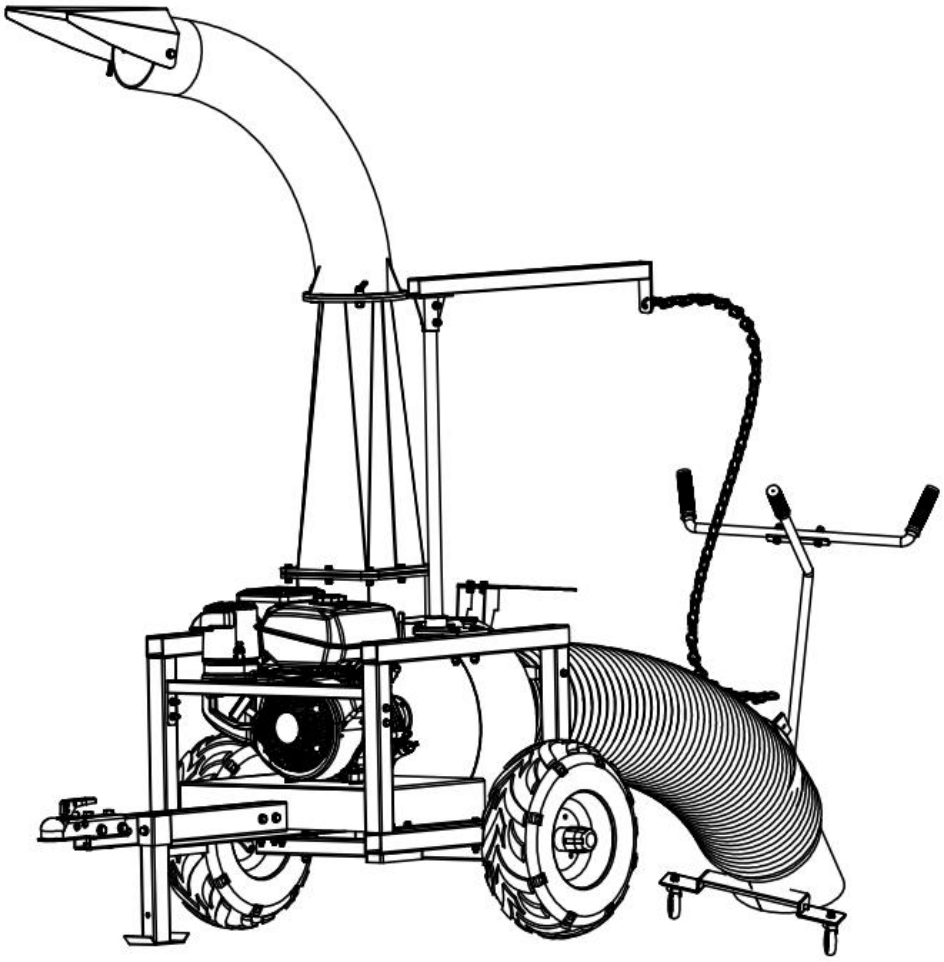
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USER MANUAL

LEAF VACUUM

SAFETY AND OPERATION INSTRUCTIONS



RR475

IMPORTANT: Read safety rules and instructions carefully before operating equipment.

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Conventions used in this manual

⚠ WARNING

This indicates a hazardous situation, which, if not avoided, could result in death or serious injury.

⚠ CAUTION

This indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

⚠ NOTICE

This information is important in proper using of your machine. Failure to follow this instruction could result in damage to your machine or property.

Additional Information and Potential Changes

We reserve the right to discontinue, change, and improve its products at any time without notice or obligation to the purchaser. The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your machine. This manual provides complete operating and maintenance instructions that will help to maintain your Leaf Vacuum in top running order. Read this manual carefully before assembling, operating, or servicing your equipment.

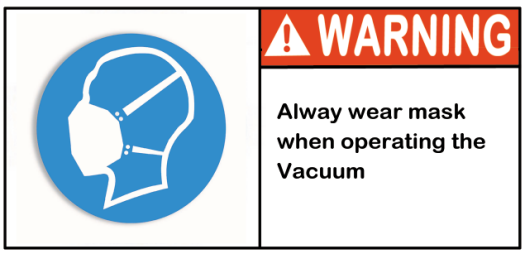
PART I: General Safety Rules

Safety Labels Found on Your Unit

The labels shown below were installed on your Leaf Vacuum. If any labels are damaged or missing, replace them before operating this equipment.







⚠ WARNING

Read this Safety & Operating Instructions manual before you use the Leaf Vacuum. Become familiar with the operation and service recommendations to ensure the best performance of your machine.

Propose

⚠ CAUTION

This vacuum is designed for picking up trash, organic material and other similar debris, must not be used for any other purpose. It should only be used by trained operators who are familiar with the content of this manual. It is potentially hazardous to fit or use any parts other than your dealer parts. The company disclaims all liability for the consequences of such use, which in addition voids the machine warranty.

Before using the Leaf Vacuum

⚠ NOTICE

A. Operators must be fully trained before using this machine.

B. User Manual is read and understood.

C. All fasteners are checked for tightness.

When using the Leaf Vacuum

⚠ NOTICE

A. Maintain strict discipline at all times and service machine at specified periods.

B. DO NOT operate the machine whilst under the influence of alcohol or drugs.

Protecting Yourself

⚠ WARNING

This is a high-powered machine, with moving parts operating with high energy. You must operate the machine safely. Always take the following precautions when using this machine:

A. Always wear protective goggles or safety glasses while using the Leaf Vacuum to protect your eyes.

B. Wear shoes with non-slip treads when using your Leaf Vacuum. If you have safety shoes, we recommend wearing them. Do not use the machine while barefoot or wearing open sandals.

Safety with Gasoline - Powered Machines

⚠ WARNING

Gasoline is a highly flammable liquid. Gasoline also gives off flammable vapor that can be easily ignited and cause a fire or explosion. Never overlook the hazards of gasoline. Always follow these precautions:

A. Never run the engine in an enclosed area or without proper ventilation as the exhaust from the engine contains carbon monoxide, which is an odorless, tasteless, and a deadly poisonous gas.

B. Store all fuel and oil in containers specifically designed and approved for this purpose and keep away from heat and open flame, and out of the reach of children.

C. Replace rubber fuel lines and grommets when worn or damaged and after 5 years of use.

D. Fill the gasoline tank outdoors with the engine off and allow the engine to cool completely. Don't handle gasoline if you or anyone nearby is smoking, or if you're near anything that could cause it to ignite or explode. Reinstall the fuel tank cap and fuel container cap securely.

E. If you spill gasoline, do not attempt to start the engine. Move the machine away from the area of the spill and avoid creating any source of ignition until the gas vapors have dissipated. Wipe up any spilled fuel to prevent a fire hazard and properly dispose of the waste.

F. Allow the engine to cool completely before storing in any enclosure. Never store a machine that has gas in the tank, or a fuel container, near an open flame or spark such as a water heater, space heater, clothes dryer or furnace.

G. Never make adjustments or repairs with the engine running. Shut down the engine, disconnect the spark plug wire, keeping it away from the spark plug to prevent accidental starting, wait 5 minutes before making adjustments or repairs.

H. Never tamper with the engine's governor setting. The governor controls the maximum safe operation speed and protects the engine. Over-speeding the engine is dangerous and will cause damage to the engine and to the other moving parts of the machine. If required, see your authorized dealer for engine governor adjustments.

I. Keep combustible substances away from the engine when it is hot.

J. Never cover the machine while the muffler is still hot.

K. Do not operate the engine with the air cleaner or the carburetor air intake cover removed. Removal of such parts could create a fire hazard. Do not use flammable solutions to clean the air filter.

L. The muffler and engine become very hot and can cause a severe burn; do not touch.

General Safety

⚠ WARNING

Operating this Leaf Vacuum safely is necessary to prevent or minimize the risk of death or serious injury. Always take the following precautions when operating:

A. Your Leaf Vacuum is a powerful tool, not a plaything. Exercise extreme caution at all times.

B. Know how to stop the Leaf Vacuum quickly.

C. Never operate your unit on a slippery, wet, muddy, or icy surface. Exercise caution to avoid slipping or falling.

D. See manufacturer's instructions for proper operation and installation of accessories.

E. Never, under any conditions, remove, bend, cut, fit, weld, or otherwise alter standard

parts on the Leaf Vacuum. This includes all shields and guards. Modifications to your machine could cause personal injuries and property damage and will invalid your warranty.

F. If the machine start to make an unusual noise or vibrate, shut down the engine, disconnect the spark plug wire, keeping it away from the spark plug to prevent accidental starting, wait 5 minutes for engine to cool down, then inspect for damage. Vibration is generally a warning of trouble. Check damaged parts and clean, repair and/or replace as necessary.

G. Never tamper with safety devices. Check their proper operation regularly.

H. Before performing any maintenance or inspection procedure, shut down the engine, disconnect the spark plug wire keeping it away from the spark plug to prevent accidental starting, wait 5 minutes for machine to cool down.

I. Never allow people who are unfamiliar with these instructions to use the Leaf Vacuum. Allow only responsible individuals who are familiar with these rules of safe operation to use your machine.

J. While using, don't hurry or take things for granted. When in doubt about the equipment or your surroundings stop the machine and take time to look things over.

K. Never operate the machine when under the influence of alcohol, drugs, or medication.

L. Use the machine only in daylight.

M. Stay alert for hidden hazards or traffic.

N. Keep all nuts and bolts tight and keep the equipment in good operating condition.

A Note to All Users

List of warnings and cautions cannot be all-inclusive. If situations occur that are not covered by this manual, the operator must apply common sense and operate this Leaf Vacuum in a safe manner. Contact the dealers for assistance in your area.

PART II: Familiar with the Vacuum

It may be helpful to familiarize yourself with the controls and features of the Leaf Vacuum. If you have any question, please contact the dealers in your area.

TECHNICAL SPECIFICATIONS

Engine: start	**Recoil/Electric Start**
Engine: HP	**13HP/15HP four strokes**
Engine: Fuel Capacity	**6.5L**
Engine: Oil Capacity	**1.1L**
Power	**Gasoline/petrol**
Bag	**Gal, Turf bag**
Overall Length	**3425mm**
Overall Width	**1174mm**
Overall Height	**2222mm**
Overall Weight	**255KG**
Noise level	**114db**

Assembly

1. **Remove the unit from the plywood box. Take care of cables since they could snag.**
2. **Follow figure below to assemble Nozzle and Collapsible hose.**

PART III: Operating the Vacuum

It may be helpful to better familiarize yourself with the features of your Leaf Vacuum before beginning the steps outlined in this chapter.

⚠ WARNING

A. Read and understand all instructions, safety precautions, and/or warnings listed in "PART I: General Safety Rules" before operating the Leaf Vacuum. If any doubt or question arises about the correct or safe method of performing anything found in this manual, please contact the dealers in your area.
B. Make sure that all operators of this equipment are trained in general machine use and safety.
C. Knowing the correct and incorrect methods of using Leaf Vacuum. Never using an incorrect or unsafe method.
D. Inspect machine work area and machine before operating.
E. PUT OIL IN ENGINE BEFORE STARTING
F. Do not operate if excessive vibration occurs. Shut engine off immediately and check for damaged or worn impeller, loose impeller bolt, loose engine or lodged foreign objects.

Starting

1. **Position your Leaf Vacuum on flat, dry ground.**
2. **Make sure the fuel shut-off valve is in the "ON" position.**
3. **Move the choke control lever to the "CHOKE" position (should only be needed if the engine is cold).**
4. **Move the throttle control lever to the "FAST" position.**
5. **Recoil Start: Turn the Ignition Switch to the "On" position. Grasp the recoil starter handle and slowly pull until you feel resistance. Let the cord retract a little bit then pull the cord rapidly to start the engine. One or two pulls usually starts the engine.**
6. **Electric Start(if have): Turn and hold the Key in the start position for 2-3 seconds until Engine starts then let the Key return to run position.**
7. **Move the choke control lever (if used for cold engine) slowly back to the "RUN" position when the engine is running well.**
8. **If the Leaf Vacuum has not been running (cold engine), warm up the engine by running the engine at half throttle for 3 to 4 minutes, then advance the engine throttle control to the maximum speed.**

Stopping

Push the emergency stop button to stop the machine. or

1. **Move the Throttle Lever to IDLE.**
2. **Recoil Start: Turn the Ignition Switch to the OFF position.**
3. **Electric Start: Turn the Key to the OFF position.**

Operation

Your Leaf Vacuum is equipped with an collapsible hose. This feature is extremely useful when clean the corner where machine can't reach.

⚠ Notice

A. The maximum RPM on the unit's engine are set. Altering them from the factory setting could potentially damage the unit and void warranty.

B. Nozzle adjustment: Adjust by turning the knob clockwise to increase height and anti-clockwise to lower it. Adjust nozzle height according to surface conditions and debris size. For vacuuming on flat surfaces, set nozzle 1/2" (12.7mm) to 5/8" (15.8 mm) above ground. Adjust higher for uneven terrain and turf.

C. For Maximum Pickup: Adjust nozzle close to debris, but without blocking airflow into the nozzle. NOTE: Never bury nozzle into debris.

D. Clearing A Clogged Nozzle & Exhaust: Turn engine off and wait for impeller to stop completely and disconnect spark plug wire. Wearing durable gloves, remove clog.

E. DO NOT place bag on or near hot surface, such as engine.

F. Frequently empty debris to prevent bag overloading with more weight than you can lift. Use the dust skirt when debris will be vacuumed in dusty conditions.

PART IV: Maintaining the Vacuum

Regular maintenance is the way to ensure the best performance and long life of your machine. Please refer to this manual and the engine manufacturer's user manual for maintenance procedures.

⚠ WARNING

Before performing any maintenance procedure or inspection, stop the engine, wait five minutes to allow all parts to cool. Disconnect the spark plug wire, keeping it away from the spark plug. Disconnect the Battery Terminals (Electric start only).

Storage

⚠ WARNING

a. **Never store engine indoors or in enclosed poorly ventilated areas with fuel in tank, where fuel fumes may reach an open flame, spark or pilot light, as on a furnace, water heater, clothes dryer or other gas appliance. If engine is to be unused for 30 days or more, prepare as follows: Remove all gasoline from carburetor and fuel tank to prevent gum deposits from forming on these parts and causing possible malfunction of engine. Drain fuel outdoors, into an approved container, away from open flame. Be sure engine is cool. Do not smoke. Run engine until fuel tank is empty and engine runs out of gasoline.**
b. **Fuel stabilizer is an acceptable alternative for minimizing the formation of gum deposits during storage. Add stabilizer to gasoline in storage container or fuel tank. Follow stabilizer manufacturer’s instructions to determine proper mix ratio. Run engine at least 10 minutes after adding stabilizer to allow it to reach carburetor.**

Regular Maintenance Checklist of Engine

Procedure	Before Each Use	Every 3 Hours	Every 25 Hours	Every 100 Hours
Check engine oil level	Δ			
Check general equipment condition	Δ			
Check wedge for sharpness	Δ			
Grease surface of slide rail	Δ			
Check belts	Δ			
Grease rack and pinion		Δ		
Check tire pressure			Δ	
Clean engine exterior and cooling			Δ	
Change Engine Oil	First time 5hours		Δ	
Replace air filter			Δ	
Replace spark plug				Δ

Engine Service

Refer to the engine manufacturer's user manual for engine maintenance.

Handling and Transportation

⚠ Notice

1. **Using two people to lift machine is recommended. Lift holding the handle and handle brace. Secure in place during transportation.**
2. **Do not use the front grill as an anchor point when securing the unit for transport.**
3. **Never lift the machine while the engine is running.**

PART V: Troubleshooting and Parts List

Most problems are easy to fix. Consult the Troubleshooting Table below for common problems and their solutions. If you continue to experience problems, contact the dealers in your area.

⚠ WARNING

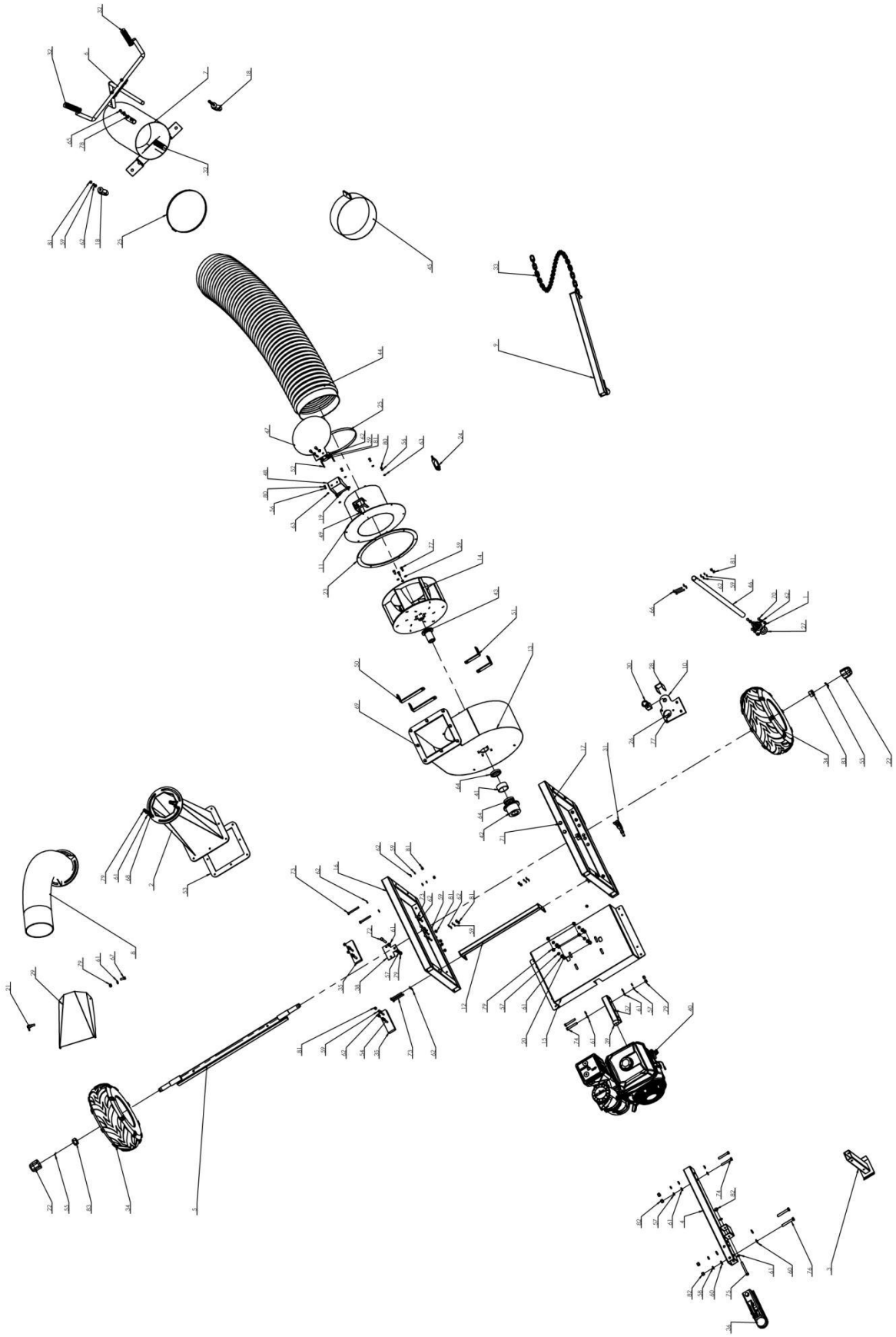
Before performing any maintenance procedure or inspection, stop the engine, wait five minutes to allow all parts to cool. Disconnect the spark plug wire, keeping it away from the spark plug.

Troubleshooting Table

SYMPTOM	POSSIBLE CAUSE
The engine won't start. *(Please refer to the engine user manual for engine-specific procedures.)*	➢ *Is the ignition switch in the "ON" position?* ➢ *Is the fuel shut-off valve on?* ➢ *Are you using fresh, clean gas? If the gas is old, change it. Use a fuel stabilizer if you keep gas longer than 30 days.* ➢ *Is the spark plug clean? If the spark plug is dirty or cracked, change it. If it's oily, leave it out, hold a rag over the plug hole and pull the recoil cord several times to blow out any oil in the cylinder, then wipe off the plug and reinsert it.*
The engine lacks power or is not running smoothly. *(Please refer to the engine user manual for engine-specific procedures.)*	➢ *Check that the Throttle Lever is in the "Run" position.* ➢ *Is the air filter clean? If it's dirty, change it following the procedure in the engine manufacturer's owner's manual.* ➢ *Is the spark plug clean? If it's fouled or cracked, change it. If it's oily, leave it out, hold a rag over the plug hole and pull your recoil cord several times to blow out any oil in the cylinder, then wipe off the plug and reinsert it.* ➢ *Are you using fresh, clean unleaded gas? If it's old, change it. Use a fuel stabilizer if you keep gas longer than 30 days.* ➢ *Does your engine have the right amount of clean oil? If it's dirty, change it following the procedure in the engine manufacturer's owner's manual.* ➢ *Check the oil level and adjust as needed.*
Engine smokes. *(Please refer to the engine user manual for engine-specific*	➢ *Check the oil level and adjust as needed.* ➢ *Check the air filter and clean or replace if needed.* ➢ *You may be using the wrong oil—too light for the temperature. Refer to your Engine Owner's Manual for detailed information.* ➢ *Clean the cooling fins if they're dirty.*

procedures.)	
excessive vibration	➢ *Check engine* ➢ *Check impeller and replace if required*
Will not vacuum or has poor vacuum performance	➢ *Clean debris bag. Shake bag clean or wash* ➢ *Adjust nozzle height* ➢ *Check for hose kit cap* ➢ *Unclog nozzle or exhaust* ➢ *Allow air to feed with debris*
Nozzle scrapes ground in lowest height setting	➢ *Adjust nozzle height*

Explosion View and Parts List



No.	Description	No.	Description	No.	Description
1	wheel flange	30	stop button	59	spring washer Φ8
2	discharge pipe	31	throttle handle	60	flat washer Φ12
3	foot	32	handle cover	61	flat washer Φ10
4	towbar	33	chain	62	flat washer Φ8
5	wheel axle	34	wheel	63	flat washer Φ6
6	handle	35	rubber pad	64	bearing
7	vaccum mouth	36	tow hitch	65	hex bolt M8*25
8	discharge elbow	37	connector pipe	66	hex bolt M8*55
9	hang bar	38	wheel plate	67	hex bolt M10*25
10	hangbar base plate	39	spacer	68	hex bolt M10*35
11	entrance plate	40	engine	69	hex bolt M8*35
12	rect bar	41	spacer	70	hex bolt M8*30
13	bellow case	42	bearing base	71	hex bolt M10*80
14	fan	43	coupler	72	hex bolt M10*65
15	base frame	44	vacuum pipe	73	hex bolt M8*75
16	right frame	45	roop	74	hex bolt M10*70
17	left frame	46	upright bar	75	hex bolt M10*90
18	small wheel	47	cover	76	hex bolt M12*80
19	M8*100 screw bar	48	revolve arm	77	hex bolt M8*20
20	M10*45 bolt	49	switch plate	78	hex nut M8
21	M10 handle screw	50	long fasten bar	79	lock nut M10
22	wheel cover	51	short fasten bar	80	lock nut M6
23	rubber seal	52	press plate	81	lock nut M8
24	kill switch	53	rubber seal	82	lock nut M12
25	fasten ring1	54	M8*80 screw	83	hex nut M24*1.5
26	fasten ring2	55	pin 4*45		
27	position ring	56	spring washer Φ6		
28	switch cover	57	spring washer Φ10		
29	delfector	58	spring washer Φ12		