

TYPE	Crusher Bucket
MAKE	Atlas Copco
MODEL	BC2500
PLANT NUMBER	82B
SERIAL NUMBER	DEQ189107

Report Number	AHH 20230324-1246
Date	24-Mar-2023
Created By	AHSH Service
Assessor	Mitchell Pennells
Assist. Assessor(s)	Rehan Mawson
Completed By	AHSH Service
Owner	Australian Hammer Supplies Hire Pty Ltd
Assessment Purpose	Hire
State	NSW

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SECTION 1 IMPORTANT INFORMATION

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This report pertains to this item of plant as it appeared on the day of inspection.

It is the responsibility of the hirer to conform with the instructions and information contained within this report. Any change in condition of this item of plant should be reported to the hire company immediately.

Any information relating to the standard features have been supplied via the manufacturer and should be used as a guide only until verified.

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

SECTION 2 MACHINE DETAILS

MACHINE DETAILS	CAPACITIES	Bowl capacity, SAE heaped (m3)	0.8
	DIMENSIONS/WEIGHTS	L x W x H (mm)	2465 x 800 x 1500
		Operating weight (kg)	2870
	HYDRAULICS	Required Oil Flow (l/min)	160-180
		Required Oil Pressure (kPa)	250 Bar
	REQUIREMENTS	Carrier Weight - Excavator (kg)	22,000-30,000
		Carrier Weight - Loader (kg)	
	WORK CAPABILITIES	Crushing Size (mm)	20-140
		Jaw Opening (mm)	

SECTION 3 RISK ANALYSIS / RISK EVALUATION



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


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

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

SECTION 4 RISK TREATMENTS REQUIRED


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






	HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating	Time Frame	Due Date	Date Rectified	Initial	
COMMISSIONING		HIGH 22	MEDIUM 12	1 Week	31-Mar-23			
	<p>Risk Treatment Required: Carrier Unit Risk Assessment A plant risk assessment must be available for the carrier unit used with this attachment.</p> <p>The risk assessments should be conducted at regular intervals on all plant, and the details available to the operator of the unit. A risk assessment must be completed for each carrier unit with which this item is to be used.</p> <p>References: ISO31000</p> <p>Assessor Comments: RESPONSIBILITY OF CARRIER DOCUMENTATION LIES WITH CARRIER OWNER - IF HIRING EXCAVATOR WITH ATTACHMENT, RISK ASSESSMENT AND SAFE OPERATING PROCEDURES WILL BE PROVIDED ON REQUEST</p> <p>Revised Date/Control Not Required Comments: RESPONSIBILITY OF CARRIER DOCUMENTATION LIES WITH CARRIER OWNER - IF HIRING EXCAVATOR WITH ATTACHMENT, RISK ASSESSMENT AND SAFE OPERATING PROCEDURES WILL BE PROVIDED ON REQUEST</p>							
	OPERATION	 INCORRECT OPERATION	CRITICAL 24	MEDIUM 15	Immediate	24-Mar-23		
		<p>Risk Treatment Required: Operator Competency Only persons who are qualified, trained and experienced and/or hold the relevant certification/license can operate this item of plant. If there is not a competent/licensed person available for operation of this item of plant then only persons who are supervised by a competent/licensed person can operate this item of plant.</p> <p>Legislation: State Health & Safety Legislation & Regulation</p> <p>References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations</p> <p>Assessor Comments: HIRER OF ATTACHMENT MUST ENSURE ON SITE OPERATORS OF EQUIPMENT MEET THESE REQUIREMENTS</p>						








HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating	Time Frame	Due Date	Date Rectified	Initial
 INCORRECT OPERATION	HIGH 21	MEDIUM 15	1 Week	31-Mar-23		
<p>Risk Treatment Required: SOP Carrier Unit Develop carrier Safe Operation Procedures, and ensure they include the following as a minimum:</p> <ol style="list-style-type: none"> 1. Know your carrier unit, its limitations and features and how they work. Keep your carrier unit in good condition. 2. Use Roll Over Protective Structures (ROPS) and seatbelts whenever and wherever possible. 3. Use Falling Object Protective Structures (FOPS) wherever possible. 4. Be familiar with the terrain on which the carrier unit will be used and drive safely. Use caution on slopes. 5. Never start an engine in an enclosed environment. Carbon monoxide is colourless, odourless- and deadly. 6. Never jump off a moving carrier unit or leave it with the engine running. 7. Never refuel while the engine is running or hot. 8. Keep all children off of and away from carrier unit and implements at all times. 9. Never be in a hurry about anything to do with the carrier unit or its implements. Take time and do it right. 10. Install safety equipment, such as fire extinguisher, first aid kit etc 11. Keep safety signs clean and free from obstructing material. Replace missing or damaged signs. 12. Dress properly. Close fitting clothing, safety footwear, heavy work gloves and eye protection are all required as a minimum. 13. Check the work area. Identify ditches, rocks, stumps and other hazards before starting work, and implement appropriate controls. 14. Always check for underground utilities and mark locations prior to bucket to break ground. 15. Never work too close to trenches or banks. These may collapse. 16. Never operate if anyone is standing too close, flying objects are a serious hazard. Keep windows and screens closed at all times. 17. Ensure all operators and bystanders wear hearing protection at all times during operation. 18. Never touch working parts of the attachment or hydraulic hoses after operation. 19. Do not carry passengers under any circumstances. <p>References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations</p> <p>Assessor Comments: RESPONSIBILITY OF CARRIER DOCUMENTATION LIES WITH CARRIER OWNER - IF HIRING EXCAVATOR WITH ATTACHMENT, RISK ASSESSMENT AND SAFE OPERATING PROCEDURES WILL BE PROVIDED ON REQUEST</p> <p>Revised Date/Control Not Required Comments: RESPONSIBILITY OF CARRIER DOCUMENTATION LIES WITH CARRIER OWNER - IF HIRING EXCAVATOR WITH ATTACHMENT, RISK ASSESSMENT AND SAFE OPERATING PROCEDURES WILL BE PROVIDED ON REQUEST</p>						





SECTION 5 RISK TREATMENTS IN PLACE

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

	HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
COMMISSIONING	 INCORRECT OPERATION	HIGH 22	MEDIUM 15
	<p>Risk Treatments in Place: Pre-start checklist The operational "pre start" checklist must be completed before the start of each operation. If any faults are detected, these must be rectified prior to commencement of operation. These inspections must be documented as part of your plant safety management programme.</p> <p>References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations</p>		

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
 INCORRECT OPERATION	HIGH 22	MEDIUM 15
<p>Risk Treatments in Place: Operation Handbook The manufacturer's operation handbook has been supplied for this item of plant.</p> <p>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.</p> <p>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.</p> <p>References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations</p>		
 INCORRECT OPERATION	HIGH 22	MEDIUM 15
<p>Risk Treatments in Place: SOP Crusher Bucket Safe Operation Procedures are available for this Crusher Bucket. The information in the Safe Operation Procedures must be followed at all times whilst operating this Crusher Bucket.</p>		
 INCORRECT OPERATION	HIGH 22	MEDIUM 15
<p>Risk Treatments in Place: 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.</p> <p>References: AS/NZS4024.1905</p>		
 ENTANGLEMENT	HIGH 19	HIGH 19
<p>Risk Treatments in Place: Entanglement Information There is a potential for entanglement in the rotating components of this item of plant. Ensure that all clothing, hair and other materials that can become entangled are close fitting and or controlled to prevent entanglement. Serious injury may result if this instruction is not adhered to.</p> <p>References: Work Health & Safety Act & Regulations- , ISO31000, Occupational Health & Safety Act & Regulations</p>		
 HEARING LOSS	HIGH 19	MEDIUM 14
<p>Risk Treatments in Place: Hearing Protection Label - Operator The hazard warning label(s) re: wearing of hearing protection attached to this item of plant refer to the level of noise produced. Permanent hearing damage will result if hearing protection is not worn. These labels must be present, clear and legible at all times whilst this item of plant is in operation.</p> <p>References: AS3781- , AS/NZS1269</p>		
 ENTANGLEMENT, SHEARING, PINCHING	HIGH 19	MEDIUM 13
<p>Risk Treatments in Place: Guarding Label All the belts, pulleys and gears are guarded. These guards must be present, fully functional and serviceable at all times whilst this item of plant is in operation and the labels re: do not open or remove while engine is running must be in place and easily seen at all times.</p> <p>References: AS/NZS4024.1201</p>		
 CRUSHING	MEDIUM 14	MEDIUM 13
<p>Risk Treatments in Place: Crush Zone This item of plant has hazard warning labels re: Crushing, keep all body parts clear, adjacent all crush zones. These labels must be present and fully functional and serviceable at all times.</p> <p>References: AS/NZS4024.1201, AS1319-</p>		

	HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
DESIGN COMPLIANCE	 STRIKING, BURNS	HIGH 22	MEDIUM 15
	Risk Treatments in Place: 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 - <ol style="list-style-type: none"> 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 		
	References: AS4024, AS2671		
	 STRIKING, BURNS	HIGH 22	MEDIUM 15
	Risk Treatments in Place: Hydraulic Hose Failure Shield This item of plant is fitted with a sturdy, permanent shield(s) between the hydraulic hoses and any body parts of the operator to provide protection during a hose or component failure. This shield(s) must be present and fully functional at all times whilst this item of plant is in operation.		
	References: AS4024, ISO4413, AS2671		
	 OPERATIONAL MALFUNCTION	HIGH 22	LOW 2
Risk Treatments in Place: Plant Modification The plant is in original condition.			
References: ISO31000			
DESIGN COMPLIANCE	 INCORRECT OPERATION	HIGH 20	MEDIUM 14
	Risk Treatments in Place: 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.		
	References: AS/NZS4024.1906		
DESIGN COMPLIANCE	 STRAINS	HIGH 19	LOW 5
	Risk Treatments in Place: 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.		
	References: AS/NZS4024.1901		
DESIGN COMPLIANCE	 INCORRECT OPERATION, SLIPPING	HIGH 17	LOW 6
	Risk Treatments in Place: Control Levers/Pedals/Buttons All controls including all levers, buttons, pedals, switches etc. must be kept non-slip and free from damage at all times.		
	References: AS/NZS4024.1901		
MAINTENANCE	 CURRENT OR PREVIOUS STRUCTURAL DAMAGE	CRITICAL 25	MEDIUM 15
	Risk Treatments in Place: 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.		
References: ISO31000			

HAZARD(S)	Prelim. Risk Rating	Residual Risk Rating
 INCORRECT OPERATION	HIGH 22	MEDIUM 15
<p>Risk Treatments in Place: Maintenance Manual The manufacturer's maintenance manual(s) has been supplied for this item of plant</p> <p>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.</p> <p>A complete risk assessment/JSEA must be undertaken covering all inspection, maintenance, servicing and transportation requirements of this piece of plant prior to use.</p> <p>A full assessment of the competence of people using the book(s) must also be undertaken</p>		
<p>References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations</p>		
 STRIKING, BURNS	HIGH 22	MEDIUM 15
<p>Risk Treatments in Place: Hydraulic Damage The hydraulic hoses to this item of plant are free from damage and protected against damage arising from contact with the plant structure. Ensure that hoses are free from damage and that protection is in place at all times whilst this item of plant is in operation. Inspection of the hydraulic hoses and protection system should be conducted regularly and documented as part of your plant safety programme.</p>		
<p>References: AS4024, ISO4413, AS2671</p>		
 OPERATIONAL MALFUNCTION	HIGH 22	LOW 2
<p>Risk Treatments in Place: Major Fluid Leaks This item of plant must remain free from leaks at all times whilst in operation (this includes engine, transmission, cooling system, air, fuel, drive line, wheel hubs, steering and hydraulics). Development of a major leak will require this item of plant to be stood-down until repaired. Minor leaks detected must be repaired within 1-14 days.</p>		
<p>References: ISO31000</p>		
 OPERATIONAL MALFUNCTION	HIGH 21	MEDIUM 15
<p>Risk Treatments in Place: Service Records Service and maintenance records are available for this item of plant.</p> <p>These records must continue to be managed and available at all times as part of your service and maintenance programme. (This programme includes the undertaking of regular inspections of the item of plant with specific reference to all OEM prescribed, scheduled and non scheduled service and maintenance requirements).</p>		
<p>References: Work Health & Safety Act & Regulations- , Occupational Health & Safety Act & Regulations</p>		

SECTION 6 IMAGES AND NOTES

IMAGES

- No Images Available -

NOTES

- No Notes Available -

RISK MANAGEMENT REPORT

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MAKE	Atlas Copco	Date	24-Mar-2023
MODEL	BC2500	Created By	AHSH Service
PLANT NUMBER	82B	Assessor	Mitchell Pennells
SERIAL NUMBER	DEQ189107	Assist. Assessor(s)	Rehan Mawson
		Owner	Australian Hammer Supplies Hire Pty Ltd
		Assessment Purpose	Hire
		State	NSW

OPERATOR ACKNOWLEDGEMENT

I the undersigned acknowledge that I have read and understand the risk management report described above. I also acknowledge that I have received a copy of this risk management report.

<u>DATE</u>	<u>NAME</u>	<u>COMPANY/POSITION</u>	<u>SIGNATURE</u>

