HAZARD & RISK ASSESSMENT SHEET – RAPTOR MV095J

DINGLI

HAZARD & RISK ASSESSMENT – ACCESS EQUIPMENT – VERTICAL MAST LIFT MV095J 25/10/2021

Electric Push Around Vertical Masts or Electric Drivable Vertical Masts.

Operator Requirements

Operator(s) must be trained and competent to use this equipment safely or hold the appropriate EWPAA ticket to operate.

Purpose For Which Equipment Is Designed

For safely elevating men, materials and tools to work at height not exceeding the manufacturer's SWL of the platform with all wheels and/or outriggers if fitted in contact with the ground. To be used on firm stable ground, capable of supporting the weight of the machine and not to exceed the maximum design incline when elevated. For use on slab smooth terrain and in zero wind environments only.

Hazards and Risks of Operating This Type Of Equipment

The hazards and risks detailed here are generic for all Vertical Mast Lifts and are intended to give the user a brief summary before operating this type of equipment. For any model specific hazards and/or further user information, reference should be made to the operating instructions supplied with the equipment.

Hazards & Risks	Suggested Control Measures
Machine not used in a serviceable condition.	Prior to daily use, the operator is to refer to the logbook on the machine and perform "Operator Daily Safety Checks", as detailed.
Hydraulics lowering without warning. Can cause serious crush injuries or death.	(i) Never work under raised hydraulics unless they are fully supported by a correctly positioned and approved safety device (most commonly a safety prop). (ii) Never put any part of your body through or under a raised Vertical Mast unless it is fully supported by an approved manufacturer's safety prop. (iii) If there is work to be conducted underneath the raised hydraulics and they cannot be supported by an "approved support device" a full assessment (ie a JSA) must be undertaken to identify all risks and specified control measures (in order to complete the work safely) MUST be implemented prior to the work being commenced.
Crush Hazards. Being crushed between the plant and fixed structures or materials whilst operating the Vertical Mast Lift with it's control panel removed from the machine.	(i) The operator MUST ensure that they are aware which is the front and which is the rear of the machine before activating the drive control lever to move the machine. (ii) Always stand to the side of the machine whilst operating. (iii) At no time stand in front or behind the Vertical Mast Lift. (iv) At no time ride on the machine in this configuration.

DINGLI

Tools or materials falling from platform.	Barricade work area and place appropriate warning signs.
Crush injuries while raising or lowering the platform.	Clear personnel from work area before raising or lowering platform.
Danger of Vertical Mast Lift to not be able To be safely slowed or stopped.	Operate at a speed appropriate for the ground conditions and do not exceed the gradiablity of the machine either going up or down a hill .
Vertical Mast Lift tipping or rolling over.	(i) Prior to operation, inspect the work site and assess the ground conditions where the machine will operate. (ii) Ensure the load is evenly distributed on the platform and within the manufacturer's SWL for that machine. (iii) Only drive the machine on a stable, level surface, capable of supporting the machine's weight, when elevated. Use outriggers if the machine is equipped with them. (iv) Never "tie off" the Vertical Mast Lift to any fixed structure or plant or use the Vertical Mast Lift as an anchor point for attaching rope, wire, cable, chain etc. (v) Never use the Vertical Mast Lift to lift, steady or pull any materials, structures or other objects. (vi) Never use or elevate the Vertical Mast Lift in winds that exceed the manufacturer's maximum wind rating. (vii) Never attach signs, banners, shade cloth etc. to the platform and exercise extreme caution when carrying items with a large surface area, such as roofing sheets or plasterboard as these can act like a "sail" and cause the machine to tip over in windy conditions. (viii) Never perform work that will subject the machine to a side force greater than the machine's rated side loading. (ix) Loads overhanging the handrails (such as pipes) can only be lifted using manufacturer approved racks fastened to the deck of the Vertical Mast Lift and may alter the machine's centre of gravity causing the machine to tip over. (x) If one or more of the wheels are not making full contact with the ground, exercise EXTREME caution and slowly lower the platform so that the machine may be repositioned so that all the wheels make full contact with the ground again. (xi) If driving near the edges of formations, drop offs or back filled areas, firstly assess that it is safe to do so and then constantly scrutinise the ground for possible soft spots.
Being trapped between the Vertical Mast Lift And/or materials or fixed structures.	(i) Avoid congested work areas. (ii) Remain within the confines of the platform when operating. (iii) Ensure sufficient clearance between the platform and any overhead or other obstructions. (iv) Keep clear of any obstructions that could interfere with the raising or lowering of the mast and watch for overhead obstructions. (v) NEVER overload the machine
Striking or coming into contact with sharp objects.	(i) Remove control panel cover before operating machine. (ii) Allow sufficient safe clearance from any protruding hazards.

Running into bystanders or unexpected movement of Vertical Mast Lift.	(i) Ensure all audible and visual alarms are operational. (ii) Clearly define the work area. (iii) Keep all other personnel clear of the work area.
Raising and lowering on uneven ground.	(i) Electric Vertical Mast Lift ONLY to be elevated on firm, level ground.
Electrocution from powerlines.	(i) Maintain mandatory minimum distances from powerlines as defined by Regulatory Authorities. (ii) Insulate all "live" powerlines within the work area. (iii) Barricade the work area and provide appropriate signage. (iv) Always remember to "Look Up And Live" whilst elevating.
Mast lift coming into contact with "live" wires.	(i) If the Mast lift does come into contact with "live" wires DO NOT touch or move the machine. (ii) Keep bystanders away from the area and ensure the power to the electrical line is turned off before touching or trying to move the machine. (iii) Drive the machine away from the hazard if it is safe to do so.
Electric shock from damaged cords.	(i) Inspect cords and plugs for any damage before use. (ii) Ensure cords are protected from falling objects and/or pinch points during operation. (iii) Do not pull cords around corners or sharp edges. (iv) Use with an RCD protected power supply. (v) Do not allow extension cords to hang over side of machine. (vi) Where equipped, extension cords must be plugged in at the base of the machine and tools run from the power outlet on the platform. (vii) Never overload the electrical circuit and exceed the maximum allowable amperage. (viii) Ensure all cords are correctly tagged and within date.
Recharging the machine.	(i) Only turn power source on after the cord has been plugged into the battery charger. (ii) Refer to Operator's Manual for more instructions.
Water near electrical equipment.	(i) Use weatherproof equipment and fittings outside. (ii) When cleaning the machine, do not use pressurised water near the control box or other electrical components.
Entanglement.	(i) Keep personnel clear during machine operation. (ii) Barricade off designated work area. (iii) Wear appropriate dress (ie no loose clothing). (iv) Ensure all long hair is tied back and out of harm's way.
Unintentional Movement in non-selected direction when slewed at 180^{o}	Coloured arrows on platform control decal indicate direction of travel
Equipment not in use.	(i) Do not leave Vertical Mast Lift fully elevated when not in use, as it could be subjected to excessive wind loads. (ii) If the Vertical Mast Lift must be left elevated and unattended for security reasons, it must be assessed as safe to do so and the platform is not to be raised more than one third of it's full extension height.

Unauthorised use.	(i) Remove the machine's ignition key. (iii) Padlock the battery isolate switch (if fitted).
Explosion. Explosion of gases, dust, vapours, liquids or other substances. Explosion during battery charging. .	(i) Charge the batteries in a clear, well ventilated area. (ii) Never charge the batteries near fire, flame or any other source of heat (as the batteries produce highly flammable and potentially explosive hydrogen gas during charging). (iii) 240V power must be turned off when plugging in or removing leads from the battery charger to minimise any possible explosion risk. (iv) Ensure there are NO naked flames or ignition sources. (v) NEVER smoke during charging.
High temperature or fire. Welding from the basket.	When welding from the basket, ensure that the machine is covered to prevent any sparks or hot fragments coming into contact with the batteries or the hydraulic hoses and always be aware of the fire risk in this situation.
Inclement weather.	Do not operate the Vertical Mast Lift in bad weather conditions, ie high winds, heavy rain, thunder and lightning etc.
Vertical Mast collapsing.	(i) Ensure NO personnel are working under the raised hydraulics. (ii) Barricade work area and place appropriate warning signs.
Shearing or cutting of body or limbs.	Never put any part of your body through or under a raised Vertical Mast unless it is absolutely necessary to do so and an approved manufacturer's safety prop is in place.
Slipping, tripping or falling out of the machine.	(i) Always remain within the confines of the platform. (ii) Never sit, stand or climb on the handrails. (iii) Never elevate the platform if the handrails have been removed. (iv) Never use ladders or scaffolding on the platform. (v) Never enter or exit the platform whilst it is elevated.
Slipping on the deck.	(i) Ensure the deck is clean and in good condition. (ii) Avoid oil, grease and mud on work boots. (iii) Maintain a clean platform, clear of rubbish and tools. (iv) Maintain a good foot and hand hold when climbing in and out of the platform.
Striking or hitting. Striking or hitting bystanders during travel.	(i) Ensure audible and visual travel alarms working correctly. (ii) Barricade work areas and place appropriate warning signs. (iii) Ensure operators are correctly trained and aware.
Suffocation. Exposure to exhaust fumes.	(i) Use confined space procedures, where applicable. (ii) Use equipment in well ventilated areas, where possible. (iii) If working in poorly ventilated areas, monitor exhaust fumes at regular intervals.
Noise. Exposure to noise.	Wear appropriate hearing protection.
Personal Protective Equipment (PPE). Eye or lung injuries possible.	Take precautions and wear the appropriate equipment for the type of environment you are working in i.e. using safety glasses and a particle mask if working in dusty conditions.

UV exposure. Excessive exposure to sunlight.	Take precautions that reduce the exposure of the skin to sunlight, such as: wearing a hat, long pants, long sleeves and regularly applying sunscreen to skin that is exposed to the sun.

Inadvertent Movement in non-selected direction when slewed 180º

Additional Hazards & Risks

As per manufacturer's operating handbook (supplied with each machine).

Note: This Hazard & Risk Assessment has been produced as an aid to workplace safety and is a combination of information from OH&S authorities, equipment manufacturers, suppliers, the industry and end users. It has been set out in this format as a user friendly, quick reference document. Each machine has a specific and more detailed explanation of the hazards and risks contained in the manufacturers operating handbook provided in the weatherproof container on the platform.

Disclaimer: In fulfilling its statutory obligations, Dingli Australia Pty Ltd has taken all reasonable precautions and exercised due diligence to ensure that it has provided all relevant information on the correct and safe use of the equipment. However, except as required by law and only to the extent so required, Dingli Australia does not make any representation, warranty or undertaking, expressed or implied, as to, or accept any responsibility or liability for, the accuracy or completeness of, or any errors in or omissions from, this Hazard & Risk Assessment Sheet.

Except as required by law and only to the extent so required, neither Dingli Australia or any of it's respective directors, officers, agents or employees shall in any way be liable directly or indirectly to any person or body for any loss or damages, costs or expenses whatever arising out of or in connection with the information contained in this Hazard & Risk Assessment Sheet.

DINGLI