

ENGINEERING BULLETIN

Upper Auger Folding Cylinder Rework

It has come to our attention, that there is a problem with a batch of auger folding cylinders on our grain carts. The result is the piston seal can break apart which can plug the oil port or the check valve mounted to the cylinder barrel. The cylinder may become inoperable.

Balzer is working on a program to switch out the affected cylinders. We will be in contact with you via e-mail or phone to set this up. While this is taking place, the grain cart (if in service) may still be used with special attention. The failure only occurs when the cylinder is extended fully out. Therefore, if the operator stops extending the cylinder as soon as the auger flanges contact each other; the piston seal should remain intact.

The problem exists on some grain carts with a build date of May 2010, and all built from June 2010 through August 2010. Below is an example of how to determine the build date from the serial number tag attached to the front right corner of the grain box.



REF# - ## ##

Month

Year

1111 - 0510

Example of affected unit.

If your build date is May of 2010 you will need to check a measurement on the cylinder to determine if it is within the affected batch. Below is a picture of how to measure this. **Make sure cylinder is fully retracted.** If the measurement is 2 ½" the cylinder needs to be replaced. If the measurement is 4" the cylinder is OK and does not need to be replaced. These measurements are only for identifying purposes. The new cylinder will have a measurement of 2 ½".



ENGINEERING BULLETIN

Upper Auger Folding Cylinder Rework

To replace a cylinder do the following:

- 1: Extend cylinder fully out and then retract slightly until top pin is loose.
- 2: Remove roll pins from cylinder pins (requires a 3/8" roll pin punch).
- 3: Verify auger is safely extended.
- 4: Place a block of wood (2x4) under cylinder barrel to support it when top pin is removed.
- 5: Remove top pin.
- 6: Retract ram fully.
- 7: Mark and remove hydraulic hoses. Flush hoses to remove any debris. Install o ring plugs from new cylinder into the ports on the old cylinder.
- 8: Attach a clevis to rod end yoke. Using a proper lifting device (cylinder weighs approximately 300 lbs) lift rod end of cylinder up until lower pin becomes loose.
- 9: Remove bottom pin.
- 10: Replace in reverse order.
- 11: Bleed air from bleed screw on top of cylinder before attaching top cylinder pin.



DANGER

Bleed screw must only be slightly cracked open. If screw is loosened too much, it will become a projectile from the force of the hydraulic fluid.

Cycle the cylinder three times to purge air prior to attaching the top cylinder pin.

This must be done prior to installing the top pin in order to remove air. The auger can suddenly drop if not properly bled.

