

Forkway Risk Assessment – RA 001

Task/ Activity	Maintenance and repair internal combustion, electric, mains or generator powered materials handling and plant equipment.			Persons Exposed		
Location	Forkway locations and customer sites throughout the UK and Republic of Ireland.			Forkway Employees	Customer Employees	Members of Public
Name of Assessor(s)	Vic Hargreaves (Regional SHEQ Advisor)	Date of Assessment	12/04/2024 (V2)	1 - 2	May be in area	May be in area
		Date of Next Review	12/04/2025			

Stop and Think

Before undertaking any task/ activity it is essential that you have read and understood all of the control measures in this document and are satisfied that the control measures herein are suitable and sufficient. If you find the control measures are not suitable and sufficient, contact your line manager before proceeding.

The personal protective equipment required at all times throughout the task is Safety Boots, Overalls, Nitrile Gloves, Safety Glasses and high visibility clothing (vest as minimum). Where additional PPE is required it will be identified at the relevant points in this risk assessment, supporting risk assessments, supporting safe working methods and relevant COSHH assessments.

Hazard	Initial			Control Measures	Residual		
	Likelihood	Severity	Rating		Likelihood	Severity	Rating
1. Crushed by elevated machine/ its components moving or falling whilst working below them;	3	5	15	Avoid working below machine or its components where possible. Machine must be isolated before work begins. Keys must be removed and remain in the possession of the engineer throughout task. Support machine or its components with blocks, axle stands, slings or chains, etc. before working below them. Follow manufacturer's guidance and Forkway safe systems of work on suitable means of supporting. If present, hydraulic lock off valves should be engaged before work begins.	1	5	5
2. Crushed due to failure of jacking, blocking or supporting equipment or methods used;	3	5	15	All jacking or supporting equipment must be within current Thorough Examination. Complete pre-use checks on all equipment before use. If defects are found, do not use. Ensure equipment is of the correct capacity before starting. Follow manufacturer's manual for suitable jacking, blocking or supporting points and methods. Ensure correct principles of jacking and blocking are followed. Equipment must never be left elevated on jack alone. Do not jack equipment with masts, booms, platforms, etc. extended or with loads still attached.	1	5	5
3. Struck or crushed by machine under repair moving unexpectedly;	3	5	15	Ensure work area is on firm, level ground. Ensure all park brakes are engaged. Machine must be isolated before work begins. Keys must be removed and remain in the possession of the engineer throughout task. Chock wheels where risk of movement is present. Don't attempt to start machine unless in the correct operating position or drive wheels are raised off the ground. Ensure equipment is in neutral and park brakes engaged before attempting to start.	1	5	5

MULTIPLY THE LIKLIHOOD AND SEVERITY TO GET THE RISK RATING

Likelihood - (5=Very Likely, 4= Likely, 3= Possible, 2= Unlikely, 1= Highly Unlikely)

Severity - (5=Very Severe, 4= Severe, 3= Moderate, 2= Slight, 1=Negligible)
measures

0- 5 = Low Risk - No Action Required.

6-15 = Medium Risk - Ensure adequate controls are in use.

16-25 = High Risk - Stop operation and implement adequate control

Hazard	Initial			Control Measures	Residual		
	L	S	R		L	S	R
4. Struck by or entangled with moving or rotating parts of machinery;	3	5	15	Machine must be isolated before work begins. Keys must be removed and remain in the possession of the engineer throughout task. Any automatic start systems must be disabled. Ensure all guards are in place covering moving or rotating parts. Ensure all moving or rotating parts have come to a stop before starting. If an operational test is required, all parts of whole person, their clothing/ PPE, tools or rags must be kept entirely clear of the machine and it's components throughout whole task.	1	5	5
5. Crushed or struck by lifting equipment (forklift, crane, etc.) being used to remove large/ heavy components or by the components being removed;	3	5	15	Avoid lifting operations where possible. All lifting operations must be fully planned beforehand. Lifting operations risk assessment and safe system of work must be followed along with manufacturer's manual for instructions on lifting method.	1	5	5
6. Struck, trapped or crushed by falling or moving bonnets, cabs, doors or covers;	3	4	12	Remove bonnets, cabs, covers, doors, etc. where practical to do so. Ensure that bonnet stays/ locking gas struts are in place and are effective. Replace defective gas struts/ locking gas struts/ bonnet stays immediately once identified. If none are fitted, support with blocks, suitable adjustable stands, slings or other appropriate lifting accessories. For jack up cabs, check contents of cab and remove any unsecure items that could dislodge when raising or lowering. Ensure doors are secured shut and stand well clear of cab when raising or lowering.	1	4	4
7. Struck by moving vehicles, plant equipment or customer machinery operating in the area;	3	5	15	Avoid work at or near areas where other vehicles, plant equipment or customer machinery operate. Wherever possible use field service vehicle as a barrier between yourself and site activities. Illuminate your service vehicle's warning beacons in areas with high volumes of traffic or if you have to stop on any traffic routes on the customer's site. If work near site traffic cannot be avoided use cones or barriers to protect your work area. Any automated machinery, such as production lines, conveyor systems, etc. must be isolated before work begins. High visibility clothing must be worn (vest as minimum).	2	5	10
8. Striking pedestrians, other vehicles or fixed objects when operating machine;	3	5	15	Request customer's trained operators to deliver/ pick-up machine. Engineer must not operate the machine unless trained to do so and familiarised with the manufacturer's operating instructions. Ensure all persons are clear from the area before operating. Follow site speed limits, traffic systems, etc. Contact line manager before proceeding if refresher or additional training is required.	1	5	5
9. Struck by fuel, oil or coolant released under pressure or components which are pressurised or spring loaded;	3	5	15	Never touch or place hands near any part of a pressurised hydraulic oil system when it is under pressure. Ensure pressure is relieved from fuel, oil or coolant systems before working on them. Ensure equipment has cooled sufficiently before removing radiator caps. Follow manufacturer's instructions when removing or re-fitting any pressurised or spring loaded components.	1	5	5

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10. Struck by materials ejected at force during removal of wheels fitted with pneumatic tyres;	3	5	15	Inspect all tyre/ wheel components and nuts to ensure they are not damaged in any way. Pneumatic tyres fitted onto split rims must be deflated prior to removing them from machines.	1	5	5
11. Impact from flying debris in the event of tyres exploding due to over inflated/damaged tyres.	3	5	15	Ensure RA 024 – Inflation of Pneumatic Tyres has been reviewed and understood, Suitable and sufficient control measures must be in place prior to inflating and deflating operations commencing.	1	5	5
12. Electrical shock, fire or explosion due to electrical shorting or ignition of battery gases;	3	5	15	Remove all jewellery before work begins. Equipment's electrics must be isolated with battery disconnected. Ensure all electrical components are fully discharged. Avoid leaning over batteries and using metal tools above them. Consider removing battery completely if work above it will be unavoidable. Never leave metal tools, parts or consumables (aerosols, etc.) on top of or near the battery or live/ charged components. Never work on machines whilst on charge or in charging area. Never perform hot work near machine batteries or in/ near a battery charging area.	1	5	5
13. Electrical shock from powered tools used;	2	5	10	Pneumatic or battery powered tools should be used as preference. Mains powered tools must not exceed 110V. A suitable RCD must be in place. Ensure hands are clean and dry prior to handling equipment. Ensure tooling including extension cables remain dry throughout task. Ensure all electrical tooling/ equipment is with current PAT test. Complete pre-use checks. If the equipment fails, or if its power supply cable or plug gets damaged, do not use it. Never try to repair powered tools yourself. Keep cables out of harm's way, and clear of moving parts.	1	5	5
14. Electrical shock/ electrocution from mains powered electricity;	3	5	15	Forkway engineers must not alter, repair, maintain or modify any mains powered machines unless they have been specifically trained and authorised to do so. Ensure mains power to machine is isolated and locked off by a competent person with the necessary electrical qualifications. Competent person must also check all components are fully discharged before work begins. Manufacturer's maintenance instructions and training manuals must be followed.	1	5	5
15. Electric shock/ electrocution from on-board generator voltage;	3	5	15	Engineers must not work on electrical parts of power generators or the systems or components powered by them unless they have been fully trained to do so. Work must be limited to visual inspection and approved electrical tests of generator and components. Engineers must not attempt to modify, maintain, replace or repair any parts or components within the generator side of the equipment. Generator and any automatic start systems must be isolated and locked off before any work begins ensuring all parts and components are fully discharged. Only approved company issued meters must be used for electrical testing. Manufacturer's maintenance instructions and training manuals must be followed.	1	5	5

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	L	S	R		L	S	R
16. Electrical shock/ electrocution from high voltage electrical services;	2	5	10	Never work anywhere near high voltage electrical services. High voltage electricity can jump through the air if a conductor comes close enough.	1	5	5
17. Fall from height when accessing parts or components which cannot be reached from ground level;	3	5	15	Work at height must be avoided where possible. Engineers must never climb freely on machine under any circumstances. Appropriate access equipment must be used to reach components at height. All engineers carry ladders as a minimum however other more suitable access equipment must be used if available or required. Work at height risk assessment and safe system of work for specific access equipment must be followed.	2	5	10
18. Struck by or striking other persons with parts or components dropped from height;	3	5	15	Avoid work in areas where pedestrians may be present below. If work in these areas cannot be avoided, work area must be cordoned off with barriers. No person may be allowed to stand in cordoned area when work at height is in progress. Avoid carrying multiple items or large, awkward or heavy items. Any person left at ground level must wear a hard hat. Work at height risk assessment and safe system of work for specific access equipment must be followed.	1	5	5
19. Slip, trip or fall when accessing or egressing from machines or service vehicles;	3	4	12	Engineer must only use the correct access routes to machines or service vehicles and maintain three points of contact. Ensure steps, handles and floors of the machine or service vehicle are clean and in good condition. Keep boots clean & free from oil. Engineers must never climb freely on machine under any circumstances.	2	4	8
20. Stranded at height when working on equipment with raised operating positions (order pickers, MEWPS, etc.)	2	5	10	Do not operate equipment with raised operating positions if you are lone working. Ensure there is a secondary contact on site at ground level who knows how to correctly operate any controlled descent devices. Ensure you have your mobile phone or other means of communication on your person to contact for help if stranded. Do not attempt to climb from raised operating position or use rope evacuation. Wait for evacuation into a MEWP following an agreed emergency procedure.	1	5	5
21. Slip, trip or fall in work area;	3	4	12	Check for slip or trip hazards (ice, oil, customer goods, etc.) and rectify them before starting. If these hazards cannot be eliminated select a more suitable work area. Good housekeeping must be maintained throughout the whole task. Tools, parts and components must be stored neatly and away from pedestrian walkways. Drip trays must be used to collect drained fluids. Spills must be cleaned up immediately.	1	4	4
22. Manual handling of parts, tools, equipment or components;	4	4	16	Engineers have been trained on the correct manual handling techniques. Avoid manual handling wherever possible. If available, use a mechanical handling device (forklift, crane, sack truck, etc.). Consider your personal capabilities and if items exceed them or are awkward to handle, support weight with mechanical handling device or share load with another person. Make use of rigger gloves for heavier components.	2	4	8
23. Sprains or strains when using tools or equipment;	3	4	12	Use suitable tooling for task as outlined by manufacturer's maintenance manual. Engineers must use tooling in accordance with its design specifications & not extend tooling through the use of tubes. Torque multipliers and large breaker bars are available on request.	2	4	8

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24. Cuts or lacerations to hands or body from contact with sharp components or components/ machinery designed for cutting;	3	4	12	Always remain vigilant for sharp components or components designed for cutting and take note of their whereabouts. Avoid working in proximity of sharp components or components designed for cutting. Do not operate equipment designed for cutting unless trained and authorised to do so. Ensure all guards are in place and effective before operating. Ensure equipment is fully isolated before maintenance begins. Avoid removing guards unnecessarily during maintenance. Ensure appropriate cut resistant PPE is worn before working on, near or handling sharp components or components designed for cutting. Follow manufacturer's guidance for specific PPE requirements or contact your line manager.	2	4	8
25. Striking head, hands or body on frame or components when working in areas of equipment with poor clearance;	3	3	9	Avoid work in areas of equipment with poor clearance. Use appropriate extensions for tooling to remove your person from areas of tight clearance or consider removing components to create better clearance. If work cannot be avoided in areas with poor clearance proceed with caution. Make use of appropriate PPE such as a bump cap and gloves.	2	3	6
26. Striking hands or body due to tools slipping or breaking;	3	4	12	Use suitable tooling for task as outlined by manufacturer's maintenance manual. Pre-use checks must be undertaken on tools before use. Engineers must use tooling in accordance with its design specifications & not extend tooling through the use of tubes.	2	4	8
27. Struck by ejected materials when hammering or using powered tools;	3	4	12	Avoid this type of work in areas where other people are present nearby. If work in these areas cannot be avoided, cordon off a work area. Ensure all guards are in place and free from defect. Standard personal protective equipment including safety glasses/ goggles must be worn. Inform others nearby of hazard and if they are to remain in the area request that they wear safety glasses.	1	4	4
28. Contact with oils, greases, fuels, coolants, gases, lubricants or solvents associated with the machine or its maintenance;	5	2	10	Avoid unnecessary contact with substances where possible. COSHH Assessments must be available for all substances used and their control measures followed. Overalls, safety boots, gloves and safety glasses must be worn as a minimum at all times. Ensure good levels of personal hygiene. Wash hands before eating, drinking, smoking or going to the toilet. Do not put oil impregnated tools or rags into pockets.	2	2	4
29. Contact with, release of or burns from LPG;	3	4	12	Where work is required on LPG system, ensure system is shut down correctly following safe system of work and the system is depressurised before you start work on it. Do not work on LPG system near drains, pits or other areas below ground level where escaped LPG (heavier than air) could gather. Similarly, never work on LPG systems where sources of heat or ignition are present in area. PPE including Neoprene gloves, goggles, overalls and safety boots must be worn. Raise alarm with customer and line manager following any release of LPG.	1	4	4
30. Contact with battery acid;	3	4	12	Engineers must wear acid resistant apron, rubber gloves and chemical grade full face visor when topping up cells or if an acid spill is present. Spills must be cleaned up immediately with sodium carbonate spill kit. Ensure that eyewash is readily available before proceeding.	1	4	4

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Contact with battery acid (cont)				Maintain good levels of personal hygiene. Wash hands before eating, drinking, smoking or going to the toilet.			
31. Burns or fire started by hot work;	3	5	15	Avoid hot work where possible. Hot work must only be undertaken if trained and competent to do so. Hot work risk assessment and safe system of work for specific hot work method must be followed.	2	5	10
32. Burns from contact with hot components, oils or coolants;	3	4	12	Allow equipment to cool to a suitable level before starting. Avoid work where contact with hot components, oils or coolants may be likely wherever possible. Overalls, safety boots, gloves and safety glasses must be worn as a minimum at all times.	2	4	8
33. Contact with chemicals or substances from customer processes or vermin;	3	5	15	If you find machine to be covered in a chemical or substance request a copy of the MSDS before starting and pass on to your line manager or regional SHEQ Advisor. Request the machine is cleaned before starting. Avoid contact with substances where possible. Consult customer contact on PPE requirements before starting. Overalls, safety boots, gloves and safety glasses must be worn as a minimum at all times. Ensure good levels of personal hygiene. Wash hands before eating, drinking, smoking or going to the toilet. Engineers trained in recognising symptoms of Leptospirosis and carry Leptospirosis cards for emergencies.	2	5	10
34. Inhalation of exhaust gases, dusts or fumes from machine or customer processes;	3	4	12	Establish a safe area with the customer before starting. Consult customer contact on nature of dusts/ fumes and PPE requirements for area. If you have any concerns about dusts or fumes from customer processes contact line manager immediately. Engineers must only run machines when there is good ventilation or an extraction system is fitted and in operation. Do not blow out any dusts indoors (radiators, engine bay, motors, etc.). Engineers must wear dust mask when blowing out dusts. Engineers must never blow out brake or transmission (clutch) dusts under any circumstance.	2	4	8
35. Exposure to high noise levels from machine, powered tools and/ or customer processes;	3	4	12	Hearing protection must be worn in locations where it is identified as being required (also If you have to raise your voice to be heard by someone 2 metres or less away). Hearing protection must also be worn when using power tools. Contact your line manager if you are regularly entering areas where excessive noise levels are present. Health Surveillance may be provided for engineers who may be a risk from long term hearing damage.	2	4	8
36. Exposure to cold temperatures or wet weather conditions;	4	3	12	Avoid working outdoors in cold/ wet weather where possible. Engineer must wear waterproof/ cold weather clothing (High vis waterproof jacket & trousers etc.) if work outdoors cannot be avoided. Take regular breaks and hot drinks. For work in Cold Stores, follow cold store risk assessment and safe system of work.	2	3	6
37. Exposure to sunshine or high temperatures;	4	3	12	Ensure a supply of cool drinking water is available before starting. Avoid working in direct sunlight where possible. Take regular breaks and drink plenty of water. Engineers must apply sun-cream to exposed areas when working in strong direct sunlight.	2	3	6

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38. On site emergency situations;	3	4	12	If you have not been shown already, enquire with site contact to determine the emergency evacuation routes and procedures in the event of a fire. Enquire whether there are any other site emergencies which may arise and the actions that must be taken, e.g. release of a toxic chemical. Inform line manager of any potential site emergency situations other than fire that you are made aware of before proceeding.	2	4	8
39. Poor lighting in area;	3	4	12	Work must not be undertaken in areas of poor lighting. Inform site contact and agree a more suitable area. If equipment cannot be moved a suitable amount of additional lighting must be used. Contact line manager before proceeding if this cannot be achieved.	1	4	4
40. Drowning from falling into water;	3	5	15	Avoid work on or near water wherever possible. Work on or near water must only be undertaken if trained and competent to do so. Work on or near water risk assessment and safe system of work must be followed.	2	5	10
41. Work at or near the roadside;	3	5	15	Avoid work at or near the roadside wherever possible. Work at or near the roadside must only be undertaken if trained and competent to do so. Work at or near the roadside risk assessment and safe system of work must be followed.	2	5	10
42. Lone working;	3	5	15	Avoid lone working where possible. If lone working cannot be avoided ensure you follow company lone working procedures. Do not carry out any identified high risk activities if lone working.	2	5	10
43. Debris or chemicals entering eyes	3	5	15	Eye protection to the correct EN standard must be worn in locations where it is identified as being required	2	5	10

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