

ASSEMBLY, OPERATING INSTRUCTIONS  
AND PARTS LIST FOR  
SICKLE BAR MOWER  
MODEL NO. 917.60656



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

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## 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 through 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.

One Bundle 606 X 78

SEARS, ROEBUCK AND CO. and SIMPSON-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).

Cut all wires.

NOTE: The one extra thick flat washer found in bag of parts must be saved for use in Step 13 Page 4.

### SETTING UP INSTRUCTIONS

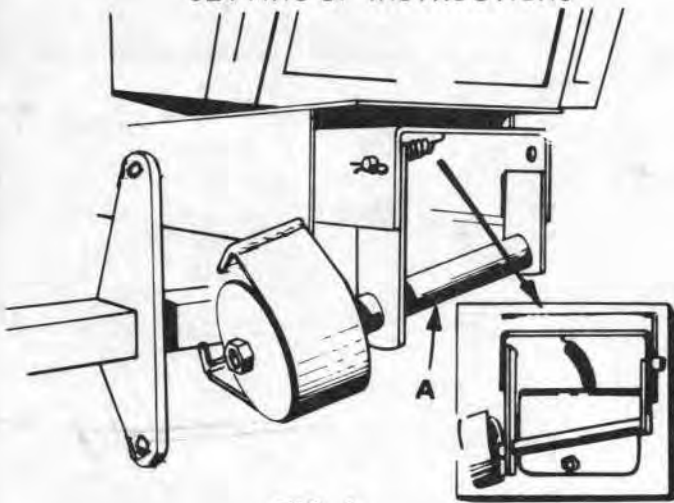


FIG. 1

1. Assemble idler shaft (A), to front of tractor frame, and hook spring into hole in rear of front axle bracket and hole in front of Idler frame as shown.

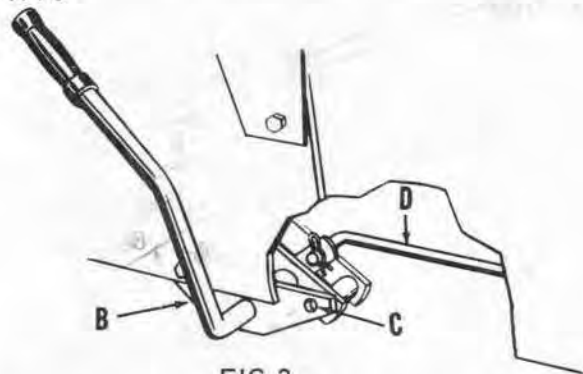


FIG. 2

2. Assemble belt tightener lever (B) to Right hand side of tractor as shown. NOTE: Bolt (C) must be removed from tractor. Use two  $3/8 \times 1\frac{1}{2}$  inch bolts provided with mower, for attaching lever.
3. Assemble belt tightener link (D) and adjusting pin to belt tightener lever (B), and secure with spring retainer as shown.

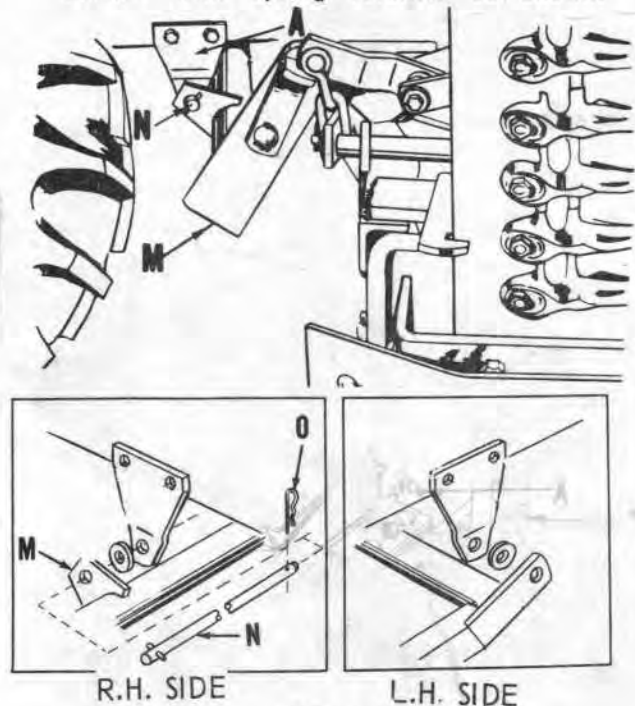


FIG. 3

4. Slide mower mounting frame beneath tractor as shown in Fig. 3. Line up hole in frame (M) with hole in rear hanger (A), refer to Fig.'s 3 and 4. Slide hanger shaft (N), with roll pin attached, through holes in frame (M) and rear hanger (A) from L.H. side. NOTE: Place a cushion washer (shipped in bag of parts) over shaft (N) and between frame (M) and rear hanger (A) at both R.H. and L.H. sides of tractor. Secure R.H. side with spring retainer (O), shipped in bag of parts.

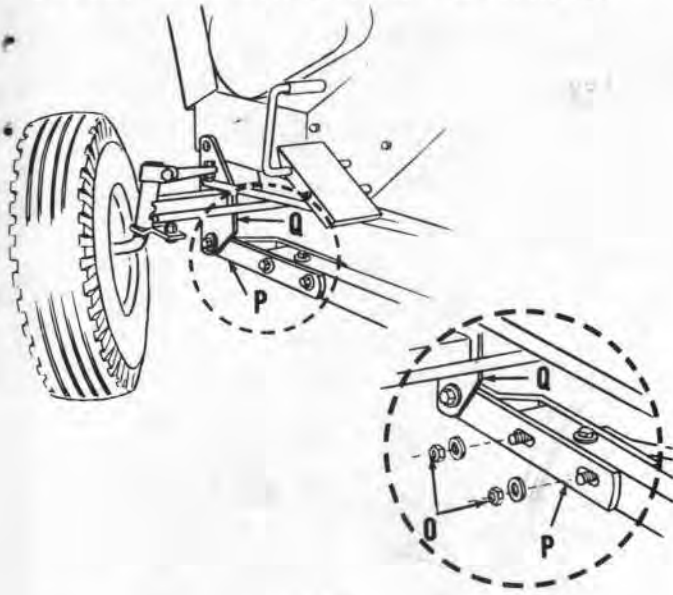


FIG. 4

NOTE: If holes in front frame straps weldment (P) and tractor mounting bracket (Q), do not align, it will be necessary to loosen two 7/16 bolts (O) in front frame straps weldment (P) and frame weldment with bearing cups to line up holes. Retighten 7/16 bolts securely.

5. Refer to Fig. 4. Insert remaining bushing shipped in bag of parts into hole in front frame straps (P). Secure front frame straps to tractor mounting bracket (Q) with a 5/8 x 2 finished hex bolt, flat washer 21/32 x 1-5/16 x 13 Ga., 5/8 lockwasher and hex nut shipped in bag of parts.

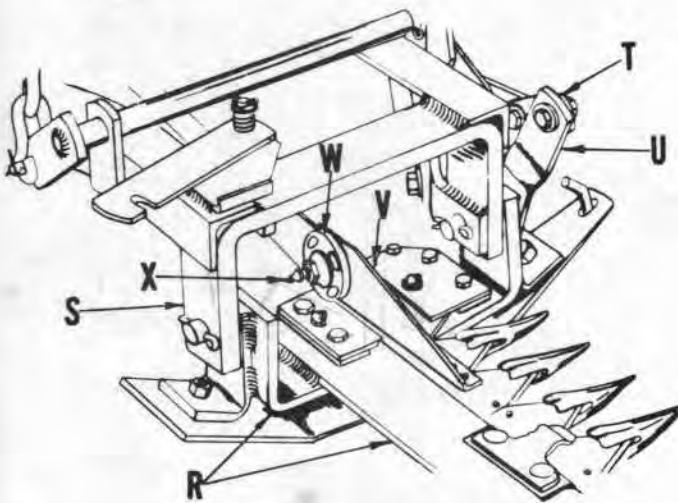


FIG. 5

6. Slide cutter bar and mounting bracket weldment (R) into position shown in Fig. 5, beneath yoke weldment (S). Pins of mounting bracket weldment enter holes in yoke weldment. Secure with the two cotter pins shipped in bag of parts.

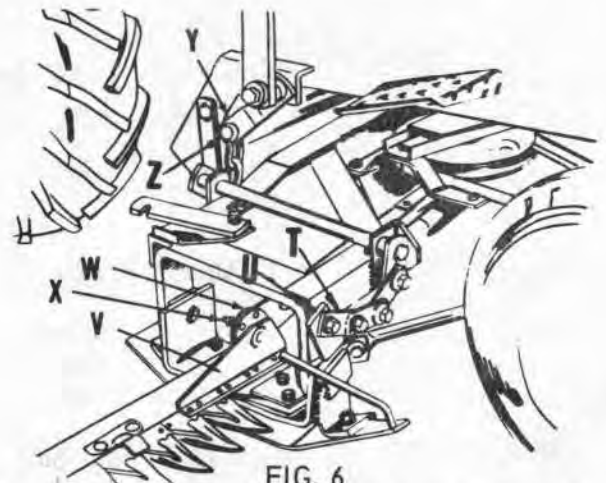


FIG. 6

7. Refer to Fig's. 5 and 6. Remove nut, lockwasher, bushing, flat washer and bolt from lift link (T). Assemble lift link (T) to cutter bar lift arm (U) with items previously removed.
8. Remove huglock nut and outer washer from pin welded to knife head (V). Leave inner washer on pin. Position end of pitman assembly (W), over pin -- it will be necessary to have knife assembly in extreme R.H. position. Now slide outer washer, previously removed, over pin and secure with huglock nut. Assemble the grease fitting (X), shipped in bag of parts, into position shown.
9. Remove cotter pin (Y) from rivet (Z) and remove rivet. Attach clevis to foot lift lever as shown in Fig. 6 with rivet and secure with cotter pin.

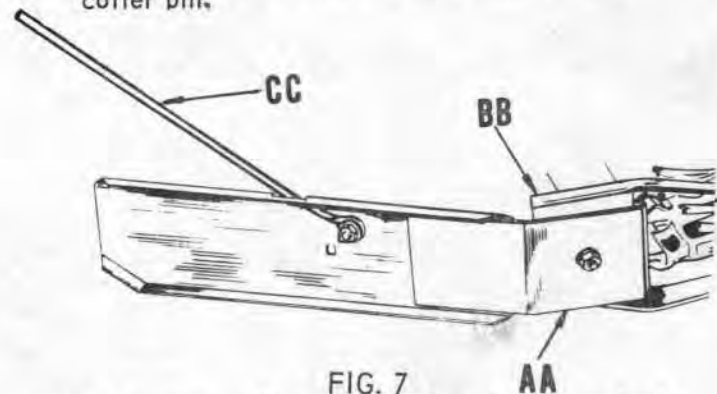


FIG. 7

10. Secure swathboard with plate (AA) attached to outer runner plate (BB) with a 3/8 x 1 square neck carriage bolt, 3/8 lockwasher and Gripco lock nut. Bolt, lockwasher and nut shipped in bag of parts.

NOTE: Tighten Gripco lock nut against lockwasher tight enough to prevent rattling but loose enough to permit swathboard to move freely up and down.

11. Attach swathstick (CC) to swathboard (AA) with a 3/8 x 1 square neck carriage bolt, flat washer 7/16 x 1, lockwasher 3/8 and hex nut. Bolt, washers and nuts shipped in bag of parts.

NOTE: There are three locations in the swathboard for the swathstick. For your proper application refer to "Swathstick Adjustment".

## SETTING UP INSTRUCTIONS -- CONTINUED

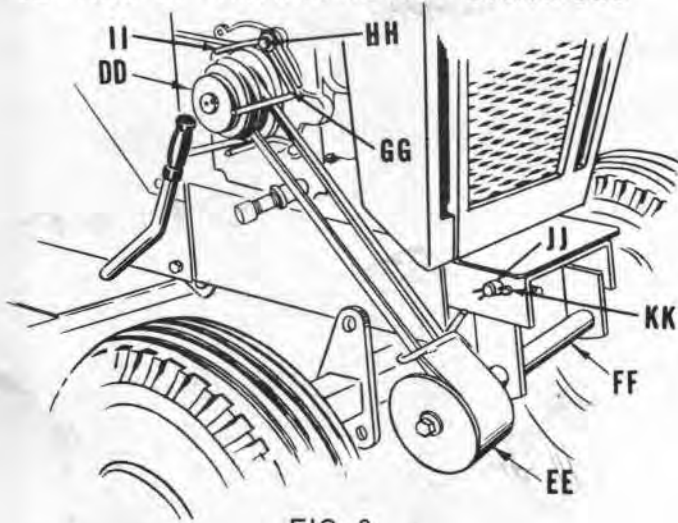


FIG. 8

12. Remove nut, lockwasher, and belt guard (EE), from shaft (FF). Place belt on idler sheaves (under belt guard EE) and on engine pulley (DD) as shown. Replace belt guard (EE), and secure with lockwasher and nut. Refer to Figure 8.
13. Remove bolt (HH) holding short belt guide (II) on engine and assemble belt guide (GG) furnished over short belt guide (II) with 3/8-16x1 1/4 bolt and 7/16x1x10 Ga. washer furnished in bag of parts. Refer to figure 8. NOTE: Adjust Belt guides (EE) (GG) and (II) so that they clear belt by 1/8 inch when belt is tight, (belt tightener lever pushed forward or engaged).
14. Assemble adjusting pin (JJ) to idler Frame (FF) and secure with spring retainer (KK) as shown. Adjust for proper belt tension see belt adjustment Page 5. Check belt guides for proper clearance.

### SAFETY PRECAUTIONS

It is imperative in operation and handling grass or weed 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 mower.

1. Never start the engine when anyone is near.
2. Never place hands or feet near sickle bar.
3. Do not attempt to clean, adjust or repair machine before stopping tractor engine.
4. Keep knife sections sharp.
5. Never leave machine unattended.
6. Always replace parts showing excessive wear.
7. Keep hands and feet and loose clothing away from moving belts.
8. No minor should operate this machine unless properly supervised.

## OPERATING INSTRUCTIONS

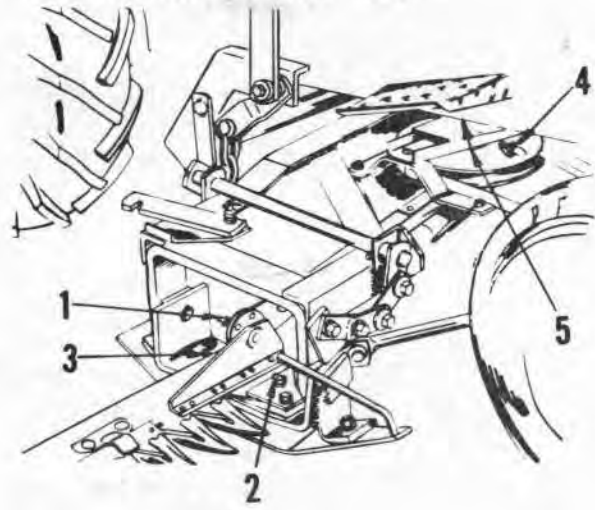


FIG. 9

1. Pitman bearing pin.
2. Front guide.
3. Rear Guide.
4. Flywheel.
5. Flywheel bearing tube.

NOTE: Use a good grade of gun grease. For intervals of lubrication, refer to "Lubrication Chart".

### KNIFE - PITMAN

Grease pitman and knife after every hour of operation. However, when mowing in sandy or gritty conditions it may be better to leave the knife run dry. The knife should be sharpened as often as necessary to maintain a good cutting edge. Keep the knife straight and true; any slight bend should be straightened.

Lubricate wear plates and knife clips with oil or grease every one or two hours of steady operation.

**DO NOT ATTEMPT TO LUBRICATE WHILE MOWER IS IN OPERATION.**

**CAUTION:** Run engine at reduced speed whenever possible to reduce vibration and wear on pitman and knife. Operating angle of cutter bar not to exceed 35° above level.

It is the responsibility of the operator to see that the area where the sickle bar will be used is free of all types of foreign material. This includes wire, rope, sticks, cans, bottles, pipe, rocks, etc. These represent potential dangers to the sickle bar and operator, and are certain to damage the sickle bar.

Always be on the alert for obstacles when mowing, and never leave the sickle bar in operation while unattended.

NOTE: Sickle bar must be in operation before beginning to move through material to be cut.

## MAINTENANCE AND SERVICE INSTRUCTIONS SWATHSTICK ADJUSTMENT

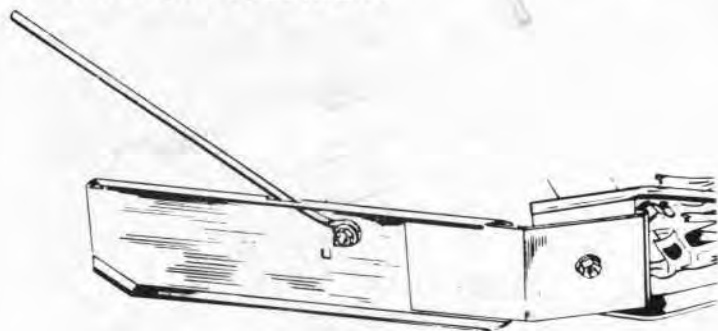


FIG. 10

There are three holes in swathboard for swathstick adjustment. Adjust to best turn crop being cut. Lower hole for higher weeds.

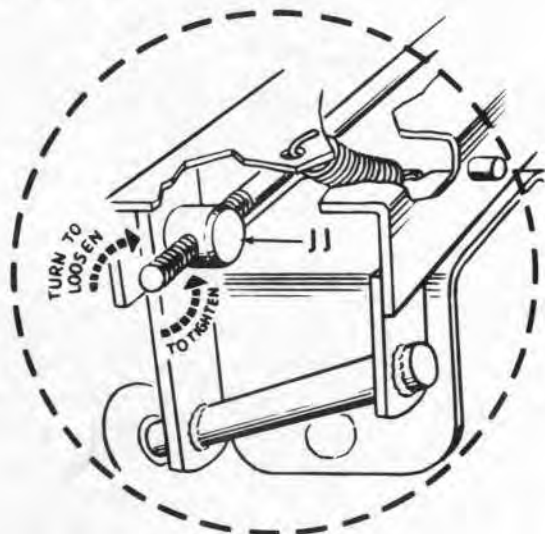


FIG. 11

### BELT ADJUSTMENT

Turning adjusting pin (JJ) figure 11 adjusts belt. Remove spring retainer (KK) in figure 8 and turn adjusting pin (D) figure 11 in a counter clockwise direction (when standing in front of tractor) to tighten belt.

Belt tightener lever requires fair amount of effort to engage lever (push forward) when belt is properly adjusted. Belts that slip wear out rapidly. Keep belt properly adjusted to prevent premature failure. Replace spring retainer in adjusting pin.

### LUBRICATION CHART

Your mower is lubricated through 5 grease fittings located as follows:

Pitman Bearing Pin	1
Front Guide	1
Rear Guide	1
Flywheel	1
Flywheel Bearing Tube	1

Refer to Fig. 9 for the location of these grease fittings.

## LUBRICATION -- CONTINUED

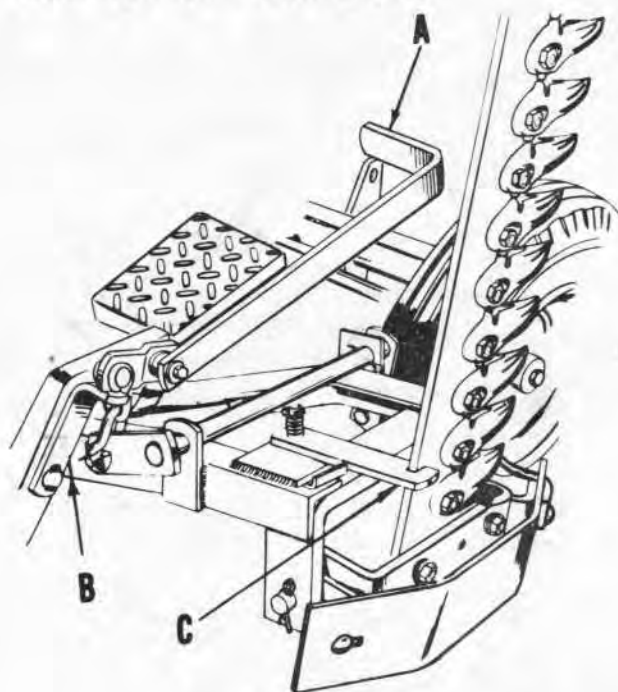


FIG. 12

Lubricate these fittings after every hour of operation, with a standard grease gun loaded with a general purpose automotive type grease. Before applying grease, wipe each fitting with a rag to remove dirt and grit. Avoid forcing dirt into the fittings with the clean grease.

Lubricate wear plates and knife clips with SAE #10 oil every one or two hours of steady operation.

**DO NOT ATTEMPT TO LUBRICATE WHILE MOWER IS IN OPERATION.**

### TO TRANSPORT

Refer to Fig. 12.

Stop tractor engine. Depress on foot lift lever (A) until latch bracket (B) can be positioned as shown in Fig. 12. Secure bar in upright position with transport strap (C).

### DAILY MAINTENANCE

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

### STORAGE

Before storing mower for any long period of time thoroughly clean away all dirt and debris. Wearing surfaces should be given a good coat of grease or rust preventive especially the mower knife. Store in a clean, dry area.

## MOUNTING 917.60656 CUTTER BAR MOWER TO 1965 OR OLDER TRACTORS

To Mount Mower to the following model tractors 917.60633, 917.60634, 917.60637, 917.60644, 917.60645, 917.60646 and 917.60647. It will be necessary to order Cat. No. 9919 kit. The kit consists of belt tightener lever assembly, rear hanger, engine pulley, belt guides, etc.

To Mount Mower to tractors built prior to 1964 (tractors with round front axles). It will be necessary to order Cat. No. 9917 offset tie rod kit, in addition to Cat. No. 9919 kit above. It consist of offset tie rod, template for mounting rear hanger, etc.

## HOW TO ORDER REPAIR PARTS

### SEARS SICKLE BAR MOWER--MODEL NUMBER 917.60656

The above number is the Model Number of your SEARS SICKLE BAR 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.

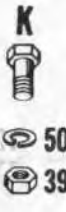
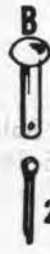
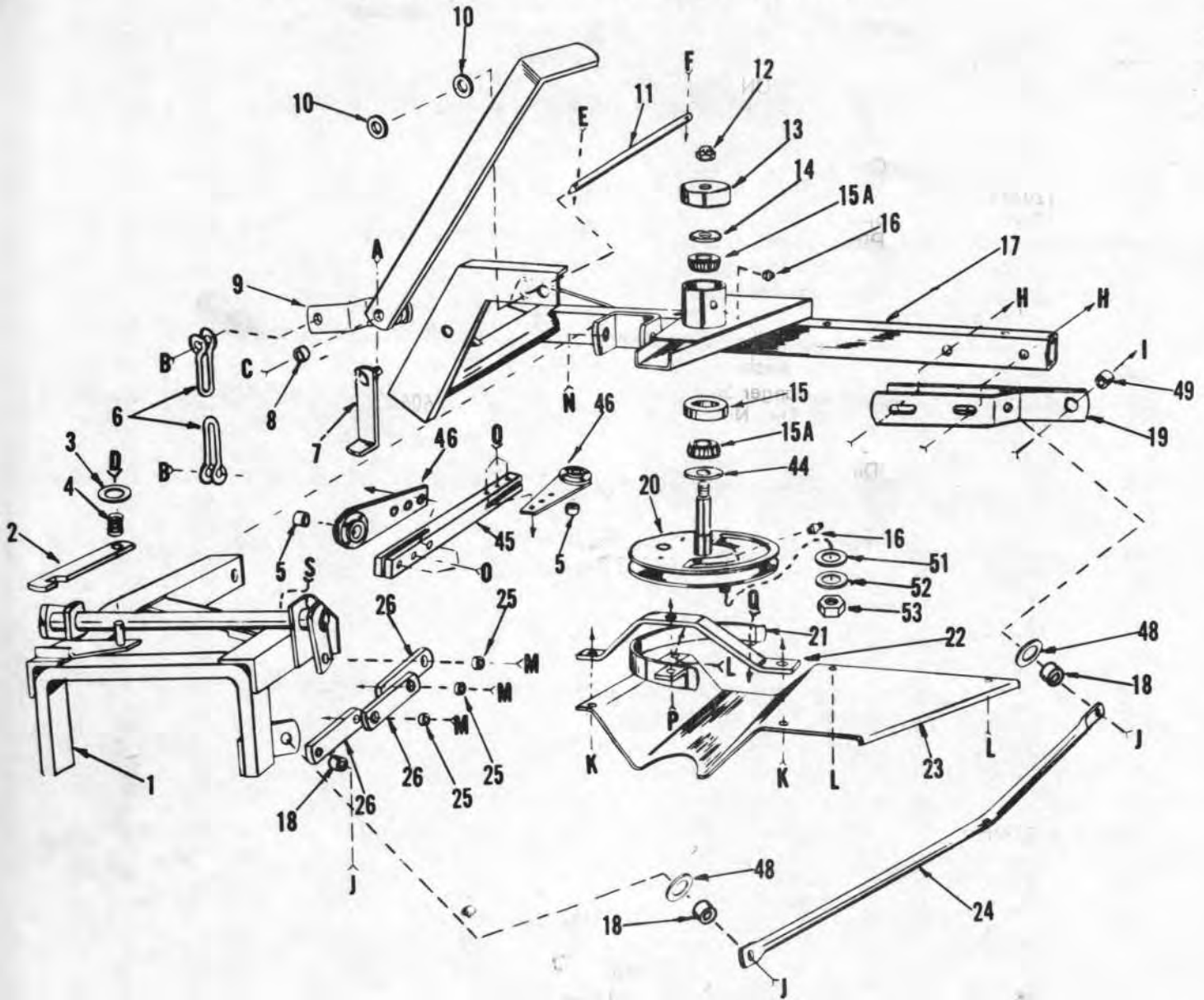
All parts listed herein may be ordered through SEARS, ROEBUCK AND CO. or SIMPSONS-SEARS LIMITED. When ordering parts by mail from the mail order house which serves the territory in which you live, selling prices will be furnished on request or parts will be shipped at prevailing prices and you will be 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 -- 917.60656.
4. The NAME of Implement -- SICKLE BAR MOWER.

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

SEARS SICKLE BAR MOWER -- MODEL NUMBER 917.60656



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PARTS LIST

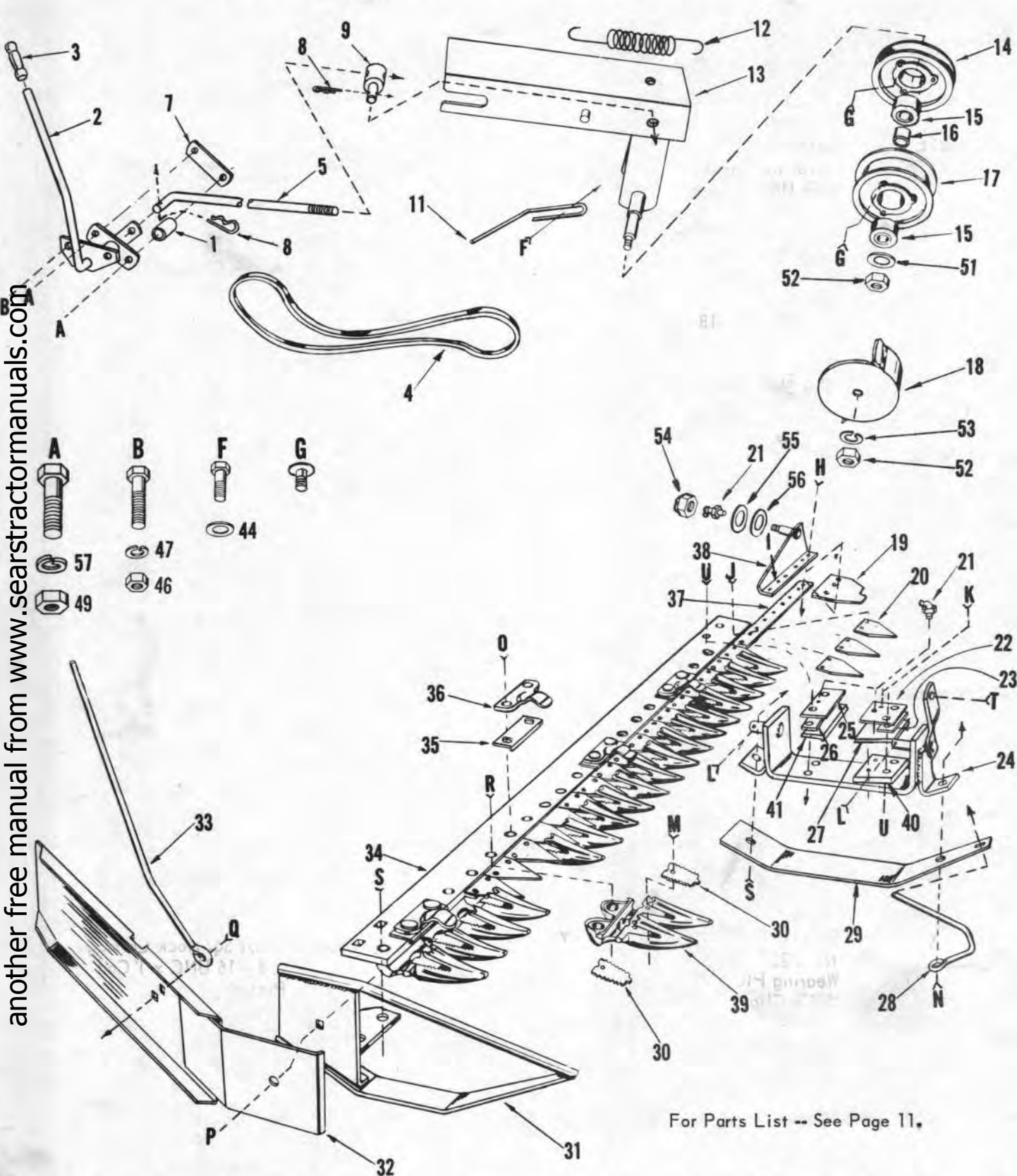
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	606A278	Yoke Weldment	41	120388	*Washer, Flat 7/16 x 1 x 14 Ga.
2	5252H	Cutter Bar Latch	42	120384	*Washer, Lock 1/2 Cad. Plated
3	120394	Washer, 13/32x13/16x16 Ga.	43	219434	*Nut Hex ASF 1/2-13 UNC Cad. Plated
4	1542U	Spring	44	5310H	Grease Retainer Washer
5	3990H	Pitman Bearing	45	5307H	Pitman Wood
6	5234H	Clevis	45A	606A282	Pitman and Bearings, Assembled (Includes Key No's 5, 46 and O)
7	606A290	Transport Strap and Rivet	46	606A304	Pitman Spring and Bearing Housing Assembled
8	6523H	Bushing	48	120388	*Washer, Flat 7/16 x 1 x 14 Ga.
9	606A362	Foot Lever Weldment	49	2623M	Bushing
10	5309H	Cushion Washer	50	120214	*Washer, Lock 5/16
11	5235H	Frame Hanger Shaft	51	5306H	Pitman Thrust Washer --Inner
12	5304H	Elastic Stop Nut, 5/8-18UNF -3	52	5305H	Pitman Thrust Washer Outer
13	5280H	Dust Cap	53	357H	Huglock Nut
14	131016	Washer, 21/32x1-5/16x13 Ga. Cad. Plated	A	103384	*Cotter Pin 1/8 x 3/4
15	1553H	Timken Cup, LM 1910 (2 Req.)	B	5297H	Rivet, Drilled
15A	1554H	Timken Cone, LM11949 (2 Req.)	C	122472	*Bolt, Finished Hex 1/2 - 13 UNC x 2 1/2
16	6855M	Grease Fitting, 1/4-28 NF - Str.	D	108632	*Cotter Pin 3/16x7/8
17	606A283	Frame Weldment with Bearing Cups	E	4940M	Retainer Spring
18	5277H	Bushing	F	1572H	Roll Pin
19	606A286	Frame Strap Front Weldment	H	122333	* Bolt, Finished Hex 7/16-14 UNC x 3
20	606A279	Flywheel Assembly	I	428691	*Bolt, Finished Hex 5/8 - 11 UNC x 2 Cad. Plated
21	606A287	Belt Guide Weldment - Flywheel	J	122145	*Bolt Finished Hex 3/8 - 16 UNC x 1 1/4
22	5249H	Flywheel Guard Bracket	K	122007	*Bolt, Finished Hex 5/16 - 18 UNC x 3/4 Cad. Plated
23	5282H	Flywheel Guard	L	120696	*Bolt, Finished Hex 5/16-18 UNCx 2 1/4 Cad. Plated
24	5237H	Pull Rod	M	120233	*Bolt Finished Hex 3/8 - 16 UNC x 1
25	7939M	Bushing	N	122491	*Bolt, Finished Hex 1/2-13 UNC x 3/4
26	5296H	Lift Link	O	106905	*Rivet, Truss Hd 1/4 x 1-3/8
28	103384	*Cotter Pin, 1/8x3/4	P	122017	*Bolt Finished Hex 5/16 - 18 UNC x 1 Cad. Plated
29	120390	*Washer, Flat 9/16 x 1-3/8x12 Ga.	Q	120696	*Bolt Finished Hex 5/16 - 18 UNC x 2 1/4 Cad. Plated
30	120384	*Washer, Lock 1/2	S	103408	*Cotter Pin 3/16 x 1 1/4
31	219434	*Nut, Hex ASF 1/2-13 UNC			
32	120389	*Washer, Flat 1/2x 1 1/4 x 14 Ga. (4 Req.)			
33	272232	*Nut, Hex ASF 7/16 - 14 UNC			
34	131016	*Washer, Flat 21/32 x 1-5/16 x 13 Ga., Cad. Plated			
35	121574	*Washer, Lock 5/8 Cad. Plated			
36	219436	*Nut, Hex ASF 5/8- 11 UNC Cad. Plated			
37	120382	*Washer, Lock 3/8			
38	219432	*Nut, ASF Hex 3/8 - 16 UNC			
39	219431	*Nut, Hex ASF 5/16 - 18 UNC Cad. Plated			
40	120393	*Washer, Flat 11/32 x 11/16 x 16 Ga., Cad. Plated			

For Illustration --  
See Page 8.

\*Standard Hardware Item --  
may be purchased locally.

SEARS SICKLE BAR MOWER -- MODEL NUMBER 917.60656

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For Parts List -- See Page 11.

## SEARS SICKLE BAR MOWER -- MODEL NUMBER 917.60656

## PARTS LIST

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	1689E	Bushing	48	5394H	Gripco Nut
2	606A353	Lever Weldment	49	219431	*Nut, Hex 5/16 ASF- 18 UNC Cad. Plated
3	4379H	Shift Handle Grip	51	120395	*Washer Flat 15/32 x 1 x 12 Ga.
4	5308H	V-Belt (Engine to Flywheel)	52	272233	*Nut Hex 7/16 - 20 UNC
5	6499H	Belt Tightener Link	53	120383	*Washer, Lock 7/16
7	6508H	Lever Stop Strap	54	357H	Huglock Nut
8	4940M	Retainer Spring	55	5305H	Pitman Thrust Washer -- Outer
9	6501H	Adjusting Pin	56	5306H	Pitman Thrust Washer -- Inner
10	219431	Hex Nut 5/16-18	57	120214	Lock Washer 5/16
11	4775H	Belt Guide	A	122040	Bolt, Hex 5/16-18 UNC x 1 1/2
12	4301H	Spring	B	180124	Bolt, Hex 3/8-16 UNC x 1 1/4 Grade 5 H.T. Cad. Plated
13	606A294A	Idler Shaft Assembly	F	180124	Bolt, Hex 3/8-16 UNC x 1 1/4 Grade 5 H.T. Cad. Plated
14	606A296	Idler and Bearing - Inner	G	144531	*Machine Screw, Truss Hd. 1/4-20 UNC x 1/2
15	697H	Bearing	D H	134827	*Rivet, FH. 7/32 x 3/4 (3 Req.)
16	5386H	Bushing	D I	110795	*Rivet R.H. 5/32 x 13/16 (5 Req.)
17	606A295	Idler and Bearing - Outer	D J	110791	*Rivet, R.H. 5/32 x 9/16 (35 Req.)
18	606A252	Belt Guide Weldment - Front	K	123316	*Bolt, Finished Hex 1/4-28 UNF x 1/2
19	5312H	Knife Head Plate	L	103419	*Cotter Pin 1/4 x 1 1/4
20	575X31	Knife Sections Only (Box of 25)	M	6802M	Rivet
21	6842M	Grease Fitting 1/4-28 NF - 45° (3 Req.)	N	126411	*Bolt, Sq. Neck Carriage 3/8-16 UNC x 1 1/2
22	5289H	Front Guide <i>2.60</i>	O	101536	Bolt, Sq. Neck Plow 3/8- 16 UNC x 1 1/4
23	5284H	Knife Head Spacer-Front <i>55</i>	P	120915	*Bolt, Sq. Neck Carriage 3/8 - 16 UNC x 1 Cad. Plated
24	606A280	Cutter Bar and Mounting Bracket Weldment (Includes Key No's 34, 23,27 and 40)	Q	120915	*Bolt Sq. Neck Carriage 3/8 - 16 UNC x 1 Cad. Plated
25	5290H	Rear Guide <i>1.95</i>	R	101535	*Bolt Sq. Neck Plow 3/8- 16 UNC x 1
26	5285H	Knife Head Spacer- Rear <i>70</i>	S	120915	*Bolt, Sq. Neck Carriage 3/8 - 16 UNC x 1
27	5247H	Wear Plate - Front	T	126402	*Bolt, Finished Hex 3/8 - 16 UNC x 1 1/4
28	5233H	Inner Runner Divider Rod	U	120918	*Bolt Finished Hex 3/8- 16 UNC x 1 1/2
29	5256H	Inner Runner			
30	575X32	Guard Plates (Box of 25)			
31	606A273	Outer Runner Weldment			
32	606A292	Swathboard Assembly			
33	5232H	Swathstick			
34	606A280	Cutter Bar and Mounting Bracket Weldment (Includes Key No's 23,24,27 and 40)			
35	4569M1	Wearing Plate <i>4. 1.55 ea</i>			
36	4572M	Knife Clip			
37A	606A285	Knife Assembly (Includes Key No's 19,20 and 38 and Rivets)			
37	5248H	Knife Back			
38	606A272	Knife Head and Pin			
39	575A53	Double Guard Assembly			
40	5254H	Front Wear Plate Base <i>3.00</i>			
41	5311H	Wear Plate - Rear <i>2.35</i>			
42	120388	*Washer, Flat 7/16 x 1 x 14 Ga.			
43	120380	*Washer, Lock 1/4			
44	19141610	*Washer Flat 7/16 x 1 x 10 Ga. Cad. Plated			
45	120382	*Washer Lock 3/8			
46	219432	*Nut, Hex 3/8 ASF-16 UNC			
47	120382	*Washer, Lock 3/8 Cad. Plated			

\*Standard Hardware Item --  
may be purchased locally.

For Illustration -- See Page 10.