Industrial Workshop Lifting Jacks and Hoists

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:

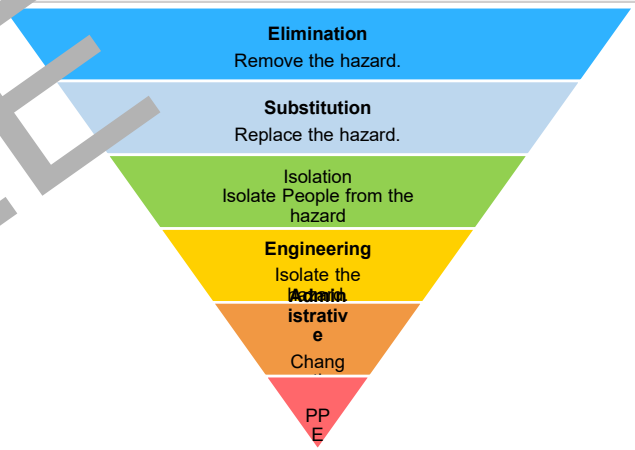
CLIENT OR PRINCIPAL CONTRACTOR DETAILS

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 Legal Compliance	• Lack of clear allocation of WHS duties for lifting jacks and hoists under WHS Act 2011 and WHS Regulations • Directors and senior management not exercising due diligence in relation to plant risks • Failure to identify all relevant Australian Standards (e.g. AS 1418, AS 2550, AS 2615, AS 4991) and OEM requirements • Absence of a documented plant risk register covering all types of jacks and hoists in the workshop • Inadequate consultation with workers and HSRs on selection, use and maintenance of jacks and hoists • No formal process to verify supplier / installer competence and compliance documentation • Failure to ensure safe systems of wo for use of floor jacks, mechanical hoist and vehicle support stands • Inadequate review of dents and near misses related lifting systems at a governance leve	4A	• Establish and maintain a documented Pla Safety Ma gement Standard that references WHS Act 2011, WHS Regulations and relevant Austra Sta ds for lifting jacks and hoists • Formally allocate WHS responsibilities for pla fety to offic managers and supervisors, including documented role descriptions d KPIs • Maintain a plant risk register th lists all floor jacks, chanical jacks, hoists, accessories and their risk assessments, ins ion imes d owners • Implement due diligence hecklis r exe ives that includes periodic review of lifting plant risk controls, audi tcomes a incident • Ens procure pr rocedures require suppliers/installers to provide evidence of compliance (design regist ic where plicable, test certificates, manuals and maintenance instructions) • Estab h a mal co ultation process (toolbox talks, WHS committee, HSR input) specifically addres g lift operations and plant • Im em t a doc mented change management process for new or modified jacks, hoists or lifting syste cluding formal risk assessment prior to use et up an annual management review of the lifting plant safety system, with agreed improvement actions a timeframes	3H
2. Plant Selection, Design and Suitability	• Selection of jacks or hoists that are ot rated or designed for the loads an vehicle types handled • Use of domestic or non-industrial floor jacks in a heavy industrial workshop environment • Incompatible lifting points or adaptor fittings leading to unstable load support • Lack of design verification or registration where required for certain hoists • Acquisition of plant without considering ergonomics, access, guarding and emergency features	4A	• Implement a plant selection and approval procedure requiring documented engineering review of load ratings, intended duty cycle and compatibility with workshop activities • Specify minimum design and compliance requirements in purchasing standards (e.g. compliance with AS 2615 for jacks, AS 1418/AS 2550 for hoists, OEM certification and rating plates) • Require all new lifting jacks and hoists to be supplied with certificates of test, manuals, and clear SWL/WLL markings prior to commissioning • Ensure hoist and jack configurations are matched to common vehicle types, including approved lifting points and any required adaptors or stands • Develop an engineering guideline for minimum safety factors and capacity margins for all lifting devices and accessories • Include environmental and ergonomic criteria in plant selection (corrosion resistance, floor load ratings, approach clearance, control layout, noise and vibration) • Formalise a plant lifecycle policy that includes defined obsolescence criteria, end-of-life assessment and decommissioning process	2M

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
	• Failure to consider environmental conditions (corrosive, wet, outdoor) when selecting equipment • Inadequate capacity margin between equipment WLL/SWL and maximum expected load • No formal process to retire outdated, non-compliant or damaged jacks and hoists		• Require sign-off by a competent person (e.g. mechanical engineer or qualified plant specialist) before new jacks or hoists are put into service	
3. Installation, Commissioning and Layout of Hoists and Jacks	• Incorrect hoist installation leading to structural failure or collapse • Inadequate floor strength or anchorage for two-post and four-post hoists • Poor workshop layout causing congestion, vehicle collision with hoist columns, and restricted access for emergency egress • Insufficient overhead clearance resulting in contact between raised load and roof structures or services • Absence of commissioning tests and sign-off by a competent person • Inadequate separation between hoists and pedestrian walkways or other plant • Lack of clearly marked operating zones and exclusion zones around lifted vehicles • Hidden underground services affected by hoist anchors or floor-mounted jacks and rails	4A	• Develop a formal installation and commissioning procedure requiring qualified installers in accordance with OEM and Australian Standard requirements • Require pre-installation structural assessment of workshop slabs and building support by a competent structural engineer, including anchorage design and verification • Undertake a layout risk assessment and workflow analysis to determine safe spacing between hoists, access paths, parking zones and emergency exits • Ensure commissioning includes proof load testing, function checks of safety locks, limit switches and emergency stops, with results documented and retained • Mark hoist operating zones and exclusion areas on the floor with durable line-marking and associated signage, including maximum vehicle height notices • Ensure minimum clearances to overhead structures, lighting, sprinklers and service piping are met and documented in layout drawings • Implement a permit or approval process for any floor penetrations, drilling or anchoring with review of underground services plans • Maintain as-built configuration drawings and commissioning records for all hoists and fixed lifting systems, accessible for inspection and audit	2M
4. Inspection, Testing, Maintenance and Repair Systems	• Inadequate preventative maintenance leading to mechanical or hydraulic failure of jacks and hoists • Failure to detect cracks, worn components, hydraulic leaks or faulty safety locks • Lack of documented inspection regime for floor jacks, vehicle stands and lifting accessories	4A	[redacted]	2M

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
	• Repairs performed by unqualified personnel using non-genuine parts • No tagging or isolation system for defective lifting equipment • Maintenance activities creating secondary hazards (e.g. working under unsupported loads) • Out-of-date test certificates or missed periodic statutory inspections • Reliance on user reporting only, without scheduled competent inspections		[redacted]	
5. Operator Competency, Licensing and Training Systems	• Untrained personnel operating hoists and jacks • Assumptions that automotive trade qualification alone is sufficient to operate specific lifting systems • Inconsistent competency levels between shifts and sites • No verification of competency for contractors or temporary staff • Lack of refresher training leading to skill fade and unsafe shortcuts • Inadequate understanding of load limits, lifting points and the difference between lifting and supporting • Failure to train workers in emergency procedures for stuck or failed hoists • Reliance on informal 'buddy system' training without structured assessment		[redacted]	2M
6. Procedures, Work Instructions and Safe Systems of Work	• Absence of written procedures for the safe use of jacks, hoists and support stands • Inconsistent work practices between technicians and shifts • Failure to distinguish between temporary lifting and long-term support requirements	4A	[redacted]	2M

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
	• Use of hoists or jacks outside of OEM-specified applications (e.g. side lifting on non-approved points) • No documented controls for working alone when vehicles are raised • Inadequate procedures for multi-hoist operations or split-level lifting of long vehicles • Poor integration between high-level risk assessments and detailed SWMS, leading to procedural gaps • Procedures not reviewed after incidents, modifications or regulatory changes		[redacted]	
7. Load Management, Vehicle Positioning and Stability Controls	• Incorrect estimation of vehicle or component weight versus jack/hoist capacity • Uneven load distribution causing vehicle instability on hoists or floor jacks • Failure to secure vehicles (brakes, chocks) leading to rolling or shifting on hoists • Use of improvised packing or non-rated blocks between jack saddles and load • Incorrect axle or chassis lifting point leading to structural damage and collapse risk • Lifting of modified or heavily loaded vehicles without adjusted load and balance assessment • No formal system for managing centre-of-gravity issues on vehicles with major components removed • Simultaneous tasks on the same raised vehicle causing unexpected movement or imbalance	4A	[redacted]	2M
8. Isolation, Lockout and Emergency Controls for Lifting Plant	• Unexpected lowering or movement of hoists during work under raised vehicles	4A	[redacted]	2M

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
	• Unauthorised operation of hoists or jacks while others are working underneath • Failure to isolate power during maintenance or when hoists are tagged out • Inadequate or non-functional emergency stop and safety lock systems • No formal procedure for controlled lowering of stuck or failed hoists • Lack of redundancy in support (reliance on hydraulic pressure alone) • Confusion over responsibility for isolating and re-energising hoists • Inadequate signage and lockout devices leading to inadvertent re-use of defective plant		[redacted]	
9. Workshop Traffic Management and Interaction with Other Plant	• Vehicle collisions with hoist columns, jacks, or raised vehicles during manoeuvring • Forklifts or mobile plant contacting hoists, floor jacks or loa[redacted]g raised • Pedestrians enter[redacted]g hoist operating zones without awa[redacted]ness of lift[redacted] • Restricted visibility [redacted]d hoist ba[redacted] leading to near misses or contact incidents • Lack of segregation betwe[redacted]n parking, queuing and lifting areas • Uncontrolled reversing of vehicles into hoist bays without spotter systems • Use of jacks on unsuitable or cluttered floor surfaces leading to sudden movement • Emergency access routes obstructed by vehicles waiting for hoist access or jack use	3H	[redacted]	2M
10. Ergonomics, Manual Handling and Work Organisation	• Awkward postures and excessive force when positioning floor jacks and mechanical hoists arms	3H		2M

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
	• Manual handling of heavy jack units, stands or adaptors without mechanical assistance • Repetitive movements leading to musculoskeletal disorders for technicians frequently using jacks and hoists • Time pressure and poor work scheduling prompting shortcuts in lift set-up and stability checks • Insufficient staffing levels leading to solo handling of tasks designed for two persons • Inadequate lighting around hoist bays, increasing risk of misplacement of jacks or stands • Fatigue-related errors in judgement when assessing load stability late in shifts • Poorly designed controls or displays leading to operator strain or mis-readings		[redacted]	
11. Contractor, Visitor and Third-Party Management	• Contractor technici[redacted] using workshop hoists and jacks wi[redacted]ut understanding site-specific contr[redacted] • Service providers b[redacted]ssing isolati[redacted] and lockout procedures during maintenance work • Visitors entering hoist bays or areas where jacks are in use without supervision • Inconsistent safety standards between host employer and contractors leading to confusion and unsafe practices • Lack of clarity about who controls lifting operations when multiple parties are involved • Inadequate exchange of plant condition and defect information between owners and contractors	3H	[redacted]	2M

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
	• Subcontractors bringing non-compliant or poorly maintained portable jacks and lifting devices on site		[redacted]	
12. Incident Reporting, Monitoring and Continuous Improvement	• Under-reporting of near misses involving hoists, jacks and falling loads • Repeat incidents due to poor investigation and follow-up of root causes • Lack of trend analysis masking systemic issues with lifting practices or equipment • No feedback loop from incidents to training, procedures or equipment selection • Supervisors normalising deviance from safe systems due to production pressure • Workers not understanding the importance of reporting minor defects or anomalies with lifting plant • Failure to share critical safety learning between different sites or workshops	3H	[redacted]	2M
13. Emergency Preparedness and Rescue Planning	• Delayed response to hoist collapse or vehicle instability incidents • Workers trapped under or [illegible] vehicles and plant without a rehearsed rescue plan • Emergency services unable to access hoist bays due to poor layout or blocked access routes • Lack of suitable equipment to safely support or stabilise vehicles during rescue • Workers not trained in first response actions for hydraulic failures or suspended loads • Confusion over who coordinates emergency response within the workshop • Inadequate post-incident scene preservation for investigation	3H	[redacted]	2M

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
14. Environmental and Infrastructure Integrity	• Degradation of floor surfaces leading to uneven support for floor jacks and vehicle stands • Corrosion of hoists, anchors or structural elements in wet or chemically aggressive environments • Inadequate drainage causing pooling of liquids under hoists and jacks, increasing slip and stability risks • Power outages or electrical faults causing uncontrolled stoppage of hoists in raised position • Poor ventilation in enclosed hoist bays leading to accumulation of fumes during under-vehicle work • Insufficient load rating of mezzanines or pits used in conjunction with jacks and hoists • Infrastructure modifications (trenching new services) undermining slab integr around hoists	3H	[redacted]	2M

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