plant assessor™

by Online Safety Systems

RISK MANAGEMENT REPORT

Report Number	DIEA 20110311-1150
Assessment Date	11-March-2011
Assessor	Greg Cox
Company	Dieci Australia
Make	Dieci
Model	Apollo 25.6
Type	Telescopic Handlers
Identifier	1901159
Lot Number	
Assessment Purpose	Sale
State	NSW

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SECTION 1 IMPORTANT INFORMATION

This Risk Management Report has been prepared for -

_____

(insert recipient name/company name)

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

This document is provided to meet duty of care obligations as set out in OH&S regulations for the supply of plant and the sale and transfer of plant.

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

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

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

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

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

SECTION 2 UNIT DETAILS

STANDARD SPECS

- Noise Test Results	
1. Manufacturers specified noise level dBA	
2. Ambient noise level dBA	
3. Noise level - Operator position (high idle) dBA	
4. Noise level - Operator position (low idle) dBA	
5. Noise level LHS dBA @ m (high idle)	
6. Noise level Front dBA @ m (high idle)	
7. Noise level RHS dBA @ m (high idle)	
8. Noise level Rear dBA @ m (high idle)	
Brakes	
Brake Type	
Bucket	
Bucket width (mm)	
Capacities	
Capacity at maximum reach (mm)	800kg @ 3.25
Fuel tank capacity (litres)	80
Reach with 1t load (mm)	2.5
Dimensions/Weights	
Dry Weight (kg)	4800

Ground clearance (mm)	
Height (mm)	1910
Length (mm)	4096
Lift capacity maximum height (kg)	1700 @ 5.78
Operating weight (kg)	
Reach at maximum height (mm)	1000
Turn circle diameter (mm)	6800 (tyres)
Wheelbase (mm)	2350
Width (mm)	1800
Drives	
Drive	
Engine	
Engine displacement (lit)	3.319
Engine make & model	Yanmar 4TNV98
Engine number	
Engine power - rated speed (rpm)	
Engine power kw/(hp)	52/(71)
Number of cylinders	4
Power (kW@rpm)	52@2500
Extras	
Airconditioning & heating	
ROPS & FOPS	
Stabilisers fitted?	No
General	
Air Suspension Seat	
Boom Lower (seconds)	
Boom Raise (seconds)	
Carrier Rotating Angle (degrees)	
Chassis Type	
Crowd (seconds)	
Dump (seconds)	
Extras	
Extras B	
Front & Rear Brakes	
Front, Rear & Roof Wiper & Washer	
Heaped capacity, 2:1 SAE (m3)	
Hydraulic Attachment Locking	
Hydraulic Oil reservoir capacity (litres)	
Hydraulic System	
Hydraulics - Flow Rate (l/min) / Pressure (kg/cm2)	
Hydraulics Oil Cooler	
Park Brake type	
Power rating RPM	
Steering Angle (degrees)	
Tele In (seconds)	
Tele Out (seconds)	
Tyres - Front & Rear	12 - 16.5
Work Lights - Front	
Work Lights Rear	
Plant Classifications	
Class	
Year	
Retail $	

UNIT DETAILS

Make	Dieci	**Identifier**	1901159
Model	Apollo 25.6	**Assessor**	Greg Cox
Type	Telescopic Handlers	**Date**	11-March-2011

New Price	
New Price Date	
Steering	
Steering system	
Transmission	
Max travel speed (km/hr)	26
Maximum speed (km/h)	26
Speeds, F/R	
Transmission type	Hydrostatic
Work Capabilities	
Maximum lift capacity, any height (kg)	2500
Maximum lift height (mm)	5.78
Maximum reach (mm)	3.25

EXTRAS

	DETAILS
Air Conditioning	Factory
FOPS	factory

SECTION 3

Risk Analysis

Consequence

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

Risk Evaluation

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

Risk Treatment

Selecting the most appropriate risk treatment option involves balancing the costs and efforts of implementation against the benefits derived, with regard to legal, regulatory and other requirements. (source AS/NZS ISO 31000:2009)

Eliminate	Eliminate the risk source.
Substitute	Provide an alternative that is capable of performing the same task which is safer.
Engineering	Provide or construct a physical barrier or guard.
Administrative	Develop policies, procedures, practices and guidelines in consultation with employees to mitigate the risk. Provide training, instruction and supervision about the risk source.
Personal protective	Provide personal protective equipment to protect the individual from the risk source.

SECTION 4 PART 1 RISK TREATMENTS REQUIRED

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

There are no risk treatments required

SECTION 4 PART 2 RISK TREATMENTS IN PLACE

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

Delivery

Hazard(s): Crushing **Relevant References:**

Preliminary Risk Rating: HIGH 22

Risk Treatment: SWMS Loading/Unloading

Ensure that all operators follow these steps when loading and unloading this machine to and from a flat top truck or trailer, low loader or tilt tray -

Step 1

• Vehicle choice
- Vehicle load carrying capacity must be equal or greater than the sum of machine, attachments and any ancillary equipment
- Vehicle must have adequate space for the load
- Load carrying deck must be clean

Step 2

• Site selection
- Site for loading and unloading must meet the following criteria -
i. Be level in camber (to achieve this direction of carrier unit may need to be adjusted several times)
ii. Longitudinally the combined grade of site and loading ramps/elevated tilt tray must NEVER exceed the gradeability of machine being loaded
iii. Be stable enough to withstand combined weight of machine and carrier unit
iv. Be isolated from traffic movements via its location, barriers or administrative traffic controls
v. Be clear of overhead power lines

Step 3

• Loading
- FLAT TOP/LOW LOADER
i. Engage creep gear
ii. Clear bystanders from each side of the carrier unit and loading ramps
iii. Drive machine on slowly
iv. Place machine in transport/park configuration, apply brakes & shut off engine
v. Use extreme caution when egressing machine

- TILT TRAY
i. Manoeuver machine to adjacent tilt tray, NEVER drive machine onto a tilt tray
ii. Place machine in park configuration, apply brakes & shut off engine
iii. Attach winch cable to machine tow point
iv. Clear bystanders from each side of the carrier unit and loading ramps
v. Take up slack so that winch has weight of unit
vi. Place machine in towing configuration (release brake, select neutral gear/disengage hydrostatic drive)
vii. Egress machine, NEVER ride in or on machine whilst being winched onto a tilt tray
viii. Winch machine on slowly
ix. Place machine in transport/park configuration, apply brakes & shut off engine

x. Use extreme caution when egressing machine
xi. Engage any transit locks

Step 4

• Restraint
- See transport restraint guidelines

Hazard(s): Crushing **Relevant References:**
Preliminary Risk Rating: HIGH 22
Risk Treatment: SWMS Load Restraint
Ensure that all operators follow these steps when restraining this machine for transport -

Step 1

• Loading
- Load machine as per loading guidelines

Step 2

• Load placement
- Loads must be placed so that the centre of it's mass is in front of the centre of the rear axle/axle group

Step 3

• Lashing choice
- Always select lashings whose combined lashing capacity is –
i. In the forward direction equal to or greater than 2 x the weight of the load
ii. In the sideways direction equal to or greater than the weight of the load
iii. In the rearward direction equal to or greater than the weight of the load
- Always select tensioning devices whose capacity is equal to or greater than the chain/webbing lashing capacity

Step 4

• Lashing technique
- Lashing must be from tie down point on machine to dedicated attachment point on carrier truck or trailer (if no tie down points fitted machine must be tied down by axles or chassis)
- Lashing point on truck or trailer must have sufficient strength to hold machine weight
i. Minimum one chain per tie down point
ii. One tensioning device per chain
iii. Ratio of horizontal to vertical as close to 2:1 as possible
iv. Chains must not at right angles to the machine in any plane (unless two chains used per tie down point)

• Tips
- NEVER USE FAULTY OR DAMAGED RESTRAINING EQUIPMENT
- All machines must be restrained including any attachments and ancillary equipment
- Chains may need to be tied forwards/backwards or across the truck/trailer to achieve the 2:1 ratio or angle less than 90 degrees to machine
- More than one chain may be necessary per tie down point to achieve restraining capacity
- Attach lashings to tie rail at rail support intersection

Operation

Hazard(s): Incorrect Operation **Relevant References:** AS1470, AS2153, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Operation Handbook
The manufacturer's operation handbook has been supplied for this item of plant.

This handbook must be available at all times to all potential operators and supervisory staff. All potential operators must read and be familiar with this handbook prior to operating.

A complete risk assessment/Job Safety Analysis must be undertaken covering all operating processes and environments associated with this item of plant. SWMS should be produced for specific tasks associated with use of this item of plant.

Hazard(s): Incorrect Operation **Relevant References:** ISO31000-2009 Risk Management

Preliminary Risk Rating: HIGH 22
Risk Treatment: SOPs Telescopic Handler
Safe Operation Procedures are available for this telescopic handler. The information in the Safe Operation Procedures must be followed at all times whilst operating this telescopic handler.

Hazard(s): Incorrect Operation **Relevant References:** ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Pre-Op Checklist Telescopic Handler
A pre-operational checklist is available for this telescopic handler. All operators must complete this checklist prior to operating this telescopic handler.

Hazard(s): Collision **Relevant References:** ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Phone Use label
This item of plant is fitted with an instruction label advising that mobile phones must not be used whilst operating this machine. Accordingly all operators must not use a mobile phone at any time whilst operating machine. If phone use is necessary then operator must place machine in park configuration in a safe position prior to phone use. Operators MUST adhere to this advice at all times.

This label must be clear and legible at all times whilst this item of plant is in operation.

Hazard(s): Incorrect Operation **Relevant References:** AS1064, AS1470, AS2956, HB59, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Control Labels
All controls including all levers, buttons, pedals, switches etc. are clearly labelled as to their purpose and method of operation. These labels must be maintained in a clean and serviceable condition at all times.

Hazard(s): Crushing, Falling **Relevant References:** AS1470, AS1636, AS2294, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Passenger Seat Label
This item of plant is fitted with a clear hazard warning label re: Operator only, No passengers. Passengers must not be carried at anytime. This label must be clear and legible at all times whilst this item of plant is in operation.

Legislation: State Health & Safety Legislation & Regulation

Hazard(s): Crushing **Relevant References:** AS1470, AS1636, AS2294, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: ROPS Label
The warning label stating that the ROPS must not be damaged at any time (including cuts, drill holes, welds and dents) must be present, clean and legible at all times.

Hazard(s): Electrocution **Relevant References:** AS1470, AS2550, AS3017, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Electrical Approach Distances
This item of plant has a hazard warning label re: overhead electrical hazards and minimum approach distances fitted. These distances must be adhered to strictly. These labels and tables must be present, clear and legible at all times.

Spotters are required when working within 5 metres of the minimum approach distance of any live electrical apparatus.

Any encroach within the minimum approach distances must only occur if the following provisions have been met -
1. The machine is designed to work within the minimum approach distances
2. Permission has been granted by the electricity company and
3. Safe systems of work have been documented and approved.

Hazard(s): Burns, Explosion, Poisoning **Relevant References:** AS1470, AS2153, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Tank ID Label
The tank(s) on this item of plant have clear, legible label(s) identifying their contents, and if appropriate any necessary controls re: the contents. These must be present, clear and legible at all times. (this includes radiators and petrol/diesel tanks)

Hazard(s): Collision **Relevant References:** AS1470, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Left Hand Drive Label
This item of plant has a hazard warning label re: left hand drive, at the rear. It must be present, clear and legible at all times.

Hazard(s): Burns, Cutting, Entanglement, Pinching, **Relevant References:** AS1470, AS2153

Preliminary Risk Rating: HIGH 19
Risk Treatment: Engine Guard Label
The engine fan and alternator belts, pulleys and gears are guarded. These guards have clear legible hazard warning labels re do not open or remove guards while engine is running. These labels must be present, legible and easily seen at all times whilst this item of plant is in operation.

Hazard(s): Crushing, Poor Signage **Relevant References:** AS1418.8, AS1470, AS4024, ISO31000-2009 Risk Management

Preliminary Risk Rating: HIGH 19
Risk Treatment: Boom Lifting Point Table
This item of plant has a lifting point fitted to the boom, accordingly a load/distance table is present at the operator work area. This must be clear and legible at all times. This item of plant must comply with the relevant parts of AS 1418 at all times. All operators must be appropriately trained to use this item of plant and licenced where necessary.

Hazard(s): Collision, Crushing **Relevant References:** AS1470, AS2153, AS2359, ISO31000-2009 Risk Management

Preliminary Risk Rating: MEDIUM 12
Risk Treatment: Warning Device (horn)
This item of plant is fitted with a fully functional audible warning device such as a horn. This must be easily accessed by the operator, and easily identifiable by nearby pedestrians.

All operators should ensure the warning devices are functional at the start of each shift, by completing pre-start checklists. Warning devices should operate automatically where appropriate (eg reversing)

Hazard(s): Incorrect Operation **Relevant References:** AS1470, AS2359, ISO31000-2009 Risk Management
Preliminary Risk Rating: MEDIUM 12
Risk Treatment: Load Plate
This item of plant is fitted with a manufacturers load plate. This plate must be clean, free from damage and legible at all times. This load plate must contain the following information as a minimum - Manufacturers specifications re:
1. Plant weight.
2. Correct operating tyre pressures.
3. Lifting and angle capacity.
4. Maximum height to which a given load can be lifted.
All operators must read, understand, use and comply with this information during operation of this item of plant.

Hazard(s): Poor Signage **Relevant References:** AS1418.1-2002 Cranes - General requirements, AS1470, ISO31000-2009 Risk Management

Preliminary Risk Rating: MEDIUM 12
Risk Treatment: SWL Label
This item of plant has a rated capacity (SWL) label. This capacity must not be exceeded at any time during operation. This label must be clear and legible at all times whilst this item of plant is in operation.

Hazard(s): Collision, Crushing, Striking **Relevant References:** AS1470, AS2153, AS4024, ISO31000-2009 Risk Management

Preliminary Risk Rating: MEDIUM 12
Risk Treatment: Tail Swing Label
The rear of this item of plant has a hazard warning label re: general plant movement, tail swing, keep clear. It must be present and fully functional and serviceable at all times.

Hazard(s): Instability **Relevant References:**
Preliminary Risk Rating: MEDIUM 9
Risk Treatment: Recovery Point Label
This item of plant has a clear towing instruction label adjacent the recovery tow point. This label contains as a minimum machine weight, towing speed, towline capacity and tow angle.

These instructions must be adhered to at all times when towing this item of plant. This instruction label must be clean and legible at all times.

Hazard(s): Fire **Relevant References:** AS1470, AS1841, AS1851, AS2153.7, ISO31000-2009 Risk Management

Preliminary Risk Rating: MEDIUM 13
Risk Treatment: Fire Extinguisher
This item of plant is fitted with an approved and maintained fire extinguisher. Fire extinguisher(s) must be present and fully functional at all times. They must be readily accessible to the operator. Regular inspections must also be carried out in accordance with the manufacturer's requirements and AS 1851 – 1995

Design Compliance

Hazard(s): Collision **Relevant References:** AS1470, ISO31000-2009 Risk Management

Preliminary Risk Rating: HIGH 22

Risk Treatment: Beacon

This item of plant is fitted with a safety beacon. This beacon must meet the following criteria at all times whilst this item of plant fitted is in operation -

-is visible from 200m in all directions (allowing for intermittent obstruction from the plant structure whilst the plant is in operation)
-is fitted in the most appropriate location on machine to maximise visibility without risking continual damage

NOTE: more than one beacon may be fitted to meet these criteria.

Hazard(s): Entrapment **Relevant References:** AS1470, AS2153.7, AS2953, ISO31000-2009 Risk Management, ISO4252

Preliminary Risk Rating: HIGH 21

Risk Treatment: Two Operator Exits

The operator cabin/work area on this item of plant has a minimum of two (2) possible exits. These must be functional and accessible at all times whenever the item of plant is manned, whether during operation or maintenance activities.

Hazard(s): Crushing **Relevant References:** ISO24135.1-2006, ISO3776.1-2006, ISO6683-2005

Preliminary Risk Rating: HIGH 22

Risk Treatment: Seat Belt

This item of plant is fitted with an operator seat belt. This seat belt must be free from damage, and permanently and sturdily attached at all times whilst this item of plant is in operation. Operators must use this seat belt at all times during operation.

Hazard(s): Crushing, Incorrect Operation **Relevant References:** AS1418.1-2002 Cranes - General requirements, AS1418.19-2007 Telescopic Handlers

Preliminary Risk Rating: HIGH 22

Risk Treatment: Boom Length Indicator

This item of plant is fitted with a telescopic boom length indicator. The information provided by this device must be used in conjunction with the boom angle indicator and the load chart in the operators work area. The combination of information provided by these safety features must not be exceeded at any time during operation. This item of plant must not be operated if this device is not present and fully functional.

Hazard(s): Collision, Crushing **Relevant References:** AS1470, ISO31000-2009 Risk Management

Preliminary Risk Rating: CRITICAL 24

Risk Treatment: Park Brake

The park brake fitted to this item of plant is fully functional at all times. The park brake must be regularly inspected and tested. These inspections and tests must be documented as part of your plant safety programme.

Hazard(s): Crushing, Incorrect Operation **Relevant References:** AS1418.1-2002 Cranes - General requirements, AS1418.11-2007, AS1418.19-2007 Telescopic Handlers

Preliminary Risk Rating: HIGH 22

Risk Treatment: Manual Boom Angle Indicator

This item of plant is fitted with a boom angle indicator. The information provided by this device must be used in conjunction with the boom length indicator and the load chart in the operators work area. The combination of information provided by these safety features must not be exceeded at any time during operation. This item of plant must not be operated if this device is not present and fully functional.

Hazard(s): Crushing, Incorrect Operation **Relevant References:** AS1418.19-2007 Telescopic Handlers

Preliminary Risk Rating: HIGH 22

Risk Treatment: Lateral Slope Indicator

This item of plant is fitted with a lateral slope indicator. This indicator must always be easily legible from the normal operating position and indicate level and permitted lateral slope as specified by the rated capacity chart. The maximum permissable lateral slope must not be exceeded at anytime during operation of this item of plant. Operation of this item of plant other than on level ground must cease if this device is not present and fully functional.

Hazard(s): Crushing, Incorrect Operation **Relevant References:** AS1418.19-2007 Telescopic Handlers

Preliminary Risk Rating: HIGH 22

Risk Treatment: Longitudinal Stability Indicator

This item of plant is fitted with a longitudinal stability indicator. This indicator warns both visually and audibly when the rated capacity based on longitudinal stability is being approached. This warning must not be ignored. Operators must immediately take the appropriate actions to decrease longitudinal instabiilty. This item of plant must not be operated if this device is not present and fully functional.

Hazard(s): Crushing, Incorrect Operation **Relevant References:** AS1418.19-2007 Telescopic Handlers

Preliminary Risk Rating: HIGH 22

Risk Treatment: Longitudinal Stability Limiter

This item of plant is fitted with a longitudinal stability limiter. This safety device restricts operation in excess of the item of plants longitudinal tipping load. Operation of this item of plant must cease if this safety device is not present and fully functional.

Hazard(s): Crushing **Relevant References:** AS2294, ISO3471-2008

Preliminary Risk Rating: HIGH 22

Risk Treatment: Earthmoving ROPS

A Roll Over Protective Structure (ROPS) to AS 2294, ISO 3471 or SAE J1040 is fitted to this item of plant. A permanent label stating this standard must be attached to the structure at all times. It must also carry a warning label re: wearing of seat belts at all times whilst this item of plant is in operation, and accordingly seat belts must be worn at all times during operation.

Hazard(s): Collision, Crushing **Relevant References:** AS1470, AS4024, ISO31000-2009 Risk Management

Preliminary Risk Rating: HIGH 22

Risk Treatment: Reverse Movement Alarm

A reverse movement sensor alarm is fitted to this item of plant. It must be fully functional and serviceable at all times whilst this item of plant is in operation.

Hazard(s): Burns, Striking **Relevant References:** AS2671-2002, ISO4413-1998

Preliminary Risk Rating: HIGH 22

Risk Treatment: Hydraulic Hoses

This item of plant has hydraulic hoses. These hoses must be inspected each day or before each use for wear and tear. If there are visible signs of wear immediate action must be taken to control the risk arising from this wear. These inspections must be documented.

Hydraulic fluid at high pressure can penetrate the skin, never use any part of your body to check for leaks. If oil penetrates the skin seek medical advice immediately. Always use a piece of cardboard or similar to check for suspected leaks.

Hydraulic pressure can be stored and is a hazard. Before disconnection or connection of hydraulic hoses complete the following steps -

1. Stop engine
2. Keep all bystanders clear of the work area
3. Refer to operators manual as to methods to release pressure
4. Wait 5 minutes

Hazard(s): Current or previous structural damage **Relevant References:** AS1470, ISO31000-2009 Risk Management

Preliminary Risk Rating: CRITICAL 25

Risk Treatment: Structural Integrity

Regular checks for structural damage must be undertaken. Look for cracks in frames/chassis (current or repaired), bends or damage to structural components, etc.

Hazard(s): **Relevant References:** AS4024.1906-2006, ISO31000-2009 Risk Management

Preliminary Risk Rating: HIGH 20

Risk Treatment: Intuitive Controls

The controls fitted to this item of plant are orientated so that the movement of the control is consistent with the action of the machine e.g. moving a control lever to the left results in the machine turning to the left. This design feature must be maintained at all times whilst this item of plant is in operation.

Hazard(s): Entanglement **Relevant References:** AS2153.1-1997, AS2958.2-1998, AS4024.1-1996

Preliminary Risk Rating: MEDIUM 14

Risk Treatment: Engine Guards

The engine fan and alternator belts, pulleys and gears are guarded. These guards must be present and fully functional and serviceable at all times whilst this item of plant is in operation.

Hazard(s): Collision, Poor Visibility **Relevant References:** AS1470, AS2153, ISO13564-1.2, ISO14401.1-2009, ISO31000-2009 Risk Management

Preliminary Risk Rating: MEDIUM 12

Risk Treatment: Operator Mirrors

The operator rear view mirrors fitted to this item of plant must be fully functional and kept clean at all times. There must always be at least one mirror on each side to provide rear vision to the operator to avoid striking bystanders and objects.

Hazard(s): Poor Visibility **Relevant References:** AS1470, AS2153, ISO31000-2009 Risk Management

Preliminary Risk Rating: HIGH 21

Risk Treatment: Windscreen Wipers

The windscreen wipers fitted to this item of plant must be fully functional at all times.

Hazard(s): Slipping **Relevant References:** AS1470, AS1657-1992, AS2153.1, AS2153.3, AS2153.7, AS3868-1991, ISO31000-2009 Risk Management

Preliminary Risk Rating: MEDIUM 12

Risk Treatment: Operator Work Area Access/Egress

Safe access and egress to the cabin/work area(s) must be maintained at all times whilst this item of plant is in operation. It must be non slip, free from damage, located at a height so as to not cause undue body stresses and strains with three points of contact available to personnel at all times.

All personnel must -
1. Always face the item of plant during access and egress.
2. Always maintain three points of contact during access and egress.
3. Never carry an object(s) in his/her hand(s) during access and egress.
4. Never jump off machine.

Hazard(s): Incorrect Operation, Slipping

Relevant References: AS1470, AS2153.3, AS2153.6, AS2153.7, AS2956, ISO31000-2009 Risk Management

Preliminary Risk Rating: HIGH 17

Risk Treatment: Control Levers/Pedals/Buttons

The control levers and foot controls must be kept non-slip and free from damage at all times.

Hazard(s): Strains

Relevant References: AS1064, AS1246, AS1470, AS2153.3, AS2956, HB59

Preliminary Risk Rating: HIGH 19

Risk Treatment: Controls Ergonomics

All controls including all levers, buttons, pedals, switches etc, are placed near the operator work position and are easy to reach and operate during the execution of the operator's normal duties. This applies for all persons within the 95th percentile of the normal population distribution.

Hazard(s): Burns, Striking

Relevant References: AS1418.1-2002 Cranes - General requirements, AS2671-2002, AS4024, ISO31000-2009 Risk Management, ISO4413-1998

Preliminary Risk Rating: MEDIUM 14

Risk Treatment: Hydraulics 500mm

This item of plant is fitted with a sturdy, permanent guard(s) between the hydraulic hoses and any body parts of the operator to provide protection during a hose failure. This guard(s) must be in place at all times whilst this item of plant is in operation.

Hazard(s): Collision, Poor Visibility

Relevant References: AS1470, AS2153, AS4024, ISO31000-2009 Risk Management

Preliminary Risk Rating: HIGH 22

Risk Treatment: Machine Lights

This item of plant is fitted with self contained lighting. All of these lights must be fully functional and serviceable whilst this item of plant is in operation in areas of reduced light. If any of these lights stop working the operation must cease immediately and the faulty light be repaired before operation can continue in the areas of reduced light.

Hazard(s): Incorrect Operation, Slipping

Relevant References: AS1470, AS2153.1, AS2153.6, AS2153.7, ISO31000-2009 Risk Management

Preliminary Risk Rating: MEDIUM 9

Risk Treatment: Operator Floor

Ensure all work area floors are non-slip and remain free from damage at all times whilst this item of plant is in use.

Hazard(s): Burns

Relevant References: AS1470, ISO31000-2009 Risk Management

Preliminary Risk Rating: MEDIUM 9

Risk Treatment: Air Conditioning

This item of plant is fitted with an air conditioned cabin. This air conditioned cabin helps control the air quality and temperature for the operator and also provides shade from the sun. The air conditioner must be fully functional and serviceable at all times whilst this item of plant is in operation.

Hazard(s): Collision, Crushing

Relevant References: AS1470, AS2153, ISO31000-2009 Risk Management

Preliminary Risk Rating: HIGH 22

Risk Treatment: Neutral Start

This item of plant has neutral start control in place. It must be fully functional and serviceable at all times whilst this item of plant is in operation.

Hazard(s): Crushing

Relevant References: AS1418.10-2004 Elevating work platforms, AS1418.11-2007

Preliminary Risk Rating: HIGH 22

Risk Treatment: Crane Load Holding Devices

The boom load carrying cylinders on this item of plant are fitted with automatic means (e.g. load-holding valves) to prevent uncontrolled movement of the unit in the case of loss of power or hydraulic failure. These devices must be present and fully functional at all times whilst this item of plant is in operation.

Hazard(s): Operational Malfunction

Relevant References: AS1470, ISO31000-2009 Risk Management

Preliminary Risk Rating: HIGH 22
Risk Treatment: Plant Modification
The plant is in original condition.

Hazard(s): Strains
Relevant References: AS1470, AS2153.1, AS2153.2, AS2153.6, AS2153.7, AS2953, ISO31000-2009 Risk Management, ISO3691-1980

Preliminary Risk Rating: MEDIUM 9
Risk Treatment: Operator Seat
The operator seat fitted to this item of plant must remain free from damage and tears, and be permanently and securely fitted at all times.

Hazard(s): Crushing
Relevant References: AS1418.8
Preliminary Risk Rating: CRITICAL 24
Risk Treatment: Closed Eye Lifting Point
The lifting point fitted to this item of plant is the closed eye type. Hooks with or with out latching devices must not be used as a lifting point at any time.

Maintenance

Hazard(s): Incorrect Operation
Relevant References: AS1470, AS2153, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Maintenance Manual
The manufacturer's maintenance manual(s) has been supplied for this item of plant

These manual(s) must be available at all times to all users and maintenance staff of this item of plant. All users and maintenance staff must read and be familiar with these handbook(s) prior to maintaining or repairing this item of plant.

A complete risk assessment/JSEA must be undertaken covering all inspection, maintenance, servicing and transportation requirements of this piece of plant prior to use.

A full assessment of the competence of people using the book(s) must also be undertaken

Hazard(s): Crushing
Relevant References: AS1470, AS1636, AS2294, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: ROPS Damage
The Roll Over Protective Structure (ROPS) fitted to this item of plant must remain free from damage at all times whilst this item of plant is in operation.

Hazard(s): Burns, Striking
Relevant References: AS2550, AS2671-2002, ISO31000-2009 Risk Management, ISO4413-1998
Preliminary Risk Rating: HIGH 22
Risk Treatment: Hydraulic Damage
The hydraulic hoses to this item of plant are protected against damage arising from contact with the plant structure. Ensure this protection is in place at all times whilst this item of plant is in operation. Inspection of this protection system should be conducted regularly and documented as part of your plant safety programme.

Hazard(s): Collision, Instability
Relevant References: AS1470, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 22
Risk Treatment: Tyres
The tyres and wheel components must be inspected as part of a "pre start" checklist. These inspections must be documented as part of your plant safety programme.

Hazard(s): Operational Malfunction
Relevant References: AS1470, ISO31000-2009 Risk Management
Preliminary Risk Rating: HIGH 21
Risk Treatment: Service Records
Service and maintenance records are available for this item of plant.

These records must continue to be maintained and stored in a secure area as part of your plant safety management programme. This programme includes the undertaking of regular inspections concerning the general condition of the item of plant including (but not limited to) tyre condition, oil levels and wear and tear on critical items such as brakes and steering, etc. All OEM prescribed, scheduled and non scheduled maintenance must also be documented as part of these records and attended to within a risk management framework.

Hazard(s): Poor Visibility
Relevant References: AS1470, AS2153, ISO31000-2009 Risk Management

UNIT DETAILS

Make	Dieci	**Identifier**	1901159
Model	Apollo 25.6	**Assessor**	Greg Cox
Type	Telescopic Handlers	**Date**	11-March-2011

Preliminary Risk Rating: MEDIUM 9

Risk Treatment: Windows & Screens

Ensure the cabin/work area safety glass windows and screens are kept clean and free from cracks and other damage at all times whilst this item of plant is in use.

Hazard(s): Operational Malfunction

Relevant References:

Preliminary Risk Rating: HIGH 22

Risk Treatment: Major Fluid Leaks

This item of plant must remain free from major and minor leaks at all times whilst in operation (this includes engine, transmission, cooling system, air, fuel, drive line, wheel hubs, steering and hydraulics). Development of a major leak will require this item of plant to be stood-down until repaired. Minor leaks detected must be repaired within 1-14 days.

SECTION 5 PHOTOS AND NOTES

NOTES

PHOTOS

There are no photos

<END OF RISK ASSESSMENT REPORT>