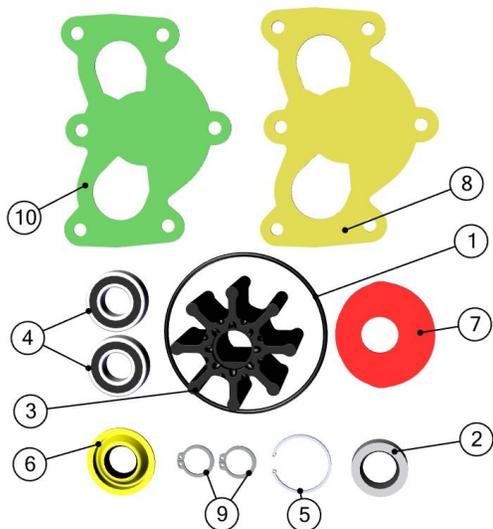


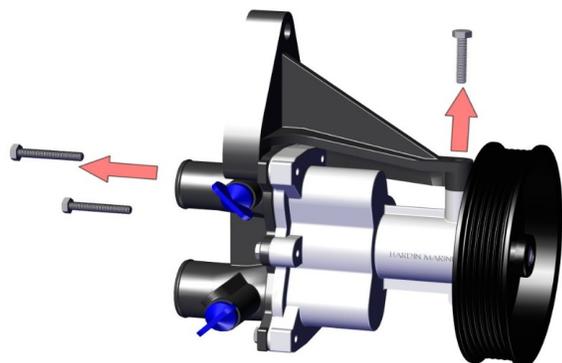


GEN 7 PLUS DELUXE REBUILD KIT

625-4133

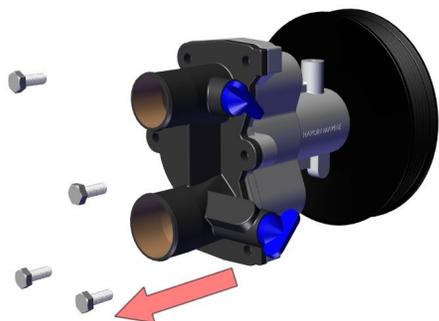


#	PART#	DESCRIPTION	QTY
1	625-1153	ORING	1
2	625-4005	SEAL	1
3	625-4080	IMPELLER	1
4	625-4242	BEARING	2
5	625-4243	SNAP RING	1
6	625-4244	SEAL	1
7	625-4245	WEAR PLATE-INT	1
8	625-4246	WEAR PLATE-REAR	1
9	625-4247	SNAP RING	2
10	625-4248	GASKET	1



Step 1

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



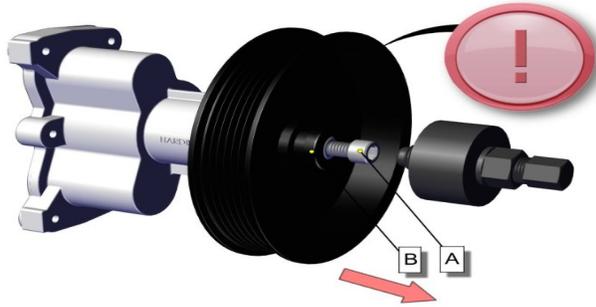
Step 2

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



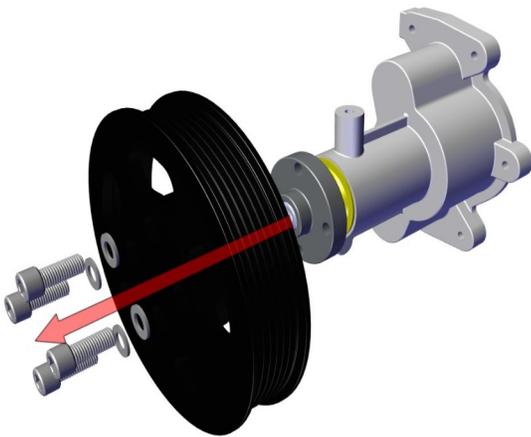
GEN 7 PLUS DELUXE REBUILD KIT 625-4133

Step 3 – Mercury Pulley



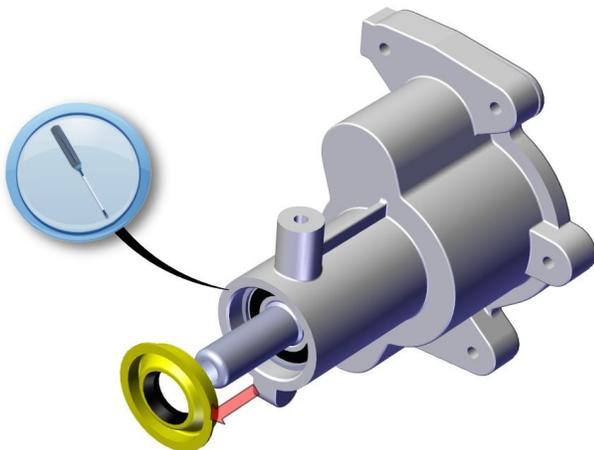
1. Install 3/8-16 socket cap screw into the shaft, Fig B.
2. Using OTC-7185 remover. Attached to groove in the pulley, Fig. B.

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



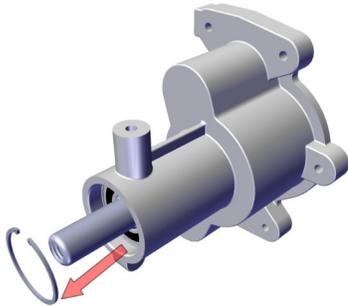
1. Use screwdriver to pry front seal from the body.



GEN 7 PLUS DELUXE REBUILD KIT 625-4133

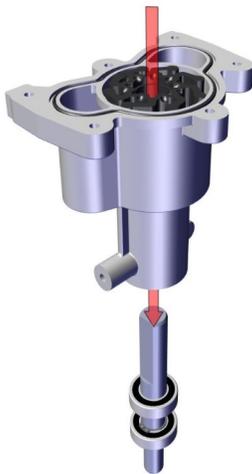
Step 5

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



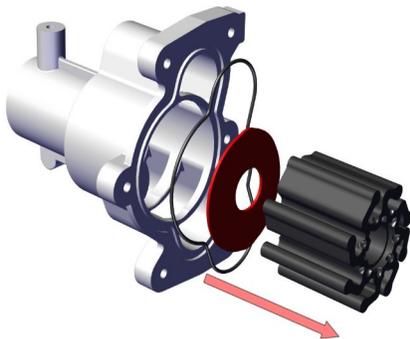
Step 6

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



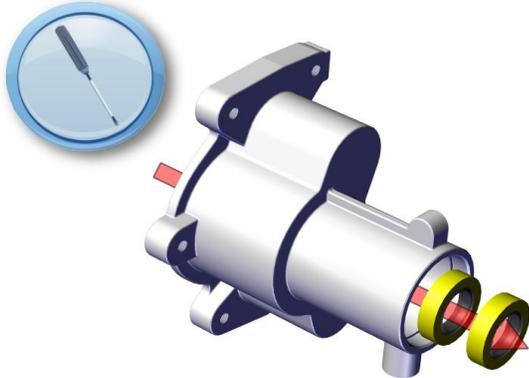
Step 7

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



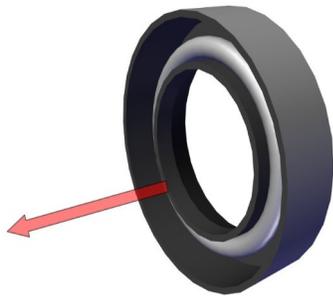


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Step 8

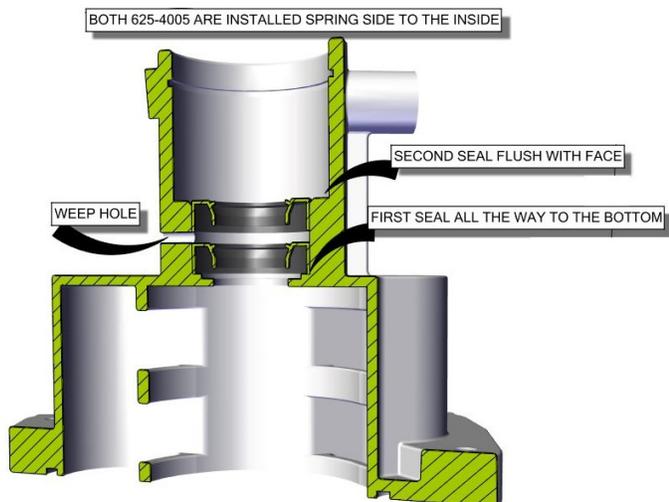
1. Use a screw driver to remove both internal seals.
2. Clean seal & bearing bore area.



SPRING SIDE OF SEAL GOES TOWARDS THE IMPELLER

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.



Step 10

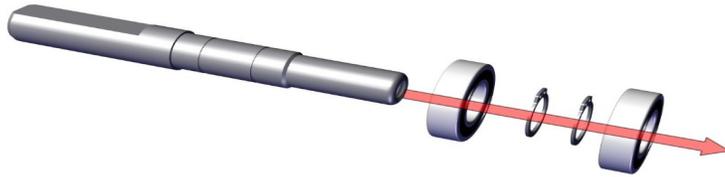
1. Find a socket the same size as the outside diameter of the seal.
2. Install first seal until it bottoms out in the body.
3. Install second seal flush with the face as shown.



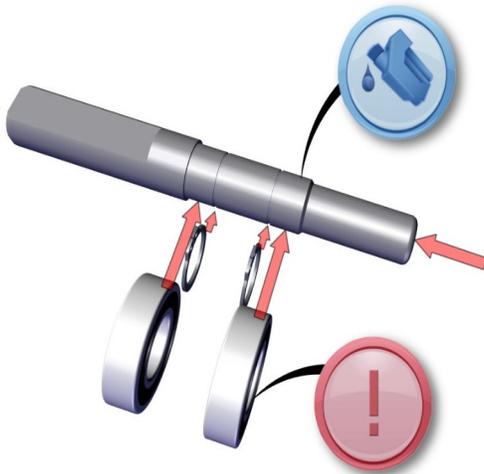
GEN 7 PLUS DELUXE REBUILD KIT

625-4133

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.

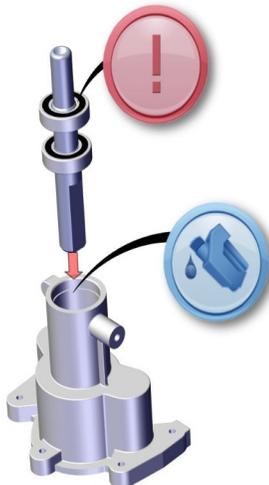


Step 12

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.

Step 13

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

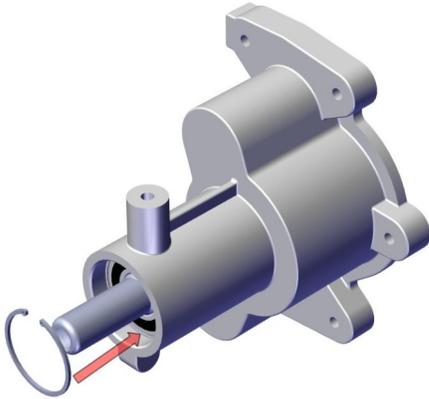




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DELUXE REBUILD KIT**
625-4133

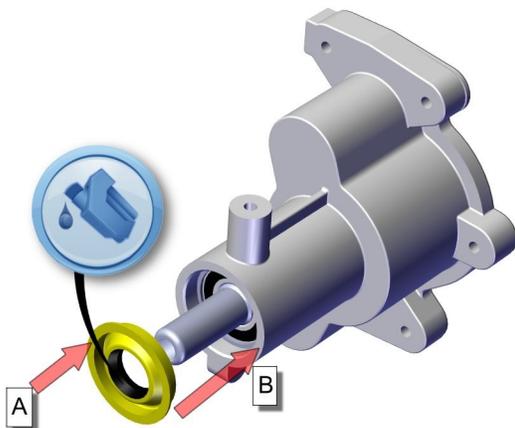
Step 14

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



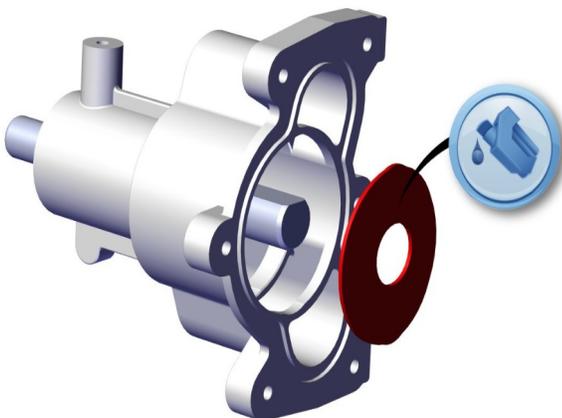
Step 15

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.



Step 16

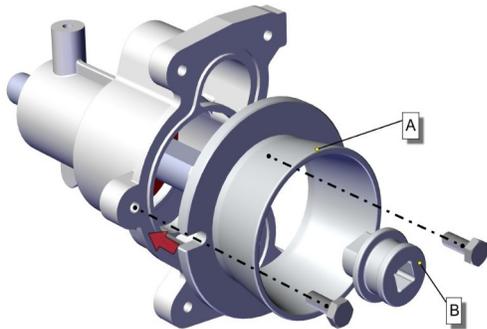
1. Install white lithium grease on the face of the wear plate that impeller will ride on.
2. Install into the body.





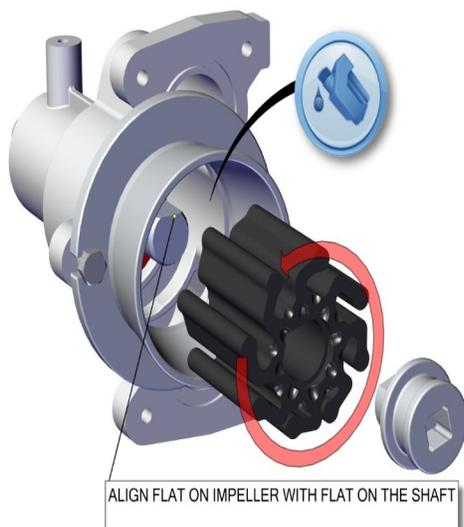
GEN 7 PLUS DELUXE REBUILD KIT 625-4133

Step 17



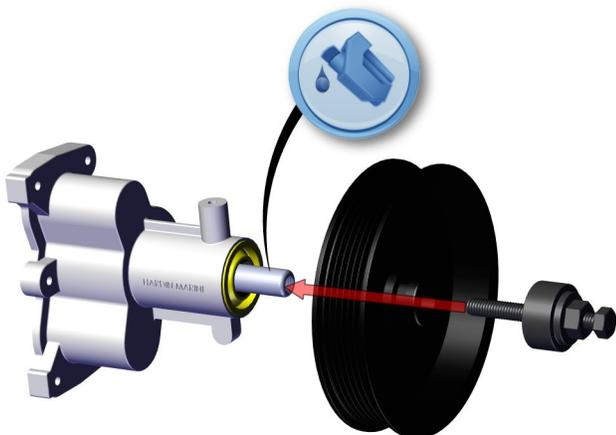
1. If you did not purchase 625-4209 installation tools go to step 18.
2. Attach 625-4208 cone, Fig. A, using the stock rear cover bolts.
3. Fig. B shows 625-4207 driver.

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



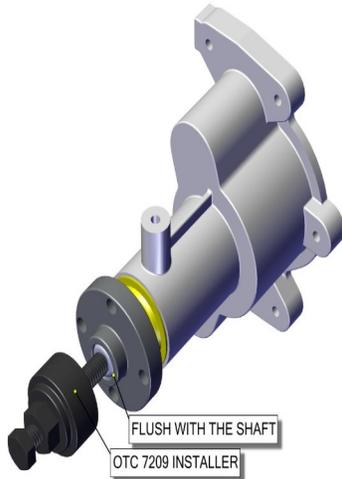
1. Apply grease to pump shaft.
2. Use OTC 7209 to install pulley. Do not press the pulley on.



GEN 7 PLUS DELUXE REBUILD KIT 625-4133

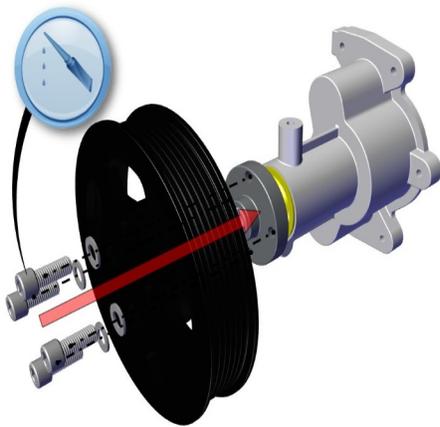
Step 19 - Hardin Pulley

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.



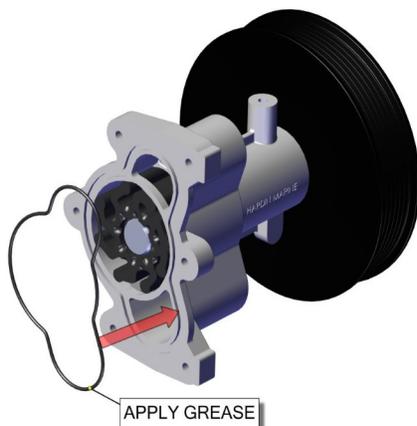
Step 19 - Hardin Pulley

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..



Step 20

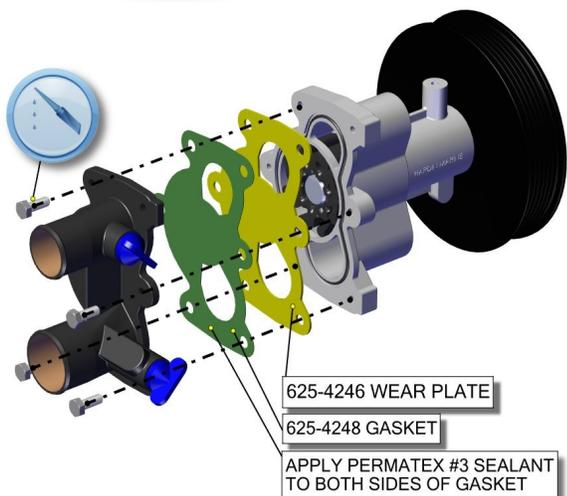
1. Apply white lithium to o-ring and install in the groove.
2. Apply white lithium grease to the end of the impeller





GEN 7 PLUS DELUXE REBUILD KIT

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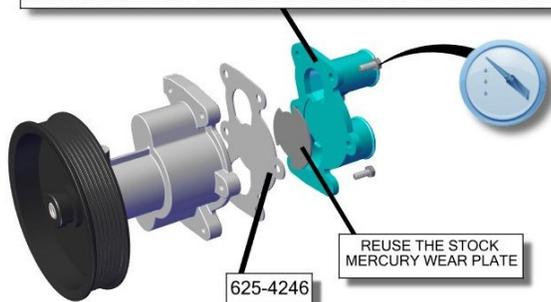
Step 21

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 21A

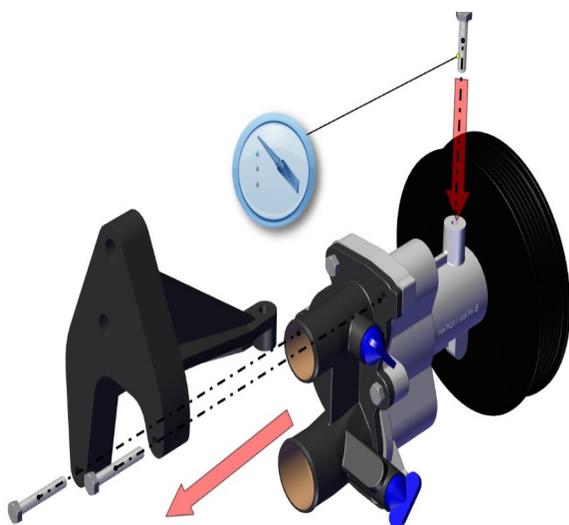
1. Plastic rear cover only!
2. Do not use the 625-4248 gasket.
3. You must reuse the wear plate that goes in the rear cover.
4. Apply thin layer of Black RTV on the rear cover. Let is set up for 5 minutes before installing.

WITH THE REPLACEMENT PLASTIC REAR COVER, YOU NEED TO REUSE THE INNER WEAR PLATE. DO NOT USE THE SUPPLIED GASKET. APPLY A THIN COAT OF BLACK RTV. ALLOW TO SET UP FOR 5 MINUTES. NOW INSTALL THE REAR COVER.



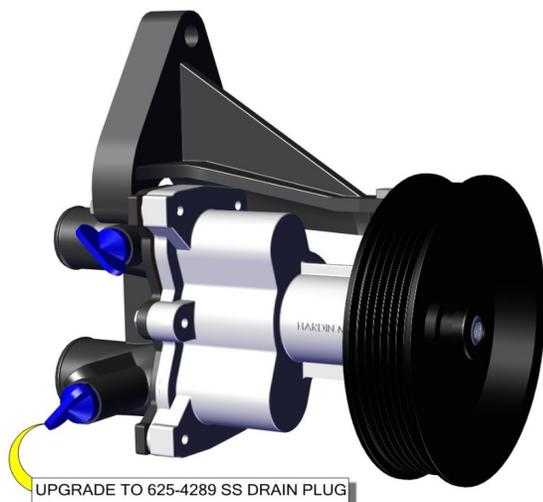
Step 22

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





GEN 7 PLUS DELUXE REBUILD KIT 625-4133



Step 23

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.