

ASSEMBLY, OPERATING INSTRUCTIONS
AND PARTS LIST FOR

ROTARY MOWER

FOR
SEARS
SUBURBAN
RIDING TRACTOR



MODEL NUMBER
917.60642



SEARS, ROEBUCK AND CO.—U.S.A.
SIMPSONS-SEARS LIMITED—CANADA

PRINTED IN U.S.A.

INTRODUCTION

Although this Mower is simple to operate and care for, it is very important that instructions as outlined in this manual be studied and followed very closely before beginning to assemble.

Each Mower is given a thorough inspection before shipment, however, it is important that it be again checked at the time of receipt to ascertain if any damage has occurred in transit.

The Mower shipment consists of:

One Bundle 606 X 51

OPTIONAL EQUIPMENT

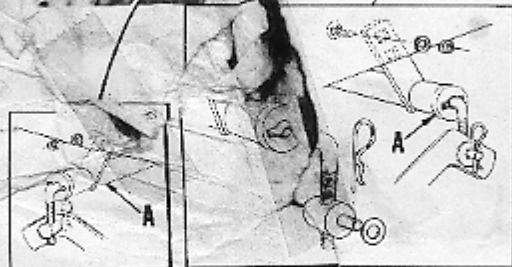
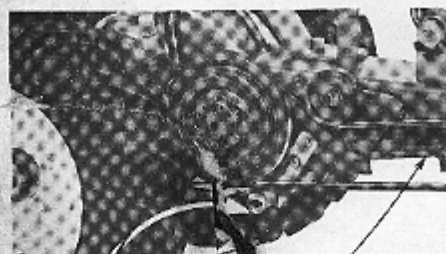
Catalog No. 9911

606 X 52 Leaf Mulcher

SEARS, ROEBUCK AND CO. and SIMPSONS-SEARS LIMITED reserves the right to make any changes in design and changes or improvements without imposing any obligation to install the same upon its implements heretofore manufactured.

Setting Up, Operating Instructions and Safety Precautions should be studied very closely before beginning to assemble your mower. A number at the beginning of a paragraph in the following instructions refers to an arrow in the adjoining figure, except when otherwise stated. When R.H. (Right Hand) and L.H. (Left Hand) are used, it should be understood to mean from a position behind and facing the mower (or direction of travel).

SETTING UP INSTRUCTIONS



L.H. SIDE

R.H. SIDE

FIG. 1

Remove mower from carton and cut all wires.

NOTE: The two extra thick flat washers found in bag of parts must be saved for use in Step 16, Page 4.

1. Bolt rear hanger (A) to tractor frame as shown with three (3/8 - 16 UNC x 3) and one (3/8 - 16 UNC x 1 1/2) carriage bolt, lockwashers and nuts found in bag. The 1/4 inch bolt to lower R.H. side.

NOTE: Carriage bolt heads inside of frame. Refer to Fig. 1.

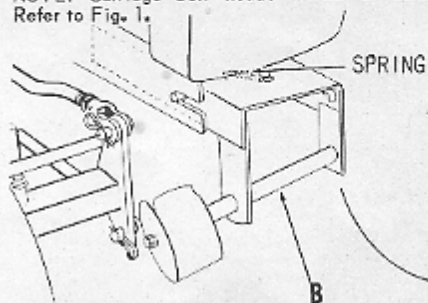


FIG. 2

2. Assemble idler shaft assembly (B) to front of tractor frame and hook spring into hole in rear of front axle bracket and hole in front of idler frame. Refer to Fig. 2.

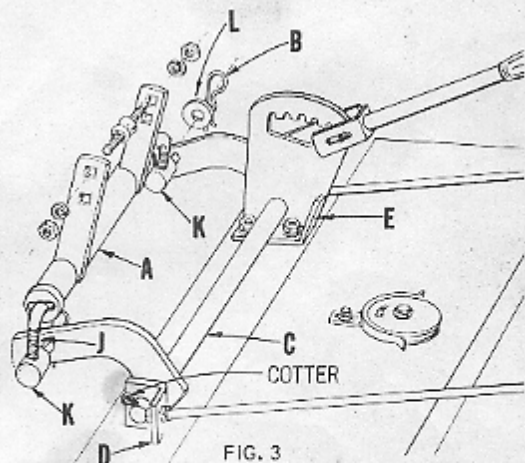


FIG. 3

3. Remove cotter from end of lift lever shaft and remove lift lever weldment (C) from L.H. lift shaft bracket, and insert in R.H. lift shaft bracket (D). Insert cotter in shaft and spread cotter. Refer to Fig. 3.
4. Remove spring retainers (B) and flat washers (L) from adjusting nuts (K). This releases rear hanger (A) from lift lever so that hanger can be bolted to tractor.

SETTING UP -- CONTINUED

5. Assemble lift lever quadrant (E) to top of mower housing with two (3/8 - 16 UNC x 3/4) carriage bolts, lockwashers and nuts provided. Refer to Fig. 3.

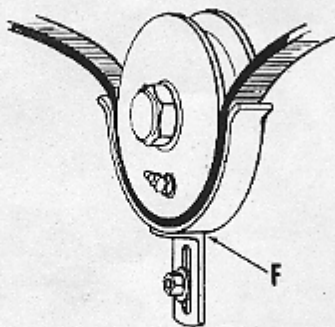


FIG. 4

6. Loosen nut holding belt guide (F) to belt cover and assemble belt over center mandrel sheave. Readjust belt guide so that guide clears belt by 1/8" and tighten nut securely.

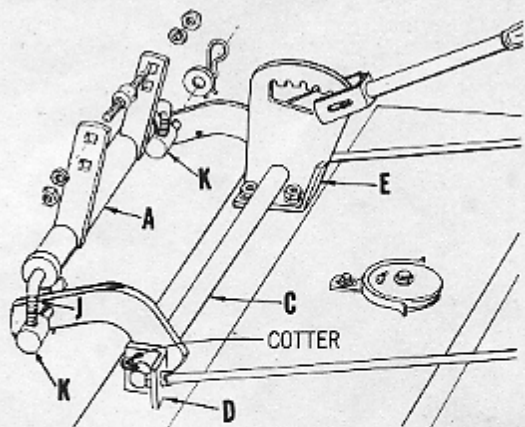


FIG. 6

Refer to Fig. 6.

NOTE: Washers and spring retainers to L.H. side of arms.

Remove these two plug buttons for lubricating.

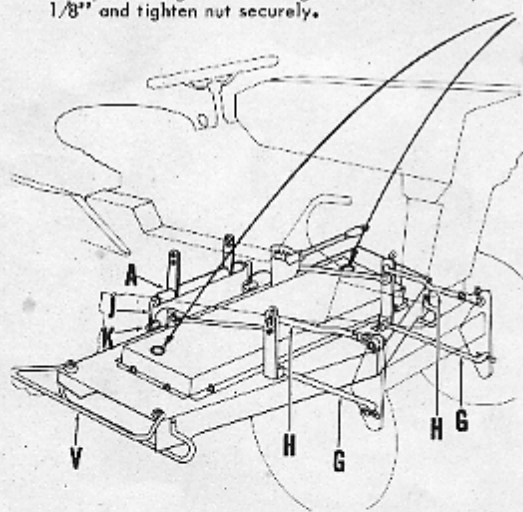


FIG. 5

Steps 7, 8, 9 and 10 refer to Fig. 5.

7. Slide mower assembly under tractor from L.H. side.
8. Assemble lower parallel rods (G) to mower and tractor as shown. Secure with retainer springs.
9. Assemble upper parallel rods (H) to mower and tractor with clevis to front axle as shown. Secure with retainer springs.
10. Secure adjusting nuts (K) to arms on lift lever with (9/16 x 1-3/8 x 12 Ga., Cad. Plated) washers and spring retainers.

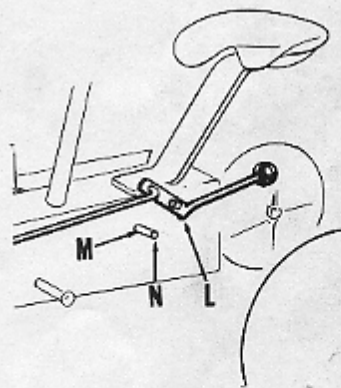


FIG. 7

Refer to Fig. 7.

11. Assemble belt tightener lever (L) to L.H. frame side as shown with (3/8 - 24 UNF x 1 1/2) Cad. Plated, Heat Treated) bolt, (7/16 x 1 x 14 Ga.) flat washer and bushing provided.
12. Assemble bushing (M) and finished hex bolt (N) (3/4 - 20 UNC x 1 1/2) in L.H. frame side for belt tightener lever stop.

SETTING UP -- CONTINUED

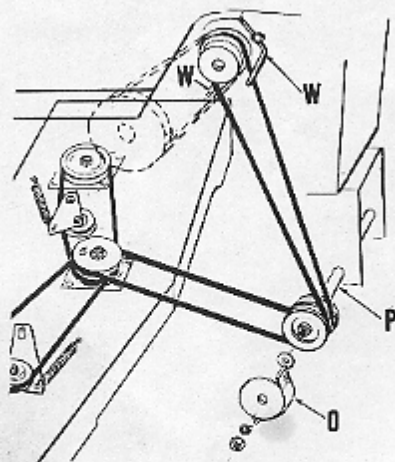


FIG. 8

- Remove nut, lockwasher and belt guard (O) from front idler shaft (F), place belt on idler sheaves and on engine pulley as shown. Replace belt guard and secure with nut and lockwasher.

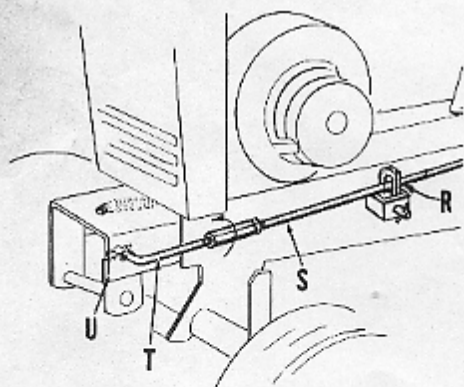


FIG. 9

Steps 13 and 14 refer to Fig.'s 7 and 9.

- Slip belt tightener rod guide (R) on long belt tightener link (S). Assemble long link (S) to belt tightener lever (L) and secure with cotter.
- Bolt belt tightener rod guide (R) to latch pin bracket on tractor and assemble front end of tightener link (T) to idler frame (U) at the same time and secure with retainer spring. See "Belt Adjustment", on Page 5, for adjustment. Turn up link adjustment sleeve to tighten belt.
- Refer to Fig. 5. Assemble guard (V) to R.H. side of mower housing with (3/8 x 1) carriage bolts (7/16 x 1 x 14 Ga.) washers and nuts provided.

Refer to Fig. 8.

- Assemble belt guides (W) to engine as shown with (5/16 x 1) finished hex bolts and extra thick washers provided.

Refer to Fig. 8.

NOTE: There are four bolts provided; two with fine threads and two with coarse threads. Fine thread bolts are used on "600" tractor engine, and coarse thread bolts are used on "725" engine.

Belt guard (O) must clear belt by 1/8 inch when belt is tight.

Mower is completely set up. See Page 5 for leveling and tilt of mower.

TO REMOVE MOWER FROM TRACTOR

- Remove belt from engine pulley.
- Remove spring retainer from front end of belt tightener link, unlock spring from frame and front axle bracket and remove idler shaft assembly and belt from frame. Refer to Fig. 9.
- Remove four spring retainers from ends of upper and lower parallel links, and remove links. Refer to Fig. 5.
- Remove two spring retainers and flat washers from adjusting nuts, and slide mower out from under L.H. side of tractor. Belt tightener lever and links can be left on tractor, but adjusting rods must be removed from rear hanger.

OPERATING INSTRUCTIONS

Read "Safety Precautions" on Page 5 carefully before operating your mower.

- With tractor engine running at full throttle, engage mower belt tightener lever slowly. CAUTION: Never engage mower except when SITTING on tractor seat and keep hands and feet from beneath the housing.
- Engage tractor clutch slowly. Have speed changer lever to the extreme rear and move forward slowly to increase ground speed until engine is loaded to a reasonable point.
- Height of cut can be adjusted by means of the lift lever. Moving the lever forward lowers the mower, while moving it backward raises the mower. The lever latch is actuated by depressing the latch button at the top of the lever handle. Each notch changes the height of cut approximately 1/2 inch. Should some intermediate height be desired, this can be obtained by lengthening or shortening each of the adjusting rods (J, Fig. 3) an equal amount. This adjustment does not affect the fore and aft tilt of the mower, since the mower is attached to the tractor by means of the parallel linkage which causes it to raise and lower the same at the front as at the rear.
- When mowing next to buildings and/or flower beds the tractor should be driven in a counter-clockwise direction so that the discharge of the mower will be away from the building or flower bed, i.e. the discharge will be onto the uncut area. The mower can be permitted to discharge onto the uncut area, if desired, except when cutting very tall grass which would tend to block the discharge opening of the mower.

For "Tall Grass or Weeds", see Page 6.

SAFETY PRECAUTIONS

It is imperative in operating and handling grass cutting equipment that certain normal precautions be observed to prevent the possibility of injury or damage.

Please read the rules for safe operation before you assemble or use your lawn cutting equipment.

1. Never start the engine when anyone is near.
2. Never place hands or feet under the machine.
3. Do not attempt to clean blade housing, or to otherwise clean, adjust or repair machine before stopping tractor engine.
4. Keep blades properly balanced.
5. Never leave machine running unattended.
6. Always replace spring washer, slotted nut, and cotter when replacing blade, and check slotted nut at frequent intervals to make sure it is tight, and cotter is in place.
7. Always keep hands and feet and loose clothing away from spinning blades and belts.
8. Keep rod guide and bracket in place at all times.
9. Remove stones, wires, cans, boards, branches, bones and other foreign objects from area before each mowing. Avoid striking rocks or roots. Any of the above, if struck by the mower blade, may be thrown, causing injury to operator, to property, or to the mower itself.
10. Never run engine inside a building without opening all doors and windows.
11. Never fill the gasoline tank while the engine is hot, and wipe off any gasoline that might be spilled.
12. Only persons acquainted with the rules of safe operation should be permitted to use mower.
13. No minor should operate this machine unless properly supervised.

MAINTENANCE AND SERVICE INSTRUCTIONS

LUBRICATION

Starting each day, lubricate center and outer mandrels with heavy lithium or pressure gun grease. Apply a few drops of motor oil to all pivot points; parallel links, lift links, clutch lever shaft, lift lever shaft, lever latch and between the inner and outer frame bars on the mower.

ADJUSTMENTS

Level from R.H. to L.H. side.

1. Drive tractor, with mower mounted, onto a smooth surface. Have tires properly inflated.
2. Measure height between floor and cutting edge at tip of R.H. blade and L.H. blade when cross-wise of the machine.
3. Adjust length of adjusting rods to raise or lower sides of machine to make both blades the same height.
4. Secure by replacing washers and spring retainers in adjusting nuts.

TILT FROM FRONT TO BACK

With tractor on a level surface and tires properly inflated, position R.H. and L.H. blades so that they are parallel to the tractor frame. Measure the height of the blade tip from the ground at the front and then rotate 1/2 turn and measure at the rear. The measurement at the rear should be 1/4 to 3/8 greater than that at the front. Lengthen or shorten upper parallel links, Figure 5, Illustration H, to obtain this difference. One turn will change the difference between blade tip height at front to rear approximately 5/32 inch. This tilt is required to avoid "double cutting" which requires additional power and impairs the functional performance of the machine.

BELT ADJUSTMENT

Belt from engine to center mandrel.

Turning the link adjustment sleeve adjusts length of links. The length of these links adjusts belt tension. With belt tightener lever pushed forward against stop, loosen lock nut on rear link and turn link adjustment sleeve up to lengthen links or tighten belt. Tighten lock nut against sleeve. Belt must be just tight enough to prevent slipping.

Belts from center mandrel to outside mandrel.

These belts are spring loaded and no adjustment is necessary.

REPLACEMENT OF BELTS

Engine to mower belt.

Remove mower from tractor. See Page 4.

1. Remove nut holding belt guard to belt cover and remove belt. Install new belt and replace guard. Adjust guard for 1/8 inch clearance of belt when belt is tight.

Outside Mandrel Belts.

Use steps outlined above, remove brace rods and bolts holding belt cover to mower housing and remove belt cover. Roll belts from sheaves and install new belts. (On left hand mandrel it is necessary to unhook spring to remove belt). Replace cover on housing. Tighten all bolts securely.

DAILY MAINTENANCE

Make sure all nuts on bolts are tight and cotters spread. Keep blades balanced and sharp. Observe all safety precautions. Keep mower lubricated.

TALL GRASS OR WEEDS

When mowing in tall grass or weeds, remove shield from under rear center of mower. This allows material to move out from under mower quicker, and requires less power. However, when mowing normal height grass, replace shield under mower. This shield helps prevent grass clippings from dribbling out the back of mower. Place speed changer in slow range for cutting heavy grass. Refer to Fig. 10.

AFTER EACH USE

Immediately after each use, wash under mower housing. Use a water hose with water pressure to clean under mower housing while clippings are fresh.

When clippings dry under housing, it is necessary to scrape them from under housing.

BEARING ADJUSTMENT

The Timken bearings on the mandrel shaft are correctly adjusted at the factory and should run without excessive heating. After long service, these bearings may develop play. They can be adjusted as follows:

1. Remove belt from mandrel pulley.
 2. Loosen the two set screws in mandrel pulley.
 3. Tighten elastic stop nut not more than 1/12 turn at a time until shaft is difficult to turn. Back off nut 1/12 turn. Strike end of shaft with a heavy brass hammer. Check shaft to see that it turns freely. If it does not, repeat the above process. IMPORTANT: 1/12 turn of hex slotted nut is .005; end play must not exceed .006.
- CAUTION: Do not adjust bearings too tight. Mandrel should turn freely after adjustment.
4. Reassemble. Tighten nuts securely.

STORAGE

When the mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grass, leaves, etc. Give blades a good coat of grease or rust preventative. Store in a clean, dry area.

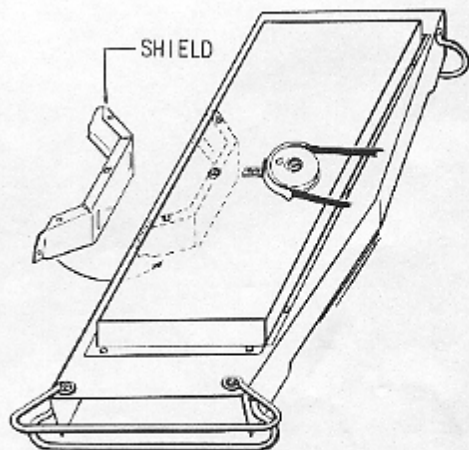


FIG. 10

another free manual from www.seartractormanuals.com

HOW TO ORDER REPAIR PARTS

SEARS ROTARY MOWER -- MODEL NUMBER 917.60642

The above number is the Model Number of your SEARS ROTARY MOWER. It will be found on a plate attached to the top of the idler shaft assembly. Always mention the Model Number of your mower when communicating with us or when ordering repair parts.

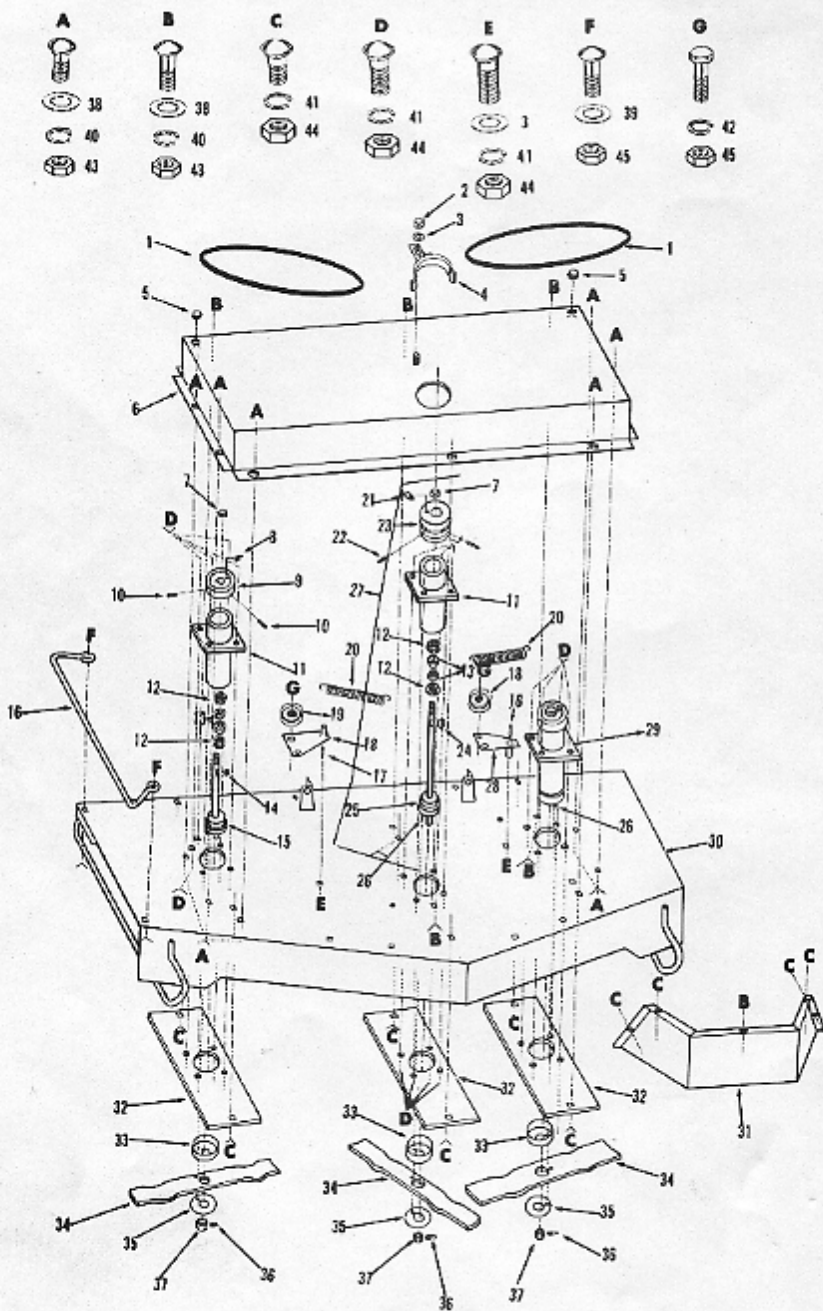
All parts listed herein may be ordered through SEARS, ROEBUCK AND CO. or SIMPSONS-SEARS LIMITED. When ordering parts by mail from the mail order house which serves the territory in which you live, selling prices will be furnished on request or parts will be shipped at prevailing prices and you will be billed accordingly.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST:

1. The PART NUMBER.
2. The PART NAME.
3. The MODEL NUMBER -- 917.60642.
4. The NAME of implement -- ROTARY MOWER.

Each part has been given a Key Number or Letter which is used only as a guide to find the part number. Do not use the Key Number or Letter when ordering repair parts.

SEARS ROTARY MOWER -- MODEL NUMBER 917.60642



For Parts List -- See Page 9.

PARTS LIST

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	4833H	V-Belt (Center to Outer Mandrels)	28	606A236	Belt Tightener Bracket and Bushing, L.H.
2	1685H	Gripco Nut, 5/16 - 18 UNC	29	606A240	Mandrel Sheave Assembly with Sheave - Outer
3	19121414	*Washer, 3/8 x 7/8 x 14 Ga. Cad. Plated	30	606A244	Housing Weldment
4	606A254	Belt Guide and Bracket	31	4805H	Shield
5	4829H	Plug Button	32	4820H	Mandrel Reinforcement
6	606A253	Belt Cover and Weld Bolt	33	9250M1	Hub Cap
7	4831H	Elastic Stop Nut, 1/4 - 16 UNF 2	34	4828H	Blade
8	6855M	Grease Fitting, 1/4 - 28 UNF Straight Male	35	9914M	Spring Washer
9	4823H	Mandrel Sheave - Outer	36	06010420	*Cotter Pin, 1/8 x 1 1/4
10	17890510	*Screw, Hex Socket Headless Set, C.P. Nylock 5/16 - 18 UNC x 5/8	37	03381000	*Nut, ASF Hex Slotted 5/8 - 18 UNF
11	606A238	Mandrel Tube and Cups	38	19091016	*Washer, 9/32 x 5/8 x 16 Ga. Cad. Plated
12	1554H	Timken Cone, LM 11949	39	19141614	*Washer, 7/16 x 1 x 14 Ga. Cad. Plated
13	1553H	Timken Cup, LM 11910	40	10030400	*Washer, Lock 1/4
14	9943M	Woodruff Key 1/4 x 1	41	10030500	*Washer, Lock 5/16
15	606A237	Shaft and Flange - Outer	42	10030600	*Washer, Lock 3/8
16	4781H	Guard	43	03220400	*Nut, ASF Hex 1/4 - 20 UNC Cad. Plated.
17	4969H	Bushing	44	03030500	*Nut, ASF Hex 5/16 - 18 UNC
18	606A235	Belt Tightener Bracket and Bushing, R.H.	45	03220600	*Nut, ASF Hex 3/8 - 16 UNC
19	4827H	Grooved Idler	A	02230404	*Bolt, Short Shoulder Carriage 1/4 - 20 UNC x 1/2 Cad. Plated
20	4301H	Spring	B	02010406	*Bolt, Carriage 1/4 - 20 UNC x 3/4 Cad. Plated
21	6842M	Grease Fitting, 1/4 - 28 UNF 45° Male	C	02010506	*Bolt, Carriage 5/16 - 18 UNC x 1/4
22	17890610	*Screw, Hex Socket Headless Set, C.P. Nylock 3/8 - 16 UNC x 5/8	D	02010508	*Bolt, Carriage 5/16 - 18 UNC x 1
23	4824H	Mandrel Sheave - Center	E	02010516	*Bolt, Short Shoulder Carriage 5/16 - 18 UNC x 2
24	6820M	Woodruff Key, 1/4 x 1	F	02240608	*Bolt, Carriage 3/8 - 16 UNC x 1, Cad. Plated
25	606A241	Shaft and Flange - Center	G	04010622	*Bolt, Finished Hex 3/8 - 16 UNC x 1-3/8
26	9939M	Roll Pin, 1/4 x 5/8			
27	606A243	Mandrel Sheave Assembly with Sheave - Center			

*Standard Hardware Item -- may be purchased locally.

For Illustration -- See Page 8.

SEARS ROTARY MOWER -- MODEL NUMBER 917.60642

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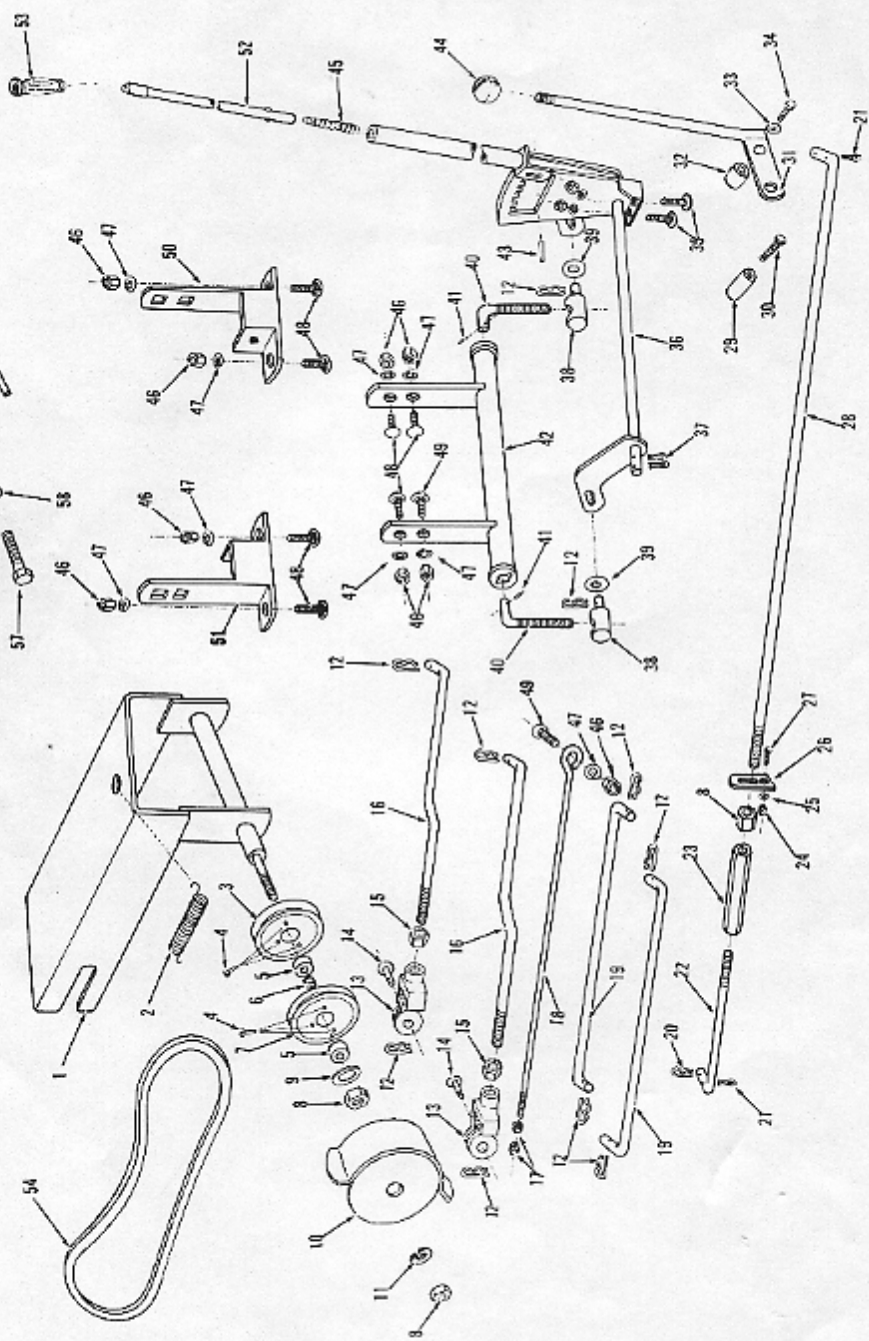


FIG. 10 For Parts List -- See Page 11.

PARTS LIST

KEY PART NO.	DESCRIPTION	KEY PART NO.	DESCRIPTION
1 606A301	Idle Shaft Assembly	32 4959H	Bushing
2 4301H	Spring	33 19141614	*Washer, 7/16 x 1 x 14 Ga., Cad. Plated
3 5389H	Inside Idler	34 04770624	*Bolt, Finished Hex 3/8 - 24 UNF x 1 1/2, Cad. Plated
4 04470408	*Screw, Truss Head Slotted Machine 1/2 - 20 UNC x 1/2	35 02010606	*Bolt, Carriage 3/8 - 16 UNC x 3/8
5 697H	Bearing	36 606A256	Lift Lever Weldment
6 5386H	Bushing	37 06010620	*Cotter, 3/16 x 1 1/4
7 5388H	Outside Idler	38 4790H	Adjusting Nut
8 03290700	*Nut, Hex ASF 7/16 - 20 UNF	39 19182212	*Washer, 9/16 x 1-3/8 x 12 Ga., Cad. Plated
9 09151612	*Washer, 15/32 x 1 x 12 Ga.	40 4782H	Adjusting Rod
10 606A252	Belt Guide Weldment	41 175H	Roll Pin, 3/16 x 3/4
11 10030700	*Washer, Lock 7/16	42 606A251	Hanger - Rear
12 4940M	Retainer Spring	43 9465M	Roll Pin, 3/16 x 1 1/2
13 1123H	Clevis	44 9439M	Control Knob
14 6978A	Rivet, Drilled B.H. 5/8 x 1 1/2 Cad. Plated	45 2876H	Spring
15 03301000	*Nut, Hex ASF Jam 5/8 - 18 UNF	46 03220600	*Nut, Hex ASF 3/8 - 16 UNC
16 4784H	Parallel Arm, Upper	47 10030600	*Washer, Lock 3/8 - 16 UNC
17 03220600	*Nut, Hex ASF 3/8 - 16 UNC	48 02240608	*Bolt, Carriage 3/8 - 16 UNC x 1, Cad. Plated
18 4777H	Housing Brace	49 02240610	*Bolt, Carriage 3/8 - 16 UNC x 1 1/2, Cad. Plated
19 4785H	Parallel Arm, Lower	50 606A249	Hanger, Complete - R.H.
20 4939M	Retainer Spring	51 606A250	Hanger, Complete - L.H.
21 06010512	*Cotter, 5/32 x 3/4	52 606A248	Lever Plunger and Button
22 4778H	Belt Tightener Link, Front	53 2895H	Handle Grip
23 4791H	Link Adjustment Sleeve	54 4832H	V-Belt (Engine Pulley, Outside Idler, Idler sheave and Center Mandrel)
24 03220400	*Nut, Hex ASF 1/4 - 20 UNC	55 4775H	Belt Guide
25 10030400	*Washer, Lock 1/4	56 04770516	*Bolt, Finished Hex 5/16 - 24 UNF x 1, Cad. Plated for "600"
26 4970H	Belt Tightener Rod Guide	57 04760516	*Bolt, Finished Hex 5/16 - 18 UNC x 1, Cad. Plated for "725"
27 04760410	*Bolt, Finished Hex 1/2 - 20 UNC x 5/8, Cad. Plated	58 19121610	*Washer, 3/8 x 1 x 10 Ga.
28 4780H	Belt Tightener Link, Rear	---	917.60642 Instruction and Parts Book
29 4835H	Bushing		
30 04760424	*Bolt, Finished Hex 1/2 - 20 UNC x 1 1/2, Cad. Plated		
31 606A257	Belt Tightener Lever		

For Illustration -- See Page 10.

*Standard Hardware Item - may be purchased locally.

697-H - BEARING



SAFETY FIRST

CAUTION: Keep all bolts and nuts securely tight. Check at regular intervals.

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