

BAGGING 101

**Bagging 101 is only meant for Akron Grain Storage Systems
Read and understand the owner's manual before operation**

SITE PREPARATION

1. Clean Ground w/Disc or Box Scraper. Make sure there is no debris that could puncture the bottom of the bag.
2. Smooth the ground with a grain cart by driving over the site. Be careful not to compact the ground too much and create a low spot that could allow water to pool.
3. Bag slightly downhill if you are on an incline to decrease the chance of water getting into the bag. The end of the bag you start on has a better seal than the side you end on.
4. Spread-out Dry Fertilizer (ammonia or Urea) on bag site to control rodents.

LOADING BAG AND BAGGING GRAIN

1. Line up bagger in straight line, put an irrigation flag in the center of the end of the bagging site as a target to keep bag straight. If tractor is equipped, set an AB line with GPS to keep bagger tractor straight.
2. Extend bag lift and tray down and out. Place the bag box at the end of the cradle after it is extended out. Be sure the box is orientated correctly so the top flap edge is pointing away from the tractor. Some brands have an arrow to indicate the orientation of the bag.
3. Open the box and load bag onto easy lift, outside white flap rearward and inside black flap toward tractor and lift bag onto bagger lift. Make sure the stretch mark indicator on the bag is eye level when you load the bag.
4. Activate the hydraulics in the tractor in detent to keep continuous flow to the bagger. NOTE: There is a back flow preventor on one of the main hoses. If the tractor lever is in the wrong direction it may cause the oil to seize between the tip and the backflow valve. If the operations on the machine don't work immediately switch the tractor lever direction or switch the hoses to flow oil in the correct direction. If hydraulics seizes, take off the tip to relieve the pressure.
5. Use hydraulics to lift bag and retract tray to install the bag on the tunnel. Secure bag with elastic rope and four tiebacks from the ground. See manual for proper rope installation.
6. Pull the leading edge of the bag off of the bagger tunnel until you see the start line on the bag or approximately 12-15 feet.
7. Close the beginning of bag by placing 2x4 or 2x6 boards on top and bottom of the edge of the bag and use 2-1/2 screws to seal the bag, roll the bag under 3-4 times. Do not drive the screws in too deep. If they stick out the bottom side it will penetrate the bag when you roll it up and cause holes for rodents to get in.
8. Avoid double bagging. Pull the inside black flap of the bag out from under the folds of the bag. Pull the flap toward the tractor all the way around the tunnel to show black (see figures 1, 2, 3). While bagging, if the black plastic in the tray is gone and you see white plastic you are double bagging. Double bagging occurs when the inside black flap of plastic is not pulled out (see Figure 1,2,3) and the inner plastic is coming off along with the outer plastic creating 2 layers of plastic when the bag is laid out. Double bagging can cause damage to your machine. If you double bag, stop, pull away, cut the bag and seal it and begin a new bag.
9. Put tractor in neutral, run PTO at recommended PTO speed.

10. Apply minimal brake pressure on brake system to start. You need enough pressure to be sure grain is piled on top of the boards but do not over stretch. Start loading grain in the hopper, make sure the boards do not unroll during the start of the bag.
11. When the bagger starts moving apply more or less pressure to brake system as needed.
12. Watch the stretchmarks on the bag, max stretch is noted on most bags. Max stretch is generally 10% of the original mark on the bag before it is filled. Do not over stretch, allow 5% stretch left after bag is filled to allow for settling. More brake pressure increases stretch and less pressure decreases stretch. Small changes in pressure make a difference on bag stretch.
13. Once you achieve a consistent stretch use the brake lock out feature to keep the pressure consistent. It is still necessary to measure the stretch mark on the bag and monitor the pressure gauge to confirm the pressure is not fluctuating and increasing or decreasing the stretch. Crop moisture and ambient air temperature can change the stretch while keeping a consistent brake pressure. The most important thing to monitor is the stretch mark on the bag. An over stretched bag is more prone to split when unloading.
14. Leave 15' or 5 folds at the end of the bag to seal the bag the same as the start of the bag. Place a 4" high board the length (approximately 14') of the bag underneath the bagger tray when you reach the end mark on the bag or when there is 15' or 5 folds left on the tunnel. Continue bagging over the board. The board will stop most water from getting inside the bag.
15. Close the bag with 2x4 or 2x6 boards and use 2-1/2 screws to seal bag, roll bag under 3-4 times. Put weight on end of bag to keep it from unrolling.
16. Leave 15' or 5 folds at end to fit unloader on the bag easily. Over filling the bag makes it harder to start the unloader.
17. Pay attention to air temperature and moisture of grain. 15% moisture grain in a bag can last 1-2 years depending on the condition of the bag and outside ambient temperature. 28% moisture grain in a bag can last 1-2 months depending on the condition of the bag and ambient air temperature.
18. Monthly Inspection of bags is a good practice, treat grain in a bag like you do a grain bin.
19. Apply dry fertilizer (ammonia or urea) in a windrow around the bag, especially around the ends. During monthly inspections re-apply if rodents are present. Repair any holes or damage on the bags with the tape provided by the bag manufacturer or a heavy duty outdoor tape.

EXTRACTOR SET UP AND EXTRACTION

1. Remove the boards and cut the bag on the top middle ½ way up the sloped grain pile. Cut right next to the boards or unscrew the boards to leave as much bag as possible. A longer tail on the bag makes it easier to hook up the extractor.
2. Back the machine into the bag. Make sure the tractor and extractor are straight and in the center of the bag. Sitting in the tractor the unload auger should be slightly to the passenger side of the middle of the bag for the machine to be centered. Also check the bottom rear auger to make sure there is equal space between the auger and the sides of the bag.
3. Engage the hydraulics and rotate the roller using the "ROLL" lever at the operator control station so the points on the roller are on the top of the roller.
4. Put the bottom side of the bag under the auger, in front of the pusher bar and up onto the roller. Attach to the points on the roller.
5. Flip up the knife guard. Warning: The knives are sharp, be sure not to lean on or touch the knives or serious injury can occur.
6. Pull the top side of the bag around the vertical auger and attach it to the points on the roller. Keep both sides of the bag tight around the auger onto the roller. Make sure there is similar tension on the top and bottom of the bag when attached onto the roller.
7. Put the tractor in neutral and be sure the park brake is disengaged. Engage the "ROLL" lever to roll the bag onto the roller. You can regulate the speed of the roller with the speed control knob. When you get to the pile of grain slow the speed down and disengage the lever.
8. Be sure the tractor in neutral and run PTO at recommended speed.
9. Activate the detent spool ("ROLL") and use speed control knob to control speed of grain flow. Start the roller slow so you don't slug or overload the machine. Once grain is flowing turn the speed knob to the desired speed. The faster the roller turns the faster grain is extracted. Max capacity is when the grain is

- to the top of the narrowest part of the unload spout. Speed also varies depending on the quality and moisture of grain. If you run too fast you can overload the machine or split the bag on the top side.
10. When the desired amount of grain has been extracted turn the “ROLL” lever off and continue running the PTO to empty the auger. The machine is designed to start and stop unloaded.
 11. The pusher bar is designed for clean up but it can be used to stop grain from pooling on the back side of the rear cross auger. That will also speed up efficiency.
 12. While unloading the bag be sure to keep the tractor and unloader straight with the bag. The plastic pulling on the roller pulls the extractor and tractor into the bag. If the tractor wheels are not straight the extractor will pull crooked and the rear bottom auger can tear the bag. If the tractor is not straight first try to steer it back. If it is too far off unroll the bag by pushing the “ROLL” lever in the opposite direction to release tension, disengage the side clutch on the roller and pull the tractor ahead to realign with the bag and begin the process again.
 13. When you get to the end of the bag it is important to have the extractor in the middle of the bag and square with the bag. This ensures that most of the grain will be unloaded and there will be minimal clean up.
 14. At the end of the bag run bag and boards tight against cross auger and extend the pusher bar out to push grain into auger. It is also helpful to raise and lower the machine while also extending and retracting the pusher bar to work the grain into the auger to be unloaded.
 15. When you extract multiple bags one after the other lift the machine up and take to the next bag. Open the next bag and back the machine in. Cut the boards off and let the grain fall into the new bag. Pull away and unwind the bag off the machine. This eliminates cleanup after every bag.
 16. For extra efficiency use the Duo Lift bag roller to roll the bag into a 3’ mini round bale. Duo Lift makes a skid steer bag roller or one that is mounted to the Akron Extractor. Rolling up the bag immediately after it is extracted makes managing the bag much easier.

HELPFUL HINTS

DISTANCE BETWEEN BAGS

- Always lay the bags north and south. This allows for more even sunlight on the bags.
- Allow a minimum of 5’ between bags. When the bag is filled it will be wider than the tunnel on the bagger. Allow for the wider bag when laying out your bag site. Lay the next bag in the opposite direction.
- Allow 20’ between each pair of bags for truck and unload equipment. The vertical unload auger is to the passenger side. Lay the bags in the correct direction so the vertical auger is toward the 20’ area.
- Correct spacing should be 20’, then 5’, then 20’ in sequence.

EXTRACTING IN MUDDY CONDITIONS

- When extracting grain in muddy conditions always be sure the pusher bar and rear cross auger are not running the mud. The pusher bar is lower than the rear cross auger. Be sure the pusher bar is not in mud or dirt. Raise the machine using the height lever so that the pusher bar is 1” to 2” above the mud or dirt.
- If the extractor sinks too far into the mud and can not be raised any further the dual wheel kit is needed. Contact your nearest Akron Dealer

SPLIT BAG

- If a bag is split, fold the corners in, lift up and get the bag folds on the roller to form a cone and attached the bag the same as if it were not split. Run the roller slow and continue to unload bag. Watch the outside disks on the roller as they can be damaged by the bag wrapping tightly on the outside of roller. If the discs are bending or taking too much stress, stop, unroll enough bag to easily attach it back on the roller, cut the bag and restart.

EXTRACTING WET GRAIN

- If grain is too wet to flow, first try moving the extractor up and down and the pusher bar in and out. The guard on the extractor rear lower auger can break enough grain free that the remaining grain will fall into the rear bottom auger.
- If this technique does not work immediately stop operation as serious damage to machine may occur.
- Akron manufactures a “Crumbler Kit”. It is an attachment on the rear side of the extractor and runs inside the bag. It has spinning paddles that break the bridged grain free to make it flowable again. See you nearest Akron dealer for more information.

AUGER COMING OUT OF THE SIDE

- Caused by tractor and extractor becoming out of alignment with the bag. Keep tractor aligned to avoid this.
- If the tractor and extractor are out of alignment: Stop, unroll the bag by actuating the “ROLL” lever the opposite of the normal operating direction to relieve tension on the roller. Disengage the clutch on the roller (see manual) and pull ahead roughly 20-30 feet, tape up the hole, realign to go straight and restart. It is ok to back the tractor up to the grain pile but once the rear auger is at the bottom of the pile only use the roller to extract grain. Do not use the tractor to push the extractor into the grain, this may cause severe damage to your extractor.

BAGGING DIFFERENT CROPS

- Anything that’s flowable (corn, wheat, beans, milo, sunflowers, millet, almonds, pistachios, salt pellets, fertilizer).
- When bagging small grains, watch for leaks in hopper and other areas. Use silicone to seal leaks.

Figure 1

BLACK OUT



BLACK OUT

Figure 2 BLACK OUT



BLACK OUT

Figure 3



BLACK OUT

BLACK OUT