

**TRACTOR
ADVICE
WORTH
LISTENING
TO.**

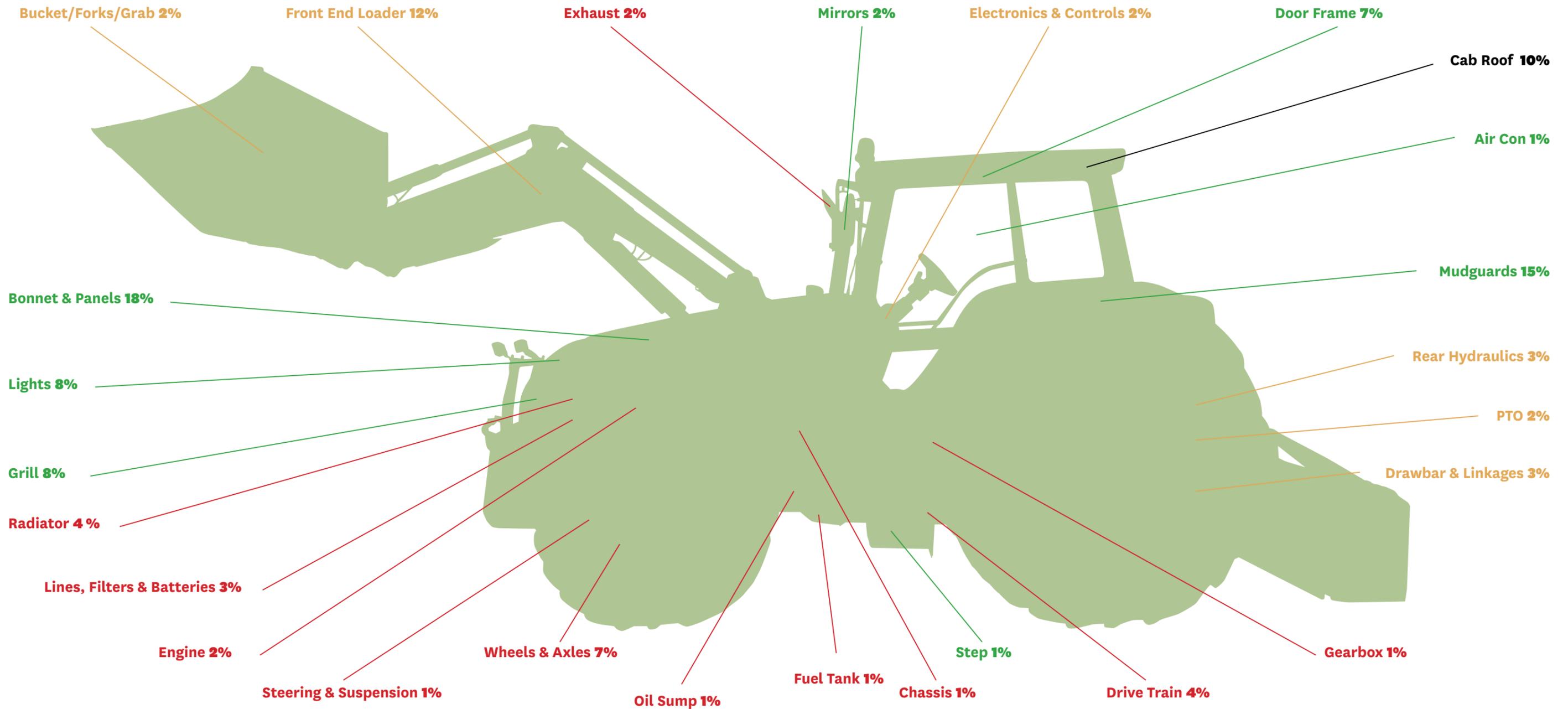


FMG
Advice & Insurance

We're here for the good of the country.

45% **OF CLAIMS INVOLVE DAMAGE TO THE PROTECTIVE OUTER**
 Tractor could potentially be used without immediate repair, but prolonged use could lead to further damage.

23% **OF CLAIMS INVOLVE DAMAGE TO OPERATIONAL COMPONENTS**
 Damage could prevent the tractor from being used for specific tasks.



37% **OF CLAIMS INVOLVE DAMAGE TO CORE COMPONENTS**
 Damage would likely prevent the tractor from being used without immediate repair.

A FEW THINGS WE'VE LEARNT.

FMG provides insurance cover for almost 30,000 tractors around the country. Last year an average of 15 tractors a week were involved in damaging accidents.

With so many of these accidents disrupting farming and contracting businesses, we decided to analyse the claims we've had over the past 5 years (2,200 in all) to see what we could learn to help avoid the damage.

The findings showed the most damage occurs in three key areas:

- Damage to the underside of the tractor due to impact with objects (i.e. branches, rocks, baleage wrap)
- Objects falling from the front end loader
- Rollovers and slides.

UNDERSIDE DAMAGE

Almost 20% of claims involved damage to core mechanical components on the underside of the tractor including the drivetrain, steering, suspension, axles and wheel hubs, oil sumps and diesel tanks.

This damage is commonly caused by objects such as sticks, stumps, rocks, or baleage wrap, piercing, striking or becoming entangled. **Underside damage frequently renders the tractor unusable** with the farmer needing to find an alternative tractor, or delay certain farming activities until the tractor is repaired.

Tips to avoid underside damage:

- Keep operating areas as free of objects as possible.
- Tidy baleage wrap from paddocks and operating areas – wrap can entangle itself around a tractor's driveshaft.
- A common scenario for damage involves pushing up branches and other debris with the front end loader. Be conscious of protruding points, and of the potential for branches to flick under the tractor and pierce components (particularly fuel tanks and radiators).
- Always remove all old wires, posts and waratahs from the paddock – even if this means digging them up. Not only are hidden wires and waratahs hazardous to tractors, they can inflict significant damage upon implements such as mowers and choppers, which in turn can also damage the tractor. 25% of claims for damage to tractor rear linkages and PTOs occurred while mowing.
- When mowing, harvesting, cultivating or doing other activities that involve multiple loops of a specific paddock, take a few moments to inspect the paddock for hidden objects, especially near fence lines and water troughs. Also look for any holes or sudden undulations that a tractor wheel could drop into.
- Reduce speeds on rough and stony terrain – significant damage, including the snapping of the chassis often occurs when tractors get airborne or strike solid objects at speed.

Continued overleaf.

OBJECTS FALLING FROM THE FRONT END LOADER

Accounting for approximately 1 in every 5 claims, **this is the most frequent cause of tractor damage.**

The damage usually occurs to the bonnet and the cab areas of the tractor and the Front End Loader (FEL) itself. The most commonly dropped objects are branches, hay/baleage, and loader attachments not properly attached.

Tips to avoid front end loader damage:

- Use the appropriate FEL attachment for the job at hand – the objective should be to hold the lifted item(s) as securely as possible.
- If moving logs or branches, consider cutting them into smaller, more easily and safely handled pieces before lifting or loading with a FEL. Consider cutting into pieces that can be handled with the bucket, rather than forks.
- Attachments not properly locked onto the FEL quick hitch can cause significant damage and potential injury. Carry out visual verification from the cab only if the operator has a clear view of the latching indicator, and can clearly determine that the attachment is securely attached. Otherwise get off the tractor and carefully check.
- Overseas research shows that self-levelling features reduce the risk of loads rolling back on the FEL. If investing in a new FEL, consider one with a self-levelling feature.

ROLLOVERS

Rollovers are the leading cause of significant damage

(50% of claims are over \$10,000). Almost 1 in 10 claims are from tractors rolling, or sliding into a drain or gully.

Tractor rollovers often occur on hilly terrain, with compounding factors including slippery conditions, towing, and failure to apply the handbrake.

Rollovers, however, are not specifically a hill country issue. Approximately half of rollovers occur on flat (or near flat) land, often involving sharp braking or turning in a tractor with a FEL attached. Nor are rollovers restricted to wet, slippery conditions. Rollovers are just as common in summer as they are in winter.

Tips to avoid rollover damage:

- Drive with the FEL positioned as low as safely possible to maintain a lower centre of gravity, especially if carrying a load.
- Avoid driving around corners with the front end loader up, especially if carrying a load.
- Reduce ground speed before turning into a corner. Even a small reduction in speed has a significant reduction on the forces causing a tractor to roll.
- Be conscious of the centre of gravity and balance of towed trailers/wagons/spreaders etc, especially on hill country. The tractor may be stable, but an unstable trailer has the potential to pull the tractor down with it.

HEALTH AND SAFETY

While rollovers are not just hill country or wet weather issues, they are **always a health and safety matter.** Approximately 180 ACC claims are made due to tractor related accidents each year. What's more, tractor fatalities on farms are just as common as quad fatalities, averaging 5 per year.

Worksafe's 'Safe use of tractors on farms' provides practical guidance on how to help reduce the risk of injuries and fatalities. To find out more, visit **[saferfarms.org.nz/guides/safe-use-of-tractors-on-farms](https://www.worksafe.org.nz/guides/safe-use-of-tractors-on-farms)**.

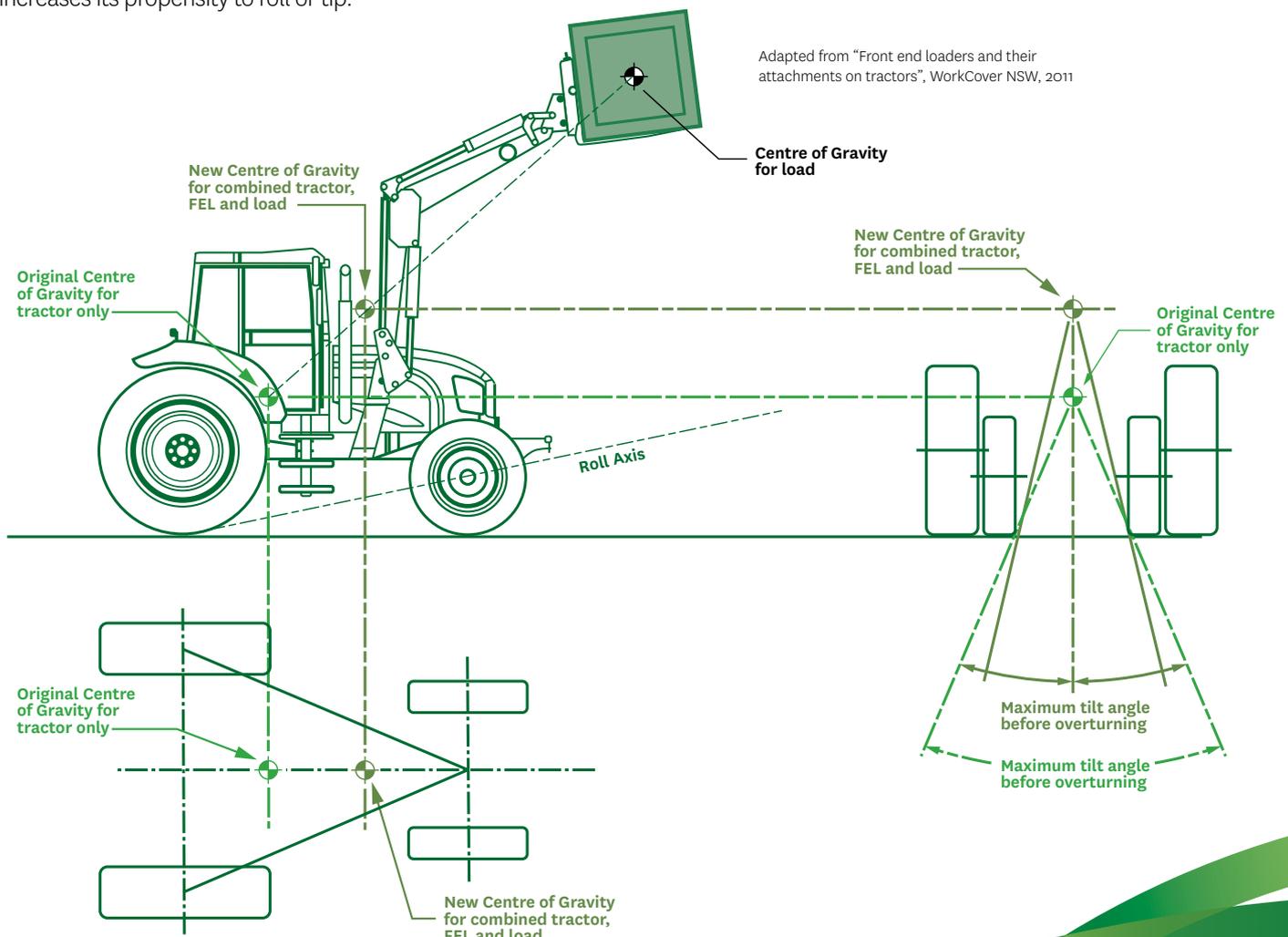
Adopting good safety practices are very important, as they not only help minimise health and safety related risks and foster a healthy and safe workplace, but may also reduce your exposure to prosecution under the Health and Safety at Work Act 2015.

HOW A FRONT END LOADER CHANGES THE CENTRE OF GRAVITY.

In New Zealand, tractors commonly have Front End Loaders attached, which changes the centre of gravity and balance of a tractor – often significantly. A 2WD tractor’s centre of gravity is typically around a foot above and two feet in front of the rear axle. For a 4WD tractor, it’s slightly forward of this again, approximately where the driver’s feet are. Lifting a round hay bale to the FEL’s highest point shifts the centre of gravity in height from the driver’s feet, to the driver’s eye level, and moves it forward from a couple of feet in front of the rear axle, to a couple of feet behind the front axle. This significant lifting of the tractors centre of gravity affects the driving capabilities of the tractor and increases its propensity to roll or tip.

MORE HASTE, LESS SPEED

Speed is also a common factor in tractor rollovers. If the cornering speed is doubled, the force trying to roll the tractor is quadrupled (and conversely, if the cornering speed is halved, the forces trying to roll the tractor are cut by four times). Even a small drop in cornering speed can give a significant improvement in tractor handling; decreasing the speed around a corner from 40km/h to 35km/h decreases the force trying to roll the tractor by 25%.



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