

**Parts List
and
Service Manual for**



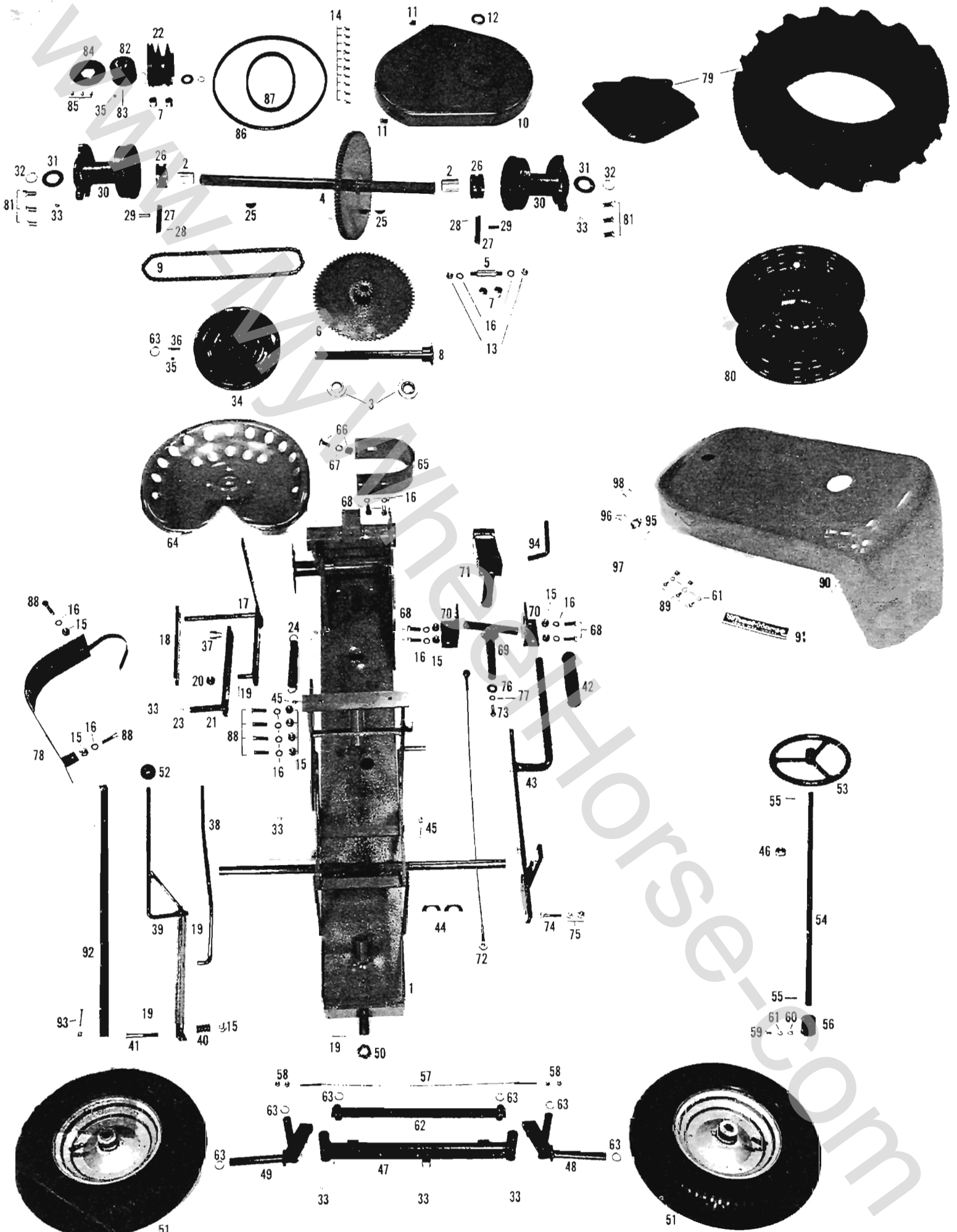
Ride-Away Jr. Garden Tractor

YOUR GUARANTEE

The "Ride-Away" is guaranteed for ninety days from the date of purchase against defective materials or workmanship. We will replace, free of charge, any defective part if returned prepaid. The engine is covered by the manufacturer's guarantee.

WHEEL-HORSE PRODUCTS

SOUTH BEND, INDIANA



RIDE-AWAY JR. PARTS LIST

Key No.	Part No.	Name	No. Req.	List Price
1	3424	Frame Assembly	1	\$32.00
2	1503	Bronze Bearing, 1 1/8 O.D. x 1 I.D. x 1 1/2 long	2	.75
3	1502	Ball Bearing	2	1.25
4	1878	Axle and Gear Assembly	1	11.00
5	1853	Jack Shaft Stud	1	.55
6	1879	Gear & Sprocket Ass'y. w/brgs.	1	6.00
7	1513	Needle Bearing	4	.80
8	1880	Cross Shaft Assembly	1	2.60
9	1809	Chain, Roller	1	4.60
10	1801	Housing, Casting Gear	1	9.50
11	1013	Pipe Plug	2	.15
12	1011	Oil Seal	1	.40
13	1110	Hex Nut, 3/8 - 24	2	.05
14	1009	Hex Head Cap Screw, 1/4 - 20x1/2	10	.05
15	1016	Hex Nut, 3/8-16	11	.05
16	1039	Washer, Spring Lock, 3/8	14	.02
17	1865	Secondary Pivot Bar Assembly	1	1.60
18	1866	Brace Bar, Secondary	1	.40
19	1002	Cotter Pin 1/8 x 1	5	.01
20	1044	Hex Nut, Slotted, 1/2-20	1	.05
21	1852	Primary Pivot Bar Assembly	1	1.30
22	1851	Variable Speed Pulley w/brgs.	1	18.00
23	1126	Snap Ring, 3/8	1	.10
24	1129	Spring, Tension	1	.35
25	1008	Woodruff Key, No. 15	2	.10
26	1846	Pawl Hub	2	1.80
27	1847	Pawl	2	.95
28	1130	Spring, Pawl	2	.15
29	1881	Pin, Pawl	2	.12
30	1845	Wheel Hub Casting	2	6.05
31	1076	Washer, Shim (State thickness: .010" .020" .040")	2	.06
32	1128	Snap Ring, 1"	2	.10
33	1030	Grease Fitting, 1/4-28 thread	7	.10
34	1600	Pulley, Tractor	1	2.50
35	1042	Set Screw, Socket Head, Cup Point, 5/16-18 x 5/16	3	.10
36	1005	Key, Square, 3/16 x 1	1	.05
37	1861	Shoulder Pin	1	.25
38	3434	Fore and Aft Rod	1	.65
39	3405	Selector Lever Assembly	1	1.75
40	1131	Spring, Selector Lever	1	.20
41	1152	Hex Head Cap Screw, 3/8-16x2 1/4	1	.10
42	1082	Grip, Rubber Handle, 3/4" I.D.	1	.35
43	3410	Tool Lift Lever Assembly	1	2.10
44	1040	Washer, Flat, 3/4" SAE	2	.10
45	1137	Cotter Pin, 3/16 x 1	2	.02
46	1085	Shaft Collar, 3/4" I.D.	1	.45
47	3435	Front End Assembly	1	3.60
48	3400	Front Spindle Assembly (Left)	1	2.75
49	3401	Front Spindle Assembly (Right)	1	2.75
50	1010	Hex Nut, Slotted, 3/4-16	1	.25
51	1709	Front Tire and Wheel Assembly	2	22.00
	1514	Bearing for front wheel		.75
52	1001	Knob	1	.25

Key No.	Part No.	Name	No. Req.	List Price
53	3415	Steering Wheel	1	7.50
54	3438	Rod, Steering	1	1.40
55	1134	Rollpin, 3/16 x 1 1/4	2	.05
56	3409	Spool, Steering	1	1.20
57	3441	Steering Cable	1	2.60
58	1034	Hex Nut, 1/4-20	4	.05
59	1009	Hex Head Cap Screw, 1/4-28x1/2 (Spool)	1	.05
60	1119	Washer, Flat, 1/4 SAE	1	.02
61	1067	Washer, Shakeproof, 1/4	4	.05
62	3456	Tie Rod Bar Assembly	1	1.25
63	1127	Snap Ring, 3/4	7	.10
64	2510	Seat	1	2.60
65	3414	Spring, Seat	1	2.85
66	1106	Carriage Bolt, 1/2-13 x 1	1	.10
67	1115	Washer, Spring Lock, 1/2	1	.05
68	1062	Cap Screw, Hex Head, 3/8-16x1	6	.05
69	3447	Draw bar "T" Assembly	1	1.00
70	3419	Angle block, Draw bar mounting	2	.60
71	3442	Lift cradle assembly	1	2.40
72	3448	Lift cable	1	2.70
73	1090	Cap screw, Hex head, 5/16-18x1	1	.05
74	1006	Cap Screw, Hex head, 5/16-18x1 1/4	1	.05
75	1007	Hex nut, 5/16-18	2	.05
76	1041	Washer, Flat, 3/8	1	.05
77	1045	Washer, Spring lock, 5/16	1	.05
78	3449	Fender Assembly, Belt	1	2.50
79	1650	Tire and Tube Assembly, 6-12	2	22.50
80	1700	Rim Assembly, 5JA	2	5.50
81	1004	Bolt, Wheel (Special), 7/16-20 x 3/4	6	.10
82	1609	Pulley, 2-Groove, 2 1/2 A x 3/4 Bore	1	2.70
83	1120	Key, Pulley, 3/16 Sq x 2	1	.10
84	1882	Reverse Disc	1	4.00
85	1147	Drive Screw, Type U, No. 10x1/2	3	.05
86	1552	V Belt, 37-A	1	1.50
87	1556	V Belt, 20-A	1	1.24
88	1028	Cap screw, Hex head, 3/8-16 x 1 1/4	6	.05
89	1153	Stove bolt, Round head, 1/4x1/2	3	.05
90	1869	Hood	1	13.00
91	1144	Decal (WHEEL-HORSE)	2	N/C
92	3457	Strap, Tank mounting	1	.35
93	1104	Stove bolt, Round head, 3/16x1 1/4	1	.05
94	1813	Tool pin	1	.45
95	3279	Stop button	1	.90
96	1145	Screw, Stop button mounting, No. 6x1/2	2	.05
97	1146	Wire, Stop lead	1	.10
98	1150	Screw, Throttle control mounting No. 7 x 1/2	2	.05
	1654	Inner Tube, Tire (6-12)	2	4.85
	1781	Engine, 3 1/2 h.p.	1	89.00
	1782	Throttle control assembly	1	1.90

TRACTOR INSTRUCTIONS

ASSEMBLY

1. Uncrate tractor and find bag containing 6 wheel bolts, 2 snap rings, and 1 roll pin.
2. Bolt on the rear wheels, with the tread pointing forward on top. The arrows on the side of the tires point the proper forward direction of rotation. The wheels should also be bolted on widest way with the tire valves on the inside for more stable operation, unless there is some reason for wanting the tread of the tractor as narrow as possible.
3. Slip on the two front wheels and secure with the snap rings provided. Install the snap rings with the sharp edge out.
4. Place steering wheel in place. Line up the hole through the hub of the wheel with the hole through the steering column and drive the roll pin provided through the lined up holes.

SERVICING

1. See engine manual for servicing engine.
2. Fill gear housing with No. 90 gear lube to level of check plug (located on front side of casting near the bottom). Check the level of oil in gear housing each time the motor oil is changed. Add No. 90 gear lube if needed.
3. Grease all grease fittings with a pressure gun until grease is forced out between bearing surfaces. Repeat about every 50 operating hours. CAUTION: Do NOT over grease the variable speed pulley, as grease will escape into the grooves of the pulley and get on the belts causing slipping and excessive wear of belts.
4. Heavy wheel bearing grease has been pocked around the pawl of each wheel at the factory. It will be necessary to repeat this operation about every 50 operating hours. This heavy grease keeps the pawl from "flopping." During a turn, the outside wheel must speed up (which automatically drives the pawl into the neutral position) and if the pawl in the outside wheel "flops" into the reverse position, it locks the wheel and prevents it from turning any faster than the inside wheel can turn. This forces the tractor to skid straight forward. Do not confuse this condition with the skidding of the front wheels under some conditions because of insufficient friction between the front wheels and the ground.
5. Occasionally oil all other moving parts with an oil can.
6. Rear tires should be inflated to six pounds pressure. Front tires to 22 pounds. The tires of the front wheels can be filled with calcium chloride solution to add about 18 pounds of weight to each wheel. This will improve the steering qualities of the tractor for lawn use. The rear tires can also be filled in a like manner which will add about 49 pounds to the weight of each of these wheels. Normally, it is not necessary to fill the rear tires because the weight of the operator adds sufficient weight for plenty of traction.

OPERATION

After the engine and tractor have been properly serviced, your tractor is ready to operate. Refer to your engine instruction manual for starting and running of engine.

Before starting engine, make sure speed selector lever (located on right side) is in neutral position. While sitting on the tractor seat, reach around the outside of your left leg and grasp the retractable starter handle with your left hand. CAUTION: Take care not to scrape hand on seat as you pull upward to start engine. To stop engine, press on stop button (located in rear of hood) until engine stops.

To drive forward, move the selector lever forward. The further forward the selector lever is moved, the faster the tractor will move. CAUTION: Do not attempt to move the selector lever past the stop at the end of the forward position. Such action will cause damage to the belts. There are five different speeds forward and any speed may be selected while the tractor is in motion. If the belts should slip under a hard pull, shift to a lower speed. Do not allow the belts to continue slipping as this will cause them to wear out fast.

To reverse tractor, pull the selector lever backward as far as it will go. As a safety feature, the selector lever must be held in the reverse position firmly for as long as you want to move backward. As soon as it is released, the selector lever will move forward to neutral.

Do not attempt to shift into the forward position while rolling freely backward down a hill. The sudden change in direction and the incline of the hill is very apt to cause the front of the tractor to rear up and come over backward.

When rolling freely forward down a hill, you may shift momentarily into the reverse position to "brake" the tractor from "running away." This action should be taken before the tractor is moving too fast. If the tractor is allowed to gain momentum before shifting to reverse, there is danger of breaking a pawl or stripping the ratchet teeth from the wheel hub.

When pushing the tractor forward or backward by hand, the pawls may lock in the drive position and make it hard to push. This is perfectly normal and does not indicate any trouble or change the performance of the tractor when the power of the engine is applied. If desired, the pawls can be freed by turning the tractor pulley a few revolutions either direction until the pawl spring passes by the knob on the pawl plate that causes the pawl to be held in the drive position. Sometimes, just rocking the tractor back and forth will free the pawl from the drive position.

When pulling a load, always pull from the cradle hitch provided. Any attempt to pull from a make-shift hitch on the rear of the frame will cause the front to rear under heavy pulling conditions.

ADJUSTMENTS

1. **Steering Cable:** The cable is installed with one loop around the steering spool. The ends lead off the bottom side of spool to the tie rod pins in each end of the tie rod. The studs on the end of the cable pass through the hole in the tie rod pins and are secured and adjusted by two nuts on the outside of each tie rod pin. The two nuts on each end are locked together to keep them from vibrating loose. The cable should be adjusted for tension until one side or the other (not both sides at the same time) can just be pressed down with the thumb or touch the tie rod. The cap screw holding the cable to the spool must be in the dead center position when the wheels are straight forward. If it is not, loosen the cap screw and allow the cable to slip under the washer and retighten in proper position. Slight adjustments for the position of this cap screw can be made by loosening and tightening the nuts on opposite ends of the cable. If the cable is too loose, it may slip off the end of the spool and break. If it is too tight the cable may bind and break.
2. **Speed Selector Lever:** With the engine stopped, move the speed selector lever slightly to the right until spring tension carries it forward as far as it will go without the operator's pushing on it. This will tighten both belts. The position lug in the speed selector lever should now be about $\frac{1}{4}$ inch behind the neutral hole, but not in the neutral hole. If it is not, remove the front end of the "fore and aft" (Part No. 3434) rod and screw in or out until properly adjusted.
3. **Belt Guard:** Be sure the belt guard follows around the engine pulley to within $\frac{1}{4}$ inch of belt. If this guard hangs too far away from the belt, the belt may jump out of the groove while shifting into reverse, and cause trouble.
4. **Front End:** If the front end cross bar should wear and become loose, remove the cotter pin from the retaining nut and tighten nut until all the play is gone. Replace the cotter pin.
5. **Pawl Mechanism:** Both rear wheels should drive both forward and reverse. If one or the other wheels do not drive, it is an indication that something is wrong in the ratchet mechanism. To inspect, remove the snap ring which will allow the wheel and hub to be withdrawn and expose the pawl and pawl hub assembly. The pawl hub should be against the pawl plate. This will insure that the pawl spring will be close enough to the pawl plate to make contact with the ring of knobs in the pawl plate for proper operation. When the wheel hub is replaced, shim washers should be used to take out any end play between the pawl hub and retaining snap ring.
6. **Snap Rings:** When replacing any snap ring, be sure to install the sharp edge toward the outside. Be sure, also, that the groove is clean and free of any grit, so the ring can seat properly.
7. **Tension Spring:** Adjust to the lowest hole in the lever of the pivot mechanism to keep the belts tightest for maximum pulling. The spring on the lift lever (left side) should be removed to plow, cultivate, or disc; otherwise these attachments will have a tendency to lift out of the ground.

WHEEL-HORSE PRODUCTS CO.

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SOUTH BEND, INDIANA