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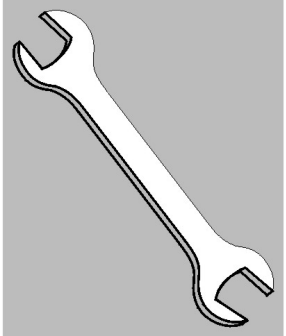
Kit Instruction—KTAMPM001B



Read the Safety Manual

PELLERIN MILNOR CORPORATION POST OFFICE BOX 400, KENNER, LOUISIANA 70063-0400, U.S.A.

Please Read

About the Manual Identifying Information on the Cover

The front cover displays pertinent identifying information for this manual. Most important, are the published manual number (part number) /ECN (date code). Generally, when a replacement manual is furnished, it will have the same published manual number, but the latest available ECN. This provides the user with the latest information applicable to his machine. Similarly all documents comprising the manual will be the latest available as of the date the manual was printed, **even though older ECN dates for those documents may be listed in the table of contents**.

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References to Yellow Troubleshooting Pages

This manual may contain references to "yellow pages." Although the pages containing troubleshooting procedures are no longer printed on yellow paper, troubleshooting instructions, if any, will be contained in the easily located "Troubleshooting" chapter or section. See the table of contents.

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REBUILDING MILNOR CENTRIFUGAL PUMPS

These instructions are for rebuilding Milnor centrifugal pumps. The approximate time to complete the pump rebuild is three man hours. Before beginning to rebuild the pump, it is necessary to familiarize yourself with all safety precautions in the equipment's manuals; please observe all safety precautions. It is also imperative that these instructions, including the attached drawing are read and understood before beginning the retrofit. Pay close attention to the notes on the attached drawing. While working on any electrical or electronic equipment, tag and lockout the power. Also, inventory the parts received with the kit.

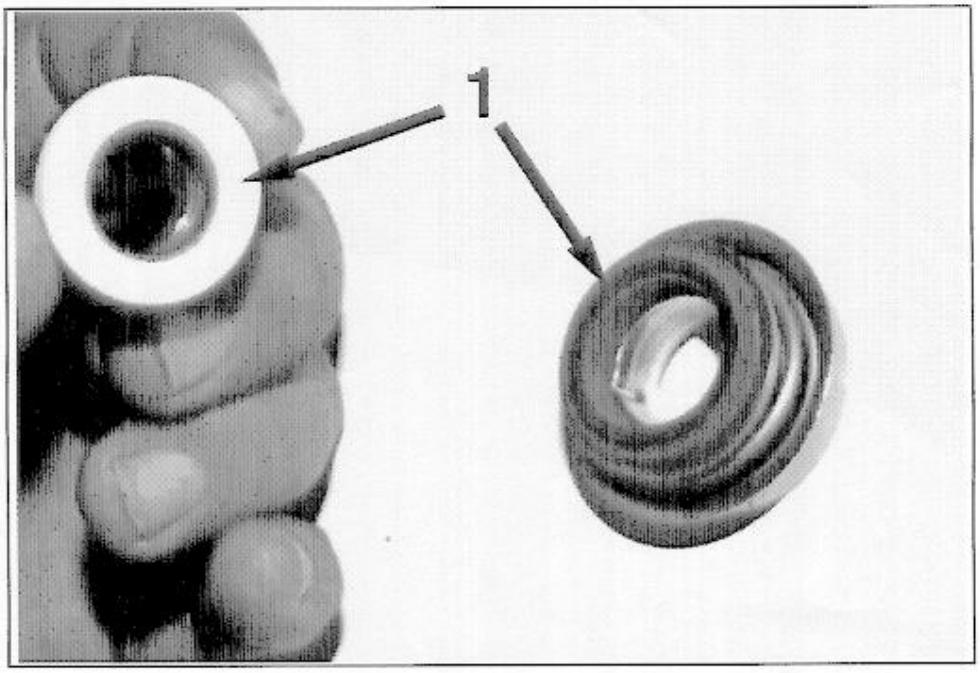
Tools required for this retrofit are: pair of locking pliers (Vise Grips), .005" feeler gauge, rubbing alcohol, cotton swab (Q-tip), lint free rag and common hand tools.

PUMP DISASSEMBLY

Remove the pump from the machine that it is installed on. Mark the motor connection wires, both on the pump motor and the machine that the pump is installed on. During the disassembly process refer to drawing 27E958K74 and the drawings bill of materials. Remove the pump top (item 5) and drain all of the water from the pump housing. Bring the pump assembly to a clean, dry location. When disassembling the pump, lay out the disassembled parts in a logical order on a clean dry surface. Remove the pump housing (item 1) by removing the four hex cap screws (item 18) that holds the pump housing to the pump assembly. Remove the diffuser (item 3). Remove the left hand threaded screw that holds the impeller to the pump motor shaft (item 14). Remove the impeller (item 2). **Important:** Take note of how many spacers (items 10 and 11, note 3) are used to maintain the .005" gap between the impeller (item 2) and the diffuser (item 3). Remove the top portion of the mechanical seal (item 12). Remove the pump adapter (item 4) by removing the four hex cap screws (item 18) that holds the adapter to the pump motor. Knock out the bottom portion of the mechanical seal pressed (item 12) into the pump adapter (item 4).

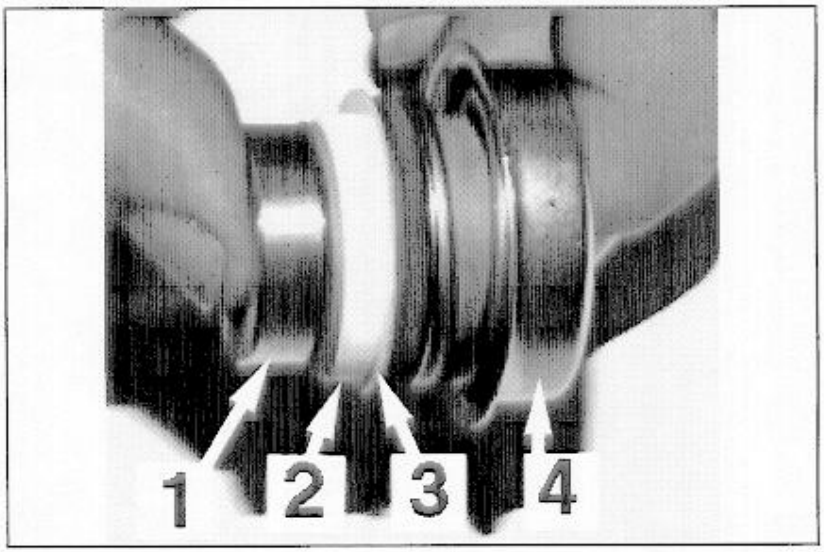
Clean the disassembled pump parts and remove items 006, 007, 007A, 008 and

009 on drawing 27E958K74. These items are to be replaced with new parts upon reassembling the pump.



CERAMIC ROTARY SEAL

Important: Keep the ceramic rotary seal in its original wrapper until ready to install. It is very important that no grease or any other foreign matter, including finger prints and seal lubricant, get on the mating surface of the seal. Contaminants on these surfaces will cause the seal to fail prematurely. Figure 1 item 1, shows the ceramic rotary seal's mating surfaces.



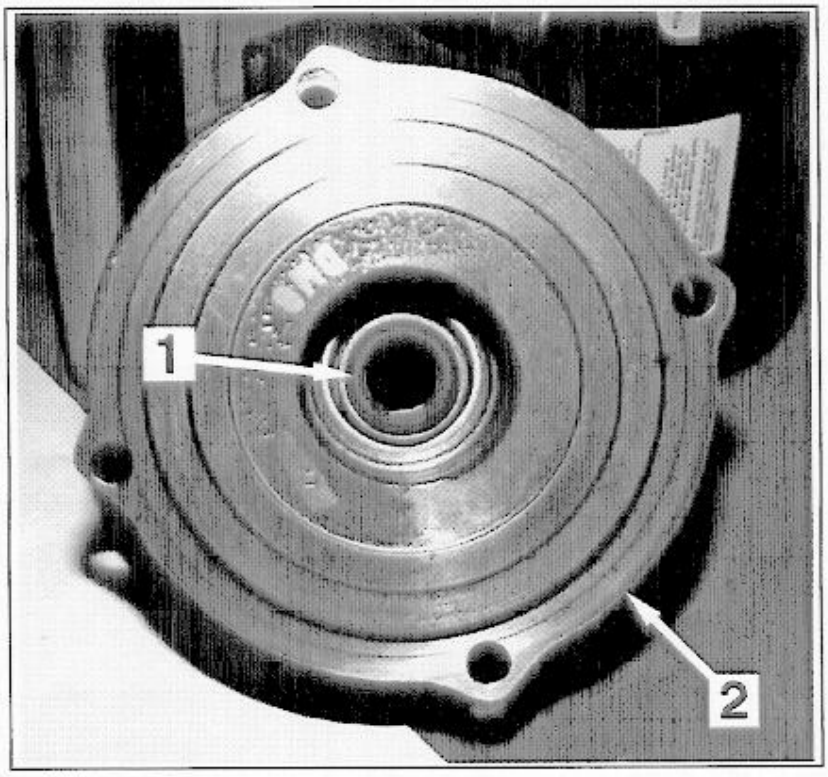
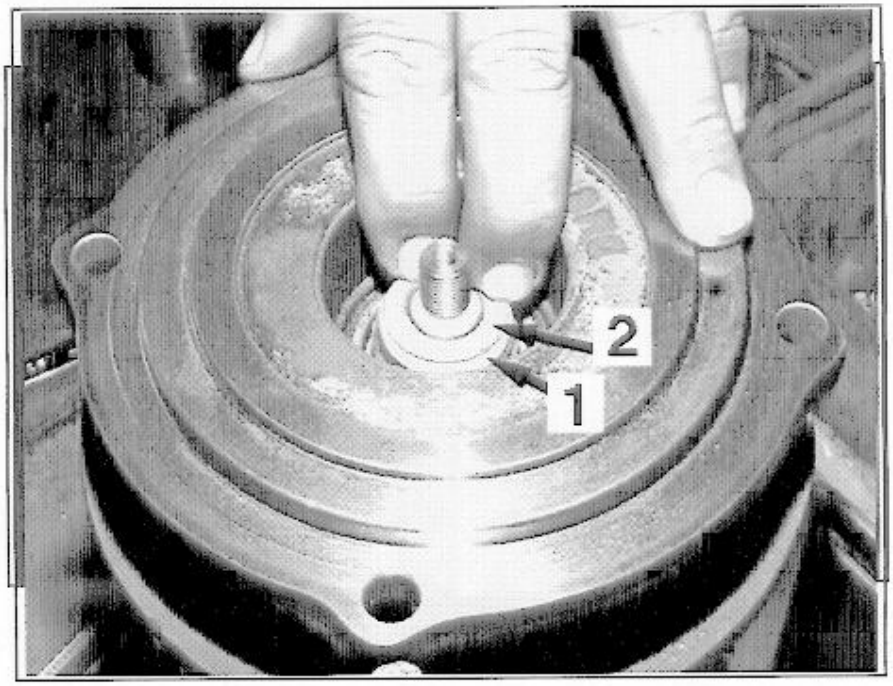


Figure 2 shows the ceramic rotary seal. Item 1 is the seal spacer. Item 2 is the rubber gasketed ceramic mating ring. Item 3 is a cardboard disc placed between the seal halves to protect the seal surfaces during shipment. Discard the cardboard disc before seal installation. Item 4 is the purebide E siliconized graphite seal ring.

PUMP ASSEMBLY

Figure 3 item 1, shows the graphite seal ring pressed into item 2 the pump adapter. If a proper press is not available, a deep 1.25" socket and a vise can be used to press the seal into the pump adapter.

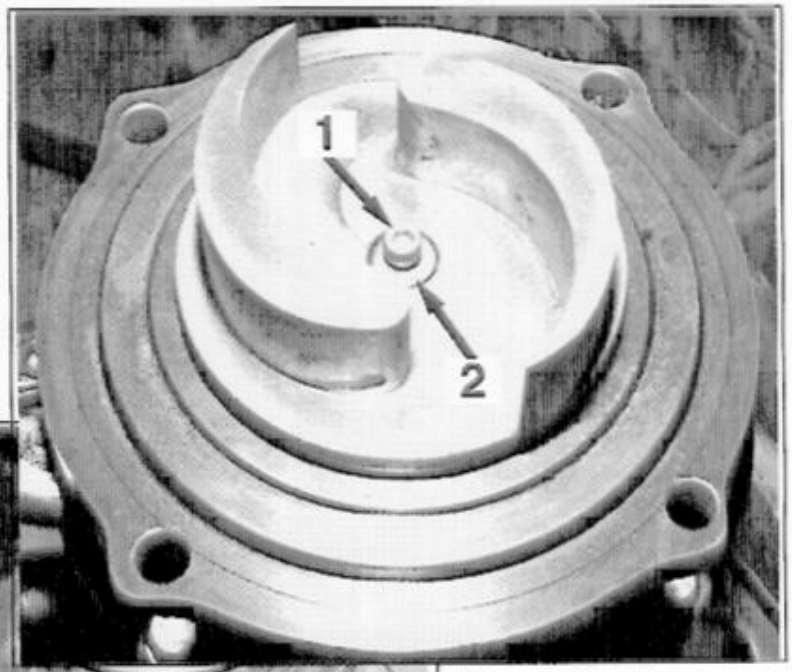
Install the new seals on the pump motor. Refer to drawing 27E958K74 item 7 and note 2, Figure 4 item 1, shows the location of where to install the new splash seal (slinger). The new splash seal may be significantly larger than the old splash seal. Stand the pump motor on end. Install the splash seal centered

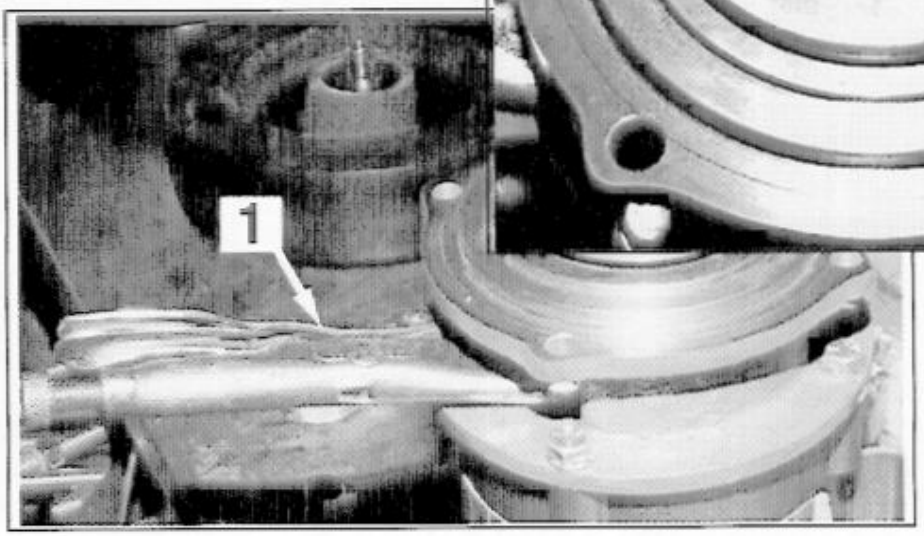


on the smooth portion of the shaft item 2, approximately one inch from the motor housing. Install the adapter onto the motor. Ref to item 4 on drawing 27E958K74.

Shake the 2cc ampule of Pac-ease, included in the kit, until the color of the liquid is consistent. The generally accepted method of applying Pac-ease is with a cotton swab (Q-tip). In case Pac-ease or any other contaminants get on a seal face, immediately clean the face with ordinary rubbing alcohol and a lint free rag. Apply the Pac-ease to the pump motor shaft and rubber seal holder. Then install the rubber gasketed ceramic mating ring over the pump motor shaft. Refer to figure 5 item 1. The end with the exposed rubber faces away from the motor. Refer to figure 5 item 2. Install the seal spacer over the shaft. The countered bored side of the ceramic rotary seal spacer goes toward the motor shaft.

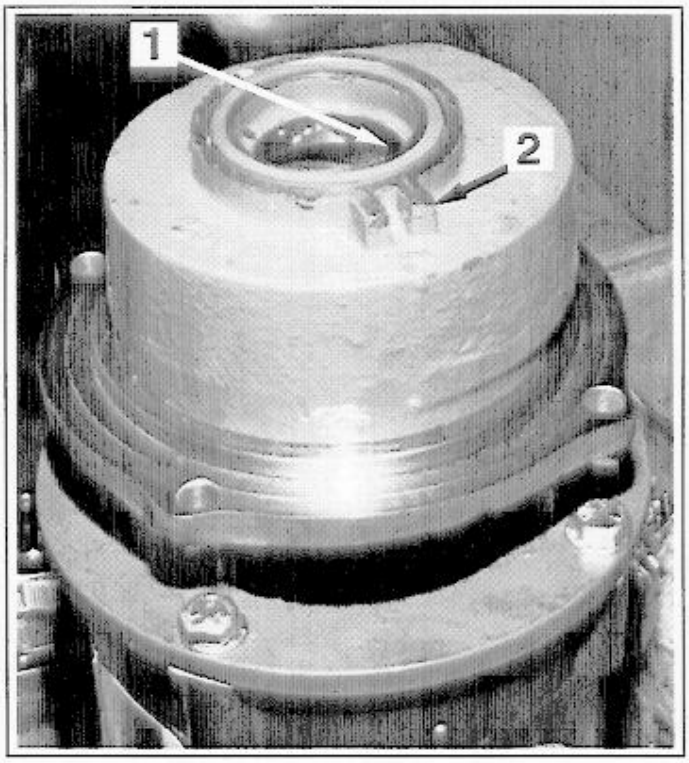
Thread the impeller onto the motor shaft. Using a pair of locking pliers (Vise Grips), gently clamp down on the motor shaft on the motor side of the splash seal, figure 6 item 1. Using a pry bar between the impeller, tighten

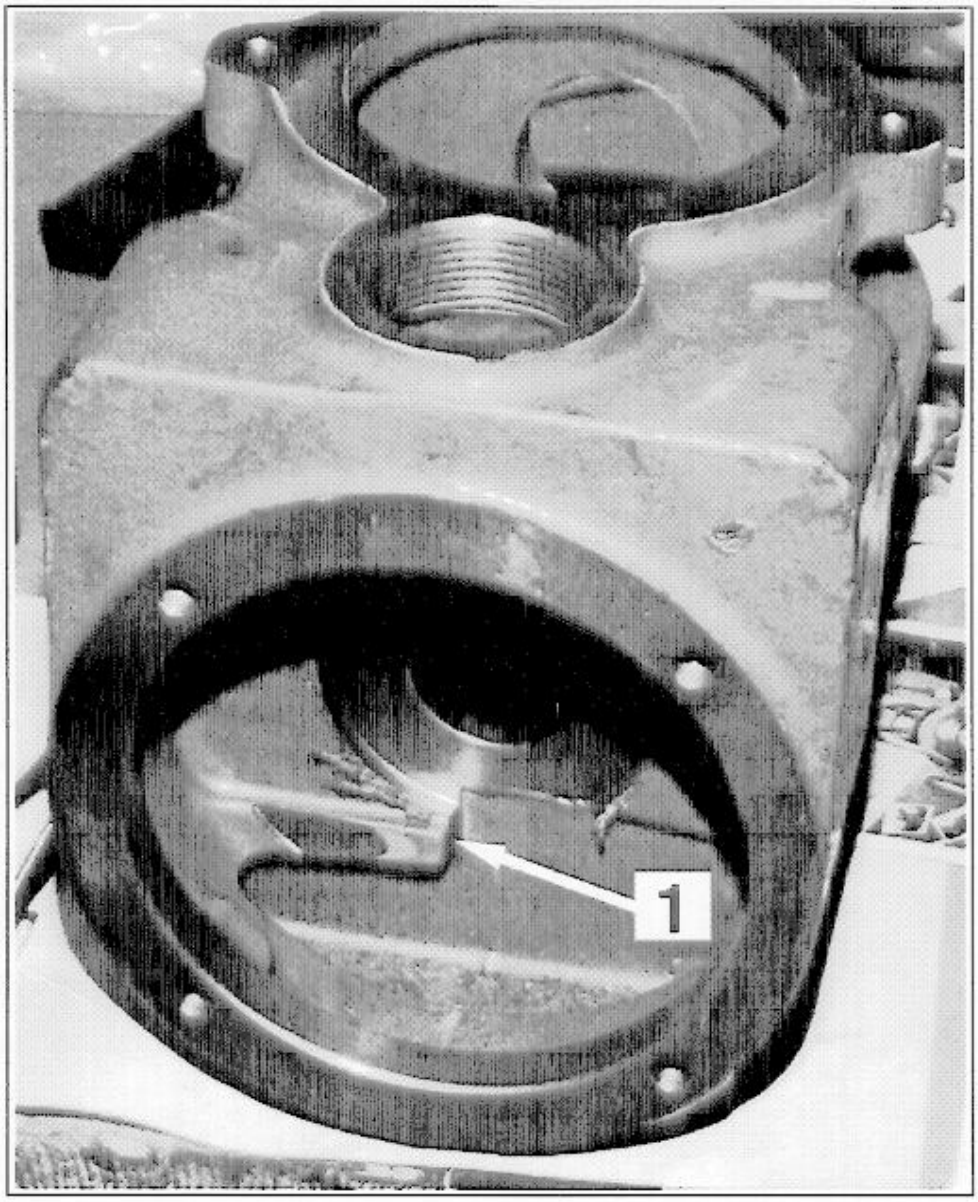




the impeller onto the shaft. Put the spacer in the hole in the impeller. Refer to figure 7, item 2. Thread and tighten the impeller retainer

screw. **The threads on this screw are left hand threaded.** Refer to figure 7, item 1. Install the diffuser (drawing 27E958K74 item 3). After the diffuser is installed, use the .005" feeler gauge to check the clearance between the diffuser and the impeller. Refer to figure 8, item 1. If the clearance is incorrect, add or remove spacers as needed (drawing 27E958K74 items 10 and 11). Figure 8, item 2 shows the notch on the diffuser that needs to be aligned with the pump housing notch, figure 9, item 1. Install the new pump housing seals. refer to drawing 27E958K74 item 6. Bolt the pump housing to the pump adapter.





If you should have any question, please call Milnor Technical Support at (504) 467-9591 extension 276.

Attachment: Drawing 27E958K74, Bill of Materials 27E958K74.