

MAFES Dawg Tracks



MISSISSIPPI STATE
UNIVERSITY

April 1, 2013



Handling Big Bales Safely

As you travel around the South, and not only in Mississippi, you will observe that the majority of hay you see is in big bales. The big reason for this is convenience and the labor savings involved. The number of farmers and ranchers adapting to big bales has evolved rapidly over the last years. With the advent of large bale technology, some hazards have evolved at the same time. Some of these hazards are the same as you see in other types of farm equipment. The power in large balers is much greater than in the conventional small bale machines, which increases the risk of greater injury if one should occur. The large bales normally weigh anywhere from 500 lbs. to 1-1/2 tons and are round in nature. This makes them roll more freely, and if they start to roll, the weight results in more momentum for increases in speed and more potential for a hazard.

All farmers have the responsibility to know the capabilities and hazards associated with using "big bale" equipment. The manufacturer's instruction manual, provided with the equipment purchase, contains all the information needed to operate the machinery safely and efficiently. As an added safety note – the instruction manual and/or equipment manuals should automatically be a part of every farm's safety program.

ADVANCE PREPARATION MAKES SENSE-

A detailed off-season maintenance program in advance of planting and harvest seasons will reduce the amount of downtime in the field and improve your efficiency. A possible added benefit of a good maintenance program is that it might reduce the potential for a personal injury.

Following are some tips that could help in detecting some potential hazards and improve the baler efficiency:

- ✓ Clean the baler thoroughly to remove crop residue, mouse nests, and any other debris that might have collected in the machine. Lubricate the machine according to the manufacturer's specs.
- ✓ Check for missing or loose nuts, guards or pickup teeth. Replace any missing or damaged guards or shields.
- ✓ Inspect all the belts and chains for excessive wear or breaks
- ✓ Check belt tensions for wear or breaks. Also check belt tension to prevent slippage, which can cause plugging or heat buildup.
- ✓ Check all the hydraulic hoses for wear, breaks, or leaks and that they are hooked up correctly.
- ✓ Check the twine feeding and cutting mechanism for proper operation. Also, check the slip clutch, roll scraper, and rear gate latch to see that they are adjusted and working properly according to the manufacturer's instructions.

- Check the lights, reflectors and SMV that they are operational and functioning properly. Importantly, make sure that there is a fire extinguisher mounted on the baler and also one on the tractor.

Do not attempt to clean, lubricate or adjust the baler unless the engine is turned off, the PTO is disengaged, and the ignition key is removed.

Most farmers are familiar with their hay fields and potential hazards of their equipment, but as human nature goes, if they are not careful with all the elements that can change the "lay of the land" and remain cognizant of potential hazards with the balers, then an accident or incident can happen. Following are some tips that will act as "heads ups" and reminders to aid you in having a safe operation:

- Check the fields for changes in field slopes around ditches. Check overhead power lines that could present a hazard of the tractor raising the rear gate too high and into a power line.
- The pickup should be adjusted to provide adequate ground clearance. If the tines hit the ground the operator could be showered with soil and rocks. Also the baler probably won't operate correctly.
- Engage the PTO while the equipment is stationary to make sure that it is working properly. Cycle the hydraulic systems to be sure that they are functioning properly. As mentioned earlier, check the twine feeding mechanism for proper functioning.
- Do not attempt to unplug, clean out or adjust the baler while it is operating. A severe injury or death could occur.
- Walk around and double check the rear lift gate latch to be sure that it is secure and working properly. I know of a situation in county nearby to Lee County where the operator stopped to check a bale that was hung in the hole. He raised the gate, assumed that it was locked - but it dropped on him - and he was killed instantly.

SAFE TRANSPORTATION-

- Be sure to obey all applicable traffic regulations when traveling on public roads.
- Lock your brake pedals together and use safety chains.
- Make sure that the tractor and baler are equipped with lights and reflectors and a clearly visible SMV sign.

FIRE PRECAUTIONS-

- If a fire starts in the Baler, pull into a level, open area and deject the bale.
- Drive away from the burning bale to a safe distance. Call for help, if possible, and get the extinguisher to try to get control of the fire.

WHEN IN DOUBT CHECK IT OUT!

*** **** ***** **

SAFETY-

DO IT FOR YOUR FAMILY

Ted Gordon-Risk Mgmt. / Loss Control Mgr.
MAFES / MSU-ES (662) 566-2201
Excerpts: www.nasdonline.org
1/14/2013