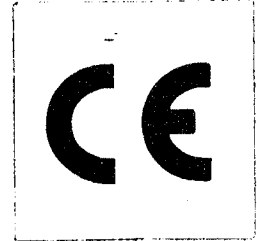


**GIANT-VAC MFG. INCORPORATED**



**OPERATOR / OWNERS MANUAL  
2425-BHWSA  
WOOD SPLITTER**

## IN THE INTEREST OF SAFETY



**BEFORE STARTING ENGINE, READ AND UNDERSTAND THE "ENTIRE OPERATOR'S MANUAL & ENGINE MANUAL."**



**THIS SYMBOL MEANS WARNING OR CAUTION. DEATH, PERSONAL INJURY AND/OR PROPERTY DAMAGE MAY OCCUR UNLESS INSTRUCTIONS ARE FOLLOWED CAREFULLY.**

### WARNING: DO NOT

1. DO NOT run engine in an enclosed area. Exhaust gases contain carbon monoxide, an odorless and deadly poison.
2. DO NOT place hands or feet near moving or rotating parts.
3. DO NOT store, spill or use gasoline near an open flame, or devices such as a stove, furnace, or water heater which has a pilot light or devices which can create a spark
4. DO NOT refuel indoors where area is not well ventilated. Outdoor refueling is recommended.
5. DO NOT fill fuel tank while engine is running. Allow engine to cool for 2 minutes before refueling. Store fuel in approved safety containers.
6. DO NOT remove fuel tank cap while engine is running.
7. DO NOT operate engine when smell of gasoline is present or other explosive conditions exist.
8. DO NOT operate engine if gasoline is spilled. Move machine away from the spill and avoid creating any ignition until the gasoline has evaporated.
9. DO NOT transport unit with fuel in tank.
10. DO NOT smoke when filling fuel tank.
11. DO NOT choke carburetor to stop engine. Whenever possible, gradually reduce engine speed before stopping.
12. DO NOT run engine at excessive speeds. This may result in injury &/or damage to unit.
13. DO NOT tamper with governor springs, governor links or other parts which may change the governed engine speed.
14. DO NOT tamper with the engine speed selected by the engine manufacturer.
15. DO NOT check for spark with spark plug or spark plug wire removed. Use an approved tester.
16. DO NOT crank engine with spark plug removed. If engine is flooded, place throttle in "FAST" position and crank until engine starts.
17. DO NOT strike flywheel with a hard object or metal tool as this may cause flywheel to shatter in operation. Use proper tools to service engine.
18. DO NOT operate engine without a muffler. Inspect periodically and replace, if necessary. If engine is equipped with muffler deflector, inspect periodically and replace, if necessary, with correct deflector.
19. DO NOT operate engine with an accumulation of grass, leaves, dirt or other combustible material in the muffler area.
20. DO NOT use this engine on any forest covered, brush covered, or grass covered unimproved land unless a spark arrester is installed on the muffler. The arrester must be maintained in working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands.
21. DO NOT touch hot muffler, cylinder, or fins because contact may cause burns.
22. DO NOT run engine without air cleaner or air cleaner cover.
23. DO NOT operate during excessive vibration.
24. DO NOT leave machine unattended while in operation.
25. DO NOT park machine on a steep grade or slope.

### WARNING: DO

1. ALWAYS DO remove the wire from the spark plug when servicing the engine or equipment TO PREVENT ACCIDENTAL STARTING.
2. DO keep cylinder fins and governor parts free of grass and other debris which can affect engine speed.
3. DO pull starter cord slowly until resistance is felt. Then pull cord rapidly to avoid kickback and prevent hand or arm injury.
4. DO examine muffler periodically to be sure it is functioning effectively. A worn or leaking muffler should be repaired or replaced as necessary.
5. DO use fresh gasoline. Stale fuel can gum carburetor and cause leakage.
6. DO check fuel lines and fittings frequently for cracks or leaks. Replace if necessary.
7. Follow engine manufacturer operating and maintenance instructions.
8. Inspect machine and work area before starting unit.

## SOUND

### SOUND TESTS

Sound tests conducted were in accordance with 79/113/EEC and were performed on 00/00/96 under the conditions listed:

GENERAL CONDITION: \_\_\_\_\_  
TEMPERATURE: \_\_\_\_\_  
WIND SPEED: \_\_\_\_\_  
WIND DIRECTION: \_\_\_\_\_  
HUMIDITY: \_\_\_\_\_  
BAROMETRIC PRESSURE: \_\_\_\_\_

OPERATOR

## VIBRATION

### VIBRATION LEVELS 0.0 g

Vibration levels at the operators handles were measured in the vertical, lateral, and longitudinal directions using calibrated vibration test equipment. Tests were performed on 00/00/96 under the conditions listed:

GENERAL CONDITION: \_\_\_\_\_  
TEMPERATURE: \_\_\_\_\_  
WIND SPEED: \_\_\_\_\_  
WIND DIRECTION: \_\_\_\_\_  
HUMIDITY: \_\_\_\_\_  
BAROMETRIC PRESSURE: \_\_\_\_\_

## GENERAL SAFETY

*For your safety and the safety of others, these directions should be followed:*



Do not operate this machine without first reading owner's manual and engine manufacturer's manual.



Use of Ear Protection is recommended while operating this machine.

Use of Eye and Breathing protection is recommended when using this machine, especially in dry and dusty conditions.

•DO NOT operate during excessive vibration.

- DO NOT operate machine with hose flange, or hose removed
- DO NOT use this machine for vacuuming exclusively sand, dust, fine dirt, rock, glass, string like material, grain, rags, cans, metal, bark or water.
- DO NOT pick up any hot or burning debris, or any toxic or explosive material
- DO NOT operate this machine on slopes greater than 20%.
- DO NOT place hands or feet inside nozzle intake opening. near debris outlet or near any moving parts
- DO NOT allow children to operate this equipment.

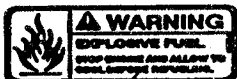
## PACKING CHECKLIST

These items should be included in your carton. If any of these parts are missing, contact your dealer.

Literature Checklist	
Owner's Manual	<input type="checkbox"/> Check Owner's Manual
Literature Loose Parts	<input type="checkbox"/> Check Literature Loose Parts
Accessories	<input type="checkbox"/> Check Accessories
Warranty Card	<input type="checkbox"/> Check Warranty Card
EU Declaration of Conformity & EU Distributor List	<input type="checkbox"/> Check EU Declaration of Conformity & EU Distributor

### INSTRUCTION LABELS

These labels should be included on your Vacuum. If any of these labels are damaged, replace them before putting this equipment into operation.



Label Do Not Fill While Engine is Hot



Label Read Owner's Manual



Label Danger Flying



Label Danger Keep Hands and Feet Away



Label Ear Eye Breathing

### ENGINE LABELS

Briggs & Stratton



**GIANT-VAC MFG., INCORPORATED**  
**SOUTH WINDHAM, CT 06226**  
**860-423-7741**

**THE BIG-GIANT LOG SPLITTER**

Model 2425-BHWSA

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Your Big-Giant Log Splitter comes complete in two crates--Models 2405-B and 2405-BHW, three crates - with the necessary parts. Inspect your unit for any damage that might have occurred in shipping. If any is found, save the packing container and immediately notify the Transport Carrier who delivered your machine as he is responsible for the damage and is the only one to make any adjustments. Before leaving our plant, all components are completely inspected. All manufacturing dimensions are held to close tolerances, and thus you will have little difficulty in assembling your Log Splitter 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.**

**MOTOR INSTRUCTIONS:**

You have received a complete engine manual with your machine. Especially note instructions on OILING. Fill out the Warranty Card immediately and send it to the engine manufacturer and not to Giant-Vac. Consequently, if any difficulties exist, please contact them rather than us as much time will be saved as they are the only ones to make any adjustments. If you will check the yellow pages in your telephone book, you will find the local engine servicing dealer.

1. Install wheels on motor base with two 5/8" x 3 1/2" bolts and lock nuts. To tighten wheel securely, tighten lock nut onto wheels on Model 2405-BHW only. Place axle under motor base and install with four 1/2 x 2" bolts, nut & lockwasher. Next, install wheels on axle, then

securely install the 2" ball hitch and hitch holder on the front of the main frame. Caution: wheel bearing must be serviced with wheel bearing grease before installing. Do not over tighten the lock nut onto the side of the wheel bearing.

2. Install main frame onto motor base with four 1/2" x 2" bolts. Make sure flat washers and lock washers are used on slotted holes.
3. Install hydraulic pump onto motor base. First put pump shaft through center hold, then install the pump half of the coupling with an 1/8" keyway. Do not tighten at this time. Install motor end of coupling with rubber spider and using 1/4" keyway. Then install the pump with two 5/16" bolts and lock nuts. (Make sure street elbow on pump is facing upward). (We recommend type sealer Teflon on all pipe thread fittings). Then install low pressure hose from pump to main frame. This would be the hole closest to the wedge on the main frame.
4. Install valve body onto motor base upright. (Make sure the valve handle is facing towards wedge). With three 2" x 5/16" bolts, nuts and lockwashers. Next, install high pressure hose from pump to cylinder side of valve. Then install the two top hoses from valve to cylinder. The short hose goes to the front part of cylinder and long hose goes to the back part of cylinder, then install the other low pressure hose, again using Teflon pipe sealer onto main frame. This hole is located near the motor base. Next install valve handle.
5. Install ram head onto cylinder rod using the 1 1/4" pins supplied and using the 1/2" bolts with lock washers and flat washer supplied. Make sure to use flat washers to hold pins in place. Then slide the four 1/2" bolts through ram head and install the two bottom spacers and then the bottom plate and securely lock with 1/2" nuts and lock washers supplied. Make sure ram head is installed on center of top plate.
6. CAUTION: Before starting engine. The hydraulic pump can be damaged if run before the hydraulic system has been serviced.
7. Please follow the engine manual for type of oil and grade of gasoline to be used.
8. Do not run engine until hydraulic system has been serviced with 14 quarts of Quaker State Dextron 2 or equivalent type automatic transmission fluid.

### OPERATING INSTRUCTIONS

**CYCLING RAM:** Cycle the ram 15 to 20 full strokes to eliminate any trapped air in the hydraulic system. If the ram seems to lunge or moves in surges, some air is still trapped in the system. Continue to cycle the ram through the full stroke until a steady forward and return stroke is obtained.

**OPERATING LEVER:** Ram movement forward, neutral and reverse is completely controlled by the lever. Pushing the lever forward or towards the wedge will cause the ram to move

forward. When the lever is in the center, the ram will not move. Pull the lever for reverse. The lever may be pushed into forward or into reverse at any time during the forward or return stroke.

**LOG SIZE:** Your Big-Giant Log Splitter provides over 10 ton ram pressure and is designed to split most wood 24 inches long by 18 inches in diameter. To split large, tough logs, always place the log on the splitter so as to split first, a side section. Continue to slab split the large log until a medium sized piece remains, then split it down the center.

**MAINTENANCE:**

- A. Please follow your Engine Manual on type of oil and when to change it.
- B. The oil and oil filter in the hydraulic system should be changed every 80 hours of operation under normal conditions, and more frequently under dusty conditions. To change the oil in the hydraulic system, the RAM should be in returned position, then simply remove the plug located under the FRAME. Refill with 14 quarts of Quaker State Dextron 2 or equivalent after replacing plug on bottom of frame. To check oil level, run the RAM out all the way and there should be two (2) inches oil level in the oil tank.
- C. Keep the top platen where the log and ram travel free from oil and dirt. The guide shoes under the ram will last longer. Dirt mixed with oil acts as an abrasive compound and quickly wears down the ram shoes and top platen.

**CHECK ALIGNMENT BEFORE STARTING PUMP**

The single common cause of pump failure on start up (AND IS NOT WARRANTED) is failure to correctly mount the flexible coupling on the pump shaft end and/or misaligning the pump/coupling/motor or engine drive.

- 1. Don't force or pound the pump coupling half over the pump shaft. End thrust could damage the pump internally.
- 2. The flexible coupling is not a universal joint. Coupling shaft misalignment acts directly on the shaft seal, shaft bearing, and precision-fitted internal parts. Before the initial start up and after mounting pump and piping is complete, take enough time for a final check with a straight edge that the coupling halves are not parallel or angular misaligned (see sketch) or too close and introducing an end thrust to the pump.

## **SOME MORE CAUTIONS**

If you use Teflon tape on your fittings, use only 1½ wraps and none on the first two threads. Special care should be taken to avoid over-tightening pipe connections. Due to the excellent lubricity of the Teflon tape the wrench tightening "feel" is different than when the fitting is dry or pipe doped. You can screw a fitting in and crack the port or distort the casting without getting a "snugged up" feel. A good rule of thumb is to turn the connector (Example 3/8 NPTF steel tubing fitting) in about 2½ turns by hand then 1½ turns by wrench into a 3/8 NPTF tapped port hole in cast iron. Remember it is usually easier and cheaper to snug up a leaking joint than to replace a component.

Starting the hydraulic pump properly for the first time can save you trouble of a quick failure. Jog the pump several times (alternately start and stop unit) until pump is primed and full flow begins.

Use the recommended CLEAN oil. If pump is noisy it may be an indication of a starving pump, an air leak in the inlet line fittings, too thick oil, or a clogged inlet filter.

If the pump is equipped with an internal relief valve, the pump should not be operated at pressures greater than 80% of the full by-pass setting (i.e., 80% of 2000 PSI = 1600 PSI). Otherwise, it will recirculate hot oil internally overheating the pump and thinning the oil and eventually fail the pump.



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

**Parts List No. 5754**

<u>Ref</u> <u>No</u>	<u>Part</u> <u>No</u>	<u>Description</u>	<u>2425-</u> <u>BHWSA</u>
1	10071	Main Frame	1
2	10072	Motor Base	1
3	38013	Ball Hitch 2"	1
4	38014	Hitch Holder	1
5	27126	Bottom Cylinder Support	1
6	27127	Top Cylinder Support	1
7	27128	Ram Head	1
8	27129	Upper Ram Head Spacer	2
9	27130	Spacer Ram Head	2
10	27131	Bottom Ram Head Spacer	2
11	33037	Wheel 16" O.D.	2
12	33058	Hub	2
13	33057	Seal	2
14	33056	Bearing-High Speed	4
15	31151	Axle Nut	2
16	33055	Dust Cap	2
17	33086	Axle High Speed	1
18	35000	Throttle Cable	1
19	31261	Axle Bolt & Locknut, 5/8" x 4"	
20	33087	Wheel Semi-Pneumatic	
21	61017	Cylinder 24" x 4"	1
22	61018	Pump	
22	61032	Pump	1
23	61019	Valve	
23	61030	Valve Semi-Automatic	1
24	23074	Valve Control Lever	1
25	31262	Coupling Engine Half	1
26	31263	Insert Spider	1
27	31264	Coupling Pump Half	1
28	61020	Low Pressure Hose 1/2" x 28"	1
29	61021	Low Pressure Hose 1/2" x 13"	1
30	61022	High Pressure Hose 3/8" x 22"	1
31	61023	High Pressure Hose 3/8" x 24"	1
32	61024	High Pressure Hose 3/8" x 13"	1
33	31152	Lug Nut	8
34	63026	Street Elbow 1/2"	1
35	31185	Bolt, Nut, Washer 3/8" x 1 1/4"	4
36	61028	Connector 3/4" x 1 1/2"	2
37	61029	Connector 1/2" x 3/8"	2
38	61031	Filler Cap	1
39	31265	Back Ram Pin	1

**Parts No. 5754**

<b><u>Ref</u></b> <b><u>No</u></b>	<b><u>Part</u></b> <b><u>No</u></b>	<b><u>Description</u></b>	<b>2425-</b> <b><u>BHWSA</u></b>
40	31266	Front Ram Pin	1
41	31267	Bolt, Nut 5/16" x 1 1/2"	2
42	31268	Bolt, nut, washer 1/2" x 2 1/4"	12
43	31277	Key Pump Shaft	1
44	31278	Key Motor Shaft	1
45	31270	Bolt, nut washer 1/2" x 2 1/2"	4
46	31271	Valve Lever Holder	1
	39001	5 HP B&S Engine	1