EAST WEST ENGINEERING

INSTRUCTION MANUAL

Type CGC130
Crane/Forklift Goods Cage

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ALL EAST WEST GOODS CAGES CONFORM TO AS/NZS 1554.1:2014, AS 1418.1 – 2004, AS 2550.1 – 2011, AS 2359.1 – 1995 & AS 2359.2 – 2013

EAST WEST ENGINEERING
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1) QUALITY POLICY STATEMENT

East West Engineering is an Australian Owned company in the Sydney suburb of Brookvale. We are Australia's leading manufacturer of forklift attachments, storage, waste containers and environmental protection equipment.

East West Engineering's products are a result of extensive market research into our customer's needs. From the first concept to engineering certification and finally, CAD/CAM manufacturing, all our designs have been rigorously researched and developed.

2) GENERAL DESCRIPTION OF PRODUCT

The type CGC130 Crane/Forklift Goods Cage is designed to safely convey loose or palleted goods by either forklift or crane. The full gate width allows a 1200mm square pallet to be placed directly inside the CGC130 Crane/Forklift Goods Cage. The CGC130 Crane/Forklift Goods Cage features mesh sides and four crane-lifting eyes. The type CGC130 Crane/Forklift Goods Cage weighs 210 kg and has a Working Load Limit (WLL) of 1000 kg. The standard finish on the type CGC130 Crane/Forklift Goods Cage is Base Assembly & optional Ramp Enamel Painted, Cage & Gate Assembly Zinc Plated.

Crane attachments[1] are designed in accordance with AS 2550.1 and AS1418 where relevant. Forklift attachments are designed in accordance with AS 2359.1 where relevant. The uses of specific crane and forklift attachments should also be in conformance with the statutory regulations that are relevant at the time of design registration.

The use of this attachment is restricted to the purpose for which it is designed. EAST WEST ENGINEERING is not liable if this restriction is breached.

Note: The use of the words '**Forklift**' & '**Industrial Truck**' throughout these instructions both refer to '**Powered Industrial Truck**' as defined in AS 2359.1.

Type Data

To accurately identify the Goods Cage and when ordering parts, please quote the ***Type*** and ***Serial Number***. This information can be found on the compliance plate situated on the side of the Good Cage. Please refer *Fig. 9.1* and *Table 9.2*, codes "A" and "E" for more information.

WARNING: These Instructions **MUST be READ in FULL by the Crane/Forklift Operator & all Crane Personnel** and all Operational & Safety Procedures and Risk Control Measures complied with before the use of this attachment.

[1] Crane attachments cover the following Crane, Hoists and Winches: Bridge, Gantry and Portal cranes, Tower static and mobile Cranes. Hoists of the Chain, Cylinder, Scaffolding and Wire rope types. Winches of the Creeper, Drum, and Trolley type.

3) ASSEMBLY INSTRUCTIONS

The type CGC130 Goods Cage is supplied disassembled. Refer to the Assembly Instructions contained within the packaged unit or Appendix B attached to these Instructions to correctly assemble the unit prior to its use. All fasteners on the unit MUST BE correctly tightened and the Gate & the Drop Ramp freely swinging in accordance with the Assembly Instructions.

WARNING: The type CGC130 Goods Cage **MUST NOT** be used unless assembled strictly in accordance with the Assembly Instructions supplied.

4) METHOD OF ATTACHMENT

Forklift attachment procedure

Before handling the CGC130 Goods Cage with a forklift, ensure that the fork arms are suited to the attachment and set to a width that ensure stability of the load.

To ensure the CGC130 Goods Cage stays on the tines when elevated, always back tilt the forklift mast. Before lifting the CGC130 Goods Cage, ensure the Gate is secure with both the 'Antiluce' catches positioned vertically.

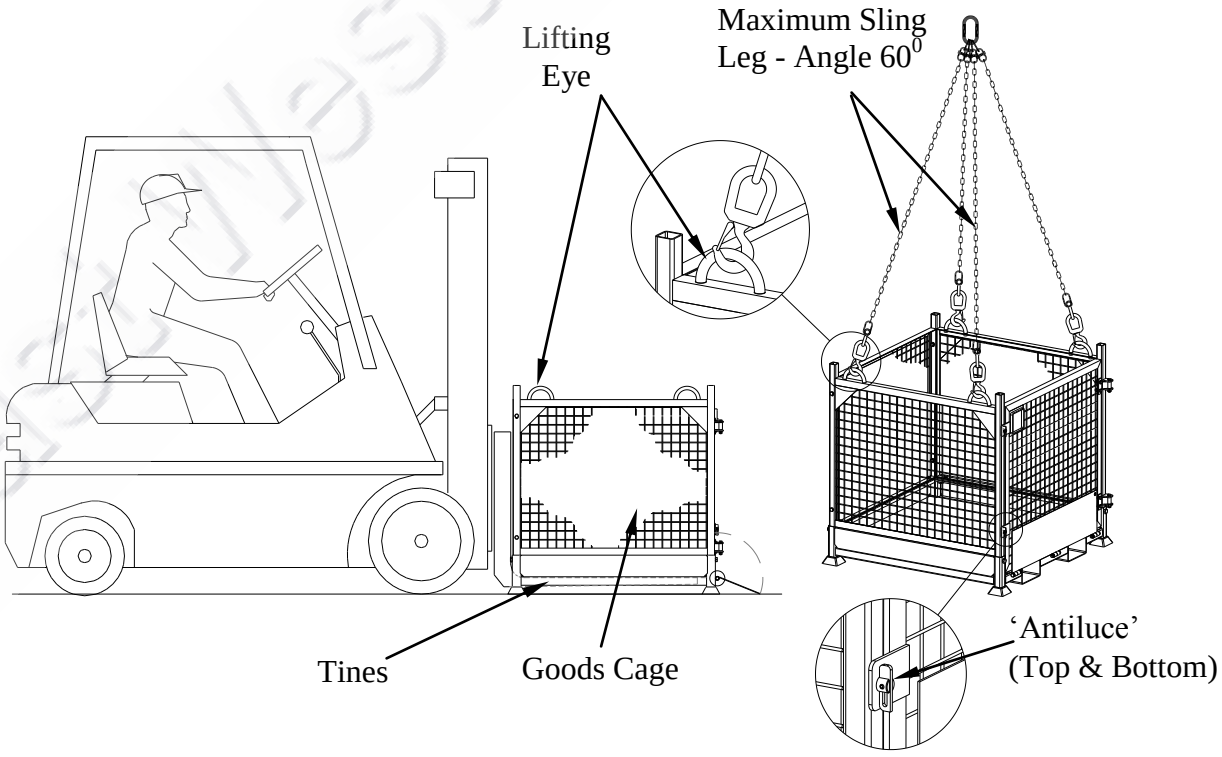

Fig. 4.1

Crane attachment procedure

A qualified person shall operate the crane and the CGC130 Goods Cage shall be hoisted in a safe manner. Before lifting the CGC130 Goods Cage, ensure the Gate is secure with both the 'Antiluce' catches positioned vertically.

When a crane is used to hoist the CGC130 Goods Cage, attach a four-leg lifting chain to each of the lifting eyes as shown in *Fig 4.1* above. Ensure that the sling length provides a maximum leg angle of 60^0. If fitted, consult the chain data plate regarding the number of leg slings and maximum angle of the chain sling.

When engaging or disengaging the crane hook, ensure the crane attachment chains are not twisted or tangled. Use of a single fall rope to hoist the crane attachment, may allow the hook to spin and create a dangerous situation. Do not allow the crane hook to rest on or in the CGC130 Goods Cage. Keep the CGC130 Goods Cage in an upright position at all times.

5) OPERATIONAL and SAFETY PROCEDURES

Preliminary Safety Checks

A "Competent Person" shall inspect all components on the CGC130 Goods Cage and Crane to ensure they are in safe working order. Do not use the Goods Cage if any of the components are damaged or not in safe working condition. A "Competent Person" shall inspect the lifting slings and Gate/latch system daily to ensure they are operational and in safe working order.

The Operator shall check that the attachment has been correctly fitted in accordance with these Instructions (refer Section 4), and/or the relevant Crane or Industrial Truck Operator's Manual depending on the operation to be carried out.

All signage must be strictly adhered to and checked to ensure that the compliance plate is not damaged and is legible.

General Operating and Safety Procedures

The use of the CGC130 Goods Cage shall be limited to those situations for which it is specifically designed and in accordance with AS 2550.1. All lifting equipment used must meet the relevant Australian Standards including AS 3990.1, AS 3775 and AS 3776. Maximum sling leg angle is 60°.

Forklift attachments can alter load centres and reduce the load capacity. The type of load to be handled in addition to the operating conditions must be considered when determining the actual working capacity for each application.

All operating checks as stated in Section 6 below and as stated in AS 2550.1 and/or AS 2359.2 are to be carried out at the start of shifts or immediately prior to the lifting of loads.

Do not exceed the recommended Crane, Forklift or Goods Cage rating.

WARNING: Any WLL noted on the Good Cage is a structural rating of the Goods Cage only and makes no claim to the suitability of the Crane/Forklift. Actual load may be restricted to the suitability of the Crane/Forklift. Actual rated working load of the Crane must be obtained from the Crane manufacturer. Actual lift truck capacities must be obtained from the lift truck manufacturer.

Before the CGC130 Goods cage elevates any load, the Operator shall lift it to the required working height to confirm that all systems function correctly.

Ensure all Risk Control Measures, as outlined in Section 6 and detailed in Appendix A, are complied with before hoisting the CGC130 Goods Cage by Crane or before lifting the CGC130 Goods Cage using an Industrial Truck.

East West Engineering attachments shall not be modified in any way which affects the operation or performance except with the prior approval of East West Engineering. After any changes have been effected, appropriate alterations shall be made on the relevant nameplate and markings prior to placing the attachment back into service. East West Engineering must be notified of the changes to nameplates and makings with reference to the attachment serial number.

6) RISK CONTROL MEASURES – SUMMARY

When handling loads, the Risk Control Measures outlined below in Sections **6.1** (for Crane Operations), **6.2** (for Forklift Operations) and **6.3** are to be observed by the Crane/Forklift Operator and Crane Personnel to ensure all identified hazards relative to using this equipment are eliminated or controlled – **refer Appendix A for a detailed analysis**;

6.1 Risk Control Measures – Crane Operations

A) The Crane Operator's qualifications must conform to the requirements of the relevant regulatory authority. Where applicable, the Crane Operator shall hold a certificate of competency. To operate a particular Crane, the Operator must be authorised by a responsible representative of the Crane used or hiring contractor. Training in the safe use of the attachment shall be undertaken before usage. The Crane Operator must not work the Crane unless they are physically and mentally capable. This is in accordance with AS 2550.1 clause 6.2.

B) Authorised personnel must perform the following pre-checks on the Crane in accordance with the operating manual before the Crane is placed into service. Typically, Crane pre-checks as stated in AS 2550.1 Appendix G covers the following;

- Oil level, fuel levels and lubrication,
- Condition of ropes, rope terminals, fittings & anchor points, rope drums and sheaves,
- Condition and pressure of tyres where applicable,
- Drain all water from air reservoirs,
- Structural checks for loose, damaged or cracked components that may be indicated by rust marks, flaking or marked paint,
- Check the security and application of counter weights,
- Load moment system, where fitted is correctly set,
- Indicator appropriate to the boom or fly-jib length is correctly fitted,
- Cleanliness of cabin – is it free from grease, oil, rags, tools etc.,
- Pneumatic and hydraulic systems and their safety devices operate correctly,
- Operation of the Crane through all motions with particular attention to brakes,
- Operation of all limit switches, cut out and safety devices.
- Communications equipment is working correctly and clearly loud enough to be heard,
- All fire extinguishers are placed in the correct position and are suitable for the particular application and are in working order.

C) In conformance with AS 2550.1 clause 6.1, the operator shall review the logbook where applicable and be satisfied about the presence of unauthorised personnel on the crane, safe working condition of the crane and safe operation of each of the crane movements. Authorised personnel must carry out any adjustments or alteration needed for safe operation.

D) Any stabilisers shall be engaged prior to lifting.

E) Do not exceed the rated working Load of the Crane.

F) Ensure that all movements of the Crane are carried out under power.

G) **Do NOT** move the Crane/attachment unless the safety of persons in the vicinity of the Crane is assured. Be alert to the possibility of trapping or injuring persons in the vicinity of the Crane when handling loads or moving the Crane.

H) Unless a dangerous situation occurs, follow directions and signals given by an authorised person. Cease any Crane movement if a dangerous situation occurs.

I) The Operator shall hoist the load vertically and in a smooth manner at slow speeds with minimum acceleration and deceleration.

J) Sudden stops, jerky or other movements that may cause the load to swing unduly must be avoided. Ensure minimum impact when Crane engages 'end stops'.

K) Movement of hook/attachment when out of sight is only permissible when directed by an authorised person such as a dogman, crane chase, spotter or rigger.

L) The hook/attachment must be raised sufficiently to avoid collision during horizontal movement. Only when the load is freely suspended is horizontal movement permissible.

M) When landing the Goods Cage, avoid developing rope slack.

N) The Operator must know the location of the main isolation switch and Fire fighting equipment.

6.2 Risk Control Measures – Forklift Operations

A) The Industrial Truck Operator requires a suitable forklift licence to cover both the Industrial Truck being operated and any attachment that has been fitted. Training in the safe transport of the Goods Cage shall be undertaken before usage.

B) Authorised personnel must perform the following pre-checks immediately prior to the use of the Industrial Truck in accordance with AS 2359.2 Clause 3.1 and 6.4 and corrective action initiated where applicable;

- Nameplate and markings regarding the Industrial Truck and Attachment capacities are to be read and acknowledged,
- Condition of lift and tilt systems on the Industrial Truck to be checked,
- Inspect all tyres for wear, condition and pressure if applicable,
- Liquid levels of battery cell electrolyte, oils (hydraulic, engine, transmission and brake), cooling water and fuel to be checked,
- All steering and brake controls, warning devices and lights to be checked for effective operation.

C) Do not exceed the rated capacity of the Industrial Truck to handle the load.

D) The Industrial Trucks shall be used on a hard level surface. The area in which the Goods Cage is to be used shall be accessed as suitable for the task to be undertaken. There should be suitable clear space to safely transport the Goods Cage and a system developed for handling the load.

E) Manoeuvre slowly and cautiously when the Goods Cage is elevated.

F) Transport the Goods Cage positioned as low as practicable.

G) The mast, if adjustable shall be back tilted.

H) Never drag the Goods Cage horizontally along the ground.

I) The Operator shall keep hands and feet clear of controls other than controls in use.

J) Ensure safety features are provided, visible and working effectively.

6.3 Risk Control Measures – General Operations

A) Gain assurance from a responsible person that the Goods Cage and/or load may be handled safely and that person has provided all information necessary to ensure that risks are eliminated or controlled.

B) While lifting in an area subject to passing traffic, barriers or warning signs shall be used to prevent any interference.

C) The Operator shall check the Goods Cage is securely attached, refer Section 4.

D) The Operator shall ensure the Cage Gate is closed & secured at all times whilst lifting, lowering or transporting the Cage.

E) **This Cage is not designed or certified to convey Personnel.** The Operator to ensure that **NO PERSONNEL rides on or in the Cage at any time**.

F) The Operator shall stay with the Crane/Industrial Truck controls at all times.

G) The Operator shall keep clear of overhead obstructions and in particular **MAINTAIN RELEVENT CLEARANCE OF ELECTRICAL CONDUCTORS.**

H) Before any load is hoisted, the Operator shall lift the Goods Cage unladen to the required working height to confirm that all systems are functioning correctly.

I) Ensure there has been no unauthorised interference or alteration to the equipment that may cause risk.

J) Ensure regular maintenance, testing and inspections are carried out and recorded in accordance with the relevant Crane and/or Industrial Truck Manuals and these instructions (refer Section 8), and corrective action initiated where applicable.

K) Ensure the instructions of East West Engineering are followed.

L) If any of the equipment becomes unsafe, stop all usage until the risk is eliminated or controlled

WARNING: Failure to observe the above **Risk Control Measures** and those outlined in **Appendix A** could result in **SERIOUS INJURY or DEATH.**

7) PARTS LIST

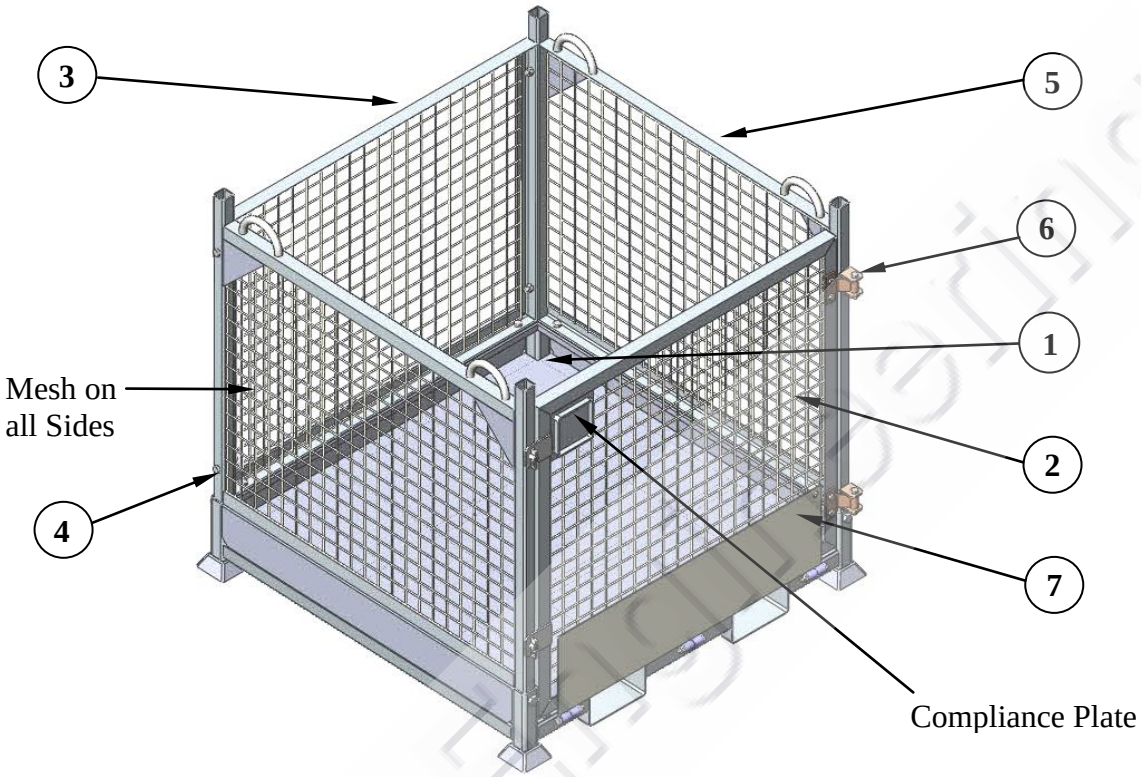

Fig. 7.1

Item	Description	Part Number
1	Base Assembly	CGC-130-04
2	Gate Assembly	CGC-130-13
3	Rear Panel	CGC-130-12
4	Left Hand Panel	CGC-130-11
5	Right Hand Panel	CGC-130-10
6	Hinge	CGC-130-25
7	Drop Ramp	CGC-130-14

Table 7.2

8) MAINTENANCE

Regular maintenance including Testing, Inspection and Cleaning should be carried out on the Goods Cage to reduce the risk of potential hazards arising. The Goods Cage should be cleaned and visually inspected by a "Competent Person" under adequate lighting conditions, before each shift, to ensure all components are functioning correctly and are free from any noticeable wear or damage, particularly at any load bearing or highly stressed points. If components are considered worn or damaged, or if safety charts or labels are damaged or illegible, the Goods Cage should be taken out of service and East West Engineering or an "Authorised Person" contacted for advice. Periodic testing may be required if any damage is noted as this could be an indication of abuse or overloading. Regular cleaning makes identification of damage easier. Keep maintenance records to ensure safety checks are carried out.

Maintenance Schedule

	Maintenance Period					
Description	**Daily** **or 8 Hrs**	**Weekly** **or 40 Hrs**	**Monthly** **or 160 Hrs**	**3 Months** **or 500 Hrs**	**Annually** **or 2000 Hrs**	**Other**
Cage Frame Ass'y	CI					
Gate – Hinges & Bolts	CI	GS		T		
Gate – 'Antiluce's'	CI					
Lifting Eyes/Chains	CI					

Table 8.1 (refer Fig. 7.1)

Maintenance to be carried out		
Maintenance Codes		**Lubricant to be used**
GS = Grease smear	**D** = Drain	**G** = Grease, Shell Alvania R2 or equivalent
GN = Grease at nipple	**R** = Replace	**H** = Hydraulic Oil Shell Tellus
CI = Clean and inspect	**T** = Tighten	**Ot** = Oil, Shell 20W/40W or equivalent
C = Check & fill oil to level	**N** = Note below	**Oa** = Oil, Shell Turbo T32 or equivalent

Table 8.2

9) COMPLIANCE PLATE INFORMATION

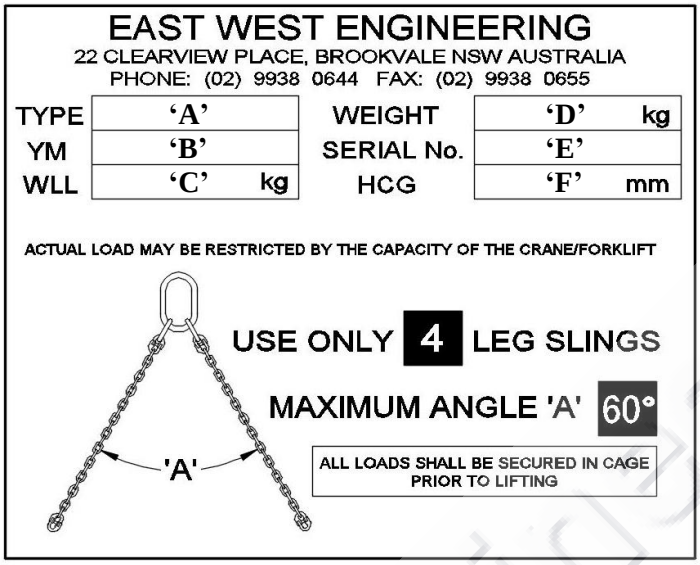

Fig. 9.1

A	Product Type	Refer "A", *Table 9.2*
B	Year of Manufacture	Individually stamped
C	Working Load Limit	Refer "C", *Table 9.2*
D	Dry Weight of the unit	Refer "D", *Table 9.2*
E	Serial Number	Individually stamped
F	Horizontal C of G	Refer "F", *Table 9.2*

COMPLIANCE PLATE MARKING						
Type	**"A"**	**"B"**	**"C"**	**"D"**	**"E"**	**"F"**
CGC130	CGC130	YM	1000	210	Serial No	625

Table 9.2

10) CERTIFICATION INFORMATION

Certificate

Type CGC130 Crane/Forklift Goods Cage

We certify that the Type CGC130 Crane/Forklift Goods Cage is rated to 1000kg Working Load Limit (WLL) and is designed and fabricated strictly in accordance with relevant Australian Standards including those listed below –

AS/NZS 1554.1: 2014	Structural Steel Welding – Welding of Steel Structures
AS 1418.1 – 2004	Cranes – General Requirements
AS 2550.1 – 2011	Cranes – Safe Use, General Requirements
AS 2359.1 – 1995	Powered Industrial Trucks – General Requirements
AS 2359.2 – 2013	SAA Industrial Truck Code – Operation
AS 3990 – 1993	Mechanical Equipment – Steelwork
AS 4991 – 2004	Lifting Devices

Signed on behalf of **EAST WEST ENGINEERING,**

Ron King
MANAGING DIRECTOR

11) TERMS of TRADE, CONDITIONS of SALE and WARRANTY STATEMENT

1. East West Engineering (EWE) products are to be used only as indicated. Misuse or misapplication may cause failure resulting in possible property damage or bodily injury.

2. It is the obligation of the user to ensure EWE products are used in accordance with appropriate Codes and System requirements.

3. All liability for EWE products performance is disclaimed and the warranty will be voided if any of the following conditions exist:
   3.1) the product is used beyond the published or stated Working Load Limit (WLL) or Rated Capacity (RC). Note: **ALL** ratings are for static conditions and do not account for dynamic loading such as wind, water or seismic loads,
   3.2) the product is not properly installed per published or stated instructions,
   3.3) the loading to the product is not vertical,
   3.4) the product is deformed or stressed in any way during fitting or installation,
   3.5) the product is used in a corrosive environment.

4. All safety regulations required by the user must be observed.

5. Custom builds cannot be cancelled after order placement.

6. EWE products at the time of dispatch are warranted to be free of defects in material or workmanship. **NO OTHER WARRANTY EXPRESSED OR IMPLIED SHALL EXIST IN CONNECTION WITH THE SALE OR USE OF EWE PRODUCTS**. Claims for errors, shortages, defects or non-conformities ascertainable upon inspection must be made in writing within 15 days after buyer's receipt of products. All other claims must be made to EWE within 12 months. Products claimed nonconforming or defective must upon EWE's request promptly be returned for inspection. Claims not made as provided above and within the applicable time period will be barred. EWE shall in no event be responsible if the products have not been used in accordance with the specifications and/or recommended procedures. EWE will, at its option either repair or replace nonconforming or defective products for which it is responsible or return to buyer their purchase price. The foregoing states buyer's exclusive remedy for any breach of EWE warranty and for any claim, whether sounding in contracts, tort or negligence for loss or injury caused by the sale or use of any product. Without limiting the generality of the foregoing EWE shall in no way be responsible for any loss of business or profits, downtime or delay, labour, repair or material cost or any similar or dissimilar consequential loss or damage incurred by the Buyer.

7. Examine goods immediately upon receipt and advise any damage or shortage to carriers and ourselves within 15 days, otherwise no claim whatever will be considered. Provided advice is given within the prescribed time, we will make good any shortage and will repair or replace free of charge goods damaged in transit where we are responsible for delivery of the goods.

8. Returning of goods within 2 months of the EWE dispatch date, will be accepted only upon issue of a Return Goods Form (RGF). Goods must be unused and undamaged, restocking fees may apply. Special builds and freight charges are non-refundable. Return freight arrangements, including costs, cannot be reclaimed on EWE. Goods outside this period will not be considered for return.

9. If goods are not received within 14 days from receipt of invoice please advise us in writing.

10. If any errors are discovered in the invoicing please notify supplying branch at once for correction.

11. **Property and Payment:** – By acceptance of delivery and retention of the goods it is acknowledged that the property of the goods remains with EWE and that legal title thereto will not pass until payment is made but that nevertheless the goods are at your risk after delivery. In the event that payment is not made within 30 days of delivery, or other agreed terms, full licence and authority is given to EWE to enter any premises where the goods are stored and to recover possession of them. In the event of the sale of the goods prior to payment, the proceeds of sale belong to EWE.

12. **Terms of Payment:** – Unless credit has been arranged strictly net cash; if credit has been arranged, payment must be made by the 25th day of the month, following the month appearing in the date on the front of the invoice.

13. **East West Engineering reserves the right to alter specifications, designs and prices without notification.**

Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 1 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
1. Crane Operational Safety Pre-Checks.	a) Unsafe use of Crane resulting in Cage, and/or items shifting & falling from height and striking Personnel and/or objects.	• Serious Risk to Personnel. • Moderate Risk to Operator.	- The Crane has been duly commissioned & all lifting apparatus appropriately marked in accordance with AS 1418. - Pre-operational inspections (in accordance with AS 2550.1), to be carried out before each shift – Crane taken out of service if any risks or malfunctions are found. These MUST be reported & recorded for assessment by a competent person. - Operator to review logbook, be satisfied about presence of unauthorised personnel on the Crane & the safe working conditions of the Crane. - Operator to ensure the rated working load of the Crane & any lifting apparatus is not exceeded. - (continued on sheet 2 of 15).	

Assessment carried out by: Ben PRASAD, East West Engineering Date of Assessment: 30th January 2015

Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 2 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
1. Crane Operational Safety Pre-Checks (Continued).	a) Unsafe use of Crane resulting in Cage, and/or items shifting & falling from height and striking Personnel and/or objects. (Continued)	• Serious Risk to Personnel. • Moderate Risk to Operator.	- Any stabilisers to be engaged prior to lifting. - All Crane movements to be carried out under power. - The operational areas to be assessed for hazards prior to and during work shifts. - The Operator to be provided with all necessary information to ensure risks are eliminated or controlled. - The Crane must to be left in safe condition after each shift. - Inspections, maintenance and repairs to be carried out in accordance with the relative Crane Instruction Manuals and AS 2550.1.	

Assessment carried out by: Ben PRASAD, East West Engineering Date of Assessment: 30th January 2015

Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 3 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
1. Crane Operational Safety Pre-Checks (continued).	b) Electric Shock	• Serious Risk to Operator. • Serious Risk to Personnel.	- All Risk Control Measures outlined in 1(a) above are to be in place. - The Power Supply is to be compatible with the Crane. - Operator to keep clear of overhead obstructions and in particular MAINTAIN RELEVANT CLEARANCES of ELECTRICAL Conductors. - A Spotter shall be used whenever operating near aerial conductors in accordance with AS 2550.1. - Ensure an Electrical isolation procedure developed for the Crane is in place – Operator must know location of main isolation switch & fire fighting equipment. - If more than 25 persons employed at workplace/site, a Certified First Aider to be at Workplace or on Site.	

Assessment carried out by: Ben PRASAD, East West Engineering Date of Assessment: 30th January 2015

Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 4 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
2. Industrial Truck Operational Safety Pre-Checks.	a) Unsafe use of Industrial Truck – resulting in Cage and/or Items shifting & falling from height and striking Personnel and/or objects.	• Serious Risk to Operator. • Serious Risk to Pedestrians.	- Pre-operational inspections (in accordance with AS 2359.2), to be carried out before each shift – Industrial Truck taken out of service if any risks or malfunctions are found. These MUST be reported & recorded for assessment by a competent person. - Inspections, maintenance and repairs to be carried out in accordance with the relative Industrial Truck Operating Manuals and AS 2359.2. - The Industrial Truck & attachments supporting the Cage to comply with AS 2359.1. - The rated capacity of the Industrial Truck to handle the load must not be exceeded. - (continued on sheet 5 of 15).	

Assessment carried out by: Ben PRASAD, East West Engineering Date of Assessment: 30th January 2015

Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 5 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
2. Industrial Truck Operational Safety Pre-Checks (continued).	a) Unsafe use of Industrial Truck – resulting in Cage and/or Items shifting & falling from height and striking Personnel and/or objects (continued).	• Serious Risk to Operator. • Serious Risk to Personnel.	- The operational areas to be assessed for hazards prior to and during work shifts. - The Industrial Truck to be used on a hard level surface. - The Industrial Truck to be left in a safe condition after each shift. - The Operator to be provided with all necessary information to ensure risks are eliminated or controlled - If more than 25 persons employed at workplace/site, a Certified First Aider to be at Workplace or on Site when the Industrial Truck is being used.	

Assessment carried out by: Ben PRASAD, East West Engineering Date of Assessment: 30th January 2015

Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 6 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
3. Goods Cage Operational Safety Pre-Checks.	a) Unsafe use of Cage resulting in Cage and/or Load shifting & falling from height and striking personnel and/or objects.	• Serious Risk to Personnel. • Moderate Risk to Operator.	- Inspections, maintenance and repairs to be carried out in accordance with Instruction Manual. - All Pre-Checks listed in the Instruction Manual are to be carried out before each shift. - The Cage is to be fitted securely to the lifting apparatus according to the Instruction Manual. - All instructions for the use of the Cage as laid out in the Instruction manual are to be followed. - The Operator to lift the Cage to required height to confirm all systems are functioning correctly. - (continued on sheet 7 of 15)	

Assessment carried out by: Ben PRASAD, East West Engineering Date of Assessment: 30th January 2015

Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 7 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
3. Goods Cage Operational Safety Pre-Checks (continued).	a) Unsafe use of Cage resulting in Cage and/or Load shifting & falling from height and striking personnel and/or objects. (continued).	• Serious Risk to Personnel. • Moderate Risk to Operator.	- The Operator to ensure there has been no unauthorised interference or alteration to the equipment that may cause risk. - The hoist used to lift the Cage is not to be twisted or tangled before lifting. - If any equipment becomes unsafe, stop all usage until risk has been eliminated or controlled. - The use of the attachment is limited to those situations for which it is specifically designed and/or in accordance with AS 2550.1.	

Assessment carried out by: Ben PRASAD, East West Engineering Date of Assessment: 30th January 2015

Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 8 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
4. Lifting, Lowering, transporting or manoeuvring Cage/Load with Crane or Industrial Truck.	a) Unsafe/Incompetent Operator.	• Serious Risk to Operator. • Serious Risk to Personnel.	- Only Certified & fully Trained Operators are to use the Crane or Industrial Truck. - Operators must not work the Crane or Industrial Truck unless they are physically & mentally capable.	
	b) Items Falling from Height.	• Serious Risk to Personnel. • Moderate Risk to Operator.	- All Risk Control Measures outlined above are to be in place. - Operator to ensure the Cage is fitted securely to the lifting apparatus. - Operator to ensure Cage Gate is secured in the closed position at all times. - Barriers/warning Signs in areas subject to passing traffic to be installed. - NO PERSONNEL are to ride on or in Cage at any time. - The Cage to be raised no higher than necessary. - (continued on sheet 9 of 15)	

Assessment carried out by: Ben PRASAD, East West Engineering Date of Assessment: 30th January 2015

Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 9 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
4. Lifting, Lowering, transporting or manoeuvring Cage/Load with Crane or Industrial Truck (continued).	b) Items falling from height (continued).	• Serious Risk to Personnel. • Moderate Risk to Operator.	- The Industrial Truck mast, if adjustable, to be back tilted - Transport the Cage as low as practicable. - Operator to hoist Cage vertically in a smooth manner slowly with minimum acceleration & deceleration.	
	c) Cage and/or load uncontrolled and/or having unexpected movements.	• Serious Risk to Personnel • Moderate Risk to Operator.	- All Risk Control Measures outlined in 4(b) above are to be in place. - Operator to gain assurance from a responsible person that the Cage and any load may be handled safely. - The Operator to check the Load is secured inside the Cage & the Cage prevented from swinging. - Use a 'tagline' if necessary - Operator to avoid sudden stops, jerky movements. - The Operator is to stay with controls at all times whilst in operation. - (continued on sheet 10 of 15)	

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Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 10 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
4. Lifting, Lowering, transporting or manoeuvring Cage/Load with Crane or Industrial Truck (continued).	c) Cage and/or Load uncontrolled and/or having unexpected movements (continued).	• Serious Risk to Personnel. • Moderate Risk to Operator.	- The Cage is NOT to be dragged along the ground. - Cage not to be moved unless the safety of persons in the vicinity of the Crane/Industrial Truck is assured. - Operator to follow directions & signals given by an authorised person unless a dangerous situation occurs in which case all Cage movements to cease. - Cage/hook not to be moved when out of sight unless directed to by an authorised person. - When landing the Cage by Crane, rope slack must be avoided.	
	d) Operator exposed to fixed/moving components.	• Serious Risk to Operator.	- The Operator is to stay with controls at all times whilst in operation. - The Operator is to keep hands/feet wholly within Crane/Industrial Truck Cab whilst in operation.	

Assessment carried out by: Ben PRASAD, East West Engineering Date of Assessment: 30th January 2015

Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 11 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
4. Lifting, Lowering, transporting or manoeuvring Cage/Load with Crane or Industrial Truck (continued).	e) Cage and/or load too heavy and/or unbalanced (e.g. Industrial Truck overturning).	• Serious Risk to Operator. • Serious Risk to Personnel.	- All Risk Control Measures outlined in 4(b) and 4(c) above are to be in place. - The Operator to be aware of the weight of Cage & load. - The rated working load of the Crane is NOT to be exceeded. - The rating capacity of the Industrial Truck to handle the load is NOT to be exceeded. - The Operator is to be trained in the use of lifting booms, slings & chains for lifting loads. - When transporting using an Industrial Truck, it is to be used on a hard surface, the area assessed before usage. - The attachment is to be raised unladen to working height to confirm all systems are functioning.	

Assessment carried out by: Ben PRASAD, East West Engineering Date of Assessment: 30th January 2015

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Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 12 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
4. Lifting, Lowering, transporting or manoeuvring Cage/Load with Crane or Industrial Truck (continued).	f) Cage/Load and/or Industrial Truck striking Personnel.	• Serious Risk to Personnel.	- All Risk Control Measures outlined in 4(c) and 4(e) above are to be in place. - A suitable clear space between barriers is to be left to safely use the Cage. - The Crane/Cage is NOT to be moved unless the safety of Personnel is assured. - Cage MUST be visible to Personnel controlling the Crane movements at all times whilst suspended. - All safety equipment on the Crane/Industrial Truck MUST be functioning before use, (ie Reversing Beepers). - Convex mirrors are to be placed at Aisle corners used by Industrial Trucks. - (continued on sheet 13 of 15)	

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Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 13 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
4. Lifting, Lowering, transporting or manoeuvring Cage/Load with Crane or Industrial Truck (continued).	f) Cage/Load and/or Industrial Truck striking Personnel (continued).	• Serious Risk to Personnel.	- A system is to be developed for handling the Cage/loads about the Workplace/Site. - Manoeuvre slowly & cautiously when the Cage/load is elevated.	
	g) Cage/Load striking objects, Industrial Truck and/or Mast striking Objects.	• Serious Risk to Operator. • Serious Risk to Personnel.	- All Risk Control Measures outlined in 4(b), 4(c) and 4(f) above are to be in place. - Lifting & lowering areas to be assessed & the Crane Operator and/or Controller made aware of any objects within the path of normal Crane movements. - Cage/hook to be raised sufficiently to avoid collision during horizontal movements. - The Crane or Industrial Truck Mast to keep clear of any overhead obstructions, and in particular ELECTRICAL conductors. - (continued on sheet 14 of 15)	

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Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 14 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
4. Lifting, Lowering, transporting or manoeuvring Cage/Load with Crane or Industrial Truck (Continued)	g) Cage/Load striking objects, Industrial Truck and/or Mast striking Objects (continued).	• Serious Risk to Operator. • Serious Risk to Personnel.	- Work areas to be assessed to ensure NO overhead fittings can be contacted by Industrial Truck mast, Cage and/or load.	
	h) Crane or Industrial Truck falling from raised areas.	• Serious Risk to Operator. • Serious Risk to Personnel.	- All Risk Control Measures outlined above are to be in place. - All safety railings are to be placed in raised areas such as Ramps, Loading Docks etc.	
	i) Entanglement with lifting ropes, chains, slings, beams, fallropes & taglines.	• Serious Risk to Personnel.	- All Risk Control Measures outlined above are to be in place. - Spotters, Dogmen, Riggers are to be well clear of any lifting apparatus before any Crane movements take place. - All lifting ropes, chains, slings and/or lifting beams are to be prevented from swinging and/or become slack.	

Assessment carried out by: Ben PRASAD, East West Engineering Date of Assessment: 30th January 2015

Appendix A – to form Part of the Instruction Manual

Risk Control Measures & Risk Assessment for Identified Hazards

Equipment Type & Description: Type CGC130 Crane/Forklift Goods Cage Sheet: 15 of 15

Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
5. Storage of Goods Cage	a) Cage becoming damaged.	• Serious Risk to Personnel. • Moderate Risk to Operator.	- Regular Maintenance, inspection and testing according to the Instruction Manual to be carried out. - Prior to storage, all dirt should be removed from the Goods Cage and air-dried at ambient temperature. - Cage to be stored in dry areas and away from any corrosive chemicals.	
	b) Cage in the way of normal Workplace/Site Operations.	• Moderate Risk to Pedestrians.	- Cage to be stored in areas which will not interfere with the normal running of the Workplace/Site.	

Assessment carried out by: Ben PRASAD, East West Engineering Date of Assessment: 30th January 2015

Appendix B – to form part of the Instruction Manual

ASSEMBLY INSTRUCTIONS

Type CGC130
Crane/Forklift Goods Cage

Flat Pack Contents

Item	Part Number	Description	Quantity
1	CGC-130-04	Base Assembly	1
2	CGC-130-10	Right Hand Panel	1
3	CGC-130-11	Left Hand Panel	1
4	CGC-130-12	Rear Panel	1
5	CGC-130-13	Gate Assembly	1
6	CGC-130-14	Drop Ramp	1
7	CGC-130-25	Hinge	2
8	M16 x 80	Bolt–Hex Head M16 x 80mm long (Grade 8.8)	4
9	M16	Washer – Flat M16	4
10	M16	Nut – Nyloc M16	4
11	M12 x 65	Bolt–Hex Head M12 x 65mm long (Grade 8.8)	4
12	M12 x 25	Bolt–Hex Head M12 x 25mm long (Grade 8.8)	6
13	M12	Washer – Flat M12	10
14	M12	Nut – Nyloc M12	10
15	M10 x 80	Bolt – Hex Head M10 x 80mm long	3
16	M10 x 70	Bolt – Hex Head M10 x 70mm long	2
17	M10 x 30	Bolt – Hex Head M10 x 30mm long	4
18	M10	Washer – Flat M10	14
19	M10	Nut – Nyloc M10	9

Note:
Items 8 to 19 have been packaged in the plastic bag provided with the Flat Pack.

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TOOL REQUIREMENTS

The following Tools will be required to assembly the type CGC130 Goods Cage;

Tube Spanners	24mm A/F
Ring Spanners	16, 17, 18, 19 & 24mm A/F

ASSEMBLY INSTRUCTIONS

A) Unpack all items packed inside the 'Flat Pack' carton.

B) Prior to assembly, ensure the minimum quantity of components as detailed under 'Flat Pack Contents' above, have been supplied. Please contact East West Engineering or their Authorised Agent prior to assembly if components are missing or damaged.

C) Place the Cage Base Assembly (Item 1) onto level ground with the Slippers underneath as shown in Figure 1.1 below. Place the Left Hand Panel (Item 3) orientated as shown in Figure 1.1 below, onto the left hand side of the Base aligning the two (2) holes (1 each end), with those in the Base. Loosely assemble together both ends, using two (2) M16 x 80mm long Hex. Head Grade 8.8 Bolts (Item 8), M16 Flat Washers (Item 9) and M16 Nyloc Nuts (Item 10) with the bolt heads positioned outside Cage as shown in Figure 1.1 below.

Loosely assemble the base of the Left Hand Panel (Item 3) with Base Assembly (Item 1) using (2) M12 x 25mm long Hex. Head Grade 8.8 Bolts (Item 12), M12 Flat Washers (Item 13) and M12 Nyloc Nuts (Item 14) with the bolt heads positioned on the top as shown in Figure 1.2.

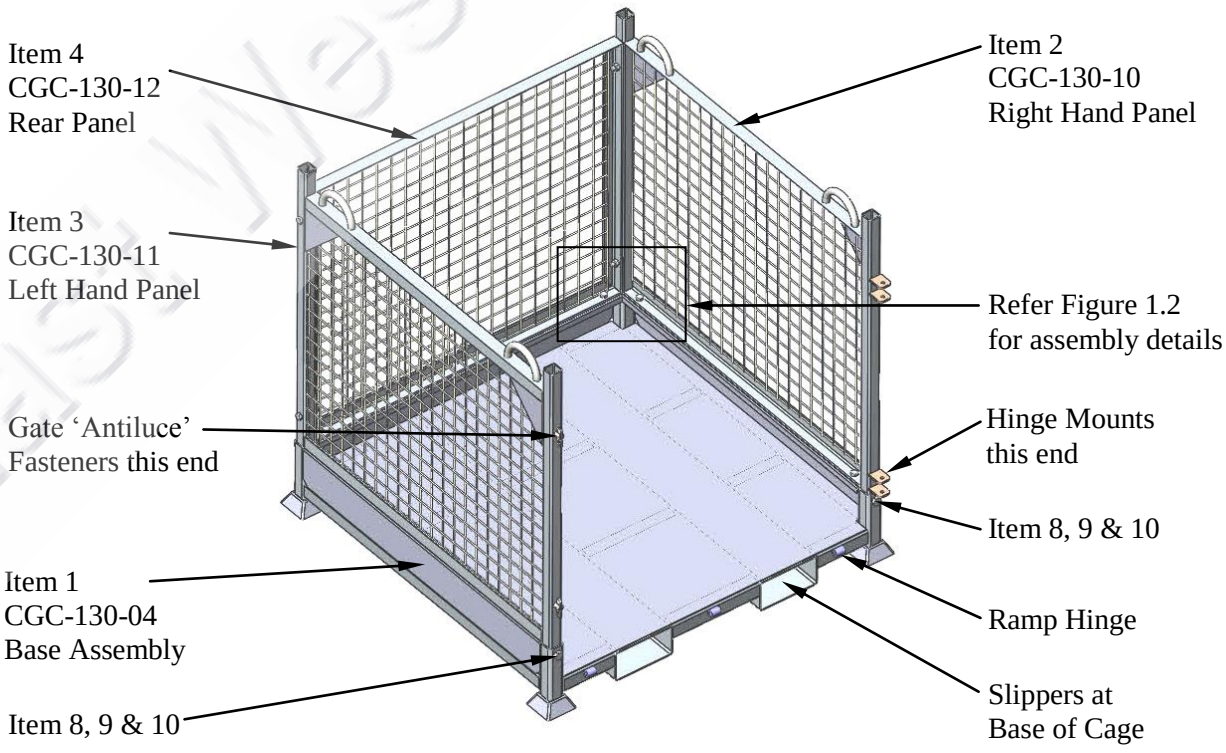


Figure 1.1

D) Place the Right Hand Panel (Item 2) orientated as shown in Figure 1.1, onto the right hand side of the Base aligning the two (2) holes (1 each end), with those in the Base. Loosely assemble together both ends, using two (2) M16 x 80mm long Hex. Head Grade 8.8 Bolts (Item 8), M16 Flat Washers (Item 9) and M16 Nyloc Nuts (Item 10) with the bolt heads positioned outside Cage as shown in Figure 1.1.

Loosely assemble the base of the Right Hand Panel (Item 2) with Base Assembly (Item 1) using (2) M12 x 25mm long Hex. Head Grade 8.8 Bolts (Item 12), M12 Flat Washers (Item 13) and M12 Nyloc Nuts (Item 14) with the bolt heads positioned on the top as shown in Figure 1.2 below.

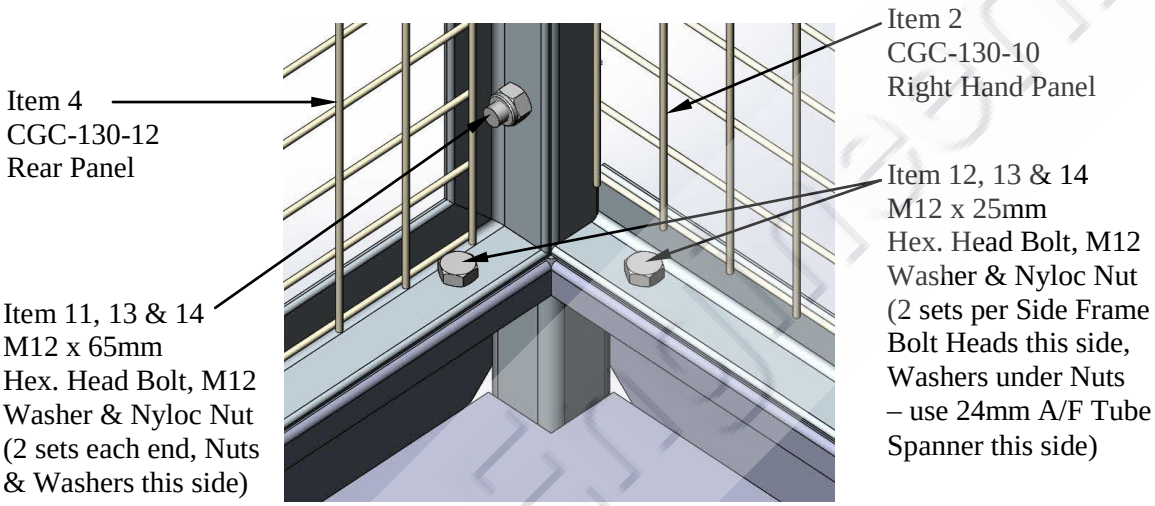


Figure 1.2

E) Place the Rear Panel (Item 4) between both Side Panels orientated as shown in Figures 1.1 & 1.2 above, aligning the two holes each side with those on the Left Hand & Right Hand Panels, Loosely assemble together using four (4) M12 x 65mm long Hex. Head Grade 8.8 Bolts (Item 11), M12 Flat Washers (Item 13) and M12 Nyloc Nuts (Item 14) with the bolt heads positioned on the outside of the Cage as shown in Figure 1.2 above

Align (2) Holes on the Base Assembly (Item 1), Loosely assemble Item 4 & Item 1 together using two (2) M12 x 25mm long Hex. Head Grade 8.8 Bolts (Item 12), M12 Flat Washers (Item 13) and M12 Nyloc Nuts (Item 14) with the bolt heads positioned on the top as shown in Figure 1.2 above.

F) Ensuring all Frames are orientated correctly and are sitting square to the Base Frame, tighten all Side Panels Bolts/Nuts and then the Rear Panel Bolts/Nuts.

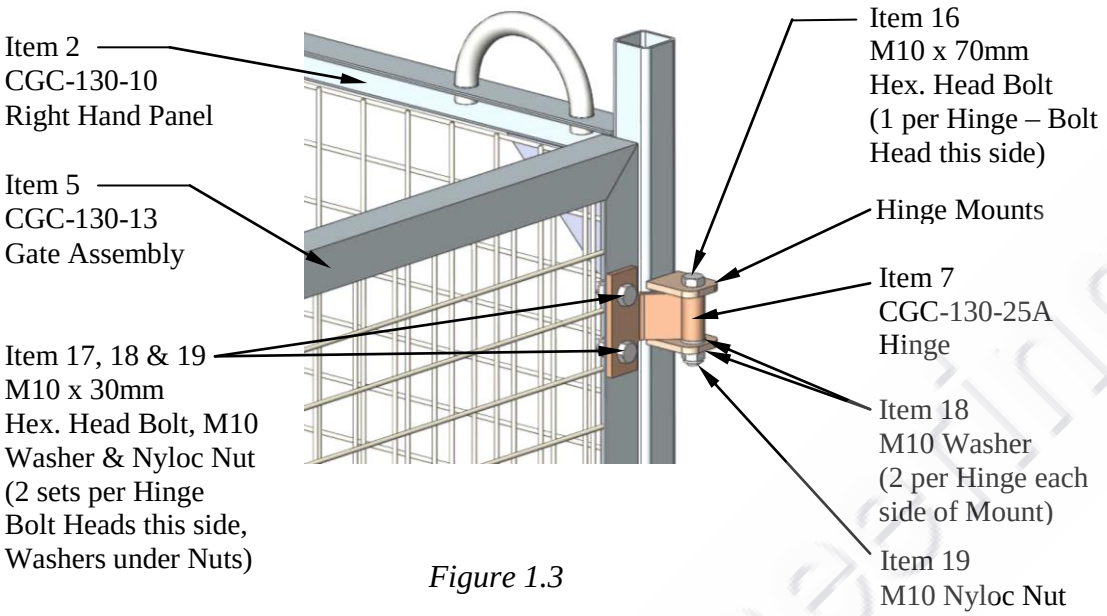


Figure 1.3

G) Position both Hinges (Item 7) orientated as shown in Figure 1.3 above onto the Gate Assembly (Item 5) aligning mounting holes with those in the Gate. Loosely assemble together using two (2) M10 x 30mm long Hex. Head Bolts (Item 17), M10 Flat Washers (Item 18) and M10 Nyloc Nuts (Item 19) per Hinge, with the bolt heads positioned on the outside of the Frame/Hinge as shown in Figure 1.3 above.

H) Fit the Gate Assembly onto the Hinge Mounts on the Right Hand Panel as shown in Figure 1.3 above. Loosely assemble the Hinges to the Hinge Mounts using one (1) M10 x 70mm long Hex. Head Bolt (Item 16), M10 Flat Washers (2) (Item 18) and M10 Nyloc Nut (Item 19) per Hinge, with the bolt head positioned at the top of the Hinge Mounts as shown in Figure 1.3 above.

I) Ensure the Gate Assembly has been orientated as shown in Figure 1.3 above and closes onto the 'Antiluce' fasteners as shown in Figure 1.4 below without interference to allow the Gate to swing externally. This should result in the Gate being aligned with the top of both Side Panels and have an even gap with the Side Panels each end. Tighten all Bolts/Nuts securing the Hinges to the Gate and then the Bolts/Nuts securing the Hinges to the Hinge Mounts.

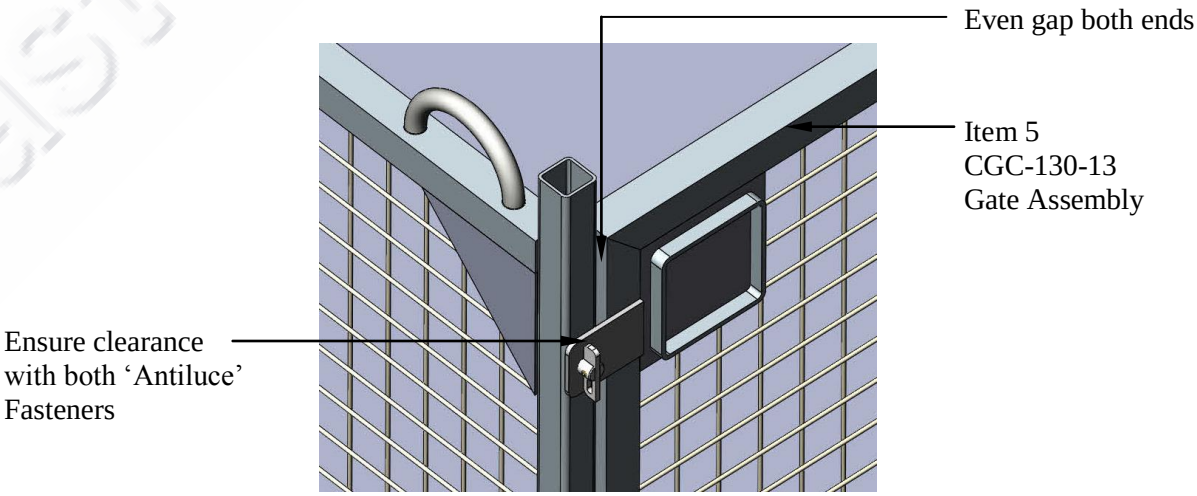
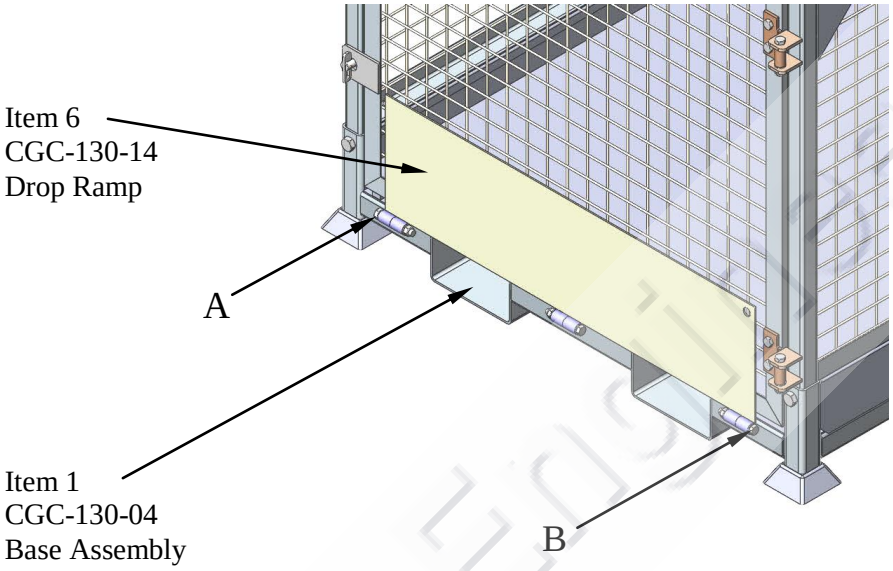
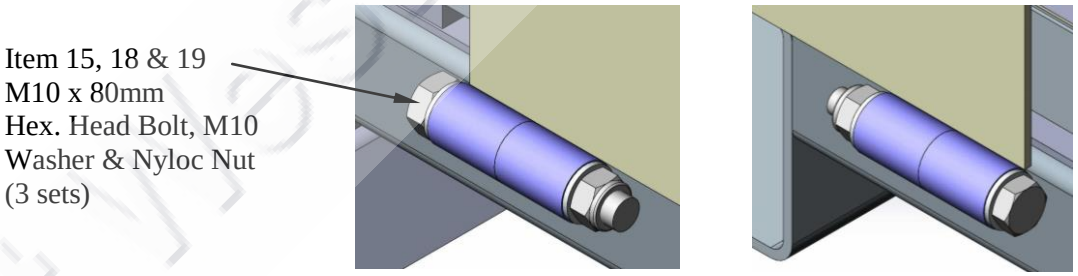


Figure 1.4

J) Ensuring the Gate is closed and locked, position the Ramp (Item 6) orientated as shown in Figure 1.5 below. Aligning Ramp with Ramp Hinge holes on the Base Assembly (Item 1), loosely assemble together using three (3) M10 x 80mm long Hex. Head Bolts (Item 15), M10 Flat Washers (Item 18) and M10 Nyloc Nuts (Item 19), with the bolt heads positioned as shown in Figure 1.5, Detail 'A' & Detail 'B' below.

Tighten all the Bolts & Nyloc Nuts with enough clearance for the Ramp to swing.





Detail 'A' Detail 'B'

Figure 1.5

K) The CGC130 Crane/Forklift Goods Cage is now fully assembled and ready for use. Please read the Instruction Manual and in particular the 'Risk Control Measures', supplied with the unit before use.