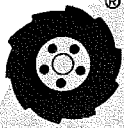


# PARTS LIST AND INSTRUCTIONS

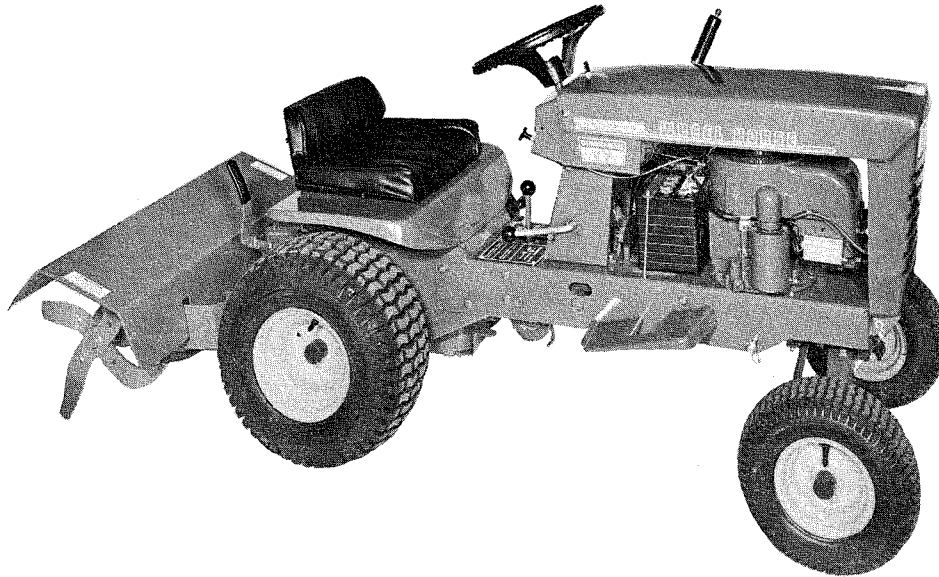


*Wheel Horse*

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

# TILLER

## MODEL 7-1221



### DESCRIPTION

The Model 7-1221 Tiller is designed to fit the vertical shaft tractors. It has cutting width of 30".

It is recommended that rear wheel weights #8-1121 or #8-1151 be installed on the tractor for better ground holding and traction when operating with a tiller.

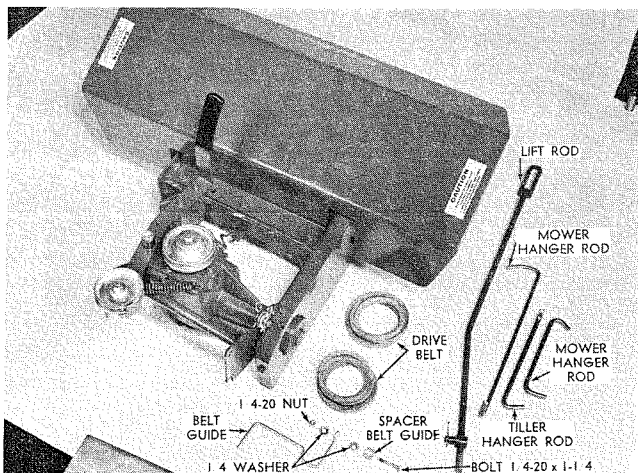


FIGURE 1

### TILLER INSTALLATION

To identify the parts as they are installed, refer to Figure 1. The tractor seat is shown removed in the photos for instruction purposes only.

1. Remove the nuts, bolts, and lockwashers holding the hitch support bracket to the tractor and remove the bracket as shown in Figure 2.

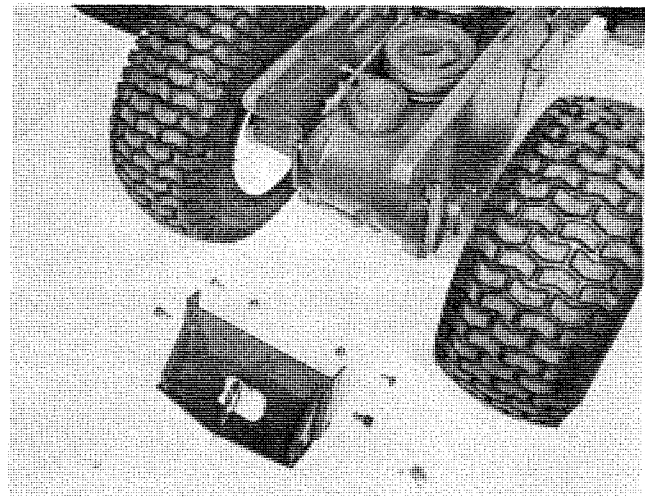
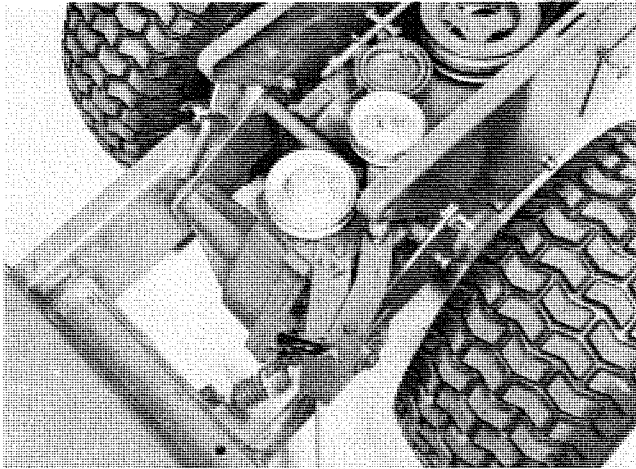


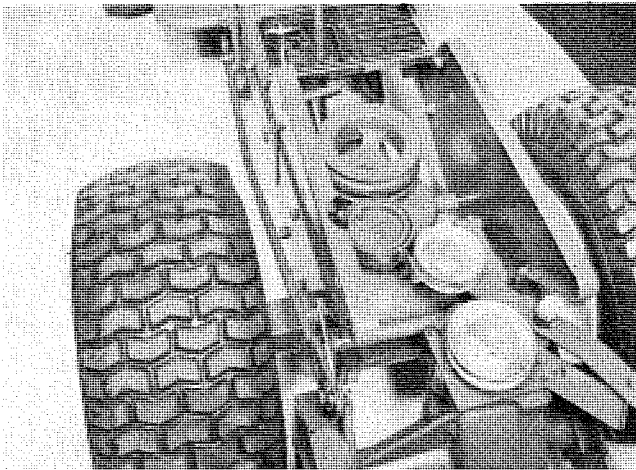
FIGURE 2

2. Partially insert the bolts and lockwashers used in the lower hitch bracket holes. Slots are provided in the tiller frame to fit over these bolts. Fit the slots over these bolts and lift up on the rear of the tiller to align the top holes, insert the bolts and nuts and tighten the bolts to secure the unit in place as shown in Figure 3.



**FIGURE 3**

3. Fasten the lift rod between the tractor lift arm and the tiller lift rod bracket as shown in Figure 4. The trunnion should be threaded in or out on the rod until the tines clear the ground from 2½" to 3" in the transport position.



**FIGURE 4**

4. On automatic transmission type tractors, the 36" belt Part No. 9430 is used. On shift type transmission tractors, the 39" belt Part No. 9431 is used. Select the proper belt to fit your tractor. To install the belt, move the clutch handle to the left and install the belt on the pulleys as shown in Figure 5.

5. The belt guide is mounted to the left rear panel and extends over the belts as shown in Figure 5. It is held in place with a bolt, two washers, spacer, and nut. On shift type transmission tractors, the spacer is used as shown in Figure 5. On automatic transmission type tractors, the spacer is not used and should be discarded.

6. The catch plate (Item #51) must be adjusted to hold the clutch handle pulley away from the belt in the disengaged position.

To position the catch plate properly:

- A. Raise the tiller to the transport position with the lift lever.
- B. Start the tractor engine. This will cause the tines to rotate.
- C. Move the clutch handle to the left until the tines stop rotating. Observe the position of the

handle. The catch plate must be positioned to hold the handle at this point.

- D. Stop the engine, move the catch plate into position, and tighten the catch plate bolts.
- E. Start the engine. Test the adjustment by engaging and disengaging the clutch arm several times. Readjust plate if necessary.

## OPERATING INSTRUCTIONS

To start the tines rotating, lift up on the clutch handle and release. To stop the tines, move the handle to the left until it catches on the catch plate.

Never dismount from the tractor without disengaging the tiller clutch and setting the tractor parking brake. Always stop the engine before doing any work on the tines such as removing rocks or other debris.



**FIGURE 5**

For best performance the tiller should be operated with the tractor engine set at full throttle. The ground speed of the tractor should then be regulated to match soil conditions.

In hard, compacted soils or clay it may be necessary to go slowly in order to obtain soil penetration.

Under certain soil conditions it is advisable to till an area twice by overlapping cuts in the same direction or by making a second pass 90° to the first if the terrain permits.

When tilling sod or gumbo soils the tiller will have a tendency to push the tractor. Wheel weights will help counteract this, but it may also be advisable to reduce the depth of soil penetration.

Do not over-till the soil or pulverize it. Soil tilled too finely will not readily absorb moisture. It will cause puddling and water run-off and the soil will become compacted too easily.

## TILLER REMOVAL

1. Remove the lift rod trunnion from the lift arm.
2. Disengage the tiller clutch and remove belt guide and belt.
3. Remove bolts and nuts holding tiller frame to tractor. Move tiller away from tractor.

## LUBRICATION

The unit is shipped with the gear case dry and will require filling.

To fill the case, remove the plug located at the upper rear end of the case and pour in the 40 ounces of oil provided.

The oil must be poured slowly to allow time for it to flow through the axle bearings. All the oil provided must be used to fill the case.

Check the oil level periodically.

The correct oil level is flush with the bottom edge of the hole. SAE 90 MP (GL4-GL5) oil may be added as necessary. When storing the unit for an extended period of time, apply a light coat of grease to the tines to prevent rust.

A good grade of grease should be used in the grease fitting located at the clutch handle pivot.

## CHAIN TENSION ADJUSTMENT

The chain tension is adjusted at the factory, but it should be checked before using the tiller and after every 25 hours of operation. To adjust the chain tension, loosen the nut and bolt in the slot of the chain case, lift the bolt up until it stops, and tighten.

## DRIVE BELT REPLACEMENT

When replacing belts be sure to purchase genuine Wheel Horse belts, as these belts are specifically designed for each application.

## SPECIFICATIONS

Width of cut 30".

Rotor tine diameter 13½".

Maximum depth of cut 6".

Lubricant — Gear Box — MP-90 (GL4-GL5) Gear Lube — Capacity 40 ounces.

Four one-piece heat treated tines. Eight cutting edges per side, sixteen total cutting edges.

Reduction from tractor engine to output shaft 19.5 to 1 automatic type transmission, 19.4 to 1 shift type transmission.

Tine shaft R.P.M. at full 3800 engine R.P.M.; 195 automatic type transmission, 196 shift type transmission.

Net weight 130 lbs.

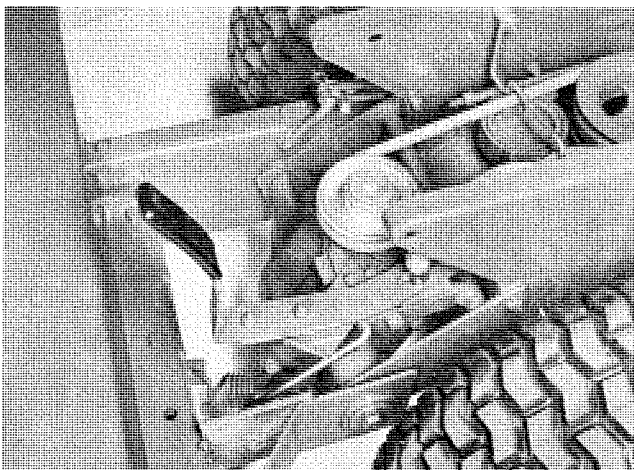


FIGURE 6

## ATTACHMENT SUPPORT HANGERS

Three hanger rods are included with the unit, one tiller and two mower. They permit installation and use of the tiller while the mower is in place or use of the mower while the tiller is in place.

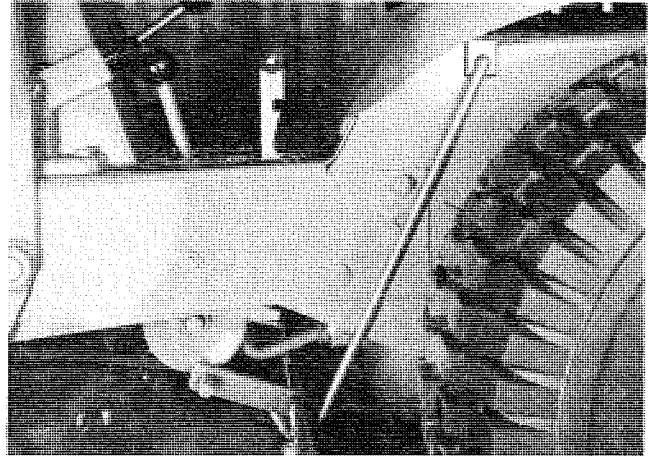


FIGURE 7

To install the tiller hanger rod, lift the tiller to the transport position and place the short hooked end (see Figure 1 for proper rod) through the hole in the hanger plate as shown in Figure 6. Hook the other end into the hole provided in the square cross bar of the tiller frame.

To insert the mower hanger rods, remove the mower lift link and raise the mower to the highest cut position with the gage wheels.

Slip the short hooked end of the long mower hanger rod on the mower height adjustment shaft as shown in Figure 7. Lift up on rear of the mower and hook the remaining end over the left rear panel as shown in Figure 7.

On 7 H.P. tractors remove the front seat support shaft and insert the hanger rod end as shown in Fig. 7.

On 8 H.P. tractors insert the rod end into the hole provided in the left rear panel.

Lower Gage wheels.

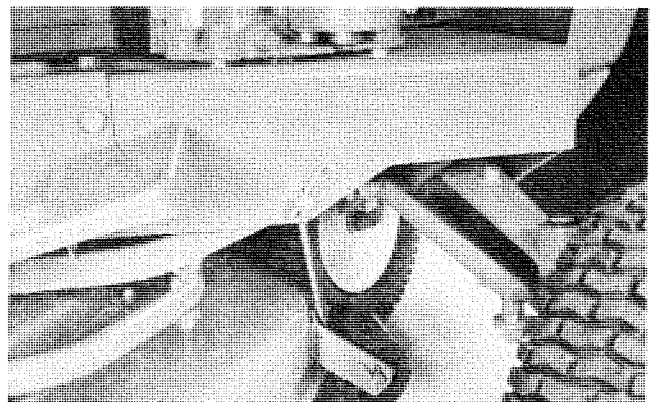


FIGURE 8

Slip the short hooked end of the small mower hanger under the front lip of the deck, and hook it over the attachment pivot rod as shown in Figure 8.

## PARTS LIST FOR TILLER MODEL 7-1221

(Specifications subject to change without notice.)

Parts available only through Authorized Dealers.

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

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	9216	Frame	1	46	908065-4	Bolt — Hex 1/2-13 x 3	1
2	9223	Support	1	47	9771	Mounting Plate	1
3	900063-4	Bolt — Carriage 3/8-16 x 1"	3	48	9258	Idler Arm	1
4	915663-4	Nut — Hex 3/8-16 Elastic Stop	5	49	1030	Grease Fitting	1
5	9226	Tines	4	50	9660	Plate — Wear	1
6	908034-6	Bolt 3/8-16 x 1" Nyllok	5	51	9255	Bracket — Clutch Adjustment	1
7	908035-6	Bolt 3/8-16 x 1 1/4 Nyllok	1	52	908003-4	Bolt — Hex 1/4-20 x 3/4	4
8	9230	Shaft — Tine	1	53	915661-4	Nut — Hex 1/4-20 Elastic Stop	4
9	9231	Bearing — Flanged Mounted	2	54	3736	Bolt — Shoulder	1
10	936131	Snap Ring — External	5	55	7434	Pulley — Flat — Idler	1
11	932965-4	Pin — Clevis 3/8 Dia. x 1 1/2	4	56	908037-4	Bolt — Hex 3/8-16 x 1 3/4	1
12	932016-4	Cotter Pin 1/8 Dia. x 3/4	4	57	920009-4	Washer 3/8	1
13	937232	Key — Hi-Pro #806	1	58	9774	Bracket — Belt Guard	1
14	9233	Sprocket	2	59	5359	Grip	1
15	900037-4	Bolt — Carriage 5/16-18 x 3/4	8	60	9197	Spring — Idler	1
16	915662-4	Nut — Hex 5/16-18 Elastic Stop	10	61	915236-4	Nut — Hex Jam 3/8-16	1
17	9234	Tine — Shield	1	62	7938	Washer — Thrust	1
18	4646	Plate	2	63	9262	Chain — Drive	1
19	908027-4	Bolt — Hex 5/16-18 x 3	2	64	9263	Roller — Chain Support	1
20	908043-4	Bolt — Hex 3/8-16 x 3 1/2	1	65	9261	Spacer — Chain Support	1
21	9238	Case — Gear	1	66	900066-4	Bolt — Carriage 3/8-16 x 1 3/4	1
22	1526	Bearing — Needle	1	67	9264	Cover — Case — Chain	1
23	5571	Bearing — Bronze	1	68	908015-4	Bolt — Hex 5/16-18 x 1/2	8
24	9239	Ball Bearing	1	69	920082-4	Lock Washer 5/16	8
25	9240	Seal	1	70	8868	Rod — Lift — Hitch	1
26	9241	Shaft — Output	1	71	8870	Trunnion — Rod — Lift	1
27	937232	Key — Hi-Pro #806	2	72	920011-4	Washer 1/2	3
28	9242	Gear — Spiroid	1	73	932017-4	Cotter Pin	1
29	9243	Gear — Pinion Spiroid	1	74	933512-4	Hairpin Cotter	2
30	9244	Ball Bearing	1	75	9430	Belt 36" Automatic Transmission	1
31	936130	Snap Ring — External	1	76	9431	Belt 39" Shift Type Transmission	1
32	9245	Cap — Gear Box	1	77	9772	Rod — Tiller Hanger	1
33	908033-6	Bolt — Hex 3/8-16 x 7/8 Nyllok	4	78	9265	Rod — Mower Hanger	1
34	937225	Key — Hi-Pro #606	1	79	9488	Rod — Mower Hanger	1
35	100290	Pulley — Drive	1	80	5415	Decal — Wheel Horse	1
36	8867	Washer — Special	1	81	4498	Decal — Caution	2
37	908002-4	Bolt — Hex 1/4-20 x 5/8	1	82	9818	Spacer—Mech. Trans. Tractors Only	1
38	9247	Gasket — Gear — Case	1	83	9589	Guide — Belt	1
39	9248	Cover — Gear — Case	1	84	908006-4	Bolt — Hex 1/4-20 x 1 1/4	1
40	8016	Plug — Breather	1	85	920037-4	Washer 1/4	2
41	943420	Plug — Pipe 3/8-18	1	86	915111-6	Nut — Hex 1/4-20 Nyllok	1
42	943419	Plug — Pipe 1/4-18	1	87	9232	Spacer tine Shaft	1
43	9773	Spring — Stop	1	88	920083-4	Washer 3/8 Lock	1
44	9249	Pivot Frame Mounting	1	89	915236-4	Nut Hex 3/8-16 Jam	1
45	9250	Spacer	1	90	920122-4	Washer — Lock — Ext. Tooth 1/4	1

