

Circulate to: Sales Manager Accounting Service Manager Technician Parts Manager

Product Improvements for MerCruiser Vazer Models

Models Affected

Models Affected	Serial Number
All Vazer models	1A035015–1A035331

Some Vazer power packages will have been updated prior to shipment. Before beginning repairs on any Vazer model, refer to MercNET or contact MerCruiser Customer Service or your regional service center to verify that repairs have not already been completed. Letters will be sent to registered owners.

Situation

Mercury MerCruiser recently changed the design of several Vazer model components to improve durability.

Correction

Install the following improved components: exhaust elbow and exhaust elbow connecting screws, water supply bellows, water pump seal and sterndrive installation gasket.

Some Vazer model PCMs require a calibration update. Refer to the table below to verify the status of your PCM.

Model	PCM Calibration Number	Status
Vazer 100	8M2000436	PCM calibration update is required.
Vazer 100	8M2007208	PCM calibration update is not required.

If your PCM requires a calibration update please contact MerCruiser Customer Service or your Marine Power International Office for instructions.

NOTE: Refer to the Vazer Service Manual (90-869267), available electronically on MercNET, for additional information.

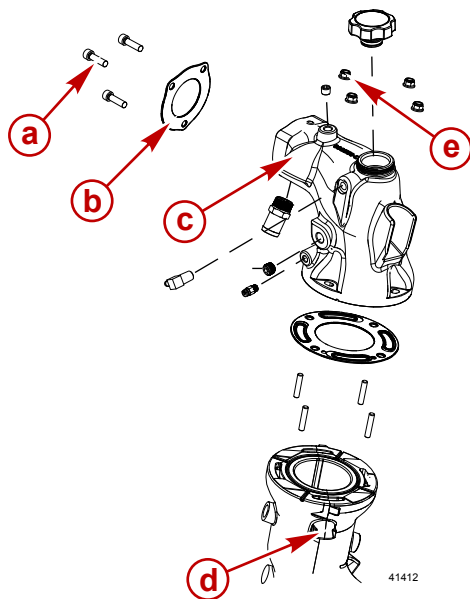
Exhaust Elbow—Removal and Installation

1. Drain the exhaust elbow only, using the elbow drain shown.
2. Remove the 3 socket-head screws and the 4 nuts that retain the exhaust elbow. Discard the screws, but retain the nuts.
NOTE: It may be necessary to loosen the crossover pipe retaining bracket on the port side of the engine to allow removal and installation of the exhaust elbow.
3. Discard the exhaust elbow and exhaust elbow gaskets.
4. Install the new exhaust elbow and exhaust elbow gaskets, using the new screws and the nuts retained in step 2. Tighten the screws and nuts in two passes as specified.

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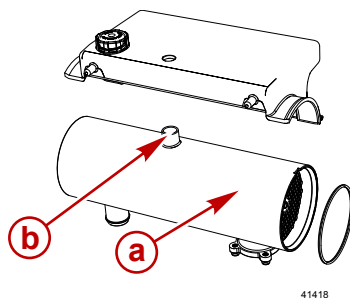
Description		Nm	lb-in.	lb-ft
Exhaust elbow nuts and screws	First pass	15	–	11
	Second pass	30	–	22



Vazer exhaust—intermediate pipe and elbow

- a** - Screw—exhaust crossover tube to exhaust elbow
- b** - Gasket—exhaust crossover tube to exhaust elbow
- c** - Exhaust elbow
- d** - Exhaust elbow drain
- e** - Exhaust elbow nut

5. Loosen the hose clamps that secure the expansion tank to the heat exchanger and position the expansion tank to allow access to the hex plug on top of the heat exchanger.
6. Remove and discard the hex plug.
7. Install the bleeder valve in place of the hex plug in the top of the heat exchanger.
8. Fill the cooling system reservoir with a 50/50 mix of extended-life coolant and water. Purge any trapped air from the cooling system as follows:
 - a. With the bleeder valve open, fill the cooling system at the exhaust elbow with a 50/50 blend of extended-life coolant.
 - b. Continue to fill at the exhaust elbow until no air bubbles are present in the discharge from the bleeder valve.
 - c. Close the bleeder valve and fill the exhaust elbow to the top of the fill port with coolant.
 - d. Install the coolant fill cap onto the exhaust elbow.
 - e. Reinstall and secure the expansion tank.



- a** - Heat exchanger
- b** - Location of bleeder valve

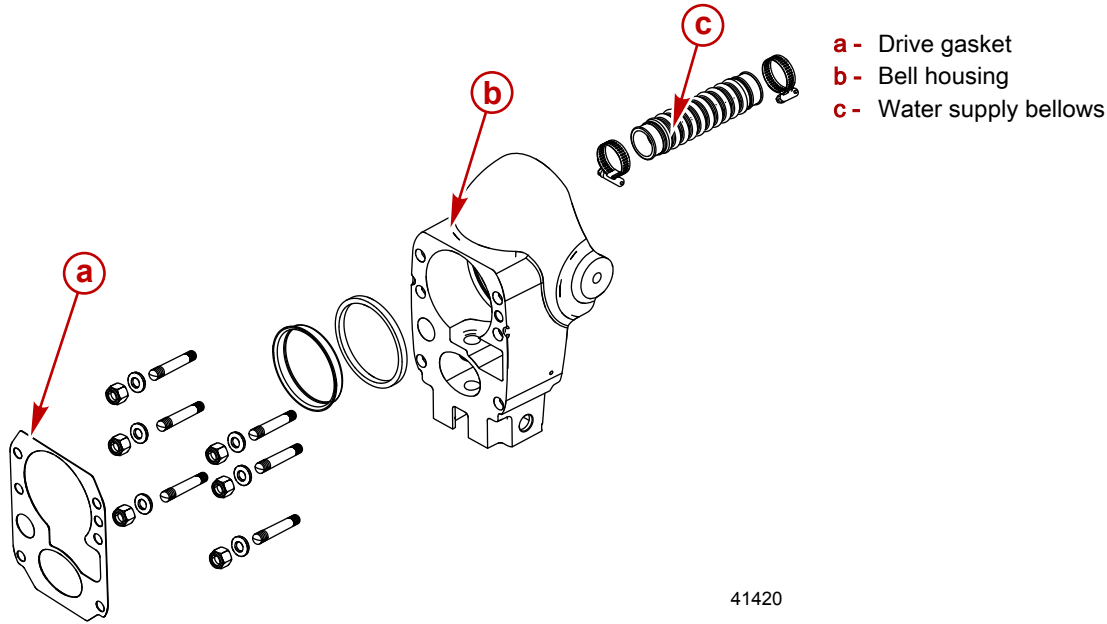
Water Supply Bellows—Removal and Installation

1. Place the drive in a hard right turn and in the full up (out) position. Remove and discard the water supply bellows.

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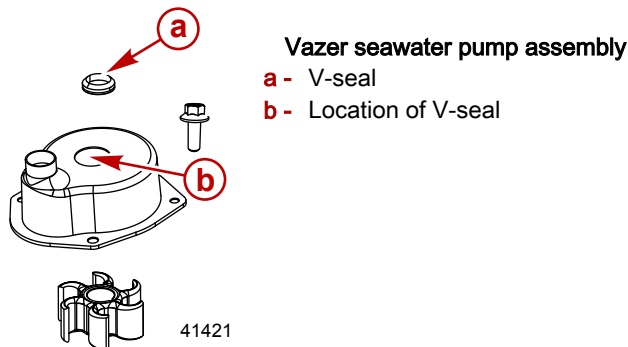
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2. Install the new water supply bellows between the transom plate and the bell housing. Tighten the hose clamps to specifications. See **Hose Clamp Identification**.



Water Pump Seal—Removal and Installation

1. Remove the sterndrive. Refer to the **Vazer Service Manual**.
2. Remove the gear case. Refer to the **Alpha Sterndrive Service Manual**.
3. Place a plug in the oil passage of the driveshaft housing to reduce the loss of drive lube and replace the V-seal on the top of the water pump housing. Refer to the instructions included with the seal kit.



4. Apply sealant to both sides of the drive installation gasket and replace the gasket.

Tube Ref No.	Description	Where Used	Part No.
19	Perfect Seal	Drive installation gasket	92-34227 1

5. Install the gear case. Refer to the **Alpha Sterndrive Service Manual**.
6. Install the sterndrive. Refer to the **Vazer Service Manual**.
7. Fill the sterndrive with MerCruiser High Performance Gear Lubricant. Refer to the **Vazer 100 Owner's Manual**.

Tube Ref No.	Description	Where Used	Part No.
87	High Performance Gear Lubricant	Vazer sterndrive	92-858064K01

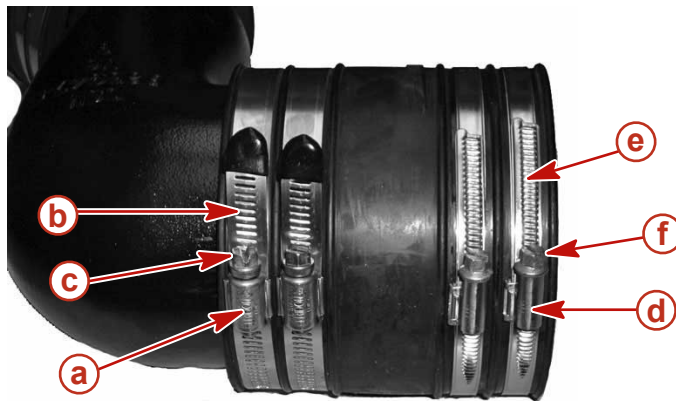
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8. Test run the engine after all repairs are complete. Allow the engine to reach normal operating temperature and check for leaks.

Hose Clamp Identification

IMPORTANT: Two different types of hose clamps may be used in various locations on Mercury MerCruiser power packages. The hose clamps differ in appearance and require different torque specifications.



- a - Tridon hose clamp
- b - Slot cut through the band
- c - Screw hex head (5/16 in.)
- d - Norma hose clamp
- e - Solid stamping
- f - Screw hex head (7 mm)

31449

Tridon Hose Clamp

The Tridon hose clamp uses a worm screw with 5/16 in. hex head to engage slots cut through the band.

Description	Nm	lb-in.	lb-ft
Tridon hose clamp	4.41	39	–

Norma Hose Clamp

The Norma hose clamp is narrower than the original hose clamp and solid-stamped to eliminate cuts through the band. The hex head size of the screw is 7 mm.

Description	Nm	lb-in.	lb-ft
Norma hose clamp	3.33	29.5	–

Parts Required

Order all parts through your normal parts distribution.

Qty.	Description	Part Number
1	Exhaust elbow kit with gaskets and bolts	866559A02
1	Bleeder valve	818390
1	Drive and transom kit	879150A84

Warranty

United States and Canada: Mercury Marine will credit the dealer for the cost of labor through July 31, 2012. Submit a warranty claim through your normal warranty-processing channel, listing:

1. MerCruiser serial number.
2. Flat Rate Code and Labor NJC 5.5
 - Remove and replace the exhaust elbow and bleed the cooling system–3.0 hrs
 - Replace the water supply bellows–0.5 hrs
 - Replace the drive installation gasket and water pump seal–2.0 hr
3. Part Code–699

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4. Failure Code-40

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

Old Parts

- **United States and Canada:** Scrap the replaced parts.
- **Outside the United States and Canada:** Follow instructions issued by your regional service office or by your distributor.

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Dear Mercury Marine Customer

Thank you for your purchase of a new boat powered by a Mercury MerCruiser Vazer 100 engine package. We appreciate your business and hope you are enjoying your new boat.

We have made a few improvements to the product that we would like to provide to you. We have determined that replacing certain parts on your engine and sterndrive will increase the durability and reliability of your power package. We will perform these upgrades for you at no charge to you.

What you should do

Contact your authorized Mercury MerCruiser dealer and arrange for installing these modifications. The dealer will refer to Mercury MerCruiser Service Bulletin 2009-12 for instructions. Mercury Marine will reimburse the dealer for performing the work.

If you need assistance locating an authorized dealer, a dealer locator feature is available at www.MercuryMarine.com. You can also contact Mercury MerCruiser Customer Service at +1 405 743 6566 for assistance.

If you no longer own this power package, please contact MerCruiser Customer Service at +1 405 743 6566.

Mercury Marine apologizes for any inconvenience this rework may cause you. However, we have taken this action to ensure that your boating experience will be enjoyable and trouble-free.

Sincerely

Mercury MerCruiser Service