Discussion Questions for "Homemade ROPS – Should you make your own?" ¹

In recent years, an increasing number of Kentucky farmers have decided to make their own Rollover Protective Structures (ROPS) for their tractors or hire someone, such as a local machine shop, to make the ROPS for them.

- 1. Why do you think farmers have chosen to make a homemade ROPS for their tractors?
- 2. Do you think it is a good idea to use a homemade ROPS on farm tractors? Why or why not?

Now read the "Homemade ROPS Fact Sheet" on the next page, and the memo "Concerns Regarding the Use of Homemade ROPS" on the following page. When you finish looking at these materials, answer the following questions.

- 3. What are some of the reasons that homemade ROPS are not such a good idea?
- 4. What problems may farmers encounter when they install homemade ROPS on their tractors, especially if a tractor overturns?

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Homemade ROPS Fact Sheet

- 1. All commercial ROPS are designed for a specific make and model of tractor or a series of models.
- 2. Each commercial ROPS has been tested, under standard test conditions, on the specific tractor for which it was made. The test ensures that the ROPS will withstand the forces of a tractor overturn. Only after the testing is a ROPS certified by the manufacturer for that make and model tractor.
- 3. High quality materials including the special steels, bolts and high strength welds are required to ensure the structural strength of the ROPS and the mounts. These materials may not be readily available in the local community.
- 4. ROPS are designed to provide some flexibility in an overturn while maintaining a zone of protection for an operator belted into the tractor seat. This "give" or deflection in the ROPS is designed to absorb some of the force of the overturn in order to protect the axles and mountings on the tractor from failure during an overturn.
- 5. All commercially certified ROPS have a permanently attached label indicating the ROPS meets SSAE, ASAE and/or OSHA standards. The label will also identify the manufacturer of the ROPS.
- 6. While it is not illegal to make a homemade ROPS, doing so creates risks.
 - Without proper testing, the ROPS could fail in an overturn resulting in serious injury or death to you, another family member or a worker.
 - If an injury or death occurs to someone other than the person who made the ROPS, then large civil suits and liability judgments can result against the person who constructed the ROPS and/or allowed the person to operate the tractor without a certified ROPS.
 - Under the Occupational Safety and Health Administration (OSHA) Regulations, any tractor manufactured after October of 1976 is required to have a certified ROPS installed if it is operated by an employee (family members are excluded).

- 7. Even a certified ROPS should be replaced if it has been involved in a tractor overturn or has possibly been damaged in any other way.
- 8. Never weld or drill holes in the ROPS structure. This may weaken the structure and cause it to fail in an overturn. If lighting or other optional equipment is added, clamp the item to the frame.
- 9. Never hook ropes, chains, or cable to the ROPS and use it to pull objects. The ROPS sits high above the tractor. Pulling with the ROPS can cause the tractor to flip over backwards.