



I-LOCK[®] COUPLER Operation Manual

C2
Series



902-002-11 Rev 6 TWO LINE – SINGLE SWITCH

THE WEDGELOCK I-LOCK[®] COUPLER RANGE COMPLIES WITH AS4772-2008



SPECIAL NOTE

Your new Wedgeloock Coupler is fitted with the I-LOCK[®] Safety System.
Please follow the operator instructions carefully.



wedgeloock

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OUR FOCUS IS....

THE OPERATOR, because operators and their co-workers deserve safer work sites

OUR PURPOSE....

Transforming the world's excavators into highly productive, safe and user-friendly tool carriers.

OUR VALUES....

PIONEERING, we are continually pushing in new directions. We are building a reputation as the industry innovators through constantly looking for ways to make excavator operators' lives better. And we look to new opportunities in new markets, reaching customers that others don't.

COMMITTED – we are committed to our customers, our people, our community and New Zealand. We are committed to the cause of simple, user-centric design and we are committed to safety, without compromise.

COLLABORATIVE – we maximize the value we add to our customers' business by working in active, collaborative partnerships. We are onsite: we take time to listen, we encourage honest dialogue, we look for opportunities on their behalf, we think proactively as well as responsively.

COURAGEOUS – we are bold and intrepid in our quest for earth-moving innovation. We do not turn back at the first hurdle. We are determined (the earth wasn't moved in a day!) Our attitude is robust and our product testing rigorous. We honor the Kiwi pioneering spirit and are proud to uphold it.

FAMILY – we believe people need to be treated as they are family. We look to build long-term relationships both internally and externally through an honest, down-to-earth approach. We believe business success is crucial – but not at the expense of people.

OUR MISSION....

CREATING HUMAN ATTACHMENTS

A business that builds stronger, more enduring human relationships

A business that creates uniquely user-centric products

The Wedglock Quick Coupler was originally developed by Graham Calvert at Waikanae Engineering, NZ, in 1987. The company and its reputation have since grown into a global leader in the design, manufacture and distribution of excavator attachments.

Over the years Wedglock has developed a complete range of excavator attachments to cater for machines from one tonne to 100 tonne. Spearheading the range is the I-Lock Coupler.

Changes in safety standards and a continuous commitment to product improvement has resulted in the development of the I-Lock Coupler, a world first in coupler safety. The I-Lock Coupler incorporates the unique patented I-Lock Safety Knuckle, a differentiated safety feature that is first on and last off, eliminating the high risk of dropping an attachment during change over.



SECTION 1: Safety

***Congratulations on your purchase of the I-LOCK coupler.
You have just bought the SAFEST coupler in the world.***

1.0 I-LOCK SAFETY SYSTEM

The I-LOCK Coupler by WedgeLock must be installed correctly utilizing our two hose circuit technology. Correct installation ensures that the I-LOCK Coupler's built in safety features operate in accordance with the way in which the coupler has been designed.

INSTANT SAFETY

Most accidents occur in the first FIVE seconds of latching an attachment. Your coupler is fitted with the I-LOCK SAFETY SYSTEM which ensures that your attachment is locked the **INSTANT** that it is latched (see figure 1.0.1). This means there is no danger of dropping the attachment if the primary lock is not engaged completely. The I-LOCK SAFETY SYSTEM operates independently of the primary lock.

MOST SERIOUS ACCIDENTS HAPPEN IN THE FIRST 5 SECONDS OF LATCHING THE WEDGELOCK ADVANTAGE

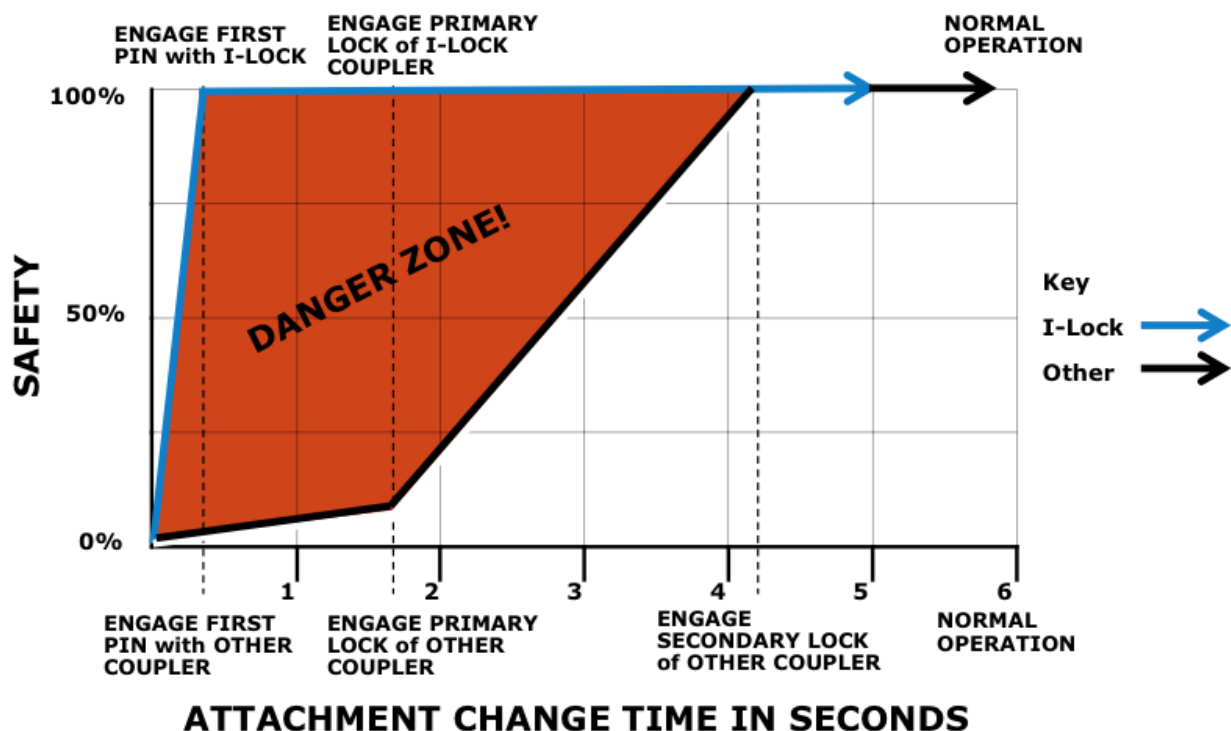


Fig. 1.0.1



OPERATOR CONTROLLED SAFETY KNUCKLE

The attachment can only be disconnected completely from the I-LOCK Coupler after the intentional operation of the Lock-Out switch which activates the **PRIMARY WEDGE** and **SAFETY KNUCKLE**. The I-Lock controller has a built in time delay, which allows a fixed timeframe to disengage the attachment. After the time elapses the buzzer tone slows and the safety knuckle will automatically reset. If the attachment **has not** been removed completely the automatic reset of the safety knuckle will render the attachment into a safe situation again. If the attachment **has** been removed the automatic reset of the safety knuckle ensures that the coupler is ready to reconnect to the next attachment.

WEDGE LOCKING PRINCIPLE

Another safety feature of the I-LOCK Coupler is the Wedge Locking Principle. The locking principle of the primary wedge provides at least 2.5 times the locking force compared with a swinging jaw coupler. This assures that both attachment pins are locked firmly to the coupler body minimizing the wear in the locking area of your coupler.

1.1 INTEGRATED DESIGN FEATURES:

The I-Lock Coupler has been designed to operate on the carrier machine's **MAINS PRESSURE** supply.

The I-Lock Controller mounted within the coupler electrical circuit consists of a PIC which controls the I-Lock Control Valve function. It also controls the warning buzzer and the I-Lock Safety Knuckle timeout feature. The electrical circuit is protected by a 10 Amp fuse.

The I-Lock Control Valve controls the oil pressure and oil flow to the coupler for both the Primary Wedge function AND the Safety Knuckle function.

The I-Lock Control Valve is only energized to release the attachment. This will ensure that in the event of an electrical failure the primary locking mechanism and safety knuckle will stay in the locked position.

The warning buzzer is present to alert the operator that the electric circuit is live and the attachment can be released. The warning buzzer has three distinctive frequencies which alerts the operator of the "mode" in which the coupler locking sequence is in during the attachment change over process

The unique one piece hydraulic cylinder body eliminates port welding and potential feeder tube damage. Integrated into the cylinder is a 'Pilot Operated Safety Check Valve' which locks the pressure in the extend side of the cylinder in the event of hose failure anywhere in the coupler circuit. In addition, on the larger models, an internal pressure relief valve is fitted to the cylinders to protect against the potential of mechanically induced pressure spikes.



SECTION 1: Safety

1.2 SAFE COUPLER USE



Your I-LOCK Coupler will extend the overall length of the dipper arm.

ATTACHMENTS MAY HIT THE CABIN AND OR BOOM



Your I-LOCK Coupler may enable the operator to use buckets and attachments for which it is not designed, i.e. oversized buckets or attachments.

ONLY USE ATTACHMENTS THAT ARE DESIGNED SPECIFICALLY FOR THE HOST MACHINE.



Never place your hands inside the coupler or anywhere near the linkage mechanism whilst the hydraulic system is pressurized or the carrier machine is turned on.



Never use the Primary Locking Wedge or I-LOCK Safety Knuckle as a lifting device.

FOR INFORMATION RELATING TO “SAFE LIFTING PROCEDURES” REFER TO SECTION 5 OF THIS MANUAL.




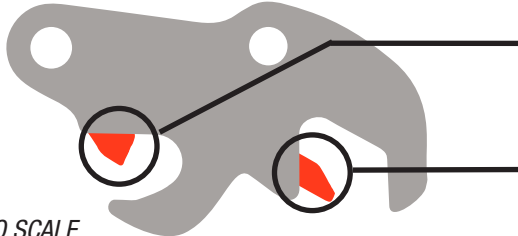
Always fully engage the coupler to the bucket or attachment even if you just want to lift or move the attachment to a different position on your work site



Any damage deemed by Wedglock to have been caused by operator misuse will invalidate the manufacturers warranty.



2.0 TERMINOLOGY

	<p>LOCK-OUT SWITCH</p>
 <p>NOT TO SCALE</p>	<p>KNUCKLE – AT THE FRONT OF THE COUPLER (CLOSEST TO THE CAB)</p> <p>WEDGE – AT THE REAR OF THE COUPLER (FURTHEST FROM THE CAB)</p>
<p>NOTE: The I-Lock Tilt Coupler and I-Lock Standard Coupler operate in the same manner. For clarity the images of the coupler shown on the following pages are of the Standard I-Lock Coupler.</p>	

2.1 SAFETY KNUCKLE FEATURE



PLEASE READ CAREFULLY

The automatic resetting of the **SAFETY KNUCKLE** during operation is controlled by a “built-in timer” in the I-Lock controller. This is a safety feature providing “instant latching” of the first pin.

In the event the safety knuckle “re-sets” to the safe (down) position before the coupler has been completely moved away from the attachment, simply crowd the coupler, re-seat the attachment and re-activate the lock-out switch to raise the safety knuckle. Only when the safety knuckle is raised can the coupler be moved away from the attachment.



SECTION 2: Operation

2.2

OPERATOR ACTION

COUPLER ACTION

DETACH

1

Position excavator & attachment so pins are not loaded against wedge & knuckle.

Position excavator to allow pump pressure to raise in later steps.



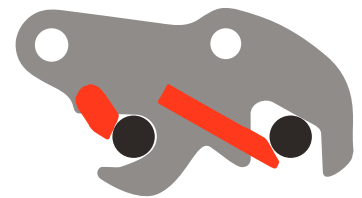
POSITION EXCAVATOR

2

Turn lock out switch to ON

Timer function starts.
Alarm tone is FAST BEEP.
Wedge MAY slowly retract (machine dependent).

TIMER START



UNLOCKING SEQUENCE STARTED

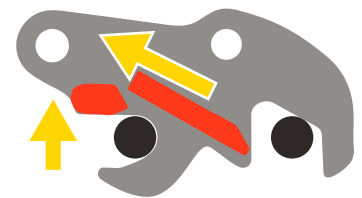
3

Build hydraulic pressure on bucket circuit until wedge and SAFETY knuckle are retracted.

Wedge will quickly retract.
SAFETY knuckle will lift up.

FAST BEEP

BUILD PRESSURE



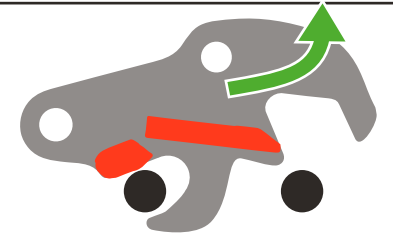
WEDGE & KNUCKLE RETRACT

4

Remove attachment from coupler.

Alarm tone is FAST BEEP.

TIMER



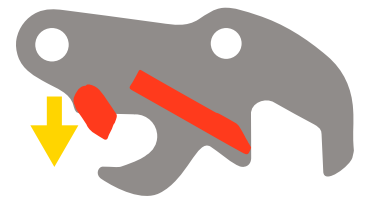
REMOVE ATTACHMENT

5

When timer ends alarm tone changes to SLOW BEEP.
SAFETY knuckle will automatically reset and drop down.

END

SLOW BEEP



AUTO RESET



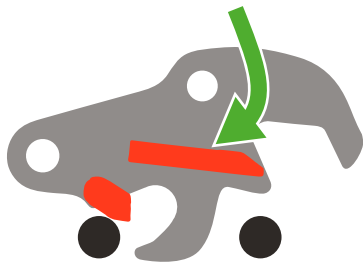
ATTACH

OPERATOR ACTION

COUPLER ACTION

2.3

SLOW BEEP



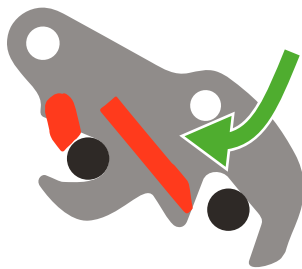
INSTANT LOCK

Connect coupler front jaw over attachment pin.

SAFETY knuckle rides over pin and INSTANTLY LOCKS once pin has gone past.

Alarm tone is still SLOW BEEP.

1



POSITION REAR PIN

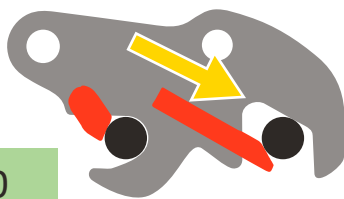
Rotate the coupler to position rear pin in rear jaw of coupler.

Alarm tone is still SLOW BEEP.

2



BUILD PRESSURE



LOCK WEDGE

Turn lock out switch to OFF.

Build hydraulic pressure to extend wedge quickly.

Alarm will turn OFF.
Wedge will extend.

3



TEST

Rattle test to ensure bucket is attached securely.

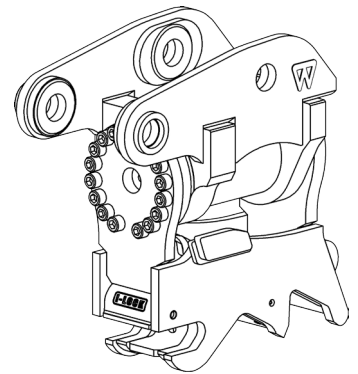
4



SECTION 2: Operation



This part of the manual is applicable to the I-Lock Tilt Coupler Only.



2.4 TILT COUPLER OPERATION

To operate the rotary action of the I-Lock Tilt Coupler a clear understanding of the way in which the coupler has been connected to the auxiliary hydraulics of the excavator is required.

Depending on customer preference and full function requirement of the carrier machine the rotary actuation of the I-Lock Tilt Coupler can be operated in a number of different ways.

In most circumstances the activation of auxiliary hydraulic circuits can be achieved by either a foot pedal or a joystick (Fig 2.6.1 & Fig 2.6.2) configured to achieve the multi function that the customer needs to fulfil his operation in an efficient manner.

For full instructions on how to activate the rotary action of the I-Lock Tilt™ Coupler please refer to the install manual and consult with the qualified hydraulic installer or dealer of the carrier machine.

2.5 TILT COUPLER PRECUATIONS

The I-Lock Tilt Coupler has been designed to withstand the normal rigors of general earthmoving and construction operations for which the carrier machine has been designed.

Abuse of the product can cause serious damage to the working mechanism and will void warranty in all circumstances.


Maximum bucket widths recommended for use on the I-Lock Tilt Coupler must not be exceeded. See table below.

Model	Weight Class (t)	Helac Rotary Actuator	Maximum Bucket Width (mm)
CMT-037	2.9 to 3.7	PT06	1200
CMT-045	3.8 to 4.5	PT07	1400
CMT-055	4.6 to 5.5	PT07	1400
CMT-070	5.6 to 7.0	PT100	1500
CMT-099	7.1 to 9.9	PT100	1500
CMT-130	10.0 to 13.0	PT180	1800
CMT-170	14.0 to 17.0	PT180	1800
CMT-210	18.0 to 21.0	PT10	2000

SECTION 3: Maintenance



3.0 COUPLER IDENTIFICATION

 wedgeloK www.wedgeloK.com Made in New Zealand	
PRODUCT	
MACHINE	SERIAL
CAP.	WT.
GET	SWL
MAX PRESSURE	

EXAMPLE

All WedgeloK Couplers are fitted with an Aluminium Data Plate (FIG 3.0.1). Information pertains to the product code, the carrier machine, product serial number, working load limit (for lifting purposes) and the maximum operating pressure. If any of the cells are left blank it means that the information is non applicable to this attachment

Fig. 3.0.1



WARNING: WedgeloK Quick Couplers that incorporate a factory fitted lifting eye will be labeled and marked with a Working Load Limit (WLL) of the lifting eye. The lifting eyes are designed in accordance with NZS/BS2573:Part1. It is highly recommended that a Bow Type Shackle be used to connect to the lifting eye. See page 15.

3.1 SERVICING SCHEDULE

Maintenance Required	Daily	Weekly
Check all pin retainers, bolts & nuts for tightness on the quick coupler and the attachments	✓	
Lubricate all greasing points – the attachment will have to be removed to access all grease points.	✓	
Check hydraulic hoses and fittings for any leaks or wear – replace immediately if required	✓	
Check the quick coupler switch and audible warning buzzer is operating properly	✓	
Check the full operation of all the moving parts within the quick coupler – repair or replace immediately if required	✓	
Check the hydraulic cylinder mounting bolts for tightness – remedy if required		✓
Thoroughly clean the quick coupler and ensure there is no material build up around locking cylinder, wedge or I-Lock™ safety system		✓
Check the quick coupler for evidence of fatigue, weld failure or stress – if evident contact your WedgeloK dealer immediately for assistance		✓



SECTION 4: Troubleshooting

4.0 TROUBLE SHOOTING GUIDE

PROBLEM	CHECK	REMEDY
1. I-Lock Safety Knuckle will not retract when activated	Check hydraulic line to I-Lock Safety Knuckle	If damaged or leaking repair or replace
	Check electrical circuit between solenoid and I-Lock Controller	Repair connections or replace loom if required
	Check function of solenoid spool valve for I-Lock Safety Knuckle circuit	Remove spool valve, clean and clear any debris. Replace spool if necessary
	Check mechanical function of solenoid coil for I-Lock Safety Knuckle circuit	Replace solenoid coil if required
	Check in-cab switch is functioning	See instructions below
2. I-Lock Safety Knuckle remains in retracted (up) position	Check Safety Knuckle & housing for damage	Repair or replace parts if necessary
	Check Safety Knuckle and housing for lodged debris	Remove debris
	Check hydraulic lines	Repair or replace if required
	Check I-Lock spring assembly for damage	Replace if required
	Check I-Lock shaft assembly for damage	Replace if required
3. The I-Lock Safety Knuckle is slow to or partially activates.	Check the system pressure being supplied to the I-Lock piston during operation	Crowd the bucket cylinder to overcome low idle pressure
	Check condition of wiring loom between the in-cab I-Lock Controller and the solenoid	Replace or repair as necessary
	NOTE: Should this problem occur it must be investigated and remedied immediately	

SECTION 4: Troubleshooting



4.0 TROUBLE SHOOTING GUIDE (cont.)

PROBLEM	CHECK	REMEDY
3. The I-Lock Safety Knuckle is slow to or partially activates. (cont.)	Check for damage to Safety Knuckle	Replace parts if required
	Check grease around I-Lock piston	Grease liberally
	Check I-Lock spring assembly for damage	Replace if required
4. There is oil leaking around the I-Lock piston assembly	Check the hose connection on the I-Lock piston	Tighten as necessary
	Check seals, rod and bore of piston assembly for damage	Remove the I-Lock piston assembly and dismantle. Replace parts where necessary and re-assemble.
5. The primary wedge is operating slower than normal	Check that the operator is crowding the bucket cylinder to create machine pressure	Crowd the bucket cylinder to overcome low idle pressure
	Check the operating pressure that extends the Primary Wedge	Adjust the pressure reducing valve if required
	Check the inlet port on coupler directional control valve	Clean and clear any debris that is present from the orifice
6. There is oil leaking around the main cylinder in the coupler	Check hoses and connections to the main cylinder	Tighten and replace as necessary
	Check cylinder for damage	Remove main cylinder and dismantle. Replace any damaged parts
7. Primary Wedge will not retract	Check coupler for any debris that maybe lodged behind the Wedge plate	Clear the debris
	Inspect the Pilot Operated Safety Check valve in main cylinder	Remove, clean and replace if necessary
	Check in-cab I-Lock Lock-Out switch is functioning	See previous instructions
	Check mechanical function of solenoid spool valve for the Primary Wedge circuit	Remove spool valve, clean and clear any debris. Replace spool if necessary



SECTION 5: **Safe Lifting**

5.0 SAFE LIFTING PROCEDURE



Your Wedglock Quick Coupler may have been manufactured with an incorporated lifting eye as part of the side plate of the coupler or it may have a welded lifting eye fitted to the rear plate of the coupler. Either of these two options offers the operator a safe lifting point that can be used to lift loads suspended from the coupler body.

Before suspending any loads from the lifting eye you must first do the following

- Remove any attachment or bucket that is currently fitted to the coupler. If lifting with a Tilt Coupler, position the coupler into the upright vertical position.
- Understand and verify the maximum suspended load that the carrier machine can lift taking into account the mass weight of the coupler.
- Understand and verify the working load limit of the coupler lifting eye by referring to the coupler aluminum data plate affixed to the coupler body or the stamped markings next to the lifting eye.
- Ensure that you use the correct lifting rigs and lifting procedures for the loads that are to be suspended. A Bow Type Shackle is highly recommended to be used through the lifting eye.
- Ensure that co-workers KEEP WELL CLEAR at all times during the lifting procedure.

Refer to the following attached appendices' for the working load limit of the certified lifting eyes that are either part of the side plate or welded to the rear plate of your Wedglock Coupler. If you can not identify the W.L.L from either the aluminum data plate, what is stamped on the coupler or chart below please contact your nearest Wedglock dealer immediately for further assistance.

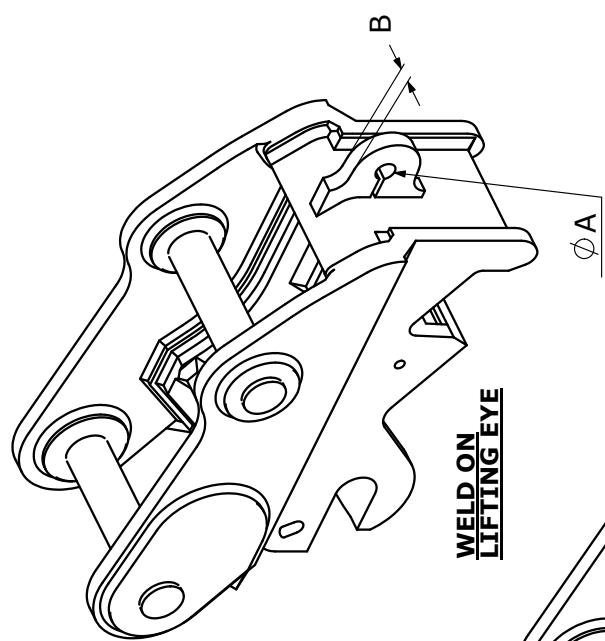
5.1 APPENDICES SCHEDULE

DRG #	Title
910-300-1-D	WEDGELOCK COUPLER LIFTING EYE IDENTIFICATION CHART
910-300-10-D	LIFTING EYE CERTIFICATE (DICK JOYCE CONSULTS LTD)

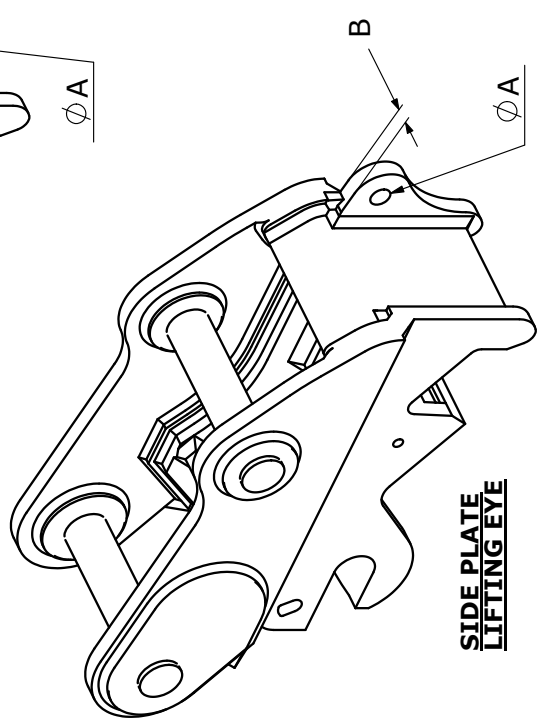
WEDGELOCK COUPLER LIFTING EYE AND SHACKLE COMPATABILITY

	COUPLER LIFTING EYE				SHACKLE (RR-C-271)		
	A (mm)	B (mm)	WLL (kg)	WEDGELOCK CODE	C (mm)	D (mm)	PART#
WELD ON FLAT REAR PLATE	20	16	2000	T9000-X11016	16	22	02325016
	24	25	4000	T9003-X11025	22	31	02325022
	32	32	8000	T9004-X11032	28	43	02325028
	38	40	10 000	T9005-X11040	35	51	02325035
WELD ON FOLDED REAR PLATE	40	40	12 000	T9006-X11040	38	57	02325038
	44	50	15 000	T9007-X11050	42	60	02325042
	24	25	4000	T2229-X11025	22	31	02325022
	32	32	8000	T4030-X11032	28	43	02325028
SIDE PLATE EYE	38	40	10 000	T4166-X11040	35	51	02325035
	40	40	12 000	T2243-X11040	38	57	02325038
	44	50	15 000	T4188-X11050	42	60	02325042
	32	25/ 32	7000	C-7 SWL	28	43	02325028
	40	32/ 40	13 000	C-13 SWL	38	57	02325038
	44	40/ 50	15 000	C-15 SWL	42	60	02325042

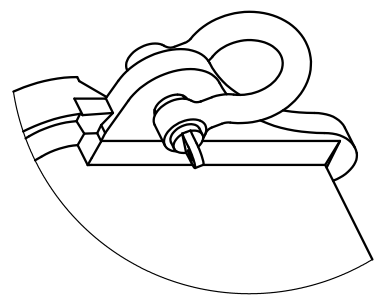
Shackle Part # are quoted from Bridon Cookes Catalogue (New Zealand)



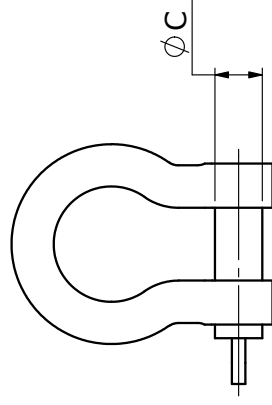
**WELD ON
LIFTING EYE**



**SIDE PLATE
LIFTING EYE**



SHACKLE FITTED TO COUPLER



BOW TYPE SHACKLE

REV	DESCRIPTION	DATE	BY
AR	16/10/12		

WELD ON EYES SEPERATED TO
FLAT & FOLDED REAR PLATES
WLL STANDARDISED AS kg CAPACITY



www.wedgeloek.com

WEDGELOCK COUPLER LIFTING EYE IDENTIFICATION CHART

DRG: 910-300-1-D

DATE: 18/03/09

REV A



DICK JOYCE CONSULTANTS LTD.

MECHANICAL, TRANSPORT & STRUCTURAL ENGINEERS

131-135 HUTT PARK RD, P.O. BOX 33045, PETONE

PHONE (04) 568-9300 FAX (04) 568-6227 EMAIL info@djconsult.co.nz

23 May 2005

COMPLIANCE CERTIFICATE - 03801

Type Of Lifting Equipment: Quick Hitch Lifting Lugs
Equipment Manufactured By: Wedgelock Equipment Ltd
Equipment Part No(s): T9000 – X11016
T9003 – X11025
T9004 – X11032
T9005 – X11040
T9006 – X11040
T9007 – X11050
Testing Carried Out By: Titan Cranes Ltd
Equipment Owner(s): Wedgelock Equipment Ltd


This is to certify that, at the time of inspection, the design (as specified in the attached Table 03801) and testing of the above lifting equipment, including the attachment of the lifting eye to the appropriate backing plate structure, was in accordance with the following standards and codes of practice:

OSH – Approved Code of Practice: Load-Lifting Rigging (Section 5.6)
NZS/BS 2573: Part 1: 1983: Rules for Design of Cranes
NZS 3990: 1993: Mechanical Equipment - Steelwork

The following Safe Working Load (SWL) ratings apply:

PART No	SWL (kg)	Test Load (kg)
T9000 – X11016	2,000	4,000
T9003 – X11025	4,000	8,000
T9004 – X11032	8,000	16,000
T9005 – X11040	10,000	20,000
T9006 – X11040	12,000	24,000
T9007 – X11050	15,000	30,000

Signed: 
R.J. Joyce
CPEng


D.J. Martin
Inspecting Engineer

Wedgelock Lifting Lug Requirements for Compliance With NZS/BS2573: Part 1

Table 03801

Prepared by Dick Joyce Consultants Ltd

Lifting Lug Part Number*	Application	SWL (Tonnes)	Minimum lug mounting plate material specification and dimensions (Span X Height X Thickness)(mm)	Welding Requirements (See Notes)	Weld Type	
					Weld Type	Weld Size(mm)
T9000 - X11016	1 - 5 T Excavator	2	AS 1594 - HA350 - 124x105x12	Lifting Lug - Mounting Plate Mounting Plate - Main Structure	Continuous Fillet Continuous Fillet	6 6
T9003 - X11025	5.5 - 9 T Excavator	4	AS 1594 - HA350 - 162x115x16	Lifting Lug - Mounting Plate Mounting Plate - Main Structure	Continuous Fillet Continuous Fillet	8 8
T9004 - X11032	10 - 21 T Excavator	8	AS 1594 - HA350 - 225x190x20	Lifting Lug - Mounting Plate Mounting Plate - Main Structure	Continuous Fillet Continuous Fillet	10 8
T9005 - X11040	22 - 27 T Excavator	10	AS 1594 - HA350 - 360x235x25	Lifting Lug - Mounting Plate Mounting Plate - Main Structure	Continuous Fillet Continuous Fillet	10 8
T9006 - X11040	28 - 36 T Excavator	12	AS 1594 - HA350 - 356x250x32	Lifting Lug - Mounting Plate Mounting Plate - Main Structure	Continuous Fillet Continuous Fillet	10 8
T9007 - X11050	37 - 45 T Excavator	15	AS 1594 - HA350 - 480x350x40	Lifting Lug - Mounting Plate Mounting Plate - Main Structure	Continuous Fillet Continuous Fillet	12 8

*. The lifting lug part numbers correspond to the "Wedgelock Lifting Lug (05/08/03)" drawing as supplied. The minimum material specification for these lugs is to be AS 1594 - HA350.

Welding Notes:

All welding is to be in accordance with AS/NZS 1554.1 & 1554.4. The joint identification F1(table 4.4(c) of these standards) is applicable to the fillet welds specified for both welding cases.

The welding in both cases may be carried out using a GMAW process and E70T flux cored wire. In the case of welding the mounting plate top the Bisalloy structure the following preheat and heat input requirements must be followed.

The parent metals being joined must be preheated to 50 - 170° C prior to welding and a maximum permissible arc energy of 1.0 - 3.5kJ/mm should not be exceeded. Where possible a post weld treatment should be used to facilitate slow cooling of the weld.



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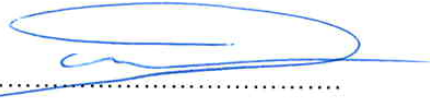
MECHANICAL, TRANSPORT & STRUCTURAL ENGINEERS
131-135 HUTT PARK RD, P.O. BOX 33045, PETONE
PHONE (04) 568-9300 FAX (04) 568-6227 EMAIL info@djconsult.co.nz

Wednesday, October 12, 2005

Compliance Certificate 03801 –Amendment - 01
Ref - 05965

The design for the original equipment part numbers listed below had been revised since the original design and test procedure. The design revisions were not considered to have affected the lifting capacity of the equipment. The principle compliance certificate – 03801 was retained and amended by the omission of the original equipment part numbers and substitution of the amended equipment part numbers shown in the table below.

Original Equipment Part Number	Amended Equipment Part Number
T9007-X11050	T4188-X11050
T9006-X11040	T2243-X11040
T9005-X11040	T4166-X11040
T9004-X11032	T4030-X11032
T9003-X11025	T2229-X11025

Signed: 

D.J Martin
Mechanical Engineer
DJC

PRINCIPAL R.J.JOYCE B.E, CPEng, M.I.P.E.N.Z.

Design & Engineering

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DICK JOYCE CONSULTANTS LTD.

MECHANICAL, TRANSPORT & STRUCTURAL ENGINEERS

38 SEAVIEW ROAD, P.O. BOX 33072, PETONE

PHONE (04) 568-9300 FAX (04) 586-9401 EMAIL info@djconsult.co.nz

30 January 2008

COMPLIANCE CERTIFICATE - 08051

Type Of Lifting Equipment: C Series Lifting Eyes
Equipment Manufactured By: Wedgelock Equipment Ltd
Equipment Types:
13-21T C-7 SWL
22-35t C-13 SWL
36-45t C-15 SWL
Testing Carried Out By: Cookes Bridon NZ Ltd, Auckland
Equipment Owner(s): Wedgelock Equipment Ltd

This is to certify that the design and testing of the above lifting equipment, including the attachment of the lifting eye to the appropriate backing plate structure, was in accordance with the following standards and codes of practice:

NZS/BS 2573: Part 1: 1983

Rules for Design of Cranes

NZS 3990: 1993

Mechanical Equipment - Steelwork

The following Safe Working Load (SWL) ratings apply:

Type	SWL (kg)	Test Load (kg)
13-21t C-7 SWL	7,000	Horizontal – 14,189 Vertical – 14,081
22-35t C-13 SWL	13,000	Horizontal – 26,042 Vertical – 26,108
36-45t C-15 SWL	15,000	Horizontal – 30,093 Vertical – 30,060

Signed:.....


A.J. McMaster
CPEng

PRINCIPAL R.J. JOYCE B.E., CPEng, M.I.P.E.N.Z.

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