



FINISHING MOWER

**Operation, Service
& Parts Manual For
FM-60, FM-72,
SFM-72, & SFM-84**

February 2000

TABLE OF CONTENTS

Introduction	1
Safe Operating Rules	2
Operational Safety	3-4
Set-up Instructions	5
Belt Replacement	6-7
Parts Diagram	8
Parts List	9
Gearbox Assembly	10-11
Blade Spindle Assembly	12
Driveline	13
Limited Warranty	14

Date of Purchase: _____

Model Number: _____

Serial Number _____

INTRODUCTION

We welcome you as an owner of a Gearmore mower. Please read the following instructions and refer to them when required.

This manual contains valuable information about your new Gearmore Mower. It has been carefully prepared to give you helpful suggestions for operating, adjusting, servicing and ordering repair parts.

Keep this manual in a convenient place for quick and easy reference. Study it carefully. You have purchased a dependable and sturdy mower, but only by proper care and operation can you expect to receive the service and long life designed and built into it.

Sometime in the future your mower may need new parts to replace those that are worn or broken. If so, go to your dealer and provide him with the model and part number.

CAUTION NOTE: *This mower is designed for and must be operated with a 540 rpm PTO.*

BEFORE PUTTING MOWER INTO SERVICE

1. Fill gearbox with 90 to 140 weight gear oil. Fill through 1/2" pipe plug hole to 1/8" pipe plug hole.
2. Fill all (3) spindle units with grease until full. There are (3) grease access holes for greasing spindle units in top cover.
3. Grease all wheel axles, wheel forks, front roller axle, and PTO shaft.
4. Check air pressure in tires, maintain rated psi listed on the tire at all times.
5. Check all nuts, bolts and belts to insure they are tight and secure.

NOTE: Grease every 8 hours

SAFE OPERATING RULES

1. The area to be mowed should be a clean area, free of debris.
2. *Do not* operate on steep hillsides.
3. *Do not* allow passengers on tractor or mower.
4. Keep all safety shields in place at all times.
5. *Always* shut mower and tractor completely off before performing any maintenance on mower.
6. Disengage tractor PTO before getting off the tractor.
7. *Never* operate mower while it is in a raised position.
8. *Never* place any part of your body under the mower at any time.
9. *Always* keep hands and feet away from the mower when it is in operation.
10. A violation of these rules could result in a serious injury or death.

Use Proper Tractor Size To Match Mower

OPERATE MOWER AT 540 PTO RPM ONLY

Check all bolts and adjustments regularly to make sure they are tight.

Adhere to all warnings on following page.

**SHIPPED WITHOUT OIL IN GEARBOX AND
WITHOUT GREASE IN GREASE FITTINGS.
UNIT MUST BE SERVICED BEFORE USING.**

There are three (3) cutting height adjustment spacers from 1/2" to 1 1/2" (see drawing on page 7 reference #1).

OPERATIONAL SAFETY



**FAILURE TO OBSERVE THE FOLLOWING
MAY RESULT IN SERIOUS INJURY
OR DEATH.**



**ONLY A PROPERLY TRAINED OPERATOR SHOULD
OPERATE THIS MOWER. KEEP ALL OTHERS OFF
TRACTOR AND MOWER.**

**NEVER ALLOW CHILDREN TO OPERATE
TRACTOR AND MOWER.**

BEFORE OPERATING MOWER:

1. Read operator's manual carefully for safe operation of this mower.
2. Do not remove shields and guards.
3. Make sure universal joints turn freely and are locked into tractor and implement drive shafts.
4. Check area for any objects which may be thrown by mower.

WHILE OPERATING MOWER:

1. Operate mower at 540 RPM PTO.
2. Stay on tractor seat at all times while mower is in operation.
3. Never allow passengers to ride on tractor or mower, nor carry children on tractor or mower.
4. Always stop mower in raised position and disengage PTO power before transporting mower from one location to another.
5. Always stop engine before leaving tractor seat.
6. Always disengage the PTO before leaving the tractor seat.
7. Never adjust, clean or unstop mower when engine is running.

FOR THE SAFETY OF YOURSELF AND OTHERS:

1. Keep yourself, others and clothing away from the rotating PTO.
2. Keep others away from area to be mowed to avoid injury from flying objects.
3. Use mower only with tractors that have factory installed seats.
4. Adjust, check and lubricate mower as recommended in operator's manual.
5. Never stand between mower and tractor.

OPERATIONAL SAFETY

DANGER

Keep away - Rotating Blades
To prevent serious injury or death when blades are rotating due to engine running.

- ➔ Keep hands and feet from underneath deck of mower.
- ➔ Never allow riders, especially children, on tractor or mower.
- ➔ Do not operate while others are in mowing area.



DANGER

- To prevent serious injury or death
- ➔ Never operate mower if shields and guards are not in good condition or have been removed.
 - ➔ Never stand near or allow others to stand near tractor and mower when in operation.



DANGER

- To prevent serious injury or death
- ➔ Keep away from mower when it is in raised position or being lowered.
 - ➔ Keep all others away from mower when it is in raised position or being lowered.
 - ➔ Keep all others away when mower is in raised position while being serviced or transported.



DANGER

- To prevent serious injury or death
- ➔ Keep others away from area to be mowed to avoid being struck by flying objects.
 - ➔ Stop operating tractor and mower if others come onto area being mowed.



IT IS THE RESPONSIBILITY OF THE OWNER OF THIS EQUIPMENT TO REPLACE WARNING LABELS WHEN THEY CANNOT BE READ OR HAVE BEEN DAMAGED. TO OBTAIN NEW WARNING LABELS, CONTACT YOUR LOCAL DEALER OR GEARMORE, INC.

SET-UP INSTRUCTIONS

Your Gearmore Finishing Mower has been carefully assembled at the factory. By following a few simple instructions, your Finishing Mower will be ready for dependable service.

This Finishing Mower is designed to fit most tractors equipped with a standard three (3) point system. The lift pins on the mower are classified as Category I. The Finishing Mower is shipped from the factory with a safety shielded PTO shaft. This mower is designed to mow grass only.

Before placing your Gearmore Finishing Mower in service, please follow these instructions very carefully. **Your mower was shipped from the factory with no oil in the gearbox nor grease in blade spindles and wheel axles.** Fill the gearbox approximately one-third full with at least 90 weight oil. Grease the PTO shaft in two places before putting in service and after every eight hours use. Grease the roller after every eight hours of use. There are three (3) blade spindle housings. The tops of each blade spindle housing are visible through three (3) access holes in the top safety shield. Grease these blade spindle housings through the top of the shaft before placing in service and after eight hours use. Adjust belts as necessary, keeping them tight but not over-tight. When properly adjusted, belt should have approximately $\frac{3}{4}$ inch deflection with 10 lb. pull.

TO ADJUST BELT

1. Remove top cover.
2. Release adjustment spring.
3. Loosen nut on adjustment pulley to allow for movement.
4. Loosen nut on right side of "L" bracket.
5. Turn nut on left side of "L" bracket in counterclockwise direction until belt is tight.
6. Re-tighten nut on right side of "L" bracket and nut on adjustment pulley.
7. Re-hook adjustment spring.
8. See Figure D.

BELT REPLACEMENT

TO REPLACE BELT:

- STEP 1** Remove PTO shaft.
- STEP 2** Remove top cover.
- STEP 3** Loosen nut on adjustment pulley to allow for movement.
(See Figure D)
- STEP 4** Loosen nut on right side of “L” bracket. (See Figure D)
- STEP 5** Loosen belt by moving adjustment pulley in opposite direction you would to tighten belt.
- STEP 6** Remove belt from all pulleys and idlers, leaving it on the main pulley.
(See Figure E)
- STEP 7** Loosen nuts (4) retaining the gearbox to the gearbox plate.
Note: the top of the nuts should be flush with the end of the bolts.
- STEP 8** Remove bolts (4) holding the gearbox plate to the finishing mower deck.
- STEP 9** Remove the gearbox and gearbox plate assembly from the finishing mower. **Note:** the belt should be removed with the assembly.
- STEP 10** Turn gearbox and plate assembly over and allow to rest on the gear box. This will allow a space to develop between the main pulley and the gearbox plate flange. The belt can be removed through this space.
- STEP 11** Install new belt.
- STEP 12** Reassemble by reversing steps 1 through 10.

After mounting the Finishing Mower to the tractor’s three point lifting system, set the mower to the desired cutting height. Adjust height by arranging the different spacers on the four wheels, see page 7, reference #1. This will result in relieving the weight of the mower from the tractor’s lifting system. There are three height positions for the chain adjustment. Select the height that allows the mower to float freely over any terrain without any weight on the three (3) point lift system, see reference 25, page 8. The Finishing Mower is not designed to cut foreign objects such as steel rods, old tires or tubes, or tree limbs, etc. It is designed to cut grass only.

BELT REPLACEMENT

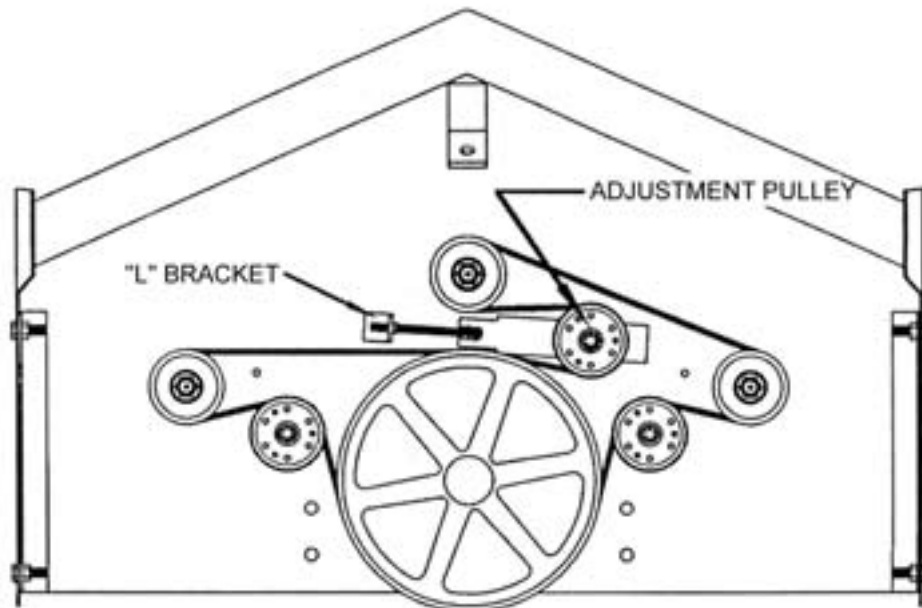


Figure D

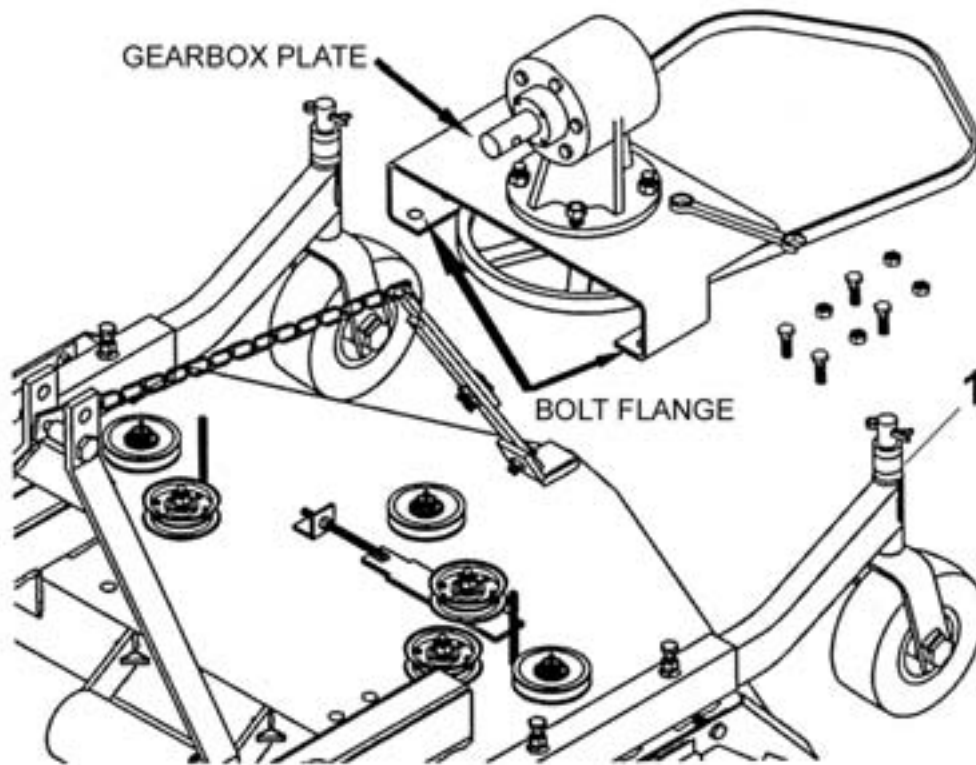
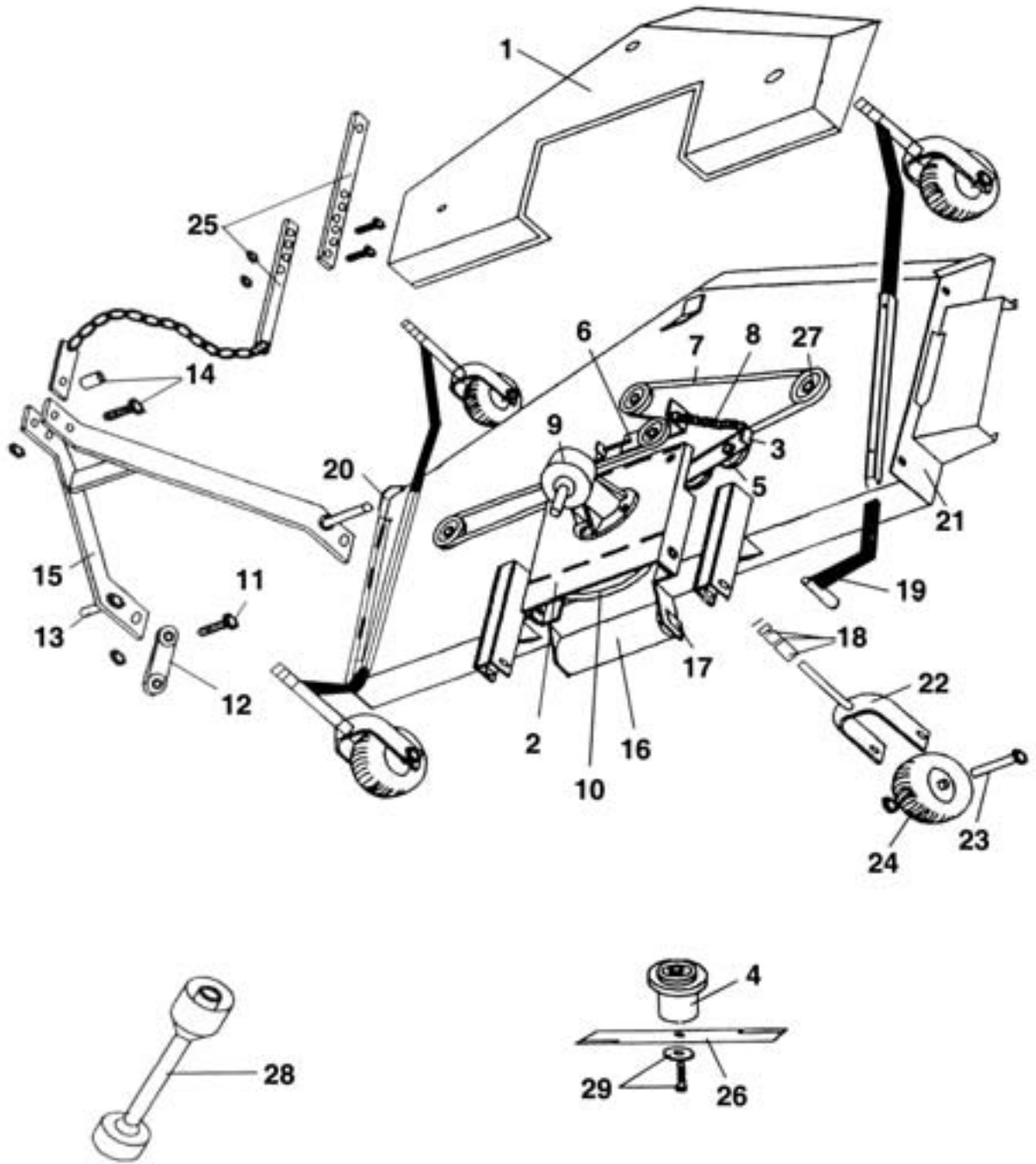


Figure E

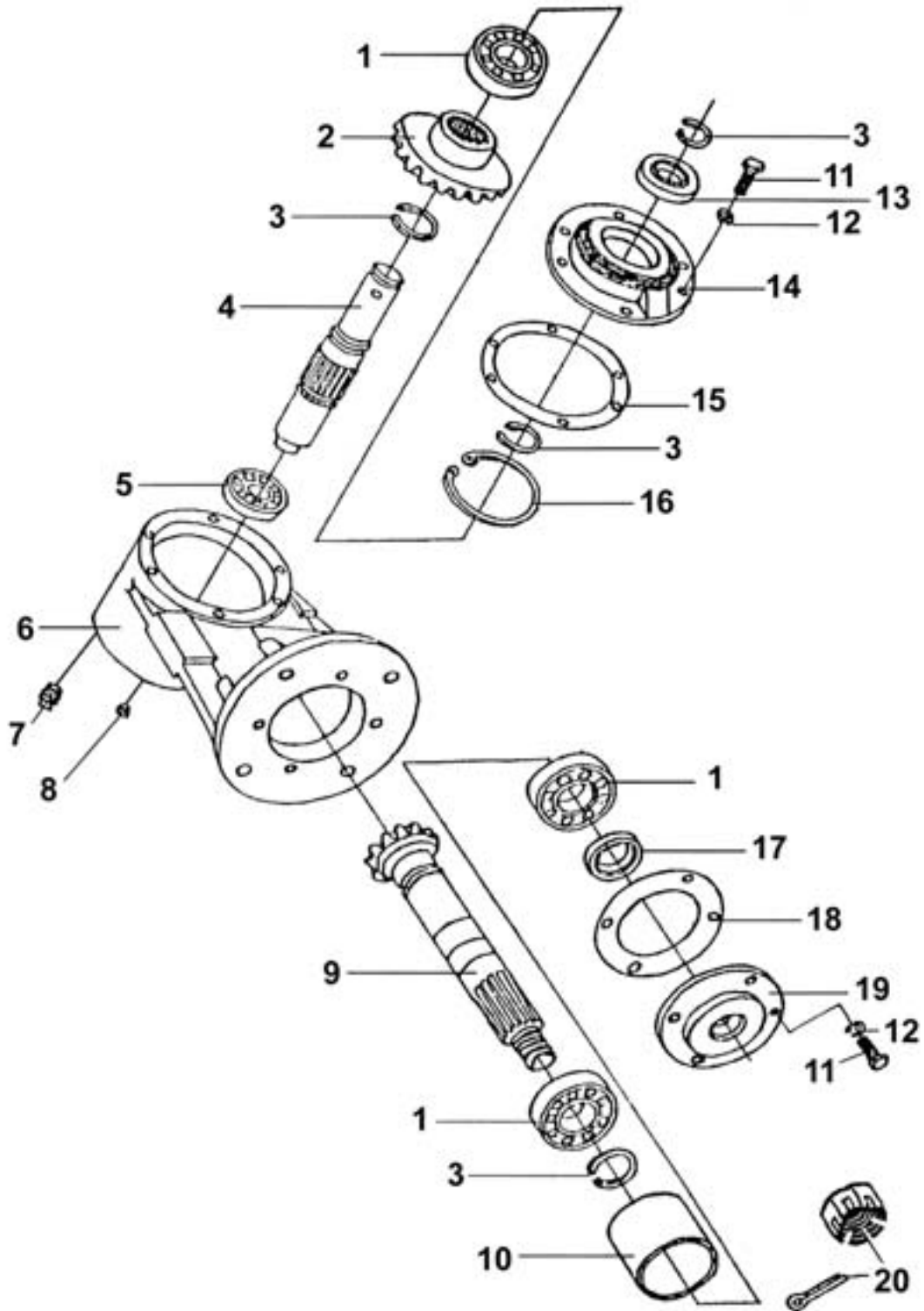
PARTS DIAGRAM



PARTS LIST

REF#	PART NO.				DESCRIPTION
	4'	5'	6'	7'	
1	403684	124685	124686	403687	Top Cover
2	403024	403025	403025	403025	Gearbox Plate
3	-	312647	312647	312647	Idler Pulley Bracket
3	-	-	312641	312641	Double Idler Pulley Bracket
4	502300	502300	502300	-	Spindle Unit - Single
4	-	-	502301	502301	Spindle Unit - Double
5	164090	164090	164090	164090	Idler Pulley - Single
5	-	-	164105	164091	Idler Pulley - Double
6	403682	403688	403688	403688	Belt Adjustment Assembly
7	167112	167133	167148	167162	V-Belt
7	-	-	167149	167163	V-Belt - Double
8	-	502027	502027	502027	Spring
9	184000	184000	184000	184005	Gearbox
10	165114	165114	165112	165114	Main Pulley - Single
10	-	-	165113	165155	Main Pulley - Double
11	502011	502011	502011	502011	Bolt 3/4" x 4" w/Nut
12	502010	502010	502010	502010	Swivel Link Set
13	500001	500001	500001	500001	Lift Pin Set - Cat. I
14	502012	502012	502012	502012	Lift Arm Spacer w/Bolt & Nut
15	403662	403662	403662	403662	Lift Arm Assembly
16	502110	502110	502110	502110	Center Roller w/Axle
17	403670	403670	403670	403670	Roller Axle
18	502120	502120	502120	502120	Height Adjuster Set
19	403700	403700	403700	403700	Wheel Fork Arm
20	403665	403667	403667	403668	Side Panel - RH
21	403630	403678	403678	403679	Side Panel - LH (Discharge Chute)
22	403023	403023	403023	403023	Wheel Fork
23	502125	502125	502125	502125	Axle Bolt 3/4" x 5" w/Nut
24	502015	502020	502020	502020	Tire & Rim w/Axle & Nut
25	502690	502690	502690	502690	Chain Assembly
26	502316	502320	502324	502328	Blade Set w/Bolts
27	502311	502311	502311	502311	Spindle Pulley - Single
27	-	-	502312	502312	Spindle Pulley - Double
28	147022	147022	147022	147022	22" PTO Shaft
29	502310	502310	502310	502310	LH Blade Bolt Set w/Washer
30	-	102287	102287	-	Plastic Knob (Not Shown)

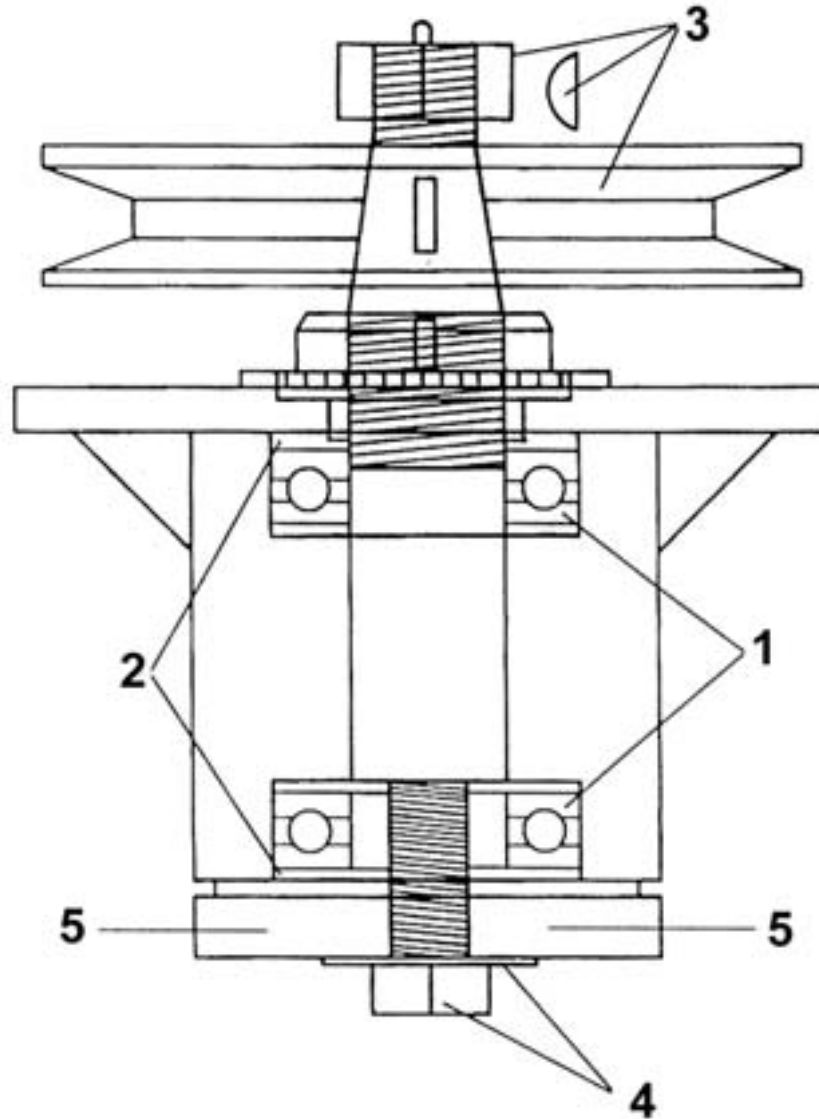
GEARBOX ASSEMBLY



GEARBOX ASSEMBLY

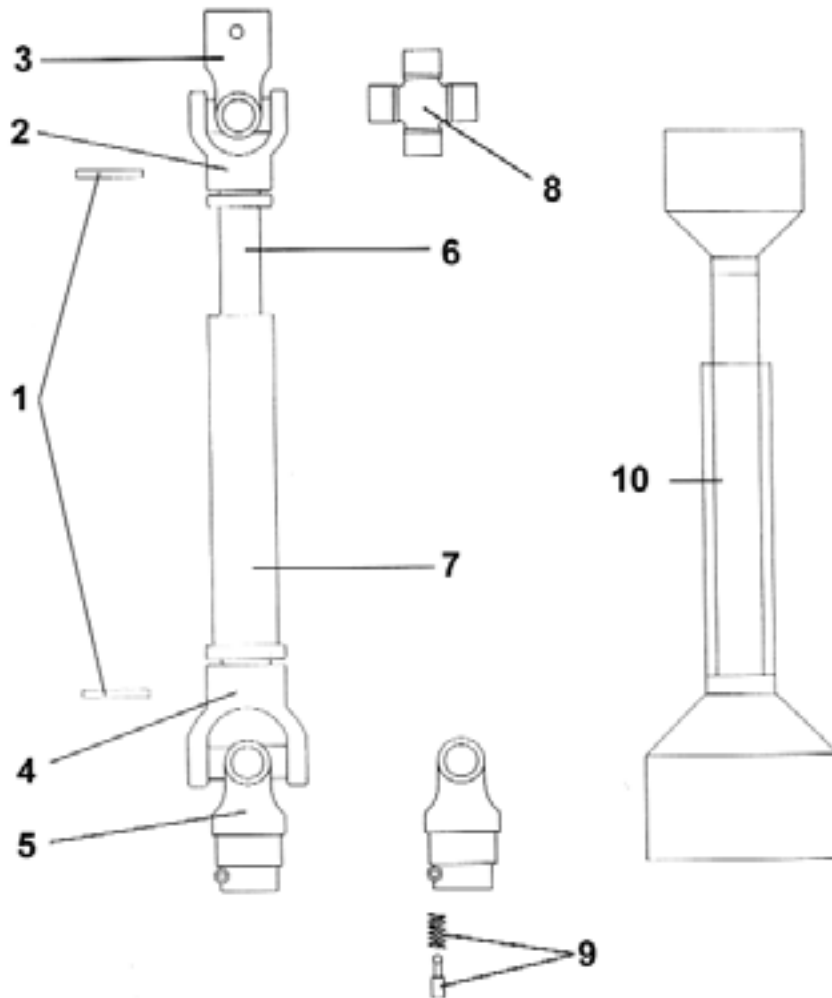
<u>REF#</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	155005	Bearing
2	185007	Input Gear - 184000 Gearbox
2	185010	Input Gear - 184005 Gearbox
3	131031	Snap Ring
4	186010	Input Shaft
5	155010	Bearing
6	129010	Housing
7	131035	1/2" Pipe Plug
8	131040	1/8" Pipe Plug
9	185005	Output Shaft - 184000 Gearbox
9	185006	Output Shaft - 184005 Gearbox
10	131045	Spacer
11	-	3/8" x 1 3/4" Bolt
12	-	3/8" Lock Washer
13	156010	Input Seal
14	129015	Front Cover
15	124130	Front Cap Gasket
16	131030	Snap Ring
17	156005	Output Seal
18	124131	Gasket
19	129005	Bottom Cover
20	501110	1" Castle Nut w/Washer & Cotter

BLADE SPINDLE ASSEMBLY



<u>REF#</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	155009	Ball Bearing
2	156026	Seal
3	502311	Spindle Pulley w/Nut & Key (502300 Spindle)
3	502312	Spindle Pulley w/Nut & Key (502301 Spindle)
4	502310	Blade Bolt Set (3) w/Washer
5	191302	Spindle Cap

PTO DRIVELINE 147022



<u>REF#</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	170120	Roll Pin
2	151045	Male Tube End Yoke
3	151040	Implement End Yoke
4	151050	Female Tube End Yoke
5	151035	Tractor End Yoke
6	151091	Inner Tube 14 Series
7	151090	Outer Tube 14 Series
8	170015	Cross Kit #4
9	170110	Quick Disconnect Pin
10	124310	Series 14 Safety Shield

LIMITED WARRANTY



GEARMORE, INC., warrants each new Gearmore product to be free from defects in material and workmanship for a period of twelve (12) months from date of purchase to the original purchaser. This warranty shall not apply to implements or parts that have been subject to misuse, negligence, accident, or that have been altered in any way.

Our obligation shall be limited to repairing or replacement of any part, provided that such part is returned within thirty (30) days from date of failure to Gearmore through the dealer from whom the purchase was made, transportation charges prepaid.

This warranty shall not be interpreted to render us liable for injury or damages of any kind or nature, direct, consequential or contingent, to person or property. This warranty does not extend to loss of crops, loss because of delay in harvesting or any other expenses, for any other reasons.

Gearmore in no way warrants engines, tires, or other trade accessories, since these items are warranted separately by these respective manufacturers.

Gearmore reserves the right to make improvements in design or changes in specification at any time, without incurring any obligations to owners or units previously sold.

GEARMORE, INC.
13477 Benson Ave.
Chino, CA 91710

Always refer to and heed machine operating warning decals on machine.

The serial number of this product is stored in our computer database, thus submitting a warranty registration card is not required.