No. 2000-8

WARRANTY INFORMATION

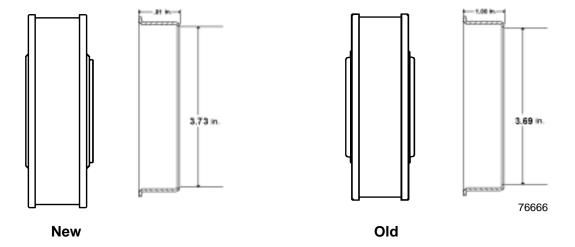
✓ SERVICE INFORMATION

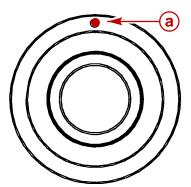
When replacing a current Bravo Drive with a Bravo One X / Two X / Three X, Bravo One XR Drive a Magnum or Hi-Performance Transom must be used.

Problem

The gimbal bearing inner race thickness has changed to accommodate the larger U-Joint used in the X, XZ and XR Bravo drives. If an X, XZ or XR drive is installed on a transom with the thicker gimbal bearing, interference will occur between the U-Joint and the bearing. Either one or both components will fail.

Identification





76667

a - Red Dot

Inspection

- 1. Remove sterndrive unit.
- 2. Inspect gimbal bearing for red dot. If gimbal bearing has a red dot in the location specified previously, you do not need to replace the bearing. If the indentation is not painted, proceed with the following instructions.

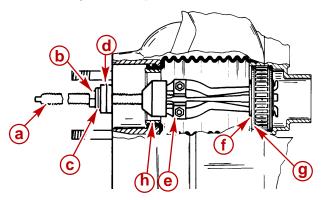
Removal

IMPORTANT: Gimbal bearing and cartridge are a matched set and must be replaced as an assembly. Tolerance ring must be replaced any time gimbal bearing is removed.

A CAUTION

Do not remove gimbal bearing unless replacement is necessary, as damage to bearing may result during removal.

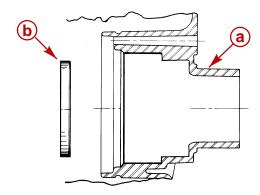
Remove gimbal bearing assembly and sleeve.



22119

- a *Puller Shaft
- **b** *Nut
- c *Washer
- d 3 Plates
- e 3 Jaw Puller
- f Gimbal Bearing Inner Race
- g Gimbal Bearing Cartridge
- h Bellows Sleeve

2. Remove and discard grease seal using a slide hammer.



77017

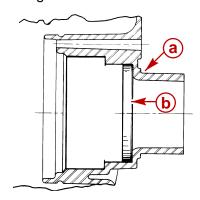
- a Gimbal Housing
- **b** Grease Seal

Page 2 of 6 JUNE 2000 2000-8

^{*} From Bearing Removal and Installation Tool 91-31229A7

Installation

1. Install a new grease seal using a suitable mandrel.



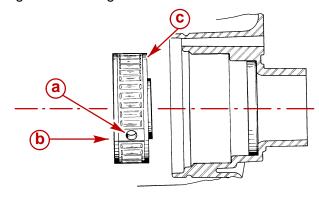
22171

- a Gimbal Housing
- **b** Grease Seal
- 2. Install and position new tolerance ring.
- 3. Align opening in tolerance ring with grease hole in gimbal bearing cartridge.

IMPORTANT: Red dot on gimbal bearing cartridge must be positioned at top.

IMPORTANT: Ensure that notched edge of bearing cartridge faces inward in bore.

4. Align gimbal bearing cartridge grease hole and tolerance ring opening with grease cavity hole in gimbal housing.

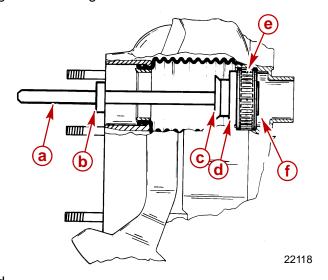


77020

- a Gimbal Bearing Cartridge Grease Hole
- **b** Tolerance Ring Opening
- c Gimbal Bearing Cartridge Notch Face Inward

2000-8 JUNE 2000 Page 3 of 6

5. Install gimbal bearing, using hammer and tools shown. Make sure gimbal bearing cartridge seats in gimbal housing.



- a *Drive Rod
- **b** *Plate
- c *Drive Head
- **d** *Mandrel
- e Gimbal Bearing Assembly
- f Chamfer

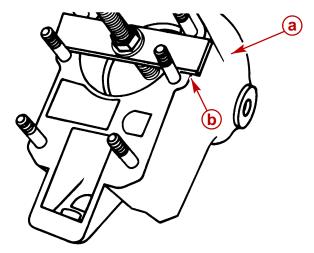
Page 4 of 6 JUNE 2000 2000-8

^{*} From Bearing Removal and Installation Tool 91-31229A7

Bellows Sleeve

Removal

1. Spray engine cleaner around edge of bellows sleeve and remove with U-joint bellows sleeve removal tool.

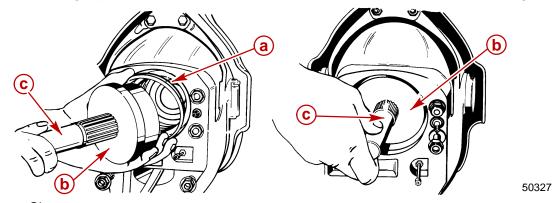


71526

- a Bell Housing
- **b** U-joint Bellows Sleeve Removal Tool

Installation

1. Lubricate sleeve outside diameter (O.D.) with soap and water or engine cleaner and install using U-joint bellows retention sleeve installation tool and a suitable driving rod.



a - Sleeve

b - U-joint Bellows Retention Sleeve Installation Tool

c - Suitable Driving Rod

2000-8 JUNE 2000 Page 5 of 6

Sterndrive Gimbal Bearing Installation Kit

Bearing kit containing the red dot bearing and correct sleeve P/N 30-862540A2

Parts List

Qty.	Description	Part Number
1	Tilt Limit Spacer Kit	15768A3
1	Gimbal Bearing	30-862540A1
1	Bellows Sleeve	862209
1	Tolerance Ring	61075
1	Grease Seal	26-88416

Special Tools

Description	Part Number
3 Jaw Puller (From Slide Hammer)	91-34569A1
Hex Nut	11-24156
Puller Plates (3)	91-29310
Threaded Rod	91-31229
U-joint Bellows Sleeve Removal Tool	91-862546
U-joint Bellows Retention Sleeve Installation Tool	91-818162
Washer	12-34961
Spanner Wrench	91-821709T
Mandrel	91-30366
Drive Head	91-32325
Drive Rod	91-37323

Page 6 of 6 JUNE 2000 2000-8