

**TYPE** Loader, Skidsteer - Seated  
**MAKE** Case  
**MODEL** SV185  
**SERIAL NUMBER** NJM448634  
**ENGINE NUMBER** 0127266



**Report Number** PAES 20190802-1211  
**Date** 02-Aug-2019  
**Created By** Kristel Ulm  
**Assessor** Kristel Ulm  
**Assist. Assessor(s)**  
**Completed By** Kristel Ulm  
**Owner** Earthmoving Equipment Australia  
**Customer Name** Mainstream Recycling Pty Ltd  
**Assessment Purpose** Sale  
**State** NSW

## TABLE OF CONTENTS

<b>SECTION 1</b>	<b>IMPORTANT INFORMATION</b> Contains information outlining the scope and any limitations applicable to this Risk Management Report
<b>SECTION 2</b>	<b>MACHINE DETAILS</b> Contains standard machine specifications and details of any extras fitted
<b>SECTION 3</b>	<b>RISK ANALYSIS, RISK EVALUATION &amp; RISK TREATMENT</b> Contains details of the technique used to calculate risk ratings, time frame and risk treatments. Please refer to this information when reviewing and interpreting the information in section 4 & 5
<b>SECTION 4</b>	<b>RISK TREATMENTS REQUIRED</b> Contains detailed information regarding the risk treatments to be implemented including hazard, risk rating, time frame, relevant standards & legislative references
<b>SECTION 5</b>	<b>RISK TREATMENTS IN PLACE</b> Contains detailed information regarding the risk treatments in place including hazard, risk rating, relevant standards & legislative references
<b>SECTION 6</b>	<b>IMAGES AND NOTES</b> Contains images & any relevant information entered by the assessor

## SECTION 1 IMPORTANT INFORMATION

This report generated by Plant Assessor™ © Online Safety Systems on Friday, 2 Aug 2019 12:15 PM

This Risk Management Report has been prepared for -

(insert recipient name/company name)

This document has been prepared to cover the sale or transfer of this item of plant between the Company identified on the front cover and their named recipient. This report must not be used for any subsequent sale or transfer.

This document is provided to meet duty of care obligations as set out in relevant state and territory health and safety regulations for the supply of plant and the sale and transfer of plant.

The safety hazards associated with the operating and maintaining of this item of plant have been identified as far as practical by visual inspection. This item of plant is being sold in an "as-is" condition with known and unknown safety hazards. No physical testing has been conducted (eg. Wire rope tests, stress tests, structural/non-destructive tests, noise tests, vibration tests, brake tests, insulation tests etc.) unless stated otherwise in the notes.

This document is not intended to provide information on, nor warrant the mechanical, electrical or structural condition of this item of plant. Any information on standard features have been supplied through the manufacturer and should be used as a guide only until otherwise verified.

This item of plant should be further assessed, tested and inspected or dismantled as necessary to gauge any further hazards and /or risks relating to SPECIFIC WORKPLACE USE, which are currently unknown, in accordance with relevant standards, regulations and acts.

Under common law and relevant state and territory health and safety acts, regulations and codes of practice, there is a requirement for the plant owner, employer and operator to exercise a duty of care in the safe operation and maintenance of plant. Accordingly before this item of plant is supplied to, or used at any workplace it must be inspected to ensure it is in a fully operational, safe and serviceable condition and that operators and maintenance personnel are appropriately trained in the use & maintenance of this item of plant.

For further information regarding this report contact Online Safety Systems on 1300 72 88 52

## SECTION 2 MACHINE DETAILS

MACHINE DETAILS	- NOISE TEST RESULTS	1. Manufacturers specified noise level dBA	
		2. Ambient noise level dBA	
		3. Noise level - Operator position (high idle) dBA	
		4. Noise level - Operator position (low idle) dBA	
		5. Noise level LHS dBA @ m (high idle)	
		6. Noise level Front dBA @ m (high idle)	
		7. Noise level RHS dBA @ m (high idle)	
		8. Noise level Rear dBA @ m (high idle)	
	BUCKET	Buckets width, min-max (mm)	1.5 - 1.8
	CAPACITIES	Bucket capacity, min-max (m3)	0.33 - 0.67
		Fuel Tank Capacity (Litres)	75.5
		Rated operating load (kg)	840
		System pressure (bar)	
	DIMENSIONS/WEIGHTS	Dump height (mm)	2380

	Height (mm)	1970
	Length (mm)	3600 (max)
	Load height (mm)	
	Weight with loader (kg)	2950
	Width (mm)	1630
ENGINE	Engine Displacement (Litres)	2.2
	Engine Hours	
	Engine Make & Model	ISM N844T / M3
	Engine Number	
	Engine Petrol/Diesel	Diesel
	Number of Cylinders	4
	Power (kW@rpm)	42.1@2900
	Torque (Nm@rpm)	
HYDRAULICS	Torque rise (%)	
	Hydraulic Oil Flow (l/min)	
	Hydraulic Oil Reservoir Capacity (Litres)	
OPTIONS	Hydraulic Pump Type	Gear
	Ride control (Std/Opt/NA)	
PLANT CLASSIFICATIONS	Class	
	Year	
SAFETY STRUCTURES	FOPS Compliance No.	
	FOPS Serial No.	
	ROPS Compliance No.	
	ROPS Serial No.	
TRANSMISSION	Maximum speed, F/R (km/h)	11/11
	Transmission Type	
TYRES	Tyre Size	
WORK CAPABILITIES	Bucket breakout (kgf)	24.2kN
EXTRAS	Air Conditioning	
	Bucket - 4 in 1	
	FOPS	
	ROPS - Cabin	

## SECTION 3 RISK ANALYSIS / RISK EVALUATION

RISK ANALYSIS		CONSEQUENCE				
LIKELIHOOD		1. INSIGNIFICANT Dealt with by in house first aid	2. MINOR Treated by medical professionals, hospital out patients	3. MODERATE Significant non permanent injury overnight hospital stay	4. MAJOR Extensive permanent injury eg. Loss of fingers, extended hospital stay	5. CATASTROPHIC Death, permanent disabling injury eg. Loss of hand, quadriplegia
	A. Almost certain to occur in most circumstances	MEDIUM 8	HIGH 16	HIGH 18	CRITICAL 23	CRITICAL 25
	B. Likely to occur frequently	MEDIUM 7	MEDIUM 10	HIGH 17	HIGH 20	CRITICAL 24
	C. Possibly and likely to occur at sometime	LOW 3	MEDIUM 9	MEDIUM 12	HIGH 19	HIGH 22
	D. Unlikely to occur but could happen	LOW 2	LOW 5	MEDIUM 11	MEDIUM 14	HIGH 21
	E. May occur but only in rare circumstances	LOW 1	LOW 4	LOW 6	MEDIUM 13	MEDIUM 15

RISK EVALUATION	CRITICAL	Act immediately to mitigate risk. Implement risk treatment(s) in accordance with the risk treatment table below.
	HIGH	Act immediately to mitigate risk. Implement risk treatment(s) in accordance with the risk treatment table below. If the appropriate risk treatments are not immediately accessible establish interim risk treatment strategies. Permanent risk treatments must be implemented within one week.
	MEDIUM	Take reasonable steps to mitigate and monitor the risk. Implement risk treatment(s) in accordance with the risk treatment table below. Permanent risk treatments must be implemented within one month.
	LOW	Take reasonable steps to mitigate and monitor the risk. Implement risk treatment(s) in accordance with the risk treatment table below. Permanent risk treatments must be implemented within three months.

RISK TREATMENT	Selecting the most appropriate risk treatment option involves balancing the costs and efforts of implementation against the benefits derived, with regard to legal, regulatory and other requirements. (source AS/NZS ISO 31000:2009)	
	Eliminate	Eliminate the risk source.
	Substitute	Provide an alternative that is capable of performing the same task which is safer.
	Engineering	Provide or construct a physical barrier or guard.
	Administration	Develop policies, procedures, practices and guidelines in consultation with employees to mitigate the risk. Provide training, instruction and supervision about the risk source.
	Personal protective	Provide personal protective equipment to protect the individual from the risk source.





## SECTION 4 RISK TREATMENTS REQUIRED







This section of the report pertains to hazards created by use of this item of plant which currently do not have risk treatments in place. The risk treatments recommended in this section have been developed based on relevant Australian Standards, health & safety legislation, the hierarchy of risk treatment in accordance with the guidelines set forth in AS/NZS ISO 31000 – Risk Management and various other sources. The recommended risk treatment measures must be developed, implemented and validated as effective prior to the operation, maintenance or testing of this item of plant. Treatments applied must be dated and initialled adjacent the recommendations. All operators must read and understand the entire contents of this section prior to operating this item of plant.








HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating	Time Frame	Due Date	Date Rectified	Initial
-----------	---------------------	----------------------	------------	----------	----------------	---------








## SECTION 5 RISK TREATMENTS IN PLACE






This section of the report pertains to risk treatments currently in place on this item of plant. This section must be read in conjunction with the safety section of the manufacturers handbook. All operators must read and understand the entire contents of this section prior to operating this item of plant. These treatments or equivalent must remain in place at all times whilst this item of plant is in operation.








	HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
DELIVERY	 <b>CRUSHING</b> <b>Risk Treatments in Place:</b> SWMS Loading/Unloading Ensure that all operators follow approved SWMS/SOP when loading and unloading this machine to and from a flat top truck or trailer, low loader or tilt tray. <b>References:</b> Work Health & Safety Act & Regulations-	HIGH 22	MEDIUM 15
	 <b>CRUSHING</b> <b>Risk Treatments in Place:</b> SWMS Load Restraint Ensure that all operators follow the approved SWMS/SOP when restraining this machine for transport. <b>References:</b> Work Health & Safety Act & Regulations-	HIGH 22	MEDIUM 15
OPERATION	 <b>INCORRECT OPERATION</b> <b>Risk Treatments in Place:</b> Operator Competency Only persons who are qualified, trained and experienced and/or hold the relevant certification/license can operate this item of plant. If there is not a competent/licensed person available for operation of this item of plant then only persons who are supervised by a competent/licensed person can operate this item of plant. <b>References:</b> Work Health & Safety Act & Regulations-	CRITICAL 24	MEDIUM 15
	 <b>INCORRECT OPERATION</b> <b>Risk Treatments in Place:</b> Operation Handbook The manufacturer's operation handbook has been supplied for this item of plant.  This handbook must be available at all times to all potential operators and supervisory staff. All potential operators must read and be familiar with this handbook prior to operating.  A complete risk assessment/Job Safety Analysis must be undertaken covering all operating processes and environments associated with this item of plant. SWMS should be produced for specific tasks associated with use of this item of plant.	HIGH 22	MEDIUM 15








HAZARD(S)		Prelim. Risk Rating	Residual Risk Rating
	INCORRECT OPERATION	HIGH 22	MEDIUM 15
	<p><b>Risk Treatments in Place:</b> Pre-op Checklist Loader, Skidsteer - Seated</p> <p>A pre-operational checklist is available for this Loader, Skidsteer - Seated. All operators must complete this checklist prior to operating this Loader, Skidsteer - Seated.</p> <p><b>References:</b> Work Health &amp; Safety Act &amp; Regulations-</p>		
	INCORRECT OPERATION	HIGH 22	MEDIUM 15
	<p><b>Risk Treatments in Place:</b> SOP Loader, Skidsteer - Seated</p> <p>Safe Operation Procedures are available for this Loader, Skidsteer - Seated. The information in the Safe Operation Procedures must be followed at all times whilst operating this Loader, Skidsteer - Seated.</p> <p><b>References:</b> Work Health &amp; Safety Act &amp; Regulations-</p>		
	INCORRECT OPERATION	HIGH 22	MEDIUM 15
	<p><b>Risk Treatments in Place:</b> Control Labels</p> <p>All controls including all levers, buttons, pedals, switches etc. are clearly labelled as to their purpose and method of operation. These labels must be maintained in a clean and serviceable condition at all times.</p> <p><b>References:</b> AS/NZS4024.1905</p>		
	FALLING, CRUSHING	HIGH 22	MEDIUM 15
	<p><b>Risk Treatments in Place:</b> Passenger Seat Label</p> <p>This item of plant is fitted with a clear hazard warning label re: Operator only, No passengers. Passengers must not be carried at anytime. This label must be clear and legible at all times whilst this item of plant is in operation.</p> <p>Legislation: State Health &amp; Safety Legislation &amp; Regulation</p> <p><b>References:</b> AS1319-</p>		
	CRUSHING	HIGH 22	MEDIUM 15
	<p><b>Risk Treatments in Place:</b> ROPS seat belt label</p> <p>This item of plant is fitted with a ROPS and has an advisory label stating that "seatbelts must be worn".</p> <p>This label must be present, clean and legible at all times.</p> <p>All operators and passengers must wear seatbelts whilst on this item of plant.</p> <p><b>References:</b> AS2294, ISO3471</p>		
	ELECTROCUTION	HIGH 22	MEDIUM 15
	<p><b>Risk Treatments in Place:</b> Electrical Approach Distances</p> <p>This item of plant has a hazard warning label re: overhead electrical hazards and minimum approach distances fitted. These distances must be adhered to strictly. These labels and tables must be present, clear and legible at all times.</p> <p>Spotters are required when working within 5 metres of the minimum approach distance of any live electrical apparatus.</p> <p>Any encroach within the minimum approach distances must only occur if the following provisions have been met -</p> <ol style="list-style-type: none"> <li>1. The machine is designed to work within the minimum approach distances</li> <li>2. Permission has been granted by the electricity company and</li> <li>3. Safe systems of work have been documented and approved.</li> </ol> <p><b>References:</b> ISO31000</p>		







HAZARD(S)		Prelim. Risk Rating	Residual Risk Rating
	EXPLOSION, ELECTROCUTION	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place:</b> Dial Before You Dig (AUS) This item of plant is fitted with a clear hazard warning label re: underground services and advice to "Dial 1100 Before You Dig" to the operator work area. This advice must be adhered to strictly. Digging into an electricity cable or gas pipe can cause serious injury or death. Damaging a pipe or cable may also lead to isolating a community from emergency services such as fire, police or ambulance. This label must be present, clear and legible at all times. <b>References:</b> ISO31000			
	COLLISION	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place:</b> Phone Use label This item of plant is fitted with an instruction label advising that mobile phones must not be used whilst operating this machine. Accordingly all operators must not use a mobile phone at any time whilst operating machine. If phone use is necessary then operator must place machine in park configuration in a safe position prior to phone use. Operators MUST adhere to this advice at all times.  This label must be clear and legible at all times whilst this item of plant is in operation. <b>References:</b> AS1319- , ISO31000			
	POISONING, EXPLOSION, BURNS	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place:</b> Tank ID Label The tank(s) on this item of plant have clear, legible label(s) identifying their contents, and if appropriate any necessary controls re: the contents. These must be present, clear and legible at all times. (this includes radiator, hydraulic and petrol/diesel tanks) <b>References:</b> Work Health & Safety Act & Regulations-			
	CRUSHING	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place:</b> Hydraulic Coupler The loader boom is fitted with an automatic hydraulic attachment coupler i.e. is remotely operated from the operator position. The coupler is fitted with a safety device which detects and displays verification that coupler locking device is engaged. After engagement operators MUST manipulate the attachment to confirm correct engagement of coupler locking device.  Once fitted the safety device must be fully functional at all times whilst this item of plant is in operation.  This device must be checked as part of your daily pre-operational checklist, if any fault is detected at any time then operation must cease until the fault is rectified. <b>References:</b> ISO31000			
	INCORRECT OPERATION, CRUSHING	HIGH 22	HIGH 21
<b>Risk Treatments in Place:</b> Boom Rated Capacity Label This item of plant has a rated capacity label fitted to each side of the boom. Ensure that these labels are clear and legible at all times whilst this item of plant is in operation. Operators must not exceed this rated capacity at any time during operation. <b>References:</b> AS1418.8			
	FIRE	HIGH 21	MEDIUM 15
<b>Risk Treatments in Place:</b> Fire Extinguisher This item of plant is fitted with an approved and maintained fire extinguisher. Fire extinguisher(s) must be present and fully functional at all times. They must be readily accessible to the operator. Regular inspections must also be carried out in accordance with the manufacturer's requirements and AS 1851 – 1995			
	CRUSHING	HIGH 21	MEDIUM 15
<b>Risk Treatments in Place:</b> Loader Crush Zone Label The loader boom on this item of plant is fitted with a hazard warning label re: crush zone, keep clear. This label must be present and fully functional and serviceable at all times. <b>References:</b> ISO20474- , AS1319-			








HAZARD(S)		Prelim. Risk Rating	Residual Risk Rating
	HEARING LOSS	HIGH 19	MEDIUM 14
<b>Risk Treatments in Place:</b> Hearing Protection Label - Bystanders The hazard warning labels re: wearing of hearing protection for bystanders attached to this item of plant refer to the level of noise produced. Permanent hearing damage will result if hearing protection is not worn. These labels must be present, clear and legible at all times whilst this item of plant is in operation. <b>References:</b> AS/NZS1269, AS3781-			
	HEARING LOSS	HIGH 19	MEDIUM 14
<b>Risk Treatments in Place:</b> Hearing Protection Label - Operator The hazard warning label(s) re: wearing of hearing protection attached to this item of plant refer to the level of noise produced. Permanent hearing damage will result if hearing protection is not worn. These labels must be present, clear and legible at all times whilst this item of plant is in operation. <b>References:</b> AS/NZS1269, AS3781-			
	COLLISION, STRIKING, CRUSHING	HIGH 19	MEDIUM 14
<b>Risk Treatments in Place:</b> Tail Swing Label The rear of this item of plant has a hazard warning label re: general plant movement, tail swing, keep clear. It must be present and fully functional and serviceable at all times. <b>References:</b> ISO20474-			
	CRUSHING	MEDIUM 15	MEDIUM 15
<b>Risk Treatments in Place:</b> ROPS Label The warning label stating that the ROPS must not be damaged at any time (including cuts, drill holes and welds) must be present, clean and legible at all times. <b>References:</b> ISO3471			
	BURNS, ENTANGLEMENT, SHEARING	MEDIUM 14	MEDIUM 13
<b>Risk Treatments in Place:</b> Engine Guard Label The engine fan and alternator belts, pulleys and gears are guarded. These guards have clear legible hazard warning labels re do not open or remove guards while engine is running. These labels must be present, legible and easily seen at all times whilst this item of plant is in operation. <b>References:</b> AS1319- , AS/NZS4024.1201			
	COLLISION, CRUSHING	MEDIUM 12	LOW 6
<b>Risk Treatments in Place:</b> Warning Device (horn) This item of plant is fitted with a fully functional audible warning device such as a horn. This must be easily accessed by the operator, and easily identifiable by nearby pedestrians.  All operators should ensure the warning devices are functional at the start of each shift, by completing pre-start checklists. Warning devices should operate automatically where appropriate (eg reversing) <b>References:</b> ISO7731, ISO9533			
	COLLISION	MEDIUM 9	LOW 5
<b>Risk Treatments in Place:</b> Recovery Point Label This item of plant is fitted with a hazard warning label adjacent the recovery tow point which states "Recovery tow point – Read manufacturer's towing instructions before towing". Failure to do so could result in DEATH or SERIOUS INJURY.  This label must be clear and legible at all times whilst this item of plant is in operation. <b>References:</b> ISO31000			




HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
 COLLISION, CRUSHING	CRITICAL 24	MEDIUM 15
<b>Risk Treatments in Place: Park Brake</b> This item of plant is fitted with a fully functional park (hand) brake which meets the following requirements – a) is separate to the service brakes b) has a device which maintains the brake in the on position until intentionally disengaged & c) requires at least two separate and distinct movements to disengage the park brake.  The park brake must be regularly inspected and tested. These inspections and tests must be documented as part of your plant safety programme. <b>References:</b> AS2958		
 CRUSHING	CRITICAL 24	MEDIUM 15
<b>Risk Treatments in Place: Level Lift Loader</b> This item of plant is fitted with a level lift type loader. The level lift functionality must be operational at all times whilst this item of plant is in operation.  OR  This item of plant is fitted with a FOPS to control the crushing hazard created by the non level lift loader. The FOPS must be present at all times whilst this item of plant is in operation and a restraining device must be used to hold loads in place which a risk assessment indicates are unstable and may fall. <b>References:</b> ISO20474-		
 STRIKING, BURNS	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place: Hydraulic Hoses</b> This item of plant has hydraulic hoses. These hoses must be inspected each day or before each use for wear and tear. If there are visible signs of wear immediate action must be taken to control the risk arising from this wear. These inspections must be documented.  Hydraulic fluid at high pressure can penetrate the skin, never use any part of your body to check for leaks. If oil penetrates the skin seek medical advice immediately. Always use a piece of cardboard or similar to check for suspected leaks.  Hydraulic pressure can be stored and is a hazard. Before disconnection or connection of hydraulic hoses complete the following steps -  1. Stop engine 2. Keep all bystanders clear of the work area 3. Refer to operators manual as to methods to release pressure 4. Wait 5 minutes <b>References:</b> AS2671, AS4024		
 CRUSHING, NON COMPLIANCE	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place: Control Lock out</b> The primary operator controls are fitted with an isolation device which meets the following requirements - a) Must be engaged to allow entry & exit of the machine b) Is not easily bypassed.  This device deactivates the primary operator controls. This must be employed during entry, exit and while performing maintenance on this item of plant. This device must be fully functional at all times whilst this item of plant is in operation. <b>References:</b> ISO10968		
 STRIKING, ENTANGLEMENT, COLLISION, CRUSHING	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place: Neutral Start</b> This item of plant has neutral start control in place. It must be fully functional and serviceable at all times whilst this item of plant is in operation. <b>References:</b> AS4024.1603		

HAZARD(S)		Prelim. Risk Rating	Residual Risk Rating
	CRUSHING	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place: Seat Belt</b> This item of plant is fitted with an operator seat belt. This seat belt must be free from damage, and permanently and sturdily attached at all times whilst this item of plant is in operation. Operators must use this seat belt at all times during operation. <b>References:</b> ISO6683			
	CRUSHING	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place: Earthmoving ROPS</b> A Roll Over Protective Structure (ROPS) to AS 2294, ISO 3471, ISO 12117.1 or 2 or SAE J1040 is fitted to this item of plant. A permanent label stating this standard must be attached to the structure at all times. It must also carry a warning label re: wearing of seat belts at all times whilst this item of plant is in operation, and accordingly seat belts must be worn at all times during operation. <b>References:</b> AS2294, ISO3471			
	COLLISION, CRUSHING	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place: Reverse Movement Alarm</b> A reverse movement sensor alarm is fitted to this item of plant. It must be fully functional and serviceable at all times whilst this item of plant is in operation. <b>References:</b> ISO7731, ISO9533			
	COLLISION, POOR VISIBILITY	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place: Machine Lights</b> This item of plant is fitted with self contained lighting. All of these lights must be fully functional and serviceable whilst this item of plant is in operation in areas of reduced light. If any of these lights stop working the operation must cease immediately and the faulty light be repaired before operation can continue in the areas of reduced light. <b>References:</b> ISO20474-			
	ENTANGLEMENT	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place: Engine Guards</b> The engine fan and alternator belts, pulleys and gears are guarded. These guards must be present and fully functional and serviceable at all times whilst this item of plant is in operation. <b>References:</b> AS/NZS4024.1601			
	CRUSHING	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place: Loader Prop</b> The loader boom on this item of plant is fitted with a safety support and instruction label. These must be fully functional and serviceable at all times. The support must be used when accessing the area under the boom and bucket for maintenance or any other purpose. <b>References:</b> ISO20474-			
	COLLISION	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place: Beacon</b> This item of plant is fitted with a safety beacon. This beacon must meet the following criteria at all times whilst this item of plant fitted is in operation - <ul style="list-style-type: none"> <li>- Is visible up to 200m in all directions (allowing for intermittent obstruction from the plant structure whilst the plant is in operation)</li> <li>- Is fitted in the most appropriate location on machine to maximise visibility without risking continual damage</li> </ul> NOTE: more than one beacon may be fitted to meet these criteria. <b>References:</b> ISO20474-			

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
 <b>OPERATIONAL MALFUNCTION</b> <b>Risk Treatments in Place:</b> Plant Modification The plant is in original condition.	HIGH 22	LOW 2
 <b>ENTRAPMENT</b> <b>Risk Treatments in Place:</b> Two Operator Exits The operator cabin/work area on this item of plant has a minimum of two (2) possible exits. These must be functional and accessible at all times whenever the item of plant is manned, whether during operation or maintenance activities. <b>References:</b> AS3868	HIGH 21	MEDIUM 15
 <b>POOR VISIBILITY</b> <b>Risk Treatments in Place:</b> Windscreen Wipers The windscreen wipers and washers fitted to this item of plant must be fully functional at all times. <b>References:</b> AS/NZS4024.1201	HIGH 21	MEDIUM 15
 <b>CRUSHING</b> <b>Risk Treatments in Place:</b> FOPS General This item of plant is fitted with a Level I Falling Objects Protective Structure (FOPS). This structure is designed to protect the operator from small falling objects (e.g. bricks, small concrete blocks, hand tools)  Before operating this item of plant a task based risk assessment must be conducted to determine the level of FOPS required. Level I - withstands 1,365 joules (e.g. 20kgs @ 7m drop, 70kgs @ 2m drop) - operations such as highway maintenance, landscaping and other construction site services Level II - withstands 11,600 joules (e.g. 200kgs @ 6m drop, 394kgs @ 3m drop) - operations such as site clearing, overhead demolition or forestry  This task risk assessment must be undertaken before each operation, in particular when the item of plant is moved to a new location, even if it is within the same site. <b>References:</b> AS2294, ISO10262, ISO3449	HIGH 21	LOW 5
 <b>INCORRECT OPERATION</b> <b>Risk Treatments in Place:</b> Intuitive Controls The controls fitted to this item of plant are orientated so that the movement of the control is consistent with the action of the machine e.g. moving a control lever to the left results in the machine turning to the left. This design feature must be maintained at all times whilst this item of plant is in operation. <b>References:</b> AS/NZS4024.1906	HIGH 20	MEDIUM 14
 <b>STRAINS</b> <b>Risk Treatments in Place:</b> Controls Ergonomics All controls including all levers, buttons, pedals, switches etc, are placed near the operator work position and are easy to reach and operate during the execution of the operator's normal duties. This applies for all persons within the 95th percentile of the normal population distribution. <b>References:</b> AS/NZS4024.1901	HIGH 19	LOW 5
 <b>STRIKING, BURNS</b> <b>Risk Treatments in Place:</b> Hydraulic Hose Failure Shield This item of plant is fitted with a sturdy, permanent shield(s) between the hydraulic hoses and any body parts of the operator to provide protection during a hose or component failure. This shield(s) must be present and fully functional at all times whilst this item of plant is in operation. <b>References:</b> AS2671, AS4024, ISO4413	HIGH 19	LOW 5

HAZARD(S)		Prelim. Risk Rating	Residual Risk Rating
	SLIPPING, INCORRECT OPERATION	HIGH 17	LOW 6
<b>Risk Treatments in Place:</b> Control Levers/Pedals/Buttons All controls including all levers, buttons, pedals, switches etc. must be kept non-slip and free from damage at all times. <b>References:</b> AS/NZS4024.1901			
	SLIPPING	MEDIUM 12	LOW 6
<b>Risk Treatments in Place:</b> Operator Work Area Access/Egress Safe access and egress to the cabin/work area(s) must be maintained at all times whilst this item of plant is in operation. It must be non slip, free from damage, located at a height so as to not cause undue body stresses and strains with three points of contact available to personnel at all times.  All personnel must - <ol style="list-style-type: none"> <li>1. Always face the item of plant during access and egress.</li> <li>2. Always maintain three points of contact during access and egress.</li> <li>3. Never carry an object(s) in his/her hand(s) during access and egress.</li> <li>4. Never jump off machine.</li> </ol> <b>References:</b> AS3868			
	SLIPPING, FALLING	MEDIUM 12	LOW 6
<b>Risk Treatments in Place:</b> Access/Egress Instruction Label An instruction label is fitted adjacent access/egress areas to advise all personnel of the following - <ol style="list-style-type: none"> <li>1. Always face the item of plant during access and egress.</li> <li>2. Always maintain three points of contact during access and egress.</li> <li>3. Ensure the steps are clean.</li> <li>4. Never jump off machine.</li> </ol> This label must be clear and legible at all times whilst this item of plant is in operation. <b>References:</b> ISO31000			
	POOR VISIBILITY, COLLISION	MEDIUM 12	MEDIUM 11
<b>Risk Treatments in Place:</b> Operator Mirror This item of plant is fitted with at least one rear vision mirror. This mirror must be fully functional and clean at all times whilst this item of plant is in operation. <b>References:</b> ISO5006			
	ELECTRIC SHOCK, BURNS	MEDIUM 12	LOW 6
<b>Risk Treatments in Place:</b> Battery Cover All batteries fitted to this item of plant are constrained to prevent displacement & fitted with a permanent sturdy cover which allows for ventilation. The constraint and cover must be present and fully functional and serviceable at all times whilst this item of plant is in operation. <b>References:</b> AS/NZS4024.1201			
	SLIPPING, INCORRECT OPERATION	MEDIUM 9	LOW 4
<b>Risk Treatments in Place:</b> Operator Floor All work area floors are non-slip and free from damage & debris.  Floor area must remain non-slip and free from damage & debris, including rubbish, tools and other items, at all times whilst this item of plant is in use. <b>References:</b> AS/NZS4024.1201, ISO20474-			

HAZARD(S)		Prelim. Risk Rating	Residual Risk Rating
	STRAINS	MEDIUM 9	LOW 1
<b>Risk Treatments in Place:</b> Operator Seat The operator seat fitted to this item of plant must remain free from damage and tears, and be permanently and securely fitted at all times. <b>References:</b> AS/NZS4024.1401 , ISO20474-			
	HEAT STROKE, DEHYDRATION	MEDIUM 9	LOW 4
<b>Risk Treatments in Place:</b> Air Conditioning This item of plant is fitted with an air conditioned cabin. This air conditioned cabin helps control the air quality and temperature for the operator and also provides shade from the sun. The air conditioner must be fully functional and serviceable at all times whilst this item of plant is in operation. <b>References:</b> ISO31000			
	BURNS	MEDIUM 9	LOW 5
<b>Risk Treatments in Place:</b> Exhaust The engine exhaust on this item of plant is fitted with a guard to prevent injury to any person and control the risk of initiating a fire. It must be present and fully functional and serviceable at all times whilst this item of plant is in operation. <b>References:</b> AS/NZS4024.1201			
	CURRENT OR PREVIOUS STRUCTURAL DAMAGE	CRITICAL 25	MEDIUM 15
<b>Risk Treatments in Place:</b> Structural Integrity Regular checks for structural damage must be undertaken. Look for cracks in frames/chassis (current or repaired), bends or damage to structural components, etc.			
	INCORRECT OPERATION	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place:</b> Maintenance Manual The manufacturer's maintenance manual(s) has been supplied for this item of plant  These manual(s) must be available at all times to all users and maintenance staff of this item of plant. All users and maintenance staff must read and be familiar with these handbook(s) prior to maintaining or repairing this item of plant.  A complete risk assessment/JSEA must be undertaken covering all inspection, maintenance, servicing and transportation requirements of this piece of plant prior to use.  A full assessment of the competence of people using the book(s) must also be undertaken <b>References:</b> Work Health & Safety Act & Regulations-			
	STRIKING, BURNS	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place:</b> Hydraulic Damage The hydraulic hoses to this item of plant are free from damage and protected against damage arising from contact with the plant structure. Ensure that hoses are free from damage and that protection is in place at all times whilst this item of plant is in operation. Inspection of the hydraulic hoses and protection system should be conducted regularly and documented as part of your plant safety programme. <b>References:</b> AS2671, AS4024, ISO4413			
	CRUSHING	HIGH 22	MEDIUM 15
<b>Risk Treatments in Place:</b> ROPS Damage The Roll Over Protective Structure (ROPS) fitted to this item of plant must remain free from damage at all times whilst this item of plant is in operation. <b>References:</b> AS2294, ISO3471			

HAZARD(S)		Prelim. Risk Rating	Residual Risk Rating
	<b>OPERATIONAL MALFUNCTION</b> <b>Risk Treatments in Place:</b> Major Fluid Leaks This item of plant must remain free from leaks at all times whilst in operation (this includes engine, transmission, cooling system, air, fuel, drive line, wheel hubs, steering and hydraulics). Development of a major leak will require this item of plant to be stood-down until repaired. Minor leaks detected must be repaired within 1-14 days. <b>References:</b> ISO31000	HIGH 22	LOW 2
	 <b>OPERATIONAL MALFUNCTION</b> <b>Risk Treatments in Place:</b> Service Records Service and maintenance records are available for this item of plant. These records must continue to be maintained and stored in a secure area as part of your plant safety management programme. This programme includes the undertaking of regular inspections concerning the general condition of the item of plant including (but not limited to) tyre condition, oil levels and wear and tear on critical items such as brakes and steering, etc. All OEM prescribed, scheduled and non scheduled maintenance must also be documented as part of these records and attended to within a risk management framework. <b>References:</b> Work Health & Safety Act & Regulations-	HIGH 21	MEDIUM 15
	 <b>POOR VISIBILITY</b> <b>Risk Treatments in Place:</b> Windows & Screens Ensure the cabin/work area safety glass windows and screens are kept clean and free from cracks and other damage at all times whilst this item of plant is in use. <b>References:</b> ISO20474- , AS/NZS4024.1201	MEDIUM 9	LOW 4

## SECTION 6 IMAGES AND NOTES

### IMAGES

- No Images Available -

### NOTES

- No Notes Available -