
THE GIANT-VAC

‘PTO BLOWER’

MODELS 2000*/3200/4000*****

ASSEMBLY INSTRUCTIONS AND OPERATOR’S MANUAL

Congratulations!

You have just purchased one of the finest pieces of outdoor power equipment on the market today. If properly cared for, your Giant-Vac PTO Blower will provide years of dependable service. Please read and follow this instruction manual carefully in order to get the most out of your new equipment.

First, inspect your machine upon delivery. Each Giant-Vac product leaves our factory in excellent condition; occasionally, however, some damage may occur during shipment. If any such damage is found upon initial inspection, *immediately* notify the transport carrier who delivered your machine, as they are solely responsible for the damage as well as any subsequent adjustments.

Your Giant-Vac PTO Blower requires very little assembly. Simply follow the instructions contained within this manual to begin enjoying the benefits of your new unit.

CALIFORNIA PROPOSITION 65 WARNING

Gasoline and Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

As an owner of off-road gasoline or diesel engine equipment and/or as an employer, you also may have an obligation under the California Occupational Safety and Health Act or under Proposition 65 to warn persons exposed to gas and diesel engine exhaust and/or other Proposition 65 chemicals in and around your workplace. See California Health and Safety Code section 25249.5, Title 22 of the California Code of Regulations at Section 1200 *et seq.*, and Title 8 of the California Code of Regulations Section 5194.

* Model 2000 P.T.O. Blower is designed to be used in conjunction with a P.T.O. 3-point hitch tractor equipped with an 18-25HP P.T.O. drive that can achieve 540 R.P.M.

** Model 3200 P.T.O. Blower is designed to be used in conjunction with a P.T.O. 3-point hitch tractor equipped with a 25-38HP P.T.O. drive that can achieve 540 R.P.M.

***Model 4000 P.T.O. Blower is designed to be used in conjunction with a P.T.O. 3-point hitch tractor equipped with a 40+HP P.T.O. drive that can achieve 540 R.P.M.

REV. B – 8/00

1 SAFETY RULES REGARDING YOUR GIANT-VAC PTO BLOWER

IMPORTANT!

READ THE FOLLOWING SAFETY RULES *CAREFULLY* BEFORE OPERATING UNIT:

- **Regard your Giant-Vac PTO Blower as a piece of power equipment and teach this regard to all who will operate this unit. Never allow children or young teenagers to operate the unit.**
- **Be sure to assemble the unit completely. If any parts are discovered missing during assembly, contact your dealer immediately; do not attempt to operate unit with missing parts.**
- **Always wear appropriate safety equipment when operating this unit. Proper eye, ear, and breathing protection is a must.**
- **Be sure you know how to stop the unit at a MOMENT'S NOTICE. Refer to the operation section of this manual, as well as the owner's manual supplied with your tractor.**
- **Do not operate with any guards or component parts removed from unit.**
- **Unless there is very good artificial light, use only during daylight.**
- **While in operation, keep all parts of body away from intake and exhaust sections. Never insert any body part or other foreign object in any opening while the machine is running.**
- **When operating unit, keep people and pets a safe distance away. Instruct children to keep away from the area of operation at all times.**
- **Keep away from PTO shaft while unit is in operation. Contact with a rotating PTO shaft can easily cause fatal injury.**

**FAILURE TO FOLLOW THESE RULES CAN RESULT IN CHRONIC
HEALTH PROBLEMS, SERIOUS INJURY, OR EVEN DEATH.**

2

UNIT ASSEMBLY

MODEL 2000

*Your Giant-Vac Model 2000 PTO Blower comes fully assembled * and ready for installation onto your tractor. (Follow the manufacturer's instructions for proper connection to the tractor.)*

* The only assembly step required is the installation of the inner deflector door control rod:

- Remove 1/2" lock nut from threaded stud end of control rod.
- Slide rod end through hole in control rod holder (the long angle piece with the large hole on top, extending upward from the blower frame assembly).
- Insert threaded stud end of rod down through hole in inner deflector door control arm and replace lock nut, tightening just enough to allow free, but not sloppy, movement of rod.

MODELS 3200-4000

PRE-ASSEMBLY:

- Identify the following items inside the components box:
 - 2 – Caster wheel assemblies
 - 2 – Lower hitch point assemblies
 - 2 – Support legs
 - 1 – Top hitch point
 - 1 – Hardware package

INSTALLING THE CASTER ASSEMBLIES:

- Remove the 1/2" x 1-1/4" bolt (Parts list ref. #24) and washers (#21-23) from the top of each of the two caster assemblies. Also remove red caster spacers, but leave thrust bearing (#18) in place.
- Slide top section of each caster assembly up through caster arm sleeves, replace spacers, then secure with same hardware removed in previous step.
- Carefully tilt unit onto side so that caster wheels contact ground, then remove metal skid. **Note: Assistance is recommended, as weight of unit can cause serious injury.**

2

UNIT ASSEMBLY (cont.)

INSTALLING THE HITCH POINTS AND SUPPORT LEGS:

- Remove hardware holding each lower hitch point assembly together, and separate pieces, **making careful note of assembly configuration, as it will be reassembled onto the shaft frame in the same manner.**
- Slide lower hitch points (#51) onto side panels of shaft frame (#39) so that center gap within hitch point receives edge of side panel into it. **Note: Hitch pin (#61) should be facing out.** Align holes in hitch point with corresponding holes in bottom outer corner of side panel, then insert four 1/2" x 3-1/2" bolts (#55, previously removed from assembly) through mounting holes in each hitch point.
- Replace jack stand spacers (making sure to use two sets of - two 1/4" spacers (#53) and one 1/8" spacer (#52) - for each hitch point) and side support plate onto each assembly, securing with lockwashers (#56) and nuts (#57). Tighten all fasteners securely.
- Insert jack stand (#58) up through receiving hole of each lower hitch point assembly, created by spacers and side support plate, securing with jack stand pin (#59) and bridge pin (#60).
- Fasten top hitch point bracket (#47) to top of shaft frame using four 1/2" x 1-1/4" bolts (#48), lockwashers (#49) and nuts (#50). **Note: To aid in top hitch point installation, shaft frame top cover plate (#45) removal is recommended ***
**Helpful hint: Before replacing top cover plate, check shaft bearings for grease.*

INSTALLING THE DISCHARGE DIRECTION CONTROL ROD:

- Fasten control rod support bracket (#40) to upper right side of shaft frame with two 1/2" x 1-1/4" bolts (#41), lockwashers (#42) and nuts (#43).
- Remove locknut (#38) from threaded stud end of control rod (#36). Slide rod through hole in control rod support bracket. Insert stud through hole in discharge direction control arm (#35) and secure with locknut, tightening just enough to give control arm free (but not sloppy) movement.

Assembly of your Giant-Vac PTO Blower is complete. You are now ready to mount your unit onto the 3-point hitch of your tractor. Refer to the manufacturer's instructions of your tractor for information on proper connecting procedures.

3

UNIT OPERATION

GENERAL RULES TO OBSERVE BEFORE AND DURING OPERATION:

- Be sure that you have connected the unit to the tractor correctly and securely, carefully following manufacturer's instructions.
- Follow the tractor manufacturer's recommendations for safe operation.
- Clear the entire work area of all debris that could catch on or be thrown by the PTO Blower. High velocity discharge can easily turn rocks and branches into dangerous flying projectiles.
- Do not engage unit until you are ready to begin debris removal, and promptly disengage unit as soon as operation is complete.
- Use proper discretion in selecting your cleaning pattern, especially on uneven terrain. Avoid steep hills, especially if turf is wet. Do not travel straight down slopes exceeding 14 degrees. If tires begin to slip when climbing a slope, the grade is too steep for safe operation. Angle the tractor to a less steep slope until tires stop slipping and traction is regained.
- Be keenly aware of the unit's presence on the rear of the tractor, especially when backing up or negotiating tight spaces and corners. Failure to do this can result in serious damage to unit, tractor, and/or property.
- Be certain the P.T.O. lever is disengaged before turning off the tractor's engine.

ENGAGING THE UNIT:

- With tractor engine running, set throttle to slow position, engage P.T.O. drive lever, then *slowly* increase throttle to a maximum of 540 R.P.M. **Caution: Never run the tractor's P.T.O. drive over 540 R.P.M. All Giant-Vac P.T.O. Blowers are designed for a maximum input of 540 R.P.M.**

CHANGING DIRECTION OF DISCHARGE:

- Upon engaging the unit, all models discharge air initially from the left side of the blower (driver's perspective). However, right hand discharge can be achieved by pulling the discharge direction control rod, located to the left rear of the operator and easily accessible while seated on the tractor. This rod operates an inner deflector door, which diverts air flow out to the right side. * This door is held in

3

UNIT OPERATION (cont.)

place by the pressure of the air flow, which permits hands-free operation while in right hand mode; when the power unit's R.P.M.'s have been decreased sufficiently, or the PTO is disengaged, air flow will automatically revert back to left hand discharge. Each discharge opening has an adjustable deflector to assist in directing the ground air flow for varying conditions.

*Please note that the Giant-Vac PTO blower is designed to be equally efficient in either left or right hand discharge mode.

4

UNIT MAINTENANCE

- Before performing any maintenance adjustments or repairs, stop tractor engine and remove P.T.O. Drive Shaft.
- Check Drive Belt tension* after one hour, then after 10 hours of initial operation. Belt tension is initially set at the factory; however, they will wear in and adjust. **To check tension:** remove shaft frame top cover plate, and place a belt-tensioning gauge in the center of the belt span between pulleys. **Note: Check one belt at a time.** Gauge should read 15 pounds pressure with 1/4" deflection.
*Also check pulley alignment, as this will affect belt tension.
- Promptly replace worn, frayed or stretched belts. Important: Replace belts as a set, as each set is machine matched to provide minimum tolerance between each belt, resulting in longer belt life.
- Keep unit free from accumulations of grass, leaves or excessive grease. **An accumulation of these combustible materials may result in a fire.**
- Grease P.T.O. drive shaft, caster wheels and assemblies, and input and impeller shaft bearings every 50 hours of use.
- Keep tires inflated to manufacturer's rated p.s.i. (located on sidewall of tire).
- If possible, keep unit in closed, dry storage when not in use.

GIANT-VAC WARRANTY

GIANT-VAC MFG. INCORPORATED, here-in-after called Giant-Vac, warrants each new Giant-Vac to the original retail purchaser of the new Giant-Vac equipment to be free from manufacturing defects in normal service for a period of 1 year, unless it is used for rental purposes, which limits the warranty to 30 days. This warranty does not apply to engines, tires or other parts that are purchased and warranted by their manufacturer. Items such as bags, grass catchers, hoses and blades are not warranted, as these are considered expendable items. This warranty does not include equipment failures due to normal wear.

Any obligation under this warranty is expressly limited to the replacement or repair, at an authorized servicing Giant-Vac dealer, or at a point designated by us, of such parts as appear to us to have been defective. All defective parts have to be returned freight prepaid before credit will be issued.

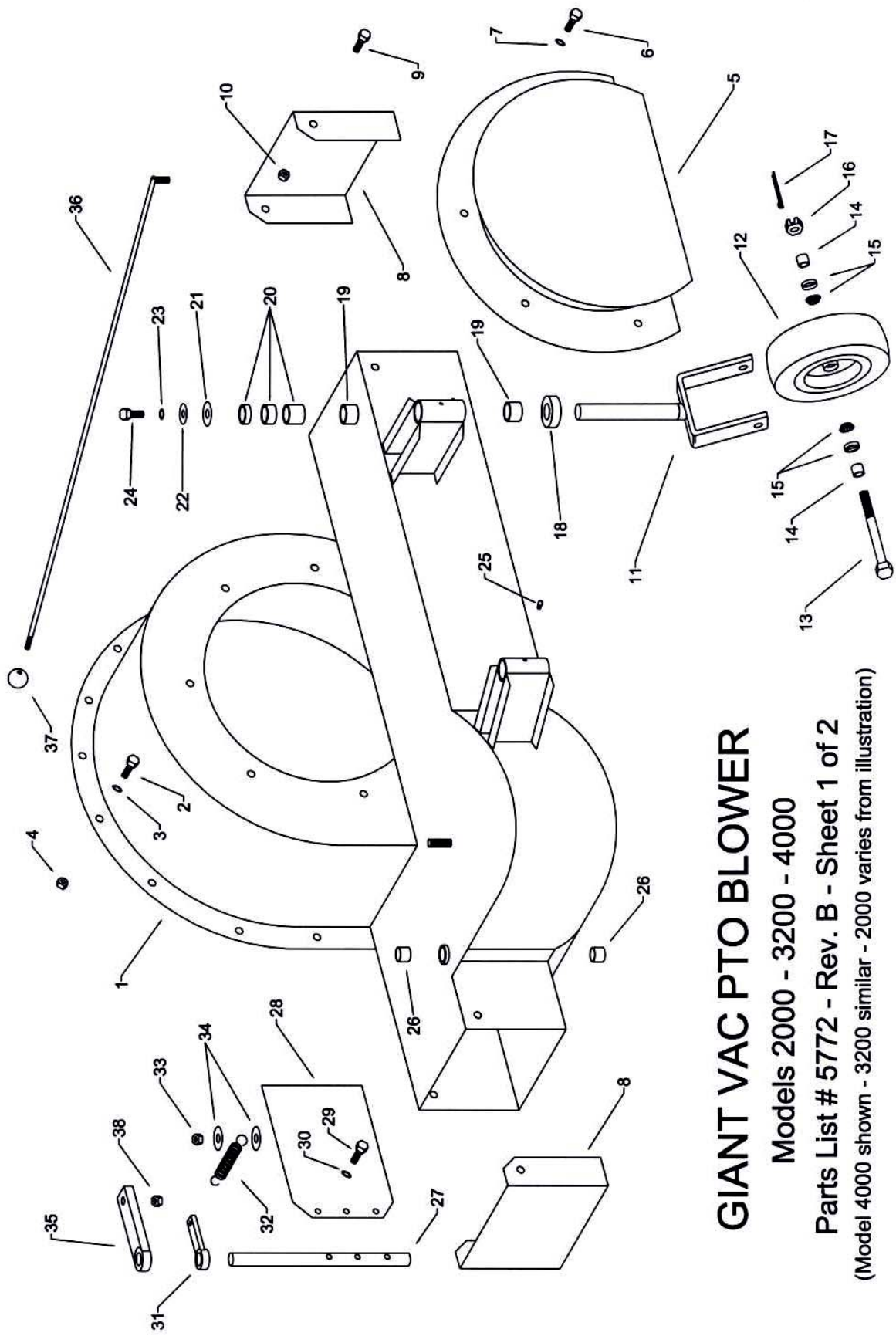
We shall not be liable for transportation charges in connection with the replacement or repair of defective parts.

This warranty does not apply to a Giant-Vac upon which repairs or alterations have been made by others except with our prior written approval.

We shall not be liable for consequential damages or contingent liabilities for the fitness of any Giant-Vac for any particular purpose.

We make no other express, implied or statutory warranty, nor is anyone authorized to make any in our behalf.

GIANT-VAC MFG. INCORPORATED
P.O. BOX 195
SOUTH WINDHAM, CT. 06266
PHONE: 860-423-7741 • FAX: 860-423-2654



GIANT VAC PTO BLOWER

Models 2000 - 3200 - 4000

Parts List # 5772 - Rev. B - Sheet 1 of 2

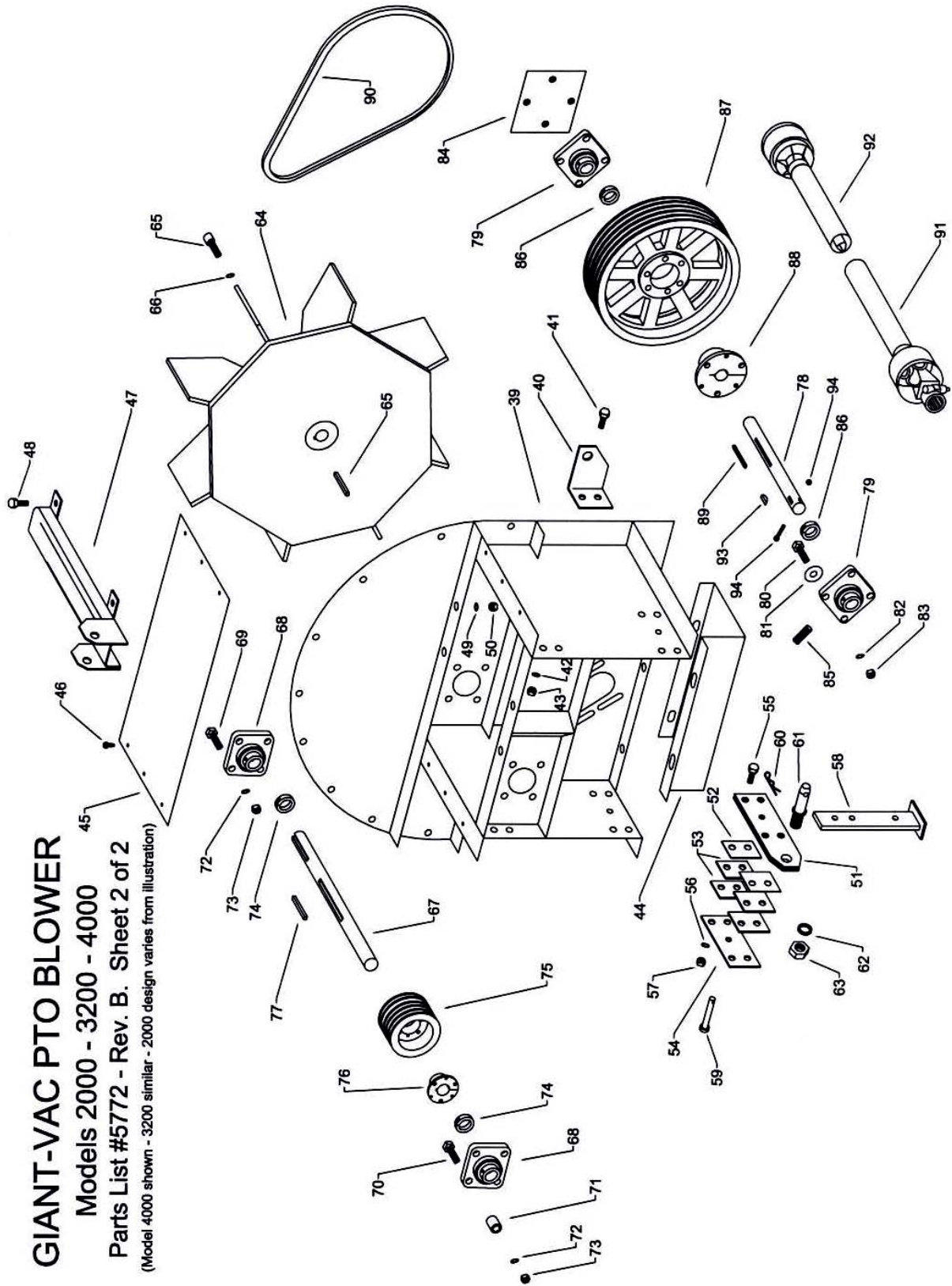
(Model 4000 shown - 3200 similar - 2000 varies from illustration)

GIANT-VAC PTO BLOWER

Models 2000 - 3200 - 4000

Parts List #5772 - Rev. B. Sheet 2 of 2

(Model 4000 shown - 3200 similar - 2000 design varies from illustration)



PARTS LIST # 5772 – REV. B

GIANT-VAC MODEL 2000 PTO BLOWER

<u>Ref</u> <u>No.</u>	<u>Part</u> <u>No.</u>	<u>Description</u>	<u>Qty</u>
		SHEET 1	
1	10167	Blower housing & shaft frame	1
2-4	----	-----N/A on Model 2000-----	--
5	20191	Intake baffle	1
6	31400	5/16" x 3/4" hex bolt	5
7	31003	5/16" lockwasher	5
8	24615	Deflector	2
9	31114	3/8" x 1" hex bolt	4
9a	31034	3/8" flatwasher (not shown)	4
10	31388	3/8" lock nut	4
11	33189	Caster horn	2
12	33197	Caster wheel - 410-350x4	2
13	33116	5/8-11 x 5 hex bolt	2
14	----	-----N/A on Model 2000-----	--
15	33122	Wheel bearing	2
16	31571	5/8-11 hex nut	2
17-18	----	-----N/A on Model 2000-----	--
19	31306	Caster horn flange bushing (1" ID)	4
19a	33196	Caster arm (not shown)	2
19b	31312	5/16 x 1 hex bolt (not shown)	8
19c	31003	5/16 lockwasher (not shown)	8
19d	31027	5/16 flatwasher (not shown)	8
20	31442	Caster spacer - 1/4"	4
20	31441	Caster spacer - 1/2"	4
21-24	----	-----N/A on Model 2000-----	--
24a	31305	1/4" x 2" snapper pin (replaces 21-24 on 2000)	2
25	31437	Caster horn grease fitting	2
26	----	-----N/A on Model 2000-----	--
27	23218	Inner deflector door rod	1
28	20215	Inner deflector door	1
29	31400	5/16" x 3/4" hex bolt	2
30	31003	5/16" lockwasher	4
31	27308	Spring arm holder	1
32	31422	Spring	1
33	31388	3/8" lock nut	1
34	31388	3/8" flatwasher	2
35	23219	Deflector rod upper control arm	1
36	23220	Control rod	1
37	31103	Control rod knob - 3/8"	1
38	31560	3/8" lock nut	1

SHEET 2

39-44	----	-----N/A on Model 2000-----	--
45	37128	Shaft frame top cover plate	1

PARTS LIST # 5772 – REV. B

GIANT-VAC MODEL 2000 PTO BLOWER

<u>Ref</u> <u>No.</u>	<u>Part</u> <u>No.</u>	<u>Description</u>	<u>Qty</u>
46	31562	#12 x 3/4" self tapping screw	6
47	38035	Top hitch point bracket	1
48	31084	1/2" x 1-1/4" hex bolt	4
49	31078	1/2" lockwasher	4
50	31022	1/2" hex nut	4
51-60	----	-----N/A on Model 2000-----	--
61	31463	Hitch pin	2
62	31464	7/8" hitch pin nut	2
63	31465	7/8" hitch pin lockwasher	2
64	21548	Impeller	1
65	31456	Impeller bolt & key (5/8 x 3)	1
66	31457	5/8 lockwasher	1
67	36255	Impeller shaft	1
68	36163	Impeller shaft bearing	2
69	31459	1/2" x 1-3/4" hex bolt (impeller shaft inner bearing)	4
70	31461	1/2" x 2-1/2" hex bolt (impeller shaft outer bearing)	4
71	31460	Impeller shaft outer bearing spacer	4
72	31078	1/2" lockwasher	8
73	31022	1/2" hex nut	8
74	31458	Impeller shaft collar	2
75	36256	Impeller shaft pulley	1
76	36233	Impeller shaft pulley hub ass'y (w/hardware)	1
77	31677	Key - 3/8" x 3-1/2"	1
78	36257	Lower input shaft	1
79	36167	Lower input shaft bearing	2
80	31147	1/2" x 1-3/4" hex bolt	8
81	31043	1/2" flatwasher	4
82	31078	1/2" lockwasher	8
83	31022	1/2" hex nut	8
84	37100	Lower input shaft inner bearing bolt plate	1
85	31453	1/2" x 4" Allen head pusher bolt	2
86	31462	Lower input shaft locking collar	2
87	36258	Lower input shaft pulley	1
88	36231	Lower input shaft pulley hub ass'y (w/hardware)	1
89	31678	Key - 1/4" x 2-1/4"	1
90	36259	Drive belts (4 to a set)	1 set
91	36253	Drive shaft - tractor end*	1
92	36254	Drive shaft - unit end*	1
*	36252	Drive shaft - complete assembly	--
93	31449	5/16 drive shaft key	1
94	31448	1/4 x 2-1/2 bolt & nut	1

PARTS LIST # 5772 – REV. B

GIANT-VAC MODEL 3200 / 4000 PTO BLOWER

Ref No.	Part No.	Description	Qty	
			3200	4000
SHEET 1				
1	10178	Blower housing	1	--
1	10111	Blower housing	--	1
2	31084	1/2" x 1-1/4" hex bolt	14	14
2	31147	1/2" x 1-1/2" hex bolt (shaft frame bottom cover)	2	2
2a	31043	1/2" flatwasher (shaft frame bottom cover)	2	2
3	31022	1/2" lockwasher	16	16
4	31078	1/2" hex nut	16	16
5	20186	Intake baffle	1	1
6	31114	3/8" x 1" hex bolt	5	5
7	31115	3/8" lockwasher	5	5
8	24619	Deflector – left hand discharge	1	--
8	24620	Deflector – right hand discharge	1	--
8	24587	Deflector - typical	--	2
9	31114	3/8" x 1" hex bolt	4	4
10	31388	3/8" lock nut	4	4
11	33119	Caster horn	2	2
12	33120	Caster wheel - 410-350-6	2	2
13	31450	3/4" x 7" axle bolt	2	2
14	33121	Axle spacer	4	4
15	33122	Wheel bearing & seal	4	4
16	31451	3/4-25 axle castle nut	2	2
17	31452	Axle nut cotter pin	2	2
18	31455	Caster horn thrust bearing 1-1/4"	2	2
19	31454	Sleeve bushing 1-1/4" ID	4	4
20	33123	Caster horn spacer set (2", 1", 1/2")	2	2
21	31489	5/8" flatwasher	2	2
22	31043	1/2" flatwasher	2	2
23	31078	1/2" lockwasher	2	2
24	31084	1/2" x 1-1/4" hex bolt	2	2
25	31437	Caster horn grease fitting	2	2
26	31454	Sleeve bushing 1-1/4" ID	2	2
27	23156	Inner deflector door rod	1	1
28	20187	Inner deflector door	1	1
29	31492	3/8 x 3/4" hex bolt	3	3
30	31115	3/8" lockwasher	3	3
31	27179	Spring arm holder	1	1
32	31466	Spring	1	1
33	31476	1/2" lock nut	2	2
34	31043	1/2" flatwasher	2	2
35	23157	Deflector rod upper arm	1	1
36	23155	Control rod	1	1
37	31103	Control rod knob - 3/8"	1	1
38	31424	1/2" lock nut	1	1

PARTS LIST # 5772 – REV. B

GIANT-VAC MODEL 3200 / 4000 PTO BLOWER

Ref No.	Part No.	Description	Qty	
			3200	4000
SHEET 2				
39	10110	Blower back & shaft frame	1	1
40	27178	Control rod guide bracket	1	1
41	31084	1/2" x 1-1/4" hex bolt	2	2
42	31078	1/2" lockwasher	2	2
43	31022	1/2" hex nut	2	2
44	27127	Shaft frame bottom cover	1	1
44a	31368	1/2" x 1" bolt, lockwasher & nut (not shown)	2	2
44b	31043	1/2" flatwasher (not shown)	2	2
45	37101	Shaft frame top cover plate	1	1
46	31562	#12 x 3/4" self tapping screw	6	6
47	38015	Top hitch point bracket	1	1
48	31084	1/2" x 1-1/4" hex bolt	4	4
49	31078	1/2" lockwasher	4	4
50	31022	1/2" hex nut	4	4
51	38016	Hitch lower point plate	2	2
52	31676	Jack stand spacer - 1/8"	4	4
53	31470	Jack stand spacer - 1/4"	8	8
54	38018	Jack stand side support plate	2	2
55	31467	1/2" x 3-1/2" hex bolt	8	8
56	31078	1/2" lockwasher	8	8
57	31022	1/2" hex nut	8	8
58	38017	Jack stand	2	2
59	31468	Jack stand pin	2	2
60	31469	Jack stand hair clip	2	2
61	31463	Hitch pin	2	2
62	31465	7/8" hitch pin lockwasher	2	2
63	31464	7/8" hitch pin nut	2	2
64	21576	Impeller	1	--
64	21542	Impeller	--	1
65	31456	Impeller bolt & key (5/8 x 3)	1	1
66	31457	5/8 lockwasher	1	1
67	36162	Impeller shaft	1	1
68	36163	Impeller shaft bearing	2	2
69	31459	1/2" x 1-3/4" hex bolt (impeller shaft inner bearing)	4	4
70	31461	1/2" x 2-1/2" hex bolt (impeller shaft outer bearing)	4	4
71	31460	Impeller shaft outer bearing spacer	4	4
72	31078	1/2" lockwasher	8	8
73	31022	1/2" hex nut	8	8
74	31458	Impeller shaft collar	2	2
75	36164	Impeller shaft pulley (4V)	1	--
75	36234	Impeller shaft pulley (5V)	--	1
76	36232	Impeller shaft pulley hub assembly (w/hardware)	1	1
77	31677	Key - 3/8" x 3-1/2"	1	1
78	36166	Lower input shaft	1	1

PARTS LIST # 5772 – REV. B

GIANT-VAC MODEL 3200 / 4000 PTO BLOWER

<u>Ref</u> <u>No.</u>	<u>Part</u> <u>No.</u>	<u>Description</u>	<u>Qty</u>	
			<u>3200</u>	<u>4000</u>
79	36167	Lower input shaft bearing	2	2
80	31147	1/2" x 1-3/4" hex bolt	8	8
81	31043	1/2" flatwasher	8	8
82	31078	1/2" lockwasher	8	8
83	31022	1/2" hex nut	4	4
84	37100	Lower input shaft inner bearing bolt plate	1	1
85	31453	1/2" x 4" Allen head pusher bolt	2	2
86	31462	Lower input shaft locking collar	2	2
87	36168	Lower input shaft pulley (4V)	1	--
87	36235	Lower input shaft pulley (5V)	--	1
88	36230	Lower input shaft pulley hub ass'y (w/hardware)	1	1
89	31678	Key - 1/4" x 2-1/4"	1	1
90	36165	Drive belts (4 to a set)	1 set	--
90	36236	Drive belts (5 to a set)	--	1 set
91	36169	Drive shaft - tractor end*	1	1
92	36170	Drive shaft - unit end*	1	1
*	36171	Drive shaft - complete assembly	--	--
93	31449	5/16 drive shaft key	1	1
94	31448	1/4 x 2-1/2 bolt & nut	1	1

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE