DURABILT INDUSTRIES, LLC

RCI

ASSEMBLY INSTRUCTIONS

UNPACK THE CONTENTS OF THE CRATE

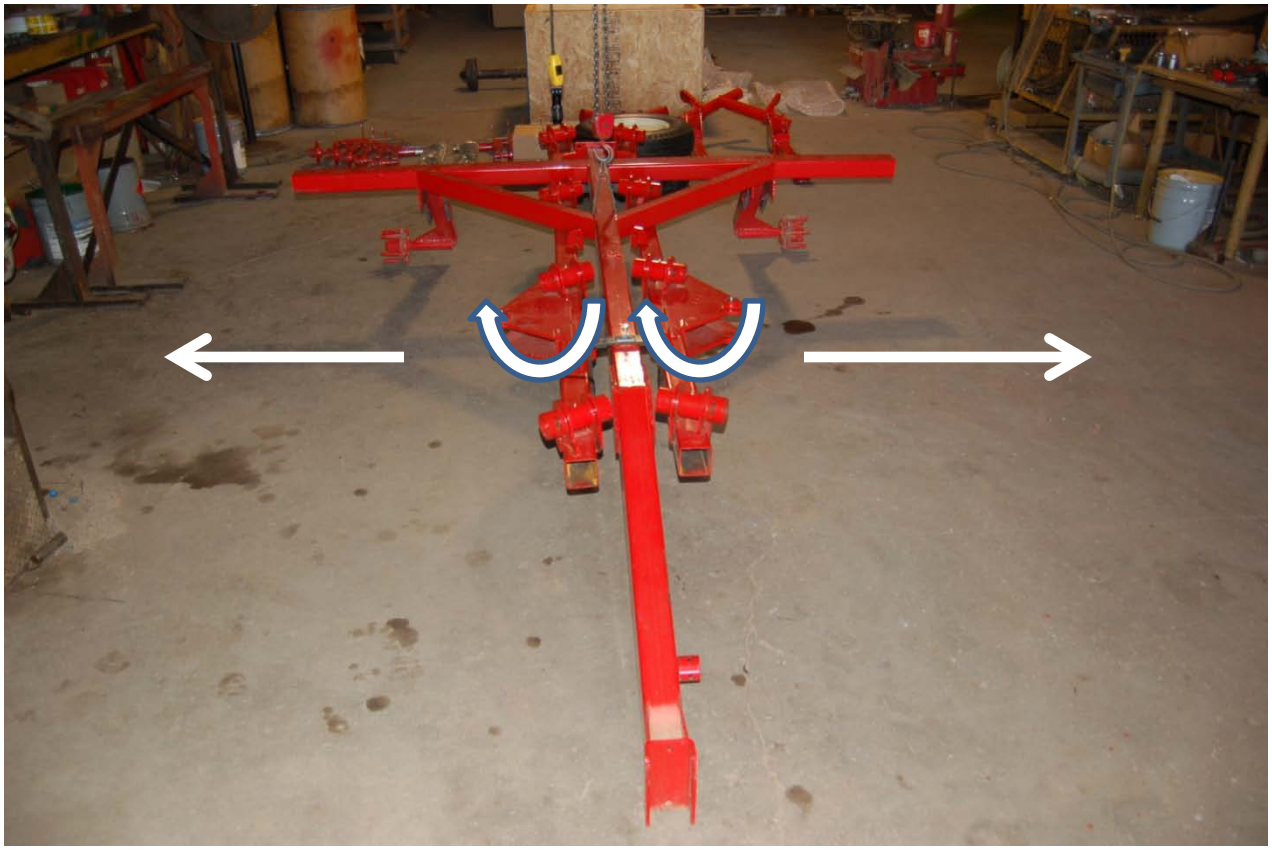
CRATE CONTENTS 8 WHEEL RAKE

3 X LH STANDARD SINGLE WHEEL ARM
3 X RH STANDARD SINGLE WHEEL ARM
1 X LH REAR SINGLE WHEEL ARM
1 X RH REAR SINGLE WHEEL ARM
2 X HYDRAULIC CYLINDER 3” X 10”
1 X JACK 10”
1 X LH WING ASSEMBLY
1 X RH WING ASSEMBLY
1 X LH TOWER ASSEMBLY
1 X RH TOWER ASSEMBLY
2 X 8 WHEEL HARDWARE BOXES
2 X TIRE AND WHEEL ASSEMBLY

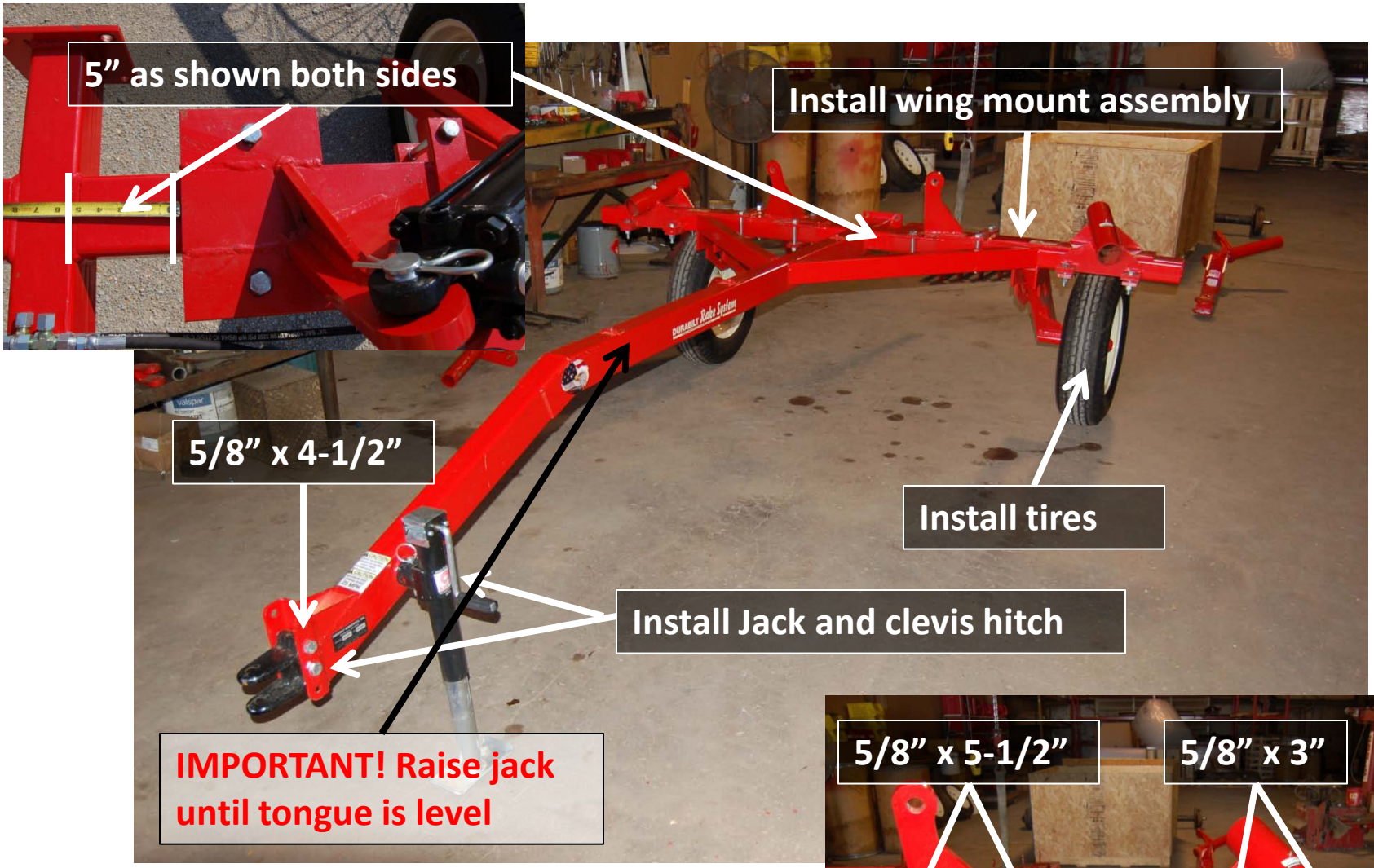
CRATE CONTENTS 10 WHEEL RAKE

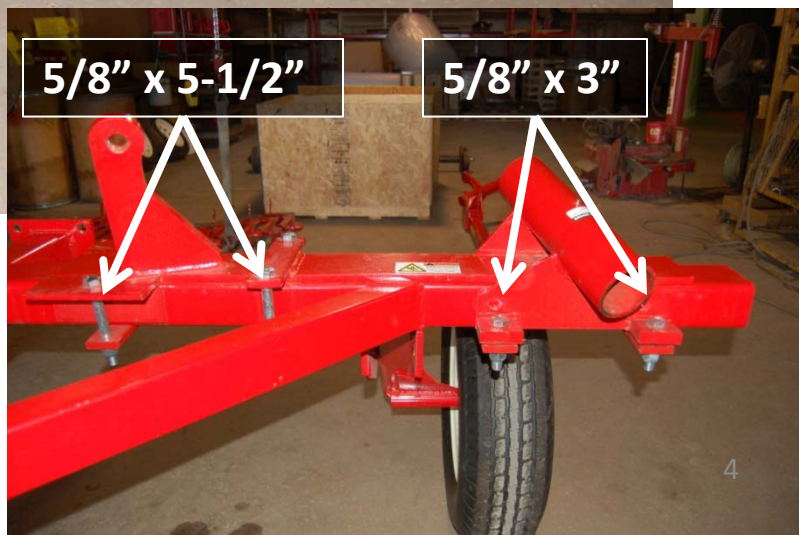
4 X LH STANDARD SINGLE WHEEL ARM
4 X RH STANDARD SINGLE WHEEL ARM
1 X LH REAR SINGLE WHEEL ARM
1 X RH REAR SINGLE WHEEL ARM
2 X HYDRAULIC CYLINDER 3” X 10”
1 X JACK 10”
1 X LH WING ASSEMBLY
1 X RH WING ASSEMBLY
1 X LH TOWER ASSEMBLY
1 X RH TOWER ASSEMBLY
2 X 10 WHEEL HARDWARE BOXES
2 X TIRE AND WHEEL ASSEMBLY

Removing the main arms from the shipping brackets.

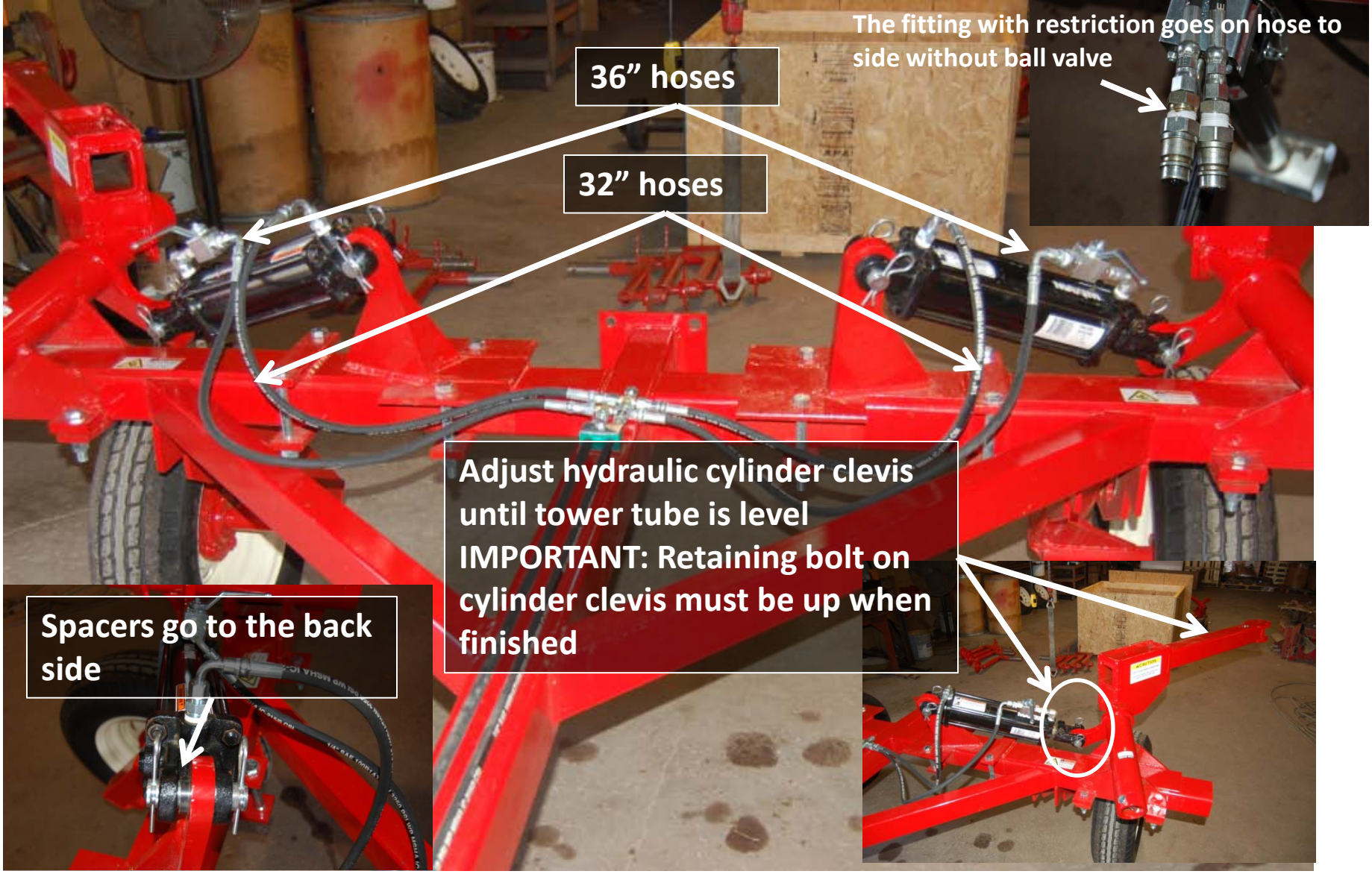


1. Cut the wire ties holding the main arms onto the shipping brackets. Remove and flip the main arms right side up. Set the main arms off to the side that they came off of.
2. Remove shipping brackets and discard.



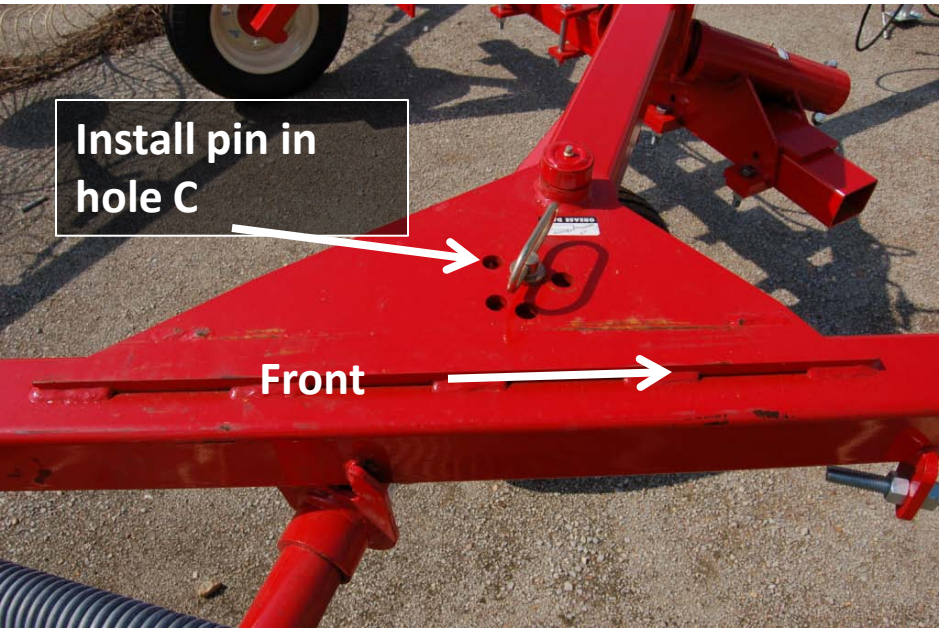


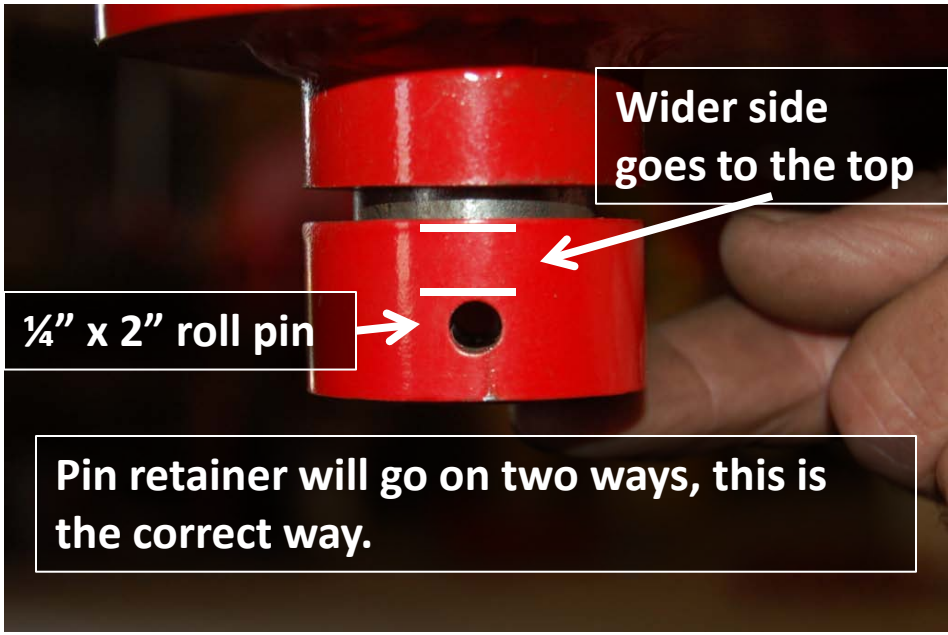
1. Install tires
2. Install clevis hitch using qty-2 5/8” x 4-1/2” bolts.
3. Install jack on jack mount and adjust until tongue is level
4. Install wing mount assemblies as shown using qty-8 5/8” x 5-1/2” and qty-8 5/8” x 3” bolts **(tighten bolts evenly making sure base plate is flat on frame tube**)



1. Install hydraulic cylinders and wing towers **(make sure ¼” spacers are on the cylinder pins as shown)**.
2. Install hydraulic hoses and fittings as shown. **(Make sure fitting with the restriction goes on the male quick coupler attached to the hose that goes to the side of the cylinders that does not have a shut off valve)**

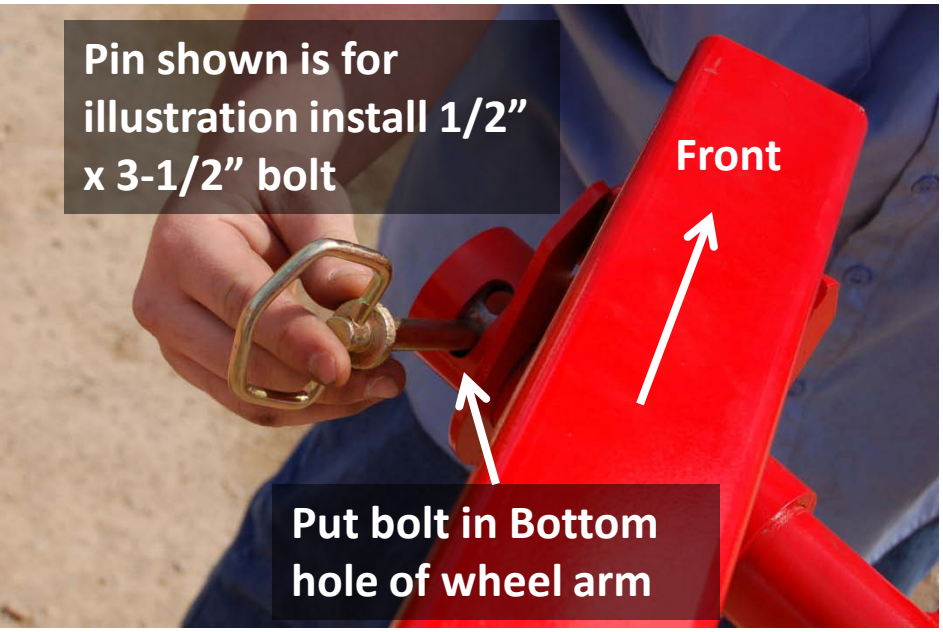
Installing the main arm into the tower RCI

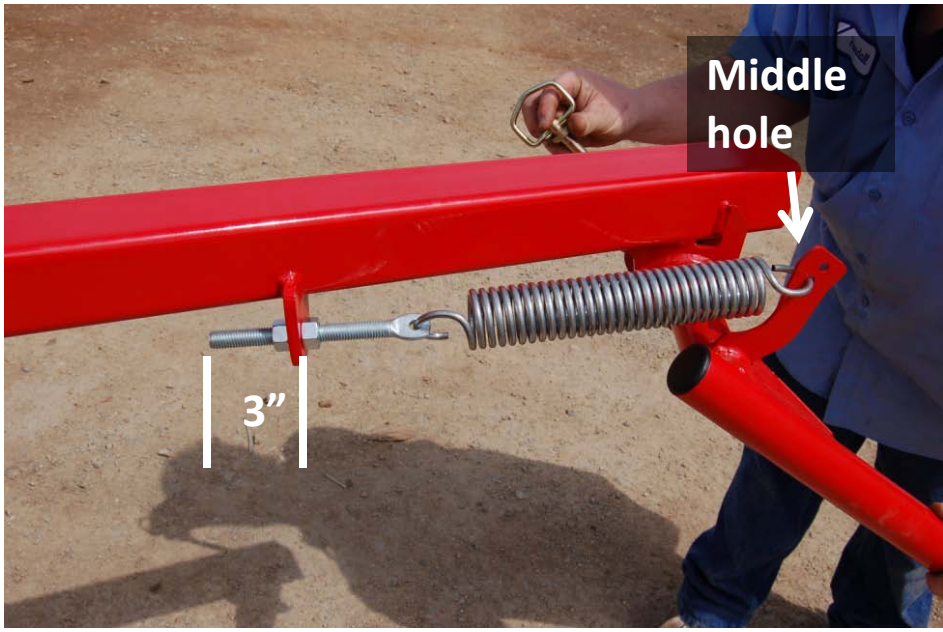




1. Install main arm onto tower. Install retaining pin as shown and install adjustment pin in hole C. **Note: The main arms go onto the same side of the rake that they were attached to for shipping.**

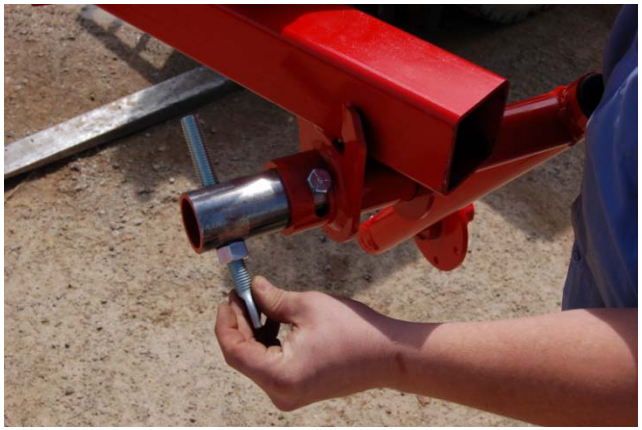
Assemble Front Wheel Arm



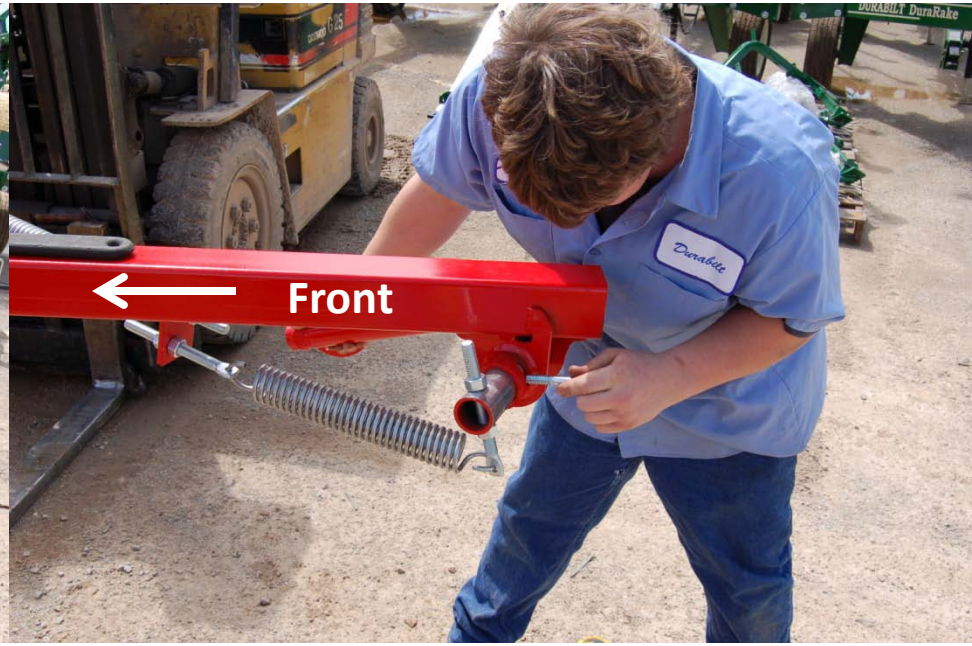


1. Install and rotate front wheel arms **(rear wheel arms have the longer mounting tube)** into position and install the 1/2” x 3-1/2” bolt in the bottom hole looking from the rear to the front. **Note: The other hole in the rake wheel arm is there so the user can bolt the front wheels up so they don’t rake hay.**
2. Install the Spring as shown **Note: 3” Length of Eye bolt is just a starting position. Once rake is completely assembled all springs will need to be readjusted.**

Installing The Rear Wheel Arm



1. Install the rear wheel arm into the main arm, and slide it in so the second hole lines up with the slotted hole in the main arm. Install the bolt but not the nut.
2. Install one 5/8” nut onto the eyebolt and set it 4 ¼” from the end of the bolt.
3. Install the eyebolt into the wheel arm, install retaining nut and tighten.



4. Install spring onto eyebolt.
5. Prepare second eyebolt with a nut screwed 3” from the end.
6. Install the second eyebolt onto the other end of the spring.
7. Remove the wheel arm retaining bolt. Hold the end of the eyebolt and rotate the wheel arm up until the eyebolt will go all the way into the hole in the bracket on the main arm.
8. Install second 5/8” nut onto the eyebolt and tighten it.
9. You can now rotate the wheel arm back down into the proper position and reinstall the bolt and nylon lock nut. **Note: be careful not to over rotate the wheel arm down as this will bend the spring eye where it is connected to the wheel arm.**

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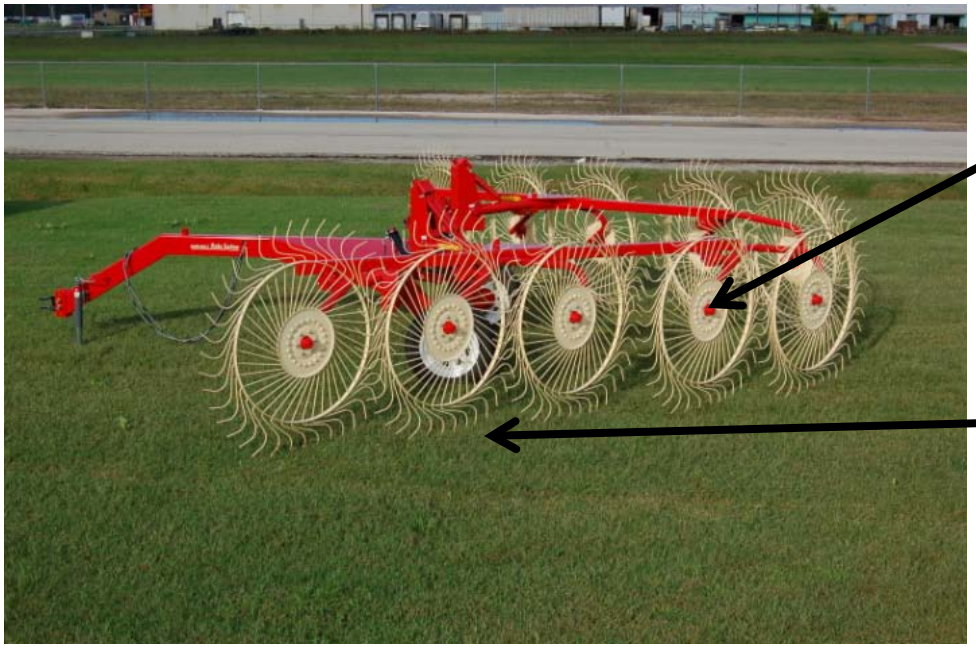
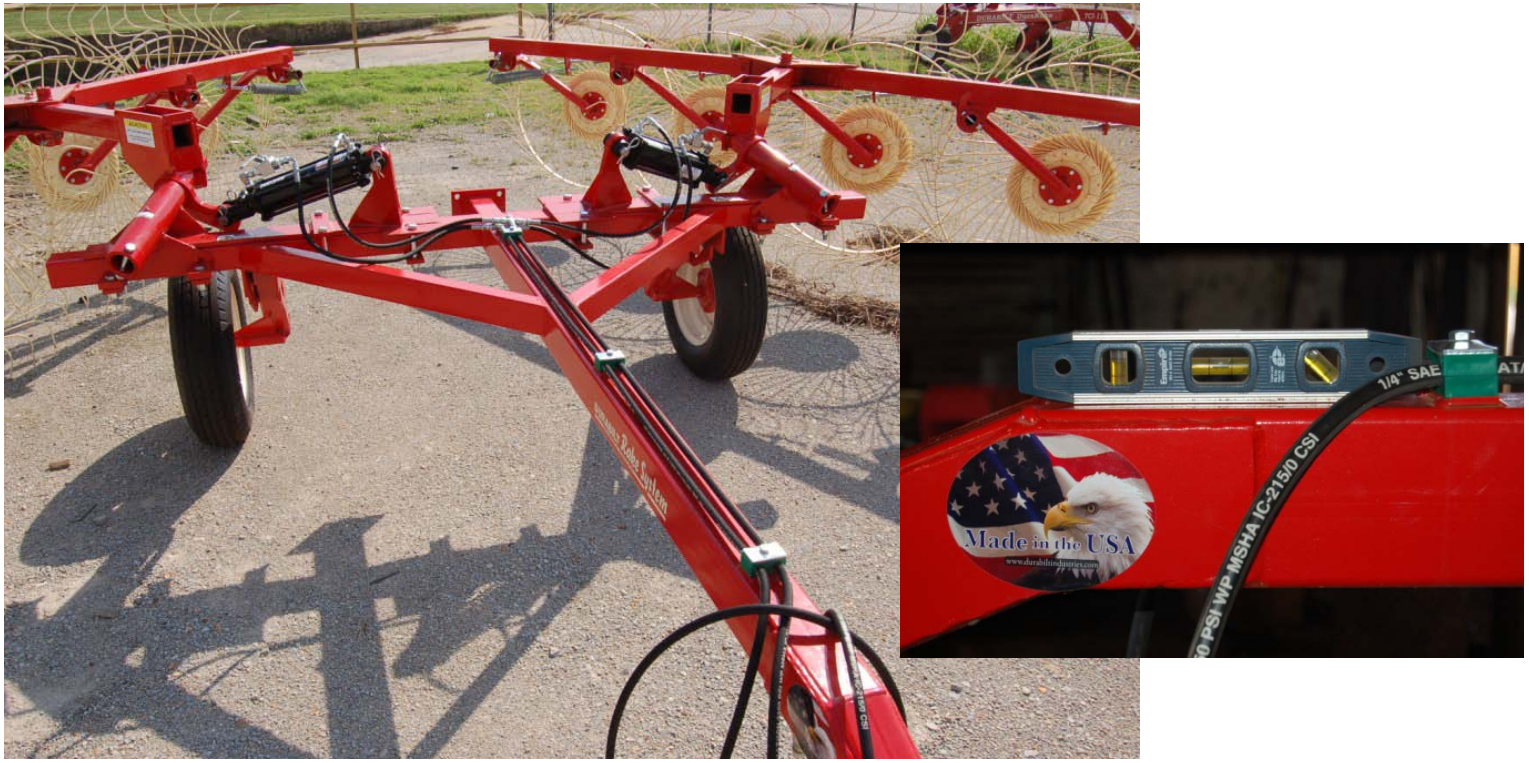
- Repeat the sequence for the other side.
- Install the rake wheels as normal.



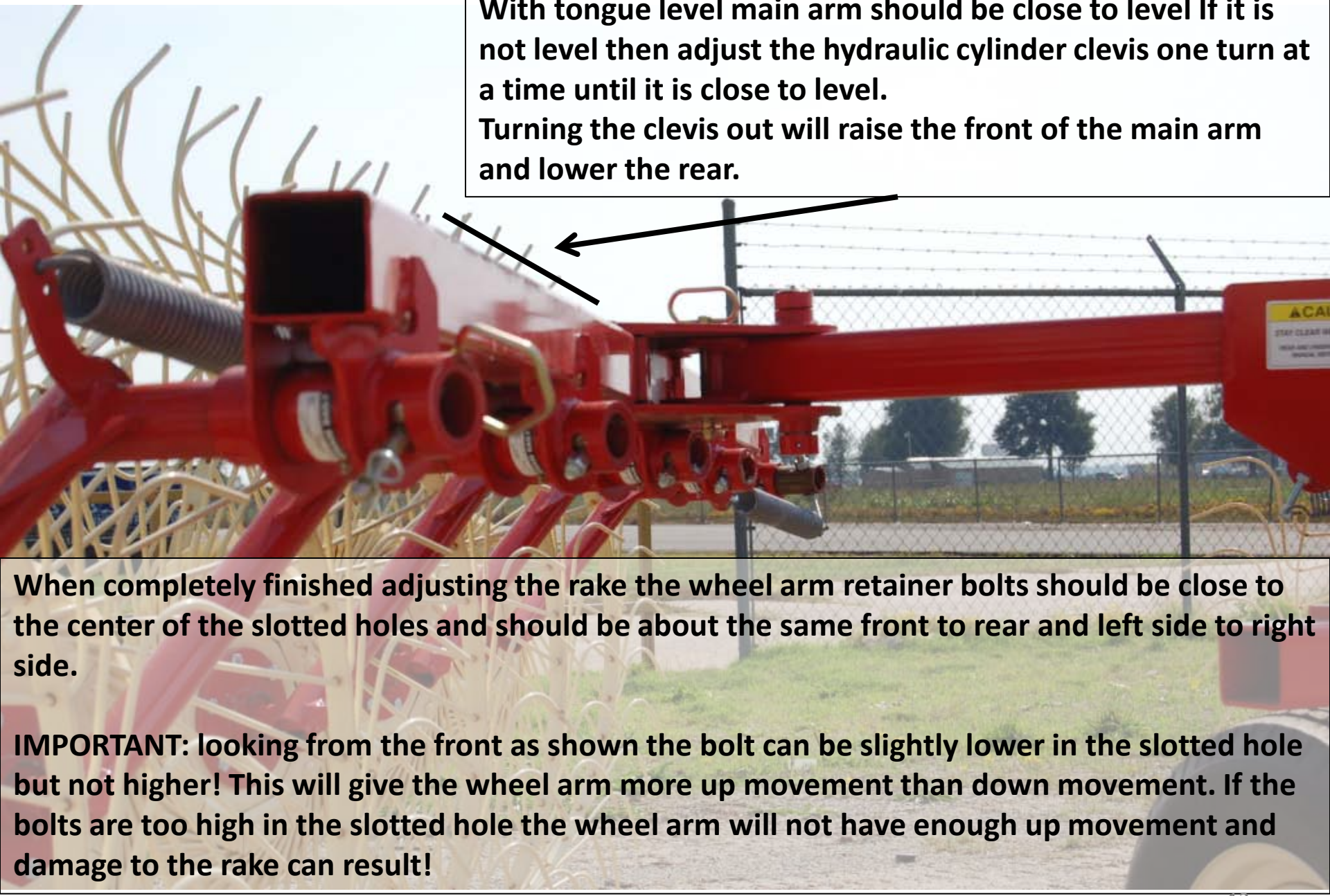
Nuts on this side, carriage heads on inside where hay contacts wheel.

Tines point forward at bottom of wheel.

FINAL ADJUSTMENT OF RAKE



1. Unfold rake into working position on level surface.
2. Make sure tongue is level.

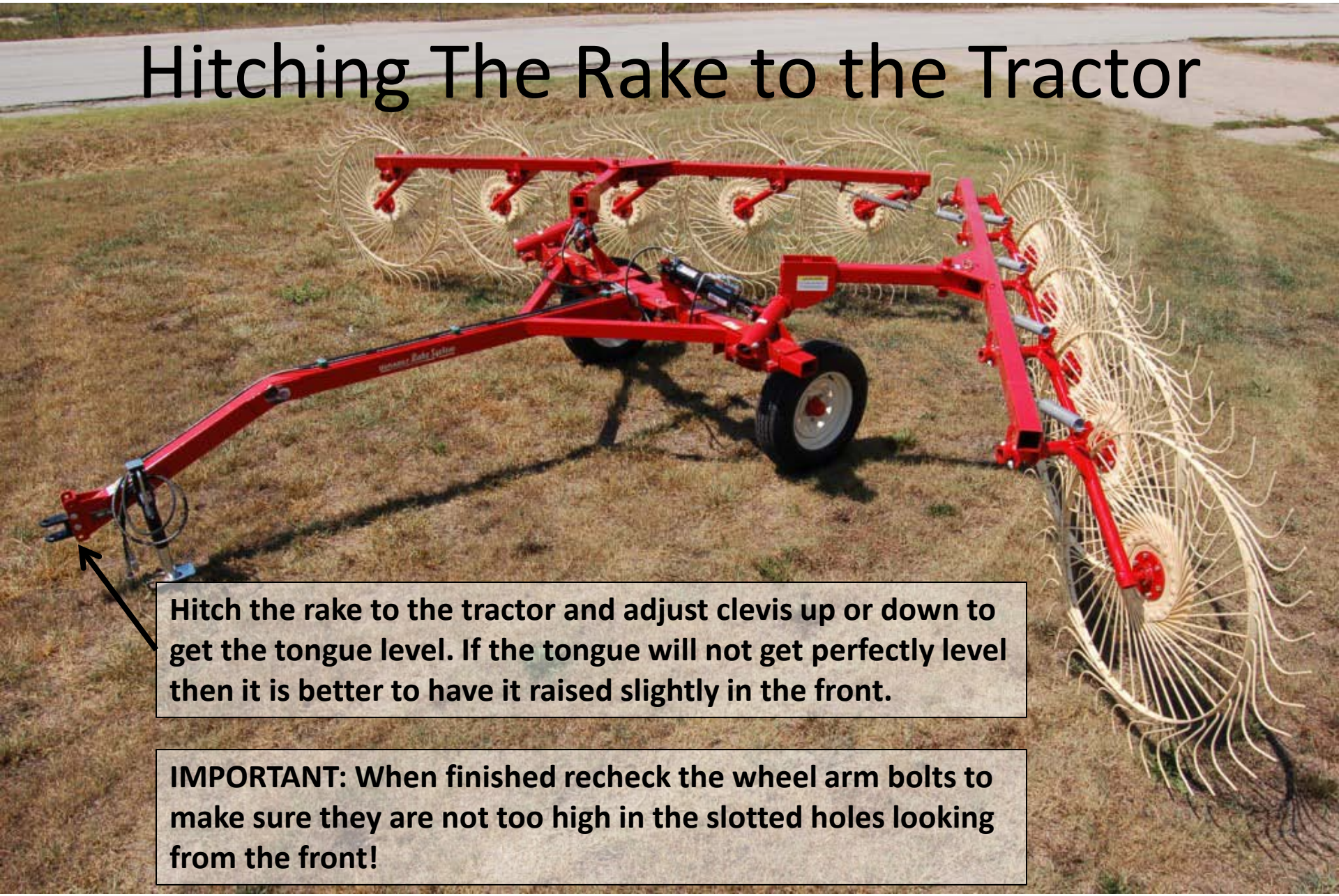


With tongue level main arm should be close to level If it is not level then adjust the hydraulic cylinder clevis one turn at a time until it is close to level.
Turning the clevis out will raise the front of the main arm and lower the rear.

When completely finished adjusting the rake the wheel arm retainer bolts should be close to the center of the slotted holes and should be about the same front to rear and left side to right side.

IMPORTANT: looking from the front as shown the bolt can be slightly lower in the slotted hole but not higher! This will give the wheel arm more up movement than down movement. If the bolts are too high in the slotted hole the wheel arm will not have enough up movement and damage to the rake can result!

Hitching The Rake to the Tractor



Hitch the rake to the tractor and adjust clevis up or down to get the tongue level. If the tongue will not get perfectly level then it is better to have it raised slightly in the front.

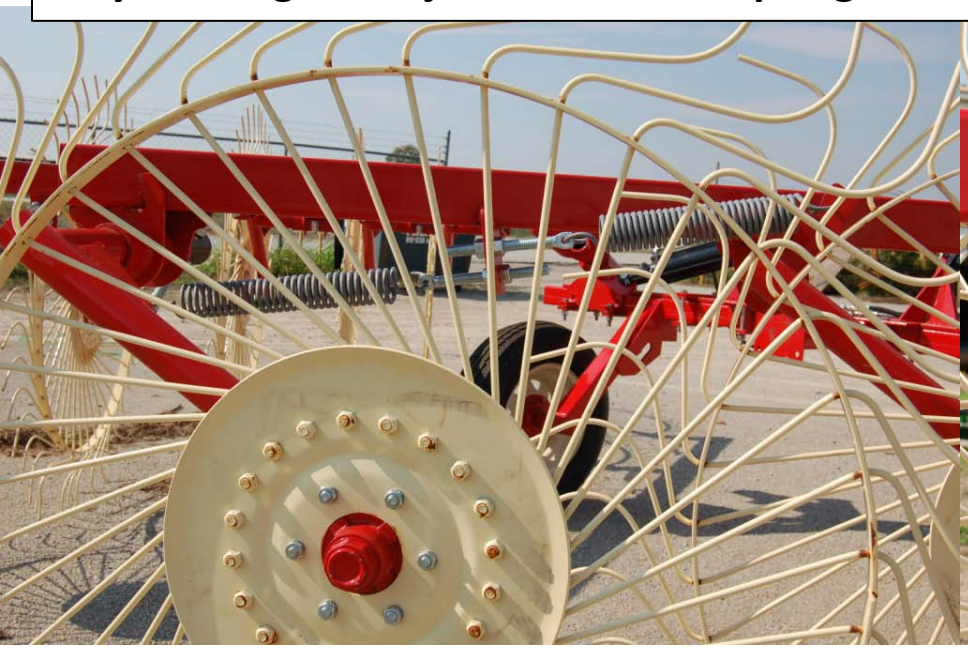
IMPORTANT: When finished recheck the wheel arm bolts to make sure they are not too high in the slotted holes looking from the front!

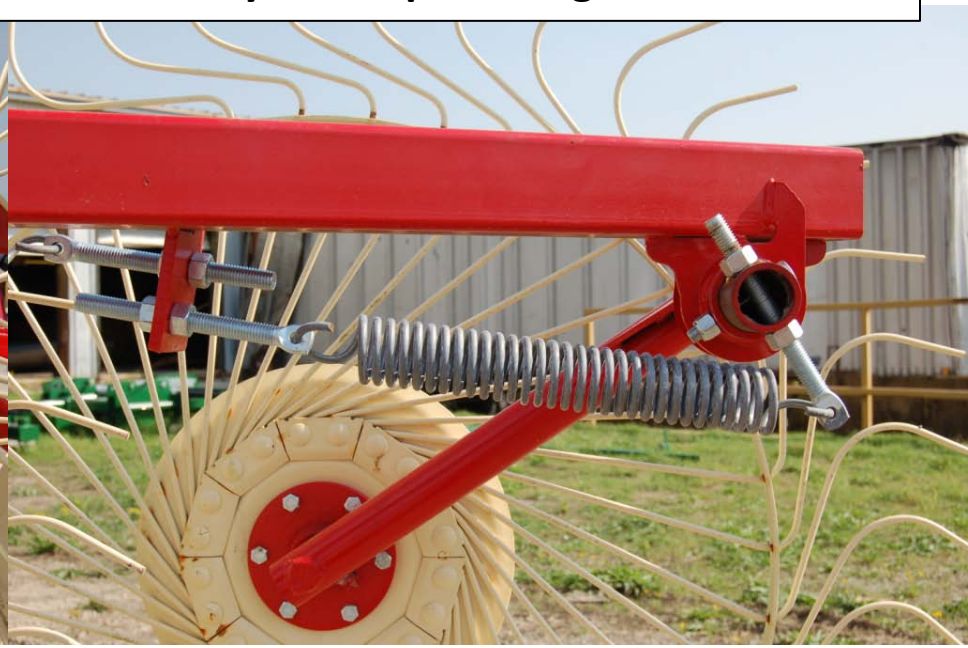
Ground Pressure Adjustment

IMPORTANT: Only after hitching the rake to the tractor and after all other adjustments are done can you adjust the ground pressure of each rake wheel, make sure wheel arms are free and not binding.

Adjust the eye bolt so the rake wheel can be lifted easily with two fingers and will drop back to the ground nice and easy. The rake wheel should not drop like a rock!

NOTE: Adjust the rake wheels on the light side! if they are too light they will not drop all the way back down to the ground and will skip when raking. If they do not drop all the way to the ground just reduce the spring tension until they do drop to the ground.





IMPORTANT: It is much better to error on the side of too little ground pressure rather than too much! The end user can always add more down pressure if the rake wheel skips when raking!

Wheel arm spring bracket (center hole is the normal position). Move spring up away from the arm to increase tension and down towards the arm for less tension.

Rear wheel arm spring attaches with an eye bolt instead of a bracket. If you can't get the spring tension you desire with the adjuster rod then you can adjust this eye bolt in for less tension and out for more tension.

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