



Australian Risk Assessment Configuration Record

Risk Assessment: SJ12E – SJ16E – SJ20E Risk Assessment

Serial Ranges: A601000906 - A601999999

Risk Assessment Number: 249730

Basis of Risk Assessment: SKJ002-030-001-2

Revision	Date	Operations Manual Reviewed	Impact Statement
249730AA	16 Dec 2022	243454AB	Initial Release.
249730AB	21 May 2024	243454AC	Manual review confirms no change to risk assessment.



RISK ASSESSMENT OF PLANT

DATE OF ASSESSMENT: 16/08/2022	MANUFACTURER: SKYJACK		ORGANISATION:	SKYJACK AUSTRALIA
	MODEL: SJ12E-SJ16E-SJ20E			
PRELIMINARY ASSESSMENT FOR REVIEW	RISK ASSESSMENT METHOD USED: SAFETY REVIEW		ADDRESS:	LOT 272 HONEYCOMB DVE, EASTERN CREEK, NSW

This Hazard Identification and Risk Assessment has been prepared based on information available at the date of publication.

The assessment must be reviewed by all stakeholders and revised:

- (a) Having regard to the options and general arrangement of miscellaneous equipment/facilities that may be provided on the plant according to the end users requirements or specification;
- (b) According to the particular circumstances under which the plant is used and maintained;
- (c) As new hazards are identified or as risks are reassessed;
- (d) As new or revised control measures are implemented;
- (e) As and when work procedures are altered.

Although every attempt has been made to identify reasonably foreseeable circumstances no guarantee as to the completeness of this assessment is implied or provided.

This document is not to be interpreted as a compliance assessment; a separate verification should be undertaken on items of plant to determine if they comply with all relevant Australian Standards.

Please consult the relevant Work Health Safety Regulations for information regarding obligations of parties to conduct their own risk assessment. This risk assessment has been prepared on behalf of the organisation listed above and cannot be used by other parties to discharge any duties they may have under relevant law.

Documentation

Operators manual: 243762AAA, 243454AB
Maintenance Manual: 241914AC

Repair manual:
Spare parts manual: 241913ACA
Manual Supplements: 0

Description

Self-propelled	Vertical Mast.	Type 3	Group A	Battery powered	Non-insulated
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Sound power level 70 < dBA at work platform
70 < dBA at ground controls

Safety Devices

Load Control	Position Control	Moment Limiting	Slope indication	Outriggers	Wheels	Speed Control	Elevated Drive Speed control	Motion Alarm	Pothole protection
Load Sensing	NA	NA	Slope Alarm & interlock	NA	Filled Tyres			Motion Alarm	Passive

Options

Secondary Guarding	Material Handler	Platform Mesh	Folding Guardrails	Work Lighting	Hydraulic AC Generator	Detachable Work Platform
Active 2ndry Guarding	Yes	NA	NA	NA	NA	NA

Material handler devices include: Tube caddy (223575) and Pipe rack (223586)

Risk Ranking Matrix

Reference: ISO TR14121.1 Clause 6.5.2

Severity Se	Class C1 (Fr+Pr+Av)					Frequency Fr	Probability Pr		Avoidance Av
	4	5-7	8-10	11-13	14-15				
Death, losing an eye or arm	4	MEDIUM	HIGH	HIGH	HIGH	≥1 h	5	very high	5
Permanent, losing fingers	3	LOW	MEDIUM	HIGH	HIGH	<1 h - ≥ 24h	5	likely	4
Reversible, medical attention	2	LOW	LOW	MEDIUM	HIGH	<24 h - ≥ 2w	4	possible	3
Reversible, first aid.	1	LOW	LOW	LOW	MEDIUM	<2 w - ≥ 1y	3	rarely	2
									3

- 1 Scratches, bruises that are cured by first aid.
- 2 More severe injury, bruises, stabbing, which require medical attention from professionals
- 3 Normally irreversible injury. It will be slightly more difficult to continue work after healing
- 4 Irreversible injury in such a way that it will very difficult to continue work, if at all.

- 2 The interval between exposure is more than 1 year.
- 3 The interval between exposure is more than 2 weeks but less than or equal to 1 year.
- 4 The interval between exposure is more than 1 day but less than or equal to 2 weeks.
- 5 The interval between exposure is more than 1 hour but less than or equal to a 1 day.

Probability: The probability of the occurrence of the hazardous event.

- 1 Negligible - e.g. the component never fails, no possibility of human error.
- 2 Rarely - e.g. it is unlikely that the component fails, human error unlikely.
- 3 Possible - e.g. the component can fail, human error is possible.
- 4 Likely - component will probably fail, human error is likely.
- 5 Very High - component is not made for the application, human error is highly likely.

- 1 Likely - e.g. contact with a moving part behind an interlock guard will be avoided in most cases - if the interlock fails.
- 2 Possible - e.g. where there is sufficient space to avoid moving machinery.
- 3 Impossible - e.g. it is impossible to avoid the sudden appearance of a laser beam.

The strengths of this method are:

- The analysis provides a ranking of risk.
- The method encourages the risk analyst or team to understand the hazard in order to rank the significance of the risk.

The major problems involved in applying such a method are:

- People guess levels of likelihood and consequence without sufficient analysis of the hazard or existing controls.
- The analysis methodology is applied to a risk where the circumstances of occurrence are rare. For example, suppose a person was exposed to a hazard for a short period of time; once every 10 years. Suppose also that that hazard was almost certain to cause fatality upon each exposure. It would be incorrect to use a simple methodology whereby the likelihood of the consequences was ranked relatively lowly at once in 10 years. In that particular example the likelihood of fatality is certain once exposure occurs. An amended methodology will be required to deal with those circumstances such as the fine risk score calculator.

WARNING

The risk ratings used in this document are intended to stimulate discussion from the parties affected by the use of the subject MEWP; they shall not be adopted as the most appropriate risk rating without sufficient consideration by the designer, manufacturer, management or user of the plant.

NOTES:

- 1 SKYJACK Refers to SKYJACK AUSTRALIA Pty Ltd
- 2 MGMT Refers to the person legally responsible for the use of the unit; it generally means the employer, the company or the legal entity that has responsibility under the Health and Safety legislation in the State or Territory in which the unit is being used.
- 3 OP Is the operator, authorized by management and responsible for the operation and preoperational inspection and use of the unit.
- 4 MGMT/OP Is a combination of both management and operators.
- 5 MEWP The term MEWP refers to the Mobile Elevating Work Platform.

GENERAL NOTES:

- 1 This Risk Assessment has been prepared for SKYJACK AUSTRALIA for the subject plant and is not transferable to other plant or parties.
- 2 Item Numbers refer to hazards, which can exist if the unit is not adequately maintained – e.g. Guards not fitted, gauges fail to correctly display readings etc. The measures listed to control risks arising from this type of hazard can include reference to operating procedures. Operating Procedures cannot ensure this Hazard Identification and Risk Assessment document has been prepared based on information available at the date of publication. In order to ensure this Hazard Identification, Risk Assessment, Risk Control document is both accurate and complete; "Management of the Unit" must review it:
 - (a) According to the particular circumstances under which the plant and/or process is used and maintained,
 - (b) As new hazards are identified or as risks are re-assessed,
 - (c) As new or revised control measures are implemented,
 - (d) As and when work procedures are altered.

Although every attempt has been made to identify reasonably foreseeable circumstances, no guarantee as to the completeness of this assessment is implied or provided.
- 4 "Preliminary" is placed in this document to indicate that the Controls listed in Columns C and E are a practicable way of controlling the risks arising out of the Hazards listed in Column B. "Preliminary" status remains in place until the "Management of the Unit" agrees that the assessment is complete and that the controls proposed are practicable.
- 5 Column H has been provided on the document to allow the "Management of the Unit" to record that their Hazard Identification, Risk Assessment, and

Risk Control process has been completed and that all controls are in place and operating. When Column H is completed, the document becomes a record of the completeness of the process and the documentation (subject to any changes which need to be further reviewed in accordance with Item 3 above).

6 The use of the word "AND" or "&" in the supplementary risk control measure column is intended to mean that the combination of risk control measures are to be implemented on the whole not in part.

7 The determination of risk, column D, is a subjective assessment based on the following factors: exposure – the number of times humans are exposed to the risk, the probability of the hazard arising, and the consequence of the hazard – death or serious injury.

Risk Management

Risk management is a five-step process for controlling exposure to health and safety risks associated with hazards in the workplace. To properly manage exposure to risks, a person must:

- (a) Identify hazards;*
- (b) Assess risks that may result because of the hazards;*
- (c) Decide on appropriate control measures to prevent or minimise the level of the risks;*
- (d) Implement control measures; and*
- (e) Monitor and review the effectiveness of the measures.*

Hazards and risks are NOT the same thing.

*A **hazard** is something with the potential to cause harm. This can include substances, plant, work processes or other aspects of the work environment.*

***Risk** is the likelihood that death, injury or illness might result because of the hazard.*

As examples:

- The hazard is electricity—the risk is the likelihood that a worker is electrocuted because of exposure to electrical wires that are inadequately insulated.*
- The hazard is a 40 kg bag—the risk is the likelihood that a worker might suffer back strain from manually lifting 40 kg bags.*
- The hazard is carbon monoxide—the risk is the likelihood that a worker might suffer carbon monoxide poisoning because they are using a petrol-operated pump in a well.*

When undertaking risk management:

- (a) Involve workers in the process; (it is legal requirement that all stakeholders are consulted)*
- (b) Don't use it to justify a decision that has already been made;*
- (c) Consider good industry practice; and be aware of the current State of Knowledge in relation to the hazard*
- (d) Record any risk management activities undertaken.*

Under the relevant Workplace Health and Safety Acts, to properly manage exposure to risks, a person should consider the appropriateness of control measures in the following order (sometimes referred to as the 'Hierarchy of Control'):

- (a) Eliminating the hazard or preventing the risk; or*

(b) *If eliminating the hazard or preventing the risk is not possible, minimising the risk by measures that must be considered in the following order:*

- (i) *Substituting the hazard giving rise to the risk with a hazard giving rise to a lesser risk;*
- (ii) *Isolating the hazard giving rise to the risk from anyone who may be at risk;*
- (iii) *Minimising the risk by engineering means;*
- (iv) *Applying administrative measures; and*
- (v) *Using personal protective equipment.*

Examples of subparagraph (iii)—redesigning work, plant, equipment, components or premises.

Examples of subparagraph (iv)—training, reasonable hours of work.

The higher in the hierarchy of control, the better and more reliable the control is. In practice, several control options are often used in combination. Personal protective equipment is usually used in conjunction with other control measures.

Control measures must be implemented before work commences.

RISK ASSESSMENT: SKYJACK SIZE-S116F-S120E										PRELIMINARY (Refer to "Notes" section)																																		
A		B		C						D1		D2		D		E		F		G		H																						
Hazard No.		Hazard Description -		Is there any risk?																																								
(the situation or parts of plant which could cause injury or illness)				Describe the risk control measures ALREADY implemented				Severity		Frequency		Probability		Avoidance		Class		Risk Level		Are the control measures practicable? Yes/No		For Action by Whom		Confirmation that the necessary action has been completed																				
General – Device selection and use																																												
0.1				Persons could be injured when following a poor system of work in relation to the operation of this device.	Operating manual provided, part number 243762AAA, 243454AB which includes maintenance instructions, detailing specifications, limitations and residual hazards associated with the operation of the machine. Provision for operators manual storage included on the platform. Operating, service & parts manuals provided, part number 243762AAA, 243454AB, 241914AC & 241913ACA which includes maintenance instructions, detailing specifications, limitations and residual hazards associated with the operation of the machine. Service manuals provided, part number 241914AC which includes maintenance instructions, detailing specifications, limitations and residual hazards associated with inspection and maintenance of the machine.																		4	5	4	3	12	HIGH		Prepare a documented system of work having regard to the operating specification and limitations as detailed in the owners operating manual. Verify that the procedure is appropriate having regard to alternative methods that may be available. Verify that the procedure covers all modes of operation of the MEWP (including emergency procedures and maintenance) and is a practicable solution.	Yes	MGMT/OP												
0.2				Persons could be injured if the device is not suitable for the required task.	Standard machine specifications included in the operators manual [Section 7].																		4	5	3	3	11	HIGH		Ensure that the unit is adequately rated in terms of capacity, height and reach, rated inclination and mass; having regard to the required task, the site conditions and the environment. Ensure the unit is suitable to operate in the work environment having regard to the possibility of exhaust emissions, exposure to wind, ground/floor capacity and proximity live electrical apparatus. Source another MEWP if the specifications do not match the requirements for the task.	Yes	MGMT/OP												
0.3				Persons could be injured or injure others when operating the unit without sufficient information, instruction, training and supervision.	Operating manual provided, part number 243762AAA, 243454AB which includes maintenance instructions, detailing specifications, limitations and residual hazards associated with the operation of the machine. Warning in operator's manual [p. 9] to operate the machine in accordance with the manual. Warning in manual [p. 16, 21] that the MEWP is only to be used by personnel who hold the necessary work permits and/or licenses. Warning in operator's manual [p. 21] that the MEWP is only to be used by authorised personnel who are qualified, trained and certified to operate the machine. Warning in operator's manual [p. 9] that only personnel who have read and understand the operating instructions contained within the operator's manual are permitted to use the MEWP. Warning in operator's manual [p. 16] that the operator must obey all laws, regulations and job site rules. Warning in operator's manual [p. 9] that all personnel shall read, understand and follow the instructions in the manual before operating or performing maintenance on the MEWP. Minimum operator qualifications are listed in the operator's manual [p. 21].																		4	4	3	3	10	HIGH		Ensure that all Standard Work Procedures (SWP's) are effectively implemented. Ensure that the operator(s) have read and understand the training and instructions (which must include Manufacturer's and local information). Ensure that the MEWP is only operated by personnel who are appropriately trained and certified.	Yes	MGMT/OP												
0.4				Injury as a result of site specific hazards.	List of typical site specific hazards to be checked is included in the operator's manual [p. 19]. AS2550.10 – 2006 section 4 includes a list of site checks to be undertaken by the operator.																		4	4	3	1	8	HIGH		Ensure that operators are aware of the requirements of AS2550.10. Implement appropriate training to enable operators to identify particular hazards that may be encountered at the site and implement actions to ensure that they are addressed by appropriate means.	Yes	MGMT/OP												

RISK ASSESSMENT: SKYJACK SIZE-S116F-S120E										PRELIMINARY (Refer to "Notes" section)			
A	B	C				D1	D2	D	E	F	G	H	
Hazard No.	Hazard Description -	Is there any risk?	Severity	Frequency	Probability	Avoidance	Class	Risk Level		Are the control measures practicable?	For Action by Whom	Confirmation that the necessary action has been completed	
	(the situation or parts of plant which could cause injury or illness)	Describe the risk control measures ALREADY implemented						Proposed SUPPLEMENTARY risk control measure		Yes/No			
		Warning in operator's manual [p. 19] that a survey of the work area should be performed for hazards such as electric power lines, drop offs, concealed holes and overhead obstructions. Warning in operator's manual [p. 21] that the operator must know all national, state or territorial and local rules which apply to operation of the MEWP and jobsite.						HIGH	Ensure a site hazard assessment is conducted before use on each site.	Yes	MGMT/OP		
								HIGH	Ensure appropriate systems are implemented to eliminate the hazards or adequately control the risks associated with the hazards identified.	Yes	MGMT/OP		
								HIGH	Ensure operators feedback information relating to new hazards they have identified so they may be reviewed and implemented in a training package.	Yes	MGMT/OP		
								HIGH	Ensure that if operators are uncertain how to address a particular site hazard that they seek advice from a competent person.	Yes	OP		
								HIGH	Ensure operators are trained in emergency retrieval and operation.	Yes	MGMT/OP		
0.5	Hazards arising from lack of, or inadequate emergency procedures.	Emergency retrieval procedures are detailed in the operator's manual [p. 55]. Decal fitted adjacent to the emergency controls explaining the operation [173237].	4	1	3	3	7	HIGH	Ensure that refresher training is undertaken by operators on a regular basis.	Yes	MGMT/OP		
								HIGH	Ensure that ground personnel are present who are trained in the emergency lowering procedures.	Yes	MGMT/OP		
0.6	Hazards arising from working alone.	Instructions provided in AS2550.10 – 2006 clause 5.14 regarding the assistance that shall be available from ground support personnel prior to operation.	4	3	3	1	7	HIGH	Establish protocols and procedures to ensure a timely and appropriate response in emergencies in accordance with AS2550.10 requirements.	Yes	MGMT		
								HIGH	Ensure that workers do not work solo. If not practicable ensure that all operators working solo are equipped with portable communications equipment.	Yes	MGMT		
								HIGH	Ensure all operators report in when attending site and on a routine basis thereafter.	Yes	MGMT		
0.7	Personnel are injured due to unauthorised use.	Key switch provided in accordance with AS1418.10 – 2011 clause 2.2.14. Instructions provided in operator's manual [p. 18] to secure the MEWP when not in use against unauthorised use.	3	2	3	1	6	HIGH	Ensure that workplace procedures are established regarding securing the MEWP at the end of each day.	Yes	MGMT/OP		
		Battery cut-out switch provided. Warning in operator's manual not to leave the MEWP unattended with the key in the key switch [p. 18].						MEDIUM	Ensure that the MEWP is secured against unauthorised use at the end of each shift or when it is left unattended.	Yes	OP		
								MEDIUM					
								MEDIUM					
0.9	Persons injured due to unrecognised hazard.	Preliminary Hazard ID prepared and provided for review.	2	2	3	3	8	MEDIUM	Ensure that Risk Assessment has been conducted for the particular operation to be undertaken.	Yes	MGMT/OP		
								MEDIUM	Update hazard ID as necessary (see notes on page 1).	Yes	MGMT		
								MEDIUM	Implement risk control measures having regard to the hierarchy of control measures available.	Yes	MGMT/OP		
								MEDIUM	Regularly review Hazard ID and update as required.	Yes	MGMT/OP		
1	Mechanical hazards (due to events that may arise during normal operation)												
1.1	Crushing hazard												
1.1.1	Operator is crushed or suffers impact injury whilst operating the extending structure.	Operator's position located away from mechanical hazards in accordance with AS1418.10 – 2011 clause[s] 2.6.2 & 2.6.4. Controls are fitted in the platform and provide the operator with a clear line of sight of the intended path of the platform. Warning in operator's manual [p. 17] to avoid overhead obstructions or other possible hazards. Warning in operator's manual [p. 17] to take care and study the surroundings including overhead obstructions before actuating control functions. General list of job site hazards included in operator's manual [p. 19] includes checking for overhead obstructions.	4	1	4	1	6	HIGH	Ensure that operators, observe the surroundings and move at appropriate speeds.	Yes	OP		
								HIGH	If necessary ensure ground personnel are present to warn operator against potential obstructions and take corrective or emergency action if necessary.	Yes	MGMT/OP		
								HIGH	Ensure a safe work method statement is prepared if the MEWP is to be engaged in operations where overhead hazards exist.	Yes	MGMT/OP		
								HIGH					
								HIGH					

RISK ASSESSMENT: SKYJACK S112E-S116E-S120E										PRELIMINARY (Refer to "Notes" section)				
A	B	C					D1	D2	D	E	F	G	H	
Hazard No.	Hazard Description -	Is there any risk?												
	(the situation or parts of plant which could cause injury or illness)	Describe the risk control measures ALREADY implemented	Severity	Frequency	Probability	Avoidance	Class	Risk Level	Proposed SUPPLEMENTARY risk control measure	Are the control measures practicable? Yes/No	For Action by Whom	Confirmation that the necessary action has been completed		
1.1.2	Operator is crushed or suffers impact injury during travelling.	Warning decal fitted to take care with regard to the danger of overhead obstructions [173235]. Anti-entrapment system fitted (SGLE) which prevents further aggravating movements if the system is activated by the operator's body. Platform controls are arranged so that the operator must be standing in front of the control panel to actuate travel control functions. Warning in operator's manual [p. 17] to avoid overhead obstructions or other possible hazards around MEWP. Warning in operator's manual [p. 19] that a survey of the work area should be performed for hazards such as floor obstructions/ bumps and overhead obstructions. Decal fitted [230746] to controls which clearly indicate the direction of actuator movement for desired travel direction.	4	1	2	3	6		Ensure that operators, observe the surroundings and move at appropriate speeds. Ensure that operators avoid kerbs or depressions that could result in large movements of the platform when travelling. If necessary ensure ground personnel are present to warn operator against potential obstructions and take corrective or emergency action if necessary.	Yes Yes Yes	MGMT/OP OP MGMT/OP			
1.1.3	Operators crushed due to inadvertent operation.	Anti-entrapment system fitted (SGLE) which prevents further aggravating movements if the system is activated by the operator's body. Controls comply with AS1418.10 – 2011 clause 2.6. Function enable switch provided which must be pressed and held for controls to be activated (two separate actions required for movement to take place). All controls are of the hold to run type and return to neutral on being released. Upper & Lower controls require two deliberate and simultaneous actions by the operator before they function. The direction of movement resulting from each control is clearly marked beside the control and controls are arranged for logical operation as far as possible. Symbols used for marking comply with ISO20381.	3	2	1	3	6	HIGH	Maintain controls and their marking. Ensure operators are familiar with the control layout and function.	Yes Yes	MGMT/OP MGMT/OP			
1.1.4	Hands crushed between the platform and obstructions while operating the extending structure.	The platform controls are positioned within the platform guard rails and at least 50mm below the top guard rail. Warning in the operator's manual that personnel in the platform are to keep their hands within the confines of the platform when it is in motion [p. 17]. Warning in the operator's manual that personnel are to keep all body parts within the confines of the platform [p. 17]. Warning in decal [173235] which advises to take care that hands on the guardrail are not caught in obstacles. Proportional controls used to enable precise platform movement when controls are activated.	3	2	1	1	4	MEDIUM	Ensure that personnel are trained with respect to this hazard. Ensure additional ground personnel are present to observe and warn operators against potential obstructions. Ensure that personnel are trained to look in the direction of travel.	Yes Yes Yes	MGMT/OP MGMT/OP MGMT/OP			
1.1.5	Operator crushed as a result of MEWP sliding down a ramp or other slippery surface.	Warning in the operators manual [p. 17] not to exceed the slope limits of the MEWP. Instructions and precautions included in operator's manual for loading and unloading [section 6.5]. Warning in operator's manual [p. 16] that MEWP is to be operated on firm level surfaces.	3	2	1	1	4	LOW	Ensure operators are well trained in regards to the potential hazard. Ensure MEWP is not set up on ramps or other slippery surfaces.	Yes Yes	MGMT/OP OP			
1.1.6	Operator crushed or suffers impact injury as result of incorrect travel direction.	Decal fitted [230746] to controls which clearly indicate the direction of actuator movement for desired travel direction.	3	2	1	1	4	LOW	Train operators to be aware of these hazards.	Yes	MGMT			
1.1.7	Ground personnel crushed whilst machine is operating during normal use.	Warning lights are fitted to increase the visibility of the MEWP.	3	3	1	1	5	LOW	Ensure operators are familiar with the system and to follow/observe the direction arrows on the MEWP. Ensure that the area around the MEWP is controlled and barricaded.	Yes Yes	MGMT/OP MGMT/OP			

RISK ASSESSMENT: SKYJACK S12E-S16E-S120E													PRELIMINARY (Refer to "Notes" section)							
A		B		C							E			F	G	H				
Hazard No.		Hazard Description -		Is there any risk?				Severity	Frequency	Probability	Avoidance	Class	D	Proposed SUPPLEMENTARY risk control measure		Are the control measures practicable?	For Action by Whom	Confirmation that the necessary action has been completed		
		(the situation or parts of plant which could cause injury or illness)		Describe the risk control measures ALREADY implemented												Yes/No				
				Motion alarm (beeper) is fitted which sounds when the MEWP is in motion. Control positions provide the operator with visual contact with the resulting platform movements. Warning in operator's manual [p. 17] check the surrounding area for obstructions before raising or lowering. Warning in operator's manual [p. 56] to barricade work site to prevent personnel entering the area where the MEWP is operating. Warning in operator's manual [p. 17] not to lower the platform unless the area below is clear of personnel and obstructions. Warning label fitted [173235] to make sure that no person or obstacle is around the machine. Warning label fitted [173235] to keep away from overhead obstructions.											MEDIUM		Ensure that ground personnel keep clear of the MEWP while it is in operation. Ensure that personnel are trained with respect to this hazard. Ensure that personnel do not enter the area underneath the platform.	Yes Yes Yes	OP MGMT OP	
1.2		Shearing hazard		Joint member clearances as per AS1418.10 clause 2.3.4.				3	2	1	1	4	LOW		Ensure personnel are trained and aware of this hazard.	Yes	MGMT/OP			
1.2.1		Personnel injured due to shear hazard at elevating mechanism (booms, mast, articulating/scissor arms etc.).		Operator located away from hazard during normal operation. Audible alarm fitted which sounds whenever the platform is lowering. Warning labels fitted at shear hazard locations [119866].									LOW		Ensure that all guards are in place before operation. Ensure that personnel keep clear of moving parts whilst the MEWP is in motion.	Yes Yes	OP OP			
1.2.4		Shear hazard to personnel closing guards, engine covers or battery doors.		Handles provided on the guard/cover. Warning labels fitted at shear hazard locations [119866].				1	2	1	3	6	LOW		Ensure that operators are aware of the residual risks.	Yes	MGMT/OP			
1.3		Cutting or severing hazard											NS							
1.4		Entanglement hazard																		
1.4.1		Hazard number not used.		See 11.1																
1.5		Drawing-in or trapping hazard																		
1.5.1		Hazard number not used.		See 11.1																
1.6		Impact hazard																		
1.6.1		Impact injury to personnel from MEWP collision with vehicular traffic.		Warning lights are fitted to increase the visibility of the MEWP. An audible alarm sounds whenever the MEWP is in motion. Instruction in operator's manual [p. 16] that operator's are required to conform to national, state or territorial/provincial and local health and safety regulations applicable to the operation of the MEWP.				1	2	2	3	7	LOW		Implement a traffic management system. Ensure a traffic management system is enforced, should the MEWP be exposed to vehicular traffic.	Yes Yes	MGMT/OP MGMT/OP			
1.7		Stabbing or puncture hazard											NS							
1.8		Friction or abrasion hazard											NS							
1.9		High pressure fluid injection hazard																		
1.9.1		Injury as a result of a high pressure hydraulic leak while operating or maintaining the MEWP.		Operator is located away from hydraulic components. A pressure relief valve is installed which limits the maximum system pressure. Pipes and connections designed for twice maximum pressure.				1	2	1	3	6	N		Ensure that personnel are properly trained and aware of the hazard. Ensure that the correct pressure setting is maintained as per the operation manual instructions. Ensure that personnel are trained with respect of this hazard and do not place hands or other body parts in front of escaping hydraulic fluid.	Yes Yes Yes	MGMT/OP MGMT/OP MGMT/OP			

RISK ASSESSMENT: SKYJACK SIZE-S116F-S120F										PRELIMINARY (Refer to "Notes" section)			
A	B	C					E				F	G	H
Hazard No.	Hazard Description -	Is there any risk?	Severity	Frequency	Probability	Avoidance	Class	D	Proposed SUPPLEMENTARY risk control measure	Are the control measures practicable?	For Action by Whom	Confirmation that the necessary action has been completed	
	(the situation or parts of plant which could cause injury or illness)	Describe the risk control measures ALREADY implemented								Yes/No			
		Burst pressure of hoses at least three times the maximum pressure. All other components are designed to withstand the pressures they are likely to experience including, during set up, testing, inspection and normal maintenance. A pressure gauge connection port is provided on the manifold block allowing maintenance personnel check and set the pressure relief valve correctly.					LO		Ensure that the correct pressure setting is maintained as per the operation manual instructions. Ensure that SWP's for maintenance include first aid requirements for such injuries.	Yes Yes	MGMT/OP MGMT/OP		
1.10	Ejection of parts						NS						
1.11	Loss of stability (of machinery and machine parts)												
1.11.1	Persons could be injured as a result of instability or overturning. Overturning due to overload: See 19.2 Overturning - generally See 23	MEWP stability is calculated and tested in accordance with AS1418.10 – 2011 clause 3.6.3.	4	2	1	3	6	HIGH	Train operators in respect of proper siting and precautions necessary to ensure stability. Ensure that operators read and understand the instructions and precautions listed in the operator's manual prior to use. Ensure that thorough site checks are performed prior to operation. Audit work practices on a regular basis to ensure safe work procedures are being followed.	Yes Yes Yes Yes	MGMT MGMT/OP MGMT/OP MGMT/OP		
1.12	Slip, trip and fall hazards												
1.12.1	Operator falls whilst accessing the platform.	Access step providing access to the platform is provided in accordance with AS1418.10 – 2011 clause 2.5.8.	2	4	2	3	9		Ensure operators maintain 3 points of contact when accessing the platform.	Yes	OP		
		Warning in manual stating that operator should only enter or exit platform from the ground only [p. 19]. Note in manual to use care when accessing and egressing from the platform and to use three points of contact [p. 51].						MEDIUM	Ensure operators a physically capable of operating the MEWP, including being able to enter and exit the work platform, without endangering themselves or others.	Yes	MGMT/OP		
1.12.5	Personnel slip on platform floor.	Platform floor has a non-slip surface.	2	3	2	3	8	MEDIUM	Ensure the work platform floor is clear of debris and clean. Ensure that any damage is repaired immediately.	Yes Yes	OP MGMT/OP		
2	Electrical hazards												
2.1	Electrical contact (direct or indirect)												
2.1.1	Persons could be injured due to contact or approach to live overhead electrical apparatus.	Warnings and instructions in AS2550.10 – 2006 clause 5.8. Legislative requirements to maintain clearances. Safe approach distances are listed in the operator's manual [p. 15] which are consistent with AS2550.10 requirements. Warning in operators manual [p. 16] to check and abide by local regulations for minimum safe approach distances. Warning label fitted [172693] at chassis and platform that MEWP is uninsulated. Jobsite inspection list in operator's manual [p. 19] includes a check for overhead conductors. Clearance distance labels [161631] are fitted at platform.	4	3	3	3	9	HIGH	Ensure that No-go zones and/or clearances and conditions permitted according to local regulation are observed. Ensure that safety decals and warnings are maintained as per requirements listed in the operating instructions. Ensure that operators are trained with respect to the hazard posed by overhead electrical conductors and equipment. Ensure spotters are present to warn operator of getting too close to overhead conductors.	Yes Yes Yes Yes	MGMT/OP MGMT/OP MGMT/OP MGMT/OP		
2.1.4	Persons could be injured if the unit is operated while in a confined space forcing reduced clearances.	Warning in operators manual [p. 15] not to operate near power lines and to maintain minimum safe approach distances. Clearance distance labels [161631] are fitted at platform.	4	2	1	3	6	HIGH	Establish operating procedures to minimize risk when using machine in confined space. Review operating procedures routinely to ensure they can be maintained and followed. Instruct personnel in respect to the revisions made. Revise procedures if necessary.	Yes Yes Yes	MGMT/OP MGMT/OP MGMT/OP		

RISK ASSESSMENT - SKYJACK SJ12E-SJ16E-SJ20E										PRELIMINARY (Refer to "Notes" section)							
A		B		C			D			E			F	G	H		
Hazard No.		Hazard Description -		Is there any risk?													
		(the situation or parts of plant which could cause injury or illness)		Describe the risk control measures ALREADY implemented			Severity	Frequency	Probability	Avoidance	Class	Risk Level	Proposed SUPPLEMENTARY risk control measure		Are the control measures practicable?	For Action by Whom	Confirmation that the necessary action has been completed
2.1.5		Operator electrocuted as a result of conductive materials carried in basket/platform.		Warning in operators manual [p. 15] not to operate near power lines and to maintain minimum safe approach distances.	4	2	1	3	6	HIGH	Instruct personnel in respect of revisions. Ensure operators are trained with respect to the hazard.	Yes	MGMT/OP		Yes	MGMT	
2.2	Electrostatic phenomena									NS							
2.3	Thermal radiation									NS							
2.4	External influences on electrical equipment																
2.4.1		Uncontrolled motions due to interference with control signal inputs or false input commands in high-frequency electromagnetic fields.		The electrical installation is designed to comply with the requirements of the EMC directive (2004/108/EC) and so is not easily susceptible to interference. Individual manufacturers have provided EMC certificates for their parts and therefore do not constitute a risk.	2	2	2	3	7	LOW	Ensure that the MEWP is not used in environments which include strong electro-magnetic fields unless written approval is obtained from the manufacturer.	Yes	MGMT/OP				
3	Thermal hazards																
3.1	Burns and scalds by contact of persons with flames or explosions and also with radiation from heat sources																
3.1.1		While working in an explosive atmosphere.		Warning in operator's manual [pp. 19 & 69] not to use in hazardous locations.	4	2	2	3	7	HIGH	Ensure unit is not used in a hazardous environment unless it has been suitably modified by the manufacturer or a competent organisation. Ensure sufficient ventilation is provided before using MEWP in hazardous locations.	Yes	MGMT/OP				
3.1.4		Operators suffer burns because of fire or explosion whilst carrying fuel or other explosive substances in platform.		Warning in operators manual [p. 62] to take care when handling flammables or anything that can cause a fire. Warning in operator's manual [pp. 19 & 69] if the machine is to be used in a flammable area to ventilate the space.	3	2	2	3	7	MEDIUM	Ensure no explosive materials or fuel is stored on platform during operation. Ensure that a first aid kit and extinguisher available.	Yes	OP				
3.1.5		Personnel injured by fire or explosion while smoking in platform or around flammable liquids at worksite.		Standard SWPs apply. Warning provided in manual [pp. 42, 71] do not smoke in an area where MEWPs are stored or refuelled. No smoking decal fitted [138/146].	3	2	2	3	7	MEDIUM	Prohibit smoking on the jobsite. Ensure that a first aid kit and extinguisher available. Identify potential sources of fuel/hazard during site-specific hazard ID.	Yes	MGMT		Yes	MGMT/OP	
3.1.6		Personnel injured as a result of MEWP fire.			1	2	1	3	6	LOW	Fit a fire extinguisher on MEWP. Implement a fire safety plan. Maintain fire extinguisher at the job site. Train personnel in the use of the fire extinguisher.	Yes	MGMT		Yes	MGMT/OP	
3.2	Health-damaging effects from hot or cold work environment																
3.2.1		Operator injured due to extreme cold or hot temperatures.		Standard Job site procedures apply. Suggested minimum PPE requirements listed in operator's manual [p. 15] for normal use of the MEWP. List of precautions to take in extreme environmental conditions for MEWP preparation listed in the operators manual [p. 15]. Environmental limits specified in manual [Section 7].	1	2	2	3	7	LOW	Ensure operators are provided the appropriate PPE for the working environment. Ensure that the period of exposure is kept within acceptable levels.	Yes	MGMT		Yes	MGMT/OP	
4	Hazards generated by noise																
4.1	Hearing loss (deafness), other physiological disorders (e.g. loss of balance, loss of awareness, etc.)																

RISK ASSESSMENT: SKYJACK SIZE-S106-S120E										PRELIMINARY (Refer to "Notes" section)								
A		B		C						D1		D2	D	E		F	G	H
Hazard No.		Hazard Description -		Is there any risk?														
		(the situation or parts of plant which could cause injury or illness)		Describe the risk control measures ALREADY implemented		Severity	Frequency	Probability	Avoidance	Class	Risk Level	Proposed SUPPLEMENTARY risk control measure		Are the control measures practicable?	For Action by Whom	Confirmation that the necessary action has been completed		
												Yes/No		Yes/No				
4.1.1		Noise generated by machine causes hearing loss to operators.	The maximum guaranteed sound power level is [sound power level is less than 70< dBA] and complies with the essential health and safety requirements of European Directives 2006/42/EC and 2004/108/EC. List of precautions to take in extreme environmental conditions for MEWP preparation listed in the operators' manual [p. 15].	1	4	2	3	9	LOW		Ensure that if noise exposure exceeds acceptable levels that either ear protection is worn and/or the operators are removed from the noisy environment.	Yes	MGMT/OP					
4.1.2		Noise generated by machine causes hearing loss to bystanders.	The maximum guaranteed sound power level is [sound power level is less than 70< dBA] and complies with the essential health and safety requirements of European Directives 2006/42/EC and 2004/108/EC.	1	2	1	3	6	LOW		Competent person to assess the noise impact on bystanders taking into consideration the environment and other machines operating nearby.	Yes	MGMT					
4.2		Interference with speech communication, acoustic signals, etc.																
4.2.1		Injuries exacerbated as a result of insufficient communication procedures or equipment on job sites where noise can affect communication.		1	2	1	3	6	LOW		Ensure that all operators are equipped with portable communications equipment where necessary.	Yes	MGMT					
5		Hazards generated by vibration																
5.1		Vibration caused by machinery																
5.1.1		Vibration caused by MEWP.	The vibration measured at the upper limbs does not exceed 2.5 m/s2 (RMS) and the vibration exerted on the operator's body does not exceed 0.5 m/s2 (RMS).	1	2	1	3	6	LOW									
6		Hazards generated by radiation																
6.1		Electrical arcs																
6.1.1		Operators suffer radiation burns caused by welding either from the platform or to the MEWP.	Standard welding SWP's apply. Warning in the manual [p. 15] forbidding the use of the MEWP as a ground for welding.	1	3	2	3	8	LOW		Ensure that SWP's are developed and followed when using the MEWP for welding operations.	Yes	MGMT					
											Ensure that only trained personnel perform welding tasks.	Yes	MGMT/OP					
											Ensure that the correct PPE is worn by personnel performing welding tasks.	Yes	OP					
6.2		Lasers																
6.3		Ionizing radiation sources																
6.4		Machines using high-frequency electromagnetic fields																
6.4.1		Hazards caused by emission of EMF	The electrical installation is designed to comply with the requirements of the EMC directive (2004/108/EC) and so is not easily susceptible to interference.	2	2	2	3	7	LOW		Ensure that the MEWP is not used in environments which include strong electro-magnetic fields unless written approval is obtained from the manufacturer.	Yes	MGMT					
7		Hazards generated by materials and substances processed, used or exhausted by machinery																
7.1		Hazards resulting from contact with or inhalation of harmful fluids, gases, mists, dusts and fumes																
7.1.1		Persons could be injured if the unit is operated indoors without adequate ventilation.	MEWP is battery powered.	2	2	2	3	7	LOW		Ensure that the unit is operated only in well-ventilated areas.	Yes	MGMT/OP					
7.1.2		Operator suffers injuries caused by inhalation of hydrogen gas from batteries.	Battery located away from operating positions. Warning provided in manual [Section 4] regarding hazards associated with conducting battery maintenance. Warning of residual hazard in the operator's manual [p. 37].	2	2	2	3	7	LOW		Ensure operators are made aware of the potential hazard.	Yes	MGMT					
										LOW	Ensure that only trained personnel conduct maintenance on or near batteries.	Yes	MGMT/OP					
											Ensure that proper maintenance procedures are implemented when working near batteries.	Yes	MGMT/OP					
											Ensure the correct PPE is worn by all personnel performing maintenance on batteries.	Yes	MGMT/OP					
											Ensure operators are made aware of the potential hazard.	Yes	MGMT					
7.1.3		Personnel suffer skin irritations due to contact with operating fluids or materials used in the MEWP	Standard SWP's apply.	1	3	2	3	8	LOW					Yes	MGMT			

RISK ASSESSMENT: SKYJACK SIZE-S16F-S120F										PRELIMINARY (Refer to "Notes" section)									
A		B		C				D1	D2	D	E			F	G	H			
Hazard No.		Hazard Description -		Is there any risk?															
(the situation or parts of plant which could cause injury or illness)				Describe the risk control measures ALREADY implemented				Severity	Frequency	Probability	Avoidance	Class	Risk Level	Proposed SUPPLEMENTARY risk control measure			Are the control measures practicable? Yes/No	For Action by Whom	Confirmation that the necessary action has been completed
7.1.4		Burns as a result of exposure to hot oil.	Standard SWP's apply. Operating positions are not in the vicinity of exposed hydraulic hoses.	1	3	2	3	8					LOW	1	Ensure appropriate PPE is worn by personnel. Ensure that personnel are trained and aware of this hazard. Ensure that the appropriate PPE is worn by personnel.	Yes Yes Yes	OP MGMT MGMT		
7.2	Fire or explosion hazard																		
7.2.1		Explosion hazard resulting from vapours emitted during battery charging.	Batteries are well ventilated in accordance with AS1418.10 – 2011 clause 2.2.21. Fuse fitted to main battery lead. Battery isolation switch fitted. Warning provided in manual [Section 4] regarding hazards associated with conducting battery maintenance. Warning in operator's manual [p. 16] not to wear jewellery whilst operating MEWP. Warning decal fitted [11967/4] which states to disconnect battery before servicing.	4	2	2	3	7					HIGH		Ensure that the appropriate PPE is worn by personnel. Ensure that the battery is disconnected before charging	Yes Yes Yes	MGMT/OP MGMT OP		
7.3	Biological and microbiological (viral or bacterial) hazards																NS		
8	Hazards generated by a mismatch of machinery with human characteristics and abilities.																		
8.1		Unhealthy postures or excessive efforts.	Access steps provided in accordance with AS1418.10 clause 2.5.8. Note in manual to use care when accessing and egressing from the platform and to use three points of contact [p. 43].	1	4	1	5	10					LOW		Ensure that operators always use 3 points of contact when entering and egress of the work platform.	Yes	MGMT/OP		
8.2	Inadequate consideration of human hand-arm or foot-leg anatomy.																NS		
8.3	Neglected use of personal protection equipment																		
8.3.1		Persons could be injured due to exposure to UV.	Standard practices apply. Standard Job site procedures apply.	1	3	2	3	8					LOW		Develop and provide specification for appropriate UV protection and its use. Provide UV protective equipment including hat, sunglasses and sunscreen. Instruct operators on the requirements for its use.	Yes Yes Yes	MGMT/OP MGMT/OP MGMT/OP		
8.3.2		Persons could be injured if equipment is operated while not wearing appropriate PPE.	Requirement specified in AS2550.10 – 2006 clause 5.2. Standard Job site procedures apply. Note in operator's manual [p. 15] for the operator to wear appropriate personal protective equipment.	3	3	2	3	8					HIGH		Provide specification for appropriate PPE including gloves, safety glasses, hard hat and safety footwear as appropriate for the workplace. Instruct operators on the requirements for its use. Ensure appropriate PPE is worn.	Yes Yes Yes	MGMT MGMT OP		
8.3.3		Operator sustains damage to hearing due to not wearing ear protection in noisy environment.	Standard SWP's apply. Note in operator's manual [p. 15] for the operator to wear appropriate personal protective equipment.	3	2	2	1	5					MEDIUM		Ensure that if noise exposure exceeds acceptable levels that either ear protection is worn and/or the operators are removed from the noisy environment.	Yes	MGMT/OP		
8.3.4		Operator could be injured if working in proximity to bright lights without sunglasses or equivalent.	Standard Job site procedures apply.	1	2	1	3	6					LOW		Identify bright lights located on job sight and react accordingly with setting up of MEWP or wearing appropriate PPE. Ensure operators are provided with suitable PPE.	Yes	OP MGMT/OP		
8.3.5		Operator or ground personnel injured because they are not wearing high visibility clothing.	Standard SWP's apply. Requirement specified in AS2550.10 – 2006 clause 5.2. Note in operator's manual [p. 15] for the operator to wear appropriate personal protective equipment.	2	3	2	3	8					MEDIUM		Ensure operators are wearing appropriate PPE suitable for the given task.	Yes	MGMT/OP		
8.4	Inadequate area lighting																		

RISK ASSESSMENT: SKYJACK SIZE-S16F-S120E										PRELIMINARY (Refer to "Notes" section)				
A	B	C				D1	D2	D	E	F	G	H		
Hazard No.	Hazard Description -	Is there any risk?	Severity	Frequency	Probability	Avoidance	Class	Risk Level	Proposed SUPPLEMENTARY risk control measure	Are the control measures practicable?	For Action by Whom	Confirmation that the necessary action has been completed		
8.4.1	(the situation or parts of plant which could cause injury or illness) Persons could be injured if the light on the job site is inadequate.	Describe the risk control measures ALREADY implemented See also 12.1								Yes/No				
			1	2	1	3	6	LOW	Fit lighting if the MEWP is to be used in areas of low light	Yes	MGMT/OP			
									Monitor lighting levels throughout the operation of the MEWP, as lighting is prone to change relative to time of day.	Yes	OP			
8.5	Mental overload or under load, stress, etc.													
8.5.1	Persons could be injured if the operator's performance was inhibited by excessive fatigue.		2	2	2	3	7	LOW	Implement a system to ensure that operators do not work excessive or continuous shifts and manage peak demands.	Yes	MGMT/OP			
									Ensure that operators do not continue use of the MEWP if they feel tired or are suffering from fatigue.	Yes	MGMT/OP			
8.5.2	Operator injured because they do not possess sufficient mental capacity to operate the MEWP.		4	2	2	3	7	HIGH	Ensure all personnel are trained with respect to machine operation.	Yes	MGMT			
									Ensure only trained personnel are permitted to operate MEWP.	Yes	MGMT/OP			
8.5.3	Operator injured due to inattention from boredom.		3	1	2	3	6	MEDIUM	Limit shift hours.	Yes	MGMT			
									Ensure rotation of operators during shift.	Yes	MGMT/OP			
8.6	Human error													
8.6.1	Operator or ground personnel injured due to "horse play" or inappropriate use.	Warning in the operator's manual [p. 18] stating MEWP should not engage in horseplay.	3	1	2	3	6	MEDIUM	Ensure operators do not engage in horse play or stunt driving.	Yes	MGMT/OP			
		Warning in operator's manual [p. 21] that the MEWP is only to be used by authorised personnel who are qualified, trained and certified to operate the machine.							Ensure that only properly trained and licensed personnel use MEWP.	Yes	MGMT/OP			
		Warning in operator's manual [p. 9] that only personnel who have read and understand the operating instructions contained within the operator's manual are permitted to use the MEWP.							Ensure that when not in use, the platform is secured against unauthorised use.	Yes	OP			
		Warning in manual [p. 16] to obey employers safety rules and worksite regulations.												
8.6.2	Persons could be injured if the unit is operated by persons under the influence of drugs and/or alcohol.	Standard SWP's apply.	3	2	2	3	7	MEDIUM	Ensure that operators do not use the MEWP while under the influence of alcohol or drugs.	Yes	MGMT/OP			
		Warning in the operator's manual [p. 18] that the unit is not to be operated by persons under the influence of drugs and/or alcohol.							Instruct the operator that operation while under the influence of alcohol or drugs are prohibited.	Yes	MGMT/OP			
		Warning in manual [p. 16] to obey employers safety rules and worksite regulations.												
8.6.3	Persons could be injured if the operator's performance is inhibited by poor health or medication with side effects.	Standard SWP's apply.	3	2	2	3	7	MEDIUM	Instruct the operator that he/she must report to the supervisor if suffering poor health and safe operating performance could be affected.	Yes	MGMT			
		Warning in the operator's manual [p. 18] that the unit is not to be operated by persons whose performance is inhibited by poor health or medication with side effects.												
9	Hazard combinations													
9.1	Injuries exacerbated as a result of insufficient procedures or equipment.	Emergency retrieval procedures are detailed in the operator's manual [p. 55]. Decal fitted adjacent to the emergency controls explaining the operation [173237].	4	2	1	3	6	HIGH	Establish and audit routine emergency procedures.	Yes	MGMT			
									Display emergency phone numbers and contact procedures at the site in ready display to the appropriate personnel.	Yes	MGMT			
									Periodically verify emergency equipment and supplies.	Yes	MGMT			
9.2	Hazards caused by improper procedures following contact with live conductors.	See AS2550.10 – 2006 clause 5.8.4 for correct procedures following contact.	4	1	1	3	5	HIGH	Ensure that all personnel are trained and aware of the necessary procedures required following the accidental contact with live overhead conductors.	Yes	MGMT			
									Ensure that the unit is withdrawn from service and appropriately assessed by a competent person.	Yes	MGMT/OP			
									Immediately isolate the unit for 24 hours.	Yes	MGMT/OP			
10	Hazards caused by failure of energy supply, breakdown of machinery parts & other functional disorders													
10.1	Failure of energy supply (of energy and/or control circuits)													

RISK ASSESSMENT: SKYJACK SIZE-S16E-S120E										PRELIMINARY (Refer to "Notes" section)													
A		B		C				D1		D2		D		E		F		G		H			
Hazard No.		Hazard Description -		Is there any risk?																			
(the situation or parts of plant which could cause injury or illness)		Describe the risk control measures ALREADY implemented		Severity		Frequency		Probability		Avoidance		Class		Risk Level		Proposed SUPPLEMENTARY risk control measure		Are the control measures practicable?		For Action by Whom		Confirmation that the necessary action has been completed	
10.1.1		Operator trapped in an elevated position due to failure of main energy supply.		MEWP is fitted with an emergency system which does not rely on the primary power source to enable rescue if the operator becomes trapped in an elevated position due to failure of main energy supply. Emergency retrieval procedures are detailed in the operator's manual [p. 55]. Decal fitted adjacent to the emergency controls explaining the operation [173237]. All solenoid valves return to the neutral position if power is lost.		3	2	2	3	7	MEDIUM	MEDIUM	Ensure operators are trained in the use of the emergency lowering systems.	Yes	MGMT/OP								
													Ensure that the emergency system is checked on a periodic basis.	Yes	MGMT/OP								
													Ensure that the MEWP undergoes a pre-operational inspection prior to every use in accordance with the manufacturer's instructions.	Yes	MGMT/OP								
				Maintenance/service manuals [part number 241914ABA] prepared which cover all aspects of maintenance of the control and braking systems.							NS		Ensure that the MEWP is not operated if any faults are detected during the pre-operational inspections.	Yes	OP								
10.2		Unexpected ejection of machine parts or fluids										NS											
10.3		Failure/malfunction of control system																					
10.3.1		Uncontrolled motions due to control system failure.		Emergency stop switches fitted at the control positions. Control systems designed in accordance with AS1418.10 – 2011 clause 2.6. Pre-operational inspection includes functional test of controls [section 4].		3	1	1	3	5	MEDIUM	Ensure that all pre-operational inspections are performed in accordance with the manufacturer's instructions prior to use. Ensure that all control system faults are logged and reported to service personnel. Ensure that the machine is not operated if any faults exist.	Yes	MGMT/OP		Yes	OP						
10.4		Errors of fitting																					
10.4.1		Personnel exposed to hazards due to incorrect fitting of components during manufacture.		Manufacturer has a quality assurance system in place which involves multiple checks of critical components during the manufacturing process. Production tests are conducted in accordance with AS1418.10 – 2011 clause 3.3 upon completion of manufacture.		3	2	1	3	6	MEDIUM	Ensure that only qualified service personnel are charged with the maintenance of the MEWP. Ensure they follow the instructions provided in the repair manual.	Yes	MGMT		Yes	MGMT						
10.4.2		Personnel exposed to hazards due to incorrect fitting of components during repair.		Maintenance instructions provided which covers all anticipated aspects of maintenance required for MEWP. Detailed instructions are provided in the maintenance section which covers correct hose fitting procedures. Warning provided in the operator's manual that only trained and qualified personnel should perform maintenance [p. 13].		3	2	1	3	6	MEDIUM	Ensure that only qualified service personnel are charged with the maintenance of the MEWP. Ensure they follow the instructions provided in the repair manual.	Yes	MGMT		Yes	MGMT						
				Warning in operator's manual [p.13] to only use genuine spare parts.																			
10.4.3		MEWP overturns because incorrect wheels/tyres have been fitted.		Warning in operator's manual [p. 35] that intermingling of tyres is prohibited and that only wheels/tyres approved by the manufacturer may be fitted.		3	2	1	3	6	MEDIUM	Ensure that only approved wheels/tyres are fitted.	Yes	MGMT		Yes	MGMT						
													Ensure that only qualified service personnel are charged with the maintenance of the MEWP. Ensure they follow the instructions provided in the repair manual.	Yes	MGMT		Yes	MGMT					
10.5		Overturn, unexpected loss of machine stability										NS											
10.5.2		Due to tyre/wheel failure.		Solid wheels fitted.		4	2	2	3	7	NS	Ensure operators perform checks of wheels/tyres before using MEWP. Ensure that tyres are replaced as necessary with original specification.	Yes	MGMT/OP		Yes	MGMT/OP						
11		Hazards caused by (temporary) missing and/or incorrectly positioned safety-related measures/means										NS											
11.1		All kinds of guards										NS											
11.1.3		Unintentional activation of controls due to entanglement of hoses or cables with joystick.		Guarding around platform controls minimises the risk of entanglement.		3	1	1	3	5	UM	Ensure operators are aware of the residual risk.	Yes	MGMT/OP		Yes	MGMT/OP						

RISK ASSESSMENT: SKYJACK SIZE-S116E-S120E										PRELIMINARY (Refer to "Notes" section)				
A	B	C					D1	D2	D	E	F	G	H	
Hazard No.	Hazard Description -	Is there any risk?	Severity	Frequency	Probability	Avoidance	Class		Risk Level	Proposed SUPPLEMENTARY risk control measure	Are the control measures practicable? Yes/No	For Action by Whom	Confirmation that the necessary action has been completed	
	(the situation or parts of plant which could cause injury or illness)	Describe the risk control measures ALREADY implemented												
		Constant pressure function enable switch fitted which must be activated in order for elevating structure movements to occur.												
11.2	All kinds of safety-related (protection) devices													
11.2.1	Hazards arising due to safety switches being overridden.	Warning in operator's manual [p. 15] not to disable any safety device. Preoperational checks specified in Operators' manual [section 4]. Decal fitted [156613] which states do not alter or disable any safety switch or device.	4	2	1	3	6		HIGH	Ensure that safety devices are not tampered with and are in good condition before use of machine. If any faults are discovered do not use machine until all faults are rectified.	Yes	MGMT		
11.2.2	Personnel exposed to hazards due to unauthorised alteration or interference.	Warning in operator's manual [p. 15] that the machine is not to be used if it has been modified or altered in any way without the written approval of the manufacturer. Decal fitted [156613] which states do not alter or disable any safety switch or device. Pre-operational checks included in operator's manual [section 4].	4	2	1	3	6		HIGH	Seek advice from the manufacturer or a competent person for all modifications/repairs considered during life of MEWP. Ensure that no additions or alterations are performed on the platform without written approval from the manufacturer or their authorised agent in Australia.	Yes	MGMT		
11.2.4	Personnel exposed to hazards because Load Sensing System has been disabled or is incorrectly adjusted.	System designed so that it cannot be easily disabled. Decal fitted [156613] which states do not alter or disable any safety switch or device.	4	2	1	3	6		HIGH	Ensure load sensing system is not tampered with or disabled. Ensure load sensing system is checked at the regular intervals as detailed by manufacturer. Ensure that operators are trained in the correct emergency procedures.	Yes	MGMT/OP		
11.2.6	Persons could be injured as a result of instability or overturning due to operation on excessive slope.	AS2550.10 – 2006 includes additional advice regarding operation on slopes. Chassis inclination indicator system provided which warns the operator if the lateral and longitudinal slope limits of the chassis are exceeded. Chassis inclination interlocks are provided which prevent movement of the platform & elevated drive if the lateral and longitudinal slope limits of the chassis are exceeded. Chassis inclination limitations are provided in the operator's manual [p. 68 (S112E), p. 68 (S116E), p. 68 (S120E), 1. The chassis inclination limits are listed on the data plate.	4	2	1	3	6		HIGH	Ensure that the MEWP is operated within the rated slope limitations specified. Ensure that thorough site checks are performed prior to operation. Select the correct MEWP for the anticipated slopes at the job site. Check the operation of the inclination alarms and interlocks in accordance with the manual.	Yes	MGMT/OP		
11.3	Starting and stopping devices													
11.3.1	Emergency stop switches malfunction or missing components.	Emergency stop switches comply with AS1418.10 – 2011 clause 2.6.6. Emergency stop switches located at both control stations. Check of emergency stop operation included in pre-start inspection [p. 40].	4	2	1	3	6		HIGH	Ensure that the inspection checks are performed as per instructions in manual. Ensure that any malfunctioning components or systems are repaired prior to use. Ensure that emergency stop switches are present and function correctly before use of MEWP as per pre-start inspection.	Yes	MGMT/OP		
11.4	Safety signs and signals													
11.4.1	Personnel injured due to missing or illegible safety signs.	A list and description of all labels fitted to the MEWP is included in the operator's manual [section 6]. Warning in the operator's manual [p. 34] that all safety labels are to be in place prior to use of MEWP. Pre-operational checks [p. 34] include a check of all the safety labels.	3	2	1	3	6		MEDIUM	Conduct pre-operational checks as described in manual. Maintain signs and replace as necessary. Ensure all decals are present and legible before using MEWP.	Yes	OP		
11.5	All kinds of information or warning devices													
11.5.1	Personnel are not provided with sufficient instruction because operators manual missing from MEWP.	Storage compartment fitted on the platform for manual.	3	2	1	3	6		LOW	Ensure the MEWP is supplied with all of the relevant operating manuals.	Yes	MGMT		

RISK ASSESSMENT: SKY/JACK SIZE-SJ16F-SJ20E										PRELIMINARY (Refer to "Notes" section)				
A	B	C			D1	D2	D	E	F	G	H			
Hazard No.	Hazard Description -	Is there any risk?												
	(the situation or parts of plant which could cause injury or illness)	Describe the risk control measures ALREADY implemented			Severity	Frequency	Probability	Avoidance	Class	Risk Level	Confirmation that the necessary action has been completed			
		Manuals available from manufacturer's website.												
11.6	Energy supply disconnecting devices	No accumulators fitted.			1	2	1	3	6					
11.6.1	Maintenance personnel injured due to failure of pressure isolating or depressurising devices in hydraulic circuit(s).				1	2	1	3	6					
11.7	Emergency devices													
11.7.1	Emergency pump does not operate.				1	2	1	3	6					
11.7.2	Keys have been removed from selector switch whilst personnel are elevated in platform.	Key can only be removed in the "off" or "ground controls" position.			3	2	1	1	4					
11.7.5	Hazards arising as a result of incorrect emergency retrieval procedures.	Emergency retrieval procedures are detailed in the operator's manual [p. 55]. Decal fitted adjacent to the emergency controls explaining the operation [173237].			1	2	1	3	6					
11.8	Feeding/removal means of work pieces				NS									
11.9	Essential equipment and accessories for safe adjusting and/or maintaining													
11.9.1	Persons injured whilst performing maintenance.	Maintenance procedures provided by manufacturer detailing all critical maintenance requirements. Detailed instructions provided in maintenance manual which covers all anticipated repairs and maintenance items.			1	2	1	3	6					
11.9.2	Personnel crushed working under the elevated structure	A support pin is provided in accordance with AS1418.10 – 2011 clause 2.3.5 which supports the platform and lifting mechanism for maintenance and inspection purposes. Warning in maintenance manual to ensure personnel are clear from under unsupported components/systems that are at risk of movement during maintenance.			1	2	1	3	6					
11.9.3	Persons injured whilst handling heavy or unsupported items.	Support chocks are available from manufacturer.			1	2	1	3	6					
11.9.4	Strains/sprains when removing components or performing certain maintenance aspects of the MEWP.	Standard SWPs apply.			1	2	1	3	6					
11.9.5	Personnel fall whilst performing maintenance checks.	Standard SWPs apply Pre-operational checks able to be performed at ground level.			1	2	1	3	6					
11.10	Equipment evacuating gases, etc.				NS									

RISK ASSESSMENT: SKYJACK SIZE-S1.6F-S1.20F										PRELIMINARY (Refer to "Notes" section)				
A	B	C					D1	D2	D	E	F	G	H	
Hazard No.	Hazard Description -	Is there any risk?												
	(the situation or parts of plant which could cause injury or illness)	Describe the risk control measures ALREADY implemented	Severity	Frequency	Probability	Avoidance	Class		Risk Level	Proposed SUPPLEMENTARY risk control measure	Are the control measures practicable? Yes/No	For Action by Whom	Confirmation that the necessary action has been completed	
12	Inadequate lighting of moving/working area													
12.1	Collision with structures or objects due to inadequate lighting of work site													
12.1.1	Persons could be injured if the light on the job site is inadequate.	Standard SWP's apply	3	2	1	3	6		MEDIUM	Ensure lighting in job area is assessed by trained personnel prior to undertaking further machine operation.	Yes	MGMT/OP		
										Monitor lighting levels throughout the operation of the MEWP, as lighting is prone to change relative to time of day.	Yes	MGMT/OP		
										Fit work lights if anticipating work at night or poorly lit areas.	Yes	MGMT		
13	Hazards due to sudden movement/instability during handling													
13.1	General Manoeuvring													
13.1.1	While personnel are moving MEWP around job site.	Maximum travel speeds are fixed.	3	2	1	3	6		MEDIUM	Ensure that MEWP is not driven on excessive slopes or rough terrain at speed.	Yes	OP		
		Proportional controls used to enable smooth operation of drive function.								Ensure that operators travel at speeds commensurate with the conditions.	Yes	OP		
13.2	Lifting/Loading/Towing													
13.2.1	Operator is dragged along the ground while operating the travel controls.	Lower controls only control the extending mechanism of MEWP (type 3 MEWP).	3	2	1	3	6		MED					
13.2.2	When loading/unloading MEWP from trucks.	Stowing and transportation procedures provided in the operators manual [p. 59]. Instructions and precautions included in operator's manual for loading and unloading [section 6.5].	4	2	2	3	7		HIGH	Ensure that operators are aware of the precautions and operational requirements specified in the manual.	Yes	MGMT		
										Ensure persons abide by the instructions.	Yes	OP		
										Ensure that only trained personnel are permitted to load the machine onto trucks.	Yes	MGMT/OP		
13.2.3	When lifting MEWP from transportation.	Instructions are provided in the operator's manual [section 6.5] for lifting the MEWP, which includes warnings regarding the proper selection of lifting hardware and use of the correct lifting points. Lift points fitted and identified on the MEWP [124767]. The unladen mass of the MEWP is listed on the data plate fitted to the MEWP. Standard machine specifications included in the operators manual [Section 7].	3	2	2	3	7		MEDIUM	Ensure that only trained personnel are permitted to lift the MEWP.	Yes	MGMT/OP		
										Ensure that the proper lifting points are used.	Yes	MGMT/OP		
										Ensure that suitably rated chains & slings are used.	Yes	MGMT/OP		
13.2.4	Operator ejected from platform whilst loading onto trucks.	PPE list includes the fall restraint equipment required to be worn by personnel loading and unloading the MEWP.	3	2	2	3	7		MEDIUM	Ensure that only suitably trained personnel are permitted to load MEWPs onto trucks.	Yes	MGMT/OP		
		Instructions and precautions included in operator's manual for loading and unloading [section 6.5].								Ensure that personnel wear the correct fall restraint harness whilst loading the MEWP onto trucks.	Yes	MGMT/OP		
13.2.5	Injury from unsecured vehicle whilst transporting.	Instructions in operator's manual [section 6.5] regarding transporting MEWP as required by AS1418.10 – 2011 clause 4.1.3 (a). Tie-down points fitted to MEWP and identified with decals [124767].	3	2	2	3	7		MEDIUM	Ensure that the instructions provided in the operator's manual are followed.	Yes	MGMT/OP		
										Ensure the MEWP is properly secured when transporting on vehicles.	Yes	MGMT/OP		
13.2.6	Injury due to tray or float of inadequate size.	Standard machine specifications included in the operators manual [Section 7]. Warning provided in operator's manual [p. 58] regarding checking that the truck is capable of accommodating the MEWP.	1	2	1	3	6		LOW	Ensure that the vehicle is of adequate size to carry the MEWP.	Yes	MGMT/OP		
13.2.7	Personnel activate free-wheeling mode which causes MEWP to roll.	Decal fitted [230744] which explains procedure for releasing the brakes and includes warnings. Instructions provided in operator's manual [p. 55] for brake release which includes all safety precautions.	1	2	1	3	6		LOW	Ensure that operators are trained to perform brake release.	Yes	MGMT/OP		
										Ensure operators follow the instructions provided in the manual.	Yes	MGMT/OP		
14	Inadequate/non-ergonomic design of driving/operating position													
14.1	Hazards due to dangerous environments (contact with moving parts exhaust gases, etc.)													
									NS					

RISK ASSESSMENT: SKYJACK SIZE-S16E-S120E										PRELIMINARY (Refer to "Notes" section)					
A		B		C				E		F	G	H			
Hazard No.		Hazard Description -		Is there any risk?											
(the situation or parts of plant which could cause injury or illness)				Describe the risk control measures ALREADY implemented				Proposed SUPPLEMENTARY risk control measure					Are the control measures practicable? Yes/No	For Action by Whom	Confirmation that the necessary action has been completed
				Severity	Frequency	Probability	Avoidance	Class	Risk Level						
14.2				Inadequate visibility from driver/operator's position											
14.2.1				Personnel injured due to operator having limited visibility from operating position.	Operator's position in platform generally offers a good position to see all parts of the MEWP structure.	3	2	1	3	6	MEDIUM	Ensure operators survey the area within which they are to be working in order to familiarise themselves with possible obstructions.	Yes	MGMT/OP	
					Meshed floor provides good visibility under the platform while travelling and lowering.							Ensure a spotter is used if required.	Yes	MGMT/OP	
14.2.2				Due to collision with obstructions because operator in the platform cannot see from operating position.	Controls positioned in accordance with AS1418.10 clause 2.6.1 so that the operator has visual contact with the resulting travel and extending structure movements. Warning in operator's manual [p. 17] to avoid overhead obstructions or other possible hazards around MEWP.	3	2	1	3	6	MEDIUM	Ensure operators are trained with respect to this hazard.	Yes	MGMT/OP	
												Ensure the MEWP is operated at reduced speeds when clearance between the platform and other objects is reduced.	Yes	MGMT	
												Ensure a spotter is used if required.	Yes	OP	
14.3				Inadequate seat/seating (seat index point)				NS							
14.4				Inadequate/non-ergonomic design/positioning of controls											
14.4.1				Operator suffers fatigue as a result of the position of the controls.	Controls positioned so that a comfortable stance can be achieved.	1	2	1	3	6	LOW	Implement a system to ensure that operators do not work excessive or continuous shifts and manage peak demands.	Yes	MGMT	
												Ensure that operators do not continue use of the MEWP if they feel tired or are suffering from fatigue.	Yes	MGMT/OP	
14.4.2				The position of the platform controls causes the operator to adopt an unhealthy posture.	Controls placed in an ergonomic location allowing ease of use by operator.	1	2	1	3	6	LOW	If the position of the controls causes discomfort to the operator ensure that they are moved to an appropriate position.	Yes	MGMT	
												Limit the length of shifts to a reasonable time.	Yes	MGMT/OP	
14.4.4				Excessive effort required to activate control functions.	Effort required to activate controls is reasonable.	1	2	1	3	6	LOW	Maintain Controls to ensure that undue force is not required to activate control functions.	Yes	MGMT	
					Control actuation forces comply with ISO 21455 requirements.							Limit the length of shifts to a reasonable time.	Yes	MGMT/OP	
14.5				Starting/moving of self-propelled machinery				NS							
14.6				Road traffic of self-propelled machinery											
14.6.1				MEWP collision with vehicular traffic on job site.	An audible alarm sounds whenever the MEWP is in motion.	4	1	1	3	5	HIGH	Implement a traffic management system.	Yes	MGMT/OP	
					Warning in manual regarding the residual hazard of traffic on-site [p. 19].							Ensure that the rotating/strobe light is used whenever the machine is in motion.	Yes	OP	
												Ensure a traffic management system is enforced, should the MEWP be exposed to vehicular traffic.	Yes	MGMT/OP	
14.7				Movement of pedestrian-controlled machinery				NS							
15				Mechanical hazards (due to failure of systems or devices)											
15.1				Hazards to exposed persons due to uncontrolled movement											
15.1.1				Failure of cylinder or hose resulting in uncontrolled movement of the work platform and extending structure.	Cylinders have been assessed in accordance with AS1418.10 – 2011 clause 2.9.1.2.1.	2	2	1	3	6	LOW	Ensure cylinders are inspected in accordance with procedures outlined in manual.	Yes	MGMT/OP	
					Cylinders are fitted with load holding check valves to prevent movement in case of hose failure.							If any defects are detected ensure that the MEWP is withdrawn from service until the defects are rectified.	Yes	OP	
					Hydraulic filters fitted.										
					Maintenance manual provided which includes service requirements for hydraulic system.										
15.1.2				Operator crushed as a result of uncontrolled motion while on a slope due to brake failure.	Brakes fitted to four wheels, which exceeds the requirements of AS1418.10 – 2011 clause 2.2.12.	4	2	2	3	7	HIGH	Ensure travel speed is reduced when travelling on gradients.	Yes	OP	
					Brakes designed and tested to achieve the stopping distances in accordance with AS1418.10 – 2011 clause 2.2.16.										
					Theoretical gradeability limits in the operator's manual (Section 7).										
					Theoretical gradeability limits listed on the serial plate [173329AB(S12E), 173330AB(S16E), (S120E)].										
15.2				Hazards due to break-up and/or ejection of parts											

RISK ASSESSMENT: SKYJACK SLIDE-SIZE-S106E-S120E										PRELIMINARY (Refer to "Notes" section)																							
A		B		C			E			F	G	H																					
Hazard No.		Hazard Description -		Is there any risk?																													
(the situation or parts of plant which could cause injury or illness)		Describe the risk control measures ALREADY implemented		Severity			Frequency			Probability																							
													Avoidance			Class			Risk Level														
D1			D2			D			Are the control measures practicable?			For Action by Whom										Confirmation that the necessary action has been completed											
15.2.1																																	
MEWP could collapse or break up as a result of poor design or manufacture.		Designed & manufactured to comply with the requirements of the design standards and directives in the country where the unit is sold. MEWP is load tested as part of pre-delivery checks by manufacturer before delivery to customer. Warning in manual not to operate an aerial platform that is malfunctioning or damaged [p. 18]. Pre-operational inspection requirements detailed in operator's manual which includes checks of structural members [section 4].		1			2			1			3			6			Ensure that the unit is registered with manufacturer.			Yes			MGMT								
																			Periodically check for the existence of routine safety alerts that may be issued by the manufacturer or the representative. Routinely inspect the MEWP by a competent organisation external to operator.			Yes			MGMT								
																			Monitor local Hazard Alerts and Incident Safety Notices and examine these to determine if they are or could be relevant to the MEWP.			Yes			MGMT								
																			Ensure preoperational inspections are conducted as per the manufacturer's instructions.			Yes			MGMT/OP								
15.2.2																																	
Due to failure to observe or rectify safety upgrades from manufacturer.		Manufacturer maintains a database of who owns which model MEWP. Instructions included in operators manual [p. 9] regarding transfer of ownership procedures.		4			2			1			3			6			LOW			Ensure that the MEWP is registered with the manufacturer. Periodically check the status in respect of safety bulletins or upgrades applying to the MEWP. Ensure that safety upgrades provided by the manufacturer are implemented. Ensure the manufacturer is advised when the MEWP is disposed of or sold.			Yes			MGMT					
																			Yes			MGMT											
15.3																																	
Hazards due to rolling over (roll over protection – ROP)		NS																															
15.4																																	
Hazard due to falling objects (falling object protection – FOP)		NS																															
15.4.1																																	
Ground crew or passer-by being struck by falling tools or objects. See AS2550:10 – 2006 clause[s] 5.10 & 5.16.		Kick panel provided on platform in accordance with AS1418:10 – 2011 clause 2.5.4.		3			2			1			3			6			MEDIUM			Barricade area from public access. Ensure that materials are not supported on the guardrails or exceed the confines of the platform. Remove all loose tools and objects from the platform before driving. Consider the fitment of the half mesh infill kit on the platform.			Yes			OP					
																			Yes			OP											
15.5																																	
Inadequate means of access		NS																															
15.6																																	
Hazards caused due to towing, coupling, connecting, and transmission		NS																															
15.6.3																																	
Injury sustained whilst towing.		Towing/winching points are fitted and identified [124767] on the MEWP. Instructions are included in the operator's manual regarding the correct procedures for towing and/or winching the MEWP including residual risks that may exist [p. 55].		2			2			1			3			6			LOW			Ensure that the instructions provided in the operator's manual are followed. Ensure that only trained personnel are permitted to tow the MEWP.			Yes			MGMT/OP					
																			Ensure MEWP is parked on flat level ground before releasing brakes. Ensure that personnel do not release the brakes unless the MEWP is properly chocked in accordance with the instructions provided in the operator's manual.			Yes			MGMT/OP								
15.7																																	
Hazards due to batteries, fire, emissions, etc.		LOW																															
15.7.1																																	
Hazards from batteries and associated faults.		Batteries are well ventilated in accordance with AS1418:10 – 2011 clause 2.2.21. Battery isolation switch fitted.		2			2			2			3			7			LOW			Ensure the battery isolation switch is used whenever battery maintenance is performed. Ensure that the appropriate PPE is worn when working on or near the batteries. Ensure safe work procedures are established in regards to working with batteries. Ensure operators follow established safe work procedures. Ensure that only trained personnel conduct maintenance on or near batteries. Ensure that personnel who are trained in first aid are readily available to render assistance if required.			Yes			MGMT/OP					
																			Yes			MGMT/OP											
16																																	
Hazards due to lifting operation		LOW																															

RISK ASSESSMENT: SKY/JACK SIZE-SJ16E-SJ20E										PRELIMINARY (Refer to "Notes" section)																			
A		B		C						D1		D2		D		E		F		G		H							
Hazard No.		Hazard Description -		Is there any risk?						Severity		Frequency		Probability		Avoidance		Class		Risk Level		Proposed SUPPLEMENTARY risk control measure		Are the control measures practicable? Yes/No		For Action by Whom		Confirmation that the necessary action has been completed	
		(the situation or parts of plant which could cause injury or illness)		Describe the risk control measures ALREADY implemented																									
16.1		Lack of stability																											
16.1.1		Hazard number not used.		See 19.2, 23																									
16.2		Derailment of machinery																											
16.3		Loss of mechanical strength of machinery and lifting accessories																											
16.3.1		Failure of lifting points.		Lift points are designed for loads as anticipated during normal lifting for the life of the MEWP. Instructions are provided in the operator's manual [section 6.5] for lifting the MEWP, which includes warnings regarding the proper selection of lifting hardware and use of the correct lifting points. Lift points fitted and identified on the MEWP [124767].		3		2		1		3		6															
16.4		Uncontrolled movements																											
17		Inadequate view of trajectories of the moving parts																											
		Hazard number not used.		See 14.2.		4		3		2		3		8															
18		Hazards caused by lightning																											
18.1		Persons could be injured if the unit is operated during storms.		Warning in operator's manual [p. 15] that MEWP is not to be operated during storms.		4		1		1		3		5															
19		Hazards due to loading/overloading																											
19.1		Mechanical Hazards																											
19.1.1		Maximum rated capacity is exceeded.		Load sensing system fitted to platform which prevents platform overload from vertical loads. (See 20.2). Warning in operator's manual [p. 18] not to overload the work platform. The maximum rated capacity is listed in the operator's manual [p. 68 (SJ12E), p. 68 (SJ16E), p. 68 (SJ20E),]. The maximum rated capacity is displayed on the manufacturers ID plate. The maximum rated capacity is displayed on the work platform.		3		3		1		3		7															
19.1.2		Maximum manual force is exceeded.		Maximum manual force specified in the operator's manual [p. 68 (SJ12E), p. 68 (SJ16E), p. 68 (SJ20E),]. Maximum permitted manual force displayed on platform. Warning in operator's manual [p. 17] not to exert side forces on MEWP while it is elevated. Warning in operators manual [p. 17] that the work platform is not to be used for pushing or pulling objects. Maximum permitted manual force included on ID plate. Decal fitted to platform includes maximum manual force.		4		1		1		3		5															
19.1.3		Maximum wind speed/wind load is exceeded.		MEWP is designed and rated for wind speed of 12.5 m/s for the maximum number of platform occupants in accordance with AS1418.10. Additional advice in AS2550.10 – 2006 clause 4.10. Warning in operator's manual [p. 16] not to increase the surface area that can catch the wind. Warning in the operators manual [p. 16] states MEWP is not to be operated in wind speeds which exceed limits. ID plate includes maximum wind speed rating.		4		1		1		3		5															

RISK ASSESSMENT: SKYJACK SIZE-SJ16E-SJ20E										PRELIMINARY (Refer to "Notes" section)							
A		B		C			E					F	G	H			
Hazard No.		Hazard Description -		Is there any risk?								Are the control measures practicable? Yes/No		For Action by Whom		Confirmation that the necessary action has been completed	
		(the situation or parts of plant which could cause injury or illness)		Describe the risk control measures ALREADY implemented			Severity	Frequency	Probability	Avoidance	Class	Risk Level	Proposed SUPPLEMENTARY risk control measure				
19.1.4		Structural failure due to influences from load combinations not taken fully into account.	Decal fitted to platform includes maximum wind speed rating. Outdoor option available (SJ16E) for use up to 3.6 m platform height. Decal fitted (SJ16E) warning not to elevate above 3.6 m unless in no wind conditions. Structural analysis accounts for normally encountered load combinations: wind + dynamic + static; wind + manual force + static. Standard machine specifications included in the operators manual [Section 7]; detail the load combinations which are acceptable. MEWP is fitted with a load sensing system which limits the magnitude of the vertical load. The maximum rated capacity is displayed on the work platform. Decal fitted to platform includes maximum wind speed rating. Maximum permitted manual force displayed on platform.	3	1	1	3	5						Ensure that the machine is only operated within the specification detailed in the operating manual and in accordance with industry standards and AS2550.10. Ensure each person required to operate the machine has been trained and assessed in accordance with the recognised assessment instruments and in accordance with the requirements specific to this MEWP. Verify expected loading and confirm it is less than rated capacity. Verify operating slopes are less than the maximum permitted chassis inclination of the MEWP. Verify wind conditions experienced in service are less than the maximum wind speed rating of the MEWP. Ensure the machine is isolated to prevent unauthorised use at the end of each work shift. Ensure that only manufacturer approved equipment is fitted to the work platform.	Yes	MGMT/OP	
19.1.5		Fittment of non-standard equipment or brackets to platform exceeds rated capacity.	Warning in operator's manual [p. 15] that only manufacturer approved equipment may be fitted to the platform.	1	2	1	3	6	MEDIUM				Ensure that any lifting devices fitted are not overloaded and all instructions for use are followed. Ensure operators do not cause platform overload by lifting additional equipment from elevated platform using ropes.	Yes	MGMT/OP		
19.1.6		Due to operator in platform lifting loads with ropes.	Warning in operator's manual [p. 17] not to use MEWP as a lifting tool or crane.	4	2	1	3	6	HIGH					Yes	MGMT/OP		
19.2		Overturning/loss of stability															
19.2.1		Maximum rated capacity is exceeded.	Load sensing system fitted to platform which prevents platform overload from vertical loads. (See 20.2). See also 19.1.1	1	2	1	3	6	LOW								
19.2.2		Maximum manual force is exceeded.	See 19.1.2	1	2	1	3	6	LOW								
19.2.3		Excessive wind speed or wind load.	See also 19.1.3	1	2	1	3	6	LOW								
19.2.4		Overturning on excessive slope	Interlock fitted which prevents elevated travel and elevation from the travel position if the slope exceeds the manufacturer's limits. Warning in the operators manual [p. 17] not to exceed the slope limits of the MEWP. Warning in the operators manual [p. 16] not to drive elevated on a slope.	1	2	1	3	6	LOW				Ensure that the MEWP is not operated on slopes which exceed the limits listed in the manual and on the data plate.	Yes	MGMT/OP		
19.2.5		Overturning due to exceeding the maximum permitted number of operators in the work platform.	Specifications in operator's manual [p. 68 (SJ12E), p. 68 (SJ16E), p. 68 (SJ20E),] detail the maximum platform capacities which include the maximum number of operators permitted in the work platform for both indoor and outdoor use. Decal [173257(SJ12E), 173260(SJ16E), 23075(SJ20E),] listing the platform capacity limitations for both indoor and outdoor use fitted in work platform.	1	2	1	3	6	LOW				Ensure that operator's are trained to restrict the number of personnel in the work platform in respect of the manufacturers limits for both indoor and outdoor use. Ensure that the maximum number of operator's does not exceed the manufacturers limits for both indoor and outdoor use.	Yes	MGMT/OP		
20		Hazards due to lifting persons												Yes	MGMT		

RISK ASSESSMENT: SKYJACK SJ12E-SJ16E-SJ20E										PRELIMINARY (Refer to "Notes" section)																				
A		B		C						D1		D2		D		E		F		G		H								
Hazard No.		Hazard Description -		Is there any risk?																										
(the situation or parts of plant which could cause injury or illness)				Describe the risk control measures ALREADY implemented				Severity		Frequency		Probability		Avoidance		Class		Risk Level		Proposed SUPPLEMENTARY risk control measure		Are the control measures practicable? Yes/No		For Action by Whom		Confirmation that the necessary action has been completed				
20.1																														
Mechanical strength				Mechanical strength of extending structure is insufficient to support platform loads.				Mechanical strength has been assessed in accordance with AS1418.10 – 2011.		1	2	1	3	6	Verify expected loading and confirm it is less than Rated Capacity.											Yes	MGMT/OP			
				Load holding valves fitted to all load bearing hydraulic cylinders in accordance with AS1418.10 – 2011 clause 2.9.2.											Audit the rated capacity of the anticipated load on a regular basis.											Yes	MGMT/OP			
				Structure designed and assessed against the requirements of AS1418.10 – 2011 clause 2.1.																										
				Platform load sensing system fitted in accordance with AS1418.10 – 2011 clause 2.3.1.2.																										
				Pre-operation inspection criteria included in the operator's manual [Section 4].																										
20.1.2																														
Structural failure due to dynamic loading.				Dynamic loads are accounted for in the design standard against which the MEWP is assessed.				1	2	1	3	6	Ensure that the system function speeds are set and maintained to the specifications listed in the manual.											Yes	MGMT					
20.1.4																														
Injury from using the MEWP in an unsuitable condition due to poor maintenance or inspections.				Maintenance instructions provided which includes maintenance instructions for all anticipated maintenance requirements over the life of the MEWP.				4	3	2	3	8	Ensure that pre-start inspections are completed prior to use of MEWP.											Yes	MGMT/OP					
				Maintenance instructions provided which includes maintenance instructions for all anticipated maintenance requirements over the life of the MEWP.									Ensure that MEWP is not used if any defects are found.											Yes	MGMT/OP					
				Pre-operational checks include loose or missing fasteners [p. 22].									Ensure that any damage or accidents that involve the MEWP are reported to the relevant manager/authorities.											Yes	MGMT/OP					
				Operator maintenance instructions included in the manual [Section 4].									Modify maintenance program according to use and the operating environment.											Yes	MGMT/OP					
				Pre-start inspection procedures specified in operator's manual [Section 4] to cover all normal maintenance requirements of MEWP.									Ensure that the unit is checked, repaired and maintained by appropriately trained/qualified and experienced personnel in accordance with the checklist contained in the operation manual.											Yes	MGMT/OP					
													Ensure all inspections, servicing, replacement of parts and modifications are entered into logbook.											Yes	OP					
													Use equivalent replacement parts and log replacement.											Yes	MGMT					
													Instruct the operator/competent person to report all faults to management.											Yes	MGMT/OP					
													Ensure logbook provided on MEWP to record usage and faults.											Yes	MGMT					
													Ensure the operators are instructed to properly stow unit prior to transportation.											Yes	MGMT/OP					
													Ensure the elevating structure & platform is restrained during transportation.											Yes	MGMT/OP					
20.1.5																														
Persons could be injured as a result of structural fatigue failure – Road Transport.				Pre-operational inspection includes checks of the structure for cracks.				4	2	1	3	6	Regularly inspect the interior of the MEWP elevating structure.											Yes	MGMT/OP					
				Instructions and precautions included in operator's manual for loading and unloading [Section 6.5].									Clean the unit of all debris on a regular basis.											Yes	MGMT/OP					
				Tie-down points fitted to MEWP and identified with decals [124767].									Reinstall all damaged covers.											Yes	MGMT/OP					
20.1.6																														
Failure due to corrosion resulting from ingress of moisture and debris into the extending structure.								4	2	1	3	6																		
20.1.7																														
Injury as a result of excess water/debris in platform.				The work platform floor is self-draining as per the requirements of AS1418.10 – 2011 clause 2.5.7.				1	2	1	3	6	Ensure that the platform is cleaned regularly to prevent a build-up of debris.											Yes	MGMT/OP					
													Ensure the platform is stored in a location which prevents the build-up of debris.											Yes	MGMT/OP					
20.2																														
Loading control				MEWP is fitted with a load sensing system.																										
20.2.1																														
Rated capacity is exceeded.				The maximum rated capacity is listed in the operator's manual [p. 68 (SJ12E), p. 68 (SJ16E), p. 68 (SJ20E)].				3	3	3	1	7	Ensure that any faults are reported directly to management and machine is withdrawn from service.											Yes	MGMT/OP					

RISK ASSESSMENT: SKYJACK S112E-S16E-S10E										PRELIMINARY (Refer to "Notes" section)										
A		B		C				D1		D2	D	E		F	G	H				
Hazard No.		Hazard Description -		Is there any risk?																
(the situation or parts of plant which could cause injury or illness)		Describe the risk control measures ALREADY implemented		Severity		Frequency		Probability		Avoidance		Class		Risk Level						
		Danger note in operator's manual [p. 18] not to exceed the rated capacity of the MEWP. Rated capacity is displayed in the ID plate. The maximum rated capacities displayed on the platform. Warning label fitted [230746] which includes warning not to overload platform.										MEDIUM		Ensure calibration checks are performed in accordance with the service manual. Ensure MEWP is not overloaded during operation.		Yes MGMT/OP				
21																				
Controls																				
21.1																				
Movement of Work Platform																				
21.1.1		Due to accidental impact or engagement – unintentional activation of controls.		Controls comply with AS1418.10 – 2011 clause 2.6.		4		4		2		3		9		Ensure operators are familiar with the control layout and function. Ensure control switches automatically return to neutral when released. Ensure that all incidents in relation to the machine are reported and acted on.		Yes Yes Yes	MGMT/OP OP MGMT/OP	
				Function enable switch provided which must be pressed and held for controls to be activated (two separate actions required for movement to take place). All controls are of the hold to run type and return to neutral on being released Upper & Lower controls require two deliberate and simultaneous actions by the operator before they function. The direction of movement resulting from each control is clearly marked beside the control and controls are arranged for logical operation as far as possible. Function enable has a 10 sec timeout. Function enable must be engaged prior to any elevating structure movement control to effect motion. Symbols used for marking comply with ISO20381.										HIGH						
														LOW		Ensure that hydraulic system is maintained as per manufacturer's instructions.		Yes	MGMT/OP	
21.1.2		Hydraulic control failure		Overriding emergency system designed in accordance with AS1418.10 – 2011 clause 2.6.10.		1		2		1		3		6		Ensure operators are familiar with the emergency lowering procedures prior to operating the MEWP.		Yes	MGMT/OP	
														LOW						
21.2																				
Safe travel control																				
21.2.1		Excessive travel speed leads to machine instability.		MEWP travel speed is automatically reduced when the platform is elevated out of the transport position. Maximum travel speeds are fixed.		1		2		1		3		6		Ensure that maximum travel speeds are maintained in accordance with manufacturer's specifications.		Yes	MGMT/OP	
				Travel speeds given in operator's manual [Section 7]. Elevated drive speed check is listed in preoperational checks [p. 45].										LOW		Ensure MEWP travel speed is automatically reduced when the platform is elevated out of the transport position.		Yes	MGMT/OP	
21.2.2		Operator ejected whilst travelling over kerbs or depressions		Dynamic stability tests conducted in accordance with AS1418.10-2011 clause 3.6.3.2.		1		2		1		3		6		Ensure operators are aware of this hazard.		Yes	MGMT/OP	
21.3																				
Safe speed control																				
21.3.1		Injury due to excessive platform movement speeds.		Extending structure speeds comply with AS1418.10 – 2011 clause 2.3.6. Maximum system speeds are fixed and cannot be altered by the operator. Function speeds are listed in the operator's manual [p. 67 (S172E), p. 67 (S176E), p. 67 (S120E).]		3		2		1		3		6		Ensure that machine is maintained in accordance with manufacturer's instructions and all settings are maintained.		Yes	MGMT/OP	
22																				
Falling of persons																				
22.1																				
Personal protective equipment																				
22.1.1		Operator falls from elevated platform.		Guardrail system designed in accordance with AS1418.10 – 2011 clause 2.5.4.		3		2		2		3		7		Instruct operators to wear fall restraint/arrest harness' at all times where identified by a task based risk assessment when in the platform and to attach the fall restraint/arrest lanyard to the anchor point provided.		Yes	MGMT/OP	

RISK ASSESSMENT: SKYJACK SIZE-S16E-S120E										PRELIMINARY (Refer to "Notes" section)				
A	B	C				D1	D2	D	E	F	G	H		
Hazard No.	Hazard Description -	Is there any risk?												
	(the situation or parts of plant which could cause injury or illness)	Describe the risk control measures ALREADY implemented	Severity	Frequency	Probability	Avoidance	Class	Risk Level	Proposed SUPPLEMENTARY risk control measure	Are the control measures practicable? Yes/No	For Action by Whom	Confirmation that the necessary action has been completed		
		Fall arrest anchorage points provided. Fall arrest test has been performed in accordance with AS1418:10-2011 instructions for use of fall arrest/restraint harness and lanyard provided in operator's manual [p. 19, 25]. Labels fitted [172646] which identifies harness anchorage points.						MEDIUM	Ensure harness and lanyards are in good condition. Audit use of fall restraint/arrest devices.	Yes	MGMT/OP			
		Ensure that platform guard rails are properly fitted and not damaged.								Yes	MGMT/OP			
22.1.2	Falling from guardrails, ladders or stools located in the work platform.	Warning in the operator's manual [p. 17] that ladders and/or stools are not permitted to be used in the work platform. Requirements per AS2550.10.	4	2	2	3	7	HIGH	Ensure that operators do not use any means to gain additional height. Ensure that operators do not use any means to gain additional height. Ensure the correct MEWP in terms of rated capacity, height and reach is used for the particular task at hand.	Yes	MGMT/OP			
22.1.4	Operator falls through the platform access opening.	Platform gate designed in accordance with AS1418.10 – 2011 clause 2.5.6 and is self-closing and latches in the closed position. Gate opens inwards. Warning in operators manual [p. 18] to close the gate after entry.	4	2	1	3	6	HIGH	Ensure that personnel do not exit the platform except at ground level. Audit use. Ensure gate is maintained in accordance with manufacturers instructions. Ensure MEWP is not used if gate is faulty.	Yes Yes Yes	MGMT/OP MGMT/OP MGMT/OP			
22.1.5	Stepping out of elevated platform onto structures.	Requirements provided in AS2550.10, see clause 5.9 and figure 5.9(B).	4	1	1	3	5	HIGH	Ensure that operator egress at heights is prohibited unless in an emergency and there is a safe means to do so. Ensure that the operator does not egress from the platform at height unless secured via a twin lanyard assembly to a secure anchor point on a fixed structure. Refer to requirements per AS2550.10, see clause 5.9 and figure 5.9(B).	Yes Yes	MGMT/OP MGMT/OP			
22.2	Trappdoors							NS		Yes	MGMT/OP			
22.3	Work platform tilt control							NS						
23	Work platform falling/overturning													
23.1	Falling/tipping/overturning													
23.1.1	Overturning due to operation on excessive slope.	AS2550.10 – 2006 includes additional advice regarding operation on slopes. Warning in manual regarding overturning hazards [p. 16]. Warning in operator's manual [p. 16] not to operate on excessive slope. The chassis inclination limits are listed on the data plate. For Type 2 & 3 MEWPs see 11.2.6.	4	2	1	3	6	HIGH	Ensure that the MEWP is operated within the rated slope limitations specified.	Yes	OP			
23.1.2	Overturning as a result of settling up on uneven surfaces.	Warning in operator's manual [p. 16] that MEWP is to be operated on firm level surfaces.	4	2	1	3	6	HIGH	Ensure that operators are trained relating to proper setup, including the necessity to set up on flat surfaces within the limits specified both fore and aft and sideways.	Yes	MGMT/OP			
23.1.3	MEWP overturns due to slipping/driving off planks or similar inappropriate support surface.	Label [173235] fitted stating not to drive on uneven surfaces. Warning in operator's manual [p. 16] that MEWP is to be operated on firm level surfaces.	4	2	1	3	6	HIGH	Ensure operators follow these requirements. Ensure the MEWP is not operated on planks.	Yes Yes	MGMT/OP OP			
23.1.4	Overturning due to collapse of support surface.	Additional notes in AS2550.10. Maximum wheel/stabiliser loads displayed on MEWP as required by AS1418.10 – 2011 clause 4.2.10. Warning in operator's manual [p. 16] do not drive elevated on a soft or uneven surface.	4	2	1	3	6	HIGH	Ensure the unit is not set up on rough, soft or otherwise hazardous surfaces. Seek advice regarding ground/surface capacities as necessary from a competent person. Ensure that thorough site checks are performed prior to operation.	Yes Yes	OP MGMT/OP OP			

RISK ASSESSMENT: SKYJACK SIZE-SJ16E-SJ20E										PRELIMINARY (Refer to "Notes" section)							
A		B		C						D1	D2	D	E		F	G	H
Hazard No.		Hazard Description -		Is there any risk?													
		(the situation or parts of plant which could cause injury or illness)		Describe the risk control measures ALREADY implemented		Severity	Frequency	Probability	Avoidance	Class	Risk Level	Proposed SUPPLEMENTARY risk control measure		Are the control measures practicable? Yes/No	For Action by Whom	Confirmation that the necessary action has been completed	
				Maximum wheel load listed in the operator's manual [p. 70 (SJ12E), p. 70 (SJ16E), p. 70 (SJ20E), 1. Maximum wheel loads displayed on MEWP next to wheels [1774051(SJ12E), 171557(SJ16E), 230754(SJ20E), 1.								Document procedures.		Yes	MGMT/OP		
23.1.5		MEWP overturns while manoeuvring around job site.		The lowered travel position is limited by the control system.		4	2	1	3	6		Ensure the work platform is not raised while travelling at speeds above the permitted elevated drive speed.		Yes	OP		
				Warning in operator's manual [p. 17] not to drive on slopes which exceed the maximum gradeability. Warning in operator's manual [p. 16] not to drive elevated near depressions, or holes, loading docks, debris, drop-offs or surfaces that may affect stability.						HIGH		Ensure the gradeability limits are not exceeded whilst travelling.		Yes	OP		
												Ensure that operators, observe the surroundings and move at appropriate speeds.		Yes	OP		
23.1.6		Overturning due to operation on a truck or similar device.		Warning in the operator's manual [p. 17] not to operate MEWP while parked on the back of a truck or similar.		4	2	1	3	6		Ensure that the MEWP is not operated whilst on a truck or similar.		Yes	MGMT/OP		
23.1.7		Overturning due to operator falling out of platform while attached to the harness & lanyard.		Fall arrest stability test results demonstrate compliance with AS1418.10 – 2011 clause 3.6.2.		4	2	1	3	6		Ensure that operators wear the correct harness and lanyard.		Yes	MGMT/OP		
										HIGH		Ensure that the operators attach the lanyard to the correct attachment points when they are in the platform.		Yes	OP		
												Ensure that the number of operators attached to a single point does not exceed the maximum number permitted.		Yes	OP		
23.2	NS																
24	Markings																
24.10		Personnel injured due to missing or illegible safety signs.		A list and description of all labels fitted to the MEWP is included in the operator's manual [section 8].		3	2	1	3	6		Train operators in relation to the meaning of the markers.		Yes	MGMT/OP		
				Warning in the operator's manual [p. 34] that all safety labels are to be in place prior to use of MEWP. Pre-operational checks [p. 34] include a check of all the safety decals.						MEDIUM		Ensure that pre-operational check of safety decals is performed before use.		Yes	OP		
24.20		Unclear instructions on safety signs.		All instructions are given in English. All numerical values are given in SI units. Symbols used for marking comply with ISO20381.		1	2	1	3	6		Ensure that operators are familiar with the meaning of all safety signs and warnings.		Yes	MGMT/OP		
										LOW							

