

SAFETY WITH GRAIN AUGERS

Grain augers have probably replaced more hard work from handling grain than most other machines, but they have also been the cause or source of more injury and even death to farm workers and children than any other machine for the number of hours used.

Many of the injuries suffered are amputations, lacerations, broken bones, and electrocutions. Most, if not all, could have been prevented with safer working practices and machinery.

Always Leave Shields In Place

Removing shields from machinery and not replacing them is an extremely common cause of injury on the farm. When shields are in place and undamaged, there is much less opportunity to become entangled with moving parts.

Shields on PTO shafts reduce the opportunity to become wrapped up in the rapidly turning machinery. PTO shafts rotating at 540 revolutions per minute and a surface speed of 3.24 feet per second can cause extreme injury and even death. Don't use PTO driven grain augers or other machinery when the shields are damaged or missing.

The unshielded power shaft that transmits the power to the top of the auger can cause the same kind of injury as an unshielded, rotating PTO shaft. Always replace missing and damaged PTO and power shaft shields before using the machine.

Intake screens at the base of the auger will help prevent adult hands and feet from becoming caught between the auger screw and tube. Most intake screens have large enough openings to prevent straw and chaff from plugging the auger but small enough to keep most hands and feet out. New augers are sold with screens in place; older machines are less likely to have them, but they should be added on if missing. Replacing missing or damaged screens is good, economical safety insurance.

Many smaller grain augers receive their power through a belt or chain drive system. Many of these systems are not shielded. A belt or chain drive has at least two and sometimes three pinch points. The pinch point is where the belt or chain wraps onto the pulley or sprocket. Severe injury, usually amputation, results when a finger and/or clothing is caught in a pinch point. If replacement shields are not available they are easily fabricated in the farm shop for most situations.

Start Grain Augers Safely

Some grain augers are powered by small gasoline engines, the power being transmitted to the auger with a vee-belt drive. A safe auger has a clutch and starter for the gasoline engine. Some augers without a clutch or starter are started by pulling on the vee-belt drive — AN EXTREMELY UNSAFE PRACTICE! This method is a clear invitation to injury resulting from getting caught in the belt and pulley. Augers with this starting condition should be improved with a clutch and starter, either rope or electric.

Empty The Auger Before Stopping It

An empty grain auger is always easier to start again than a full one. It is also safer. A full or partially full auger may be top-heavy. When it is pulled away from the grain bin it is likely to flip over quickly, the bottom end going up and the top end coming down, easily causing injury to the operator or bystanders and damage to the machine. Except in emergency situations, always let the auger rattle empty before stopping it.

Be Careful When Moving Augers, Always Look Up!

Overhead electric power lines are commonly found at many bin sites. It is extremely difficult to accurately estimate the height of an overhead power line when there is nothing to compare it to.

It is a good idea to have someone else watch the power line clearance when you are moving grain augers. Most surviving victims of power line entanglements had no idea of how high the wire was, and thought the auger would safely pass under the wire — but it didn't.

Not all overhead power lines have insulation on the wire. When an auger comes in contact and your body completes the connection to ground there is likely to be an electrocution. ALWAYS LOOK UP WHEN MOVING GRAIN AUGERS AT BIN SITES!

Adjust Grain Auger Height Carefully

There is a limit as to how high a grain auger can safely be raised. Most augers have a track that the upper supports slide on as the height is adjusted. Many augers do not have stops at the ends of the track. When the upper supports come to the end of the track or guide, the auger may come down — FAST! Fatal injuries have resulted from this type of situation.

Install stops at the ends of your auger's track if they are not there. Such parts may be available through a dealer or may be easily fabricated on the farm.

Do not raise an auger beyond its recommended height. Use a longer auger if more height is needed. Raising an auger excessively high can put additional strain on the power system as well as raise the safety hazard. It is simply a matter of using

machinery correctly. Always follow instructions.

Don't Try To Grab The Crank

If the height-adjusting crank should get out of your grasp while adjusting the auger, do not attempt to stop it or grab for it. **LET IT GO!** Many broken arms and wrists have resulted from such action. Yes, the auger is going to come down fast — and probably with damage as a result, but you will be in one piece and be able to make repairs, without a broken arm.

Set It Up Carefully, Block It In Place

A grain auger may tend to roll or move as it is running and fills with grain. Always block a grain auger in place. Place blocking in front of and behind the wheels, preventing them from moving. Anchor the bottom end of the auger to the ground, too. The auger must be placed on level ground and completely stable if it is to be safe.

Other Precautions

Be sure to wear close fitting clothing when working near the grain auger. Loose, floppy clothing, long shoe strings and draw strings on hooded jackets will easily become entangled in rotating parts. Entangled clothing will pull the body into the moving machinery and severe injury will result.

Limit the number of people around the auger when in use. Only those who are essential to the job to be done should be there. Those who are just visiting can innocently get in trouble too easily.

Always stop the machinery when debris (straw, chaff, etc.) begins to be a problem. Never use your hands or feet to remove such debris from moving machinery.

Grain augers are very useful, labor-saving machines. They are also very hazardous when not safely operated and maintained. Take these precautions to reduce the chance of injury on your farm. Safety practices are always cheap accident insurance.