

Tandem Axle for 3955/3975 PTFH

Bundle with 31.5-15 Tires RC0284

Bundle with 11L-14 Tires RC0285

Bundle Less Tires RC0298



Parts Listing Service Information Installation Instructions

John Deere 3955 / 3975 Pull-Type Forage Harvester



Please retain this document for future reference.

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1. Contents of Bundle



Note: Wheels and tires not shown.

Bundle includes two tires and rims, depending on part number of bundle.

1.1 Parts Listing

Note: For service parts, see your local John Deere dealer.

RCI Part Number	Part Name	Quantity
RC0186	Rim - 11Lx14	2
RC0187	Rim - 31.5x15	2
RC0188	Spindle Assembly	4
RC0189	Tire - 31.5x15	2
RC0190	Tire - 11L-14	2
RC0211	Pivot Plate - RH Side	1
RC0210	Pivot Plate - LH Side	1
RC0214	Walking Beam	2
RC0209	Washer	2
RC0180	Light bar	2
RC0313	Bolt 3/4"x2.5	4
RC0314	Bolt 3/4"x4	2
RC0315	Bolt 3/4"x5.5	10
RC0316	Bolt 3/4"x6	2
RC0317	Bolt 3/4"x9	1
RC0318	Bolt 3/4"x10.5	4
RC0319	Nut 3/4"	16
RC0195	Bolt 3/8"x3	4
RC0196	Lock Nut 3/8"	4
RC0197	Bolt 3/8"x1.25"	4
RC0182	Flat Washer 3/8"	4
RC0320	Flange Bolt 7/16"x2.5	4
RC0321	Flange Nut 7/16"	4
RC0198	Grease Zirk	2
RC0179	Support	4
RC0177	Plate	1
RC0178	Gusset	4
RC0322	Strap	2
RC0325	1/2-13 x 3.0 zinc bolt, grade 5	2
RC0326	1/2-13 Hex Nut	2
RC0327	1/2" flat washer	4
RC0328	5/16"- 18 x 2" zinc bolt, grade 5	1
RC0329	5/16-18 Hex nut, grade 5	1
RC0330	5/16 flat washer	2
RC0332	Jack Stand	1
RC0323	Installation Instructions	1

2. Service Information

2.1 Service Intervals

Daily

- 1/ Grease center pivot pin of walking beam assembly.

25 Hours of Operation

- 1/ Grease wheel hubs. Grease fitting is located on back side of hub.

IMPORTANT:

NEVER lift machine under the spindles or anywhere on the walking beam.

Always lift machine with proper jack at a safe point on the main frame of the machine.

Always use blocks to support the machine when in raised position.

Please retain this document for future reference.

3. Installation of Tandem Axle Bundle

Remove Tire and Spindle Assembly

Using the proper equipment and jacking location, raise the left hand wheel of the machine. Use blocks to secure the machine once lifted.

Remove the wheel and warning light mast from the base plate.

Remove the spindle.

Remove the four bolts used to secure the spindle assembly.

Install LH Frame Supports.

Three frame supports will be welded to the end of the frame on the LH side of the machine. Two will be on the front face and one will be a strip added to the rear face for support.

Remove paint within 3 inches of affected area. Use Figure 1 as a guide for the area.

Using a clamp, install the plate shown in Figure 1 for welding.

Using a bolt and nut, lightly install the gusset and flange as shown in Figure 2. Two of each will be used on the top of the frame to mirror the supports on the bottom of the frame.

Weld around the perimeter of each support as shown. Figure 3 shows the bottom support on the front face.

After gap-welding the straight plate to the mounting surface, be sure to grind the weld to be flush with the surface for proper installation of the tandem assembly.

Clean and repaint affected areas as necessary.

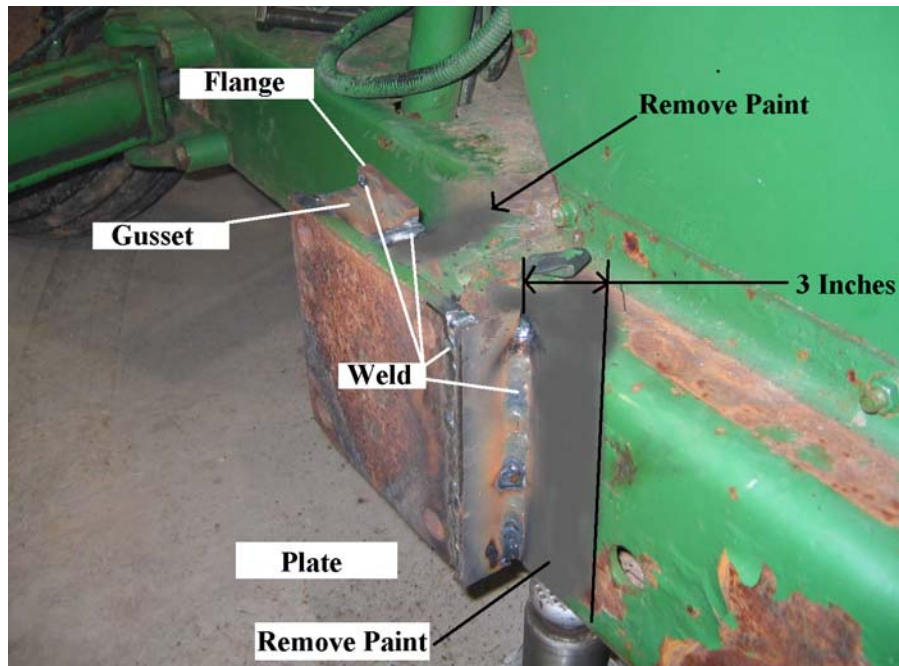


Figure 1. Installation of Frame Supports, LH Side (View from Rear)



Figure 2. Install bolt to hold flange and gusset in place for welding.

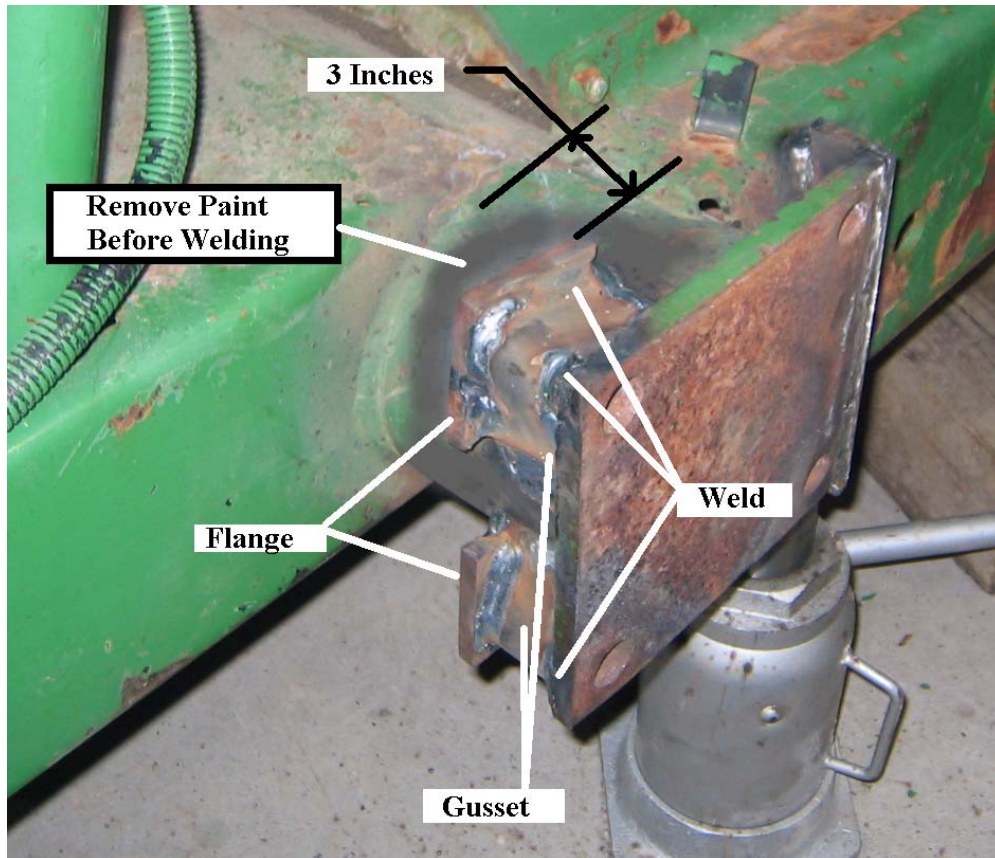


Figure 3. Front View of LH Frame End Support Installation



Figure 4. Completed Frame Reinforcement, LH Side, Side View



Figure 5. Completed Frame Reinforcement, LH Side, Front View

Install Spacers

Install frame spacers as required. Use only Grade 8 Hardware included in the bundle.

Torque Specification: 315 ft-lbs

Use proper hardware for all bolted connections. Threads must pass at least 2 turns past the end of the nut when installed.

Install LH Pivot Plate

Install LH Pivot Plate in place of spindle assembly. Use only hardware supplied in the tandem axle bundle. All hardware must be Grade 8.

Torque Specification: 315 ft-lbs

Use proper hardware for all bolted connections. Threads must pass at least 2 turns past the end of the nut when installed.

Note: See Figure 6 to identify the LH Pivot Plate. The vertical offset of the pivot pin is designed to replicate that of the production spindle. Therefore, it is important to install each Pivot Plate on the corresponding side of the machine.



Figure 6. Installation of Pivot Plate, LH Side

Install Grease Fitting

Install Grease Fitting in the end of the shaft. Grease the shaft as shown in Figure 7, below.

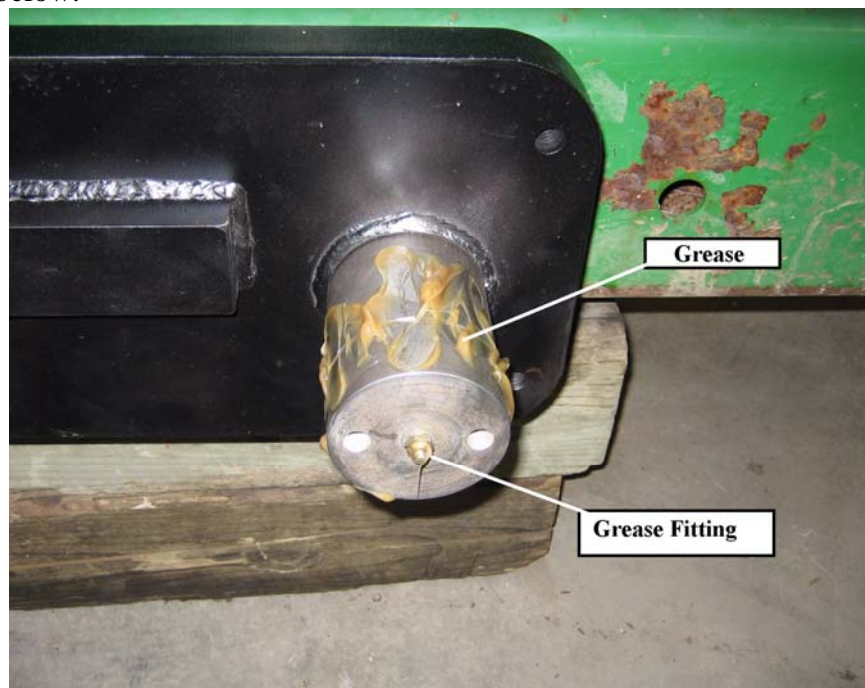


Figure 7. Grease Fitting Installation

Install Walking Beam

Install Walking Beam as shown in Figure 8. For reference, the decal for greasing will be on the top side of the walking beam, pointed towards the wheels.

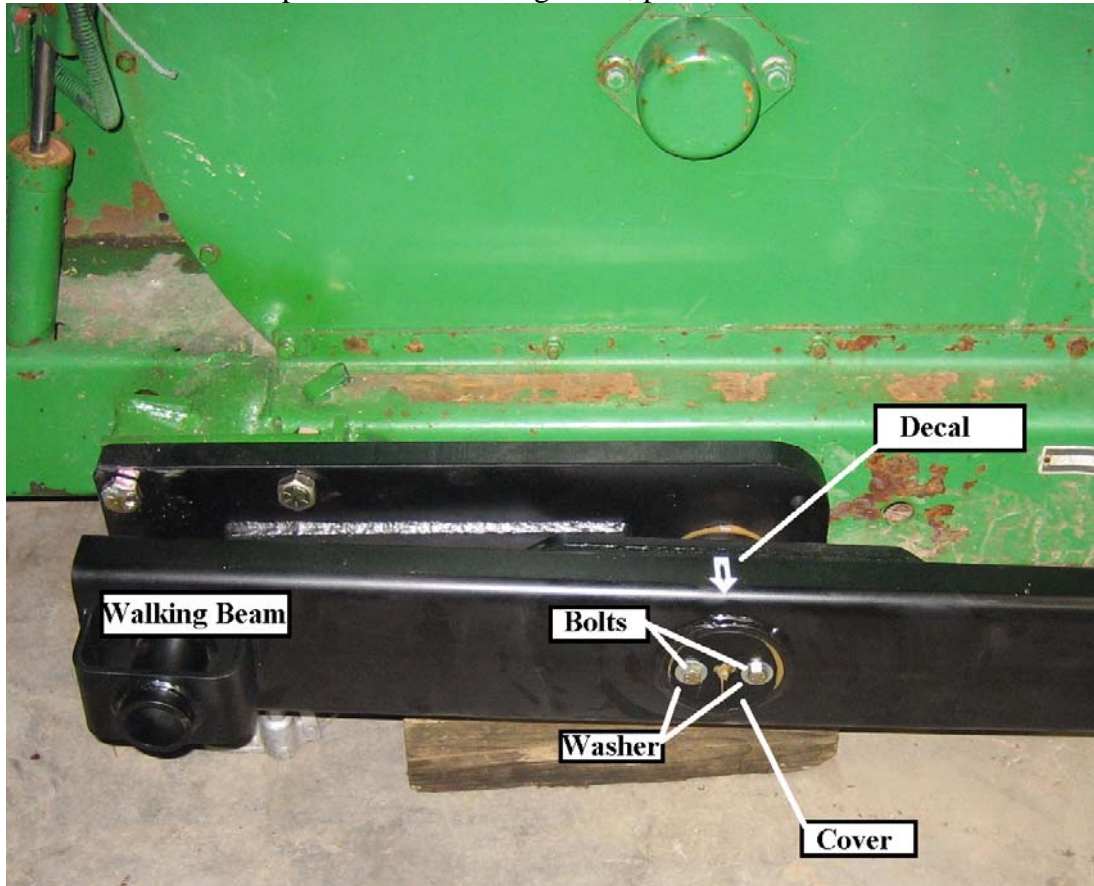


Figure 8. Walking Beam Installation

Install the cover with two 3/8" x 1-1/4" Grade 8 bolts and washers.

Note: Use high-strength *Loctite* on the bolts during the installation.

Torque Specification: 46 ft-lbs

Grease the assembly with through the grease fitting until grease appears at the outer perimeter of the large washer.

Install Spindles

Install the spindles in the tubes of the walking beam as shown in Figure 9.

Use 3/8" x 3" bolts and lock nuts to complete the installation.

Torque Specification: 46 ft-lbs



Figure 9. Assembly of Spindle to Walking Beam

Assemble Light Bar Support

Install a Light Bar support as shown below using two 7/16" x 3" Flange Head Cap Screws shown in Figure 10. Secure the bolts with 7/16" Flange Nuts.

Torque Specification: 52 ft-lbs

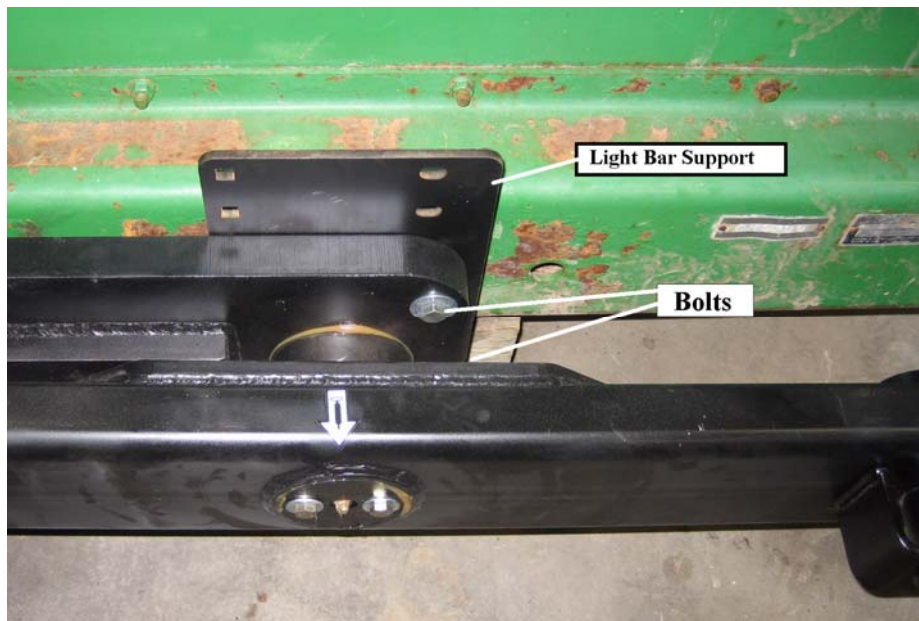


Figure 10. Installation of Light Bar

Assemble Light Bar to Light Bar Support

Assemble the light bar to the light bar support using the original hardware.

Properly route wire harness in a manner similar to that used when changing tire spacing with spacers. Use the RC0322 Strap to attach the harness to the frame as shown in Figure 12.



Figure 11. Installation of Light Bar

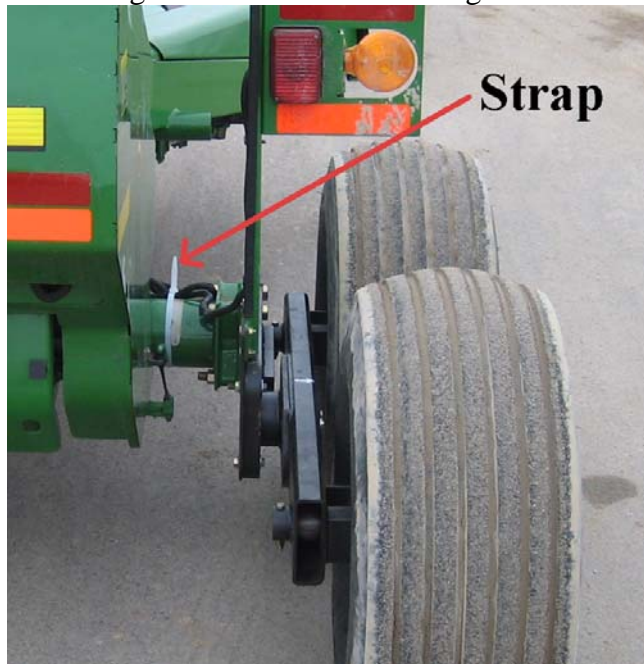


Figure 12. Strap Installation

Install Wheels

Install wheels using wheel studs provided. Tighten properly.

Note: 31.5x15 Wheels must always be installed with the valve stem towards the inside of the machine.

Note: 11Lx14 Wheels can be installed either direction but it is recommended to install the wheels “dish-in” to minimize overall machine width.

With wheels fully installed and wheel studs tightened properly, remove blocks and safely lower machine to the ground.

3.11 Install RH Side Frame Supports

Using the proper equipment and jacking location, raise the right hand wheel of the machine off the ground. Use blocks to secure the machine once lifted.

Remove the wheel and warning light mast from the base plate.

Remove end shield and the spindle from the frame..

Remove the four bolts used to secure the spindle assembly.

Remove paint within 3 inches of affected area. Use Figure 12 as a guide for the area.

Using a bolt and nut, lightly install the gusset and flange as shown in Figure 12. Two of each will be used on the top of the frame to mirror the supports on the bottom of the frame.

Weld around the perimeter of the supports in a manner similar to the bottom factory supports.

Once completed and cooled, properly clean and paint affected area.

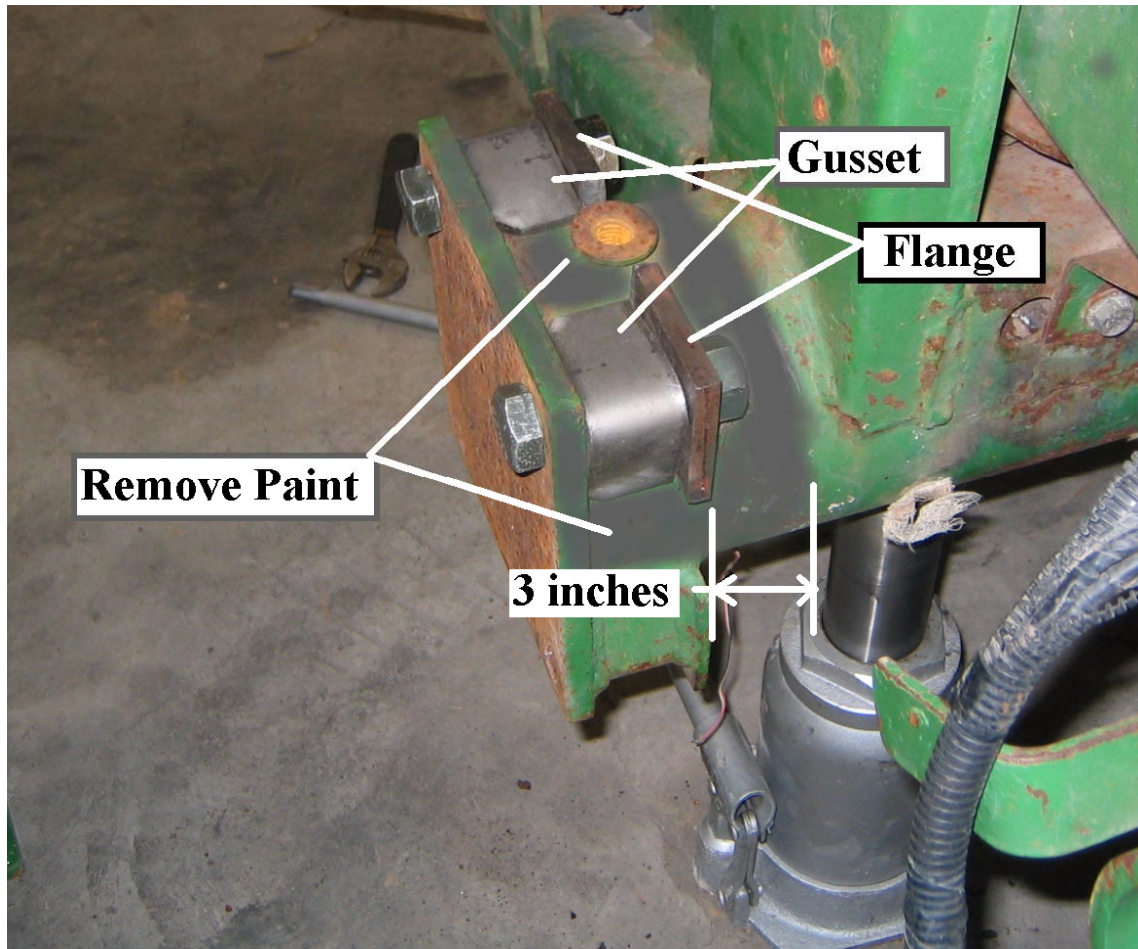


Figure 12. Frame Support Installation

3.12 Install Spacers

Note: At least 6" of spacers must always be used on the RH Side of the machine, regardless of machine configuration (KP vs non-KP) to prevent interference between the tandems and the body panels. See instructions for wheel spacers for further instructions on wheel spacing as needed.

Install frame spacers as required. Use only Grade 8 Hardware included in the tandem axle bundle.

Torque Specification: 315 ft-lbs

Use proper hardware for all bolted connections. Threads must pass at least 2 turns past the end of the nut when installed. See Figure 13 for reference.



Figure 13. For Reference: Completed Assembly, RH Side

3.13 Installation of Tandem Axle on RH Side of machine.

Repeat installation process from opposite side with remaining parts. Remember to grease the pivot pin before and after assembly to ensure that the entire contact surface is covered. Also remember to use high-strength *Loctite* on the two bolts on the end of the pivot pin and to use proper torques on all hardware.

4.0 Installation of Jack Stand Bracket on 7' Hay Pickup (as needed only)

If the PTFH is outfitted with all of the following, the enclosed jack stand bracket must be installed:

- a single 13" axle spacer on the RH side of the machine
- AND
- a 7' hay pickup unit
- AND
- 31.5x15 tires

In this configuration only, interference may occur at the jack stand as shown below.



Figure 14. Potential Inteference

4.1 Installation of Jack Stand Mount

Secure the hay pickup to the machine per the Operator's Manual.

Remove the welds on the jack stand bracket shown below. Repaint as needed



Figure 15. Remove Welds Shown

Install Jack Stand into bolt-on bracket from the bundle. Mount the bracket to the hay pickup as shown using the 1/2" x 3" bolts to replace the gauge wheel bolts and an additional 5/16" x 2" bolt for the top position. Tighten properly and raise the jack stand to storage position.

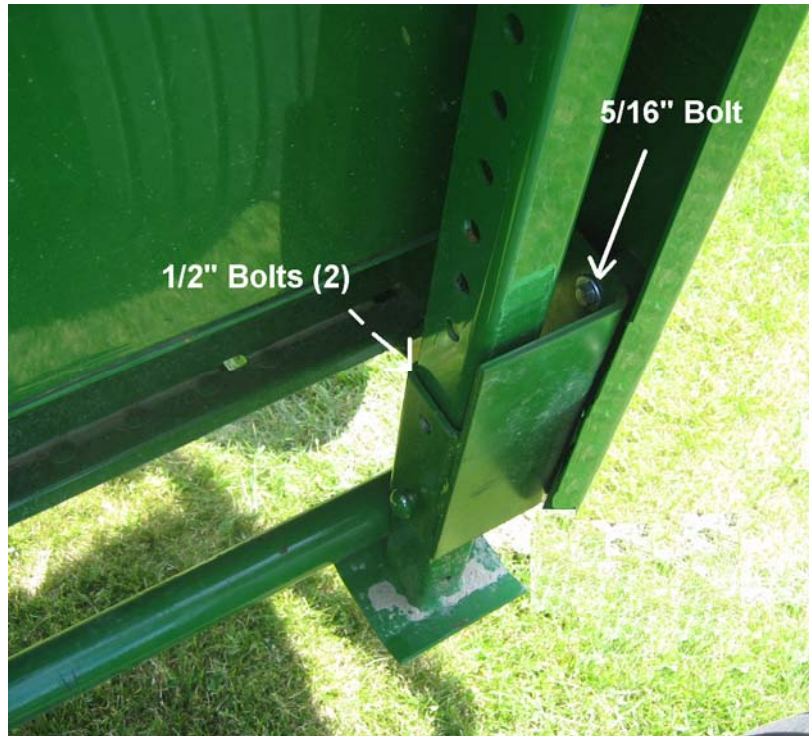


Figure 15. New Jack Stand Installed