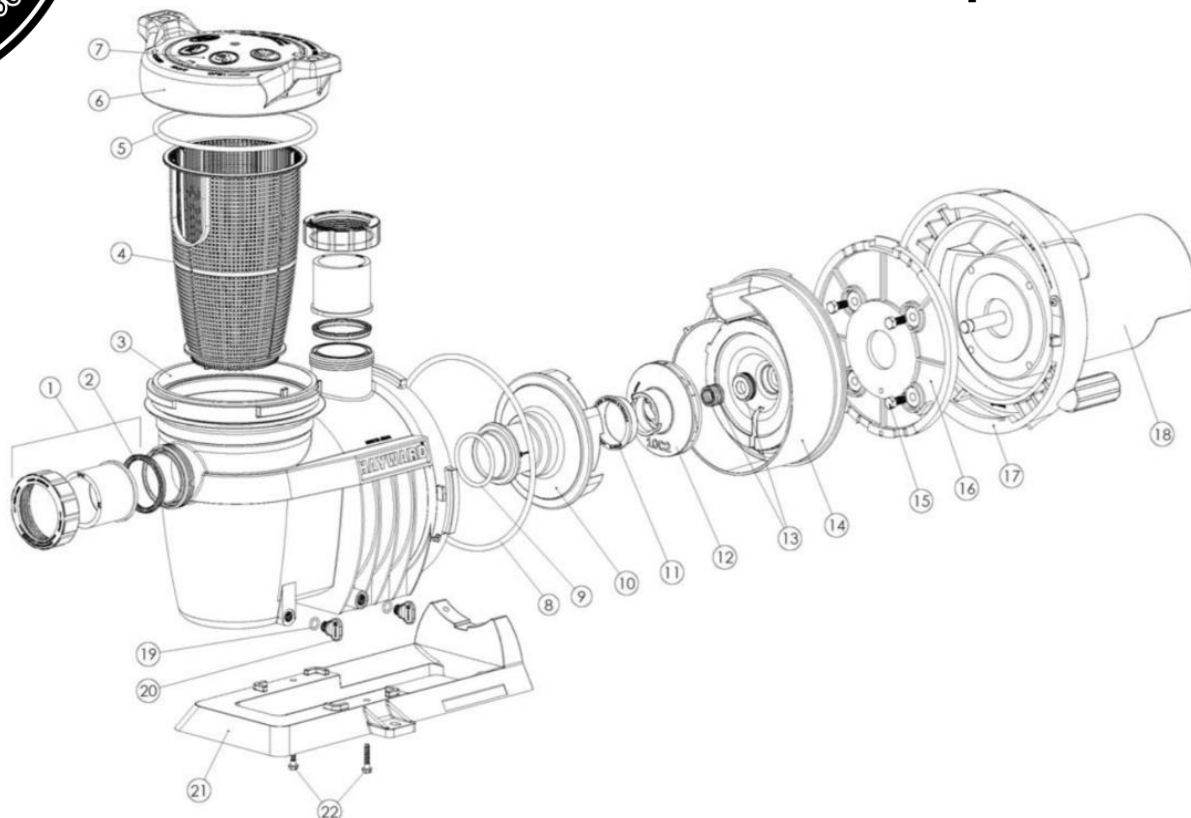




REBUILD KIT

COMPATIBLE WITH

HAYWARD® NorthStar™ Series Pumps



SHAFT SEAL CHANGE INSTRUCTIONS:



⚠ WARNING

IMPORTANT SAFETY INSTRUCTIONS PLEASE READ AND FOLLOW ALL INSTRUCTIONS When servicing electrical equipment, basic safety precautions should always be observed including the following. Failure to follow instructions may result in injury. **A. WARNING** – To reduce risk of injury, do not permit children to use this product. **B. Disconnect all electrical power service to pump before beginning shaft seal replacement.** **C. Exercise extreme care in handling both the rotating and the stationary sections of the two-part replacement seal. Foreign matter or improper handling will easily scratch the graphite and ceramic sealing surfaces.**

Removing the Motor Assembly 1. Release motor lock ring latch (item #17), then grasp lock ring handle and rotate up. 2. Slide the motor assembly out of the pump/strainer housing (item #3), exposing the diffuser (item #10). Pull the diffuser off of the seal plate (item #14), exposing the impeller (item #12).

(The diffuser may remain in the pump/strainer housing. To remove, pull it straight out of the pump/strainer housing.) **Removing the Impeller** 3. Remove the motor end cover by removing the two (2) screws or pry off the cap covering the motor shaft. Hex shaped caps must be twisted off. 4. To prevent motor shaft from turning, secure motor shaft using a 1/2" open-end wrench, which fits over the two (2) flats on the motor shaft. 5. Rotate the impeller (item #12) counterclockwise and remove. The spring portion of the seal assembly (item #13) is now exposed. Note carefully the position of the spring seal, and remove it. Remove impeller ring (item #11) as well. NOTE - Replace motor cover to protect delicate motor parts. **Removing the Ceramic Seat** 6. Remove the seal plate (item #14). Note the tab on the top of the plate and the mating groove on the top of the motor mounting plate (item #16). 7. Press the ceramic seat with rubber cup (item #13) out of the seal plate (item #14). If tight, use a small screwdriver to tap seal out. STOP - Clean all recesses & parts to be reassembled. Inspect gaskets & replace if necessary. **Seal Installation** 8. Clean and lightly lubricate the motor shaft and seal recess in the seal plate (item #14) with a dilute solution of non-granulated liquid-type soap. Gently wipe the polished face of the ceramic seal (item #13) with a soft cotton cloth. Lubricate the rubber cup on the ceramic seat and press it firmly into the recess of the seal plate – polished side facing away from seal plate. 9. Reassemble the seal plate (item #14) to the motor mounting plate (item #16), aligning the tabs on the seal plate with the grooves on the motor mounting plate. 10. Gently wipe the black, polished surface of the spring seal assembly (item #13) with a clean, soft, cotton cloth. Press the spring seal assembly onto the motor shaft – black polished surface facing the ceramic seat. **Replacing the Impeller and Diffuser** 11. Screw the impeller (item #12) onto the motor shaft in a clockwise direction. Tighten snugly by holding motor shaft with wrench as noted in step #4. Place the impeller ring (item #11) back onto the impeller, with flange facing towards the diffuser (item #10). 12. Place the diffuser (item #10) over the impeller/impeller ring (item #11 & #12) onto the seal plate (item #14). **Replacing the Motor Assembly** 13. Fasten motor end cover by using the two (2) hex shaped screws. Slide the motor assembly with the diffuser (item #10) in place, into pump/strainer housing (item #3), being careful not to disturb the diffuser gasket (item #9). 14. Fasten assembly to pump/strainer housing (item #3) by rotating motor lock ring (item #17) down until lock engages. (Be sure housing gasket is lubricated and in place, and replace if damaged).

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ALL PARTS ARE MADE IN THE UNITED STATES OR SOURCED FROM US SUPPLIERS.

THANK YOU FOR SUPPORTING A SMALL AMERICAN BUSINESS!