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Improved Power Trim Poppet Valves (PO Check Valves)

Models Affected

IMPORTANT: Please note this bulletin is advisory only. If the outboard is under warranty, a claim for repair may be filed for conditions exhibited under "Kit Usage" on page 2 of this bulletin.

Models Covered	Serial Number
40 (3-cylinder) FourStroke	All
55/60 (3-cylinder) 2-Stroke	All
40/50/60 (4-cylinder) FourStroke	All
75/90 (3-cylinder) 2-Stroke	All
115/125 (4-cylinder) 2-Stroke	All
75/90/115/125 OptiMax (1.5L)	All
75/80/90/100/115 (1.7L) FourStroke	All
75/80/90/100/115 (2.1L) FourStroke	All
150 FourStroke	All

Scope

Worldwide

Situation

A new power trim poppet valve (pressure operated check valve) has been released which incorporates improved urethane face seals. This new poppet valve will help to reduce or eliminate the poppet valve related system leakage issues. These issues would include:

- The outboard will not hold trim position while the boat is underway.
- The outboard will not hold tilt/trailer position with the boat moored or on a trailer (engine off). See **Normal Power Trim Operation** following for details.
- 150 FourStroke only: The outboard will not trim/tilt down from a fully tilted up (trailer) position.

A service kit containing three improved poppet valves is now available to repair these power trim issues rather than replace the power trim assembly. This service kit is compatible with the various power trim assemblies as used on the outboard models listed.

Normal Power Trim Operation - All Models except 150 FourStroke

IMPORTANT: When operating the outboard above the trim range, the outboard will automatically return down to the maximum trim range if the applied thrust force exceeds the preset pressure limit of the tilt circuit. The tilt circuit preset pressure limit can be exceeded at approximate engine speeds of 1500–2000 RPM. The following variables directly affect which engine speed the pressure limit will be exceeded:

- **The outboard shaft length**
- **Gearcase type**
- **Weight of the load in the boat**

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- Propeller pitch

Normal Power Trim Operation - 150 FourStroke

When operating the outboard above the trim range, the outboard will remain at the selected tilt position, however, the engine RPM will be limited.

Normal Power Trim Operation - All Listed Models

IMPORTANT: It is normal for the trim units on these models to leak down as much as 55 mm (2.2 in.) of cylinder stroke in 24 hours. This leak down condition will not be covered under warranty.

Kit Usage

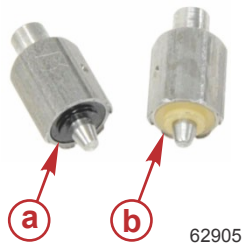
All models listed:

- The outboard will not maintain trim position while the boat is underway.
- The outboard will leak down from a tilted up position at a rate greater than one inch of cylinder stroke in a 24 hour period.

150 FourStroke:

- The outboard will not tilt down from a full tilt (trailer) position.

Poppet Seal Assembly Comparison



- a** - Original poppet valve assembly - black colored seal face
- b** - New poppet valve assembly - neutral colored seal face

Correction

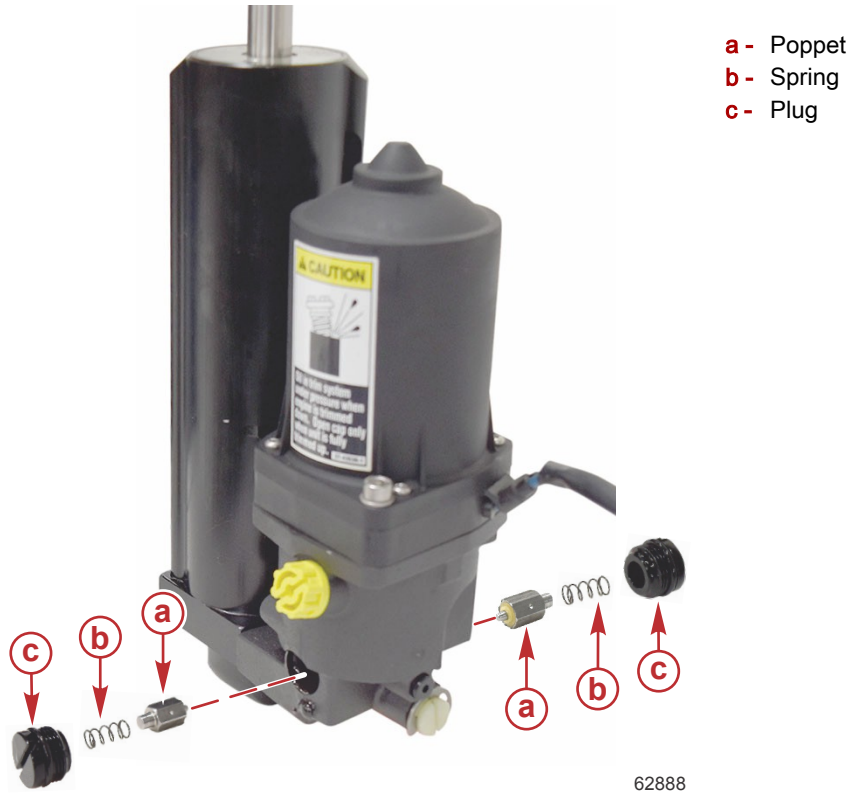
75/80/90/100/115 FourStroke, 75/90/115/125 OptiMax, 75/90/115/125 2-Stroke (3 Poppet Valves Required)

NOTE: The power trim reservoir does not require draining prior to this repair, but be prepared for a small amount of oil to leak when the various components are disassembled.

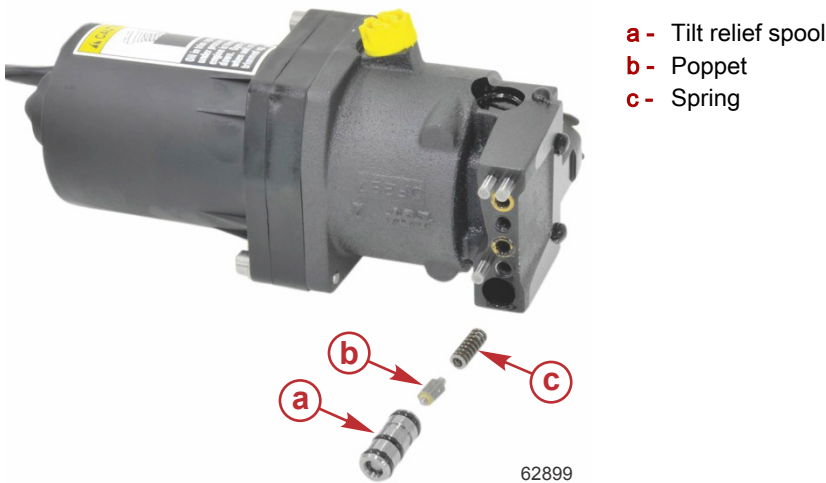
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1. Replace the power trim poppet valves as outlined in the kit supplied service instructions.



2. Replace the power trim up-circuit/tilt pressure relief valve (poppet) as outlined in the kit supplied service instructions.



150 FourStroke (2 Poppet Valves Required)

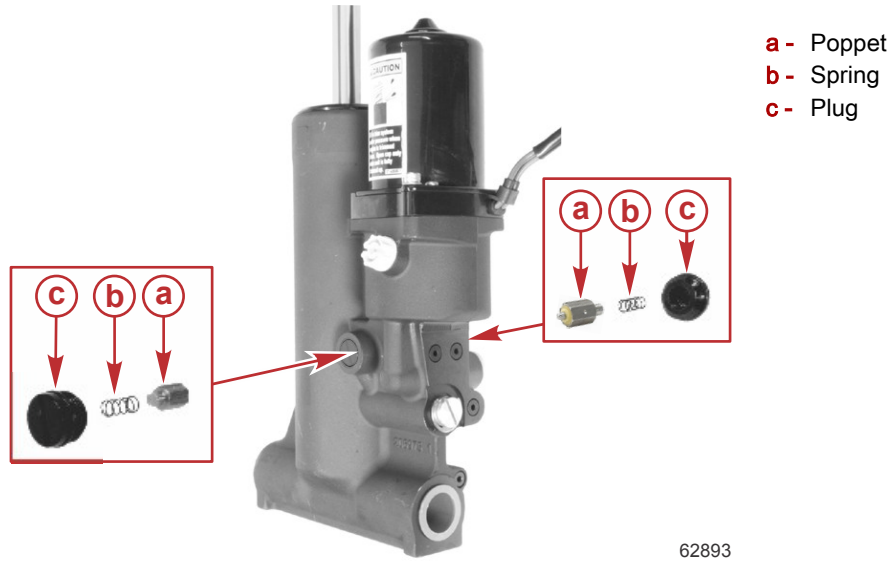
NOTE: The power trim reservoir does not require draining prior to this repair, but be prepared for a small amount of oil to leak when the various components are disassembled.

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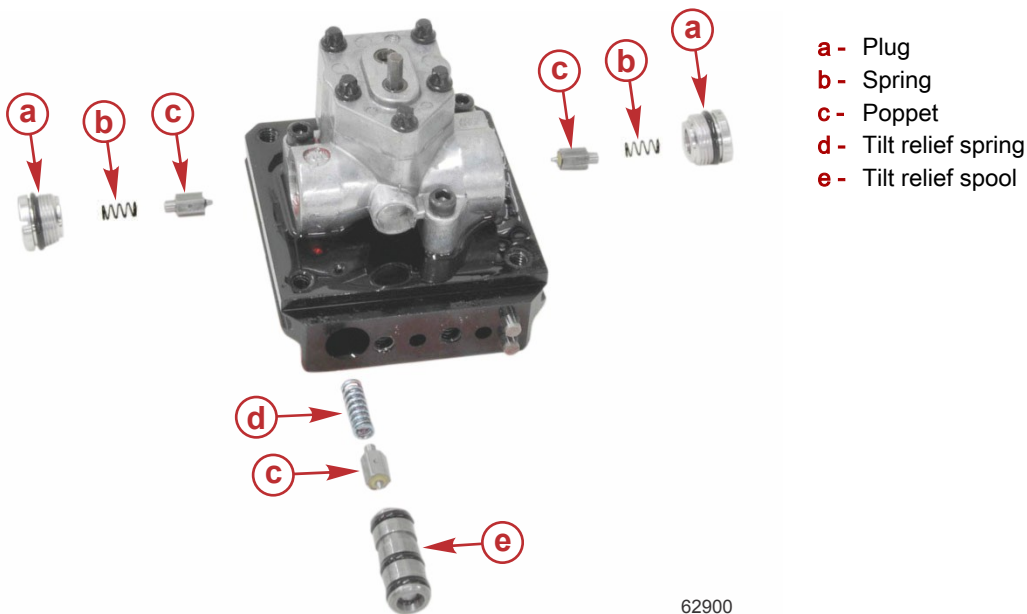
Replace the power trim poppet valves as outlined in the kit supplied service instructions.



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40/50/60 FourStroke, 55/60 2-Stroke (3 Poppet Valves Required)

Replace the power trim poppet valves as outlined in the kit supplied service instructions.



62900

Parts Required

Qty	Description	Part Number
1	Power trim poppet valve kit (contains three PO check valves)	8M0127334

Warranty

Mercury Marine will credit the dealer for the cost of the parts and labor. Complete a warranty claim listing:

- Outboard serial number
- Labor: 1.3 hours

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- Warranty flat rate code: SB08 + SB05
- Part code: 111
- Fail code: 83
- Qty. 1, P/N 8M0127334

United States and Canada: Complete/process the claim via MercNET or return a warranty claim form.

Outside the United States and Canada: Follow the instructions issued by the Marine Power International office or by an authorized Marine Power Distributor.

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