

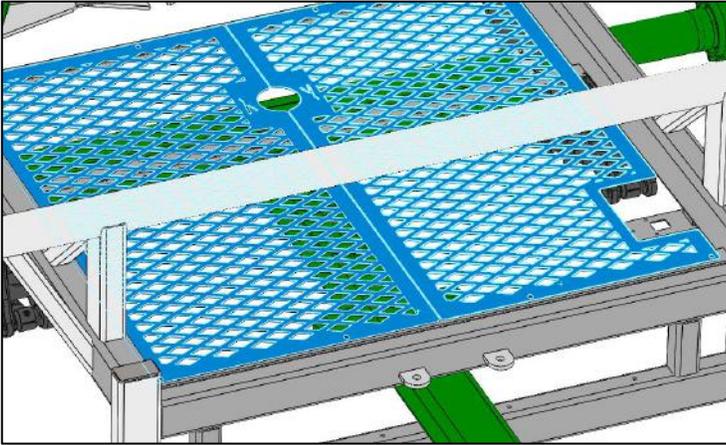
HOSE CART

OPERATING INSTRUCTIONS

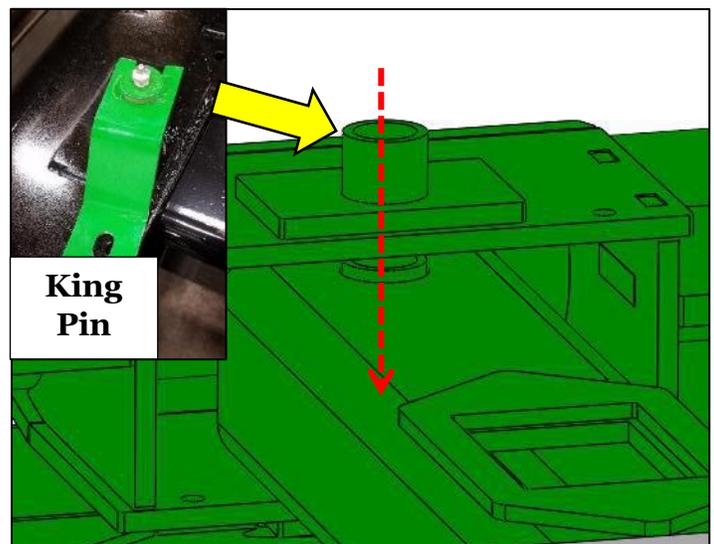
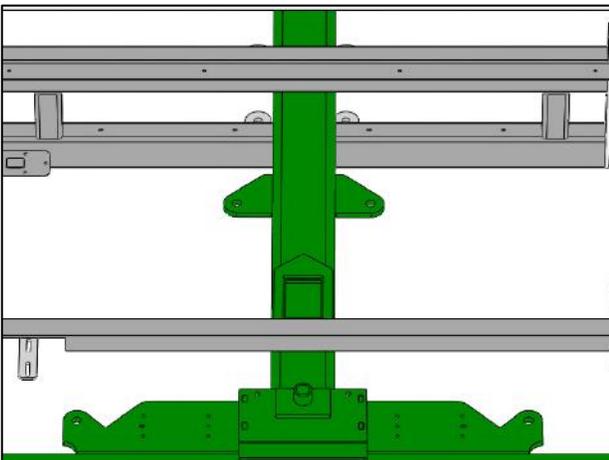


Installing Tongue

1. Remove the grates highlighted below to allow access to the internal components
2. Swing the upper poly wear strip to one side. To do this: Remove the two middle bolts and one of the end bolts. Loosen up the other end to swing the strip out of the way



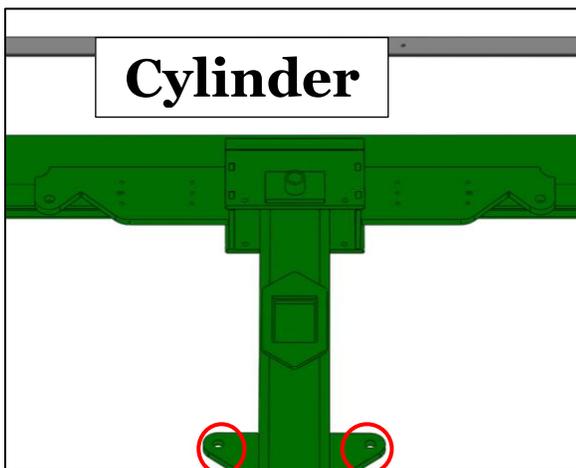
3. Insert the tongue through the wear strip area and into the axle King pin bushing using a hoist or forklift
4. Line up the holes and insert the Kingpin through the axle and tongue
 - a. Use forklift or hoist to maneuver axle to correct location in King pin bushing – Do not force in by hitting multiple times with a hammer
 - b. Carts should be shipped with axle rotated to accept tongue, but shipping or handling may have caused misalignment
 - c. If so, loosen the U-bolts around the leaf spring to rotate the axle
 - d. Re-tighten U-bolts when tongue is assembled: Be sure the axle is centered by measuring from each hub to the frame making sure both sides are equal in measurement
5. Install and tighten the bolt to hold the Kingpin in place
6. Grease the Kingpin and reinstall the poly wear strip
7. Install jack stand to the tongue



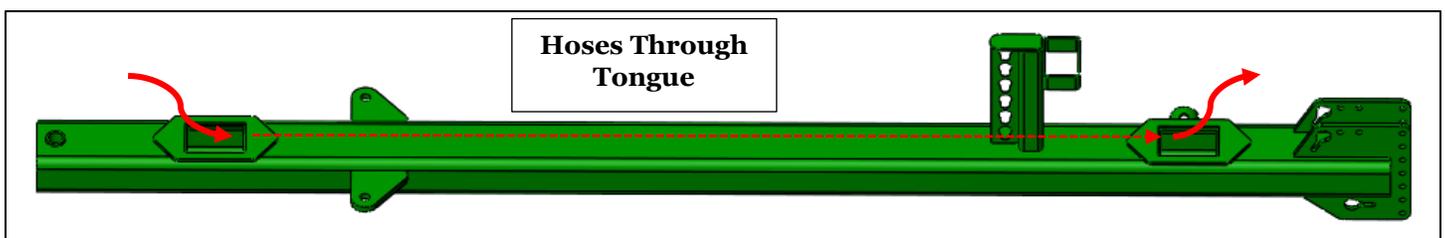
Installing Tires and Cylinders



1. Install the tires to match the picture above
2. Tires should be oriented so that on top of the tire, treads are angled toward the rear of the cart with valve stems facing to the outside
3. Driver's side lug nuts have left hand threads and passenger side lug nuts have standard threads
4. Tighten all the inner square shoulder lug nuts first
5. Then, snug up the hex nuts all around
 - a. The hex nut is intended for an axle with dual tires
 - b. The inner square shoulder lug nut is bearing the load



6. Attach the end of the cylinders to the tongue
7. Run the wires and hoses up through the tongue
8. Start with the lightest (Lights) and make your way up to the heaviest (3/4") pushing two through at a time
9. Tie up any loose hose to prevent it from getting caught in the field
10. Re-install the grate and tighten down
11. Tie up any other loose hose to the grate



Attaching Hose Cart to the Tractor

1. Hook your reel to your tractor. Ensure that the hitch on your tractor and your hose cart are compatible and rated for the loaded weight of the reel.
2. Hook up your hydraulic hoses. If your tractor has a hydraulic valve that received priority, use this valve on the hydraulics that rotate the reel from side to side.
3. If equipped with two speed motors, hook up the electrical connection to the cab controls.
4. Two speed motors also require a case drain. Hook up the case drain hose. Consult your tractor's Operator's Manual to find the proper port. If there is not a fitting in your case drain port that accepts the hose cart's case drain hose, contact your implement dealer to obtain the proper fitting.
5. If equipped with a lighting package, hook up the electrical connection



ISO coupler
compatibility check



MAKE SURE NO ONE IS STANDING NEAR THE REEL

6. Before operating your reel, be sure all people and objects are clear of the machine.
7. Stow the jack, remove any storage/transport pins, etc.
8. Always engage and disengage hydraulic motors with engine RPMs low. Engaging and disengaging at high engine speeds can cause damage to the hydraulic motors
9. Test your hydraulic functions
 - a. Rotate your reel from side to side
 - b. Engage one reel motor valve in both directions, noting the direction the reel operates.
 - c. Engage the second reel motor valve separately, and ensure that the one valve causes the reel to spin in the same direction when activated as the other. This will make it easier to operate in the field
 - d. Test two speed setting, if equipped

Rolling Hose onto Hose Cart

A common question is how much hose to roll at one time. This depends on the situation. What size of hose, what the obstacles are, how much hose is on the cart, and how straight the hose is ultimately contribute to how much you can roll. Ultimately the question is how much hose can you roll without damaging your hose. A good general rule is no more than 3 pieces.

1. Prior to rolling up hose, make sure hose is cleaned out properly.

2. When hooking up to a section of hose, leave yourself enough slack to make one complete revolution prior to pulling on the hose
3. Orient the cutout on the center of the reel in the up position
4. Slide the coupler end into the cutout
5. From the tractor cab, engage the hydraulic motor to reel the hose over the top of the reel center pipe
6. Once you have made one complete revolution, articulate the cart to one side, causing the hose to overlap approximately 1/3 of the previous revolution of hose
7. Fill each layer completely out to the dome every time. This will prevent future layers from slipping between the hose and the dome and lodging.
8. Continue to walk the hose back and forth on the cart as evenly as possible.
9. When you approach a coupler, slow the engine speed down and prepare to back up. Backing up as the couplers come on the cart prevent the hose from being excessively tight at the coupler and digging in to the hose around it. Continue to back up to keep hose loose until there is a complete revolution past the coupler.
10. Do not roll hose directly over a coupler. Build up hose on each side until the coupler does not protrude out from the mass of hose before rolling over the coupler. This will prevent damage to the hose as it rolls over the coupler.
11. Attempt to stagger couplers to different locations on the cart to prevent one portion of the cart from filling up as more hoses are loaded on the cart.
12. Hose must be pulled onto the cart in a straight line, or it will roll over on itself and 'barn rope.' If hose is not in a straight line, roll a small amount of hose on the cart, then turn around and drive back alongside the hose to where it begins to be straight. Then turn around again and drive to where the entire length of hose will be in a straight line. You will always save yourself time by straightening out your hose before you roll.
13. If there become kinks or twists in the hose as you roll, air will be trapped in the hose, causing it to roll on the cart with trapped air like sausage links. If this happens, lay back off the air filled portion where you have plenty of room in a straight line, then once you have all the air filled hose on the ground, drive in a straight line, dragging the hose behind you. As you pull it across the ground the twists will slowly come out. If you reach the end of the field before the air is out, simply turn back around and drag it back the other way until all the twists are gone. If you are in hilly terrain, dragging it across the top of a hill or across a terrace can speed the rate at which the twists come out.
14. As your final coupler approaches the cart, slow down the engine speed and slowly raise it off the ground. Rolling your final coupler onto the cart at high speed can cause it to fly over the top of the reel toward the tractor cab.
15. To hook up hose on the ground to hose on the cart, roll off some hose and hook the couplers together before following the directions above.
16. When finished, secure the loose end of the hose by wrapping it around the metering bar before road travel.



Secure hose in center of reel



Articulate reel and
reel in hose



Secure hose

Laying Out the Hose

1. Puck carts are designed to power off your hose, not to pull it off. DO NOT anchor the end of your hose and drive away with the tractor hydraulics in float, this can cause damage to your hose cart motors and hydraulic system.
2. To begin laying hose, roll your coupler end off onto the ground. Be sure to leave yourself a little slack at your starting point, you can more easily loop extra hose than find more when you don't have enough.
3. As you start, engage your motors to roll off the hose.
4. Drive through the field, shifting gears on your tractor to match your ground speed to the speed at which the hose is coming off the cart.
5. Ideally the hose will lay off loosely, falling right behind the bumper of the cart in a straight line. Avoid pulling too hard and dragging hose along with you, as well as laying it too loose and causing it to bunch up.
6. Always lay couplers off in a straight line. A coupler in the middle of a curve can cause undue stress on the coupler clamp and collar, and possibly cause a failure in the line.
7. Typically, it is a good idea to lay an 'S' in your hose on one or both sides of your couplers so that if you need to hook a booster pump up at that location, or need to fix hose, there is extra hose there to do so. This is not necessary when laying drag hose.
8. When you reach the end of the last piece of hose on your cart, slow your engine speed and allow the coupler end to gently drop out of the dome pipe. If it becomes lodged, stop your tractor, back up to create slack, and pull it out manually.
9. If you reach your destination before you run out of hose, loop the excess hose in long parallel lines in a safe location until you reach your coupler, then drag the coupler to where you would like it and unhook.



Loosely lay hose

Transporting the Cart

Follow state and local laws concerning the transportation of agricultural equipment on public roadways.

Never travel at speeds that exceed 35 miles per hour or at speeds that could make the cart unstable and potentially roll.

Check that the tire pressure is correct before moving the cart. The cart is equipped with 425/65R-22.5 or 550/50R-22.5 tires (HC8 and HC11) or 700/50R-22.5 tires (HC16). For the HC8 and HC11, the tire pressure is listed on the sidewall of the tire. The HC16 tire pressure is 35 PSI. Ensure tires are adjusted to manufacturer's recommendations before transporting the cart.

Always make sure the end of the hose is secured to avoid injury or damage to the coupler. Check that the hydraulic hoses are secured into their traveling position and will not drag.

Check that the tongue locking pins are in traveling position. Secure safety chain and check all safety pins.

Never pull more than one cart at a time.

Be sure to check tow vehicles' manual for its Gross Vehicle Weight Rating (GVWR) to ensure its ability to transport cart PRIOR to transporting. Always use a tow vehicle with safely rated towing capacities before transporting cart.

Revision History

Revision Number	Date	Equipment Line	Comments
1	05/10/2019	Hose Carts	Initial