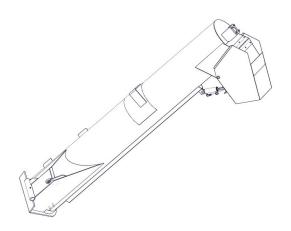
# J&M

## Service Guide



7102017

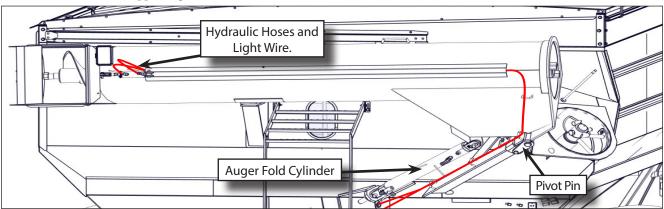
J. & M. Mfg. Co., Inc. 284 Railroad Street - P.O. Box 547 Fort Recovery, OH 45846 Ph: (419) 375-2376 Fax: (419) 375-2708 www.jm-inc.com

#### **Upper Auger Tube Removal**

⚠ Danger - Make certain that all power is shut off and all pressures is relived from the hydraulic system before service.

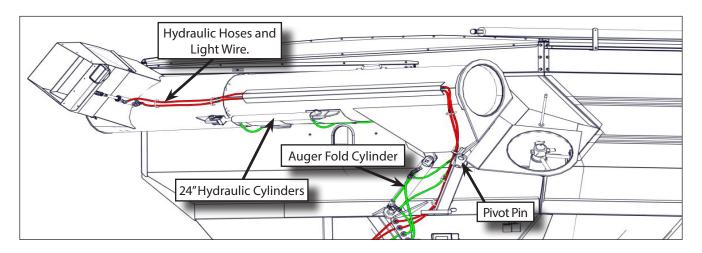
#### For regular folding grain carts

- Disconnect the auger fold cylinder from the upper auger tube.
- Remove both of the hydraulic hoses from the 1-3/4" x 4" hydraulic cylinder and disconnect the light wire.
- Pull the hoses and the light wire from the upper auger tube.
- Secure the upper auger tube with an overhead hoist or implement with a loader and remove the pivot pin.
- Now lift and remove the upper auger tube from the cart.



For regular folding grain carts with optional sliding auger

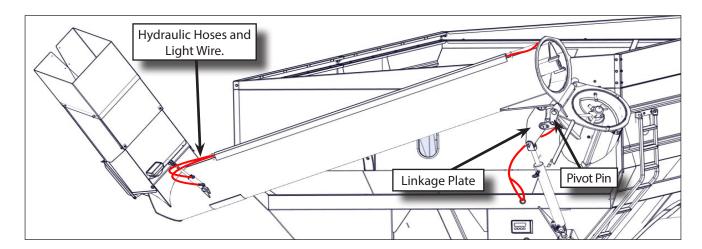
- Disconnect the auger fold cylinder from the upper auger tube.
- Remove both of the hydraulic hoses from the 1-3/4" x 4" hydraulic cylinder and disconnect the light wire.
- Pull the hoses and the light wire from the upper auger tube.
- Disconnect both of the 24" slider push cylinders from the upper auger tube and the slider spout. Remove the sliding spout before moving on to the next step.
- Secure the upper auger tube with an overhead hoist or implement with a loader and remove the pivot pin.
- Now lift and remove the upper auger tube from the cart.



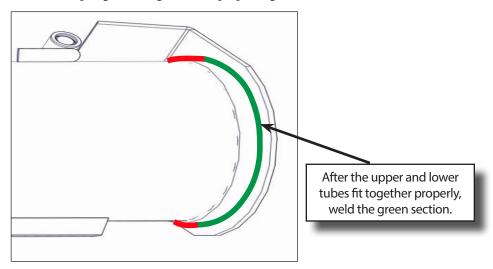
#### **Upper Auger Tube Replacement**

#### For extended reach long fold grain carts

- Disconnect the linkage plate from the upper auger tube.
- Remove both of the hydraulic hoses from the 1-3/4" x 4" hydraulic cylinder and disconnect the light wire.
- Pull the hoses and the light wire from the upper auger tube.
- Secure the upper auger tube with an overhead hoist or implement with a loader and remove the pivot pin.
- Now lift and remove the upper auger tube from the cart.

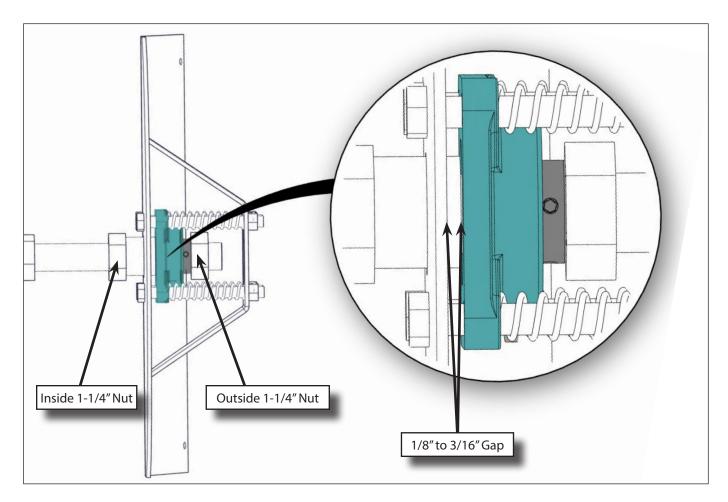


- Position the new tube into place and reinstall the pivot pin. Once the pivot pin is installed attach the cylinder or linkage plate to the upper auger tube.
  - If your grain cart is equipped with a sliding spout, reinstall the spout and 24" slider push cylinders before to the next step.
- Now raise the upper auger tube into the unload position.
  - NOTE: The bottom of the tube is not completely welded all the way around the hinge plate. This is intentional so the upper auger tube can be adjusted to fit to the lower auger tube and hinge plate.
- Adjust the top tube to fit to the bottom tube. To ensure a perfect fit some grinding and the use of a sledge hammer may be necessary.
- Once both of the tubes and hinge plates are fitted together tack weld the upper auger tube to the upper auger hinge plate.
- Now raise the upper auger so that there is around an inch gap between the two plates and solidly weld the seam.
  - NOTE: Tack welding and then raising the top tube before welding solid the seam ensures that you do not accidentally blow through and weld the top tube to the bottom tube.
- After the upper hinge plate and tube are welded together put the auger back in the unload position and let the weld cool.
  - NOTE: DO NOT use watter to cool the weld. Let the weld cool down gradually.
- Once the steel has cooled paint the weld to match the tube.
- Follow the steps in the next section to reset the top auger bearing to ensure proper alignment.



### **Upper Auger Bearing Reset**

- Raise the upper auger to the unload position.
- Now manually rotate the drive line to engage the upper auger to the lower auger.
- Untighten the outside 1-1/4" hex nut at least 1/4".
- Tighten the inside 1-1/4" hex nut until there is an 1/8" to 3/16" gap between the 4 hole flange bearing and the headpan.
- Finally tighten the outside 1-1/4" hex nut until it is tight against the 4 hole flange bearing.



- Now reinstall the hydraulic hoses, light wire, hydraulic cylinders, parts, and hardware.
- Use zip ties to secure hydraulic hoses and the light wire where necessary.