

These notes have been provided to Women in Farming Members from WorkSafe Inspector, Julii Gaunt.

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## 1. ALL TRACTORS ARE FITTED WITH A ROLL OVER PROTECTIVE STRUCTURE (ROPS) AND IN THE CASE OF TRACTORS FITTED WITH A FRONT END LOADER ATTACHMENT, A FALL PROTECTIVE STRUCTURE (FOPS)

There are several types of ROPS available, from the cab-less T bar and the folding type, to the two and four bar roof topped version, to the inbuilt ROPS cab type.

ROPS are designed to withstand the weight of the vehicle in the event of a roll over, giving the operator a 'safe space' in which they are held. Of course the operator won't be held in that safe space unless they are wearing an appropriately fitted seatbelt. This is why a combination of ROPS device and seatbelt go hand in hand. There are Australian Standards (AS) for the design of ROPS, but if your item of plant came from the US, Europe or other places, you must ensure that the certification equals or exceeds the AS to be able to use your mobile plant in a WA workplace.

It is the duty of a PCBU to ensure that the ROPS and seatbelt are maintained, and used by workers. It is the duty of a worker to wear a seatbelt which has been provided for their safety.

Although some tractors in your workplace may be too old to have been produced with a ROPS, please do not be tempted to whip up your own in the workshop. A certified ROPS is required to have testing performed, as well as a certification of that testing.

There are businesses that will provide ROPS to retro fit older tractors, or can design and build (and test) a ROPS for you. There are some older tractors which have been designed in such a manner that a ROPS cannot be fitted. (I know the older Chaimberland has at least one model). These tractors can be used in the workplace in instances where a ROPS is not practicable (for example under the canopy of fruit bearing trees), or as a stationary engine providing power to a pump, shearing plant, dairy or other plant. (see more below).

### Roll Over Protection Systems



- All tractors should have ROPS fitted
- Always wear a seatbelt when operating

A ROPS device should not be adapted, nor should anything be attached by drilling, screwing, welding or otherwise causing any potential weakness to the structure, unless the manufacturer has deemed it safe to do so (in writing). This includes that attachment of hand/grab rails, lights, data devices or other such items attached by screwing, drilling or welding.



A falling objects protective structure (FOPS) device is designed to protect the operator from the risk of objects falling onto them. These are regularly seen in earth moving, mining and forestry operations.

Information in relation to FOPS can be seen here:

<https://www.worksafe.qld.gov.au/safety-and-prevention/hazards/workplace-hazards/agriculture/machinery-and-equipment/tractors/falling-object-protective-structures-fops#:~:text=What%20is%20a%20falling%20object,branches%2C%20rocks%20and%20hay%20bales.>



2. A MASTER GUARD IS FITTED TO THE TRACTOR, THE POWER TAKE OFF (PTO) SHAFT IS GUARDED AND THE POWER INPUT COUPLING GUARD IS FITTED TO ALL PTO EQUIPMENT.

## Guarding of Plant



### Tractor Power Output Coupling





# Guarding of Plant

## Tractor Power Output Coupling

Unguarded



Insufficiently guarded



Please see the following WorkSafe bulletin:

[https://www.commerce.wa.gov.au/sites/default/files/atoms/files/power\\_takeoff\\_guarding.pdf](https://www.commerce.wa.gov.au/sites/default/files/atoms/files/power_takeoff_guarding.pdf)

You may also refer to the attached information from WorkSafe Tasmania for additional information.

### 3. ENSURE THAT MANUALS (OPERATOR'S INSTRUCTIONS) FOR MOBILE PLANT ARE AVAILABLE FOR PERSONS REQUIRED TO OPERATE EACH ITEM OF MOBILE PLANT.

All new plant is issued with operator's instructions. These are often stored in a water proof compartment behind the seat. Older mobile plant, or plant purchased second hand may not have this information available with it.

As a PCBU, you have a duty to ensure that you provide operating instructions. This may require you to contact manufacturers, search Google, or write your own. (When searching Google, please be aware of scammers who will ask for email addresses, request bank or credit card details, or require you to obtain a download licence by providing personal details.)

In the event you write your own, ensure that you have covered the basic operation of levers, gauges, pedals, and safety devices.

Operator instructions should be easily available to operators. That doesn't mean in a filing cabinet in the office when the operator may be 10km away in a paddock, and requiring information.

#### 4. SEATBELT MOUNTING POINTS ARE INCORPORATED INTO THE DESIGN OF THE MOBILE PLANT AND SEATBELTS ARE FITTED AND WORN BY THE OPERATORS.

New mobile plant will be fitted with seatbelts, with the exclusion of two wheeled motorcycles and quad bikes (these are exempt due to the operator being required to sit and stand, or move forwards and backwards in the seat during operation).

Older mobile plant were not fitted with seatbelt mounting points or seatbelts. It is considered specialised work to fit seatbelt mounting points and seatbelts so please do not attempt to fit them yourselves. There are persons who can assess plant for the retro fitting of seatbelts; and conduct this work when the plant is structurally able to withstand the forces of a restrained person in the event of a roll over or collision.

You can purchase seats with seat belts attached. There are models designed to attach to the bolt holes on many older tractors. These are able to be fitted at home in your workshop. Please seek information from the supplier before conducting this work.

#### 5. MOVEMENT OF AGRICULTURAL EQUIPMENT ON PUBLIC ROADS

Main Roads WA has produced information to assist you when operating agricultural machinery on public roads, for example moving plant from one farming location to another). Some plant requires permits, flashing beacons, pilot vehicles, agricultural pilots, certain routes to be taken etc. Please be mindful when moving large agricultural equipment of other road users.

Planning movement in times when there are unlikely to be hazards such as school busses, low light levels, dangerous winds and peak traffic is imperative to safe vehicle movement. Ensure that you have adequate communication devices such as CB Radios or hands-free mobile connections. Wearing Hi vis vests or clothing ensures that if you are required to exit the plant, you will be visible to other road users.

Ensure that you are aware of the speed rating and inflation of tyres on your agricultural plant. Remember these vehicles are not designed to be driven at high speed. If you are towing, please ensure that your agricultural plant has the capacity to tow the weight of the trailable item, and that you can brake safely.

Further information here:

- <https://www.mainroads.wa.gov.au/heavy-vehicles/permit-order-scheme/agricultural-vehicles/>
- <https://www.mainroads.wa.gov.au/globalassets/heavy-vehicles/getting-a-permit/agricultural-vehicles/towed-agricultural-implements-crossings-traffic-management-requirements.pdf?v=4a22a0>
- <file:///C:/Users/jgaunt/Downloads/guide-to-moving-oversize-agricultural-vehicles-on-public-roads.pdf>

##### 5.1. BRAKES

WA Road Traffic (Vehicles) Regulations 2014 states:

○ **Regulation 439. -Brakes**

*(1) An agricultural combination being used on a road must be capable of stopping from whichever of these speeds that is the lower speed, within a distance not exceeding 15 m —*

*(a) a speed of 30 km/h; or*

*(b) the maximum speed of which it is capable.*

(2) Any braking system on a towed vehicle which is capable of being connected to the towing vehicle must be connected to that vehicle while it and the towed vehicle are in motion on a road.

- Note also **Regulation 335. Performance of braking systems of certain vehicles**

The Department of Transport has also produced information to assist you in the safe movement of agricultural vehicles and plant. Plant used on roads may require licensing, and some licensing may be seasonal. Enquire in relation to the types of plant you may take onto WA roads.

Further information here:

- [https://www.transport.wa.gov.au/mediaFiles/licensing/LBU\\_P\\_Towed\\_Agricultural\\_Implementation\\_Guide.pdf](https://www.transport.wa.gov.au/mediaFiles/licensing/LBU_P_Towed_Agricultural_Implementation_Guide.pdf)
- <https://www.transport.wa.gov.au/licensing/agricultural-industry.asp>

## 5.2. SECURING OF LOADS

When transporting items as a load, you must ensure that the load has been adequately restrained from falling or blowing off a moving vehicle.

Advice can be located here:

- <https://www.ntc.gov.au/sites/default/files/assets/files/Load%20Restraint%20Guide%202004%20Full%20Copy.pdf> (applicable in WA)
- <https://www.ntc.gov.au/sites/default/files/assets/files/Load-Restraint-Guide-for-light-vehicles-2018.pdf>
- <https://www.ntc.gov.au/sites/default/files/assets/files/Load-Restraint-Guide-for-light-vehicles-2018.pdf> (applicable out of WA)
- [https://cdn-nrspp-s3-aus.s3.ap-southeast-2.amazonaws.com/wp-content/uploads/sites/4/2017/03/21123828/Assessment\\_of\\_Vehicles\\_for\\_the\\_Transport\\_of\\_Hay\\_and\\_Straw-Summary-25314.pdf](https://cdn-nrspp-s3-aus.s3.ap-southeast-2.amazonaws.com/wp-content/uploads/sites/4/2017/03/21123828/Assessment_of_Vehicles_for_the_Transport_of_Hay_and_Straw-Summary-25314.pdf)

## 6. OPERATION OF TRACTORS USED AS STATIONARY ENGINES

Information to assist in the operation of tractors (as a stationary engine) by contract truck drivers

Inductions for truck drivers who are required to operate tractors as stationary engines when attached to field bin may include information such as is seen on the attached document.

NOTE that this document is an example and has not been approved by WorkSafe. You are required to assess your own documentation, or seek a provider of safety information to assist you.

## 7. TRACTORS USED AS STATIONARY ENGINES

Many older tractors on farms are used as stationary engines, running plant such as pumps and field bins.

Ensure that documented risk assessments in relation to the use and locating to site of tractors as stationary engines covers hazards such as, but not limited to; terrain, speed, rollover risks, guarding, fires etc.