Australian Risk Assessment Configuration Record

Risk Assessment: SJ9233RT, SJ9243RT, SJ9253RT Risk Assessment

Risk Assessment Number: 238882

Basis of Risk Assessment: SKJ002-025-001-2

Revision	Date	Operations Manual Reviewed	Impact Statement
238882AA	09 Dec 2020	222852AD	Initial Release.
238882AB	03 Mar 2022	222852AF	Manual review confirms no change to risk assessment.
238882AC	12 Mar 2024	222852AF	No change.

Doc Reference: SKJ002-025-001-2

Date: March 12, 2024
Part Number: 238882AC

RISK ASSESSMENT OF PLANT

DATE OF ASSESSMENT: 9/12/2020	MANUFACTURER: SKYJACK	ORGANISATION:	SKYJACK AUSTRALIA
	MODEL(S): SJ9233RT, SJ9243RT, SJ9253RT		
PRELIMINARY ASSESSMENT FOR REVIEW	RISK ASSESSMENT METHOD USED: SAFETY REVIEW	ADDRESS:	LOT 272 Honeycomb Drive, Eastern Creek, NSW, 2766

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

Documentation

Operators manual: 222852ADAA
Maintenance Manual: 229046ACA
Repair manual: 229046ACA
Spare parts manual: 224578ABA
Manual Supplements: 0

Description

Self-propelled	Scissor Lift	Type 3	Group A	IC engine	Non-insulated

Sound pressure level <72 dBA at work platform
72 at ground controls
Guaranteed sound power level <100 dBA

Safety Devices

Load Control	Position Control	Moment Limiting	Slope indication	Outriggers	Wheels	Speed Control	Motion Alarm	Secondary Guarding	Drive Enable System (Slew)	Platform Levelling
Load Sensing	Position Control	NA	Slope Alarm & interlock	Interlocked Outriggers	Solid Tyres	Elevated Drive Speed control	Motion Alarm	Active 2ndry Guarding	NA	NA

Risk Ranking Matrix

Reference: ISO TR14121.1 Clause 6.5.2

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

Severity: The severity of the harm as an outcome of the hazard.

1 Scratches, bruises that are cured by first aid.
2 More sever 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.

Frequency: The average interval between frequency of exposure to the hazard.

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 a1day.
5 The interval between exposure is less than or equal to 1 hour.

Duration: Where the duration of the exposure is less than 10 minutes the value may be reduced to the next level.
Where the interval is less than or equal to 1 hour, the value shall not be decreased at any time.

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.

Avoidance: The possibility of avoiding or limiting harm.

1 Likely - e.g. contact with a moving part behind an interlock guard will 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.

Notes on using the matrix method

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 make the operator responsible for inadequate maintenance/repairs etc but is only intended to ensure that the procedures include the need for the operator to report any faults detected.

3 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

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 SJ9233RT, SJ9243RT, SJ9253RT										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
0	**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 222852ADAA 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. Maintenance Manual [229046ACA], Service Manual [229046ACA] & Parts Manual [224578ABA] provided which include maintenance instructions, detailing specifications, limitations and residual hazards associated with the operation of the machine. Service manuals provided, part number 229046ACA which includes maintenance instructions, detailing specifications, limitations and residual hazards associated with inspection and maintenanceof 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.	Yes	MGMT/OP	
									Verify that the procedure is appropriate having regard to alternative methods that may be available.	Yes	MGMT/OP	
									Verify that the procedure covers all modes of operation of the MEWP (including emergency procedures and maintenance) and is a practicable solution.	Yes	MGMT	
									Ensure operator's manual is with the MEWP at all times.	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.	Yes	MGMT/OP	
									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.	Yes	MGMT/OP	
									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 222852ADAA which includes maintenance instructions, detailing specifications, limitations and residual hazards associated with the operation of the machine. Instruction in Operators Manual [p. 9] to operate in accordance with the manual. Warning in manual [p. 9] 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. 9] 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. 10] 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. 9].	4	4	3	3	10	HIGH	Ensure that all Standard Work Procedures (SWP's) are effectively implemented.	Yes	MGMT/OP	
									Ensure that the operator(s) have read and understand the training and instructions (which must include Manufacturer's and local information).	Yes	MGMT/OP	
									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. Warning in operator's manual [p. 19] that a survey of the work area should be performed for hazards such as for electric power lines., check for drop offs, concealed holes. and overhead obstructions. Warning in operator's manual [p. 9] that the operator must know all national, state or territorial and local rules which apply to operation of the MEWP and jobsite.	4	4	3	1	8	HIGH	Ensure that operators are aware of the requirements of AS2550.10.	Yes	MGMT/OP	
									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	
									Ensure a site hazard assessment is conducted before use on each site.	Yes	MGMT/OP	
									Ensure appropriate systems are implemented to eliminate the hazards or adequately control the risks associated with the hazards identified.	Yes	MGMT/OP	
									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	
									Ensure that if operators are uncertain how to address a particular site hazard that they seek advice from a competent person.	Yes	OP	
0.5	Hazards arising from lack of, or inadequate emergency procedures.	Emergency retrieval procedures are detailed in the operator's manual [p. 67]. Decal fitted adjacent to the emergency controls explaining the operation [173624]. Operation of emergency systems is simple requiring minimal instructions.	4	1	3	3	7	HIGH	Ensure operators are trained in emergency retrieval and operation.	Yes	MGMT/OP	
									Ensure that refresher training is undertaken by operators on a regular basis.	Yes	MGMT/OP	
									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	
									Ensure that workers do not work solo, If not practicable ensure that all operators working solo are equipped with portable communications equipment.	Yes	MGMT	
									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. Instruction in Operators Manual [p. 16] to remove key to prevent unauthorised use. Battery cut-out switch provided.	3	2	3	1	6	MEDIUM	Ensure that workplace procedures are established regarding securing the MEWP at the end of each day.	Yes	MGMT/OP	
									Ensure that the MEWP is secured against unauthorised use at the end of each shift or when it is left unattended.	Yes	OP	
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	
									Update hazard ID as necessary (see notes on page 1).	Yes	MGMT	
									Implement risk control measures having regard to the hierarchy of control measures available.	Yes	MGMT/OP	
									Regularly review Hazard ID and update as required.	Yes	MGMT/OP	

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT										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	**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 Operators Manual [p. 17, 63] to be aware of blind spots. Warning in Operators Manual [p. 70] to use a spotter/check for overhead obstructions. Warning in Operators Manual [p. 17] to beware of crushing hazards between guardrails and obstructions. Warning in Operators Manual [p. 17] to beware of overhead hazards. Warning in Operators Manual [p. 19] to be aware of moving equipment Warning in Operators Manual [p. 18] to not permit horseplay. Warning in Operators Manual [p. 48, 62] to never lower without checking for persons/obstacles. Instruction in Operators Manual [p. 56] to test secondary guarding system.	4	1	4	1	6	HIGH	Ensure that operators, observe the surroundings and move at appropriate speeds. If necessary ensure ground personnel are present to warn operator against potential obstructions and take corrective or emergency action if necessary. Ensure a safe work method statement is prepared if the MEWP is to be engaged in operations where overhead hazards exist.	Yes Yes Yes	OP MGMT/OP MGMT/OP	
1.1.2	Operator is crushed or suffers impact injury during travelling.	Control positions afford the operator visual contact with all resulting movements, platform and chassis. Platform controls are arranged so that the operator must be standing in front of the control panel to actuate travel control functions. Warning in Operators Manual [p. 70] to use a spotter/check for overhead obstructions. Warning in Operators Manual [p. 17] to beware of overhead hazards.	4	1	2	3	6	HIGH	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. Fit OPS if working conditions allow	Yes Yes Yes Yes	MGMT/OP OP MGMT/OP MGMT/OP	
1.1.3	Operators crushed due to inadvertent operation.	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	MEDIUM	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. Platform is fitted with hand holds within the platform. Proportional controls used to enable precise platform movement when controls are activated. Warning in Operators Manual [p. 17] to beware of crushing hazards between guardrails and obstructions. Warning decal [173024] fitted which identifies possible hand crush zone.	3	2	1	1	4	LOW	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 Operators Manual [p. 16] not to drive on or near uneven terrain or unstable surfaces. Warning in Operators Manual [p. 73] not to exceed the gradeability. Warning in Operators Manual [p. 18] not to operate slippery surfaces Warning in Operators Manual [p. 63] describing driving on a slope. Warning in Operators Manual [p. 73] not to drive on ramps exceeding gradeability and use the winch instead.	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 [173301] 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. Ensure operators are familiar with the system and to follow/observe the direction arrows on the MEWP.	Yes Yes	MGMT MGMT/OP	
1.1.7	Ground personnel crushed whilst machine is operating during normal use.	Motion alarm (beeper) is fitted which sounds when the MEWP is in motion. Projecting extremities are identified with hazard tape. Control positions provide the operator with visual contact with the resulting platform movements. Warning in Operators Manual [p. 17, 63] to be aware of blind spots. Warning in Operators Manual [p. 48, 62] to never lower without checking for persons/obstacles. Decal fitted [139855] not to enter area underneath a raised platform.	3	3	1	1	5	MEDIUM	Ensure that the area around the MEWP is controlled and barricaded. 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 Yes	MGMT/OP OP MGMT OP	
1.2	**Shearing hazard**											
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 [137988].	3	2	1	1	4	LOW	Ensure personnel are trained and aware of this hazard. Ensure that personnel keep clear of moving parts whilst the MEWP is in motion.	Yes Yes	MGMT/OP OP	
1.2.3	Exposure to pinch points/shear points while extending the platform.	Handles provided on extension deck for operator to hold while extending and retracting deck.	1	3	2	3	8	Y	Ensure that operators are aware of the residual risks.	Yes	MGMT/OP	

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT										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										
		Instruction provided in the operator's manual [p. 64] explaining the process of extending & retracting the deck.						LOW	Ensure that the instructions provided in the operator's manual are followed.	Yes	MGMT/OP	
		Warning labels fitted at shear hazard locations [137988].										
1.2.4	Shear hazard to personnel closing guards, engine covers or battery doors.	Handles provided on the guard/cover.	1	2	1	3	6	LOW	Ensure that operators are aware of the residual risks.	Yes	MGMT/OP	
		Warning labels fitted at shear hazard locations [137988].										
1.3	**Cutting or severing hazard**											
1.3.1	Cuts from sharp edges arising from damaged platform components		1	2	1	3	6	LOW	Ensure that any damage to the MEWP is rectified to remove sharp edges.	Yes	MGMT/OP	
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.	Hazard marking fitted to projecting extremities	1	2	2	3	7	LOW	Implement a traffic management system.	Yes	MGMT/OP	
		An audible alarm sounds whenever the MEWP is in motion.							Ensure a traffic management system is enforced, should the MEWP be exposed to vehicular traffic.	Yes	MGMT/OP	
		Warning in manual regarding the residual hazard of traffic on-site [p. 19].										
		Instruction in Operators Manual [p. 9] that operators are to be qualified, trained and certified.										
		Instruction in Operators Manual [p. 10] to obey all laws, regulations and job site rules.										
		Warning in Operators Manual [p. 62] to take caution when travel on public roads is required.										
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.	1	2	1	3	6	LOW	Ensure that personnel are properly trained and aware of the hazard.	Yes	MGMT/OP	
		A pressure relief valve is installed which limits the maximum system pressure.							Ensure that the correct pressure setting is maintained as per the operation manual instructions.	Yes	MGMT/OP	
		Pipes and connections designed for twice maximum pressure.							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	MGMT/OP	
		Burst pressure of hoses at least three times the maximum pressure.							Ensure that the correct pressure setting is maintained as per the operation manual instructions.	Yes	MGMT/OP	
		Warning in service manual regarding the danger of injury from injection of high pressure hydraulic fluid [p. 13].							Ensure that SWP's for maintenance include first aid requirements for such injuries.	Yes	MGMT/OP	
		Warning in service manual [p. 10] that only trained personnel are permitted to service MEWP.										
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.	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.	Yes	MGMT	
	Overturning due to overload: See 19.2	Overturning hazards are listed in the operators manual [p. 16].							Ensure that operators read and understand the instructions and precautions listed in the operator's manual prior to use.	Yes	MGMT/OP	
	Overturning - generally See 23								Ensure that thorough site checks are performed prior to operation.	Yes	MGMT/OP	
									Audit work practices on a regular basis to ensure safe work procedures are being followed.	Yes	MGMT/OP	
1.12	**Slip, trip and fall hazards**											
1.12.1	Operator falls whilst accessing the platform.	Access ladder providing access to the platform is provided in accordance with AS1418.10 – 2011 clause 2.5.8.	2	4	2	3	9	MEDIUM	Ensure operators maintain 3 points of contact when accessing the platform.	Yes	OP	
		Warning in Operators Manual [p. 19] not to exit platform when raised.							Ensure that the platform is only entered or exited when it is fully lowered.	Yes	OP	
		Warning in Operators Manual [p. 19] to exit using generally 3 points of support.							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.	Yes	OP	
									Ensure that any damage is repaired immediately.	Yes	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.	4	3	3	3	9	HIGH	Ensure that No-go zones and/or clearances and conditions permitted according to local regulation are observed.	Yes	MGMT/OP	
		Legislative requirements to maintain clearances.							Ensure that operators are trained with respect to the hazard posed by overhead electrical conductors and equipment.	Yes	MGMT/OP	
		Warning in Operators Manual [p. 15] that the machine is not insulated							Ensure spotters are present to warn operator of getting too close to overhead conductors.	Yes	MGMT/OP	
		Warning in Operators Manual [p. 15] to obey regulations regarding required clearances from electrical conductors.										
		Instruction in Operators Manual [p. 15] to check for electric power lines.										
		Safe approach distances are listed in the operator's manual [p. 15].										
		Warning in operators manual [p. 15] not to operate near power lines and to maintain minimum safe approach distances.										
		Instruction in Operators Manual [p. 15] to check for electric power lines.										

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT										PRELIMINARY (Refer to "Notes" section)		
A	B	C				D1	D2	D	E	F	G	H
Hazard No.	Hazard Description - (the situation or parts of plant which could cause injury or illness)	Is there any risk? 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
		Clearance distance labels [161631] are fitted at platform.										
		Warning label fitted [172677] at chassis and platform that MEWP is uninsulated.										
2.1.2	Persons could suffer an electric shock due to fault with AC power supply to battery charger.	Main power disconnect switch fitted.	4	2	2	3	7	HIGH	Ensure personnel are trained with respect to this residual risk.	Yes	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] that the machine is not insulated 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.	Yes	MGMT/OP	
									Review operating procedures routinely to ensure they can be maintained and followed. Instruct personnel in respect to the revisions made.	Yes	MGMT/OP	
									Revise procedures if necessary.	Yes	MGMT/OP	
									Instruct personnel in respect of revisions.	Yes	MGMT/OP	
2.1.5	Operator electrocuted as a result of conductive materials carried in basket/platform.		4	2	1	3	6	HIGH	Ensure operators are trained with respect to the hazard.	Yes	MGMT	
									Ensure minimum safe approach distances are maintained.	Yes	OP	
									Ensure ground crew is presence to spot potential electrical hazards.	Yes	MGMT/OP	
									Ensure that conductive materials are not carried in the platform where overhead electrical hazards are located.	Yes	MGMT/OP	
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).	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	
									Ensure that radio transmitters and similar equipment are not used when operating the machine.	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.	Instruction in Operators Manual [p. 19] to check hazardous atmospheres.	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.	Yes	MGMT/OP	
									Ensure sufficient ventilation is provided before using MEWP in hazardous locations.	Yes	OP	
3.1.2	Personnel suffer burns due to contact with hot engine components.	Engine is covered. Exhaust pipe is out of reach of the operator's position.	1	2	1	3	6	LOW	Ensure that personnel are trained with respect to the residual hazard.	Yes	MGMT	
									Ensure the correct PPE is worn when handling hot components.	Yes	MGMT/OP	
3.1.3	Personnel suffer burns due to contact with hot exhaust components.	Exhaust system is fitted out of reach of the operator in the normal operating positions. Ground controls are on the opposite side to the exhaust.	1	2	1	3	6	LOW	Ensure that personnel are trained with respect to the residual hazard.	Yes	MGMT	
									Ensure the correct PPE is worn when handling hot components.	Yes	MGMT/OP	
3.1.4	Operators suffer burns because of fire or explosion whilst carrying fuel or other explosive substances in platform.		3	2	2	3	7	MEDIUM	Ensure no explosive materials or fuel is stored on platform during operation.	Yes	OP	
									Ensure that a first aid kit and extinguisher available.	Yes	MGMT/OP	
3.1.5	Personnel injured by fire or explosion while smoking in platform or around flammable liquids at worksite.	Standard SWPs apply. Warning in Operators Manual [p. 71] to refuel and charge the battery in a well ventilated area, away from sparks and flames. No smoking decal fitted [138146]. Fuel tank identification decal fitted [173413].	3	2	2	3	7	MEDIUM	Ensure that a first aid kit and extinguisher available.	Yes	MGMT	
									Identify potential sources of fuel/hazard during site-specific hazard ID.	Yes	MGMT/OP	
3.1.6	Personnel injured as a result of MEWP fire.	Standard SWPs apply. Warning in operator's manual [p. 71] to have a fire extinguisher and first aid kit ready.	1	2	1	3	6	LOW	Ensure a fire extinguisher is avaialble.	Yes	MGMT/OP	
									Ensure that personnel are familiar with the firefighting procedures listed in the operator's manual.	Yes	MGMT/OP	
									Implement a fire safety plan.	Yes	MGMT/OP	
									Train personnel in the use of the fire extinguisher.	Yes	MGMT/OP	
3.1.7	Personnel exposed to hot components while accessing brake release valve.	Brake release valve is positioned away from hot components.	1	1	2	3	6	LOW	Ensure the correct PPE is worn when handling hot components.	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. Danger note in Operators Manual [p. 15] to use PPE. Instruction in Operators Manual [p. 19] to comply with employer, job site and governmental rules regarding use of PPE. Environmental limits specified in manual [Section 7].	1	2	2	3	7	LOW	Ensure operators are provided the appropriate PPE for the working environment.	Yes	MGMT	
									Ensure that the period of exposure is kept within acceptable levels.	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.)**											
4.1.1	Noise generated by machine causes hearing loss to operators.	The maximum guaranteed sound power level (<100 dBA) and the sound pressure level at the work platform (<72 dBA) is specified in the operator manual. [p.84 (SJ9233RT), 84 (SJ9243RT), 84 (SJ9253RT),] Instruction in Operators Manual [p. 19] to comply with employer, job site and governmental rules regarding use of PPE.	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 (<100 dBA) and the sound pressure level at the ground (72) is specified in the operator manual. [p.84 (SJ9233RT), 84 (SJ9243RT), 84 (SJ9253RT),]	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	

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT										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										
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	
									Establish protocols and procedures to ensure a timely and appropriate response in emergencies.	Yes	MGMT/OP	
									Ensure that effective communication can be maintained in all instances where the unit is used.	Yes	MGMT/OP	
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). Statement provided in operators manual [p. 84] regarding whole body vibration.	1	2	1	3	6	LOW	Ensure that use of the machine in continuous shifts is limited to prevent operator fatigue which may result from exposure to machine vibration.	Yes	MGMT/OP	
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 Operators Manual [p. 15] not to use the machine as a welding ground	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**							NS				
6.3	**Ionizing radiation sources**							NS				
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 EN ISO 13766-1:2018 and IEC CIS-PR12:2007+A1:2009.	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	
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.	Warning in Operators Manual [p. 16] to always operate in a ventilated area.	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 shielded from operating positions. Warning in Operators Manual [p. 39, 71] to refuel and charge the battery in a well ventilated area, away from sparks and flames.	2	2	2	3	7	LOW	Ensure operators are made aware of the potential hazard.	Yes	MGMT	
									Ensure MEWP batteries are charged in well ventilated areas.	Yes	MGMT/OP	
									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	
7.1.3	Personnel suffer skin irritations due to contact with operating fluids or materials used in the MEWP.		1	3	2	3	8	LOW	Ensure operators are made aware of the potential hazard.	Yes	MGMT	
									Ensure appropriate PPE is worn by personnel.	Yes	OP	
									Ensure that safety data sheets are obtained from the manufacturer where required.	Yes	MGMT	
7.1.4	Burns as a result of exposure to hot oil.		1	3	2	3	8	LOW	Ensure that personnel are trained and aware of this hazard.	Yes	MGMT	
									Ensure that the appropriate PPE is worn by personnel.	Yes	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. Battery isolation switch fitted. Warning in Operators Manual [p. 39] to wear ppe when maintaining batteries. to wear PPE when maintaining batteries. Warning decal fitted [119674] which states to disconnect battery before servicing.	2	1	2	3	6	LOW	Ensure that the appropriate PPE is worn by personnel.	Yes	MGMT/OP	
									Ensure that the battery is disconnected before charging	Yes	MGMT	
7.2.2	Personnel injured whilst refuelling MEWP.	Fuel filler point is located away from heat sources in accordance with AS1418.10 – 2011 clause 2.2.20. Warning in Operators Manual [p. 39, 71] to refuel and charge the battery in a well ventilated area, away from sparks and flames.	4	2	2	3	7	HIGH				
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.**											
8.1.1	Excessive effort required to climb into work platform.	Access steps provided in accordance with AS1418.10 clause 2.5.8. Warning in Operators Manual [p. 19] to exit using generally 3 points of support.	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	
									Ensure that access steps are maintained in good condition and repaired when necessary.	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. Instruction in Operators Manual [p. 19] to comply with employer, job site and governmental rules regarding use of PPE.	1	3	2	3	8	LOW	Develop and provide specification for appropriate UV protection and its use.	Yes	MGMT/OP	
									Provide UV protective equipment including hat, sunglasses and sunscreen.	Yes	MGMT/OP	
									Instruct operators on the requirements for its use.	Yes	MGMT/OP	

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT										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										
8.3.2	Persons could be injured if equipment is operated while not wearing appropriate PPE.	Standard Job site procedures apply. Requirement specified in AS2550.10 – 2006 clause 5.2. Instruction in Operators Manual [p. 19] to comply with employer, job site and governmental rules regarding use of PPE.	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. Standard Job site procedures apply. Instruction in Operators Manual [p. 19] to comply with employer, job site and governmental rules regarding use of PPE.	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. Instruction in Operators Manual [p. 19] to comply with employer, job site and governmental rules regarding use of PPE.	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 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. Instruction in Operators Manual [p. 19] to comply with employer, job site and governmental rules regarding use of PPE. to comply with employer, job site and governmental rules regarding use of PPE.	2	3	2	3	8	MEDIUM	Ensure operators are provided with appropriate PPE suitable for the given task. Ensure operators are wearing appropriate PPE suitable for the given task.	Yes Yes	MGMT/OP MGMT/OP	
8.4	**Inadequate area lighting**											
8.4.1	Persons could be injured if the light on the job site is inadequate.	See also 12.1	1	2	1	3	6	LOW	Fit lighting if the MEWP is to be used in areas of low light Monitor lighting levels throughout the operation of the MEWP, as lighting is prone to change relative to time of day.	Yes Yes	MGMT/OP 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.	Standard SWP's apply.	2	2	2	3	7	LOW	Implement a system to ensure that operators do not work excessive or continuous shifts and manage peak demands. Ensure that operators do not continue use of the MEWP if they feel tired or are suffering from fatigue.	Yes Yes	MGMT/OP 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. Ensure only trained personnel are permitted to operate MEWP.	Yes Yes	MGMT MGMT/OP	
8.5.3	Operator injured due to inattention from boredom.		3	1	2	3	6	MEDIUM	Limit shift hours. Ensure rotation of operators during shift.	Yes Yes	MGMT MGMT/OP	
8.6	**Human error**											
8.6.1	Operator or ground personnel injured due to "horse play" or inappropriate use.	Warning in Operators Manual [p. 18] to not permit horseplay. Warning in operator's manual [p. 9] that the MEWP is only to be used by authorised personnel who are qualified, trained and certified to operate the machine. Instructions in operator's manual [p. 70] regarding the dangers of working solo and recommendations that ground personnel who are trained in the emergency retrieval procedures are present. 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. Instruction in Operators Manual [p. 10] to obey all laws, regulations and job site rules.	3	1	2	3	6	MEDIUM	Ensure operators do not engage in horse play or stunt driving. Ensure that only properly trained and licensed personnel use MEWP. Ensure that when not in use, the platform is secured against unauthorised use.	Yes Yes Yes	MGMT/OP MGMT/OP OP	
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. Warning in the operator's manual [p. 16] that the unit is not to be operated by persons under the influence of drugs and/or alcohol.	3	2	2	3	7	MEDIUM	Ensure that operators do not use the MEWP while under the influence of alcohol or drugs. Instruct the operator that operation while under the influence of alcohol or drugs are prohibited.	Yes Yes	MGMT/OP MGMT	
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	
9	**Hazard combinations**											
9.1	Injuries exacerbated as a result of insufficient procedures or equipment.	Instruction in Operators Manual [p. 67] describing use of emergency power system. Decal fitted adjacent to the emergency controls explaining the operation [173624].	4	2	1	3	6	HIGH	Establish and audit routine emergency procedures. Display emergency phone numbers and contact procedures at the site in ready display to the appropriate personnel. Periodically verify emergency equipment and supplies.	Yes Yes Yes	MGMT MGMT 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. Ensure that the unit is withdrawn from service and appropriately assessed by a competent person. Immediately isolate the unit for 24 hours.	Yes Yes Yes	MGMT MGMT/OP 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)**											
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. Instruction in Operators Manual [p. 67] describing use of emergency power system. Decal fitted adjacent to the emergency controls explaining the operation [173624].	3	2	2	3	7	MEDIUM	Ensure operators are trained in the use of the emergency lowering systems. Ensure that the emergency system is checked on a periodic basis.	Yes Yes	MGMT/OP MGMT/OP	

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT											PRELIMINARY (Refer to "Notes" section)			
A	B	C				D1	D2	D	E		F	G	H	
Hazard No.	Hazard Description - (the situation or parts of plant which could cause injury or illness)	Is there any risk? 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	
		All solenoid valves return to the neutral position if power is lost.						MEDIUM	Ensure that the MEWP undergoes a pre-operational inspection prior to every use in accordance with the manufacturer's instructions.		Yes	MGMT/OP		
		Maintenance manuals [part number 229046ACA] prepared which cover all aspects of maintenance of the control and braking systems.							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.	3	1	1	3	5	MEDIUM	Ensure that all pre-operational inspections are performed in accordance with the manufacturer's instructions prior to use.		Yes	MGMT/OP		
		Control systems designed in accordance with AS1418.10 – 2011 clause 2.6.							Ensure that all control system faults are logged and reported to service personnel.		Yes	OP		
		Solenoid control valves stop movement on power failure.							Ensure that the machine is not operated if any faults exist.		Yes	OP		
		Instruction in Operators Manual [p. 47] to test the emergency stop.												
		Instruction in Operators Manual [p. 48] to test the function enable button.												
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.	3	2	1	3	6	MEDIUM	Ensure that only qualified service personnel are charged with the maintenance of the MEWP.		Yes	MGMT		
		Production tests are conducted in accordance with AS1418.10 – 2011 clause 3.3 upon completion of manufacture.							Ensure they follow the instructions provided in the repair manual.		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.	3	2	1	3	6	MEDIUM	Ensure that only qualified service personnel are charged with the maintenance of the MEWP.		Yes	MGMT		
		Detailed instructions are provided in the maintenance section which covers correct hose fitting procedures.							Ensure they follow the instructions provided in the repair manual.		Yes	MGMT/OP		
		Warning provided in the operator's manual that only trained and qualified personnel should perform maintenance [p. 13].												
		Warning in operator's manual [p. 13] to only use genuine spare parts.												
		Functional checks are listed in the maintenance manual [p. 17]which are to be conducted following hydraulic repairs.												
10.4.3	MEWP overturns because incorrect wheels/tyres have been fitted.	Warning decal fitted [124631] warning of fitting tyres which are not approved by the manufacturer.	3	2	1	3	6	MEDIUM	Ensure that only approved wheels/tyres are fitted.		Yes	MGMT		
									Ensure that only qualified service personnel are charged with the maintenance of the MEWP.		Yes	MGMT		
									Ensure they follow the instructions provided in the repair manual.		Yes	MGMT		
10.5	**Overturn, unexpected loss of machine stability**													
10.5.1	MEWP overturns due to wear in pivot pins/ wear pads causing increased deflection in scissor stack/mast and increased overturning moments.	Maintenance manual provided [part number 229046ACA] which details maintenance checks of scissor mechanism.	4	2	2	3	7	HIGH	Ensure that the MEWP undergoes a pre-operational inspection prior to every use in accordance with the manufacturer's instructions.		Yes	MGMT/OP		
		Stability is calculated in accordance with AS1418.10 – 2011 clause 2.1.5 which includes the effect of play in the connections of the extending structure.							Ensure that the MEWP is not operated if any faults are detected during the pre-operational inspections.		Yes	MGMT/OP		
		Stability is tested using the loads calculated in accordance with AS1418.10 – 2011 clause 2.1.5 which includes the effect of play in the connections of the extending structure.												
10.5.2	Due to tyre/wheel failure.	Solid tyres fitted.	4	2	2	3	7	HIGH	Ensure operators perform checks of wheels/tyres before using MEWP.		Yes	MGMT/OP		
		Instruction in Operators Manual [p. 37] to check tyres.							Ensure that tyres are replaced as necessary with original specification.		Yes	MGMT/OP		
11	**Hazards caused by (temporary) missing and/or incorrectly positioned safety- related measures/means**													
11.1	**All kinds of guards**													
11.1.1	Personnel exposed to hazards within the engine area because guard on engine is missing.	Cover fitted over engine.	1	2	1	3	6	LOW	Ensure that guards are not removed, or altered without the written approval of the manufacturer.		Yes	MGMT/OP		
									Ensure that covers are always in place prior to operation.		Yes	OP		
									Ensure that personnel keep clear of the turret area whilst the MEWP is in operation.		Yes	OP		
11.1.3	Unintentional activation of controls due to entanglement of hoses or cables with joystick.	Constant pressure dead-man switch fitted which must be activated in order for elevating structure movements to occur.	3	1	1	3	5	MEDIUM	Ensure operators are aware of the residual risk.		Yes	MGMT/OP		
11.2	**All kinds of safety-related (protection) devices**													
11.2.1	Hazards arising due to safety switches being overridden.	Safety devices are positioned to prevent easy access.	4	2	1	3	6	HIGH	Ensure that safety devices are not tampered with and are in good condition before use of machine.		Yes	MGMT		
		Warning in Operators Manual [p. 15] not to modify the machine.							If any faults are discovered do not use machine until all faults are rectified.		Yes	MGMT/OP		
		Preoperational checks specified in Operators manual. [p. 35].												
		Decal fitted [156613] which states do not alter or disable any safety switch or device.												
11.2.2	Personnel exposed to hazards due to unauthorised alteration or interference.	Warning in Operators Manual [p. 16] not to alter components that affect safety or stability	4	2	1	3	6	HIGH	Seek advice from the manufacturer or a competent person for all modifications/repairs considered during life of MEWP.		Yes	MGMT		
		Decal fitted [156613] which states do not alter or disable any safety switch or device.							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.	4	2	1	3	6	HIGH	Ensure load sensing system is checked at the regular intervals as detailed by manufacturer.		Yes	MGMT/OP		
		Decal fitted [156613] which states do not alter or disable any safety switch or device.							Ensure that operators are trained in the correct emergency procedures.		Yes	MGMT/OP		
		Detailed instructions provided in the Maintenance Manual [p. 28] regarding the correct testing procedures.												
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.	4	2	1	3	6		Ensure that the MEWP is operated within the rated slope limitations specified.		Yes	MGMT/OP		

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT											PRELIMINARY (Refer to "Notes" section)		
A	B	C				D1	D2	D	E	F	G	H	
Hazard No.	Hazard Description - (the situation or parts of plant which could cause injury or illness)	Is there any risk? 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	
		Chassis inclination indicator system provided which warns the operator if the lateral and longitudinal slope limits of the chassis are exceeded. Chassis inclination limitations are provided in the operator's manual [p. 84 (SJ9233RT), 84 (SJ9243RT), 84 (SJ9253RT),]. The chassis inclination limits are listed on the data plate [173431AA(SJ9233RT), 173431AA(SJ9243RT), 173431AA(SJ9253RT), 173431AA(0),]. Checks of the inclination system are included in the service manual. [p. 173].						HIGH	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 Yes Yes	MGMT/OP MGMT/OP 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. Instruction in Operators Manual [p. 47] to test the emergency stop.	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 Yes Yes	MGMT/OP MGMT/OP MGMT/OP		
11.4	**Safety signs and signals**												
11.4.1	Personnel injured due to missing or illegible safety signs.	List of safety pictorials and Decals are illustrated in the Operators Manual [pp.Section 8]. Instruction in Operators Manual [p. 36] to check decals legible and in place.	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 Yes Yes	OP OP OP		
11.5	**All kinds of information or warning devices**												
11.5.1	Personnel are not provided with sufficient instruction because operations manual missing from MEWP.	Storage compartment fitted on the platform for manual. Manuals available from manufacturer's website.	3	2	1	3	6	MEDIUM	Ensure the MEWP is supplied with all of the relevant operating manuals. Ensure that the operators check that the operations manual is present before operating MEWP.	Yes Yes	MGMT OP		
11.5.2	Incorrect information is provided in the operator's manual	Independent review of manuals conducted as part or risk assessment.	3	2	1	3	6	MEDIUM					
11.6	**Energy supply disconnecting devices**												
11.6.1	Maintenance personnel injured due to failure of pressure isolating or depressurising devices in hydraulic circuit(s).	No accumulators fitted.	1	2	1	3	6	LOW	Ensure that only properly qualified maintenance personnel perform maintenance on the MEWP. Ensure that all instructions provided by the manufacturer are read and understood prior to commencing any maintenance activities on the MEWP.	Yes Yes	MGMT MGMT		
11.7	**Emergency devices**												
11.7.1	Emergency pump does not operate.	Instruction in Operators Manual [p. 27] to test the emergency controls. Emergency lowering is achieved with manually activated valves/controls.	1	2	1	3	6	LOW	Ensure that operators are trained in the correct use of the emergency retrieval system. Ensure that the emergency pump is checked on a periodic basis in accordance with the manufacturer's instructions. Ensure that MEWP is stood down from service if the emergency system is not working properly.	Yes Yes Yes	MGMT/OP MGMT/OP MGMT/OP		
11.7.5	Hazards arising as a result of incorrect emergency retrieval procedures.	Instruction in Operators Manual [p. 67] describing use of emergency power system. Operation of emergency systems is simple requiring minimal instructions. Instruction in Operators Manual [p. 31] describing operation of the secondary guarding system. Decal fitted adjacent to the emergency controls explaining the operation [173624].	1	2	1	3	6	LOW	Ensure operators are trained in emergency retrieval and operation. Ensure that refresher training is undertaken by operators on a regular basis. Ensure that ground personnel are present who are trained in the emergency lowering procedures.	Yes Yes Yes	MGMT/OP MGMT/OP MGMT/OP		
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	LOW	Ensure personnel are trained in correct repair procedures. Ensure that the MEWP is tested by a competent person prior to being returned to normal service after repairs and/or adjustment of critical components or systems. Ensure that all appropriate equipment is supplied and used when performing maintenance.	Yes Yes Yes	MGMT MGMT MGMT		
11.9.2	Personnel crushed working under the elevated structure	A support member 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. Warning in Maintenance Manual [p. 12] to use devices to support weight of components to be lifted. Warning decal [173024] fitted on turntable at crushing point under boom.	1	2	1	3	6	LOW	Ensure that personnel do not enter the area under the platform if it is not adequately supported. Provide equipment to prevent platform falling such as overhead crane.	Yes Yes	MGMT/OP MGMT/OP		
11.9.3	Persons injured whilst handling heavy or unsupported items.	Warning in Maintenance Manual [p. 12] to use devices to support weight of components to be lifted.	1	2	1	3	6	LOW	Provide necessary equipment to handle heavy items. Instruct persons undertaking tyre change to follow established SWP's in accordance with recognised industry practice.	Yes Yes	MGMT MGMT		
11.9.4	Strains/sprains when removing components or performing certain maintenance aspects of the MEWP.		1	2	1	3	6	LOW	Establish appropriate work procedures for all anticipated maintenance issues arising. Periodically review these safe work procedures (SWP's).	Yes Yes	MGMT MGMT		
11.9.5	Personnel fall whilst performing maintenance checks.	Standard SWP's apply Pre-operational checks able to be performed at ground level.	1	2	1	3	6	LOW	Ensure that appropriate equipment is used during maintenance where access at height is required. Periodically review these safe work procedures (SWP's).	Yes Yes	MGMT MGMT		

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT										PRELIMINARY (Refer to "Notes" section)		
A	B	C				D1	D2	D	E	F	G	H
Hazard No.	Hazard Description - (the situation or parts of plant which could cause injury or illness)	Is there any risk? 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
		Maintenance manual [part number 224578ABA] provided which details all checks and the residual hazards.						LI				
11.10	**Equipment evacuating gases, etc.**											
11.10.1	Exhaust system has been removed or is damaged.		1	2	1	3	6	LOW	Ensure that exhaust system is maintained in accordance with manufacturer's instructions.	Yes	MGMT/OP	
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 Manouvering**											
13.1.1	While personnel are moving MEWP around job site.	Maximum travel speeds are fixed. Ramp speed provided which is slower than travel speed. Travel speeds given in operator's manual [Section 7].	3	2	1	3	6	MEDIUM	Ensure that MEWP is not driven on excessive slopes or rough terrain at speed.	Yes	OP	
									Ensure that operators travel at speeds commensurate with the conditions.	Yes	OP	
13.1.2	Operator located on the ground crushed while operating the travel controls – type 2 or 3 MEWP.	Travel controls only provided at platform controls (type 3 MEWP).	3	2	1	3	6	MEDIUM				
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). Only possible to use controls at pre-selected position, not possible to use travel controls in platform whilst lower controls are being used to lower platform.	3	2	1	3	6	MEDIUM				
13.2.2	When loading/unloading MEWP from trucks.	Storing and transportation procedures provided in the operators manual [p. 62]. Warning in Operators Manual [p. 73] not to exceed the gradeability.	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 for transportation.	Information in Operators Manual [p. 72] describing lifting instructions. Lift points fitted and identified on the MEWP [143688]. The unladen mass of the MEWP is listed on the data plate [173431AA(SJ9233RT), 173431AA(SJ9243RT), 173431AA(SJ9253RT),] fitted to the MEWP. Standard machine specifications included in the operators manual [Section 7]. Lift points have been designed to support the intended loads over the life of the MEWP.	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.	Warning in Operators Manual [p. 73] not to exceed the gradeability. Requirement in manual [p. 19] to perform site survey prior to operation.	3	2	2	3	7	MEDIUM	Ensure that only suitably trained personnel are permitted to load MEWPs onto trucks.	Yes	MGMT/OP	
									Ensure that personnel wear the correct fall restraint harness whilst loading the MEWP onto trucks.	Yes	OP	
13.2.5	Injury from unsecured vehicle whilst transporting.	Instructions in operator's manual [p. 62] regarding transporting MEWP as required by AS1418.10 – 2011 clause 4.1.3 (a). Tie-down points fitted to MEWP and identified with decals [157528]. Warning in Operators Manual [p. 73] to secure the platform and chassis using tie downs.	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 in Operators Manual [p. 72] to make sure all equipment has suitable capacity.	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.	Information in Operators Manual [p. 68] describing free-wheeling/brake release	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.)**											
14.1.1	Operator is exposed to contact with exhaust gases.		1	2	1	3	6	LOW	Ensure that exhaust system is maintained in accordance with manufacturer's instructions.	Yes	MGMT	
14.1.2	Personnel injured due to exposure to rotating drive shafts.		3	2	1	3	6	MEDIUM	Ensure that personnel are trained with respect to the residual hazard.	Yes	MGMT	
14.2	**Inadequate visibility from driver's/operator's position**											
14.2.1	Personnel injured due to operator having limited visibility from operating position.		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	OP	
									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 Operators Manual [p. 17, 63] to be aware of blind spots.	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**											

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT										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
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.		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 ISO21455 requirements.							Limit the length of shifts to a reasonable time.	Yes	MGMT/OP	
14.5	**Starting/moving of self-propelled machinery**											
14.5.1	Unexpected movement during start-up		1	2	1	3	6	LOW	Ensure that personnel are clear before travelling or when starting.	Yes	MGMT/OP	
14.6	**Road traffic of self-propelled machinery**											
14.6.1	MEWP collision with vehicular traffic on job site.	Warning in manual regarding the residual hazard of traffic on-site [p. 19].	4	1	1	3	5	HIGH	Implement a traffic management system.	Yes	MGMT/OP	
		Projecting extremities are identified with hazard tape.							Ensure that the rotating/strobe light is used whenever the machine is in motion.	Yes	OP	
		An audible alarm sounds whenever the MEWP is in motion.							Ensure a traffic management system is enforced, should the MEWP be exposed to vehicular traffic.	Yes	MGMT/OP	
		Instruction in Operators Manual [p. 10] to obey all laws, regulations and job site rules.										
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 are fitted with load holding check valves to prevent movement in case of hose failure.	2	2	1	3	6	LOW	Ensure cylinders are inspected in accordance with procedures outlined in manual.	Yes	MGMT/OP	
		Hydraulic filters fitted.							If any defects are detected ensure that the MEWP is withdrawn from service until the defects are rectified.	Yes	OP	
		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.	Theoretical gradeability limits in the operator's manual [Section 7].	4	2	2	3	7	HIGH	Ensure travel speed is reduced when travelling on gradients.	Yes	OP	
		Theoretical gradeability limits listed on the serial plate [173431AA(SJ9233RT), 173431AA(SJ9243RT), 173431AA(SJ9253RT),].										
15.2	**Hazards due to break-up and/or ejection of parts**											
15.2.1	MEWP could collapse or break up as a result of poor design or manufacture.	MEWP is load tested as part of pre-delivery checks by manufacturer before delivery to customer.	1	2	1	3	6	LOW	Ensure that the unit is registered with manufacturer.	Yes	MGMT	
		Warning in Operators Manual [p. 18, 35] not to use a damaged/malfunctioning machine.							Periodically check for the existence of routine safety alerts that may be issued by the manufacturer or the representative.	Yes	MGMT	
		Note in Operators Manual [p. 38] to check for cracks.							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 manufacturers 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.	4	2	1	3	6	HIGH	Ensure that the MEWP is registered with the manufacturer.	Yes	MGMT	
		Instruction in Operators Manual [p. 9] to register the machine with the manufacturer.							Periodically check the status in respect of safety bulletins or upgrades applying to the MEWP.	Yes	MGMT	
		Instructions in service manual [pp. 17 & 18] to check for outstanding service bulletins during periodic inspection.							Ensure that safety upgrades provided by the manufacturer are implemented.	Yes	MGMT	
									Ensure the manufacturer is advised when the MEWP is disposed of or sold.	Yes	MGMT	
15.2.3	Structural failure due to thermal expansion of hydraulic oil if MEWP is left fully extended for a long period of time.		1	1	1	3	5	LOW	Ensure the MEWP is not left fully extended for a long period of time.	Yes	MGMT/OP	
15.2.4	Structural collapse due to loss of pivot pin(s)	Instruction in Operators Manual [p. 44] to check nuts, bolt and other fasteners.	1	1	1	3	5	LOW	Check the security of all pivot pins.	Yes	MGMT/OP	
15.3	**Hazards due to rolling over (roll over protection – ROP)**							NS				
15.4	**Hazard due to falling objects (falling object protection – FOP)**											
15.4.1	Ground crew or passer-by being struck by falling tools or objects.	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.	Yes	OP	
		See AS2550.10 – 2006 clause[s] 5.10 & 5.16.							Ensure that materials are not supported on the guardrails or exceed the confines of the platform.	Yes	OP	
									Remove all loose tools and objects from the platform before driving.	Yes	OP	
15.5	**Inadequate means of access**							NS				
15.6	**Hazards caused due to towing, coupling, connecting, and transmission**											
15.6.3	Injury sustained whilst towing.	Information in Operators Manual [p. 68] describing free-wheeling/brake release	2	2	1	3	6	LOW	Ensure that the instructions provided in the operator's manual are followed.	Yes	MGMT/OP	
		Information in Operators Manual [p. 68] describing towing instructions.							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.	Yes	MGMT/OP	
									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.**											

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT										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										
15.7.1	Hazards from batteries and associated faults.	Batteries encased within battery box. Battery isolation switch fitted. Instruction in Operators Manual [p. 39] describing battery charging Warning decal [119674] fitted to chassis which states to disconnect battery before servicing.	2	2	2	3	7	LOW	Ensure the battery isolation switch is used whenever battery maintenance is performed.	Yes	MGMT/OP	
									Ensure that the appropriate PPE is worn when working on or near the batteries.	Yes	MGMT/OP	
									Ensure safe work procedures are established in regards to working with batteries.	Yes	MGMT/OP	
									Ensure operators follow established safe work procedures.	Yes	MGMT/OP	
									Ensure that only trained personnel conduct maintenance on or near batteries.	Yes	MGMT/OP	
									Ensure that personnel who are trained in first aid are readily available to render assistance if required.	Yes	MGMT/OP	
16	**Hazards due to lifting operation**											
16.1	**Lack of stability**											
16.1.1	Hazard number not used.	See 19.2, 23										
16.2	**Derailment of machinery**							NS				
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. Information in Operators Manual [p. 72] describing lifting instructions. Warning in Operators Manual [p. 72] to use lifting eyes only Lift points fitted and identified on the MEWP [143688].	3	2	1	3	6	MEDIUM	Ensure that lift points are inspected as per the criteria detailed in the maintenance manuals.	Yes	MGMT/OP	
									Ensure instructions are followed as per the instructions provided in the operator's manual for lifting.	Yes	MGMT/OP	
16.4	**Uncontrolled movements**											
	Hazard number not used.	See 13.2	3	2	1	3	6	MEDIUM				
17	**Inadequate view of trajectories of the moving parts**											
	Hazard number not used.	See 14.2.	4	3	2	3	8	HIGH				
18	**Hazards caused by lightning**											
18.1	Persons could be injured if the unit is operated during storms.	Warning in Operators Manual [p. 15] not to operate in lightning or storms.	4	1	1	3	5	HIGH	Ensure MEWP is not used outdoors during storms or if it is likely that storm may arise during performance of the task.	Yes	MGMT/OP	
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 Operators Manual [p. 18] to not to exceed the rated load. The maximum Rated Capacity is listed in the operator's manual [p. 84 (SJ9233RT), 84 (SJ9243RT), 84 (SJ9253RT),]. The maximum rated capacity is displayed on the manufacturers ID plate [173431AA(SJ9233RT), 173431AA(SJ9243RT), 173431AA(SJ9253RT),]. The maximum rated capacities displayed on the platform [173281(SJ9233RT), 173304(SJ9243RT), 173305(SJ9253RT),].	3	3	1	3	7	MEDIUM	Ensure preoperational checks are performed in accordance with those outlined in operators manual.	Yes	MGMT/OP	
									Ensure that any faults are reported directly to management and machine is withdrawn from service.	Yes	MGMT/OP	
									Verify that the expected loads do not exceed the rated capacity.	Yes	MGMT/OP	
19.1.2	Maximum manual force is exceeded.	Warning in Operators Manual [p. 17] that the maximum manual force must not be exceeded. Maximum permitted manual force displayed on platform [173281(SJ9233RT), 173304(SJ9243RT), 173305(SJ9253RT),]. Warning in Operators Manual [p. 16] not to attach loads or tie to adjacent structures. Maximum permitted manual force included on ID plate [173431AA(SJ9233RT), 173431AA(SJ9243RT), 173431AA(SJ9253RT),]. Decal fitted to platform [173281(SJ9233RT), 173304(SJ9243RT), 173305(SJ9253RT),] includes maximum manual force.	4	1	1	3	5	HIGH	Ensure that operators do not exert lateral force greater than that specified.	Yes	OP	
									Ensure that operators do not push or pull objects with platform.	Yes	OP	
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. Warning in Operators Manual [p. 16] to not use the machine if wind speed exceeds 12.5m/s. Warning in Operators Manual [p. 16] to not increase the surface area of the platform or load. ID plate [173431AA(SJ9233RT), 173431AA(SJ9243RT), 173431AA(SJ9253RT),] includes maximum wind speed rating. Decal fitted to platform [173281(SJ9233RT), 173304(SJ9243RT), 173305(SJ9253RT),] includes maximum wind speed rating.	4	1	1	3	5	HIGH	Train operators of the dangers of carrying or fitting bluff bodies to the platform.	Yes	MGMT	
									Ensure that the EWP is not operated in high winds above the rated speed.	Yes	MGMT/OP	
									Monitor wind forecasts on a regular basis.	Yes	OP	
19.1.4	Structural failure due to influences from load combinations not taken fully into account.	Structural analysis accounts for normally encountered load combinations; wind + dynamic + static, wind + manual force + static. Maximum permitted manual force displayed on platform [173281(SJ9233RT), 173304(SJ9243RT), 173305(SJ9253RT),]. Standard machine specifications included in the operators manual [Section 7]. detail the load combinations which are acceptable. MEWP is fitted with a load sesning system which limits the magnitude of the vertical load.	3	1	1	3	5	MEDIUM	Ensure that the machine is only operated within the specification detailed in the operating manual and in accordance with industry standards and AS2550.10.	Yes	MGMT/OP	
									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.	Yes	MGMT/OP	
									Verify expected loading and confirm it is less than rated capacity.	Yes	MGMT/OP	
									Verify operating slopes are less than the maximum permitted chassis inclination of the MEWP.	Yes	MGMT/OP	

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT										PRELIMINARY (Refer to "Notes" section)			
A	B	C				D1	D2	D	E	F	G	H	
Hazard No.	Hazard Description - (the situation or parts of plant which could cause injury or illness)	Is there any risk? 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	
		The maximum rated capacities displayed on the platform [173281(SJ9233RT), 173304(SJ9243RT), 173305(SJ9253RT),].							Verify wind conditions experienced in service are less than the maximum wind speed rating of the MEWP.	Yes	MGMT/OP		
		Decal fitted to platform [173281(SJ9233RT), 173304(SJ9243RT), 173305(SJ9253RT),] includes maximum wind speed rating.							Ensure the machine is isolated to prevent unauthorised use at the end of each work shift.	Yes	MGMT/OP		
19.1.5	Fitment 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	LOW	Ensure that only manufacturer approved equipment is fitted to the work platform.				
		Additional decals are fitted which list the permitted loads for lifting devices.							Ensure that any lifting devices fitted are not overloaded and all instructions for use are followed.				
19.1.6	Due to operator in platform lifting loads with ropes.	Warning in Operators Manual [p. 16] not to attach loads or tie to adjacent structures. to attach loads or tie to adjacent structures.	4	2	1	3	6	HIGH	Ensure operators do not cause platform overload by lifting additional equipment from elevated platform using ropes.	Yes	MGMT/OP		
		Warning in Operators Manual [p. 17] not to use as crane.											
19.1.11	Load bearing cylinder collapses due to inelastic stability (buckling) due to overload.	Cylinders are assessed in accordance with AS1418.10 – 2011 clause 2.9.1.2.1.	1	2	1	3	6	LOW	Ensure that any faults are reported directly to management and machine is withdrawn from service.				
		MEWP fitted with load sensing system designed to prevent overloading due to vertical loads. (See).							Ensure MEWP is not overloaded during operation.				
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).	1	2	1	3	6	LOW					
		See also 19.1.1											
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	Ensure that the unit if not parked unattended with the MEWP fully elevated.	Yes	MGMT/OP		
19.2.4	Overturning on excessive slope	Warning in Operators Manual [p. 16] not to drive on or near uneven terrain or unstable surfaces.	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		
		Warning in Operators Manual [p. 73] not to exceed the gradeability.							Ensure that operators observe the tilt recovery instructions.	Yes	MGMT/OP		
		Instruction in Operators Manual [p. 27] to test operation of tilt alarm and drive cut-out. describing operation of tilt alarm and drive cut-out.							Enaure that the tilt alarm and cutout is tested poer the manual.	Yes	MGMT/OP		
		Maximum inclinations are detailed on the data plate [173431AA(SJ9233RT), 173431AA(SJ9243RT), 173431AA(SJ9253RT),].											
19.2.5	Overturning due to exceeding the maximum permitted number of operators in the work platform.	Specifications in Operators Manual [Section 7] detailing the maximum platform capacities which include the maximum number of persons permitted in the work platform for both high and low capacity use.	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.	Yes	MGMT/OP		
		Decal [173281(SJ9233RT), 173304(SJ9243RT), 173305(SJ9253RT), (0),] listing the platform capacity limitations for both indoor and outdoor use fitted in work platform.							Ensure that the maximum number of operator's does not exceed the manufacturers limits for both indoor and outdoor use.	Yes	MGMT		
20	**Hazards due to lifting persons**												
20.1	**Mechanical strength**												
20.1.1	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	LOW	Verify expected loading and confirm it is less than Rated Capacity.	Yes	MGMT/OP		
		Platform load sensing system fitted in accordance with AS1418.10 – 2011 clause 2.3.1.2.							Audit the rated capacity of the anticipated load on a regular basis.	Yes	MGMT		
		Pre-Operation Checks included in the operator's manual [35].							Conduct preoperation checks in accordance with the manual.	Yes	MGMT/OP		
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	LOW	Ensure that the system function speeds are set and maintained to the specifications listed in the manual.	Yes	MGMT		
		The load cases used for the structural analysis includes the dynamic load case.							Ensure the MEWP is maintained in a manner to minimise the excessive backlash between components.	Yes	MGMT		
		The acceleration due to travelling motions have been measured and accounted for in the structural analysis.											
		Function Speeds are listed in the Service Manual [p. 36].											
20.1.4	Injury from using the MEWP in an unsuitable condition due to poor maintenance or inspections.	Logbook provided on MEWP to record usage and faults.	4	3	2	3	8	HIGH	Ensure that pre-start inspections are completed prior to use of MEWP.	Yes	MGMT/OP		
		Information in Operators Manual [p. 35] detailing pre-operation checks							Ensure that MEWP is not used if any defects are found.	Yes	MGMT/OP		
		Maintenance instructions provided which includes maintenance instructions for all anticipated maintenance requirements over the life of the MEWP.							Ensure that any damage or accidents that involve the MEWP are reported to the relevant manager/authorities.	Yes	MGMT/OP		
		Instruction in Operators Manual [p. 44] to check nuts, bolt and other fasteners.							Modify maintenance program according to use and the operating environment.	Yes	MGMT/OP		
		Note in Operators Manual [p. 38] to check for cracks.							Ensure that the unit is checked, repaired and maintained by appropriately trained/qualified and experienced personnel in accordance with the checklists contained in the operation manual.	Yes	MGMT/OP		
		Instruction in Operators Manual [p. 37] to check tyres.							Ensure all inspections, servicing, replacement of parts and modifications are entered into logbook.	Yes	OP		
		Information in Operators Manual [p. Section 4.2] detailing maintenance procedures							Use equivalent replacement parts and log replacement.	Yes	MGMT		
									Instruct the operator/competent person to report all faults to management.	Yes	MGMT/OP		
20.1.5	Persons could be injured as a result of structural fatigue failure – Road Transport.	Note in Operators Manual [p. 38] to check for cracks.	4	2	1	3	6	HIGH	Ensure the operators are instructed to properly stow unit prior to transportation.	Yes	MGMT/OP		
		Warning in Operators Manual [p. 73] to secure the platform and chassis using tie downs.							Ensure the elevating structure & platform is restrained during transportation.	Yes	MGMT/OP		
		Decals fitted identifying tie down points [157528].											
20.1.6	Failure due to corrosion resulting from ingress of moisture and debris into the extending structure.	All ferrous metals are primed and painted to prevent corrosion.	4	2	1	3	6	HIGH	Regularly inspect the interior of the MEWP elevating structure.	Yes	MGMT/OP		
									Clean the unit of all debris on a regular basis.	Yes	MGMT/OP		
									Reinstate all damaged covers.	Yes	MGMT/OP		
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	LOW	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**												

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT											PRELIMINARY (Refer to "Notes" section)		
A	B	C				D1	D2	D	E	F	G	H	
Hazard No.	Hazard Description - (the situation or parts of plant which could cause injury or illness)	Is there any risk? 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	
20.2.1	Rated capacity is exceeded.	MEWP is fitted with a load sensing system.	3	3	3	1	7	MEDIUM	Ensure preoperational checks are performed in accordance with those outlined in operators manual.	Yes	MGMT/OP		
		Note in Operators Manual [p. 28] describing operation of the platform overload system							Ensure that any faults are reported directly to management and machine is withdrawn from service.	Yes	MGMT/OP		
		The maximum Rated Capacity is listed in the operator's manual [p. 84 (SJ9233RT), 84 (SJ9243RT), 84 (SJ9253RT),].							Ensure calibration checks are performed in accordance with the service manual.	Yes	MGMT/OP		
		Warning in Operators Manual [p. 18] to not to exceed the rated load.							Ensure MEWP is not overloaded during operation.	Yes	MGMT/OP		
		Rated capacity is displayed in the ID plate. [173431AA(SJ9233RT), 173431AA(SJ9243RT), 173431AA(SJ9253RT),]. The maximum rated capacities displayed on the platform [173281(SJ9233RT), 173304(SJ9243RT), 173305(SJ9253RT),].							Ensure that operators are familiar with the operation of the load sensing system.	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	HIGH	Maintain controls and their marking.	Yes	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).							Ensure operators are familiar with the control layout and function.	Yes	MGMT/OP		
		All controls are of the hold to run type and return to neutral on being released.							Ensure control switches automatically return to neutral when released.	Yes	OP		
		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.							Ensure that all incidents in relation to the machine are reported and acted on.	Yes	MGMT/OP		
		Symbols used for marking comply with ISO20381.											
21.1.2	Hydraulic control failure	Hydraulic filters fitted.	1	2	1	3	6	LOW	Ensure that hydraulic system is maintained as per manufacturer's instructions.	Yes	MGMT/OP		
		Maintenance manual provided which includes service requirements for hydraulic system.											
21.1.3	Control conflict using emergency power system.	Manual bleed down does not rely on power source.	1	2	1	3	6	LOW	Ensure operators are familiar with the emergency lowering procedures prior to operating the MEWP.	Yes	MGMT/OP		
		Overriding emergency system designed in accordance with AS1418.10 – 2011 clause 2.6.10.											
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.	1	2	1	3	6	LOW	Ensure that maximum travel speeds are maintained in accordance with manufacturer's specifications.	Yes	MGMT/OP		
		Maximum travel speeds are fixed.							Ensure MEWP travel speed is automatically reduced when the platform is elevated out of the transport position.	Yes	MGMT/OP		
		Travel speeds given in operator's manual [Section 7].											
		Instruction in Operators Manual [p. 53] to test elevated travel speed.											
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	LOW	Ensure operators are aware of this hazard.	Yes	MGMT/OP		
		Instruction in Operators Manual [p. 17] to check check for drop offs, concealed holes.							Ensure operators check for drop offs and kerbs.	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.	3	2	1	3	6	MEDIUM	Ensure that the maximum speeds do not exceed 100% (the factory default speed).	Yes	MGMT/OP		
		Maximum system speeds are fixed and cannot be altered by the operator.							Ensure that machine is maintained in accordance with manufacturer's instructions and all settings are maintained.	Yes	MGMT/OP		
		Function speeds are listed in the Service Manual [p. 36].											
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	MEDIUM	Instruct operators to wear fall restraint/arrest harness' at all times when in the platform and to attach the fall restraint/arrest lanyard to the anchor point provided.	Yes	MGMT/OP		
		Fall restraint anchorage points provided							Ensure harness and lanyards are in good condition.	Yes	MGMT/OP		
		Warning in Operators Manual [p. 17] to stay inside platform							Audit use of fall restraint/arrest devices.	Yes	MGMT/OP		
		Warning in Operators Manual [p. 19] to wear harness							Ensure that platform guard rails are properly fitted and not damaged.	Yes	OP		
		Warning in Operators Manual [p. 17] not to climb on guardrails											
		Labels fitted [172646] which identifies harness anchorage points.											
22.1.2	Falling from guardrails, ladders or stools located 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.	Yes	MGMT/OP		
		Warning in Operators Manual [p. 17] not to use additional ladders or steps							Ensure that operators do not use any means to gain additional height.	Yes	MGMT/OP		
		Warning in Operators Manual [p. 19] not to exit platform when raised.							Ensure the correct MEWP in terms of rated capacity, height and reach is used for the particular task at hand.				
		Warning in Operators Manual [p. 44] to close the gate or lower the midrail before operating.											
		Warning in Operators Manual [p. 17] to stay inside platform											
22.1.3	Operator falls over folded guard rails on the work platform.	Instructions are provided in the operator's manual [p. 76] regarding the correct procedure to erect the folding guardrails.	4	2	1	3	6	HIGH	Ensure that the guardrails are unfolded and locked before use.	Yes	OP		
									Ensure that operator egress at heights is prohibited unless in an emergency and there is a safe means to do so.	Yes	MGMT/OP		
									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.	Yes	OP		
									Refer to requirements per AS2550.10, see clause 5.9 and figure 5.9[B].	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.	4	2	1	3	6	HIGH	Ensure that personnel do not exit the platform except at ground level.	Yes	MGMT/OP		
		Gate opens inwards.							Audit use.	Yes	MGMT		

RISK ASSESSMENT: SKYJACK SJ9233RT, SJ9243RT, SJ9253RT										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? 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							Proposed SUPPLEMENTARY risk control measure			
		Warning in Operators Manual [p. 44] to close the gate or lower the midrail before operating.						HI	Ensure gate is maintained in accordance with manufacturers instructions.	Yes	MGMT/OP	
		Instruction in Operators Manual [p. 44] to check guardrails							Ensure MEWP is not used if gate is faulty.	Yes	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		Ensure that operator egress at heights is prohibited unless in an emergency and there is a safe means to do so.	Yes	MGMT/OP	
		Warning in Operators Manual [p. 19] not to exit platform when raised.						HIGH	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.	Yes	MGMT/OP	
									Refer to requirements per AS2550.10, see clause 5.9 and figure 5.9[B].	Yes	MGMT/OP	
22.1.6	Personnel fall through guard rails which have not been properly installed or locked in place.	Warning in Operators Manual [p. 17] not to climb on guardrails	4	1	1	3	5		Ensure that pre-operational inspection includes a check of the correct installation and locking of the guard rails.	Yes	MGMT/OP	
		Warning in Operators Manual [p. 17] to stay inside platform						HIGH	Ensure that the operator follows all instructions provided in the operator's manual regarding the procedure for installation of the work platform guard rails.	Yes	MGMT/OP	
									Ensure that the MEWP is not operated unless all guard rails are correctly installed.	Yes	OP	
22.2	**Trapdoors**							**NS**				
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.	4	2	1	3	6		Ensure that the MEWP is operated within the rated slope limitations specified.	Yes	MGMT/OP	
		Chassis inclination alarms fitted to each axle to warn if the permissible slopes are exceeded.						HIGH	Select the correct MEWP for the anticipated slopes at the job site.	Yes	MGMT/OP	
		Warning in manual regarding overturning hazards [p. 63].										
		The chassis inclination limits are listed on the data plate [173431AA(SJ9233RT), 173431AA(SJ9243RT), 173431AA(SJ9253RT),].										
		For Type 2 & 3 MEWPs see 11.2.6.										
23.1.2	Overturning as a result of setting up on uneven surfaces.	Stabiliser feet capable of articulating up to 10° in any direction as per AS1418.10 – 2011 clause 2.2.6.	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	
									Ensure operators follow these requirements.	Yes	MGMT/OP	
23.1.3	MEWP overturns due to slipping/driving off planks or similar inappropriate support surface.	Warning in Operators Manual [p. 16] not to drive on or near uneven terrain or unstable surfaces.	4	2	1	3	6	HIGH	Ensure the MEWP is not operated on planks.	Yes	MGMT/OP	
23.1.4	Overturning due to collapse of support surface.	Additional notes in AS2550.10.	4	2	1	3	6		Ensure the unit is not set up on rough, soft or otherwise hazardous surfaces.	Yes	OP	
		Maximum wheel/stabiliser loads displayed on MEWP as required by AS1418.10 – 2011 clause 4.2.10.						HIGH	Seek advice regarding ground/surface capacities as necessary from a competent person.	Yes	MGMT/OP	
		Warning in Operators Manual [p. 16] not to drive on or near uneven terrain or unstable surfaces.							Ensure that thorough site checks are performed prior to operation.	Yes	OP	
		Maximum wheel load listed in the operator's manual [p. 85 (SJ9233RT), 85 (SJ9243RT), 85 (SJ9253RT),].							Document procedures.	Yes	MGMT/OP	
		Maximum wheel/stabiliser load displayed on MEWP next to wheel/stabilisers [P/N...].										
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	
		The gradeability is listed on the ID plate [part number ...] fitted to the MEWP.						HIGH	Ensure the MEWP is driven at reasonable speed around the job site.	Yes	OP	
		Standard machine specifications included in the operators manual [Section 7]. which includes the gradeability.							Ensure the gradeability limits are not exceeded whilst travelling.	Yes	OP	
		Warning in Operators Manual [p. 73] not to exceed the gradeability.										
23.1.6	Overturning due to operation on a truck or similar device.	Warning in Operators Manual [p. 17] not to use on trucks or platforms.	4	2	1	3	6	HIGH	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	HIGH	Ensure that operators wear the correct harness and lanyard and that it is in proper condition.	Yes	MGMT/OP	
									Ensure that the number of operators attached to a single point does not exceed the maximum number permitted.	Yes	OP	
		Warning in the operator's manual [p. 44] to make sure battery boxes have been locked in position.						HIGH				
23.2	**Acceleration/braking**							**NS**				
24	**Markings**											
24.10	Personnel injured due to missing or illegible safety signs.	Information in Operators Manual [p. Section 8] detailing decals	3	2	1	3	6		Train operators in relation to the meaning of the markers.	Yes	MGMT/OP	
		Information in Operators Manual [p. 87] detailing control symbology.						MEDIUM	Ensure that pre-operational check of safety decals is performed before use.	Yes	OP	
		Instruction in Operators Manual [p. 36] to check decals legible and in place.										
24.20	Unclear instructions on safety signs.	All instructions are given in English.	1	2	1	3	6		Ensure that operators are familiar with the meaning of all safety signs and warnings.	Yes	MGMT/OP	
		Information in Operators Manual [p. 87] detailing control symbology.						LOW				
		All numerical values are given in SI units.										
		Symbols used for marking comply with ISO20381.										