



**GROUND DRIVE SPREADER
MODELS MX50G, MX80G
ASSEMBLY INSTRUCTION MANUAL**

**Please review and understand the
operators manual before attempting
to operate this machinery.**

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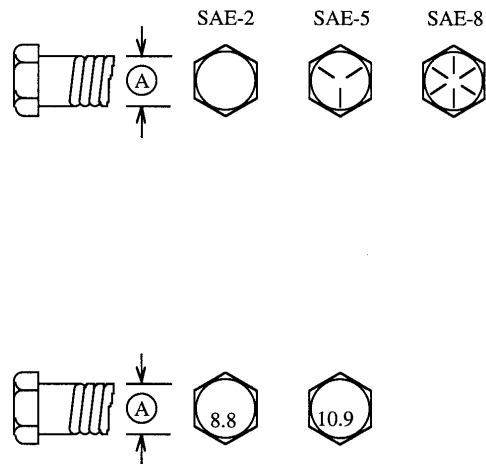
1.0 ASSEMBLY SAFETY

1. Read and understand the Assembly Manual and all safety signs before starting.
2. Follow good safety practices:
 - Keep service area clean and dry.
 - Be sure electrical outlets and tools are properly grounded.
 - Use adequate light for the job at hand.
3. Use properly sized tools, stands, jacks and hoists at all times.
4. Don't handle heavy and/or bulky components alone, ask for help.
5. Position in a large open area to allow access from all sides during assembly.
6. Keep the assembly area neat and clean to prevent slipping or tripping.
7. When using lifting equipment, place jack stands under the machine to securely stabilize it before working on, beside or under it during assembly.
8. Stay away from overhead power lines and obstructions when lifting the machine during assembly. Contact with power lines can cause electrocution. Contact with obstructions can damage components or cause them to fail.
9. Tighten all fasteners to their specified torque, then recheck before using the machine.

2.0 BOLT TORQUE

ENGLISH TORQUE SPECIFICATIONS

Bolt Diameter "A"	Bolt Torque*					
	SAE 2 (N.m) (lb-ft)		SAE 5 (N.m) (lb-ft)		SAE 8 (N.m) (lb-ft)	
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	60	155	115	220	165
5/8"	128	95	215	160	305	220
3/4"	225	165	390	290	540	400
7/8"	230	170	570	420	880	650
1"	345	225	850	630	1320	970



Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or caps crews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

* Torque value for bolts and capscrews are identified by their head markings.

3.0 ASSEMBLY

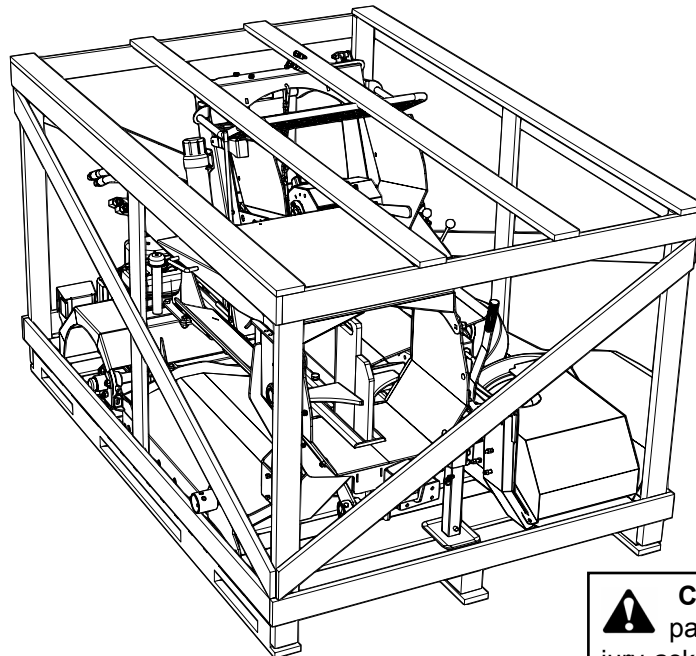
This assembly manual is for all trailer model manure spreaders. The MX50G is used as an example but generally applies to all manure spreader models. Model specific instructions are identified in the manual.

The machine is shipped from the factory in a partially disassembled configuration and attached to a pallet that provides easy moving and handling. Always use tools, equipment and fork lifts of appropriate size and capacity for the job.

Inspect for damage from shipping, immediately contact the shipping company if damage is found.

When the machine is shipped, follow this assembly procedure:

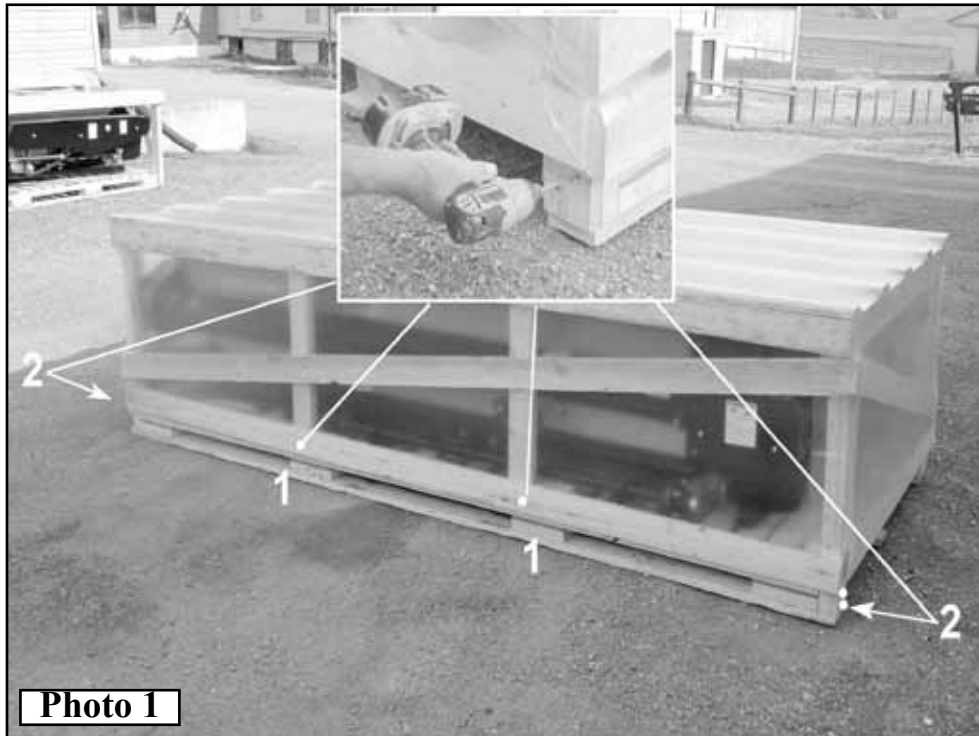
1. Clear the area of bystanders, especially small children.
2. Be sure you have all the required tools before you start.
3. Move the shipping package into an area where it is accessible from all sides.
4. Remove the screws holding the lid to the shipping pallet, remove the lid and set aside away from the assembly area.



Caution: Heavy or bulky parts: prevent potential injury ask for help when lifting or moving heavy, bulky parts.

Uncrating the Spreader

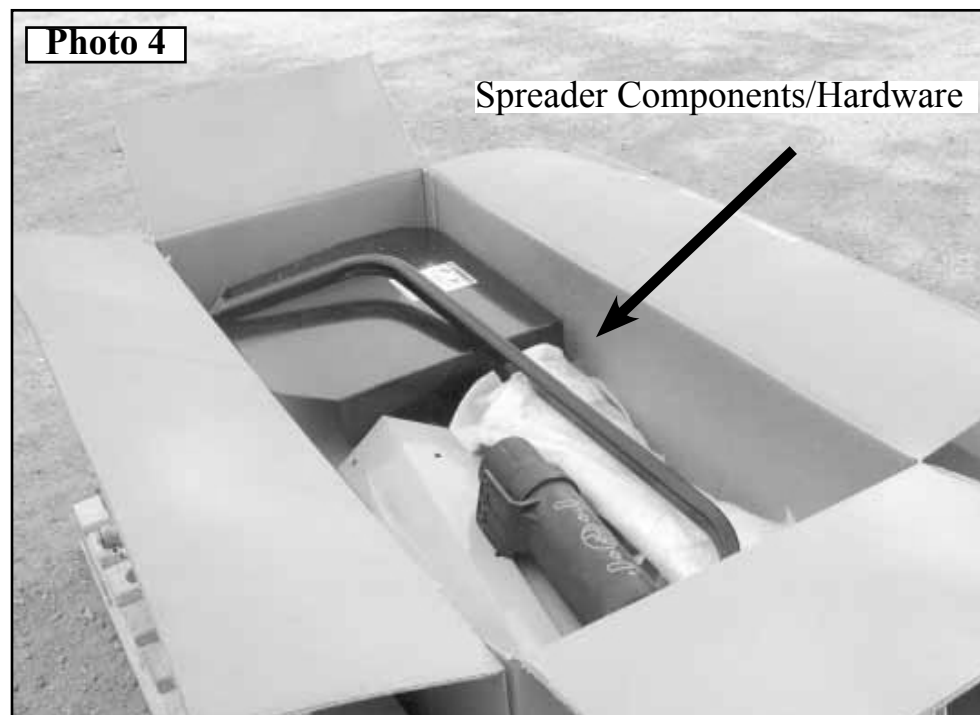
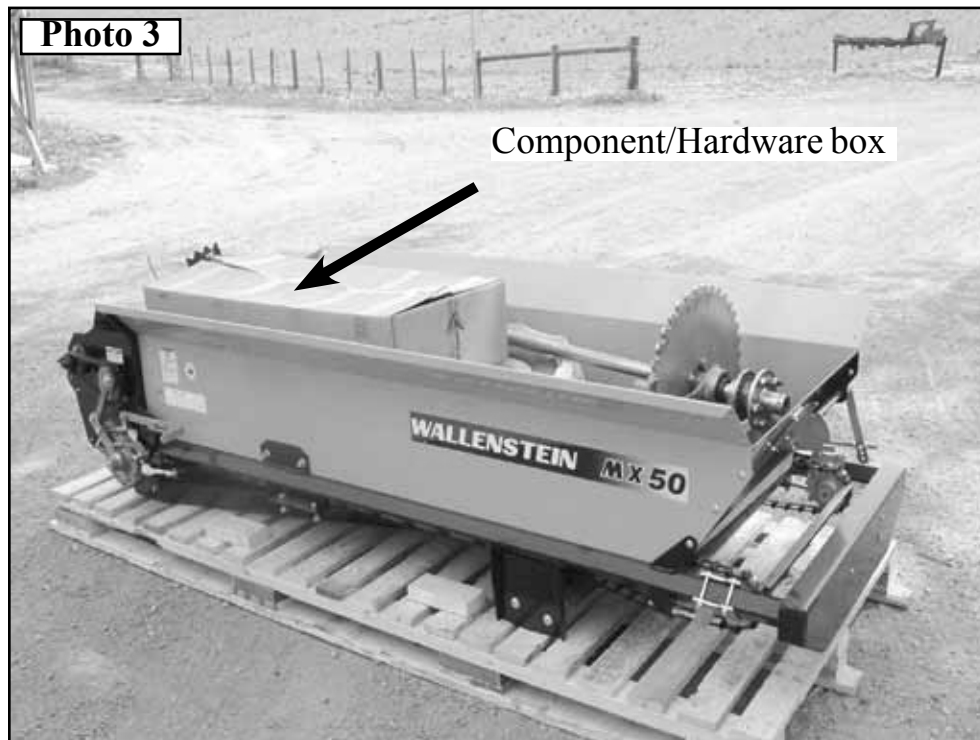
1. Remove all screws securing the upper part of the crate to the lower skid. There are two (2) screws located at each corner around the bottom of the crate, and two along each side. **Photo 1**



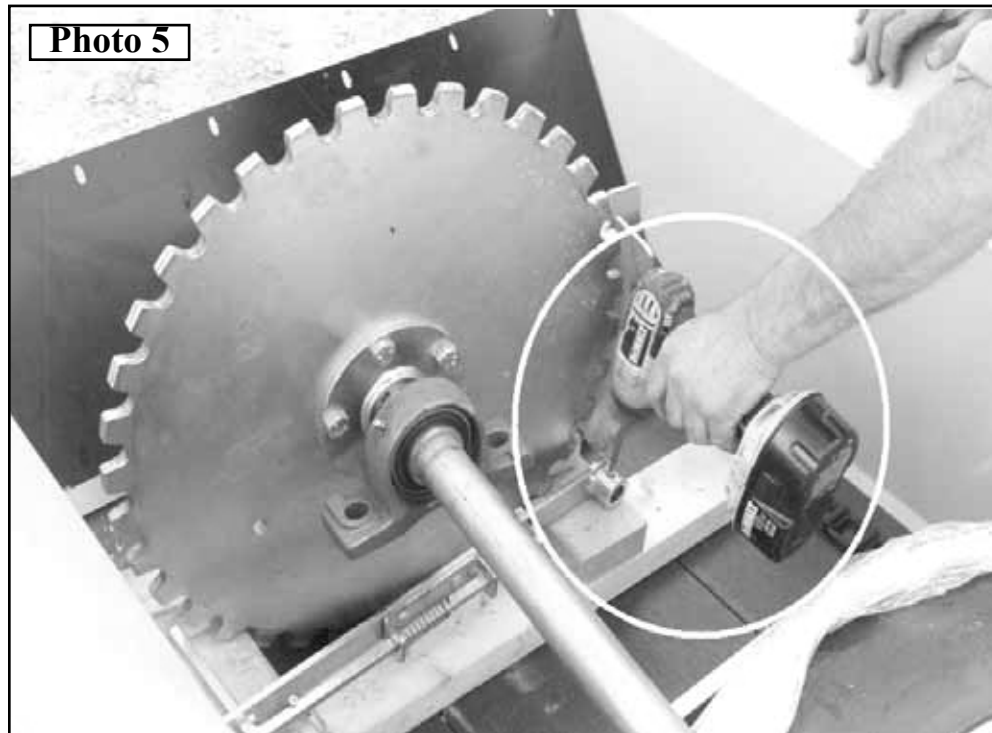
2. Remove the upper portion of the crate. **Photo 2**



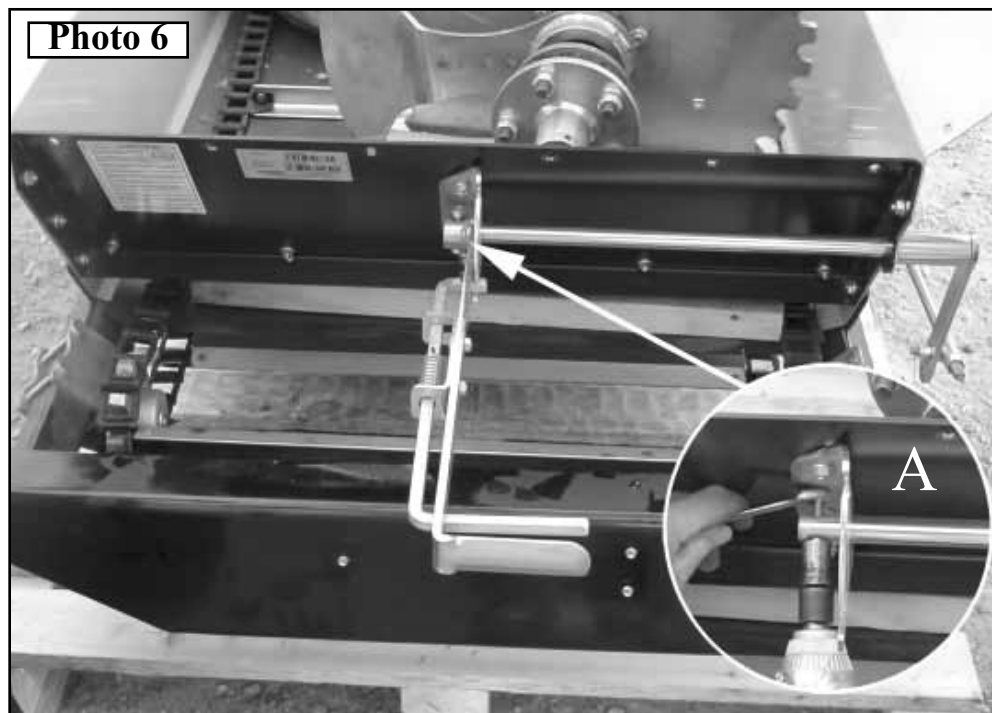
3. Locate component/hardware box situated on bed of spreader and open box to view components required for assembly. *Photo 3 & 4*



4. Unfasten and remove the Engagement Handle Assembly which is secured inside spreader bed. **Photo 5**



5. Remove the **Hex Bolt 5/16NC x 2 & Hex Lock Nut 5/16NC** temporarily mounted at the Drive Engagement Connection Rod (for your convenience. Inset A). Use this hardware to mount and secure the Engagement Handle Assembly. **Photo 6**



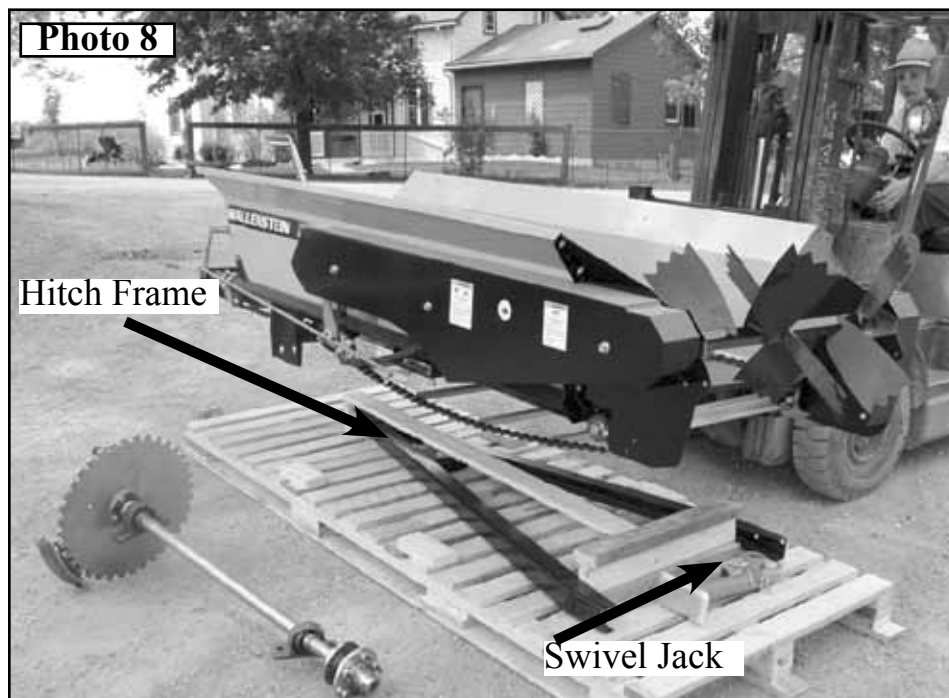
6. Remove the axle assembly from the spreader box. *Photo 7*



7. Raise spreader and remove Hitch Frame shipped mounted to skid plate below. Remove Swivel Jack. *Photo 8*

CAUTION

Exercise extreme caution when raising the spreader to ensure a safe working environment. All precautions should be taken to avoid injury.



8. Carefully set the spreader down and support with jacks at each of four corners on the lower frame. **Photo 9**



9. Remove the **Flange Nut, 5/16NC** used to mount the Apron Drive Shield. This Flange nut is mounted here for your convenience. **Photo 10**



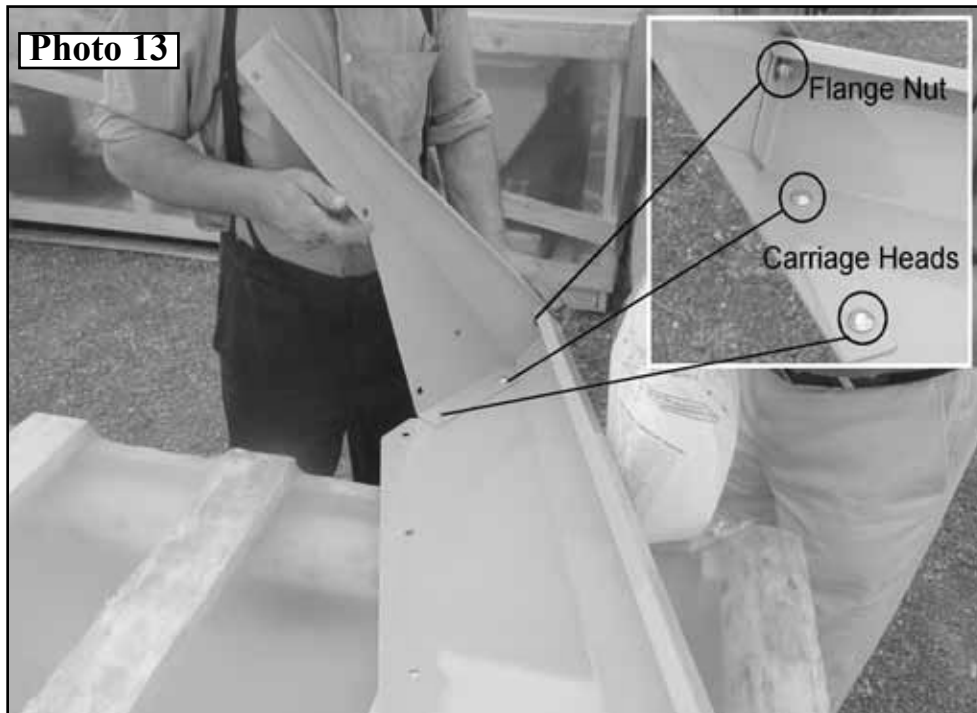
10. Attach the Apron Drive Shield, securing it with the **Flange Nut, 5/16NC** removed in step 9. *Photo 11*



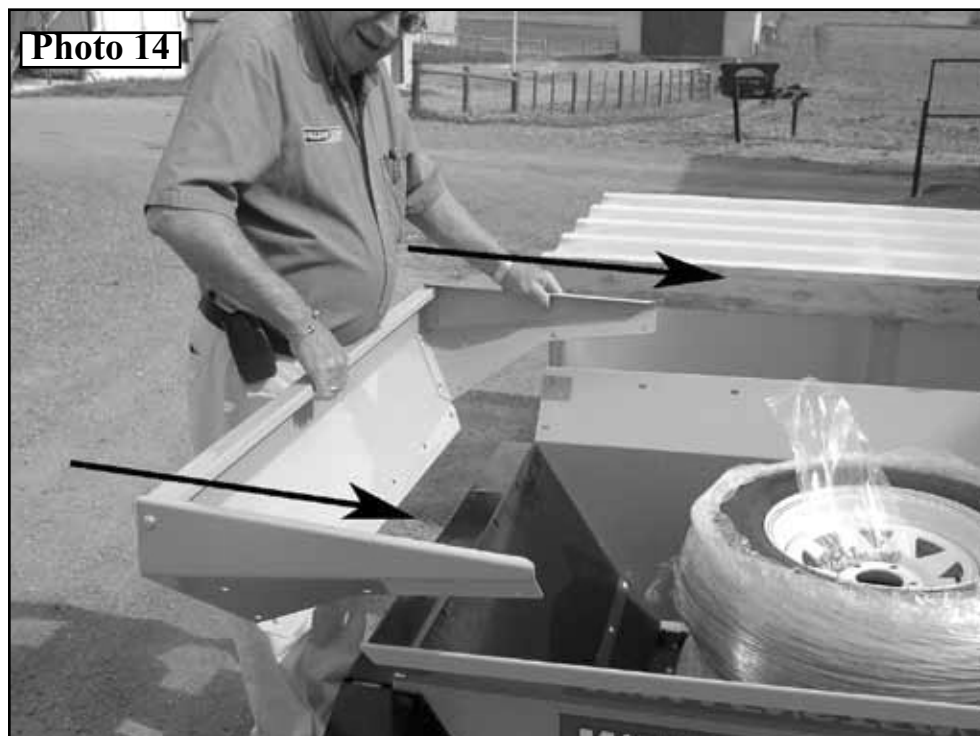
11. Secure the Apron Drive Shield with (2) two **Flange Bolt 5/16NC x 3/4** to the inside. *Photo 12*



12. Locate the box containing the Top, Left Hand and Right Hand Splash Guards and assemble the Right Hand and Left Hand Splash Guards to the Top Splash Guard using (6) **Carriage Bolts, 5/16NC x 5/8** and (6) **Flange Nut, 5/16NC**. *Photo 13*



13. Take the Splash Guard Assembly to the front of the spreader and place into position. *Photo 14*



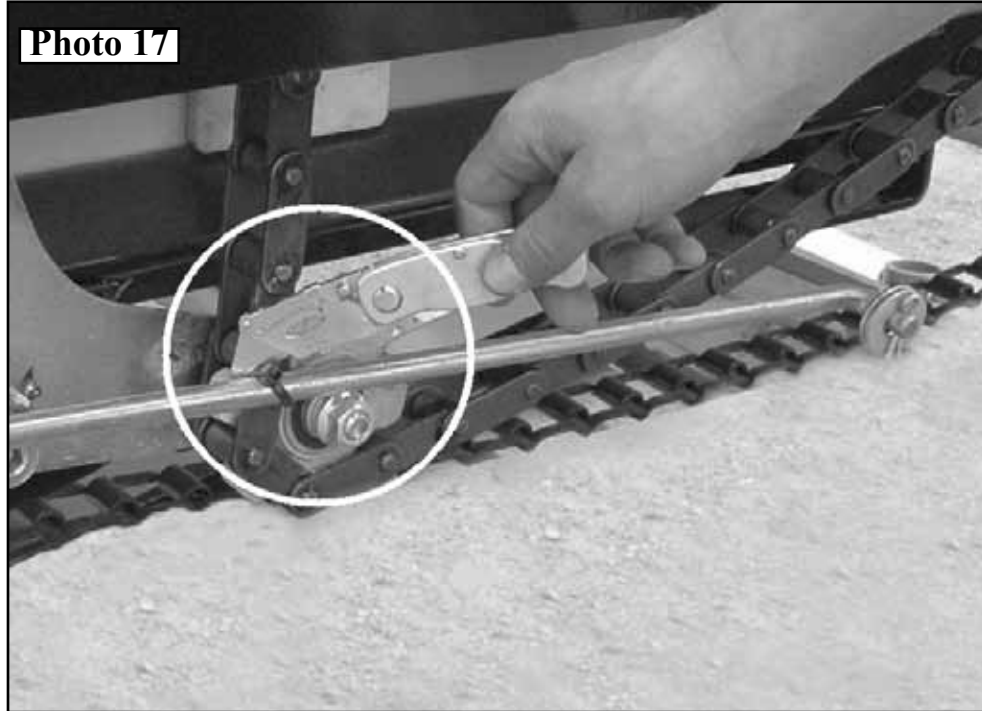
14. Loosely install (14) **Carriage Bolts, 5/16NC x 5/8** and (14) **Flange Nut, 5/16NC**, to the Splash Guard assembly, working from one side to the other. ***Photo 15***



15. Secure all Carriage Bolts by tightening down all Flange nuts. ***Photo 16***



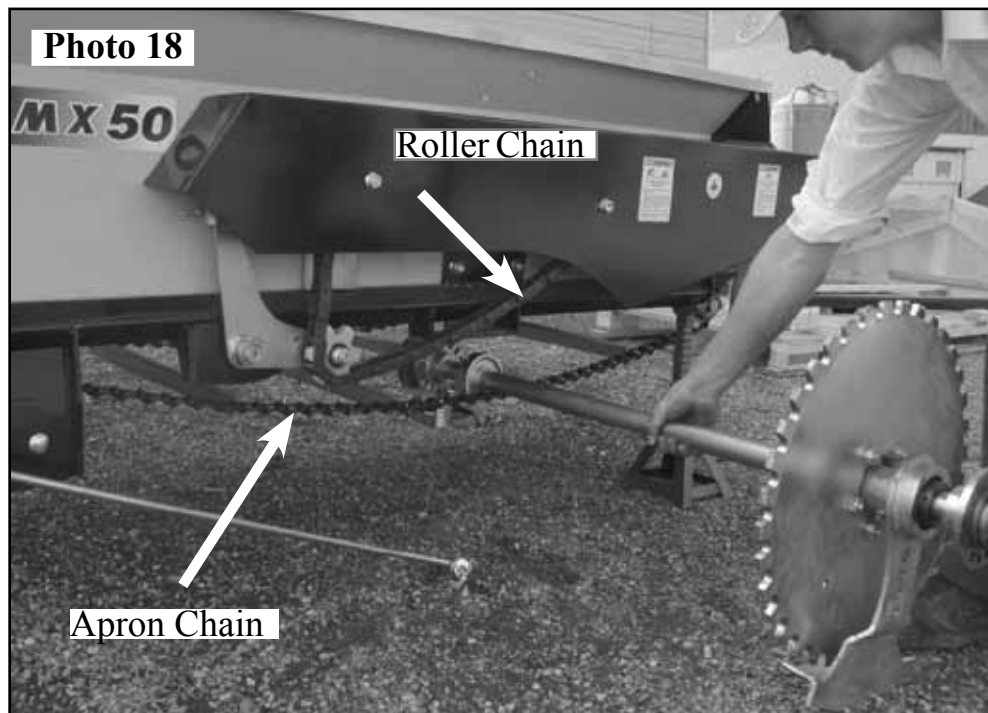
16. Locate Engagement Rod running down right hand side of spreader. Snip tie wrap securing it to roller chain for shipping purposes. Swivel out of way. **Photo 17**



17. Enlisting the help of a second pair of hands, pass the Ground Drive Axle Assembly under the spreader (from right side), to a second person on the left side.

IMPORTANT

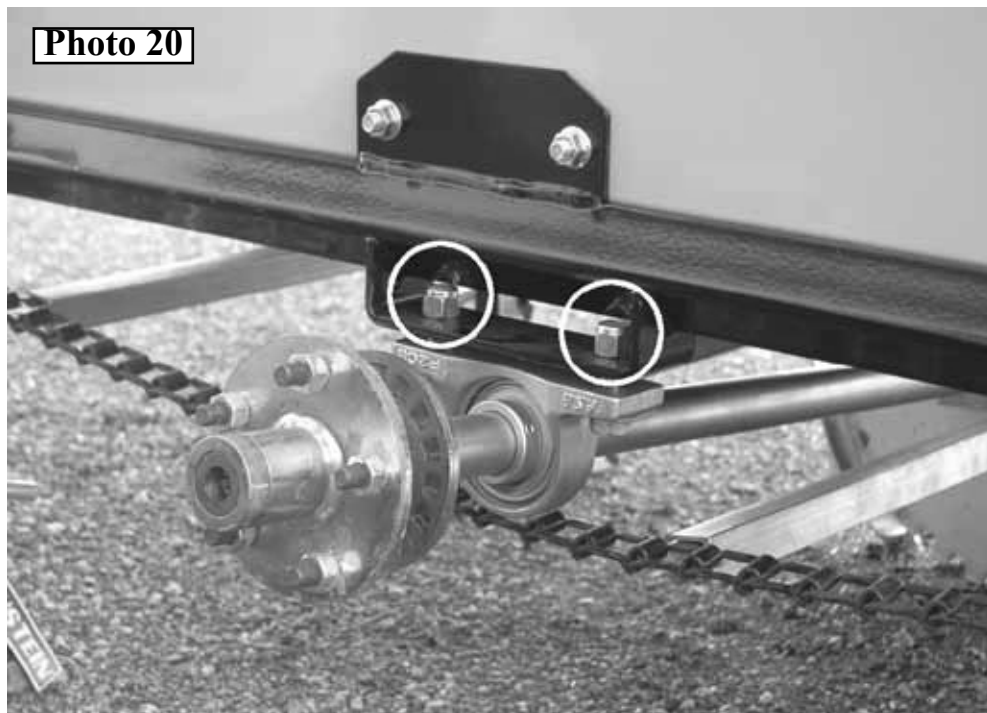
Install the axle OVER TOP of Apron Chain and UNDER the Roller Chain. *Photo 18*



18. Temporarily align the Ground Drive Axle Sprocket with the Roller Chain above.
Photo 19



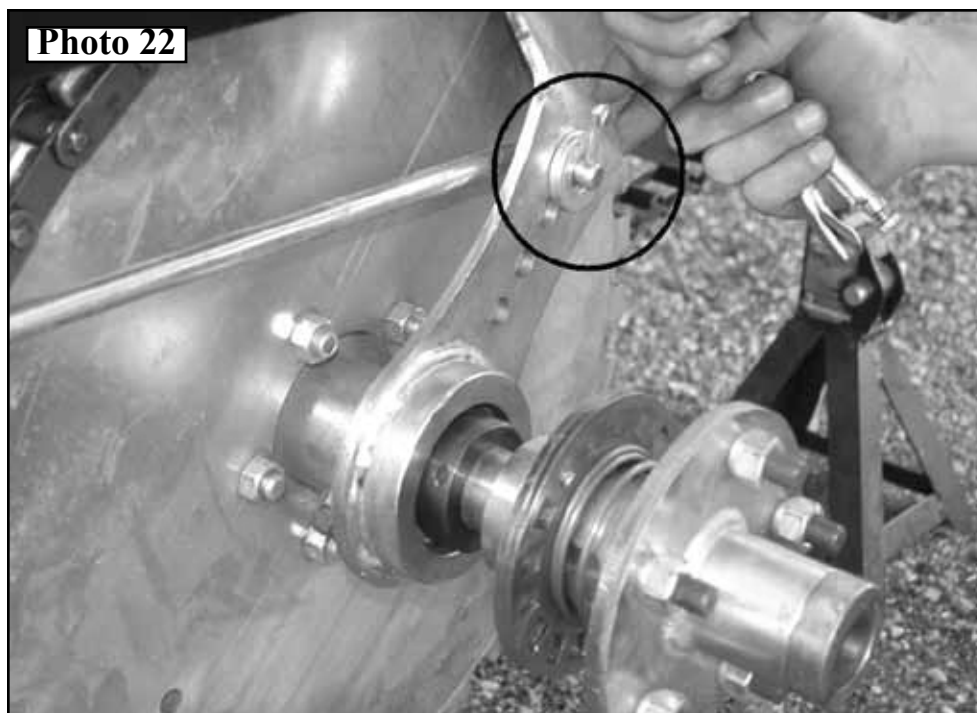
19. Loosely secure the axle to the bracket on the left side of the spreader with (2) **Hex Bolt, 5/8NC x 1-1/2** & (2) **Hex Lock Nut, 5/8NC**. *Photo 20*



20. Loosely secure the axle to the DRIVE side of the spreader with (2) **Hex Bolt, 5/8NC x 1-1/2** & (2) **Hex Lock Nut, 5/8NC**. *Photo 21*



21. Torque all nuts at bearing Pillow Blocks.
22. Connect the Engagement Rod to the Drive Chain Deflector Arm using one **Cotter Pin 3/16 X 2-1/2** & two **Flat Washers**. CONNECT THE ROD TO TOP HOLE OF CHAIN DEFLECTOR. *Photo 22*



23. At the front of spreader, raise the Engagement Handle Assembly to the off position.

Photo 23



24. Remove (10) **Lug Nut 1/2NF** from axle hub and install tires to both right and left hand side of spreader. Torque lug nuts to specified torque. Photo 24

IMPORTANT

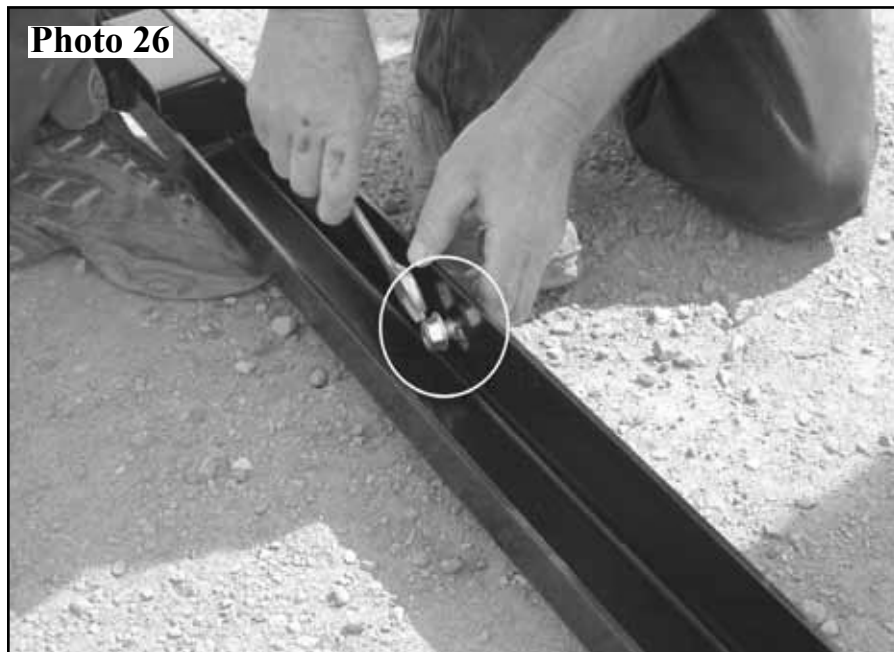
"V" Tread faces towards rear of spreader. Tire shown below is LEFT hand side.



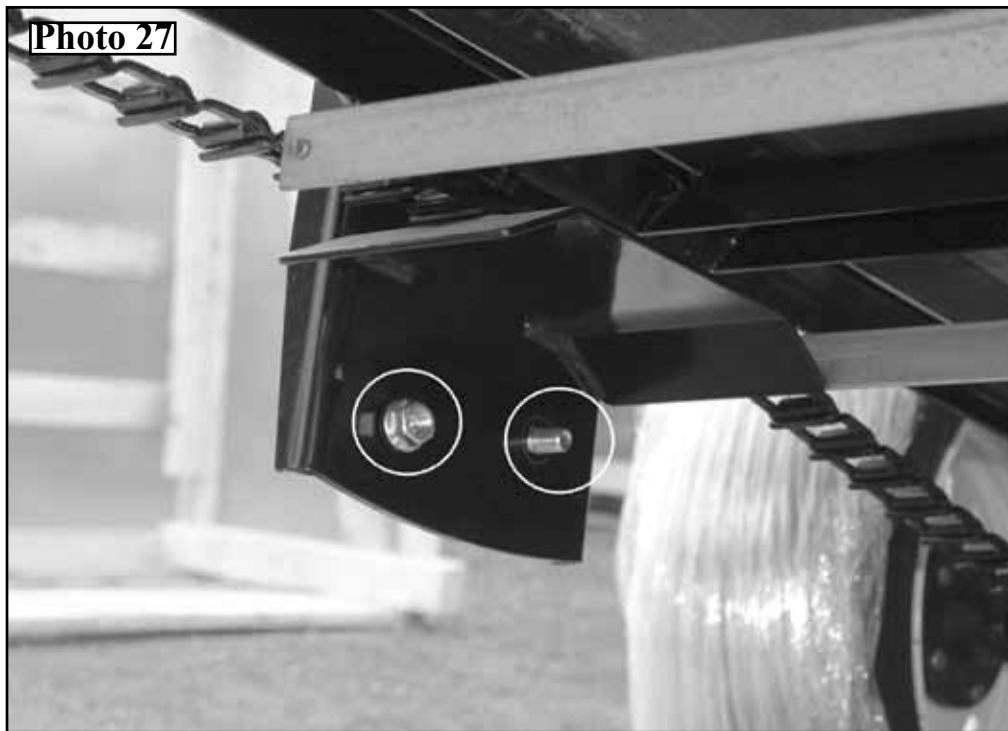
25. Using the **#10 Self Tapping Screws**, attach the protective storage compartment for the paper owners manual to front of spreader. ***Photo 25***



26. Remove the (2) **Carriage Bolt, 1/2NC x 1-1/2** & (2) **Hex Lock Nut, 1/2NC**, from the location on the Hitch where it will be attached to the spreader. This hardware is shipped mounted here for your convenience. ***Photo 26***



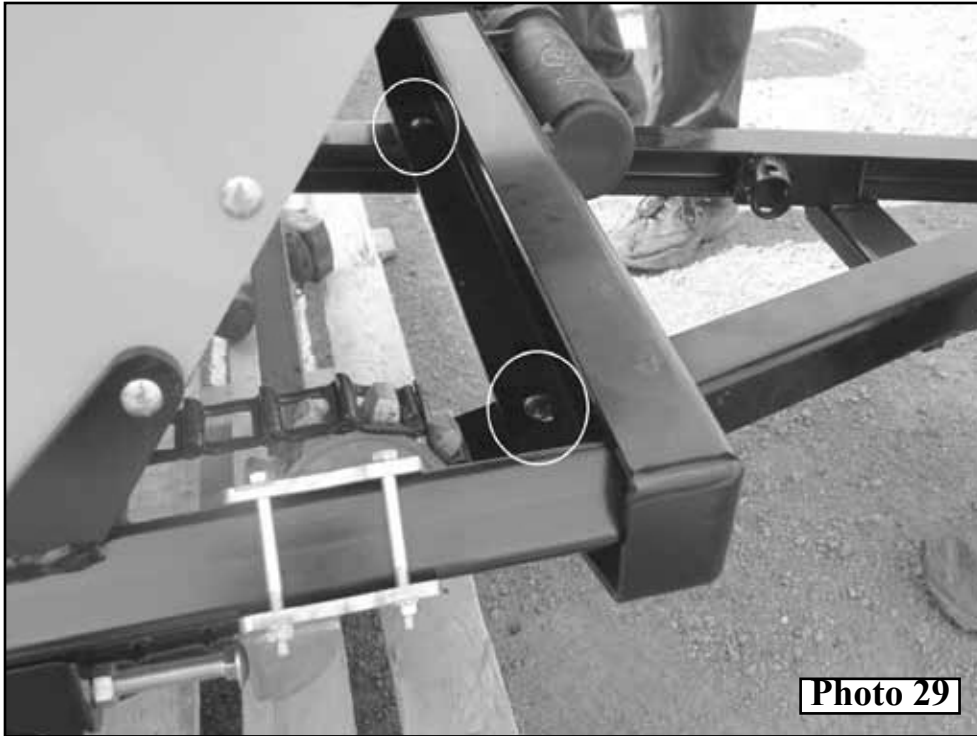
27. Remove the (2) **Carriage Bolt**, 1/2NC x 1 & (2) **Hex Lock Nut**, 1/2NC, from the bracket weldment location on both sides of the spreader where the hitch will be attached to a second point. This hardware is shipped installed at this location for your convenience. *Photo 27*



28. Place the hitch into position at the front of the spreader. *Photo 28*



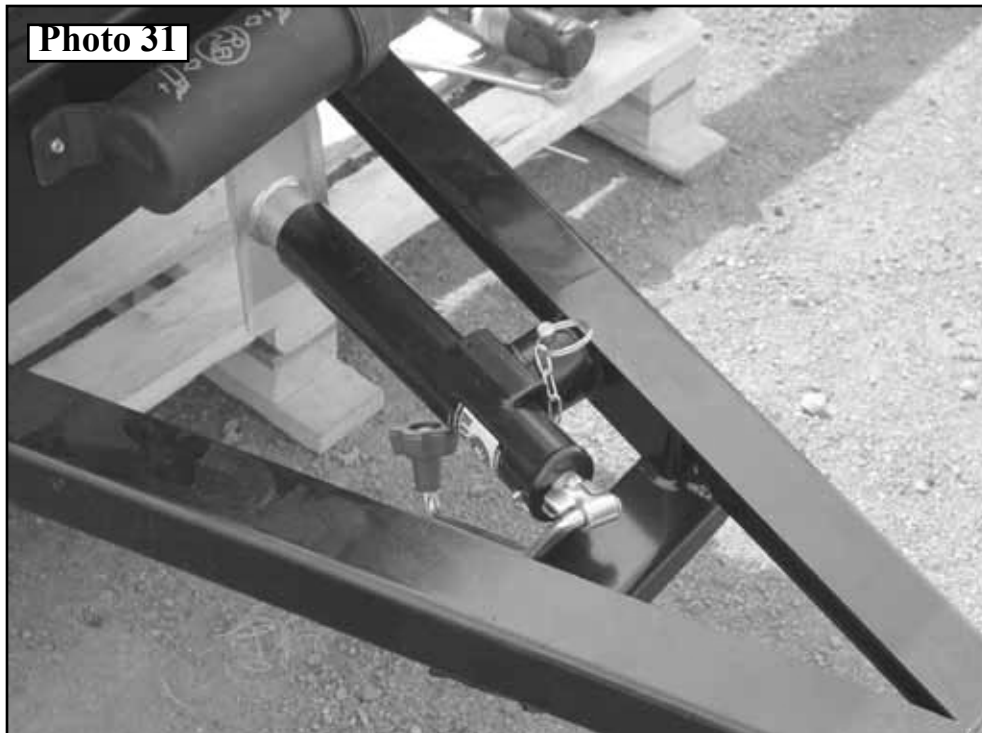
29. Attach hitch at the front location on the spreader with (2) **Carriage Bolt, 1/2NC x 1-1/2** & (2) **Hex Lock Nut, 1/2NC** removed in Step 27. *Photo 29*



30. Secure the Hitch Frame to the second mounting point (farther back) at the bracket weldment on the spreader. Use (2) **Carriage Bolt, 1/2NC x 1** & (2) **Hex Lock Nut, 1/2NC** removed in Step 28. *Photo 30*



31. Install the swivel jack in the upright position to support the front end of the spreader while finishing off the final assembly. **Photo 31**



32. Remove (2) **Carriage Bolt, 5/16NC x 3/4** & (2) **Flange Nut, 5/16NC** at rear of spreader on Left Hand Side Panel (to mount the Cross Bar). **Photo 32**



33. Remove (2) **Carriage Bolt, 5/16NC x 3/4** & (2) **Flange Nut, 5/16NC** at rear of spreader on Right Hand Side Panel (to mount the Cross Bar). *Photo 33*



34. Install the Cross Bar and tighten all **Carriage Bolt, 5/16NC x 3/4** securely. *Photo 34*



35. Hook up the spreader to towing vehicle and place the Swivel Jack in the trailering position. ***Photo 35***

