

MIRCURY OUTBOARDS

service bulletin

No. 96-21

Overheating – 3 Litre

MERCURY AND MARINER

1994 thru 1996, 225/250 HP, 3.0 Litre S/N 0D280813 thru S/N 0G437999

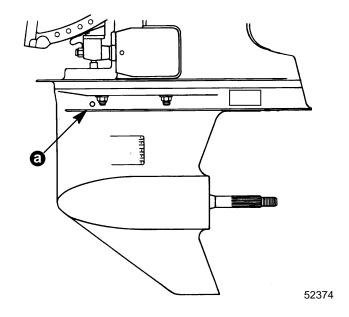
1997 200 HP DFI S/N 0G386496 thru 0G509800

There have been occasional reports of 3.0 Litre engines overheating. The customer will report hearing a warning horn, and engine rpm will drop to about 3000. Typically this occurs on large boats, when operated between the 2500 to 4500 rpm range. Normally this overheat condition is not consistent, occurring occasionally. If this problem is reported, check the following.

- Make sure that the cooling system (water pump, thermostats, poppet/relief valve, etc.) are in good operating condition.
- Check that the engine mounting height is correct, refer to Installation Section 7 of the 3.0 Litre Service Manual (P/N 90-822900R1).
- Check for objects on boat hull that would cause air-ventilated water to enter the water pickup holes on the lower unit, (boat lifting strakes, and depth finder sensor are typical examples).

CORRECTION: 1

If the overheating condition continues after the above items have been checked, restrict the drive shaft housing drain holes as outlined, using a 1/16 inch pipe plug P/N 22-56800.

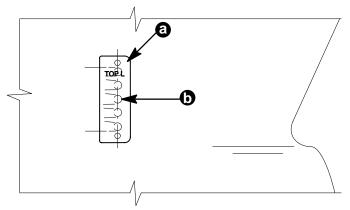


- a Drain hole drive shaft housing (one each side)
- 1. Cut threads into the drive shaft housing drain holes located on each side of the lower unit, using a tapered 1/16 inch 27 NPTF pipe tap.
- 2. Apply Loctite #271 (P/N 92-809820) to the threads of plug P/N 22-56800.
- 3. Install plug P/N 22-56800 so head of plug is even/ flush with the surface of gear housing.
- 4. Drill a 1/8 inch (3.17mm) hole through the center of the plugs.
- 5. Paint over the plug with touch-up paint.

NOTE: The two drilled plugs will restrict the water that will exit the drive shaft housing. This will insure that proper water level is maintained above the water pump, preventing air from being drawn into the cooling system through the water pump.

CORRECTION: 2

On some applications large amounts of air-ventilated water may occur. If overheating reoccurs after the drive shaft housing drain holes have been restricted, install a high speed water pickup kit P/N 832066A1 (Installation Instructions included with kit).



- a Water pickup
- b Intake holes

WARRANTY

The normal one year warranty applies, if the gear case had restriction plugs or the high speed water pickup kit is installed to resolve an overheat problem within twelve months from the date of sale.

Complete a warranty claim listing:

- Outboard serial number
- Qty. 2 P/N 22-56800 plug
- Qty. 1 P/N 832066A1 pickup kit (If required)
- One hour labor
- FLAT RATE CODE: NJC
- FAILURE CODE: 699 87

US and CANADA: Complete/process claim via Midas or return a warranty claim form.

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