MERCURY MerCruiser

Service Bulletin

☐ Warranty Information ☑ Service Information Bulletin No. 2003-11

☐ Parts Information OEM No. 2003-04

Circulate to: ☑ Sales Manager ☐ Accounting ☑ Service Manager ☑ Technician ☑ Parts Manager

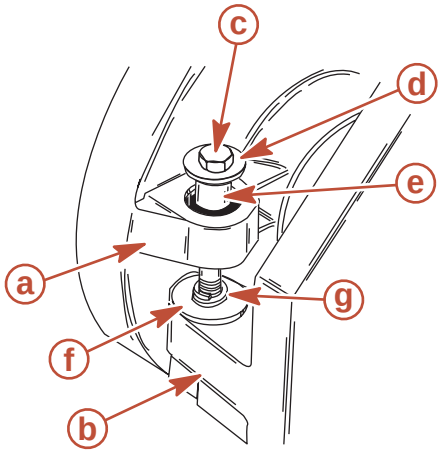
MCM Rear Engine Mount Design Change

Models Affected

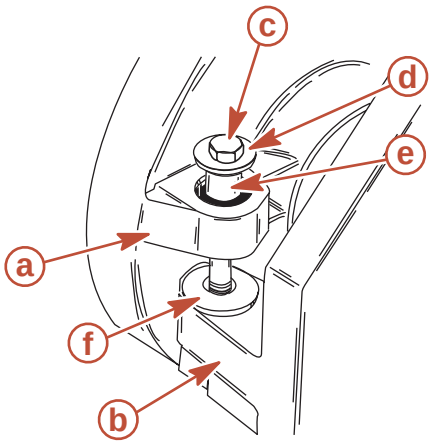
MCM 3.0L / MCM 4.3L / MCM 4.3 MPI/ MCM 5.0L / MCM 5.0 MPI / MCM 5.7L / MCM 350 MAG MPI / MCM 350 MAG MPI HORIZON / MCM MX6.2 MPI / MCM 6.2 MPI MAG HORIZON / MCM 496 MAG / 496 MAG HO

Situation

Starting with serial number 0M660000 and above, the rear engine mounts have been redesigned to improve engine alignment between the transom and the engine. With this design, the double wound lock washer has been removed and the flywheel housing engine mount has been adjusted to better align the engine coupler to the gimbal bearing.



Original design



New design

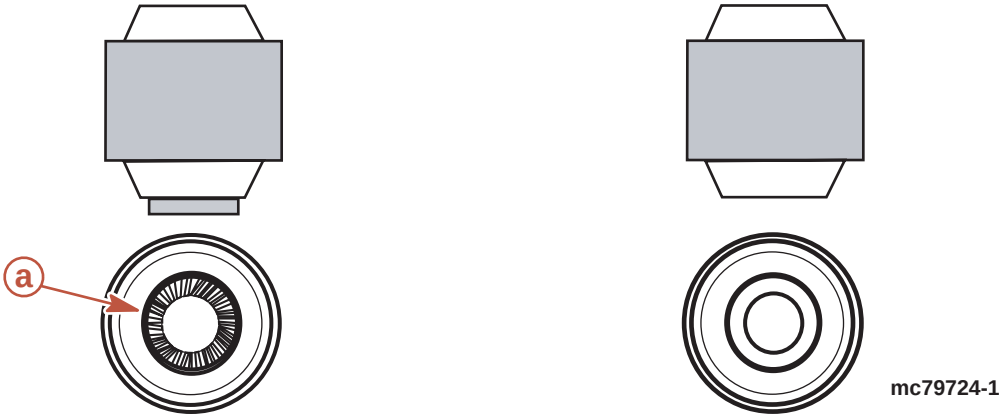
a - Rear engine mount
b - Inner transom plate
c - Bolt
d - Washer
e - Spacer
f - Fiber washer
g - Double-wound washer

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The new flywheel housing mount is serrated on the bottom side where it makes contact with the support mount ear on the inner transom plate assembly. The knurl will prevent mount windup when tightening the rear mount bolt to the nut in the inner transom plate.



New design Old design

a - Knurl

When MCM engines started shipping on 06/17/03, the rear engine mount was changed to the new design. When this new design started, the inner transom plate assembly had the double wound lock washers and the fiber washers removed as part of the new design. The fiber washers were later put back onto the inner plate to eliminate any possible type of engine flywheel housing contact with the inner transom plate mounting ear. When repowering a boat, the new replacement engine may require the addition of a Spacer Kit, P/N 12-892619A01 to be installed between the rear engine mount and the inner transom plate mounting ear. Each kit contains the parts required to shim one engine. Procedure shown following.

Installation

NOTE: *Ensure that the inner transom plate mount is clean and free of all adhesive and debris.*

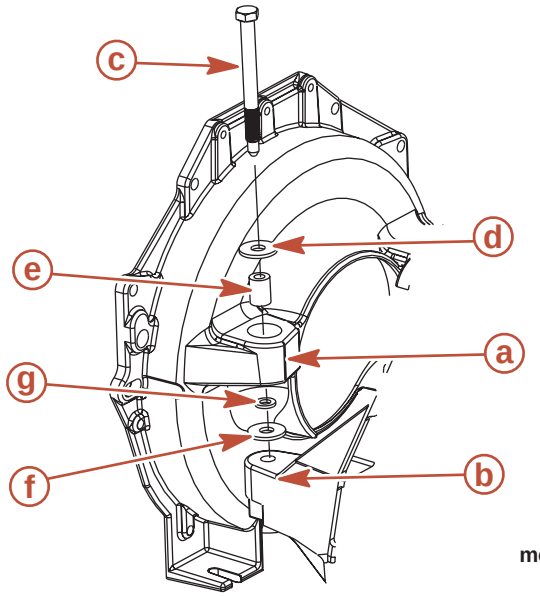
1. Apply glue to the fiber washer and position it equally around the rear engine mount bolt hole on the inner transom plate mount.

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2. Place the stainless steel washer inside the fiber washer.



mc79566-1

a - Rear engine mount
b - Inner transom plate mount
c - Bolt
d - Washer
e - Spacer
f - Fiber washer
g - Stainless steel washer

Tube Ref. No.	Description	Where Used	Part Number
162	Super Glue	Fiber washer	Obtain Locally

3. install engine into boat and align. Refer to appropriate Mercury MerCruiser engine service manual for engine alignment procedure.

The front engine mounts have a limited amount of adjustment. In some installations, there is not enough downward adjustment to achieve proper alignment with the front engine mount pads in the boat at their current position. This situation may also be encountered when replacing old flywheel housing with a new one. As a result of lowering the rear of the engine to the ideal position the front of the engine must be lowered even more to achieve proper engine to transom alignment. The chart below shows by model the nominal distance, measured at the front engine mount, that the front of the engine must be lower to achieve proper alignment.

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Nominal Drop At Front Mount Using New Rear Engine Mounts

Model	2.7 mm (0.106 in.) Spacer	Transom Thickness - 50.8 mm (2.00 in.)	Transom Thickness - 57.2 mm (2.25 in.)
3.0L Alpha with front pedestal mount	With	9.1 mm (0.358 in.)	8.8 mm (0.346 in.)
	Without	22.7 mm (0.894 in.)	22.1 mm (0.870 in.)
3.0L Alpha with side mounts	With	5.9 mm (0.232 in.)	5.8 mm (0.228 in)
	Without	14.8 mm (0.583 in.)	14.4 mm (0.567 in.)
4.3L Alpha/Bravo	With	5.9 mm (0.232 in.)	5.8 mm (0.228 in)
	Without	14.8 mm (0.583 in.)	14.4 mm (0.567 in.)
5.0L Alpha/Bravo	With	7.1 mm (0.280 in.)	6.9 mm (0.272 in.)
	Without	17.7 mm (0.697 in.)	17.1 mm (0.673 in.)
5.7L Alpha/Bravo	With	7.1 mm (0.280 in.)	6.9 mm (0.272 in.)
	Without	17.7 mm (0.697 in.)	17.1 mm (0.673 in.)
350 Mag Alpha/Bravo	With	7.1 mm (0.280 in.)	6.9 mm (0.272 in.)
	Without	17.7 mm (0.697 in.)	17.1 mm (0.673 in.)
MX6.2 MPI Bravo	With	7.1 mm (0.280 in.)	6.9 mm (0.272 in.)
	Without	17.7 mm (0.697 in.)	17.1 mm (0.673 in.)
496 Mag MPI Bravo (Base & H.O.)	With	7.1 mm (0.280 in.)	6.9 mm (0.272 in.)
	Without	17.7 mm (0.697 in.)	17.1 mm (0.673 in.)

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