HEAVY DUTY SEAWATER PUMP IMPELLER KIT

HEAVY DUTY SEAWATER PUMP **IMPELLER KIT**

IMPORTANT: This document guides our dealers, boatbuilders, and company service personnel in the proper installation or service of our products. If you have not been trained in the recommended servicing or installation procedures for these or similar Mercury Marine products, have the work performed by an authorized Mercury Marine dealer technician. Improper installation or servicing of the Mercury product could result in damage to the product or personal injury to those installing or operating the product. Always refer to the appropriate Mercury Marine service manual for component removal and installation instructions.

NOTE: After completing installation, place these instructions with the product for the owner's future use.

Components Contained in Kit

8M0120891

Qty.	Description	Part Number	
1	Formed O-ring	8M2021987	
1	0.030 in. shorter heavy duty impeller	8M0103389	
1	Overmolded 0.030 in. inner wear plate	8M0072979	

8M0121939

Qty.	Description	Part Number
1	Outer wear plate with seal	8M0074880
1	0.030 in. shorter heavy duty impeller	8M0103389
1	Overmolded 0.030 in. inner wear plate	8M0072979

8M0121940

Qty.	Description	Part Number
1	Outer wear plate with seal	8M0114788
1	0.030 in. shorter heavy duty impeller	8M0103389
1	Overmolded 0.030 in. inner wear plate	8M0072979

Installing the 0.030 in. Shorter Impeller and Overmolded Inner Wear Plate

IMPORTANT: Only use the overmolded inner wear plate in conjunction with the 0.030 in. shorter heavy duty impeller. The 0.030 in. shorter heavy duty impeller can be identified by its red hub. The overmolded inner wear plate and 0.030 in. shorter heavy duty impeller come as a set when a new impeller is ordered.

IMPORTANT: The bare metal surface of the overmolded inner wear plate must face the 0.030 in. shorter heavy duty impeller.

1. Install the overmolded inner wear plate into the impeller housing with the rubber material side of the plate facing down and seated on the floor of the impeller housing.



Overmolded inner wear plate (with bare metal surface facing the impeller)

2. Lubricate the 0.030 in. shorter heavy duty impeller with soapy water. Align the flat surfaces of the impeller hub and bearing shaft and install the impeller into the impeller housing.



- a Red impeller hub
- **b** 0.030 in. shorter heavy duty impeller
- 3. Install the O-ring into the groove in the rear face of the impeller housing.



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4. If you have the design shown below, apply a 3.175 mm (0.125 in.) wide bead of adhesive across the actuator housing; then place the stainless steel wear plate on the housing with the tabs aligned. Bolt the assembly to the pump within five minutes.



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	Tube Ref Description No. Loctite 242 66 Threadlocker		Where Used	Part No.
			Impeller housing cover or seawater pump actuator housing screw threads	92-809821



- a Stainless steel wear plate
- **b** Actuator housing
- c Large tab
- d Small tab
- e Adhesive on housing

Tube Ref No.	Description	Where Used	Part No.	
142 🗇	Loctite 598 RTV Sealant Actuator housing steal wear plate		Obtain Locally	

IMPORTANT: The following actuator housing styles will mate with either standard or 0.030 in. heavy duty impeller styles.



- a Actuator housing style with milled even surface
- **b** Actuator housing style with steel wear plate
- 5. Align and install the actuator housing on the impeller housing assembly.
- Screws that are reused may require adhesive. Apply Loctite 242 Threadlocker to the threads of 6. the screws as necessary.

- 7. Install the four screws and tighten to the specified torque.

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Description	Nm	lb-in.	lb-ft
Impeller housing cover or the seawater pump actuator housing screw	10	88.5	-

Mercury 4.5L and 6.2L Engines

IMPORTANT: The overmolded inner wear plate must be used with the 0.030 in. shorter heavy duty impeller. The 0.030 in. shorter heavy duty impeller can be identified by its red impeller hub. Do not use a 0.030 in. shorter heavy duty impeller without an overmolded inner wear plate.



- a Drain valve housing
- **b** Outer wear plate with integrated seal
- c 0.030 in. shorter heavy duty impeller with red hub
- **d** Overmolded inner wear plate
- e Impeller housing

Seawater Pump Housing Design Change

First Design

Second Design





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- First design a - Drain valve housing
- **b** Outer wear plate with integrated seal

Second design with improved porting **a** - Drain valve housing with improved

b - Outer wear plate with integrated seal and improved porting

porting

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2. Remove the impeller housing from the drain valve housing.



- Pulley removed for clarity
- **a** M8 x 35 screws (3)
- **b** M8 x 20 screw (1)

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3. Install the overmolded inner wear plate into the impeller housing with the rubber material side of the plate facing down and seated on the floor of the impeller housing.



- a Impeller housing
- **b** Overmolded inner wear plate
- Install the impeller onto the bearing shaft. 4.
- Align and attach the outer wear plate with integrated seal to the impeller housing with two hex 5. head cap screws. Tighten the screws to the specified torque.



- a 0.030 in. shorter heavy duty impeller
- **b** Outer wear plate screws (2)
- **c** Outer wear plate with integrated seals

Description	Nm	lb-in.	lb-ft
Hex head cap screw	10	88.5	-

- 6. Install the blue drain plugs in the impeller housing, if removed.
- 7. Align and install the impeller housing assembly onto the seawater pump cover.
- 8. Apply Loctite 242 Threadlocker to the threads of the seawater pump cover screws.

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shorter heavy duty impeller.

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Tube Ref No. Description		Description	Where Used	Part No.	
	66	Loctite 242 Threadlocker	Seawater pump cover screw threads	92-809821	

- 9. Install the four seawater pump cover screws and tighten them to the specified torque. NOTE: The three long screws reach into the seawater pump bracket.

Impeller and Overmolded Inner Wear Plate Installation

1. Remove three M8 x 35 screws and one M8 x 20 screw.

IMPORTANT: The bare metal surface of the overmolded inner wear plate must face the 0.030 in.

Description	Nm	lb-in.	lb-ft
Seawater pump cover screws	24	-	17.7

IMPORTANT: If a belt is to be reused, it should be installed in the same direction of rotation as before.

10. Install the serpentine drive belt.

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