

Sears

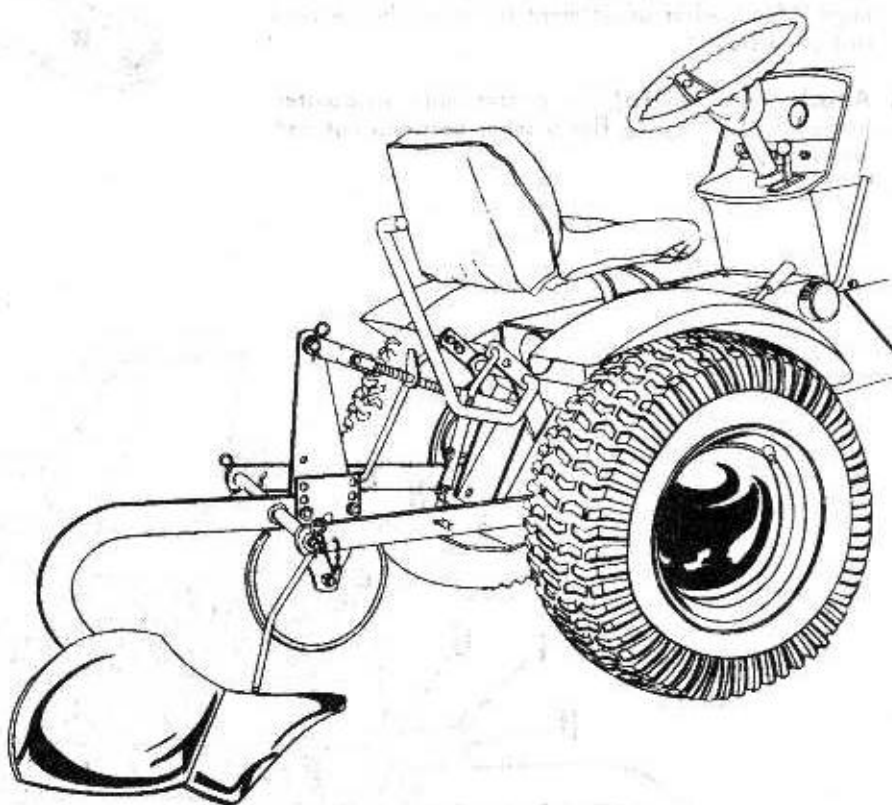
Owners manual

PLOW

MODEL NO.
917.253010

CAUTION:
Read Rules for
Safe Operation
and Instructions
Carefully

- Assembly
- Operating
- Maintenance
- Repair Parts



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

SETTING UP INSTRUCTIONS

Setting Up and Operating Instructions should be studied very closely before beginning to assemble your Plow. When R.H. (Right Hand), and L.H. (Left Hand), are used, it should be understood to mean from a position behind and facing the Plow (or direction of travel).

A letter in parentheses in the following instructions refer to an arrow in Fig. 1.

1. Cut all wires holding Plow to wood pallet in bottom of carton. Also, cut wires holding hitch bracket (A), and weed rod (B), to plow beam (C). Remove Plow from carton.
2. Remove nuts and bolts (D), from beam (C), and coulter bracket (E), refer to Fig. 1.
3. Assemble hitch bracket (A), to beam (C), as shown in Fig. 1, with bolts (D), removed in step 2. NOTE: Extra hole (F), in hitch bracket will be toward rear of Plow.
4. Assemble coulter bracket (E) with coulter to beam using center holes as shown in Fig. 1. NOTE: Be sure spacer is replaced on rear bolt between beam and coulter bracket. Secure with lock washers and hex nuts. Tighten nuts securely. Refer to page 4 for coulter adjustment for other than normal soil conditions.
5. Attach weed rod (B), to center hole in coulter bracket (E). Position flat washer between nut and weed rod.

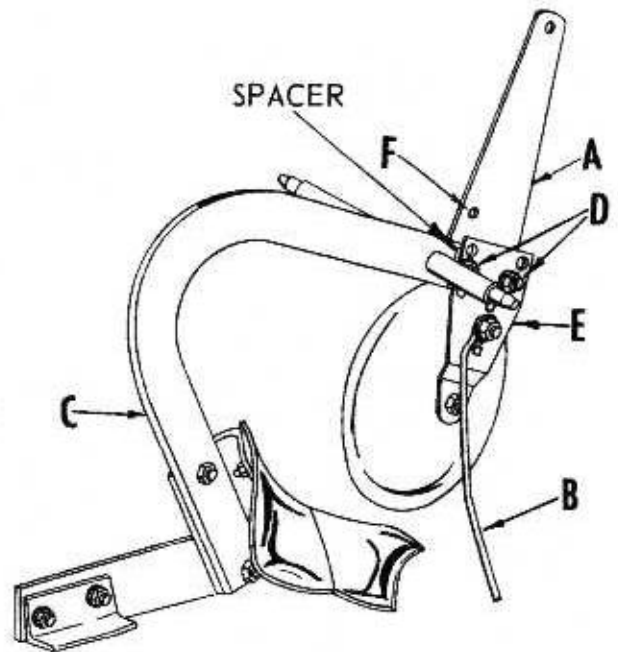


FIG. 1

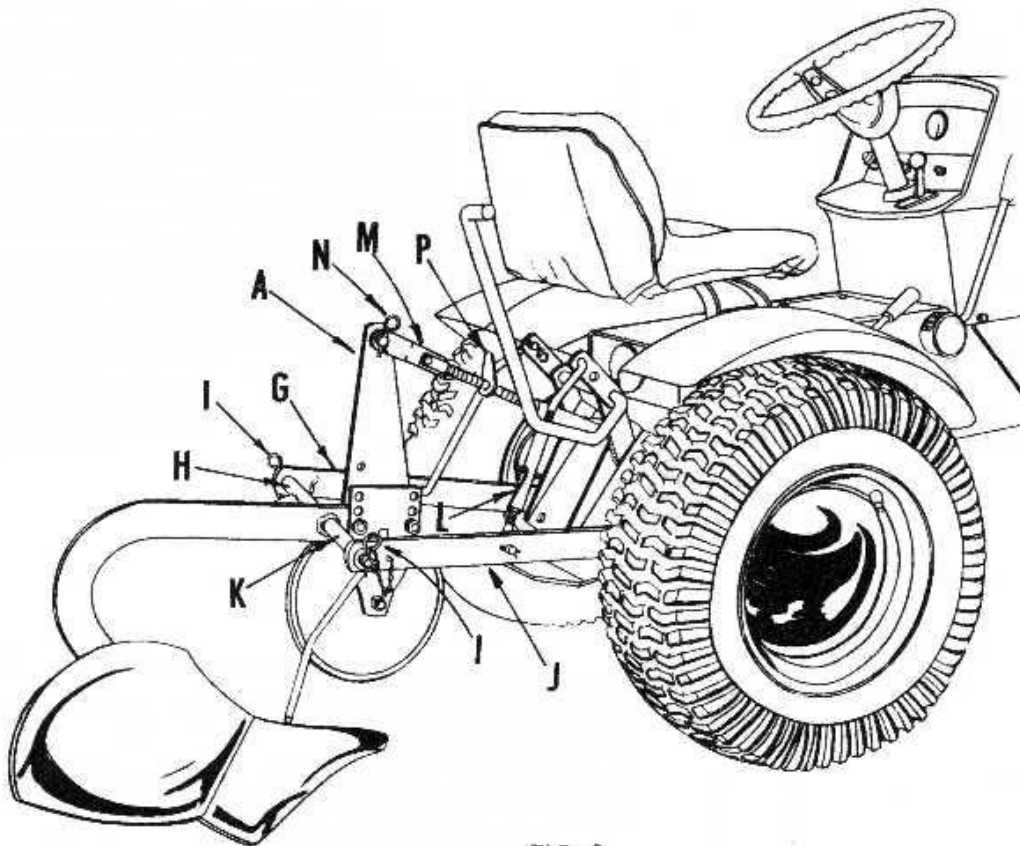


FIG. 2

INSTRUCTIONS FOR ASSEMBLING PLOW TO TRACTOR

NOTE: See Three Point Hitch Owners Manual for assembling Three Point Hitch to tractor.

A letter in parentheses in the following instructions refer to an arrow in Fig. 2, page 2.

6. Back tractor into position to attach plow. Slip L.H. hitch bar and bushings (G), over L.H. plow beam hitch bar (H), and secure with retainer spring (I).
7. Slip R.H. hitch bar and bushings (J), over R.H. plow beam hitch bar (K), and secure with retainer spring (I). NOTE: R.H. hitch bar and bushings (J), is adjustable. Rotate turnbuckle (L), so that R.H. hitch bar and bushings slide over R.H. plow beam hitch bar easily and beam is level.
8. Assemble clevis (M), to Plow hitch bracket (A), as shown. Secure with clevis pin and retainer spring (N).
9. Grease the hub of the coulter by means of the grease fitting. CAUTION: Care should be taken to avoid excessive pressure when greasing so as not to force hub cap off the hub.

OPERATING INSTRUCTIONS

INSTRUCTIONS BEFORE OPERATING

All varnish must be completely removed from the plow bottom before starting to plow. We suggest a good grade of varnish remover. We also suggest that this manual be studied carefully before operating your plow. Much thought must be given to the time of year to plow and to the ground conditions. This ground may be plowed either in the spring or fall or both.

There are several ways of opening a field or garden to plow. Perhaps the most practical method is to lay out a land and plow out in straight furrows as shown in Fig. 3. The plow will be raised at each end of the plot being plowed and returned to the ground after turning and crossing the end of the plowed ground or land. The ends or headlands will be plowed last. A good practice is to leave the same space on each side of the first furrow plowed, if the plot is not too big, so as to cause excessive idle time while traveling across the end. If the plot is too big, additional lands should be plowed out. Another method is to plow round and round the field without taking the plow from the ground as shown in Fig. 4. This system has the advantage of greater speed and minimum of idle travel. This method may be used in a large plot of ground, but is not practical in small plots since the corners remain unplowed.

Most plowmen like to throw soil toward the fence one year and toward the land the next. This can easily be accomplished by either of the two general methods of plowing described i.e. When the method of plowing around the field is used, this can be alternated by starting at the fence and turning to the left one year and beginning at the center and plowing around to the right the next.

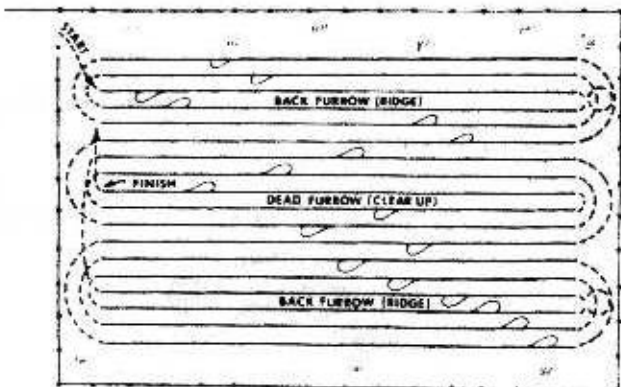


FIG. 3

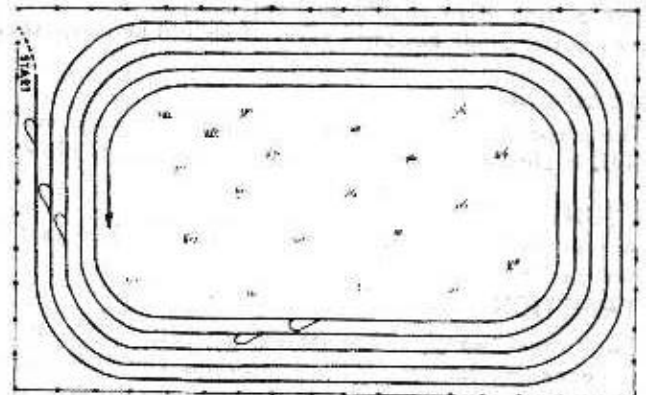


FIG. 4

OPERATING INSTRUCTIONS – Continued

In laying out a land, the plot should be measured and staked out so that the furrows will come out even when the plow is finished. Stakes at each end, will enable the operator to drive the tractor straight across the field so that the furrows will make a neat appearance. Set the plow so that the first furrow is plowed about one half the depth you would normally plow; beam must be vertical. This half depth is required so that first furrows are turned properly. Drive the tractor across the plot in as straight a line as possible. Turn tractor and plow back across the plot, running the R.H. wheel of the tractor as close to the previously plowed ground as possible, or if desired directly on the first plowed ground.

The tractor can now be driven with the R.H. front wheel next to the furrow wall of the first furrow made and plow immediately returned to the ground. The top linkage (adjusting screw and clevises), must be shortened so that plow will penetrate (or plow), to the desired depth. Adjust R.H. lift links to keep beam vertical. Upon arriving at the opposite end, lift the plow from the ground and turn tractor around driving with R.H. front wheel next to the furrow wall. Proceed by following in each successive furrow until the plot has been completely plowed.

If you decide to fall plow, your gardening should be planned so that your plowing can be done as early as possible; especially before the ground becomes dry and hard. Ground which is dry and hard will cause the plow to be unstable and you will be unable to penetrate the ground to an even depth. Also, these conditions will cause the plow to pull hard and overload the tractor.

It is undesirable to plow when the ground is too wet. This condition is most likely to occur when attempting to spring plow. If the ground is too wet, the soil will slide from the moldboard in an almost solid mass, slick and shiny. After the ground has been exposed to the sun and starts to dry it will become hard and you will be unable to work it into a suitable seed bed. A good test to determine if the soil is too wet is to take a handful of soil and try to compress it into a ball, if it crumples as soon as released from the hand, it probably is suitable to plow.

PLOW ADJUSTMENTS

DEPTH

To increase the plowing depth, adjust the top linkage by turning adjusting screw (P, Fig. 2), to shorten the linkage. The plow will go deeper until plow levels, and under normal conditions will hold that depth. This levels the plow and will leave a level furrow bottom. Adjustment can be varied to give a better furrow turning.

Actually measure the width of the cut with a ruler to determine width of cut. This should be done where the furrow is straight to get an accurate measurement. A depth of more than 6 inches is not recommended.

COULTER

The depth to which the coulter cuts is adjusted by raising or lowering the counter bracket with respect to the beam by the three sets of holes provided.

When the ground is very hard, the coulter should be raised so that it will not interfere with depth of plowing. The blade should run just deep enough to cut through all trash and leave a smooth furrow wall. When operating in soil where large stones are prevalent, the coulter and bracket should be removed as a complete unit from the beam, to prevent the coulter from holding or raising the plow bottom from the ground.

A grease fitting is provided in the coulter hub and should be greased before first operation and after every four hours of operation. CAUTION: Care should be taken to avoid excessive pressure when greasing so as not to force hub cap off the hub.

The cutting edge should be kept sharp at all times and can be sharpened by filing or grinding on an emery wheel. If the coulter blade becomes rusty it should be repolished with 00 sandpaper and crocus cloth.

WEED ROD

The purpose of the weed rod is to aid in tuning under all weeds, grass, etc. It is adjustable by means of its attaching bolt. It should be set according to the depth of plowing and material being turned under.

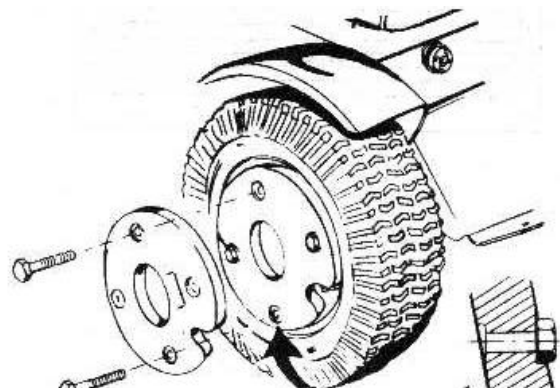
COUNTERWEIGHT

A front end counterweight should be attached to tractor if front end of tractor becomes too light and is difficult to steer in a heavy pull.

TRACTION

Two wheel weights assembled to L.H. rear wheel is necessary for satisfactory plowing. The L.H. rear wheel runs on top of the unplowed ground. Most of the weight of the tractor is shifted to the R.H. rear wheel. This is the reason for assembling the two wheel weights to the L.H. rear wheel to prevent it from slipping.

If wheels still slip, another weight can be added to R.H. rear wheel, and a calcium chloride solution can be added to both rear tires. This added weight will increase the traction to about half the weight added. Refer to wheel weight manual for assembly instructions.



OPERATING INSTRUCTIONS – Continued

HEEL

The landside adjustable heel, refer to Figure 5, is made with the rear hole slotted to enable the operator to adjust it to compensate for wear and to increase suction in extremely hard plowing conditions. A normal amount of suck is built into the plow bottom. Figure 6 shows a plow bottom with $\frac{3}{16}$ inch suck. Increase the suck by lowering the landside heel N, Figure 5. This will give the plow a tendency to penetrate the ground more readily.

For normal plowing operating the heel should be set in its highest position. When plowing very hard or dry ground or if the share has become worn, it may be difficult to get the plow to penetrate the ground properly. In this case the heel may be lowered slightly, see Figure 5. The distance that it can be lowered must be determined by trial and error. In most cases a slight adjustment at this point will be sufficient. If the share has become badly worn and dull, it should be replaced.

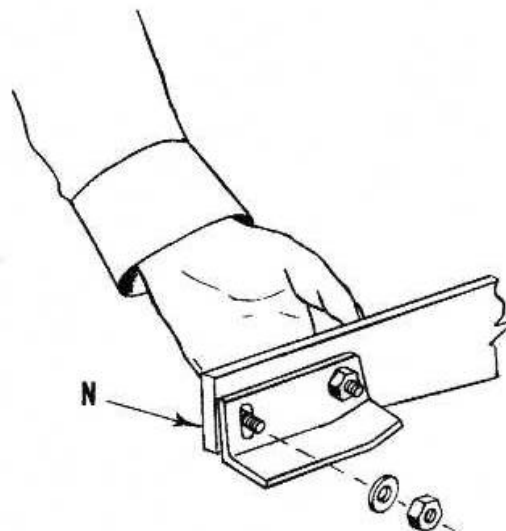


FIG. 5

MAINTENANCE AND SERVICE

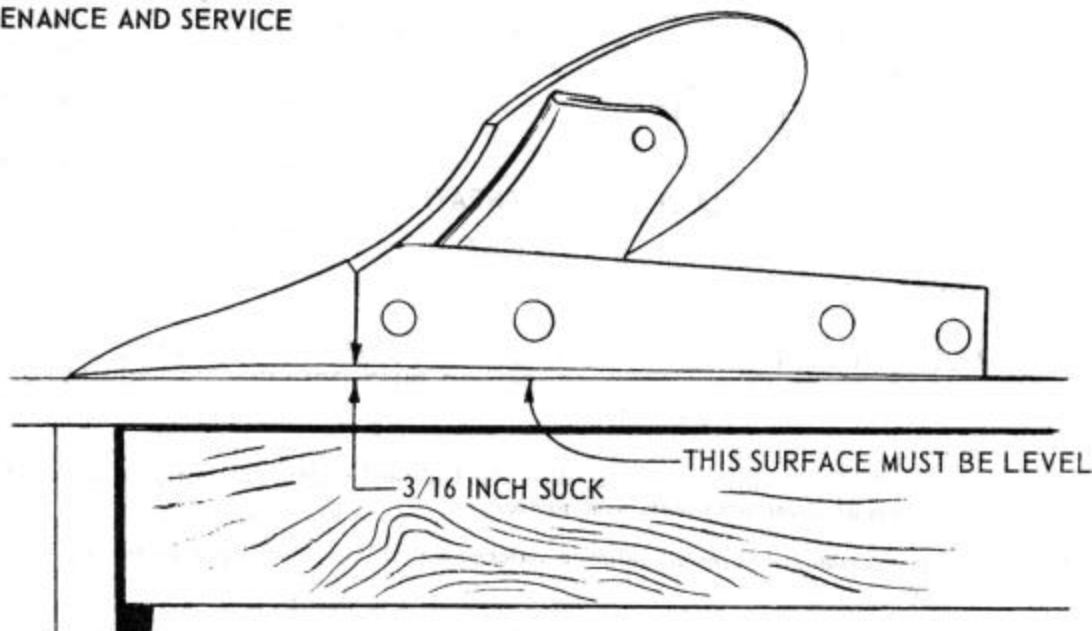


FIG. 6

PLOW SHARE

A dull or worn plow sharer is perhaps, the greatest cause of failure to do good plowing. The share may become worn quickly, depending upon the type of soil encountered. Sand, rocks, and hard dry, soil act as an abrasive and generally wear the share faster than loam or ordinary black dirt. If the plow has a tendency to rise out of the ground, is unstable, or will not penetrate to the desired depth we recommend that you check the amount of suction in the bottom and the cutting edge of the share to be sure that it is sharp. Measure the amount of suck as shown in Fig. 6. It should not be less than $\frac{1}{16}$ of an inch.

A share that has become dull can be sharpened on an emery wheel by passing the share back and forth across the wheel, engaging the area of the share shown in Fig. 7. Always grind the share from the underside as indicated.

If one of the following conditions should exist the share should be replaced with a new one.

1. Share has worn more than enough to cause it to lose suck. Measure the amount of suck as indicated above.
2. Plow shares have a tendency to wear off the cutting edge of the point, resulting in the area approximately $\frac{1}{2}$ to 1 inch behind the point engaging the ground. This results in a sled runner effect, and will hold the plow out of the ground.

MAINTENANCE AND SERVICE – Continued

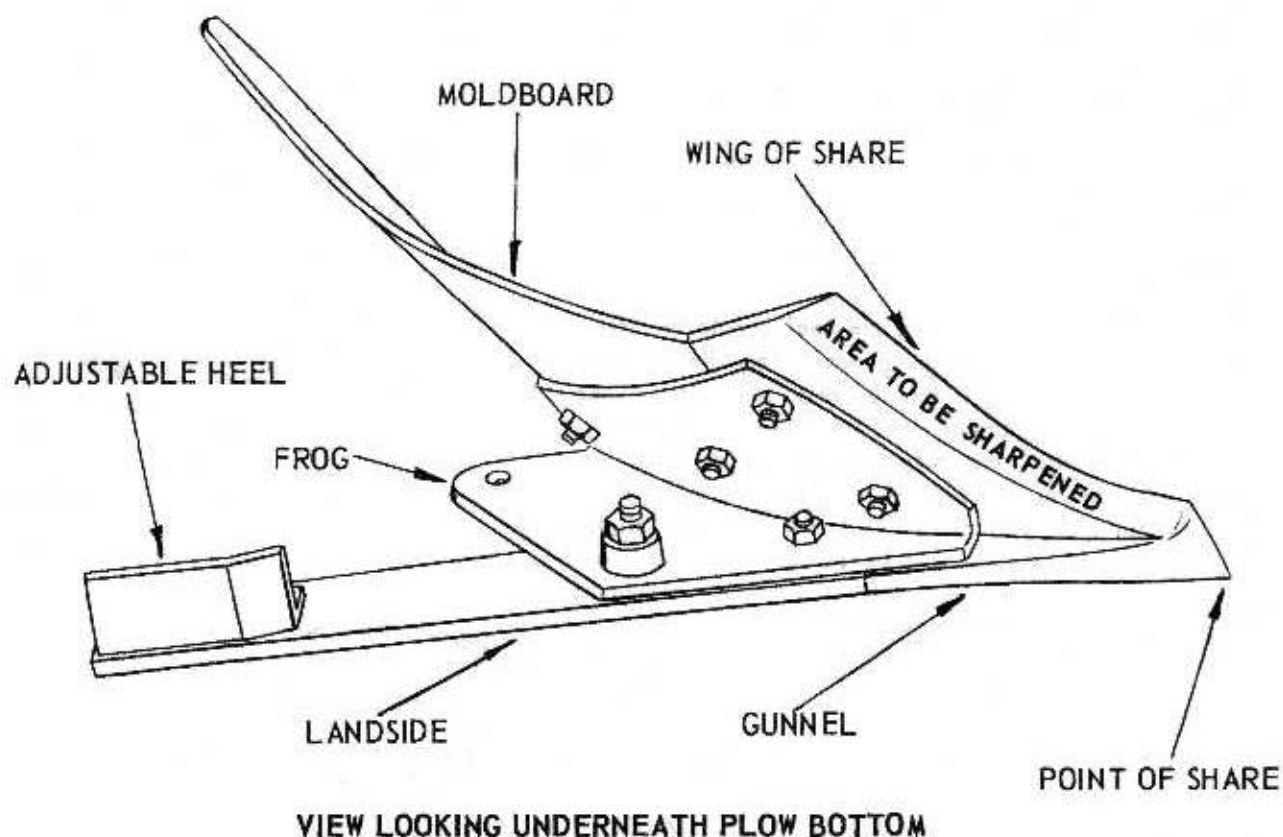


FIG. 7

CARE OF PLOW BOTTOM

YOUR PLOW BOTTOM MUST BE KEPT IN A HIGH STATE OF POLISH AT ALL TIMES, PROTECT IT FROM RUST BY COVERING IT WITH GREASE, OIL OR RUST PREVENTIVE WHENEVER IT IS NOT IN USE.

Over Night Storage – Clean and cover moldboard, share, landside and coulter with heavy oil and store plow inside. If unable to store plow inside cover same parts with grease.

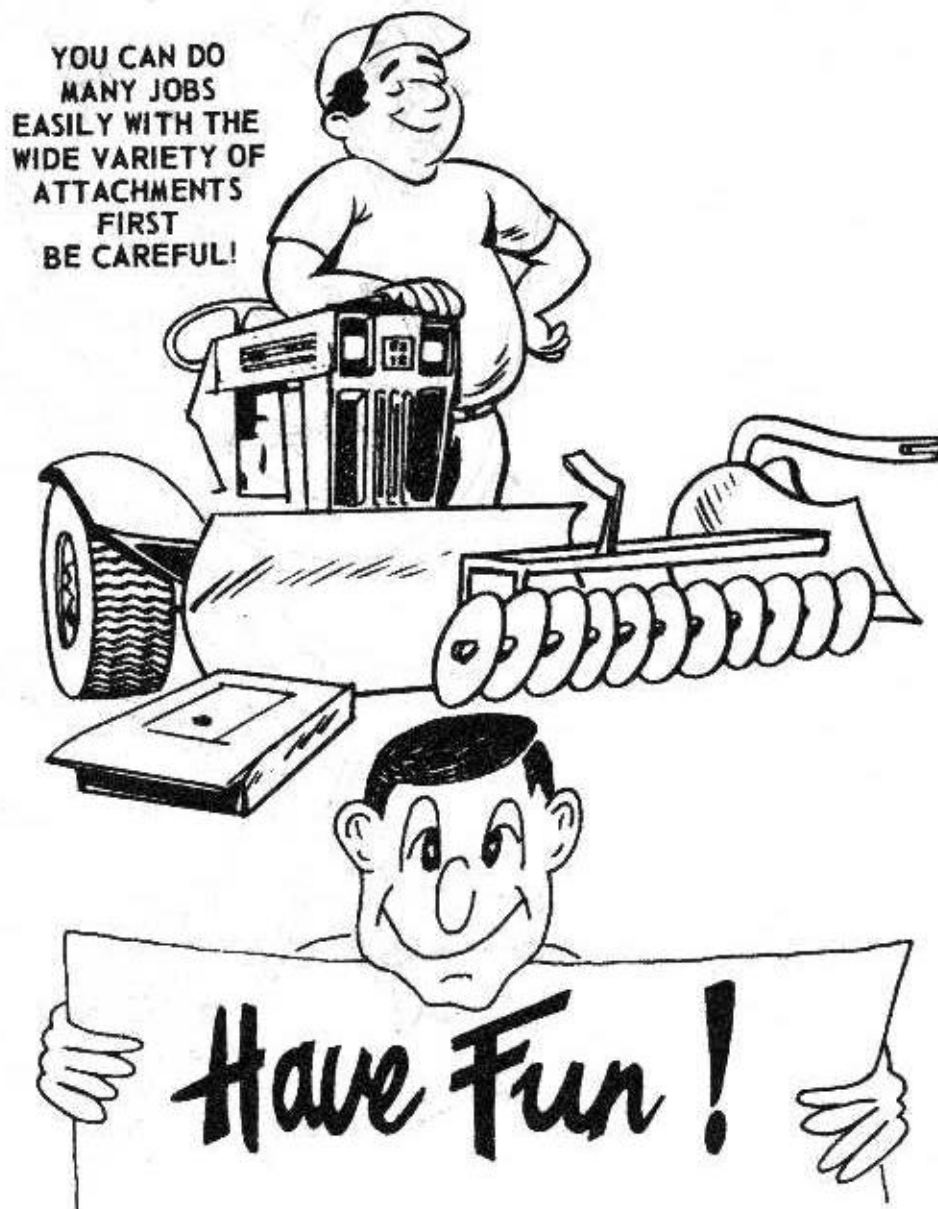
Long Period Storage – Clean and cover all polished surfaces with a thick covering of grease or rust preventative, and store in a dry area.

If the moldboard, share, or landside should become rusted or otherwise mared, re-establish the finish by cleaning with 00 sandpaper and polishing with crocus cloth.

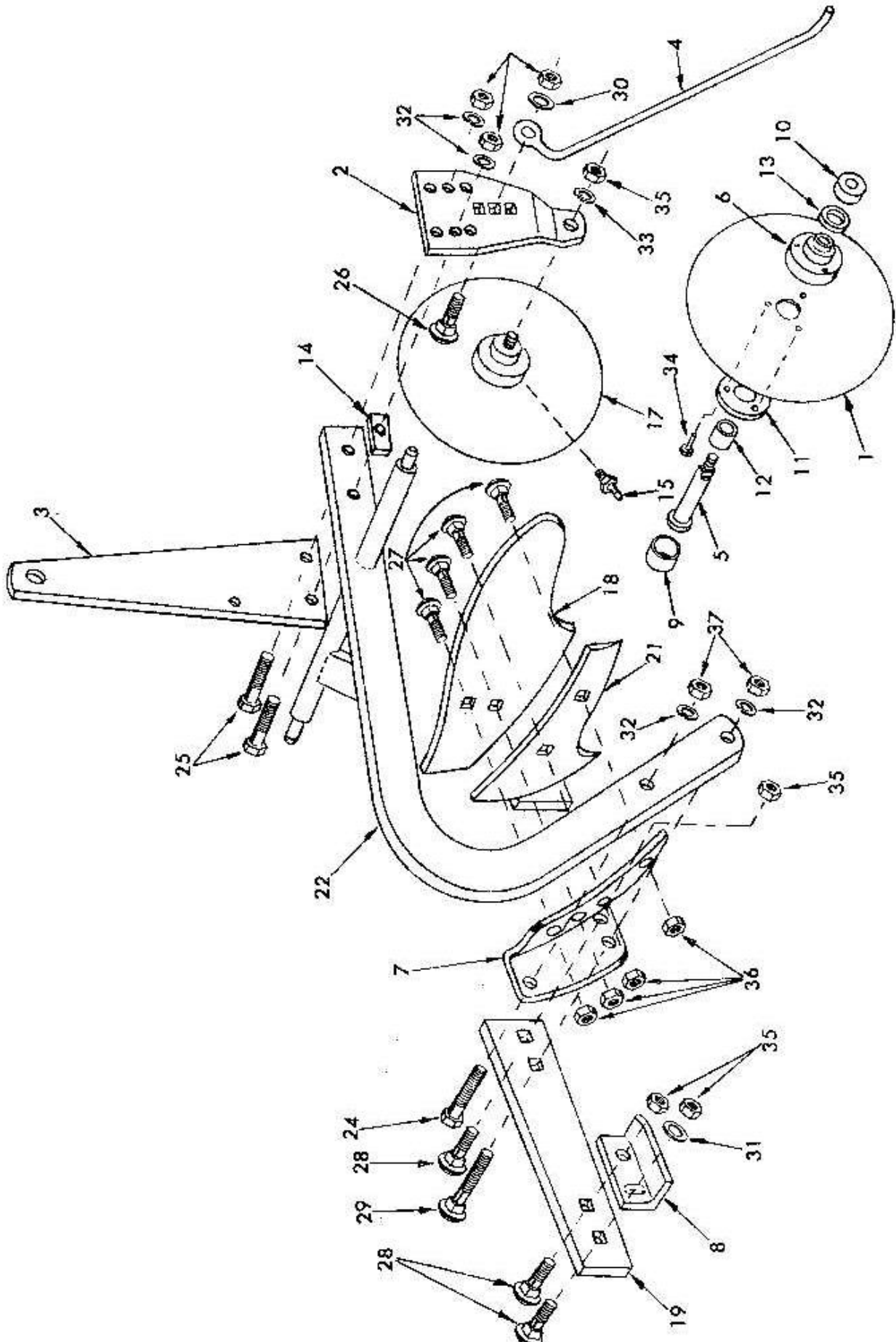
STORAGE

When the plow is to be stored for several days or longer, clean the bottom thoroughly and cover the moldboard, share, landside and coulter with a heavy grease or rust preventative. Always keep plow in a dry area.

NOTES



SEARS MOLDBOARD PLOW - MODEL NUMBER 917.253010



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

1. THE PART NUMBER
2. THE PART NAME
3. THE MODEL NUMBER – 917.253010
4. THE NAME OF THE ITEM – PLOW

PARTS LIST

Do not use Illustration Numbers when ordering Repair Parts, always use Part Numbes.

KEY NO.	PART NO.	DESCRIPTION
1	6328E	Coulter Blade
2	1513H1	Coulter Bracket
3	1514H2	Hitch Bracket
4	6324M	Weed Rod
5	6327M	Shoulder Bolt
6	6328M	Coulter Hub
7	6335M	Frog
8	6340M	Heel
9	6341M	Hub Cap
10	6342M	Dust Cap
11	6343M	Coulter Washer
12	6348M	Bushing
13	6349M	Felt Seal
14	6488M	Spacer
15	6855M	Grease Fitting
6 & 12	575PA223	Coulter Hub and Bearing
17	575PA224	Coulter Blade, Hub and Bearings
18	575PA226	Moldboard w/ Bolts
19	575PA227	Landside w/ Bolts
	606A336A	Plow Bottom, Complete
21	606A335A	Share w/ Bolts
22	606A107A	Beam and Hitch Bar
24	3000P	Hex Bolt $\frac{1}{2}$ " x $1\frac{1}{2}$ " – 13NC
25	3001P	Hex Bolt $\frac{1}{2}$ " x $1\frac{3}{4}$ " – 13NC
26	25P	Bolt, Sq. Neck Carr. $\frac{1}{2}$ " x $1\frac{1}{4}$ " – 13
27	30P	Bolt, Sq. Neck Plow $\frac{3}{8}$ " x 1" – 16
28	32P	Bolt, Sq. Neck Plow $\frac{7}{16}$ " x $1\frac{1}{4}$ " – 14
29	2P	Bolt, Sq. Neck Plow $\frac{1}{2}$ " x 2" – 13
30	1500P	Washer, Flat $\frac{17}{32}$ " x $1\frac{1}{16}$ " x 13 Ga.
31	1544P	Washer, Flat $\frac{15}{32}$ " x $\frac{15}{16}$ " x 16 Ga.
32	1000P	Washer, Lock $\frac{1}{2}$ "
33	1001P	Washer, Lock $\frac{7}{16}$ "
34	2000P	Rivets, R.H. $\frac{1}{4}$ " x $1\frac{1}{4}$ "
35	500P	Nut, Hex $\frac{7}{16}$ " – 14
36	501P	Hex Nut $\frac{3}{8}$ " – 16
37	502P	Hex Nut $\frac{1}{2}$ " – 13
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