

## How to Replace the “In-Put” Driveshaft for the 901 Mower Gear Box

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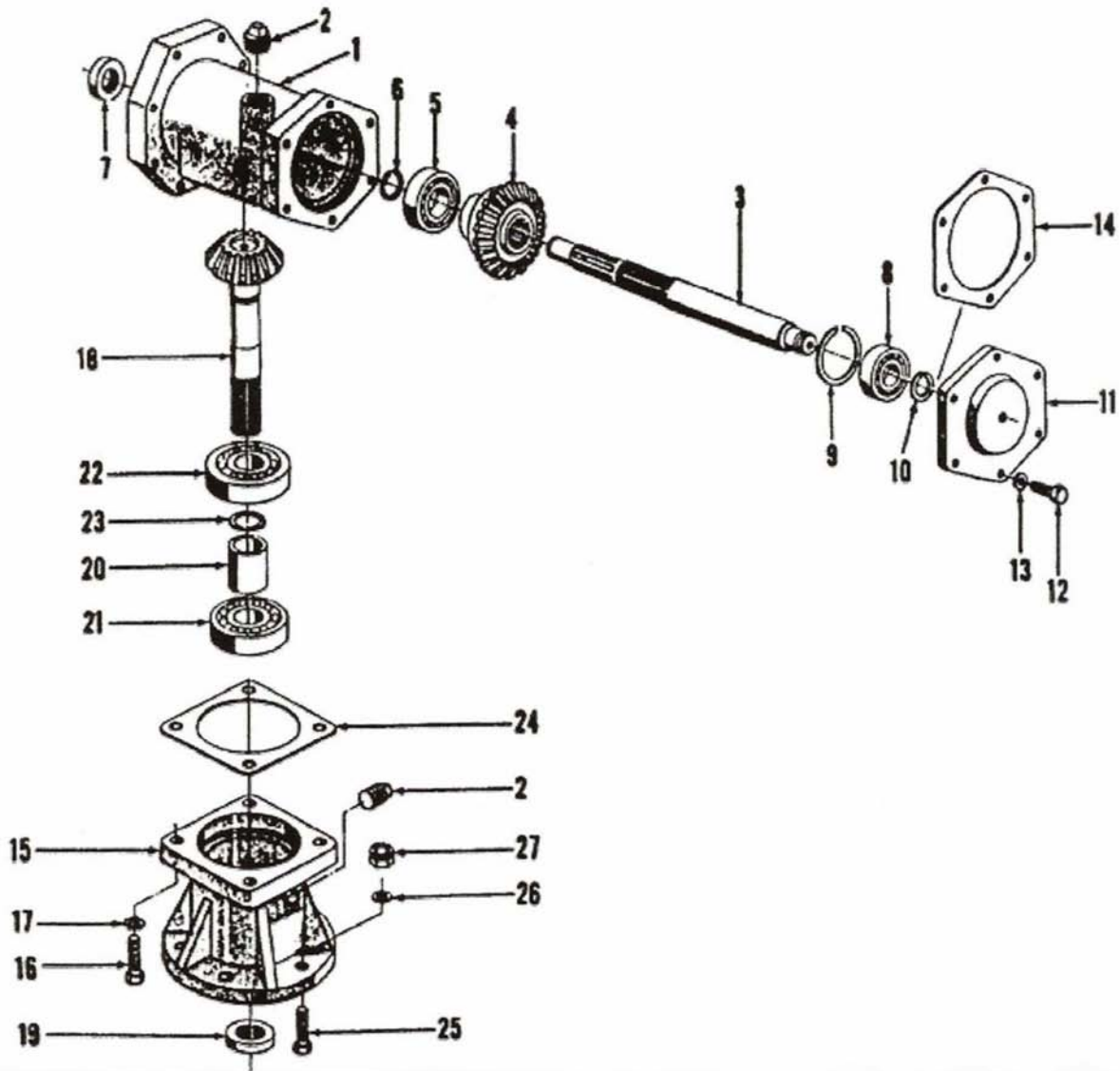
# FORD 901 60” ROTARY MOWER



## Gear Box Assembly Parts List & Dissassembly Instructions

### 901-SERIES : FORD 60" ROTARY CUTTERS

005 - GEAR BOX ASSEMBLY - 22-47,22-60,22-70,22-112



**901-SERIES : FORD 60" ROTARY CUTTERS***005 - GEAR BOX ASSEMBLY - 22-47,22-60,22-70,22-112*

Ref	Qty	Part Number	Description	OH	Indicators
	1	7500023	Gear Box Assy. Includes: Ref. 1 thru 24, No Longer Serviced		
	1	7500023	Gear Box Assy., Replaces P/N 222267 Includes: Ref. 1 thru 24, No Longer Serviced		
	1	7500023	Gear Box Assy., Replaces P/N 222159 Includes: Ref. 1 thru 24, No Longer Serviced		
1	1	222268	Housing, Ring Gear		
2	2	PL	Plug, Pipe, Square Hd., 3/4"-14 NPT		
	1	150018	Plug & Pin Assy., Pipe, Square Hd., 3/4"-14, Was Part of P/N 222267 & 222159 Gear Box Assy. which was Replaced by P/N 7500023		
3	1	7500082	Shaft, Ring Gear, Use W/P/N 7500021		
4	1	220703	Gear, Ring		
5	1	E75GE9	Bearing, Ball, 1-3/8" x 2-53/64" x 43/64"		
6	1	220951	Ring, Retaining, External, 1-1/4" x 1-9/16"		
7	1	222272	Seal, Oil, Front, 1-1/8" I.D. x 2-1/8" O.D. x 7/16" Thick, Part of P/N 7500023, Was Part of P/N 222267 Gear Box Assy. which was Replaced by P/N 7500023		
7	1	220705	Seal, Oil, Front, 1-1/8" I.D. x 2-7/8" O.D. x 15/32" Thick, Was Part of P/N 222159 Gear Box Assy. which was Replaced by P/N 7500023		
8	1	C5NNN755A	Bearing, Ball, 1-3/16" x 2-53/64" x 3/4"		
9	1	25954	Ring, Snap, 2.812", Int, #281		
10	1	220950	Ring, Snap, External, 1-1/16" x 1-5/16"		
11	1	220100F	Retainer, Bearing, The New Style Solid Back Type Bearing Retainer, P/N 220100, does not use the Bearing Cap, P/N 220708		
	1	NSS	Cap, Bearing Retainer, Not used in P/N 220100, Was Part of P/N 222159 Gear Box Assy. which was Replaced by P/N 7500023		
12	6	NSS	Bolt, HH, 7/16"-14 x 1", Retainer to Housing		
13	6	NSS	Washer, Lock, 7/16", Retainer to Housing		
14	AR	220729	SHIM, .006" Thk, Gear Housing		
14	AR	220730	SHIM, .004" Thk, Gear Housing		
15	1	220709	Housing, Pinion Gear		
16	4	PL	Bolt, HH, 5/8"-11 x 1-1/4", Housing to Housing, Part of P/N 7500023, Was Part of P/N 222267 Gear Box Assy. which was Replaced by P/N 7500023		

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Ref	Qty	Part Number	Description	OH	Indicators
	4	NLS	Bolt, HH, Drilled, 5/8"-11 x 1-1/4", Housing to Housing (PN 220088), Was Part of P/N 222159 Gear Box Assy. which was Replaced by P/N 7500023		
17	4	86977690	WASHER, LOCK, Ext Tooth, 5/8", Housing to Housing		
18	1	222161	Shaft, Pinion Gear, 24 Teeth Splined Shaft, 15 Teeth on Gear		
18	1	220952	Shaft, Pinion Gear, 10 Teeth Splined Shaft, 15 Teeth on Gear, 22-60,22-70,22-112, Was Part of P/N 222159 Gear Box Assy. which was Replaced by P/N 7500023		
18	1	220952	Shaft, Pinion Gear, 10 Teeth Splined Shaft, 15 Teeth on Gear, 22-47, Was Part of P/N 222159 Gear Box Assy. which was Replaced by P/N 7500023, Used on & BSN 3001		
19	1	222167	Seal, Oil, Bottom, 1-9/16" I.D. x 2-1/8" O.D. x .44" Thick, Part of P/N 7500023, Was Part of P/N 222267 Gear Box Assy. which was Replaced by P/N 7500023		
19	1	220762	Seal, Oil, Bottom, 1-3/8" I.D. x 2-1/8" O.D. x .437" Thick, Was Part of P/N 222159 Gear Box Assy. which was Replaced by P/N 7500023		
20	1	222162	Spacer, Bearing, 1-19/32" I.D. x 2-1/8" O.D. x 2-1/8" Lg.		
21	1	114085	Bearing, Ball, 1.574" I.D. x 3.149" O.D. x .70"		
21	1	220711	Bearing, Ball, 1-3/8" I.D. x 3-9/64" O.D. x 13/16", Prior Gear Boxes, Was Part of P/N 222159 Gear Box Assy. which was Replaced by P/N 7500023		
22	1	86511837	Bearing, Ball, M40		
23	1	220953	Ring, Snap, External, 1-7/16"		
24	1	220715	Gasket, Pinion Gear Housing		
25	6	PL	Bolt, HH, 5/8"-11 x 2", Gear Box to Frame		
26	6	PL	Washer, Flat, 5/8", Gear Box to Frame		
27	6	PL	Nut, Lock, Hex, 5/8"-11, Gear Box to Frame		

## **DISASSEMBLY INSTRUCTIONS**

The upper housing into which the Input (Main) shaft is mounted is called "Housing, Ring Gear" Item 1 on the parts breakdown.

The lower housing which contains the output shaft is called "Housing, Pinion Gear" Item 15 on the parts breakdown.

For ease in disassembly leave the mower in the horizontal position with the cutting blades attached.

### LUBRICANT REMOVAL

The first step should be to remove the lubrication from the Ring Gear Housing, Item 1. The drain plug is located on the side of the lower housing. It is extremely difficult to catch the fluid from this port. Use of a suction device to remove the majority of the lubricant through the fill port would be desirable.

STEP 1. Remove the clutch assembly or other coupler from the Input Shaft.

STEP 2. **Loosen** (but don't remove) the (6) bolts, Item 12, retaining the rear cover.

STEP 3. The upper and lower housings are bolted together by (4) bolts which are inserted up through the upper flange of the lower housing. Item 16 - these bolts have drilled heads and should have a safety wire connecting them. Remove the safety wire followed by the (4) bolts.

STEP 4. Lift the upper housing assembly straight up until it clears the output pinion gear. Move it to one side of your work bench for further disassembly.

STEP 5. Remove the (6) bolts, Item 12, retaining the rear cover, Item 11, to the upper housing.

STEP 6. Using a wooden or brass block, tap on the end of the input shaft to remove the shaft from the housing. The complete internal mechanism will come with the rear cover leaving only the front grease seal in the housing.

The main shaft (Shaft, Ring Gear), Item 3 is retained into the rear bearing, Item 8 by Snap Ring, Item 10. The rear bearing is retained into the rear cover plate by Snap Ring, Item 9.

To remove the Pinion gear from the lower housing, remove the blade assembly and push the shaft up out of the housing.



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