

## PARTS LIST AND INSTRUCTIONS

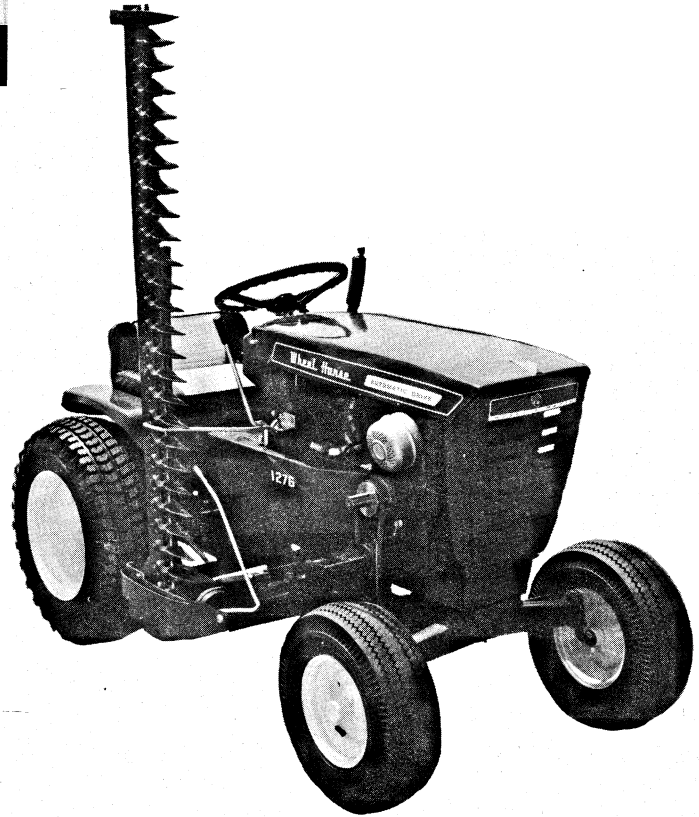


WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

# SIDE MOUNTED SICKLE

## SML-506

(Formerly SMS-506)



### ASSEMBLY

**A.** Place the tractor on which the mower is to be mounted on a clean smooth floor or other surface making sure that there is adequate clear space for the mounting of mower. Remove the mower parts from the box and arrange in a convenient manner along side the tractor.

**B.** Place the 59" belt, Part No. 1588, around the 2½" pulley in the center of the cross shaft and attach the shaft support assembly to the tractor frame using four ⅜ x 1" hex. head bolts and nuts. These bolts are to be placed in the second and fourth holes from the front end of the tractor frame.

**C.** Insert the end of the shaft on which the frame pivots, Part No. 1962 into the hole in the center of the cross bar in the frame assembly, Part No. 1954.

**(NOTE:** Make sure the collar, Part No. 1085 is installed on side of frame as shown in the exploded view before installing shaft.) Attach the bracket on the rear end of the shaft to the tractor frame at the holes near the bottom of the frame bracket which bolts to the transmission. Two ½ x 1¼ hex. head bolts and nuts are provided for this purpose.

**D.** With the lift lever in place on the pin at the rear of the drive unit, insert pin into the hole in the rear arm of the frame assembly, Part No. 1954 and secure with a ⅜ x 1" cotter pin. Bolt link at front of drive housing to belt guard portion of mower frame using two ⅜ x 1" hex. head bolts, and nuts.

**E.** With set screw in collar, Part No. 1085 loose, install the belt around the two idlers and the 4" pulley on the drive unit. Tighten the belt by moving the mower frame rearward on the shaft until proper tension is obtained by adjusting the bolt, Part No. 909576 and locking the bolt with the hex nylok nut, Part No. 915115-6. Slide collar, Part No. 1085 forward on shaft and secure with set screw (See photo 1.)

**F.** Secure engine pulley, Part No. 5590 on engine shaft with set screw and square key. The engine pulley and mower pulley, Part No. 1969 are to be in line. Push the clutch pedal forward to the detent position and slide 38" belt over engine pulley and 5" mower pulley. Release foot clutch pedal and check pulley alignment. Tightness of belt is automatic through tension spring. Install stop belt, Part No. 5949 to engine. Allow ⅛" clearance between the stop and drive belt.

**G.** Remove the nut and large washer from the carriage in the front end of the lower shoe and install grass rod, Part No. 2685. Replace nut and washer above the rod. The position of this rod can be varied for the most desirable operation.

**H.** Install the spring, Part No. 1014, between the cotter pin in the lift lever and the one in the rear frame arm.

**I.** Attach the travel hook bracket, Part No. 2700, to the tractor hood stand using two ⅝ x ¾" bolts.

**J.** Install lift rod, Part No. 6431 thru assembly frame, Part No. 1954 and secure with one hairpin, Part No. 933504-4. Install the top of the lift rod thru top hole of tractor lift arm and secure with hairpin, Part No. 933504-4.

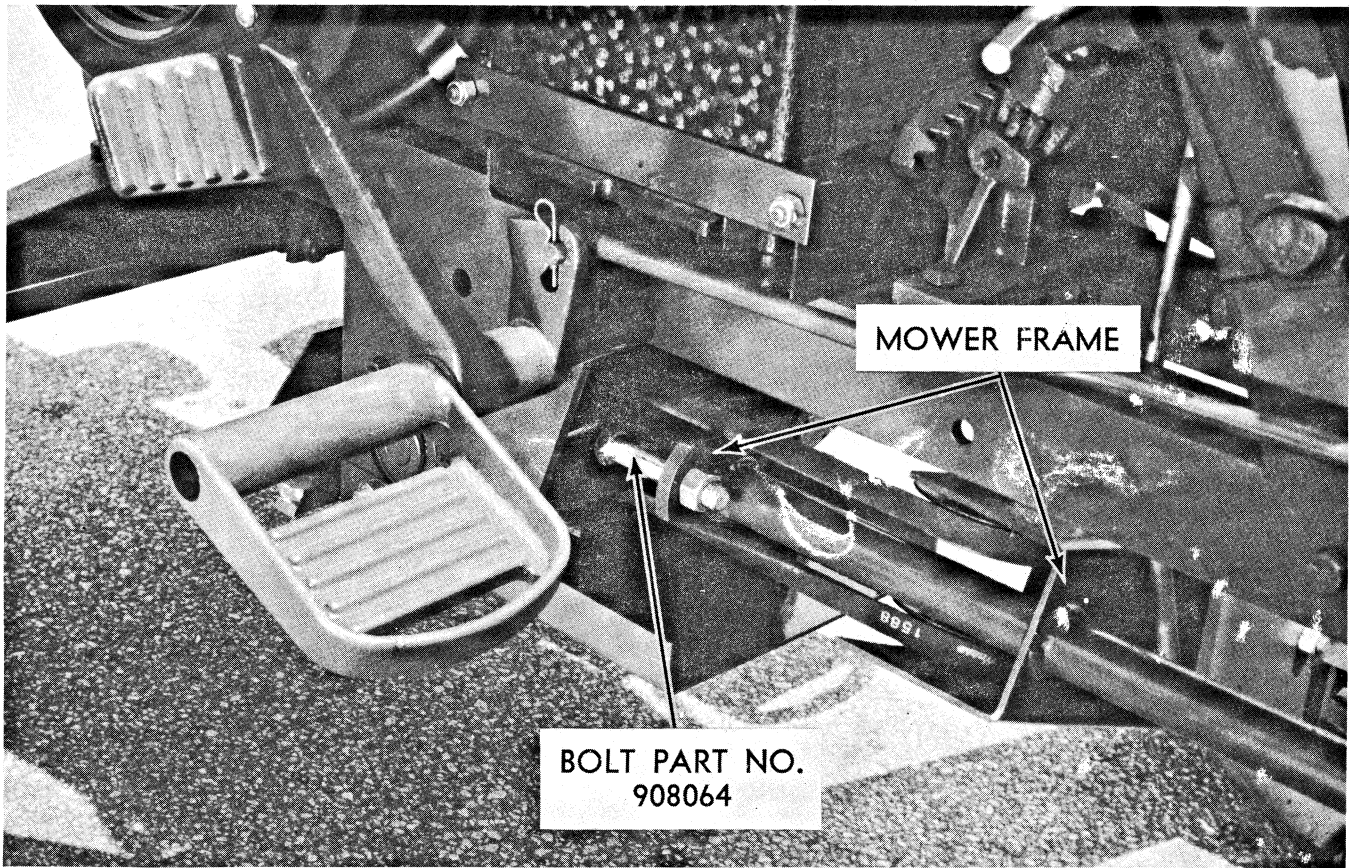


Photo 1

**K. Fill the sickle drive housing with #30 motor oil** to the level of the large filler plug in the side of the housing with the cutter bar on a level surface.

**L. Turn the flywheel pulley by hand.** If noticeable tightness is apparent inspect the guards and hold down clips. Tightness can often be eliminated by loosening the guard bolts then turning the unit several times by hand and retightening the bolts. When the unit turns relatively easily by hand start the tractor engine and run mower slowly for a few minutes. A light grade of machine oil or motor oil should be used to lubricate any hot spots that develop on the knife until it is properly worn in. Gradually increase speed until it is operating under full throttle.

## OPERATION

1. The height of the cut is controlled by the position of the cutter bar skid, Part No. 2234, at the outer end of the bar and the lower shoe, Part No. 2677. The cutter bar skid is adjusted by the addition or removal of skid spacers, Part No. 2233. Four holes are provided in the rear end of the lower shoe for adjustment.

2. The short belt tension is maintained automatically by the tension spring. The long belt is adjusted as explained in the assembly instructions.

3. The position of the grass rod may be adjusted to suit the various conditions under which the mower may operate. Correct positioning prevents plugging at the lower shoe.

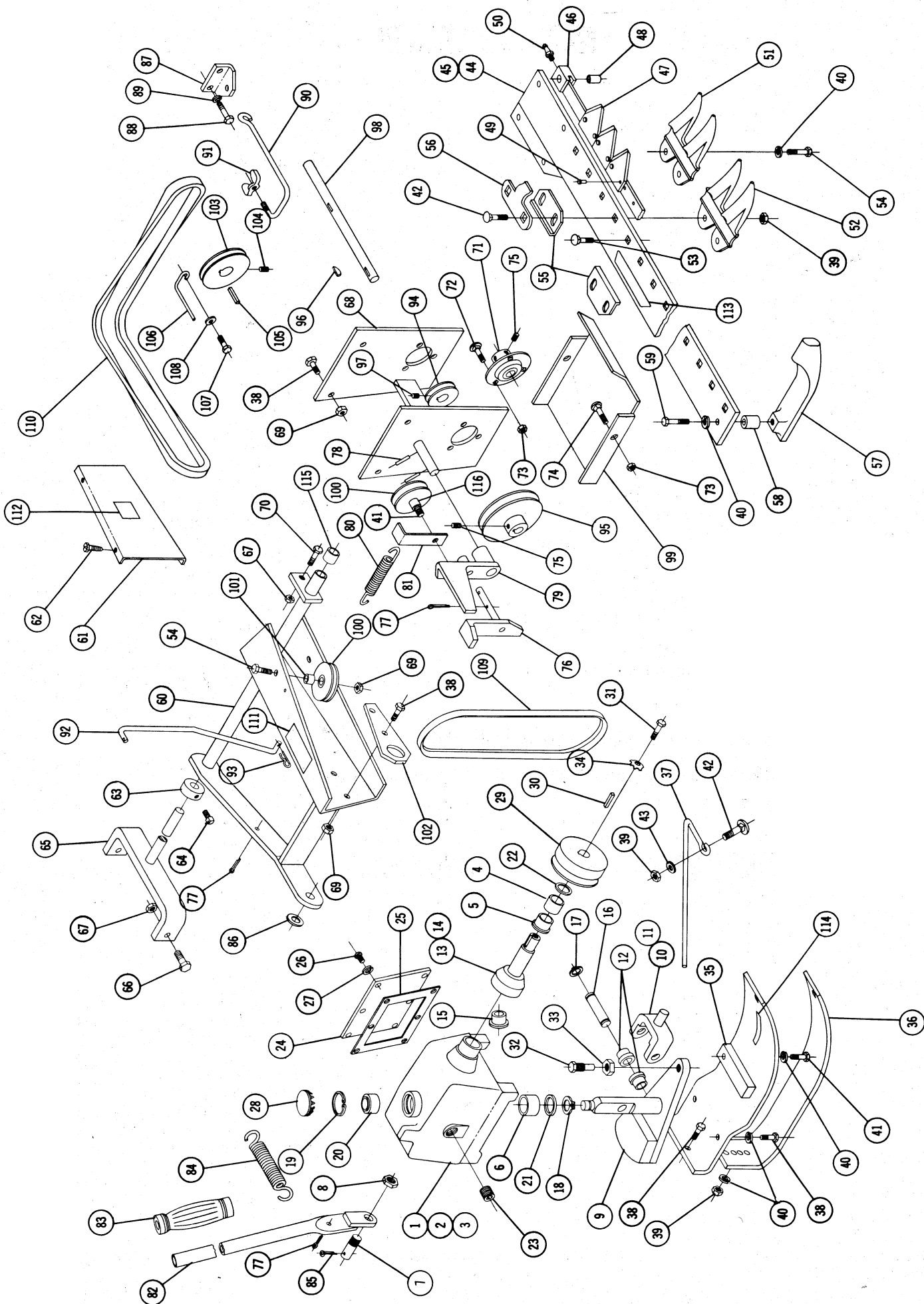
4. The knife assembly may be removed for sharpening or replacement by loosening the jam nut, Part No. 915089-4. **NOTE: It is very important that this pin and jam nut be kept tight. Looseness can destroy the threads in the drive arm.**

5. For transporting, the cutter bar may be raised to a vertical position. Insert the cutter bar hooks into the hole in the cutter bar and secure with the wing nut provided. The placement of this hook between two guards prevents accidental operation of the knife when in transport position.

6. **Safety First:** Caution should be exercised in the operation of this machine. Children and pets should be kept away from the mowing area. Never attempt to remove obstructions from the cutter bar without first shutting off the tractor engine. **CAUTION:** When operating on slopes or rough terrain, **LEFT WHEEL** should be equipped with wheel-weight #WW-126 to counter balance the weight of the mower and to provide greater stability.

## LUBRICATION

The sickle drive housing should be kept filled to the level of the large filler plug with #30 motor oil. This oil level should be checked periodically. The knife head should be lubricated with a good grade of gun grease after every four hours of operation. All other high speed bearings are sealed and need no further attention. Machine oil or motor oil may be used at hinge points to insure freedom of operation and prevent rust.



# 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        | 5041     | Ass'y. Housing Complete — Sickle Drive             | 1          | 58       | 2233     | Spacer — Skid   | 2          |
| 2        | 2701     | Ass'y. Housing & Bearings                          | 1          | 59       | 908038-4 | Bolt Hex $\frac{3}{8}$ -16 x 2                          | 1          |
| 3        | 2644     | Housing  | 1          | 60       | 1954     | Ass'y. Frame  | 1          |
| 4        | 2694     | Bearing — Bronze Sleeve                            | 1          | 61       | 5598     | Cover Belt  | 1          |
| 5        | 2692     | Bearing — Bronze Sleeve                            | 1          | 62       | 926452-4 | Screw — Hex Self Tap #8-32 x $\frac{3}{8}$              | 4          |
| 6        | 2695     | Bearing — Bronze Sleeve                            | 1          | 63       | 1085     | Collar  | 1          |
| 7        | 2655     | Pin  | 1          | 64       | 909531   | Set Screw $\frac{1}{4}$ -20 x $\frac{3}{8}$ Square Head | 1          |
| 8        | 915090-4 | Nut $\frac{3}{4}$ -16 Jam                          | 1          | 65       | 1962     | Ass'y. Bracket & Rod                                    | 1          |
| 9        | 2683     | Ass'y. Shaft — Weldment                            | 1          | 66       | 908058-4 | Bolt Hex $\frac{1}{2}$ -13 x $1\frac{1}{4}$             | 2          |
| 10       | 2687     | Ass'y. Yoke  | 1          | 67       | 915115-6 | Nut — Nyllok $\frac{1}{2}$ -13                          | 3          |
| 11       | 2690     | Yoke   | 1          | 68       | 6569     | Ass'y. Shaft Support                                    | 1          |
| 12       | 2686     | Bearing — Bronze Sleeve                            | 2          | 69       | 915663-4 | Nut $\frac{3}{8}$ -16 Elastic Stop                      | 9          |
| 13       | 2702     | Ass'y. Shaft — Wobble Drive                        | 1          | 70       | 909576   | Bolt $\frac{1}{2}$ -13 x 3 Square Hd.                   | 1          |
| 14       | 2679     | Shaft — Wobble Drive                               | 1          | 71       | 5269     | Ass'y. Bearing — Ball — Flanged                         | 2          |
| 15       | 2693     | Bearing — Bronze Sleeve                            | 1          | 72       | 900037-4 | Bolt Carriage $\frac{5}{16}$ -18 x $\frac{3}{4}$        | 4          |
| 16       | 2691     | Pin Yoke   | 1          | 73       | 915112-6 | Nut — Nyllok $\frac{5}{16}$ -18                         | 6          |
| 17       | 936121   | Snap Ring — Truarc .625 Shaft                      | 2          | 74       | 900038-4 | Bolt — Carriage $\frac{5}{16}$ -18 x 1                  | 2          |
| 18       | 936122   | Snap Ring — Truarc .669 Shaft                      | 1          | 75       | 909862-6 | Set screw $\frac{5}{16}$ -18 x $\frac{5}{16}$ Hex       | 6          |
| 19       | 936028   | Snap Ring — Truarc 1.562 Bore                      | 1          | 76       | 3380     | Ass'y. Lever — Attachment                               | 1          |
| 20       | 5596     | Bearing — Ball .687 Shaft — Double Seal            | 1          | 77       | 932017-4 | Cotter Pin $\frac{1}{8}$ x 1                            | 4          |
| 21       | 1482     | Seal $1\frac{1}{4}$ " Shaft                        | 1          | 78       | 933188   | Roll Pin $\frac{3}{16}$ x 1                             | 2          |
| 22       | 1232     | Seal 1" Shaft                                      | 1          | 79       | 3381     | Pedal Attachment Clutch                                 | 1          |
| 23       | 943439   | Plug — Pipe Square Head                            | 1          | 80       | 6651     | Spring  | 1          |
| 24       | 2657     | Cover Plate  | 1          | 81       | 6360     | Clip — Belt   | 1          |
| 25       | 2656     | Gasket   | 1          | 82       | 2678     | Ass'y. Lever Lift                                       | 1          |
| 26       | 909017-4 | Screw Round Head #10-24 x $\frac{3}{8}$            | 6          | 83       | 1000     | Grip  | 1          |
| 27       | 920079-4 | Lockwasher #10                                     | 6          | 84       | 1014     | Spring  | 1          |
| 28       | 935135-4 | Plug — Button                                      | 1          | 85       | 932034-4 | Cotter Pin $\frac{3}{16}$ x 1                           | 1          |
| 29       | 2659     | Pulley 4" Dia.                                     | 1          | 86       | 920015-4 | Washer $\frac{3}{4}$ S.A.E.                             | 1          |
| 30       | 1005     | Key Square $\frac{3}{16}$ x $\frac{3}{16}$ x 1     | 1          | 87       | 2700     | Bracket — Travel Hook                                   | 1          |
| 31       | 908033-5 | Bolt — Nyllok $\frac{3}{8}$ -16 x $\frac{7}{8}$    | 1          | 88       | 908017-4 | Bolt Hex $\frac{5}{16}$ -18 x $\frac{3}{4}$             | 2          |
| 32       | 2680     | Pin — Sickle Drive                                 | 1          | 89       | 920082-4 | Lockwasher $\frac{3}{16}$ Dia.                          | 2          |
| 33       | 915089-4 | Nut — Hex $\frac{3}{8}$ -18 Jam                    | 1          | 90       | 2666     | Hook — Travel Support                                   | 1          |
| 34       | 1336     | Washer — Dome                                      | 1          | 91       | 915586-4 | Nut Wing $\frac{3}{8}$ -16                              | 1          |
| 35       | 2643     | Ass'y. Shoe — Upper — Weldment                     | 1          | 92       | 6431     | Rod — Lift  | 1          |
| 36       | 2677     | Shoe — Lower                                       | 1          | 93       | 933504-4 | Hairpin Cotter  | 2          |
| 37       | 2685     | Rod — Grass  | 1          | 94       | 1608     | Pulley 2 $\frac{1}{2}$ Dia.                             | 1          |
| 38       | 908034-4 | Bolt — Hex $\frac{3}{8}$ -16 x 1                   | 5          | 95       | 1969     | Pulley  | 1          |
| 39       | 915113-4 | Nut Hex $\frac{3}{8}$ -16                          | 26         | 96       | 937014   | Key #9 Woodruff   | 2          |
| 40       | 920083-4 | Lockwasher $\frac{3}{8}$ Dia.                      | 7          | 97       | 909848-6 | Set Screw $\frac{1}{4}$ -20 x $\frac{1}{4}$ Hex         | 2          |
| 41       | 908036-4 | Bolt Hex $\frac{3}{8}$ -16 x $1\frac{1}{2}$        | 2          | 98       | 6572     | Shaft   | 1          |
| 42       | 900064-4 | Bolt — Carriage $\frac{3}{8}$ -16 x $1\frac{1}{4}$ | 11         | 99       | 2660     | Shield Pulley   | 1          |
| 43       | 920039-4 | Washer $\frac{3}{8}$ Dia. U.S.                     | 1          | 100      | 1623     | Ass'y. Idler Pulley                                     | 3          |
| 44       | 5043     | Ass'y. Cutter Bar Complete                         | 1          | 101      | 1967     | Spacer  | 2          |
| 45       | 2704     | Ass'y. Bar Guard                                   | 1          | 102      | 1966     | Link  | 1          |
| 46       | 2697     | Ass'y. Knife Bar & Sections                        | 1          | 103      | 5590     | Pulley — Engine — Drive                                 | 1          |
| 47       | 2236     | Section  | 25         | 104      | 909849-6 | Set Screw $\frac{1}{4}$ -20 x $\frac{3}{16}$ Hex        | 1          |
| 48       | 1498     | Bushing  | 1          | 105      | 1349     | Key Square  | 1          |
| 49       | 1071     | Rivet  | 50         | 106      | 5949     | Stop Belt   | 1          |
| 50       | 1291     | Fitting — Grease 90°                               | 1          | 107      | 908016-4 | Bolt Hex $\frac{5}{16}$ -18 x $\frac{5}{8}$             | 1          |
| 51       | 2230     | Guard — Cutter Bar                                 | 10         | 108      | 920008-4 | Washer $\frac{5}{16}$ S.A.E.                            | 1          |
| 52       | 2684     | Guard — Cutter Bar                                 | 1          | 109      | 6573     | Belt 38" Engine Drive                                   | 1          |
| 53       | 900063-4 | Bolt Carriage $\frac{3}{8}$ -16 x 1                | 15         | 110      | 1588     | Belt 59" Mower Drive                                    | 1          |
| 54       | 908035-4 | Bolt Hex $\frac{3}{8}$ -16 x $1\frac{1}{4}$        | 3          | 111      | 4498     | Decal General Caution                                   | 1          |
| 55       | 2231     | Plate — Cutter Bar                                 | 4          | 112      | 4410     | Decal Square Emblem                                     | 1          |
| 56       | 2232     | Clip — Cutter Bar                                  | 4          | 113      | 5604     | Decal — Attachment Emblem                               | 1          |
| 57       | 2234     | Skid — Cutter Bar                                  | 1          | 114      | 3710     | Decal — Grease  | 1          |
|          |          |  |            | 115      | 1957     | Bushing   | 1          |
|          |          |  |            | 116      | 2233     | Spacer  | 1          |