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Zeus 3000 Series Pod Trim Tab Manifold—Check Valve Torque Models Affected

Models Covered	Serial Number
Zeus 3000 Series JH and KH Model Pods	0M963373–0M970295

Scope

Worldwide

Situation

Mercury has increased the installation torque of the check valve fitting contained on the trim tab manifold assembly. Previous torque value was 29.5 lb-ft.

Description	Nm	lb-in.	lb-ft
Installation torque	81.35	–	60

The new torque of 60 lb-ft was effective with pod serial number 0M970296.

Field reports have indicated that the check valve fitting may loosen over time, allowing the O-ring seal to expand out between the manifold and the check valve assembly, and thereby create a minor oil leak.

When a Zeus powered boat is scheduled for service or maintenance, Mercury is requesting that this new torque be applied on the existing product.

Service Procedure

First, locate the check valve fitting on the trim hydraulic manifold assembly. See item "j" in the sketch following.

By hand, verify if the check valve assembly is loose.

If it cannot be rotated by hand, and oil is not present, tighten the fitting to the specified torque.

Description	Nm	lb-in.	lb-ft
Fitting	81.35	–	60

If the check valve is loose, or oil is present, the fitting will need to be removed and the O-ring replaced. If this is necessary, then proceed as follows:

The check valve prevents the trim tab from lowering when the hydraulic pump is not operating. Therefore hydraulic pressure is normally present if the trim cylinder is not fully extended. If this is the case, then start the engine and lower the trim tab fully.

Using a clean, lint-free cloth, wipe any dirt and debris away from the check valve fitting.

⚠ WARNING

The rubber interface ring seal has an outside coating that protects the inner core. Tears, cuts, scrapes, or exposure to lubricants or sealing compounds can damage this coating and the inner core causing water to leak into the boat. Use caution when installing and working around the interface ring seal to prevent damage. Do not use any lubricants or sealing compounds during installation.

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Place oil-absorbent wipes or similar material around the area to contain any spilled lubricant.

Loosen and remove the check valve fitting assembly (item "j").

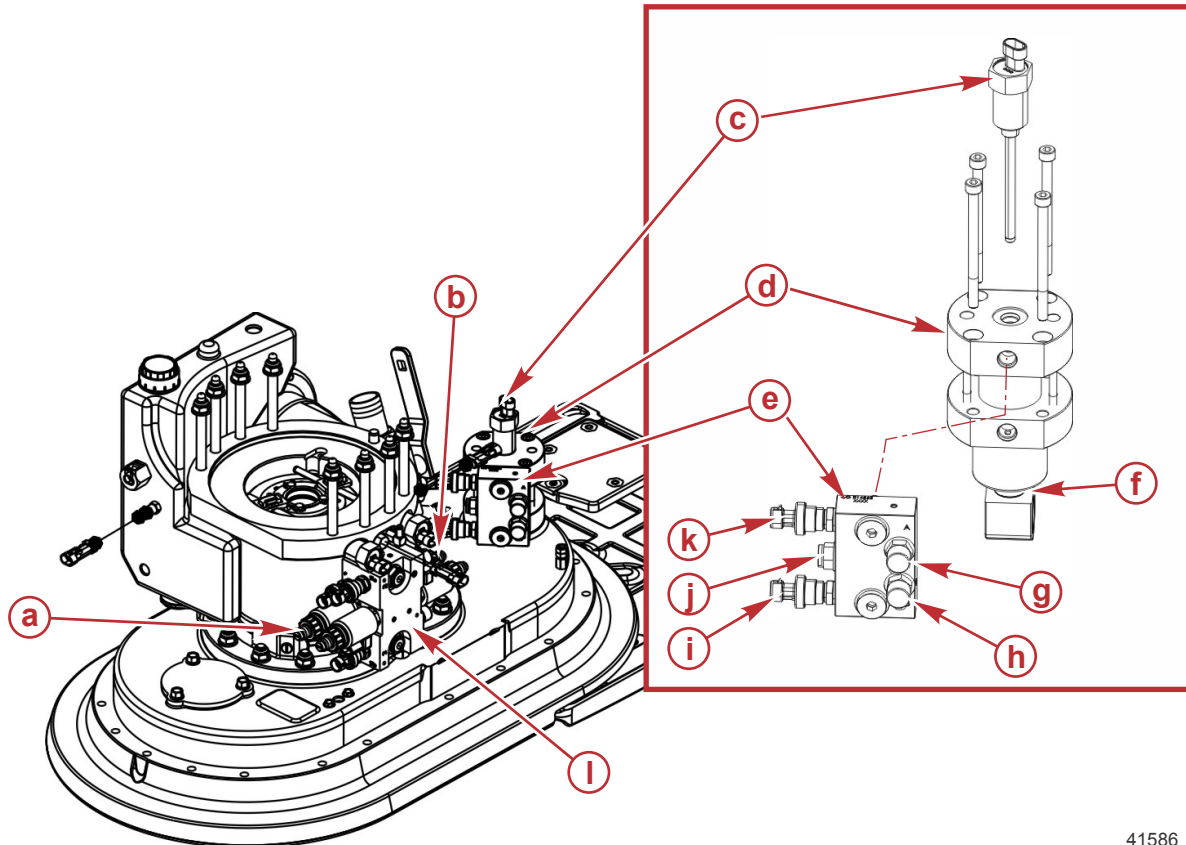
Remove the O-ring (8M0088858) and inspect. Replace if necessary.

Lubricate the surface of the O-ring with the specified lubricant.

Tube Ref No.	Description	Where Used	Part No.
 95	2-4-C with PTFE	Surface of the O-ring	92-802859A 1

Install the check valve assembly. Tighten to the specified torque.

Description	Nm	lb-in.	lb-ft
Check valve assembly	81.35	–	60



41586

- a** - Trim-down control valve with manual override button (A coil)
- b** - Trim-up control valve with manual override button (B coil)
- c** - Trim tab position sensor
- d** - Trim cylinder
- e** - Trim hydraulic manifold
- f** - End of trim cylinder ram
- g** - Hydraulic fluid fitting—tab down (A)
- h** - Hydraulic fluid fitting—tab up (B)
- i** - Trim tab B pressure sensor
- j** - Check valve
- k** - Trim tab A pressure sensor
- l** - Steering hydraulic manifold

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 **WARNING**

Avoid serious injury or death from high-pressure injection injuries caused by fluids under pressure. Fluids under pressure can penetrate the skin, resulting in excruciating pain, possible loss of limb, or death.

To avoid the possibility of high-pressure injection injuries:

- Always keep body parts away from escaping high-pressure fluids and components capable of generating high-pressure spray.
- Never check for fluid leaks with your hands.
- Always wear appropriate personal protective equipment when working with fluids under pressure.
- Always ensure that all fittings are tight before applying pressure to fluid systems.
- Always relieve system pressure before removing fittings or fluid lines.

After first start-up, check the hydraulic trim manifold for leaks. If leaks exist, stop operation immediately. Check the installation and repair as needed.

After a few minutes shut the engine down and check the oil level in the reservoir. Fill the reservoir accordingly.

Part Number

Order O-ring 8M0088858.

Warranty

United States and Canada: Mercury will credit a distributor or dealer for the cost of the O-ring and labor on each pod. Submit the appropriate warranty claims through your normal warranty processing channel listing:

- Zeus pod serial number
- Labor: 0.5 hours (per pod)
- Flat rate code: SB05
- UFO part code: 109
- UFO failure code: 00

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

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