



## Making Large Round Bales the Safe Way

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**D**on't Experience This! Accidents don't always happen to the other guy. Here are a few cases, however, where someone else wasn't so lucky.

- One farmer was killed while loading large round bales onto a truck with a front-end loader. As he raised the bale, he failed to level the bucket. The bale rolled rearward, over the tractor hood and exhaust stack, and continued toward the tractor seat. The farmer tried to bend over to avoid the oncoming bale, but was rolled over. Severe injuries made this man a statistic a few days later.
- Another tractor operator was killed in a similar situation. The bale rolled over the hood, hitting him so hard the backrest of the seat bent backward to the ground. He was killed instantly.
- One farmer was using a front-end loader, and accidentally dropped a bale on a hillside. He maneuvered the tractor downslope of the oncoming bale in an effort to halt its advance. The bale hit the tractor with such force that it flipped both tractor and driver. Luckily, the operator was not hurt.

### Pre-harvest Precautions

Those big round bales weigh 1,000 to 2,000 pounds. Developing safety awareness begins with the operator's manual. Take time to read through it when the machine is new, and make sure each operator reacquaints himself with the manual at the beginning of each season. Look for these symbols in the operator's manual. They point out key safety precautions. Make sure that young employees are trained and licensed to operate the equipment. Occupational



Safety and Health Act (OSHA) and U.S. Department of Labor standards must be adhered to. Ask your county agent if you have any doubt about the legal regulations.

Before starting, inspect the tractor-baler combination. Make sure all shields are in place, especially the PTO shields. Pull hard on the PTO shaft to ensure it is properly locked on the splined output shaft. Check the PTO speed range to be certain 1,000 RPM isn't used where 540 may be specified. Inspect hydraulic hoses, and be sure they are marked for proper hookup.

Check the maintenance records of the baler prior to starting a new baling season. Excessive grease or grass buildup on moving parts may be a fire hazard that should be removed periodically. A 5 lb. A:B:C fire extinguisher is recommended as part of your tractor equipment. When working on this equipment, chock the baler wheels, lock the tractor brakes, and remove the ignition key. Removing the key may prevent a hasty helper from starting something he shouldn't have!

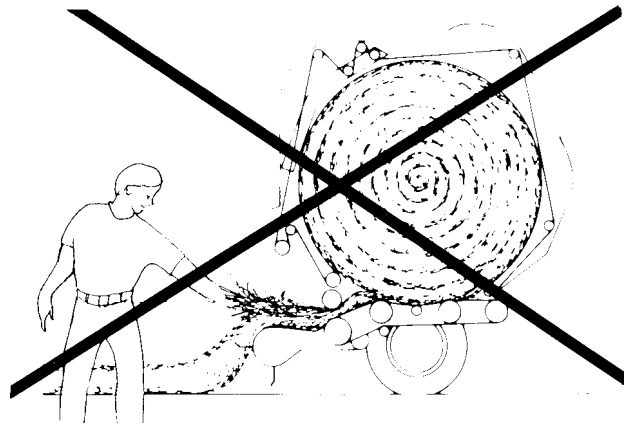
### Ready to Make Hay

You've completed your preliminary safety checks, and now you're ready to make hay. Before transport to the field, make sure the two independent brake pedals are joined together. Pump the brakes lightly to be certain the brakes are working. Dust off the SMV symbol, using your prize brimmed cap if necessary. Make sure the baler tire pressures are correct. Remember, when loaded, soft tires cause balers to drift on slopes.

When forming the bale, children should be kept away at all times. Riders should never be allowed on the tractor or baler. Moving machinery is much faster than human reaction time, so keep your body and

clothing away. Attempting to pull hay from the machine when the baler is operating may just put your traction time to the test. To your dismay, you'll find machines rarely lose. Along similar lines, do not hand feed any material into the baler, for your natural tendency is to grasp harder as the machine pulls. Never leave the tractor seat with the engine running, **even** if the PTO is disengaged. PTO's have been known to self-engage due to vibration, heat expansion, or similar quirks.

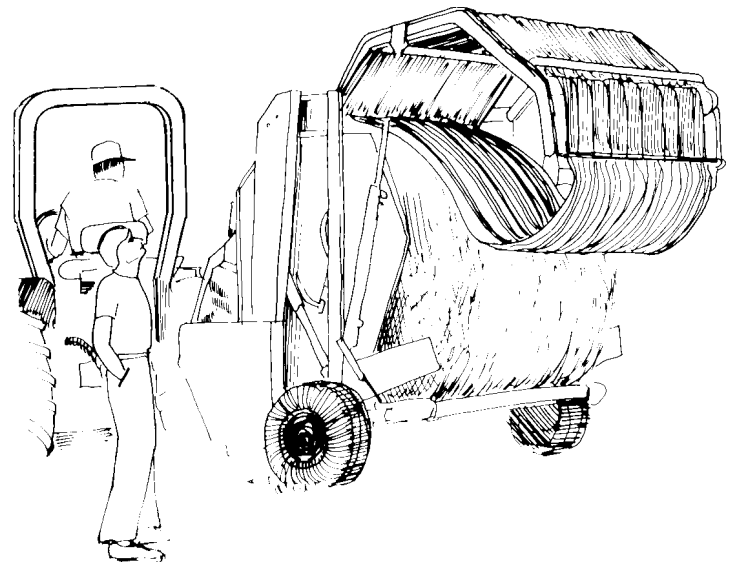
When ejecting a bale, always make sure the area behind the baler is clear before raising the tailgate. If the tailgate must be opened for maintenance or repair, install a mechanical hydraulic cylinder lock out device to prevent accidental gate closing.



## **Bale Handling and Transport**

The center of gravity is important in handling large round bales. The load should be kept as low as possible to prevent backward or side overturn. When traversing even slight embankments with a heavy load, tractors can overturn, so brake gently when necessary. As you transport the bale down a steep grade, never push in a tractor clutch pedal. Disengaging the clutch often causes the tractor to speed ahead, then engaging the clutch or braking may cause a load shift or overturn. When picking up a bale on a steep hillside, work on the downhill side.

Lifting round bales with a front-end loader is discouraged unless proper bale retraining devices are used. Often a few sturdy pipes bolted or welded to the top of a bucket will prevent a bale from rolling off toward the driver.



Movement of agricultural equipment on highways and roads requires special care. Moving a number of large bales at one time can cause braking problems. Always make sure that the load being pulled is no heavier than the pulling unit. Also, use the same gear going down a hill as you would going up a hill. Keep in mind that most tractors have only two wheel brakes. Five or six bales on a trailer may weigh 9,000 to 10,000 pounds.



Make sure the load you are moving is not too wide. As a rule, if you are moving bales for your own use, you are exempt from the wide load requirements. If you are moving bales that are sold or hauling them to a sale, you will need a wide load permit. Finally, be sure that your slow moving vehicle emblem, reflectors, and lights are in proper working order and meet state requirements. For your own protection, check with the highway patrol or a sheriff concerning the movement of agricultural equipment and bale loads on public roads.

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