



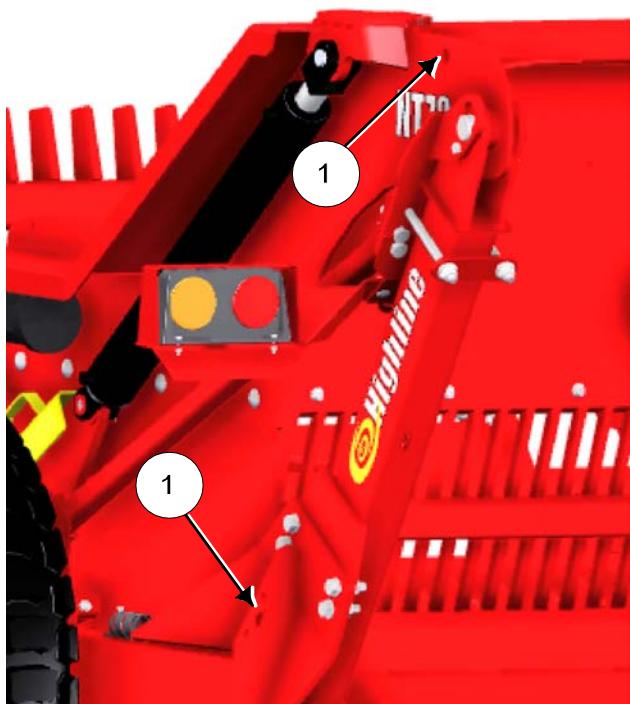
Use appropriate lifting straps, connection parts and machines that can lift the heavy equipment.

1. Remove the rockpicker from the shipping container.
 - Place the rockpicker on a firm flat surface.
 - Have the rockpicker standing on the shipping frame.
2. Attach lifting straps at the 3 lift points to lower the rockpicker.
 - Use clevis connectors at points 1.
 - Place straps through the clevis.
 - Place a strap through the welded loop near the hitch at point 2.



Remove From the Shipping Container

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Use Clevis Connectors at the Lifting Points

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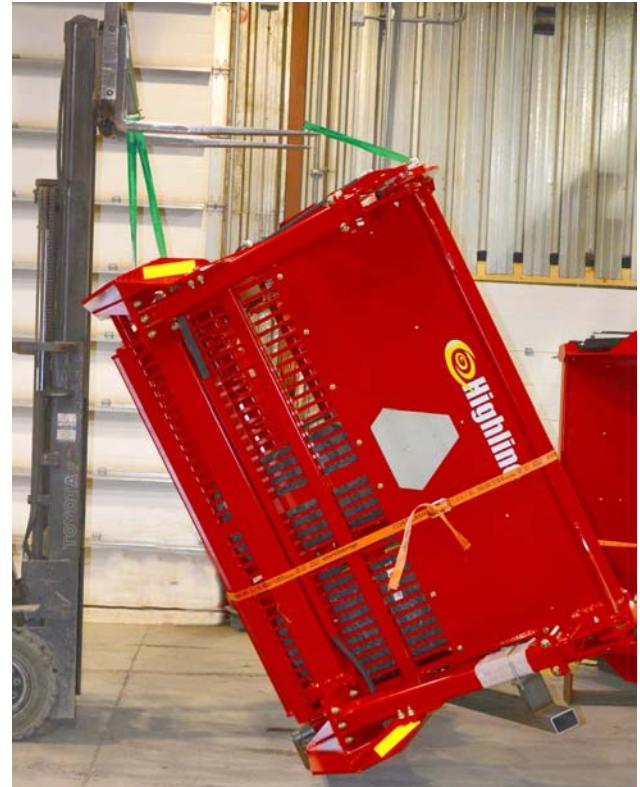
Place a Strap Through the Loop Near the Hitch

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- If a forklift is being used to lower the rockpicker, attach lifting straps from the attaching points to the fork lift.

3. Lower the rockpicker to be horizontal on a level firm surface.

- If lowering the rockpicker with a forklift then lower the forks while backing up the forklift.



Using a Forklift to Lower the Rockpicker

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4. Remove the shipping frame by removing the fasteners holding the frame to the rockpicker.



Remove the Shipping Frame
(Shown Resting on Dollies)

218176

5. Lift the wheels (1) out of the bucket.

- The wheels are bolted together at the bolt plate.



Remove the Wheels from the Bucket

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6. Remove the tires from the hubs.

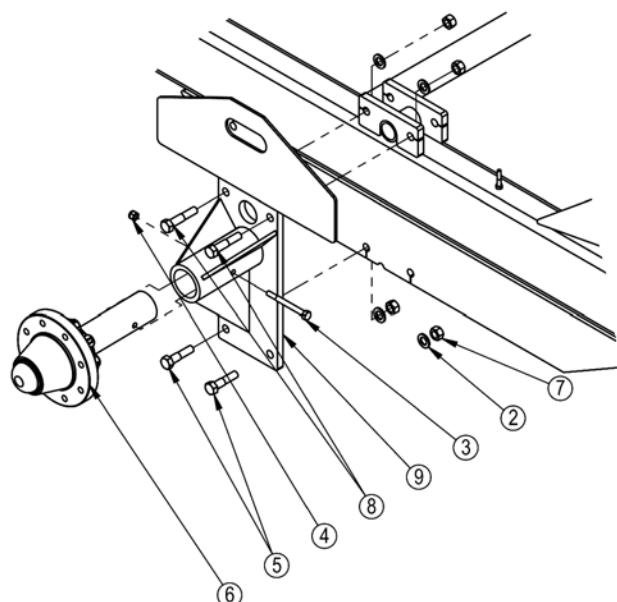
- The hub bolts will be re-used to mount the tires.

7. Lift the rockpicker and attach the axles (9).

- Bolt the axles (9) onto the bottom of the frame using 2 of 3/4" X 3" bolts (5), hardened washers (2) and locknuts (7).
- Bolt the axles (9) onto the top of the frame using 2 of 3/4" X 3-1/2" bolts (8), hardened washers (2) and locknuts (7).

Note: If the left upright support is not mounted on the rockpicker, it will need to be positioned and fastened.

- See information below.

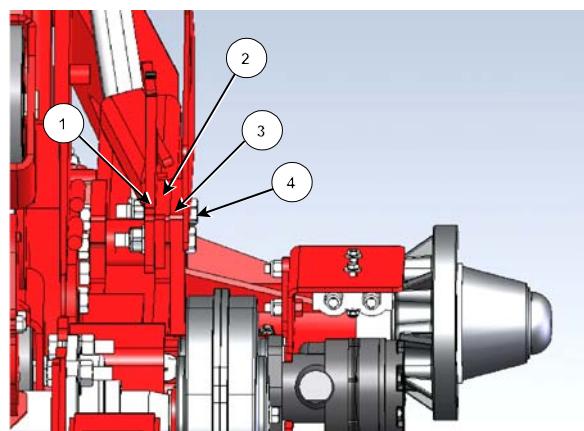


Bolt on the Axles

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Lower End of Left Upright Support

- Place the lower end of the upright support (1) on the inside of the axle mount tab (3) located on the frame.
- Place the axle plate (2) on the outside of the mount tab (3).
- Place 2 of 3/4" x 3-1/2" bolts (4) through the axle plate, mount tab and upright support. Fasten with 2 of 3/4" hardened washers and 3/4" locknuts.



Install Lower End Upright Support to Axle Plate

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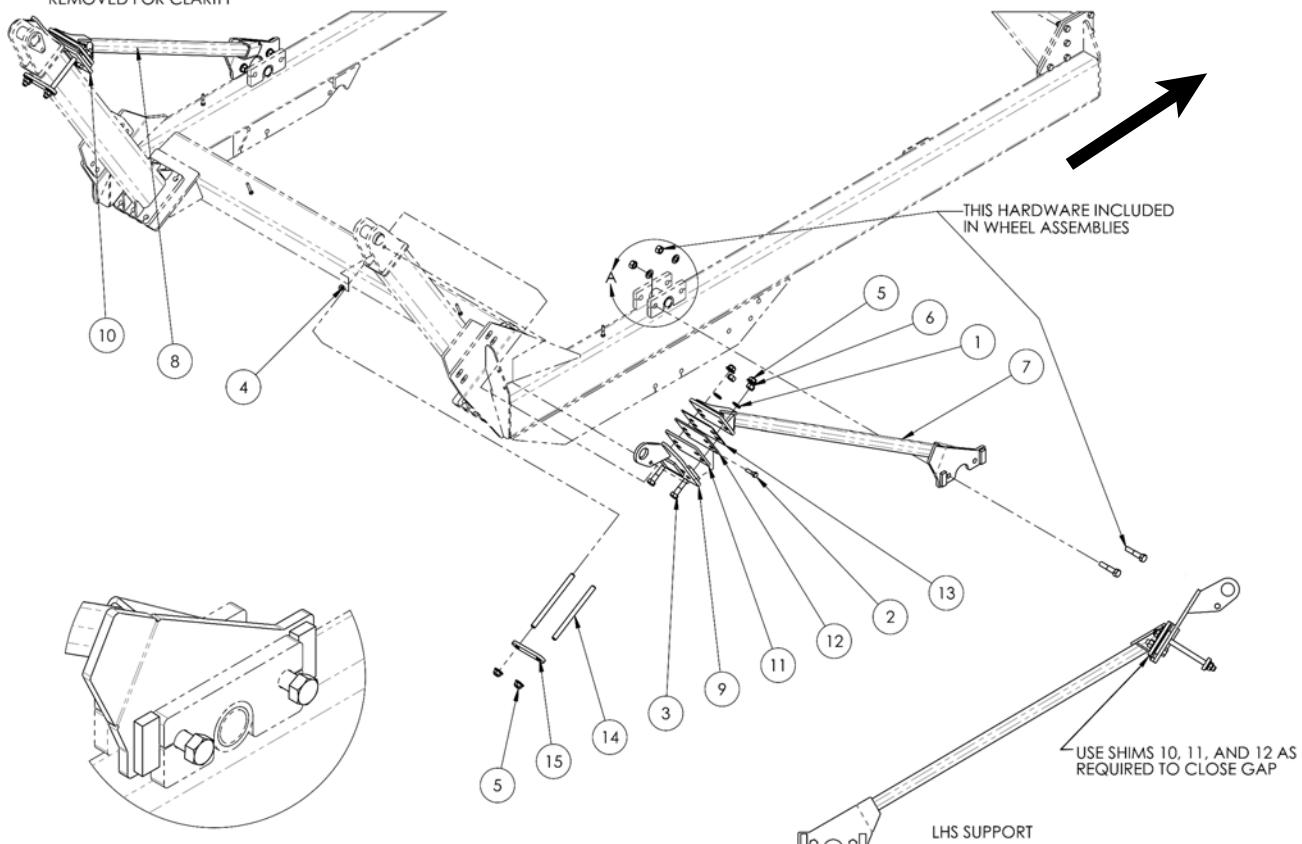
Assembly of Rockpicker NT from Shipping Container

Upper End of the Upright Support

- Attach the upper end of the support to the bucket pivot pin.
- Attach the support with the fasteners as shown below.

| ITEM | DESCRIPTION |
|------|-------------------------------|
| 1 | WSHR,3/4,HDN.,13TK,180KSI,PLD |
| 2 | BOLT,HEX,1/2X1-3/4,UNC,GR5,ZP |
| 3 | BOLT,HEX,3/4X3,UNC,GR8,ZP |
| 4 | NUT,STOVER,1/2,UNC,ZP |
| 5 | NUT,FLG,LOCK,3/4,UNC,GR5,ZP |
| 6 | NUT,STOVER,3/4,UNC,GR8,ZP |
| 7 | SUPPORT,UPRIGHT,RHS |
| 8 | SUPPORT,UPRIGHT,LHS |
| 9 | CONNECT,UPPER,RHS |
| 10 | CONNECT,UPPER,LHS |
| 11 | SHIM,SUPPORT,UPPER |
| 12 | SHIM,SUPPORT,UPPER |
| 13 | SHIM,SUPPORT,UPPER |
| 14 | ROD,THREADED,3/4,UNC |
| 15 | PLATE,BOLT,UPRIGHT |

NOTE: BUCKET AND WHEEL ASSEMBLIES
REMOVED FOR CLARITY



Install Upper End of Upright Support (Right Hand Shown for Clarity)

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8. Mount the tires onto the hubs.
9. Unstrap the hitch jack.
 - Lift the hitch with the jack.
10. Lower the rockpicker onto the tires and the hitch jack.
11. Remove the reel spacer from the left side of the reel.
 - Use lifting straps near the left side of the reel to take the weight of the reel.
 - Remove the bolts holding the reel spacer to the reel (1) and the apron side (2).
 - The reel spacer can be discarded.
 - The fasteners can also be discarded.
12. Mount the bearing and shaft to the reel and the side of the apron.

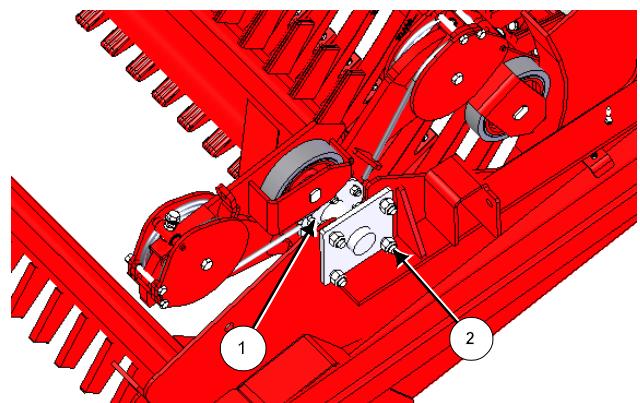
Note: The gearbox may have to be removed from the shaft. Remove the gearbox by taking out the shaft bolt, washers, spacer and shaft key.

- Position the spacers.
 - If there are tube spacers on the shaft, place them to be against the inside of the apron wall.
 - If there is a u-shaped spacer in the bolt bag, place the u-shaped spacer between the bearing and the outside of the apron wall.



Mount the Tires

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Remove the Reel Spacer

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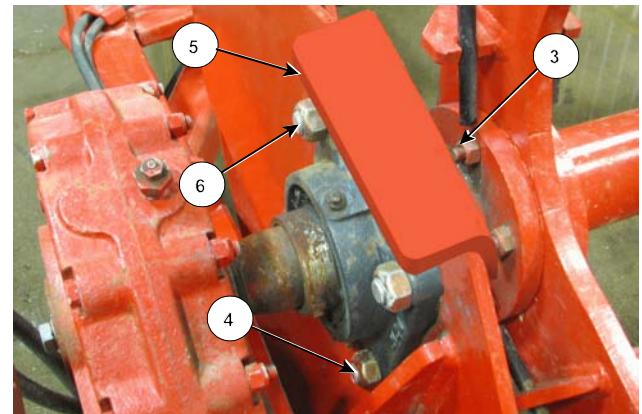
Mount Shaft to Reel and Apron

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- Fasten the shaft to the reel with $\frac{1}{2}$ " x 3" grade 8 bolts and locknuts (3).
 - Torque to 110 lbf.
- Fasten the lower portion of the bearing to the apron wall with $\frac{3}{4}$ " x 2- $\frac{3}{4}$ " bolts and locknuts (4).
 - Fasten with the u-spacers if they are supplied.
- Place the stiffener bracket (5) on the inside of the apron wall.
- Fasten the upper portion of the bearing to the apron wall and the stiffener bracket with $\frac{3}{4}$ " x 3" bolts and locknuts (6).
- Torque all 4 bolts to 265 lbf.

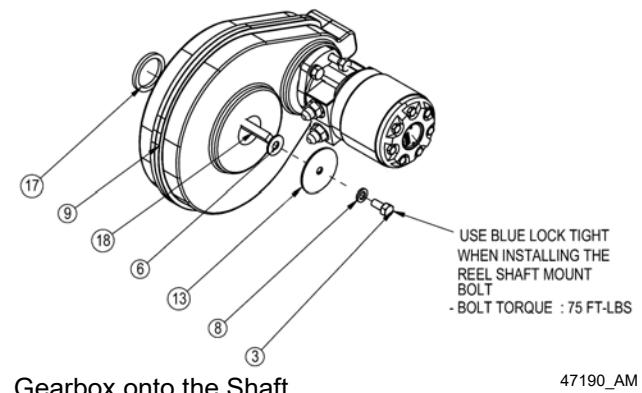
13. Mount the hydraulic motor/gearbox assembly.

- Slide the gearbox (9) onto the reel shaft.
- Slide the valve mount into the mount tube (4).
- Attach the gearbox to the shaft using
 - pipe spacer (17)
 - shaft key (18)
 - $\frac{1}{2}$ " flat washer (6)
 - 3 1/8" X $\frac{1}{2}$ " flat washer (13)
 - $\frac{1}{2}$ " lock washer (8)
 - $\frac{1}{2}$ " x 1" bolt (3)
- Use blue thread locker on the reel shaft mount bolt.
 - Torque to 75 lbf.
- Attach the valve mount to the mount tube (4) using $\frac{3}{4}$ " x 2" flat top carriage bolts and locknuts (5).
 - Do not tighten at this point.



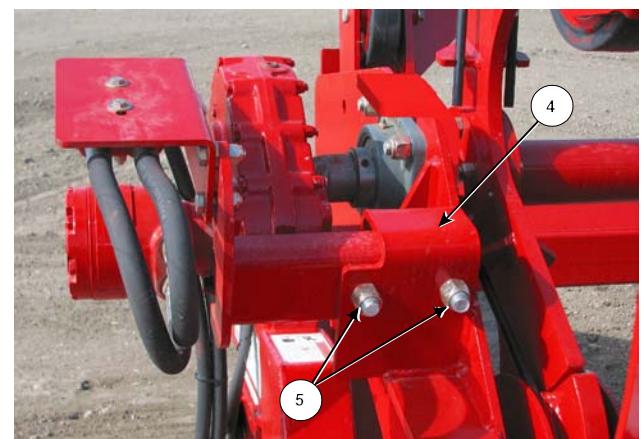
Mount Shaft to Reel and Apron

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Gearbox onto the Shaft

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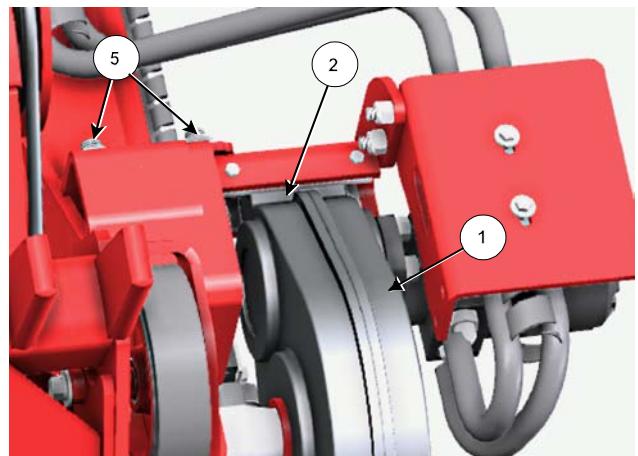
Attach to the Valve Mount Tube

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Assembly of Rockpicker NT from Shipping Container

- Slide the valve mount so that the gearbox (1) is centered on the bump stop (2) and centered between the bolts holding the bump stop.
- The slots in the valve mount tube allow the mount to be moved.- Tighten the flat top carriage bolts and locknuts (5).

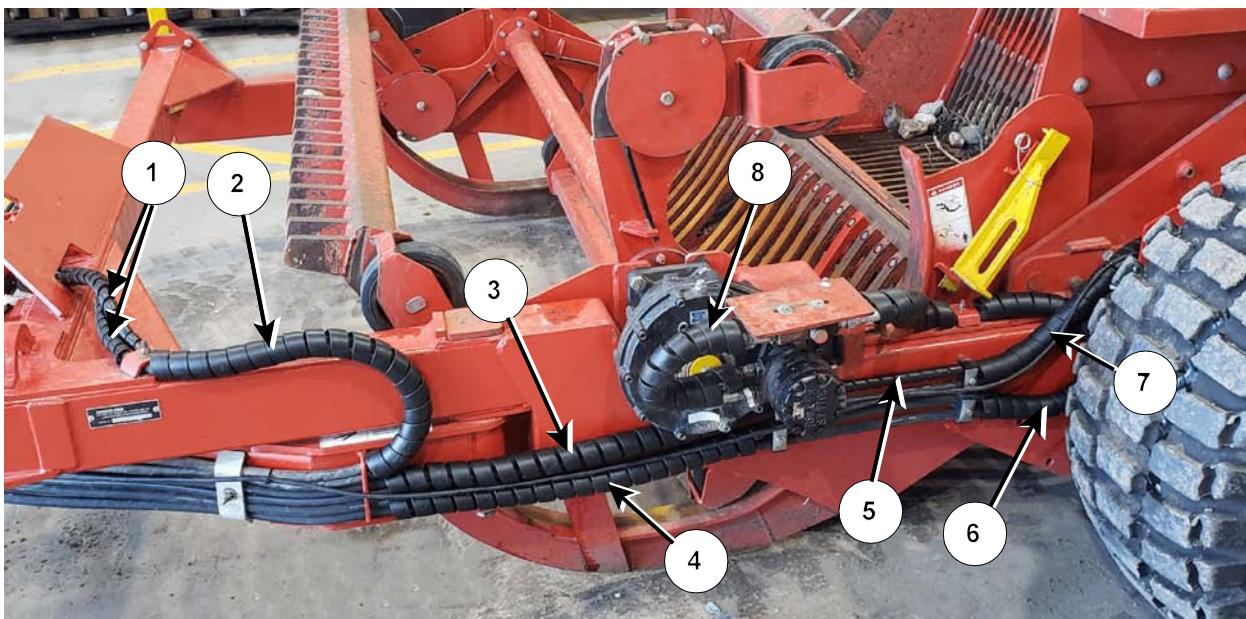
14. Place the spiral hose wraps on the hydraulic hoses according to the chart and picture.



Center Bump Stop to Gearbox

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| | |
|---|----------------------------------|
| 1 | Hose wrap, 1" diameter, 28" long |
| 2 | Hose wrap, 2" diameter, 27" long |
| 3 | Hose wrap, 2" diameter, 32" long |
| 4 | Hose wrap, 2" diameter, 32" long |
| 5 | Hose wrap, 1" diameter, 17" long |
| 6 | Hose wrap, 2" diameter, 24" long |
| 7 | Hose wrap, 2" diameter, 24" long |
| 8 | Hose wrap, 2" diameter, 20" long |

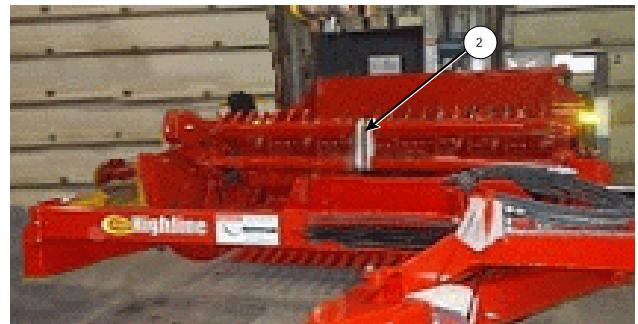


Place Spiral Wrap on Hoses. Fasten Hoses to Frame

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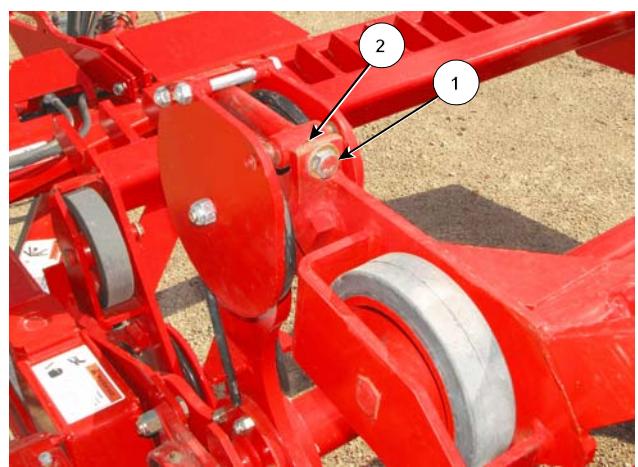
Assembly of Rockpicker NT from Shipping Container

15. Fasten all the hoses to the frame with the hydraulic hose holders.
16. Remove the strapping (2) that is holding the reel bat to the center tube.
 - There is no spring pressure on this bat.
 - Swing the bat out of the way.
17. Tighten the reel bat springs on both sides of the reel.
 - Turn the bolt (1) on the spring mechanism.



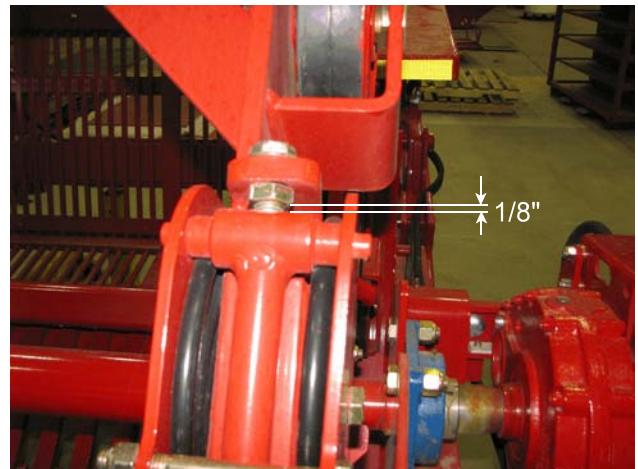
Remove Strapping from the Bat

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Tighten Both Reel Springs

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1/8" Gap Between Jam Nut and Tube

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18. After the spring is tensioned, fill the tube around the threads with grease through the flush grease zerk (1).

- Use a flush type grease coupler (or a needle nozzle) to fill the tube with grease.
- Fill until the grease comes out near the locking nut (6) or no more grease can be injected through the zerk.



19. Install the hose holder onto the hitch.

- Place the hose holder onto the hitch behind the hitch jack.
- Fasten in place with a $1/2"$ x 7-1/2" square u-bolt and flange locknuts.
 - Torque to maximum of 75 lbf.

20. Route the hydraulic hoses up the hose holder.

- Tie wrap them in place.



Install Hose Holder on Hitch, Route Hoses

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Apply Decals

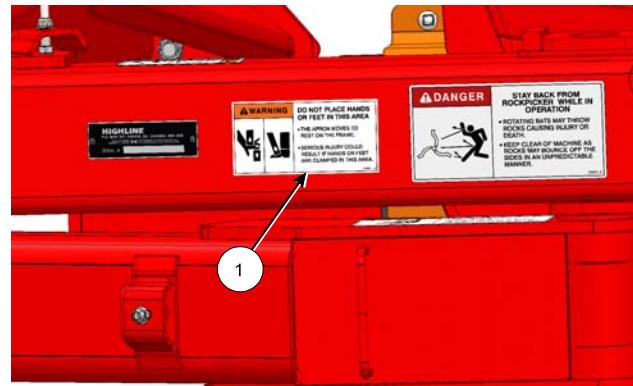
1. Apply the branding decal "Highline" to the right rear upright.



Apply Branding Decal to Right Rear Upright
(Light Bracket Shown Not Installed)

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2. Apply the Warning decal (1) next to the serial number plate located near the front hitch.



Apply the Patent Decal near the Serial Number Plate

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3. Apply the branding decal "Highline" to the right front frame member.



Apply Branding Decal to Right Front Frame

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