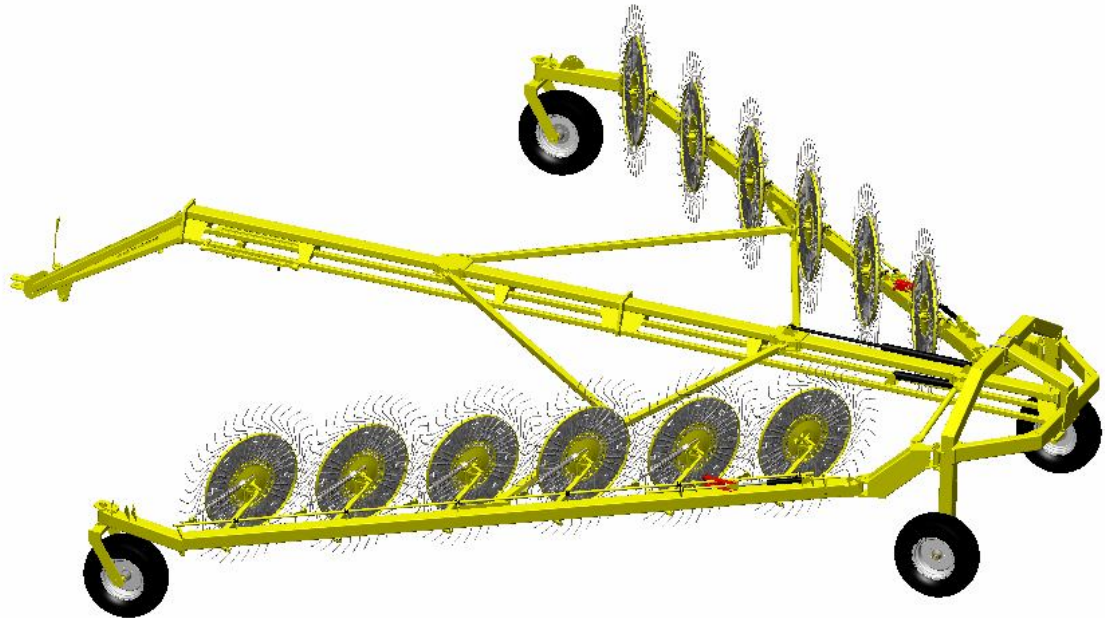


# BRIDGEVIEW



**BALE KING V-RAKE  
VMAX 1214**

**User Manual**



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## **TABLE OF CONTENTS**

TABLE OF CONTENTS.....	2
INTRODUCTION.....	3
SAFETY PRECAUTIONS.....	3
MACHINE MAINTENANCE AND LUBRICATION.....	3
WHEEL AND TIRE INFORMATION.....	4
14 WHEEL EXTENSION.....	4
HYDRAULIC HOOK UP.....	4
HIGHWAY TRANSPORT.....	5
WINDROW WIDTH ADJUSTMENT.....	7
FIELD OPERATION.....	8
ADJUSTING RAKE WHEEL ARM SPRING TENSION.....	8
TINE REPLACEMENT.....	9
SPECIFICATIONS.....	10

## **INTRODUCTION**

Thank you for purchasing your new **Bale King V-Rake**. With the proper operation and service as outlined in this manual, this V-Rake will provide you with years of trouble free operation.

## **SAFETY PRECAUTIONS**

The following safety precautions **MUST** be followed to ensure the safe operation of the Bale King V-Rake:

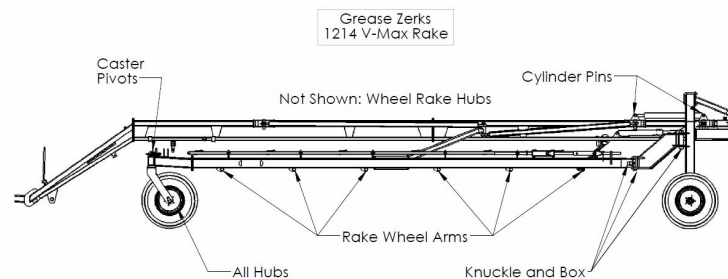
1. This trailed machine was designed and intended for on-farm use only. **Tow at speeds not to exceed 20 MPH.** Slow down for hills, curves, rough areas, and in advance of braking to prevent loss of control and possible injury or death.
2. **Always** turn off the tractor when leaving the operating platform.
3. **Always** use the transport links when towing the V-Rake on the highway.
4. Unless operating tractor, **stand clear** of the rake when in operation.
5. **Do not** stand inside the rake while it is being opened or closed.

## **MACHINE MAINTENANCE AND LUBRICATION**

General maintenance of your V-Rake should be done on a regular basis. This includes checking all bolts to ensure they are tight, making sure all grease zerks are accepting grease and ensuring that all moving parts are functioning correctly.

Your Bale King V-Rake is equipped with a number of grease zerks. It is important that these locations are lubricated according to the following maintenance schedule:

- Wheel hubs for the tires and rake wheels should be greased every 200 hours of use.
- Knuckles, caster pivots, wheel arms, and any remaining grease zerks should be greased every 10 hours use.



## **WHEEL AND TIRE INFORMATION**

The proper tire pressure for the Bale King V-Rake is 37 psi. Proper tire inflation will help alleviate a puncture problem when pulling and operating the machine in rough terrain.

The optimum tire size is 9.5L15SL, 8 Ply.

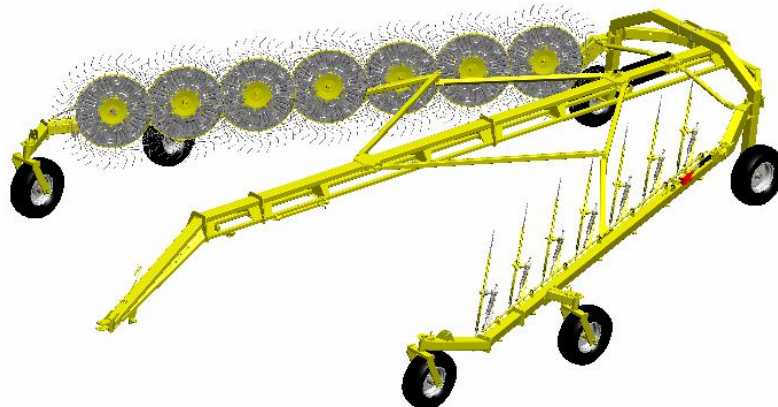
**NOTE:** Check and tighten wheel bolts on a regular basis to ensure that bolts are tightened to 90 ft-lb.

Warranty **does not** cover damaged rims and hubs due to loose wheel bolts.

Tire warranty is covered by the tire manufacturer.

## **14 WHEEL EXTENSION**

The 12 wheel rake can be fitted with an extension kit. This kit extends the length of the rake arms, adding one rake wheel to each side, making the rake a 14 wheel rake. This option increases the area covered by the rake and can be purchased as a separate kit to the 12 wheel rake.



## **HYDRAULIC HOOK UP**

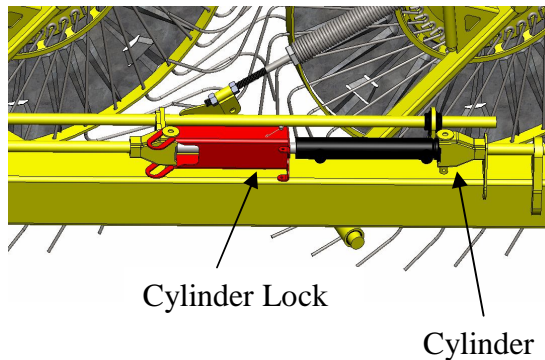
There are six hydraulic hoses to be connected to the tractor. All six hoses run out of the gooseneck of the rake, near the hitch. The hose marked with **green** controls the wing cylinder, used to open and close the rake arms. The hose marked with **blue** controls the windrow adjustment cylinder, to change the width of the rear opening, and the size of the windrow. The hose marked with **yellow** adjusts the lift arm cylinders used to raise and lower the rake wheels. These hoses should be connected to the most convenient hydraulic hook ups on the tractor. The long green and blue open the rake while the long yellow lifts the rake wheels.



## **HIGHWAY TRANSPORT**

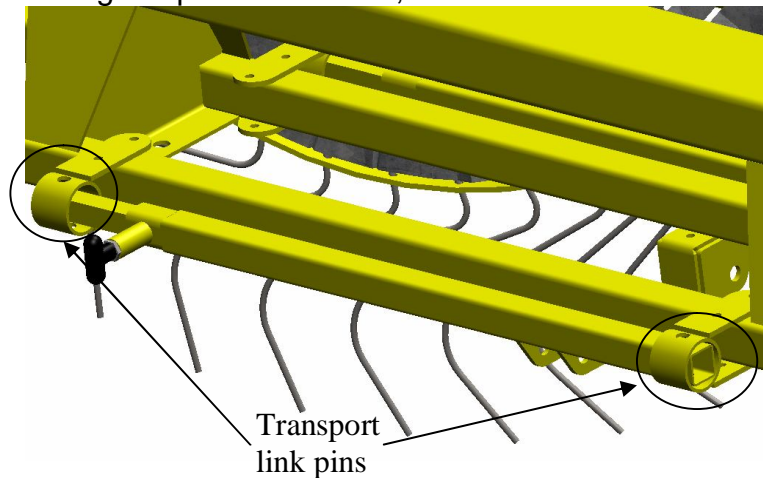
When transporting your V-Rake on the highway there are a number of safety precautions that must be taken to ensure safe travel.

First is to insert the cylinder safety locks. The lift arm cylinders (located on the left and right rake arms) should be fitted with cylinder safety locks. To insert the safety locks, raise the rake wheels to their highest position, then insert the safety lock.

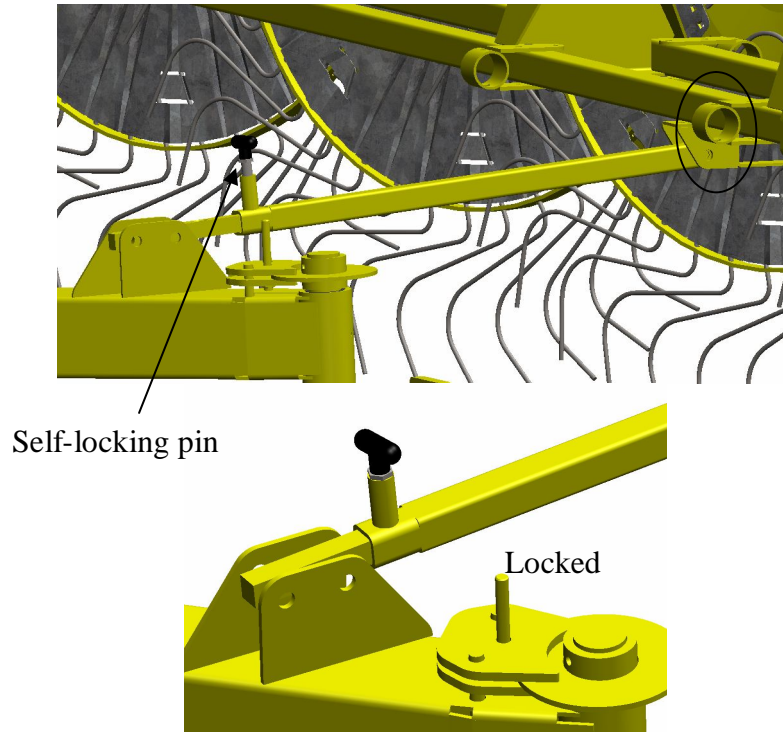


Ensure that the rear opening is in the narrow position by fully stroking the windrow adjustment cylinder. Then bring in the arms by retracting the wing cylinder until the front castors are brought in near the hitch.

The transport links must then be installed. First, remove the links from the carrying brackets by removing the pin at each end, as shown below.



Next insert the large end into the bracket at the bottom of the main frame. Pull out the self-locking pin and allow the inside tube to freely slide, then insert the small end into the bracket on the arm. Retract the wing cylinder until the self-locking pin locks in transport position. Ensure that both arms are secured and all hairpins are in place.



Align the road wheels and tighten the brake springs for all casters. The caster wheels will whip if the brakes are not sufficiently tight!

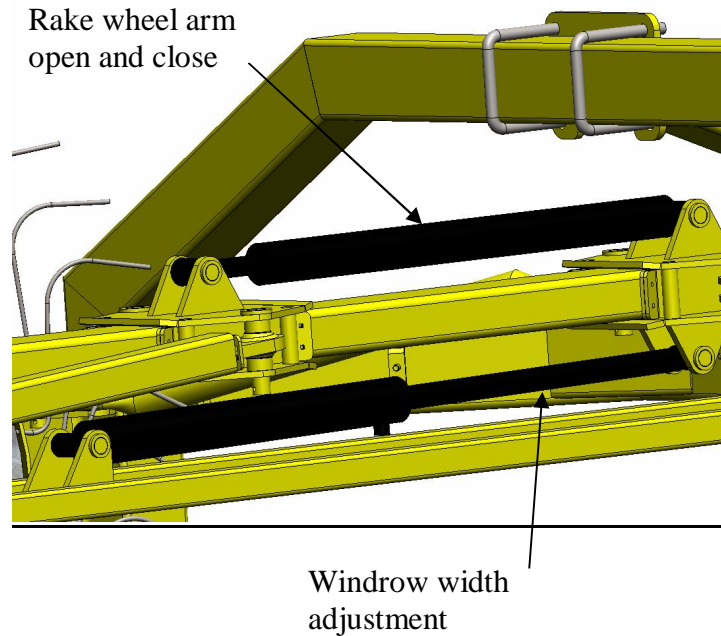
Tighten this nut



Ensure that all of the tires are at the correct pressure and that all wheel bolts are secured.

## **WINDROW WIDTH ADJUSTMENT**

The rear opening of the V-Rake is adjustable using the windrow adjustment cylinder. It must be in the narrow position to be able to transport on the highway. Widening the rear opening will space the rake wheels further apart, creating a wider windrow. Pulling the rear opening closer together will also pull the rake wheels closer together, and make a tighter swath. This allows the operator to adjust the width of the windrow to suit field conditions, and accommodate different baler sizes.

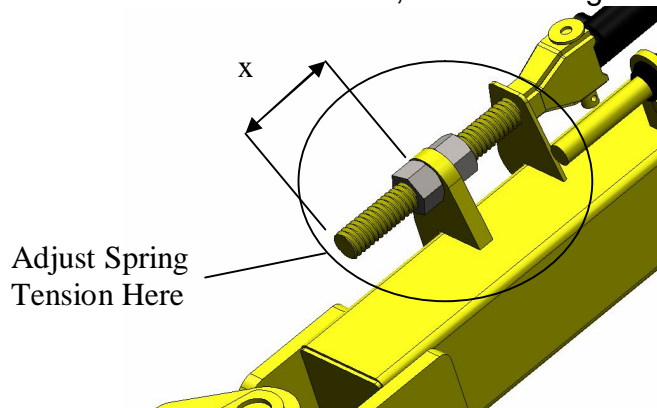


## **FIELD OPERATION**

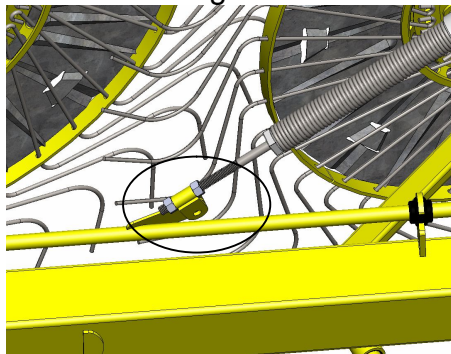
The **recommended raking speed is 8 mph (13 km/h)**, depending on field conditions. Rougher land and heavier windrows require slower operation. This will prevent damage to the rake wheels, and ensure that hay is picked up properly. For faster operation, it is recommended that rake wheel spring tension is increased to prevent bouncing of the tines.

### **ADJUSTING RAKE WHEEL ARM SPRING TENSION**

Optimum rake performance is achieved when the rake wheels are lightly scraping the ground. If the spring tension is set too heavy, premature rake tine damage will occur. If tension is too light, the hay will not be properly picked up. If the tension in the spring arms needs to be adjusted there are a number of ways to accomplish this. The first is by moving the threaded rod adjusters. The threaded rod adjusters are located at the rear end of each rake arm and are directly attached to the lift rod cylinder. By adjusting the bolts attached to the rod adjusters the tension in all the springs of that rake arm are adjusted evenly. To increase tension, decrease length “x”, as shown below. To decrease tension, increase length “x”.



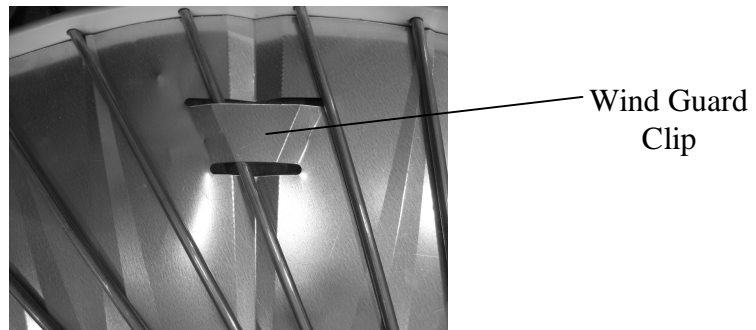
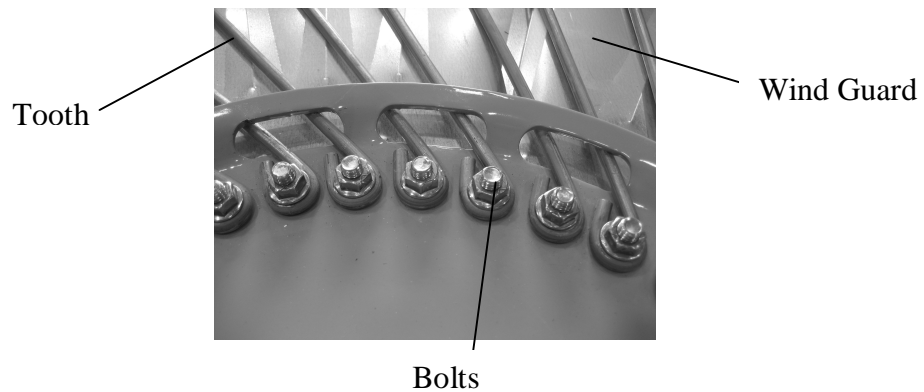
If the spring tension in only one spring needs to be adjusted then the adjustment can be done on the individual spring. There are two nuts near the end of the spring that allow the spring to be loosened or tightened.



## **TINE REPLACEMENT**

If a tine on one of the rake wheels needs to be replaced, the following procedure can be used:

- The bolt on the back of the rake wheel that corresponds to that tine should be loosened and removed completely.
- Slide the tine out of the hole in the center disk.
- Slide the tine out of the wind guard tab if necessary.
- Slide the tine out of the hole in the outer ring.
- Insert the replacement tine in the same direction as the other tines on the rake wheel.
- Then insert the bolt back in to the wind guard and tighten the nut.



## **SPECIFICATIONS**

Overall Length..... 33' 5"

Overall Width ..... 10' 1"

Overall Height..... 6' 8"

### **Overall Weight**

12 Wheel ..... 4813 lbs.

14 Wheel ..... 5605 lbs.

Tire Size ..... 9.5L15SL 8Ply

Tire Pressure ..... 37 psi.

### **Torque Settings (Wheel Bolts & Nuts)**

1/2" Dry 90 Lb.

9/16" Dry 120 Lb.

## NOTES

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.