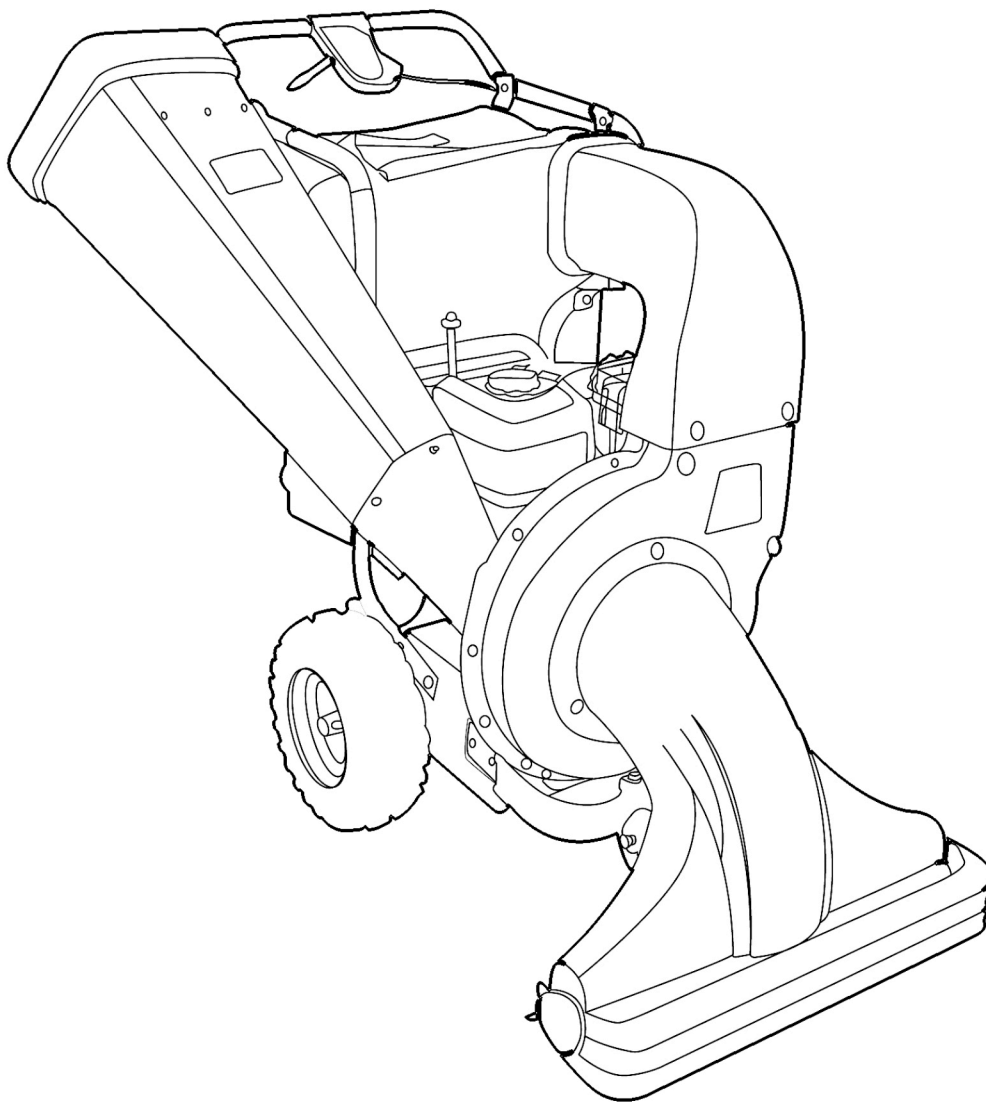


597470 VACUUM SHREDDER 6.5HP

TOOLEX[®]
Industrial



INSTRUCTION MANUAL

CONSUMER SERVICE CENTRE
PO BOX 1012
HAMILTON NSW 2303 AUSTRALIA
Made in P.R.C.

Read safety rules and instructions carefully before operation

Warning: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

This Operator's Manual is an important part of your new vacuum shredder. It will help you assemble, prepare and maintain the unit for best performance. Please read and understand what it says.

! Warning!

Be careful, there are rotating blades inside.

- Read the operator's manual.
- keep hands out of inlet and discharge openings while machine is running.
- Turn engine off and allow to come to a complete stop before clearing clogs, removing or attaching bag, vacuum nozzle or optional hose kit.
- Do not operate without bag and vacuum nozzle or optional hose kit in place.
- Do not install and remove any parts when the machine is running.
- Do not allow any metal objects or something similar into the machine.
- Do not operate the machine while under the influence of alcohol and medicine..
- Wear approved safety glasses and gloves.
- Muffler gets hot. Do not touch or allow debris to collect on it.
- Shut engine off and allow to cool for at least 2 minute before refueling.

I. Safety Labels! Warning!

This symbol points out important safety instructions which, if not followed, could endanger the personal safety and property of yourself and others. Read and follow all the instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury.





II. Safe Operation Practice

Warning: Engine exhaust, some of its constituents contain or emit chemicals known to cause cancer and birth defects or other reproductive harm.

DANGER: this machine was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

III. TRAINING

- a. Read, understand, and allow all instructions on the machine and in the manual before attempting to assemble. Be familiar with all controls and their proper operation. Know how to stop the machine and disengage them quickly.
- b. Never allow children under 16 years old to operate this machine. Children 16 years old and over should read and understand the operation instructions and safety rules in this manual and should be trained and supervised by a parent.
- c. Never allow adults to operate this machine without proper instruction.
- d. Keep bystanders, helpers, pets, and children at least 75feet from the machine while it is in operation. Stop machine if anyone enters the area.
- e. Never run an engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.
- f. Do not put hands and feet near rotating parts or in the feeding chambers and discharge opening. Contact with the rotating impeller can amputate fingers, hands, and feet.
- g. Never attempt to unclog either the feed intake or discharge opening, remove or empty vacuum bag, or inspect and repair the machine while the engine is running. Shut the engine off and wait until all

moving parts have come to a complete stop. Disconnect the spark plug wire and ground it against the engine.

IV .Preparation

- a. Thoroughly inspect the area where the equipment is to be used. Remove all rocks, bottles, cans, or other foreign objects which could be picked up or thrown and cause personal injury or damage to the machine.
- b. Always wear safety glasses or safety goggles during operation or while performing an adjustment or repair, to protect eyes. Thrown objects which ricochet can cause serious injury to the eyes.
- c. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts. Loose fitting clothes or jewelry can be caught in movable parts. Never operate this machine in bare feet or sandals. Wear leather work gloves when feeding material in the chipper chute.
- d. Before starting, check all bolts and screws for proper tightness to be sure the machine is in safe working condition. Also, visually inspect machine for any damage at frequent intervals.
- e. Maintain or replace safety and instructions labels, as necessary.
- f. To avoid personal injury or property damage use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Serious personal injury can occur when gasoline is spilled on yourself or your clothes which can ignite. Wash your skin and change clothes immediately.
 - . Use only an approved gasoline container.
 - . Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
 - . Never fill machine indoors.
 - . Never remove gas cap or add fuel while the engine is hot or running.
 - . Allow engine to cool at least two minutes before refueling.
 - . Fill fuel tank properly, provide enough space for fuel expansion.
 - . Replace gasoline cap and tighten securely.
 - . If gasoline spilled, wipe it off the engine and equipment. Move machine to another area. Wait 5 minutes before starting the engine.
 - . Never stop the machine or fuel container inside where there is an open flame, spark, or pilot light (e.g. furnace, water heater, space heater, clothes dryer, Etc.)
 - . To reduce a fire hazard, keep machine free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage and remove any fuel soaked debris.
 - . Allow machine to cool 5 minutes before storing.

V. Operation

- a. Do not put hands and feet near rotating parts or in the feeding chambers and discharge opening. Contact with the rotating impeller can amputate fingers, hands, and feet.

- b. Before starting the machine, make sure the chipper chute, feed intake, and cutting chamber are empty and free of all debris.
- c. Thoroughly inspect all material to be shredded and remove any metal, rocks, bottles, cans, or other foreign objects which could cause personal injury or damage to the machine.
- d. If the impeller strikes a foreign object or if your machine should start making an unusual noise or vibration, immediately shut the engine off. Allow the impeller to come to a complete stop. Disconnect the spark plug wire, ground it against the engine and perform the following steps:
 - . Inspect for damage.
 - . Repair or replace any damaged parts.
 - . Check for any loose parts and tighten to assure continued safe operation.
- e. Do not allow an accumulation of processed material to build up in the discharge area. This can prevent proper discharge and result in kickback of material through the feed opening.
- f. Do not attempt to shred or chip material larger than specified on the machine or in this manual. Personal injury or machine damage could result.
- g. Never attempt to unclog either the feed intake or discharge opening while the engine is running. Shut the engine off, wait until all moving parts have stopped, disconnect the spark plug wire and ground it against the engine before clearing debris.
- h. Never operate without vacuum bag and discharge chute properly attached to the machine. Never empty or change vacuum bag while the engine is running. Zippered end of vacuum bag must be kept closed at all times during operation.
- y. Never operate without either the inlet nozzle or optional hose attachment properly attached to the machine. Never attempt to attach or change either attachment while the engine is running.
- j. Keep your face and body back and to the side of the chipper chute while feeding material into the machine to avoid accidental kickback injuries.
- k. Never operate this machine without good visibility or light. Always be sure of your footing and keep a firm hold on the handles.
- m. Do not operate this machine on a gravel surface.
- n. Do not operate this machine while under the influence of the alcohol or drugs.
- o. Muffler and engine become hot and can cause a burn. Do not touch.
- p. Never pick up or carry machine while the engine is running.

VI. Maintenance & Storage

- a. Never tamper with safety devices. Check their proper operation regularly.

- b. Check bolts and screws for proper tightness at frequent intervals to keep the machine in safe working condition. Also, visually inspect machine for any damage and repair, if needed.
- c. Before cleaning, repairing, or inspecting, stop the engine and make certain the impeller and all moving parts have stopped. Disconnect the spark plug wire and ground it against the engine to prevent unintended starting.
- d. Do not change the engine governor settings or overspeed the engine. The governor controls the maximum safe operating speed of the engine.
- e. Maintain or replace safety and instruction labels, as necessary.
- f. Follow this manual for safe loading, unloading, transporting, and storage of this machine.
- g. Never store the machine or fuel container inside where there is an open flame, spark or pilot light such as a water heater, furnace, clothes dryer, etc.
- h. If the fuel tank has to be drained, do this outdoors.
- y. Observe proper disposal laws and regulations for gas, oil, etc. to protect the environment.

Do not modify engine

To avoid serious injury or death, do not modify engine in any way. Tampering with the governor setting can lead to a runaway engine and cause it to operate at unsafe speeds. Never tamper with factory setting of engine governor.

Your responsibility

Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

Important: This unit is shipped without gasoline or oil in the engine. Be certain to service

engine with gasoline and oil as instructed in the separate engine manual before operating your machine.

VII. Loose Parts in the Carton

- 1. Following is the list of loose parts shipped with your equipment. Be sure all of these parts are in the carton.
- a. nozzle b. discharge tube c. bag d. side tube e. goggle f. ear protector
- g. bolts, nuts (if equipped) h. Wrench plug

NOTE: All references in this manual to the left or right side of the yard vacuum is from the operating position only. Exceptions, if any, will be specified.

Attaching the Nozzle

- a. Remove three wing nuts from the front of the vacuum shredder .See

Figure1.



Figure 1

- b. Place nozzle in position over three studs on unit.
- c. Secure with wing nuts just removed.

Attaching the handle

- a Remove the 4 screws fixed on both sides of the handle, turn the handles 180 degree backward. See Figure 2.



Figure 2

- a. Make sure the opening under the handle is just toward to the small opening on the round tube, then fixed with bolt.
- b. Take good care of the throttle line and switch line when adjust the handle, do not broken them, then fix the throttle line and the switch line on the handle, make sure they perform the best work.

Attaching the Chipping Chute

- a. Place the chipper chute over the weld studs keeping the slotted side towards the bottom. Loosely secure with the three hex nuts and washers that were removed easily. Do not fully tighten the hex nuts at this point in the assembly.
- b. Align the support bracket with the holes in the right side of the upper and lower handles. Put the chipping chute on.

- c. Replace the hex bolts, washers and flange nuts to affix the support bracket to the handle assembly. See Figure 3.



Figure 3

- d. Follow by tightening all hardware securely first on the chipper chute, then on the support bracket, and finally on the handle.

Attaching the Bag

- a. Place bag under the upper handle assemble and slip the front opening on the bag over the discharge chute, make certain it is over the rim on the discharge chute.
- b. Place the opening of the bag to the opening of the handle, then fixed to the handle with bolts.
- c. Fasten the intake opening of the bag, fix it to the handle and the discharge opening. See Figure 4



Figure 4

VIII. Know Your Vacuum Shredder

WARNING: Be family with all controls and their proper operation. Know how to stop the machine and disengage them quickly. Now that you have set up your yard vacuum for operation, get acquainted with its controls and features. These are described below and illustrated on this page. This knowledge will allow you to use your new equipment to its fullest potential.

Chipper Chute

Allow twigs and small branches up to 3" in diameter to be fed into the impeller for chipping.

Tamper Plug

This plug is inserted into the chipper chute to push twigs and small branches towards the impeller blades without endangering your hands.

Gear Adjust Handle

Put the handle in the forward gear position 1 or 2, the machine will go forward. Put the handle in the backward gear position 1 or 2, the machine will go backward.

See Figure 5



Figure 5

Vacuum Bag

Collects shredded or chipped material fed through the chipper chute or vacuumed up through the nozzle.

Drive control

The drive control is located on the upper handle assembly. Squeezing the drive control against the upper handle engages the rear wheels. Release the drive control to slow down or step wheel drive. See Figure 6.



Figure 6

Starter Handle

It is used to stop the engine or stop the machine immediately.

Throttle Control

Upper position is to speed up the engine, lower position is to slow down the engine.

Throttle Control Lever

The throttle control lever is located on the engine. It controls the

engine's speed and stops the engine. Refer to the engine manual for further details.

Engine Controls

See the separate engine manual for the location and function of the controls on the engine.

Stop the engine

- a. Move throttle lever to STOP or OFF position.
- b. Disconnect spark plug wire from spark plug and ground against the engine.

WARNING: Always wear safety glasses during operation or while performing any adjustments or repairs. Thrown objects which ricochet can cause serious injury to the eyes.

Gas and Oil Fill-Up

Service the engine with gasoline and oil as instructed in the engine manual. Read instructions carefully.

WARNING: Use extreme care when handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Never fuel machine indoors or while the engine is hot or running. Extinguish cigarettes, cigars, pipes, and other sources of ignition.

Starting Engine

Warning: Keep bystanders, helpers, pets, and children at least 75 feet from the machine before starting and while operating. Do not operate this machine unless the discharge chute and bag have been properly installed and secured to the machine.

- a. There is no gas and oil in a new engine. Fill oil before work.
- b. Never fill full tank of oil, leave 10-15mm spaces, in case the oil spill out after heated.
- c. Never fill oil near fires or other easy ignition materials, no smoking when fill oil.
- d. Clean the oil spilled on the outer of the machine before start the engine.
- e. Never fuel the tank when the engine is running, stop the engine first, and fill oil after cool several minutes.
- f. See your engine manual packed with your unit for more detailed instructions.

To Empty Bag

- a. Open the larger zipper in the rear of the bag to empty the contents. Be sure the zipper is closed completely when operating the unit.
- b. If bag is removed for any reason, follow instructions for attaching the bag in the "Setting Up Your Vacuum Shredder" section. See Figure 7.



Figure 7

Using The Vacuum Shredder

Place both hands on top of upper handle to push unit over yard waste. Yard waste such as leaves and pine needles can be vacuumed up through the nozzle for shredding.

After material has been shredded by the blades on the impeller assembly, it will be discharged into catcher bag.

IMPORTANT: Do not attempt to shred or chip any material other than vegetation found in a normal yard (i.e. branches, leaves, twigs, etc.) Avoid fibrous plants such as tomato vines until they are thoroughly dried out. Material such as stalks or heavy branches up to 3" in diameter may be fed into the chipper chute.

WARNING: Do not attempt to shred, chip, or vacuum any material larger than specified on the machine or in this manual. Personal injury or damage to the machine could result.

IMPORTANT: The flail screen is located inside the housing in the discharge area. If the flail screen becomes clogged, remove and clean as instructed in the maintenance section. For best performance, it is also important to keep the chipper blade sharp.

WARNING: Always stop engine, disconnect spark plug, and ground against engine before cleaning, lubricating or doing any kind of maintenance on your machine.

Engine Maintenance

Refer to the separate engine manual for all engine maintenance instructions

- a. Check engine oil level before each use as instructed in the separate engine manual packed with your unit. Read and follow instructions carefully.
- b. Clean air cleaner every 25 hours under normal conditions or once a season. Clean every few hours under extremely dusty conditions. To service the air cleaner, refer to the separate engine manual packed with your unit.
- c. The spark plug should be cleaned and the gap reset once a season.

Check engine manual for correct plug type and gap specifications.

Nozzle Door Height Adjustment

The nozzle adjustment levers are located on each side of the nozzle door.

The nozzle door can be adjusted to one of five positions, ranging from 1/2" to 3" ground clearance, to provide best performance.

- a. Push adjustment lever out away from nozzle.
 - b. Fix the gear opening to the bar on the nozzle, then fastened with nut.
- See Figure 8

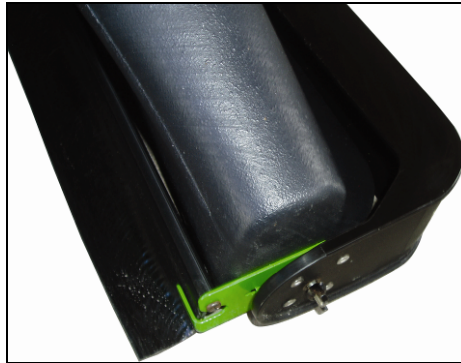


Figure 8

NOTE: Height must be adjusted equally. In general, raise the nozzle to vacuum a thick layer of leaves and lower the nozzle for smooth surface.。

Clean the Flail Screen

If the discharge area becomes clogged, remove the flail screen and clean area as follows.

- a. Stop the engine. Make sure the chipper/shredder vacuum has come to a complete stop.
- b. Disconnect spark plug wire from spark plug and ground against the engine.
- c. Remove and set aside the vacuum bag.
- d. Remove the four self-tapping screws from the bottom of the discharge chute. Remove the hex bolt, saddle washer and hex nut from the top and remove the discharge chute assembly.
- e. Remove the two hex bolts and hex nuts which extend through the impeller housing. Lift the flail screen from inside the housing. See Figure 9.



Figure 9

- f. Clean the flail screen by scraping and /or washing with water, and reinstall

the screen.

NOTE: Be certain to reassemble the flail screen with the curved side down.

- g. Reattach the discharge chute assembly with the hardware previously removed and attach the bag to the unit..

Sharpening or Replacing Chipper Blades

NOTE: When tipping the unit, empty the fuel tank and keep engine spark plug side up. Disconnect spark plug wire and ground it against engine.

Chipper blades made by the special materials, heat-treated with high hardness, sharp blade, but over time, it still becomes blunt.

a. . Replacing the chipper blades:

- . Remove the impeller; unload the closed board on the back of impeller. (Back) See figure 10.
- . Move the blade of impeller to closed board opening, put the professional tool into the screw on the blade from the opening, and then use the banner to loosen the screw from impeller opening, and then remove the blade. See Figure 10.



Figure 10

- . Remove other blade in the same manner to replace or sharpen.

! NOTE: WARNING: Use caution when replacing the blades. Wear heavy gloves to avoid injury while handling the weld bolts, housing or the blades.

NOTE: When sharpening blades, follow the original angle of grind. Also, make sure to remove an equal amount from each blade and torque hardware.

IMPRTANT: Make sure that blades are assembled with the sharp edge facing upward.

b. Sharpening the blade

- . Judgments of blade blunt: Heavy cutting sound, no loose belt but slippery, feeding slowly; These phenomenon may be caused by a blunt blade, and it should remove or inspect.
- . If blade edge were missing, the blade should be removed. In the process of grinding edge should avoid annealing and discoloration.
- . Appropriate sharpening; do not impose too much pressure to avoid small collapse on the edge.
- . Edge angle should be maintained at 45 to 40 degree range.

c. Replacing the belt:

- . Remove new V belt when it overly extends or breaks.
- . Disconnect the spark plug wire and ground it away from the spark plug.

- . Drain the gasoline and oil from the unit.
- . Remove the three wing nuts that secure the nozzle to the outer housing and remove the nozzle.
- . Remove the plastic cover and metal cover from front of the engine by removing the screws.
- . Tip the unit backward so that it rests on the handles.
- . Remove the lower guard of the gear box by removing the screws, See Figure 11



Figure 11

- . Remove the impeller (front) by removing the screws.
- . If old belt cannot remove from the unit, cut and remove it.
- . Insert new belt between “V” pulley of the clutch and the transmission pulley of the engine.
- . It is a little harder to load new belt because of its tightness. Press down the V belt and rotate impeller to place new belt into slot on the pulley. Pay attention not to put your hands between V belt and pulley to avoid injury.
- . Press down on the belt guard spring by the idler pulley, and adjust the spring.
- . Turn the impeller assembly counterclockwise to place the belt into the slot on the impeller. Make sure the belt is routed inside all belts guards.
- . Reassemble the flail screen, discharge chute, nozzle and the bag. (For reassembly, follow instructions in previous page in reverse order.)

Storing Your Yard Vacuum

Clean the equipment thoroughly.

- a. Wipe equipment with an oiled rag to prevent rust.
- b. Refer to engine manual for correct engine storage instructions.
- c. Store unit in a clean, dry area. Do not store next to corrosive material such as fertilizer.

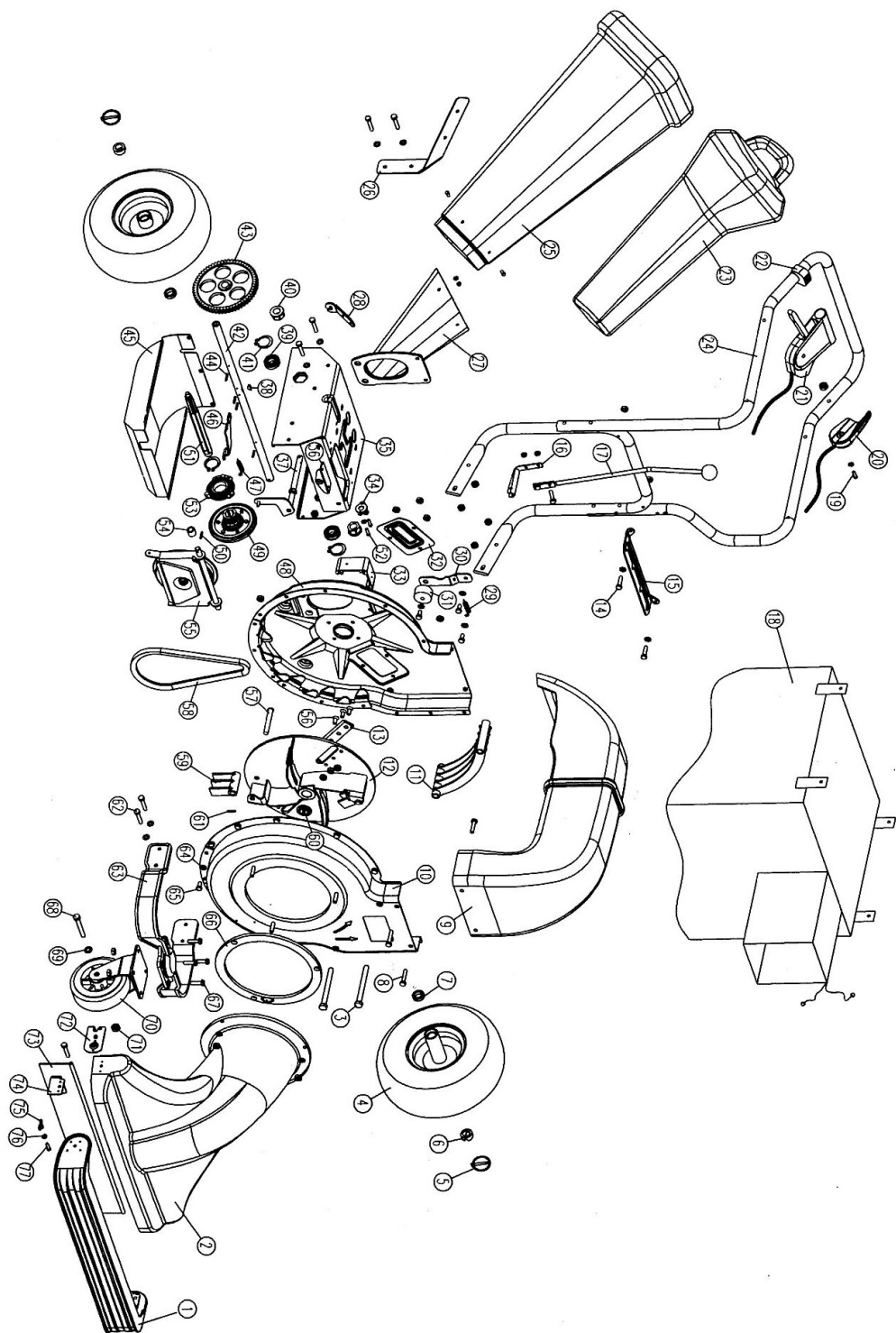
WARNING: Never store the machine or fuel container indoors where there is an open flame, spark, or pilot light such as on a water heater, furnace, clothes dryer, or other gas appliance.

Trouble shooting

Problem	Cause	Remedy
Engine fails to start	1. Spark plug wire disconnected. 2. Choke not in CHOKE position (if equipped). 3. Fuel tank empty or stale fuel. 4. Engine not primed (if equipped). 5. Faulty spark plug. 6. Blocked fuel line. 7. Engine flooded.	1. Connect wire to spark plug. 2. Make choke lever to CHOKE position. 3. Fill tank with clean, fresh gasoline. 4. Prime engine as instructed in Engine Manual. 5. Clean, adjust gap, or replace 6. Clean fuel line. 7. Wait a few minutes to restart the engine.
Engine runs erratic	1. Spark plug wire loose. 2. Blocked fuel line or stale fuel.	1. Connect and tighten spark plug wire.

	3. Vent in gas cap plugged. 4. Water or dirt in fuel system. 5. Dirty air cleaner. 6. Carburetor out of adjustment	2. Clean fuel line fill tank with clean, fresh gasoline. 3. Clear vent. 4. Drain fuel tank. Refill with fresh fuel. 5. Refer to engine manual. 6. See authorized service dealer.
Engine overheats	1. Engine oil level low. 2. Dirty air cleaner. 3. Carburetor not adjusted properly.	1. Fill crankcase with proper oil. 2. Refer to engine manual. 3. See authorized service dealer.
Occasional skips (hesitates) at high speed	1. Spark plug gap too close 2. Carburetor idle mixture adjustment improperly set.	1. Adjust gap to .030" . 2. See authorized service dealer.
Excessive Vibration	1. Loose parts or damaged impeller.	1. See authorized service dealer.
Unit does not discharge	1. Chute deflector clogged. 2. Foreign object lodged in impeller. 3. Low engine RPM. 4. Vacuum bag is full.	1. Stop engine immediately and disconnect spark plug wire. Clean flail screen and inside of discharge opening. 2. Stop engine and disconnect spark plug wire. Remove lodged object. 3. Always run engine at full throttle. 4. Empty bag.
Rate of discharge slows Considerably or composition of discharged material changes	1. Low engine RPM. 2. Chipper blade dull.	1. Always run engine at full throttle. 2. Replace chipper blade or see authorized service dealer.

For parts and /or accessories please see local authorized service dealer.



	Description	Material	Spec	Qty	No	Description	Material	Spec	Qty
1	lever			1	41	axes spring ring		35	3
2	nozzle			1	42	rear wheel axes 2#			1
3	hex bolt		M12*130	2	43	big gear	QT600-3		1
4	rear wheel		19"	2	44	spring roll pin		6*12	4
5	hemicycle pin			2	45	bottom cover	Steel Q235	t2	1
6	axle long bush	F0113J		2	46	tray spring bracket	Steel Q235	t3	1
7	axle short bush	F0113J		2	47	spring			1
8	hex bolt		M8*12	2	48	impeller case(rear)	cold rolled steel Q235	t2	1
9	discharge tube			1	49	friction wheel			1
10	impeller case(front)	cold rolled steel Q235	t2		50	spring roll pin		4*14	1
11	screen			1	51	small gear axes	hard-drawn hex steel 45#		1
12	impeller	cold rolled steel Q235	t4		52	hex bolt		M6*10	2
13	blade	W18Cr4V		2	53	slide bearing			1
14	hex bolt		M8*40	few	54	position control cover	POM		1
15	gear board 2	cold rolled steel Q235	t3	1	55	V-wheel with clutch			1
16	connector	cold rolled steel 65Mn	t2	1	56	inner hex screw	round steel 35#	M8*25	6
17	gear adjust handle			1	57	hammer axes	round steel 45#	Ø15	2
18	bag			1	58	V-belt			1
19	hex bolt		M6*50	1	59	hammer	ZG270-500		2
20	throttle control lever			1	60	blade press ring	steel Q235	t3	1
21	manipulate controller			1	61	spring roll pin		3*16	2
22	switch			1	62	hex bolt		M8*20	4
23	tamper plug			1	63	front wheel bracket	ZG270-500		1
24	handle	welded steel tubeQ235	Ø28*2	1	64	flat gasket		8	few
25	side chute 1			1	65	hex bolt		M8*12	few
26	side chute bracket	cold rolled steel Q235	t1.5	1	66	nozzle gasket	PP		1
27	side chute 2	cold rolled steel Q235	t1.5	1	67	hex bolt		M8*35	4
28	seat		t4	1	68	hex bolt		M12*100	1
29	tension wheel spring	65Mn		1	69	flat gasket		8	3

	tension wheel support	cold rolled steel Q235	t3	1	70	wheel			1
	tension wheel	PP		1	71	nut		M12	3
	blade cover plate	cold rolled steel Q235	t1.5	1	72	nozzle support plate	cold rolled steel Q235	t2	2
	impeller case supporter	ZG270-500		1	73	leaf collect plate	neoprene		1
	impeller bracket	steel 45	t3	1	74	nozzle support angle	cold rolled steel Q235	t2	2
	gear case body	steel Q235		1	75	flange nut		M6	2
	bracket	cold rolled steel Q235	t2	1	76	flat gasket		6	few
	connect bar			1	77	spiral bolt		M6*25	4
	hemicycle key		5*7.5*19	1					
	bearing		3202Z	2					
	gear case bearing	FZ1265	5*21	2					