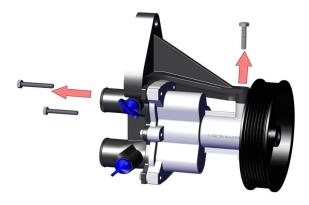
HARDINE

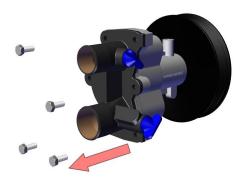




GEN 7 DELUXE REBUILD KIT

Step 1

- 1. Remove the belt.
- 2. Remove both hoses from the pump.
- 3. Using a 10mm socket, remove the 3 bolts as shown.



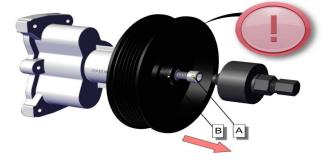
Step 2

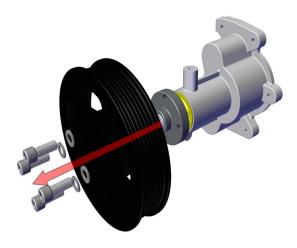
- 1. Using 10 mm socket, remove the remaining 4 bolts as shown.
- 2. Clean gasket from rear cover.
- 3. Save rear cover.

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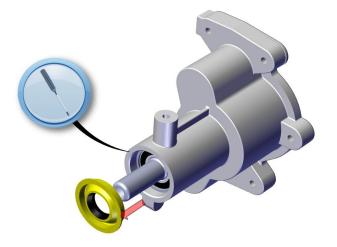


Step 3 – Mercury Pulley

- 1. Install 3/8-16 socket cap screw into the shaft, Fig B.
- 2. Using OTC-7185 remover. Attached to groove in the pulley, Fig. B.

Step 3 – Hardin Pulley

- 1. Use 3/16 hex socket to remove the 4 bolts as shown.
- 2. Remover washers & pulley.
- 3. Hub can be removed using a press or with harmonic balancer puller.

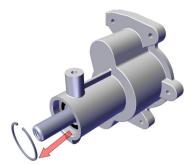


Step 4

1. Use screwdriver to pry front seal from the body.



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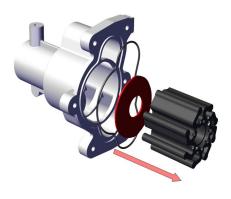
Step 5

1. Use snap ring pliers to remove the snap ring that holds the shaft with bearings in place.



Step 6

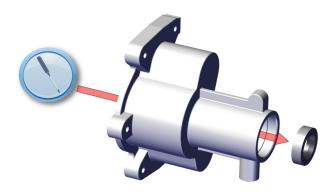
1. Press the shaft with bearings out of the pump as shown.



- 1. Remove old impeller, o-ring and internal wear plate.
- 2. Clean the impeller bore.



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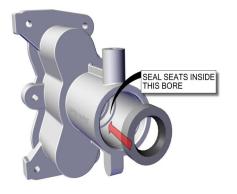
Step 8

- 1. Use a screw driver to remove the internal seal.
- 2. Clean seal & bearing bore area.



Step 9

- 1. Very important to make sure the spring side of the seal goes in towards the impeller.
- 2. Apply white lithium grease to the inside lip of the seal.

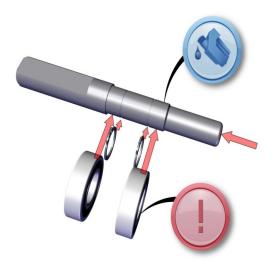


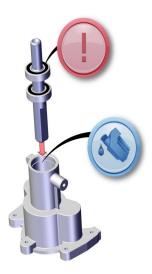
- 1. Find a socket the same size as the outside diameter of the seal.
- 2. Install seal until it bottoms out in the body.



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Step 11

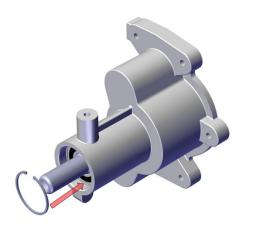
- 1. Remove the front bearing from the shaft.
- 2. Remove the 2 snap rings.
- 3. Remove the rear bearing.
- 4. Clean the shaft and check for wear.

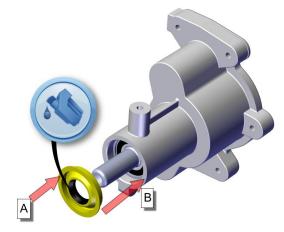
Step 12

- 1. Apply grease to shaft.
- 2. Use tool to press on the small bearing race press bearing till it bottoms out on the shaft.
- 3. Install the 2 new snap rings.
- 4. Install front bearing till it touches the snap ring.

- 1. Apply grease inside bearing bore.
- 2. Use tool to press on the small bearing race. Press into the bore till it stops.







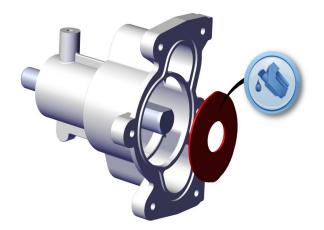
Step 14

1. Use snap ring pliers to install new ring into the groove.

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Step 15

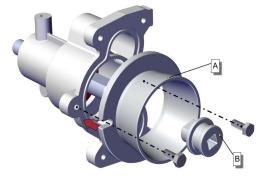
- 1. Apply white lithium grease to seal lip.
- 2. Use a tool to press on the outside diameter of the seal, Fig A.
- 3. Press till seal comes in contact with the pump, Fig B.

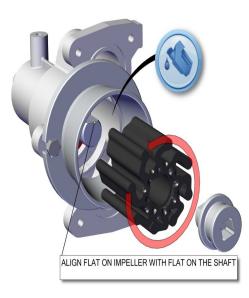


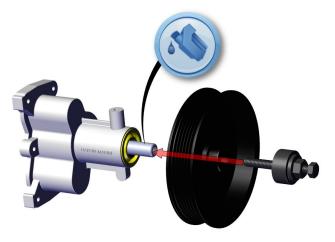
- 1. Install white lithium grease on the face of the wear plate that impeller will ride on.
- 2. Install into the body.



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Step 17

- 1. If you did not purchase 625-4209 installation tools go to step 18.
- 2. Attach 625-4208 cone, Fig. A, using the stock rear cover bolts.
- 3. Fig. B shows 625-4207 driver.

Step 18

- 1. Apply white lithium grease to the inside bore and cone.
- 2. Use the 625-4207 driver to align the flat on the impeller with the flat on the shaft.
- 3. Push impeller in and remove cone.

Step 19 – Mercury Pulley

- 1. Apply grease to pump shaft.
- 2. Use OTC 7209 to install pulley. Do not press the pulley on.





Step 19 - Hardin Pulley

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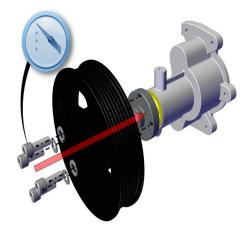
- 1. Apply grease to sea pump shaft.
- 2. Install using OTC-7209 installer. Do not press the hub
- 3. Install hub flush with end of the shaft.

Step 19 - Hardin Pulley

- 1. Install blue loctite to the 4 bolts.
- 2. Install pulley on hub with the 4 bolts, using 3/16 hex socket.
- 3. Torque to 20 ft. lbs..

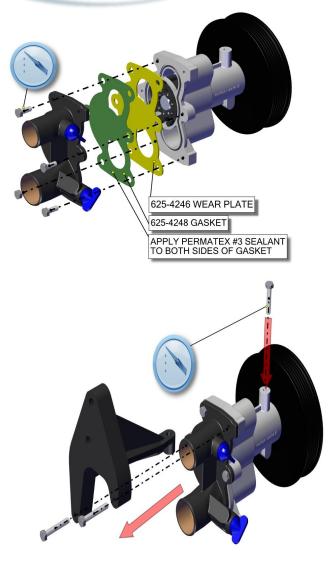


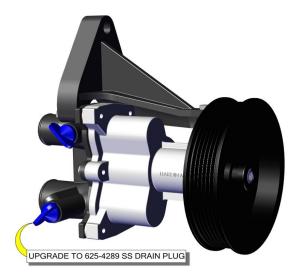
- 1. Apply white lithium to o-ring and install in the groove.
- 2. Apply white lithium grease to the end of the impeller





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Step 21

- 1. Apply Permatex #3 sealant to both sides of the gasket, as shown.
- 2. Apply anti-sieze to the 4 rear cover bolts.
- 3. Install rear cover, gasket & wear plate as shown.
- 4. Lightly tighten bolts.

Step 22

- 1. Apply anti-sieze to the remaining 3 bolts.
- 2. Install pump as shown.
- 3. Torque all 7 bolts to 6 ft. lbs..

- 1. Attached hoses and belt. Check belt alignment.
- 2. As a preventive maintenance, replace the plastic Mercury drain pugs with Hardin stainless steel drain plugs, 625-4289.