MERCURY MerCruiser **service bulletin**

No. 2001-17

☐ WARRANTY INFORMATION ☑ SERVICE INFORMATION

Bravo Gear Change

Models

ALL Bravo One / Two and Three Including Bravo One XZ (Excluding the Bravo XR)

Situation

The Bravo driveshaft housing gears and kits available from Mercury Precision Parts / Quicksilver are being replaced by the current production gear sets used in the Bravo 2000 series drive units. They will be supplied in complete installation kits that include the pinion gear, both driven gears, and the cone clutch and other required parts. All of the parts from the kits must be used to properly complete the installation of the new gear kit.

Part Required

Bravo Replacement Gear Set and Thrust Bearing Shim Races

Use the following charts when replacing driveshaft housing gear kits and thrust bearing shim races. The new replacement gear kits require shims, to be ordered separately.

Specifications

NOTICE
The number stamped on the housing will now correspond to thinner shims. Refer to the table for specific information.

If the Thrust Bearing Shim Race used with old gear Set is:			**Order one of the following Thrust Bearing Shim Race sets for the new Replacement gear set:**		
Part Number	**Shim Race Size**		**Part Number**	**Shim Race Size**	
23-87560091	.091 in.	2.31 mm	23-861782051	.051 in.	1.29 mm
23-87560094	.094 in.	2.39 mm	23-861782054	.054 in.	1.37 mm
23-87560097	.097 in.	2.46 mm	23-861782057	.057 in.	1.45 mm

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Replacement Gear Sets for (S/N 0K091000 and Above)			
Gear Set	43-883473A3	**replaces**	43-807436A6 / 43-807436A7 and 43-856184A1
Gear Set	43-883476A3	**replaces**	43-807438A5 / 43-807438A6 and 43-856186A1
Gear Set	43-883479A3	**replaces**	43-807437A5 / 43-807437A6 and 43-856188A1

Replacement Gear Sets for (S/N 0F730000 and Below)			
Shift Upgrade Gear Kit	43-883473A4	**replaces Shift Upgrade Kit**	43-807436A1
Shift Upgrade Gear Kit	43-883476A4	**replaces Shift Upgrade Kit**	43-807438A1
Shift Upgrade Gear Kit	43-883479A4	**replaces Shift Upgrade Kit**	43-807437A1

Pinion Gear Replacement

The following gasoline engine replacement pinion gears, previously sold separately, will be made N.L.A. Pinion gears will only be available as part of a gear set. See the following chart for ordering information.

Old Pinion Gear Number	Replacement Gear Sets	
	For S/N 0K091000 and Above	**For S/N 0F730000 and Below**
43-826642T (32 / 27 tooth count)	43-883473A3	43-883473A4
43-815661T (29 / 27 tooth count)	43-883476A3	43-883476A4
43-818664T (30 / 23 tooth count)	43-883479A3	43-883479A4

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Replacement Gear Set Parts List

43-883473A4, 43-883476A4, 43-883479A4

Description	Qty.	Part Number
Bearing/Gear/Clutch Assembly	1	
Gear Tooth Count 32 / 27		43-883473A4
Gear Tooth Count 29 / 27		43-883476A4
Gear Tooth Count 30 / 23		43-883479A4
Yoke and Cam Assembly	1	806552A2
Shift Shaft	1	12711
Screw	2	10-38615
Thrust Bearing	2	31-861787
Needle Bearing Race	2	31-861791
Upper Drive Shaft	1	45-812773T

43-883473A3, 43-883476A3, 43-883479A3

Description	Qty.	Part Number
Bearing/Gear/Clutch Assembly	1	
Gear Tooth Count 32 / 27		43-883473A3
Gear Tooth Count 29 / 27		43-883476A3
Gear Tooth Count 30 / 23		43-883479A3
Garter Spring	2	24-93505
Thrust Bearing	2	31-861792
Needle Bearing Race	2	31-861791
Thrust Bearing	2	31-861787

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Torque Specifications

Description	Nm	lb-in.	lb-ft
Retainer Nut	271		200
Shift Cam Cap Screw	13	110	
Shift Linkage Cap Screw	13	110	
Top Cover Screws	27		20
Rear Cover Screws	27		20

Lubricants / Sealants / Adhesives

Description	Where Used	Part Number
3M Brand Adhesive	O-rings	92-86166Q1
Loctite 271	Shift Cam Cap Screw, Shift Linkage Cap Screw	92-809820
Quicksilver Needle Bearing Assembly Lubricant	Needle Bearings	92-82565A1
Quicksilver High Performance Gear Lube (Use On All Bearings and Bearing Surfaces	Bearings and Bearing Surfaces	92-850743A1
Quicksilver Special Lubricant 101	Retainer Nut, Gear Faces, ID of Screw Recess	92-13872A1

Special Tools

Description	Part Number
Puller Jaws	91-90244A1
Puller Guide	
Puller Bolt	
Driver Guide	
Shift Handle Tool	91-17302
Stand	91-17301A1
Screw	91-90775
Puller Guide	91-90774
Driver Head (S/N 0M099999 and Below)	91-864220
Driver Head (S/N 0M100000 and Above)	91-862530

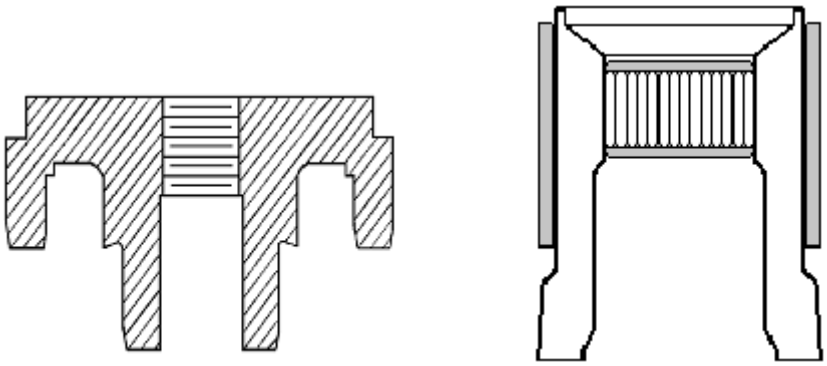
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Tools Required

The following illustrations show the proper installation tool and the positioning of the sleeve-bearing race on the bearing chimney in the drive shaft housing and top cover for all Bravo drives, excluding the Bravo One XR.

Bearing driver 91-864220 is required to install and properly place the sleeve bearing in all 1999 and Prior Bravo drive units when installing any 43-883473A3 / 43-883476A3 /43-883479A3 gear and clutch kit or 43-883473A4 /43-883476A4 and 43-883479A4 Shift upgrade gear kit.

NOTE: *All A3 and A4 kits require a shim change per the cross-reference list on page one of this bulletin.*

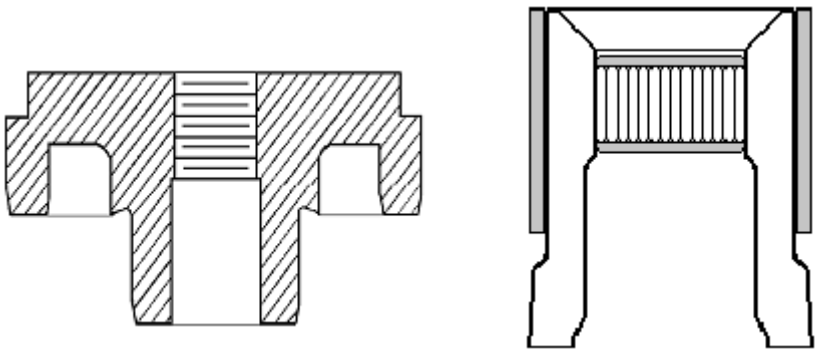


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91-864220

Bearing driver 91-862530 is required when installing the sleeve bearing in all Bravo 2000 series drive units for gear kits 43-883473A1 / 43-883746A1 / 43-883479A1 or 43-883473A2 / 43-883476A2 / 43-883479A2.

NOTE: *All A1 and A2 kits will use the original shims from the drive shaft housing that are currently installed.*



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91-862530

IMPORTANT: Follow the Installation procedures in your Instruction booklet and/or your Bravo service manual for proper installation and assembly.

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