

Tractor Maintenance

People have been killed and seriously injured doing maintenance and repairs to farm tractors. Major hazards can occur when tractors are jacked and wheels are removed without safe working procedures. These risks are magnified on soil. Regular workshop maintenance of farm tractors and trailed implements can prevent hazardous incidents in the field.

Spot the hazard

When planning tractor maintenance, check the right equipment is available for safe jacking, removal of wheels and other tasks. People doing the job should be experienced, and there should be agreed safe procedures. Heavy lifting and carrying can cause strain injuries. Children should be kept away from tractor workshops. Field repairs present specific injury risks.

Assess the risk

The greater the risk of an injury or a dangerous incident occurring, the more urgent the need for changes to be made to minimize or eliminate the risk.

Make the changes

Here are some ways of improving tractor maintenance safety.

- Routinely adjust brakes, clutches and drives, according to the manual.
- Ensure steering, exhaust system and brakes are in top condition.
- Stop the motor before refueling, servicing or greasing and, if possible, wait until the engine is cold before refueling.
- Never remove or replace belts while pulleys are under power.
- Keep steps and working platforms free of grease and oil to avoid slips and falls.
- If the engine overheats, allow time for it to cool off before removing the radiator cap.

When jacking a tractor

- Jack on a flat surface, ideally a concrete floor.
- Avoid working alone. Ask somebody with training and experience to help.
- Refer to the manufacturer's manual on safe jacking, or seek professional advice.
- Where jacking points are not identifiable, jack from the lowest possible point.
- Use jacks that comply with applicable standards.
- Use vehicle stands that comply with applicable standards, and are designed for the load to be suspended.

Blocks and chocks

- Ensure wooden blocks for jacking are of hardwood with a surface area that will support the tractor's weight on soft soils.
- Chock all wheels that will remain on the ground, using big wooden chocks at the front and rear of each wheel. Don't use rocks; they're too unstable.
- Chock all wheels on articulated vehicles to stop them twisting sideways during jacking.
- Before jacking, apply brakes, place in gear - or automatic park - and switch ignition off.
- Stay clear of the tractor while operating the jack.

When removing wheels

- Loosen wheel nuts before the wheel is off the ground, to avoid any movement that could dislodge the tractor.
- Before removing a tractor tire from a rim, release all water and air pressure.
- Use safety equipment and procedures to avoid serious injuries from split rims.
- Never jack more than one wheel off the ground at a time in the field.
- If both rear wheels have to be removed, work on a flat, level concrete floor, in the workshop.
- When removing rear wheels, ensure the front wheels are immobilized by fixing wedges between axle and body.