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PRESS RELEASE

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FOR IMMEDIATE RELEASE

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TRACTOR ROLLOVER: IT COULD HAPPEN TO YOU
Use your tractor ROPS to avoid becoming a statistic.

Tractor rollover injury and death has continued to be the leading type of injury incident on United States' farms for decades. Because tractors have a high center of gravity, they're more susceptible to rolling over than cars or pickups.

Statistics show that:

- 1 in 10 operators overturn a tractor in his/her lifetime.
- 80% of deaths caused by tractor overturns involve experienced operators.
- 1 in 7 farmers involved in tractor overturns is permanently disabled.
- 7 of 10 farms will go out of business within 5 years following a tractor-related fatality.
- A one-time installation of a ROPS (Rollover Protective Structure) will protect whoever drives the tractor for the life of the tractor.
- Use of a ROPS and a seat belt is estimated to be 99% effective in preventing death or serious injury in the event of a tractor rollover.
- A ROPS normally limits the degree of rollover, thereby reducing damage to the tractor.
- A ROPS with enclosed cab also prevents tractor operators from being knocked out of their tractor seat from rough ground or low-hanging tree limbs, provides protection from the sun and other weather hazards, and reduces risk for the unsafe practice of extra riders on tractors.

Prior to 1967, farmers had little protection against these types of incidents. However, Roll Over Protective Structures (ROPS) became part of the design of new tractor models by 1986, providing farmers with 99% effectiveness in preventing serious injury or death when used with a seatbelt.

Since tractors are often in use for 30 or 40 years or more, there are still a large number of U.S. tractors that have not been retrofitted with ROPS, making operators vulnerable to injury or death if an overturn occurs.

Tractor overturns can occur anywhere but are documented more frequently in the Midwest, Northeast, and Southern regions of the United States. Overturns are more likely to occur when tractors are used more often, such as on farms involved in crop production and often involve speed, operator error or unsafe driving conditions.

The highest reported rate of tractor overturns involves farm family members and older operators. Side overturns are most frequent and typically occur with older tractors that are not protected with ROPS, increasing potential for serious injury or death due to a rollover.

ROPS are a roll bar or cage frame designed specifically for wheel- and track-type agricultural tractors. These types of ROPS are available as: two-post frame (with solid fold-down versions, a four-post frame, and a ROPS with enclosed cab. **ROPS don't prevent overturns**, but they all provide a zone of protection for operators if an overturn occurs.

ROPS should always be used in conjunction with a seatbelt to prevent the operator from being thrown off the tractor and crushed by the tractor or equipment mounted to or if a rollover occurs.

Since 1986, ROPS have been standard equipment on U.S. tractors. However, these factory-installed devices may have been removed so the tractor could be housed in a smaller space. Foldable ROPS are now available to help resolve this issue and keep operators safe. When using a foldable ROPS, make sure it isn't folded down when the tractor is in use.

ROPS are engineered t mount on specific tractor models and designed to operate with the tractor's mounting brackets and frame. This allows the structure to be flexible yet rigid enough to withstand loads produced during a turnover. Any prototype ROPS must pass engineered, crush, static, and dynamic tests to assure adequate performance before being mass produced. Standards for ROPS prototypes are set by the Society for Automotive Engineers (SAE) and the American Society of Agricultural Engineers (ASAE). Factory-installed ROPS are certified to meet maximum rollover impact and dynamic forces.

During testing, a ROPS must absorb impact energy without excessive deformation so the operator's protection zone is intact. A dynamic test involves hitting the ROPS in a prescribed manner with a 4,410-pound pendulum weight from and behind and from both sides. The ROPS must remain intact and maintain specific distances from the operator. A ROPS can be made from any material as long as that material meets temperature requirements and passes the tests set forth by the standards. Typically, ROPS are made of steel that is precision welded and will not fracture in cold temperatures.

Homemade ROPS are not recommended since there is no way to verify design standards or test the durability of the ROPS, which puts operators at great risk. The special steels, bolts and welding supplies used for certified ROPS are not readily available to farmers. Use of a homemade ROPS could also result in great liability issues if an overturn occurs.

ROPS maintenance includes inspection for rust, cracks or other signs of wear. Any of these could result in failure of the ROPS during a rollover. If wear is a concern, contact the ROPS manufacturer or dealer to determine a suitable course of action.

Never modify, abuse or misuse a ROPS. Never drill holes into the ROPS frame or weld any additional steel to the frame. Any lighting or light attachments should be clamped onto a ROPS.

Never use a ROPS as a point of attachment for a chain, hook or cable. Using it for the purpose of pulling could damage it or result in a rear overturn.

If a tractor with a ROPS does overturn, the ROPS must be replaced because it's specifically designed to absorb energy generated when the tractor contacts the ground. ROPS are designed and certified to withstand a single overturn.

Tractor companies and aftermarket manufacturers have designed and developed ROPS for most tractor models. Low-cost retrofit kits are available for many tractor brands. Agricultural equipment dealers are approved to install a retrofit ROPS and seat belt.

A Guide to Agricultural Rollover Protection for various tractor models is available at https://rops.ca.uky.edu. The searchable database includes instructions for using the guide, information about ROPS, a list of ROPS suppliers and information about gray-market tractors (tractors intended for sale in a country other than the United States).

A seat belt is an integral part of a ROPS since it keeps the operator within the protective zone created by the roll bar or roll cage. A ROPS alone won't provide full protection to the tractor operator in the event of a turnover. While the combination of the two offer the best protection, at least the installation of a ROPS on all tractors is an important step toward agricultural injury protection.

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