

INSTRUCTIONS and REPAIR PARTS LIST

No. S-153

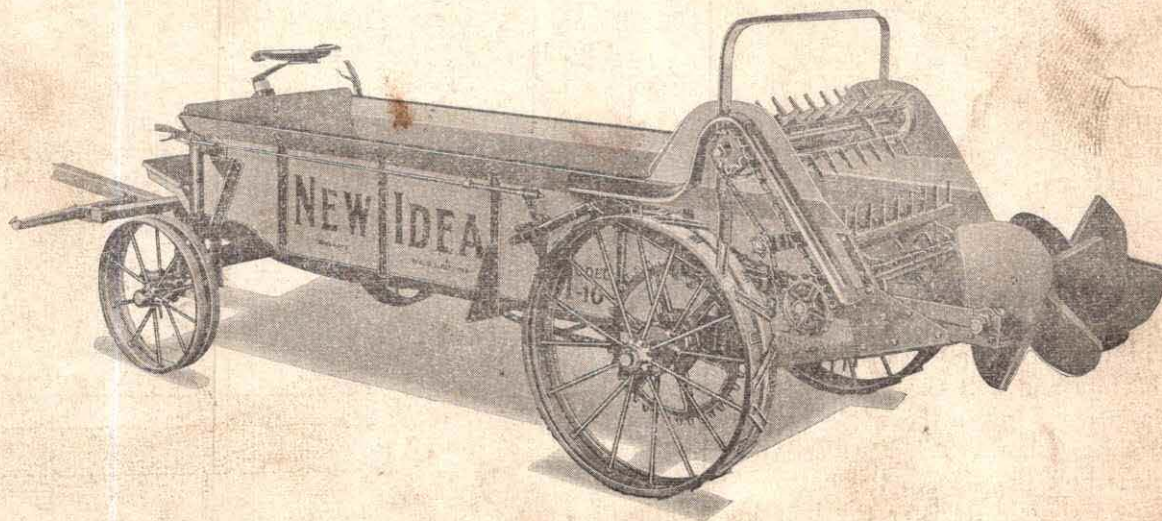
For Setting Up and Operating
MODEL 10

New Idea Manure Spreaders

For the Dealer and User

Read This Instruction

Save It For Reference



NEW IDEA

FARM EQUIPMENT COMPANY
COLDWATER, OHIO - U. S. A.

Setting Up Instructions

SHIPPING BUNDLES

- 1 Bottom parts attached
- 1 Pair Sides parts attached
- 1 Upper Cylinder Bundle
- 1 Lower Cylinder Bundle
- 1 Distributer
- 1 Sprocket Wheel Bundle
- 1 Chain Conveyor
- 1 Front Axle Bundle
- 1 Rear Axle Bundle
- 2 Bundle Shields
- 1 Pole (or Tractor Hitch)

- 1 Doubletree Bundle
- 1 Feed and Drive Rod Bundle
- 1 Bundle Chain and Levers
- 1 Pair Flared Side Boards
- 1 Endgate Bundle
- 4 Steel Wheels
or
4 Cast Wheel Hubs
and
4 Disc Wheels

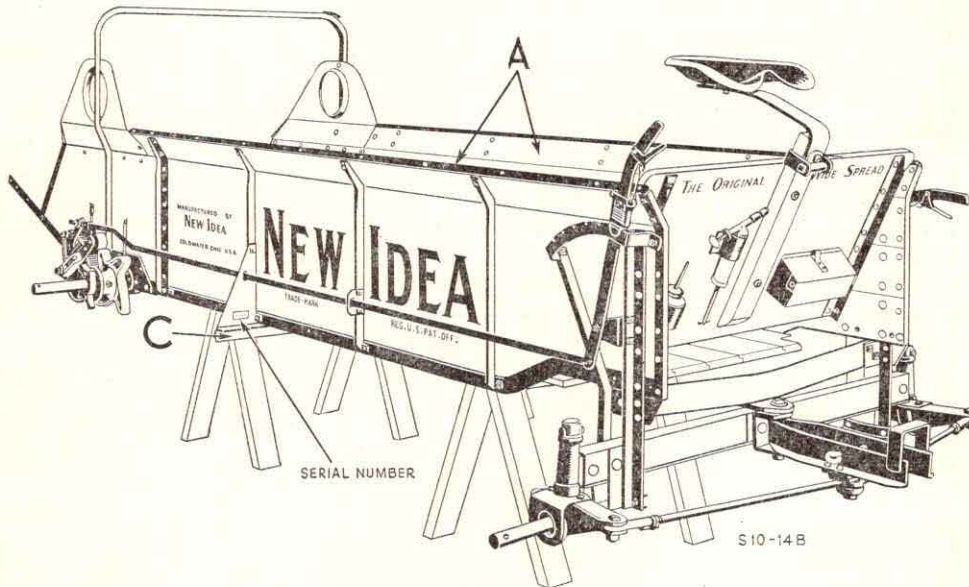


Fig. 1

Cut the wires on all of the various bundles that comprise the spreader and lay all of the parts out separately so they can be easily found when ready to bolt them in place.

Lay the bottom on a pair of trestles or boxes and remove the black paint from the end of the feed shaft that projects to the right of the bottom. Insert angle fittings in the feed shaft bearings. Lay the sides on the bottom and bolt the flared side boards "A", Fig. 1 in place. Insert the angle feed bearings in the right side as shown "B", Fig. 2. With this bearing in place bolt the side to the bottom starting at the rear feed shaft. Register the bolt holes with a punch if necessary and put all bolts in loose. Bolts will be found in the bag packed in the conveyor. Then bolt the right side brace "C", Fig. 1 to the side and bottom. Now draw all of the side bolts and the bolts in the side brace up tight. Be sure that there are lock washers under all of the nuts. Now put on the left side in the same manner as described above for the

right side except there is no feed shaft bearing. **Make sure that the feed shaft turns freely after the sides have been bolted in place.**

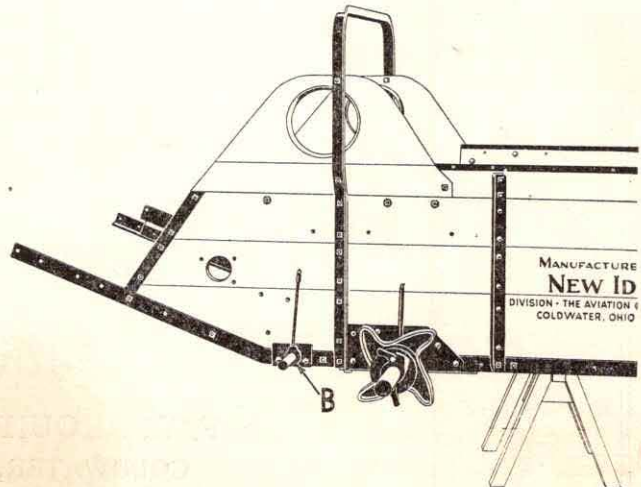


Fig. 2

Bolt the angle arch and upper cylinder shields in place as shown Fig. 2. Bolts will be found in bag wired in conveyor bundle. The two longer bolts are for the point where the upper cylinder shields bolt on to the angle arch. Be sure that all bolts are drawn up tight and that there are lock washers under parts where metal is bolted against metal.

Remove the front bolts and loosen the rear bolts in each of the tie bars that hold the front axle forks together. The tie bars will then hang down.

Get the front axle and bolster assembly and oil all points of the steering mechanism and also put some oil or grease on the guide plates and front axle forks. Then put the front axle in place as shown in Fig. 1. Now get the front wheels and clean all paint out of the bore of the wheel as well as off of the front axle spindles. Force grease into the hub of the front wheels and then put the front wheels in place on the axles and put the take up washer and retaining pin in place. Be sure the hub caps are securely attached to the front wheels.

Bolt the front end gate in place and put the bolts in from the outside, putting the upper ones in first as that will register the bolt holes. Draw all bolts up tight. Then put on the seat iron, seat, oil can holder, oil gun holder and the tool box.

Next lay the rear axle under the spreader and insert the nipples with the pressure type fittings in their proper position in the bearings and be sure to turn them in solid. The $\frac{1}{4} \times 2\frac{1}{2}$ nipple with angle fitting is for the left side and the $\frac{1}{4} \times 1\frac{1}{2}$ nipple with angle fitting is for the right side.

Be sure to cut the wires that hold the driving pawls in place during shipment on both the feed cam and sprocket wheel hub. Attach the rear axle to the spreader sides as shown in Fig. 2. Be sure the bolts that hold this rear axle in place are drawn up good and tight. Then bolt the large sprocket wheel to the hub on the left side of the spreader and make sure that the flanged portion of the wheel comes next to the flanged portion of the hub or the teeth will stand backward.

Now remove the trestles or boxes from under the bottom and set one under each end of the main axle.

Lay the conveyor in the bed as shown in Fig. 3 with part of the conveyor unrolled pointing to the feed wheels (**rear**). Keep unrolling the conveyor putting it squarely over the feed wheels and pulling it under the bottom and passing it under the axle until

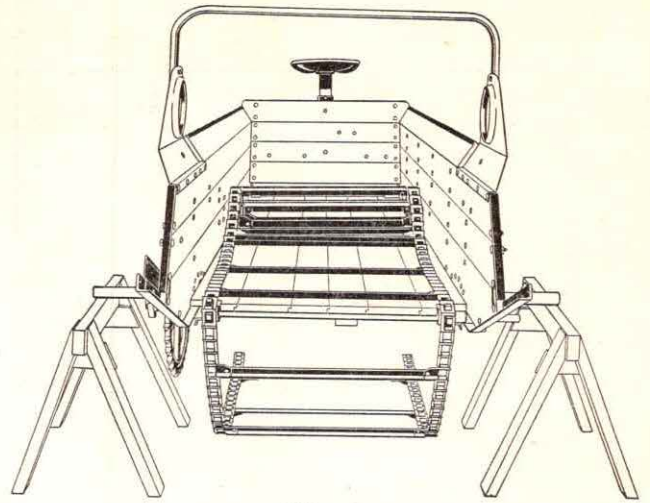


Fig. 3

the end of the conveyor is near the front of the machine. Then run the other end of the conveyor between the bottom and the endgate and couple both ends together, driving the links with a hammer. Be sure the conveyor is in the machine so that the bars travel squarely over the feed wheels and not one side ahead of the other. Chain breakage is sure to be the result by running the bars askew. The conveyor should now appear as shown in Fig. 4 and not like Fig. 5 which is wrong.

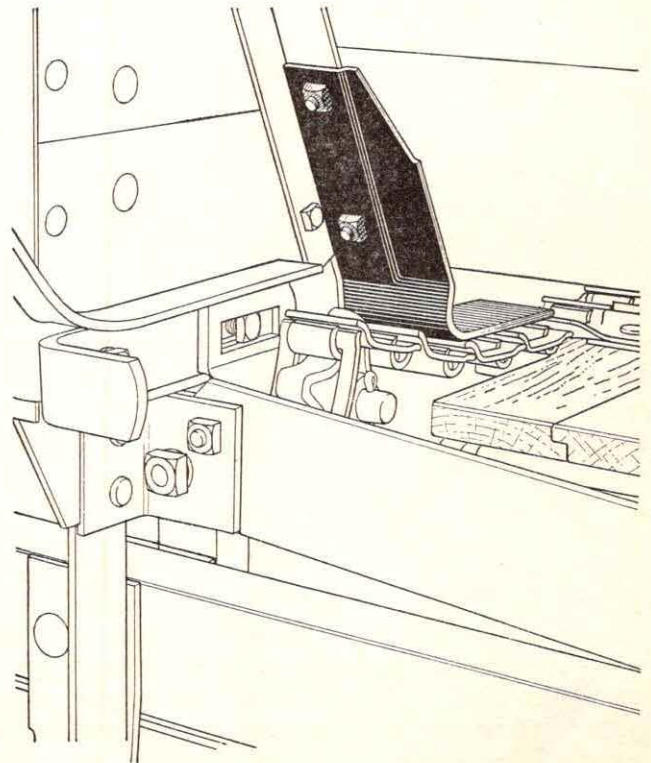


Fig. 3A

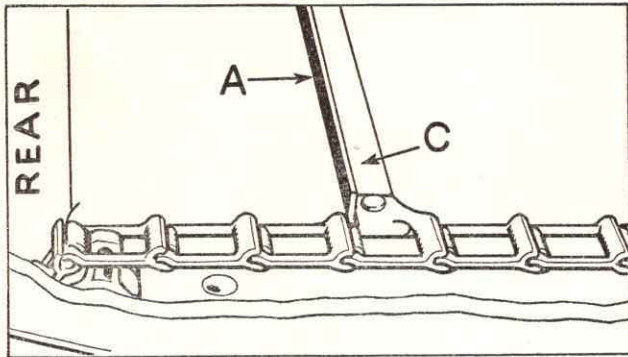


Fig. 4

CONVEYOR IN CORRECT

The side near the feeding mechanism has been cut away to show the feed shaft at the feed wheels with the conveyor in the correct position. Note that the bar "C" has the wide portion "A" rearward or in the direction of the travel of the chain, thus pushing the manure rearward and toward the cylinder. This also gives the proper bracing to the riveting of the attachment links, preventing link breakage. A conveyor properly put in should never give any trouble.

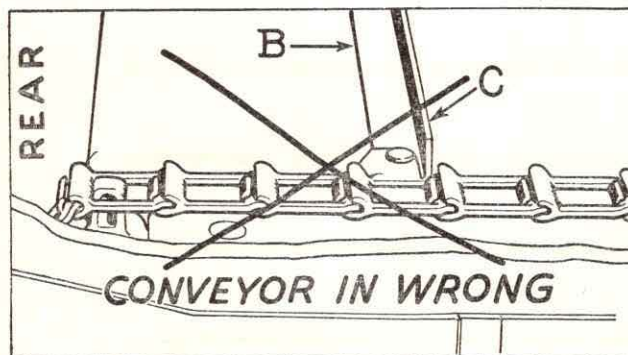


Fig. 5.

CONVEYOR IN WRONG

Here the bar "C" has the thin portion "B" rearward or in the direction of the travel of the chain. This gives no support to the rivets in the attachment links and is liable to cause them to break on a heavy pull.

Next attach the foot board and put the front conveyor idlers in place. Conveyor idlers are easily put in place if proper instructions are followed. Turn the conveyor so that the bars are about 6" from the front end of the bottom. Next take the conveyor idlers under the bottom and hook the sprocket into the end of the conveyor chain, raise it so the bracket is above the lip of the side sill, draw forward and bolt aside of the footboard support angle, (the bolts should be put in from the inside, that is the nuts should be on the outside of the machine). The conveyor idlers and foot board support angles are held in place by the same bolts. Bolt the front conveyor hold down irons or chain slides to the lower front side of the end-gate. Fig. 3A. The purpose of these irons are to hold the conveyor down on to the front end of the bottom. Then bolt the conveyor slides in place under the center of the bottom.

Remove the bars from the upper cylinder assembly and bolt the upper cylinder to the angle arch as shown in Fig. 6. Be sure the bearing plates are bolted to the outside of the arch and that these plates fit squarely on the arch. Insert the $\frac{1}{8} \times 1\frac{1}{4}$ nipple and coupling with angle fitting in the left bearing. Now bolt the upper cylinder bars to the head. Be sure the bolts are drawn up tight and that there are lock washers under all of the bolt heads.

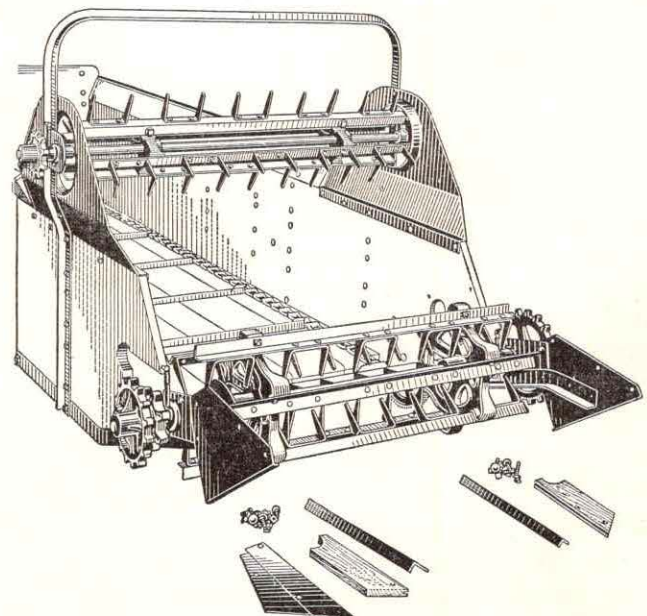


Fig. 6

Remove the rear end angles and other parts from the rear end of the sides so as to open up the slots to receive the lower cylinder as shown in Fig. 6. Lay the cylinder assembly on the side sills, with the two sprocket wheels to the left and the distributor sprocket wheel to the right. **Do not remove any of the sprocket wheels from the shaft.** Insert the $\frac{1}{8}$ x 2 nipple and coupling with angle fitting in the left bearing. Now remove the bolts in the bearing plates, then slide the cylinder in place, making sure that the bearing plates are on the outside of the sides. Now replace the parts previously removed from the sides and then bolt the main cylinder bearing plates in place, first putting all bolts in loose. After the bolts are in place then draw each one up tight.

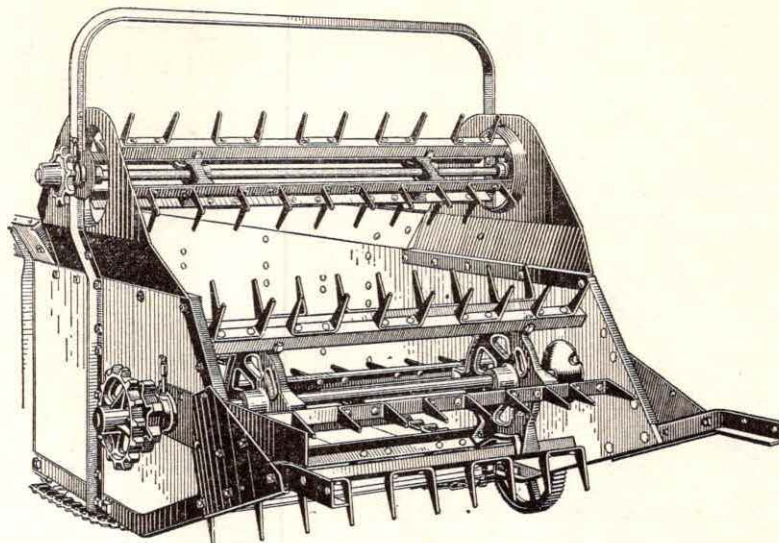


Fig. 7

Now turn the cylinder bars one at a time so that the teeth will stand outward. After turning the bars be sure to bolt it on the heads in the same place as it was before turning. Be sure that there are lock washers under each of the bolt heads. The finished assembly should now appear as shown in Fig. 7 and the bars on both upper and lower cylinder should stand in relations to each other as shown in Fig. 8.

Clean the end of the feed shaft carefully and insert the key in the shaft (key will be found in a small bag in the conveyor). Clean all paint from the bore of ratchet wheel and put the ratchet wheel on the feed shaft hub first so that the hub comes next to the bearing in the sill of the machine. The washer for the feed shaft is to take up end play if any. Use it if needed, otherwise not.

Get the feed arm assembly and thoroughly clean all paint out of the bore of the feed arm casting and see that the oil hole is clear. Do not take any of the feed arm parts apart. Remove bolts from post of L-338 and start them in the sides from the inside of the bed so they protrude through the wood a little.

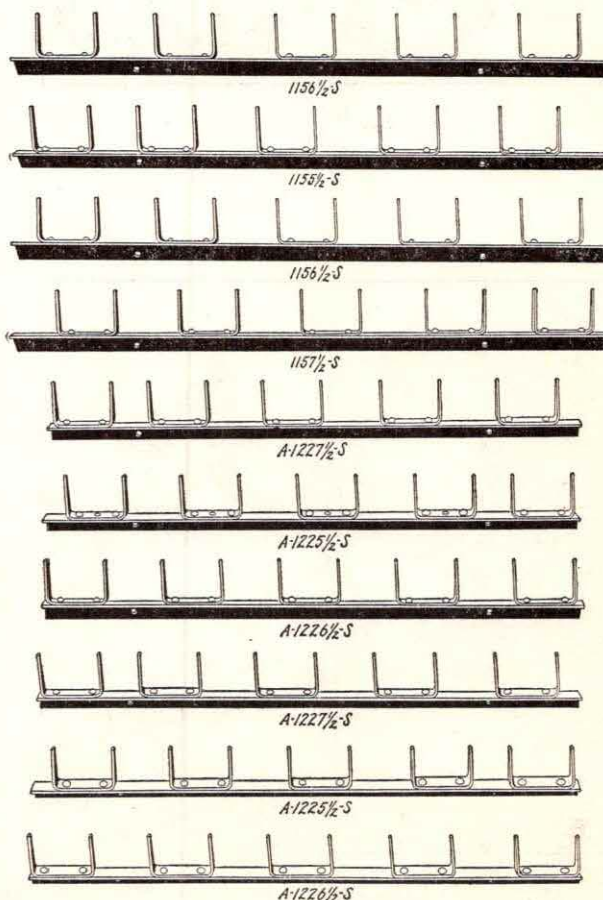


Fig. 8

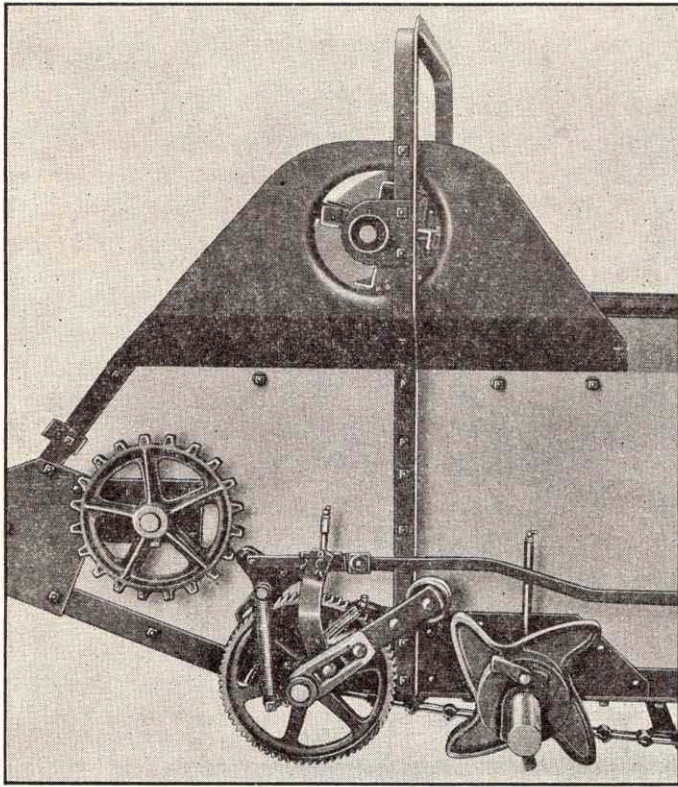


Fig. 9

Put the feed arm on the feed shaft, oiling the shaft as it is put on and be sure that it works freely. Bolt ratchet post L-338 in place. Oil feed arm bearing through oiler and also oil roller on each side and spin the roller so oil works into the bearing, see Fig. 9.

Bolt the feed rod, feed lever and feed sector (feed lever goes on inside of sector) in place as shown in Fig. 1 and connect the feed rod to the feed arm. Now adjust the feed. Place the feed lever in the first notch of the sector and check to see if there is $\frac{1}{4}$ " clearance between the roller of the feed arm and the lobe of the feed cam. If there is not $\frac{1}{4}$ " clearance then adjust the set collar on the feed rod so as to get the desired results. The feed arm slide collar should slide freely on the feed rod. Be sure that the entire feed mechanism works freely in all respects.

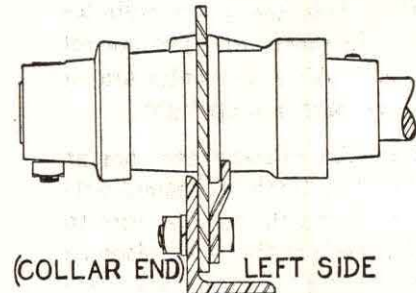


Fig. 9A

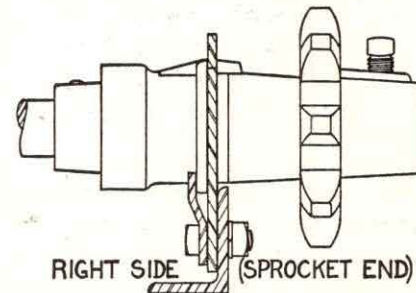


Fig. 9B

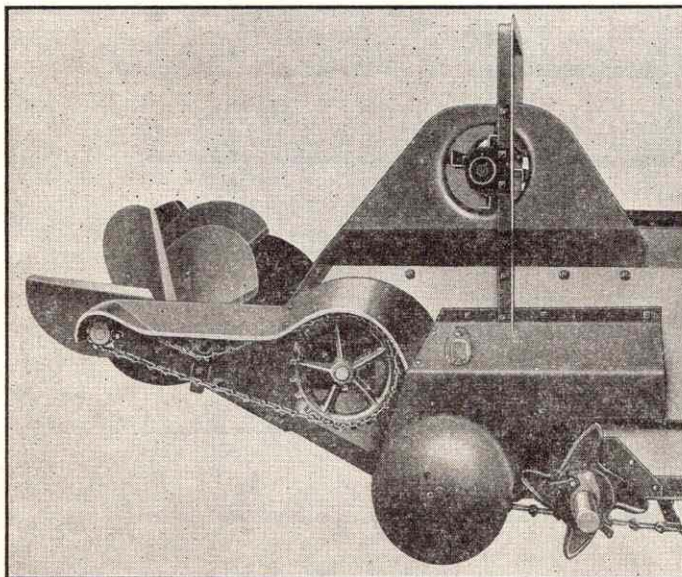


Fig. 10

Put the distributor in place with sprocket to the right, bolting the bearing plates to the rear side sills. The bearing plates are to go on the **inside** of the sill. See Figs. 9A and 9B. Be sure that there are lock washers under all of the nuts. Insert straight fittings in the bearings. Oil the upper cylinder, main cylinder and distributor bearings and turn all of these parts rapidly so that the oils works down into the bearings. Put on the distributor chain (43 links of No. 52 chain). The chain should be put on so that the open part of the link will be up and leading in the direction of travel, see Fig. 12. Now bolt all of the feed shields and distributor chain shields in place as shown in Fig. 10. When bolting the distributor chain shield in place, also attach the distributor chain tightener. Be sure to get the chain tightener on so that the lip of the slide is squarely underneath the side sill angle.

Now bolt the drive chain assembly, including the drive arm, auxiliary drive arm and chain straddler in place as shown in Fig 11. Do not take any of the chain assembly apart as it is all properly assembled at the factory and is ready to bolt on. If chain is taken apart put it on the sprockets as illustrated in Figs. 11 and 13. Also attach the drive rod, drive lever and its sector. Then put the upper cylinder drive chain and its chain tightener in place. (41 No. 52 steel links). Drive chain should be put on in the same manner as the chain for the distributor. See Fig. 12 for the proper method of putting on this chain.

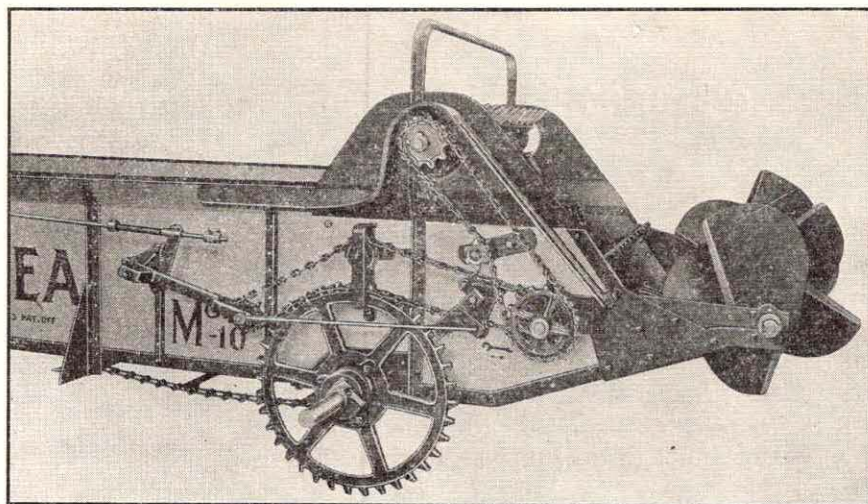


Fig. 11

Then bolt the drive chain shields in place as shown in Fig. 11.

Thoroughly clean all paint off both ends of the main axle and out of the rear wheel hubs. Be sure the oil holes are open and pack both the wheels with grease and put them in place on the axle but **make sure that the wire that holds the driving pawls in place for shipment has been removed.** If the machine is equipped with air tired wheels it will be necessary to bolt the disc wheel to the wheel hubs. Be sure to draw bolts up tight. If desired the disc wheels can be removed from the hub and used on other implements if the machine is equipped with the proper type hubs. Put on the axle collar and pins and spread the spring cotters.

Go over the entire machine carefully and make sure that all parts are correctly put together and that all bolts where necessary have lock washers and all nuts are drawn up tight. Hurried and careless setting up and a few minutes' time saved has often caused considerable misery, dissatisfaction, trouble and expense to the user, dealer and manufacturer. Oil the machine generously and carefully and preferably run the machine empty so that the oil will work down into the bearings and lubricate every part. See that the main axle bearings are well lubricated before the machine goes into the field. Many bearings have been cut out because the machine was delivered with dry bearings. A new machine needs plenty of oil and checking to see that it reaches vital points. More machinery is ruined by careless wearing in of new bearings than by years of hard use afterwards. Oil the bearing seats and all minor moving parts.

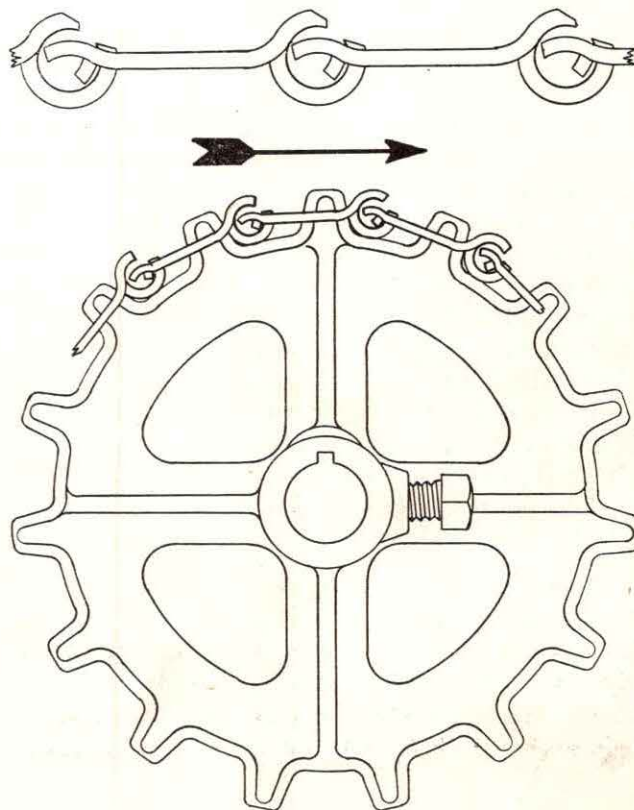


Fig. 12

The Correct Way to Put Sprocket Chains on The New Idea Spreader and the Reason Therefore

There is a great difference of opinion among implement men as to **how the chains should be put on**. In the majority of instances chains are run without any regard to rules or good engineering practice and the result is that chains and sprocket wheels wear unduly, chains break, power is wasted, and the user failing to check the chains with the instructions blames the manufacturer of the particular implement.

A variety of conditions come up in sprocket chain drives which require careful analysis and individual treatment; but in the average chain drives, especially where the driven wheel is small in diameter and the driver comparatively large, the conventional rule is: "Run drive chain with **hook forward** and slot to the outside, for conveyor and elevator chains **bar forward** and slot to the outside." This rule applies to all the chains on the NEW IDEA Model 10 Spreader. On some other implements where the drive sprocket is smaller than the driven sprocket, the chain should be run with the bar of the link forward and the slot to the outside.

Now what is meant by saying: "Run drive chains with hooks forward and slot to the outside." It means that where chains are used to transmit power from a larger driver to a small driven wheel, the hook or barrel end of each link should travel forward in the direction of travel of the chain. In this way the chain when it disengages the small wheel, which it does under strain, **does not** cause any rubbing with consequent wear on the links and teeth of the driven wheel; however, if the chain in this same drive is run with the **bar forward** it would have to leave the tooth of the driven wheel under full strain in rubbing contact, causing excessive wear on the chain links and also on the teeth of the driven sprocket. Thus in the chains driving the cylinders and distributor make sure that the links run Hook Forward in the direction of travel and slot to the outside.

What is meant by the rule—"Run Conveyor and Elevator Chains Bar Forward and slot to the outside." Conveyors do not have driven wheels, only a driver, the wheels at the other end are idlers. So in this case apply the above rule and run the conveyor chain so that the links come Bar Forward in the direc-

tion of travel and slot to the outside. In this way the links disengage with rolling contact off of the driving feed sprocket wheels, thus giving ready release which is desirable especially since the feed wheels are frequently filled with particles of manure.

By applying these rules it will be found that the chains and conveyor will operate satisfactory.

LUBRICATING CHAINS

Very few chains running on implements are lubricated, yet when it is considered that these chains transmit all the power and since these chains are nothing but a series of joints bending around the different small sprocket wheels under strain, it would seem strange that so much care is put on lubricating bearings and none on the chains. A properly lubricated chain transmits the power with much less loss than a dry running chain and wears considerably longer. Complaints are sometimes made that chains running in the open are susceptible to dust and grit if lubricated. This is not near as bad as generally imagined, however, it is better in such cases to use a lubricant that is not so susceptible to collect dust and grit, than to run chains dry. Put chains on correctly and then keep them properly lubricated with a suitable lubricant.

To get long life from a spreader conveyor it is good practice to occasionally clean it thoroughly and apply a lime solution and then slush oil on both the chain and bars. The lime acts as a neutralizer of the corrosive action of manure acids and the oil as a lubricant.

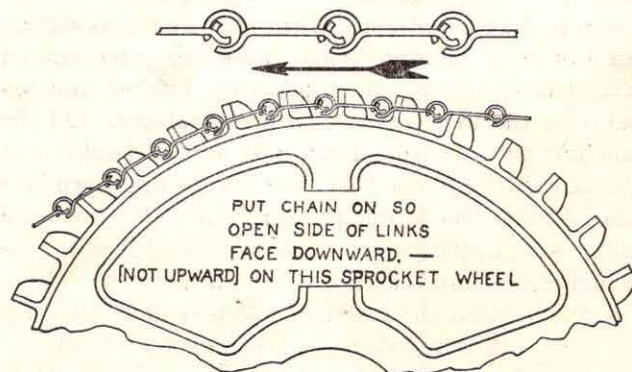


Fig. 13

ADJUSTING AND OPERATING

Read This Before Using A New Machine

Be sure to lubricate the axle bearings before the machine is ever moved. Give each axle bearing a very generous greasing.

Before using, take the pressure gun and force grease in all fittings, (see page 14 and 15). Also oil all such parts that move in any way. Put plenty of oil everywhere and break the machine in well. Preferably for the greasing turn the machine by hand to work the grease down into the new dry bearings. Also oil the sprocket chains that drive the machinery and keep them oiled.

There are two small oil fittings one for each feed shaft bearing under the bottom, also one for the angle feed bearing. Use the grease gun on all three.

In ordinary usage the machine should be greased twice daily when machine is used all day. If used at intervals grease in proportion. **Also give the minor working or moving parts including the chains a generous oiling frequently, so nothing runs dry.**

Before starting to use a new machine it pays to go over it to see that it is properly set up and all bolts are tight and adjustments properly made.

ADJUSTMENTS

Keep the end play out of both main wheels. If the feed arm does not lift up high enough, release the small set collar on the feed rod and push the set collar ahead a little, just enough so it gives the $\frac{1}{4}$ " clearance that the roller and cam should have when feed lever is in the first notch of sector.

If the drive chain does not lift up high enough to clear the teeth of the big sprocket wheel properly, adjust the collar on the drive rod, setting it so that the chain will lift up to the proper height. When in gear the spring tension on the drive rod should be adjusted to hold the drive arm down and the chain taut.

LOADING

Next, proceed to load. There is no fixed method of loading. The best results are usually obtained by starting to load at the front end, especially in long straw manure. To get good results do not pile any manure into the cylinders. The height of the load

depends upon the condition of the manure, the condition and nature of the field. In ordinary barnyard or stable manure a load loaded to pass under the rear arch, rounded on each side, will do a nice spreading job and will not overload the machine. Do not put on extra side boards. Be satisfied with the capacity of the machine and do not abuse it. Overloading will be the cause of loss of time sooner or later.

SPREADING

When ready to spread, stop the team and put the drive chain in gear, and set the feed lever to feed. We say, "Stop the team to put the drive chain in gear"—it takes but a moment to do it and prevents a severe jolt to the entire machine.

When about through spreading a load, a little manure stays in the bed. Shift into the heavy feed for the last rod or so, and slow down the team, this then cleans the bed. When the machine is empty, disengage the drive and then the feed. Make a practice of this so the feed will **always** be disengaged when the machine is empty, otherwise in driving to the field the next load will be forced into the cylinders and cause breakage of the key in the ratchet wheel, which is the safety. In that event, the ratchet wheel must be taken off and a new half moon key put in. This key will never shear off from ordinary use. The operator either forgot to disengage the feed, or the adjustment on the feed rod slipped and did not give the $\frac{1}{4}$ to $\frac{3}{8}$ inch clearance required. An extra key is furnished with every machine.

GENERAL

Chain tighteners should be set up when chains get too loose, but not too much. There is adjustment on the conveyor, but it should run loose. After considerable use it can be taken up. Tempered steel chain which will not stretch or wear much is used throughout.

The New Idea Spreader is made of good material and workmanship. Any part breaking or proving defective within thirty (30) days from date of delivery to farmer purchaser will be replaced free of charge F. O. B. factory or branch, providing the broken or defective part is returned to factory, transportation charges prepaid, upon instructions from our nearest branch office.

LIME AND MARL SPREADING ATTACHMENT

Figures 14 and 15 clearly illustrate how the lime spreading attachment should be attached to the spreader. As will be noted the lime spreading attachment is driven by removing the upper cylinder chain and placing it in position for driving the attachment. When loading lime into the spreader the endboard should be placed in front of the tine rake. This is for the purpose of preventing lime from losing out of the rear when driving to the field. The figures on the endboard indicate the amount of lime that is in the spreader bed when it is loaded to a certain height. These figures are based on agricultural lime. When ready to spread the endboard should be removed and hung over the top of the side so the board is on the outside of the machine and then the feed lever should always be set in the first or second notch. The figures on the endboard will indicate the amount of lime that will be spread per acre when the lever is set in either the first or second notch.

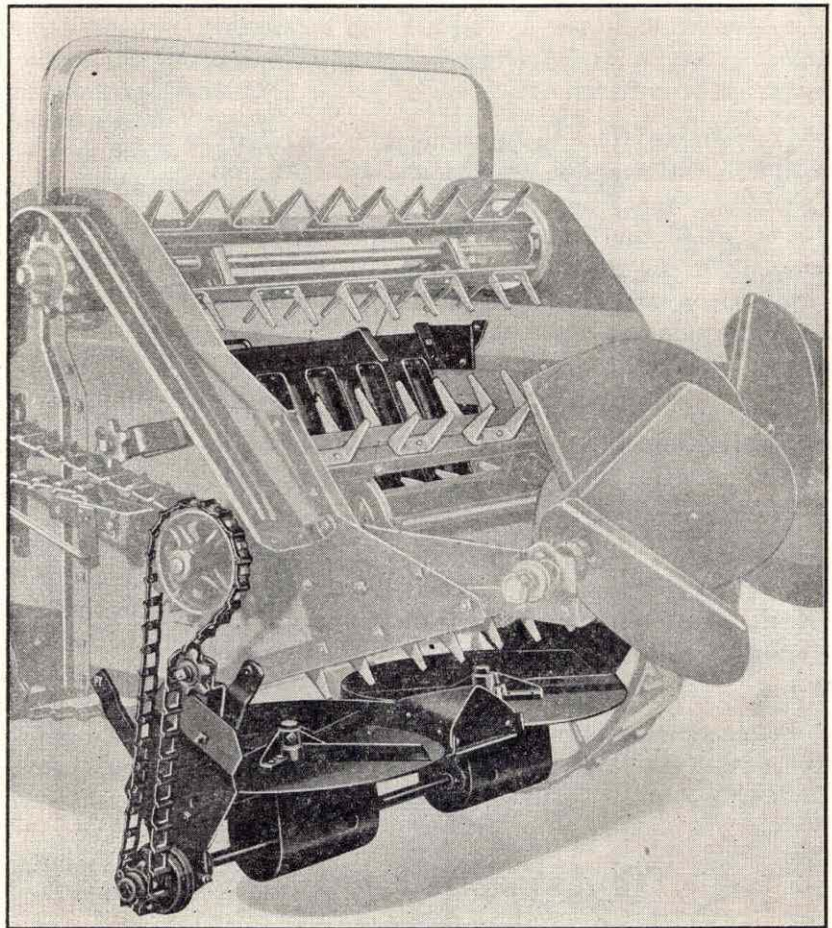


Fig. 14

To remove the lime spreading attachment take off the chain and remove the four bolts that fasten the disc assembly to the hangers. It is not necessary to remove the hangers as they will not interfere with the manure spreading. To remove the tine rake take out the bolts that fasten the tine rake to the sides and flare shields of the spreader together with the brackets that support the tine rake. Wire all of these brackets and supports together so that they will not be lost or mislaid.

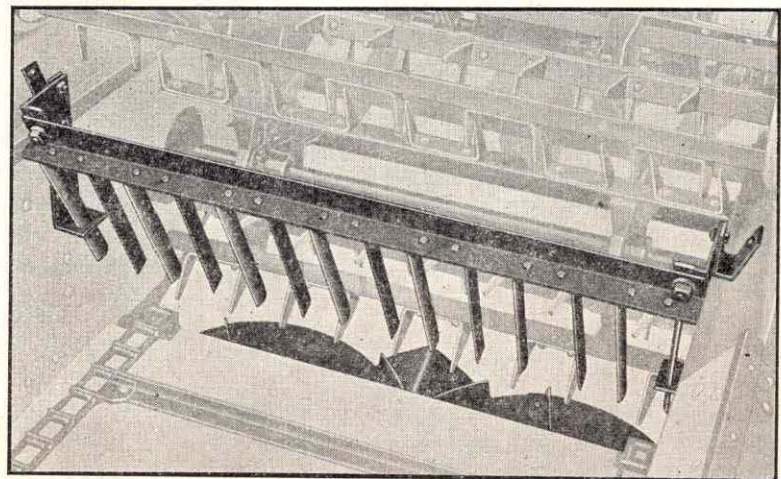


Fig. 15

BRAKE

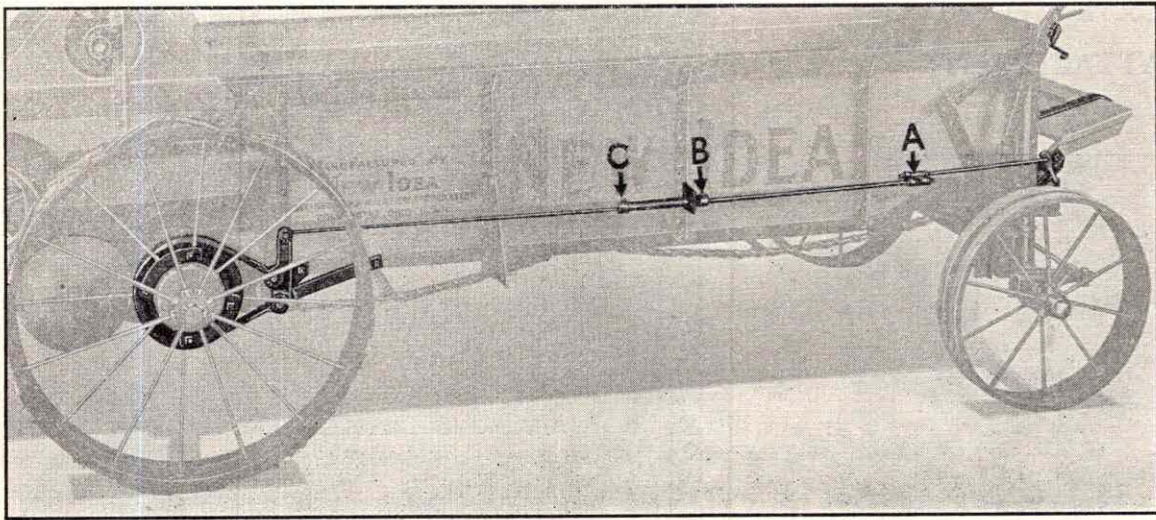


Fig. 16

Illustrations are self-explanatory, Figs. 16 and 17. It is necessary to drill two holes to attach the foot pedal latch and support angle to the foot board. Locate the foot pedal latch and angle support bearing by the one hole that will be found in the foot board and drill in the other two holes necessary in order to attach these two parts. Be sure the bent end of the latch is down and over the front edge of the foot board as shown. The brake can be tightened by loosening the bolt in clamp "A" and tightening the nut on the rod whereafter the clamp should again be tightened by the bolt. The position of the brake pedal can be adjusted by the collar "B" and the spring tension by the collar "C".

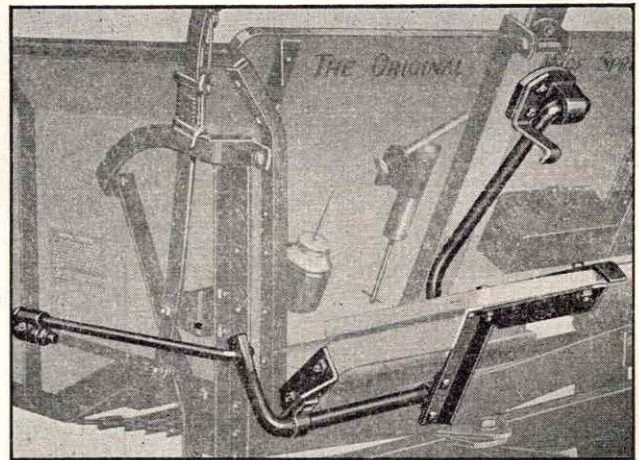


Fig. 17

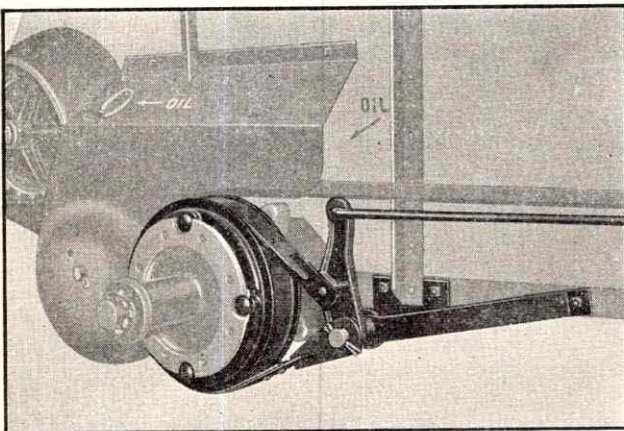


Fig. 18

See Fig. 18 for attaching brake to spreader equipped with air tired wheels. Be sure cast ring is in place as shown.

TAIL BOARD ATTACHMENT

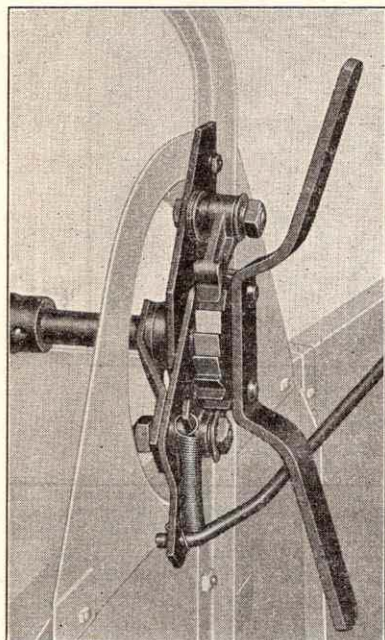


Fig. 19

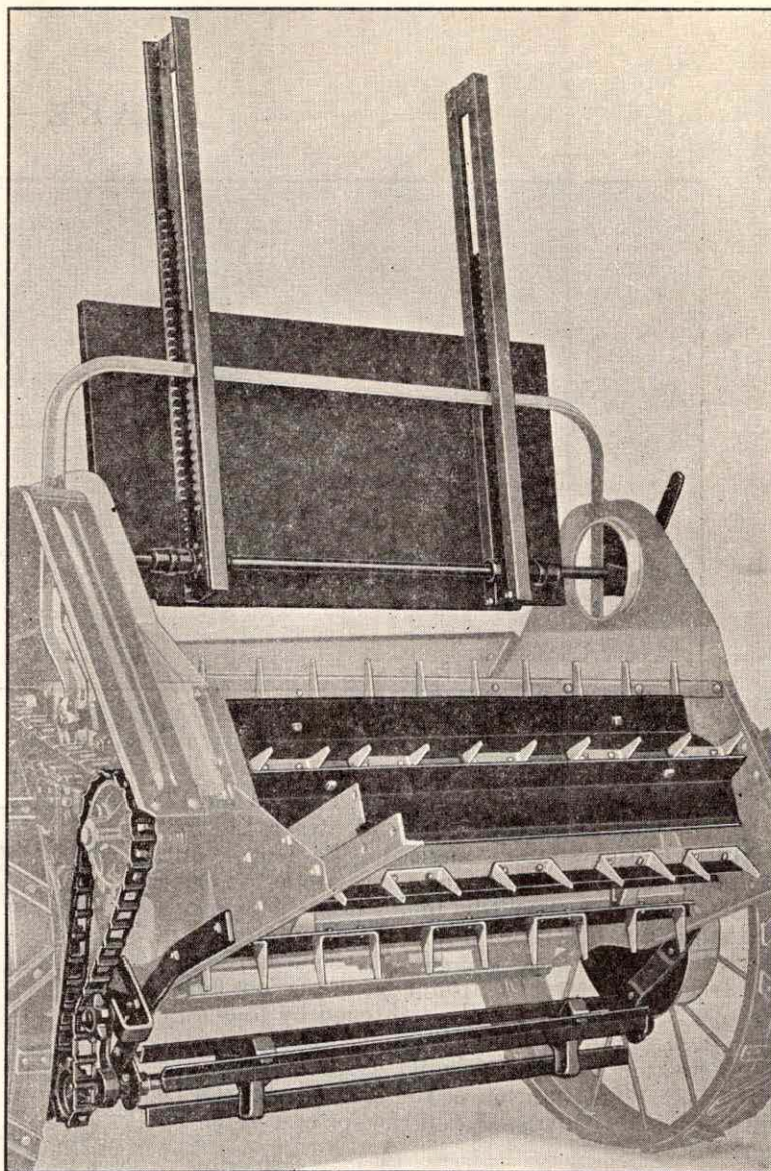


Fig. 20

Remove the entire upper cylinder assembly from the machine as none of these parts are needed when the tail board attachment is installed.

Place the raising lever shaft with its gears and brackets in place and bolt the left bearing bracket to the angle iron arch. Then remove the hand lever with its ratchet and bearing plate from the raising shaft and strip the small flat brace (with bend to the outside) and the spacer washer on the raising shaft. Replace the bearing plate with the locking pawl on the shaft and bolt to offset brace. Replace hand lever and ratchet. Then bolt right bearing plate to arch. The finished assembly should appear as in Fig. 19.

Tail Board front raising lever is attached to the same place that the feed lever is attached; using the longer bolt which will be found with the attachment. The lever guide is attached to the same bolts that hold the lever sector in place. Hook the rod in the lever and plate having the ratchet pawl so the long

bend in the rod is toward the rear. Drill two holes in the flared side board of the spreader near the side angle and attach the rod guide as shown.

Remove the tail board tie pieces and strip the tail board over the arch and raising shaft so that the gear rack and tail board are in front of the raising shaft, (facing the seat). See that the gears are evenly placed in the rack so that the tail board works straight up and down and then replace tie pieces.

Bolt filler pans to main cylinder so that the short side always lies against the cylinder bar using the same bolts that hold the cylinder bars in place. Then bolt the special beater furnished with the tail board attachment and its bracket to the underside of the spreader as shown in Fig. 20 and 21, put the drive chain in place. The same chain is used as is ordinarily used for driving the upper cylinder. Adjust the chain tightener for proper tension. The piece of belting furnished with the attachment should be bolted to the lower end of the front endgate.

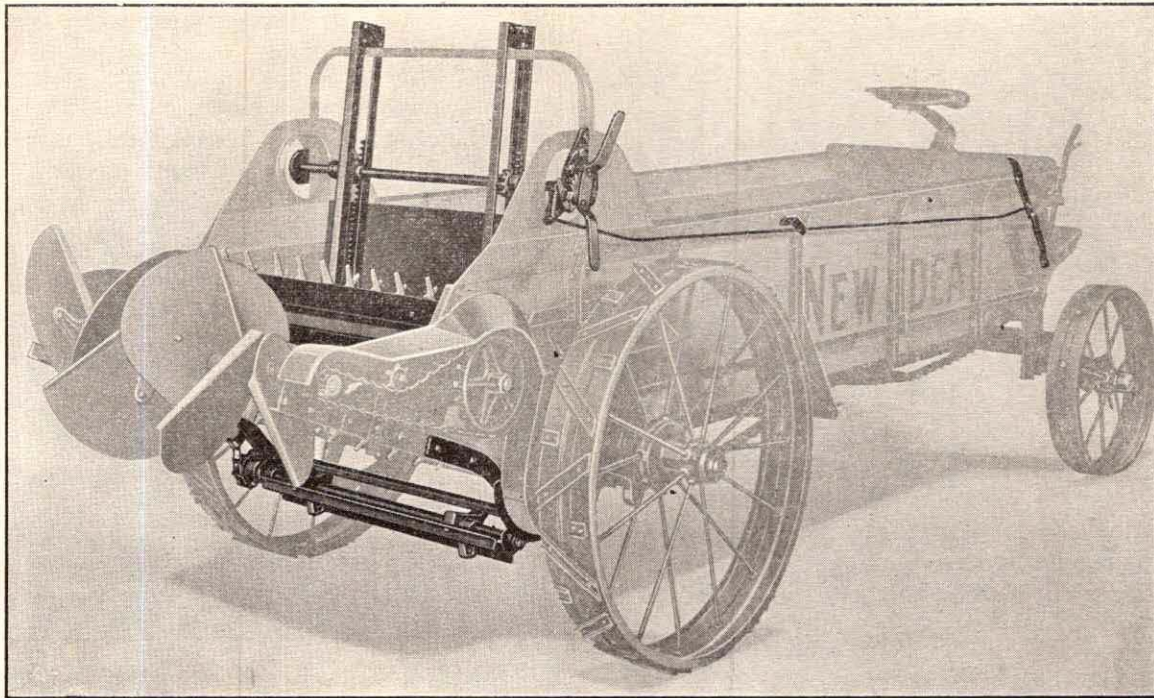


Fig. 21

THREE HORSE HITCH

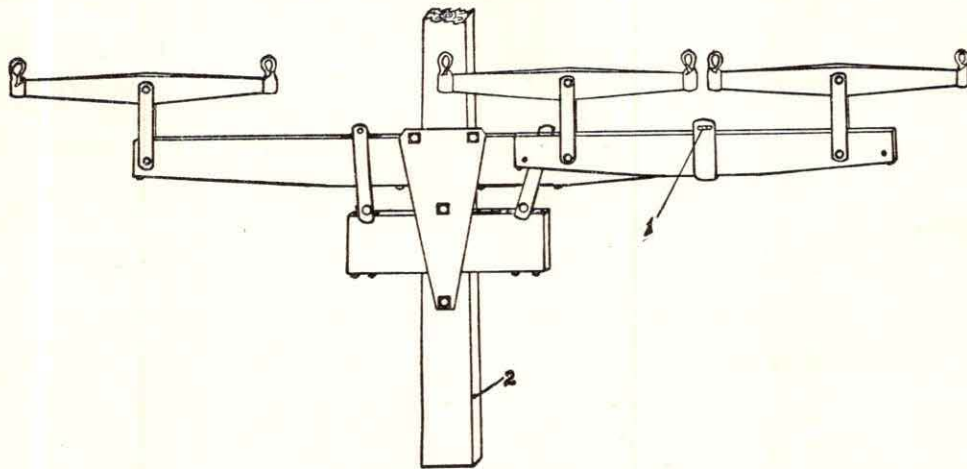


Fig. 22

Take out the $\frac{1}{8}$ " pole pin at 2, Fig. 22 and replace with a $\frac{5}{8}$ " doubletree pin, to get rigidity into the pole connection. Use the $\frac{1}{8}$ " pin afterwards for a doubletree pin at 1.

Remove hammer strap and two horse hitch and attach three horse hitch by using the two holes by which the doubletree and hammer strap were attached. Ream out the $\frac{1}{2}$ " hole to which the hammer strap was bolted to a $\frac{5}{8}$ " hole.

The U strap goes under the pole. It is necessary

that all four bolts are drawn up tightly as all have spacer bushings. This then holds the hitch securely to the pole.

Attach two horse doubletree to the three horse member, as shown at 1 and move the single-trees to the inner holes.

This puts the two horses on the right side and the single horse on the left side of the pole. Attach the neckyoke in the first hole of the pole and so the longest end is toward the single horse.

TRACTOR HITCH

A tractor hitch can be furnished where desired. When a tractor hitch is used the user must be careful in backing or a tractor will back the machine in an opposite direction from where it is wanted and is very liable to damage the steering mechanism or something on the front truck. This applies to other implements as well. See Fig. 23.

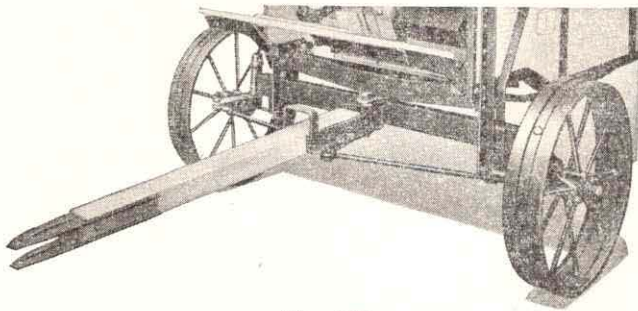


Fig. 23

ANTI-WRAP UPPER CYLINDER

To attach the anti-wrap upper cylinder simply remove the regular upper cylinder and bolt the anti-wrap cylinder in place. Bolt bars in place. See Fig. 24.

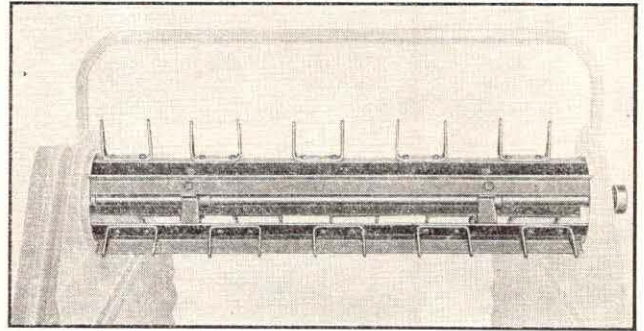


Fig. 24

INFLATION PRESSURE FOR RUBBER TIRES

For Front Wheels	5.50 - 16	-	32 Pounds
For Rear Wheels	7.50 - 24	-	24 Pounds

NUMBER AND POSITION OF PRESSURE TYPE FITTINGS

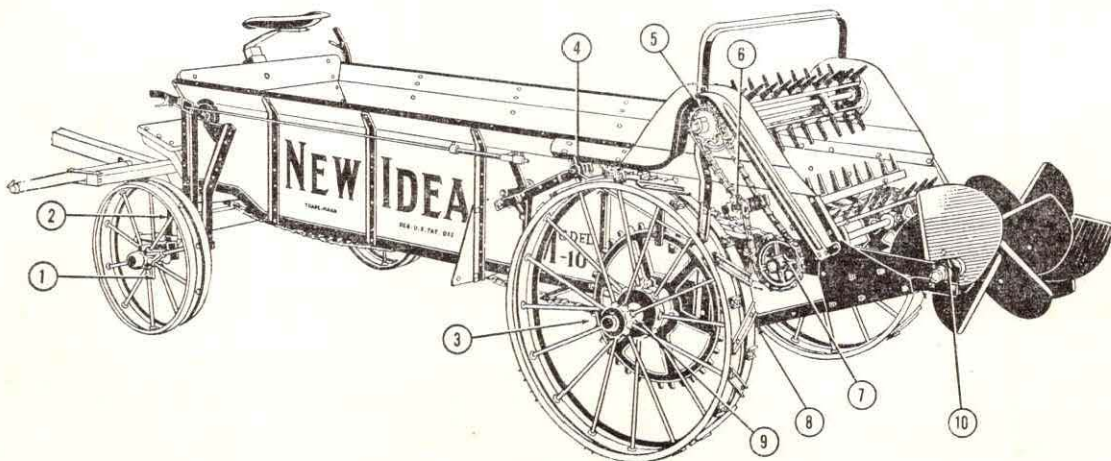


Fig. 25

NUMBER AND POSITION OF PRESSURE TYPE FITTINGS (Con't)

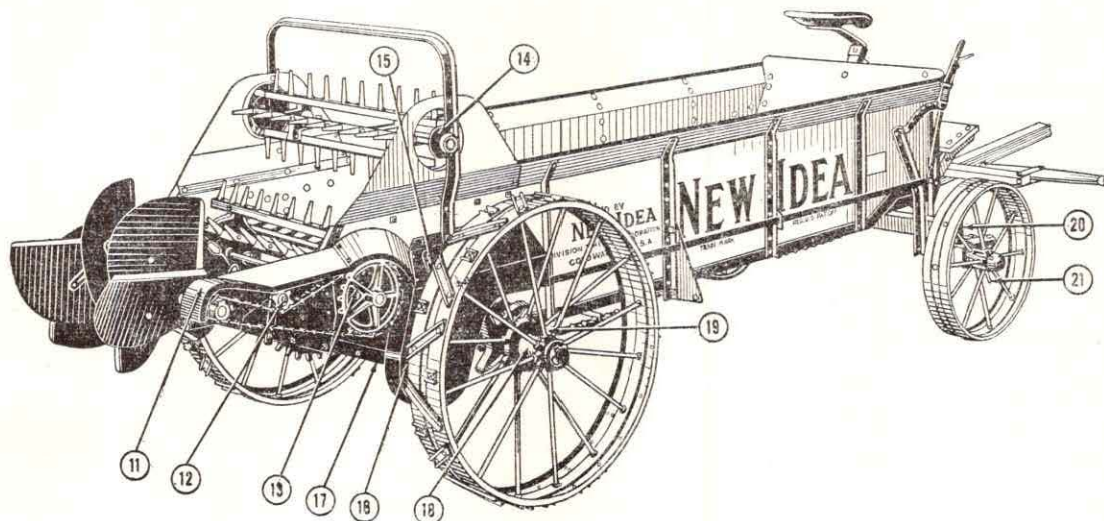


Fig. 26

Give the machine a thorough lubrication and be sure to find all of the grease fittings. Start at the left front wheel and proceed as follows:—

Position	Number of Fittings	Position	Number of Fittings
1 Left front wheel.....	1	12 Distributer chain tightener sprocket.....	1
2 Left pivot axle bearing.....	1	13 Right main cylinder bearing.....	1
3 Left rear axle bearing.....	1	14 Right upper cylinder bearing.....	1
4 Drive arm sprocket.....	1	15 Angle feed shaft bearing.....	1
5 Left upper cylinder bearing.....	1	16 Feed arm bearing.....	1
6 Upper cylinder chain tightener sprocket	1	17 Right feed shaft bearing.....	1
7 Left main cylinder bearing.....	1	18 Right rear wheel.....	1
8 Left feed shaft bearing.....	1	19 Right rear axle bearing.....	1
9 Left rear wheel.....	1	20 Right pivot axle bearing.....	1
10 Left distributor bearing.....	1	21 Right front wheel.....	1
11 Right distributor bearing.....	1		

Give all the other moving parts as well as the chains a thorough lubrication with machine oil.

FOR LIME ATTACHMENT

- 1 In clutch
- 1 Chain tightener sprocket
- 5 Main shaft bearings
- 2 Vertical spindle bearings

FOR ENDGATE ATTACHMENT

- 1 Right bearing for cylinder under bottom
- 1 Left bearing for cylinder under bottom
- 1 Chain tightener sprocket

REPAIR PARTS LIST

The following pages contain parts list and illustrations of "exploded" views of the various units so that part wanted may be easily located.

DO NOT ORDER REPAIR PARTS FROM ILLUSTRATIONS ONLY; ALSO REFER TO THE DESCRIPTION OF THE PART.

Standard bolts, nuts and rivets having no number, should be ordered by size.

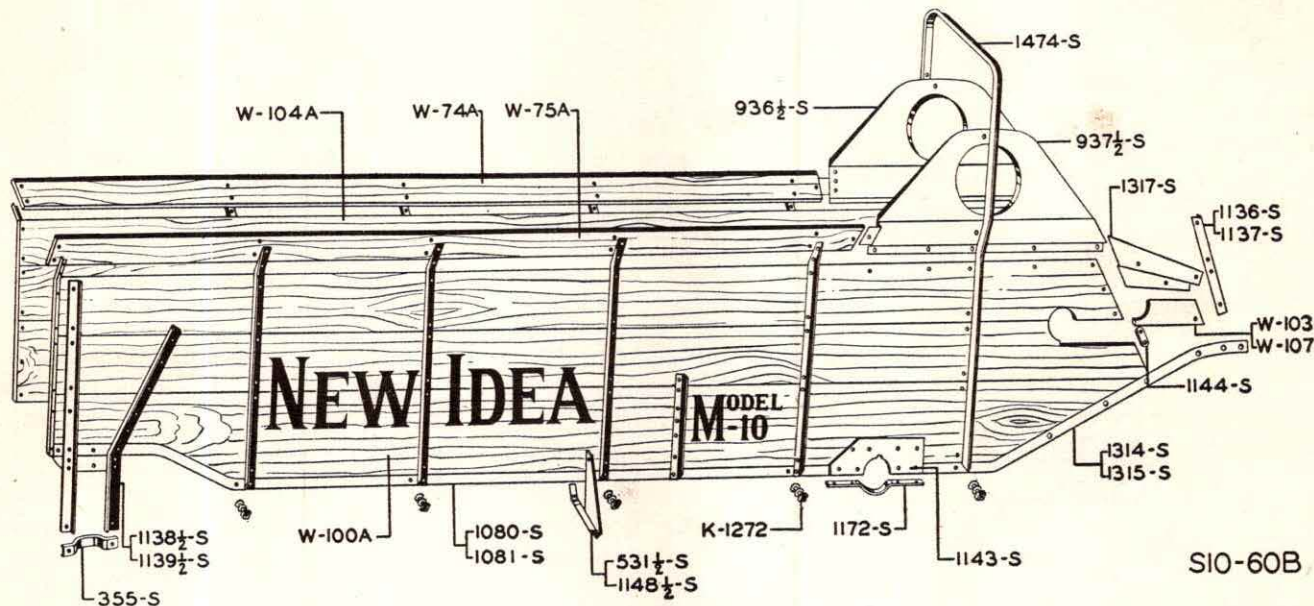
Always order repairs by number and give the description of the part, where used and whether it is a right or left hand part. Right or left parts can be determined by standing back of the machine looking in the direction of travel and then parts on the right are right hand parts and those on the left are left hand parts. Also give Lot and Serial number. Lot number will be found stamped on a small metal plate attached near front of right side. Serial number is stamped on the forward side of the right triangular side brace. Always order repairs from the NEW IDEA Dealer from whom you purchased this machine and be assured of getting genuine NEW IDEA repairs. In order to keep your NEW IDEA machine performing at its highest efficiency, always insist on genuine repairs. NEW IDEA repairs are made from the same patterns and are of the same high quality material and workmanship as the original part and are guaranteed to fit. Specify shipping instructions.

We reserve the right to change specifications or design at any time without incurring the obligation to install such changes on machines previously manufactured.

INDEX

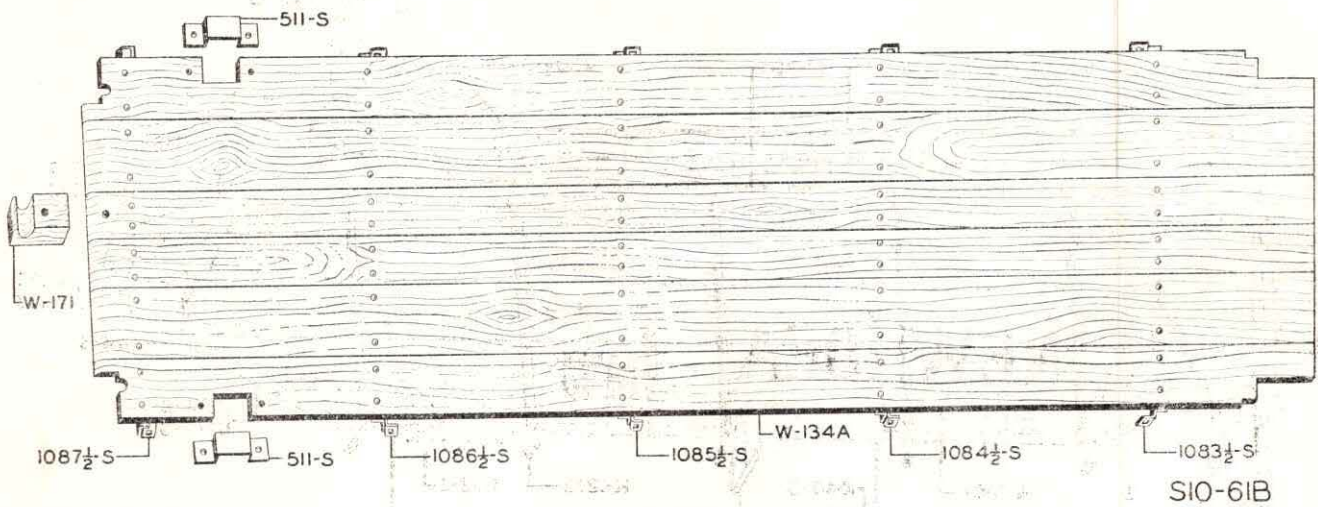
Description	Page No.
Bottom.....	18
Brake.....	34
Distributor.....	24
Endgate Attachment Beater.....	33
Endgate Attachment Board.....	32
Endgate and Footboard.....	19
Feed Shaft, Conveyor and Feed Lever.....	25
Feed and Distributer Shields.....	26
Front Axle.....	21
Lime Attachment Disc Assembly.....	30
Lime Attachment End Board and Tine Rake.....	31
Main Cylinder.....	22
Main Drive.....	27
Pole and Hitch.....	28
Rear Axle.....	20
Sides and Arch.....	17
Three Horse Hitch.....	29
Tractor Hitch.....	28
Upper Cylinder.....	23
Numerical Index.....	35

SIDES AND ARCH



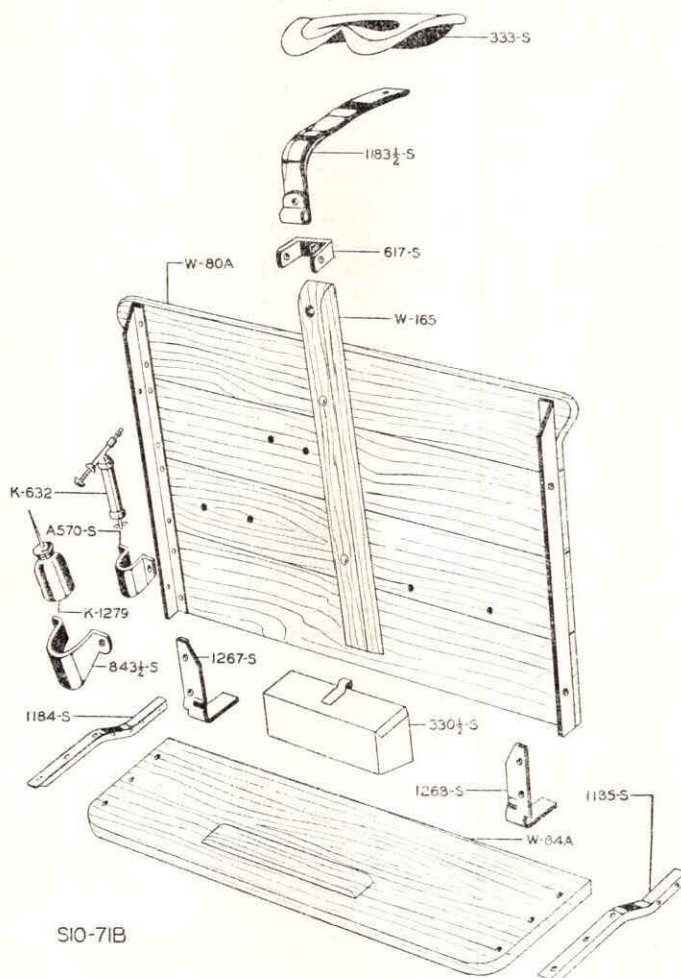
Part No.	Description	Wt. Lbs.
K 1272	Bolt for attaching sides to bottom, 1/2" Dia., 1" long. Special carriage.	2 oz.
355 S	Pivot axle guide tie strap, 1-1/4 x 1/2 x 3/16" channel, 6-1/4" long.	1-1/4
531-1/2 S	Side brace complete, left.	4-1/2
936-1/2 S	Upper cylinder shield, right.	5-1/2
937-1/2 S	Upper cylinder shield, left.	5-1/2
1080 S	Front main side angle, right, 1-3/4 x 1-1/4 x 3/16" angle, 106-13/16" long.	16
1081 S	Front main side angle, left, 1-3/4 x 1-1/4 x 3/16" angle, 106-13/16" long.	16
1136 S	Rear end angle on side, right, 1-3/8 x 1 x 5/32" angle, 14-5/8" long.	1-1/2
1137 S	Rear end angle on side, left, 1-3/8 x 1 x 5/32" angle, 14-5/8" long.	1-1/2
1138-1/2 S	Pivot axle guide complete, right.	11
1139-1/2 S	Pivot axle guide complete, left.	11
1143 S	Rear axle bearing plates, 1/4 x 5" flat, 11-5/8" long.	4-1/4
1144 S	Reinforcement plate at rear end of sides, 1-1/16 x 4" long, 14 gauge.	1/4
1148-1/2 S	Side brace complete, right.	4-1/2
1172 S	Rear axle bearing straps, 5/16 x 1-1/4" flat, 16-1/4" long.	1-3/4
1314 S	Rear main side angle, right, 1-3/4 x 1-1/4 x 3/16" angle, 44-15/16" long.	6-3/4
1315 S	Rear main side angle, left, 1-3/4 x 1-1/4 x 3/16" angle, 44-15/16" long.	6-3/4
1317 S	Filler shield for left side angle.	1
1474 S	Arch, 1-3/8 x 1 x 3/16" angle, 125-3/4" long.	14-3/4
W 74A	Flare board with angle top rail, right, 4-7/16 x 104" long.	14
W 75A	Flare board with angle top rail, left, 4-7/16 x 104" long.	14
W 100A	Side complete, left.	
W 103	Filler piece for rear end of side, left.	
W 104A	Side complete, right.	
W 107	Filler piece for rear end of side, right.	

BOTTOM



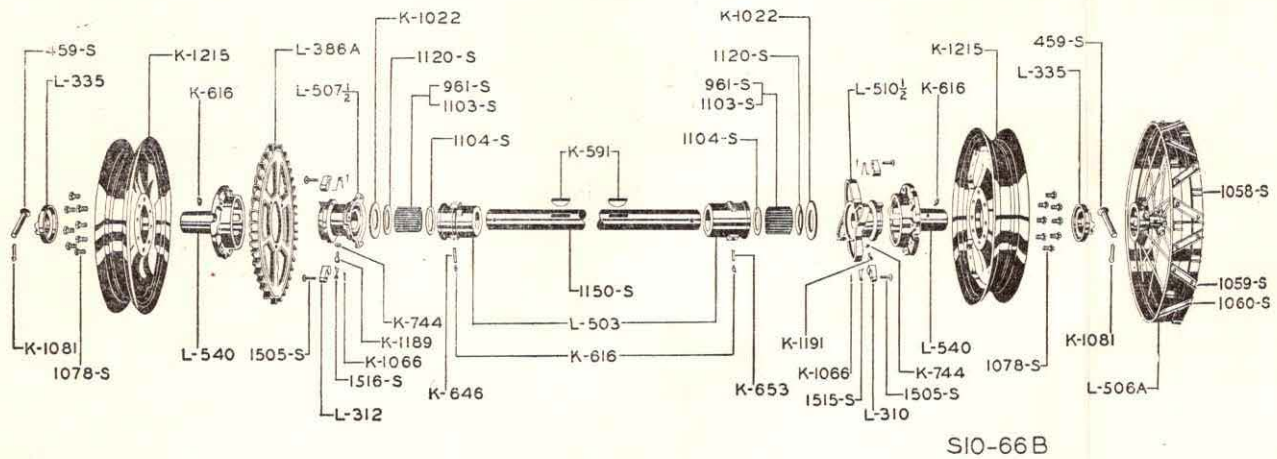
Part No.	Description	Wt. Lbs.
511 S	Rear axle bearing cover, 2-5/8 x 8-5/8" long, 14 gauge.....	1/2
1083-1/2 S	Front cross angle with end brackets, 1-3/4 x 1-1/4 x 3/16" angle, 36-1/2" long.....	5 3/4
1084-1/2 S	Second from front cross angle with end brackets, 1-3/4 x 1-1/4 x 3/16" angle, 36-13/16" long.....	5 3/4
1085-1/2 S	Third from front cross angle with end brackets, 1-3/4 x 1-1/4 x 3/16" angle 37-3/16" long....	5 3/4
1086-1/2 S	Fourth from front cross angle with end brackets, 1-3/4 x 1-1/4 x 3/16" angle; 37-9/16" long..	5 3/4
1087-1/2 S	Rear cross angle with end brackets, 1-3/4 x 1-1/4 x 3/16" angle, 38-13/16" long.....	6
W134A	Bottom complete.....	
W 171	Center feed shaft bearing, 1-7/8 x 2-7/8 x 3-3/8" long.....	1

ENDGATE AND FOOTBOARD



Part No.	Description	Wt. Lbs.
K 632	Grease gun.....	1/2
K 1279	Oil can.....	1
330-1/2 S	Tool box.....	3-1/2
333 S	Seat.....	4-1/2
A570 S	Grease gun holder.....	1/4
617 S	Seat post straddler, 5/16 x 1-1/2" flat, 9-1/4" long.....	1-1/4
843-1/2 S	Oil can holder.....	1-1/4
1183-1/2 S	Seat iron complete, 3/8 x 3" flat, 19-1/2" long.....	6-3/4
1184 S	Footboard support, right, 1-3/4 x 1-1/4 x 3/16" angle, 23-1/4" long.....	3-1/2
1185 S	Footboard support, left, 1-3/4 x 1-1/4 x 3/16" angle, 23-1/4" long.....	3-1/2
1267 S	Conveyor chain slide, right, 3/16 x 2-3/4" flat, 11-1/16" long.....	1-1/2
1268 S	Conveyor chain slide, left, 3/16 x 2-3/4" flat, 11-1/16" long.....	1-1/2
W 80A	Endgate complete.....	
W 84A	Foot board.....	
W 165	Seat post, 1-1/2 x 3 x 24-1/4" long.....	

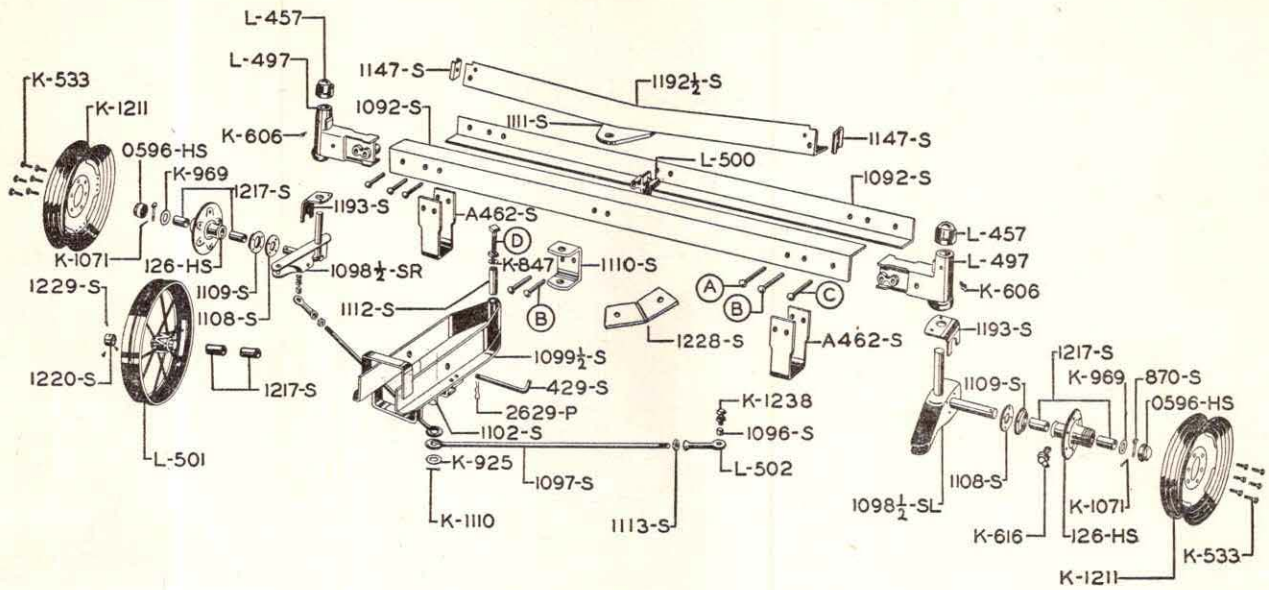
REAR AXLE



SIO-66B

Part No.	Description	Wt. Lbs.
K 591	No. 29 Woodruff key, 3/8" thick, 1-3/4" long.....	1 oz.
K 616	Grease fitting, 1/8" pipe thread, 67-1/2 degree elbow.....	1 oz.
K 646	Pipe nipple, 1/4" I. D., 2-1/2" long.....	1 oz.
K 653	Pipe nipple, 1/4" I. D., 1-1/2" long.....	1 oz.
K 744	Lock nut, 1/2".....	1 oz.
K 1022	Washer, 4" O. D., 1-15/16" I. D., 12 gauge.....	1/4
K 1066	Spring cotter, 3/32" Dia., 1/2 " long.....	1 oz.
K 1081	Spring cotter, 3/16" Dia., 1" long.....	1 oz.
K 1189	Set screw, 1/2" Dia., 1-1/4" long.....	1 oz.
K 1191	Set screw, 1/2" Dia., 1-1/2" long.....	1 oz.
K 1215	Disc wheel 24".....	44
L 310	Pawl for feed cam.....	1/2
L 312	Pawl for sprocket hub.....	1/2
L 335	Axle collar.....	1
L 386A	36 tooth sprocket wheel.....	28
L 503	Bearing housing.....	6-1/2
L 506A	Steel wheel, 1-3/4" bore.....	115
L 507-1/2	Sprocket wheel hub, with pawls and springs, 1-3/4" bore. Uses K 591 key.....	15-1/2
L 510-1/2	Feed cam with pawls and springs, 1-3/4" bore. Uses K 591 key.....	19-1/2
L 540	Wheel hub, 1-3/4" bore.....	23
459 S	Axle pin, 1/2" Dia., 2-3/4" long, oval head.....	1/4
961 S	Roller for bearing (17 required) 3/8" (.368") Dia., 4-3/8" long.....	2 oz.
961-1/4 S	Roller bearing complete, consisting of 17 961 S, 1 1103 S, 1 1104 S and 1 1120 S.....	2-1/4
1058 S	Short cleat for steel wheel, 1-15/32 x 15/32 x 5/32" channel, 2" long.....	1/4
1059 S	Long cleat for steel wheel, right, 1-15/32 x 15/32 x 5/32" channel, 7-1/2" long.....	3/4
1060	Long cleat for steel wheel, left, 1-15/32 x 15/32 x 5/32" channel, 7-1/2" long.....	3/4
1078 S	Hub bolt, 9/16" Dia., 1-1/2" long.....	2 oz.
1103 S	Spacer roller for bearing, 5/16" Dia., 4-1/4" long.....	2 oz.
1104 S	Thrust washer, 2-31/64" O. D., 1-25/32" I. D., 16 gauge.....	1 oz.
1120 S	Bearing plug, 2-5/8" O. D., 1-25/32" I. D., 10 gauge.....	2 oz.
1150 S	Axle, 1-3/4" Rd., 69" long. Uses K 591 key.....	47
1150-1/2 S	Axle complete with 2 L 503 and bearings, 1 L 507-1/2 and 1 L 510-1/2.....	97-1/2
1505 S	Pin for pawls, 1/4" Dia., 1-7/8" long, W. B. head.....	1 oz.
1515 S	Torsion spring for feed cam.....	1 oz.
1516 S	Torsion spring for sprocket wheel hub.....	1 oz.

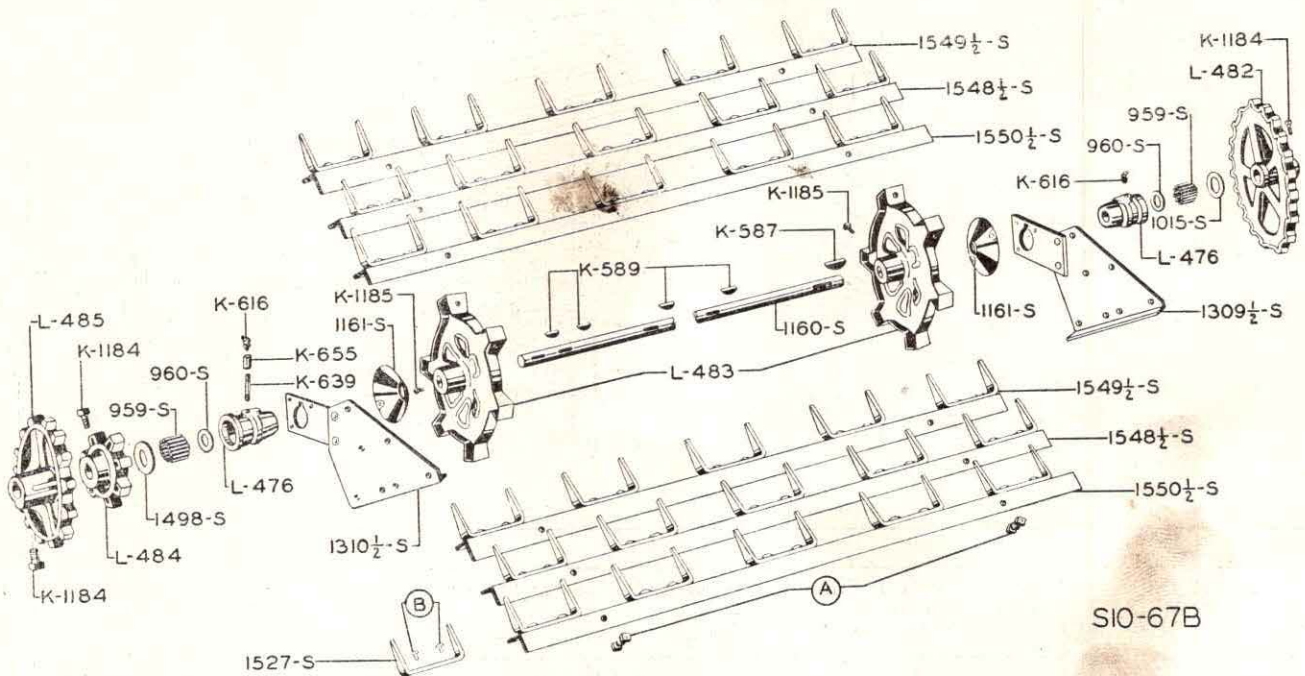
FRONT AXLE



S10-58B

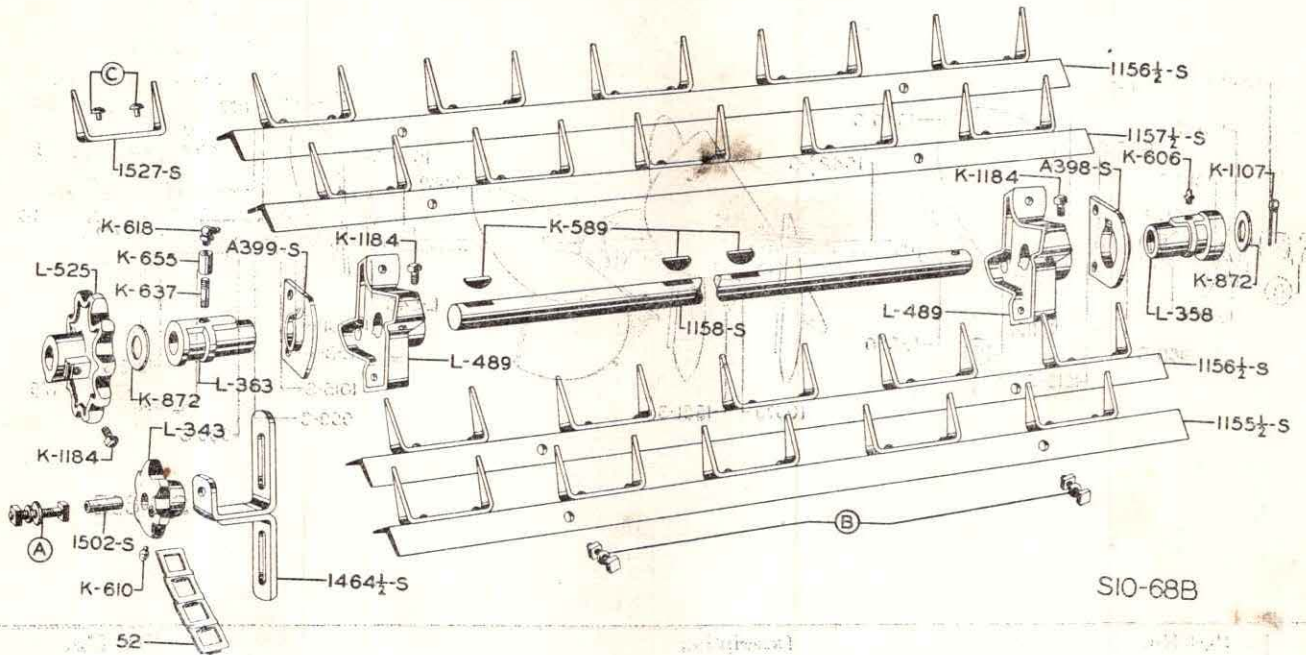
Part No.	Description	Wt. Lbs.
126 HS	Hub for disc wheel with renewable bronze bushings and hub cap.....	12
0596 HS	Screw type hub cap.....	1/2
K 533	Cap screw, 9/16" Dia., 1-13/32" long.....	1 oz.
K 606	Grease fitting, 1/8" pipe thread, straight.....	1 oz.
K 616	Grease fitting, 1/8" pipe thread, 67-1/2 degree elbow.....	1 oz.
K 847	Washer, 1-1/2" O. D., 21/32" I. D., 13 gauge.....	1 oz.
K 925	Washer, 2-1/4" O. D., 1-3/16" I. D., 5/32" thick.....	2 oz.
K 969	Washer, 2-9/16" O. D., 1-7/16" I. D., 16 gauge.....	1 oz.
K 1071	Spring cotter, 1/8" Dia., 3/4" long.....	1 oz.
K 1110	Spring cotter 5/16" Dia., 2-1/4" long.....	1 oz.
K 1211	Disc wheel, 16".....	18
K 1238	Special machine bolt, 5/8" Dia., 2" long.....	2 oz.
L 457	Pivot axle cap.....	3/4
L 497	Axle casting.....	6-3/4
L 500	Filler block.....	1-1/4
L 501	Front wheel with removable bronze bushings.....	53
L 502	Steering rod head.....	1
2629 P	Spring clip.....	2 oz.
429 S	Pole pin, 9/16" Rd., 7-1/8" long.....	1/2
A462 S	Wearing plate, 3/16 x 3" flat, 13-5/8" long.....	2-1/4
870 S	Axle pin, 3/8" Dia., 1-3/4" long.....	2 oz.
1092 S	Axle angle, 3 x 2 x 3/16" angle, 49-9/16" long.....	12-1/2
1092-1/2 S	Axle complete with 2 L497, 1 L500, 2 A462 S, 2 1092 S and 1 1110 S.....	48
1096 S	Bushing, 27/32" (.840") O. D., 47/64" long.....	1 oz.
1097 S	Steering rod, 3/4" Rd., 29" long.....	3-1/2
1098-1/2 SR	Pivot axle complete, right.....	12
1098-1/2 SL	Pivot axle complete, left.....	12
1099-1/2 S	Pole connection complete.....	12-1/4
1102 S	Stud for steering rod, 1-1/8" Dia., 2-5/8" long.....	1/4
1108 S	Washer, 4-1/4" O. D., 1-3/8" I. D., 3/16" thick.....	1/4
1109 S	Wheel seal, 4-1/4" Dia.....	1/4
1110 S	Pole connection hinge, 5/16 x 3-1/4" flat, 9" long.....	2-1/2
1111 S	Bolster plate, 1/4 x 6" flat, 5-1/2" long.....	2-1/2
1112 S	Bushing, 7/8" O. D., 4-1/8" long.....	2 oz.
1113 S	Nut for steering rod, 3/4" hexagon.....	2 oz.
1147 S	Bolster end block, 1-15/32 x 15/32 x 5/32" channel, 2-1/4" long.....	1/2
1192-1/2 S	Bolster complete with plate, 3 x 2 x 7/32" angle, 37-5/8".....	13-3/4
1193 S	Wheel shield.....	3/4
1217 S	Bronze bushing, 1-9/16" (1.566") O. D., 2-1/2" long.....	3/4
1220 S	Slip type hub cap.....	1/4
1228 S	Pole stop.....	3/4
1229 S	Cap screws.....	1 oz.
	"A" rivet, 3/8" Dia. 2-3/4" long, Csk head.....	
	"B" rivet, 1/2" Dia., 3" long, oval head.....	
	"C" rivet, 1/2" Dia., 2-3/4" long, oval head.....	
	"D" machine bolt, 5/8" Dia., 5-1/2" long with lock washer.....	

MAIN CYLINDER



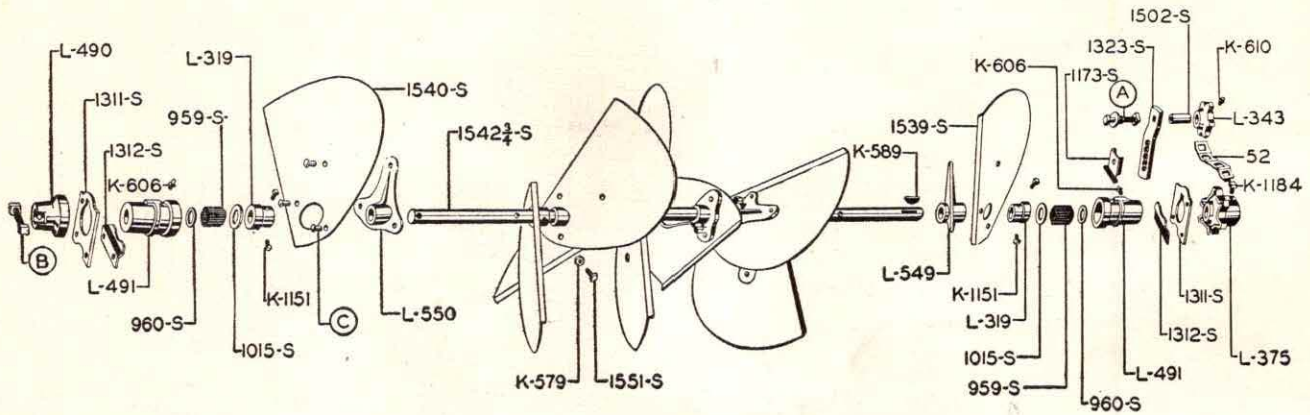
Part No.	Description	Wt. Lbs.
K 587	No. 26 Woodruff key, 3/16" thick, 1-3/4" long.....	1 oz.
K 589	No. 13 Woodruff key, 3/16" thick, 1" long.....	1 oz.
K 616	Grease fitting, 1/8" pipe thread, 67-1/2 degree elbow.....	1 oz.
K 639	Pipe nipple, 1/8" I. D., 2" long.....	1 oz.
K 655	Pipe coupling, 1/8".....	1 oz.
K 1184	Set screw, 1/2" Dia., 3/4" long.....	1 oz.
K 1185	Set screw, 1/2" Dia., 1" long.....	1 oz.
L 476	Bearing housing.....	2
L 482	20 tooth sprocket to drive distributor, 1-1/16" bore. Uses K 587 key.....	7-3/4
L 483	Cylinder head, 1-1/16" bore. Uses K 589 key.....	11-1/4
L 484	7 tooth drive sprocket, 1-1/16" bore. Uses K 589 key.....	3-1/4
L 485	15 tooth sprocket to drive upper cylinder, 1-1/16" bore. Uses K 589 key.....	5
959 S	Roller for bearing (16 required), 1/4" Dia., 2-17/32" long.....	1 oz.
959-1/4 S	Roller bearing complete, left, consisting of 16 959 S, 1 960 S and 1 1498 S.....	1
959-1/2 S	Roller bearing complete, right, consisting of 16 959 S, 1 960 S and 1 1015 S.....	1
960 S	Bearing end washer, 1-9/16" O. D., 1-3/32" I. D., 16 gauge.....	1 oz.
1015 S	Bearing closure washer, 2" O. D., 1-3/32" I. D., 18 gauge.....	1 oz.
1160 S	Shaft, 1-1/16" Rd., 50" long. Uses K 587 and K 589 keys.....	12-1/2
1160-3/4 S	Shaft complete with 2 L 476 and bearings, 1 L 482, 2 L 483, 1 L 484, 1 L 485, 2 1161 S, 1 1309-1/2 S and 1 1310-1/2 S.....	65
1161 S	Anti-wrap shields, 6" Dia.....	3/4
1309-1/2 S	Bearing plate complete, right.....	7-1/2
1310-1/2 S	Bearing plate complete, left.....	7-1/2
1498 S	Bearing closure (spacer) washer, 2" O. D., 1-3/32" I. D., 1/8" thick.....	2 oz.
1527 S	Cylinder bar tooth with rivets.....	1/2
1548-1/2 S	Cylinder bar with teeth, 1-3/8 x 1-3/8 x 5/32" angle, 36-3/4" long.....	6-3/4
1539-1/2 S	Cylinder bar with teeth, 1-3/8 x 1-3/8 x 5/32" angle, 36-3/4" long.....	6-3/4
1550-1/2 S	Cylinder bar with teeth, 1-3/8 x 1-3/8 x 5/32" angle, 36-3/4" long.....	6-3/4
	"A" machine bolt, 3/8" Dia., 1" long with lock washer.....	1 oz.
	"B" rivet, 5/16" Dia., 3/4" long, oval head.....	1 oz.

UPPER CYLINDER



Part No.	Description	Wt. Lbs.
52	Steel chain link (complete chain 41 links)	2 oz.
K 589	No. 13 Woodruff key, 3/16" thick, 1" long	1 oz.
K 606	Grease fitting, 1/8" pipe thread, straight	1 oz.
K 610	Grease fitting, 5/16" drive type	1 oz.
K 618	Grease fitting, 1/8" pipe thread, 90 degree elbow	1 oz.
K 637	Pipe nipple, 1/8" I. D., 1-1/4" long	1 oz.
K 655	Pipe coupling, 1/8"	1 oz.
K 872	Washer, 1-3/4" O. D., 1-1/32" I. D., 16 gauge	1 oz.
K 1107	Spring cotter, 5/16" Dia., 1-1/4" long	1 oz.
K 1184	Set screw, 1/2" Dia., 3/4" long	1 oz.
L 343	6 tooth tightener sprocket	1
L 343-1/2	6 tooth tightener sprocket with bolt and bushing	1-1/4
L 358	Bearing, right, 1" bore	1-1/4
L 363	Bearing, left, 1" bore	1-1/4
L 489	Cylinder head, 1" bore. Uses K 589 key	3-1/2
L 525	10 tooth sprocket, 1" bore. Uses K 589 key	5
A398 S	Bearing plate, right, 3/16 x 4" flat, 4" long	1
A399 S	Bearing plate, left, 3/16 x 4" flat, 4" long	1
1155-1/2 S	Cylinder bar with teeth, 1-1/4 x 1-1/4 x 5/32" angle, 42" long	7
1156-1/2 S	Cylinder bar with teeth, 1-1/4 x 1-1/4 x 5/32" angle, 42" long	7
1157-1/2 S	Cylinder bar with teeth, 1-1/4 x 1-1/4 x 5/32" angle, 42" long	7
1158 S	Shaft, 1" Rd., 49-7/8" long	11-1/4
1158-3/4 S	Shaft complete with 1 L 358, 1 L 363, 2 L 489, 1 L 525, 1 A398 S and 1 A399 S	23-1/2
1464-1/2 S	Chain tightener complete with sprocket	3-1/4
1502 S	Bushing, 19/32" O. D., 1-9/16" long	2 oz.
1527 S	Cylinder bar tooth with rivets	1/2
	"A" machine bolt, 3/8" Dia., 2-1/4" long with lock washer	
	"B" machine bolt, 3/8" Dia., 1" long with lock washer	
	"C" rivet, 5/16" Dia., 3/4" long, oval head	

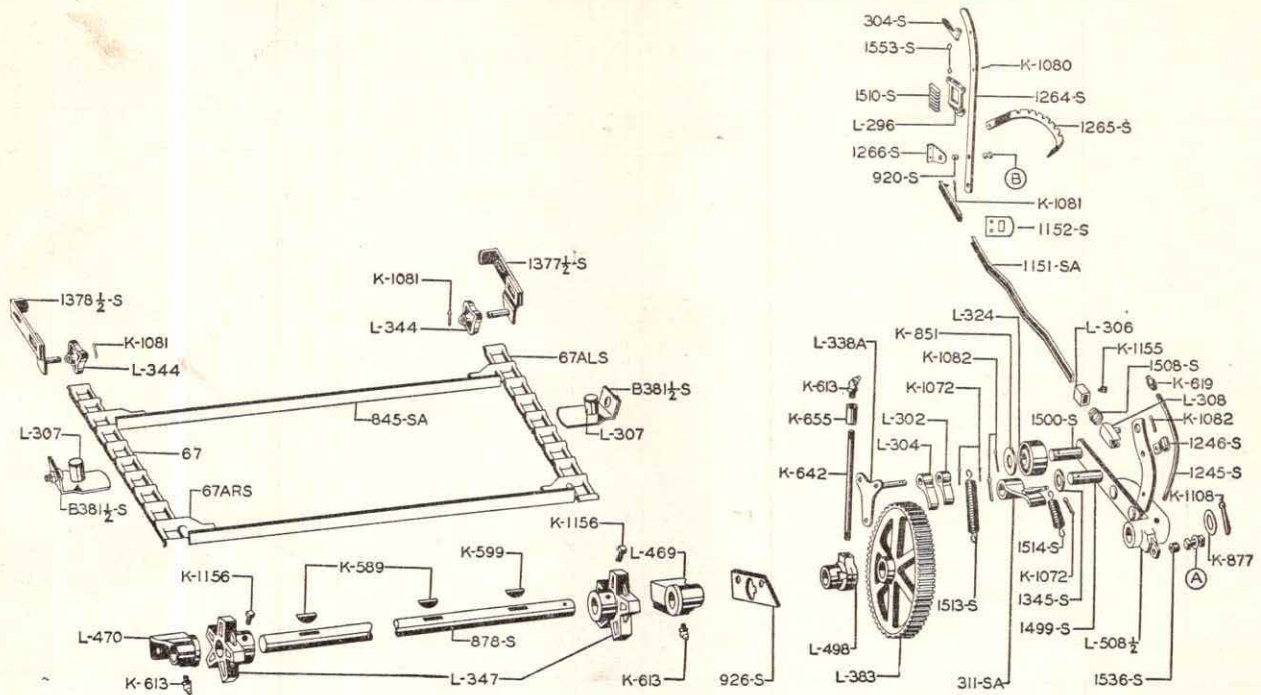
DISTRIBUTER



S10-69B

Part No.	Description	Wt. Lbs.
52	Steel chain link (complete chain 44 links).....	2 oz.
K 579	Hexagon jam nut, 1/2".....	1 oz.
K 589	No. 13 Woodruff key, 3/16" thick, 1" long.....	1 oz.
K 606	Grease fitting, 1/8" pipe thread, straight.....	1 oz.
K 610	Grease fitting, 1/8" pipe thread, 5/16" drive type.....	1 oz.
K 1151	Set screw, 5/16" Dia., 5/16" long.....	1 oz.
K 1184	Set screw, 1/2" Dia., 3/4" long.....	1 oz.
L 319	Spacer collar, 1-1/16" bore.....	3/4
L 343	6 tooth tightener sprocket.....	1
L 343-1/2	6 tooth tightener sprocket with bolt and bushing.....	1-1/4
L 375	6 tooth sprocket, 1-1/16" bore. Uses K 589 key.....	2-1/4
L 490	End collar.....	3/4
L 491	Bearing housing.....	2
L 549	Paddle casting, right.....	2-1/4
L 550	Paddle casting, left.....	2-1/4
959 S	Roller for bearing, (16 required) 1/4" Dia., 2-17/32" long.....	1 oz.
959-1/2 S	Roller bearing complete, consisting of 16 959 S, 1 960 S and 1 1015 S.....	1
960 S	Bearing end washer, 1-9/16" O. D., 1-3/32" I. D., 16 gauge.....	1 oz.
1015 S	Bearing closure washer, 2" O. D., 1-3/32" I. D., 18 gauge.....	1 oz.
1173 S	Lock for chain tightener arm.....	2 oz.
1311 S	Bearing plate, 3/16 x 4" flat, 3-1/2" long.....	3/4
1312 S	Keeper for bearing, 1/8 x 1-3/4" flat, 4" long.....	1/4
1323 S	Chain tightener arm, 5/16 x 1-1/4" flat, 6" long.....	3/4
1323-1/2 S	Chain tightener complete with sprocket.....	2-1/4
1502 S	Bushing, 19/32" O. D., 1-9/16" long.....	2 oz.
1539 S	Paddle, right.....	3-1/2
1540 S	Paddle, left.....	3-1/2
1542-3/4 S	Shaft with sprocket, 1-1/16" Rd., 46-1/2" long. Uses K-589 key.....	14
1542-3/4 SA	Distributor complete.....	70
1551 S	Set screw, 1/2" Dia., 1-5/16" long, cone point.....	1 oz.
	"A" machine bolt, 3/8" Dia., 2-1/2" long with lock washer.....	
	"B" machine bolt, 5/16" Dia., 1-5/8" long with lock washer.....	
	"C" rivet, 5/16" Dia., 3/4" long, truss head.....	

FEED SHAFT, CONVEYOR AND FEED LEVER



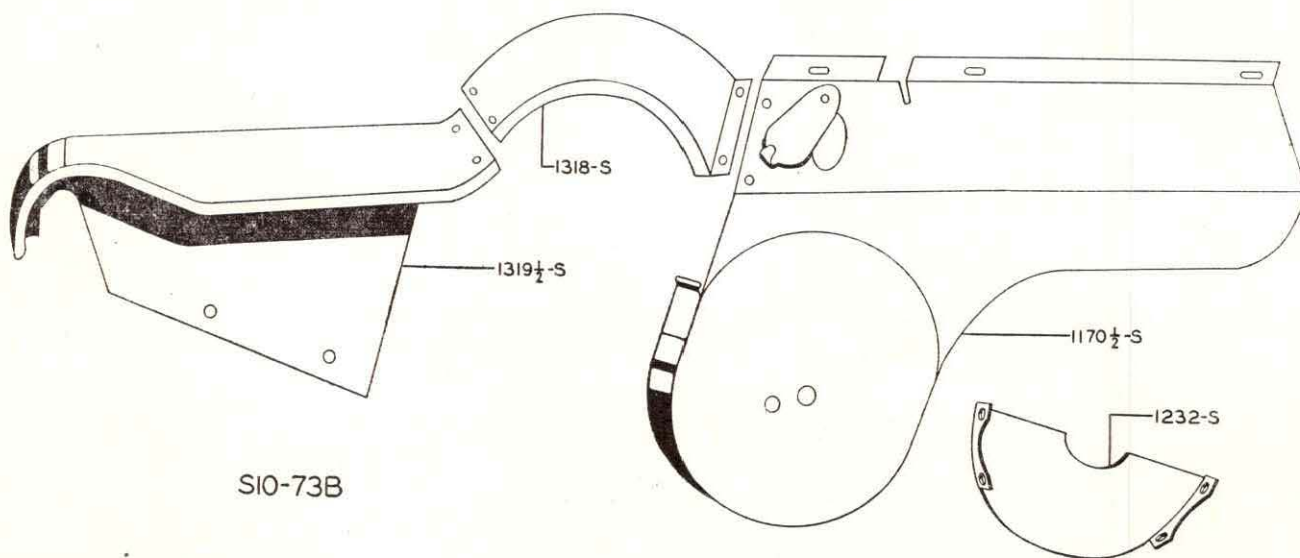
S10-70B

Part No.	Description	Wt. Lbs.
67	Plain steel chain link.....	2 oz.
67 ARS	Steel attachment link, left.....	3 oz.
67 ALS	Steel attachment link, right.....	3 oz.
CF 323	Conveyor complete with 67 steel chain and 845 SA bar, 176-67 plain links, 15-67 ARS and 15-ALS attachment links; 13 bars each followed by 6 plain links and 2 bars each followed by 5 plain links.....	84
K 586	No. 13 Woodruff key, 3/16" thick, 1" long.....	1 oz.
K 599	No. 14 Woodruff key, 7/32" thick, 1" long.....	1 oz.
K 913	Grease fitting, 1/8" pipe thread, 30 degree elbow.....	1 oz.
K 916	Grease fitting, 1/8" female pipe thread, straight.....	1 oz.
K 642	Pipe nipple, 1/8" I. D., 7" long.....	2 oz.
K 655	Pipe coupling, 1/8".....	1 oz.
K 851	Washer, 1-1/2" O. D., 15/16" I. D., 16 gauge.....	1 oz.
K 877	Washer, 1-3/4" O. D., 1-1/8" I. D., 16 gauge.....	1 oz.
K 1072	Spring cotter, 1/8" Dia., 1" long.....	1 oz.
K 1080	Spring cotter, 3/16" Dia., 3/4" long.....	1 oz.
K 1081	Spring cotter, 3/16" Dia., 1" long.....	1 oz.
K 1082	Spring cotter, 3/16" Dia., 1-1/4" long.....	1 oz.
K 1108	Spring cotter, 5/16" Dia., 1-1/2" long.....	1 oz.
K 1155	Set screw, 3/8" Dia., 5/8" long.....	1 oz.
K 1156	Set screw, 3/8" Dia., 5/8" long, low head.....	1 oz.
L 296	Lever slide casting.....	1/2
L 302	Retention pawl, short.....	1/2
L 304	Retention pawl, long.....	1/2
L 306	Single set collar.....	1/4
L 307	Conveyor guide.....	1/4
L 308	Slide collar.....	1/2
L 324	Roller for feed arm.....	1-1/2
L 338A	Retention pawl support with pin.....	1-1/2
L 344	4 tooth idler sprocket.....	1
L 347	5 tooth feed sprocket, 1-1/16" bore. Uses K 589 key.....	2
L 383	Ratchet wheel, 1-1/16" bore. Uses K 599 key.....	12-1/4
L 469	Feed bearing, right, 1-1/16" bore.....	2
L 470	Feed bearing, left, 1-1/16" bore.....	2
L 498	Angle feed bearing, 1-1/16" bore.....	3/4
L 508-1/2	Feed arm complete with roller, pawl and spring.....	8-1/2
304 S	Lever latch.....	1/4
311 SA	Feed pawl, 1/4 x 1-1/4" flat, 5-3/4" long.....	3/4
B381-1/2 S	Conveyor slide complete, 1/8 x 3" flat, 5-1/8" long.....	1-1/4
845 SA	Conveyor bar with links, 1-3/8 x 1 x 5/32" angle, 34-1/4" long, overall.....	3-1/4
878 S	Shaft, 1-1/16" Rd., 44-5/8" long.....	11-1/4

FEED SHAFT, CONVEYOR AND FEED LEVER (Con't)

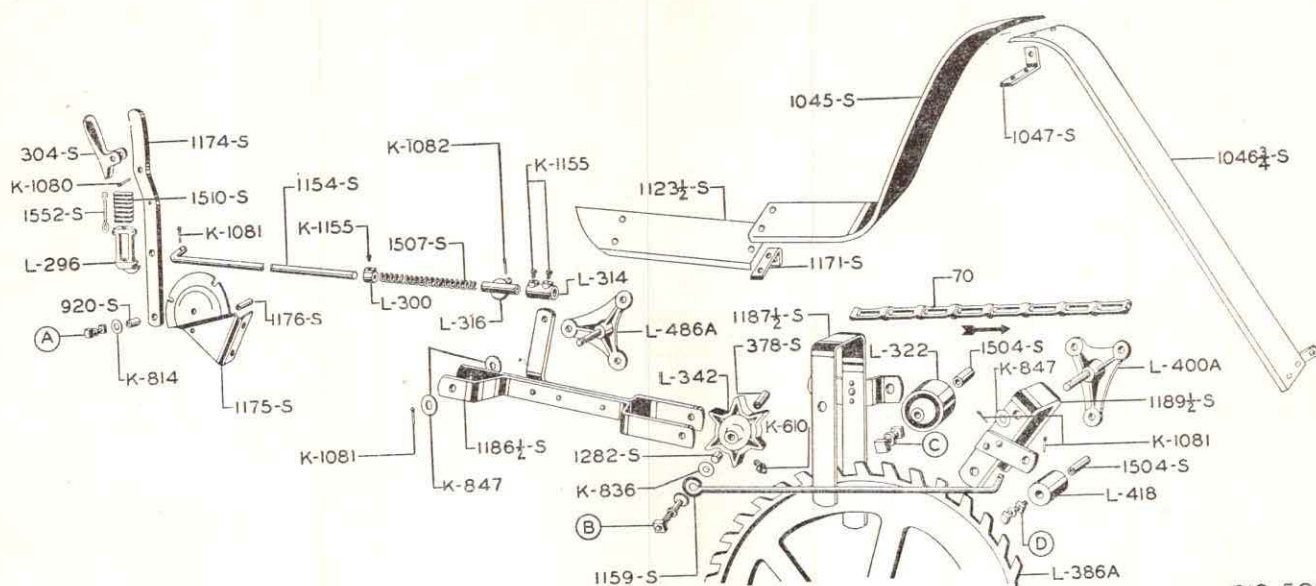
Part No.	Description	Wt. Lbs.
878-1/2 S	Shaft complete with 2 L 347.....	15
920 S	Bushing, 9/16" O. D., 3/8" long.....	1 oz.
926 S	Angle feed bearing plate.....	3/4
1151 SA	Feed rod, 3/4 x 3/8 x 1/8" channel, 117-3/4" long.....	5-1/2
1152 S	Feed rod guide, 1/8 x 3" flat, 2-3/16" long (not illustrated).....	1/4
1245 S	Pipe nipple, bent, 1/8" I. D., 8" long.....	1/4
1246 S	Bracket for pipe nipple.....	2 oz.
1264 S	Feed lever, 5/16 x 1-1/4" flat, 26-3/4" long.....	3-1/2
1264-1/2 S	Feed lever complete with latch, slide and spring.....	4
1265 S	Feed lever sector, 5/16 x 1-1/4" flat, 19-5/8" long.....	2-1/2
1266 S	Feed lever bracket, 3/16 x 4-3/4" flat, 2-5/8" long.....	3/4
1345 S	Washer, 1-5/8" O. D., 7/8" I. D., 1/4" thick.....	2 oz.
1377-1/2 S	Conveyor tightener with stud, right.....	2
1378-1/2 S	Conveyor tightener with stud, left.....	2
1499 S	Feed pawl stud, 7/8" Dia., 2-17/32" long.....	1/4
1500 S	Feed roller stud, 7/8" Dia., 2-3/4" long.....	1/4
1508 S	Compression spring, 1-1/8" O. D., 7/16" long, 3 coils.....	1 oz.
1510 S	Compression spring, 11/16 x 1-9/16 x 2-1/2" long, 7-3/4 coils.....	3 oz.
1513 S	Extension spring, 7/8" O. D., 4-3/4" long, overall 6-1/2", 40 coils.....	1/4
1514 S	Extension spring, 5/8" O. D., 2-1/4" long, overall 3-1/2", 41 coils.....	2 oz.
1536 S	Bushing, 1/4" I. D., 5/16" long.....	1 oz.
1553 S	Feed lever wire, 3/16" Dia., 6-1/2" long.....	2 oz.
	"A" machine bolt, 5/16" Dia., 1" long with lock washer.....	
	"B" machine bolt, 3/8" Dia., 1-1/4" long with lock washer.....	

FEED AND DISTRIBUTER SHIELDS



Part No.	Description	Wt. Lbs.
1170-1/2 S	Ratchet wheel shield.....	6-1/2
1232 S	Inner ratchet wheel shield.....	1
1318 S	Shield connecting distributor and ratchet wheel shields, 18" long.....	1-1/2
1319-1/2 S	Distributor chain shield.....	3-1/4

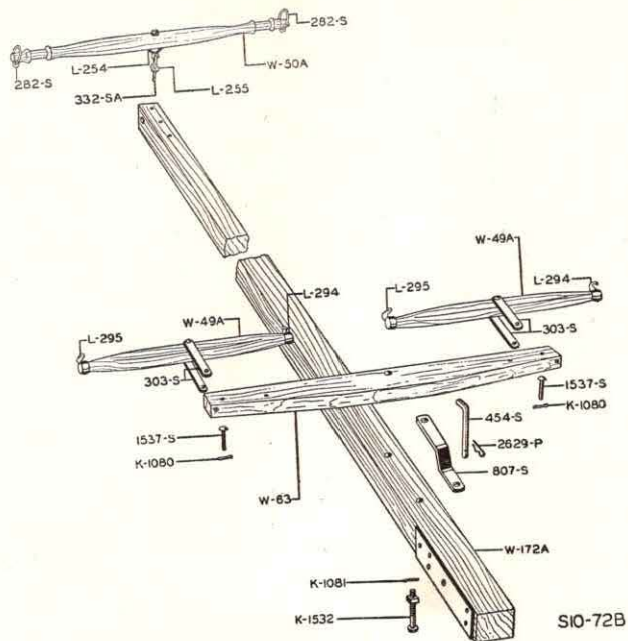
MAIN DRIVE



S10-59B

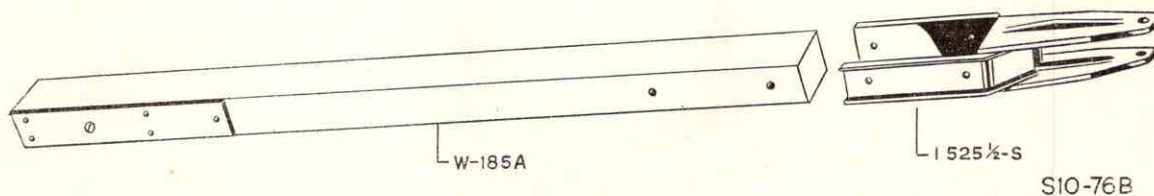
Part No.	Description	Wt. Lbs.
70	Steel chain link (complete chain 42 links)	2 oz.
K 610	Grease fitting, 5/16" drive type	1 oz.
K 814	Washer, 1" O. D., 7/16" I. D., 16 gauge	1 oz.
K 836	Washer, 1-3/8" O. D., 7/16" I. D., 16 gauge	1 oz.
K 847	Washer, 1-1/2" O. D., 21/32" I. D., 13 gauge	1 oz.
K 1080	Spring cotter, 3/16" Dia., 3/4" long	1 oz.
K 1081	Spring cotter, 3/16" Dia., 1" long	1 oz.
K 1082	Spring cotter, 3/16" Dia., 1-1/4" long	1 oz.
K 1155	Set screw, 3/8" Dia., 5/8" long	1 oz.
L 296	Lever slide casting	1/2
L 300	Single set collar	1/4
L 314	Double set collar	1/2
L 316	Slide collar	1/2
L 322	Straddler roller	1-3/4
L 342	6 tooth idle sprocket	1-3/4
L 386A	36 Tooth main driver sprocket	27-1/4
L 400A	Auxiliary drive arm post with pin	2
L 418	Roller for auxiliary drive arm	1
L 486A	Drive arm post with pin	2-1/2
304 S	Lever latch	1/4
378 S	Bushing, 19/32" O. D., 2-5/16" long	1 oz.
920 S	Bushing, 9/16" O. D., 3/8" long	1 oz.
1045 S	Shield connecting drive chain and upper cylinder chain shields, 4 x 20-1/4" long, 18 gauge	1-1/4
1046-3/4 S	Upper cylinder chain shield, 4 x 30" long, 18 gauge	1-3/4
1047 S	Top bracket for upper cylinder chain shield, 3/16 x 1" flat, 4-1/2" long	1/4
1123-1/2 S	Drive chain shield, 4 x 14-1/8" long, 18 gauge	1
1154 S	Drive rod, 9/16" Rd., 80-1/2" long	5-3/4
1159 S	Auxiliary drive rod, 1/2" Rd., 30-1/4" long	1-3/4
1171 S	Drive chain shield rear bracket, 3/16 x 1-1/4" flat, 6-1/4" long	1/2
1174 S	Drive lever, 5/16 x 1-1/4" flat, 16" long	1-3/4
1174-1/2 S	Drive lever complete with latch, slide and spring	2-3/4
1175 S	Drive lever sector, 3/16 x 6" flat, 10" long	3-1/4
1176 S	Spacer, 1/4" I. D., 1-9/16" long	1 oz.
1186-1/2 S	Drive arm complete with sprocket	7-1/4
1187-1/2 S	Chain straddler with bracket	3
1189-1/2 S	Auxiliary drive arm	2-1/4
1282 S	Bushing, 19/32" O. D., 9/16" long	1 oz.
1504 S	Bushing, 19/32" O. D., 2-7/16" long	2 oz.
1507 S	Compression spring, 7/8" O. D., 7" long, 23 coils	1/4
1510 S	Compression spring, 11/16 x 1-9/16 x 2-1/2" long, 7-3/4 coils	1/4
1552 S	Lever wire, 3/16" Dia., 5-5/16" long	2 oz.
	"A" machine bolt, 3/8" Dia., 1-1/4" long with lock washer	
	"B" carriage bolt, 3/8" Dia., 4" long with lock washer	
	"C" machine bolt, 3/8" Dia., 3-3/4" long with lock washer	
	"D" machine bolt, 3/8" Dia., 3-1/4" long with lock washer	

POLE AND HITCH



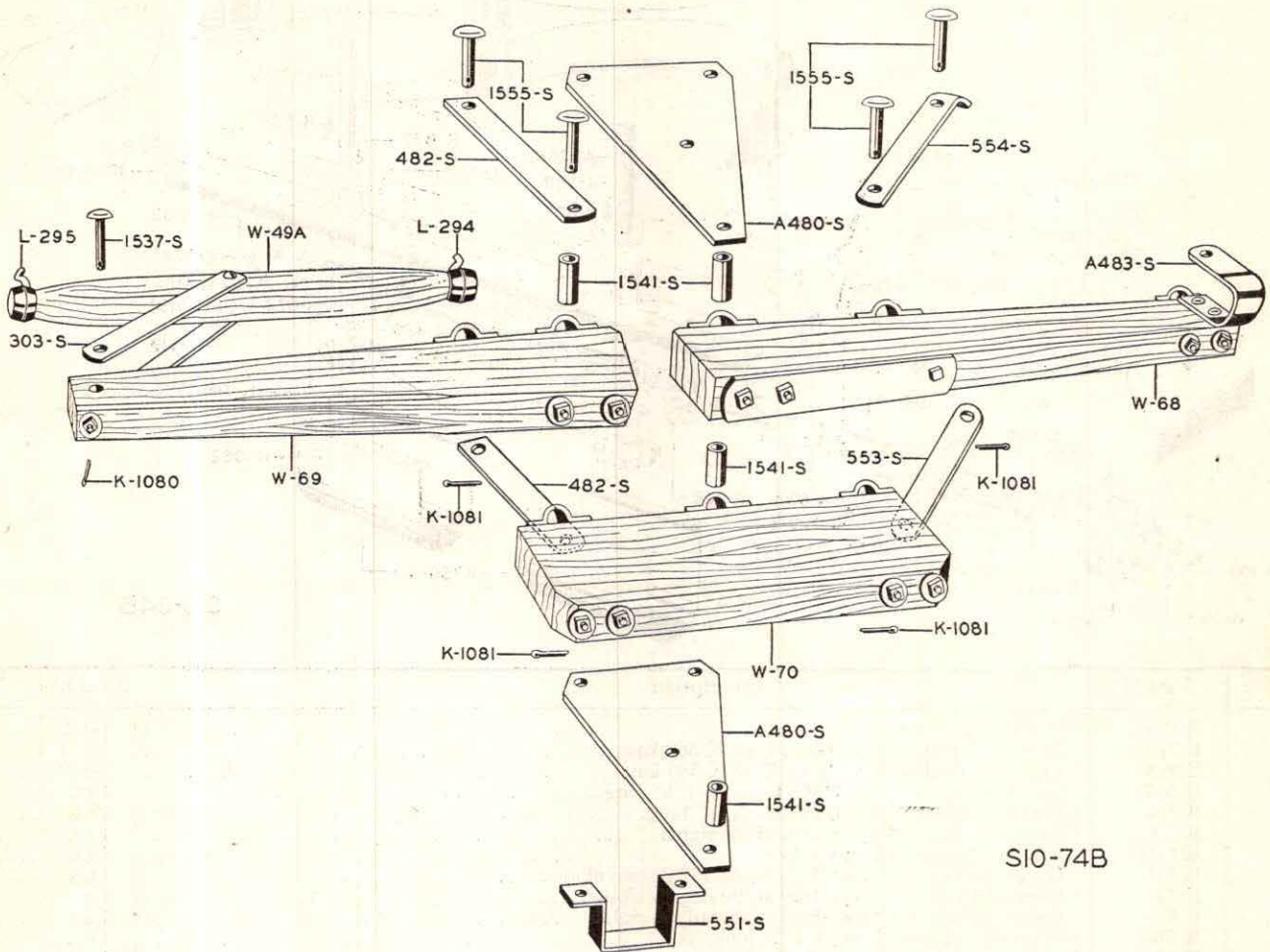
Part No.	Description	Wt. Lbs.
K 1080	Spring cotter, 3/16" Dia., 3/4" long.....	1 oz.
K 1081	Spring cotter, 3/16" Dia., 1" long	1 oz.
K 1532	Carriage bolt, 1/2" Dia., 4" long, drilled for cotter	1/4
L 254	Neckyoke washer.....	1/4
L 255	Pole washer.....	1/4
L 294	Singletree hook, right.....	1/2
L 295	Singletree hook, left.....	1/2
2629 P	Spring clip.....	2 oz.
282 S	Ferrule and ring for neckyoke.....	3/4
303 S	Singletree strap, 3/16 x 1-1/4" flat, 9" long.....	1/2
332 SA	Eyebolt for neckyoke.....	3/4
454 S	Hammer strap pin, 5/8" Rd., 7-1/8" long.....	1/2
807 S	Hammer strap, 5/16 x 1-1/2" half oval, 11-3/4" long.....	1
1537 S	Pin for doubletree, 3/8" Dia., 2-3/4" long, W. B. head.....	2 oz.
W 49A	Singletree complete	
W 50A	Neckyoke complete	
W 63	Doubletree.....	
W 172A	Pole.....	

TRACTOR HITCH



Part No.	Description	Wt. Lbs.
1525-1/2 S	Hitch irons complete.....	8-3/4
W 185A	Stub tongue.....	

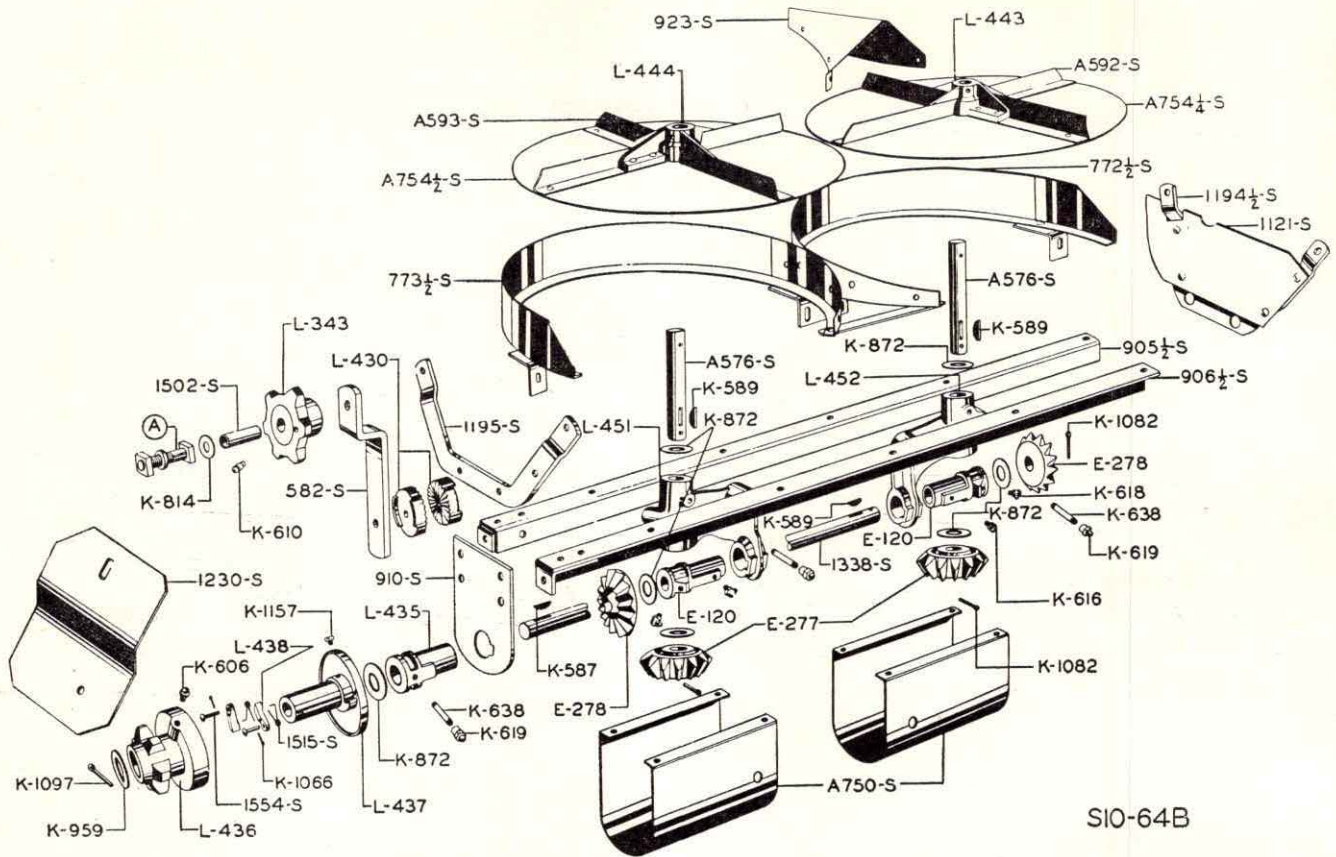
THREE HORSE HITCH



S10-74B

Part No.	Description	Wt. Lbs.
K 1080	Spring cotter, 3/16" Dia., 3/4" long.....	1 oz.
K 1081	Spring cotter, 3/16" Dia., 1" long.....	1 oz.
L 294	Singletree hook, right.....	1/2
L 295	Singletree hook, left.....	1/2
303 S	Singletree strap, 3/16 x 1-1/4" flat, 9" long.....	1/2
A480 S	Center plate.....	5-1/4
482 S	Three horse bar strap, left, 1/4 x 1-1/2" flat, 10" long.....	1-1/4
A483 S	Clevis, 5/16 x 2-1/4" flat, 12" long.....	2-1/2
551 S	Pole strap, 3/16 x 1-3/4" flat, 12-3/4" long.....	1-1/4
553 S	Three horse bar strap, right, 1/4 x 1-1/2" flat, 10-1/2" long.....	1-1/4
554 S	Three horse bar slide strap, right, 1/4 x 1-1/2" flat, 12" long.....	1-1/4
1537 S	Pin, 3/8" Dia., 2-3/4" long, W. B. head.....	2 oz.
1541 S	Bushing, 27/32 (.840)" O. D., 1-7/8" long.....	2 oz.
1555 S	Pin, 5/8" Dia., 3" long, oval head.....	1/4
W 49A	Singletree complete.....	
W 68	Three-horse bar, no irons, right, 29" long.....	
W 69	Three-horse bar, no irons, left, 31-1/2" long.....	
W 70	Equalizer bar, 20" long.....	

LIME ATTACHMENT DISC ASSEMBLY



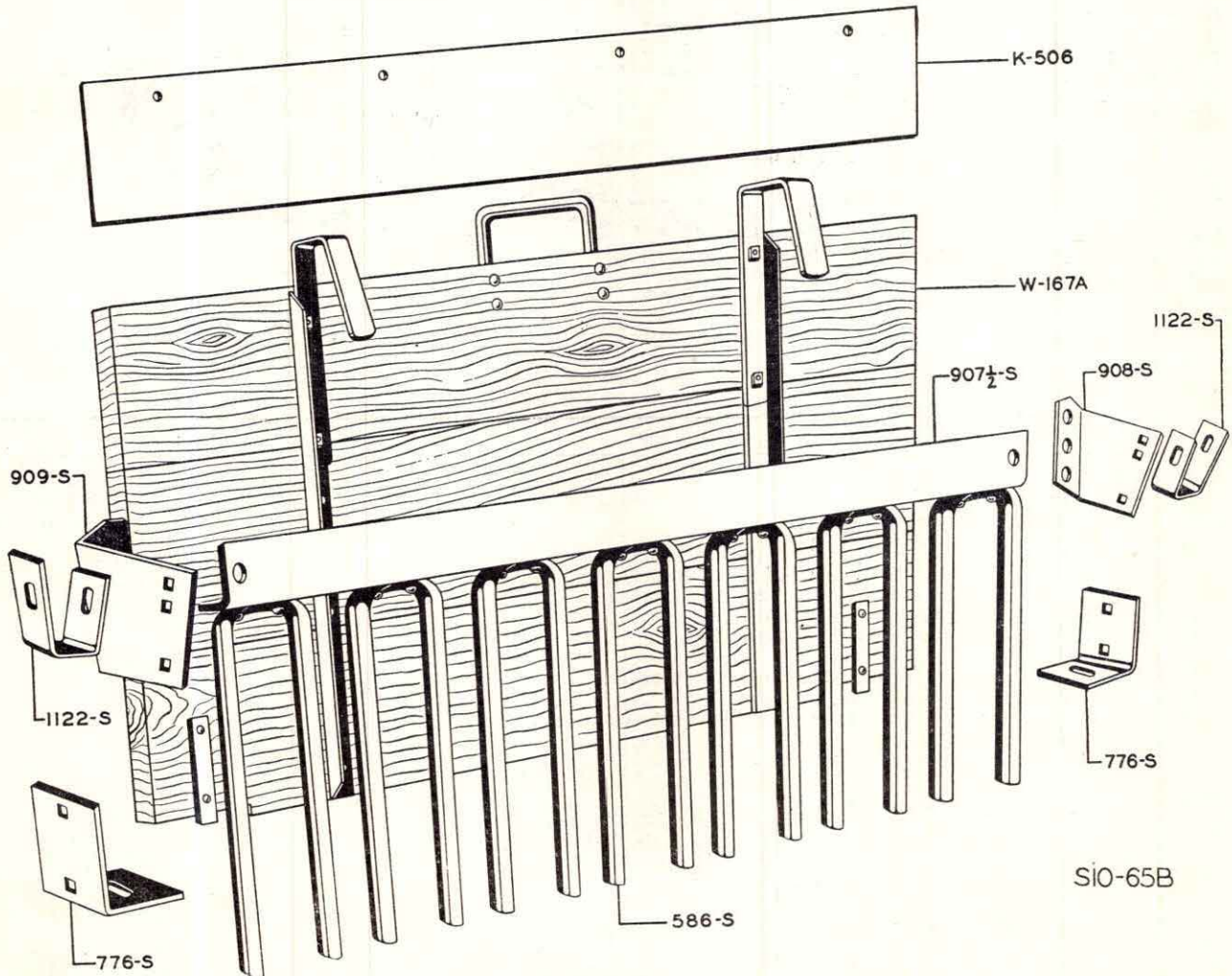
SIO-64B

Part No.	Description	Wt .Lbs.
E 120	Bearing, 1" bore.....	1-1/2
E 277	13 tooth bevel gear, 1" bore. Uses K 589 key.....	1-1/4
E 278	14 tooth bevel gear, 1" bore. Uses K 589 key.....	1-1/2
K 587	No. 26 Woodruff key, 3/16" thick, 1-3/4" long.....	1 oz.
K 589	No. 13 Woodruff key, 3/16" thick, 1" long.....	1 oz.
K 606	Grease fitting, 1/8" pipe thread, straight.....	1 oz.
K 610	Grease fitting, 5/16" drive type.....	1 oz.
K 616	Grease fitting, 1/8" pipe thread, 67-1/2 degree elbow.....	1 oz.
K 618	Grease fitting, 1/8" pipe thread, 90 degree elbow.....	1 oz.
K 619	Grease fitting, 1/8" female pipe thread, straight.....	1 oz.
K 638	Pipe nipple, 1/8" I. D., 1-1/2" long.....	1 oz.
K 814	Washer, 1" O. D., 7/16" I. D., 16 gauge.....	1 oz.
K 872	Washer, 1-3/4" O. D., 1-1/32" I. D., 16 gauge.....	1 oz.
K 959	Washer, 2-1/2" O. D., 1-11/16" I. D., 16 gauge.....	1 oz.
K 1066	Spring cotter, 3/32" Dia., 1/2" long.....	1 oz.
K 1082	Spring cotter, 3/16" Dia., 1-1/4" long.....	1 oz.
K 1097	Spring cotter, 1/4" Dia., 2-1/4" long.....	1 oz.
K 1157	Set screw, 3/8" Dia., 5/8" long, cross drilled.....	1 oz.
L 343	6 tooth idler sprocket.....	1
L 343-1/2	6 tooth idler sprocket with bolt and bushing.....	1-1/4
L 430	Tightener ratchets.....	1/2
L 435	Bearing, 1" bore.....	1
L 436	6 Tooth ratchet sprocket.....	3
L 437	Ratchet clutch, 1" bore. Uses K 587 key.....	3-1/4
L 437-1/2	Ratchet clutch complete with sprocket, spring and pawl. Uses K 587 key.....	6-1/4
L 438	Clutch pawl.....	2 oz.
L 443	Disc spider, right.....	3-1/2
L 444	Disc spider, left.....	3-1/2
L 451	Double bearing, left.....	4-3/4
L 452	Double bearing, right.....	4-3/4
A576 S	Vertical shaft, 1" Rd., 6-5/8" long.....	1-1/2
582 S	Chain tightener arm, 5/16 x 1-1/2" flat, 7-3/4" long.....	1
582-1/2 S	Chain tightener complete with bolt, bushing and sprocket.....	2-1/2
A592 S	Disc wing, right.....	1
A593 S	Disc wing, left.....	1
A750 S	Bearing shield, 9-1/2 x 16-3/8" long, 18 gauge.....	3
A754-1/4 S	Disc complete, right.....	11
A754-1/2 S	Disc complete, left.....	11
772-1/2 S	Disc guard complete, right.....	4
773-1/2 S	Disc guard complete, left.....	4

LIME ATTACHMENT DISC ASSEMBLY—(Con't)

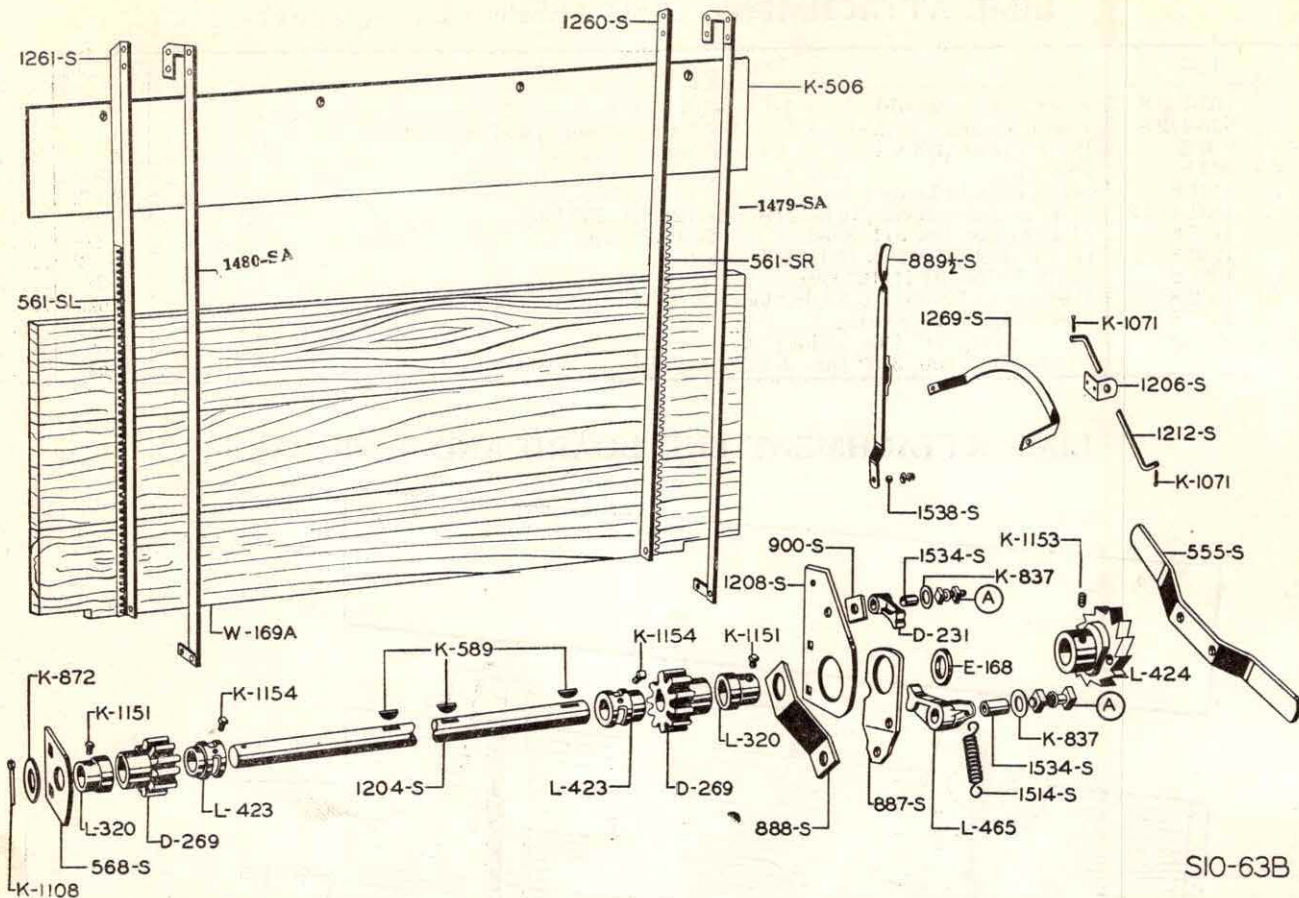
Part No.	Description	Wt. Lbs.
905-1/2 S	Front main angle with clip, 1-3/8 x 1-3/8 x 5/32" angle, 42-7/8" long.....	5
906-1/2 S	Rear main angle with clip, 1-3/8 x 1-3/8 x 5/32" angle, 42-7/8" long.....	5
910 S	Bearing plate, 1/4 x 4-1/2" flat, 9-5/8" long.....	3
923 S	Divider.....	3/4
1121 S	Shield on right hanger.....	1-1/2
1194-1/2 S	Main hanger complete, right, 5/16 x 1-1/2" flat, 25" long.....	4-3/4
1195 S	Main hanger, left, 5/16 x 1-1/2" flat, 20-1/2" long.....	2-3/4
1230 S	Clutch shield, 7-9/16 x 10-13/16", 18 gauge.....	1-1/2
1338 S	Shaft, 1" Rd., 34-11/16" long.....	7-3/4
1502 S	Bushing, 19/32" O. D., 1-9/16" long.....	2 oz.
1515 S	Torsion spring for pawl.....	1 oz.
1554 S	Pin for pawl, 1/4" Dia., 1" long, W. B. head.....	1 oz.
	"A" machine bolt, 3/8" Dia., 2-1/2" long with lock washer.....	2 oz.

LIME ATTACHMENT END BOARD AND TINE RAKE



Part No.	Description	Wt. Lbs.
K 506	Retainers on front endgate, 6" wide, 37" long.....	4
586 S	Rake tines, 5/16 x 1-1/4" half oval, 23-1/2" long.....	1-3/4
776 S	Tine support, 3 x 2 x 3/16" angle, 2-1/2" long.....	1/2
907-1/2 S	Tine rake complete.....	19-1/2
908 S	Rake support bracket, right.....	1
909 S	Rake support bracket, left.....	1
1122 S	Bracket extension, 3/16 x 1-1/4" flat, 4-5/8" long.....	1/4
W 167A	Endboard complete.....	

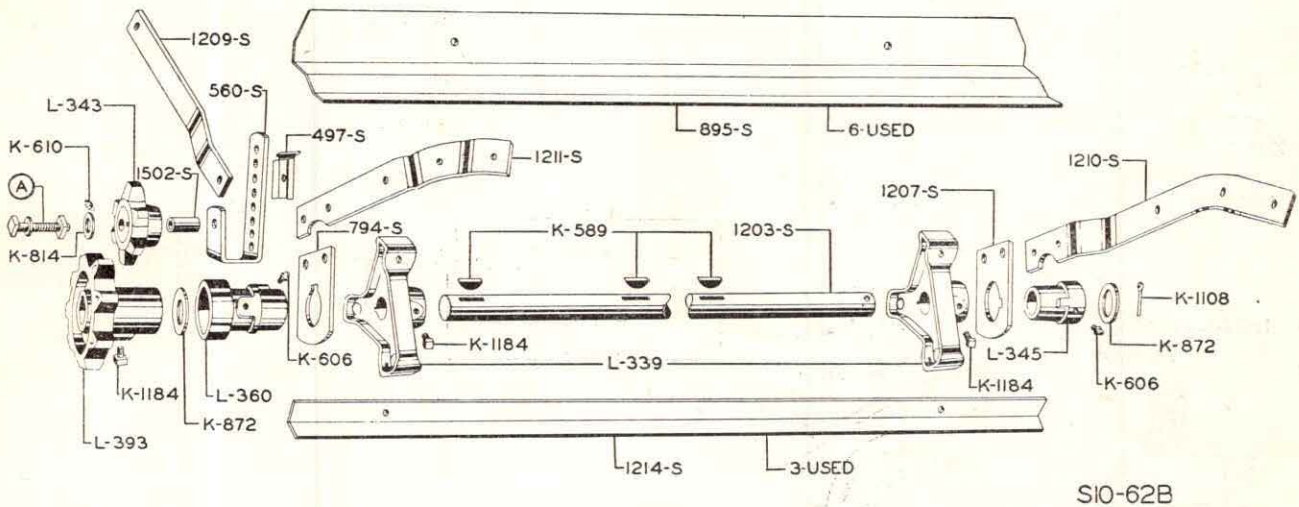
ENDGATE ATTACHMENT TAIL BOARD



S10-63B

Part No.	Description	Wt. Lbs.
D 231	Retention pawl.....	1/2
D 269	10 tooth spur gear.....	1-3/4
E 168	Spacer washer.....	2 oz.
K 506	Retainer on front endgate, 6 x 37" long.....	4
K 589	No. 13 Woodruff key, 3/16" thick, 1" long.....	1 oz.
K 837	Washer, 1-3/8" O. D., 9/16" I. D., 16 gauge.....	1 oz.
K 872	Washer, 1-3/4" O. D., 1-1/32" I. D., 16 gauge.....	1 oz.
K 1071	Spring cotter, 1/8" Dia., 3/4" long.....	1 oz.
K 1108	Spring cotter, 5/16" Dia., 1-1/2" long.....	1 oz.
K 1151	Set screw, 5/16" Dia., 5/16" long.....	1 oz.
K 1153	Set screw, 3/8" Dia., 3/8" long, hollow head.....	1 oz.
K 1154	Set screw, 3/8" Dia., 1/2" long.....	1 oz.
K 1263	Hollow head set screw wrench, 3/8" (not illustrated),.....	2 oz.
L 320	Set collar, 1" bore.....	3/4
L 423	Spacer collar, 1" bore.....	1/2
L 424	Ratchet.....	3-1/4
L 465	Ratchet pawl.....	1/2
555 S	Handle for ratchet, 1/4 x 1-1/2" flat, 17-1/2" long.....	2
561 SR	Gear tooth angle, right, 1 x 1 x 1/4" angle, 26-1/2" long.....	3-1/4
561 SL	Gear tooth angle, left, 1 x 1 x 1/4" angle, 26-1/2" long.....	3-1/4
568 S	Bearing plate, left, 3/16 x 4" flat, 4" long.....	1
887 S	Ratchet arm, 3/16 x 2-3/4" flat, 7-7/8" long.....	1-1/4
888 S	Brace for ratchet arm, 3/16 x 1-1/2" flat, 5-1/2" long.....	1/2
889-1/2 S	Front control lever, 3/16 x 1-1/4" flat, 23-5/8" long.....	1-3/4
900 S	Spacer for pawl, 1/4 x 1-1/4" flat, 1-1/4" long.....	2 oz.
1204 S	Raising shaft, 1" Rd., 45-1/8" long. Uses K 589 key.....	10
1206 S	Support for connecting rod.....	1/4
1208 S	Bearing plate, right, 3/16 x 4" flat, 6-5/8" long.....	1-1/2
1212 S	Connecting rod, 3/8" Rd., 110" long.....	3-1/2
1260 S	Front guide angle, right, 1-3/8 x 1-3/8 x 5/32" angle, 42-1/2" long.....	5
1261 S	Front guide angle, left, 1-3/8 x 1-3/8 x 5/32" angle, 42-1/2" long.....	5
1269 S	Guide for front control lever, 1/8 x 1" flat, 22" long.....	3/4
1479 SA	Rear guide straps, right, 1/4 x 1-1/4" flat, 42-1/2" long.....	4
1480 SA	Rear guide straps, left, 1/4 x 1-1/4" flat, 42-1/2" long.....	4
1514 S	Extension spring, 5/8" O. D., 2-1/4" long, overall 3-1/2", 41 coils.....	2 oz.
1534 S	Bushing, 11/16" O. D., 1-1/16" long.....	1 oz.
1538 S	Bushing, 9/16" O. D., 1/4" long.....	1 oz.
W 169A	Endgate complete.....	
	"A" machine bolt, 1/2" Dia., 2-1/4" long with lock washer.....	

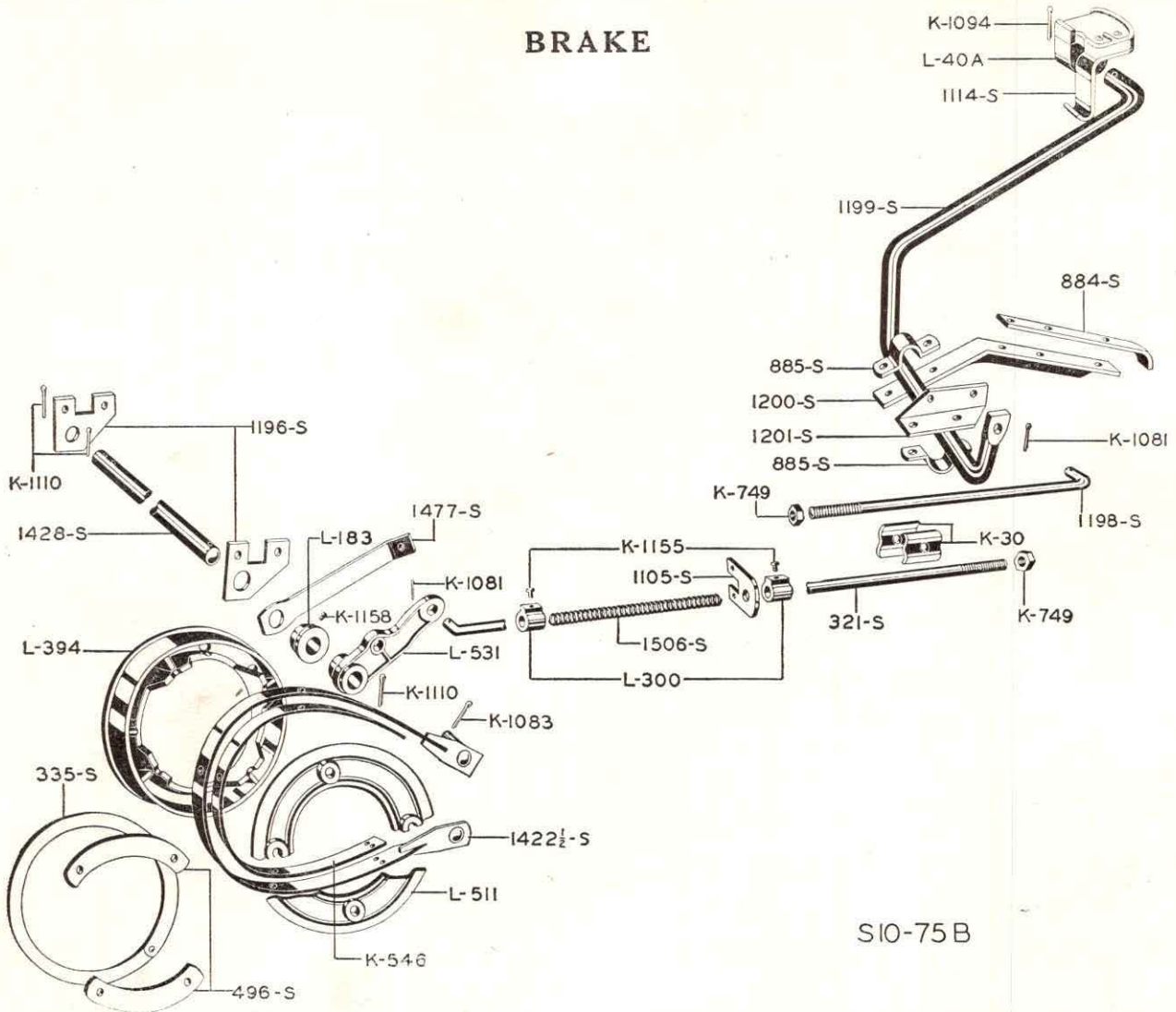
ENDGATE ATTACHMENT BEATER



SIO-62B

Part No.	Description	Wt. Lbs.
K 589	No. 13 Woodruff key, 3/16" thick, 1" long.....	1 oz.
K 606	Grease fitting, 1/8" pipe thread, straight.....	1 oz.
K 610	Grease fitting, 5/16" drive type.....	1 oz.
K 814	Washer, 1" O. D., 7/16" I. D., 16 gauge.....	1 oz.
K 872	Washer, 1-3/4" O. D., 1-1/32" I. D., 16 gauge.....	1 oz.
K 1108	Spring cotter, 5/16" Dia., 1-1/2" long.....	1 oz.
K 1184	Set screw, 1/2" Dia., 3/4" long.....	1 oz.
L 339	Beater heads, 1" bore. Uses K 589 key.....	2-3/4
L 343	6 Tooth idler sprocket.....	1
L 343-1/2	6 Tooth idler sprocket with bolt and bushing.....	1-1/4
L 345	Bearing, right.....	3/4
L 360	Bearing, left.....	1
L 393	8 Tooth sprocket, 1" bore. Uses K 589 key.....	2-1/4
497 S	Lock for chain tightener arm.....	2 oz.
560 S	Chain tightener arm, 5/16 x 1-1/4" flat, 9-1/2" long.....	1
560-1/2 S	Chain tightener complete with sprocket.....	2-1/4
794 S	Bearing plate, left, 3/16 x 3" flat, 3-7/8" long.....	3/4
895 S	Main cylinder filler sheets, 6 x 37" long, 14 gauge.....	5-1/4
1203 S	Shaft, 1" Rd., 44-3/8" long.....	10
1207 S	Bearing plate, right, 3/16 x 3" flat, 3-7/8" long.....	3/4
1209 S	Bearing brace, 1/4 x 1-1/4" flat, 8-1/2" long.....	3/4
1210 S	Bearing support, right, 5/16 x 1-3/4" flat, 20-1/2" long.....	3-1/4
1211 S	Bearing support, left, 5/16 x 1-3/4" flat, 20-1/2" long.....	3-1/4
1214 S	Beater bar, 1-1/4 x 1-1/4 x 1/8" angle, 37-1/4" long.....	3
1502 S	Bushing, 19/32" O. D., 1-9/16" long.....	2 oz.
	"A" machine bolt, 3/8" Dia., 2-1/2" long.....	

BRAKE



S10-75 B

Part No.	Description	Wt. Lbs.
K 30	Rod clamp.....	1/2
K 546	Brake lining, 1-3/4" wide, 30" long.....	1
K 749	Hexagon nut, 9/16".....	1 oz.
K 1081	Spring cotter, 3/16" Dia., 1" long.....	1 oz.
K 1083	Spring cotter, 3/16" Dia., 1-1/2" long.....	1 oz.
K 1094	Spring cotter, 1/4" Dia., 1-1/2" long.....	1 oz.
K 1110	Spring cotter, 5/16 Dia., 2-1/4" long.....	1 oz.
K 1155	Set screw, 3/8" Dia., 5/8" long.....	1 oz.
K 1158	Set screw, 3/8" Dia., 3/4" long.....	1 oz.
L 40A	Pedal casting.....	2-1/4
L 183	Cross shaft collar.....	3/4
L 300	Single set collar.....	1/4
L 394	Brake drum.....	12-1/2
L 511	Spacer ring (rubber tired machine only).....	6-1/2
L 531	Brake arm.....	2-3/4
321 S	Long brake rod, with nut, 9/16" Rd., 82" long.....	5-3/4
335 S	Spacer ring (steel wheel machine only).....	1-1/4
496 S	Brake clamp (steel wheel machine only).....	1-1/4
884 S	Inside pedal shaft plate, 1/4 x 1-1/2" flat, 10-9/16" long.....	1-1/4
885 S	Pedal shaft bearing cap, 1/4 x 1-1/2" flat, 5-1/4" long.....	1/2
1105 S	Rod support, 3/16 x 3" flat, 4" long.....	3/4
1114 S	Safety latch, 1/4 x 1-1/4" flat, 6-1/2" long.....	1/2
1196 S	Cross shaft bearing plate, 1/4 x 4" flat, 5-1/2" long.....	1-1/2
1198 S	Short brake rod with nut, 9/16" Rd., 22-3/8" long.....	1/1-2
1199 S	Pedal shaft, 1" Rd., 41-1/2" long.....	9-1/4
1200 S	Inside pedal shaft bracket, 1-1/2 x 1-1/4 x 5/32" angle, 17-1/4" long.....	2-1/4
1201 S	Outside pedal shaft bracket, 2 x 1-1/2 x 3/16" angle, 5-1/2" long.....	1
1422-1/2 S	Brake band with lining.....	3-1/2
1428 S	Cross shaft, 1-1/8" Rd., 47" long.....	13-1/4
1477 S	Cross shaft brace, 5/16 x 1-1/2" flat, 15" long.....	2
1506 S	Compression spring, 7/8" O. D., 10" long, 32-1/2 coils.....	1/2

NUMERICAL INDEX—(Con't)

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
429 S.....	21	1015 S.....	22-24	1174-1/2 S...	27	1477 S.....	34
454 S.....	28	1045 S.....	27	1175 S.....	27	1479-SA	32
459 S.....	20	1046-3/4 S...	27	1176 S.....	27	1480-SA.....	32
A462 S.....	21	1047 S.....	27	1183-1/2 S...19		1498 S.....	22
A480 S.....	29	1058 S.....	20	1184 S.....	19	1499 S.....	26
482 S.....	29	1059 S.....	20	1185 S.....	19	1500 S.....	26
A483 S.....	29	1060 S.....	20	1186-1/2 S...27		1502 S.....	23-24-31
496 S.....	34	1078 S.....	20	1187-1/2 S...27			33
497 S.....	33	1080 S.....	17	1189-1/2 S...27		1504 S.....	27
511 S.....	18	1081 S.....	17	1192-1/2 S...21		1505 S.....	20
531-1/2 S...17		1083-1/2 S...18		1193 S.....	21	1506 S.....	34
551 S.....	29	1084-1/2 S...18		1194-1/2 S...31		1507 S.....	27
553 S.....	29	1085-1/2 S...18		1195 S.....	31	1508 S.....	26
554 S.....	29	1086-1/2 S...18		1196 S.....	34	1510 S.....	26-27
555 S.....	32	1087-1/2 S...18		1198 S.....	34	1513 S.....	26
560 S.....	33	1092 S.....	21	1199 S.....	34	1514 S.....	26-32
560-1/2 S...33		1092-1/2 S...21		1200 S.....	34	1515 S.....	20-31
561 SR.....	32	1096 S.....	21	1201 S.....	34	1516 S.....	20
561 SL.....	32	1097 S.....	21	1203 S.....	33	1525-1/2 S...28	
568 S.....	32	1098-1/2 SR.21		1204 S.....	32	1527 S.....	22-23
A570 S.....	19	1098-1/2 SL.21		1206 S.....	32	1534 S.....	32
A576 S.....	30	1099-1/2 S...21		1207 S.....	33	1536 S.....	26
582 S.....	30	1102 S.....	21	1208 S.....	32	1537 S.....	28-29
582-1/2 S...30		1103 S.....	20	1209 S.....	33	1538 S.....	32
586 S.....	31	1104 S.....	20	1210 S.....	33	1539 S.....	24
A592 S.....	30	1105 S.....	34	1211 S.....	33	1540 S.....	24
A593 S.....	30	1108 S.....	21	1212 S.....	32	1541 S.....	29
617 S.....	19	1109 S.....	21	1214 S.....	33	1542-3/4 S...24	
A750 S.....	30	1110 S.....	21	1217 S.....	21	1542-3/4 SA.24	
A754-1/4 S...30		1111 S.....	21	1220 S.....	21	1548-1/2 S...22	
A754-1/2 S...30		1112 S.....	21	1228 S.....	21	1549-1/2 S...22	
772-1/2 S...30		1113 S.....	21	1229 S.....	21	1550-1/2 S...22	
773-1/2 S...30		1114 S.....	34	1230 S.....	31	1551 S.....	24
776 S.....	31	1120 S.....	20	1232 S.....	26	1552 S.....	27
794 S.....	33	1121 S.....	31	1245 S.....	26	1553 S.....	26
807 S.....	28	1122 S.....	31	1246 S.....	26	1554 S.....	31
843-1/2 S...19		1123-1/2 S...27		1260 S.....	32	1555 S.....	29
845 SA.....	25	1136 S.....	17	1261 S.....	32		
870 S.....	21	1137 S.....	17	1264 S.....	26		
878 S.....	25	1138-1/2 S...17		1264-1/2 S...26			
878-1/2 S...26		1139-1/2 S...17		1265 S.....	26		
884 S.....	34	1143 S.....	17	1266 S.....	26		
885 S.....	34	1144 S.....	17	1267 S.....	19		
887 S.....	32	1147 S.....	21	1268 S.....	19		
888 S.....	32	1148-1/2 S...17		1269 S.....	32		
889-1/2 S...32		1150 S.....	20	1282 S.....	27		
895 S.....	33	1150-1/2 S...20		1309-1/2 S...22			
900 S.....	32	1151 SA.....	26	1310-1/2 S...22			
905-1/2 S...31		1152 S.....	26	1311 S.....	24		
906-1/2 S...31		1154 S.....	27	1312 S.....	24		
907-1/2 S...31		1155-1/2 S...23		1314 S.....	17		
908 S.....	31	1156-1/2 S...23		1315 S.....	17		
909 S.....	31	1157-1/2 S...23		1317 S.....	17		
910 S.....	31	1158 S.....	23	1318 S.....	26		
920 S.....	26-27	1158-3/4 S...23		1319-1/2 S...26			
923 S.....	31	1159 S.....	27	1323 S.....	24		
926 S.....	26	1160 S.....	22	1323-1/2 S...24			
936-1/2 S...17		1160-3/4 S...22		1338 S.....	31		
937-1/2 S...17		1161 S.....	22	1345 S.....	26		
959 S.....	22-24	1170-1/2 S...26		1377-1/2 S...26			
959-1/4 S...22		1171 S.....	27	1378-1/2 S...26			
959-1/2 S...22-24		1172 S.....	17	1422-1/2 S...34			
960 S.....	22-24	1173 S.....	24	1428 S.....	34		
961 S.....	20	1174 S.....	27	1464-1/2 S...23			
961-1/4 S...20				1474 S.....	17		

W

W 49A.....	28-29
W 50A.....	28
W 63.....	28
W 68.....	29
W 69.....	29
W 70.....	29
W 74A.....	17
W 75A.....	17
W 80A.....	19
W 84A.....	19
W 100A.....	17
W 103.....	17
W 104A.....	17
W 107.....	17
W 134A.....	18
W 165.....	19
W 167A.....	31
W 169A.....	32
W 171.....	18
W 172A.....	28
W 185A.....	28



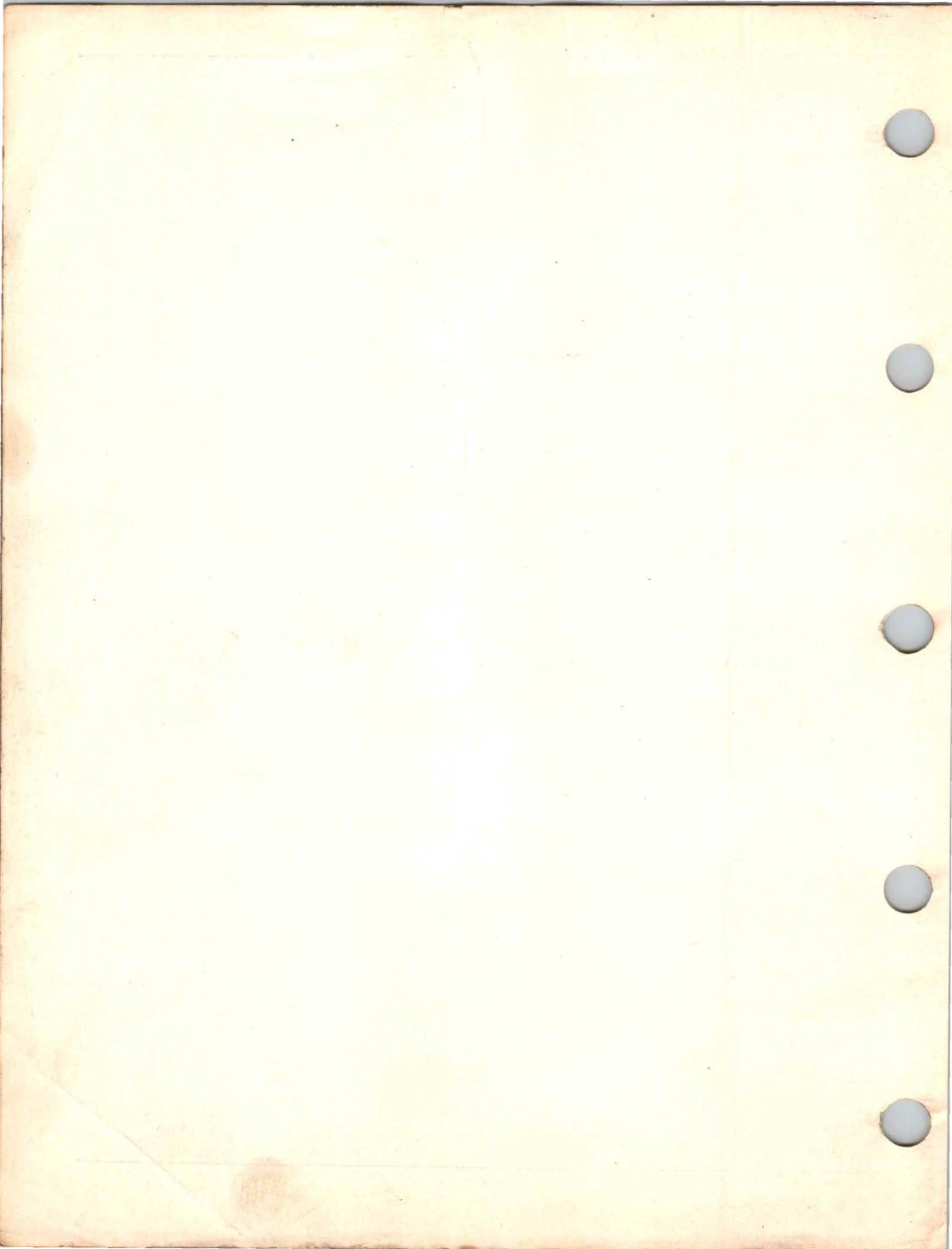
Most farm accidents, like industrial, home and highway accidents, are caused by the failure of some individual to observe simple and fundamental safe rules or precaution. For this reason farm accidents, just as other types of accidents, can be prevented by recognizing the cause of accidents and doing something about it before the accident occurs.

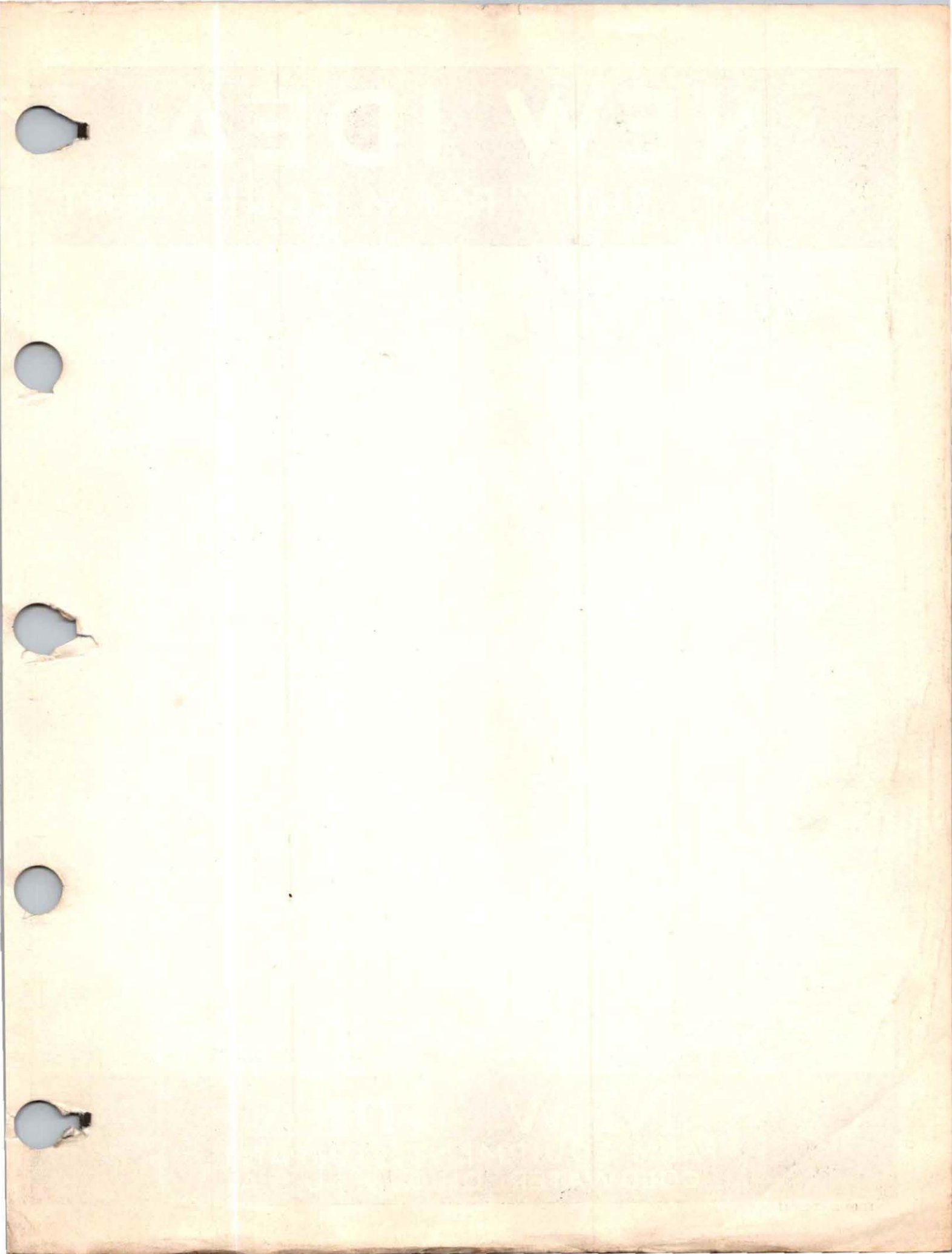
Regardless of the care used in the design and construction of farm equipment, there are many points that cannot be completely safeguarded without interfering with accessibility and efficient operation.

A careful operator is the best insurance against an accident.

The complete observance of one simple rule would prevent many thousand serious injuries each year. That rule is "NEVER ATTEMPT TO CLEAN, OIL, OR ADJUST A MACHINE WHILE IN MOTION."

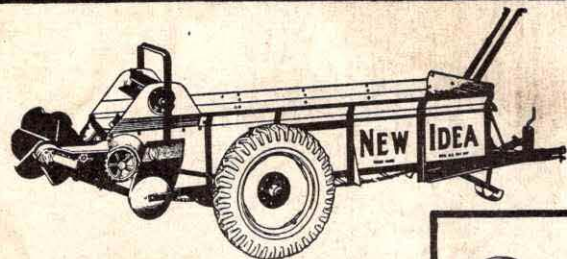
—National Safety Council



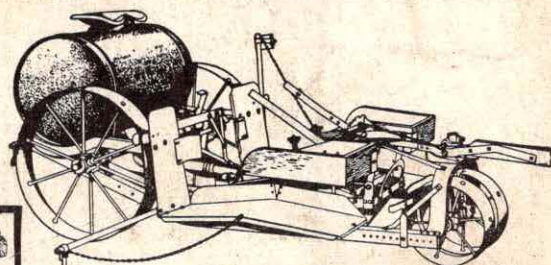


NEW IDEA

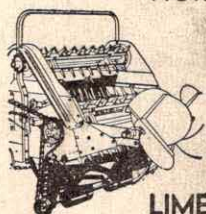
"QUALITY BUILT" FARM EQUIPMENT



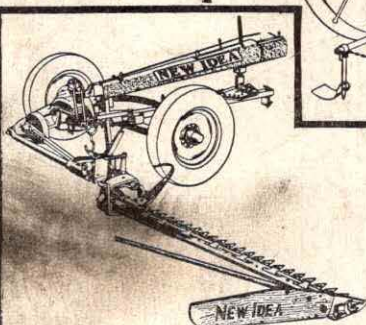
HORSE AND TRACTOR
DRAWN MANURE
SPREADERS



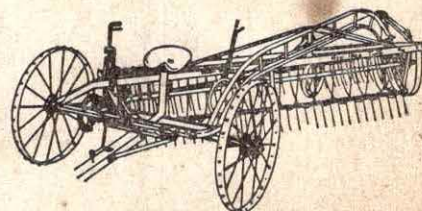
TRANSPLANTERS



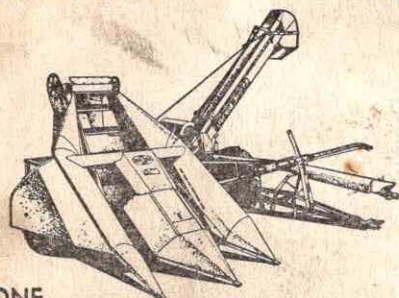
LIME SPREADING
ATTACHMENT



TRACTOR DRAWN MOWERS



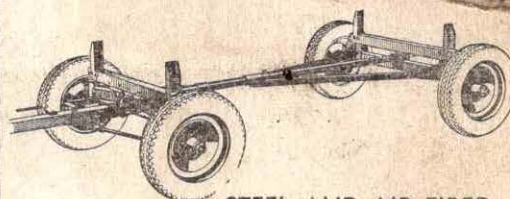
SIDE RAKES AND TEDDERS



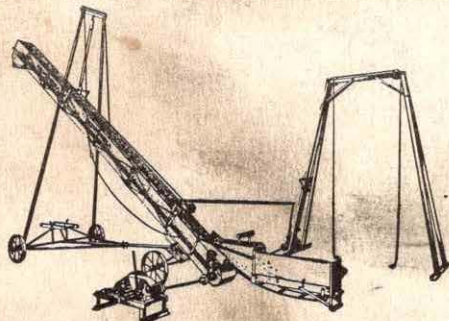
ONE
AND TWO-ROW CORN PICKERS



HAY LOADERS



STEEL AND AIR TIED
FARM WAGONS



PORTABLE ELEVATORS



HAND
CORN SHELLERS



HUSKER-SHREDDERS



NEW IDEA
FARM EQUIPMENT COMPANY
COLDWATER, OHIO — U.S.A.