

# Manual

## Rotary hay rake








## 1.specification of rotary hay rake

<b>Model</b>	<b>RXHR2500</b>
<b>Raking width</b>	<b>250cm</b>
<b>Tedding width</b>	<b>160cm</b>
<b>Exterior size</b>	<b>Working 210*250*95cm</b>
<b>L*W*H</b>	<b>Transporting 210*195*95cm</b>
<b>Weight</b>	<b>160kgs</b>
<b>Reed quantity</b>	<b>12</b>
<b>Operation efficiency</b>	<b>4-8km/h</b>
<b>Matched power</b>	<b>18-50hp tractor</b>
<b>Matching PTO rotating speed</b>	<b>540r/m</b>

## 2.Safety instruction

Read entire manual before operating.Failure to follow the instructions outlined in this manual may result in personal injury and/or damaged equipment,and could void the warranty.

	This symbol precedes specific safety instructions throughout this manual.when reading the manual pay close attention to the information the follow this symbol
	Failure to follow instructions in this manual could result personal injury or death,read entire manual before operation rotary rake
	Keep hands,feet and clothing away from the machine's input power take-off(PTO) and any other moving parts until the machine has been shut down and the power source has been locked out.(refer to power source safety)
	Don't adjust,unclog,lubricate,or service the machine until it has been shut down and the power source has been locked out.(refer to power source safety)
	Do not lubricate or adjust the machine while it is in motion

⚠	Support the rake securely while working under it
⚠	Do not stand between the tractor and the rake while attaching or detaching the rake unless the tractor engine is shut off and the parking brake has been set
⚠	Be certain all bystanders and animals are a safe distance away from the rake before raising or lowering it. never allow anyone to ride on the rake or the tractor
⚠	When transporting, never exceed a speed of 20MPH and avoid sudden turns which may compromise the operator's control of the tractor
⚠	Be constantly aware of the location of the ends of the rake to avoid collision with other objects.
⚠	When moving the machine on public roads use the proper reflectors, lights and slow moving vehicle signs required by local government agencies.

### 3. Installation

Take out all spare parts, and install according the photos below, and use the prop to settle the machine before attach on the tractor.

#### A. Assembly of the teeth arm

The way of the hay rake rotates:



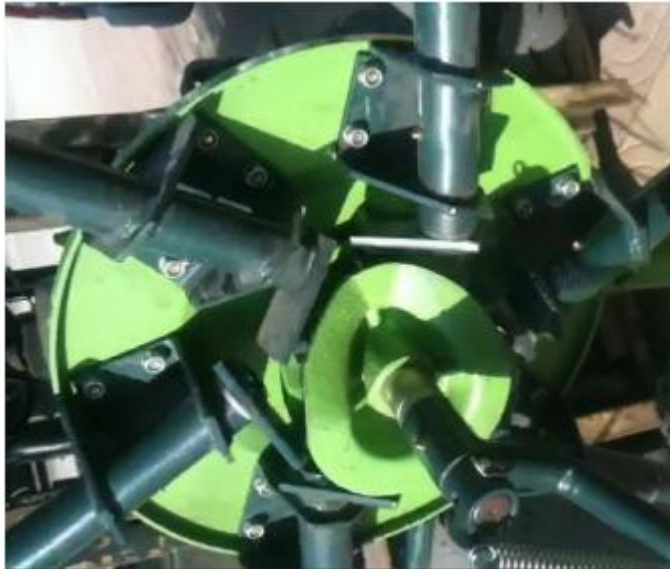
**(1)Take out the teeth arm, check the teeth and make sure they are tighten on the arm.**



**(2)take nuts off the rotary disc**

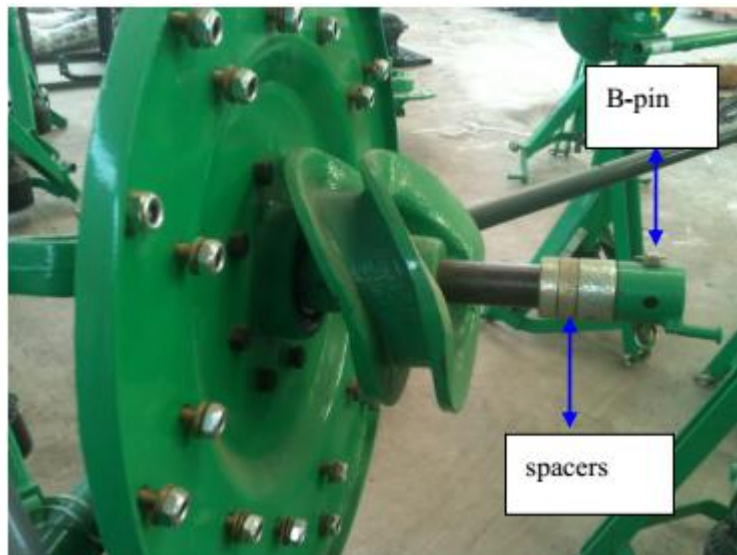


**(3)fix the bearings into the track and tighten the arm on the rotary disc one by one by the nuts.**



### B.Assemble of the wheel

(1)open the B-pin and spacer



(2)fix the axis into the sleeve and click it by the B-pin.

(3)Connecting the spring according to the picture.



### C.Assemble of grass guard

Fix the rod into the sleeve and lock it by pin.(remark: the cloth in the left of rotary disc)



D. Assembly the support legs

Fix the support legs as picture. Insert pin into the highest position of hole and lock it.



E. connecting to tractor

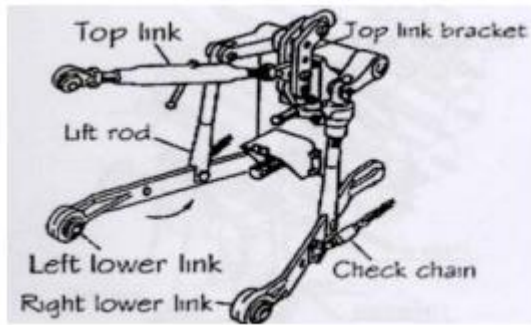
The machine is designed for 18-50hp tractor. PTO 540rpm.

(make sure the tractor and hay rake on a even place, no slope or slide spots)

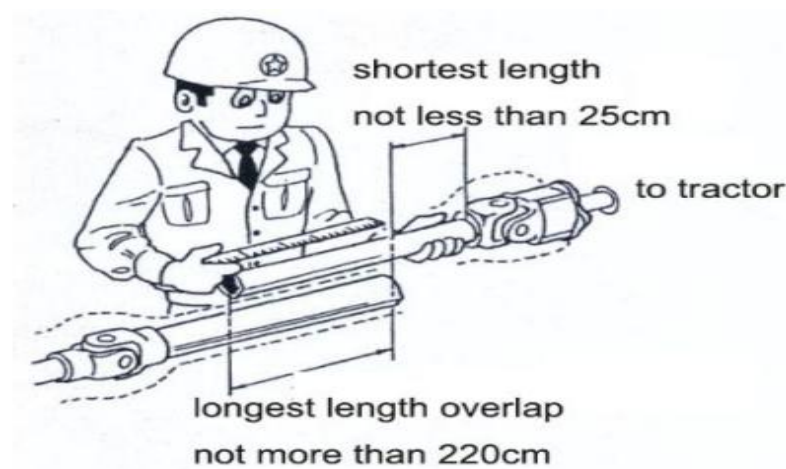
Do not connect the hay rake to tractor while its engine start or PTO engaged.)

1) adjust the tractor's lower links are at the same height with the rake's connecting pins.

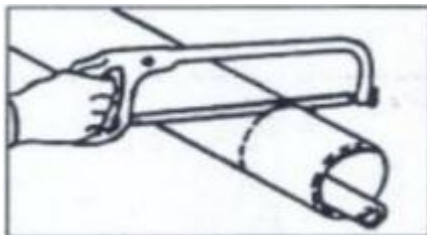
If the machine can not be lifted high up enough, the pin of lift rod should be inserted into front side of hole of lower link.



2) fix PTO shaft to connect tractors PTO and rake's PIC shaft.  
 If the PTO shaft is shorter, please change to a longer one.  
 If the PTO shaft is too long, please cut it shorter.  
 Method of cutting as below:



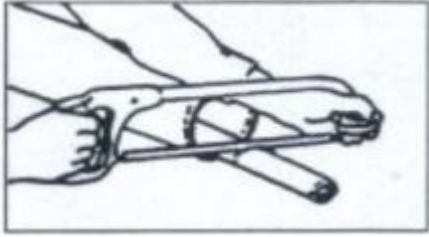
(1) cut off excess of inner and outer safety cover



(2) mark on inner and outer pipe the same length of cut off safety cover from the end of inner and outer tube



(3) Before cutting off, put rag into between safety cover and pipe not to come into sawdust



Cut off excess length of tube by metal saw.

(3)connecting the lower links of tractor with lower pins,and then connecting the upper link with upper pin.



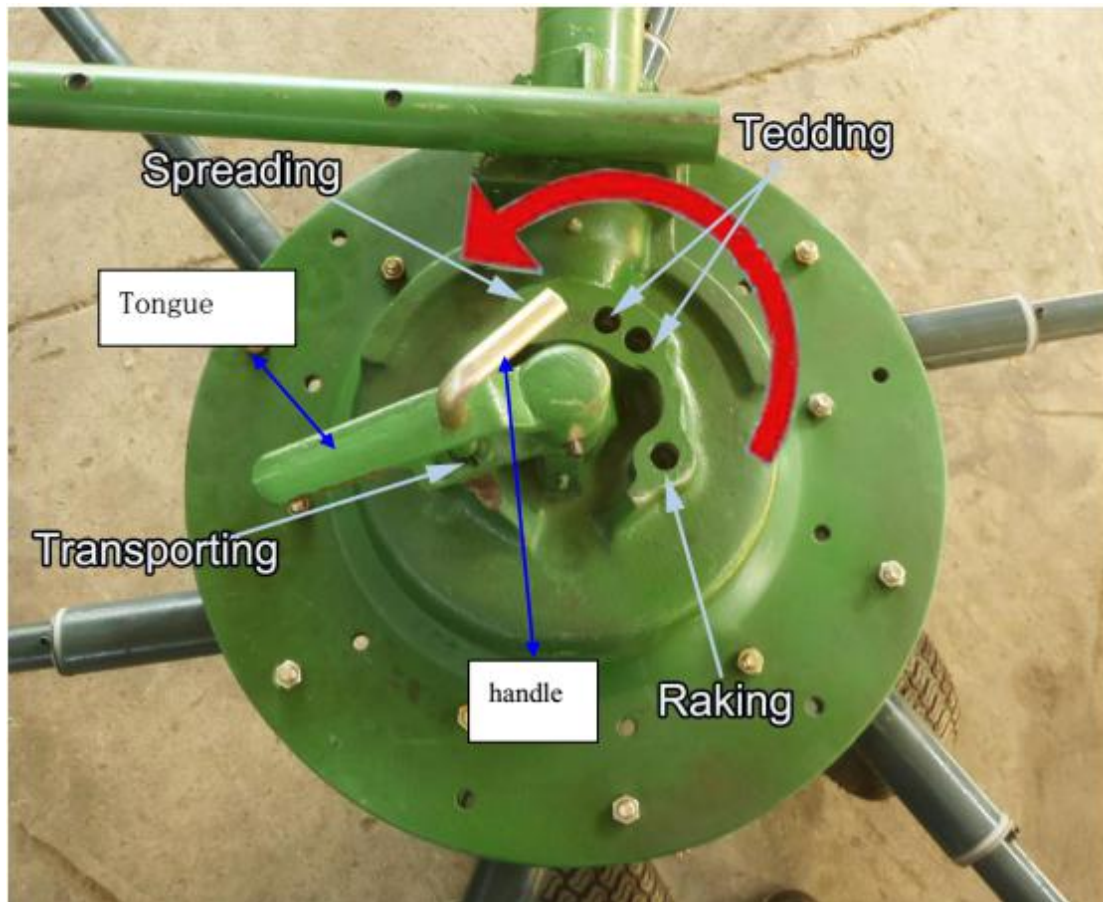
(4)fix the lock pin in the lowest hole



4. Operation method

By adjusting the tongue position,the machine can work as a rake or tedder.





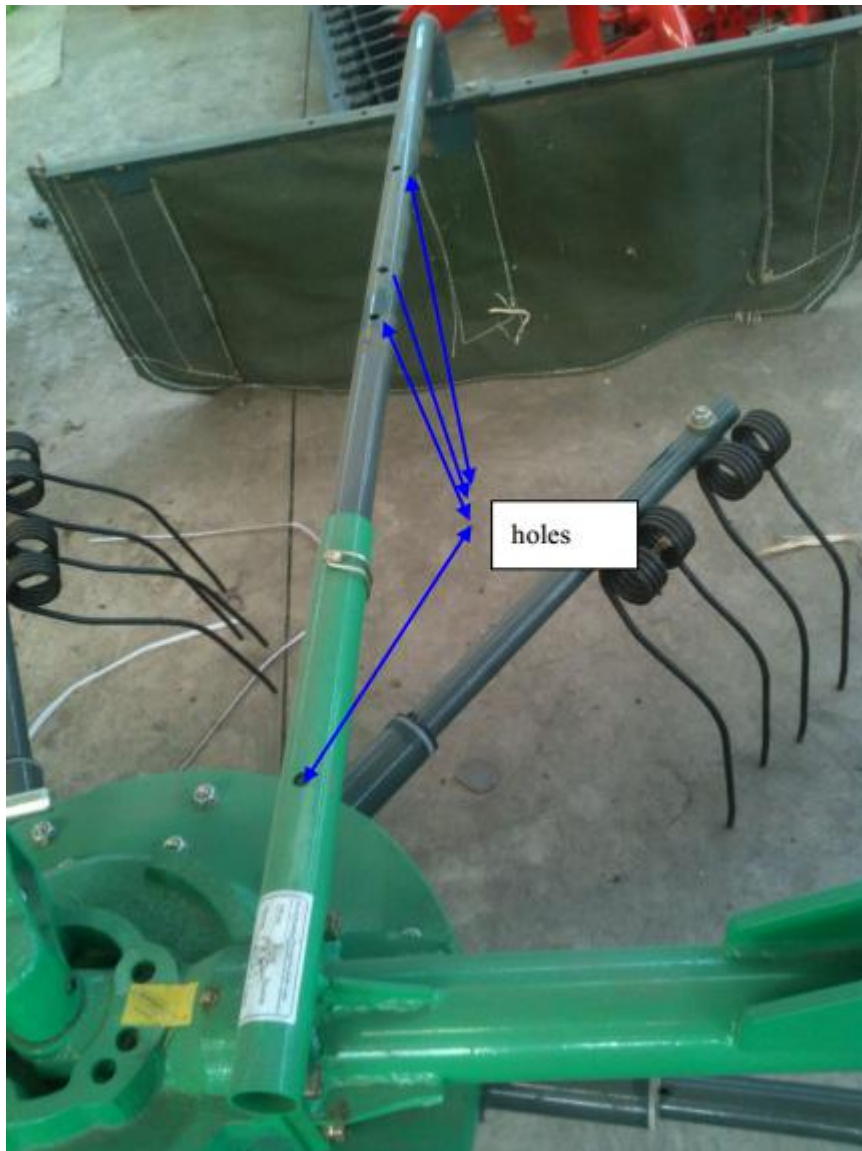
(1),as a tedder,it spreads and teds the fresh cut materials,and let them dry down fast.  
 Push the handle up,and fix the tongue towards "tedding"or "spreading"positions.  
 then fix the handle into the holes.  
 Also,fix the grass guard in opposite side.



(2)As a rake,it collects the materials into windrow lines  
 Push the handle up,and fix the tongue towards "raking"position and put the handle into the holes.  
 Also fix the grass guard as below picture.



Adjusting the length of grass guard by fix the pin in different holes of rod and sleeve.(remark: the length have to be longer than the spring teeth reach)



(3)no matter as a tedder or rake

You can adjust the height of rotary disc to be suitable to your field.



Fix the spacers previous than wheel sleeve,the working height is higher

Fix the spacers below the wheel sleeve,the working height is lower

5 storage

A. Detaching from a tractor

- (1) Slid down stand and insert pin into the highest position of a hole.
- (2) Lower hydraulic control lever of a tractor until tires of the machine contract with the ground.
- (3) Stop the tractor engine and apply parking brake
- (4) Detach power joint from the tractor PTO shaft
- (5) Detach right side of lower link, left side of lower link and top link.

B

- (1) clean every parts of the machine
- (2) Inspect moving parts and connecting parts. if any damaged or worn parts are found ,they must be replaced with new ones.
- (3) Apply grease or oil for parts needed.
- (4) Apply oil to rotating, pivoting parts and sliding parts such as clump pin of power joint.
- (5) Apply grease on PTO shaft, PIC shaft and spline holes of power joint yoke.
- (6) Paint or apply oil on damaged surface of parts to prevent from the rust.
- (7) Storage the machine in well ventilating indoor.
- (8) If there is no choice but to keep the machine in out door, cover a machine with plastic sheet.

Parts list

