



service bulletin

No. 91-16

Cylinder Block Bearing Shoulder Bore Depth - 150 thru 200

Mercury

Models and serial numbers with special shim above the lower crankshaft bearing.

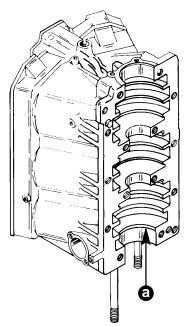
150 XR4	200 Carb.	175 XRi	175 XRi
OD068494	OD068489	OD068477	OD068482
68499 68547	68491 68572	68478 68479	68485 68486
68565	00372	68480	68487
		68481	68488
175 XRi	200 XRi	200 XRi	200 XRi

175 XRi	200 XRi	200 XRi	200 XRi
OD068495	OD068445	OD068455	OD068462
68498	68447	68456	68463
68521	68450	68457	68464
68551	68451	68458	68465
68631	68452	68459	68466
	68453	68461	68467
	68454		

200 XRi	200 XRi	
OD068468	OD068474	
68469	68475	
68470	68476	
68471	68483	
68472	68484	
68473	68564	

Fifty three (53) V6 cylinder blocks had the lower main crankshaft bearing shoulder machined deeper than specified. A steel shim is inserted above the lower crankshaft bearing to correctly position the crankshaft in the cylinder block. The shim is 0.030 inch (0.76mm) thick, 3.5 inches (89mm) O.D. and 3.25 inches (83mm) I.D.

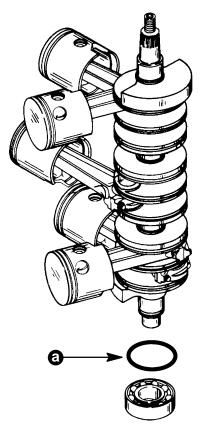
NOTE: Service replacement cylinder blocks do not required the special shim.



50805

a - Shoulder Machined Too Deep

Figure 1. Cylinder Block



a - Special Shim Added

Figure 2. Shim Position

SERVICE NOTE;

The special shim must stay with these cylinder blocks forever!

REPLACING CYLINDER BLOCK

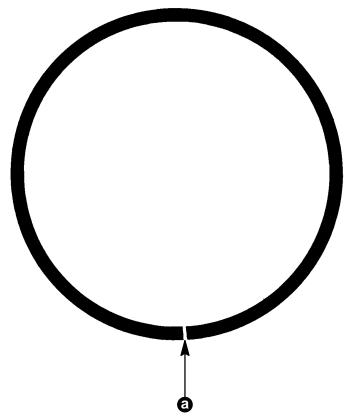
The shim is not required with a new block. Remove the shim from the crankshaft before assembly.

REPLACING CRANKSHAFT

When a crankshaft is replaced and the cylinder block is reused, the special shim must be reinstalled above the lower bearing. Service crankshafts have the lower bearing assembled to the crankshaft, so the shim must be cut to allow for installation. When a shim must be cut, remove approximately 0.040 inch (1mm) of material, file the ends square to prevent the ends from over lapping and remove burrs. **Do not** remove the lower bearing to install the special shim on a service crankshaft. Removal of that bearing destroys the bearing race and then the bearing requires replacement.

REPLACING LOWER BEARING

When a lower bearing is replaced and the cylinder block is reused, the special shim must be reinstalled above the lower bearing. Do not damage the shim when removing the lower bearing from the crankshaft. Reinstall the shim on the crankshaft before pressing the new lower bearing onto the crankshaft.



a - 0.040 inch (1mm) Material Removed

Figure 3. Lower Crankshaft Bearing Shim

This information will be added to the service manual.

This Service Bulletin is furnished to inform the dealership organization on changes in servicing our product. Special or extended warranty coverage is not intended or implied.

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