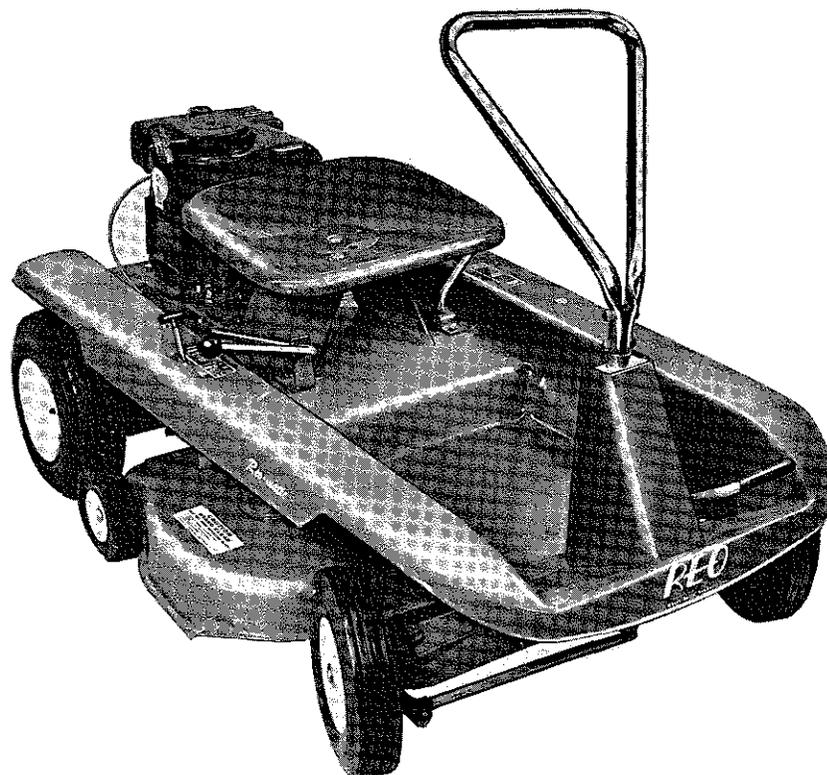


REO

model

RR-46

Riding Rotary Mower



OPERATION AND SERVICE MANUAL WITH PARTS LIST



WHEEL-HORSE PRODUCTS, INC.

SOUTH BEND, IND.

ASSEMBLY

Your new Reo RR-46 comes completely assembled except for installation of steering handle.

A. Remove unit from carton.

B. Place 2 washers, Part No. 920216-4, on steering shaft. Install steering handle and secure with 2 $\frac{5}{16}$ -18 x $1\frac{1}{2}$ bolts, Part No. 908021-4 and 2 $\frac{5}{16}$ -18 stop nuts, Part No. 915662-4.

WARRANTY

We warrant Wheel Horse Products for One Year from date of purchase against defective parts and workmanship. We will replace, free of charge, any defective part if returned to the factory Prepaid.* Wheel Horse Products, Inc., reserves the right to make changes or improvements upon its products without imposing any obligations upon itself to install the same upon its products that have been previously manufactured.

The engine and battery carry a separate warranty by the manufacturers. For engine or battery service, contact your local engine or battery service headquarters.

*All warranty claims, work shipments, must be handled through your authorized Wheel Horse Reo Dealer

NOTE: 90 Days Warranty for Commercial Use.

BEFORE YOU START

There is **NO OIL** in the crankcase of the engine when shipped from the factory. **OIL** . . . Use a good grade of regular oil. The engine weights listed below are recommended by the engine manufacturer and must be followed for best performance and long life.

Above 32° Use S.A.E 30W

Below 32° Use S.A.E 10W

Check oil level every 5 hours of operating time or each time equipment is used.

Change oil every 25 operating hours or sooner if equipment is operated in extremely dusty or dirty conditions. Read engine manual and follow all instructions pertaining to type of lubrication specified. The engine is the heart of your riding mower and it is very important that you keep it in good condition.

Before mowing, the mower should be operated at a slow speed to check all moving parts for any damage or looseness caused in shipping.

Lubricate all grease fittings with a regular pressure gun lubricant every eight or ten hours of operation. Refer to Figure 1 for location of grease fittings.

A light machine oil should be used on all moving parts.

The transmission has been packed at the factory with special lubricant and should need no further attention.

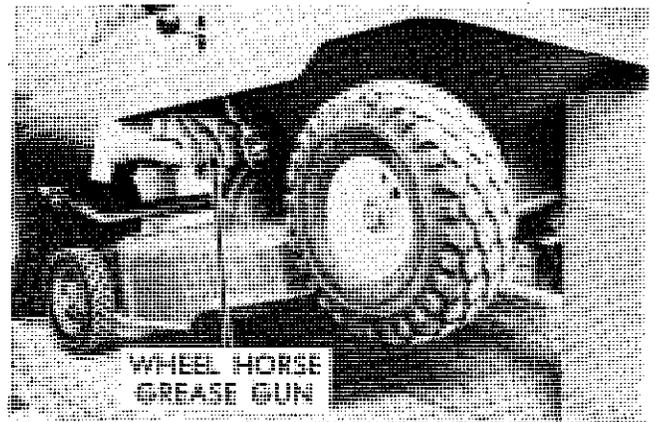


PHOTO A

The mower gear boxes have been lubricated at the factory. The spindles are mounted in precision needle bearings and will run for long periods, without relubrication. Under average conditions, seasonal lubrication at the beginning of the mowing season is all that is required. To relubricate, lower mower and place the front end of the rider on a box for greater clearance. See photo (A). Use a regular Wheel Horse grease gun to lubricate the grease fittings on the top of spindles after removing access plug. A small amount of grease should be added with the gun lifted off the spindle fitting to lubricate the gears. Regular pressure gun grease is used.

TIRES

The front tires are 10 x 2.75 semi-pneumatic. The rear tires are 4.10-3.50 x 6 and should be inflated to 8 to 10 pounds of air pressure.

STARTING ENGINE

1. Before starting the engine fill gas tank (located on the engine) with a good grade of regular gas. See Figure 1.
2. Place gear shift lever in neutral position.
3. Make sure mower clutch is disengaged.
4. Move throttle lever to choke position.
5. The Model RR-46 has a recoil starter with a choke position on the throttle control.
(NOTE: Keep feet clear of mower while pulling recoil starter) Move to choke position — pull recoil.
6. When engine starts move throttle control off choke and to the desired engine speed

CLUTCHING AND REVERSING

The pedal at the left hand side of the steering column serves as both the clutch and reverse control. The transmission is disengaged from the engine by depressing the pedal slightly over halfway down. At this point the transmission can be shifted into the high or low range.

With the transmission in either range the direction of travel can be reversed when the pedal is firmly depressed.

The travel speed in reverse is **one-half** the travel speed forward in either range.

The clutch-reverse pedal can be used as a brake in operation by pressing it down to where it begins to engage reverse. To shift to reverse when travelling at full speed forward, firmly but slowly push the pedal down as far as it will go.

CARE OF THE RR-46

1. Keep RR-46 greased and oiled regularly. Refer to Figure 1 for location of grease fittings.
 2. Keep engine air cleaner clean. This will add to engine life.
 3. Keep tires properly inflated. See instructions on tires.
 4. Keep RR-46 covered and in dry place when not in use.
 5. Keep grass and dirt out of engine cowling as this will stop the flow of air and decrease engine life.
 6. Clutch-Reverse Adjustment: If the clutch-reverse pedal bottoms out on the mower body before reverse is fully engaged an adjustment can be made at the trunnion located just inside the left front wheel. Remove the cotter pin from the trunnion and turn trunnion farther onto the rod extending to the rear. This adjustment should be such that the pedal cannot be depressed all the way down to the mower body. Reinstall trunnion and cotter pin when proper adjustment has been attained.
 7. When replacing belts make sure all pulleys are in line.
 8. Your RR-46 is only as good as the service you give it. See your Reo Dealer for a thorough check-up after each season of use.
 9. When replacing belts be sure to purchase genuine Wheel Horse belts, as these belts are specifically designed for each application.
- (NOTE: Make sure all pulleys are in line.)
10. The seat has three (3) possible seat positions provided by the three holes in the seat support.

MOWER BELT ADJUSTMENT

11. If mower blades slow down or stop and engine continues to run when mowing heavy grass check tension of long twisted belt. This belt is tensioned by adjusting the nut at the front end of the bar adjacent and parallel to the belt. Do not put more tension on belt than necessary as excess tension will lead to premature belt and bearing failure.

12. Make sure that wire fingers retaining the belt on the engine reverse pulley are as close to the belt as permissible without rubbing.

13. The mower will operate most efficiently when the front of the mower is tipped down slightly. The tips of the blades at the front should be about $\frac{1}{8}$ " below the tips of the blades at the rear. This can be adjusted by removing the pin from the front mower support link, Part No. 5737 and adjusting the link in or out of the threaded trunnion as required.

OPERATION

With proper care and adjustment, your new Reo RR-46, has been designed to give many years of satisfactory performance

Preparation for operation and operating hints listed below are recommended for all mowers and approved by the Outdoor Power Institute for safe operation of your mower.

1. Before mowing, clear the entire lawn area to be mowed of oil debris that could catch on or be thrown by the blades.
2. When you mow on rough terrain or in high grass or weeds, the mower should be set at the highest cutting point. In tall grass or weeds, a second cutting may be made to bring the grass down to the desired height. Adjust cutting height by raising and lowering wheels on mower.
3. Mowers do not operate well in wet grass. Wet grass has a tendency to build up on mower housing and give non-uniform discharge.
4. Fill gas tank outdoors. Avoid spilling gasoline and **Do Not fill the tank** while engine is running or while you are smoking.
5. While mowing, give undivided attention to the job at hand, keep the cutting path in area of operation clear of all persons, particularly small children.
6. Never leave engine running unattended, children could get hurt.
7. Don't overspeed the engine. Excessive cutting speed or tampering with governor can be dangerous.
8. Exercise special care when mowing around objects to prevent the blades from striking them, and never deliberately mow over any object.
9. **Stop mowing when another person approaches** — prohibit others from riding with you on your Riding Mower.
10. Riding mowers can be tipped to either back or side. Exercise extreme caution when mowing on slopes or inclines. Engage clutch slowly and smoothly. Never abuse your mower by improper handling.
11. Never adjust mower until engine has been turned off.

12. If your RR-46 is to be used for purposes other than mowing place mower clutch in disengaged position, stop engine, and remove the belt in the bottom groove of the engine pulley.

Never allow children to operate unless you have removed this belt to prevent their accidentally engaging mower.

SPECIFICATIONS

MODEL RR-46 ... recoil starter

(Specifications subject to change without notice.)

Engine	4 H.P.	
Fuel Capacity	2 quarts	
Speeds		
	Low Range	High Range
Forward	1 to 2 m.p.h.	2 to 4 m.p.h.
Reverse	$\frac{1}{2}$ to 1 m.p.h.	1 to 2 m.p.h.
Length	52 $\frac{3}{8}$ inches	
Wheel Base	35 inches	
Height	29 inches	
Cutting Heights	1 $\frac{3}{8}$ inches to 3 $\frac{1}{4}$ inches	
Cutting Width	32 inches	
Tires		
Front	10 x 2.75 Semi-Pneumatic	
Rear	4.10-3.50 x 6 (Tube Type)	
Outside Turning Radius	5 feet	
Shipping Weight	Approx. 250 lbs	

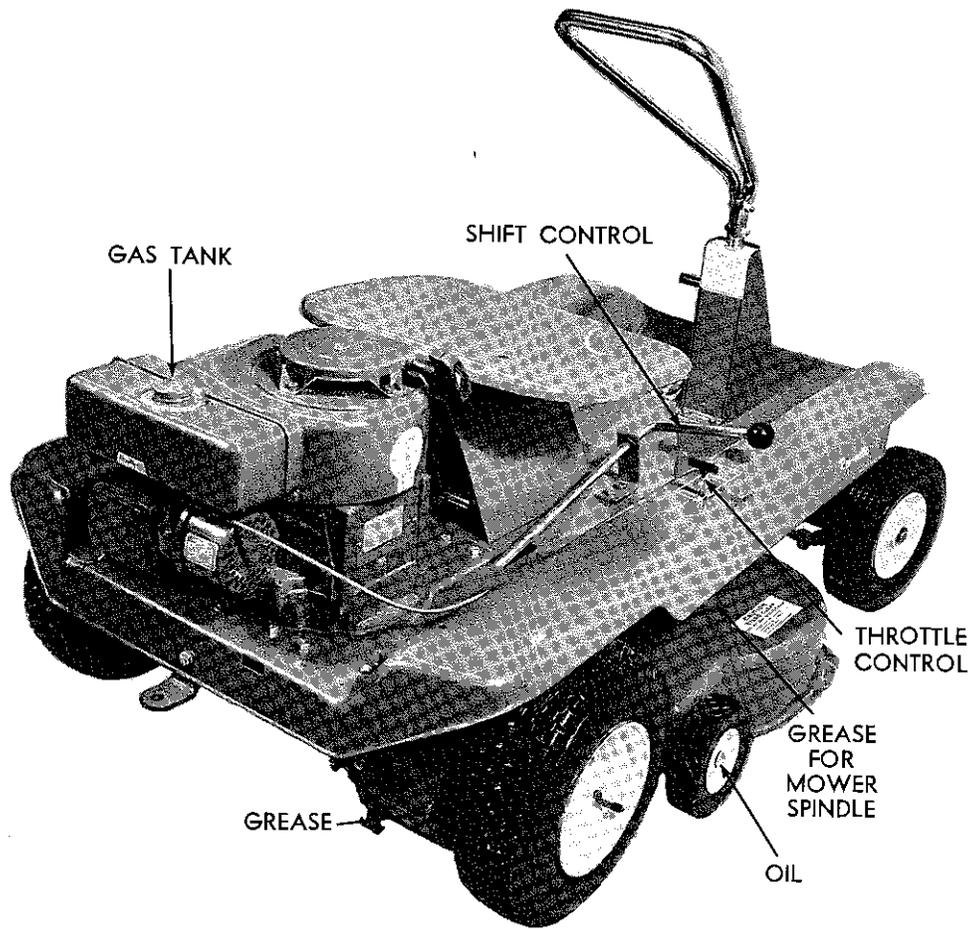
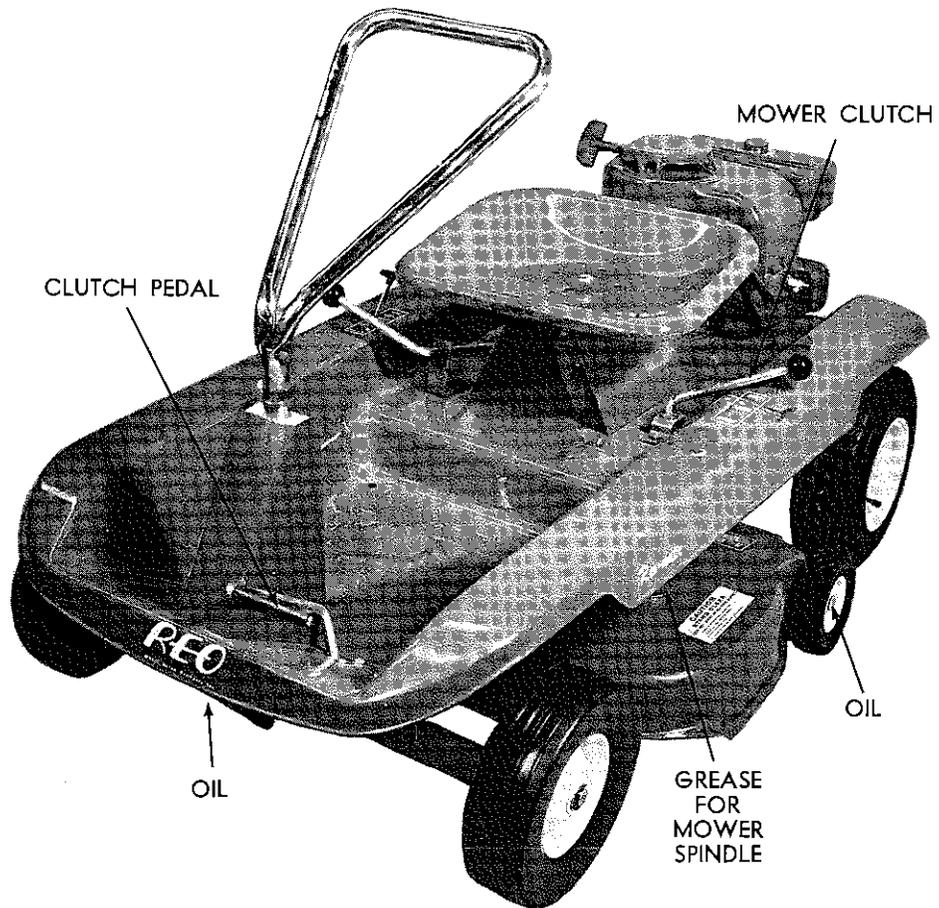
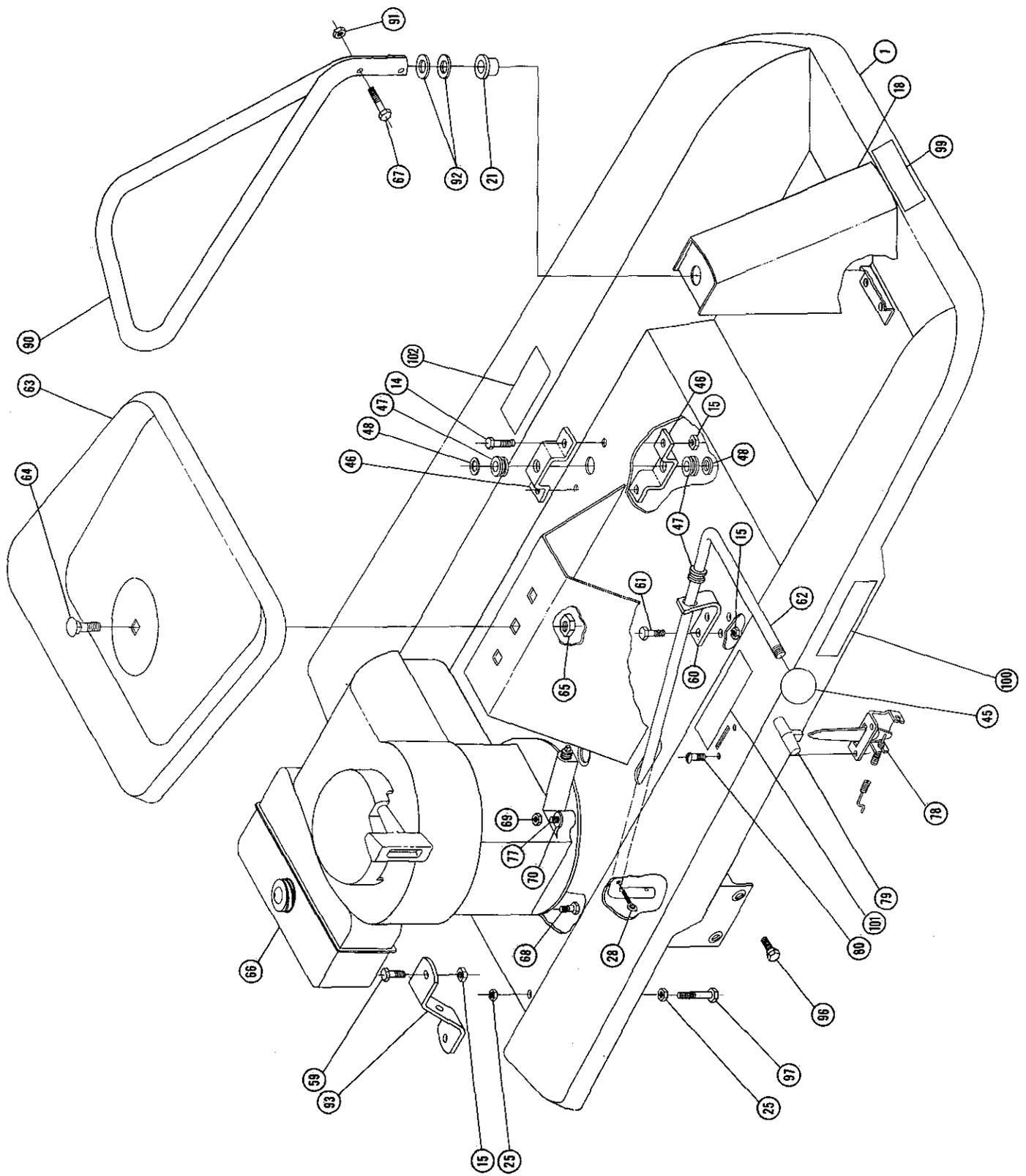
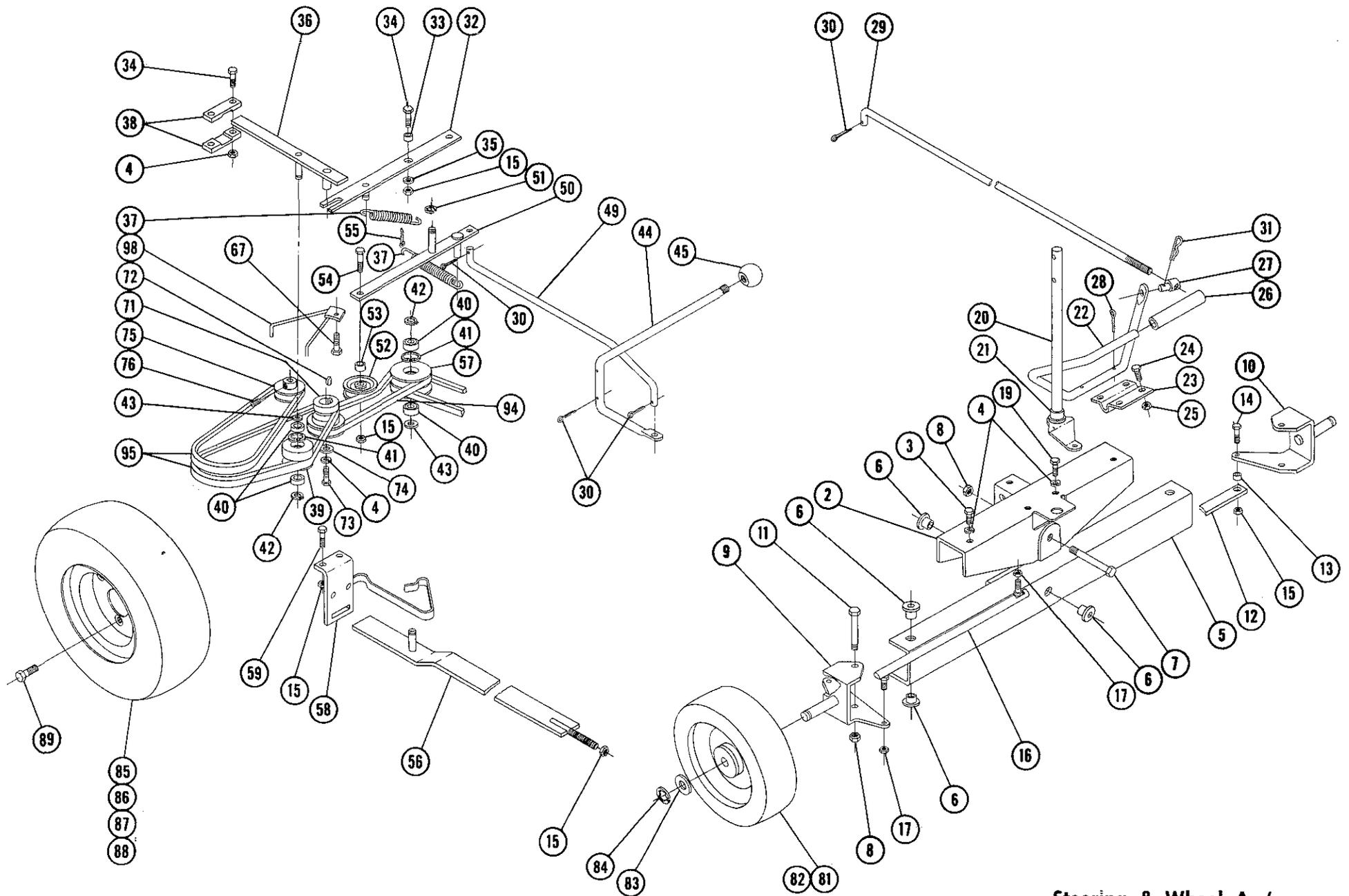


Figure 1





Main Body Ass'y.

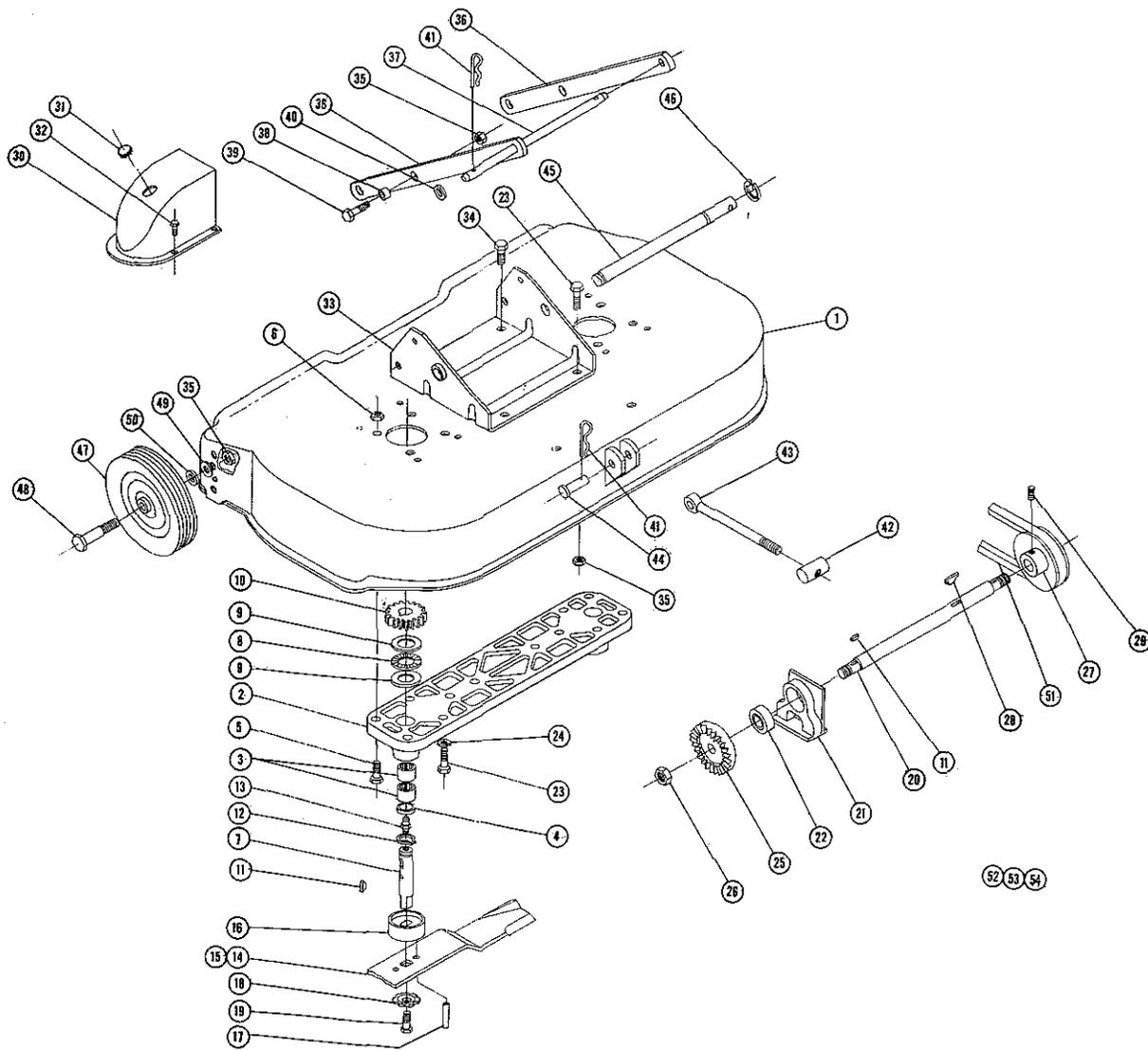


Steering & Wheel Ass'y.

RR-46 RIDING MOWER PARTS LIST

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

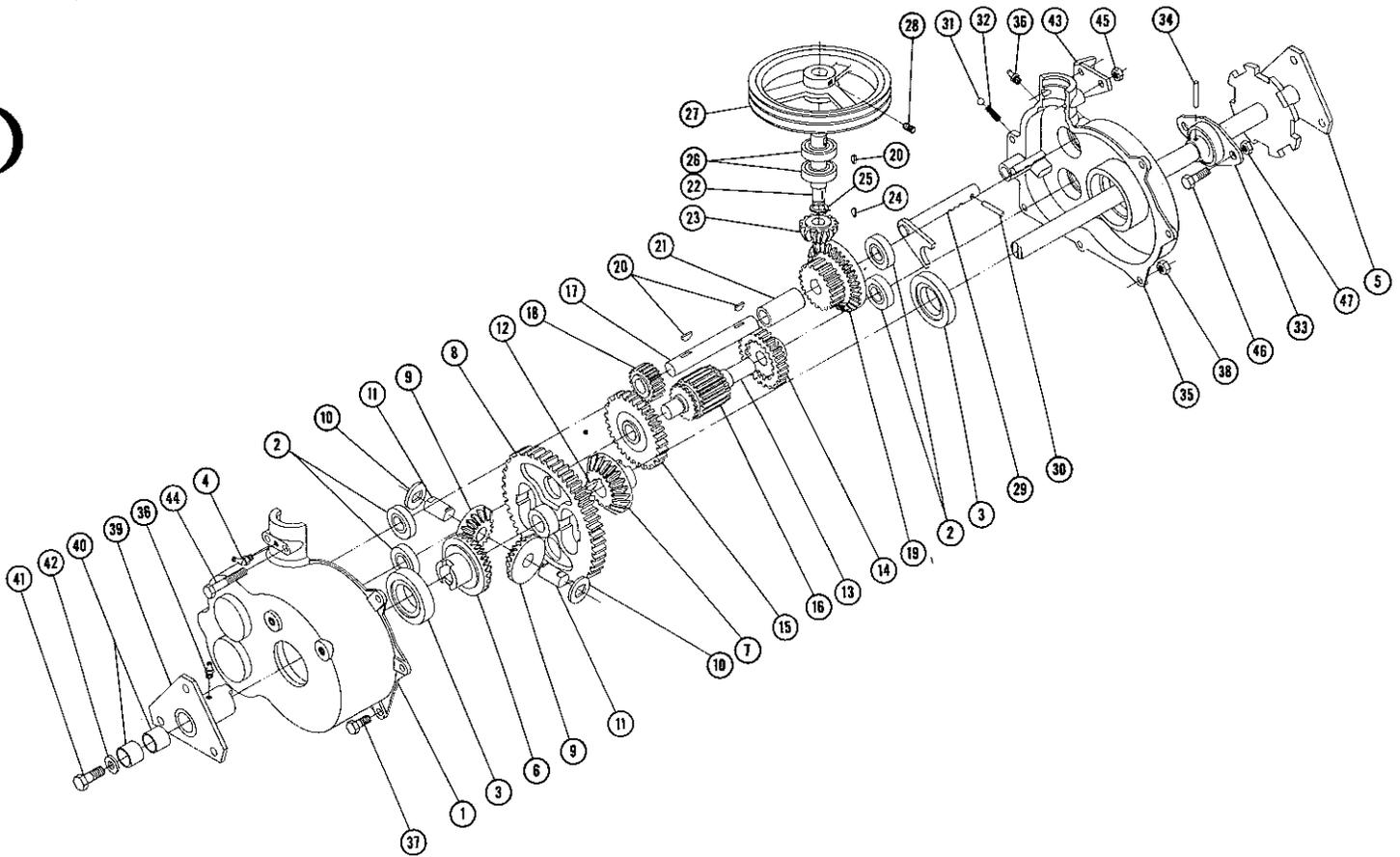
Ref. No.	Part No.	Description	No. Req'd.	Ref. No.	Part No.	Description	No. Req'd.
1	6367	Ass'y. Body	1	52	MW-8821	Pulley — Idler $\frac{3}{8}$ — Bore	1
2	6370	Ass'y. Axle Support	1	53	2138	Spacer $\frac{3}{8}$ Bore	1
3	908030-4	Bolt Hex $\frac{3}{8}$ -16 x $\frac{1}{2}$	3	54	908038-4	Bolt Hex $\frac{3}{8}$ -16 x 2	1
4	920083-4	Lockwasher $\frac{3}{8}$ Dia.	6	55	932015-4	Cotter Pin $\frac{1}{8}$ x $\frac{1}{2}$	1
5	5775	Ass'y. Axle — Front	1	56	5813	Ass'y. Arm — Belt Adjustment	1
6	5840	Bushing	8	57	5817	Pulley — Double Idler	1
7	5795	Bolt Hex $\frac{1}{2}$ -13 x 3 (Special)	1	58	5818	Ass'y. Bracket — Guide	1
8	915751-4	Nut — Hex $\frac{1}{2}$ -13	3	59	908033-4	Bolt Hex $\frac{3}{8}$ -16 x $\frac{7}{8}$	4
9	5782	Ass'y. Arm & Spindle R.H.	1	60	5821	Bracket — Shift	1
10	5783	Ass'y. Arm & Spindle L.H.	1	61	908032-4	Bolt Hex $\frac{3}{8}$ -16 x $\frac{3}{4}$	2
11	5794	Bolt — Hex — Special $\frac{1}{2}$ -13	2	62	5822	Rod — Shift	1
12	5796	Drag Link	1	63	3973	Seat	1
13	4937	Spacer	2	64	900112-4	Bolt Carriage	1
14	908034-4	Bolt — Hex $\frac{3}{8}$ -16 x 1	4	65	915115-6	Nut $\frac{1}{2}$ -13 Nylok	1
15	915663-4	Nut — Elastic Stop $\frac{3}{8}$ -16	19	66	6380	Ass'y. Engine 4 HP Recoil	1
16	5797	Ass'y. Ball Joint	1	67	908021-4	Bolt Hex $\frac{5}{16}$ -18 x $1\frac{1}{2}$	3
17	915001-6	Nut Nylok $\frac{3}{8}$ -24	2	68	908016-6	Bolt Hex $\frac{5}{16}$ -18 x $\frac{5}{8}$ Nylok	2
18	6372	Ass'y. Steering Support	1	69	915112-6	Nut Nylok Hex $\frac{3}{16}$ -18	2
19	908031-4	Bolt Hex $\frac{3}{8}$ -16 x $\frac{5}{8}$	2	70	920008-4	Washer $\frac{3}{8}$ Dia.	2
20	6375	Ass'y. Shaft — Steering	1	71	5835	Pulley — Engine	1
21	5409	Bushing — Nylon	2	72	937010	Key #6 Woodruff	1
22	5841	Pedal — Reverse Clutch	1	73	908182-4	Bolt — Hex $\frac{3}{8}$ -24 x $\frac{7}{8}$	1
23	5842	Bracket — Pedal	1	74	2844	Washer — Special	1
24	908001-4	Bolt Hex $\frac{1}{4}$ -20 x $\frac{1}{2}$	4	75	5836	Pulley Camshaft	1
25	915111-6	Nut Hex $\frac{1}{4}$ -20 Nylok	8	76	909850-6	Set Screw Hex Socket $\frac{1}{4}$ -20 x $\frac{3}{8}$	1
26	4569	Tube — Rubber Pedal	1	77	908020-4	Bolt Hex $\frac{5}{16}$ -18 x $1\frac{1}{4}$	1
27	5791	Stud — Trunion	1	78	6160	Ass'y. Control — Throttle	1
28	932017-4	Cotter Pin $\frac{1}{8}$ x 1	3	79	6161	Knob	1
29	5792	Rod — Clutch	1	80	908996-4	Screw Round Head #8-32 x $\frac{1}{2}$	2
30	932016-4	Cotter Pin $\frac{1}{8}$ x $\frac{3}{4}$	5	81	6381	Ass'y. Wheel 10 x 2.75	2
31	933505-4	Hairpin Cotter	1	82	6385	Bearing	2
32	6194	Ass'y. Arm — Clutch	1	83	1278	Washer	2
33	6331	Spacer	1	84	5618	"E" Ring $\frac{3}{4}$ Shaft	2
34	908035-4	Bolt Hex $\frac{3}{8}$ -16 x $1\frac{1}{4}$	5	85	6383	Ass'y. Wheel & Tire	2
35	920009-4	Washer $\frac{3}{8}$ S.A.E.	1	86	5837	Wheel	2
36	5798	Ass'y. Bar — Clutch Idler	1	87	MW-10493	Tire	2
37	1129	Spring	2	88	MW-10494	Tube	2
38	5802	Block — Nylon	4	89	1004	Lug Bolt — Wheel $\frac{7}{16}$ -20	6
39	5803	Pulley — Idler — Forward & Reverse	1	90	6378	Handle — Steering	1
40	5804	Bearing — Ball $\frac{7}{16}$ I.D.	4	91	915662-4	Nut $\frac{3}{16}$ -18 Elastic Stop	2
41	936015	Snap Ring $\frac{29}{32}$ — internal	4	92	920216-4	Washer	2
42	936115	Snap Ring $\frac{7}{16}$ — External	2	93	5838	Bar — Hitch	1
43	920201-4	Washer	2	94	1598	V-Belt 4L x 22"	1
44	5805	Lever — Mower Clutch	1	95	1597	V-Belt 3L x 25"	2
45	5852	Knob	2	96	6352	Bolt Lug $\frac{3}{8}$ -16 x $\frac{5}{8}$	2
46	5806	Bracket — Clutch Lever	2	97	908010-4	Bolt Hex $\frac{1}{4}$ -20 x $2\frac{1}{4}$	2
47	5807	Grommet — Rubber	3	98	6363	Ass'y. Belt Retainer	1
48	920011-4	Washer $\frac{1}{2}$ S.A.E.	2	99	6151	Decal — Reo Logo	1
49	5808	Rod Mower Clutch	1	100	6202	Decal — Reomatic	2
50	5809	Ass'y. Arm — Mower Clutch	1	101	6386	Decal — Throttle & Shift	1
51	5701	"E" Ring $\frac{1}{2}$ Dia.	1	102	6387	Decal — Mower Clutch & Brake	1



RR-46 MOWER PARTS LIST

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

Ref No.	Part No.	Description	No. Req'd.	Ref No.	Part No	Description	No. Req'd.
1	5726	Ass'y. Deck	1	28	937159	Key #9 HI-PRO	1
2	5233	Housing	1	29	909862-6	Set Screw $\frac{1}{16}$ -18 x $\frac{1}{16}$ Nyllok	1
3	1508	Bearing	4	30	3141	Cover — Gear	2
4	1303	Seal — Oil	2	31	3757	Plug Button	2
5	908017-4	Bolt Hex $\frac{5}{16}$ -18 x $\frac{3}{4}$	4	32	1304	Screw Hex #8-32 — Self Tap	8
6	915112-6	Nut Nyllok $\frac{1}{8}$ -18	4	33	5736	Hanger	1
7	3724	Shaft — Spindle	2	34	908032-4	Bolt Hex $\frac{3}{8}$ -16 x $\frac{3}{4}$	2
8	1534	Bearing — Thrust	2	35	915663-4	Nut Elastic Stop $\frac{3}{8}$ -16	8
9	1535	Washer — Thrust	4	36	5732	Link — Rear Parallel	2
10	3131	Gear — Spur	2	37	5733	Pin — Rear Link	1
11	937084	Key #5 Woodruff	4	38	4937	Spacer	2
12	936125	Snap-Ring $\frac{3}{4}$ Shaft	2	39	908033-4	Bolt Hex $\frac{3}{8}$ -16 x $\frac{7}{8}$	2
13	1030	Fitting — Grease	2	40	920009-4	Washer $\frac{3}{8}$ Dia.	2
14	3718	Blade R.H. 16"	1	41	933505-4	Hairpin	3
15	3719	Blade L.H. 16"	1	42	5734	Trunion — Front Link	1
16	3716	Cup	2	43	5737	Eye Bolt	1
17	933211	Roll Pin $\frac{1}{4}$ x $\frac{3}{4}$	4	44	932964-4	Pin — Clevis	1
18	1336	Washer Dome	2	45	5735	Shaft — Belt Tightener	1
19	908033-5	Bolt $\frac{3}{8}$ -16 x $\frac{7}{8}$ Nyllok	2	46	5618	"E"-Ring	2
20	3715	Cross Shaft	1	47	6384	Wheel — Plastic	2
21	3138	Housing	2	48	5188	Bolt — Shoulder	2
22	1515	Bearing — Ball	2	49	MW-4304	Washer $\frac{3}{8}$	2
23	908034-4	Bolt — Hex $\frac{3}{8}$ -16 x 1	6	50	6379	Spacer	2
24	920083-4	Lockwasher $\frac{3}{8}$ Dia	4	51	1596	"V" Belt	1
25	3130	Gear	2	52	6163	Decal — Belt Diagram	1
26	915639	Nut $\frac{5}{8}$ -18 Elastic Stop	2	53	3710	Decal — Grease	2
27	1613	Pulley	1	54	4570	Decal — Caution	2



RR-46 TRANSMISSION No. 5050 PARTS LIST

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

Ref. No.	Part No	Description	No Req'd.
1	5738	Case R.H	1
2	5740	Bearing — Ball $\frac{5}{8}$ I.D.	4
3	5741	Bearing — Ball $1\frac{1}{4}$ I.D	2
4	1481	Fitting — Grease 45°	1
5	5742	Ass'y Axle	1
6	6328	Ass'y Gear — Axle R.H	1
7	5747	Gear — Axle L.H.	1
8	5745	Gear — Final Drive	1
9	5748	Gear — Differential Pinion	2
10	5749	Washer — Thrust	2
11	5750	Pin — Differential	2
12	937017	Key #11 Woodruff	1
13	5751	Shaft — Sliding Gear	1
14	5752	Ass'y. High Gear	1
15	5755	Ass'y Low Gear	1
16	5758	Gear — Sliding	1
17	5760	Shaft — Hi Low Pinion	1
18	5761	Pinion — Low	1
19	5762	Gear — Combination	1
20	937014	Key #9 Woodruff	3
21	5763	Spacer	1
22	5764	Shaft Input	1
23	5765	Gear — Pinion — Input	1
24	937007	Key #3 Woodruff	1

Ref. No.	Part No.	Description	No. Req'd.
25	936117	Snapring $\frac{1}{2}$ External Truarc	1
26	6192	Bearing — Ball $\frac{5}{8}$ I.D	2
27	5766	Pulley	1
28	909850-6	Set Screw $\frac{1}{4}$ -20 x $\frac{3}{8}$	1
29	5767	Ass'y Fork-Shift	1
30	933190	Roll Pin $\frac{3}{16}$ x $1\frac{1}{4}$	1
31	3517	Ball	1
32	6188	Spring	1
33	5770	Ass'y. Bearing & Housing	1
34	933171	Roll Pin $\frac{3}{32}$ x 1	1
35	5739	Case L.H.	1
36	1030	Fitting — Grease	2
37	908018-4	Bolt Hex $\frac{5}{16}$ -18 x $\frac{7}{8}$	6
38	915662-4	Nut $\frac{5}{16}$ -18 Elastic Stop	6
39	5771	Ass'y Hub & Flange	1
40	1504	Bushing	2
41	908032-6	Bolt Hex $\frac{7}{8}$ -16 x $\frac{3}{4}$ Nylak	1
42	2844	Washer — Special	1
43	5823	Bracket — Shift Rod	1
44	908025-4	Bolt Hex. $\frac{3}{16}$ -18 x $2\frac{1}{2}$	2
45	915112-6	Nut $\frac{5}{16}$ -18 Nylak	2
46	908031-4	Bolt Hex. $\frac{3}{8}$ -16 x $\frac{5}{8}$	2
47	915113-6	Nut $\frac{3}{8}$ -16 Nylak	2

OWNERS MAINTENANCE RECORD

OIL CHANGES

DATE	TYPE & KIND OF OIL
_____	_____
_____	_____
_____	_____

DATE	GREASE JOBS
_____	_____
_____	_____
_____	_____

TUNE UPS

DATE	PARTS REPLACED
_____	_____
_____	_____
_____	_____

BATTERY SERVICE

DATE	SERVICE REQUIRED
_____	_____
_____	_____
_____	_____

MISCELLANEOUS

DATE	
_____	_____
_____	_____
_____	_____

OWNERS MAINTENANCE RECORD

OIL CHANGES

DATE	TYPE & KIND OF OIL
_____	_____
_____	_____
_____	_____

DATE	GREASE JOBS
_____	_____
_____	_____
_____	_____

TUNE UPS

DATE	PARTS REPLACED
_____	_____
_____	_____
_____	_____

BATTERY SERVICE

DATE	SERVICE REQUIRED
_____	_____
_____	_____
_____	_____

MISCELLANEOUS

DATE	
_____	_____
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