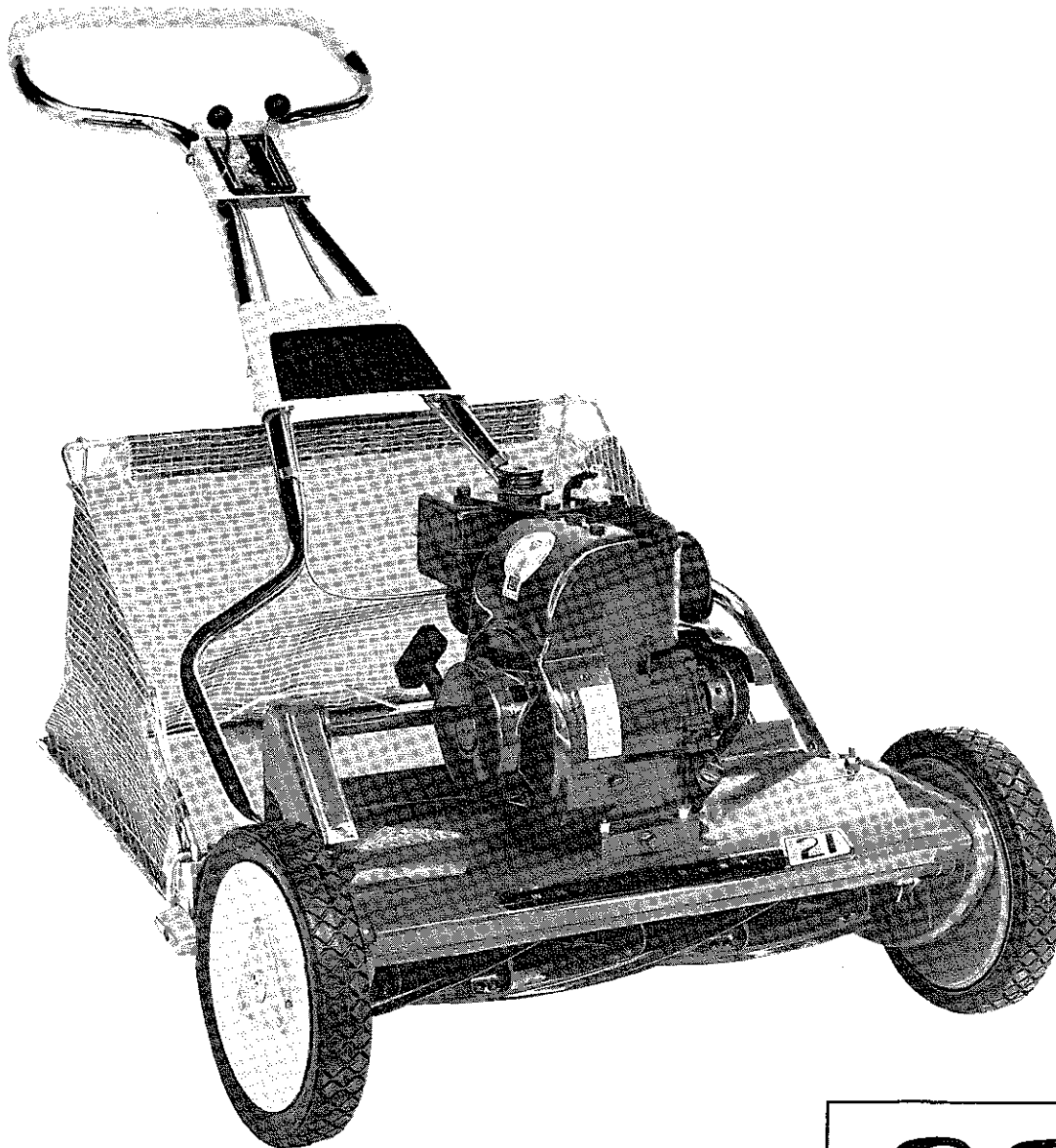


PARTS LIST AND INSTRUCTIONS

REO

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

**ROYALE IV
MODEL
LL-217**



OWNERS MANUAL

"Quality is Standard Equipment in Every Wheelhorse Product"



INTRODUCTION:

This Owner's Manual is your guide to proper mower operation.

The simple maintenance suggested on the pages of this manual will prolong the efficiency and life of the mower. We recommend that you read this manual thoroughly in its entirety before operating your mower. The more familiar you become with the mower and its operation, the better results you will have in its use.

DEFINITION OF DIRECTIONS:

As used throughout this manual, the following definitions apply: "Right" and "Left" refer to the operator's right or left when standing behind the mower in the normal operating position "Front" and "Rear" likewise refer to directions from the viewpoint of the operator.

ASSEMBLY:

The control cables are attached to the mower. Lay the controls down on the floor. Follow the steps shown to assemble the handle.

1. Attach the lower handle to the mower as follows. (See Fig. I)

(A) Loosen the nuts that holds the stop brackets, this will allow them to hang down

(B) Slip the **Right** hand arm on to the handle stud. Note that the cutouts on the end of the arms must face down.

(C) Slide the **Left** hand arm on to the handle stud. Note some pressure has to be applied to this arm to spring it into position.

(D) Swing the stop brackets up as shown in Fig. I and tighten nuts.

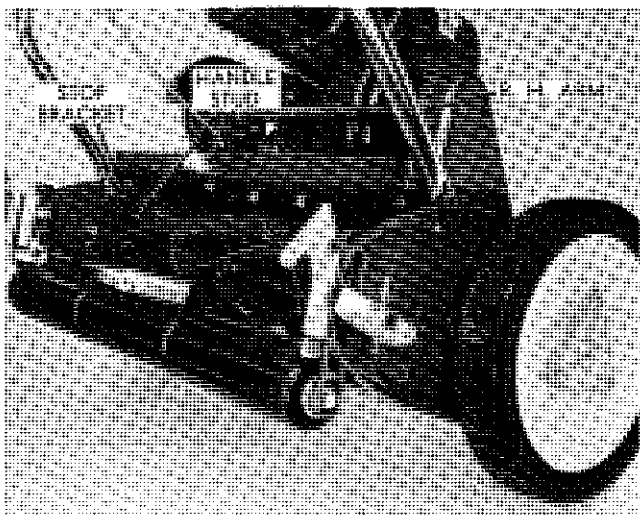


Figure I

2. Fit the upper handle to the lower handle and slide on the handle shield. Fasten with the $\frac{1}{4}$ -20 bolts and nuts provided. Note the longer bolts are installed first and in the holes shown. (See Fig. II) **DO NOT TURN THE NUTS TIGHT AT THIS TIME.**

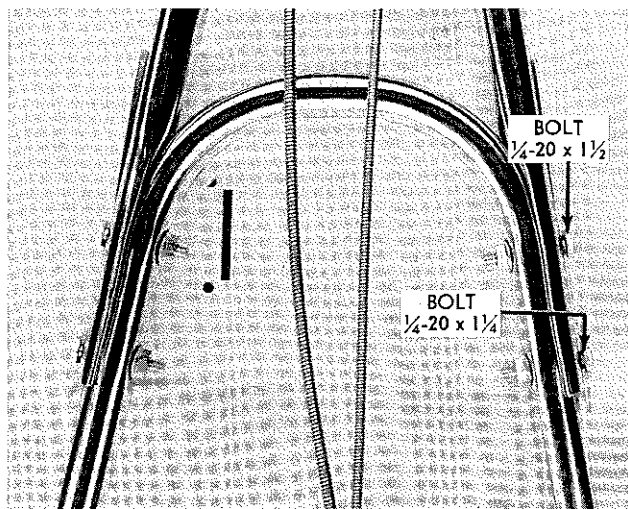


Figure II

3. Slide the control bracket up between the upper arms. (See Fig. III) Fit the control cover over the throttle levers and on to the handle. Insert the $\frac{1}{4}$ -20 x $4\frac{1}{2}$ bolt and fasten securely with (1) $\frac{1}{4}$ -20 nut. Install the small (#8-32) round head screw through the middle of the cover and into the bracket, secure with (1) nut. Fit the control knobs to the control levers, a light rap with a hammer may be needed to hold them on.

4. Tighten the nuts and bolt that hold the upper handle to the lower handle.

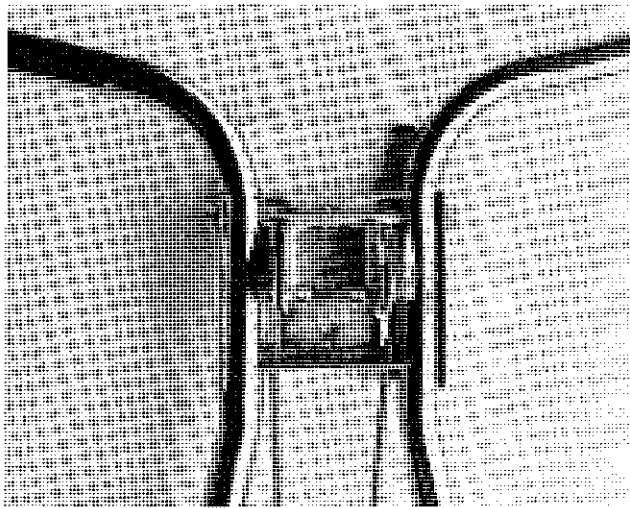


Figure III

OPERATING INSTRUCTIONS: OPERATING CONTROLS:

Engagement of the drive to place mower and reel into motion is controlled by the clutch control lever, located on the control panel. (See Fig. IV) Pulling the clutch lever back engages the drive to power the mower ahead. Pushing the lever forward, disengages the drive and reel, and stops forward movement of the mower.

We suggest operating the mower in an open area until you get the "feel" of the mower and the operation of the clutch lever. Once familiar with the operation, mower can be maneuvered around obstacles easily by engaging and disengaging drive. When maneuvering in small areas, it may be necessary to disengage drive and pull the mower back by hand.

When operating in an open area, engage drive and guide mower. Keep up with mower, allow the engine to do the work. Always keep alert and be prepared to disengage drive in the event of an emergency.

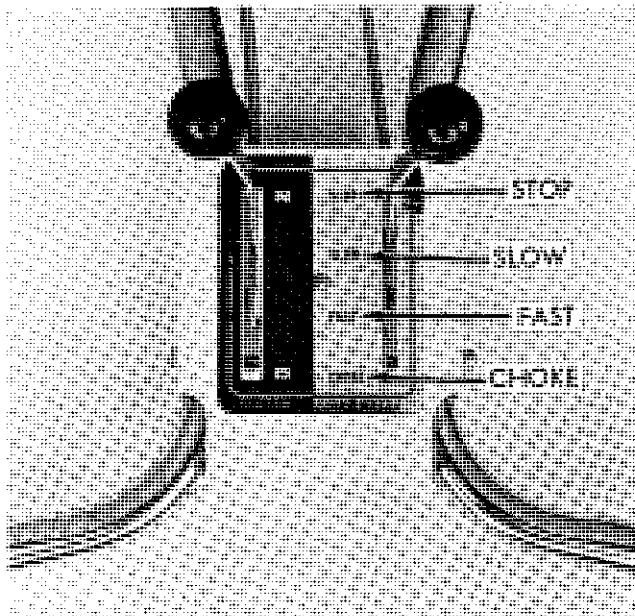


Figure IV

ENGINE CONTROL LEVER:

The engine control lever is located on the right of the control panel within easy reach from the operator's position. By moving the control lever, the speed of the engine increases or decreases, or stops the engine. Refer to the starting instructions in this manual regarding the positioning of the control lever for starting, operating and stopping the engine.

OPERATING THE MOWER:

After the mower has been placed into motion by moving the clutch lever to the engaged position, the forward speed of the mower can be varied by moving the engine control lever. After determining the desired speed, the control lever can remain in that position when engaging or disengaging the drive.

To prevent tearing the lawn when making sharp turns, push down on the handle to raise the drive wheels and make the turn on the rear rollers. Disengage the drive when making very sharp turns. To pull the mower backwards, disengage the drive and push down on the handle and move the mower on the rear rollers.

CAUTION

When cutting tall grass, periodically check (remove if necessary) for excessive grass build-up around the reel shaft between the chain guard and reel. A build-up of grass in this area could force the chain guard into the chain and cause damage.

The only safe and efficient method to mow on hills and terraces is to cut along the side (horizontally) instead of up and down. This places the operator away from the mower if he slips.

STARTING AND STOPPING THE ENGINE:

Before Starting the Engine

Check mower to insure it is in good operating condition and handle sections are tightened securely together. Make certain the reel is clean and free from obstructions. If required, adjust the cutting height.

Check spark plug wire for proper connection on the plug.

Starting the Engine

1. Disengage drive by pushing on clutch control lever.
2. Check fuel supply and crankcase oil level. Refer to the engine manual for fuel and oil requirements.
3. Set engine control lever to the "choke" position.

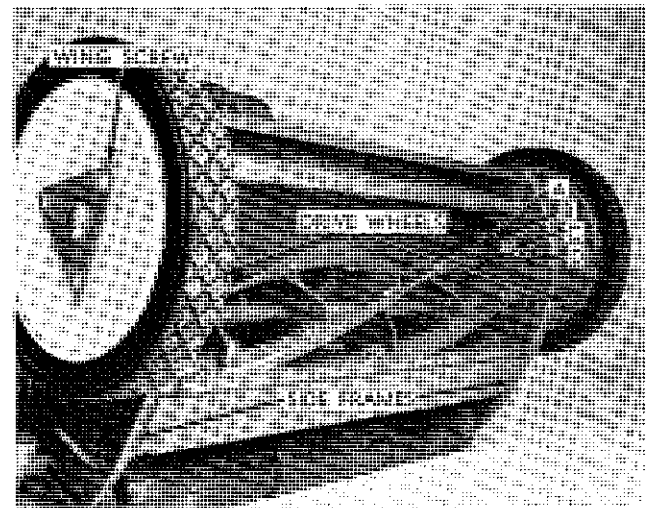


Figure V

4. Grasp starter handle, pull slowly and firmly to crank engine. After pulling the starter handle, allow the starter cord to rewind slowly by lowering the handle to the starter. Do not allow the cord to "snap" back into the starter.

CAUTION

Keep hands and feet away from reel blades before and after starting the engine.

5. When the engine starts, move the engine control lever to a run position. Partial choking may be required while engine is cold. Allow engine warm-up period before operating the mower.

Stopping the Engine

Disengage the drive and move the engine control lever to the "stop" position.

ADJUSTMENTS:

CUTTING HEIGHT ADJUSTMENT (See Fig. V & VI)

The cutting height of the mower is adjusted by raising and lowering the drive wheels and roller brackets. Refer to the cutting height table (page 4) to determine what position the wheels and roller brackets must be in to obtain the desired cutting height.

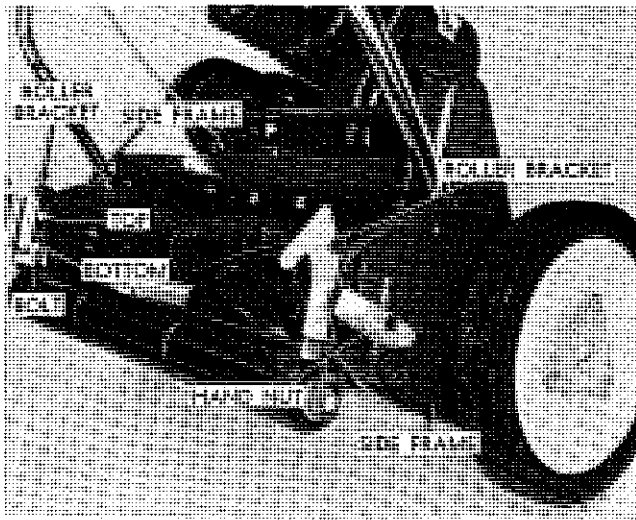


Figure VI

CUTTING HEIGHT TABLE

Cutting Height	Wheel		Roller	Notch In Roller Bracket
	Position Front	Position Side Frame	Position Side Frame	
1/2"	A	1	1	Bottom
3/4"	A	2	2	Bottom
7/8"	A	3	3	Bottom
1"	B	1	1	Top
1 1/8"	A	3	3	Top
1 1/4"	B	2	2	Bottom
1 3/8"	B	3	3	Bottom
1 1/2"	B	3	3	Top
*1 5/8"	C	2	2	Bottom
*1 3/4"	C	2	2	Top
*1 7/8"	C	3	3	Bottom
*2"	C	3	3	Top
*2 1/8"	D	1	1	Top
*2 1/4"	C	4	4	Bottom
*2 3/8"	C	4	4	Top
*2 1/2"	D	3	3	Bottom
*2 5/8"	D	3	3	Top
*2 3/4"	D	4	4	Bottom
*3"	D	4	4	Top

*Cutting heights over 1 1/2" should be used only when grass conditions permit, i.e., tall, firm, vigorous grass.

DRIVE WHEEL ADJUSTMENT:

1. Loosen the drive wheel wing screws and push the screws in, to disengage the special nuts from the height adjustment notch in the side frames.
2. Move the wheels to the desired position and engage two corners of the special nuts in the notch in the side frames
3. Tighten the wing screws securely to lock the wheels in position.

NOTE

Make sure the drive wheels are in the same notch in each side frame.

REAR ROLLER ADJUSTMENT:

1. Loosen the roller bracket hand nuts until the end of the nuts clear the side frame.
2. Move the roller brackets to the desired position and push hand nuts in engaging hole in the side frames.

3. Move the roller brackets up or down until the bolts line up with the top or bottom notch in the brackets.

4. Tighten the hand nuts securely making certain the square shoulder of the bolts engage properly with the notch in the roller brackets.

NOTE

Make certain the bolts are in the same notch in each roller bracket and the hand nuts are engaged in the same hole in each side frame.

HANDLE HEIGHT ADJUSTMENT (See Fig VII)

For operating comfort, the handle height can be adjusted to one of four positions. To adjust handle height, proceed as follows:

1. Remove the hex nut and handle stop bracket from the handle stop bolt in each side frame.
2. Remove the hex nut and lockwasher securing the handle stop bolt in the side frames and remove the handle stop bolts
3. Push the handle forward and insert the handle stop bolts through the desired notch in each side frame. Make certain the bolts are in the same notch in each side frame.
4. Reassemble handle stop brackets by reversing steps 1 and 2.

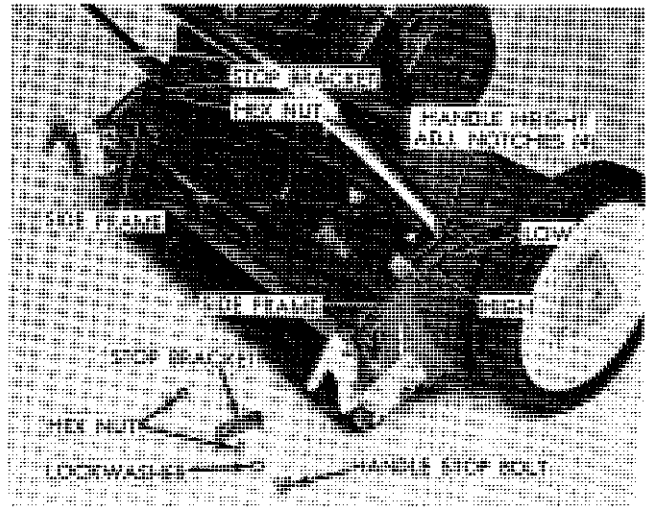


Figure VII

NOTE

When the handle is in the high position, the handle stops are not required.

DRIVE BELT ADJUSTMENT (See Fig. VIII)

The spring loaded idler pulley on the clutch automatically compensates for normal belt wear and stretch. If excessive belt slippage occurs and the belt is in good condition, perform the following adjustment:

1. Loosen the four engine mounting screws and slide the engine forward to remove only the excess slack from the belt. Do not move the engine too far forward, the belt will not disengage
2. After adjusting the belt, tighten the engine mounting screws securely. Make certain the engine pulley is in line with the large pulley. Check alignment of pulleys by looking through rear of belt guard.

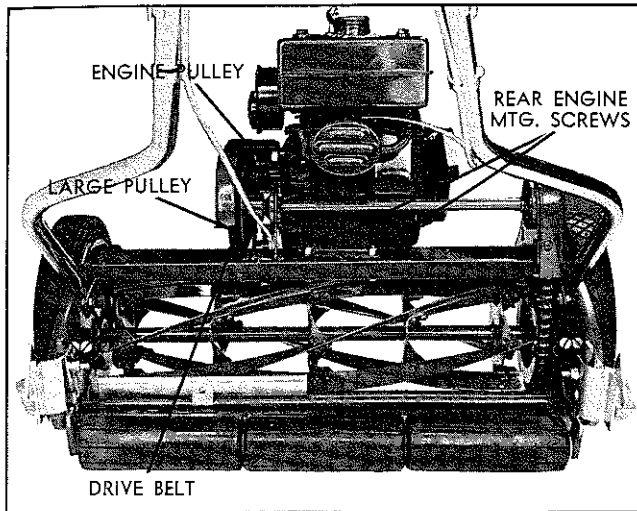


Figure VIII

3. To insure the belt is properly adjusted, perform the following check:

- a. Place the clutch lever in the disengaged position and move the engine control lever to the stop position.
- b. Pull the starter handle several times. If the mower has a tendency to move, belt is too tight. Move engine back to loosen belt and repeat the above procedure.
- c. Start the engine and check the operation of the clutch, mower should not move when the clutch is disengaged.

CUTTER BAR ADJUSTMENTS (See Fig. IX)

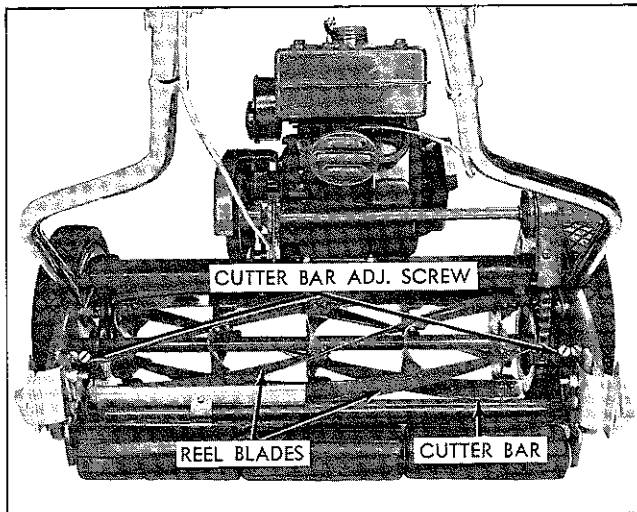


Figure IX

The cutter bar is adjusted by turning the two adjusting screws on the inside of each side frame. With a screw driver, turn the screw equally to the left (counter-clockwise) to bring the cutter bar closer to the reel blades. The cutter bar should very lightly contact the reel blades for best performance.

NOTE

Excessive tightness will cause rapid wear of the cutting edges. A correctly adjusted cutter bar will cut a strip of newspaper along the full length of each reel blade and the reel will revolve freely.

CHAIN ADJUSTMENT (See Fig. X)

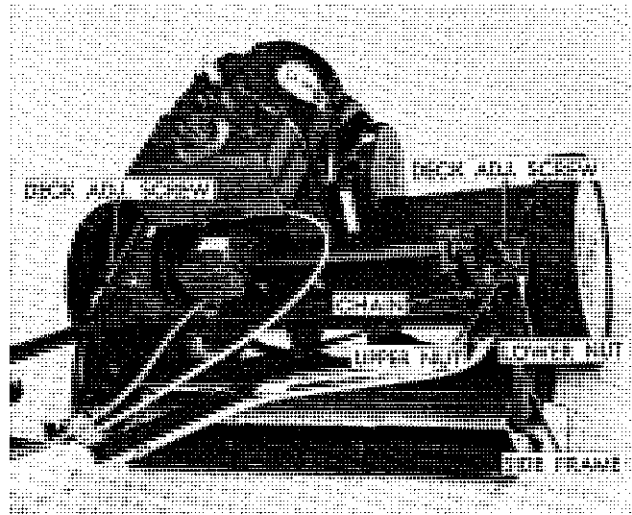


Figure X

After a new mower has been operated for 5 to 10 hours, the chain may require adjustment to take up initial slack. After the initial adjustment, check chain adjustment each time the chain is lubricated. Adjust chain as follows:

1. Place the clutch lever in the disengage position.
2. Remove the chain guard
3. Loosen the upper nut on the deck adjusting screws on each side of the deck. On the chain side of the deck, insert a screw driver or steel bar between the deck and side frame. Pry the deck upward to tighten the chain. A properly adjusted chain has a slight amount of slack between the sprockets.
4. When the proper chain tension is obtained, reach through the handle slot in the deck and turn the lower nut on the adjusting screw up until it contacts the underside of the deck; then tighten the upper nut securely against the deck.
5. Adjust the opposite side of the deck approximately the same amount.
6. Reinstall chain guard.

CAUTION

Do not adjust the chain too tightly. This causes rapid wear and chain stretch, and may cause failure of the reel and cross shaft bearing.

LUBRICATION:

LUBRICATING THE MOWER (See Fig. XI, XII, XIII)

Lubricating the mower as instructed below:

- A. Rear Rollers — Every 10 to 15 operating hours, lubricate the rollers, Figure XI, with SAE No. 30 oil. Tip the mower to allow oil to run into the rollers.
- B. Reel Bearings — Shield type ball bearings, Figure XI, are lubricated at the factory and the only attention required is checking of the lubricant when the reel blades are sharpened, or when the mower is checked by your dealer.
- C. Gears and Wheels — At the beginning of each cutting season lubricate the gears and wheels, Figure XII, with a semi-fluid grease, such as, Alemite Lubricant 0-164. To lubricate proceed as follows:

1. Remove the cotter pins from the end of the wing screws. Turn the wing screws out of special nuts and remove the wheels from the mower. Remove the lockwasher and axle from the wheels.

2. Apply a liberal amount of grease to the pinion and wheel gears, wheel hubs and axle.
3. Reassemble wheels by reversing Step 1. Make certain pinion and wheel gears mesh properly

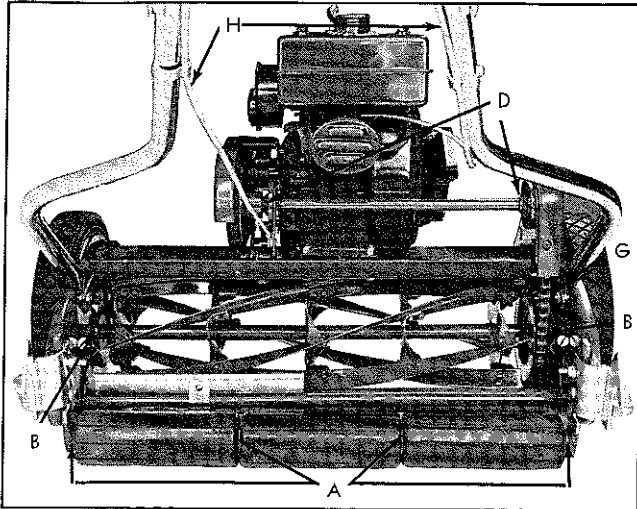


Figure XI

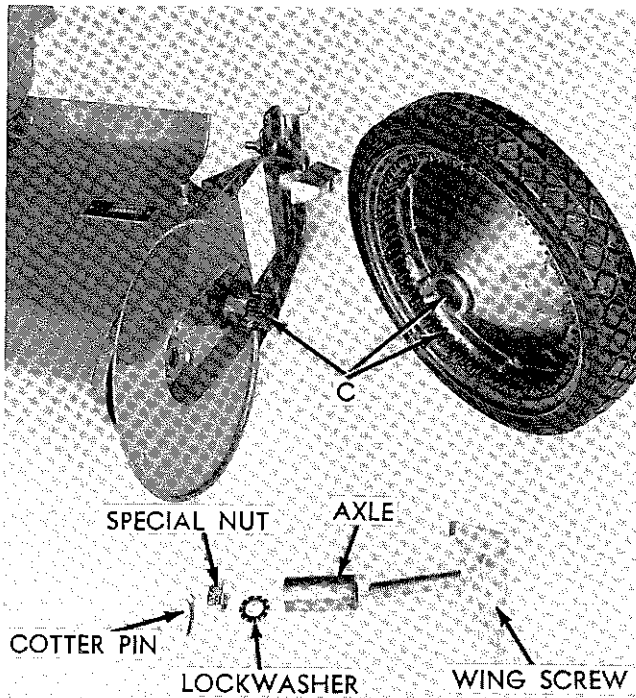


Figure XII

D. Cross Shaft Bearings — At the beginning of each season and after every 30 days of service, lubricate bearings, Figure XI, with SAE No. 30 oil. Insert spout of an oil can through the hole in the bearing covers and force oil into the felt retainer until saturated.

E. Clutch Pivot Points — At the beginning of each cutting season and as required to maintain smooth operation, lubricate clutch pivot points, Figure XIII, with SAE No. 30 oil.

F. Idler Arm Cam — At the beginning of each cutting season and as required to maintain smooth operation, lubricate the bottom edge of the idler arm cam, Figure XIII, with a light coat of grease

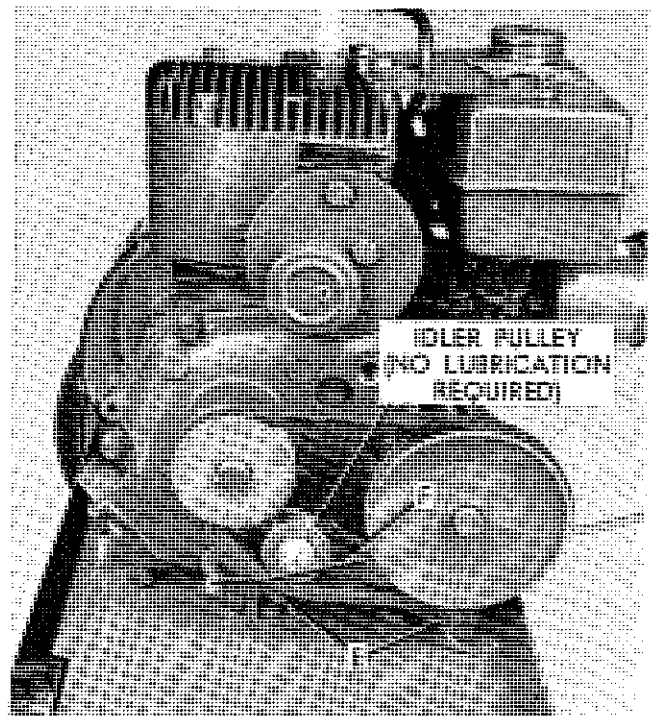


Figure XIII

G. Roller Chain — Every 8 operating hours, lubricate the roller chain, Figure XI, with SAE No. 30 oil. Apply oil to the chain so that it reaches the inside of each roller.

H. Throttle and Clutch Control Cables — If the control cables, Figure XI, become hard to operate, lubricate the outside of the control cable housing with No. 30 oil. Oil will run between the coils and lubricate the inside of the housing. Wipe off the excess oil that remains on the outside of the housing.

CHANGING ENGINE CRANKCASE OIL (See Fig. XIV)

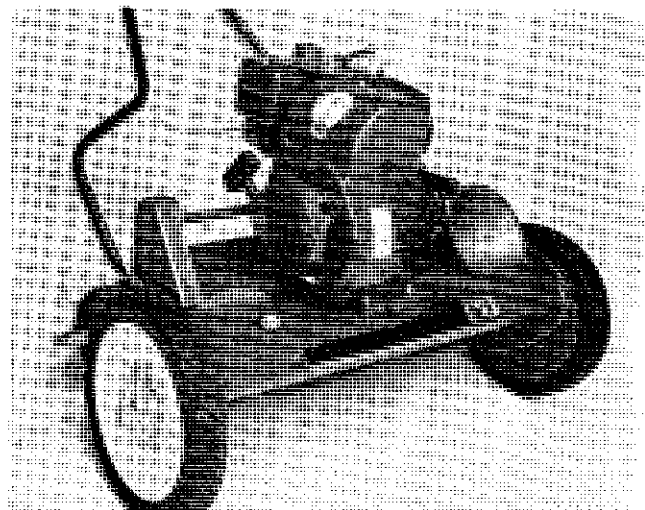


Figure XIV

The engine crankcase may be easily filled, Figure XIV, by utilizing a funnel.

Follow the instructions in the engine manual, furnished with your mower, regarding how often to change oil. To change oil, proceed as follows:

1. Drain crankcase — Tip the mower forward catching the oil in disposable container. Drain the crankcase completely

2. Refill crankcase — Fill the crankcase until the oil level is even with the bottom edge of the filler hole. Reinstall the filler plug securely

MAINTENANCE:

DRIVE BELT REPLACEMENT (See Fig. XV)

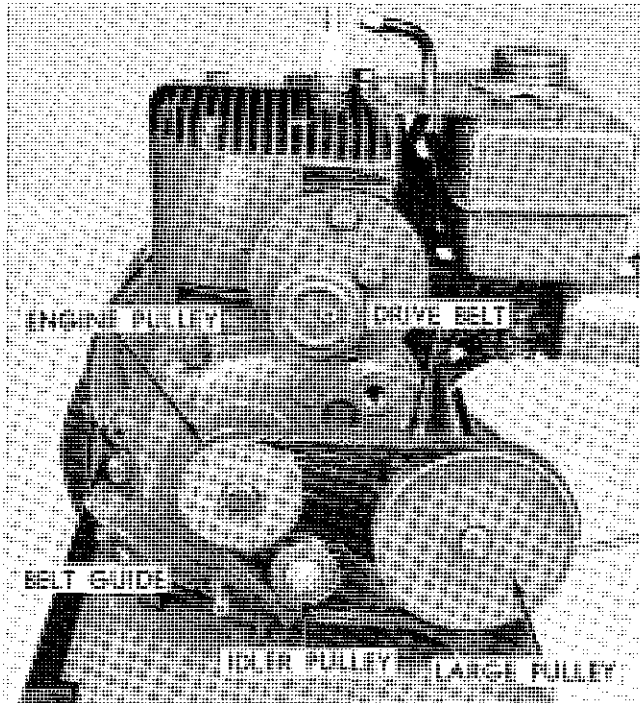


Figure XV

1. Remove belt guard
2. Loosen the four engine mounting bolts and slide the engine back as far as possible.
3. Place the clutch lever in the disengaged position. Remove the old drive belt from around the engine pulley and then from around the large pulley.
4. Position the new drive belt around the large pulley. Slip the belt around the engine pulley making certain the bottom of the belt is between the belt guide and idler pulley.
5. Reinstall the belt guard making certain the pin inside the guard is above the belt.
6. Refer to drive belt adjustment instructions in this manual.

ENGINE MAINTENANCE

1. Periodically check (clean if required) for accumulation of grass or debris on the air intake screen to prevent engine damage caused by overheating.
2. When tipping the mower to work on the reel or under side of deck, tip only opposite carburetor side of the engine to prevent oil spilling from breather.

STORAGE

At the end of the season, or if mower is to be stored for any length of time, the following steps are recommended.

Wash off accumulated dust and clippings with spray from garden hose, being careful not to direct water at the engine. If necessary a soft bristled scrub brush can be used to clean wheels and tires. A small stick can be used effectively to clean out corners.

Wipe entire unit with clean cloth to remove gasoline stains and oily spots. This simple procedure will keep your mower looking like new for years to come.

When mower is completely dry, lubricate mower following the lubricating instructions in this manual. Then refer to the Engine Manual for storage instructions. Be faithful to these simple procedures and your Reo mower will give you faithful service year after year.

GRASS CATCHER:

The Grass Catcher is furnished with the mower. To attach to the mower slide the catcher under mower till the lower rods hook under the catcher bracket, then lift up and forward till the upper rods fall into the upper notches of the brackets. To remove simply lift up and away. If the back of the catcher drags on the grass or if tilted to high adjustments can be made by moving the side bars up or down.

LAWN CARE:

CUTTING HEIGHT

Cutting height will vary with different types of grass, climate, and individual preference. Generally, grass should be cut 1" to 1½" in spring, and not less than 2" in hot summer weather.

USE OF GRASS CATCHER

By continually mulching grass clippings into the lawn, a thick mat may form which could suffocate grass roots. To avoid matting and to develop a thick turf, it is recommended to gather grass clippings in a catcher. Using the grass catcher also helps prevent the spreading of weeds by cutting and gathering the seed.

MOWING PATTERNS

Reversing and changing mowing direction, every cutting will help to eliminate matting, graining, and corrugation, thereby enhancing your lawn appearance. Instead of cutting in circles, try various mowing patterns to get additional mowing benefits.

MOWING PATTERNS

TURF MAINTENANCE

Proper fertilizing, weed and insect control are necessary to maintain a healthy lawn. Due to variations in climate, soil, grass, etc., it would be impossible to cover proper turf maintenance adequately. For turf maintenance information, see your garden supply dealer. Local county agents, park and golf course superintendents are also excellent sources of information.

WATERING

It is recommended your lawn be watered to equal 1" to 2" of rainfall each week when natural rain does not provide this amount. This should be done in one deep watering to stimulate root growth. Light, frequent waterings promote weak grass growth and strong weed growth.

STREAKING

Caused by wheel tracks, limp grass, grass too high. Cut grass shorter and more frequently. Do not cut when grass is wet. If grass is too long, cut twice: first time ½" above desired finished cut. To eliminate wheel tracks, overlap each cut going in opposite direction.

This power mower has been certified by the manufacturer to conform to A.S.A. Safety Standards.

Outdoor Power Equipment Institute, Inc. sponsored

SAFETY SUGGESTIONS

SAFETY SUGGESTIONS FOR ALL POWER MOWER USERS

Recommended practices from the American Standard
Safety Specifications for Power Lawn Mowers

TRAINING

1. Regard your mower as a piece of power equipment, and teach this regard to all who operate the equipment.
2. Never allow children or young teen-agers to operate a power mower.
3. Be sure you know how to stop the mower and engine at a moment's notice.
4. Instruct children to keep away from the area of operation of the mower at all times.

PREPARATION

1. Before starting operation, clear the entire lawn area of all debris that could catch on to or be thrown by the blade.
2. Plan the cutting operation so it is not necessary to pull the mower rearward towards you, particularly on a downgrade.
3. When you mow on rough terrain or in high grass or weeds, the blade should be set at the highest cutting point to minimize debris being ejected from the mower.
4. Unless there is very good artificial light, mow only during the daylight.
5. Do not operate power mowers in wet grass, which clogs the mower and increases the danger of your slipping and possibly coming into contact with the blade.
6. Fill gasoline-driven mowers outdoors. Avoid spilling gasoline and don't fill the tank while engine is running or while you are smoking.
7. Don't mow when barefoot or wearing open sandals. Provide some protection by means of long, heavy denim trousers and brogues. If you have safety shoes, wear them.
8. Mower guards should never be removed.

OPERATION

1. Give complete and undivided attention to the job at hand.
2. Keep the area of operation clear of all persons, particularly small children.
3. Don't start the engine and reel until you are ready to start mowing. Stop the engine whenever you leave the mower.
4. Don't overspeed the engine. Excessive cutting speed or tampering with the governor can be dangerous. Operate the engine at the slowest speed which will cut satisfactorily.
5. Start the mower carefully. Stand firmly, with your feet away from the blade. Be sure the mower will not tip or roll during the starting operation.

6. Stay clear of the front of self-propelled mowers during and after starting.

7. If the mower handle has a safety latch to hold it in normal operating position, keep it engaged during the operation.

8. Keep in step with mower. Do not lag behind or let it pull you so you will not be in full command of the machine. Do not run.

9. Control the direction of the mower by hand pressure on the handle, not by foot pressure on the mower housing.

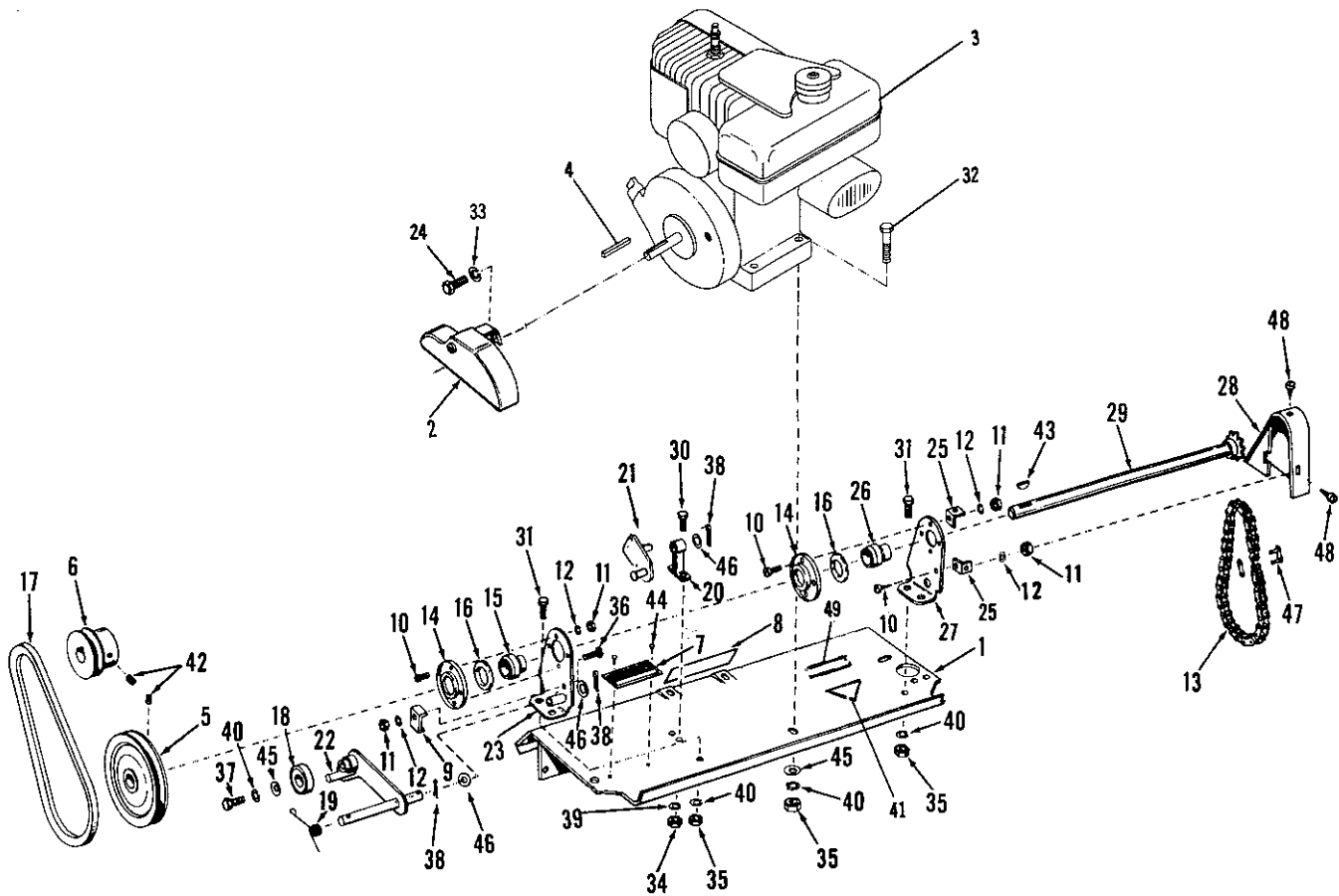
10. When operating over uneven terrain and slopes, use extreme care and make sure of solid and firm footing at all times.

11. Exercise special care when operating around objects to prevent the blades from striking them and never deliberately operate over any object.

12. Stop operation when another person approaches. Do not pass or stand on the grass-discharge side of the machine with the engine running.

MAINTENANCE AND STORAGE

1. Follow implicitly the manufacturer's recommendations for maintenance.
2. Have a competent serviceman make a thorough inspection of the machine at least once a year.
3. Never adjust the machine or change attachments until the engine has been turned off and the sparkplug wire disconnected. Otherwise it is possible that the engine could start if the blade or cutter bar were turned while making an adjustment or repair.
4. If carburetor adjustment is necessary, stand to one side and keep feet and hands in the clear while making adjustments.
5. Keep engines free from accumulations of grass, leaves, or excessive grease. An accumulation of these combustible materials may result in a fire.
6. Store gasoline in a safe container. Store the container in a cool, dry place, **not in the house or near heating appliances.**
7. Keep the machine and fuel container in locked storage to prevent children from playing and tampering with them.
8. Maximum operating results and safety can only be expected if the machine is maintained and operated correctly.
9. Gasoline powered equipment or fuel containers should not be stored in basement or any closed area where heating or heat appliances or open pilot lights are present, unless fuel is completely drained from power equipment and fuel containers.

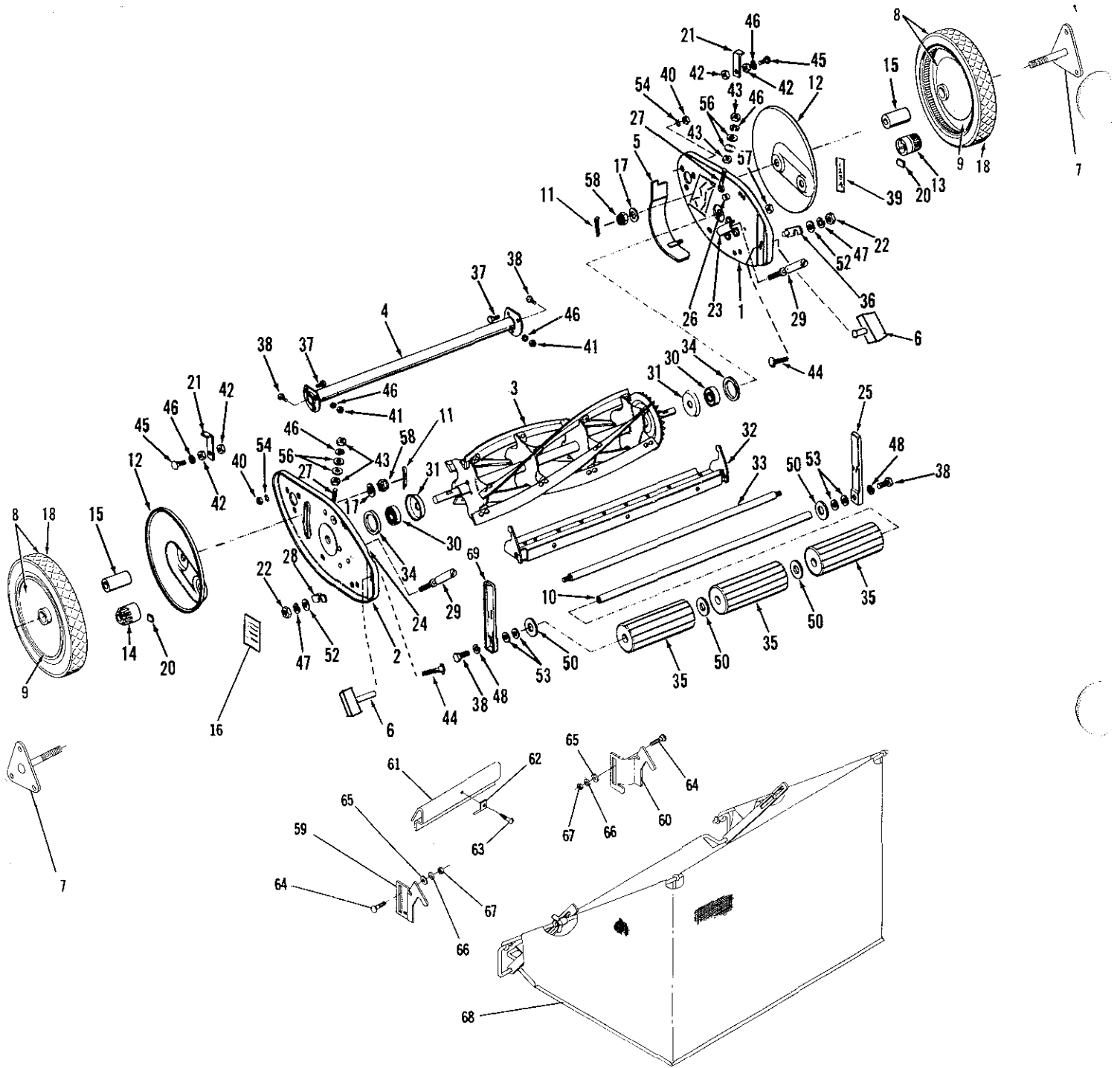


Deck - Cross Shaft - Clutch

When ordering parts always list Part No and name of part

Item No	Part No	No. Req'd	Description
1	7274	1	Deck Assembly
2	7275	1	Guard, Belt
3	7246	1	Engine Assembly
4	MW-8331	1	Key, Crankshaft Pulley
5	7277	1	Pulley, Cross Shaft
6	7279	1	Pulley, Crankshaft
7		1	Plate, Serial Number
8	7172	1	Decal Name
9	7280	1	Clamp, Clutch Cable
10	909017-4	9	Screw, #10-24 x 3/8 Rd. Hd
11	915538-4	10	Nut, #10-24, Hex
12	920152-4	10	Lackwasher, #10 Type 12
13	7288	1	Chain, Roller Drive, w/Ref. 47
14	7281	2	Cover, Cross Shaft Bearing
15	7282	1	Bearing Cross Shaft, LH
16	7283	2	Felt, Oil Retaining
17	7236	1	Belt, Drive
18	7284	1	Bearing, Idler
19	7285	1	Spring, Belt Tightener
20	7286	1	Bracket, Bell Crank
21	7287	1	Crank, Bell
22	7291	1	Shaft & Arm, Clutch
23	7278	1	Cross Shaft Brkt Assembly
24	908286-4	1	Screw 1/2 20 x 3/8
25	7297	2	Clip, Upper Chain Guard

Item No.	Part No	No. Req'd	Description
26	7290	1	Bearing, Cross Shaft, R.H
27	7292	2	Bracket, Bearing, Crass Shaft
28	7295	1	Guard, Chain, Upper
29	7289	1	Shaft, Cross w/Sprocket
30	908002-4	2	Screw, 1/4-20 x 3/8 Hex Hd Cap
31	908016-4	4	Screw, 3/16-18 x 3/8 Hex Hd. Cap
32	908021-4	4	Screw, 3/16-18 x 1 1/2 Hex Hd Cap
33	920085-4	1	Lackwasher 1/2 SAE
34	915111-4	2	Nut, 1/4-20, Hex
35	915112-4	8	Nut, 3/16-18, Hex
36	909022-4	1	Screw, #10-24 x 3/4 Rd Hd. Machine
37	909068-4	1	Screw, 3/16-18 x 1/2 Rd. Hd. Machine
38	932001 4	3	Pin, 1/16 x 3/4 Cotter
39	920081-4	2	Lackwasher, 1/4 Med
40	920082-4	9	Lackwasher, 3/8 Med
41	7299	1	Decal, Safety, ASA
42	909862	2	Screw, 3/16-18 x 3/16, Set
43	937085	1	Key, #6 Woodruff
44	926408-4	2	Screw, #2 x 1/4, Type U-Drive
45	7293	5	Washer, 3/16 Burr
46	920009-4	3	Washer, 3/8 SAE
47	7294	1	Link, Master - Drive Chain
48	7296	2	Screw, #10 x 1/2 Truss Hd
49	7339	1	Decal Caution



Lower Unit

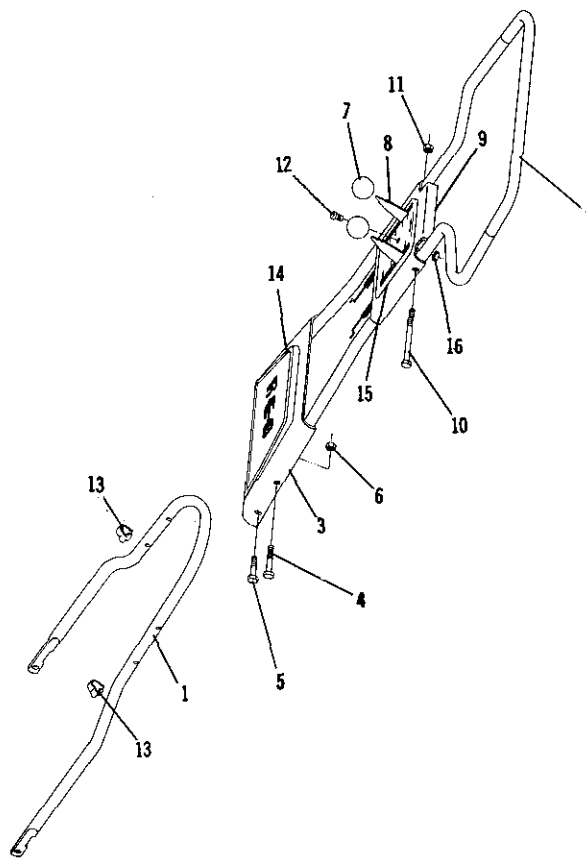
When ordering parts always list Part No and name of part

Item No	Part No	No. Req'd.	Description
1	7300	1	Frame, R.H. Side
2	7301	1	Frame, L.H. Side
3	7302	1	Reel Assembly, 5 Blade, w/Sprocket
4	7303	1	Tube, Front Cross
5	7333	1	Guard Reel Sprocket
6	7312	2	Knob, Roller Adj
7	7253	2	Knock-Off Spinner Ass'y.
8	7304	2	Wheel w/Tire
9	7305	2	Wheel w/O Tire
10	7306	1	Shaft, Rear Roller
11	932017-4	2	Pin, 1/8 x 1 Cotter — Wh. Ret

Item No.	Part No	No. Req'd.	Description
12	7307	2	Shield, Dust
13	7308	1	Pinion, Drive, R.H.
14	7309	1	Pinion, Drive, L.H.
15	7310	2	Shaft, Wheel
16	7298	1	Decal, Height Inst.
17	920126-4	2	Lockwasher, 1/2 Ext.
18	7311	2	Tire, Diamond Tread
20	7313	2	Pawl, Pinion Drive
21	7314	2	Bracket, Handle Stop
22	915236-4	2	Nut, 3/8-16, Hex Jam

(Continued on Page 11)

23	7315	1	Case, R.H. Adjusting Screw	45	900214-4	2	Bolt, $\frac{5}{16}$ -18 x $\frac{3}{4}$ Short Neck Carriage
24	7316	1	Case, L.H. Adjusting Screw	46	920082-4	8	Lockwasher, $\frac{5}{16}$
25	7317	1	Bracket, Rear Roller R.H.	47	920084-4	2	Lockwasher, $\frac{3}{8}$
26	7318	2	Stud, Handle	48	920123-4	2	Lockwasher, $\frac{5}{16}$
27	7319	2	Screw, Deck Adjusting	50	920041-4	4	Washer, $\frac{1}{2}$ Flat
28	7320	1	Plate, L.H. Mounting Plate	52	920009-4	2	Washer, $\frac{3}{8}$ SAE
29	7322	2	Screw, Cutter Bar Adjusting	53	920008-4	4	Washer, $\frac{11}{32}$ SAE
30	7323	2	Bearing, Reel Shaft	54	7330	6	Lockwasher, $\frac{1}{4}$
31	7325	2	Slinger, Dirt	56	7331	4	Washer, $\frac{3}{16}$ Flat
32	7327	1	Bar, Cutter	57	7334	1	Nut, $\frac{5}{16}$ -18 Hex Conelock
33	7324	1	Rod, Tie	58	7332	2	Nut, $\frac{1}{2}$ -13 Adjustment (Special)
34	7326	2	Washer, Seal, Reel Bearing Felt	59	7335	1	Bracket, L.H. Catcher
35	7321	3	Roller, Rear	60	7336	1	Bracket, R.H. Catcher
36	7328	1	Plate, R.H. Mounting Pin	61	7337	1	Deflector, Grass
37	908001-4	6	Screw, $\frac{1}{4}$ -20 x $\frac{1}{2}$ Hex Hd. Cap	62	7338	1	Clip
38	908016-4	4	Screw, $\frac{5}{16}$ -18 x $\frac{5}{8}$ Hex Hd. Cap	63	926234-4	1	Screw, Rd. Hd. #10 x $\frac{1}{2}$ S.M.
39	7329	1	Decal, Roller Adj	64	900215-4	2	Bolt, Carriage S.N. $\frac{5}{16}$ -18 x 1
40	915111-4	6	Nut, $\frac{1}{4}$ -20 Hex	65	920008-4	2	Washer, Flat $\frac{5}{16}$ STD
41	915001-4	4	Nut, $\frac{5}{16}$ -18 Hex	66	920082-4	2	Washer, Lock $\frac{5}{16}$
42	915235-4	4	Nut, $\frac{3}{16}$ -18 Hex Jam	67	915001-4	2	Nut, Hex $\frac{3}{16}$ -18
43	915084-4	4	Nut, $\frac{5}{16}$ -24 Hex Jam	68	7254	1	Grass Catcher Ass'y.
44	900040-4	2	Bolt, $\frac{3}{16}$ -18 x $1\frac{1}{2}$ Carriage	69	7276	1	Bracket, Rear Roller L.H.



Handle Assembly

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

Item No.	Part No.	No. Req'd.	Description
1	7247	1	Handle, Lower
2	7099	1	Handle, Upper
3	7101	1	Shield, Handle
4	908007-4	2	Screw, Hex Head Cap $\frac{1}{4}$ -20 x $1\frac{1}{2}$
5	908006-4	2	Screw, Hex Head Cap $\frac{1}{4}$ -20 x $1\frac{1}{2}$
6	960008-4	4	Nut, Hex Whizlock $\frac{1}{4}$ -20
7	7248	2	Knob, Control
8	7249	1	Control, Dual

Item No.	Part No.	No. Req'd.	Description
9	7250	1	Cover, Control
10	908148-4	1	Screw, Hex $\frac{1}{4}$ -20 x $4\frac{1}{2}$
11	960008-4	1	Nut, Hex Whizlock $\frac{1}{4}$ -20
12	910775-4	1	Screw, Pan Head #2 Phil. #8-32 x $\frac{3}{8}$
13	7098	2	Clip, Control Cable
14	7179	1	Decal, "Royale IV"
15	7180	1	Decal, Control Lever
16	915537-4	1	Nut Hex #8-32

"REEL" MOWING FACTS

Today, an increasing number of home owners desire the better-looking lawn which only a reel-type power lawn mower can provide.

Many of these home owners have had no experience whatever with reel mowers unless it may have been with the old push-type hand mower. Since the days when such people used a hand mower, lawns themselves have changed radically and lawn care has undergone a revolution. Home owners who are seeking better lawns are apt to be those who apply chemicals, fertilizers and water most religiously. Very probably, they have better than average lawns. From experience, they are more than ordinarily demanding of the appearance of their lawns after cutting

For a well maintained lawn, a reel mower will give the finest appearance it is possible to obtain. There are, however, certain things which should be understood about reel mowers as a group, as an aid in selecting the right machine.

1. A reel mower cuts by shearing off the grass blades as would a pair of scissors. Consequently, the cut grass tip is clean. There is no ragged tip "wound". The end will seal quickly with no dead fringe or discoloration. This is one of several important reasons why a lawn cut with a reel mower looks better and why growth is accelerated, rather than impaired.

2. Reel mowers have no "lift" action. They will not raise grass blades which are lying down. Similarly, if grass blades lie over at the tips, reel mowers will push a certain number of them under the bed knife without cutting these blades off. Hence the need for reasonably frequent cutting with reel mowers and for cutting at lower heights where the grass stem is more firm.

3. Reel mowers with blades in the reel that are close together and which turn faster give a finer cut, produce a more velvet-like surface, and make a prettier lawn than a mower with blades far apart and turning slower. BUT, the closer the blades and the higher the turning speed the more necessary it is that the lawn be cut often so that only short lengths of grass are cut off. Likewise, it is important to cut close to the root crown ($1\frac{1}{2}$ " or less) unless grasses are stiff and sturdy and will stand up in the shearing action area.

4. Reel mowers with fewer blades set further apart give a good cut and will do a better job at higher cutting heights or when a greater length of grass is to be cut off. The wide spacing of the blades permits longer grass to get into the shearing area. The slower turning speed of the reel prevents pushing uncut grass blades under the bedknife.

5. There is a practical limit to the maximum height at which any reel mower will produce a smooth, even cut with few or no missed grass blades. For Kentucky blue, Merion blue, and fescue lawns, the maximum height at which a good, even cut the first time over can be assured is about $1\frac{1}{2}$ inches. For St. Augustine, Bermuda, and Zoysia lawns, it is about $1\frac{3}{4}$ to 2 inches.

The lawn itself will govern the maximum height for good cutting. Healthy, well-fed lawns with sturdy grass blades may permit going above the limits specified. Sickly, under-fed, or shady lawns with limp grass will almost certainly need lower cutting heights.

No reel mower is a brush cutter and none is designed to cut hayfield high grass.

For the home owner who cares about appearance and who is willing to cut frequently enough, the reel mower is the ideal machine.

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 carries a separate warranty by the manufacturers. For engine service, contact your local engine service headquarters.

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

NOTE: 90 Days Warranty for Commercial Use.