



No. 2000-07

Circulate to:	Sales Manager	Accounting	Service Manager	Technician	Parts Manage

Air Compressor End Cap Oil Leak

Models Affected

MERCURY/MARINER 200/225 HP, 3.0 LITRE OPTIMAX S/N 0T136400 Thru 0T161961

The spacer between the air compressor end cap bearings may have been cracked during assembly. The cracked spacer could allow oil to leak past the compressor outer end bearing.

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 inspection and/or replacement of the compressor end cap.

Dealer Outboard Inventory

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

Service Parts Stock

U.S. customers: Inspect air compressor assemblies **P/N 828123T15** in your inventory to determine if the date code is between 00055 to 00073. Return any compressor between the above date codes to Mercury Marine for credit. All compressors outside of the above date codes are not affected by this bulletin. Please note on the form that the return is part of Service Bulletin 2000-07 and send compressors to:

Mercury Marine Warranty Receiving W6250 Dock 9A Pioneer Road Fond du Lac, WI 54936

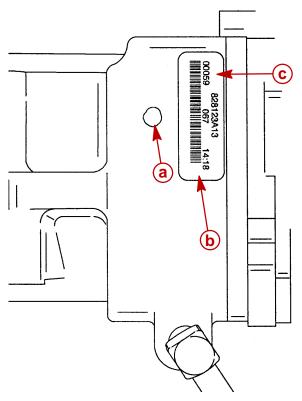
Non – U.S. customers: Return any **828123T15** compressor within the affected date codes to the appropriate distribution center for credit. Follow the normal return parts procedure. Please make reference to Service Bulletin 2000-07.

Inspection/Test

Before proceeding with the following inspection confirm that the work has not been completed prior to receiving the engine. Refer to the Midas system under engine history.

ENGINE IN CARTON: If engine is still in the carton, check for a RED dot near or on the serial number label. If RED dot is present, no further action is required, engine has been reworked at the factory. If a RED dot is not present, follow procedure for engine out of carton.

ENGINE OUT OF CARTON: Check the date code on the air compressor bar code label. If the date code is between 00055 and 00073, look for a WHITE paint dot next to the bar code label. A WHITE paint dot indicates that compressor has been reworked at the factory, and no further action is required.



- a WHITE Paint Dot
- **b** Bar Code Label
- c Date Code

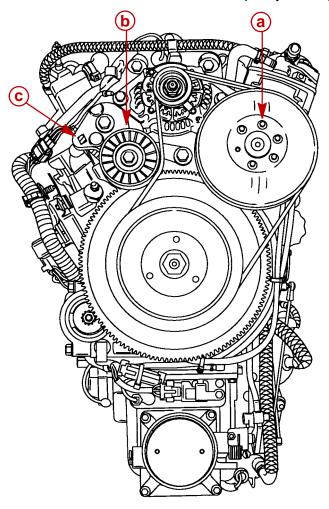
Correction

If the compressor is within the above listed date code, and does NOT have a WHITE dot next to the compressor bar code label, replace the air compressor end cap assembly with **P/N 1173-828131A5.** The new assembly includes the end cap, crankshaft, bearings, spacer, pulley flange, seals, and O-rings.

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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.



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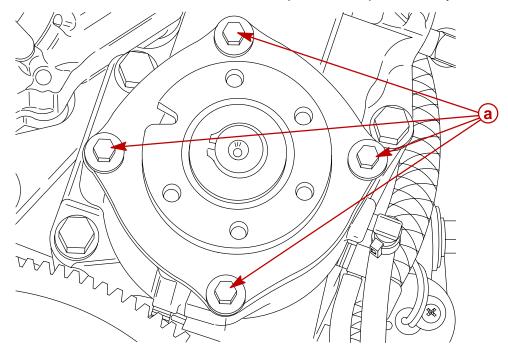
a - Pulley Retaining Bolts (5)

b - Tensioner

c - 3/8 inch (9.5 mm) Square Drive

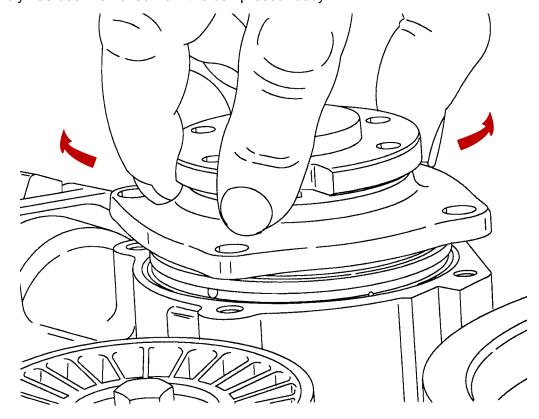
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• Remove the 4 bolts that retain the end cap to the compressor body.



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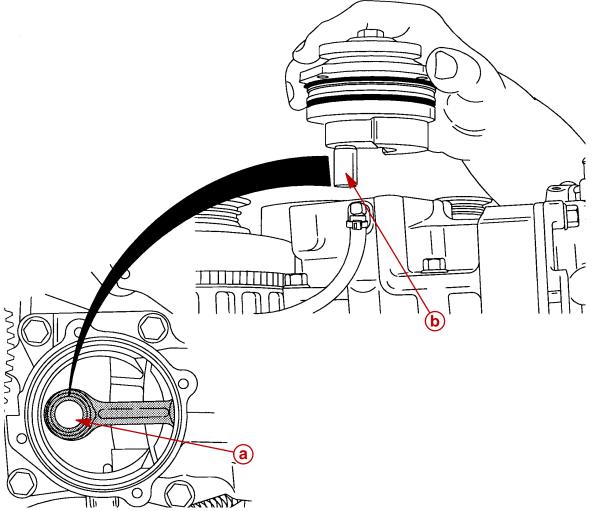
- a End Cap Retaining Bolts (4)
- While rotating the pulley flange alternately clockwise and counterclockwise about 1/8
 to 1/4 turn, pull outward on the pulley flange. Continue rotating until the end cap assembly has been removed from the compressor body.



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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 has contacted 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.

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Part Required

Qty. one (1) End Cap Assembly P/N 1173-828131A5

Repair Identification

FACTORY REWORK IDENTIFICATION

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

DEALER REWORK

After the compressor has been inspected and/or end cap has been replaced, place a WHITE paint dot on the compressor body near the bar code label.

Warranty

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

- Outboard serial number
- Qty. 1 End Cap Assembly P/N 1173-828131A5 (if required)
- Three tenths (0.3) hour labor inspection (ENGINE OUT OF CARTON)
- Five tenths (0.5) hour labor for replacement of end cap assembly (if required)
- Warranty Flat Rate Code: NJC

Part Code: 761Failure Code: 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.

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