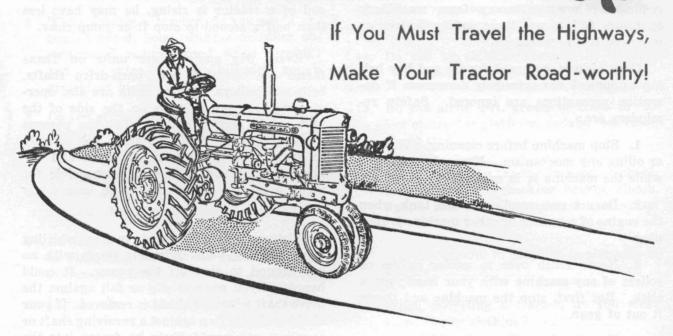
L-370 Safety Series Worksheet No. 4

Farm Machinery Safety

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N ONE STATE, COLLISION WITH VEHICLES accounted for more than eight out of 10 farm tractor accidents. Tractor accidents result in much higher death and injury ratio than other motor vehicles because there is less protection. There are 14 tractor-driver fatalities to each auto fatality in highway tractor-auto collisions.

Yes, we are the most mechanized country in the world today. We have more of everything that freedom-loving people desire. Along with the many comforts of living, we also have more accidents per 100,000 people than any other country! Over 2,600 people in Texas alone will be killed in accidents this year.

The 290,000 tractors in Texas today, while helping to produce plentiful supplies of food, at the same time will account for many, many accidents. A tractor can be a coffin on wheels if it is not properly equipped or controlled. Do your part to avoid tragedy by following safety rules. The signs on the road are the signs of life for the driver of motor vehicles.

Check these points for safe tractor travelling: 1. Be sure you can see ahead, to the side and to the rear of the vehicle you are operating. Have your headlights beamed and focused properly. Check to see that the lights will burn for an after-dark trip.

2. Be sure that others can see your tractor. Have flags during the day and proper lighting at night. Glass reflectors and reflective tape can be placed at proper points to identify your vehicle with little effort.

3. Be sure you can steer. Have mechanical steering apparatus in good condition. More than 3-inch play in the steering wheel is too much. Tractors with wheels that shimmy should be kept off the road until repaired.

4. Be sure you can stop. Keep your brakes equalized and tight enough to make short stops. Have good control at all times.

5. Be familiar with the vehicle you are operating. Do not carry passengers on your tractor.

Safety Reminders

Manufacturers strive to build more and more safety into farm machinery. Shields are provided to cover more of the belts, gears and other moving parts. Safety warnings are stamped on power machines as "ever present" reminders; however, many farm machinery operators fail to use these safety devices or pay heed to the warnings.

Corn pickers, cotton strippers and hay baling equipment are extremely dangerous if operation precautions are ignored. Safety reminders are:

1. Stop machine before cleaning, adjusting or oiling any mechanism. Never do such jobs while the machine is in motion.

2. Do not put gasoline in the tank when the engine of a tractor or other machine is running.

3. Never reach over to unclog knives or rollers of any machine with your hand; use a stick. But first, stop the machine and throw it out of gear.

4. Keep in place all guards which are provided to shield exposed parts.

5. Do not get on or off while a tractor or machine is in motion. A misstep might cause a fall into the path of the oncoming machine.

6. Never step in front of a horse-hitched machine such as a mower or binder.

7. Do not allow children to play around power equipment or give them rides on tractors or other machines. Tractor tipping is also a big killer on present-day farms. Slow speeds are the only safe speeds. Tipping backwards, in most cases, is caused by hitching too high or trying to pull up steep inclines. Once a driver realizes the front end of a tractor is rising, he may have less than half a second to stop it or jump clear.

Every day many power units on Texas farms are operated with open-drive shafts, belts and pulleys. Power units are also operated without safety grills on the side of the unit, or in such a manner that the persons working around the installation are actually in great danger. Open-drive shafts and unguarded belts and pulleys are responsible for many accidents which could have been easily prevented.

Picture yourself caught in the whirling drive shaft of your irrigation pump with no one around to shut off the power. It could happen if you were to slip or fall against the drive shaft when the shield is removed. If your clothing should flap against a revolving shaft or coupling, you would likely be drawn into the shaft.

Many farmers with years of experience sometimes disregard good safety practices and work around their power unit or motor that has not been shielded adequately. Serious burns are suffered from falling against hot exhaust manifolds; fingers and hands are amputated by getting them caught in open fans. Tragedies such as these often result from such careless habits. Fill in the following with the words *Always*, *Usually* or *Never*:

- 1. Before starting a tractor, do you check the gear-shift lever to see if it is in neutral?
- 2. When driving a tractor, do you avoid excessive speed, holes, ditches or other obstructions; reduce speed when turning; and use extra care on hillsides, rough ground or highways?.....
- 3. Do you engage the clutch gently, especially when pulling uphill, out of ditches, or heavy loads?.....
- 4. To reduce speed or stop, do you brake the tractor wheels equally and use brake connecting latch if provided?.....
- 5. Do you keep the power take-off shielding in place and stop power take-off before dismounting from tractor?.....
- 6. Do you allow extra riders on the tractor?
- 7. Do you use care in refilling the radiator of an overheated tractor with a pressure cooling system?.....
- 8. Do you refuel or service the tractor while it is running or extremely hot?.....
- Do you operate a tractor in a closed building or where exhaust will come in contact with flammable material?.....
- 10. Do you dismount tractor while it is still in motion?.....

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- 11. Do you hitch to tractor drawbar, especially heavy loads?.....
- 12. Do you keep tractor in gear while going down steep hills or grades?.....
- 13. When removing or replacing a belt, do you stop the tractor?.....
- 14. Do you let children operate the tractor?
- 15. Do you allow dirt, grease or trash to collect on tractor platform, pedals, foot rests, steps, etc?.....
- 16. Do you keep the tractor in good mechanical condition by checking brakes, clutch, lights, fuel lines and control mechanism frequently?.....
- 17. Are you careful in coupling implements to tractor?.....
- 18. When operating a tractor, do you wear loose, sloppy clothing?.....
- 19. Are you alert at all times and observe standard traffic signals when operating a tractor on public highways?.....
- 20. Do you check to see that everyone is in the clear before starting a tractor?.....
- 21. Do you use lights for night operation of tractor?.....
- 22. Do you use wide wheel treads whenever possible?.....

Farm Machinery Safety Activities

1. Begin a program in your community to get all power unit installations properly shielded. This includes tractors, irrigation pumps, gins, hammer mills, feed grinders, light plants and many other such applications.

2. Hold a 4-H Club safety day where all 4-H members, parents and neighbors in the community can come and receive information on safety precautions and can actively engage in making drive shafts, belt, pulley, manifold and fan shields; also caution signs.

3. Participate in county programs demonstrating how a power unit could be made safe so that others may become safety conscious.

Describe below some special machinery safety activity you have carried out.

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