



# service information

ADVISORY  
 BULLETIN

No. 99-6

## End Cap OptiMax Air Compressor

### Models Affected

MERCURY/MARINER

135/150 HP, 2.5 LITRE OPTIMAX  
S/N 0G868674 Thru 0G925496

200/225 HP, 3.0 LITRE OPTIMAX  
S/N 0G869454 Thru 0G925439

The air compressor end cap retaining bolts may become loose due to a machining error. The loose bolts could allow the end cap to lift out of the compressor body causing an oil leak, and/or loss of air pressure.

### Owner Notification

A letter will be sent to every registered owner of an affected outboard. The letter will advise the owner to return their outboard to their selling dealer or any authorized dealer for replacement of the compressor end cap.

### Dealer Outboard Inventory

Affected outboards in dealer inventory **MUST BE** reworked prior to customer delivery.

### Service Parts Stock

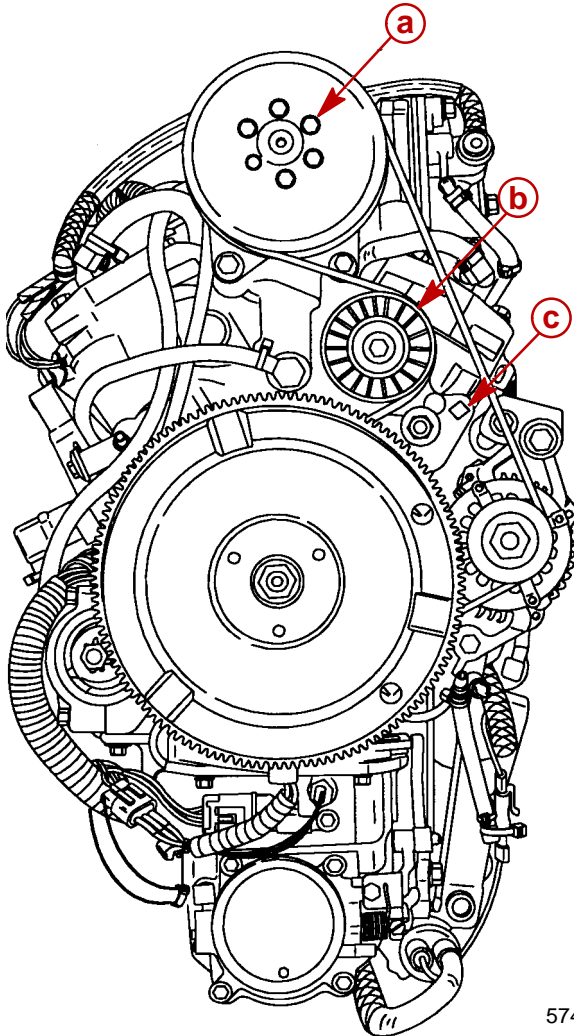
Return all compressor end cap assemblies **P/N 1173-828131A4** to Mercury Marine for credit.

### Correction

Replace the air compressor end cap assembly with **P/N 1173-828131A5**. The new assembly includes the end cap, crankshaft, bearings, pulley flange, seals, and O-rings.

## Disassembly

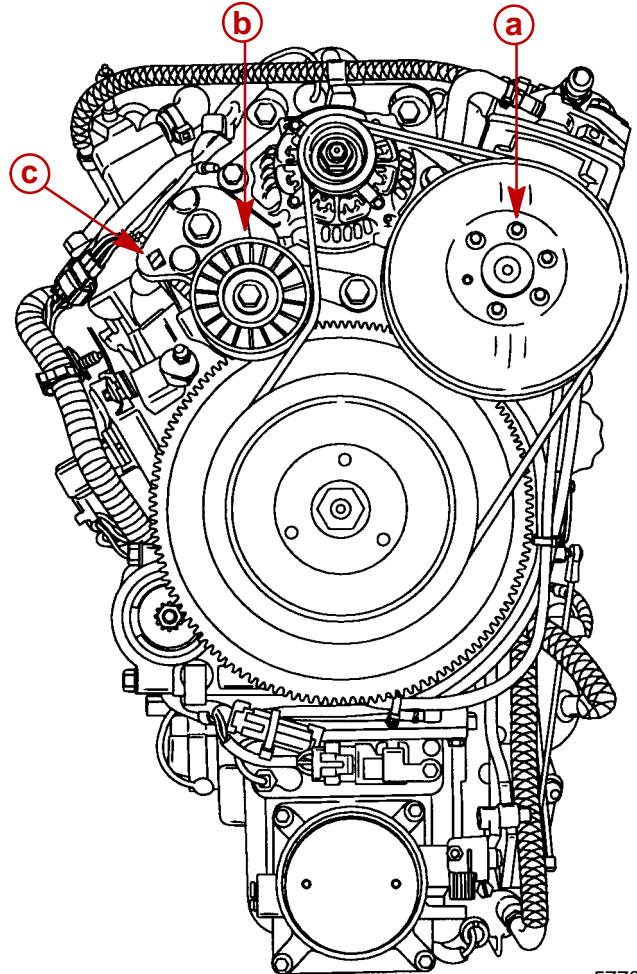
- Remove flywheel cover
- Use 3/8-inch (9.5 mm) drive on belt tensioner arm to relieve belt tension, and remove belt.
- Remove the 5 bolts that retain the pulley to the pulley flange.



57489

### 2.5 Liter

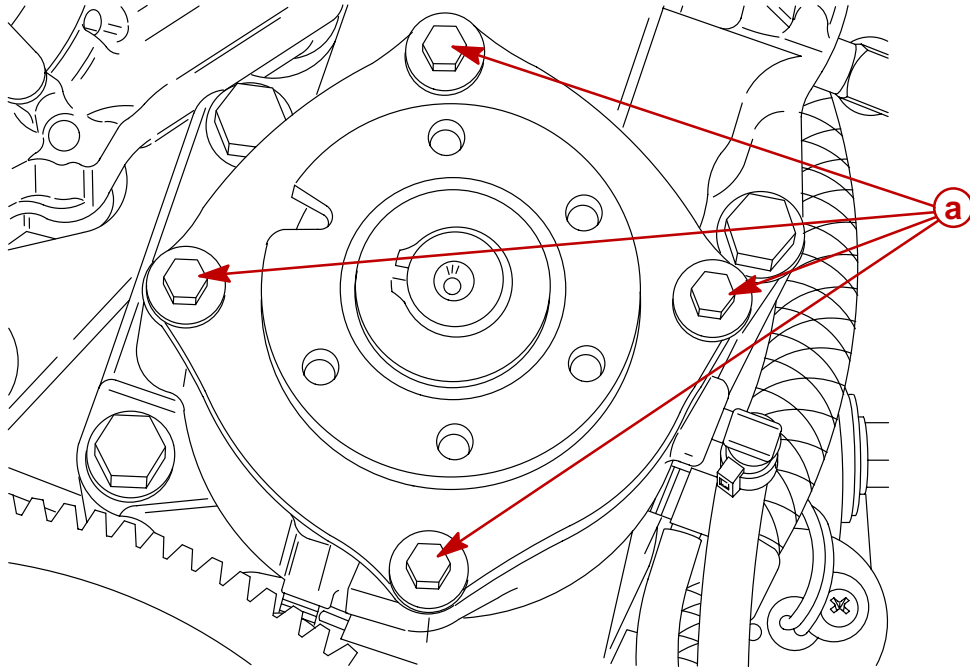
- a** - Pulley retaining bolts (5)
- b** - Tensioner
- c** - 3/8 (9.5 mm) square drive



57784

### 3.0 Liter

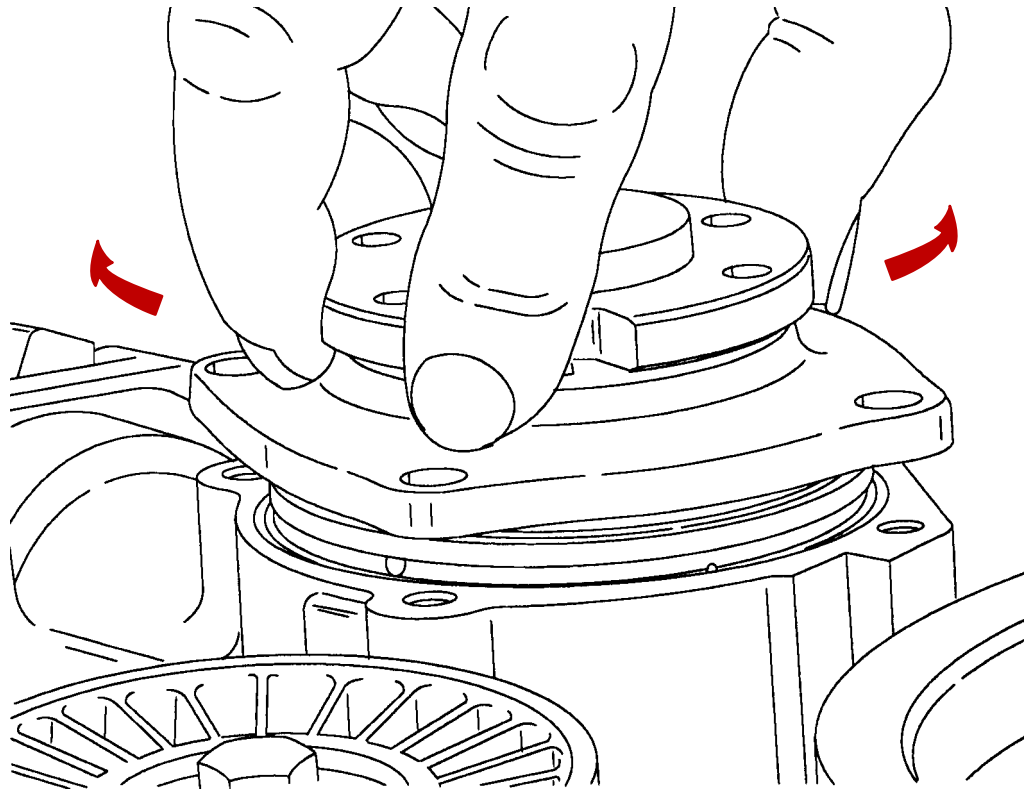
- Remove the 4 bolts that retain the end cap to the compressor body.



57809

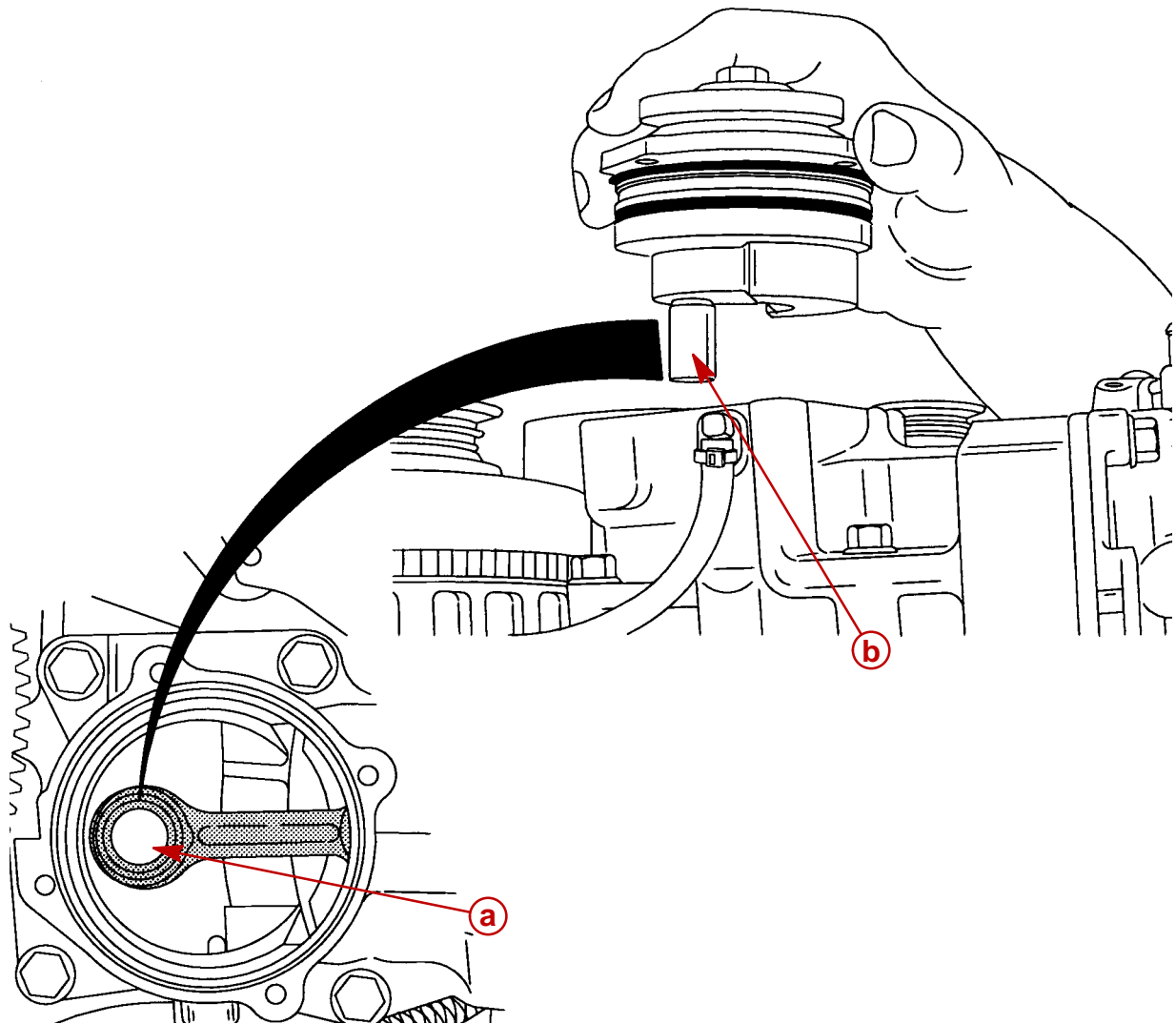
**a** - End cap retaining bolts (4)

- While rotating the pulley flange alternately clockwise and counterclockwise about 1/8 to 1/4 turn, pull outward on the pulley flange. Continue rotating until the end cap assembly has been removed from the compressor body.



## Reassembly

- Lubricate end cap O-ring and O-ring contact area in compressor body with two cycle oil.
- Slide the new end cap assembly into the compressor body, keeping the connecting rod journal lined up with the open end of the connecting rod, until the crankshaft just enters the open end of the connecting rod.



- a** - Connecting rod open end
- b** - Crankshaft connecting rod Journal

- While rotating the pulley flange clockwise and counterclockwise, push the end cap into the compressor. Continue rotating the flange until the end cap is all the way down against the compressor body.
- To confirm that the connecting rod journal has properly engaged with the connecting rod, rotate the flange until you feel resistance from the piston trying to compress air in the cylinder.
- Apply Loctite 271 (P/N 92-809820) to the threads of the end cap retaining bolts and torque to 100 lb. in. (11.5 Nm).
- Apply Loctite 271 (P/N 92-809820) to the pulley retaining bolts and torque to 100 lb. in. (11.5 Nm).
- Install compressor/alternator belt.
- Run engine to confirm that compressor is functioning correctly.

---

## Part required

Qty. one (1) End cap assembly P/N 1173-828131A5

## Repair Identification

### FACTORY REWORK IDENTIFICATION

Engines reworked at the factory have a GREEN dot on the engine carton, near the serial number location, and a WHITE dot on the compressor near the bar code identification.

### DEALER REWORK

After the end cap has been replaced, place a WHITE paint dot on the compressor body near the bar code identification.

## Warranty

The normal 2 year Optimax warranty applies. Complete warranty claim listing.

- Outboard serial number
- Qty. 1 End cap assembly **P/N 1173-828131A5**
- Eight tenths (0.8) hour labor
- Warranty Flat Rate Code: NJC
- Failure Code : 761-00

U.S. and Canada: Return end cap with completed warranty claim.

INTERNATIONAL: Follow instructions issued by Marine Power International office or by your distributor.



**Mercury Marine**

*Marine Products and Services*

---

W6250 Pioneer Road  
P.O. Box 1939  
Fond du Lac, WI 54936-1939 USA  
Phone: 920-929-5000  
[www.mercurymarine.com](http://www.mercurymarine.com)

Dear Mercury Marine Customer:

Our records indicate that you are the owner of a Mercury Marine outboard included in a recall. Due to an air compressor manufacturing error, the air compressor end cap retaining bolts may become loose. The loose bolts could allow the end cap to lift out of the compressor body causing an oil leak, and/or loss of air pressure.

**WHAT YOU SHOULD DO**

Contact your authorized dealer, preferably the one who sold you the engine, and make arrangements to determine if your engine needs to be repaired. The dealer will refer to Mercury Marine Service Bulletin 99-6 for instructions. You must deliver your engine to the dealer and present this letter, the reverse side of which is a claim-form your dealer needs to send to us for reimbursement.

**NOTE:** *If your boat is in storage, you may want to wait until you remove it from storage to have this service performed.*

**WHAT WE WILL DO**

We will reimburse the authorized dealer for inspecting and/or replacing the air compressor end cap assembly in line with the service bulletin.

We apologize for any inconvenience this recall may have caused you. However, we have taken this action to assure your boating enjoyment and continued satisfaction with our product.

Sincerely,

Mercury Marine