

Replacement Of Spark Plugs. Risk Assessment

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

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THIS 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: | | | | | | | | Notes on Hierarchy of Controls: | |
| 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. | | | | | | | | Remember to apply controls in the preferred order shown by the coloured pyramid: | |
| 3H Review and approve additional controls before task starts. Senior supervisor sign-off needed. | | | | | | | | 1. Eliminate | |
| 2M Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions. | | | | | | | | 2. Substitute | |
| 1L Proceed, following standard operating procedures. Monitor and keep records. | | | | | | | | 3. Isolate | |
| | | | | | | | | 4. Engineering | |
| | | | | | | | | 5. Administrative | |
| | | | | | | | | 6. PPE | |
| Consequence Scale: | | | | | | | | Always document why a lower-order control is accepted if elimination or substitution is not reasonably practicable. | |
| 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 | | | | |
| | | | | | | | | <i>aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.</i> | |

| 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. Gather Tools and Materials | Lifting injuries, Tripping hazards | 3H | <p>Ensure tools are within easy reach to prevent overreaching.</p> <p>Use proper lifting techniques when handling heavy tools.</p> <p>Clear the work area of any unnecessary items to prevent tripping.</p> <p>Wear appropriate footwear with slip-resistant soles.</p> <p>Ensure adequate lighting in the workspace.</p> <p>Use tool belts to carry smaller tools efficiently.</p> <p>Conduct a safety briefing before starting.</p> <p>Ensure all personnel are aware of the tools being used.</p> <p>Designate a safe area for tool storage.</p> <p>Inspect tools for any defects before use.</p> | 2M |
| 2. Isolate Vehicle | Vehicle movement, Unauthorized engine start | 3H | <p>Place the vehicle in park or neutral and engage the handbrake.</p> <p>Chock wheels to prevent vehicle movement.</p> <p>Disconnect the battery before starting.</p> <p>Display a 'Do Not Operate' sign on the steering wheel.</p> <p>Verify isolation of the vehicle with a second person.</p> <p>Ensure all keys are removed from the ignition.</p> <p>Perform a walk-around to ensure the vehicle is stable.</p> <p>Re-check isolation after every break.</p> <p>Ensure engine is cool before touching any components.</p> <p>Record vehicle isolation in the logbook.</p> | 1L |
| 3. Remove Engine Covers | Sharp edges, Back strain | 2M | <p>Wear cut-resistant gloves.</p> <p>Use proper lifting techniques to avoid strain.</p> <p>Ask for assistance when lifting heavy covers.</p> <p>Place removed covers in a designated safe area.</p> <p>Ensure that all tools required are within reach.</p> <p>Use caution tape to delineate the work area.</p> <p>Ensure even weight distribution when lifting.</p> <p>Use step ladder if required for better reach.</p> | 1L |

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| | | | Regularly inspect tools used for removing covers. Report and replace defective tools immediately. | |
| 4. Access Spark Plug Area | Burn hazards, Electrical shock | 3H | 1. Turn off the engine and remove the key from the ignition. 2. Wear appropriate PPE, including safety glasses and gloves. 3. Use insulated tools to avoid electrical shock. 4. Be cautious of hot engine components to avoid burn hazards. 5. Clearly mark and block the vehicle to prevent accidental movement. 6. Disconnect the negative battery terminal if necessary for safety. 7. Keep the work area clean and free of clutter. 8. If unsure, consult a qualified technician. 9. Do not touch electrical components unnecessarily. 10. Use proper body mechanics to avoid strain. | 1L |
| 5. Disconnect Ignition Coils | Electrical shock, Connector damage | 3H | 1. Ensure the engine is completely off and the key is removed. 2. Wear safety glasses and gloves. 3. Use insulated tools to disconnect the coils. 4. Label the disconnected coils for easy reconnection. 5. Avoid touching any electrical terminals. 6. Keep the work area organized. 7. If you notice any damage to the connectors, stop work and report it. 8. Double-check that the ignition system is properly isolated. 9. Use proper technique to avoid pulling on wires. 10. Take breaks to avoid fatigue. | 1L |
| 6. Remove Old Spark Plugs | Strain injuries, Tool slippage | 2M | 1. Use the correct size spark plug socket. 2. Apply steady pressure when turning the plug out. 3. Keep your feet firmly planted on the ground for stability. 4. Use a torque wrench to ensure proper removal torque. 5. Inspect the plug for wear and record the mileage. 6. Store the old plug properly for inspection. 7. Clean the plug hole in the cylinder head. 8. Avoid using excessive force that could damage the head. 9. Keep the workspace clear of debris. 10. If you experience any pain or discomfort, stop immediately. | 1L |

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| | | | | |
| 7. Inspect Spark Plug Area | Debris inhalation, Eye injury | 2M | | 1L |
| 8. Install New Spark Plugs | Cross-threading, Over-tightening | 3H | | 1L |
| 9. Reconnect Ignition Coils | Improper connection, Electrical faults | 2M | | 1L |

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| | | | | |
| 10. Reattach Engine Covers | Pinch points, Dropping covers | 2M | | 1L |
| 11. Reconnect Battery | Battery explosion, Electrical shock | 3H | | 1L |
| 12. Conduct System Check | Engine faults, Malfunction indications | 2M | | 1L |

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| | | | | |
| 13. Clean Work Area | Slips and falls, Leftover tools | 2M | | 1L |
| 14. De-Isolate Vehicle | Engine start hazards, Vehicle movement | 2M | | 1L |
| 15. Document Task Completion | Incomplete records, Information inaccuracy | 2M | | 1L |

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SAMPLE

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>

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>

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>

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>

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>

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

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.