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## Official Recall Notification U.S. Federal Boat Safety Act: Power-Assisted Steering Pump and Pulley Replacement Required

NOTICE
Revised August 2018. This bulletin supersedes the previous MerCruiser bulletin number 2018-05 August 2018 and OEM bulletin number 2018-04 August 2018.

### Models Affected

Models Covered	Serial Number
4.5L Sterndrive	2A572595-2A577294
6.2L Sterndrive	2A572595-2A577294
8.2L Sterndrive	2A572595-2A577294

### Scope

Worldwide

### Situation

Mercury MerCruiser has observed contamination in certain power-assisted steering pumps and reservoirs on engines within the listed serial number ranges. Pumps and related components on engines within the affected serial number range must be inspected and replaced, if necessary, with new components of an improved design that provide a better pump and pulley. Continued use of the pump could lead to overheating or in extreme circumstances, fire.

**Do not deliver any new boats until the inspection and, if necessary, power steering pump replacement has been completed. Be aware that the affected customers have been advised to stop operating their boats until this inspection/repair has been completed.**

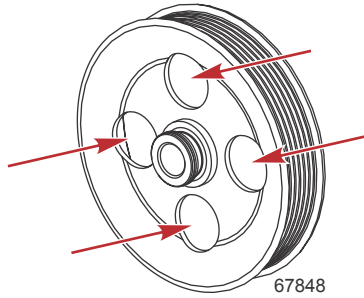
### Power Steering Pump Identification

For all affected engines within the listed serial number ranges, identify the power steering pump by the pulley:

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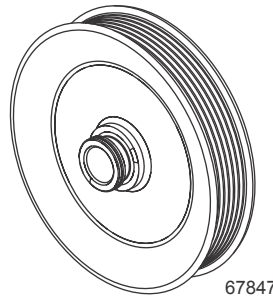
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- If the power-assisted steering pump pulley has windows, then replacement is not required.



**Pulley has windows; replacement is not required**

- If the power-assisted steering pump pulley has a solid face (does not have windows), then the pump must be replaced. Follow the instructions provided in this service bulletin and the appropriate service manual, as indicated.



**Pulley has no windows; pump must be replaced**

## Correction

## Order Replacement Parts

Order a replacement pump and pulley kit, new reservoir, and new reservoir lines. Refer to **Parts Required** for part numbers. Note that the replacement pump has a different shaft diameter from the old pump, so the new pulley must be used.

## Remove the Old Components

### ⚠ WARNING

Performing service or maintenance without first disconnecting the battery can cause product damage, personal injury, or death due to fire, explosion, electrical shock, or unexpected engine starting. Always disconnect the battery cables from the battery before maintaining, servicing, installing, or removing engine or drive components.

Refer to the appropriate engine service manual for the reservoir, reservoir line, and pump removal procedures. Adhere to the following for a cleaner removal process:

- Use a suction tool to remove the fluid from the reservoir prior to disassembly.
- After removing the reservoir, place the reservoir hose end into a container to collect fluid from the steering system.
- Use the same container to catch fluid from the hoses removed from the pump.

## Install the Replacement Components

Refer to the appropriate engine service manual for the pump, reservoir line, and reservoir installation procedures.

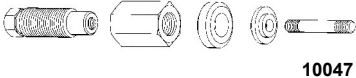
When installing the pump pulley, note that the press depths are different, due to the different shaft and pulley. Refer to the following **Power-Assisted Steering Pump Pulley Installation** procedure for pulley installation details.

## Power-Assisted Steering Pump Pulley Installation

Install the power-assisted steering pump pulley using the pulley pusher installer or equivalent.

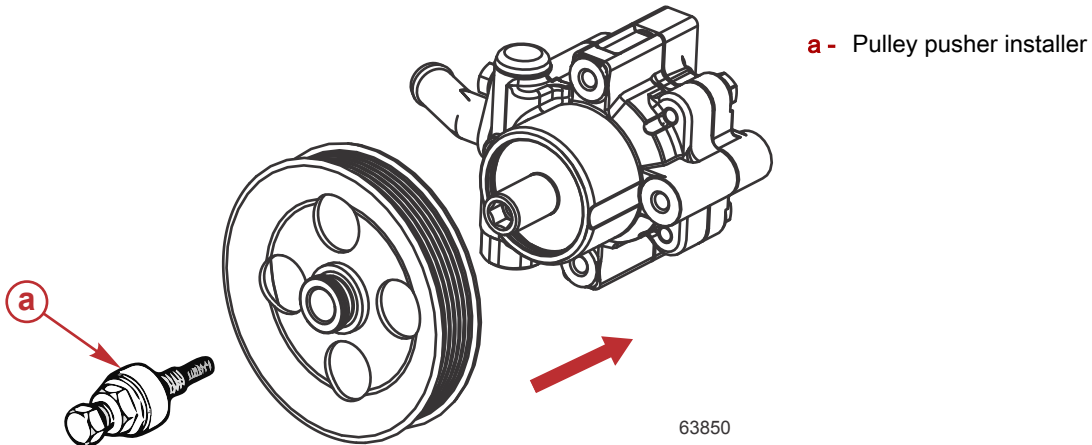
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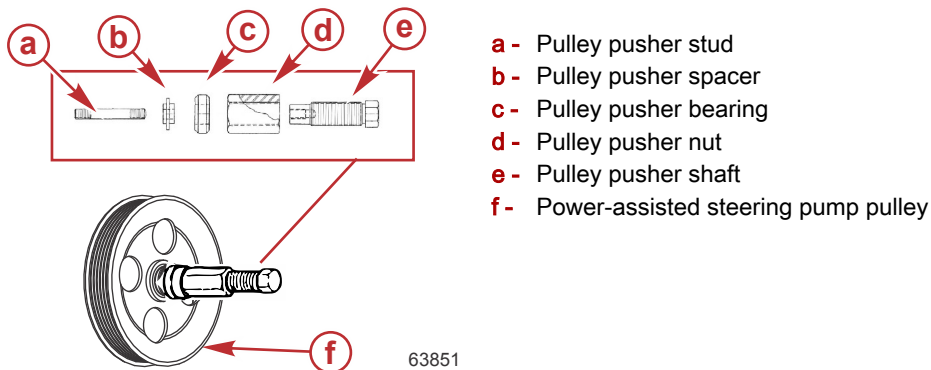
Pulley Pusher Installer	91- 93656A 1
 <p>10047</p>	Installs the pulley onto the power steering pump.

**NOTE:** Aftermarket pulley pusher installers can be readily obtained locally or from an online source.

1. Lubricate the power-assisted steering pump shaft with Power Trim and Steering Fluid. Refer to **Parts Required** for Mercury part number.
2. Start the pulley onto the steering pump shaft.



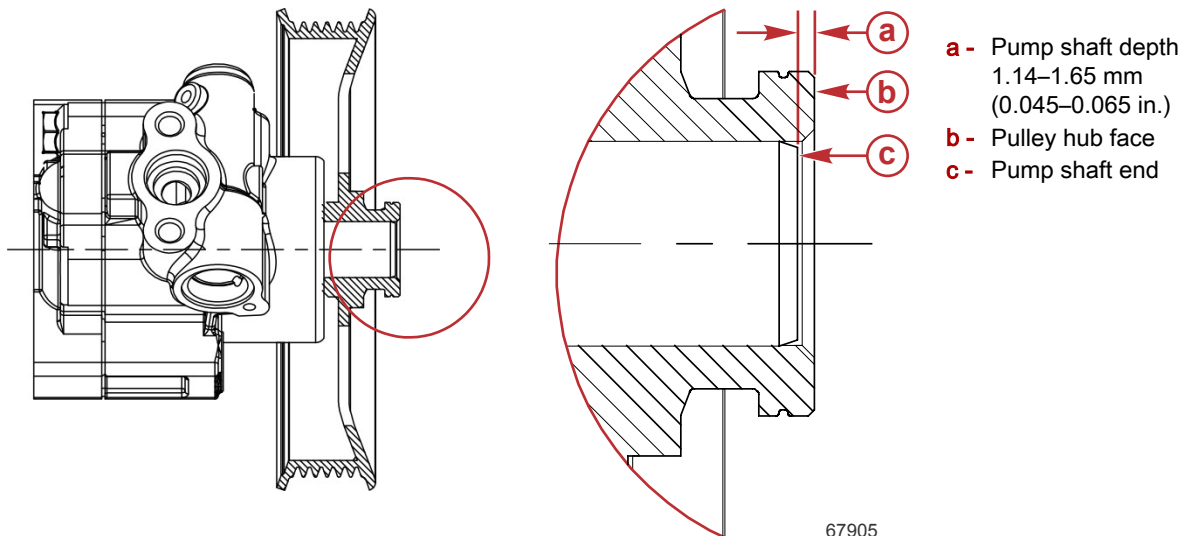
- a. Thread the pulley pusher stud completely into the power-assisted steering pump shaft.
  - b. Place the pulley pusher spacer onto the pulley pusher stud, and position it against the power-assisted steering pump pulley.
  - c. Place the pulley pusher bearing over the pulley pusher stud and against the pulley pusher spacer.
- NOTE:** The spacer is designed to keep the bearing centered on the pulley pusher installer.
- d. Thread the pulley pusher nut onto the pulley pusher shaft.
  - e. Thread the pulley pusher shaft and nut onto the pulley pusher stud (threaded into the power-assisted steering pump shaft).



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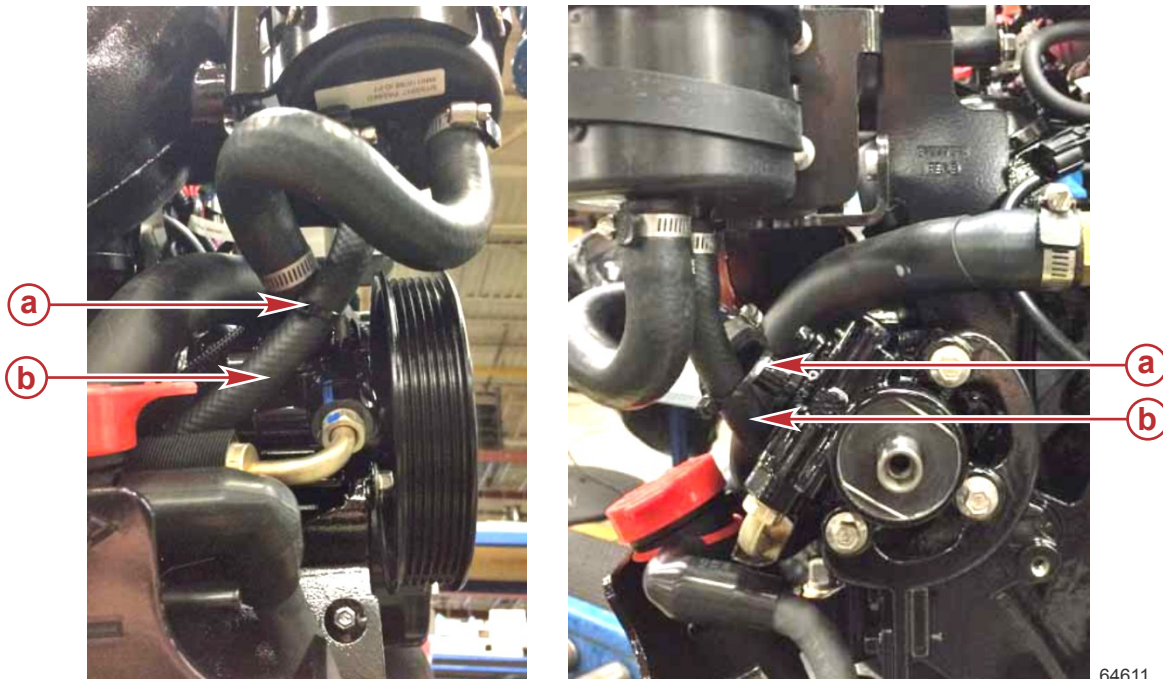
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- f. Turn the pulley pusher nut until the pulley hub face is 1.14–1.65 mm (0.045–0.065 in.) from the end of the shaft.



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3. Remove the tool and install the serpentine drive belt. Refer to the appropriate engine service manual.
4. **For 4.5L/6.2L sterndrive models**—Install a cable tie to secure the power steering return hose to the power steering pump. This will ensure that the return hose will not contact the power steering pulley.



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**Cable tie location**

- a - Cable tie
- b - Power steering return hose

5. Starting with the positive (+) lead, connect the battery cables to their terminals.
6. Fill the power steering fluid reservoir with Power Trim and Steering Fluid.

## Flushing Procedures

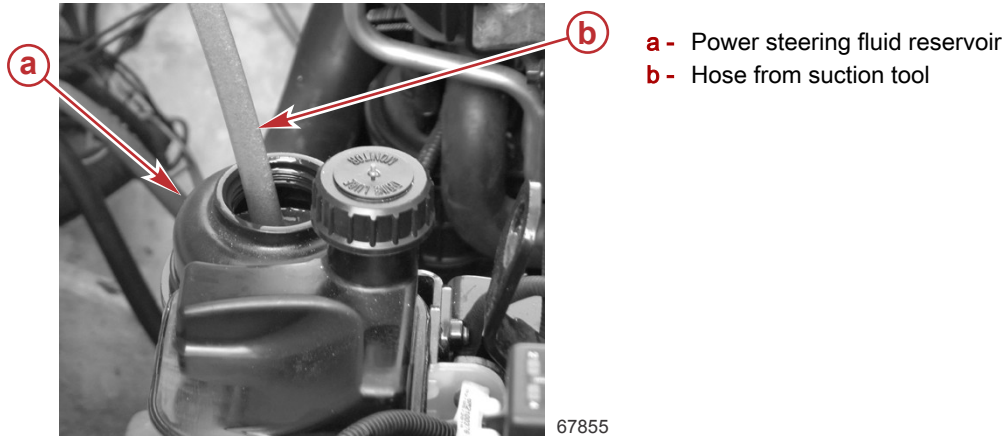
The hydraulic system must be flushed.

1. Make sure the reservoir is full and cooling water is supplied to the engine.

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2. Start the engine, and bring it up to operating temperature.
3. Check the system for leaks.
4. Turn the steering wheel to full lock in one direction, back to the center position, and then to full lock in the opposite direction. Repeat this step a total of 10 times.
5. Stop the engine.
6. Use a suction tool to remove the fluid from the power steering fluid reservoir, including any debris that may be present. Capture the fluid in an appropriate container.



**a** - Power steering fluid reservoir  
**b** - Hose from suction tool

7. Dispose of the fluid according to local laws and regulations.
8. Refill the reservoir.
9. Bleed any air from the system. Refer to the appropriate engine service manual.

## Parts Required

Part Description	Part Number			
	4.5L	6.2L	8.2L EC	8.2L Non-EC
Pump and pulley kit	8M0110722	8M0110722	8M0110722	8M0110722
Reservoir	8M0121093	8M0121093	8M0121094	8M0121093
Reservoir line	8M0077292	8M0077292	8M0069812	865717
Reservoir line	8M0077293	8M0099061	8M2022130	8M0046187
Power Trim and Steering Fluid (6 - 8 oz tubes)	858074K01	858074K01	858074K01	858074K01

## Warranty

Mercury Marine will credit the dealer for the cost of the parts and labor for engines within the serial number ranges. Submit a warranty claim through your normal warranty processing channel.

Part code: 804

Failure code: 40

*For each engine requiring inspection only (no repair required):*

Labor: 0.2 hours

Warranty flat rate code: SB02

*For each engine requiring repair:*

Labor: 3.0 hours

Warranty flat rate code: SB30

Return the power-assisted steering pump through your current warranty parts return process. Do not return the reservoir or hoses.

**Outside the United States and Canada:** Follow the instructions issued by your local office or distributor.

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## **OFFICIAL RECALL NOTIFICATION FEDERAL BOAT SAFETY ACT RECALL**

Dear Mercury Marine Customer,

Mercury Marine is dedicated to providing superior products with outstanding quality and reliability. As part of our continuing efforts to achieve this goal, we have determined that your registered MerCruiser product may require service.

### **What You Need to Know:**

We have identified an issue with the power-assisted steering pumps on some MerCruiser engines. The situation could lead to an overheat condition, which could lead to a fire.

### **What You Should Do:**

1. **Do not operate your boat until the power steering pump has been inspected and replaced, if necessary.**
2. Contact your authorized Mercury dealer to schedule a service appointment. Be sure to mention Mercury MerCruiser Service Bulletin 2018-05, and present this notice at the time of service.

### **Mercury Marine's Commitment to You:**

We have provided instructions to our authorized dealers for this service. The required service will be performed at NO COST to you.

### **Time-Saving Opportunity:**

Some customers that receive this letter have a power steering pump that is not at risk for overheating and does not need to be recalled. If you feel comfortable doing so, identifying which power-assisted steering pump you have on your engine may prevent you from having to make an appointment with a dealer. Refer to the included **Power Steering Pump Identification** instructions in order to make that determination.

If you have any questions, or no longer own this Mercury Marine product, please contact Mercury Marine Customer Service, at 1-920-929-5040, between 7:30 AM and 4:30 PM, Central Time.

We have sent this notice in the interest of your continued satisfaction with our product. We sincerely regret any inconvenience this may cause you.

Thank you,

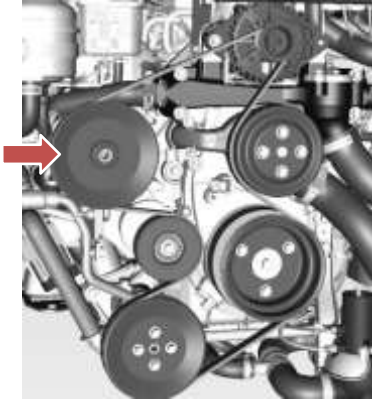
Mercury Marine Customer Service



## Power Steering Pump Identification

The power steering pump is located on the front of the engine, as shown. If you are unsure of where the pulley is located on your engine, contact your dealer to make an appointment.

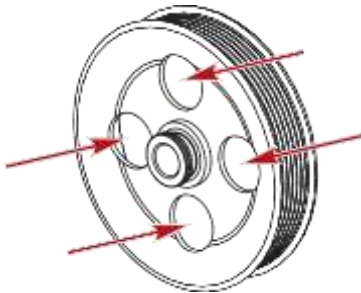
**4.5L/6.2L Models**



**8.2L Models**



- If the power-assisted steering pump pulley has windows (as shown below), then replacement is not required.



Contact Mercury Marine, and we will remove you from future mailings on this issue:

- o Call 920-929-5040; the customer specialist will ask for your engine serial number.
  - o Email [mercruiser.customer.assistance@mercmarine.com](mailto:mercruiser.customer.assistance@mercmarine.com) with the subject line "Power Steering Letter." Include your engine serial number in the body of the email.
- If the power-assisted steering pump pulley does not have windows (as shown below), then the pump **must be replaced**. Contact your dealer to make an appointment.



- If you cannot easily determine whether the pulley on your engine has windows, contact your dealer to make an appointment.