Tyre Changing- Truck and Bus

Business Name:	ABN:	
Business Address:		
Contact Person:	Phone:	Email:

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU OF THE PROJECT

Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.

Full Name:		
Signature:	Title:	Date:

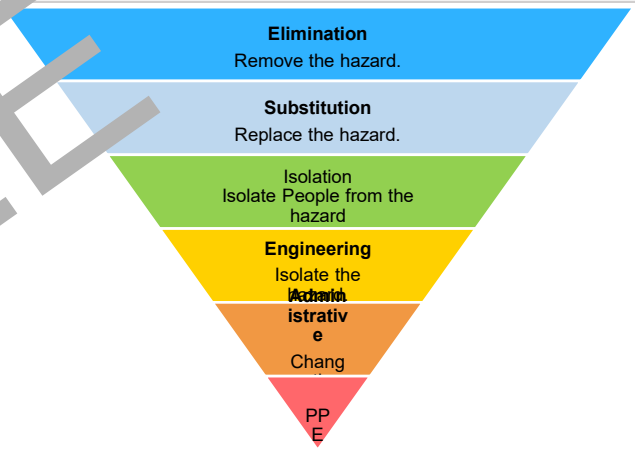
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date Risk Assessment supplied to Project Manager:	

RISK MATRIX

LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE		
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Rev before work
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACU	2M MO RATE	Ensure control measures in place.
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 H	1L LOW	Monitor and keep records.

HIERARCHY OF CONTROLS



Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. E inate the hazar redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or hi er-level authorisati is required.
3H	Review and approve additional c rols b ask arts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in ace and effe ive. Proceed with caution; monitor conditions.
1L	Proceed, following standard operating procedures Monitor and keep records.

Consequence Scale:

Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
Catastrophic	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
Major	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
Moderate	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
Minor	First-aid only, no lost time	negligible delay	Isolated non-conformance
Insignificant	No injury	no schedule impact	Deviation caught and corrected on site

Notes on Hierarchy of Controls:
Remember to apply controls in the preferred order shown by the coloured pyramid:

1. **Eliminate**
2. Substitute
3. Isolate
4. Engineering
5. Administrative
6. PPE

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

aligned with Safe Work Australia's Managing the risk of fatigue at work *(2023) and ISO 45001:2018 clauses 6–8.*

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
1. Governance, WHS Duties and Consultation	• Lack of clear allocation of WHS duties for tyre changing on heavy vehicles under WHS Act 2011 leading to unmanaged critical risks • Board and senior management not receiving adequate information about tyre-related risks, incidents and compliance gaps • Inadequate consultation with workers, health and safety representatives (HSRs) and contractors undertaking truck and bus tyre work • Absence of formal WHS objectives, targets and KPIs specific to heavy vehicle tyre management and roadside work • Poor integration of tyre-related risks into the organisation's overall WHS risk register and critical risk program	High	• Define and document WHS roles, responsibilities a accountabilities for heavy vehicle tyre management (PCBU, officers, managers, supervisors, leading hands and workers) in line with WHS Act 2011 and WHS Regulations • Establish a governance framework requiring regular reporting of tyre-related incidents, near misses, non-conformances and audit outcomes to senior management and the Board • Implement a structured consultation process (e. WHS committee agenda item) focused on tyre changing for trucks and buses, including feedback from tyre fitters, drivers and supervisors • Develop and comm a tyre and wheel safety policy for heavy vehicles that references relevant Australian Stand s and industry guidance (e.g. S 4457 series, manufacturer instructions, state/territory regulator gui ce) • Includ heavy vehicle t risks (inflati , wheel separation, jack/stands failure, roadside exposure) in the co ate risk r er with defined risk owners and review dates • Requ officers to monstrate due diligence regarding heavy vehicle tyre risks through regular briefing sit visits, a review of training, maintenance and contractor controls • Ensure HSRs e supported to participate in inspections and investigations relating to tyre changing on he vehicles a can access all relevant tyre safety information	Medium
2. Procurement of Vehicles, Wheels, Tyres and Equipment	• Purchasing trucks, buses, rims and tyres that are incompatible, not fit for purpose, or not compliant with Australia Standards and OEM s ications • Procurement of i rior or non-compliant jacks, s ds, torqu bead breakers or in stems without safety features • Lack of specification for safety-c ical features (e.g. safety cage straints for inflation, mechanical lifting aids, wheel nut indicators) in purchase contracts • No lifecycle consideration for inspection, maintenance, calibration and replacement of tyre-related tools and equipment • Inadequate assessment of supplier competence and quality control for retreaded tyres, refurbished rims and specialised wheel components	High	• Develop procurement standards that mandate compliance with relevant Australian Standards, OEM requirements and Road Transport regulations for heavy vehicle wheels, tyres and associated equipment • Specify compatibility requirements for rims, tyres and wheel fixings (size, rating, stud pattern, load and speed rating) to prevent mismatching and wheel failures • Require safety features for tyre fitting and inflation equipment (e.g. restraining devices, clip-on chucks, remote inflation lines, pressure regulators, guards) to be included in procurement documentation • Include requirements for supplier documentation such as certificates of conformity, test reports and OEM guidance for rims, tyres and critical tools • Mandate that lifting and jacking equipment used for heavy vehicles is rated, labelled and compliant, and that procurement includes user manuals and maintenance schedules • Implement a pre-qualification process for tyre and equipment suppliers including evaluation of WHS systems, training capability, and track record • Ensure torque-limiting devices, calibrated torque wrenches and wheel nut indicators are specified and standardised across the fleet • Include whole-of-life considerations (maintenance, calibration, spare parts, replacement intervals) for tyre tools and equipment in procurement decisions	Medium
3. Contractor Management and	• Reliance on external tyre service providers without verifying their	High		Medium

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Outsourced Tyre Services	competence, WHS systems or compliance with organisational standards • No clear agreement on responsibilities for risk assessment, safe systems of work, equipment maintenance and incident reporting for tyre changing work • Inconsistent practices between contractors leading to variable safety standards, particularly for roadside or after-hours heavy vehicle tyre tasks • Inadequate monitoring of contractor performance, including near misses, enforcement actions and non-conformances • Contractor workers not inducted into site-specific risks, traffic management rules or emergency procedures for depots, bus yards and workshops		• Implement a formal contractor pre-qualification process for tyre service providers, including review of WHS management systems, training records, licences, insurances and incident history • Develop written contracts or service level agreements that clearly define WHS roles, responsibilities and expectations for heavy vehicle tyre work, including compliance with the WHS Act 2011 and organisation-specific procedures • Require contractors to provide documented safe systems of work, training evidence and equipment inspection records relevant to truck and bus tyre changing and roadside response • Ensure contractor personnel complete site-specific induction that cover depot layouts, traffic management plans, restricted areas, emergency procedures and reporting requirements • Include tyre-related performance indicators in contractor evaluations, such as incident rates, audit findings, responsiveness to corrective actions and evidence of continuous improvement • Establish a joint incident and near-miss reporting and investigation process that includes contractor workers and shares lessons learned across all parties • Periodically audit contractor tyre work (both on-site and roadside) against agreed standards, with documented findings and corrective action plans	
4. Competency, Licensing and Training Systems	• Workers performing heavy vehicle tyre changing without formal competency-based training or verification of skills • Inconsistent understanding of critical risks such as split rim explosions, wheel separation, crush hazards and stored energy in tyres • No structured refresher training or re-assessment following incidents, equipment changes or regulatory updates • Supervisors unable to effectively verify competence or coach workers due to limited technical knowledge of heavy vehicle tyre risks • Inadequate literacy, language or numeracy support leading to poor understanding of procedures, torque values and pressure specifications	High	[redacted]	Medium
5. Procedures, Safe Systems of Work and Documentation	• Absence of documented procedures for heavy vehicle tyre changing, inspection, rotation and roadside repairs	High		Medium

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	• Procedures not reflecting current equipment, OEM recommendations or regulatory requirements, leading to outdated or unsafe methods • Procedures too generic, not clearly distinguishing between light vehicle and heavy vehicle, or between single-piece and multi-piece rims • Lack of standardised documentation for pre-job risk assessment, permits, and authorisation for high-risk tyre tasks (e.g. split rims, roadside emergencies) • Poor accessibility to procedures for workers in the field, especially during after-hours or remote roadside operations		[redacted]	
6. Plant, Tools, Maintenance and Calibration Systems	• Tyre fitting and lifting equipment not inspected, maintained or calibrated in line with manufacturer r[redacted]ments and standards • Use of damaged[redacted] unsuitable [redacted], stands, rattle guns, [redacted] bead breakers or inflation lines increasing risk of sudden failure or incorrect wheel assembly • No formal system to remove defective equipment from service, leading to continued use of unsafe plant • Calibration of torque tools not scheduled or recorded, causing under- or over-tightening and potential wheel loss • Inadequate availability of mechanical aids and tyre handling equipment resulting in manual handling of heavy truck and bus tyres	High	[redacted]	Medium

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7. Workplace Design, Traffic Management and Work Environment	• Inadequate workshop layout leading to interaction between moving vehicles, forklifts, pedestrians and tyre work areas • Tyre changing carried out in poorly lit, uneven or cluttered areas increasing risk of slips, trips, falls and poor positioning of jacks and stands • Insufficient separation between live traffic and tyre work zones in depots, bus yards and loading areas • Lack of designated safe locations for roadside tyre changes resulting in ad-hoc, high-risk setups on road shoulders or narrow verges • Poor environmental conditions (heat, cold, rain, noise, dust) affecting concentration, stability of equipment and safe communication	High	[redacted]	Medium
8. Fleet and Tyre Management Programs	• No systematic progr[redacted]spection, rotation, replaceme[redacted]and pressure management of he[redacted]y vehicle tyr[redacted] leading to in-servic[redacted]ailur[redacted] • Inconsistent recording of tyre histo[redacted] including repairs, retreads and rim[redacted] changes, making trend a[redacted]nd early intervention difficult • Failure to identify recurring defects or patterns (e.g. specific axle positions, routes or loads) that contribute to tyre damage and sudden failures • Running tyres beyond recommended age, tread depth or damage limits due to cost or scheduling pressures • Ineffective communication between drivers, maintenance teams and tyre service providers regarding tyre condition and defects	High	[redacted]	Medium

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9. Roadside and Remote Work Management	• Exposure of workers to live traffic when conducting roadside truck and bus tyre changes, particularly on high-speed or high-volume roads • Inadequate pre-job assessment leading to tyre work proceeding in unsafe locations or conditions (e.g. poor visibility, narrow shoulders, severe weather) • Lack of standardised controls for vehicle positioning, traffic warning devices and communication with road authorities or tow services • Workers operating alone in remote or isolated locations without effective communication or emergency support • Pressure to return vehicles to service quickly, leading to rushed assessments and incomplete wheel security checks	Extreme	[redacted]	High
10. Fatigue, Work Scheduling and Supervision	• Tyre changing on heavy vehicles bei performed at the end of lon shifts, overnight or during irr ours, increasing fatigue- ted errors • Inadequate supe sion du risk tasks such as split roadsid changes and work on large multi-axl vehicles • Tyre work being squeeze tween operational deadlines (e.g. scheduled bus runs, freight delivery times) leading to rushed or incomplete tasks • Lack of coordination between dispatch, maintenance and tyre service providers regarding realistic timeframes for safe tyre work • Supervisors not present or not competent to intervene during critical stages of heavy vehicle tyre work	High	[redacted]	Medium
11. Personal Protective Equipment and	• Inconsistent provision, selection and use of PPE for heavy vehicle tyre work	High		Medium

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Emergency Preparedness	(e.g. eye, hand, hearing and foot protection) • Workers unaware of how to respond to tyre explosions, rim failures, jack collapse or traffic incidents during tyre changing • No specific emergency response planning for incidents involving trucks and buses during tyre work in depots or roadside locations • Insufficient first aid equipment and training for likely tyre-related injuries (e.g. crush, amputation, eye injury, high-pressure injection) • Lack of coordination with emergency services and road authorities for incidents occurring during roadside tyre operations		[redacted]	
12. Incident Reporting, Investigation and Continuous Improvement	• Under-reporting of tyre-related incidents, near misses and equipment failures due to normalisation of risk or fear of blame • Inadequate investigation of wheel-off incidents, tyre explosions, near misses and equipment failures preventing learning and improvement • Lack of data analysis to identify systemic causes such as training gaps, maintenance issues or scheduling pressures • Corrective actions not tracked or verified, allowing repeat incidents and persistent non-conformances • Workers not informed of investigation outcomes and lessons learned, leading to low engagement and repeated unsafe practices	High	[redacted]	Low

EMERGENCY RESPONSE – CALL 000 FOR EMERGENCIES

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

LEGISLATIVE REFERENCES

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES FOR ANY STATE THAT ARE NOT APPLICABLE

Queensland & Australian Capital Territory
Work Health and Safety Act 2011
Work Health and Safety Regulations 2011
Legislation QLD: https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws
Codes of Practice QLD: https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice
Legislation ACT: https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations
Codes of Practice ACT: https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice

New South Wales
Work Health and Safety Act 2011
Work Health and Safety Regulations 2025
Legislation NSW: https://www.safework.nsw.gov.au/legal-obligations/legislation
Codes of Practice NSW: https://www.safework.nsw.gov.au/resource-library/list-of-codes-of-practice

Northern Territory
Work Health and Safety (National Uniform Legislation) Act 2011
Work Health and Safety (National Uniform Legislation) Regulations 2011
Legislation NT: https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws
Codes of Practice NT: https://worksafe.nt.gov.au/forms-and-resources/codes-of-practice

South Australia
Work Health and Safety Act 2012 (SA)
Work Health and Safety Regulations 2012 (SA)
Legislation for SA: https://www.safework.sa.gov.au/resources/legislation
Codes of Practice for SA: https://www.safework.sa.gov.au/workplaces/codes-of-practice#COPs

Tasmania
Work Health and Safety Act 2012
Work Health and Safety (Transitional and Consequential Provisions) Act 2012
Work Health and Safety Regulations 2012
Work Health and Safety (Transitional) Regulations 2012
Legislation for TAS: https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations
Codes of Practice for TAS: https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.

Victoria
Occupational Health and Safety Act 2004
Occupational Health and Safety Regulations 2017
Legislation VIC: https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations
Codes of Practice VIC: https://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice

Western Australia
Work Health and Safety Act 2020
Work Health and Safety Regulations 2022
Legislation Western Australia: https://www.commerce.wa.gov.au/worksafe/legislation
Codes of Practice WA: https://www.commerce.wa.gov.au/worksafe/codes-practice

Safe Work Australia Links
Law and Regulation (All States): https://www.safeworkaustralia.gov.au/law-and-regulation
Model Codes of Practice: https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice

Model Codes of Practice

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work