

Working With Airbag Systems Risk Assessment

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

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON 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	HIERARCHY OF CONTROLS	
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			Elimination Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	Substitution Replace the hazard.	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts.	Isolation Isolate People from the hazard	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.	Engineering Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	Administrative Change	
								PPE	

Risk Rating & Required Action:

4A	Stop work. The risk is intolerable. Eliminate the hazard or redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or higher-level authorisation is required.
3H	Review and approve additional controls before the task starts. Senior supervisor sign-off needed.
2M	Ensure all nominated controls are in place and effective. 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. Preparation	Electric shock, Static electricity discharge	3H	<ul style="list-style-type: none"> - Conduct a pre-work briefing to ensure all team members understand the procedure. - Use insulated tools to avoid electric shock. - Wear anti-static wristbands to prevent static discharge. - Ensure all power sources are disconnected before commencing work. - Verify training records for handling airbag systems are up-to-date. - Keep a fire extinguisher suitable for electrical fires within reach. - Ensure clear communication channels amongst the team. - Identify and demarcate safe work zones. - Check environmental conditions to minimize static risk. - Maintain a dry work area to reduce the chance of electric shock. 	2M
2. Deactivating the Airbag System	Accidental deployment, Initial current	4H	<ul style="list-style-type: none"> - Disconnect the battery prior to deactivating the airbag. - Wait for a minimum of 30 minutes after battery disconnection to allow capacitors to discharge. - Follow manufacturer-specific guidelines for deactivation. - Isolate the system using lockout/tagout procedures. - Use appropriate personal protective equipment, such as safety goggles and gloves. - Verify deactivation with a multimeter. - Place a warning sign on the steering wheel or dashboard to indicate deactivation. - Ensure only trained personnel work on deactivation. - Use a protective covering over the airbag system during deactivation. - Ensure constant supervision during deactivation process. 	2M
3. Removing the Airbag Module	Inadvertent airbag deployment, Strain injuries from improper lifting	3H	<ul style="list-style-type: none"> - Check that the airbag system is deactivated. - Use appropriate lifting techniques to avoid strain injuries. - Ensure adequate team lifting support if required. - Handle the airbag module with care to avoid accidental chamber activation. - Use the correct tools specified for airbag removal. - Keep removal area clear of non-essential personnel. - Post removal, place the airbag module in a designated, safe container. - Avoid direct body positioning in the airbag deployment path. 	1L

<p>Parts from airbag inflator,</p>	<p>2M</p>	<p>- Inspect module connectors for damage.</p>
<p>Contamination, Explosion</p>	<p>3H</p>	

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7. Reinstalling the Airbag Module	Improper installation leading to failure, Pinching hazards	3H		1L
8. Reconnecting Power	Electrical surge, Unexpected deployment	4A		2M
9. Final System Check	System faults leading to deployment, Electronic malfunctions	3H		1L

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10. Cleanup and Debrief	Slips, trips and falls, Waste handling	2M		1L
11. Training Review	Inadequate knowledge leading to errors, Training fatigue	2M		1L
12. Emergency Preparedness	Delayed response during an emergency, Inadequate emergency equipment	4A		2M

[illegible]

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15. Safety Culture Enhancement	Complacency in following procedures, Inadequate safety leadership	3H	[Redacted]	1L
16. Equipment Inspection and Maintenance	Equipment failure, Improper use	3H	[Redacted]	1L
17. Review of Procedures	Outdated work practices, Failure to apply lessons learned	2M	[Redacted]	1L

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18. Supplier and Contractor Management	Non-compliance from external parties, Quality issues with provided components	3H	<ul style="list-style-type: none"> 1. Verify supplier credentials and certifications. 2. Conduct thorough vetting of contractors. 3. Implement strict quality control protocols. 4. Establish clear communication channels. 5. Perform regular inspections and audits. 6. Maintain detailed records of all transactions. 7. Enforce contractual obligations. 8. Provide training on quality standards. 9. Implement a feedback loop for continuous improvement. 10. Establish a contingency plan for quality issues. 	1L

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 IF 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 2017

Legislation NSW: <https://www.safework.nsw.gov.au/legal-obligations/legislation>

Codes of Practice NSW: <https://www.safework.nsw.gov.au/resource-library/list-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/laws-and-compliance/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