

Corn Planter User Manual



Contents

1. Function and Features.....	
2. Safety and Warnings.....	
3. Main Specification.....	
4. Structure and Function	
5. Installation Method.....	
6. Instructions.....	
7. Adjustment Method.....	
8. Maintenance.....	
9. Common Faults and Fix Methods.....	
10. Spare Parts.....	

Thanks for purchasing our corn planter. Please read this user manual carefully before using:

Function and Features

2BYFS-2, 2BYFS-3, 2BYFS-4, 2BYFS-5, 2BYFS-6, 2BYFS-8 corn no-tillage fertilizer planter is matched with wheeled tractors, widely used in plains and hilly areas, and able to sowing corn, soybeans (change seed plate) with or without soil preparation. It is able to fertilize at the same time and truly achieve multi-purpose. The design of the machine is reasonable, easy to operate, flexible and adaptable to small plot operations. The machine can complete a number of operations such as ditching, fertilizing, sowing, covering soil, and suppressing at one time.

The machine has the following features:

1. The frame is welded of high quality steel, featuring light weight, reasonable structure, high strength and good performance.

2. The components and the frame are connected by U-bolt and pressing plates, which is quick to assemble, convenient to adjust, and reliable.
3. The opener is welded with high quality steel and is equipped with a dismountable alloy steel tip, which has strong wear resistance.
4. The single-drive seeding mechanism is adopted, and each seeding assembly can complete the entire working process independently. It has a profiling function and can float with the ground. When the field is undulating, it can maintain a certain seeding depth.
5. Scoop wheel type single seeder adopts aluminum alloy, throwing away the traditional brush and plastic wheel and no wearing parts, which greatly extend the service life. The seeding effect is comparable to that of the air suction precision seeder, which not only saves the seed, but also truly realizes an innovative revolution in the sowing industry.
6. The rationalized shock absorption design is beautiful and firm, and effectively avoids the leakage caused by the ground wheel slip.
7. Streamlined flat shovel type opener reduces power consumption. The alloy steel head is easy to adjust and durable.
8. The shifting type of plant spacing adjustment mechanism is adopted, which makes the plant spacing adjustment very convenient.

Safety and Warnings

(1) For your safety, please note the following:

1. You must carefully read the instruction manual before use, and be familiar with the structure and performance of the machine, safety operation, use and adjustment methods.
2. The machine can be started only when no one is close to start the machine.
3. If there is abnormal noise or stuck phenomenon during operation, stop the machine immediately and continue working after troubleshooting. Do not touch the rotating parts with hands during work.
4. Do not go backwards when planting.
5. Stop the machine when add seeds or fertilizer midway or clearing seeds or fertilizer after seeding.
6. Stop the machine when adjust, repair and replace parts.
7. When repairing the machine, the tools such as wrenches, hammers, screwdrivers, etc. should be inventoried, and should not be left in the machine to prevent accidents when starting the machine.
8. The machine is strictly forbidden to turn without being lifted. The unit is strictly prohibited from turning sharply.
9. There should be no iron wire, stones and other debris in the seed and fertilizer boxes.

 Warning	
	Do not open or disassemble the cover when operating

 Warning	
	<ol style="list-style-type: none"> 1. The machine should be locked when maintenance. 2. Keep away from the machine when the machine rises and falls

 Warning	
It is strictly forbidden to stand on the pedal when the machine is working or transporting.	

 Warning	
After the broadcast volume is adjusted properly, the lock nut must be locked.	

	Please keep away when the machine is lifting
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	Do not go backwards when sowing
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Main Specification

Model	2BYFS-2	2BYFS-3	2BYFS-4	2BYFS-5	2BYFS-6	2BYFS-8
Dimension (mm)	1950*1270*1120	1950*1500*1120	1950*2000*1120	1950*2850*1120	1950*3150*1120	1950*4550*1120
Weight (kg)	190	270	350	475	570	760
Working Width (mm)	800-1800	1200-1800	1600-2400	2000-3000	2400-3600	3200-4800
Rows	2	3	4	5	6	8
Basic Row Spacing (mm)	400-900	400-600	400-600	400-600	400-600	400-600
Seeding Type	Bucket wheel type					
Fertilizing Type	Outer geneva					
Transmission Type	Chain drive + shaft drive					
Power (kw)	11-22	11-22	22-36.8	26.8-73.5	26.8-73.5	26.8-73.5
Efficiency (hm ² /h)	0.2-0.5	0.2-0.5	0.3-0.6	0.4-1.0	1.0-2.0	1.0-3.0
Working Speed (km/h)	2-6					

Structure and Function



- | | | | |
|------------------------------------|---------------------------------|------------------|----------------------|
| 1. Fertilizer box | 2. Fertilizing port | 3. Hanging frame | 4. Anti-winding tube |
| 5. Front opener transmission shaft | 6. Fertilizer Pipe | 7. Rear opener | 8. Seed metering |
| | 9. Fertilizer transmission gear | 10. Seed box | |



- | | | | |
|------------------------------|---------------------------|---------------------------------|-----------------------|
| 1. Seed tube | 2. Pressure adjusting rod | 3. Ground wheel | 4. Transmission shaft |
| 5. Precision metering device | 6. Imitated structure | 7. Fertilizer adjustment handle | |

(1) Rack- the rack connects the components into a complete machine and hooked to the tractor through the upper and lower suspension pins on the frame. The rack is mainly formed by the front beam, the rear beam, the left and right arms, the reinforcing ribs and the upper and lower suspension arms. A fertilizing opener is installed on the front beam, and a seeding assembly is installed on the rear beam.

(2) Fertilizing opener - the front of the rotary shaft can prevent the tangling of straw or weed, so as to achieve no-till sowing in the stubble field; fertilizing opener opens the fertilizer ditch, and fertilizers are sowed through the plow and fertilizer tube.

(3) Precision metering device assembly-seed metering mechanism adopts the wheel-type single-grain seeder. The device is refined with aluminum alloy instead of traditional brush and plastic rotating parts, which greatly prolongs the service life.

(4) Covering device - the covering device can be hung up or removed according to different operation conditions. If there are wheat stubble and straw weeds in the ground, the covering device should be removed to avoid affecting the operation effect; the covering device should be equipped of the field is cultivated.

(5) Ground wheel - as the power source of the seeding operation. the sowing and fertilizing mechanism is driven by the rotation of the ground wheel to complete the sowing and fertilizing operation.

(6) Chain guard box - it is a safety protection device. Its function is to prevent person from being hurt when the chain transmission parts working, and also to protect the chain from being entangled by straw and weeds.

(7) Spring floating mechanism - its function is to make the ground wheels have a copying effect to avoid slipping of the ground wheel and causing leakage.

(8) Seed box and fertilizer box - the fertilizer device adopts the outer geneva fertilizer mechanism, and the fertilizer volume is adjusted by the hand wheel (the longer the working length of outer geneva is, the bigger the fertilizer volume will be)

Installation Method

The installation of planter and tractor. Connect the suspension bracket under the planter to the lower suspension rod of the tractor. The upper suspension bracket is connected with the upper suspension rod of the tractor. Fixed the pin and locking pin after coupling. Adjust the middle adjustment rod of the suspension frame to keep the front and rear of the planter on level; adjust the left and right adjustment rods of the hydraulic suspension to make the left and right sides of the frame horizontal; adjust the two limit swing chains of the suspension rod to ensure the chain drive is reliable when the seeder is working.

Instructions

1. Inspection of the seeder

- a. All parts requiring lubrication should be filled with grease. The lubrication position is: gear box, chain, sprocket and rotating parts.
 - b. Check whether the transmission mechanism is reliable and flexible, and whether the chain tension is appropriate.
 - c. All kinds of fastening parts and pin joints should be inspected one by one, and there should be no loose appearance.
 - d. Check whether the planter and the tractor are hitched correctly, and whether the rotation of each rotating component is flexible.
2. Before adding seeds (fertilizer), the contents of the box should be removed first. Do not bring in the sundries when adding seeds (fertilizer), or throw the baled seeds (or fertilizer) into the box.
 3. Before planting, please trail seeding to see if the seeding (fertilizer) condition is satisfactory. When planting, attention should be paid to observing the work of the seed metering device.
 4. When planting normally, a certain amount of seeds should be kept in the seed (fertilizer) box.
 5. When the machine is not raised, the tractor is not allowed to retreat and make a sharp turn. The rise or fall of the planter should be slow during move.
 6. When the opener is difficult to enter the soil, the length of the tractor pull rod can be shortened to increase the positive pressure of the opener on the soil.
 7. When transporting or transferring for long distances, no seed or fertilizer should be fed. Only after reaching the working place can seeds and fertilizers be added.
 8. When the tractor is working, the tractor usually uses one gear or second gear, and the speeding operation is strictly prohibited.

Adjustment method

1. Adjustment of row spacing. Adjust according to agronomic requirements. The fertilizer opener and seeder should be adjusted to the required distance at the same time. The lateral spacing between the sowing fertilizer ditch and the seeding ditch should not be less than 50 mm to avoid fertilizer hurt the seeds.
2. Adjustment of the amount of sowing fertilizer. It is mainly to adjust the working length of the fertilizer wheel. Rotate the hand wheel to change the working length. After the sowing amount meeting the requirements, tighten the nut.
3. Adjustment of sowing depth. The depth and earthing performance of the whole machine is achieved by adjusting the suspension of the tractor. Adjust the height of plow leg when the single line is inconsistent.
4. The machine should be in a horizontal position during operating.
5. Plant spacing adjustment. Each group of sowing assemblies can adjust the plant spacing separately according to different requirements.

There are two transmission modes: chain drive and shaft drive. The specific adjustment of the plant spacing is as follows:

14 teeth	Up		Unit: cm							
18 teeth	Down		8档	7档	6档	5档	4档	3档	2档	1档
			36	33	30	27	24	21	18	15
18 teeth	Up		Unit: cm							
14 teeth	Down		档: Gear							
			8档	7档	6档	5档	4档	3档	2档	1档
			23	21	19	17	15	13	11	9



Precision Metering Device

Note: the above is theoretical plant spacing for reference.

Maintenance

1. After the end of each shift, the soil on each part of the machine should be cleaned.
2. After each shift is completed, check the fasteners of each part and tighten them.
3. Check whether the rotating parts are flexible. If they are not normal, adjust them in time.
4. Fill the lubrication point once every 4 hours, pay attention not to coating grease on the chain and sprocket.
5. After the end of the season operation, the seed (fertilizer) box should be thoroughly cleaned, and the seed metering device (fertilizer) should be cleaned and placed in a dry storage shed. The machine should be padded with wooden boards to avoid rain washing.

6. the sprocket and chain should be oiled.
7. Each compression spring should be stored in a free state.
8. Plastic parts should be placed in the warehouse to avoid wind, sun and rain.
9. The rusted parts should be polished and painted, and the various parts should be inspected. If there is damage, the damaged parts should be purchased and changed in time.

Common Faults and Fix Methods

Fault phenomenon	Reasons	Elimination methods
Chain falling	Chain is too tight Large sprocket axial offset	Adjust the tension Adjust the sprocket position
No seeds or fertilizer in the ditch	Seeds or fertilizer tubes plug	Clean up
Sowing volume change	Screw metering control is not locked	Adjust the spring tightness Lock
Inconsistent sowing depth	The machine is not leveled	Adjust the suspension rod to make the machine level