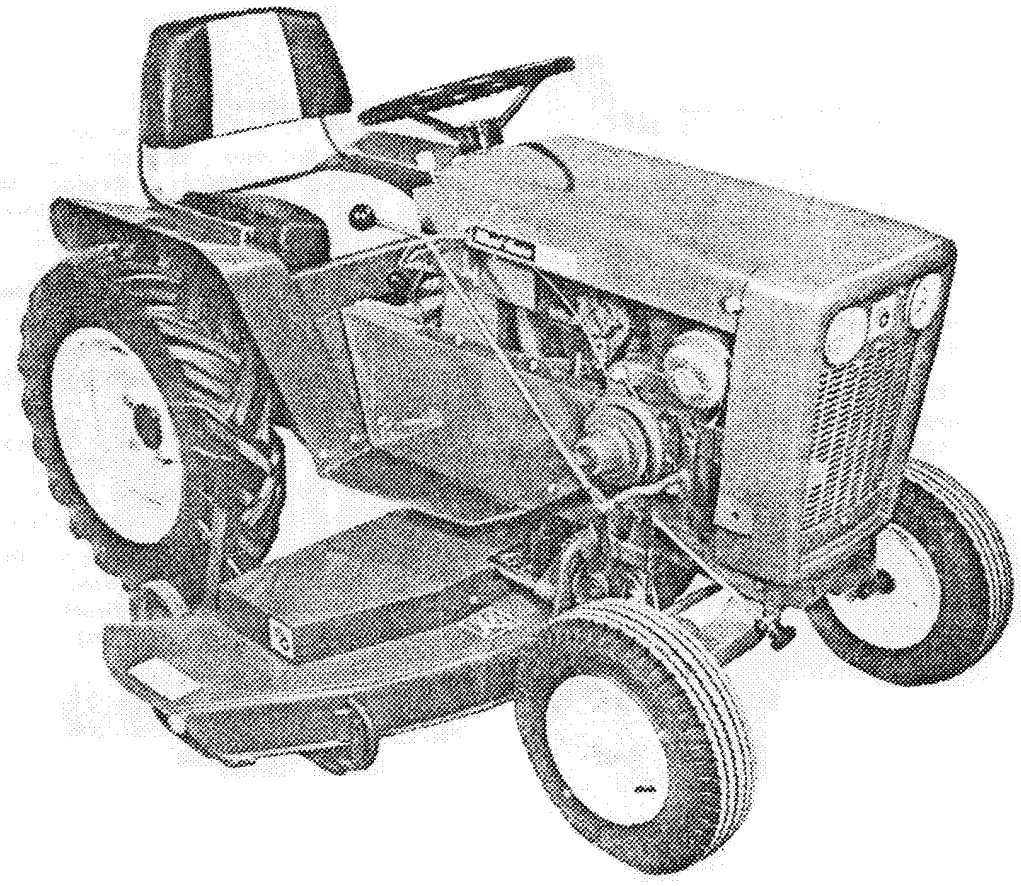
PARTS LIST AND INSTRUCTIONS

Wheel Horse®

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

ROTARY MOWER
RM-483



ASSEMBLY

Remove mower from box. Remove left bearing Part 4280. Insert gauge wheel adjusting rod in right bearing. Re-install left bearing and tighten securely. Install arm, Part 4799, through loop in adjusting handle with notches down, secure with hair pin cotter. Fasten spring, Part 1230 from cotter pin in arm to cotter pin in deck.

Install idler mounting bracket, Part 4400, by inserting leveling rod, Part 4399, through deck as shown in Figure 1. Insert idler support shaft Part 4286, into idler mounting bracket and deck as shown in Figure 1. Secure with (4) ¾" washers, Part S-57-59 and (4) 5/32 x 1½" cotter pins, Part 932026-4.

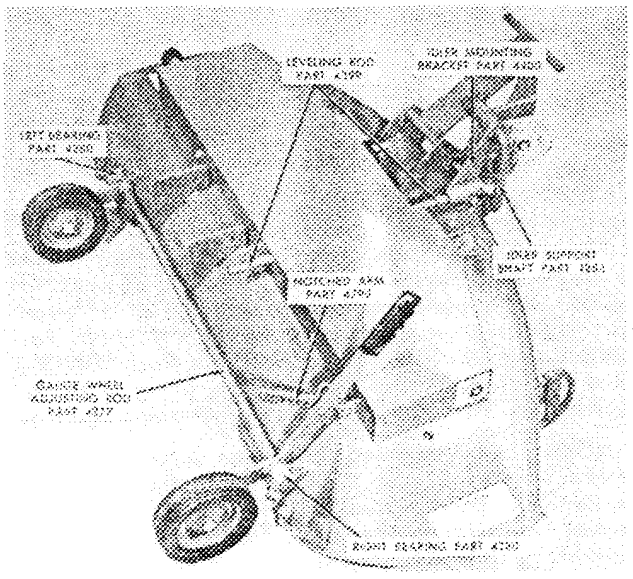


Figure 1

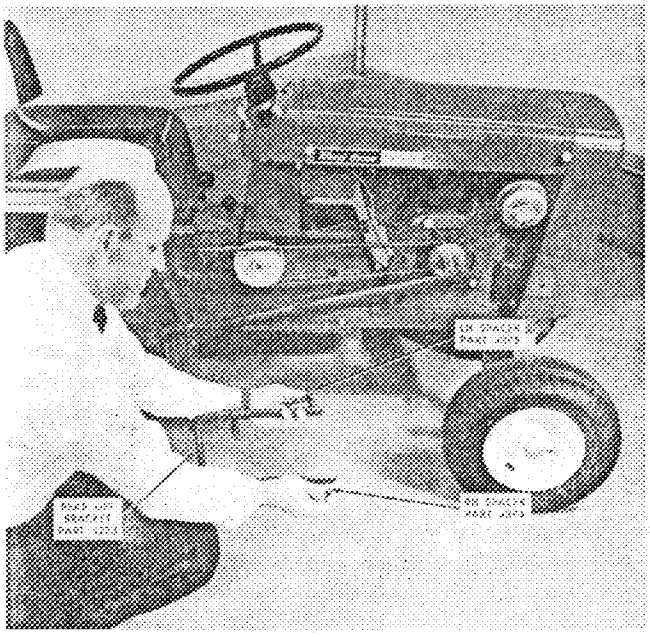


Figure 2

Remove right hand tractor guard (Tractor Part 2795) and left hand tractor guard (Tractor Part 2783).

Remove rear lift bracket, Part 4273, from mower. Install right hand spacer, Part 4394, in right bracket arm and left hand spacer, Part 4395, in left arm.

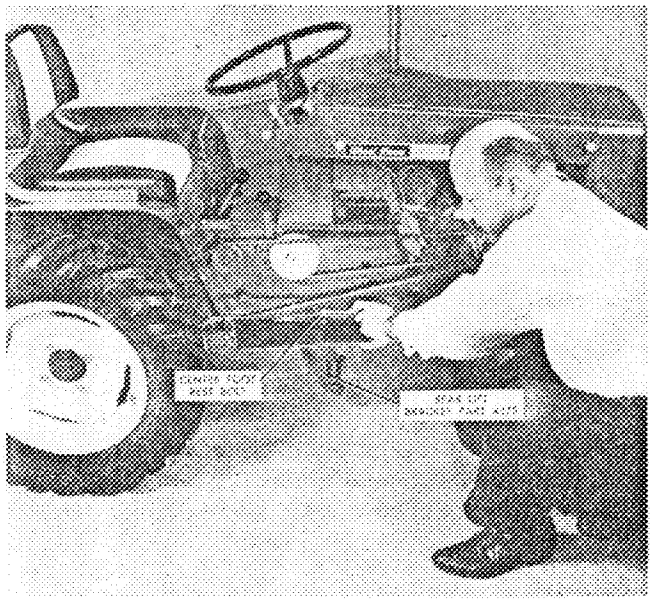


Figure 3

Remove center bolts from foot rests on each side of tractor as shown in (Figure 3). Install rear lift bracket with spacers in place using $\frac{3}{8}$" x $1\frac{1}{4}$" bolt, Part 908035-4 on right side and $\frac{3}{8}$ x 2" bolt, Part 908038-4 on left side. The $\frac{3}{8}$" washers, Part 920009-4 must be used on inside before securing with $\frac{3}{8}$" nylock nuts, Part 915113-6. Re-install tractor guards.

NOTE: Once installed, this rear lift bracket will remain a part of the tractor. When the mower is removed the bracket should be swung to the rear, up between the frame. The latch, Part 4390, which is a part of the bracket, should be hooked over the left frame rail to hold the bracket in this position so that it will not interfere with other attaching tools.

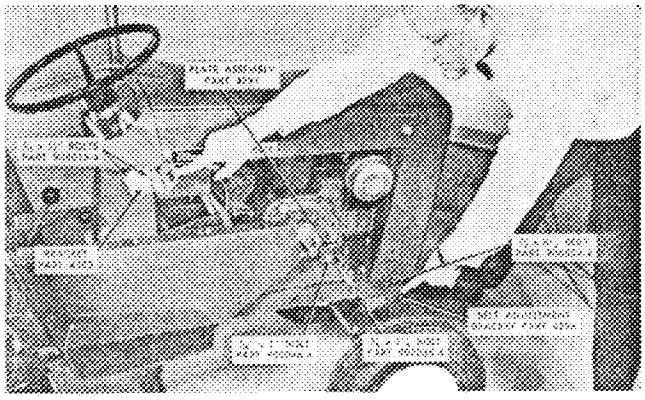


Figure 4

Mount plate assembly, Part 4291, to engine face by removing $\frac{7}{16}$ x 1" bolt (which holds lower belt guide angle on) and place plate assembly in position as shown in Figure 4. Replace bolt and lockwasher and tighten. **NOTE:** In tractors without the lower belt guide angle a $\frac{3}{8}$" x $1\frac{1}{4}$ x $2\frac{3}{4}$" spacer which is provided must be used under the plate assembly. Bolt to engine using the extra $\frac{7}{16}$ x 1" bolt and lockwasher.

Install bracket, Part 4383, to tractor as shown in Figure 4 using (2) $\frac{5}{16}$" x $\frac{1}{2}$" bolts Part 908015-4 and $\frac{5}{16}$" lockwashers.

Install belt adjustment bracket as shown in Figure 4 using $\frac{3}{8}$" x $8\frac{1}{2}$" bolt, Part 900854-4 in the front hole of the tractor frame and the $\frac{3}{8}$" x $1\frac{1}{4}$" bolt, Part 908035-4 in the rear bracket hole.

Early engines have an elbow in the engine oil drain on the right side. This elbow must be removed and the pipe plug inserted directly in the engine. (Drain is underneath late engines).

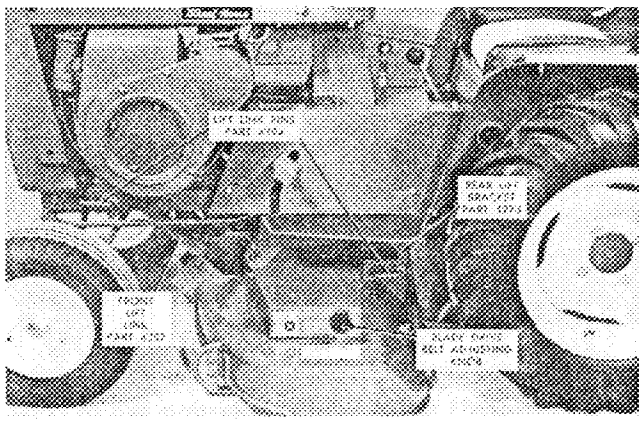


Figure 5

From the right side of the tractor, slide the mower underneath so that the front lift link is on center line of tractor. Place lift link in position between tractor frame. Insert lift link pin Part 4294 through lift link from left side of tractor as shown in Figure 5.

NOTE: The lift link pin goes in fourth hole of tractor frame and pin handle goes in second hole of frame. Secure with hair pin cotter, Part S-52-4.

Swing the rear lift bracket down between the rear mounting brackets on mower deck. Insert the other lift link pin through center holes into rear mounting bracket and place pin handle into hole provided in bracket as shown in Figure 5. Secure with hair pin cotter, Part S-52-4.

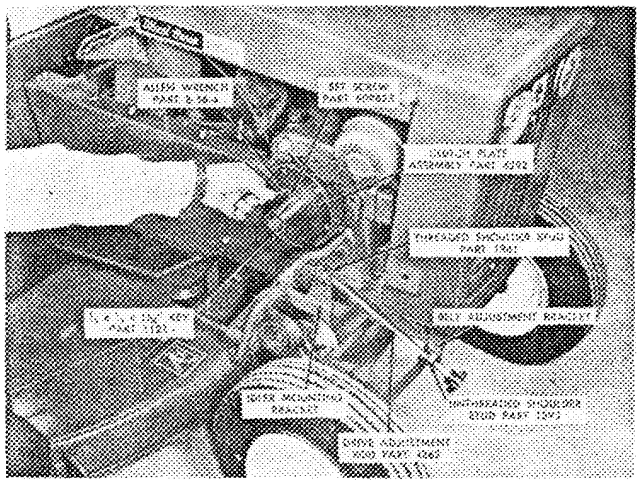


Figure 6

Insert ¼ x ¼ x 1 3/16" key, Part 1121, in engine shaft. Slide clutch plate assembly, Part 4282, on shaft until engine shaft is against snap ring inside clutch plate assembly. Secure in place by tightening set screw, Part 909825, with allen wrench, Part S-56-4 as shown in Figure 6.

Install unthreaded shoulder stud, Part 1393, in belt adjustment bracket as shown in Figure 6 and secure with ⅛" x 1" cotter pin. Install threaded shoulder stud, Part 1861 in idler mounting bracket as shown in Figure 6. Secure with ⅛" x 1" cotter pin.

Install drive adjustment rod, Part 4382, through unthreaded shoulder stud and turn into threaded shoulder stud as shown in Figure 6.

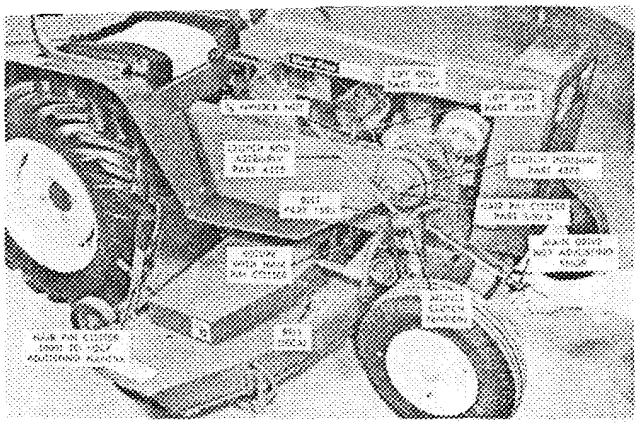


Figure 7

Slip clutch housing, Part 4379, over clutch plate assembly as shown in Figure 7.

Install belt, Part 1595, as shown in Figure 7. Refer to belt decal on mower deck for arrangement. Adjust belt tension by tightening drive adjustment as shown.

Install clutch rod assembly, Part 4355, as shown in Figure 7 using (2) ⅜" nylock nuts, one on each side of the fork shaped rod end. Insert hair pin cotter, Part S-52-6 through clutch housing and into plate on clutch rod. (REFER TO OPERATING INSTRUCTIONS FOR CLUTCH ADJUSTMENT).

Install lift stud, Part 4389, **From the right side** of tractor into lift arm and secure with hair pin cotter, Part S-52-4. Install lift rod, Part 4384, up through lift stud, Put ⅜" nylock nut on end of rod. Insert L shaped end through bracket on deck of mower as shown. Secure with hair pin cotter, Part S-52-4.

Raise hydraulic lift to up position and adjust nut so that mower stops are firmly against the tractor frame.

OPERATION

I. CUTTING HEIGHT

The height of cut is adjustable from a minimum of 1⅜" to a maximum of 4" by adjusting the gage wheels. The mower can be raised with the hydraulic lift, higher than 4" until the stops touch the frame. This is the transport position. The lock nut on the lift rod (Figure 7) should be adjusted to make sure both stops on the mower are firmly against the tractor frame with the hydraulic lift in the extreme up position.

A hairpin cotter is used through a small hole in the gage wheel adjusting handle to lock handle in the notch you select.

II. BELT ADJUSTMENT

The main drive belt, Part 1595 goes from the large groove of the engine mounting clutch, over two idler pulleys and then to the upper groove of the center pulley on the mower. (Refer to the belt arrangement as shown on the belt decal on the mower deck). Tension of this belt is adjusted by tightening knob (Figure 7). The blade drive belt, Part 1594, drives the three blades. The adjusting knob (Figure 5) located on the left side of the deck cover will tighten this belt. There is a spring under this knob which will compress as you tighten the knob. When the knob comes into solid contact with the tube which holds the spring, you will have proper belt tension. If this spring is visible at any time you should re-tighten the knob to compress the spring until the knob is again solidly against the tube. Do not tighten the knob more than one turn after it is against the tube or you will apply excessive tension to the belt. (Refer to belt arrangement as shown on the belt decal on mower deck, if you replace this belt.

III. CLUTCH OPERATION AND ADJUSTMENT

The mower is started and stopped by operating the engine mounted clutch. By moving the clutch rod from the outside notch in the bracket, to the inside notch, (toward the tractor), the friction clutch is engaged. The other end of this rod is fork shaped with a ⅜" locknut on each side. By moving these nuts in toward the tractor, more tension will be applied to the clutch. The tension should be adjusted until the clutch will not slip in heavy mowing. There are two grooves in the clutch for V-Belts, be sure the main drive belt is in the larger of the two. (Closest to the engine). The other small groove is to drive other attaching tools.

OPERATING HINTS

A. The three blades rotate to the right, so that discharge is out the right side of the deck through the discharge opening. Mower discharge should be toward cut portion of lawn for even distribution of grass. Sharp blades are necessary for good mowing. When the blades become dull, remove and regrind.

NOTE: SHARPEN EVENLY SO BLADE DOES NOT BECOME OUT OF BALANCE.

CAUTION: INSPECT BLADES FREQUENTLY, (ESPECIALLY AFTER HITTING AN OBJECT), TIGHTEN IF NECESSARY.

B. When mowing extremely heavy grass, raise the mower to the travel position and cut. Then recut at normal height.

LUBRICATION

There are four grease fittings on the mower. One for each of the spindles and one for the idler mounting bracket. All are easily accessible from the top of mower. Each spindle has a grease fitting visible through a hole in the top of the deck. Spindles have been greased at the factory, but should be greased again before operation and after every 10 hours of use.

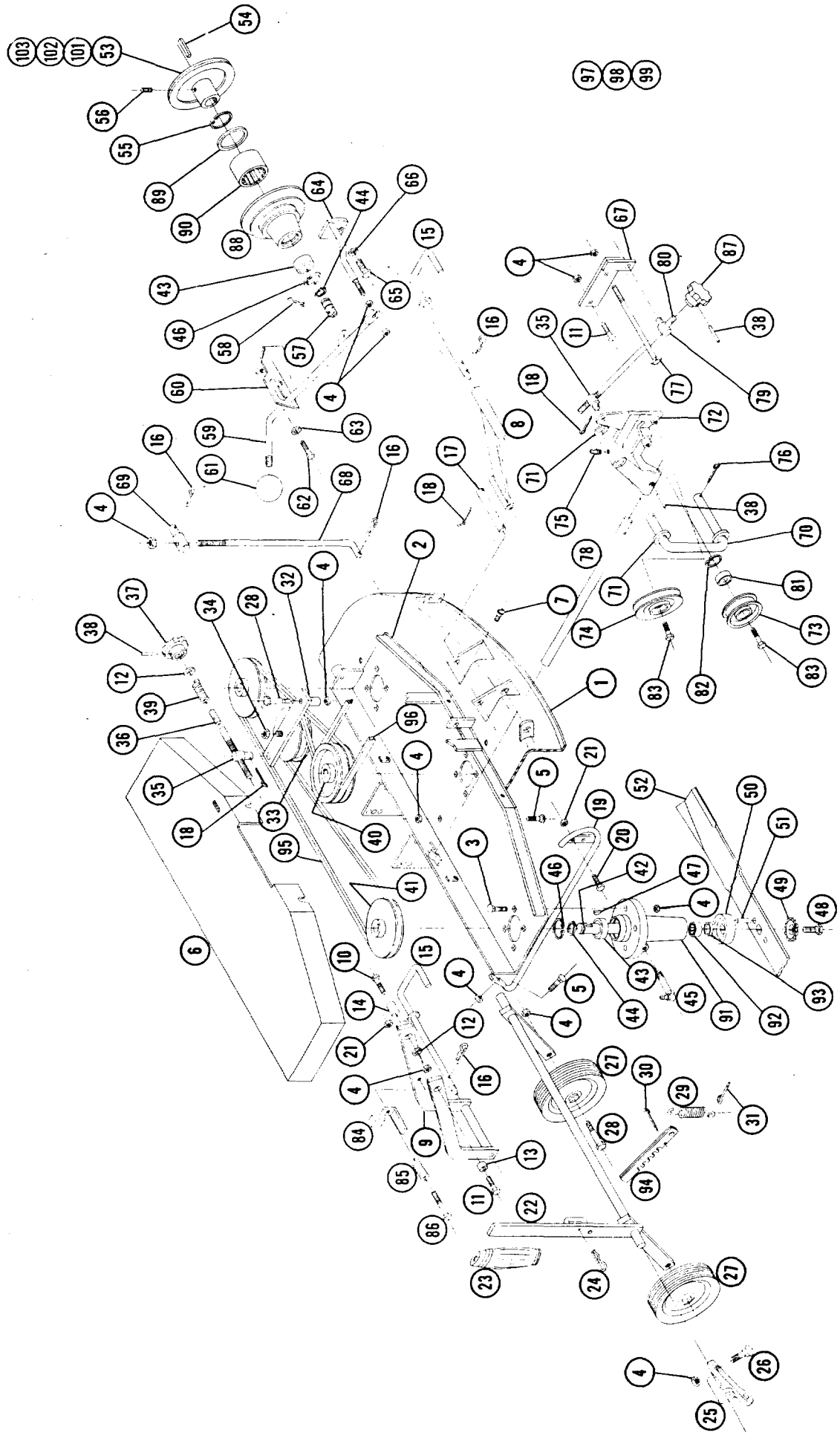
The clutch housing has a needle bearing pressed inside with a grease seal. This bearing has been greased at the factory. Every 50 hours the clutch housing should be removed and a **SMALL** amount of good quality grease applied to partially fill the spaces between the rollers.

Oil all other moving parts occasionally with a light grade of machine oil.

PARTS LIST FOR RM-483 ROTARY MOWER

When ordering parts always list Part No. and name of part.

Ref. No.	Part No.	Description	No. Req'd.
1	4257	Ass'y. — Deck	1
2	4265	Ass'y. Channel — Deck Support	1
3	900063-4	Carriage Bolt 3/8-16 x 1	12
4	915113-6	Nut — Nylock 3/8-16	31
5	900062-4	Carriage Bolt 3/8-16 x 3/4	5
6	4364	Cover — Deck	1
7	1385	Screw — Sems 1/4-20 x 1/2 Hex. Hd.	4
8	4287	Ass'y. — Front Lift Link	1
9	4273	Ass'y. — Rear Lift	1
10	908038-4	Bolt — Hex 3/8-16 x 2	1
11	908035-4	Bolt — Hex 3/8-16 x 1 1/4	2
12	920009-4	Washer 3/8 Dia. S.A.E.	3
13	4394	Spacer — R.H.	1
14	4395	Spacer — L.H.	1
15	4294	Ass'y. — Lift Link Pin	2
16	S-52-4	Hairpin Cotter	4
17	4388	Pin — Lower Front Link	1
18	932017-4	Cotter Pin 1/8 x 1	5
19	4361	Ass'y. — Skid	2
20	908016-4	Bolt — Hex. 5/16-18 x 5/8	4
21	915112-6	Nut — Nylock 5/16-18	5
22	4277	Ass'y. — Gage Wheel Adj. Rod	1
23	4451	Grip — Hand Lever	1
24	S-52-12	Hairpin	1
25	4280	Bearing — Cast Iron	2
26	900063-4	Carriage Bolt 3/8-16 x 1	4
27	4480	Wheel	2
28	4177	Shoulder Bolt 3/8-16 x 2 1/2	3
29	1230	Spring — Extension	1
30	932015-4	Cotter Pin 1/8 x 1/2	1
31	932016-4	Cotter Pin 1/8 x 3/4	1
32	4358	Ass'y. — Idler Plate	1
33	4488	Pulley — Idler	1
34	915115-6	Nut — Nylock 1/2-13	1
35	1861	Shoulder Stud	2
36	4386	Rod — Mower Adj.	1
37	4264	Knob — Adj.	1
38	933156	Roll Pin 1/8 x 1	3
39	4392	Spring	1
40	4381	Pulley — Double Groove	1
41	4385	Pulley	2
42	4393	Shaft — Spindle	3
43	1515	Ball Bearing	4
44	S-50-75	Snap Ring 3/4 External — Truarc	5
45	4566	Grease Fitting	3
46	S-51-162	Snap Ring 1 5/8 Internal — Truarc	4
47	937089	Key #9 Woodruff	3
48	1398	Bolt — Hex 3/8-16 x 7/8 Nylock	3
49	1336	Dome Washer	3
50	3716	Cup — Spindle	3
51	933211	Roll Pin 1/4 x 3/4	6
52	4380	Blade	3
53	4282	Ass'y. — Clutch Plate (Complete)	1
54	1121	Key 1/4 x 1/4 x 1 3/16	1
55	S-51-112	Snap Ring 1 1/8 Internal — Truarc	1
56	909825	Set Screw #10-24 x 1/4 Soc. Hd.	1
57	4391	Shaft	1
58	S-52-6	Hairpin Cotter	1
59	4355	Ass'y. — Clutch Rod	1
60	4383	Bracket	1
61	2709	Knob — Clutch Rod	1
62	908015-4	Bolt — Hex 5/16-18 x 1/2	2
63	920082-4	Lock Washer 5/16	2
64	4291	Ass'y. — Plate	1
65	908046-4	Bolt — Hex 7/16-14 x 1	1
66	920084-4	Lock Washer 7/16 Dia. S.A.E.	1
67	4296	Ass'y. — Belt Adj. Bracket	1
68	4384	Rod — Lift	1
69	4389	Stud — Lift	1
70	4286	Shaft — Idler Support	1
71	S-57-59	Washer	4
72	4400	Mounting Bracket — Idler	1
73	4387	Pulley Idler	1
74	4458	Pulley — Idler	1
75	1030	Fitting — Grease	1
76	932026-4	Cotter Pin 5/32 x 1 1/4	4
77	900854-4	Bolt — Sq. Hd. 3/8-16 x 8 1/2	1
78	4399	Rod — Leveling	1
79	1393	Shoulder Stud	1
80	4382	Rod — Drive Adj.	1
81	4567	Bearing — Ball	1
82	S-51-137	Snap Ring 1 3/8 Internal — Truarc	1
83	908035-6	Bolt — Hex 3/8-16 x 1 1/4 Nylock	2
84	4390	Latch — Lift	1
85	3624	Spring — Compression	1
86	908023-4	Bolt — Hex 5/16-18 x 2	1
87	4481	Knob — Adj.	1
88	4379	Housing — Clutch	1
89	4398	Seal	1
90	4397	Bearing — Needle	1
91	4299	Housing — Spindle	3
92	1508	Bearing — Needle	3
93	1303	Seal — Oil	3
94	4799	Ass'y. Arm — Gage Wheel	1
95	1594	"V" Belt — Blade Drive 107"	1
96	1595	"V" Belt — Main Drive 67"	1
97	4498	Decal — Caution	2
98	4580	Decal — Belt Installation	1
99	S-56-4	Wrech #10 Allen	1
101	4874	Ass'y. — Clutch Plate & Sleeve (Weld)	1
102	4365	Facing — Clutch	1
103	4870	Rivet — Clutch Facing	6



IMPORTANT

THERE IS NO TURNING STOP BUILT INTO R. H. STEERING ARM, YOU MUST INSTALL A STOP WHEN USING THE RM-483 ROTARY MOWER. WITH OUT A STOP, THE RIGHT FRONT TIRE WILL BE CUT BY THE IDLERS WHEN TURNING. LOCATE STOP 1/8 x 1-1/4 x 2-1/4 PIECE WITH HOLE IN IT. REMOVE 3/8-16 NYLOCK NUT ON STEERING ARM (REF NO. 7) (953) PAGE 6 & 7 OF MODEL 953 TRACTOR OPERATION AND SERVICE MANUAL. PLACE THE STOP UNDERNEATH THE STEERING ARM AND REPLACE THE THREADED TIE ROD THROUGH THE STOP THEN THROUGH THE STEERING ARM. LOOSELY REPLACE NUT. THE STOP WILL TOUCH THE FRONT AXLE OF THE TRACTOR WHEN MAKING A RIGHT TURN. THE LONG END OF THE STOP SHOULD EXTEND TOWARD THE AXLE WITH THE WHEELS TURNED TO THE RIGHT. TURN THE WHEELS FULL RIGHT AND SQUARE THE STOP WITH THE BACK OF THE FRONT AXLE. NOW TIGHTEN THE 3/8-16" LOCKNUT.

LATE MODEL TRACTORS WILL HAVE A REVISED R. H. STEERING ARM WHICH WILL LIMIT THE R. H. TURN, THUS KEEPING THE TIRE AWAY FROM THE MOWER IDLERS.

Wheel Horse®

KIT 6041

SERVICE ASSEMBLY KIT FOR RM-483 MOWER LEVELING ROD BEARING

TO INSTALL

I. Fig. 1 - Remove welded wear plate (1) grind or file off excessive weld.

II. Fig. 1 - Use template (Fig. III) to center punch for two additional holes. Drill two 13/32 holes for 3/8" bolts.

III. Fig. 2 - Install service assembly as illustrated with bolts and spacer provided.

IMPORTANT - Add a few drops of oil daily to leveling rod to lubricate bearing.

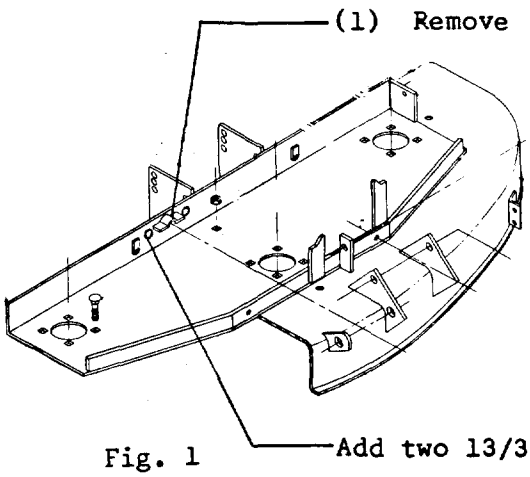


Fig. 1

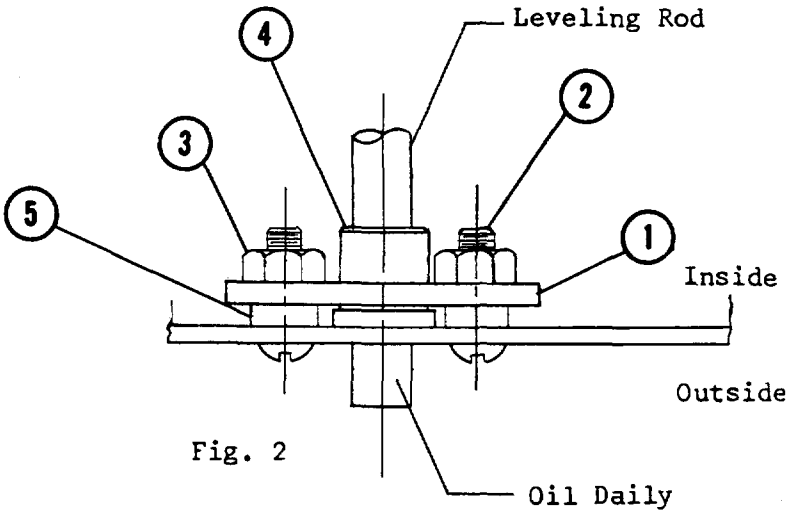
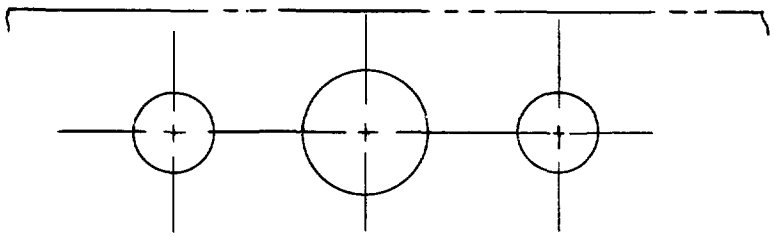


Fig. 2



Template
Fig. 3

PARTS LIST

Ref. No.	Part No.	Description	No. Req'd.
1	5198	Plate	1
2	909086-4	Bolt 3/8-16 x 1 RD.HD.	2
3	915113-6	Nut 3/8-16 Nylok	2
4	1536	Spacer	2
5	5190	Bushing	1

Wheel Horse

Service Bulletin 45

JUNE 24, 1963

TO OUR DISTRIBUTORS AND DEALERS

SUBJECT: RM-483 LEVELING ROD BEARING

WE HAVE HAD SOME REPORTS OF EXCESSIVE WEAR AT THE POINT WHERE THE LEVELING ROD, PART NUMBER 4399 GOES THROUGH THE CHANNEL ASSEMBLY, PART NUMBER 4265.

WE HAVE DEVELOPED A KIT 6041 (COPY ATTACHED) WHICH PROVIDES AN EXCELLENT BEARING SURFACE FOR THIS ROD.

THESE KITS ARE AVAILABLE FOR IMMEDIATE SHIPMENT.

FLAT LABOR RATE ----------$3.00

D. J. PALBYKIN
CUSTOMER RELATIONS MANAGER

DJP:CSU
ATTACHED

Wheel Horse®

Service Bulletin 46

JULY 5, 1963

TO OUR DEALERS AND DISTRIBUTORS

SUBJECT: RM-483 ROTARY MOWER IMPROVEMENTS

SINCE THE INTRODUCTION OF OUR MODEL RM-483 ROTARY MOWER, WE HAVE DEVELOPED SEVERAL IMPROVEMENTS WHICH ARE AVAILABLE TO YOU. TO FACILITATE HANDLING, IT WAS DECIDED TO PUT EACH IMPROVEMENT OUT SEPARATELY RATHER THAN PACKAGING THEM TOGETHER IN KIT FORM.

NEW SPINDLES

IN SOME CASES THE SPINDLES HAVE WORKED UP IN THE BEARING RESULTING IN HEATING AND SUBSEQUENT SEAL AND BEARING FAILURE. OCCASIONALLY PULLEYS HAVE WORN AND BECAME LOOSE ON THE SPINDLE. A NEW SPINDLE, PART #5217 (COPY OF INSTALLATION INSTRUCTIONS ATTACHED) HAS BEEN DEVELOPED WHICH WILL ELIMINATE BOTH FAILURES. THESE SPINDLES ARE AVAILABLE ON AN EXCHANGE BASIS. FLAT LABOR RATE FOR CHANGING (3) SPINDLES $4.50.

NEW DRIVE IDLER PULLEY

A NEW CAST IRON IDLER PULLEY, PART #4974 HAS BEEN DEVELOPED TO REPLACE THE SHEET METAL IDLER, PART #4458. THIS PULLEY IS AVAILABLE ON AN EXCHANGE BASIS. FLAT LABOR RATE FOR EXCHANGE $1.50.

NEW SPINDLE IDLER PULLEY

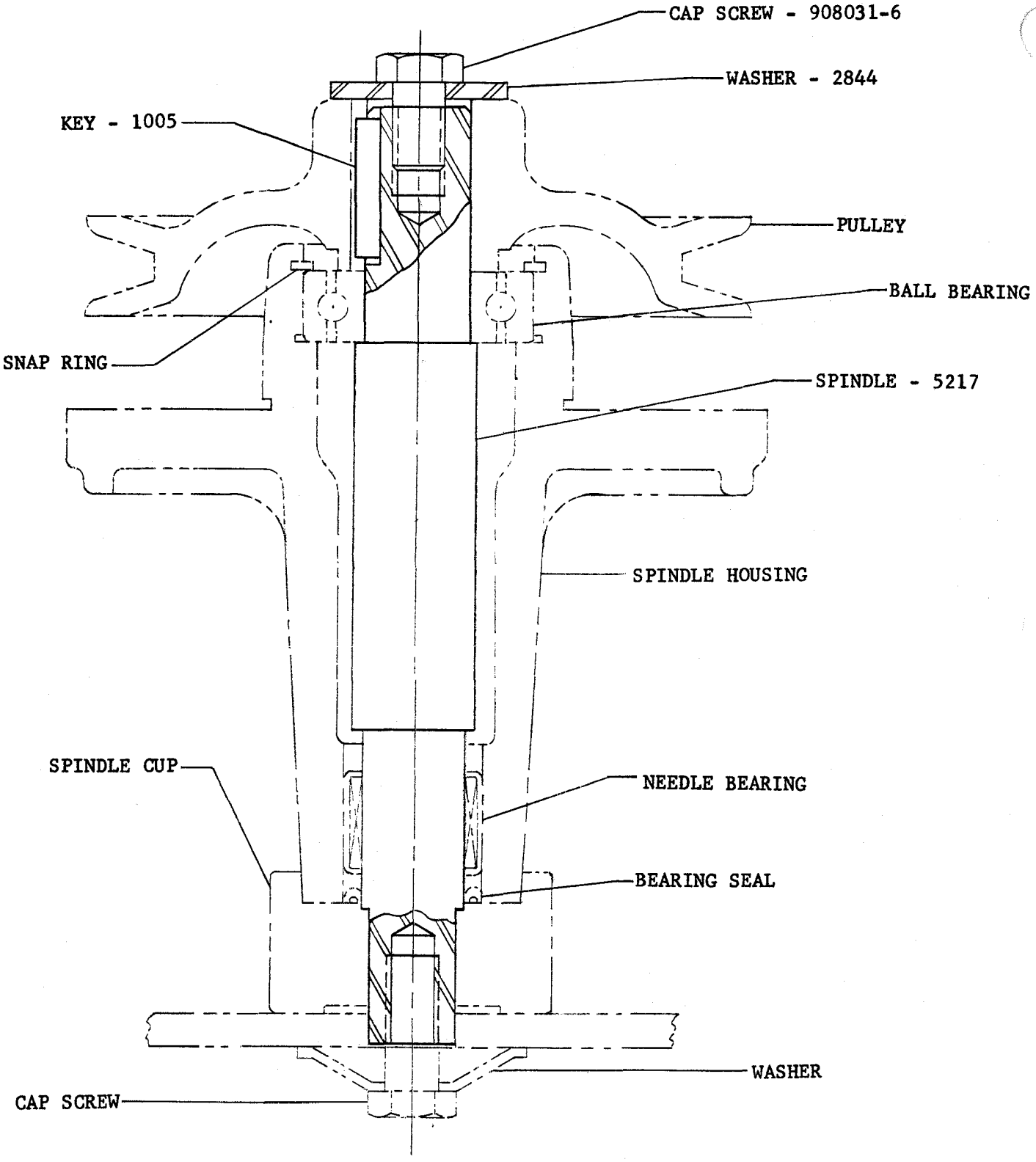
A NEW HEAVIER SHEET METAL PULLEY, PART #5216, TO REPLACE THE LIGHTER WEIGHT PULLEY PART #4488, IS ALSO AVAILABLE ON AN EXCHANGE BASIS. FLAT LABOR RATE FOR EXCHANGE $1.50.

IDLER PULLEYS ARE INSTALLED IN THE SAME MANNER AS THE IDLER PRESENTLY INSTALLED ON THE MACHINE. AFTER INSTALLATION, SPIN EACH IDLER TO INSURE AGAINST INTERFERENCE. IF NECESSARY, A WASHER MAY BE INSTALLED TO SHIM IN THE DESIRED DIRECTION.

D. J. PALBYKIN
CUSTOMER RELATIONS MANAGER

DJP:CSU
ATTACHED

SPINDLE INSTALLATION INSTRUCTIONS



TO INSTALL

Remove existing spindles and top ball bearing Part #1515 from spindle housing. Carefully press the #1515 ball bearing on the spindle. Press only against the bearing inner race. Next install spindle with bearing into the spindle housing and replace the snap ring securing the bearing. Insert key and install pulley, washer, and cap screw as shown. Tighten the cap screw securely. Install spindle cup, blade, washer, and cap screw to complete the assembly. CAUTION: Do not drive this spindle down in the housing as the needle bearing and seal may be dislodged.