

9GB series of reciprocating mower



1. Application and useful scope

9GB1.4-1.8 reciprocating mower is used for reaping the grass which grows at the farm, forest or pasture-land. It works at the hill, sloping field or small field. The matched power of this mower is 25HP-60HP tractor which has the power take-off (PTO). The tractor power take-off drives the cutting blade. The three hanging system control the mower up or down. The tractor clutch control the cutting blade running or stop. It controls by the tractor driver and it has the good working performance, the whole mower can be lifted by hydraulic pressure system when the tractor crosses the barrier.

2. Main technical specifications

Model		9GB--1.4	9GB-1.6	9GB--1.8	9GB-2.1
Item		1.4	1.6	1.8	2.1
Cutting width(m)		1.4	1.6	1.8	2.1
Working speed(km/h)		6-8			
Productivity(ha/h)		0.8-1.5			
Average cutting height(mm)		50-70			
PTO speed(r/mm)		≥540			
Matched power(HP)		25-80			
Weight(kg)		145	155	165	175
Overall dimension(mm)	Work condition	3400×700×900	3600×700×900	3800×700×900	4000×700×900
	transit condition	900×1000×1800	900×1000×2000	900×1000×2200	900×1000×2400

3. Assembling of the mower.

3.1 The cutter installation

Before the join the cutter, please install the cutter rivet first. Whether you install or disassembly, please don't touch the blade of the cutter, avoid the cutting.

Fig 1.

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3.2 connect to the tractor (Fig 1)

Please connect the headstock and the top tie bar to the three points which at the tractor's hydraulic pressure tie bar. When the mower doesn't work, the tractor inner runner should contacts the ground. At the same time, adjust the tractor brace bar, keep the bar protector away from the ground over 5cm.

3.3 The PTO installation

Connect the PTO to the tractor driving shaft (left hand turning). Lock the protector with the chain, avoid turning.

Alert: when cutting finished or before reinstall, please eliminate the butt on the PTO carefully, clean it and smear the antirust or grease, keeping carefully.

When the cutter is blocked, has some barrier, lift up or backward, please don't connect the clutch, avoid the PTO shaking.

4. Adjusting

4.1 Strap adjusting.

First, please release the belt pulley bearing bolt. Second, release the locknut on the regulating plate. Third, turning the bolt on the mower cover, please keep the belt pulley always move up or move down, keep the belt has the proper elasticity. The proper degree of the elasticity is when you inflict about 2KG on the single belt, the flexibility is about 6mm. when you finish the adjusting; please screw down the belt pulley bearing bolt and the locknut.

4.2 adjustment of limitative mechanism

When lifting the cutter, the outer runner should leave the ground before the inner runner, after that, you can lift the cutter according you like. You can do that by adjust the terminal strand.

4.3 Cutter adjusting

When pull or push the connecting-rod, the cutter should running placidly, if you feel heaviness when you pulling, you should check the clearance of the pushing broach, usually, the main reason that you feel heaviness when you pulling is pushing broach is too tight.

a) Obliquity adjusting

adjust the length of the top rod, that can made the whole implement go round with the twist join of the lower rod and the implement. Through that, you can make the tip of the cutter pitching. Please accord to the ground surface or the pasturage status to adjusting. When working at the flat pasture land, you can make it acclinic or declinate; when working at rugged ground, the cutter should raises a little, avoid the cutter broken, the suitable angle when you adjusting is about ($\pm 5-10$).

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b) Adjust the clearance of the knife section and the fixed blade (Fig 2)

Fig 2.

When wood connecting-rod at the limited, please keep the knife section close to the fixed blade. 0.5mm will be allowable. The back-end clearance should be 0.3mm-1.0mm. Especially, some clearance will be allowed 1.5mm, but this kind clearance can't over the 1/3 of the whole, **if the space is too large, please thin the cutter protector and the surface of the girder to reduce the space.** You can knock on the cutter protector by hand hammer. Please knock on the most thickness place, avoid knock on the cutter tip or the superlingua.

The installed cutter protector, fixed blade working face should in a plane; the warp shouldn't over the 0.5mm (you can get the warp that between any three cutter protectors by warp-ruler or feeler gauge)

c) Adjust the clearance between the knife section and the fixed blade by knock on

the knife holder, the clearance do not over 0.5mm.

d) Move the friction plate forward or backward to make the friction plate close to the trailing flank of the cutter holder.

e) Adjust the clearance between the knife tip, knife steering deflector and the knife tip protector, replace or adjust the gasket, make the steering deflector or the forward-protector thin, cut down the clearance between them and the knife tip($\leq 1.5\text{mm}$), that can eliminate the jumpiness or the impact.

f) When you want to adjust the cutting height, please adjust the bottom-plate of the inner runner or outer runner.

g) Adjust the clearance between the knife tip ball and the inner-outer ball-socket.

Please release the spring plate, adjust the column-nut position which at the cup head square neck bolt, keep the clearance between 0.3mm and 0.5mm. The bigger clearance will induce the oversize wallop and the noise, the smaller

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clearance will induce the calorific and wearing.

5. Using and safety regulations

5.1 transport position

Connect the mower to the tractor, **lift cutter to 90 angle**, fix it with the transport tie bar, lift the mower to the transport position by tractor lift system.

5.2 Working position

Put down the mower to the ground by lift system, Release the transport tie bar, put down the cutter to the ground (at the same time lay back the transport tie bar). Adjust the lift system; make the mower get ready for working. Connect the PTO. Please notice that if you connect the clutch, the mower will work. Please notice the limit of the cutter lift height. The distance of the inner runner to the ground doesn't allow over 180mm, if you over this limit, the clutch will break easily.

5.3 Test before working

Connect the PTO, please running with the cutter about 10 minute by low speed and check the mower bolt if it is not hard up, the bearing superheating, accessory binding etc. when you finish the checking. Please run with middle

speed about 15 minute (Avoid use high speed), please check the mower again.

5.4 At the beginning hour of the new machine working, please check the entire blot of the mower, especially the bolt which fixes the implement to the frame.

5.5 please check the dependability and the fastness of tie point especially connect or replace the wooden connecting-rod, eccentric cam and the knife tip.

Spare parts packing list:

NO.	Description of goods	Quantity
1	Wood connecting-rod	1
2	Knife section assembly	1
3	Riveting of blade guard	2
4	Knife section	5
5	Rivet	10