BASIC TRACTOR OPERATION

WHAT'S AT STAKE?

Tractor are essential in farm operations. Without proper and adequate tractor involvement, modern farm operations as we know it would not be possible. Tractors perform all sorts of tasks that would be otherwise impossible. Tractor safety is for everyone who uses a tractor-operated machinery. It applies to those working in farming, forestry, horticulture and the sports turf industry.

WHAT'S THE DANGER?

Farmers are killed every year, when using farm tractors. Many hundreds have been seriously injured. The main types of accidents involving farm tractors are:

- Tractors rolling over.
- People being run over.
- People being tangled in implements and machinery.

Other risks are:

- Tractor fires.
- Working under raised loads.
- Touching overhead power lines.
- Noise-induced hearing loss.
- Slips, trips and falls while getting off the tractor.

HOW TO PROTECT YOURSELF

Safety Checks and Safe Stops

- Start the tractor only from the driving position and not from the ground.
- Do not dismount from a moving tractor.
- Ensure the park brake is on and operating effectively before dismounting.
- Do not park a tractor on a steep slope.

 Remove the starting key when the tractor is not in use.

Operational Procedures

- Drive at speeds slow enough to retain control in unexpected circumstances.
- Reduce speed before turning or applying brakes.
- Watch out for ditches, embankments and depressions – crumbling and slippery banks can cause overturns.
- When stuck in soft ground, back out. If unsuccessful, get help.
- Reverse up steep slopes, rather than driving forward (ensure no trailing implements are attached).
- Use as wide a wheel track as possible when working on hillsides and sloping ground.
 Descend slopes cautiously. Keep the tractor in low gear and allow the motor compression to act as a brake.
- Follow the manufacturer's instructions for adding ballast to improve tractor stability.

Regular Maintenance

- Service your tractor regularly.
- Check ROPS regularly.
- Do not remove or replace belts while the pulleys are under power.
- Stop the engine before servicing or greasing.
- Keep steps and working platforms free of grease and oil to avoid slips and falls.
- Change wheels on flat surfaces only. Before removing any wheel, check the other wheels.
 Avoid improvised lifting arrangements. Use a

- wide-based jack of adequate lifting capacity. When the tractor is jacked up, block it up evenly for additional support.
- Ensure all the air pressure has been released before removing a tyre from the rim. Use correct procedures. Split rims can cause serious injuries. Tyres should be inflated in a cage for safety.

Protect your Back

- Adjust the seat to suit your body. Consider the type of seating when buying your next tractor.
- A tractor with a seat that has vibration absorbing suspension is highly recommended. Prolonged exposure to vibration may cause back damage.
- Never jump down from the tractor.
- Wear footwear that provides a firm grip when mounting or dismounting the tractor, or operating foot pedals.

Hitching Implements

- Fit attachments according to the manufacturer's instructions.
- When attaching equipment, always use the mounting points or draw bar provided by the manufacturer. Do not use improvised methods.
- Do not alter, modify, or raise the height of the draw bar outside of those adjustments made by the manufacturer.
- When a power implement is attached to the tractor ensure all guards are in place before operating.
- Never hitch above the centre-line of the rear axle, around the axle housing or to the top link pin.
- Do not attempt to adjust or work on implements while they are in motion.
- Do not use or attach implements unless the power shaft or PTO shaft is guarded.

- Read and follow all of the manufacturer's operating instructions.
- Ensure tractor drivers have completed specialized training for the particular farm needs.
- A rollover protective structure (ROPS) must be fitted to the tractor in accordance with s. 216 Roll-over protection on tractors of the Work Health and Safety Regulation 2011.
- ROPS must comply with the design and testing requirements specified in AS1636.1-1996 Tractors – Roll-over protective structures – Criteria and tests or an equivalent standard.
- Wear comfortable, well-fitting clothing and boots.
- Wear hearing protection when driving tractors without cabins.
- Wear a seat belt where fitted.
- Adjust the seat so that all controls can be operated comfortably and safely.
- Keep children away from tractors and machinery.
- Keep all guards in place, including power take off (PTO) and master shield guards.
- Do not carry passengers unless there is a designated seat and seat belt within the protective zone of the ROPS.

Summary Keys

- Operators must be trained/experienced enough to do the job.
- Always wear a seatbelt if the tractor has a Roll-Over Protective Structure (ROPS).
- Do not carry passengers on tractors that do not have instructor seats, ROPS, and safety belts.
- Ensure PTO shafts and connections are guarded and keep clear when it is engaged.
- Never jump on or off a moving tractor.

Overall Safety

FINAL WORD

Tractor are not passenger vehicles. Except for those built with instructional seats, they are built for one person to operate. Passengers on tractors can interfere with safe operation.

QUIZ

- The main types of accidents that involve farm tractors are trackers rolling over, people being run over, and people being entangled in implements and machinery.
 - True
 - o False
- 2. Slips, trips and falls only occur in plant or while collar workplaces.
 - o True
 - False
- 3. Drive in reverse going up steep slopes rather than going forward.
 - o True
 - False
- 4. Start the tractor from the ground and not from the driving position in time of emergencies.
 - True
 - False

WHAT WOULD YOU DO?

You need to finish the harvesting season as the cold is near and you are feeling pressure to complete. But your main tractor is not functioning properly. You want to get it fixed to operate better but time and money is not in your side. You are not a good mechanic.

What would you do?								

BEFORE THE TALK - TIPS	AFTER THE TALK- CHECKLIST			
Before the Meeting Preparation Tips • Pass around the attendance sheets.	PROVIDED FOLLOW-UP TO WORKERS THAT DID			
 Be prepared to discuss: Safe work practices and polices passed around pertaining to Basic Tractor Operation protocols and programs industry - wide and at your location. 	POORLY ON THE QUIZ NAME: DATE:			
 Proper reporting procedures relating to incidents, injuries, illnesses, fatalities, near misses / close calls including hazards and concerns at your location. 	OBSERVED WORKERS TASK(S): DATE:			
Other:				
 Lead a discussion with participants about safety hazards they have encountered in the use and performance of tractors. 	REFRESHER TRAINING TOPIC(S): DATE:			
 Bring to the meeting an employee who has experienced injury or illness due to tractor operational issues and lead a Q and A in the narrative. 	OTHER (DESCRIBE): MEETING DATE: LOCATION:			
• What safety recommendations would the participants recommend as a result of the discussions of this safety meeting.				
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ANSWERS:

- **1.** True
- 2. False

- 3. True
- 4. False



ATTENDANCE		
INSTRUCTOR:	DATE:	
SAFETY TALK:		