

FYS-76 SHREDDER

OPERATION MANUAL



- Double blades cutting ,more effective.
- Special discharge opening, safer and nice looking.
- Tool kit equipped, more practical and convenient.

**IMPORTANT
READ CAREFULLY BEFORE USE
KEEP FOR FUTURE REFERENCE**

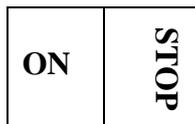
Attn: users. We are highly appreciated for your using FYS-76 shredder.

Read this operation manual carefully before attempting to assemble or operate the machine.
The power unit used for this shredder is type 168FA. Please read the attached engine manual for detail information of 168FA.

I. Warning & Symbols:

	<p>Read operator's manual.</p>
	<p>Danger – Rotating blades. Keep hands and feet out of openings while machine is running.</p>
	<p>Keep bystanders away.</p>
	<p>Check if any fuel spills or leaks. Stop the engine before refuel.</p>
	<p>Exhaust gas contains poisonous carbon monoxide. Never run the generator in an enclosed area. Be sure to provide adequate ventilation. When installed in ventilated place, protection is to be observed to avoid to work downwind of exhaust.</p>
	<p>Recommended oil type: SAE 10W30 / SAE 10W40</p>
	<p>To adjust the revolution speed of engine. The rabbit direction for speeding up and the tortoise direction for slow down.</p>

	<p>The fuel can be controlled.</p>
 <p>DON'T PUT YOUR HAND INTO THE MACHINE !</p>	<p>Don't put your hand into the machine.</p>



The label is for engine switch. If you want to start the engine, put the switch to “ON” position. If the switch in “STOP” position, the engine stops.

I. Safety Warnings:

Be extremely cautious to rotating blade in machine.

1. Never allow hand, foot, or any part of body enter hopper.
2. Never place hand, foot or any part of body closed to discharge opening while machine in operation.
3. Do not peer into hopper or discharge opening when the machine is running.
4. Never allow metal objects or something similar into machine.
5. Never allow children to operate machine.
6. Never operate your shredder-chipper under the influence of alcohol, drugs, or medication.
7. Never assemble or disassemble any parts of machine when in operation.
8. Never allow children, pets, bystanders in operation zone. Keep them in a minimum of 10 meters far.
9. Never run machine in an enclosed area since exhaust from engine contains carbon monoxide.
10. Never wear loose clothes or long jewelry and keep your long hair under a headgear when operating machine.
11. Never use machine on a slope or hard smooth floor.

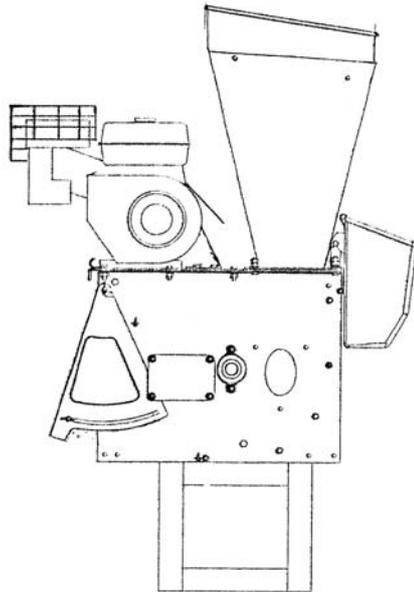
II. Assemble Instructions.

Unpack and checking contents.

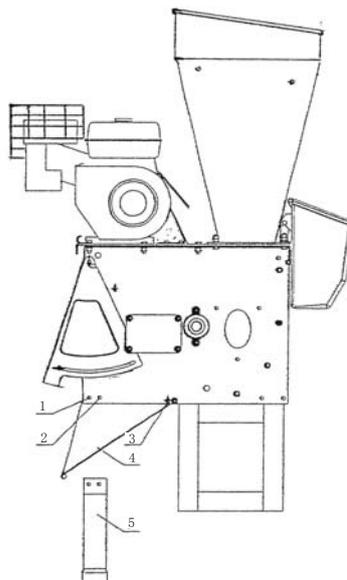
Remove all the items from the crate. If any part is missing, contact your place of purchase at once.

Assembly should be done on a clean, level surface with a helper.

1. Remove the machine from the crate and put it on a wood shelf. See picture 1.



2. Attaching front foot to the basic machine. See picture 2.

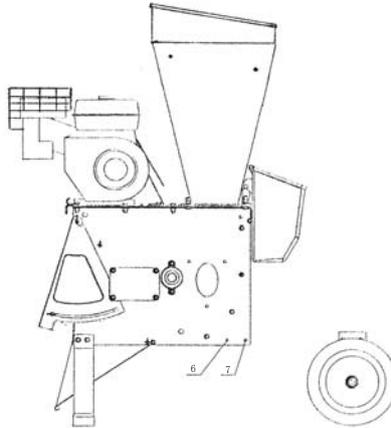


- 2.1. Remove the nuts from bolts 1,2,remove the bolts and pipe spacer.
- 2.2. Forward the parts box to make the long pin 3 clear.
- 2.3.Pull the discharge hopper out of the parts box and align the holes 1,2.
- 2.4. Hitch front foot 5 to the side board of the parts box and align the mounting holes with

holes 1,2.

2.5. Put the pipe spacer that was removed in step 1 back in place. Insert the bolts and secure them tightly with gaskets and nuts.

3. Attach axle brackets, axle and tires. See picture 3.



3.1 Remove the wood shelf.

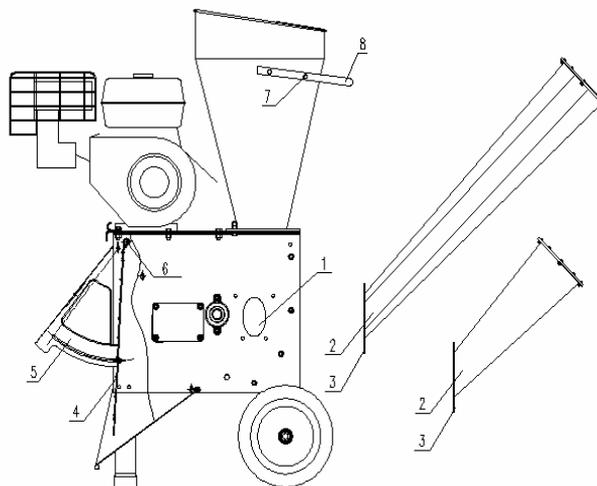
3.2 Disassemble the bolt 7 and pipe spacer.

3.3 Put the rear axle brackets in place and align the mounting hole with holes 6,7.

3.4 Insert M8*20 bolt in hole 6 from outside to inside and secure it slightly with gasket and nut.

3.5 Reassemble the pipe spacer and the long bolt 7 and secure it tightly with gasket and nut. Then screw the nut tight in 6 place.

4. Attaching the chipper tube to the basic machine.



4.1. Put the chipper tube 2 in place on the side of the basic machine. Align the three mounting holes in the flange with three holes around place 1.

4.2. Secure the flange with gaskets and nuts M8. Make sure the chipper tube has no deflection before tighten the nuts.

5. Mounting the discharge grid

5.1. Remove the thumbscrews on both sides of the movable door and lift the door on the highest position. Hook the grid on the axis of the door and clamp the grid with the spring to prevent the grid falling off.

5.2. Put lower part of the grid outside of lower axis in the discharge opening. Tighten the screws M5*15 on the left and right side of discharge opening to fix the grid.

6. Mounting frame

6.1. The steel frame can be used as handle grip. Firstly, attach the steel bar on both left and right side of hopper by screws. Please do not tighten the screws.

6.2. Put the frame on the bars and fix it by tightening the screws. Then tighten the screws on the hopper.

7. Safety instructions for machine with bagging attachments.

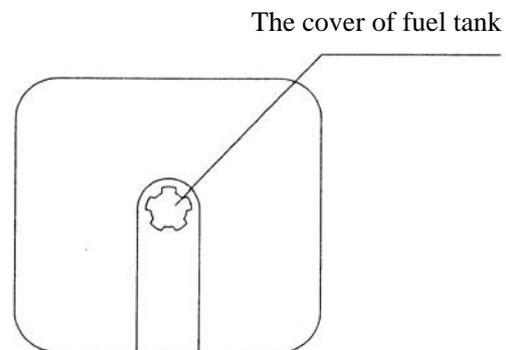
Cover the discharge opening with nylon bag and tighten the tie. When the machine is working, the chips come into the bag. That's easy to collect the chips.

8. Check all the screw, bolts, nuts and tighten them if they get loose.

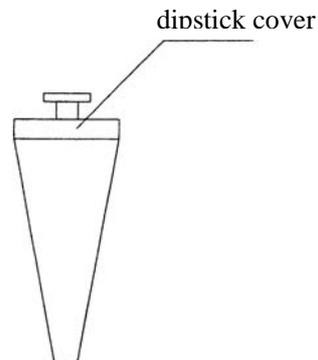
9. Add fuel to engine.

9.1. There is no fuel and oil in new engine.

9.2. Open the cover of fuel tank and add pure gasoline. See picture 5. Do not fill closer than 10mm to 15mm from the top of the fuel tank.



9.3. Open the cover and pull the dipstick out. See picture 6. Gasoline 10W-30 and 5W-30 are available. Do not fill closer than 10mm to 15mm from the top of the fuel tank.



9.4. Refer to "starting the engine" for the instruction of adding fuel.

III. Safety Instructions

i. Training

Make sure to fully understand the owner's manual before attempting to operate the machine.

ii. Preparation

1. Put the machine securely in a level surface.
2. Keep the operator area clear of other objects.
3. Do not allow children to operate this equipment.
4. Wear ear protection, safety goggles and gloves while operating the machine.

5. Do not wear any loose fitting clothing or shoes with high heel.
6. Do not operate the machine in an enclosed area since the exhaust from an engine contains carbon monoxide, which is poisonous to human.
7. Examine machine is in good condition, check all the screws, nuts and other fasteners are properly secured and screen are in place. Replace unreadable labels.
8. Pay more attention while handling fuels. They are flammable and the vapors are explosive. The points in the below should be followed.
 - Never remove the fuel cap or add fuel with power source running. Stop engine, allow engine and exhaust components to cool before refueling.
 - Never adding fuel to the machine indoors.
 - Do not smoke while adding fuel.
 - Never refuel or store the machine in the place where there is open flame, spark or other ignition object.
 - Do not attempt to start the power source if fuel is spilled, but wipe away the spillage and put it far away from the area before starting the machine.
 - Always make sure the fuel cap is securely tightened and replace before starting.
 - If the fuel tank needs to be drained, it should be done outdoors.
8. Check machine is in proper working condition after starting engine.

iii. Operation

1. Make sure the plastic cover on upper hopper is closed when your shredder is running. Flying chips is very hazardous.
2. Do not use hands or metal tools but rough wood stick instead to push the material into feed hopper.
3. Keep your face and body away from the feed intake opening.
4. Do not allow hands or any other parts of the body or clothing inside the feeding hopper, discharge chute, or other rotating parts.
5. Do not touch the muffler in operation since the temperature of muffler surface is so high that people will be burned.
6. Keep proper balance and footing at all times. Do not overreach. Never stand at a higher level than the base of the machine when feeding material into it.
7. The operator should be extremely careful that pieces of metal, stone, glass or other foreign objects are not put into the intake opening together.
8. Please check if there is abnormal noise or shaking in machine. If so, please turn off engine immediately and solve problem. Please inspect for damage; check for and tighten any loose part; have damaged parts replaced or repaired with parts having equivalent specifications.
9. Big branches are fed comparatively slowly and branches larger than the yellow ring on hopper can't be put into machine.
10. Do not allow processed material to build up in the discharge zone; this may prevent proper discharge and can result in kickback of material through the feed intake opening.
11. If the machine becomes clogged, shut-off the power source before clearing the debris. Keep the power source clear of debris and other accumulations to prevent damage to power source or possible fire.
12. Never put something on the cover of hopper in case it will fall into machine.
13. Make sure the opening of chipping tube is always covered while not at work in case

children place their hands into the tube.

14.To move machine, firmly hold the handle by both hands, step on the shaft on rear wheel by one foot, lift the front of machine, pay attention to barycenter of machine, walk slowly forward, backward or turn around.

15.Before operating the machine, please check the direction of the wind to avoid to work downwind of exhaust.

16.Keep all guards and deflectors in place and in good working condition.

17.Turn off machine before transport the machine.

18.Do not tilt the machine while the engine is running.

IV. Maintenance and storage

1.When the machine needs servicing, inspection, or storage, or to replace a part, turn off the engine, make sure all the moving parts completely stop and allow the machine to cool before making any inspections, adjustment etc.

2.Store the machine where fuel vapors will not reach an open flame or spark. If for a long time storage, drain the fuel out of the machine. Make sure the machine become cool before storing.

3.When the cutting means need servicing, the cutting means may be moved by manually mechanism although the machine is stopped.

V. Additional safety instructions for machine with bagging attachment

Before attaching or removing the bag, the engine should be shut off. Cover the discharge opening with a fabric bag and tighten the cord in the mouth of the bag. When the machine is working, all the chips come into the bag. That's convenience to collect the chips. Or you may take other way to deal with the chips.

VI. Wood Shredder operation

i. Branch chipping

1.Long branches like sunflower stems, corn stems and tree branches etc are fed into the side chipping tube for chipping by the rotating blade.

2.Some side shoots and branches may have to be trimmed from the main stalk before chipping.

3.Shorts stubs of branches may be pushed through the chipper section with next branch, never use hand.

4.Last branch is pushed inside of the tube by some tools like wood stick. Never try by hand.

5.Never push the small branches by hand, use wood stick instead.

6.When feeding branches, be certain that thicker branches should be pushed more slowly than thin ones. A technique and understanding will be acquired to successfully shred very soon.

7.Do not allow an accumulation of processed material to build up under discharge of the shredder-chipper as this can result in clogging. Use wood tools to clear the build up.

8.Do not put your face close to the feed hopper, which may result in injury.

9.Do not stand in front of discharge opening and never attempt to open the outlet of discharge while machine is on operation.

10.Set back the cover to the side tube once finishing chipping.

VII. Leaves and Grass Shredding

1.Leaves and short stalk (bean plants), cobs, sod and similar material should be fed into the hopper and chipped in 16 interlaced chipping lots.

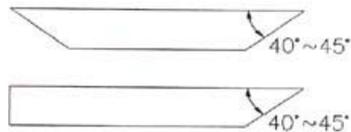
2. Do not open the plastic cover when adding more material.
3. The leaves and similar material is a little hard to go into the hopper. Use a wood stick to push them in instead of by hand or other metal bars.
4. Keep your face and body away from the feed hopper to avoid being struck by any material that may bounce back.
5. The discharge area is easily clogged if the material remains more water or sticky. Always stop engine before clearing build-up with wood tools. Never use hand or foot.
6. Never attempt to clear an accumulation of processed material when engine is still on work.
7. Perhaps you get other pretty plants in your garden and the material will be processed to be organic fertilizer as follows.
Put the discharge towards a wall, large board or other obstruction. Opening the discharge door and remove the screen to allow the processed material pile up. With a garden spade feed this material into the shredder until it reaches the consistency you want.
Keep pet, bystander away from the discharge area while the machine is on operation. Set the screen back to the place and close the discharge door when shredding is finished.

VIII. Sharpen the blade

Cutting blade is made of special material and the blade is very sharp after heat treatment. It may be dull after used for some time.

Judgment for dull blade: when the chipping sound become very ponderous and the belt always skids while it is not loose, or feeding speed gets slow, please remove the blade and check if it is dull.

1. Turn off the engine before remove the blade.
 - Remove the board covering the blade.
 - Open the small outlet of the discharge.
 - Remove the discharge screen.
2. Wearing safety gloves, turn the blade tray to a proper position.
3. Remove the location screw on the two pieces of blade.
3. Sharpen the blade.
 - If the blade is struck a break by metal or stone or some hard subjects, please sharpen the break lot at first.
 - Avoid changing the blade color and anneal when sharpening the blade.
 - It may result in a breach on the edge if you overexert.
 - Knifepoint angle should be kept in 45-40 degree.



- Two pieces of blade should keep the same weight as each other. They will shake if there is much difference between weight.
4. Put the blade back to the place where they are removed and tighten with nuts.
 5. Replace the board covering the blade.
 6. Replace the discharge screen.
 8. Close the outlet of the discharge.

IX. Adjusting the belt.

There is a “V” belt under belt cover transmitting energy from engine to the blade tray. The belt will be getting loose and skid after used for some time. So tension adjustment is required.

1. Turn off the engine and remove the belt cover.
2. Loose the four location nuts on the engine.
3. Move engine forward till the “V” belt is tight.
4. Put the main pulley and affiliated pulley in the same plane. (A ruler can be used to measure if lack of experience). Tighten the four location holes on the engine.
5. Set the belt cover back to its place.

X. Replace the belt

The “V” belt need for replacement if it is too long or damaged.

1. Turn off the engine and remove the belt cover.
2. Remove the old belt. Pull the belt outside by tools and turn the pulley gradually to remove the pulley.

Note: please mind your finger.

3. Place the new belt in the main pulley first (“V” belt on engine) and then to the affiliated pulley beside the blade tray.
4. The new belt is tighter than the old. To assembly the new one is not as easily as to remove the old. When you hold the belt into the slot, do not put your finger between the pulley and belt, which may result in injury.
5. Replace the belt cover.

XI. Adjusting the hammer

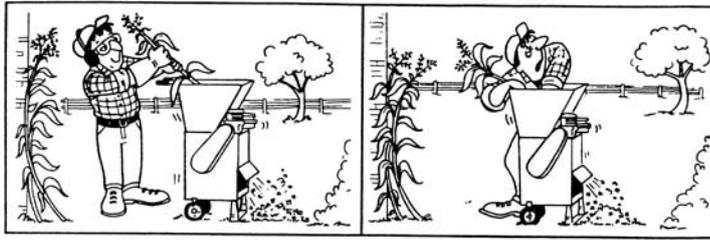
There are 16 hammers in the machine box, when the blades are running fast, these hammers will forceful hit the raw material constantly until crush them into small pieces. As the machine working for a long time, the cutting edge of the hammer will become blunt. Then, the operator needs to reinstall the hammers after overturning them 180°, let the blunt edge backward and the sharp edge forward.

When both sharp edges of one end of the hammer become blunt we can also replace this end with the other end which is with sharp edges.

1. Turn off the engine before adjusting the hammer.
2. Open the side door of the outlet of discharge, remove the discharge screen.
3. Remove the board covering the blade.
4. Remove the upper hopper.
5. Wearing safety gloves; turn the hammer to the upper position of one axle.
6. Turn the axle of the hammer; remove the roll pin which is at the end of the axle. There are four roll pins and make sure take all the roll pins out of the machine.
7. Place the axle of the hammer in the middle of the board covering the blade, then pull out the axle.
8. Place the blunt edge of the hammer to the reverse and install them to the axle.
9. When adjust the hammer well, replace the roll pins.
10. Replace the upper hopper .
11. Replace the discharge screen .
12. Replace the board covering the blade.
13. Close the outlet of the discharge.

RIGHT WAY

WRONG WAY

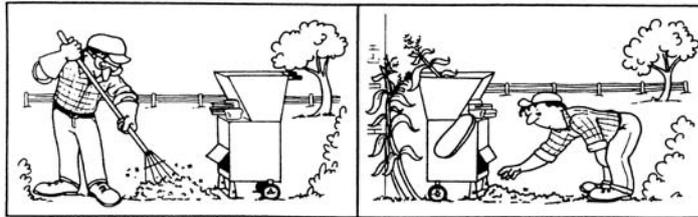


Do stand back - wear glasses and gloves

Don't allow hands to enter hopper or peer into hopper with face.

RIGHT WAY

WRONG WAY

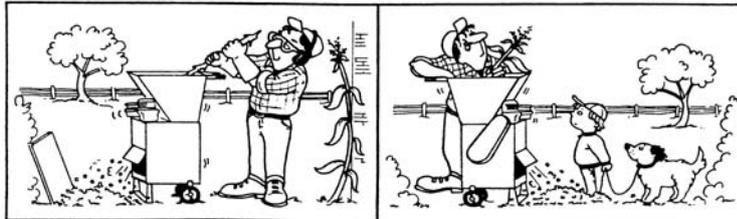


Do clear discharge area of machine with spade, rake or long handle tool.

Don't clear discharge with hands. Never place any part of your body in discharge area.

RIGHT WAY

WRONG WAY



Use stick, never hands, if material bridges in hopper. Do keep people away and discharge shredded material into compost heap or fixed obstruction.

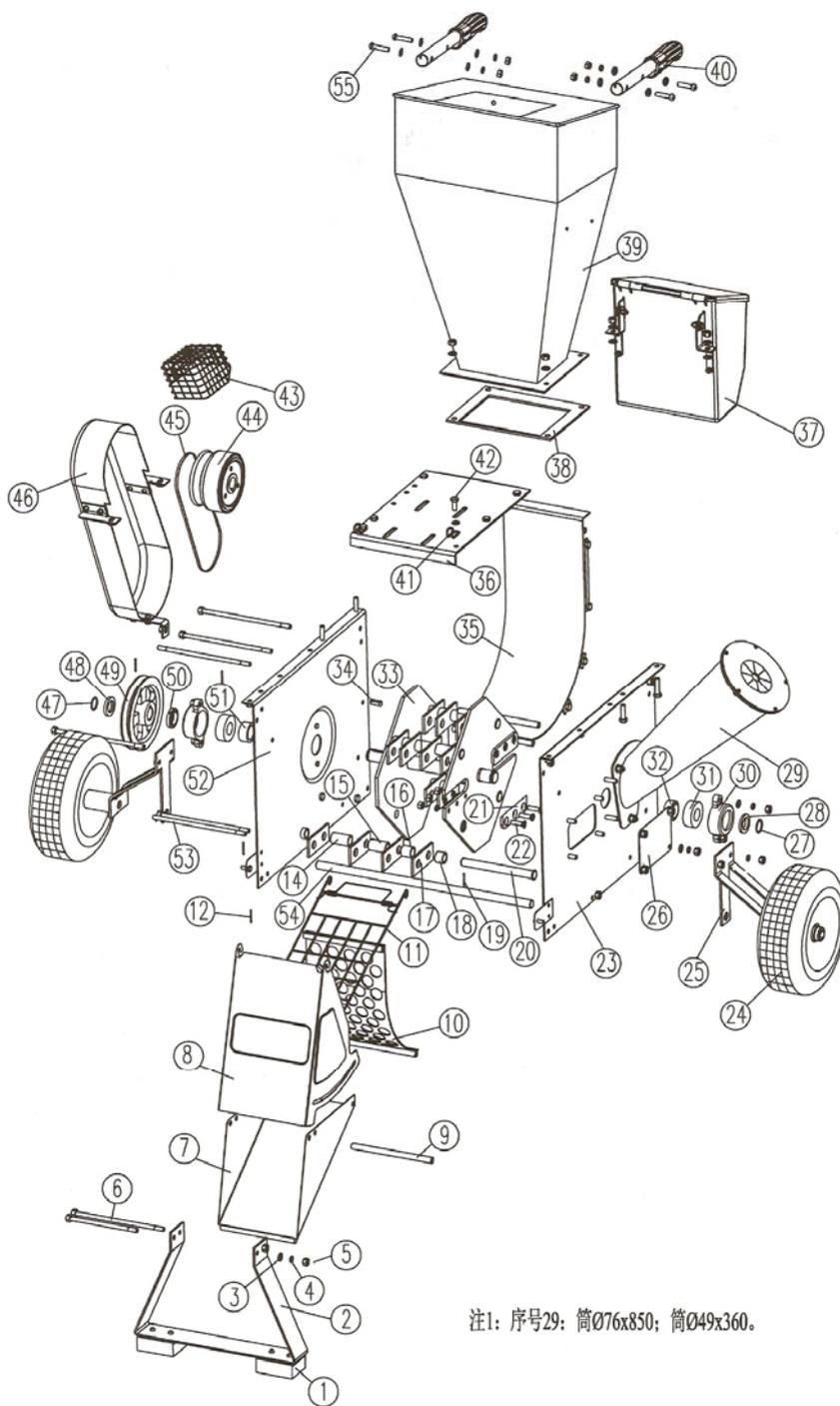
Don't allow pets, children or bystanders in operating area.

SPECIFICATION

Main dimension: L x W x H	mm	762*731*1131
Net weight	kg	70
Fuel tank volume	cm ³	2000
Oil tank volume	cm ³	600
Max. cutting speed	/min	2000/min
Type of engine Engine manufacturer Engine type Carburetor type Type of carburetor Starter Spark plug Magneto Displacement Max. shaft brake power Max. engine speed	 F7RTC or other cm ³ kW /min	168FA Shandong Huasheng Zhongtian Machinery Group., Ltd. 4-stroke engine Recoil starter Gap 0.028-0.031 in. Flywheel magneto, CDI System 196 4,8 3600
Fuel consumption:		≤395g/kwh
Fuel consumption at max. engine power	kg/h	1.56kg/h
Specific fuel consumption at max. engine power	g/kWh	1.2kg/h
Sound pressure level (Annex F of EN 13683)	dB(A)	95
Sound Power level (2000/14/EC)	dB(A)	110

No.	Name	Material	Spec.	Qty	No.	Name	Material	Spec.	Qty
1	support	neoprene		2	40	handle grip			2
2	front support	cold rolled steel A3	t3.5	1	41	hook	steel wire 10#	Ø3	2
3	flat gasket			some	42	hex bolt			some
4	spring gasket			some	43	thermal proof cover	10# steel wire	Ø2	1
5	nut			some	44	clutch			1
6	long bolt	round steel A3	M8*205	3	45	V belt		A1050	
7	discharge	cold rolled steel Q235	t1	1	46	belt cover	cold rolled steel Q235		
8	movable door	cold rolled steel Q235	t1	1	47	steel wire ring 2	steel wire 65Mn	Ø2.5	1
9	tube	steel tube 20#	Ø12*1.5	4	48	steel belt ring	cold rolled steel A3	t3	1
10	screen			1	49	belt pulley	HT200		1
11	safety grid			1	50	gasket(left)	round steel 45#	Ø40	1
12	hatch pin			2	51	cushion(left)	round steel 45#	Ø40	1
13					52	right steel board	cold rolled steel A3	t2.5	1
14	compartment 1	welded steel tube 20#	Ø20*1.5	4	53	bolt	round steel A3	M8*195	3
15	compartment 2	welded steel tube 20#	Ø20*1.5	8	54	wheel axle	round steel 45#		1
16	compartment 3	welded steel tube 20#	Ø20*1.5	4	55	cross bolt		M8*35	4
17	hammer	hot rolled steel 45#	t4.5	16					
18	compartment 4	welded steel tube 20#	Ø20*1.5	4					
19	columnar pin		4*20	4					
20	hammer axis	round steel 45#	Ø20	4					
21	blade	W18Cr4V(Cr12MoV)		2					
22	inner hex screw	round steel 35#	M8*25	6					
23	left steel board	cold rolled steel A3	t2.5	1					
24	wheel			2					
25	rear wheel support	cold rolled steel A3	t4	2					
26	cover	cold rolled steel 10#	t1.2	1					
27	steel wire ring 1	steel wire 65Mn	Ø2.5	1					
28	gasket(right)	round steel 45#	Ø40	1					
29	side chute	cold rolled steel 10#	t1.2	1					
30	bearing seat	HT200		2					
31	bearing		Ø25*Ø52*18	2					
32	cushion(right)	round steel 45#	Ø40	1					
33	blade tray			1					
34	belt key	A3		1					
35	rear board			1					
36	engine seat	cold rolled steel A3	t3.5	1					
37	tool kit	PP		1					
38	rubber gasket	butyl		1					
39	hopper	cold rolled steel 10#	T1.2	1					

FYS-76



注1: 序号29: 筒Ø76x850; 筒Ø49x360。