

PRIOR MODELS

Wheel Horse®

SECTION V

AGRICULTURAL ATTACHMENTS

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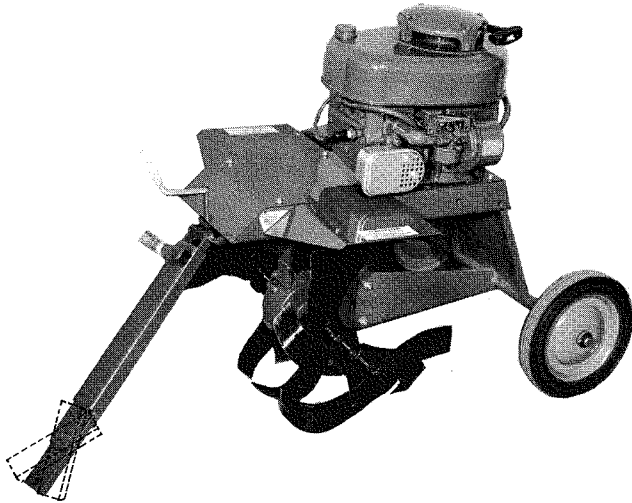
PARTS LIST AND INSTRUCTIONS



Wheel Horse

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

TILLER WT-244



ASSEMBLY

Your tiller has been factory assembled with the exception of the hitch. To attach the hitch, remove the cotter key and washer from the pull pin on the front of mounting bar Part No. 4313, install swivel block Part No. 5394, replace washer and cotter key.

To fasten to the tractor remove tractor hitch pin, insert tiller tongue Part No. 5398, then replace hitch pin.

LUBRICATION

There is **NO OIL** in the crankcase of the engine when shipped from the factory. Read engine manual and follow all instructions pertaining to the type of fuel and lubrication specified. (NOTE: The engine carries a separate warranty by the engine manufacturer. For engine service, contact your local authorized engine service headquarters.)

The tiller gear box has been filled with one pint of No. 90 gear lube at the factory. Check oil level before operation and every 25 hours of operation, add oil if necessary.

To check oil level, raise tiller to the up or travel position, remove pipe plug Part No. 1013 on the front of gear box. Gear box should be filled to the level of plug with No. 90 gear lube.

Extensive use of sealed-for-life bearings have been employed to reduce maintenance, therefore no other lubrication is required.

OPERATION

The tiller is raised and lowered by using the tractor lift lever or hydraulic control. Depth is controlled by

TILLING WIDTH—24"

TILLING DEPTH—Up to 7"; (depending on soil condition). Depth is controlled by speed of operation.

ENGINE—6 h.p. vertical shaft with recoil starting.

WHEELS—Two 10-inch semi-pneumatic with leveling action.

DRIVE—Worm gear with tapered roller and needle bearings and Neoprene oil seals.

CLUTCH—Completely enclosed belt with spring loaded idler.

SHIPPING WT.—175 lbs.

the forward speed of the tractor, a slow speed results in deep tilling and faster speeds result in shallower tilling. (NOTE: To use the tiller for cultivation, the forward speed should be adjusted so that the unit will not till too deep.) In sod or heavy soil it may be necessary to go over the ground 2 or 3 times before it is ready to plant. In hard, dry or rocky soils, the tiller will bounce. This is a design feature of this unit and should cause no alarm. However, under some conditions, it may be necessary to add weight to the tiller. There are two brackets available for this purpose, bracket Part No. 4321 which attaches the tractor front weight Part No. 4065, or bracket Part No. 4309, which will hold a standard concrete block.

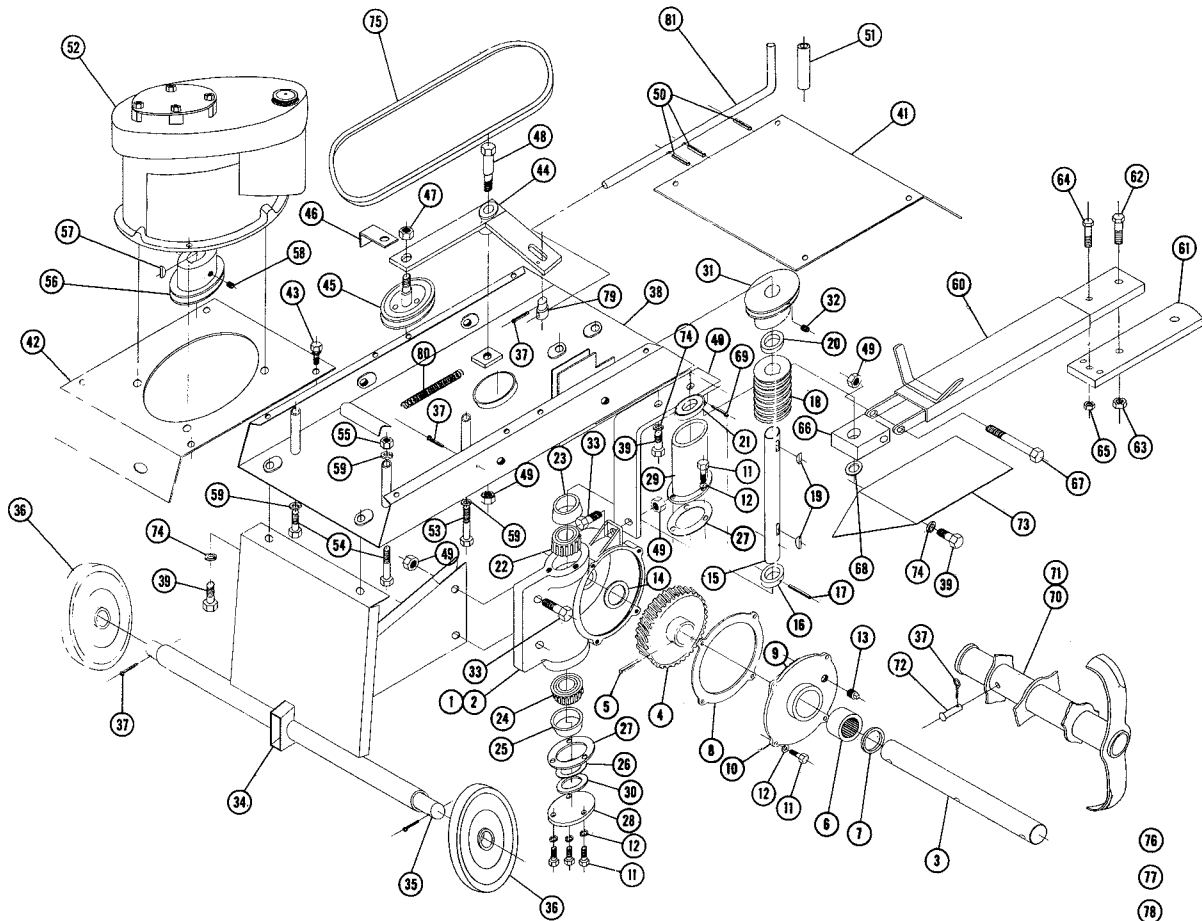
During the first few hours of operation, the tiller gear box may run hot. This is normal with worm gear drives and is not harmful. As the gears wear in, the gear box will run cooler.

When not using the tiller, it is advisable to disengage the clutch to relieve the tension on the belt.

After using tiller the first time, check all bolts to make sure they have not become loose, and retighten if necessary. To change belt, first remove top plate, Part No. 4308, to gain access to drive. Unhook spring from clutch arm. Unscrew shoulder bolt, Part No. 1392, and remove clutch arm with idler pulley and clutch rod. The belt can now be removed. Install the new belt by following reverse procedure. Be sure the pulleys are in proper alignment and replace top plate.

CAUTION — NEVER ADJUST OR REMOVE DEBRIS OR ROCKS FROM TILLER WITHOUT FIRST SHUTTING OFF THE ENGINE AND DISENGAGING CLUTCH.

PARTS LIST



Ref. No.	Part No.	Description	No. Req'd.
1	5406	Ass'y. Worm & Gear Box	1
2	4033	Case	1
3	5387	Shaft — Tine	1
4	5388	Gear — Worm	1
5	933245	Roll Pin $\frac{3}{8} \times 1\frac{3}{4}$	1
6	1526	Bearing — Needle	2
7	1213	Seal	3
8	4038	Gasket	1
9	1397	Shim	2
10	4001	Cover	1
11	908002-4	Bolt — Hex $\frac{1}{4}$ -20 x $\frac{5}{8}$	10
12	920007-4	Lockwasher $\frac{1}{4}$ Dia.	10
13	943418-4	Pipe Plug $\frac{1}{8}$ -27	1
14	1396	Shim	2
15	4080	Shaft — Worm	1
16	4064	Spacer — Upper	1
17	933156	Roll Pin $\frac{1}{8} \times 1$	1
18	4004	Gear — Worm	1
19	937014	Key #9 Woodruff	2
20	4063	Spacer — Lower	1
21	5196	Bearing — Ball	1
22	1500	Cone — Bearing	1
23	1525	Cup — Bearing	1
24	1548	Cone — Bearing	1
25	1549	Cup — Bearing	1
26	4354	Spacer	1
27	4039	Gasket	2
28	4005	Plate	1
29	5389	Support	1
30	1544	Shim	1
31	1627	Pulley	1
32	909848-6	Set Screw $\frac{1}{4}$ -20 x $\frac{1}{4}$ Nylok	2
33	908035-4	Bolt — Hex $\frac{3}{8}$ -16 x $1\frac{1}{4}$	3
34	4326	Ass'y. Pivot Tube	1
35	4328	Axle	1
36	5390	Wheel	2
37	932017-4	Cotter Pin $\frac{1}{8} \times 1$	6
38	4300	Ass'y. Deck	1
39	908034-4	Bolt — Hex $\frac{3}{8}$ -16 x 1	16
40	4313	Ass'y. Mounting Bar	1
41	4308	Plate — Top Cover	1

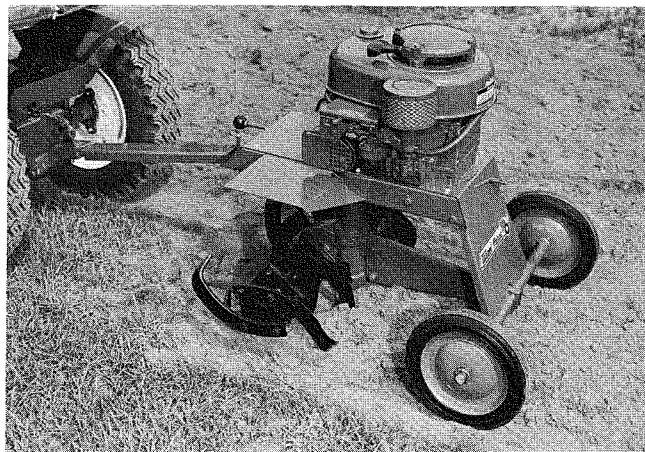
Ref. No.	Part No.	Description	No. Req'd.
42	4333	Plate — Top Rear	1
43	908001-4	Bolt — Hex $\frac{1}{4}$ -20 x $\frac{1}{2}$	8
44	4316	Ass'y. Clutch Arm	1
45	1618	Ass'y. Idler Pulley	1
46	3760	Bracket — Belt Throw Out	1
47	915087-4	Nut — Hex Jam $\frac{1}{2}$ -20	1
48	1392	Bolt — Shoulder	1
49	915113-6	Nut — Nylok $\frac{3}{8}$ -16	4
50	933188	Roll Pin $\frac{3}{16} \times 1$	3
51	5349	Tube Clutch Rod	1
52	5375	Ass'y. Engine — Lauson 6 H.P.	1
53	908140-4	Bolt — Hex $\frac{3}{16}$ -18 x $3\frac{3}{4}$	1
54	908027-4	Bolt — Hex $\frac{3}{16}$ -18 x 3	2
55	915235-4	Net Hex Jam $\frac{3}{16}$ -18	1
56	1626	Pulley — Engine	1
57	937010	Key #6 Woodruff	1
58	909862-6	Set Screw $\frac{5}{16}$ -18 x $\frac{5}{16}$	1
59	920082-4	Lockwasher $\frac{3}{16}$ Dia.	3
60	5395	Ass'y. Hitch Bar	1
61	5398	Plate — Hitch Bar	1
62	908059-4	Bolt — Hex $\frac{1}{2}$ -13 x $1\frac{1}{2}$	1
63	915115-6	Nut — Nylok $\frac{1}{2}$ -13	1
64	908036-4	Bolt — Hex $\frac{3}{8}$ -16 x $1\frac{1}{2}$	1
65	915663-4	Nut — Elastic $\frac{3}{8}$ -16	1
66	5394	Block — Swivel	1
67	908040-4	Bolt — Hex $\frac{3}{8}$ -16 x $2\frac{1}{2}$	1
68	920013-4	Washer $\frac{5}{8}$ S.A.E.	1
69	932034-4	Cotter Pin $\frac{3}{16} \times 1$	1
70	5400	Ass'y. Tine & Tube R. H.	1
71	5401	Ass'y. Tine & Tube L. H.	1
72	MW10411	Pin — Shear	2
73	4334	Cover — Tine	2
74	920083-4	Lockwasher $\frac{3}{8}$ Dia.	8
75	1579	Belt	1
76	4498	Decal — Caution	1
77	5399	Decal — Caution	1
78	4411	Decal — Attachment	1
79	1393	Stud	1
80	1014	Spring	1
81	5393	Rod — Clutch	1

PARTS LIST AND INSTRUCTIONS



WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

TILLER WT-242



TILLING WIDTH—24"

TINES—16 Wheel-Horse exclusive design (pat. pending).

TILLING DEPTH—Up to 7"; (depending on soil condition). Depth is controlled by speed of operation.

ENGINE—5½ h.p. vertical shaft with recoil starting.

WHEELS—Two 10-inch semi-pneumatic with leveling action.

DRIVE—Worm gear with tapered roller and needle bearings and Neoprene oil seals.

CLUTCH—Completely enclosed belt with spring loaded idler.

SHIPPING WT.—175 lbs.

ASSEMBLY

Your tiller has been factory assembled with the exception of the hitch. To attach the hitch, remove the cotter key and washer from the pull pin on the front of mounting bar Part No. 4313, install swivel block Part No. 4320, replace washer and cotter key.

To fasten to the tractor remove tractor hitch pin, insert tiller tongue with hitch spacers Part No. 4343 on each side. (NOTE: On some of the earlier model tractors, the hitch spacers will not be required.)

LUBRICATION

There is **NO OIL** in the crankcase of the engine when shipped from the factory. Read engine manual and follow all instructions pertaining to the type of fuel and lubrication specified. (NOTE: The engine carries a separate warranty by the engine manufacturer. For engine service, contact your local authorized engine service headquarters.)

The tiller gear box has been filled with one pint of No. 90 gear lube at the factory. Check oil level before operation and every 25 hours of operation, add oil if necessary.

To check oil level, raise tiller to the up or travel position, remove pipe plug Part No. 1013 on the front of gear box. Gear box should be filled to the level of plug with No. 90 gear lube.

Extensive use of sealed-for-life bearings have been employed to reduce maintenance therefore no other lubrication is required.

OPERATION

The tiller is raised and lowered by using the tractor lift lever or hydraulic control. Depth is controlled by

the forward speed of the tractor, a slow speed results in deep tilling and faster speeds result in shallower tilling. (NOTE: To use the tiller for cultivating, the forward speed should be adjusted so that the unit will not till too deep.) In sod or heavy soil it may be necessary to go over the ground 2 or 3 times before it is ready to plant. In hard, dry or rocky soils, the tiller will bounce. This is a design feature of this unit and should cause no alarm. However, under some conditions, it may be necessary to add weight to the tiller. There are two brackets available for this purpose, bracket Part No. 4321 which attaches the tractor front weight Part No. 4065, or bracket Part No. 4309, which will hold a standard concrete block.

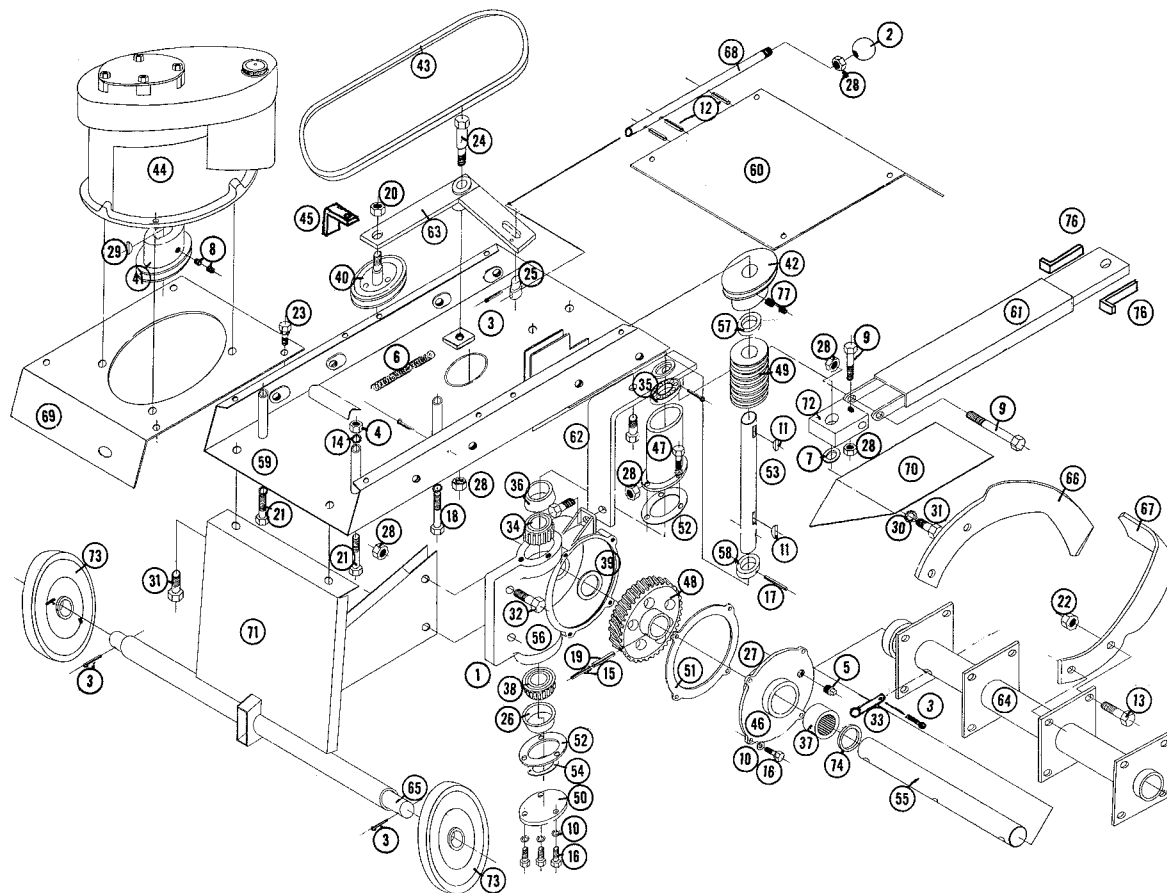
During the first few hours of operation, the tiller gear box may run hot. This is normal with worm gear drives and is not harmful. As the gears wear in, the gear box will run cooler.

When not using the tiller, it is advisable to disengage the clutch to relieve the tension on the belt.

After using tiller the first time, check all bolts to make sure they have not become loose, and retighten if necessary. To change belt, first remove top plate, Part No. 4308, to gain access to drive. Unhook spring from clutch arm. Unscrew shoulder bolt, Part No. 1392, and remove clutch arm with idler pulley and clutch rod. The belt can now be removed. Install the new belt by following reverse procedure. Be sure the pulleys are in proper alignment and replace top plate.

CAUTION — NEVER ADJUST OR REMOVE DEBRIS OR ROCKS FROM TILLER WITHOUT FIRST SHUTTING OFF THE ENGINE AND DIS-ENGAGING CLUTCH.

PARTS LIST



Ref. No.	Part No.	Name	Quantity	Ref. No.	Part No.	Name	Quantity
1	5018	Worm & Gear Box Assembly	1	40	1618	Idler Pulley	1
2	1001	Knob	1	41	1626	Engine Pulley	1
3	1002	Cotter Key $\frac{1}{8}$ x 1	7	42	1627	Tiller Pulley	1
4	1007	Hex Jam Nut $\frac{3}{16}$ -18	1	43	1579	Belt	1
5	1013	Pipe Plug $\frac{1}{8}$ Std. Pipe	1	44	1797	Engine	1
6	1014	Spring	1	45	3760	Belt Throw Out Bracket	1
7	1038	Washer $\frac{5}{8}$ I.D.	1	46	4001	Cover Plate	1
8	1042	Socket Hd. Set Screw $\frac{5}{16}$ -18 x $\frac{3}{16}$	2	47	4002	Support	1
9	1093	H.H.C.S. $\frac{3}{8}$ -16 x $2\frac{1}{2}$	2	48	4003	Worm Gear	1
10	1113	Lock Washer $\frac{1}{4}$	10	49	4004	Worm	1
11	1122	Woodruff Key No. 9	2	50	4005	End Plate	1
12	1133	Roll Pin $\frac{3}{16}$ x 1	3	51	4038	Gasket	1
13	1149	H.H.C.S. $\frac{7}{16}$ -14 x $1\frac{1}{4}$ Lg.	32	52	4039	Gasket	2
14	1196	Shake Proof Washer $\frac{5}{16}$	3	53	4080	Worm Shaft	1
15	1227	Roll Pin $\frac{3}{16}$ x $1\frac{3}{4}$ Lg.	1	54	4354	Washer	1
16	1237	H.H.C.S. $\frac{1}{4}$ -20 x $\frac{5}{8}$ Lg.	10	55	4032	Tine Shaft	1
17	1244	Roll Pin $\frac{1}{8}$ x 1	1	56	4033	Tiller Case	1
18	1258	H.H.C.S. $\frac{3}{16}$ -18 x $3\frac{3}{4}$	1	57	4063	Lower Spacer	1
19	1299	Roll Pin $\frac{3}{16}$ x $1\frac{3}{4}$ Lg.	1	58	4064	Upper Spacer	1
20	1302	Hex Jam Nut $\frac{1}{2}$ -20	1	59	4300	Deck W/A	1
21	1305	H.H.C.S. $\frac{5}{16}$ -18 x 3	2	60	4308	Top Plate	1
22	1317	Lock Nut $\frac{7}{16}$ -14 Hex Hd.	32	61	4310	Hitch Bar W/A	1
23	1385	H.H.C.S. $\frac{1}{4}$ -20 x $\frac{1}{2}$	8	62	4313	Mounting Bar W/A	1
24	1392	Shoulder Bolt	1	63	4316	Clutch Arm W/A	1
25	1393	Stud	1	64	4322	Tine Tube W/A	2
26	1549	Cup — Bearing	1	65	4328	Axle	1
27	1397	Shim — Tine	2	66	4330	Tine R.H.	8
28	1408	NyLock Nut $\frac{3}{8}$ -16	11	67	4331	Tine L.H.	8
29	1395	Woodruff Key No. 6	1	68	4332	Clutch Rod	1
30	1418	Lock Washer $\frac{3}{8}$	8	69	4333	Top Plate Rear	1
31	1425	H.H.C.S. $\frac{3}{8}$ -16 x 1" Lg.	8	70	4334	Tine Cover	2
32	1426	H.H.C.S. $\frac{3}{8}$ -16 x $1\frac{1}{4}$ Lg.	3	71	4326	Pivot Tube W/A	1
33	1476	Rivet	2	72	4320	Swivel Block	1
34	1500	Cone — Bearing	1	73	4337	Wheel	2
35	1515	Ball Bearing	1	74	1213	Seal	3
36	1525	Cup — Bearing	1	75	4411	Decal	1
37	1526	Needle Bearing	2	76	4343	Hitch Spacer	2
38	1548	Cone — Bearing	1	77	1066	Soc. Hd. Set Screw $\frac{1}{4}$ -20 x $\frac{1}{4}$	2
39	1396	Shim	As Req'd.				

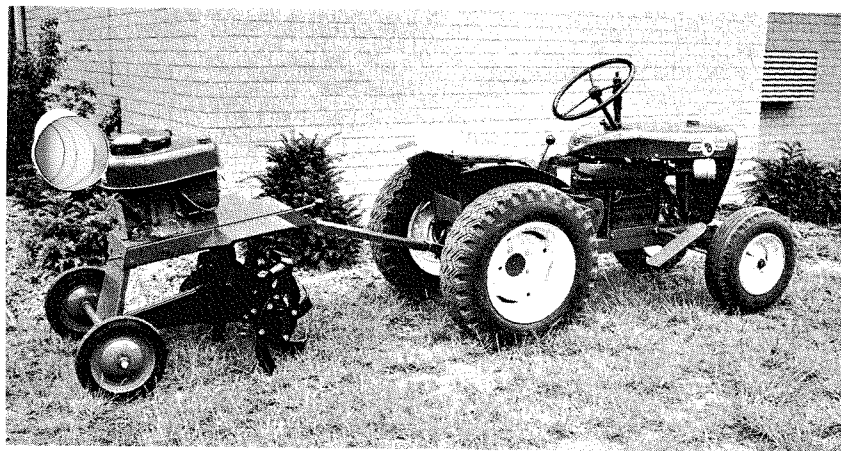
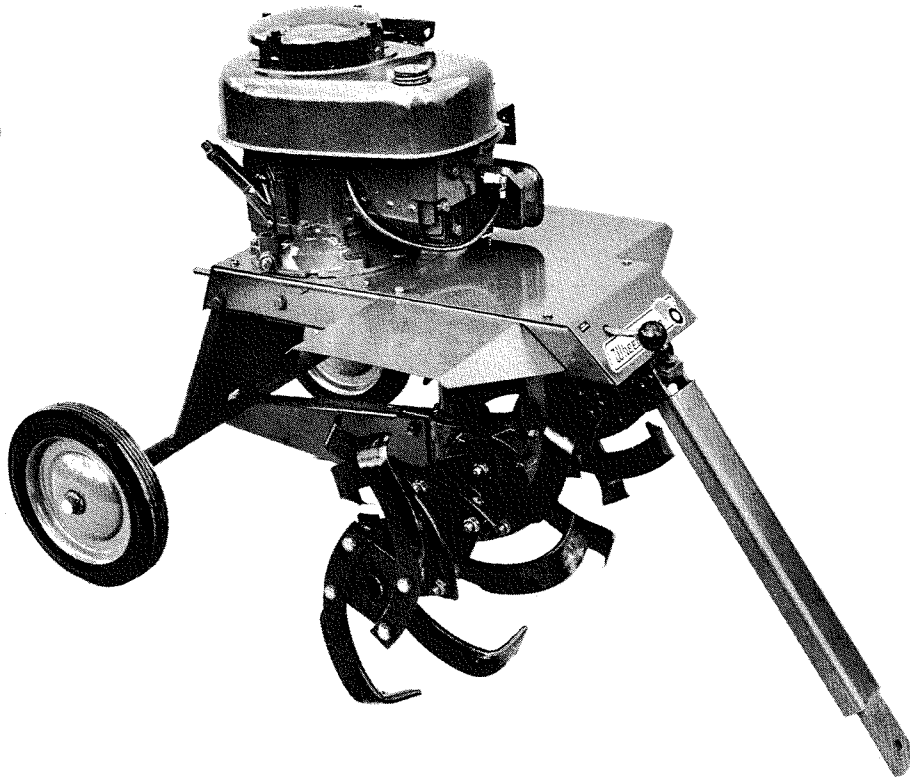


Wheel Horse[®]

**POWERED
TILLER**

**MODEL
WT-241**

*for all models
Wheel-Horse Tractors*



This tiller is the most advanced tractor-attaching tool ever produced. The tiller method of soil preparation and cultivation has fast become a favorite and a glance at the Wheel-Horse exclusives will quickly tell you "THIS IS THE ONE!"

SPECIFICATIONS

TILLING WIDTH—24".

TINES—16 Wheel-Horse exclusive design (pat. pending).

TILLING DEPTH—Up to 7" (depending on soil condition). Depth is controlled by speed of operation.

ENGINE—5½ h.p. vertical shaft with recoil starting.

WHEELS—Two 10-inch semi-pneumatic with leveling action.

DRIVE—Worm gear with tapered roller and needle bearings and Neoprene oil seals.

CLUTCH—Completely enclosed belt with spring loaded idler.

SHIPPING WT.—175 lbs.

Exclusive

FREE-FLOATING ACTION
eliminates tractor shock and protects tiller from damage by raising over foreign objects and re-adjusting to proper tilling depth automatically.

ATTACHES IN TEN SECONDS
to your tractor.
Simply lift tractor hitch pin, insert tiller tongue and replace pin.

Perfectly balanced for easy lift to travel position.

Handy clutch lever accessible from driver seat.

Packaged completely assembled, ready to go.



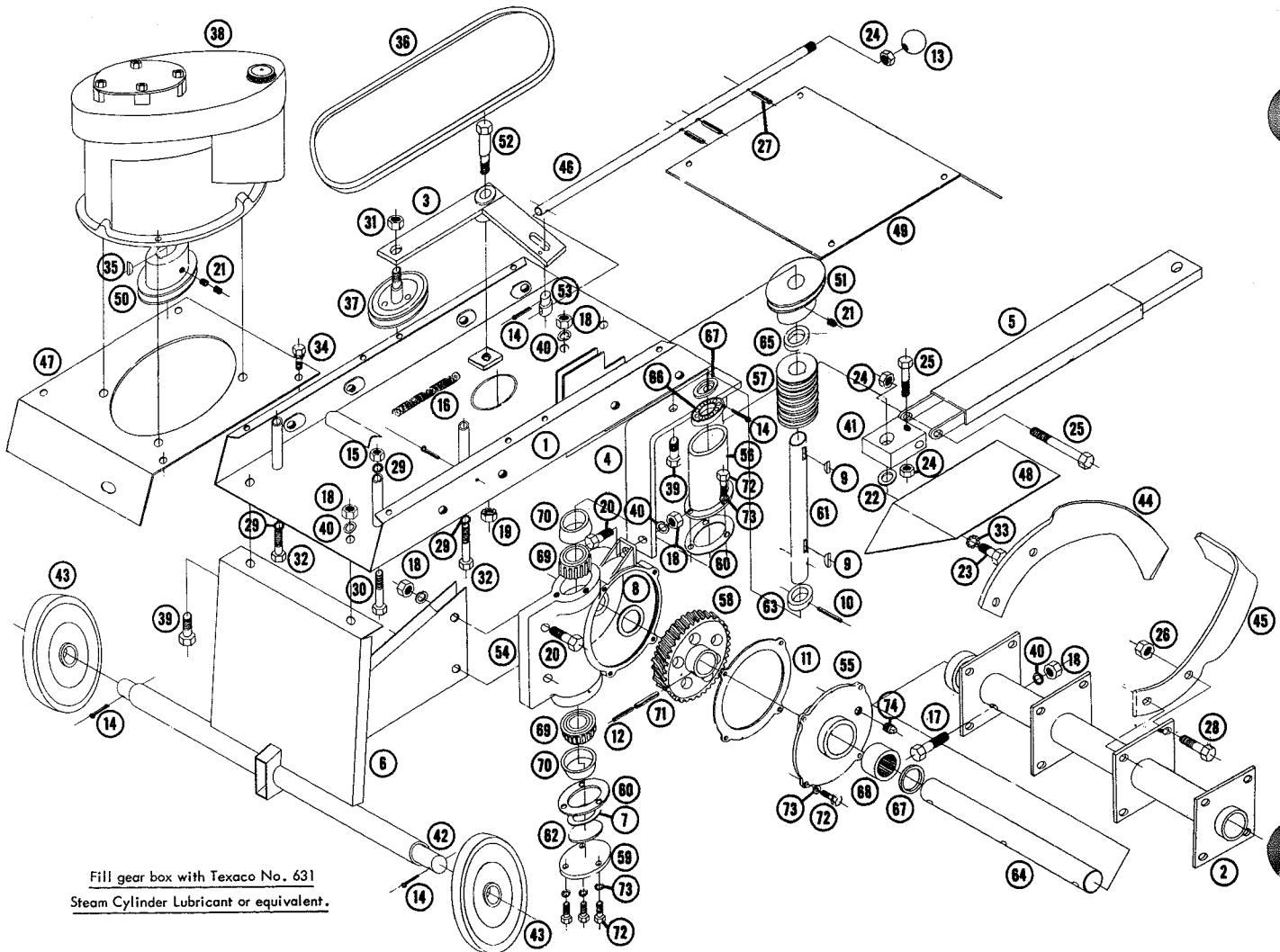


TILLER

MODEL

WT-241

ref. no.	part no.	description	no. req'd.	ref. no.	part no.	description	no. req'd.	ref. no.	part no.	description	no. req'd.
1	4300	Deck Assembly	1	26	1317	Hex Nut 7/16 - 14 Lock Nut	32	50	1626	Pulley 3" O. D. (Engine)	1
2	4322	Tine Tube Assembly	2	27	1133	Roll Pin 3/16 x 1	3	51	1627	Pulley 3" O. D. (Tiller Shaft)	1
3	4316	Clutch Arm Assembly	1	28	1149	Hex Hd. Cap Screw 7/16 - 14 x 1 1/4	32	52	1392	Shoulder Bolt	1
4	4313	Mounting Bar Assembly	1	29	1196	Shakeproof Lockwasher 5/16	3	53	1393	Stud - Control Rod	1
5	4310	Hitch Bar Assembly	1	30	1258	Hex Hd. Cap Screw 5/16 - 18 x 3 3/4	1	54	4000	Case - Tiller (Cast Iron)	1
6	4326	Pivot Tube Assembly	1	31	1302	Hex Jam Nut 1/2 - 20	1	55	4001	Plate - Cover (Cast Iron)	1
7	1396	Shim (Worm Gear)	1	32	1305	Hex Hd. Cap Screw 5/16 - 18 x 3	2	56	4002	Support (Cast Iron)	1
8	1397	Shim (Worm)	1	33	1332	Shakeproof Lockwasher 3/8	8	57	4003	Worm Gear	1
9	1122	Woodruff Key #9	2	34	1385	Hex Hd. Cap Screw W/Shake. Wash. 1/4 - 20 x 1/2	1	58	4004	Worm	1
10	1244	Roll Pin 1/8 x 1	1	35	1395	Woodruff Key #6	1	59	4005	Plate - End	1
11	4038	Gasket	1	36	1579	"V" Belt 4L 24" (Heat Resist.)	1	60	4039	Gasket	2
12	1227	Roll Pin 3/16 x 1 3/4	1	37	1618	Idler Pulley	1	61	4040	Worm Shaft	1
13	1001	Shift Knob	1	38	1797	Engine (Lauson 5/5 H.P. Vertical Shaft)	1	62	4041	Disc - Bearing Spacer	1
14	1002	Cotter Pin 1/8 x 1	5	39	1062	Hex Hd. Cap Screw 3/8 - 16 x 1	6	63	4063	Spacer - Lower	1
15	1007	Hex Nut 5/16 - 18	1	40	1039	Lockwasher 3/8	9	64	4032	Shaft - Tine	1
16	1014	Tension Spring	1	41	4320	Swivel Block	1	65	4064	Spacer - Upper	1
17	1015	Hex Hd. Cap Screw 3/8 - 16 x 1 3/4	2	42	4328	Axle	1	66	1515	Ball Bearing	3
18	1310	Lock Nut 3/8 - 16	9	43	4337	Wheels	2	67	1213	Oil Seal	1
19	1359	Hex Nut - Self Locking 3/8 - 16	1	44	4330	Tines R. H.	8	68	1526	Needle Bearing	2
20	1028	Hex Hd. Cap Screw 3/8 - 16 x 1 1/4	3	45	4331	Tines L. H.	8	69	1500	Cone - Bearing	2
21	1042	Soc. Hd. Set Screw Cup Pt. 5/16 - 18 x 5/16	3	46	4332	Rod - Clutch	1	70	1525	Cup - Bearing	2
22	1038	Flat Washer Wrought 5/8	1	47	4333	Top Plate - Rear	1	71	1299	Roll Pin 5/16 x 1 3/4	1
23	1061	Hex Hd. Cap Screw 3/8 - 16 x 3/4	4	48	4334	Cover - Tine	2	72	1237	Hex Hd. Cap Screw 1/4 - 20 x 5/8	10
24	1080	Hex Jam Nut 3/8 - 16	3	49	4308	Top Plate - Front	1	73	1113	Lockwasher 1/4	1
25	1093	Hex Hd. Cap Screw 3/8 - 16 x 2 1/2	2					74	1013	Pipe Plug Sq. Hd.	1



Fill gear box with Texaco No. 631
Steam Cylinder Lubricant or equivalent.

Wheel-Horse

Reg. U. S. Pat. Off.

WT-30 TILLER

PARTS LIST AND INSTRUCTIONS

ASSEMBLY INSTRUCTIONS

(A) Remove tiller from box. You will note there are 6 separate items.

- | | | |
|-------------------|-------------------------|---------------------------|
| 1. Main Tiller | 3. Speed Reduction Unit | 5. Speed Reduction Belt |
| 2. Hitch Assembly | 4. Side Plate | 6. Speed Reduction Shield |

(B) Service engine by using Engine Instruction Book.

(C) Mount hitch assembly to bottom of case and top hole in housing carrier. Bolts will be in hitch. (Item #1).

ASSEMBLING SPEED REDUCTION

(A) Mount speed reduction unit to the right hand frame rail using the two rear holes directly under the engine crankshaft. (Item #2).

(B) Remove the 29" belt from the tractor and install the 34" belt

to the 2 1/2" pulley on the speed reduction unit and to the 4" pulley on the tractor.

(C) Place the 29" belt on the 2 1/2" pulley on the engine to the 7" pulley on the speed reduction unit.

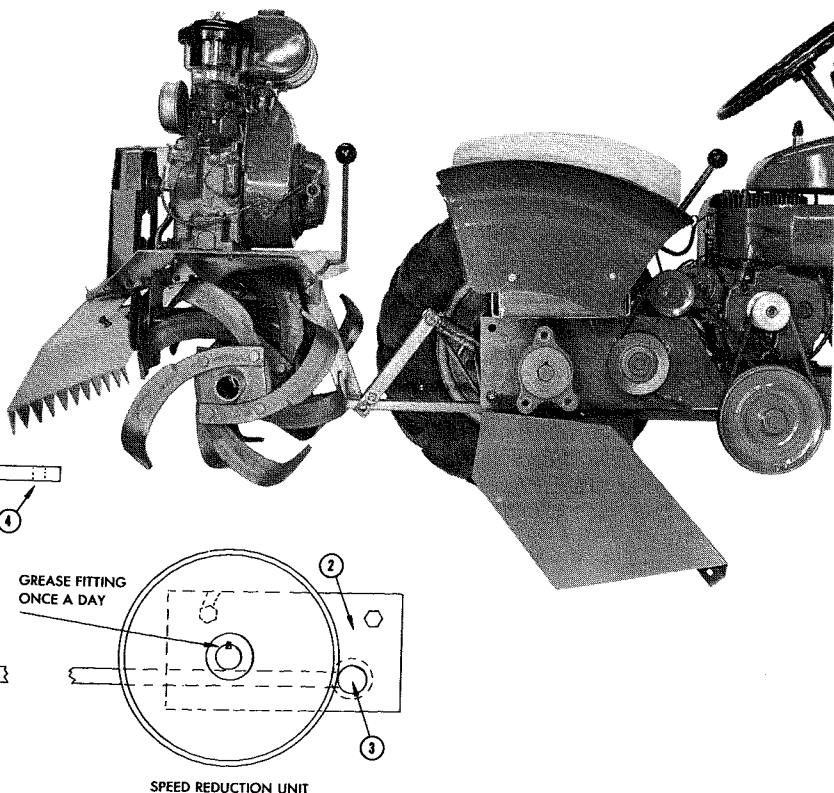
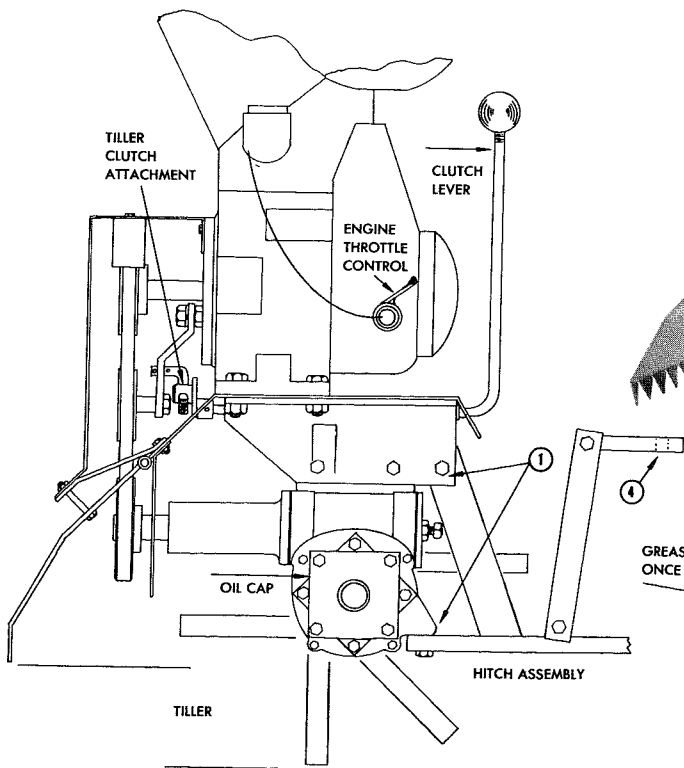
(D) Readjust clutch idler for proper clutching, if necessary, and mount shield.

(E) On '57 thru '59 tractors, the clutch system will have to be converted to '60 models to use tiller mount. Use idler conversion assembly #CC-60.

(I) Now slide tiller hitch into the hole on speed reduction unit. (Item #3).

(J) Slide remaining plate over left hand side and bolt in place as you did right hand unit.

(K) Top clevis will slide directly into the tractor hitch and you are now ready for tilling. (Item #4). (Read operating instructions first).



WHEEL-HORSE PRODUCTS



SOUTH BEND, INDIANA

OPERATING INSTRUCTIONS

(A) To start Engine, first make sure clutch is disengaged and push choke to choke position. (Never over-choke).

(B) Adjust hand throttle to desired running speed and mount tractor before engaging clutch.

CAUTION: Never have hands or feet close to tines when tiller is running.

(C) You are now ready to till. Lower tines into ground by using hand lever. After tiller is at desired depth, a maximum of 4", engage tractor clutch and you are on your way.

(D) You will find after you have run tiller for several hours that it will be necessary to readjust the tiller clutch, as a new belt will stretch at first, and it is very important that the belt is reasonably tight as slippage will burn the belt and cut into the pulleys.

(E) In very hard ground, you may find it necessary to go over ground twice, in order to cut up soil fine.

(F) Never run over stony soil fast as tiller will withstand more than the operator. In normal operation, low gear should be used. Avoid all sharp turns with tiller in ground.

(G) It may be necessary to add extra weights to front of tractor to counter-balance tiller. See your dealer and order FW-40 front weight package. This may also be used in conjunction with snow plow and snow caster.

(H) When turning at end of field if it is necessary to put tractor in reverse, make sure tiller clutch is disengaged.

(I) Under normal conditions you will find that on going over the ground the first time you can reach a depth of 5", but by going over twice it is possible to obtain a depth of 8".

(J) Tiller clutch adjustment:

(A) Remove shield.

(B) Remove belt.

(C) Remove cotter key from Idler Link Pin.

(D) Remove Idler Bar by unscrewing bolt from Engine.

(E) Now turn Idler Link Pin out to desired take-up and reassemble.

(K) If necessary to remove Engine always make sure the pulleys are in perfect alignment when reassembling.

(L) It is important that the operator does not over load tiller for first run until worm and gear get run in and tines get polished.

LUBRICATION INSTRUCTIONS

(A) Crank case of tiller is filled at the factory and should need no oil unless after continuous operation, the seals get worn and oil leaks out. If so, replace worn seals and fill crankcase to Filler Hole with No. 90 oil.

(B) For engine, read engine instruction book.

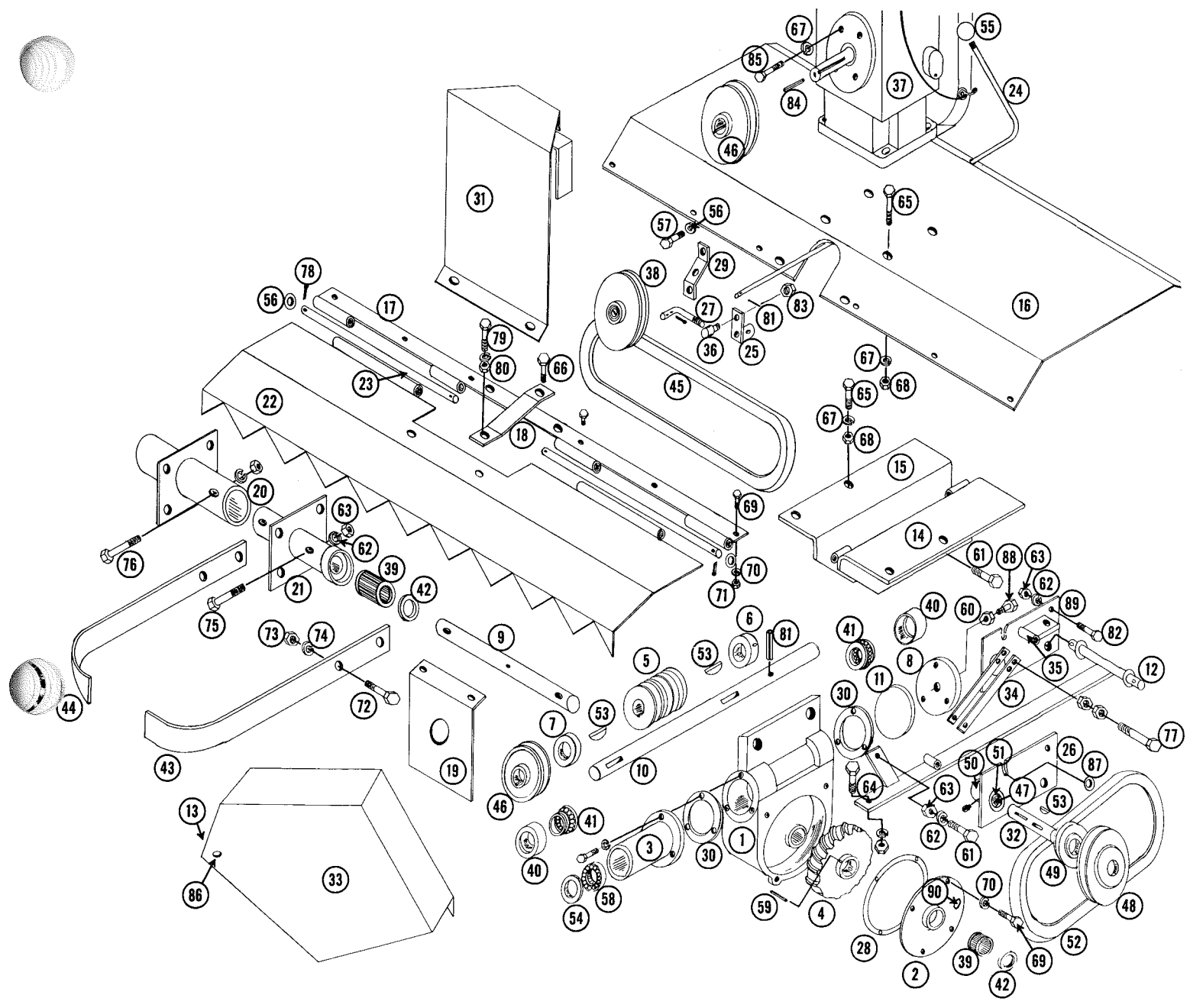
(C) Idler pulley has a sealed bearing and will need no grease.

(D) You will note one zerk on speed reduction unit, which should be greased at least once a day.

TILLER PARTS LIST

Ref. No.	Part No.	Description	No. Req.
1	4000	Tiller Case	1
2	4001	Cover Plate	1
3	4002	Support (outboard)	1
4	4003	Worm Gear	1
5	4004	Worm	1
6	4063	Spacer	1
7	4064	Spacer	1
8	4005	End Plate	1
9	4032	Tine Shaft	1
10	4040	Worm Shaft	1
11	4041	Disc	1
12	4006	Hitch Bar Assy.	1
13	4046	Spacer	1
14	4028	Engine Mount R.H.	1
15	4029	Engine Mount L.H.	1
16	4020	Housing	1
17	4016	Rear Tie Bar	1
18	4019	Drag Support	2
19	4024	Belt Guard	1
20	4010	Tine Shaft Tube	2
21	4011	Tine Shaft Tube	2
22	4014	Drag Plate	1
23	4022	Hinge Rod	2
24	4015	Clutch Lever	1
25	4027	Idler Pivot	1
26	4048	Plate	1
27	4026	Idler Link Pin	1
28	4038	Gasket	1
29	4059	Bar—Idler	1
30	4039	Gasket	2
31	4023	Shield	1
32	4050	Shaft	1

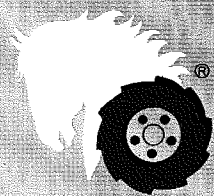
Ref. No.	Part No.	Description	No. Req.
33	4062	Belt Guard	1
34	4021	Lift Arm	2
35	4018	Lift Bar	1
36	1861	Link Pin Swivel	1
37	1793	Engine	1
38	1618	Pulley (Idler)	1
39	1526	Needle Bearing	2
40	1525	Cup (Bearing)	2
41	1500	Cone (Bearing)	2
42	1213	Seal	2
43	4042	Tines R.H.	8
44	4043	Tines L.H.	8
45	1571	Belt	1
46	1611	Pulley	2
47	1523	Needle Bearings	2
48	1600	7" Pulley	1
49	1608	2½" Pulley	1
50	1085	Collar	1
51	1303	Seal	2
52	1572	Belt	1
53	1122	Key—#9	4
54	1234	Seal	1
55	1001	Handle	1
56	1309	⅜ SAE Washer	3
57	1308	HHCS ⅝-24x1	1
58	1502	Ball Bearing	1
59	1299	Roll Pin ⅜x1 ⅜	1
60	1070	⅜-24 Hex Nut (Jam)	1
61	1064	HHCS (⅜-16x1½)	3
62	1039	Lockwasher ⅜	12
63	1016	Hex Nuts ⅜-16	22
64	1028	HHCS (⅜-16x1¼)	1



Ref. No.	Part No.	Description	No. Req.
65	1006	HHCS $\frac{5}{16}$ -18x1 $\frac{1}{4}$	4
66	1089	HHCS $\frac{5}{16}$ -18x $\frac{3}{4}$	3
67	1196	Lockwasher $\frac{5}{16}$	9
68	1007	Hex Nut $\frac{5}{16}$ -18	8
69	1237	HHCS $\frac{1}{4}$ -20x $\frac{5}{8}$	16
70	1067	Lockwashers $\frac{1}{4}$	16
71	1034	Hex Nuts $\frac{1}{4}$ -20	6
72	1095	HHCS $\frac{1}{16}$ -14x1 $\frac{1}{2}$	16
73	1109	Hex Nuts $\frac{7}{16}$ -14	16
74	1117	$\frac{7}{16}$ Lockwasher	16
75	1015	HHCS $\frac{3}{8}$ -16x1 $\frac{3}{4}$	2
76	1032	HHCS $\frac{3}{8}$ -16x2	2
77	1167	HHCS $\frac{3}{8}$ -16x2 $\frac{3}{4}$	2

Ref. No.	Part No.	Description	No. Req.
78	1002	$\frac{1}{8}$ -1 Cotter	5
79	1301	HHCS $\frac{5}{16}$ -24x2 $\frac{1}{4}$	2
80	1183	Hex Nut $\frac{3}{16}$ -24	5
81	1244	Roll Pin $\frac{1}{8}$ x1	2
82	1062	HHCS $\frac{3}{8}$ -16x1	4
83	1302	$\frac{1}{2}$ -20 Nut	1
84	1005	Sq. Key $\frac{3}{16}$ x1	1
85	1195	HHCS $\frac{5}{16}$ -24x $\frac{5}{8}$	1
86	1305	HHCS $\frac{5}{16}$ -18x3	1
87	1018	$\frac{3}{8}$ SAE Washer	2
88	1101	$\frac{3}{8}$ -24x1 $\frac{5}{8}$	1
89	4052	Plate	1
90	1013	Plug $\frac{1}{4}$ -N.P.T.	1

PARTS LIST AND INSTRUCTIONS



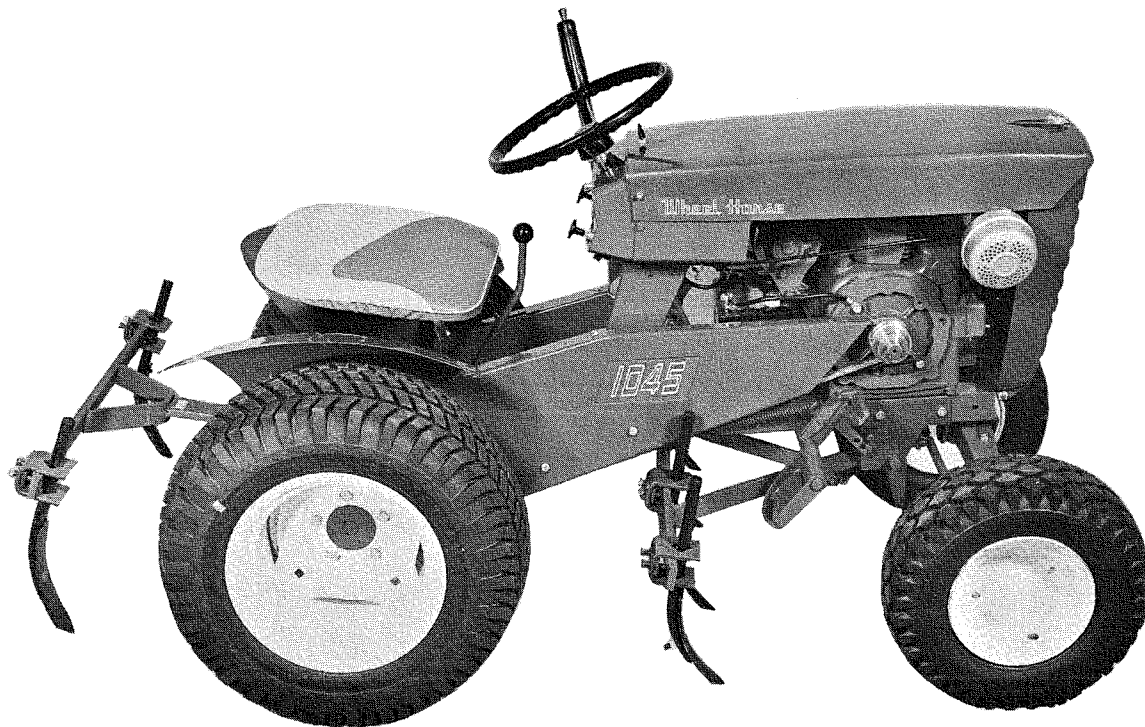
Wheel Horse

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

CULTIVATOR

MODEL 7-1721

For Use With
8-5211 Speed Hitch Only



ASSEMBLY

The cultivator is shipped complete in one carton.

A. Attach 8-5211 speed hitch to tractor according to instructions.

B. Slide front frame ass'y. Part No. 5579 under tractor with lift bar pivot arm down. Lift the cross shaft into slots in speed hitch and close latch. Secure latch in closed position with hairpin cotter through hole in L.H. plate.

C. With the long section of the lift arm ass'y. Part No. 5581 pointed forward, place it in the hole of the front frame ass'y. and secure with hairpin cotter Part No. 933505-4. Place the other end into the first hole of the tractor lift lever and secure with hairpin cotter.

D. Place rear frame into tractor hitch using tool pin to secure.

E. Install and adjust shovel standards and shovels to desired cultivating depth.

OPERATION

First decide whether or not cultivator is going to be used between the rows or to straddle them.

If it is to be used between the rows, place (4) shovels on the front frame equally spaced with one on each end.

Place (3) shovels on back frame, (1) in center and one directly behind each wheel.

When straddling rows eliminate the center shovel on the rear and set the (2) middle shovels on front frame beside the row. Be careful not to set too close to avoid cutting roots off of plant.

The two short standards (Part 7659) are required on the front frame, two inside shovels, on the Raider and Charger models.

The depth is adjusted by moving the standards up or down. Make sure screws on the clamps are tight.

Under normal use cultivator should be set to cultivate 2" to 3" deep, so as not to dry soil out, or only deep enough to cut weeds.

Under extreme conditions when soil is hard, pressure may be applied to front bar by resting feet on frame.

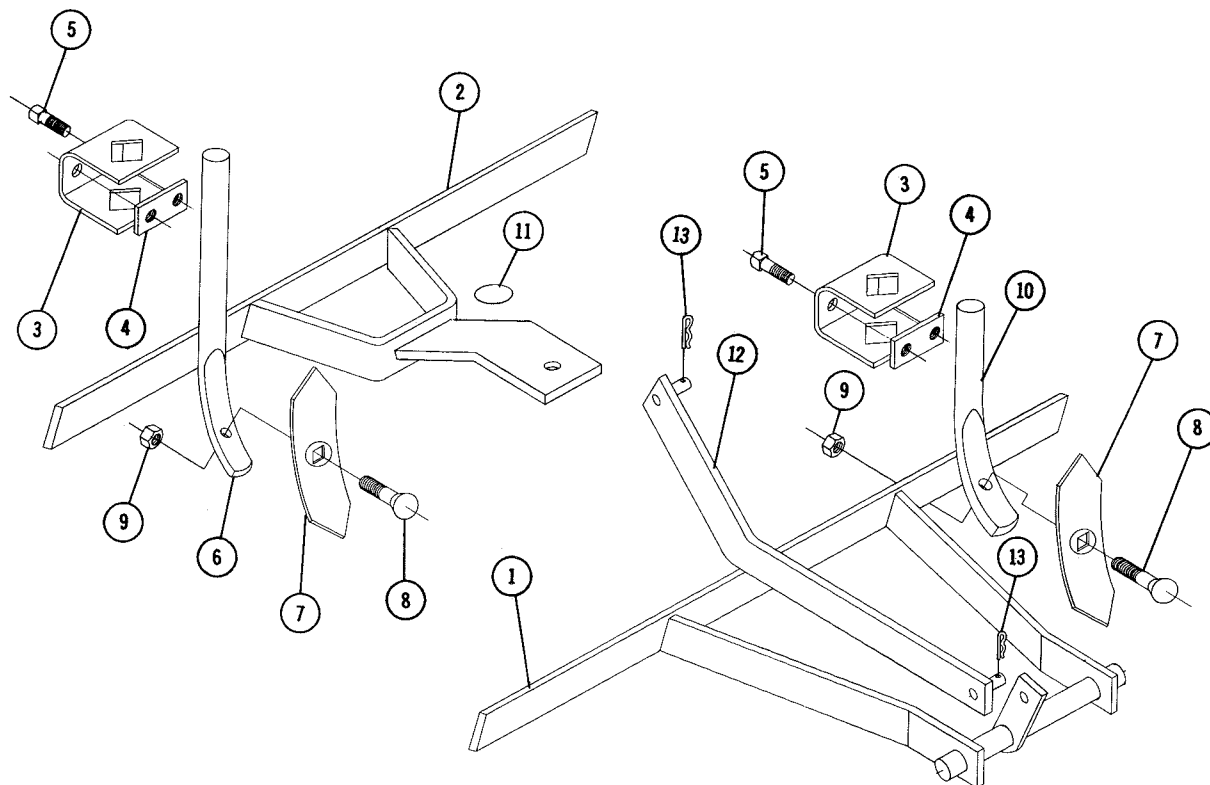
Weights may be added to rear frame as desired.

PARTS LIST

When ordering parts always list Part No. and name of part.

Item No.	Part No.	Description	No. Req'd.
1	5579	Ass'y. Frame — Front	1
2	1939	Ass'y. Frame — Rear	1
3	1907	Clamp	7
4	1911	Plate	7
5	909555	Set Screw Square Head $\frac{3}{8}$ -16 x $1\frac{1}{4}$	14
6	1952	Standard — Shovel	5
7	3358	Shovel	7

Item No.	Part No.	Description	No. Req'd.
8	901636-4	Plow Bolt $\frac{3}{8}$ -16 x $1\frac{1}{2}$	7
9	915113-6	Nut — Hex $\frac{3}{8}$ -16	7
10	7659	Standard — Shovel (Short)	2
11	4581	Decal — Round Horse Head	1
12	5581	Ass'y. Lift Link	1
13	933505-4	Hairpin Cotter	2

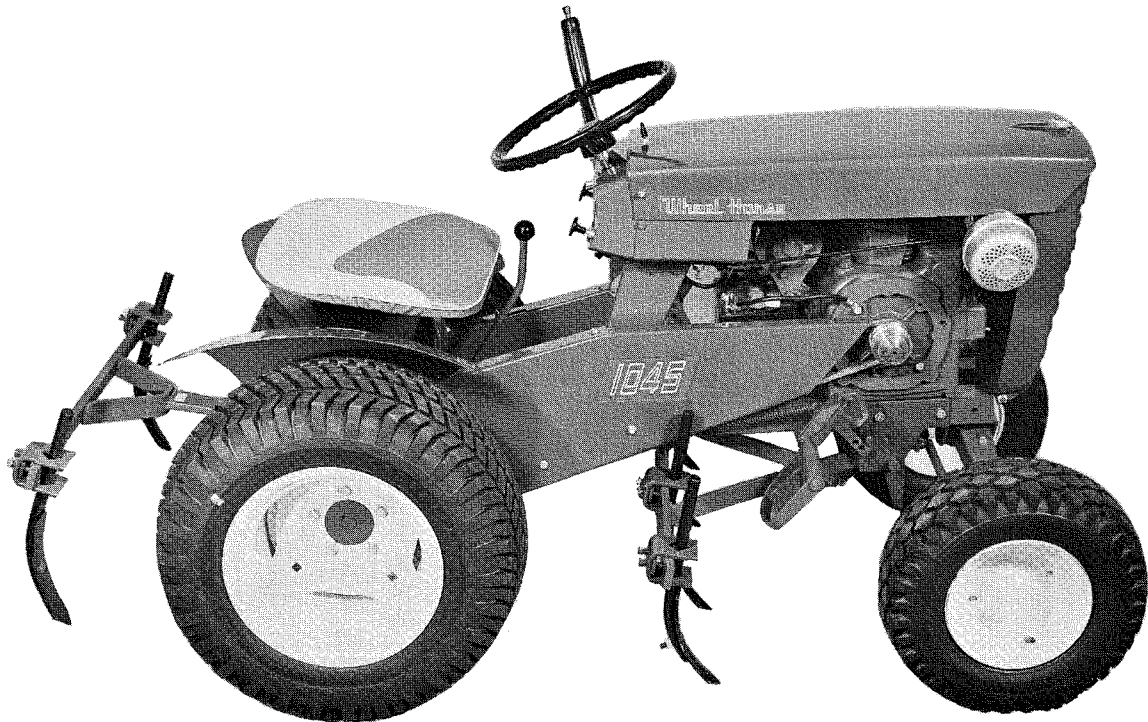


PARTS LIST AND INSTRUCTIONS



CULTIVATOR AC-675

For Use With
MA-1 Speed Hitch Only



ASSEMBLY

The cultivator is shipped complete in one carton.

A. Attach MA-1 speed hitch to tractor according to instructions.

B. Slide front frame ass'y. Part No. 5579 under tractor with lift bar pivot arm down. Lift the cross shaft into slots in speed hitch and close latch. Secure latch in closed position with hair pin cotter through hole in L.H. plate.

C. With the long section of the lift arm ass'y. Part No. 5581 pointed forward, place it in the hole of the front frame ass'y. and secure with hair pin cotter Part No. 933504. Place the other end into the first hole of the tractor lift lever and secure with hair pin cotter.

D. Place rear frame into tractor hitch using tool pin to secure.

E. Install and adjust shovel standards and shovels to desired cultivating depth.

OPERATION

First decide whether or not cultivator is going to be used between the rows or to straddle them.

If it is to be used between the rows, place (4) shovels on the front frame equally spaced with one on each end.

Place (3) shovels on back frame, (1) in center and one directly behind each wheel.

When straddling rows eliminate the center shovel on the rear and set the (2) middle shovels on front

frame beside the row. Be careful no to set too close to avoid cutting roots off of plants.

The depth is adjusted by moving the standards up or down. Make sure screws on the clamps are tight.

Under normal use cultivator should be set to cultivate 2" to 3" deep, so as not to dry soil out, or only deep enough to cut weeds.

Under extreme conditions when soil is hard, pressure may be applied to front bar by resting feet on frame.

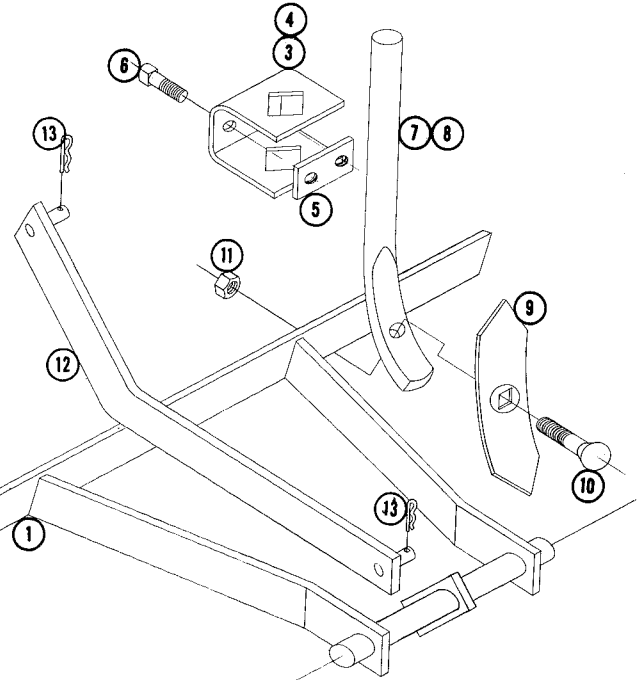
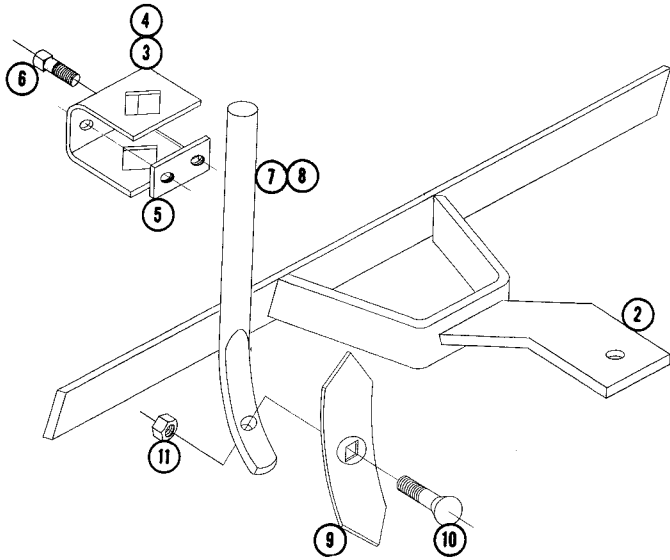
Weights may be added to rear frame as desired.

PARTS LIST

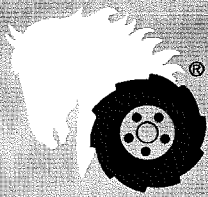
When ordering parts always list Part No. and name of part.

Ref. No.	Part No.	Description	No. Req'd.
1	5579	Ass'y. Frame - Front	1
2	1939	Ass'y. Frame - Rear	1
3	1906	Ass'y. - Clamp	7
4	1907	Clamp	7
5	1911	Plate	7
6	909555-4	Set - Screw Sq. Hd. $\frac{3}{8}$ -16 x $1\frac{1}{4}$	14
7	1951	Ass'y. Standard & Shovel	7

Ref. No.	Part No.	Description	No. Req'd.
8	1952	Standard Shovel	7
9	1931	Shovel	7
10	901636-4	Plowbolt $\frac{3}{8}$ -16 x $1\frac{1}{2}$	7
11	915113-6	Nut - Hex. $\frac{3}{8}$ -16	5
12	5581	Ass'y. Lift Arm	1
13	933504	Hairpin	2



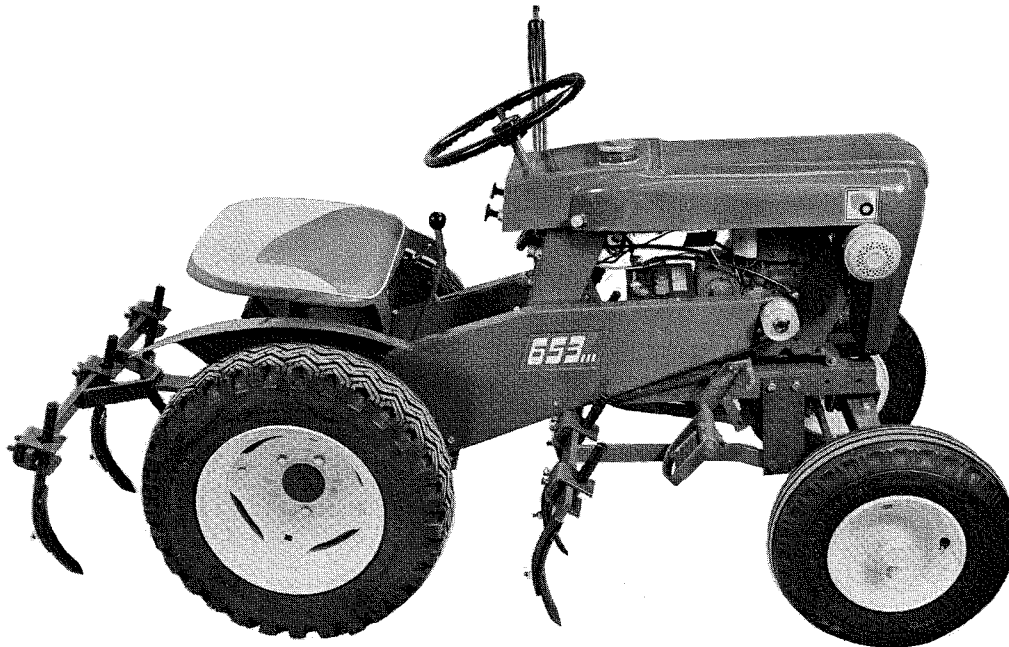
PARTS LIST AND INSTRUCTIONS



Wheel Horse

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

CULTIVATOR AC-673



ASSEMBLY

The cultivator is shipped complete in one carton.

- A.** First mount left hand mounting bracket (1950) on left side of tractor using the third and fourth holes in the left frame rail with angle cut off towards front.
- B.** Insert front frame with lift bar pivot turned up and

install right hand mounting bracket (1950).

- C.** Mount lift bar to front pivot and to lift lever assembly, using 3rd hole on lift lever.
- D.** Place rear frame into tractor hitch using clevis pin to secure.
- E.** Install shovel standards and shovels to suit.

OPERATION

First decide whether or not cultivator is going to be used between the rows or to straddle them.

If it is to be used between the rows, place (4) shovels on the front frame equally spaced with one on each end.

Place (3) shovels on back frame, (1) in center and one directly behind each wheel.

When straddling rows eliminate the center shovel on the rear and set the (2) middle shovels on front frame

beside the row. Be careful not to set too close to avoid cutting roots off of plants.

The depth is adjusted by moving the standards up or down. Make sure set screws on the clamps are tight.

Under normal use cultivator should be set to cultivate 2" to 3" deep, so as not to dry soil out, or only deep enough to cut weeds.

Under extreme conditions when soil is hard, pressure may be applied to front bar by resting feet on frame.

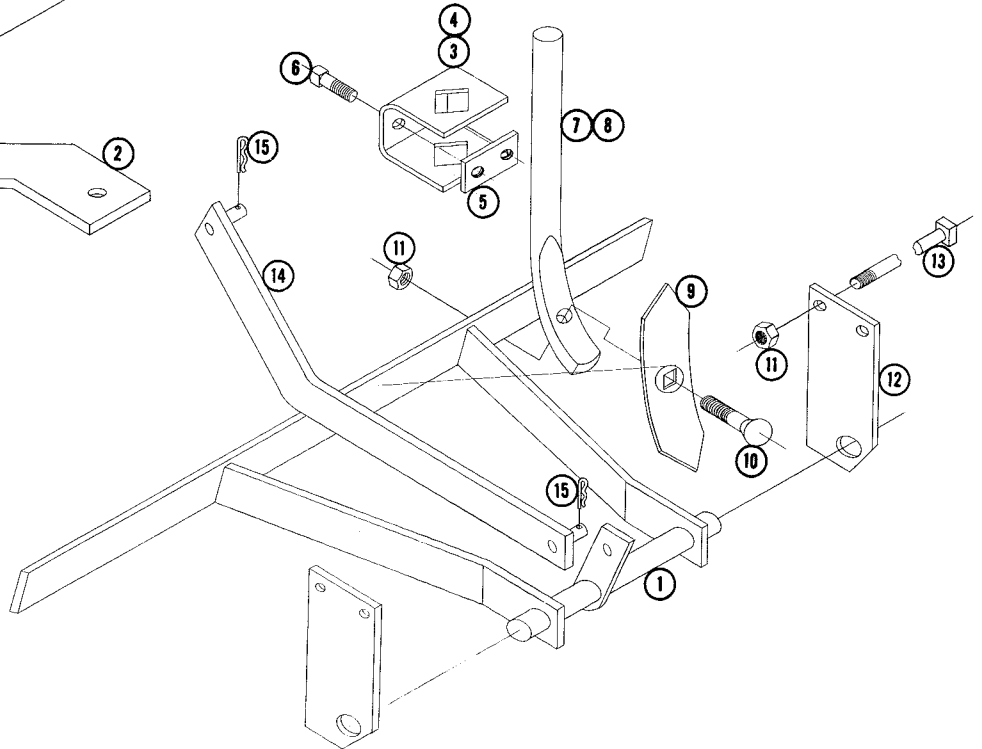
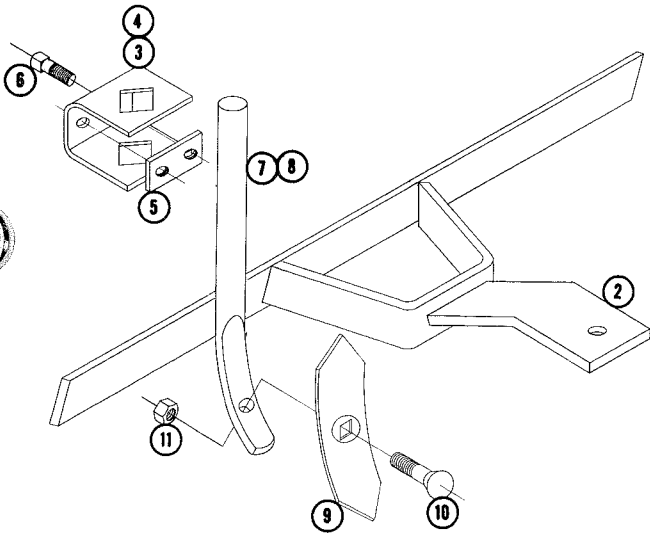
Weights may be added to rear frame as desired.

PARTS LIST

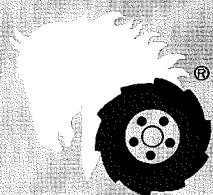
When ordering parts always list Part No. and name of part.

Ref. No.	Part No.	Description	No. Req'd.
1	3779	Ass'y. Frame - Front	1
2	1939	Ass'y. Frame - Rear	1
3	1906	Ass'y. - Clamp	7
4	1907	Clamp	7
5	1911	Plate	7
6	909555-4	Set - Screw Sq. Hd. $\frac{3}{8}$ -16 x $1\frac{1}{4}$	14
7	1951	Ass'y. Standard & Shovel	7
8	1952	Standard Shovel	7

Ref. No.	Part No.	Description	No. Req'd.
9	1931	Shovel	7
10	901636-4	Plowbolt $\frac{3}{8}$ -16 x $1\frac{1}{2}$	7
11	915113-6	Nut - Hex. $\frac{3}{8}$ -16	9
12	1950	Plate - Mounting	2
13	908034-4	Bolt - Hex $\frac{3}{8}$ -16 x 1	4
14	3777	Ass'y. Lift Arm	1
15	52-5	Hairpin	2



PARTS LIST AND INSTRUCTIONS



Wheel Horse

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

CULTIVATOR AC-67



ASSEMBLY

The cultivator is shipped complete in one carton.

- A.** First mount left hand mounting bracket (1950) on left side of tractor using the third and fourth holes in the left frame rail with angle cut off towards front.
- B.** Insert front frame with lift bar pivot turned up and

install right hand mounting bracket (1950).

- C.** Mount lift bar to front pivot and to lift lever assembly, using 3rd hole on lift lever.
- D.** Place rear frame into tractor hitch using clevis pin in the lift cable.
- E.** Install shovel standards and shovels to suit.

OPERATION

First decide whether or not cultivator is going to be used between the rows or to straddle them.

If it is to be used between the rows, place (4) shovels on the front frame equally spaced with one on each end.

Place (3) shovels on back frame, (1) in center and one directly behind each wheel.

When straddling rows eliminate the center shovel on the rear and set the (2) middle shovels on front frame

beside the row. Be careful not to set too close to avoid cutting roots off of plants.

The depth is adjusted by moving the standards up or down. Make sure set screws on the clamps are tight.

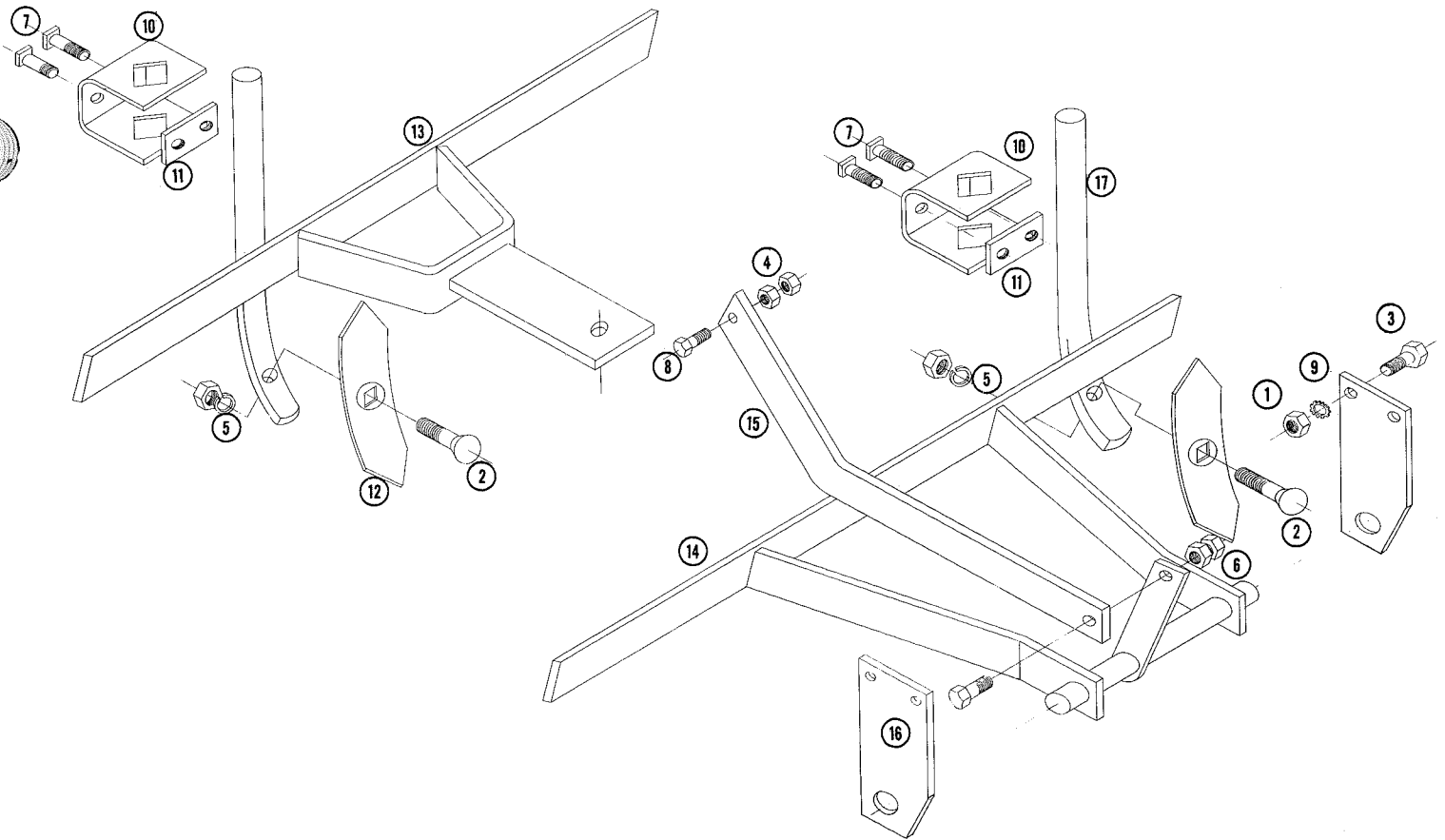
Under normal use cultivator should be set to cultivate 2" to 3" deep, so as not to dry soil out, or only deep enough to cut weeds.

Under extreme conditions when soil is hard, pressure may be applied to front bar by resting feet on frame.

Weights may be added to rear frame as desired.

PARTS LIST

Ref. No.	Part No.	Description	No. Req'd.
1	1016	Hex Nut $\frac{3}{8}$ -16	4
2	1024	Bolt & Nut $\frac{3}{8}$ -16 x $1\frac{1}{2}$	7
3	1028	Hex Hd. Cap Screw $\frac{3}{8}$ -16 x $1\frac{1}{4}$	5
4	1034	Hex Nut $\frac{1}{4}$ -20	2
5	1039	Lockwasher $\frac{3}{8}$	7
6	1080	Hex Jam Nut $\frac{3}{8}$ -16	2
7	1206	Sq Hd. Set Screw $\frac{3}{8}$ -16 x $1\frac{1}{4}$	14
8	1221	Hex Hd. Cap Screw $\frac{1}{4}$ -20 x 1	1
9	1332	Shakeproof Washer $\frac{3}{8}$	4
10	1907	Clamp	7
11	1911	Plate—Clamp	7
12	1931	Shovel	7
13	1939	Rear Frame W/A	1
14	1940	Front Frame W/A	1
15	1949	Lift Arm	1
16	1950	Mounting Bracket	2
17	1952	Standard—Shovel	7

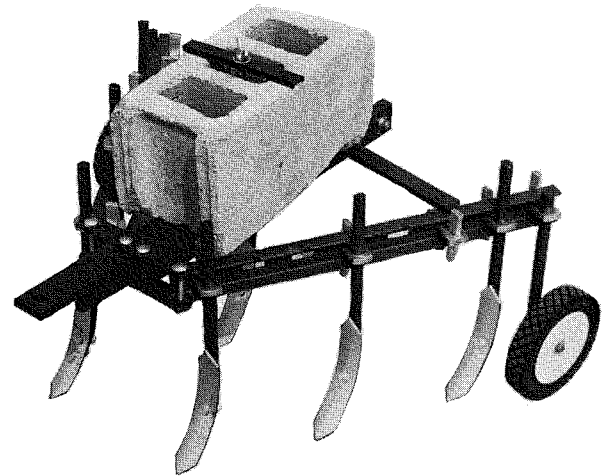
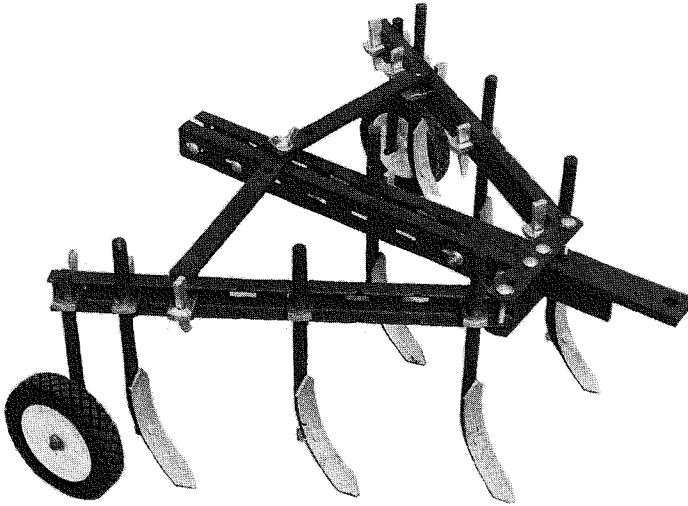


PARTS LIST AND INSTRUCTIONS



WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

CULTIVATOR MODEL 7-1711 (Formerly AC-7)



ASSEMBLY (FRAME)

1. Following illustration, insert 2 spacers (Part #3354) thru holes in Hitch Assembly (Part #3350). Lay one frame channel on each side of Hitch Assembly with spacers in place, and insert 2 carriage bolts thru channels and Hitch Assembly. Insert 2 more spacers between channels at end opposite Hitch and insert carriage bolts thru channels and spacers. Assemble plain washer, lock washer and nuts to carriage bolts and finger tighten.
2. Assemble Tie Straps, (Part # 3353) to center channels at Hitch end with carriage bolts, lock washers and nuts.
3. Assemble outer frame channels to Tie Straps (Part #3353).
4. Follow illustration for assembly of adjusting bars, shovel standards, and gauge wheels.
5. After assembling frame part; tighten all bolts.

(WEDGE LOCKS)

1. Insert shovel standard thru hole in standard keeper. (Fig. 1).
2. Insert keeper, with standard in place, thru slot in channel, (Fig. 2). Be sure that shovel or gauge wheel standards are on the notched side of channel. Adjusting bars may be assembled on either side of channel.
3. With standard in desired position; (Fig. 3), hammer wedge downward until standard is secured. Three or four sharp blows on wedge are recommended to firmly seat Wedge, Keeper, and Standard.
4. To remove or re-position Standards, lightly tap wedge up-ward until loose. NOTE: DO NOT grind off or remove curved end of Wedge since it prevents Wedge from popping out when tapped loose.

5. Set all shovels to run straight with the direction of travel. Final adjustments will depend on ground conditions, running depth, and operator's desires.
6. Gauge Wheels, when used, should be set to run approximately 2" shallower than tips of Shovels.

OPERATION

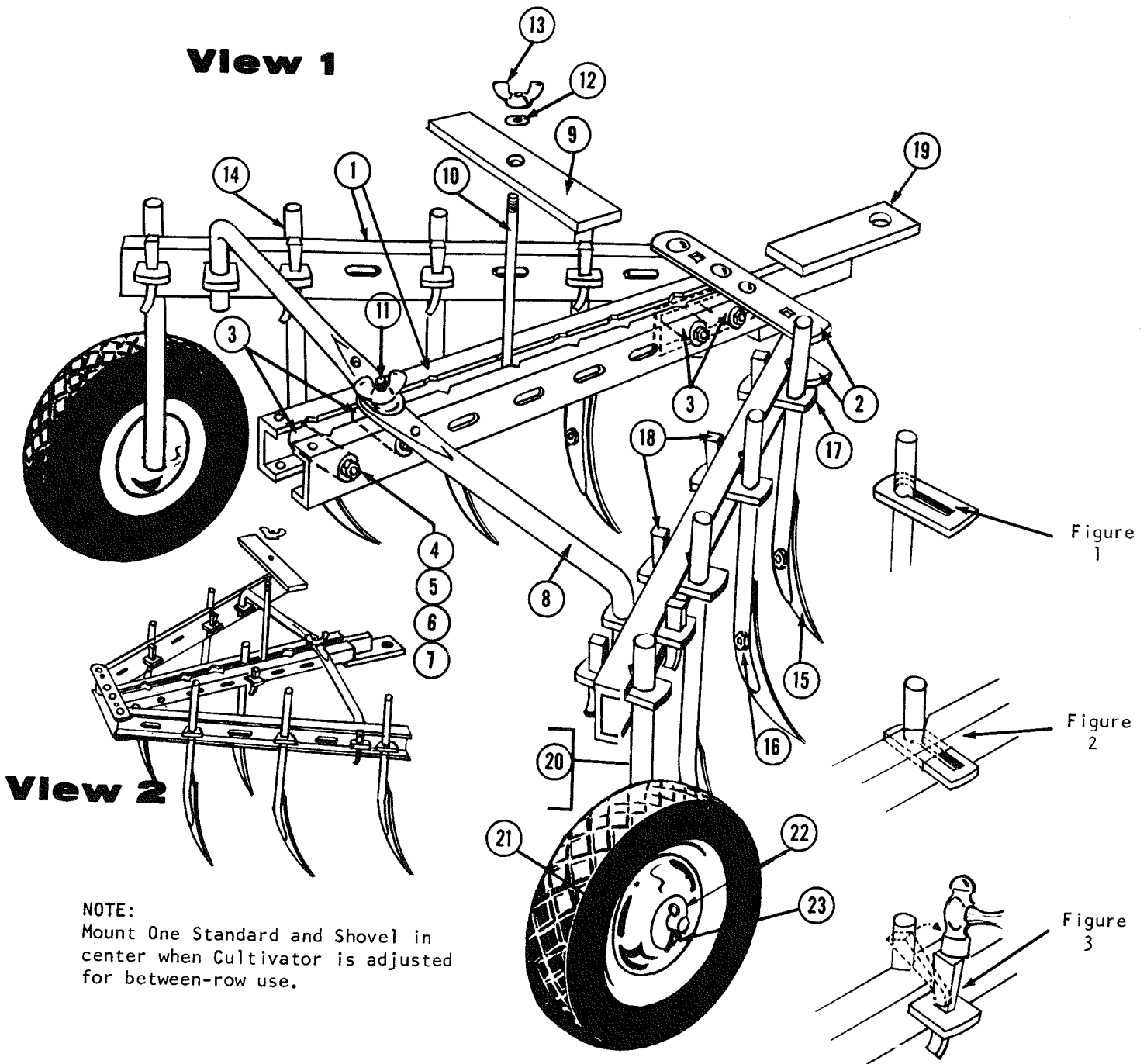
This versatile Cultivator can be used to straddle the row or work between rows. In most conditions, the Cultivator should be set up as shown in View I. The wing nut and the two wedge locks on adjusting bars, (Part #3355) allow quick widening or narrowing of Cultivator frame for different row widths or for changing from straddle row to between row cultivation. By sliding wing nut bolt forward or backward, outer frame channels can be readily moved in or out. Always keep adjusting bars in one of last three notches of outer frame channel for maximum frame rigidity. The extra Standard and Shovel must be mounted between center frame channels for between row work.

For nurseries or gardens where row centers can be spaced 40 inches or wider; and tractor can work easily between rows, the Cultivator can be reversed as shown in View II. Again, the extra Standard and Shovel should be used.

Wedge locks allow quick adjusting or repositioning of shovels, gauge wheels and other accessories.

Additional weight is not normally needed for cultivating light soil. However, it is necessary when soil is heavy, crusted, and/or thickly weeded. To improve cultivator penetration and stability, an 8" x 8" x 16" concrete building block should be attached to center frame channels with furnished 1/2" x 11 1/2" carriage bolt, strap and wing nut.

PARTS LIST



NOTE:
Mount One Standard and Shovel in center when Cultivator is adjusted for between-row use.

Ref. No.	Part No.	Description	No. Req'd.
1	3352	Frame Channel	4
2	3353	Tie Strap	2
3	3354	Spacer	4
4	900071-4	Carriage Bolt $\frac{3}{8}$ -16 x 3	8
5	920010-4	Plain Washer, $\frac{7}{16}$	4
6	920083-4	Lockwasher, $\frac{3}{8}$ Med.	15
7	915113-4	Hex Nut, $\frac{3}{8}$ -16	15
8	3355	Adjusting Bar	2
9	3356	Weight Strap	1
10	900139-4	Carriage Bolt, $\frac{1}{2}$ -13 x 11- $\frac{1}{2}$	1
11	900122-4	Carriage Bolt, $\frac{1}{2}$ -13 x 3- $\frac{1}{2}$	1
12	920085-4	Lockwasher, $\frac{1}{2}$ Med.	2

Ref. No.	Part No.	Description	No. Req'd.
13	915588-4	Wing Nut, $\frac{1}{2}$ -13	2
14	3357	Standard	7
15	3358	Reversible Shovel	7
16	901635	Plow Bolt, $\frac{3}{8}$ -16 x 1- $\frac{1}{4}$	7
17	3359	Standard Keeper	11
18	3360	Lock Wedge	11
19	3350	Hitch Assembly	1
20	3351	Wheel Strut Assembly	2
21	3361	Rubber Tire Wheel	2
22	920012-4	Washer, $\frac{7}{16}$	4
23	932018-4	Cotter Pin, $\frac{1}{8}$ x 1	2



Wheel Horse

AC-6 CULTIVATOR

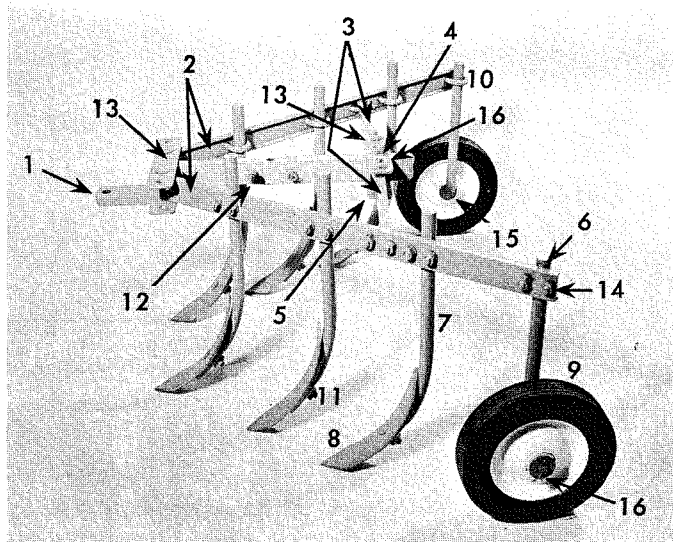
PARTS LIST AND INSTRUCTIONS

ASSEMBLING

The cultivator is shipped complete in one carton. Mount the side rails to the center rails. They may be mounted in either the inside or outside set of holes, depending on the work to be done. Now mount the adjusting plates on the center rail. Fasten the adjusting arms to the side rail and the adjusting plates as shown. Now mount the shovel and standard assemblies and gage wheels.

ADJUSTMENTS AND OPERATION

The width of the cultivator is adjusted by loosening the center bolt in the adjusting plates and sliding the plates forward or backward. Additional width may be obtained by using the outer set of holes. The depth may be controlled with the gage wheels.
Note: KEEP ALL NUTS TIGHT.



There is provision for a center shank which may be used for between row cultivating and furrowing. Remove one front shank and move the other into the slot between the center rail.

PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	NO. REQ.	REF. NO.	PART NO.	DESCRIPTION	NO. REQ.
1	1924	Cent. Rail Frame Assy.	1	10	1293	U-Bolts	10
2	1925	Side Rails L & R	2	11	1069	Plow Bolt w/nut	6
3	1926	Adjusting Arm	2	12	1294	Carriage Bolt w/nut	2
4	1927	Plate Adj. Top	1	13	1295	Carriage Bolt w/nut	5
5	1928	Plate Adj. Bottom	1	14	1039	Lockwasher	33
6	1929	Standard, Gauge Wheel	2	15	1186	Wrought Washer	4
7	1930	Standard Shovel	6	16	1002	Cotter Pin	2
8	1931	Shovel, Cult.					
9	1702	Wheel, Gauge					

Note: All fasteners are cadmium plated to help prevent rust.
All nuts are 3/8" so only 1 wrench is required.

WHEEL-HORSE PRODUCTS

● SOUTH BEND, INDIANA

PARTS LIST AND INSTRUCTIONS



Wheel Horse

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

PP-87 PLOW & RC-10 COULTER

The plow is shipped in two cartons. One carton has the plow base assembly and the coultter assembly with a bag of parts. The other carton contains the beam assembly.

ASSEMBLING THE PP-87 PLOW

Replace the adjusting rod—R.H., which was removed for shipment, in the rear vertical member. Bolt the vertical member to the plow base, with the bolts supplied. Adjust the coultter in accordance with the depth at which you are going to plow.

ASSEMBLING RC-10 COULTER

The rolling coultter is shipped complete in one package. It is attached to the plow with the clamp provided at the front of the plow beam, directly above the plow point. When correctly set it will cut the sod and allow the plow to turn a clean furrow.

LUBRICATION

There is only one grease fitting, and this is located on the coultter hub.

Before starting to plow, apply grease to coultter.

Use machine oil on the threads of adjusting rods.

When putting plow away, always wipe polished surface and coultter blade with grease or oil to prevent rust.

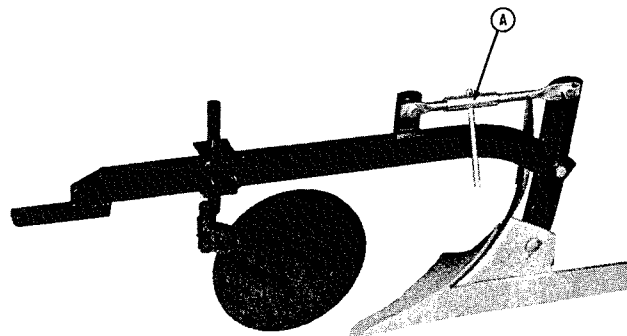
PREPARING THE PLOW FOR USE

The plow bottom must be cleaned so that dirt will slide off the mold-board without sticking. Wipe the polished surface with a rag soaked in turpentine, naphtha or gasoline. An old brick or a pumice stone can also be used to remove the protective coating, but usually this is not necessary if soil is not too wet.

TO BEGIN PLOWING

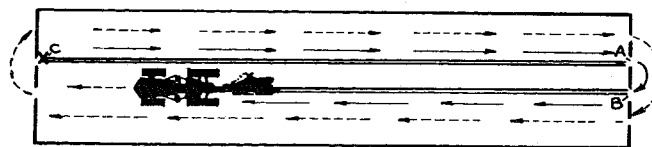
To turn the plow point into the ground when opening the furrow, use turnbuckle. After the dead furrow has been made, level the plow by running the right tractor wheels in the previous furrow and adjusting turnbuckle "A." When the right tractor wheels are in the furrow, the plow is designed to run in the proper horizontal angle.

For a 5 to 6 inch plowing depth, the coultter should slice from 2 to 3 inches deep, but not deep enough to drag the hub.



PLOWING TIPS

Lay out your field to be plowed, and if possible, make it rectangular in shape, about 3 times as long as it is wide. NOTE: it is easier to plow a few long furrows than many short ones. LEAVE SOME ROOM AT EACH END FOR TURNING YOUR TRACTOR. Start plowing by laying off a dead furrow as shown in the sketch below.



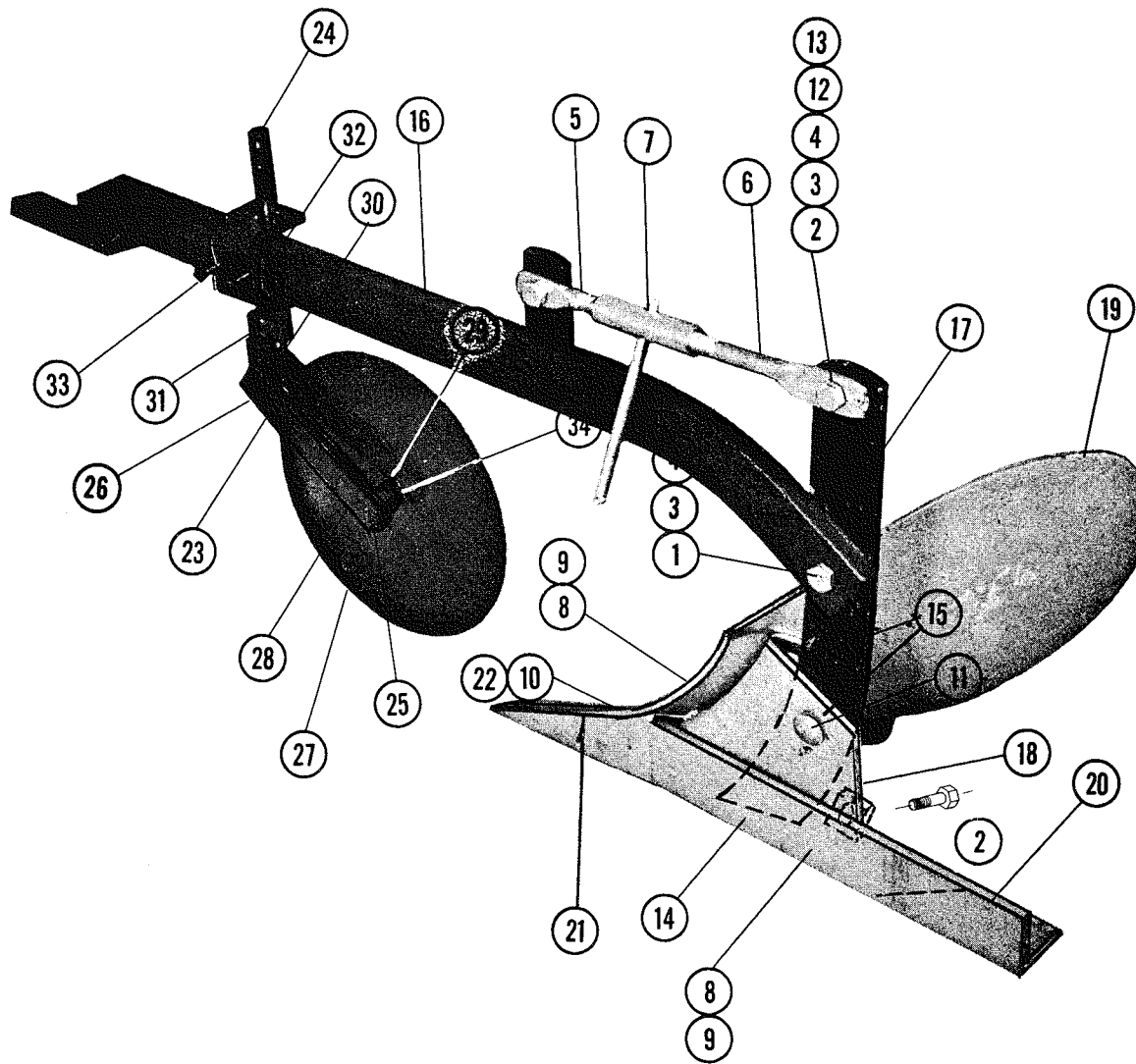
Begin at point "X" and plow a furrow to the end of your plot. Fix your eyes on a tree or some distant object in line with the middle of the plot so that you can guide your tractor and plow a straight first furrow to point "A". NOTE: ALWAYS LIFT PLOW BEFORE TURNING, and, at point "B", lower it again and plow a dead furrow piling the dirt on top of dirt from the first furrow. When you return to point "X" and start your real plowing with both the tractor's right wheels in the furrow at point "C", level out the plow with the turnbuckle. Plow in a clockwise direction, always LIFTING your plow at the end of the furrow before turning.

SPEED

Move steadily along so that the earth will turn over and not fall back into the furrow. In most soils, this is done at full throttle in second gear.

In light soils, plowing may often be done in high gear, but if you go too fast, you will get an uneven plowing job and the dirt is apt to be thrown instead of rolled over.

PARTS LIST



PARTS LIST for PP-87 PLOW

Ref. No.	Part No.	Description	No. Req'd.
1	908061-4	Bolt — Hex $\frac{1}{2}$ -13 x 2	1
2	908059-4	Bolt — Hex $\frac{1}{2}$ -13 x $1\frac{1}{2}$	3
3	920085-4	Lockwasher $\frac{1}{2}$ Diameter	3
4	915115-4	Nut — Hex $\frac{1}{2}$ -13	3
5	2025	Rod — Adjusting — R.H. Thread	1
6	2026	Rod — Adjusting — L.H. Thread	1
7	2027	Coupling Assembly — Adjusting	1
8	901634-4	Bolt — Plow — $\frac{3}{8}$ -16 x 1	5
9	915184-4	Nut — Square — $\frac{3}{8}$ -16	5
10	915185-4	Nut — Square — $\frac{3}{16}$ -14	2
11	915186-4	Nut — Square — $\frac{1}{2}$ -13	3

Ref. No.	Part No.	Description	No. Req'd.
12	5353	Spacer — Turnbuckle	2
13	920012-4	Washer $\frac{3}{16}$ SAE	2
14	901655-4	Bolt — Plow $\frac{1}{2}$ -13 x $1\frac{3}{4}$	1
15	900114-4	Bolt — Carriage $\frac{1}{2}$ -13 x $1\frac{1}{2}$	1
16	2023	Beam Assembly	1
17	6927	Standard Assembly	1
18	6928	Frog	1
19	6948	Mold Board	1
20	6946	Landslide Assembly	1
21	6947	Point — 8"	1
22	901643-4	Bolt — Plow $\frac{1}{16}$ -14 x 1	2

PARTS LIST for RC-10 COULTER

Ref. No.	Part No.	Description	No. Req'd.
23	2055	Frame Assembly	1
24	2058	Coulter, Standard Ass'y.	1
25	2061	Axle	1
26	933188	Roll Pin, $\frac{3}{16}$ x 1	1
27	2062	Hub Assembly	1
28	2063	Blade, Coulter	1
29	923080	Rivet, $\frac{3}{16}$ x $\frac{3}{8}$	3

Ref. No.	Part No.	Description	No. Req'd.
30	1030	Grease Fitting	1
31	2075	Clamp	1
32	1911	Nut, Two Hole	1
33	909555	Set Screw, $\frac{3}{16}$ -16 x $1\frac{1}{4}$	2
34	933217	Roll Pin, $\frac{1}{4}$ x $1\frac{1}{2}$	1

PARTS LIST AND INSTRUCTIONS



WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

The plow is shipped in two cartons. One carton has the plow base assembly and the coulter assembly with a bag of parts. The other carton contains the beam assembly.

ASSEMBLY

Replace the adjusting rod—R.H., which was removed for shipment, in the rear vertical member. Bolt the vertical member to the plow base, with the bolts supplied. Adjust the coulter in accordance with the depth at which you are going to plow.

LUBRICATION

There is only one grease fitting, and this is located on the coulter hub.

Before starting to plow, apply grease to coulter.

Use machine oil on the threads of adjusting rods.

When putting plow away, always wipe polished surface and coulter blade with grease or oil to prevent rust.

PREPARING THE PLOW FOR USE

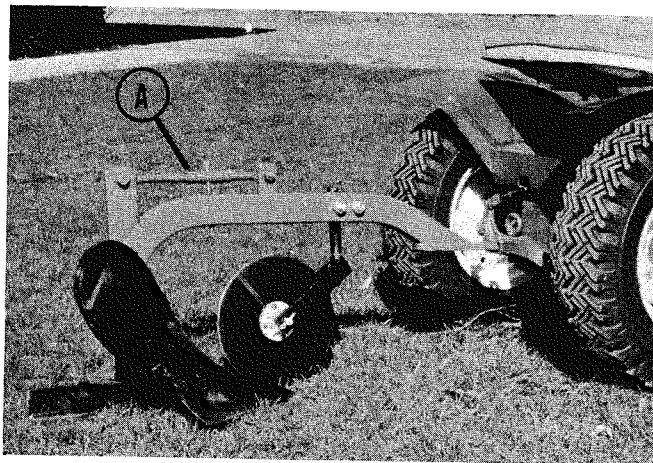
The plow bottom must be cleaned so that dirt will slide off the mold-board without sticking. Wipe the polished surface with a rag soaked in turpentine, naphtha or gasoline. An old brick or a pumice stone can also be used to remove the protective coating, but usually this is not necessary if soil is not too wet.

TO BEGIN PLOWING

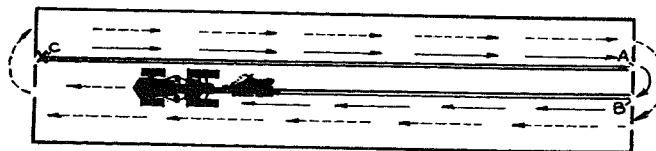
This is a 10" plow and works best at a depth of 5 to 6 inches. To turn the plow point into the ground when opening the furrow, use turnbuckle. After the dead furrow has been made, level the plow by running the right tractor wheels in the previous furrow and adjusting turnbuckle "A". When the right tractor wheels are in the furrow, the plow is designed to run in the proper horizontal angle.

For a 5 to 6 inch plowing depth, the coulter should slice from 2 to 3 inches deep, but not deep enough to drag the hub.

PLOW & COULTER PP-107



Lay out your field to be plowed, and, if possible, make it rectangular in shape, about 3 times as long as it is wide. NOTE: It is easier to plow a few long furrows than many short ones. LEAVE SOME ROOM AT EACH END FOR TURNING YOUR TRACTOR. Start plowing by laying off a dead furrow as shown in the sketch below.



Begin at point "X" and plow a furrow to the end of your plot. Fix your eyes on a tree or some distant object in line with the middle of the plot so that you can guide your tractor and plow a straight first furrow to point "A". NOTE: ALWAYS LIFT PLOW BEFORE TURNING, and, at point "B", lower it again and plow a dead furrow piling the dirt on top of dirt from the first furrow. When you return to point "X" and start your real plowing with both the tractor's right wheels in the furrow at point "C", level out the plow with the turnbuckle. Plow in a clockwise direction, always LIFTING your plow at the end of the furrow before turning.

SPEED

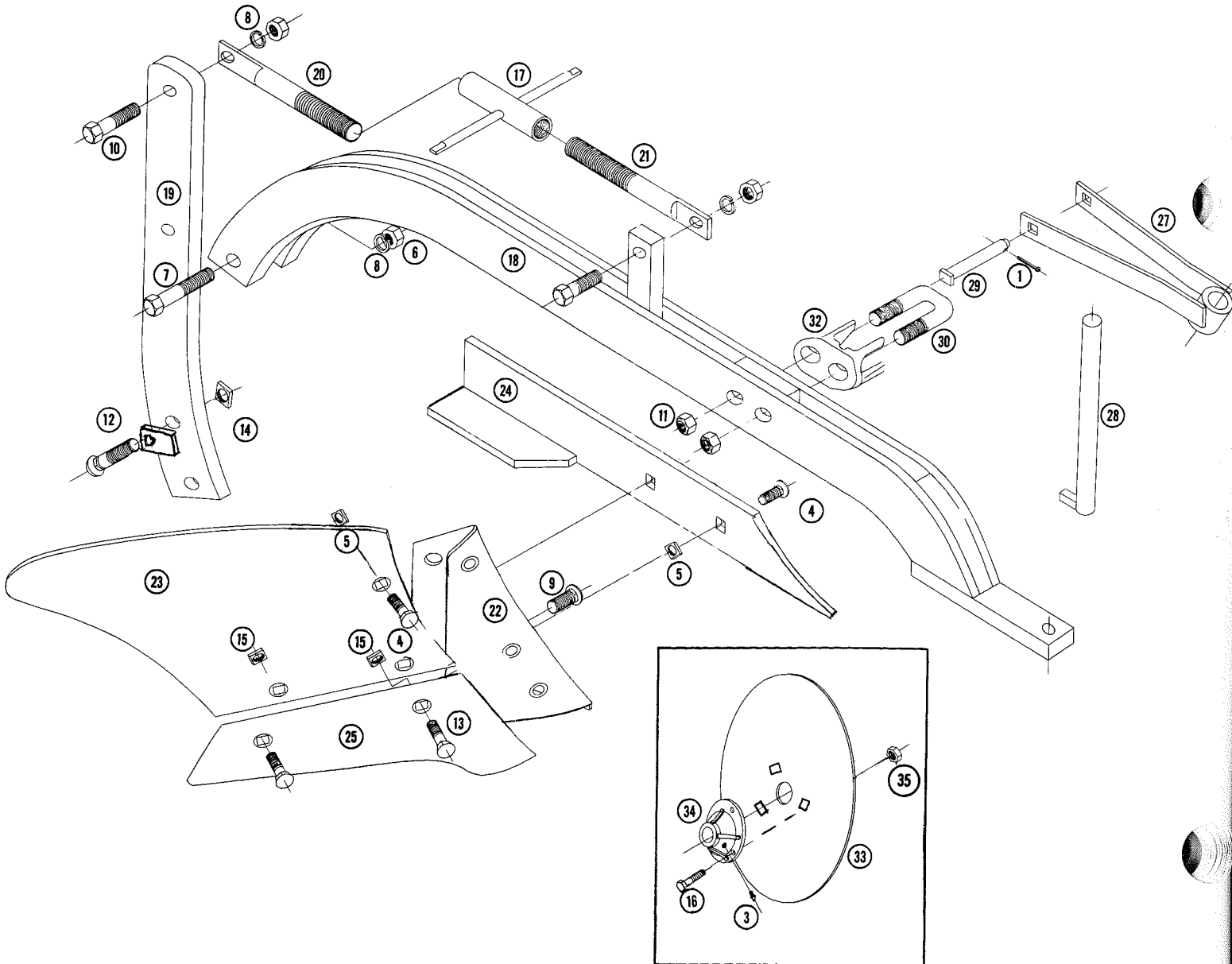
Move steadily along so that the earth will turn over and not fall back into the furrow. In most soils, this is done at full throttle in second gear.

In light soils, plowing may often be done in high gear, but if you go too fast, you will get an uneven plowing job and the dirt is apt to be thrown instead of rolled over.

PARTS LIST

Ref. No.	Part No.	Description	No. Req'd.
1	932017	Cotter Pin $\frac{1}{8}$ x 1	1
2		Not Used	
3	6934	Grease Fitting $\frac{5}{16}$ Drive Type	1
4	901634	Plow Bolt $\frac{3}{8}$ -16 x 1	5
5	915184-4	Nut — Square $\frac{3}{8}$ -16	5
6	915115-4	Nut — Hex $\frac{1}{2}$ -13	3
7	908060-4	Bolt — Hex $\frac{1}{2}$ -13 x $1\frac{3}{4}$	1
8	920085	Lockwasher $\frac{1}{2}$	1
9	901655	Plow Bolt $\frac{1}{2}$ -13 x $1\frac{3}{4}$	1
10	908059-4	Bolt — Hex $\frac{1}{2}$ -13 x $1\frac{1}{2}$	2
11	915117-4	Nut — Hex $\frac{5}{8}$ -11	2
12	900114-4	Bolt — Carriage $\frac{1}{2}$ -13 x $1\frac{1}{2}$	1
13	901643	Plow Bolt $\frac{3}{16}$ -14 x 1	2
14	915186	Nut — Square $\frac{1}{2}$ -13	2
15	915185	Nut — Square $\frac{3}{16}$ -14	2
16	900037-4	Bolt — Carriage $\frac{5}{16}$ -14 x $\frac{3}{4}$	3
17	2027	Coupling — Adjusting	1
18	2026	Beam Assembly	1

Ref. No.	Part No.	Description	No. Req'd.
19	6927	Standard Assembly	1
20	2043	Adjusting Rod — R.H.	1
21	2044	Adjusting Rod — L.H.	1
22	6928	Frog	1
23	6929	Mold Board	1
24	6930	Landslide Assembly	1
25	6931	Share	1
26		Not Used	
27	2065	Standard Assembly	1
28	2066	Rod — Swivel	1
29	2068	Pin — Pivot	1
30	2069	"U" Bolt	1
31		Not Used	
32	2072	Clamp Coulter	1
33	6932	Blade	1
34	6933	Hub — Blade	1
35	915113-4	Nut — Hex $\frac{3}{8}$ (Coulter)	3



PARTS LIST AND INSTRUCTIONS



Wheel Horse

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

PLOW & COULTER PP-1064

The plow is shipped in two cartons. One carton has the plow base assembly and the coulter assembly with a bag of parts. The other carton contains the beam assembly.

ASSEMBLY

Replace the adjusting rod—R.H., which was removed for shipment, in the rear vertical member. Bolt the vertical member to the plow base, with the bolts supplied. Adjust the coulter in accordance with the depth at which you are going to plow.

LUBRICATION

There is only one grease fitting, and this is located on the coulter hub.

Before starting to plow, apply grease to coulter

Use machine oil on the threads of adjusting rods.

When putting plow away, always wipe polished surface and coulter blade with grease or oil to prevent rust.

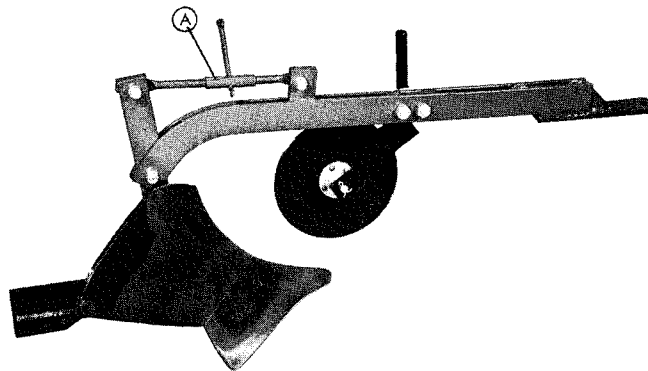
PREPARING THE PLOW FOR USE

The plow bottom must be cleaned so that dirt will slide off the mold-board without sticking. Wipe the polished surface with a rag soaked in turpentine, naphtha or gasoline. An old brick or a pumice stone can also be used to remove the protective coating, but usually this is not necessary if soil is not too wet.

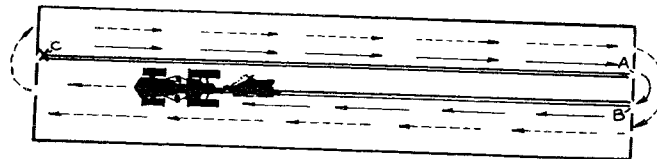
TO BEGIN PLOWING

This is a 10" plow and works best at a depth of 5 to 6 inches. To turn the plow point into the ground when opening the furrow, use turnbuckle. After the dead furrow has been made, level the plow by running the right tractor wheels in the previous furrow and adjusting turnbuckle "A". When the right tractor wheels are in the furrow, the plow is designed to run in the proper horizontal angle.

For a 5 to 6 inch plowing depth, the coulter should slice from 2 to 3 inches deep, but not deep enough to drag the hub.



Lay out your field to be plowed, and, if possible, make it rectangular in shape, about 3 times as long as it is wide. NOTE: It is easier to plow a few long furrows than many short ones. LEAVE SOME ROOM AT EACH END FOR TURNING YOUR TRACTOR. Start plowing by laying off a dead furrow as shown in the sketch below.

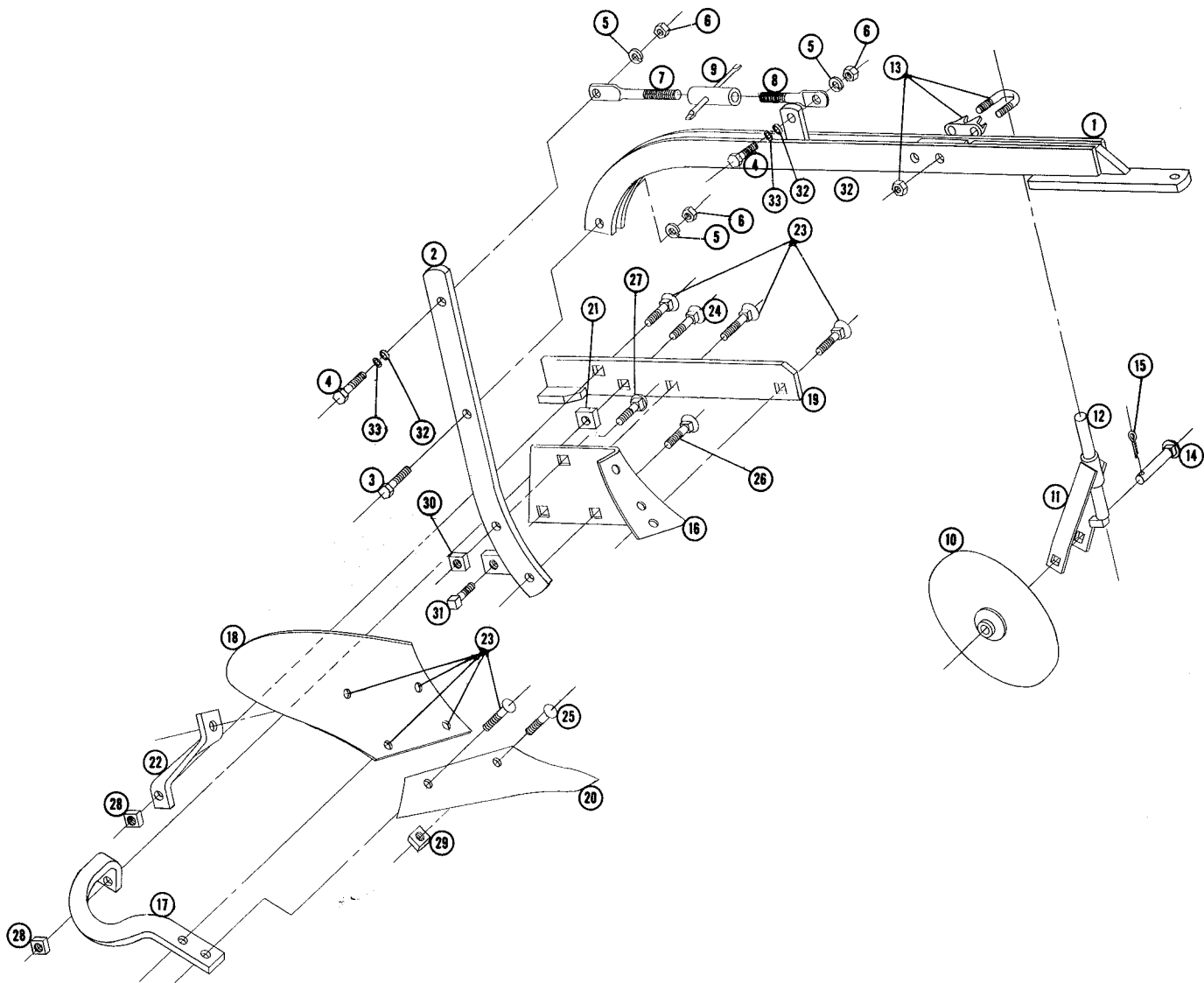


Begin at point "X" and plow a furrow to the end of your plot. Fix your eyes on a tree or some distant object in line with the middle of the plot so that you can guide your tractor and plow a straight first furrow to point "A". NOTE: ALWAYS LIFT PLOW BEFORE TURNING, and, at point "B", lower it again and plow a dead furrow piling the dirt on top of dirt from the first furrow. When you return to point "X" and start your real plowing with both the tractor's right wheels in the furrow at point "C", level out the plow with the turnbuckle. Plow in a clockwise direction, always LIFTING your plow at the end of the furrow before turning.

SPEED

Move steadily along so that the earth will turn over and not fall back into the furrow. In most soils, this is done at full throttle in second gear.

In light soils, plowing may often be done in high gear, but if you go too fast, you will get an uneven plowing job and the dirt is apt to be thrown instead of rolled over.



PARTS LIST

When ordering parts always list Part No. and name of part.

Ref. No.	Part No.	Description	No. Req'd.	Ref. No.	Part No.	Description	No. Req'd.
1	2964	Ass'y. - Beam	1	18	2969	Moldboard	1
2	2965	Standard Ass'y.	1	19	2970	Ass'y. - Landslide & Heel	1
3	908059-4	Bolt - Hex. $\frac{1}{2}$ -13 x $1\frac{1}{2}$	1	20	2048	Ass'y. Point	1
4	908061-4	Bolt - Hex. $\frac{1}{2}$ -13 x 2	2	21	2968	Spacer - Spreader	1
5	920085-4	Lockwasher $\frac{1}{2}$ Med.	3	22	2971	Brace - Moldboard	1
6	915115-6	Nut - Hex. $\frac{1}{2}$ -13 Nylock	3	23	901634-4	Bolt - Plow #3 Hd. $\frac{3}{8}$ -16 x 1	8
7	2043	Turn - Buckle End R.H. Thrd.	1	24	901636-4	Bolt - Plow #3 Hd. $\frac{3}{8}$ -16 x $1\frac{1}{2}$	1
8	2044	Turn - Buckle End L.H. Thrd.	1	25	901644-4	Bolt - Plow #3 Hd. $\frac{7}{16}$ x 14 x $1\frac{1}{4}$	1
9	2027	Ass'y. Tube & Handle	1	26	901655-4	Bolt - Plow #3 Hd. $\frac{1}{2}$ -13 x $1\frac{3}{4}$	1
10	2070	Ass'y. - Rolling Coulter	1	27	900115-4	Bolt - Carriage $\frac{1}{2}$ -13 x $1\frac{3}{4}$	1
11	2065	Ass'y. - Arm - Coulter	1	28	915184-4	Nut - Square $\frac{3}{8}$ -16	9
12	2966	Ass'y. - Standard - Coulter	1	29	915185-4	Nut - Square $\frac{1}{16}$ -14	1
13	2967	Ass'y. "U" Bolt - Clamps & Nuts	1	30	915186-4	Nut - Square $\frac{1}{2}$ -13	3
14	2068	Axle - Coulter	1	31	900878-4	Bolt - Square Hd. $\frac{1}{2}$ -13 x 1	1
15	932023-4	Cotter Pin $\frac{3}{16}$ x 1	1	32	5353	Turn Buckle Spacer	2
16	2045	Frog	1	33	920041-4	Washer $\frac{1}{2}$ Dia.	2
17	2049	Spreader	1				

PARTS LIST AND INSTRUCTIONS



WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

PP-85 PLOW & RC-10 COULTER

The plow is shipped in two cartons. One carton has the plow base assembly and the coultter assembly with a bag of parts. The other carton contains the beam assembly.

ASSEMBLING THE PP-85 PLOW

Replace the adjusting rod—R.H., which was removed for shipment, in the rear vertical member. Bolt the vertical member to the plow base, with the bolts supplied. Adjust the coultter in accordance with the depth at which you are going to plow.

ASSEMBLING RC-10 COULTER

The rolling coultter is shipped complete in one package. It is attached to the plow with the clamp provided at the front of the plow beam, directly above the plow point. When correctly set it will cut the sod and allow the plow to turn a clean furrow.

LUBRICATION

There is only one grease fitting, and this is located on the coultter hub.

Before starting to plow, apply grease to coultter.

Use machine oil on the threads of adjusting rods.

When putting plow away, always wipe polished surface and coultter blade with grease or oil to prevent rust.

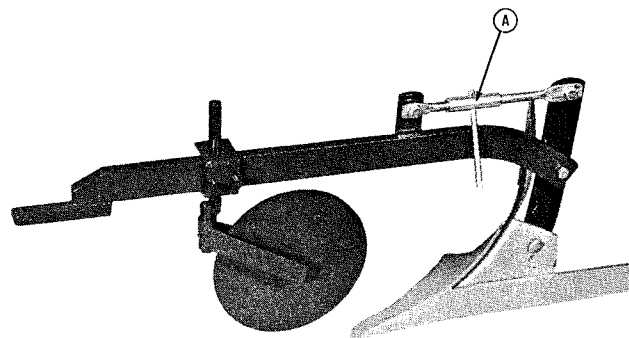
PREPARING THE PLOW FOR USE

The plow bottom must be cleaned so that dirt will slide off the mold-board without sticking. Wipe the polished surface with a rag soaked in turpentine, naphtha or gasoline. An old brick or a pumice stone can also be used to remove the protective coating, but usually this is not necessary if soil is not too wet.

TO BEGIN PLOWING

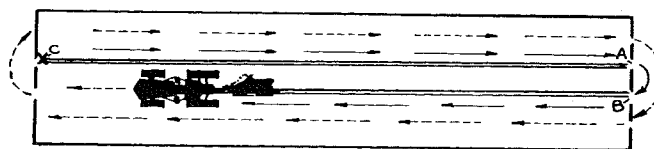
To turn the plow point into the ground when opening the furrow, use turnbuckle. After the dead furrow has been made, level the plow by running the right tractor wheels in the previous furrow and adjusting turnbuckle "A." When the right tractor wheels are in the furrow, the plow is designed to run in the proper horizontal angle.

For a 5 to 6 inch plowing depth, the coultter should slice from 2 to 3 inches deep, but not deep enough to drag the hub.



PLOWING TIPS

Lay out your field to be plowed, and if possible, make it rectangular in shape, about 3 times as long as it is wide. NOTE: it is easier to plow a few long furrows than many short ones. LEAVE SOME ROOM AT EACH END FOR TURNING YOUR TRACTOR. Start plowing by laying off a dead furrow as shown in the sketch below.



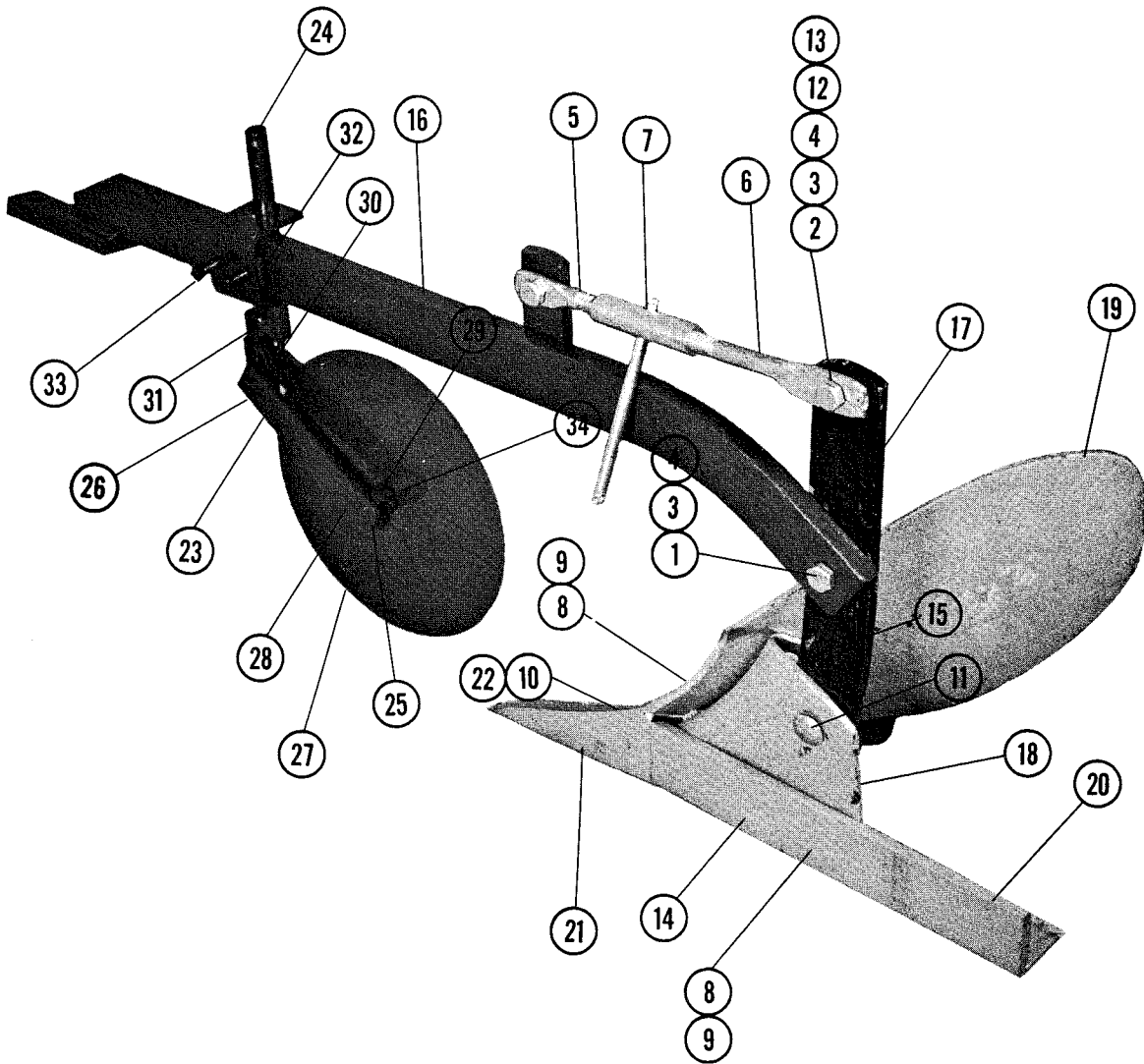
Begin at point "X" and plow a furrow to the end of your plot. Fix your eyes on a tree or some distant object in line with the middle of the plot so that you can guide your tractor and plow a straight first furrow to point "A". NOTE: ALWAYS LIFT PLOW BEFORE TURNING, and, at point "B", lower it again and plow a dead furrow piling the dirt on top of dirt from the first furrow. When you return to point "X" and start your real plowing with both the tractor's right wheels in the furrow at point "C", level out the plow with the turnbuckle. Plow in a clockwise direction, always LIFTING your plow at the end of the furrow before turning.

SPEED

Move steadily along so that the earth will turn over and not fall back into the furrow. In most soils, this is done at full throttle in second gear.

In light soils, plowing may often be done in high gear, but if you go too fast, you will get an uneven plowing job and the dirt is apt to be thrown instead of rolled over.

PARTS LIST



PARTS LIST for PP-8-A PLOW

Ref. No.	Part No.	Description	No. Req'd.	Ref. No.	Part No.	Description	No. Req'd.
1	908061-4	Bolt — Hex 1/2-13 x 2	1	12	5353	Spacer Turnbuckle	2
2	908059-4	Bolt — Hex 1/2-13 x 1 1/2	2	13	920012-4	Washer — 3/16 SAE	2
3	920085-4	Lockwasher — 1/2 Dia. Med.	3	14	901653-4	Bolt — Plow 1/2-13 x 1 1/4	1
4	915115-4	Nut — 1/2-13 — Hex.	3	15	900113-4	Bolt — Carriage 1/2-13 x 1 1/4	1
5	2025	Rod — Adjust. R.H.	1	16	2023	Ass'y. Beam	1
6	2026	Rod — Adjust. L.H.	1	17	2024	Standard Base	1
7	2027	Ass'y. Adjusting Coupling	1	18	2030	Frog Br.	1
8	901634-4	Bolt — Plow 3/8-16 x 1	4	19	2029	Moldboard	1
9	915184-4	Nut — Sq. 3/8-16	4	20	2031	Landslide Br.	1
10	915185-4	Nut — Sq. 7/16-14	1	21	2032	Point 8" Br.	1
11	915186-4	Nut — Sq. 1/2-13	2	22	901643-4	Bolt — Plow 7/16-14 x 1	1

PARTS LIST for RC-10 COULTER

Ref. No.	Part No.	Description	No. Req'd.	Ref. No.	Part No.	Description	No. Req'd.
23	2055	Frame Assembly	1	30	1030	Grease Fitting	1
24	2058	Coulter, Standard Ass'y.	1	31	2075	Clamp	1
25	2061	Axle	1	32	1911	Nut, Two Hole	1
26	933188	Roll Pin, 3/16 x 1	1	33	909555-4	Set Screw, 3/8-16 x 1 1/4	2
27	2062	Hub Assembly	1	34	933217	Roll Pin, 1/4 x 1 1/2	1
28	2063	Blade, Coulter	1	35	5604	Decal	1
29	923080	Rivet, 3/16 x 3/8	3				

PARTS LIST AND INSTRUCTIONS



Wheel Horse

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

PP-8-A PLOW & RC-10 COULTER

The plow is shipped in two cartons. One carton has the plow base assembly and the coultter assembly with a bag of parts. The other carton contains the beam assembly.

ASSEMBLING THE PP-8-A PLOW

Replace the adjusting rod—R.H., which was removed for shipment, in the rear vertical member. Bolt the vertical member to the plow base, with the bolts supplied. Adjust the coultter in accordance with the depth at which you are going to plow.

ASSEMBLING RC-10 COULTER

The rolling coultter is shipped complete in one package. It is attached to the plow with the clamp provided at the front of the plow beam, directly above the plow point. When correctly set it will cut the sod and allow the plow to turn a clean furrow.

LUBRICATION

There is only one grease fitting, and this is located on the coultter hub.

Before starting to plow, apply grease to coultter.

Use machine oil on the threads of adjusting rods.

When putting plow away, always wipe polished surface and coultter blade with grease or oil to prevent rust.

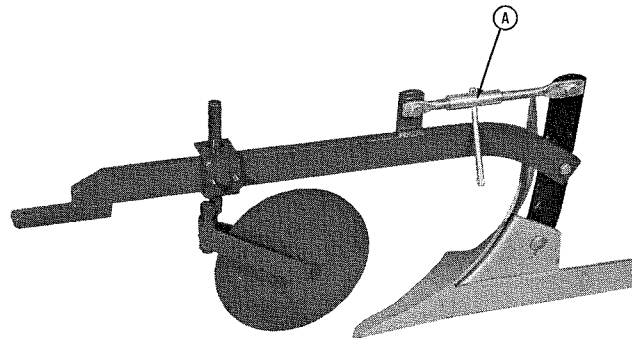
PREPARING THE PLOW FOR USE

The plow bottom must be cleaned so that dirt will slide off the mold-board without sticking. Wipe the polished surface with a rag soaked in turpentine, naptha or gasoline. An old brick or a pumice stone can also be used to remove the protective coating, but usually this is not necessary if soil is not too wet.

TO BEGIN PLOWING

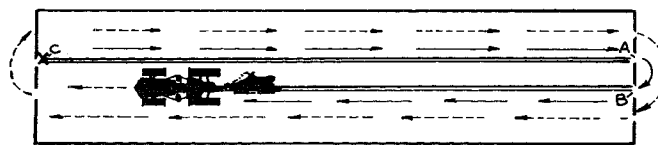
To turn the plow point into the ground when opening the furrow, use turnbuckle. After the dead furrow has been made, level the plow by running the right tractor wheels in the previous furrow and adjusting turnbuckle "A." When the right tractor wheels are in the furrow, the plow is designed to run in the proper horizontal angle.

For a 5 to 6 inch plowing depth, the coultter should slice from 2 to 3 inches deep, but not deep enough to drag the hub.



PLOWING TIPS

Lay out your field to be plowed, and if possible, make it rectangular in shape, about 3 times as long as it is wide. NOTE: it is easier to plow a few long furrows than many short ones. LEAVE SOME ROOM AT EACH END FOR TURNING YOUR TRACTOR. Start plowing by laying off a dead furrow as shown in the sketch below.



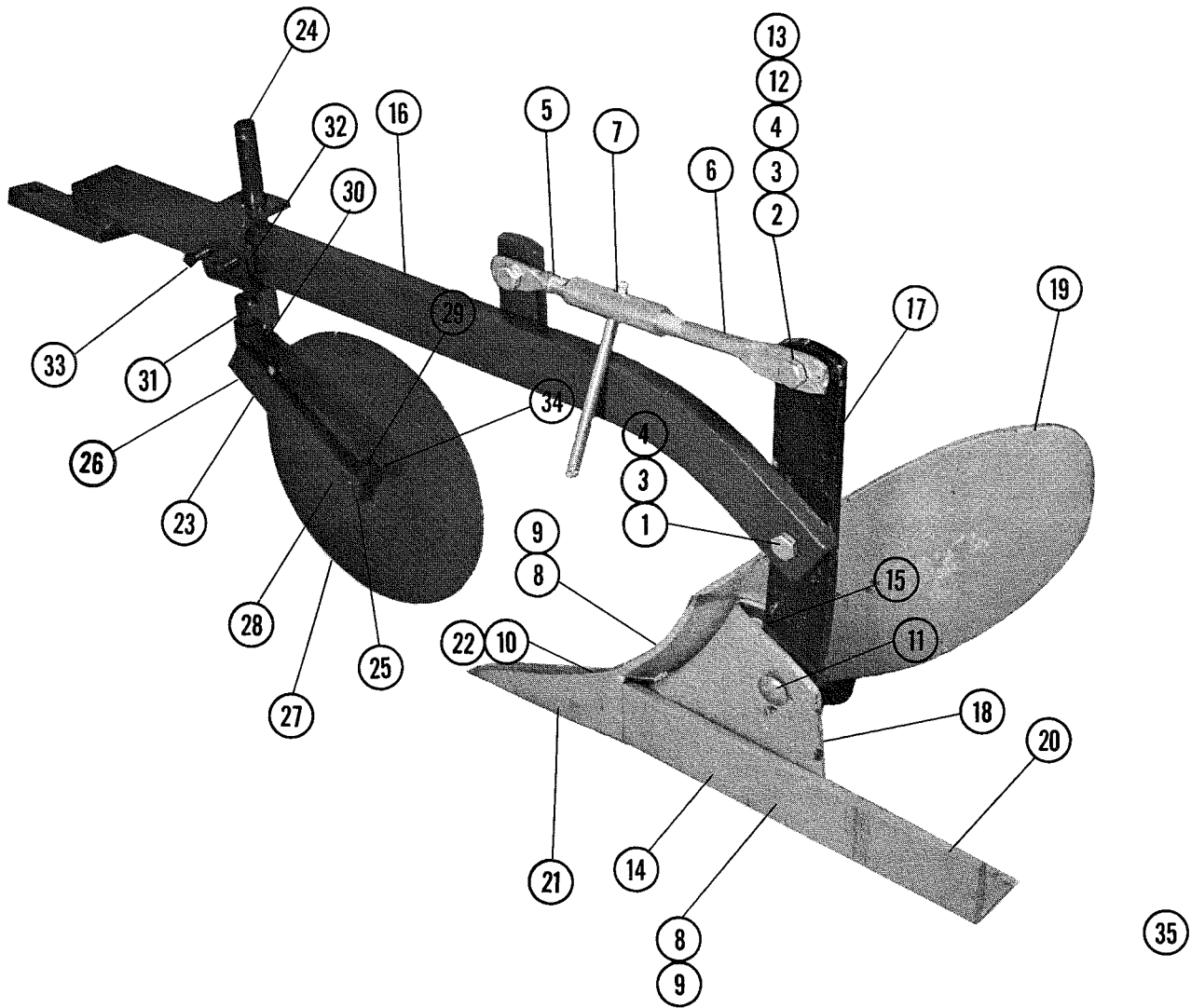
Begin at point "X" and plow a furrow to the end of your plot. Fix your eyes on a tree or some distant object in line with the middle of the plot so that you can guide your tractor and plow a straight first furrow to point "A". NOTE: ALWAYS LIFT PLOW BEFORE TURNING, and, at point "B", lower it again and plow a dead furrow piling the dirt on top of dirt from the first furrow. When you return to point "X" and start your real plowing with both the tractor's right wheels in the furrow at point "C", level out the plow with the turnbuckle. Plow in a clockwise direction, always LIFTING your plow at the end of the furrow before turning.

SPEED

Move steadily along so that the earth will turn over and not fall back into the furrow. In most soils, this is done at full throttle in second gear.

In light soils, plowing may often be done in high gear, but if you go too fast, you will get an uneven plowing job and the dirt is apt to be thrown instead of rolled over.

PARTS LIST



PARTS LIST for PP-8-A PLOW

Ref. No.	Part No.	Description	No. Req'd.
1	908061-4	Bolt — Hex $\frac{1}{2}$ -13 x 2	1
2	908059-4	Bolt — Hex $\frac{1}{2}$ -13 x $1\frac{1}{2}$	2
3	920085-4	Lockwasher — $\frac{1}{2}$ Dia. Med.	3
4	915115-4	Nut — $\frac{1}{2}$ -13 — Hex.	3
5	2025	Rod — Adjust. R.H.	1
6	2026	Rod — Adjust. L.H.	1
7	2027	Ass'y. Adjusting Coupling	1
8	901634-4	Bolt — Plow $\frac{3}{8}$ -16 x 1	4
9	915184-4	Nut — Sq. $\frac{3}{8}$ -16	4
10	915185-4	Nut — Sq. $\frac{1}{6}$ -14	1
11	915186-4	Nut — Sq. $\frac{1}{2}$ -13	2

Ref. No.	Part No.	Description	No. Req'd.
12	5353	Spacer Turnbuckle	2
13	920012-4	Washer — $\frac{3}{16}$ SAE	2
14	901653-4	Bolt — Plow $\frac{1}{2}$ -13 x $1\frac{1}{4}$	1
15	900113-4	Bolt — Carriage $\frac{1}{2}$ -13 x $1\frac{1}{4}$	1
16	2023	Ass'y. Beam	1
17	2024	Standard Base	1
18	2030	Frog Br.	1
19	2029	Moldboard	1
20	2031	Landslide Br.	1
21	2032	Point 8" Br.	1
22	901643-4	Bolt — Plow $\frac{1}{6}$ -14 x 1	1

PARTS LIST for RC-10 COULTER

Ref. No.	Part No.	Description	No. Req'd.
23	2055	Frame Assembly	1
24	2058	Coulter, Standard Ass'y.	1
25	2061	Axle	1
26	933188	Roll Pin, $\frac{3}{16}$ x 1	1
27	2062	Hub Assembly	1
28	2063	Blade, Coulter	1
29	923080	Rivet, $\frac{3}{16}$ x $\frac{3}{8}$	3

Ref. No.	Part No.	Description	No. Req'd.
30	1030	Grease Fitting	1
31	2075	Clamp	1
32	1911	Nut, Two Hole	1
33	909555-4	Set Screw, $\frac{3}{8}$ -16 x $1\frac{1}{4}$	2
34	933217	Roll Pin, $\frac{1}{4}$ x $1\frac{1}{2}$	1
35	4411	Decal	1

PARTS LIST AND INSTRUCTIONS



PLOW & COULTER PP-10HD

The plow is shipped in two cartons. One carton has the plow base assembly and the coulter assembly with a bag of parts. The other carton contains the beam assembly.

ASSEMBLY

Replace the adjusting rod—R.H., which was removed for shipment, in the rear vertical member. Bolt the vertical member to the plow base, with the bolts supplied. Adjust the coulter in accordance with the depth at which you are going to plow.

LUBRICATION

There is only one grease fitting, and this is located on the coulter hub.

Before starting to plow, apply grease to coulter.

Use machine oil on the threads of adjusting rods.

When putting plow away, always wipe polished surface and coulter blade with grease or oil to prevent rust.

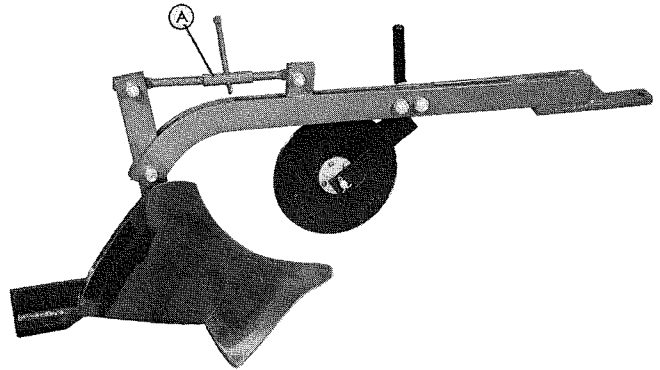
PREPARING THE PLOW FOR USE

The plow bottom must be cleaned so that dirt will slide off the mold-board without sticking. Wipe the polished surface with a rag soaked in turpentine, naphtha or gasoline. An old brick or a pumice stone can also be used to remove the protective coating, but usually this is not necessary if soil is not too wet.

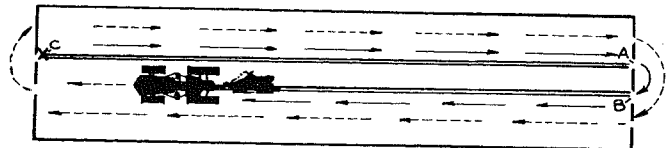
TO BEGIN PLOWING

This is a 10" plow and works best at a depth of 5 to 6 inches. To turn the plow point into the ground when opening the furrow, use turnbuckle. After the dead furrow has been made, level the plow by running the right tractor wheels in the previous furrow and adjusting turnbuckle "A". When the right tractor wheels are in the furrow, the plow is designed to run in the proper horizontal angle.

For a 5 to 6 inch plowing depth, the coulter should slice from 2 to 3 inches deep, but not deep enough to drag the hub.



Lay out your field to be plowed, and, if possible, make it rectangular in shape, about 3 times as long as it is wide. NOTE: It is easier to plow a few long furrows than many short ones. LEAVE SOME ROOM AT EACH END FOR TURNING YOUR TRACTOR. Start plowing by laying off a dead furrow as shown in the sketch below.

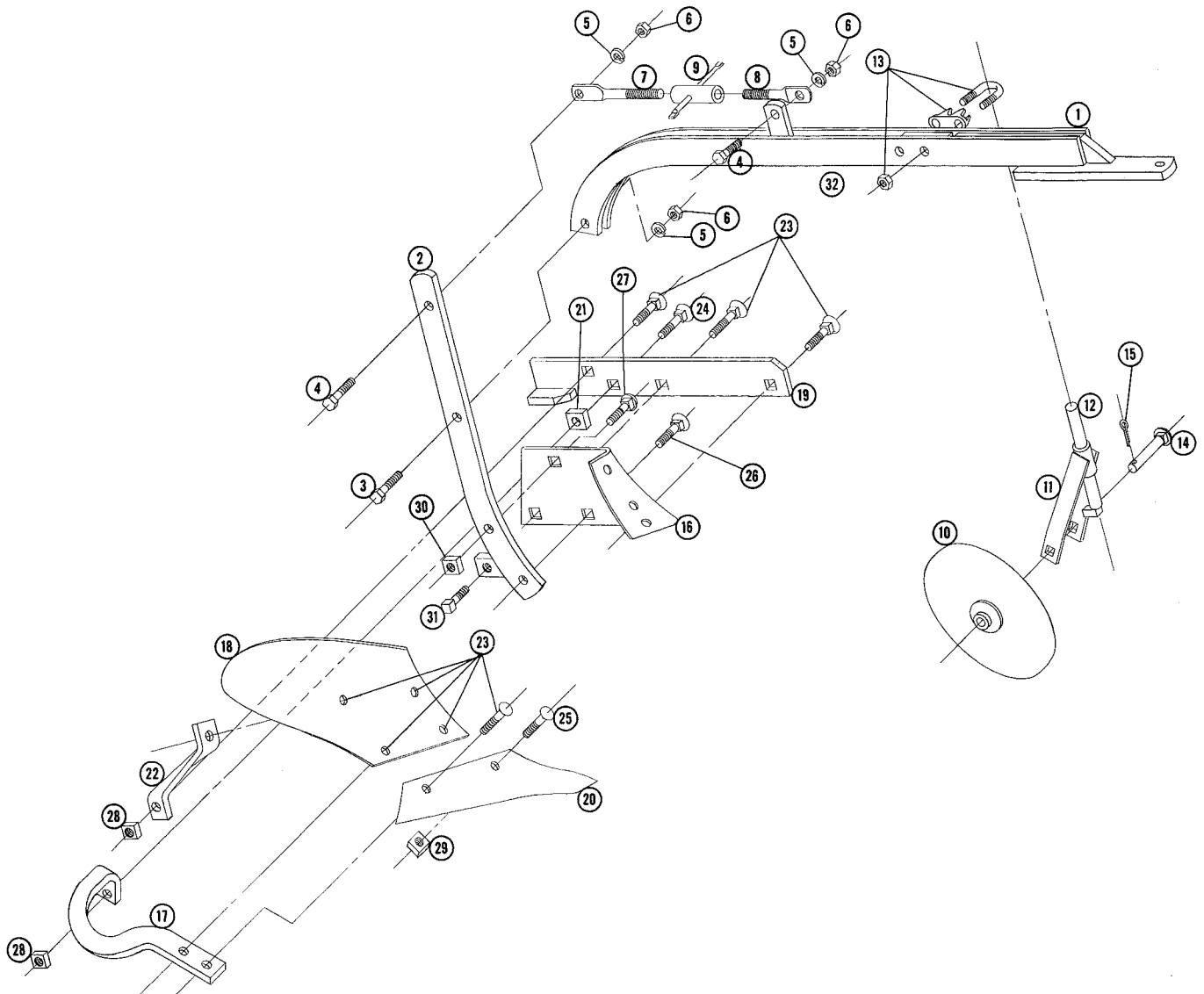


Begin at point "X" and plow a furrow to the end of your plot. Fix your eyes on a tree or some distant object in line with the middle of the plot so that you can guide your tractor and plow a straight first furrow to point "A". NOTE: ALWAYS LIFT PLOW BEFORE TURNING, and, at point "B", lower it again and plow a dead furrow piling the dirt on top of dirt from the first furrow. When you return to point "X" and start your real plowing with both the tractor's right wheels in the furrow at point "C", level out the plow with the turnbuckle. Plow in a clockwise direction, always LIFTING your plow at the end of the furrow before turning.

SPEED

Move steadily along so that the earth will turn over and not fall back into the furrow. In most soils, this is done at full throttle in second gear.

In light soils, plowing may often be done in high gear, but if you go too fast, you will get an uneven plowing job and the dirt is apt to be thrown instead of rolled over.

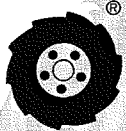


PARTS LIST

When ordering parts always list Part No. and name of part.

Ref. No.	Part No.	Description	No. Req'd.	Ref. No.	Part No.	Description	No. Req'd.
1	2964	Ass'y. - Beam	1	17	2049	Spreader	1
2	2965	Standard Ass'y.	1	18	2969	Moldboard	1
3	908063-4	Bolt - Hex. $\frac{1}{2}$ -13 x $2\frac{1}{2}$	1	19	2970	Ass'y. - Landslide & Heel	1
4	908061-4	Bolt - Hex. $\frac{1}{2}$ -13 x 2	2	20	2048	Ass'y. Point	1
5	920085-4	Lockwasher $\frac{1}{2}$ Med.	3	21	2968	Spacer - Spreader	1
6	915115-6	Nut - Hex. $\frac{1}{2}$ -13 Nylock	3	22	2971	Brace - Moldboard	1
7	2043	Turn - Buckle End R.H. Thrd.	1	23	901634-4	Bolt - Plow #3 Hd. $\frac{3}{8}$ -16 x 1	8
8	2044	Turn - Buckle End L.H. Thrd.	1	24	901636-4	Bolt - Plow #3 Hd. $\frac{3}{8}$ -16 x $1\frac{1}{2}$	1
9	2027	Ass'y. Tube & Handle	1	25	901644-4	Bolt - Plow #3 Hd. $\frac{7}{16}$ x 14 x $1\frac{1}{4}$	1
10	2070	Ass'y. - Rolling Coultter	1	26	901655-4	Bolt - Plow #3 Hd. $\frac{1}{2}$ -13 x $1\frac{3}{4}$	1
11	2065	Ass'y. - Arm - Coultter	1	27	900115-4	Bolt - Carriage $\frac{1}{2}$ -13 x $1\frac{3}{4}$	1
12	2966	Ass'y. - Standard - Coultter	1	28	915184-4	Nut - Square $\frac{3}{8}$ -16	9
13	2967	Ass'y. "U" Bolt - Clamps & Nuts	1	29	915185-4	Nut - Square $\frac{1}{16}$ -14	1
14	2068	Axle - Coultter	1	30	915186-4	Nut - Square $\frac{1}{2}$ -13	2
15	932034-4	Cotter-Pin $\frac{3}{16}$ x 1	1	31	900878-4	Bolt - Square Hd. $\frac{1}{2}$ -13 x 1	1
16	2045	Frog	1				

PARTS LIST AND INSTRUCTIONS



Wheel Horse

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

The plow is shipped in two cartons. One carton has the plow base assembly and the coulter assembly with a bag of parts. The other carton contains the beam assembly.

ASSEMBLY

Replace the adjusting rod—R.H., which was removed for shipment, in the rear vertical member. Bolt the vertical member to the plow base, with the bolts supplied. Adjust the coulter in accordance with the depth at which you are going to plow.

LUBRICATION

There is only one grease fitting, and this is located on the coulter hub.

Before starting to plow, apply grease to coulter.

Use machine oil on the threads of adjusting rods.

When putting plow away, always wipe polished surface and coulter blade with grease or oil to prevent rust.

PREPARING THE PLOW FOR USE

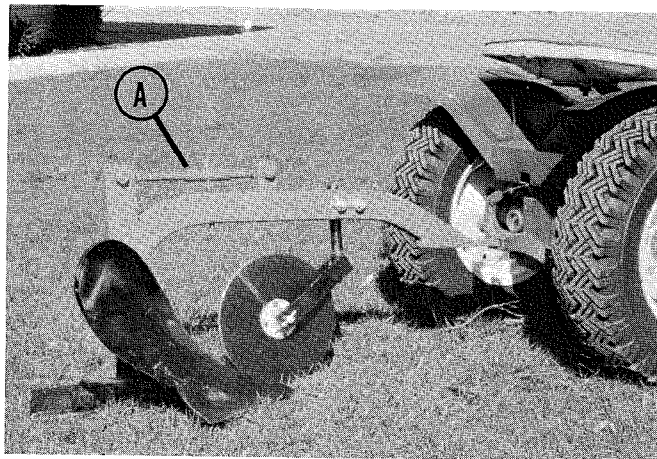
The plow bottom must be cleaned so that dirt will slide off the mold-board without sticking. Wipe the polished surface with a rag soaked in turpentine, naphtha or gasoline. An old brick or a pumice stone can also be used to remove the protective coating, but usually this is not necessary if soil is not too wet.

TO BEGIN PLOWING

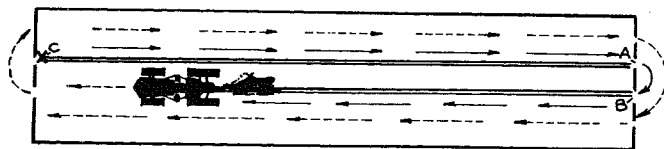
This is a 10" plow and works best at a depth of 5 to 6 inches. To turn the plow point into the ground when opening the furrow, use turnbuckle. After the dead furrow has been made, level the plow by running the right tractor wheels in the previous furrow and adjusting turnbuckle "A". When the right tractor wheels are in the furrow, the plow is designed to run in the proper horizontal angle.

For a 5 to 6 inch plowing depth, the coulter should slice from 2 to 3 inches deep, but not deep enough to drag the hub.

PLOW & COULTER PP-101



Lay out your field to be plowed, and, if possible, make it rectangular in shape, about 3 times as long as it is wide. NOTE: It is easier to plow a few long furrows than many short ones. LEAVE SOME ROOM AT EACH END FOR TURNING YOUR TRACTOR. Start plowing by laying off a dead furrow as shown in the sketch below.



Begin at point "X" and plow a furrow to the end of your plot. Fix your eyes on a tree or some distant object in line with the middle of the plot so that you can guide your tractor and plow a straight first furrow to point "A". NOTE: ALWAYS LIFT PLOW BEFORE TURNING, and, at point "B", lower it again and plow a dead furrow piling the dirt on top of dirt from the first furrow. When you return to point "X" and start your real plowing with both the tractor's right wheels in the furrow at point "C", level out the plow with the turnbuckle. Plow in a clockwise direction, always LIFTING your plow at the end of the furrow before turning.

SPEED

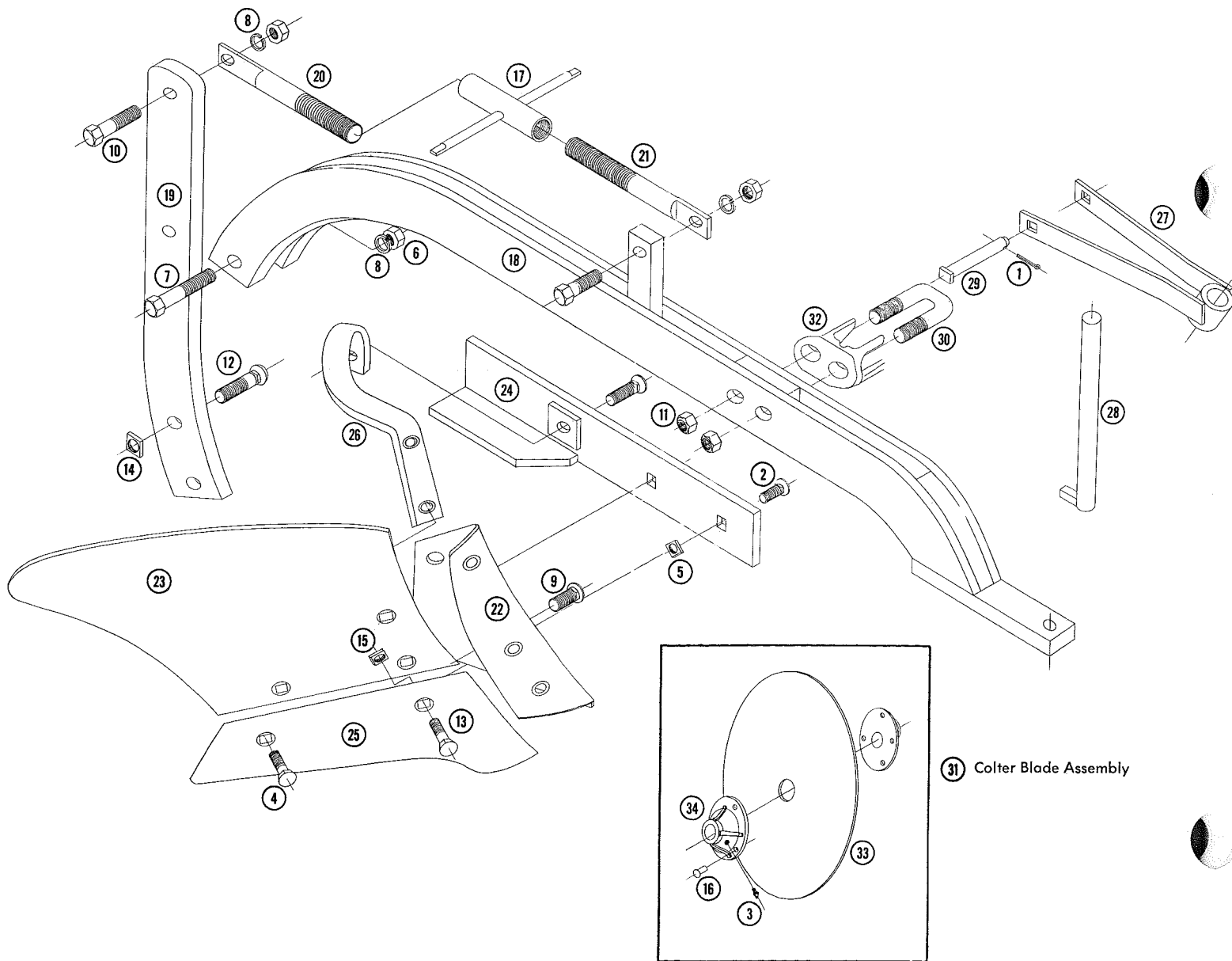
Move steadily along so that the earth will turn over and not fall back into the furrow. In most soils, this is done at full throttle in second gear.

In light soils, plowing may often be done in high gear, but if you go too fast, you will get an uneven plowing job and the dirt is apt to be thrown instead of rolled over.

PARTS LIST

Ref. No.	Part No.	Description	No. Req'd.
1	1002	Cotter Pin $\frac{1}{8} \times 1$	1
2	1024	Plow Bolt $\frac{3}{8}$ -16 x $1\frac{1}{2}$	1
3	1030	Grease Fitting $\frac{1}{4}$ -28	1
4	1069	Plow Bolt $\frac{3}{8}$ -16 x 1	6
5	1072	Sq. Nut $\frac{3}{8}$ -16	7
6	1074	Hex Nut $\frac{1}{2}$ -13	3
7	1077	Hex Hd. Cap Screw $\frac{1}{2}$ -13 x 2	1
8	1115	Lockwasher $\frac{1}{2}$	3
9	1255	Plow Bolt $\frac{1}{2}$ -13 x $1\frac{1}{2}$	1
10	1312	Hex Hd. Cap Screw $\frac{1}{2}$ -13 x $1\frac{1}{2}$	2
11	1343	Hex Nut $\frac{3}{8}$ -11	2
12	1378	Carriage Bolt $\frac{1}{2}$ -13 x $1\frac{3}{4}$	1
13	1379	Plow Bolt $\frac{7}{16}$ -14 x 1	1
14	1380	Sq. Nut $\frac{1}{2}$ -13	2
15	1381	Sq. Nut $\frac{7}{16}$ -14	1
16	1383	Rd. Hd. Rivet $\frac{1}{64} \times \frac{5}{8}$	4
17	2027	Coupling—Adjusting	1

Ref. No.	Part No.	Description	No. Req'd.
18	2036	Beam Assembly W/A	1
19	2042	Bar—Rear Vertical Member	1
20	2043	Adjusting Rod—R.H.	1
21	2044	Adjusting Rod—L.H.	1
22	2045	Frog	1
23	2046	Mold Board	1
24	2047	Landslide	1
25	2048	Point	1
26	2049	Brace—Bar	1
27	2065	Standard Assembly	1
28	2066	Rod—Swivel	1
29	2068	Pivot Pin	1
30	2069	"U" Bolt	1
31	2070	Colter Blade Assembly	1
32	2072	Clamp—Coulter	1
33	2073	Blade 10" Dia.	1
34	2074	Hub—Blade	2



Wheel-Horse

Reg. U. S. Pat. Off.

PH-18 HARROW

PARTS LIST AND INSTRUCTIONS

ASSEMBLING

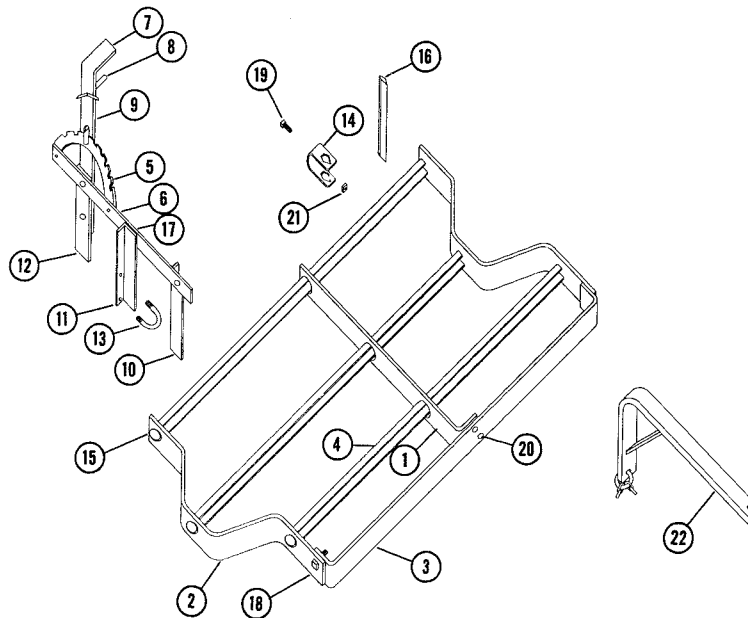
The PH-18 harrow is shipped complete as one bundle. It consists of three pieces, the harrow unit, lever assembly and draw bar hitch.

Mount the lever assembly on the harrow unit with the front and rear toggle angles on the left hand side of the center bar. Place the U-bolts around the tooth support bar, through the angles and tighten in place.

Bolt the hitch chain to each side of the harrow under the head of the $\frac{3}{8}$ machine bolt.

Place the hitch in the tractor hitch with the chain ring down.

The angle of the harrow teeth may be set by the lever assembly to meet soil conditions and results desired.



PARTS LIST for PH-18

Ref. No.	Part No.	Description	No. Req.
1	366-1	Center Beam	1
2	366-2	Side Bar	2
3	366-3	Rack Bar	1
4	366-4	Tooth Support Bar	3
5	366-5	Ten Notch Rack	1
6	366-6	Rack Support Bar	1
7	366-7	Lever Handle	1
8	366-8	Lever Wire Dog	1
9	366-9	Lever Dog Spring	1
10	366-11-F	Front Toggle Angle	1
11	366-11-C	Center Toggle Angle	1
12	366-11-R	Rear Toggle Angle	1
13	366-12	Toggle U-bolt	3

Ref. No.	Part No.	Description	No. Req.
14	366-13	Tooth Clamp	18
15	366-14	Support Bar Casting	6
16	366-16	Straight Teeth	18
17	366-18	Toggle Angle Spacer	2
18		Set Screw, $\frac{3}{8}$ -16 x $\frac{7}{8}$	18
19		Machine Bolt, $\frac{3}{8}$ x $1\frac{1}{2}$	2
20		Carriage Bolt, $\frac{3}{8}$ x 1	6
21		Nut, Square, $\frac{3}{8}$ -16	26
22	2607	Hitch Assembly (Wheel Horse)	1

Order parts direct from:
EMPIRE PLOW COMPANY
CLEVELAND, OHIO

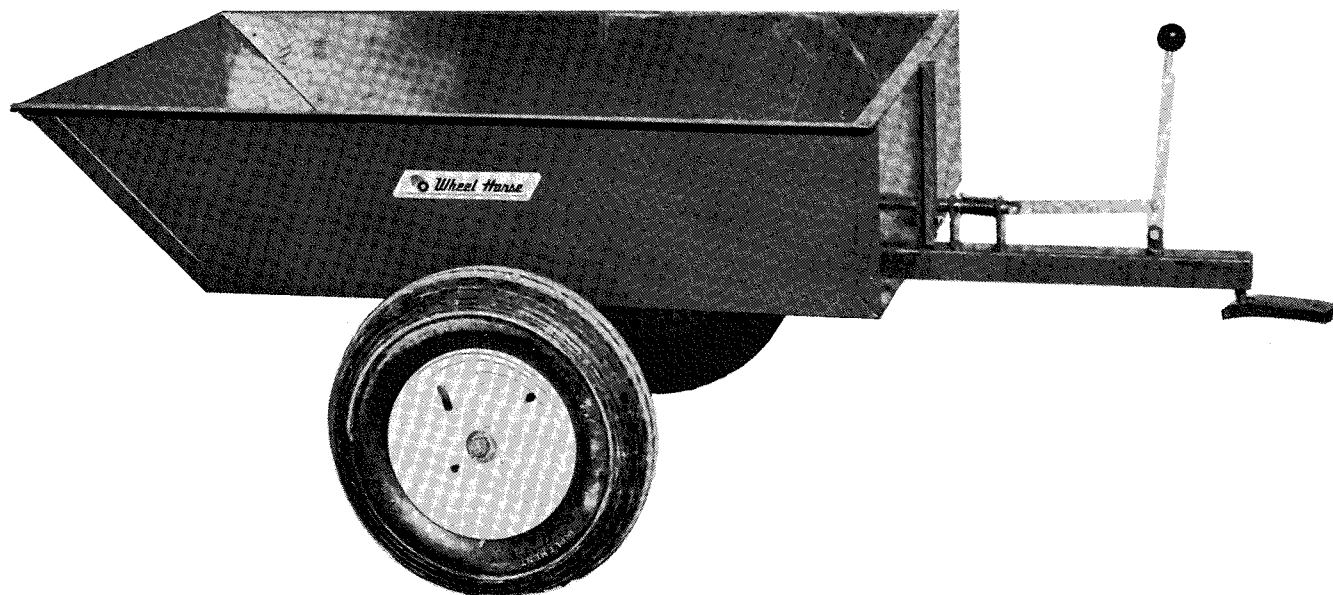
WHEEL-HORSE PRODUCTS

SOUTH BEND, INDIANA

PARTS LIST AND INSTRUCTIONS



DUMP TRAILER LTD-243



ASSEMBLY

The dump trailer is shipped complete in one carton. To assemble, first insert axle, part #2973 in frame assembly, part #2985. Fasten in position with shaft collars, part #1085. Install wheels and secure with cotter pins, part #932034-4.

Install handle assembly, part #2997 by fastening bottom hole to bracket on frame with $\frac{1}{4}$ " x 1" hex head bolt, part #908005-4. Next fasten latch bar, part #2974 to the handle assembly and to the index pin, part #2353 with the two $\frac{1}{4}$ " x 1" bolts, part #908005-4 provided. (Note: Do not tighten nylock nuts, part #915111-6 too tight as handle assembly must pivot.)

Install trailer hinges, parts #2983 and #2984 with the $\frac{1}{4}$ " x $\frac{5}{8}$ " carriage bolts, part #900014-4.

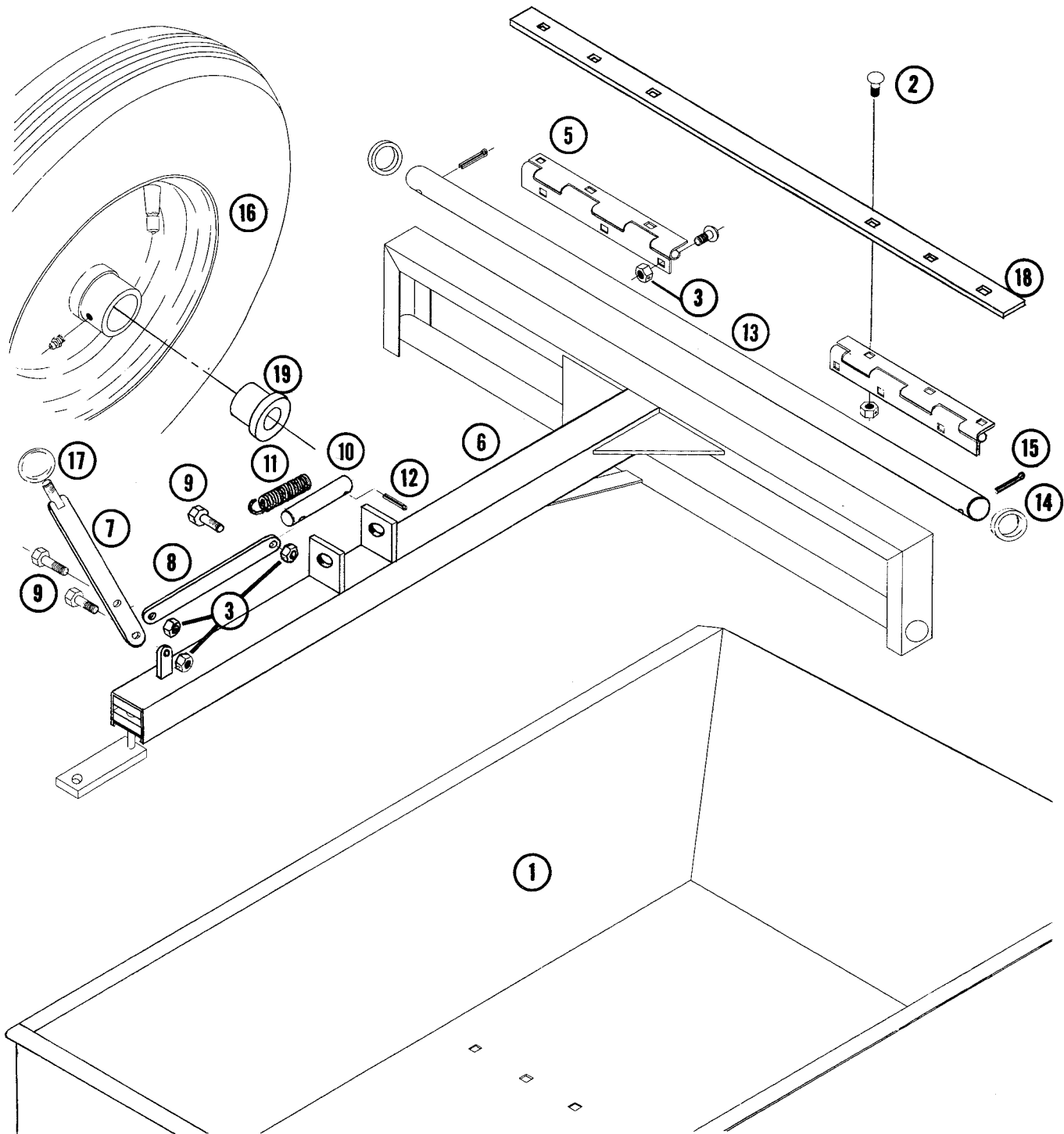
Fasten bed assembly, part #2975 to the hinges with the remaining $\frac{1}{4}$ " x $\frac{5}{8}$ " carriage bolts.

OPERATION

The dump trailer is easily attached to the tractor. Simply lift tractor hitch pin, insert trailer tongue, and replace pin. A positive lock dump lever enables the operator to dump from the drivers seat.

LUBRICATION

The high pressure grease fittings on each wheel should be lubricated before use and periodically thereafter. All other moving parts should be oiled frequently with a light grade of machine oil.



PARTS LIST

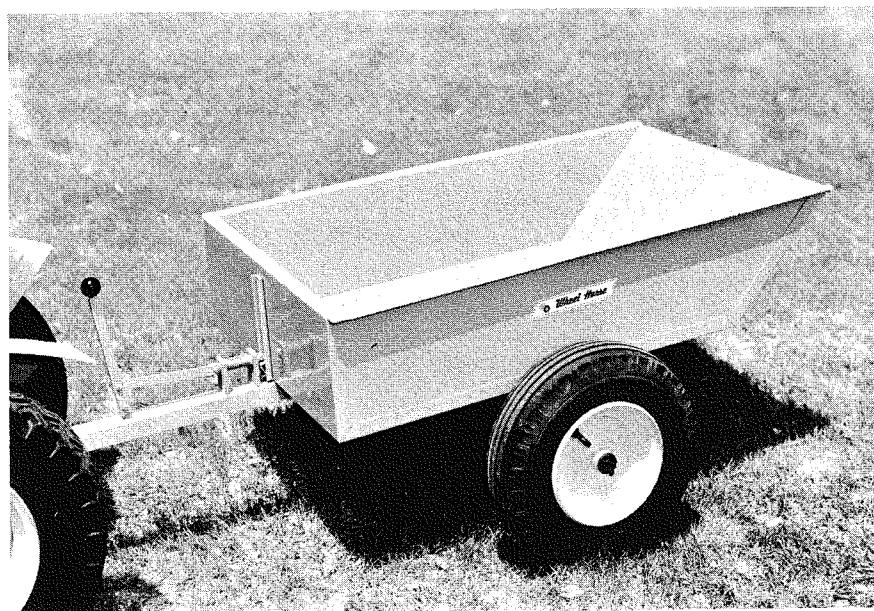
Ref. No.	Part No.	Description	No. Req'd.	Ref. No.	Part No.	Description	No. Req'd.
1	2975	Bed Ass'y. W/A	1	11	2354	Index Pin Spring	1
2	900014-4	Carriage Bolt $\frac{1}{4}$ -20 x $\frac{5}{8}$	12	12	932017-4	Cotter Pin $\frac{1}{8}$ x 1	1
3	915111-6	Nylock Nut $\frac{1}{4}$ -20	15	13	2973	Axle	1
4	2983	Trailer Hinge L.H.	1	14	1085	Shaft Collar	2
5	2984	Trailer Hinge R.H.	1	15	932034-4	Cotter Pin $\frac{3}{16}$ x 1	2
6	2985	Frame Ass'y. W/A	1	16	1758	Tire & Wheel	2
7	2997	Handle Ass'y. W/A	1	17	1001	Knob	1
8	2974	Latch Bar	1	18	2979	Shim	1
9	908005-4	Hex Hd. Cap Screw $\frac{1}{4}$ -20 x 1	3	19	1521	Bearings (2 Per Wheel)	4
10	2353	Index Pin	1				

PARTS LIST AND INSTRUCTIONS



WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

DUMP TRAILER LTD-242



ASSEMBLY

The dump trailer is shipped complete in one carton. To assemble, first insert axle, part #2973 in frame assembly, part #2985. Fasten in position with shaft collars, part #1085. Install wheels and secure with cotter pins, part #1137.

Install handle assembly, part #2997 by fastening bottom hole to bracket on frame with $\frac{1}{4}$ " x 1" hex head bolt, part #1221. Next fasten latch bar, part #2974 to the handle assembly and to the index pin, part #2353 with the two $\frac{1}{4}$ " x 1" bolts, part #1221 provided. (Note: Do not tighten nylock nuts, part #1406 too tight as handle assembly must pivot.)

Install trailer hinges, parts #2983 and #2984 with the $\frac{1}{4}$ " x $\frac{5}{8}$ " carriage bolts,

part #1438. Fasten bed assembly, part #2975 to the hinges with the remaining $\frac{1}{4}$ " x $\frac{5}{8}$ " carriage bolts.

OPERATION

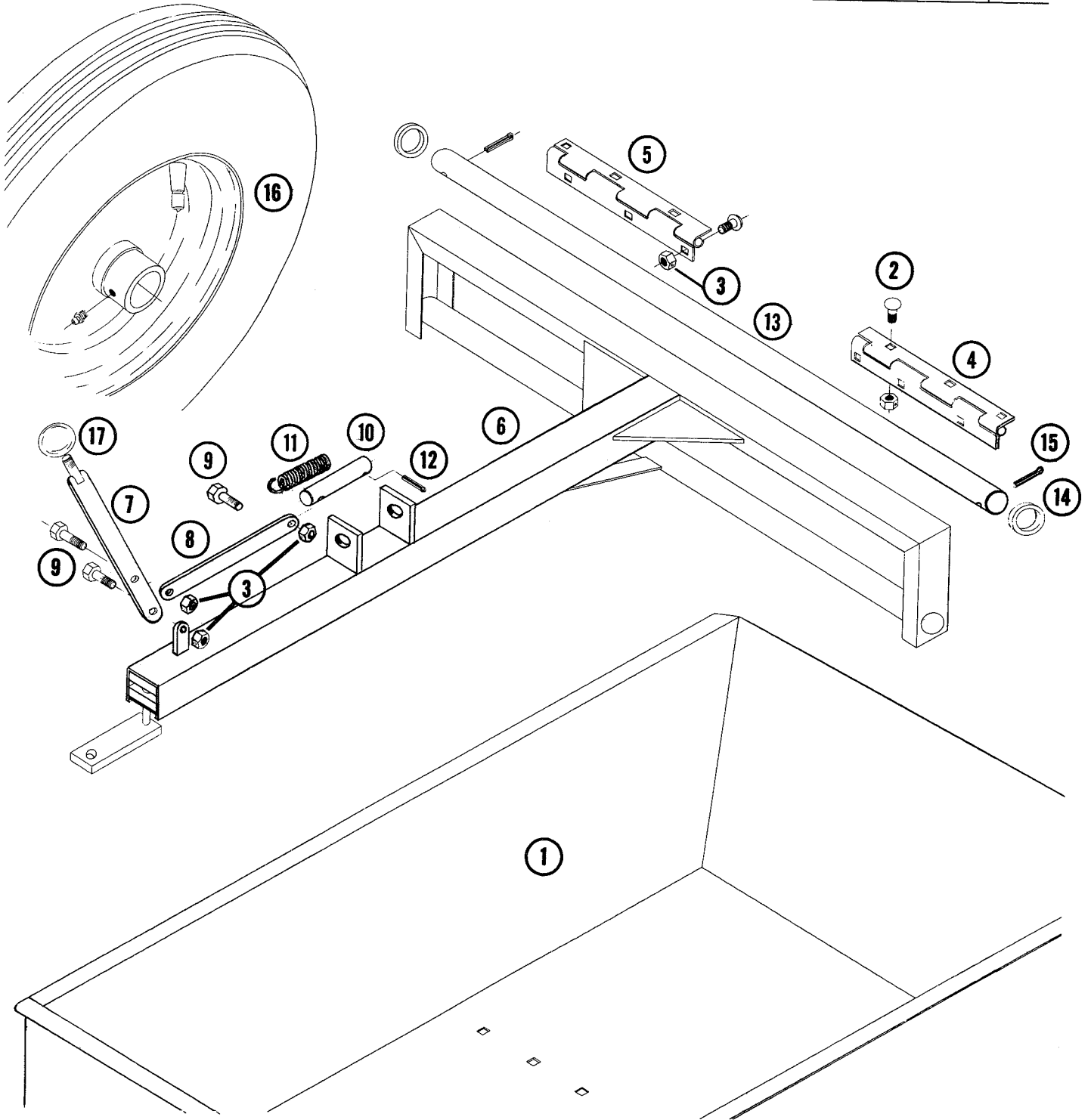
The dump trailer is easily attached to the tractor. Simply lift tractor hitch pin, insert trailer tongue, and replace pin. A positive lock dump lever enables the operator to dump from the drivers seat.

LUBRICATION

The high pressure grease fittings on each wheel should be lubricated before use and periodically thereafter. All other moving parts should be oiled frequently with a light grade of machine oil.

LTD-242 DUMP TRAILER

Part No.	Ref. No.	Description	No. Req'd.	Part No.	Ref. No.	Description	No. Req'd.
1	2975	Bed Ass'y. W/A	1	10	2353	Index Pin	1
2	1438	Carriage Bolt 1/4 - 20 x 5/8	12	11	2354	Index Pin Spring	1
3	1406	Nylock Nut 1/4 - 20	15	12	1002	Cotter Pin	1
4	2983	Trailer Hinge (L.H.)	1	13	2973	Axle	1
5	2984	Trailer Hinge (R.H.)	1	14	1085	Shaft Collar	2
6	2985	Frame Ass'y. W/A	1	15	1137	Cotter Pin	2
7	2997	Handle Ass'y. W/A	1	16	1709	Tire & Wheel	2
8	2974	Latch Bar	1	17	1001	Knob	2
9	1221	Hex Hd. Cap Screw 1/4 - 20 x 1	3				1



Wheel-Horse

Reg. U. S. Pat. Off.

LTD-24 DUMP TRAILER

PARTS LIST AND INSTRUCTIONS

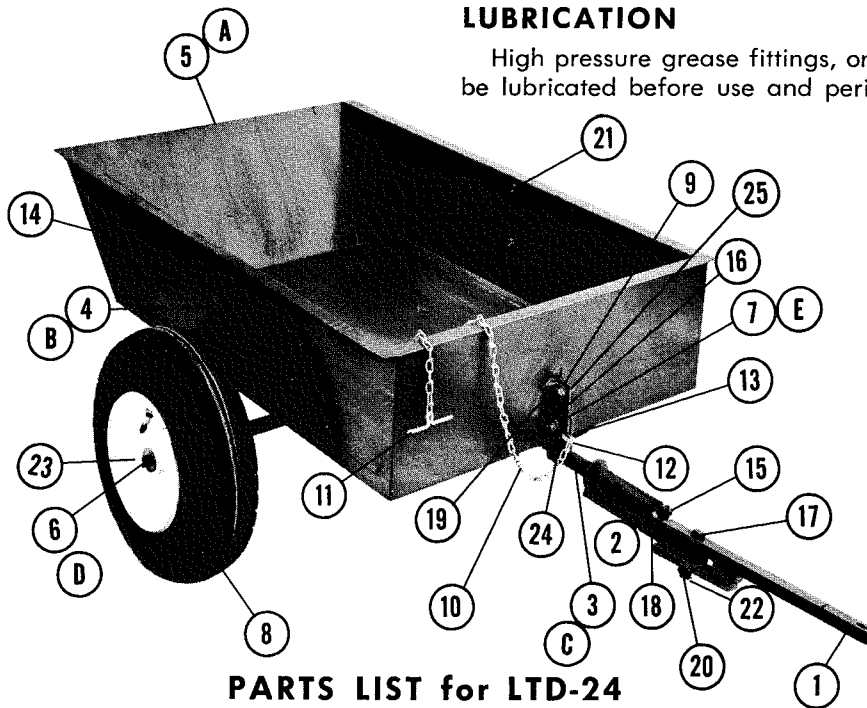
ASSEMBLING

The dump trailer is shipped complete in one package. To assemble, place the bed (A) upside down. Take the frame (B) and place it over the bed, lining up the holes. The frame is bolted in place with four $\frac{3}{8}$ -16 x 1 bolts provided. Do not tighten at this time. Put the tongue assembly (C) in place as shown, and slide the axle (D) through the

frame and tongue assembly. Adjust the tongue assembly so it will latch easily by moving the frame (B) forward or back, then tighten the bolts. Place the wheels on the axle. These are held in place with two $\frac{3}{16}$ x $1\frac{1}{2}$ cotter pins. The trip chain is then bolted to the latch (E) with the $\frac{3}{16}$ x $\frac{5}{8}$ stove bolt & Clevis link. The chain may be fastened to the seat on tractor with the toggle handle provided.

LUBRICATION

High pressure grease fittings, one in each wheel should be lubricated before use and periodically there after.



PARTS LIST for LTD-24

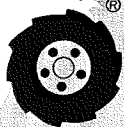
Ref. No.	Part No.	Description	No. Req.
1	2944	Swivel Hitch	1
2	2915	Hitch Bar	1
3	2922	Tongue	1
4	2927	Frame	1
5	2943	Bed	1
6	2902	Axle	1
7	2936	Latch Front	1
8	1709	Tire & Wheel	2
9	1035L	Spring Torsion	1
10	2942	Chain, Dumping 36"	1
11	2940	Handle, Trip	1
12	2941	Clevis Link	1
13	1229	Stove Bolt, $\frac{3}{16}$ x $\frac{5}{8}$	1

Ref. No.	Part No.	Description	No. Req.
14	1062	HHCS, $\frac{3}{8}$ -16 x 1	4
15	1064	HHCS, $\frac{3}{8}$ -16 x $1\frac{1}{2}$	1
16	1032	HHCS, $\frac{3}{8}$ -16 x 2	1
17	1079	HHCS, $\frac{1}{2}$ -20 x $2\frac{1}{2}$	1
18	1016	NH, $\frac{3}{8}$ -16	5
19	1080	NHJ, $\frac{3}{8}$ -16	4
20	1044	CAST, $\frac{1}{2}$ -20	1
21	1039	Lockwasher, $\frac{3}{8}$	4
22	1002	Cotter Pin, $\frac{1}{8}$ x 1	1
23	1137	Cotter Pin, $\frac{3}{16}$ x 1	2
24	1125	Lockwasher, $\frac{3}{16}$	1
25	1028	HHCS, $\frac{3}{8}$ -16 x $1\frac{1}{4}$	1

WHEEL-HORSE PRODUCTS

● SOUTH BEND, INDIANA

PARTS LIST AND INSTRUCTIONS



Wheel Horse

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

UTILITY WAGON UW-643



ASSEMBLY

The wagon is shipped completely packed in one carton.

- A. Remove from carton and remove parts from inside of bed.
- B. Turn wagon over and bolt center channels to bed, turning leg of channel towards the inside.
- C. Bolt on front and rear axles installing wheels at the same time. Grease all wheels after assembly.

OPERATION

The load capacity of the wagon is eleven cubic feet. Weight capacity is 600 lbs. More may be hauled but load should be placed evenly over entire wagon bed.

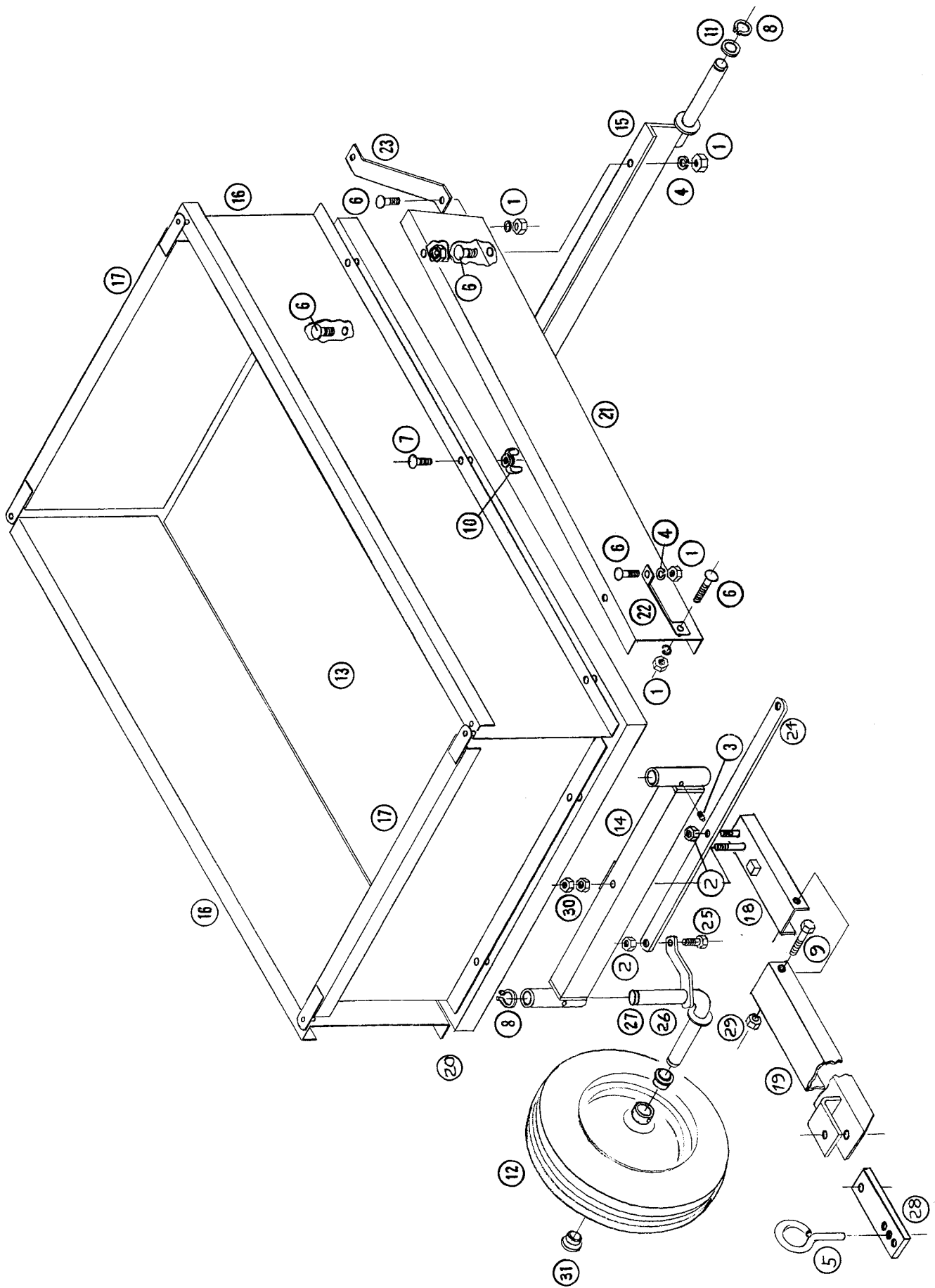
Sides are removable for hauling larger objects.

Sharp turns over uneven ground should be avoided when wagon is loaded to maximum capacity.

PARTS LIST

Ref. No.	Part No.	Description	No. Req'd.
1	915113-6	Nylock Nut $\frac{3}{8}$ -16	16
2	915238-4	Hex Jam Nut $\frac{1}{2}$ -13	2
3	1030	Grease Fitting	2
4	920083-4	Lock Washer $\frac{3}{8}$	16
5	1813	Tool Pin	1
6	908032-4	Carriage Head Bolt $\frac{3}{8}$ -16 x $\frac{3}{4}$	16
7	908037-4	Carriage Head Bolt $\frac{3}{8}$ -16 x $1\frac{3}{4}$	10
8	50-75	Snap Ring	6
9	908063-4	H.H.C.S. $\frac{1}{2}$ -13 x $2\frac{1}{2}$	1
10	915586-4	Wing Nut $\frac{3}{8}$ -16	10
11	1278	Shim Washer $\frac{3}{4}$ I.D.	4
12	1758	Wheel Assembly	4
13	3007	Bed	1
14	3050	Front Axle Assembly	1
15	3014	Rear Axle Assembly	1
16	3018	Side Panel	2

Ref. No.	Part No.	Description	No. Req'd.
17	3019	End Panel	2
18	3042	Swivel Hitch Assembly	1
19	3044	Draw Bar Assembly	1
20	3032	Bed Support R.H.	1
21	3033	Bed Support L.H.	1
22	3034	Front Brace	2
23	3035	Rear Brace	2
24	3047	Tie Rod	1
25	3608	Clevis Pin	2
26	3048	Spindle Assembly R.H.	1
27	3049	Spindle Assembly L.H.	1
28	3039	Tractor Hitch Plate	1
29	915115-6	Nylock Nut $\frac{1}{2}$ -13	1
30	915240-4	Hex Jam Nut $\frac{5}{8}$ -11	2
31	1521	Bearing (2 Per Wheel)	8



PARTS LIST AND INSTRUCTIONS



Wheel Horse

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

UTILITY WAGON UW-641



ASSEMBLY

The wagon is shipped completely packed in one carton.

- A. Remove from carton and remove parts from inside of bed.
- B. Turn wagon over and bolt center channels to bed, turning leg of channel towards the inside.
- C. Bolt on front and rear axles installing wheels at the same time. Grease all wheels after assembly.

OPERATION

The load capacity of the wagon is eleven cubic feet. Weight capacity is 600 lbs. More may be hauled but load should be placed evenly over entire wagon bed.

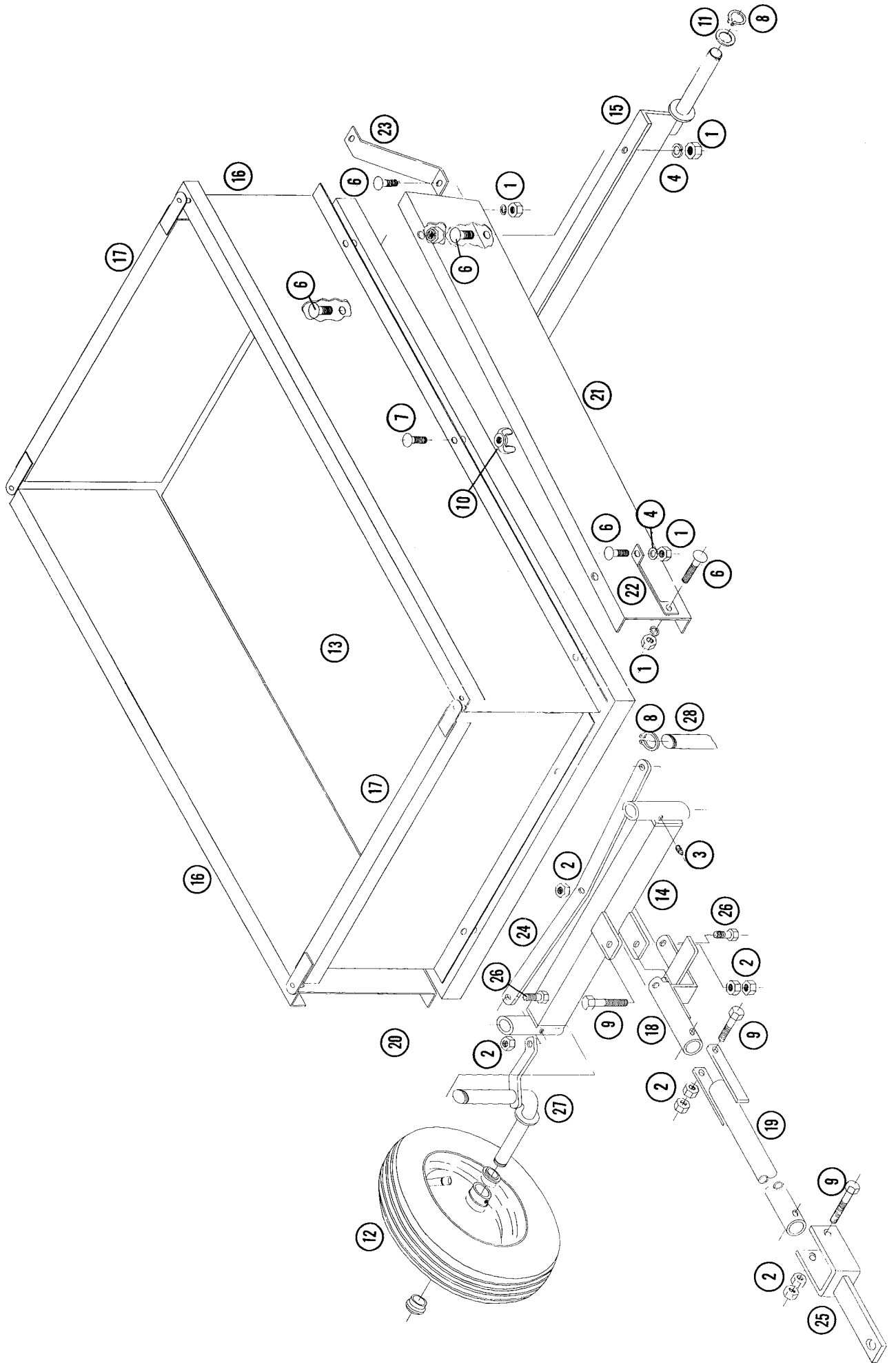
Sides are removeable for hauling larger objects.

Sharp turns over uneven ground should be avoided when wagon is loaded to maximum capacity.

PARTS LIST

Ref. No.	Part No.	Description	No. Req'd.
1	1016	Hex Nut	16
2	1026	Hex Nut	9
3	1030	Grease Fitting	2
4	1039	Lockwasher $\frac{3}{8}$	22
6	1251	Carriage Bolt $\frac{3}{8}$ -16 x $\frac{3}{4}$	16
7	1140	Carriage Bolt $\frac{3}{8}$ -16 x 1 $\frac{3}{4}$	10
8	1127	Snap Ring $\frac{3}{4}$	6
9	1170	Hex Hd. Cap Screw $\frac{1}{2}$ -13 x 2 $\frac{1}{2}$	3
10	1201	Wing Nut $\frac{3}{8}$ -16	10
11	1278	Shim Washer $\frac{3}{4}$	4
12	1709	Wheel Assembly	4
13	3007	Bed	1
14	3008	Front Axle Assembly	1
15	3014	Rear Axle Assembly	1

Ref. No.	Part No.	Description	No. Req'd.
16	3017	Side Panel	2
17	3019	End Panel	2
18	3024	Swivel Hitch Assembly	1
19	3028	Draw Bar Assembly	1
20	3032	Bed Support R.H.	1
21	3033	Bed Support L.H.	1
22	3034	Front Brace	2
23	3035	Rear Brace	2
24	3036	Tie Rod	1
25	3038	Tractor Swivel Hitch Ass'y.	1
26	3608	Clevis Pin	3
27	3622	Spindle Ass'y. R.H.	1
28	3623	Spindle Ass'y. L.H.	1

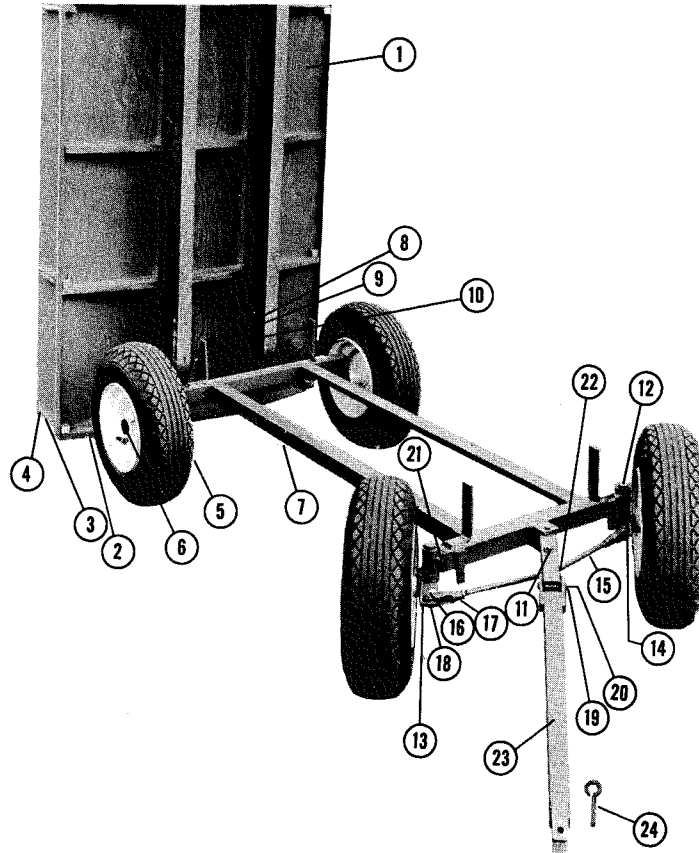


Wheel-Horse

Reg. U. S. Pat. Off.

UW-64 UTILITY WAGON

PARTS LIST AND INSTRUCTIONS



PARTS LIST for UW-64

Ref. No.	Part No.	Description	No. Req.
1	2950	Bed, 32x 64	1
2	2951	End Gate	2
3	2952	Side Board	2
4	2953	Eye Bolt w/Nut	2
5	1709	Wheel	4
6	1514	Bearing, Ball	8
	1521	Bearing, Sintered Iron	8
7	2954	Frame, Bed	1
8	1093	Cap Screw, $\frac{3}{8} \times 2\frac{1}{2}$	4
9	1016	Hex Nut, $\frac{3}{8}$	4
10	1039	Lockwasher, $\frac{3}{8}$	4
11	1119	Washer, $\frac{1}{4}$	4
12	1127	Snap Ring, $\frac{3}{4}$	6
13	2955	Spindle, right	1
14	2956	Spindle, left	1

Ref. No.	Part No.	Description	No. Req.
15	2957	Tie Rod Assembly	1
16	2958	Clevis Pin, $\frac{3}{8} \times 1$	2
17	2959	Clevis	2
18	1018	Washer, $\frac{3}{8}$	3
19	2960	Clevis Pin, $\frac{3}{8} \times 2$	2
20	1060	Cotter Pin, $\frac{3}{32} \times 1$	5
21	1030	Grease Fitting	6
22	2961	Steering Tongue	1
23	2962	Draw Bar	1
24	2963	Eye Pin	1

Order parts direct from
G. & R. MANUFACTURING COMPANY
 1119 PARMELE STREET
 ROCKFORD, ILLINOIS

WHEEL-HORSE PRODUCTS



SOUTH BEND, INDIANA

Wheel-Horse

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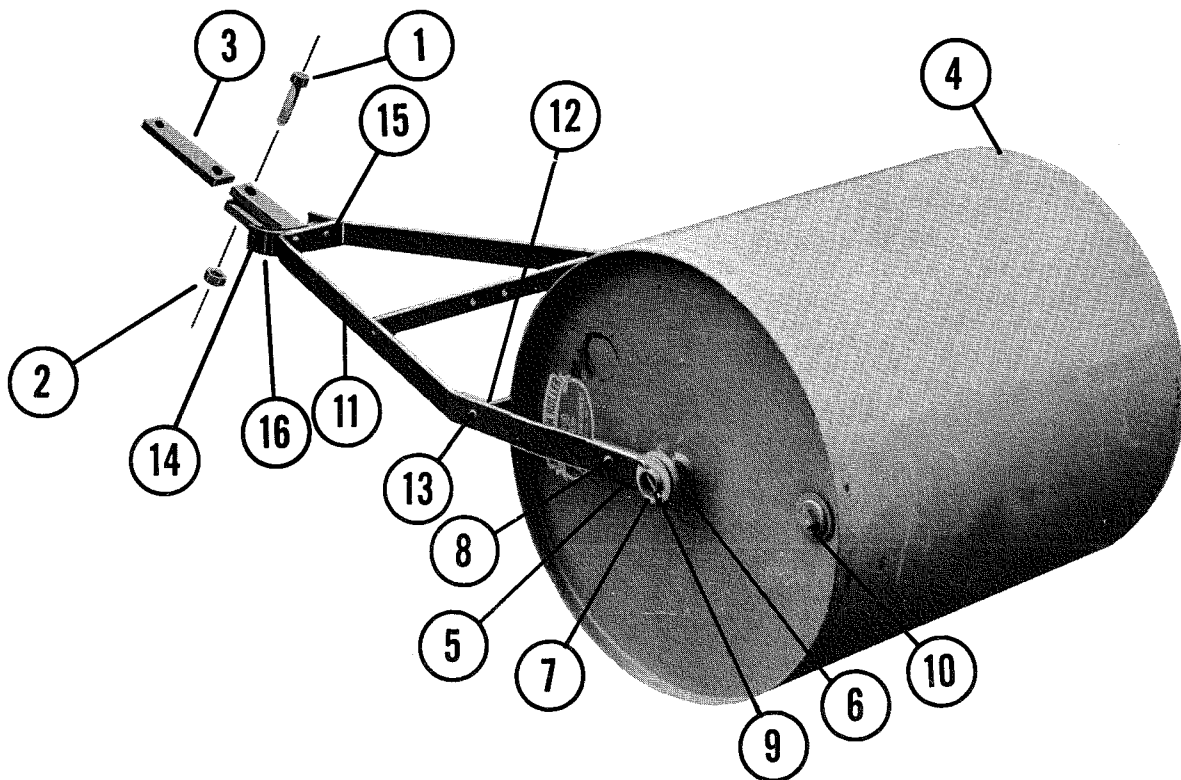
LR-24 LAWN ROLLER

PARTS LIST AND INSTRUCTIONS

ASSEMBLING

The lawn roller is shipped as two pieces, the tank assembly and the towing frame.

Mount the towing frame (8) to the bearing bracket (2) with the bolts provided. The roller is ready for use. The approximate weight when filled with water is 251 pounds.



PARTS LIST for LR-24

Ref. No.	Part No.	Description	No. Req.
1	1077	Cap Screw	1
2	1026	Nut, Jam	2
3	2512	Hitch Bar	1
Order the above parts from WHEEL-HORSE PRODUCTS • ROLLER TANK ASSEMBLY NO. 12 (Includes all parts listed in column at right) Order direct from JACKSON MANUFACTURING CO. HARRISBURG, PA. or BENTON HARBOR, MICHIGAN			

Ref. No.	Part No.	Description	No. Req.
4	2513	Tank #12, 18 x 24	1
5	2514	Bearing Bracket	2
6	2515	Bearing	2
7	1187	Washer	2
8	1260	Stove Bolt w/Nut	2
9	1012	Cotter Pin	2
10	1261	Pipe Plug	1
11	2516	Frame	1
12	2517	Scraper Bar	1
13	1262	Stove Bolt w/Nut	2
14	2518	Swivel Assembly	1
15	1263	Stove Bolt w/Nut	2
16	1002	Cotter Pin	2

WHEEL-HORSE PRODUCTS

• SOUTH BEND, INDIANA

Wheel-Horse

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SC-15 AERATOR

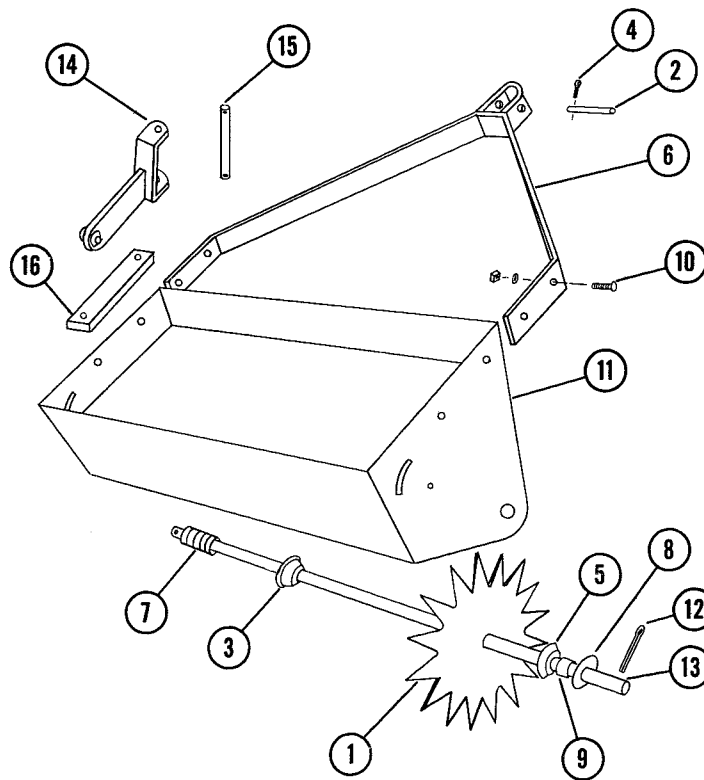
PARTS LIST AND INSTRUCTIONS

ASSEMBLING

The spike aerator is shipped complete in two cartons. To assemble, bolt the draw bar to the pan with the four 1/4" stove bolts. Fasten the ball hitch in place with the draw

pin. Next fasten the hitch bar to the ball hitch with the hitch pin.

The pan on the aerator may be used for weight if desired.



PARTS LIST for SC-15

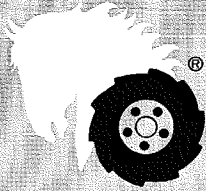
Ref. No.	Part No.	Description	No. Req.
1	E-15	10" Spike Disc	15
2	E-16	Draw Pin	1
3	E-17	Universal Spacer	24
4	E-18	Cotter Pin, 3/8 x 1	4
5	E-19	Small End Spacer	2
6	E-20	Draw Bar	1
7	E-21	Spring, 3"	2
8	E-22	Washer, outside	2
9	E-26	Axle Bushing	2
10	E-27	Stove Bolt w/Nut and Lockwasher	4
11	E-29	Pan	1

Ref. No.	Part No.	Description	No. Req.
12	E-30	Cotter Pin, 3/16 x 2	2
13	E-31	Axle	1
14	E-32	Ball Hitch	1
15		Hitch Bar	1
16		Hitch Pin	1

WHEEL-HORSE PRODUCTS

SOUTH BEND, INDIANA

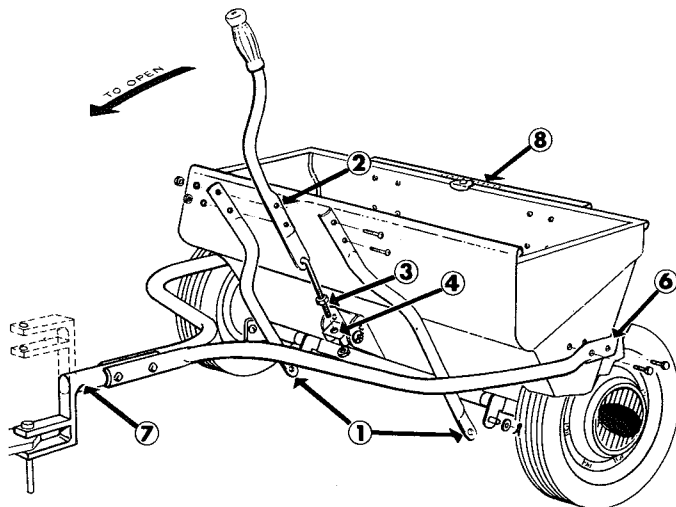
PARTS LIST AND INSTRUCTIONS



Wheel Horse

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

SPREADER FS-365



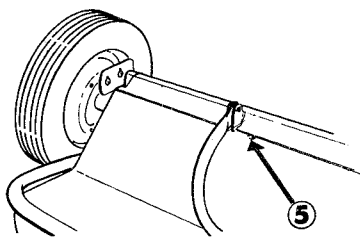
ASSEMBLY

Place hopper on floor with sliding scale mark plate down.

Fasten shut-off braces (1) to shut-off brackets with washer and cotter key.

Bolt operating lever (2) between concave ends of shut-off braces. Tighten nuts firmly.

Remove lower nut from connecting rod (3). Insert connecting rod into pivot link (4) and replace nut, but do not tighten.



Move operating lever (2) **upward** to closed position. Adjust nuts on connecting rod (3) so shut-off bar touches both stops (5) on bottom of hopper. Now tighten nuts firmly.

Assemble hitch braces (6) to hopper by inserting short bolts through flattened end of hitch brace, then through hopper. Place lock washers and nuts on bolts and tighten firmly.

Bolt hitch (7) between concave ends of hitch braces. Note hitch can be turned in either an up or down position for high or low drawbars.

Rate setting is made by sliding scale mark plate (8) on back of hopper. Loosen green knob and slide scale mark plate until desired number is in line with arrow pointer. Tighten green knob.

OPERATION

Rate settings prescribed for various materials are based on normal tractor mowing speed. If tractor is operated in low gear, then spreader should be set leaner (toward a smaller number) as more material is applied at a slower speed.

Plan to operate the spreader in the direction of the longer dimension of lawn.

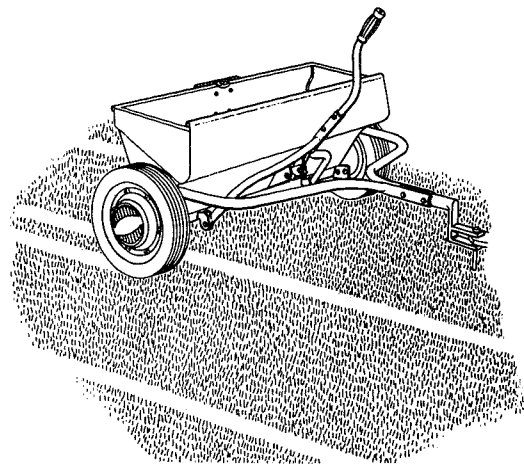
First apply two spreader widths across the shorter sides. These "headers" provide room for turning around at end of each of the long strips.

Then go back and forth from one header strip to the other until the entire area is treated. When approaching these end zones shut off the spreader to avoid double application. Keep it closed while backing or turning around to avoid extra dosage.

Next do the irregular areas, being careful to shut off spreader in backing and turning. Move the Sliding Dial to a leaner setting in cut-up areas where overlap is unavoidable.

If there are trees or shrubs in the lawn, shut off the spreader as it is pulled around them — otherwise adjacent grass may receive double or triple dosage. Use same care in treating slopes and terraces.

In high wind cover hopper with cardboard, burlap sack or heavy paper.

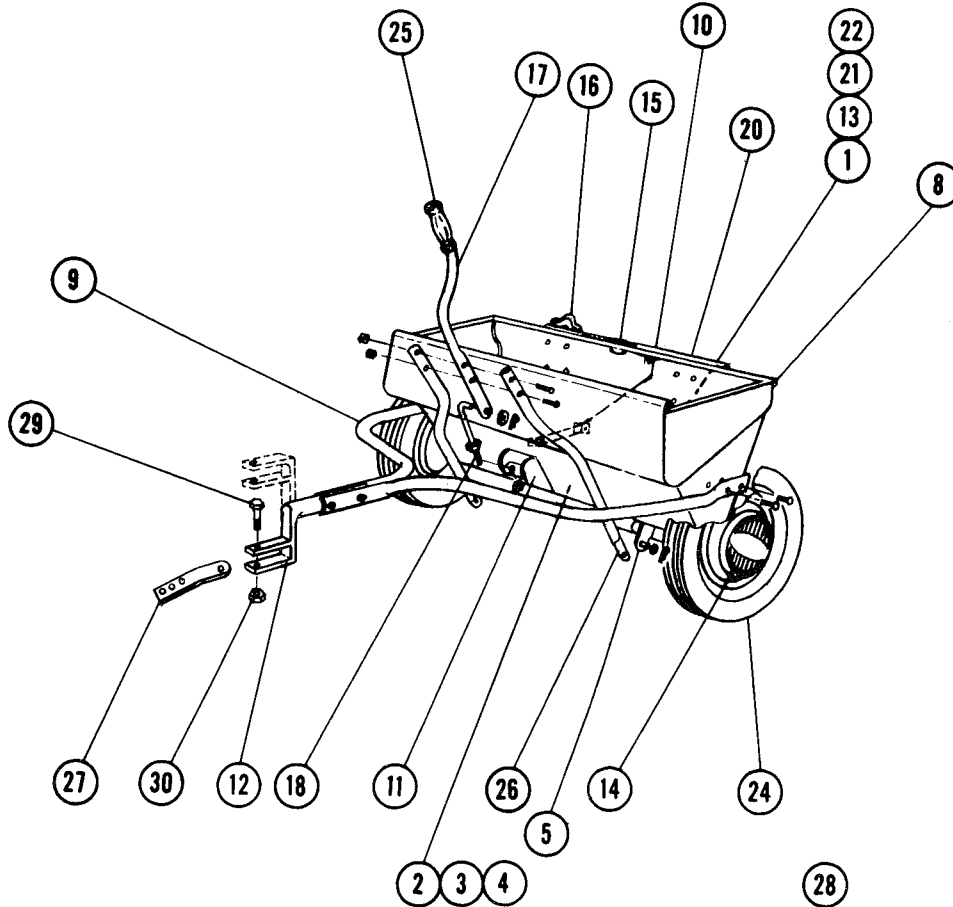
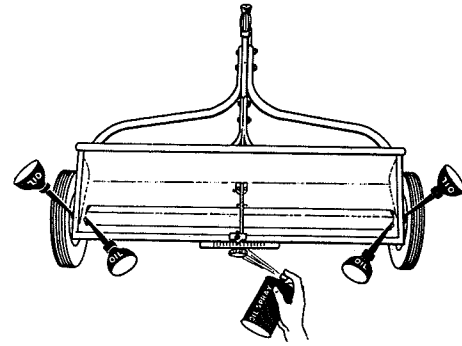


Overlap spreader wheel tracks to insure complete coverage.

CARE OF SPREADER

1. **Empty spreader** completely before storing. To do this, move spreader away from lawn area and set wide open at No. 18. Run it back and forth vigorously a few times to expel all material from hopper.

2. Oil. Leave spreader in open position. Use aerosol Oil Spray or oily rag to apply oil to underside of hopper where shut-off plate moves back and forth. Also squirt oil on spring located in housing below Sliding Dial. Place a few drops of oil on axle between wheel and hopper, at each end. If this is neglected, wheels may lock because of rusting. Light penetrating oil will usually loosen.

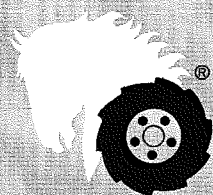


PARTS LIST

Ref. No.	Part No.	Description	No. Req'd.
1	5685	Spring — Control Rod	2
2	1673	Agitator — R.H.	1
3	1674	Agitator — L.H.	1
4	1675	Baffle	1
5	1676	Hanger — Shut Off Plate	2
6	5686	Shut Off Bar	1
7	1678	Bearing Support Ass'y. with Bearing	1
8	5687	Hopper	1
9	1680	Hitch — Brace	2
10	1681	Brace — Hopper	1
11	1682	Pivot — Bracket Ass'y.	1
12	1683	Hitch	1
13	1684	Housing — Control Ass'y. (Less Knob)	2
14	1685	Hub Cap	2
15	5688	Rate Indicator	1
16	1687	Knob	2

Ref. No.	Part No.	Description	No. Req'd.
17	1688	Operating Lever with Grip	1
18	1689	Pivot Link Rod	1
19	5689	Hopper End Plate	2
20	5690	Plate — Rate Control	2
21	5692	Rod — Rate Control — R.H.	1
22	5693	Rod — Rate Control — L.H.	1
23	1694	Bearing	4
24	1693	Wheel with Tire	2
25	1696	Grip — Operating Lever	1
26	1697	Shut Off Brace	1
27	3039	Hitch Adaptor	1
28	5604	Decal	1
29	908050-4	Bolt — 3/16-14x2 Hex.	1
30	915114-6	Nut — Nylock 3/16-14	1
31	5691	Tie Bar	1

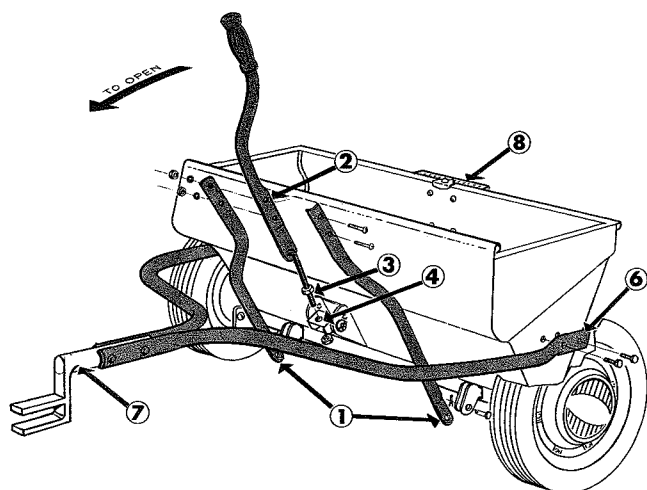
PARTS LIST AND INSTRUCTIONS



Wheel Horse

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

SPREADER FS-363



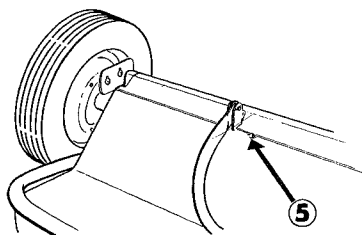
ASSEMBLY

Place hopper on floor with sliding scale mark plate down.

Fasten shut-off braces (1) to shut-off bar brackets with pin, washer and cotter key.

Bolt operating lever (2) between concave ends of shut-off braces. Tighten nuts firmly.

Remove lower nut from connecting rod (3). Insert connecting rod into pivot link (4) and replace nut, but do not tighten.



Move operating lever (2) **upward** to closed position. Adjust nuts on connecting rod (3) so shut-off bar touches both stops (5) on bottom of hopper. Now tighten nuts firmly.

Assemble hitch braces (6) to hopper by inserting short bolts through flattened end of hitch brace, then through hopper. Place lock washers and nuts on bolts and tighten firmly.

Bolt hitch (7) between concave ends of hitch braces. Note hitch can be turned in either an up or down position for high or low drawbars.

Rate setting is made by sliding scale mark plate (8) on back of hopper. Loosen green knob and slide scale mark plate until desired number is in line with arrow pointer. Tighten green knob.

OPERATION

Rate settings prescribed for various materials are based on normal tractor mowing speed. If tractor is operated in low gear, then spreader should be set leaner (toward a smaller number) as more material is applied at a slower speed.

Plan to operate the spreader in the direction of the longer dimension of lawn.

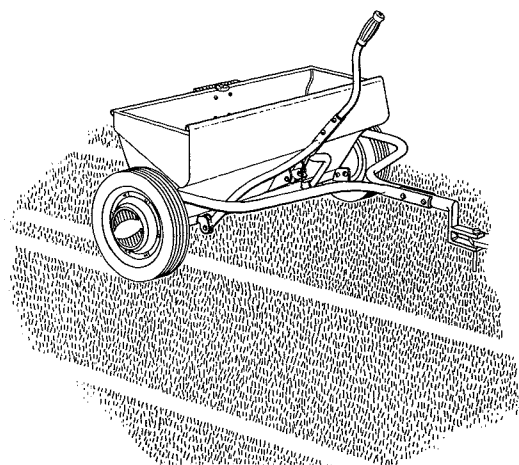
First apply two spreader widths across the shorter sides. These "headers" provide room for turning around at end of each of the long strips.

Then go back and forth from one header strip to the other until the entire area is treated. When approaching these end zones shut off the spreader to avoid double application. Keep it closed while backing or turning around to avoid extra dosage.

Next do the irregular areas, being careful to shut off spreader in backing and turning. Move the Sliding Dial to a leaner setting in cut-up areas where overlap is unavoidable.

If there are trees or shrubs in the lawn, shut off the spreader as it is pulled around them — otherwise adjacent grass may receive double or triple dosage. Use same care in treating slopes and terraces.

In high wind cover hopper with cardboard, burlap sack or heavy paper.

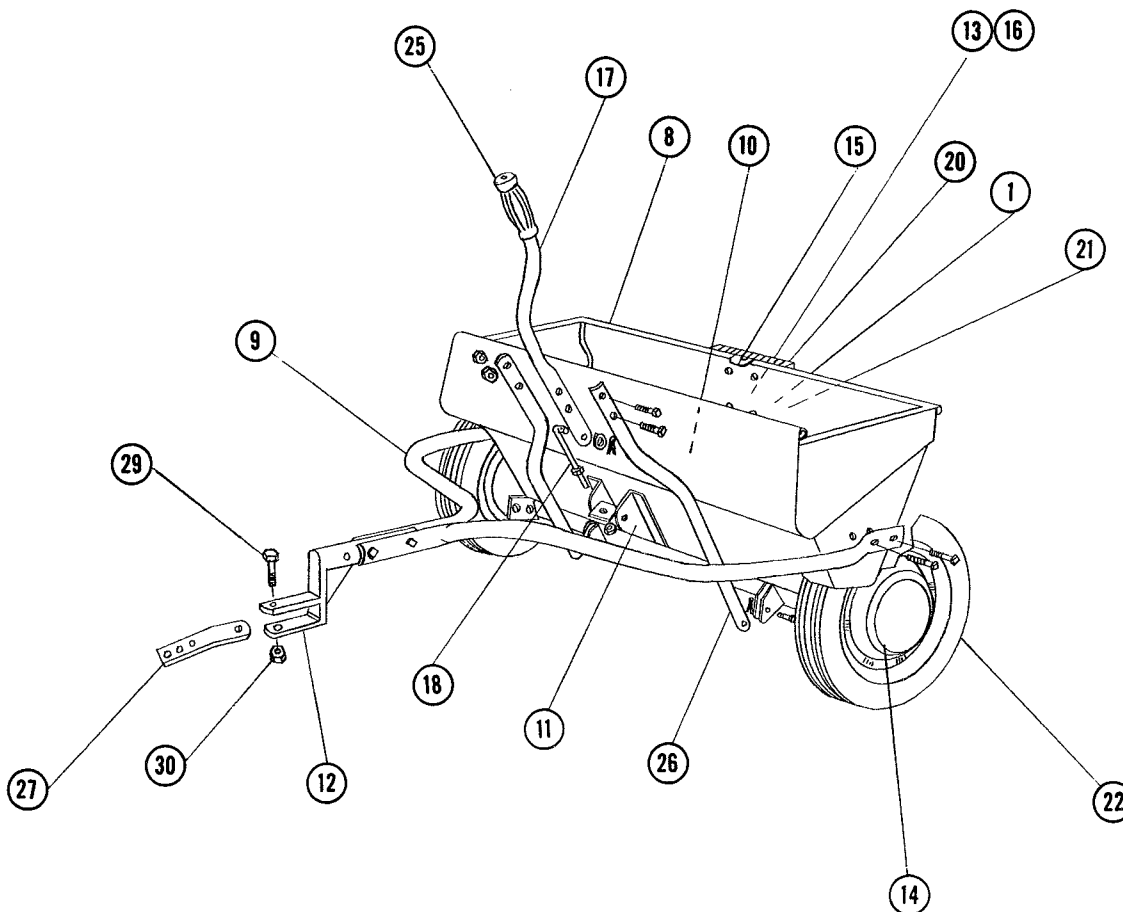
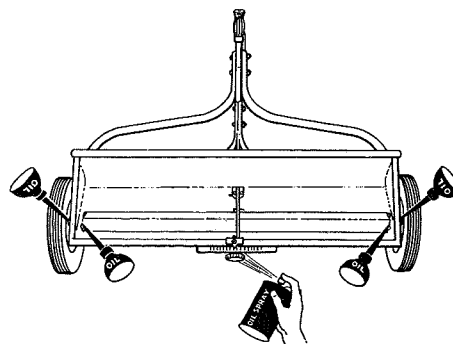


Overlap spreader wheel tracks to insure complete coverage.

CARE OF SPREADER

1. **Empty** spreader completely before storing. To do this, move spreader away from lawn area and set wide open at No. 20. Run it back and forth vigorously a few times to expel all material from hopper.

2. Oil. Leave spreader in open position. Use aerosol Oil Spray or oily rag to apply oil to underside of hopper where shut-off plate moves back and forth. Also squirt oil on spring located in housing below Sliding Dial. Place a few drops of oil on axle between wheel and hopper, at each end. If this is neglected, wheels may lock because of rusting. Light penetrating oil will usually loosen.



PARTS LIST

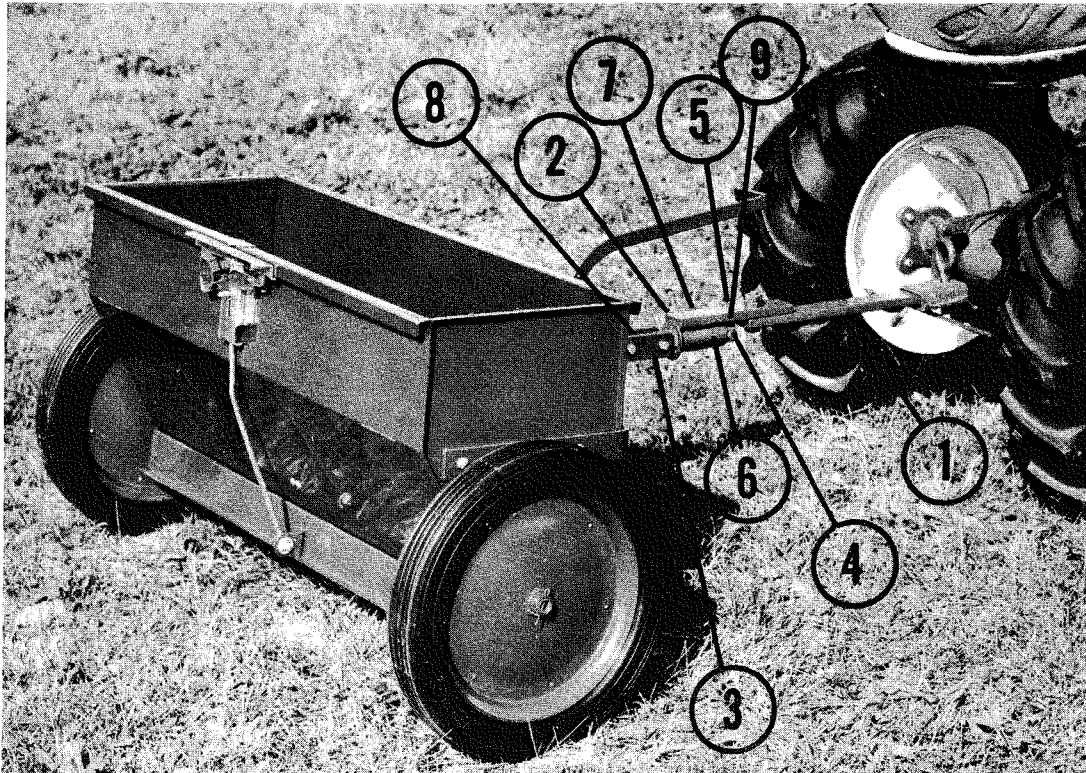
Ref. No.	Part No.	Description	Req'd. No.	Ref. No.	Part No.	Description	Req'd. No.
1	1672	Spring-Control Rod	1	16	1687	Green Plastic Knob	1
2	1673	Agitator-Axle Ass'y. R.H.	1	17	1688	Operating Lever with Grip	1
3	1674	Agitator-Axle Ass'y. L.H.	1	18	1689	Operating Lever Rod	1
4	1675	Baffle	1	19	1690	Bearing End Plate	2
5	1676	Ranger Shut-Off Bar	2	20	1691	Scale Mark Plate	1
6	1677	Shut-Off Bar	1	21	1692	Rod - Rate Control	1
7	1678	Bearing-Support Assembly with Bearing	1	22	1693	Wheel with Tire	2
8	1679	Hopper	1	23	1694	Body Bearings	4
9	1680	Hitch Brace	2	24	1695	Carton	1
10	1681	Brace-Hopper	1	25	1696	Handle Grip	1
11	1682	Shut-Off Bracket Ass'y. with 9519A-3 Control Link	1	26	1697	Shut-Off Brace	2
12	1683	Hitch	1	27	3039	Hitch Adaptor	1
13	1684	Housing Control Ass'y. less Green Knob	1	28	4411	Decal	1
14	1685	Hub Cap	2	29	1489	Bolt	1
15	1686	Pointer	1	30	1408	Nut	1

Wheel-Horse

Reg. U. S. Pat. Off.

FS-36 SPREADER

PARTS LIST AND INSTRUCTIONS



PARTS LIST for FS-36

Ref. No.	Part No.	Description	No. Req.
1	3001	Tongue	1
2	3005	Swivel Assembly	1
3	3003	Rod Assembly	1
4	1073	Cap Screw, 1/2-13 x 1 3/4	1
5	1026	Nut, Jam, 1/2-13	2
6	1064	Cap Screw, 3/8-16 x 1 1/2	1
7	1016	Nut Hex, 3/8-16	1
8	1119	Washer, 1/4 SAE	8
9	3000	Hitch, complete	1

Order above parts from
WHEEL-HORSE PRODUCTS

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SPREADER ASSEMBLY MODEL 100-T-55
(Includes all parts listed in column at right)

Order direct from
O. M. SCOTT & SONS
MARYSVILLE, OHIO

Ref. No.	Part No.	Description	No. Req.
		Agitator and Axle, pair	
		Axle Support and Bearings	
		Axle Bearings, pair	
		Baffle Plate	
		Bearing Retainer and Plate	
		Connecting Rod	
		Control Rod Housing	
		Green Knob for Control Plate	
		Handle Brace, each	
		Hopper, body only	
		Operating Lever with Knob	
		Pointer	
		Rate Control Rod	
		Scale Mark Plate	
		Spring for Rate Control	
		Shut Off Bar	
		Shut Off Bar Hanger Plates, pair	
		Shut Off Bar Yoke	
		Brackets for Operating Lever, pair	
		Wheels, Rubber Tire, each	

