

Poppet/Relief Valve Spring – 3.0 Litre

NOTICE

This is a revision of 3.0 Litre Service Bulletin 96-20. Destroy Bulletin 96-20 1196 and insert this revised (08/10/98) Service Bulletin 96-20. Changes are underlined.

Further investigation has resulted in a more effective solution to burned propeller hubs and propeller shaft seals. Disregard the information on this Service Bulletin. Refer to Service Bulletin 98-9.

MERCURY AND MARINER

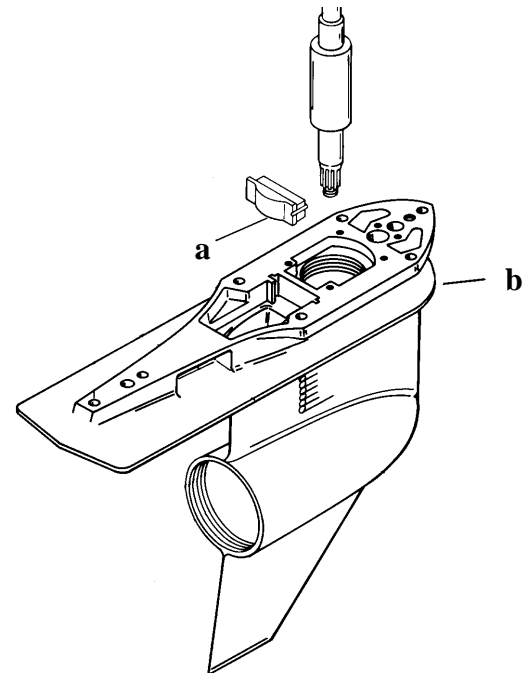
1997 225/250 HP, 3.0 Litre

1997 225 HP Seapro/Marathon 3.0 Litre
S/N 0G438000 thru 0G518681

There have been some reports of propeller hub, and bearing carrier seal burn-out on 1997, 3.0 Litre outboards. It has been determined that engines operated in the 2000 RPM range may not receive sufficient water supply to the exhaust system, resulting in excessive exhaust temperatures. This lack of water is due to the poppet/relief valve spring having incorrect tension, not allowing the poppet/relief valve to open in this RPM range. If a failure of the propeller hub or carrier seals due to a lack of water is suspected, make the following inspection.

INSPECTION

Remove the lower unit, and closely inspect the rubber filler block. If the filler block has a burnt appearance make the following correction.



- a - Filler block
- b - Gear housing

CORRECTION

Remove the bottom cowl (starboard side only).

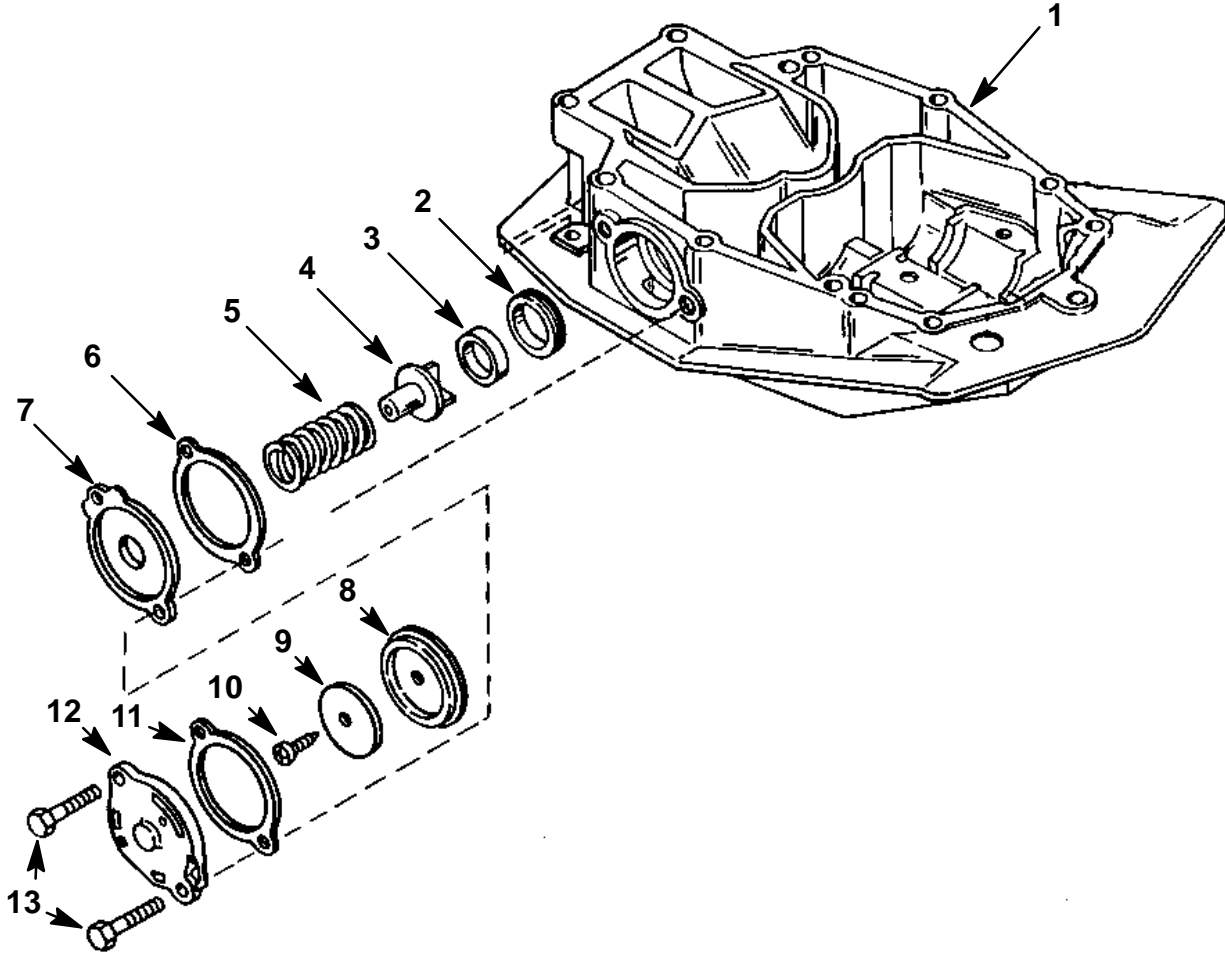
Remove the two bolts that retain the poppet/relief valve cover to the exhaust plate.

Remove the poppet/relief valve assembly from exhaust plate.

Remove the screw that retains the valve and spring to the inner poppet/relief valve plate.

Install the new poppet/relief valve spring P/N 24-854478.

Reassemble and install poppet/relief valve assembly using 2 new gasket P/N 27-88907.



- 1 - Exhaust Plate
- 2 - Carrier
- 3 - Grommet
- 4 - Poppet/Relief Valve
- 5 - Spring
- 6 - Gasket
- 7 - Inner Plate
- 8 - Diaphragm
- 9 - Washer
- 10 - Screw
- 11 - Gasket
- 12 - Outer Cover
- 13 - Bolts [Torque bolts to 20 lb. ft. (27.0 N-m)]

DEALER OUTBOARD INVENTORY

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

PARTS REQUIRED

- Qty. 1 P/N 24-854478 Poppet/relief valve spring
- Qty. 2 P/N 27-88907 Gasket poppet/relief valve assembly
- Qty. 1 P/N 821526 Filler block (If required)

PARTS IDENTIFICATION

FACTORY IDENTIFICATION

Engines reworked at the factory (U.S.) with the new poppet/relief valve spring are identified with an "X" stamped on the engine carton near the serial number.

Engines reworked at the Belgium location with the new spring will have a white dot on the poppet/relief valve cover, and a blue dot on the engine carton.

DEALER IDENTIFICATION OF WORK PERFORMED

After the poppet/relief valve spring has been changed, a white dot should be painted on the poppet/relief valve cover.

WARRANTY

If a failure occurs within twelve months from the date of sale, the normal one year warranty applies.

Complete a warranty claim listing:

- Outboard serial number
- Qty. 1 Spring P/N 24-854478
- Qty. 2 Gasket P/N 27-88907
- Qty. 1 Filler block P/N 821526 (If required)
- One hour labor
- FLAT RATE CODE: NJC
- FAILURE CODE: 618 87

NOTE: Propeller hub failure, or damage to lower unit due to bearing carrier seal (burn-out) caused by an incorrect poppet/relief valve spring, can be added to the same warranty claim, using correct flat rate and failure codes. Stainless steel propellers should have the hub replaced not the complete propeller.

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.