

BALANCE MASTER CBM

User Manual

Thank you for purchasing the chain sling set BALANCE MASTER (CBM Type).

Please read this manual carefully before use and handle the
BALANCE MASTER safely according to the instructions.

Please keep this manual in a safe place.

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Before Use

Make sure to read these instructions before using the BALANCE MASTER.

Incorrect use may result in dangerous situations such as load tipping over or falling off.

In this manual, precautions are listed under “Warning” or “Caution” which mean the following:

WARNING

Indicates that improper use may result in death or serious injury to the user.

CAUTION

Indicates that improper use of the product may result in injury to the user or in material damage.

Please note that even the items listed under “Caution” may lead to serious consequences depending on the circumstances. All of these items contain important safety information and must be followed.

Safety Precautions

Read the safety precautions carefully to prevent accidents such as falling off loads and injuries.

Read these safety precautions carefully before use and handle the product correctly and safely.

After reading, be sure to keep them in a place where you can see them at any time.

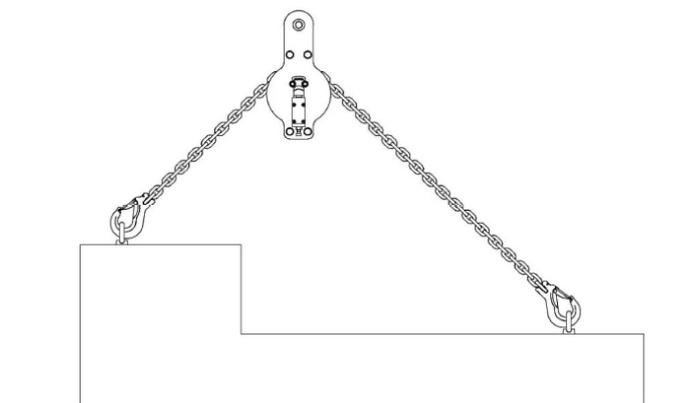
WARNING

- Do not use the BALANCE MASTER if you are not thoroughly familiar with the instruction manual.
- Lifting and carrying of loads should be carried out by qualified personnel only.
- Use according to the correct procedures. Do not use in an incorrect way.
- Persons performing work must not be under the lifted load or in the area where the load is moved
- Inspect the BALANCE MASTER before use and make sure it does not show any irregularities.
- Never use the BALANCE MASTER if there is something wrong with it.
- Do not weld or heat the BALANCE MASTER.
- Do not disassemble the BALANCE MASTER.

About the BALANCE MASTER

The BALANCE MASTER automatically adjusts the chain length when lifting asymmetric loads, allowing well-balanced lifting within a short time.

Because it is a chain system, there is no twisting or kinking as on wire ropes.

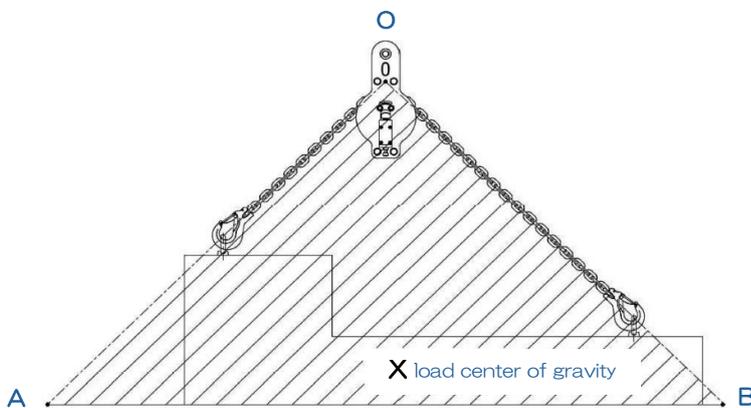


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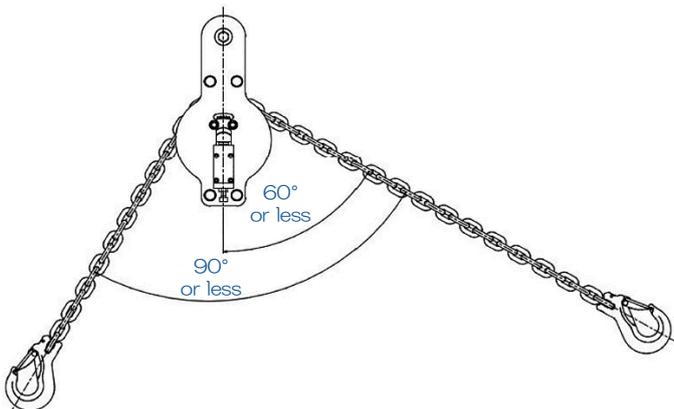
Precautions for Use

WARNING

- Make sure the load to be lifted is within the working load limit (WLL) of the BALANCE MASTER.
- Do not apply load greater than the working load limit (WLL).
- Do not operate the crane in a way that causes shock loads.
- Place the BALANCE MASTER above the center of gravity of the load to ensure stability when lifting.
- Make sure that the object you attach the BALANCE MASTER to (crane hook, eye bolt, etc.) has appropriate strength.
- Do not use if the chain is twisted or tangled.
- Do not drag the suspended load or pull it diagonally.
- Do not allow anyone to ride on a load lifted by the BALANCE MASTER.
- The center of gravity of the load must be located within the area defined by O, A and B as shown in the diagram below.



- Lift with an angle within 90°. Also, make sure that each leg angle is 60° or less.



CAUTION

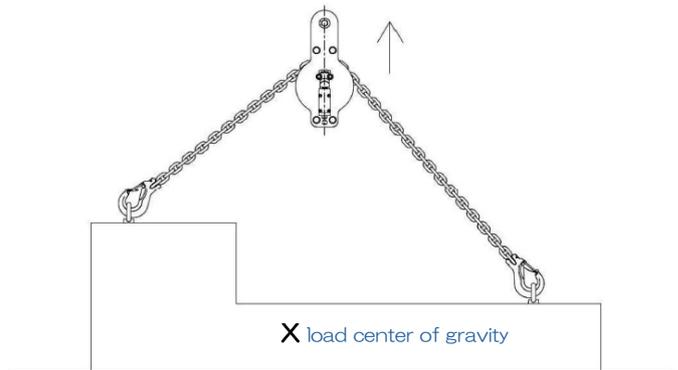
- Do not use the BALANCE MASTER if its label is missing or not clearly readable.
- Raise and lower the crane calmly and carefully.
- When load is applied, the shaft and gear will move up and down. Be careful not to pinch your fingers. Also, make sure no objects are getting caught.
- Do not use the BALANCE MASTER in the following environments:
 - at temperatures above 80°C and below -30°C
 - in acidic or alkalic solutions and atmospheres
- When not in use, store the BALANCE MASTER properly.

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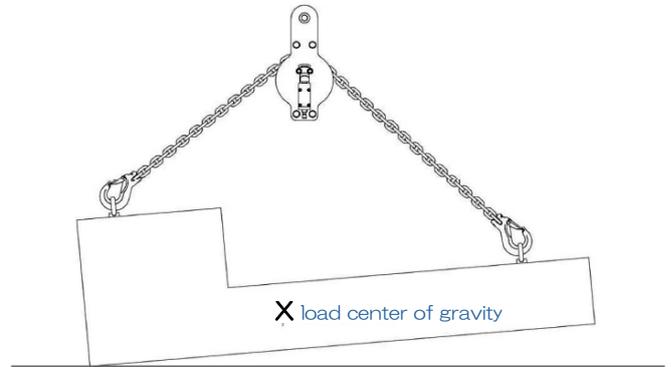
Use

1. Attach the BALANCE MASTER directly on the crane hook or by using a master link.
Make sure that the chain is properly fitted into the groove of the wheel.

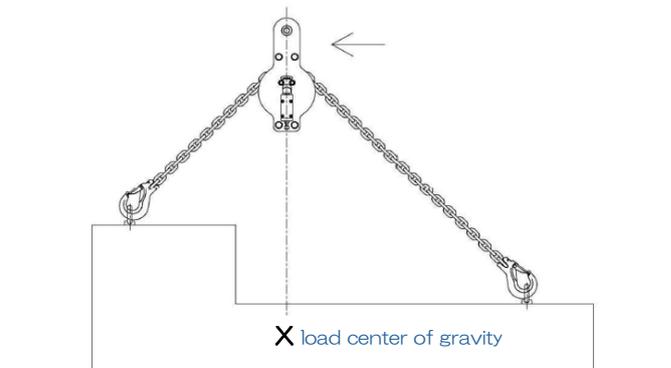
2. Move the BALANCE MASTER above the center of gravity of the load and hoist the crane. When a load of approximately 40 kgf is applied, the wheel rotation is locked and the left and right chain lengths are fixed.



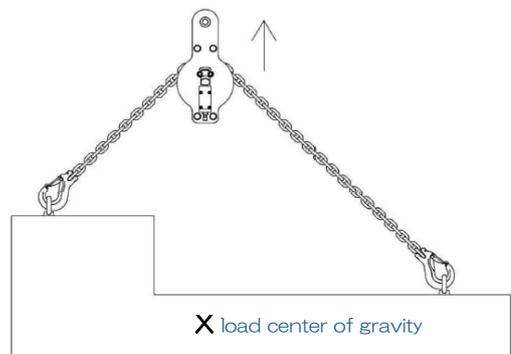
3. If only one side is lifted, it means the center of gravity has shifted. Stop lifting and lower the load.



4. To adjust the balance, move the BALANCE MASTER over the center of gravity while the chain is moving freely.



5. Raise the crane again and complete the lifting task once the wheel has locked.



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Maintenance and Inspection

WARNING

- Do not use the BALANCE MASTER beyond its operating limits.

Daily Inspection (Prior to Use)

- Make sure there are no cracks or damages at the body, chain, or hooks.
- Make sure there is no looseness in the fastening parts.
- Make sure there is no deformation of the load bearing pin.
- Make sure there is no abnormal rattling of any parts.

Periodic Inspection

- Monthly inspection: Visually check the appearance and functionality, and if any abnormalities are found, request repair or discard the product.
- Annual inspection: Set a date once a year to carry out a regular inspection, and if any abnormalities are found, request repair or discard the product.

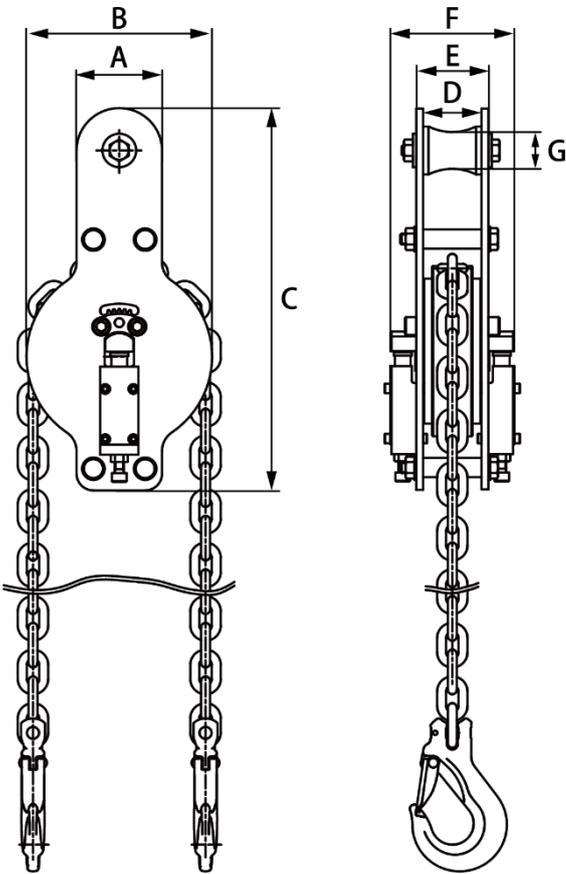
Inspection Standard

 If any of below discard criteria are reached, the product must be discarded.

Inspection Criteria	Part of BALANCE MASTER
	BODY
Moveability	The wheel must rotate smoothly on the shaft.
	When the operating load is applied, the gears must engage and the wheel rotation must be locked.
	The spring supporting the shaft must not be damaged or worn.
Fastening Parts	No looseness.
Wheel	No deformation, cracks or harmful rattle at the contact points of the chain.
Gear Parts	No damages
Load Bearing Pin	Do not use if the pin diameter of 33 mm is worn down by 5% or more.
Corrosion	Do not use if any parts are severely corroded.
Deformation	Do not use if any parts are obviously deformed, stretched, or twisted.
Cracks	Do not use if there are any cracks.
	CHAIN
Elongation (5 links)	Do not use if elongation exceeds 5%.
Corrosion	Do not use if chain is severely corroded.
Deformation	Do not use if chain links are bent or twisted.
Cracks	Do not use if there are any cracks.
	HOOKS
Moveability	Do not use if hook has a broken latch, spring or pin.
Corrosion	Do not use if a hook is severely corroded.
Deformation	Do not use if any parts are obviously deformed, stretched, or twisted.
Cracks	Do not use if there are any cracks.

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Specifications



Product Code	Hook	WLL (t)	Chain Diameter (mm)	Chain Length (m)	Set Weight (kg)
CBM-EGKNA-8		2.0	8	4	15.6
CBM-GBK-8		2.0	8	4	16.2

Product Code	Dimensions (mm)						
	A	B	C	D	E	F	G
CBM-EGKNA-8	76	165	343	52	64	110	33
CBM-GBK-8	76	165	343	52	64	110	33

* Manual issued September 2024. Product specifications are subject to change without notice to improve reliability, function or design.



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