

INSTRUCTIONS FOR ASSEMBLING AND OPERATING YOUR GIANT-VAC MODEL 1690IC

As you unpack your Giant-Vac power unit, you will find the following parts:

- 1 - Power unit with motor, impeller and wheels mounted.
- 1 - Set of handles in three parts
- 1 - Handle brace
- 1 - Package of hardware

Inspect parts for any damage that occurred in shipping. If found, save the packing box and IMMEDIATELY notify the transport carrier who delivered your machine. They are responsible for the damage and are the only ones to make any adjustments. Before leaving our plant, all dimensions are held to close tolerances. Thus, you will have little difficulty in assembling your Giant-Vac if you follow these steps.

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.

ASSEMBLY INSTRUCTIONS

HANDLE AND THROTTLE CONNECTIONS:

We make the handles in three parts and they have a telescopic fit. Completely assemble the handles and handle brace before fastening them to the vac as a unit. When assembling the handles, it is important that you DO NOT TIGHTEN ANY OF THE BOLTS until the assembly operations are complete. With the bolts loose, there will be enough movement to permit fast and easy assembly. Proceed as follows:

Insert the two lower handles into the upper handle until the bolt holes are in line. Fasten the handle brace to the handles with the two 5/16 x 1-3/4" round head bolts, lock washers and acorn nuts. In order to avoid tearing the bag, THE HEADS OF THE BOLTS SHOULD BE ON THE INSIDE OF THE HANDLES AND THE ACORN NUTS ON THE OUTSIDE. DO NOT TIGHTEN THESE BOLTS YET. The handle assembly is now ready to attach to the vac. Fasten the lower handles to the base with four 5/16 x 1-3/4" hex bolts, lock washers and nuts. DO NOT TIGHTEN THESE BOLTS YET.

Next, install the handle brace to the stud on the housing with a 3/8" lock washer and nut. Now that the handles are assembled to the machine, tighten **all** the bolts. Take the throttle cable and run it along the left side of the handle about 1/3 its length. Secure it with a clip about two inches below the brace. Secure the throttle lever to the handle by means of two 10-24 x 1-1/2" bolts, lock washers and nuts. Put the second clip just below the curve in the upper handle. Make sure you have left a generous loop between the engine and the bottom clip. THIS IS IMPORTANT to prevent the throttle binding. After starting your engine, adjust the length of the cable by loosening the screw at the throttle lever for proper engine operation.

INSTRUCTIONS FOR ASSEMBLING AND ADJUSTING DRIVE LINKAGE FOR SELF-PROPELLED GIANT-VAC

After assembling the handles and other fittings on your self-propelled vac, as explained above, you are now ready to assemble the Drive Linkage Assembly.

Before assembling, it is best to become acquainted with the transmission box. Note, a bracket is attached to the transmission with a 5/16 x 3/4" bolt. This rod has three positions. Turn it left, it will drive forward; in the middle, it is in neutral; turn it right, it will be in reverse. NOTE: IF SHIFTING IS DIFFICULT IN ANY POSITION, ROLL THE MACHINE FORWARD ON ITS WHEELS WHILE MAKING THE ABOVE CHECKS. This allows the gears to mesh correctly.

To assemble:

Remove the belt guard, then slide the lever into the bracket. Replace the belt guard and attach the master link.

DRIVE CABLE:

Note the lower end of the drive cable connects to the idler arm. Be certain the cable is flexible. Then fasten the outer end of the cable to the bottom of the spring attached to the clutch handle. Adjust the cable length with the cable clamp, then tighten the clamp. **CAUTION:** While fastening the cable to the clutch handle, or adjusting the clutch, pull the cable until the idler pulley just clears the belts. It is important to have this adjustment correct, as the transmission might be seriously damaged if shifted while power is being supplied to the transmission.

NOTE: IMPORTANT

When running the machine, be certain that the transmission is not revolving when the shift lever is in the neutral position. This happens when the idler pulley contacts the belt. THIS MUST BE OBSERVED. Neglect will result in a damaged transmission.

ATTACHMENTS:

Your Giant-Vac is extremely versatile, therefore, many attachments are available. These are easily interchangeable and fasten to your machine as follows:

All attachments which fasten to the suction end of the machine (the large round hole in the front) are secured by 3/8" wing bolts and lock washers. All attachments for the exhaust end of the machine (the smaller hole at the top of the housing) fasten with 5/16 x 1" bolts, lock washers, and wing nuts. This hardware is in the package shipped with the power unit.

VACUUM UNIT:

The vacuum unit, separately packaged, contains the nose cone, discharge elbow and dust control bag. These attach to the power unit by means of the screws described in the foregoing paragraph.

The nose cone attaches to the suction end of the machine and the exhaust elbow attaches to the exhaust end of the machine. In general, if you use your Giant-Vac on an even surface, a 5/8" clearance for the nose cone is desirable. Adjust the nose cone height by turning the caster assembly at the front of the nose cone. Tighten the thumb nut after reaching the desired height. The brush at the back of the nose cone raises or lowers easily by loosening the two bolts and sliding the brush and the brush holder by means of the adjustment slots provided. The height of the brush depends upon the particular application. Remember to re-tighten the bolts after making the adjustments. **For the FT30 or FT36 nose cone, bolt the U-clip, Ref. #90, on the left side of the vac, replacing the acorn nut joining the handles. Next put the upper lever, Ref. #91, through the U-clip and bolt the lower lever, Ref. #92, to it with two 5/16 x 3/4" hex bolts, lock washers and nuts. Then bolt the lower lever to the door on the nose cone, using a 5/16 x 3/4" hex bolt and lock nut. To operate, push handle to front of the machine then pull back and lock in U-clip. This will open and close the nose cone door for ease in picking up bulky items, such as cans and bottles.**

DUST CONTROL BAG:

The bag goes over the exhaust elbow and locks there by means of a fast tightening, locking buckle. A loop at the opposite end fits over the upper handle. This is a very large capacity bag - designed to keep dust to a minimum. The vent at the upper end of the zippered opening is for faster pick-up on some applications. This also allows the bag fill completely. *Empty the bag after every use and clean periodically.* One way to clean the bag is to leave the zipper open and run the engine for a few minutes while shaking the bag vigorously. Turning the bag inside out and sweeping briskly with a stiff broom is sometimes desirable when the bag is extremely dirty. We recommend a 510 liner bag for exceedingly dusty applications. This bag fits into the regular 210 dust control bag. **IMPORTANT: TO AVOID INJURY - DO NOT STAND BEHIND THE OPENING WITH THE ZIPPER OPEN WHILE THE ENGINE IS RUNNING.** It is **most** important that the bag be kept clean for efficient operation. We recommend occasional dry cleaning.

OPTIONAL ATTACHMENTS

BLOWING ATTACHMENT:

The blower attachment is in a separate package, which contains the exhaust blowing nozzle with an adjustable vane and the front baffle plate. Fasten these to the power unit assembly with the exhaust blower attaching in place of the exhaust elbow, and the baffle going on the front in place of the nose cone. Use the bolts supplied with the power unit assembly. When using the blower unit, it is **important** to install the front baffle plate to shield the high speed impeller. **REMEMBER THAT HIGH SPEED MOVING PARTS SHOULD BE TREATED WITH CARE. WE HAVE INSTALLED SAFEGUARDS - BE SURE TO USE THEM!!** You can mount the blower unit so that it is either facing the side or the front of the machine. Changing the speed of your engine changes the force of the exhaust. By using this method, you can move litter into a neat row at a very rapid rate. In operation, bear down on the handles so the front assembly rises slightly off the ground. The wheel assembly

mounts at the front setting. Do not pass or stand on the air discharge side of the blowing nozzle with the engine running. Stop operation when another person or an animal approaches.

HOSE ATTACHMENTS:

Many hose attachments are available for both vacuuming and blowing operations. They all mount in the same manner as the foregoing. They are ideal for cleaning leaves from hedges, chimneys and stair wells, as well as, other applications.

MOTOR INSTRUCTIONS:

You received a complete engine manual with your machine. Be sure to especially note the instructions on OILING. *ALL MACHINES ARE SHIPPED **WITHOUT OIL OR GASOLINE UNLESS OTHERWISE NOTED***. If you have any difficulties with the engine, check the Yellow Pages of your phone book for the engine dealer nearest you, rather than us, as the engines are under their own manufacturer's warranty.

SAFETY AND OPERATING INSTRUCTIONS

TRAINING:

1. Regard your Giant-Vac as a piece of power equipment and teach this regard to all who will operate this unit.
2. **Never** allow children or young teenagers to operate the Giant-Vac.
3. Be sure you know how to stop the engine at a **MOMENT'S NOTICE**.
4. Instruct children to keep away from the area of operation at all times.

PREPARATION:

1. Before starting operation, clear the **entire** work area of **all** debris that could catch on or be throw by the Leaf Vac.
2. Unless there is very good artificial light, use **only** during daylight.
3. Fill gasoline driven machines outdoors. Avoid spilling gasoline and **DO NOT** fill the engine while it is running or while you are smoking.

OPERATION:

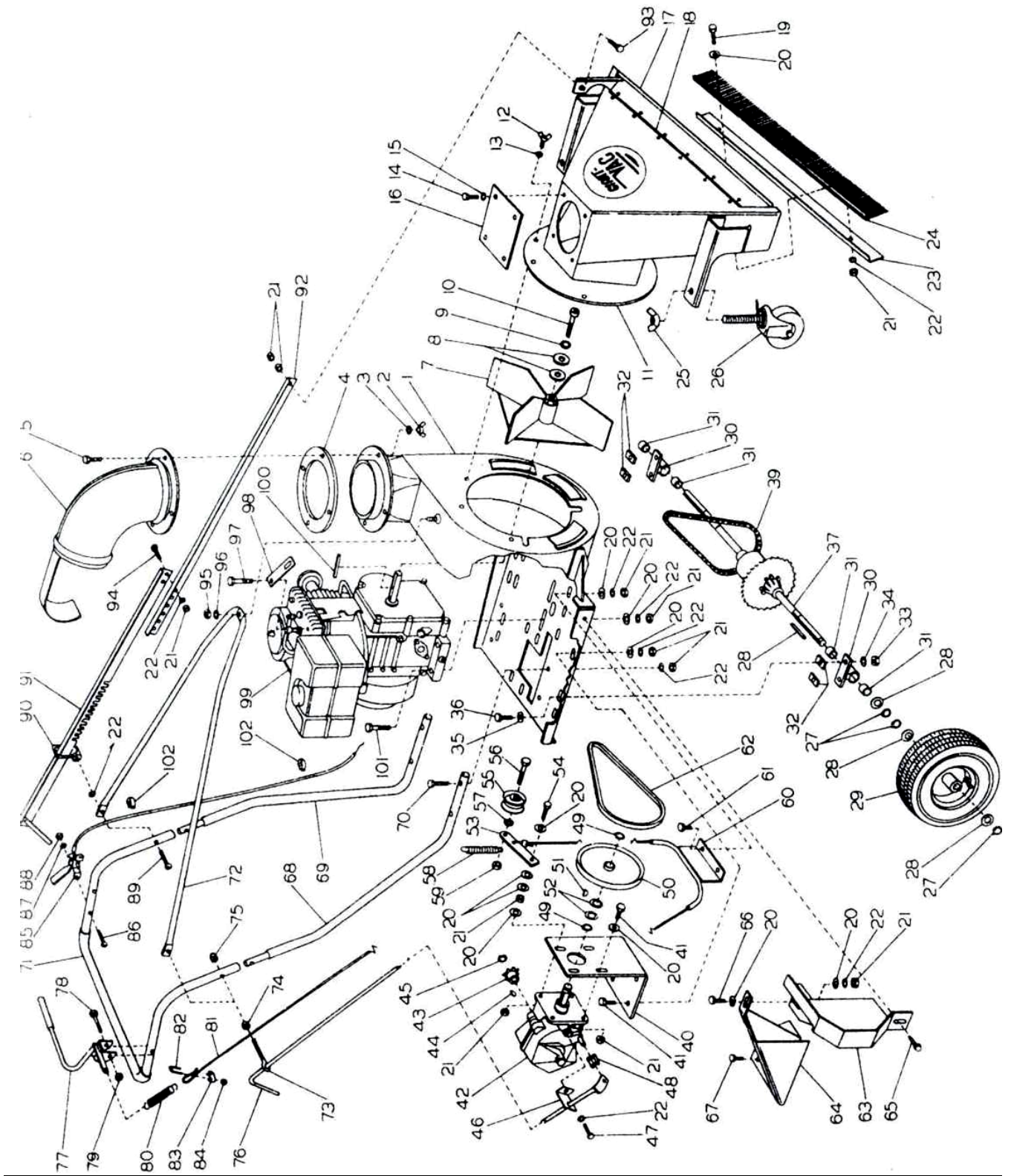
1. **Do not** operate with any guards or component parts removed from unit.
2. Before making any adjustments or repairs, stop engine and remove spark plug wire.
3. While in operation, **keep all parts of body** away from intake and exhaust sections.

4. When operating machine, keep people and pets a safe distance away.
5. Before starting, be certain to check the engine's OIL AND GASOLINE. (See engine manufacturer's Service Manual.) **NEVER** check the engine while engine is running or while you are smoking. Check **ONLY** when engine is cold.
6. Before starting the engine, be certain to **completely** assemble the unit. With your right hand, set the throttle control to the "on" position. When the engine is cold, you might have to initially choke the engine. (The choke lever is next to the carburetor.) Next, with your left hand, pull the recoil starter rope slowly until you feel compression, then pull fast and steady. Do **not** let allow the recoil starter rope snap back by itself. This may damage the rope or recoil starter assembly. After the engine starts, move the throttle lever down to approximately halfway.

MAINTENANCE AND STORAGE:

1. Follow *implicitly* the manufacturer's recommendations for maintenance.
2. **Never** adjust the Leaf Vac or change attachments until the engine is off and the spark plug wire disconnected.
3. If carburetor adjustment is necessary, stand to one side and keep feet and hands in the in the clear while making adjustments.
4. Keep engine free from accumulations of grass, leaves or excessive grease. An accumulation of these combustible materials may result in a fire.
5. Store gasoline in a safe and approved container in a cool dry place.
6. Keep the Leaf Vac and fuel container in locked storage to prevent children from playing and/or tampering with them.
7. **DO NOT** store gasoline powered equipment or fuel containers in a basement or any closed area where heating or heat appliances or open pilot lights are present, unless the fuel is completely drained from the power equipment and the fuel containers.

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PARTS LIST NO. 5782**R0503.1**

<u>REF.</u> <u>NO.</u>	<u>PART</u> <u>NO.</u>	<u>DESCRIPTION</u>	<u>1690IC</u>
1	10136	Blower housing & engine base	1
2	31592	5/16" wing nut	4
3	31003	5/16" lock washer	4
4	31105	Rubber gasket	1
5	31282	5/16 x 1" hex bolt	4
6	24510	Exhaust elbow	1
7	21554	Impeller	1
8	31020	7/16" special flat washer	1
9	31020	7/16" lock washer	1
10	31020	7/16 x 2" impeller bolt	1
11	27039	FT30 nose cone body	1
11	27040	FT36 nose cone body	1
11	27015	S100 nose cone body	1
11	27017	30HV nose cone body	1
12	31026	3/8-16 Wing bolt	3
13	31008	3/8" lock washer	3
14	31016	5/16 x 5/8" hex bolt	4
15	31003	5/16" lock washer	4
16	27045	FT nose cone cover plate	1
17	27041	FT30 door	1
17	27042	FT36 door	1
18	27043	FT30 hinge	1
18	27044	FT36 hinge	1
19	31005	5/16 x 1 1/4" hex bolt	2
20	31027	5/16" flat washer	21
21	31004	5/16" hex nut	27
21a	31436	5/16" lock nut	1
22	31003	5/16 lock washer	20
23	27019	30" nose cone brush holder	1
23	27020	36" nose cone brush holder	1
24	27010	30" nose cone brush	1
24	27011	36" nose cone brush	1
25	31038	3/4" thumb nut	2
26	33014	4" caster assembly	2
27	31000	5/8" snap ring	2
28	31074	Plain washer	2
29	33028	410 x 3.50 pneumatic wheel	2
30	36244	Bearing unit – 3/4"	2
31	31653	3/4" split collar	2
32	31593	Pillow block spacers	4
33	31004	5/16-18 hex nut	4

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<u>REF.</u> <u>NO.</u>	<u>PART</u> <u>NO.</u>	<u>DESCRIPTION</u>	<u>1690IC</u>
34	31003	5/16" lock washer	4
35	31027	5/16" flat washer	8
36	31005	5/16-18 x 1-1/4" hex bolt	4
37	33153	Axle and differential assembly	1
38	31594	Axle key 3/16 x 1"	2
39	36209	#41 chain w/30 outer links & half link	1
40	37107	Transmission bracket	1
41	31031	5/16 x 3/4" hex bolt	7
42	36012	Transmission	1
43	Trans.	Sprocket	1
44	Trans.	Sprocket key	1
45	Trans.	Snap ring	1
46	37108	Shift rod bracket	1
47	31031	5/16 x 3/4" hex bolt	1
48	36207	#41 master link	1
49	Trans.	Snap ring	2
50	36017	Transmission pulley	1
51	31107	3/16 x 5/8" woodruff key	1
52	Trans.	Spacer	2
53	36081	Idler arm	1
54	31006	5/16 x 1 1/2" hex bolt	1
55	36080	Idler pulley	1
56	31595	3/8 x 1 3/4" hex bolt	1
57	31008	3/8" lock washer	1
58	24502	Idler spring	1
59	31355	3/8" lock nut	1
60	37110	Cable guide	1
61	31031	5/16 x 3/4" hex bolt	2
62	36208	Belt L332	1
63	37109	Belt guard	1
64	37000	Chain guard	1
65	31596	5/16 x 3/4" self-threading bolt	1
66	31031	5/16 x 3/4" hex bolt	1
67	31031	5/16 x 3/4" hex bolt	3
68	23034	Lower handle - right	1
69	23035	Lower handle - left	1
70	31062	5/16 x 1 3/4" hex bolt	4
71	23005	Upper handle	1
71a	31590	Foam handle cover	1
72	23016	Handle brace	1
73	31598	5/16" eye bolt	1

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<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>1690IC</u>
74	31004	5/16" nut	1
75	31028	5/16" acorn nut	2
76	23189	Shifting handle	1
77	23066	Clutch handle	1
78	31256	1/4-20 x 1 3/4" hex bolt	1
79	31293	1/4-20 lock nut	1
80	31466	Brake spring	1
81	35008	Drive cable 55"	1
82-84	31597	Cable clamp	2
85	35002	Throttle cable	1
86	31010	10-24 x 1 1/2" bolt	2
87	31010	10-24 lock washer	2
88	31010	10-24 hex nut	2
89	31056	5/16 x 1 1/2" cap screw	2
90	31101	U-clip	1
91	23023	Upper lever	1
92	23022	Lower lever	1
93	31032	5/16 x 1" hex bolt	1
94	31031	5/16 x 3/4" hex bolt	2
95	31009	3/8" nut	1
96	31008	3/8" lock washer	1
97-98	-----	Not Used	1
99	39094	9HP B&S Intek engine	1
---	32159	1" Engine height spacer	4
100	31020	Impeller key	1
101	31623	5/16 x 2 1/2" hex bolt	4
102	31007	Throttle clip	2

ITEMS NOT SHOWN

24533	Blower air chute	1
20103	Blower intake baffle	1
24513	Blower chute deflector	1
31055	1/4 x 5/8" bolt, wing nut & lock washer	2
20128	Intake flange 4" - SP	1
20129	Intake flange 5" - SP	1
20130	Intake flange 6" - SP	1
20132	Intake flange 8" - SP	1
24511	Exhaust flange 7"	1
34002	Intake hose 4"	1
34003	Intake hose 5"	1

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<u>REF.</u> <u>NO.</u>	<u>PART</u> <u>NO.</u>	<u>DESCRIPTION</u>	<u>1690IC</u>
	34004	Intake hose 6"	1
	34006	Intake hose 8"	1
	34018	Exhaust hose 7" x 10" metal	1
	34011	Hose clamp 4"	2
	34012	Hose clamp 5"	2
	34013	Hose clamp 6"	2
	34015	Hose clamp 8"	2
	20145	Nozzle 4"	1
	20146	Nozzle 5"	1
	20147	Nozzle 6"	1
	20149	Nozzle 8"	1
	34047	Squeeze ring 7"	1
	210	Dust control bag	1
	510	Liner bag	1
	710	Polypropylene bag	1

Specifications Subject To Change Without Notice

GIANT-VAC WARRANTY

GIANT-VAC, INC., 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

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