



MAFES Dawg Tracks

April 30, 2012



*Safety Tips:
Big Bale Safety*



Hay time is fast approaching. Big bale usage continues to grow each year. Small bales have become a specialty item for the most part. Like all equipment use, large bale equipment has many benefits, but with these benefits come hazards. The hazards with large bale equipment have a greater potential for harm due to the size and horsepower of the machinery. But the biggest risk is the size of the product - which in itself causes most of the problems. A large bale can weigh anywhere from 500 lbs. to 1-1/2 tons. This size can present a threat to human life and limb in all phases of the baling process.

KNOWLEDGE IS CRUCIAL –

Equipment manuals should be a critical part of every farm’s safety program!

It is the farm’s responsibility (owner or manager on private farms and superintendents, coordinators, supervisors on university research farms) to know the specific requirements, precautions and hazards associated with the large bale process. The manufacturer’s manual is the primary source (the Bible of large bale usage) of information for all facets of large bale production and should be used to familiarize anyone working in the haying process.

Preparation and Maintenance of Equipment-

As it is with all equipment, a detailed and comprehensive maintenance program is critical in the performance of your machinery. In advance of the hay season, getting the machinery in good order will pay dividends in the reduction of potential downtime as the season progresses. Following is a checklist to use in detecting potential hazards and improving the efficiency of the baling equipment:

- Clean all the working parts of the baler of debris, possible bird and/or rodent nests. Lubricate per the manufacturer’s instruction manual.
- Check for missing or loose nuts, screws, bolts, guards, or damage to pick-up teeth. Replace any missing guards or shields.
- Inspect all the belts and chains for excessive wear or damage. The belt tension should be matched to prevent slippage, which can cause plugging and damage from heat build-up. Before replacing a belt or chain, check the manual for instructions on securing the upper chain or removing the load from the belt tension springs.
- Check the hydraulic hoses to be sure that they are clean and in good repair. Check the twine feeding and cutting mechanisms for proper operation. Check the slip clutch, roll scraper and rear gate latch to make sure that they are in proper adjustment according to the instruction manual.

Baler Operation-

Operators, as mentioned earlier, must have in-depth knowledge of all the functions of the equipment, both the tractor and the baler:

- All protective devices should be in place and securely fastened.
- Before starting equipment, check for broken or damaged parts. Check the condition of the tires; check the condition of the hydraulic system. Use a piece of wood or cardboard to check for hydraulic leaks. Do not use your hand. Obviously, make all necessary repairs before leaving for the fields.
- Dry crop materials are flammable. If it hadn’t been done in the pre-season maintenance program, check the shields, guards, covers and other components for debris removal.
- Lubricate the baler according to the manufacturer’s manual of instruction.
- Walk around the baler and tractor before starting. Check the rear gate to make sure that it is securely closed.
- Check to be sure that there are no bystanders in the area; if so, clear them out before starting to work.
- Remember the “One seat ---- One rider” policy.

Preparing to Bale-

- Even though you may be totally familiar with the hay ground, it is still prudent to check the area for erosion, debris and other factors that could cause a problem.
- The pickup should be adjusted for adequate ground clearance. If the tines touch the ground the operator could get showered with dirt and rocks, along with the baler not feeding correctly.
- Check the PTO with the machine stationary. Look and listen for any unusual signs of trouble.
- Cycle the hydraulic systems for proper operation. Check the twine feeding and cutting mechanism for proper operation.
- The harvest material should be in workable condition (moisture content-20 percent or less).
- Ground speed should match up to crop conditions and windrow size. Keep the pickup easily high enough to deliver the crop into the baler inlet.
- Do not attempt to clean out or make up adjustments to the baler with it running. “Shut her down” to prevent a serious injury or death. Wait for all machine motion to stop before making repairs or unplugging the system.
- Be sure that bale ejection is on flat ground and no personnel are around the machine.
- If a fire starts in the baler, pull into a level area, eject the bale and drive off to a clear area, call for help and use the fire extinguisher on the baler to extinguish the fire.
- Be sure to obey all traffic rules when transporting the load to their final destination.