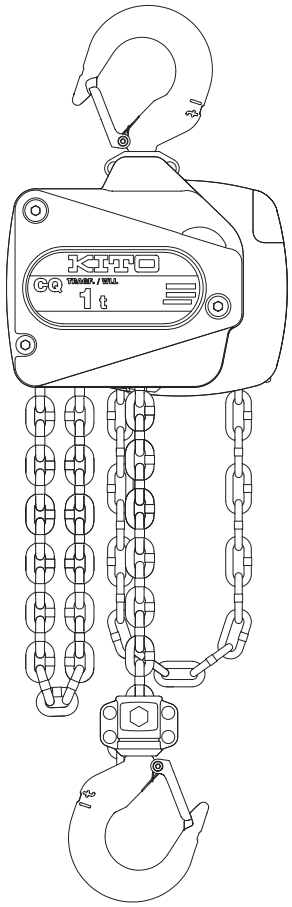
OM-CQ1ZZZ-CEE-01_EN

Original Instruction

OWNER'S (OPERATOR'S) MANUAL AND SAFETY INSTRUCTIONS FOR KITO MANUAL CHAIN HOIST

CQ 005/010/015/ 020/030/050



WARNING **This equipment should not be installed, operated or maintained by any person who has not read and understood all the contents of this manual. Failure to read and comply with the contents of this manual can result in serious bodily injury or death, and/or property damage.**

Issued in February, 2026.

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Introduction

This manual chain hoist is designed and manufactured to lift and lower a load manually within a normal work environment. The model CQ manual chain hoist is operable from any angle direction. In addition, traversing movement is also enabled by combining with a trolley.

This Owner's Manual is intended for those operating the Kito model CQ manual chain hoist.
Assign the maintenance personnel* for periodic inspection and repair. Separate document; "Disassembly/Reassembly Manual" is also available separately for the maintenance personnel*. Please contact Kito or your dealer for the material.

* A person who is authorized by the business entity as having thorough knowledge and expertise on the structure and devices of a chain hoist, or a person with similar thorough knowledge and expertise and capable of understanding periodic inspection, and Disassembly/Reassembly Manual.
When these conditions are not satisfied, consult Kito or your dealer, or request maintenance.

• Reproduction of this document, in whole or in part, without prior consent is prohibited.
• This document is subject to change without prior notice.
• This document was prepared with the utmost care. However, the customer is kindly requested to inform us of any question, error or unclear point included in the document.

Safety Precautions

Improper use of this manual chain hoist may result in danger, such as dropping a suspended load. Before installation, operation, maintenance and inspection, be sure to read this manual carefully, comply with its instructions and operate the product correctly. Prior to operation, all the safety and operating information, and safety precautions must be fully understood.
In this manual, precautions are classified into three categories: “Danger”, “Warning” and “Caution”.
In addition, read the instruction manuals of the equipment (such as trolley) related to the operation of the manual chain hoist, and follow the instructions.

Description of Signal Words

⚠ **DANGER**	DANGER indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury and property damage.
⚠ **WARNING**	WARNING indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and property damage.
⚠ **CAUTION**	CAUTION indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and property damage.

However, even CAUTION situations may result in serious injury or death depending on circumstances.
Ensure all precautions are recognized as important and complied with. After reading this manual, ensure it remains readily available for users.

Description of Safety Symbols

⃠ Prohibited	⃠ means a “Prohibited” action or a thing “You must not do”. Specific prohibited actions are shown in the safety symbol or described near the same.
❗ Mandatory	❗ means a “Mandatory Action” or “Do as indicated”. The specific required action is shown in the safety symbol or described near the same.

Disclaimer

- Kito shall not be liable for any damage incurred due to fire, natural disasters such as earthquake and lightning, actions of a third party, other accidents, intentional or accidental improper operation or misuse by customer, and operation under conditions exceeding the operating environmental conditions.
- Kito shall not be liable for any incidental damage incurred due to the use or inability to use this product (loss of business profit, interruption of business, and damage to the lifted load).
- Kito shall not be liable for any damage incurred due to negligence concerning the instructions in this manual, or operation under a condition exceeding the range defined in the specifications.
- Kito shall not be liable for any damage arising from malfunction due to the combination of the chain hoist used with other equipment, unrelated to Kito.

Restricted usage

- The product is intended for use only in the region or the country where it was purchased. Due to the differences in regulations and standards, it is not for use outside of the region or the country where it was purchased.
- This product is not designed nor manufactured to transport people. Do not use the product to transport people.
- This product is designed and manufactured for the purpose of lifting and lowering a load manually under normal operating environmental conditions. Do not lift or lower loads using electric power. Movement in a horizontal direction is enabled by combining with a trolley. Decide on and judge the appropriateness of use in accordance with the intended purpose of the product design and manufacture.
- Since this chain hoist is used under diverse conditions, the customer should judge whether the product would be used appropriately by carrying out analysis and tests if necessary. Ensuring the product performance and safety are the responsibility of the person who judges the appropriateness.

Operators

- Before operating the product, read this manual and that of related equipment thoroughly to understand the contents.
- Be sure to wear the proper clothing and personal protective equipment when using and operating the product.

■ Handling & Maintenance

⚠ WARNING

Prohibited

Do not handle the chain hoist in any of the following manners.

- Disassembly and further inspection should only be performed by a qualified person trained in the disassembly and re-assembly of the hoist.
  Disassembly and repair shall be carried out in accordance with the document.
- Do not enter into any area under a suspended load or within its moving range. Do not transport a load over people or allow people to enter into the moving range of a suspended load.
- Do not modify the product and its accessories.
- Do not adjust or disassemble the Overload Limiter (a device to prevent excessive overload).

Failure to comply with these instructions may result in death or serious injury.

Mandatory

Comply with the following instructions when handling the chain hoist.

- Before operating the product, fully understand the contents of this manual and the caution labels.
- Carry out daily inspection before operation.
- Request the maintenance personnel to carry out periodic inspection. (refer to page 28).
- Keep the record of the periodic inspections.
- When not in use of the chain hoist, store it at any place where appropriate for the weight and size.

Failure to comply with these instructions may result in death or serious injury.

⚠ CAUTION

Prohibited

Do not drag or throw the chain hoist when carrying.

The chain hoist may be broken or damaged and any fall of the lifted load during use may result in injury or physical damage to property.

Mandatory

Follow the operating environmental conditions (refer to page 12) when using the chain hoist.

Use of the chain hoist beyond the conditions may result in injury or physical damage to property.

Mandatory

When discarding the product, disassemble it to ensure it is not reused, and discard in accordance with local government regulations and ordinances or the rules defined by the business entity.

Contact your local government for proper disposal instructions.
Refer to Disassembly/Reassembly Manual for how to disassemble the chain hoist, or consult Kito.

Chapter 1

Operation

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Safety Precautions

■ Installing

⚠ WARNING

Prohibited

Avoid the following when installing the chain hoist.

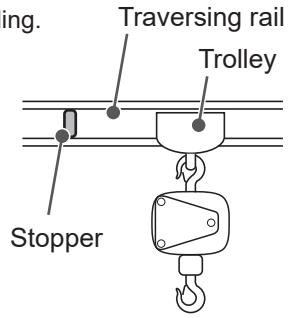
- Ensure that only qualified persons install the chain hoist.
- Do not install the chain hoist within the range of movement of other devices (equipment), such as a trolley.

Failure to comply with these instructions may result in death or serious injury.

Mandatory

Comply with the following instructions when installing the chain hoist.

- Ensure the structure meets the intended ratings for both hoist and load before installing.
- Fix the Top Hook to the structure securely.
- Before using the chain hoist with a trolley, read the trolley owner's manual and adjust the trolley to properly fit the beam width.
- When installing two or more trolleys on the same beam, be careful not to allow the trolleys to collide with each other.
- Install a stopper at both ends of the traversing beam for the trolley.



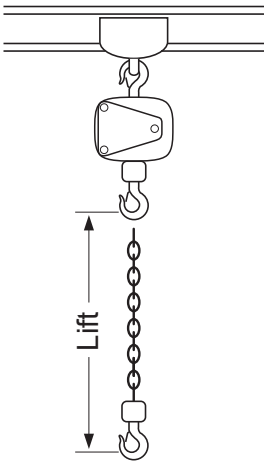
Failure to comply with these instructions may result in death or serious injury.

⚠ CAUTION

Mandatory

Comply with the following instructions when installing the chain hoist.

- Install the chain hoist so that no object will interfere with the movements of the hoist.
- Install the chain hoist so that the weight of the load is applied only to the top and bottom hooks during lifting.
- Install the chain hoist with sufficient standard lift for lifting work.
- While installing be careful of pinch points of movable sections.



Failure to comply with these instructions may result in injury or physical damage to property.

■ Before use

⚠ CAUTION

Mandatory

Check the following before using the chain hoist.

If a defect is found while checking the chain hoist, stop using it, place a notice indicating "failure/inspection in progress or lockout/tagout" and request the maintenance personnel to carry out inspection and repair.

- Ensure there is no defect in the sling before use.
- Ensure operator is using the correct hoist for the purpose, capacity and lift.
- Ensure the work area is secure and path is clear before moving the load.
- Ensure operator has proper footing when performing a lift.
- Before operating the hoist, inform nearby personnel to stay clear of the operation.

Failure to comply with these instructions may result in injury or physical damage to property.

■ Operation

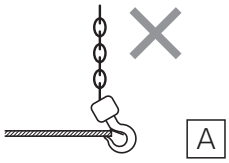
⚠ WARNING

Prohibited

Do not use the chain hoist in the following manners.

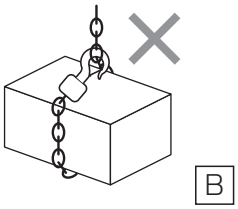
<General>

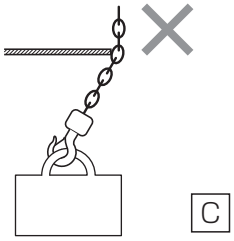
- The load chain is exclusively designed for this model of chain hoist. Do not use chains of other models of chain hoist. Ensure that the maintenance personnel replace the chain with an authorized part for this model, referring to Disassembly/Reassembly Manual.
- Operate the chain hoist using only manual force.
- Do not leave a lifted load unattended for an extended period.



<Slinging>

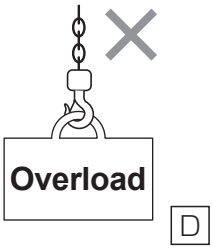
- Do not use a hook without a latch.
- Do not apply a load to the tip of the hook or latch. **<Fig. A>**
- Do not use the load chain as a sling. **<Fig. B>**
- Do not operate the hoist while the load chain is in contact with any sharp edge object, e.g. of steel plate. **<Fig. C>**

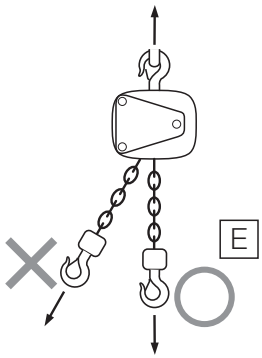




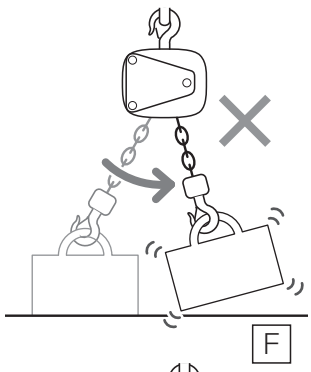
<Lifting>

- Do not lift more than the rated load. **<Fig. D>**
- Do not cause the load to come into contact with the load or hand chains.
- Do not lift the load while holding the load chain.
- Do not swing the lifted load.
- When lifting the load obliquely, be careful of swinging. If it swings, stop operation until it stops swinging.
- Do not use the chain hoist without a straight line present between the top and bottom hooks relative to the load direction. **<Fig. E>**

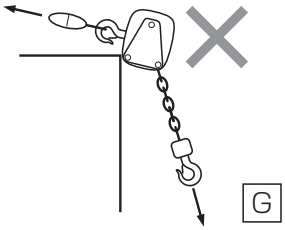


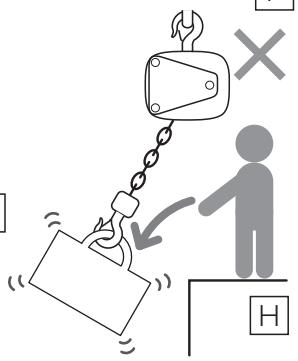


- Do not swing the load when lifting it off the ground. **<Fig. F>**
  For chain hoists with a trolley, lift the load underneath the trolley to avoid exerting excessive force on the trolley.
- In the situation where the chain hoist is to be used as a sling by connecting it to a crane, be certain to convey the fact of this intended usage to Kito beforehand to confirm whether this type of use is possible.
- When the chain hoist is used as a sling, do not allow the hand chain to come into contact with the load or structures.

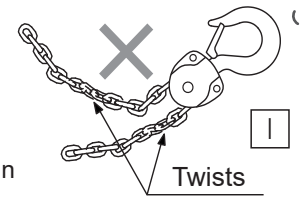


- Do not use the chain hoist as a fulcrum. **<Fig. G>**
- When lifting a load from an elevated position, ensure there is no slack in the load chain to avoid shock loading. **<Fig. H>**
- Do not use the hoist if the bottom hook is capsized or the load chain is twisted. **<Fig. I>**





- Do not lift or lower past the limits of the chain length.
- Do not engage the overload repeatedly.



Failure to comply with these instructions may result in death or serious injury.

(Continued on the following page)

■ Operation (continued from the previous page)

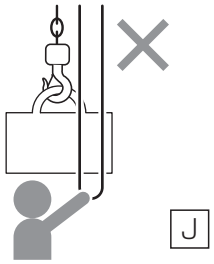
⚠ WARNING

Prohibited

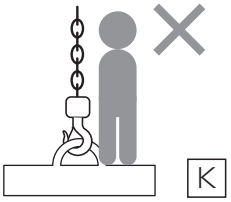
Do not use the chain hoist in the following manners.

<Transportation/Move>

- Operators shall not operate the chain hoist underneath the load. Operators shall not transport a load over people. **<Fig. J>**



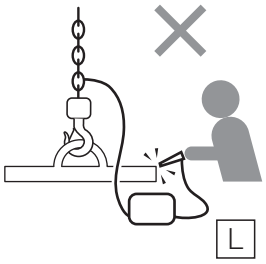
- Operators shall not use the hoist to lift, support or transport people. **<Fig. K>**



- Do not strike the stopper of the traversing rail or the structure with the chain hoist or the trolley.

<Post-lifting Work>

- Do not execute welding or cutting of any suspended load.
- Do not allow the chain, or hook to be used as a welding ground. Do not allow the chain, or hook to be used as a welding ground. **<Fig. L>**
- Ensure that the hand chain is only operated by a single person.



<Abnormality/failure>

- Do not use damaged hoist or hoist that has abnormal sounds or not working properly.
- Do not use the chain hoist if one of the following defects is found in the load chain.
  - ・Deformation, twists, kinks, flaws, cracks, adhesion of foreign matter, corrosion, and abnormal meshing
  - ・Heavy elongation or abrasion
- Do not use the chain hoist out of order or under repair.

Failure to comply with these instructions may result in death or serious injury.

Mandatory

Comply with the following instructions when using the chain hoist.

<Slinging>

- Ensure the sling is correct for the shape and weight of the load.
  Improper slinging may result in an unsafe situation, such as the falling of the lifted load.

<Lifting>

- If the force to operate the hand chain becomes excessive, stop operation immediately.
- Before use, check the minimum distance between the hook and load (minimum headroom) and lift within that working range (refer to page 11).
- If the overload limiter is activated, stop the lifting operation immediately and ensure that the chain hoist is in a no load state.

<Post-lifting Work>

- Disassembly and reassembly should take place on a stable surface. Disassembly and further inspection should only be performed by maintenance personnel trained in the disassembly and re-assembly of the hoist.

<Abnormality/failure>

- If any abnormality is found in the hoist, stop using it immediately, indicate failure/repair in progress or lockout/tagout and request that maintenance personnel perform maintenance and repair.

Failure to comply with these instructions may result in death or serious injury.

⚠ CAUTION

Prohibited

Do not use the chain hoist in the following manners.

- Do not operate the chain hoist if the hand chain is tangled or twisted.
- Do not expose the chain hoist to sparks from welding.
- Do not use an overload limiter for measuring the weight of the load.
- Do not hang the hook directly to a metal fittings which applying excessive force to the hook.
- Ensure no objects or structures interfere with the operation of the load chain or hand chain.
- If a load bounces up and down significantly when lowering the load, do not operate the chain hoist until the bouncing reduces.

Failure to comply with these instructions may result in injury or physical damage to property.

Mandatory

Comply with the following instructions when using the chain hoist.

- Eliminate any twists in the load chain before lifting a load.
- If the load and hand chains are entangled or twisted, stop the operation immediately and reset the entangled or twisted chains.
- When lifting a load with two hoists, ensure that each hoist has a capacity rated for the total load, and ensure that the load is balanced between both hoists equally.
- There are risks of overheating of the braking system during prolonged lowering of loads. If you are considering of the use under such condition, consult Kito.
- Wear protection equipment such as protection goggles and gloves depending on the work contents. Especially, wear helmet and safety belt when carrying the high lift work.
- Pay attention to work method, work procedure and work posture.
- Remove the oil or grease attached to the product or spilt on the floor.And keep the work area clean when disassembling the product.

Failure to comply with these instructions may result in injury or physical damage to property.

■ Maintenance inspection / storage

⚠ WARNING

Prohibited

Only the maintenance personnel are allowed to carry out maintenance inspection of the chain hoist.

- Do not cut, extend, or weld the load or hand chains.
- Do not apply oil or any lubricant material to any of the braking components.
- When replacing a part, use only an authorized part for the Kito model CQ manual chain hoist.
  Even if the part is an authorized Kito part, ensure that it is intended for the specific hoist model.

Failure to comply with these instructions may result in death or serious injury.
Qualified employees who are trained in maintenance and inspections. Disassembly and further inspection should only be performed by maintenance personnel trained in the disassembly and re-assembly of the hoist.

⚠ CAUTION

Mandatory

Comply with the following instructions when carrying out maintenance inspection and storing the chain hoist.

- Ensure that a label stating "Inspection in progress" to avoid misuse of the hoist.
- When storing chain hoist ensure that all dust and water droplets are wiped off, apply oil to the neck of the of the hook and chain.

Failure to comply with these instructions may result in injury or physical damage to property.

Unpacking

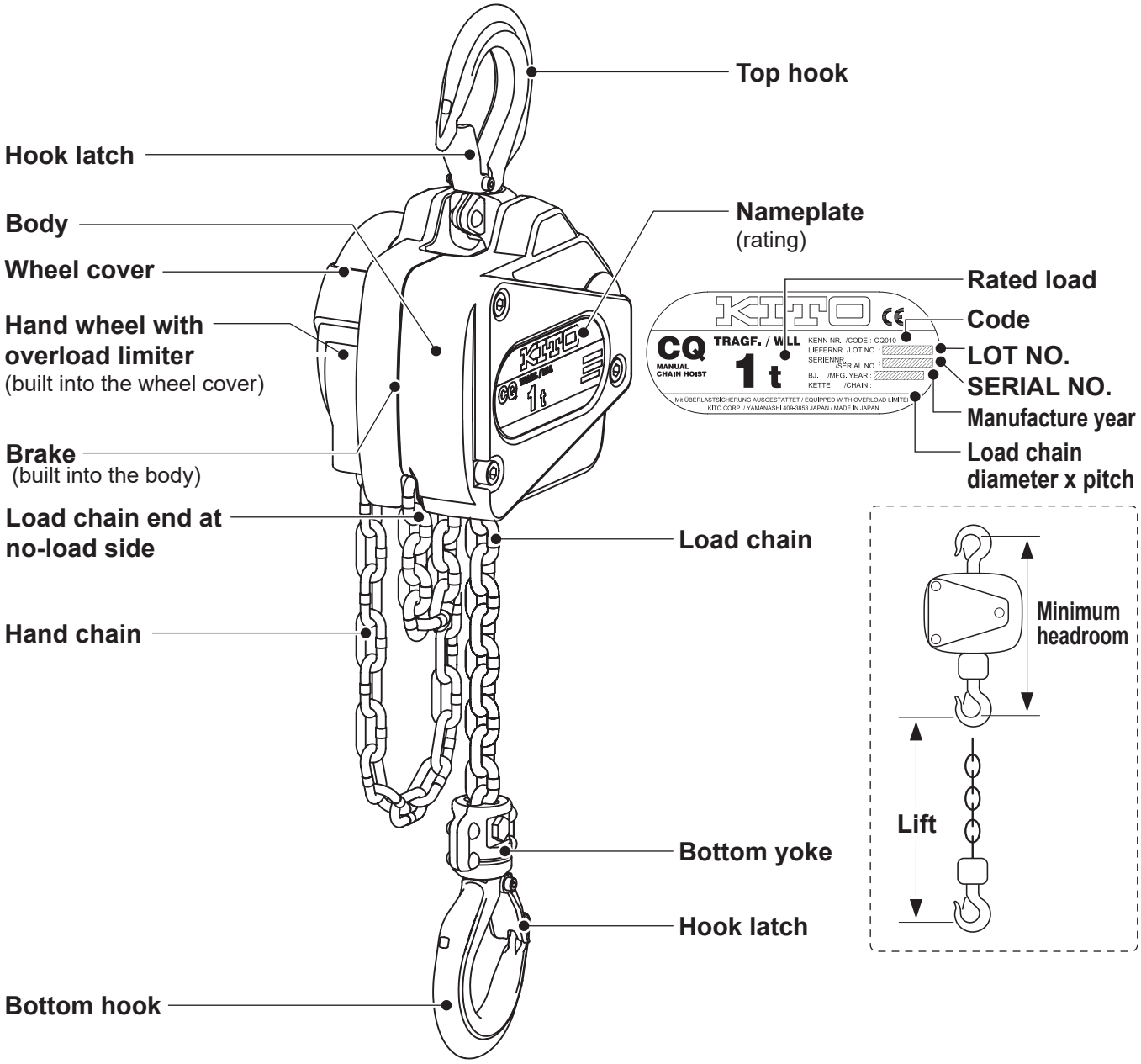
- **Ensure that the information on the box and the product match the details of your order.**
- **Check to see whether the product has been deformed or damaged by an accident in transit.**
- **Fill in the blank provided in the right table with the LOT NO., the SERIAL NO. (written on the nameplate on the product), the date of purchase, and the name of the store where you purchased the product.**

* Contact Kito when spare parts or repair is needed.

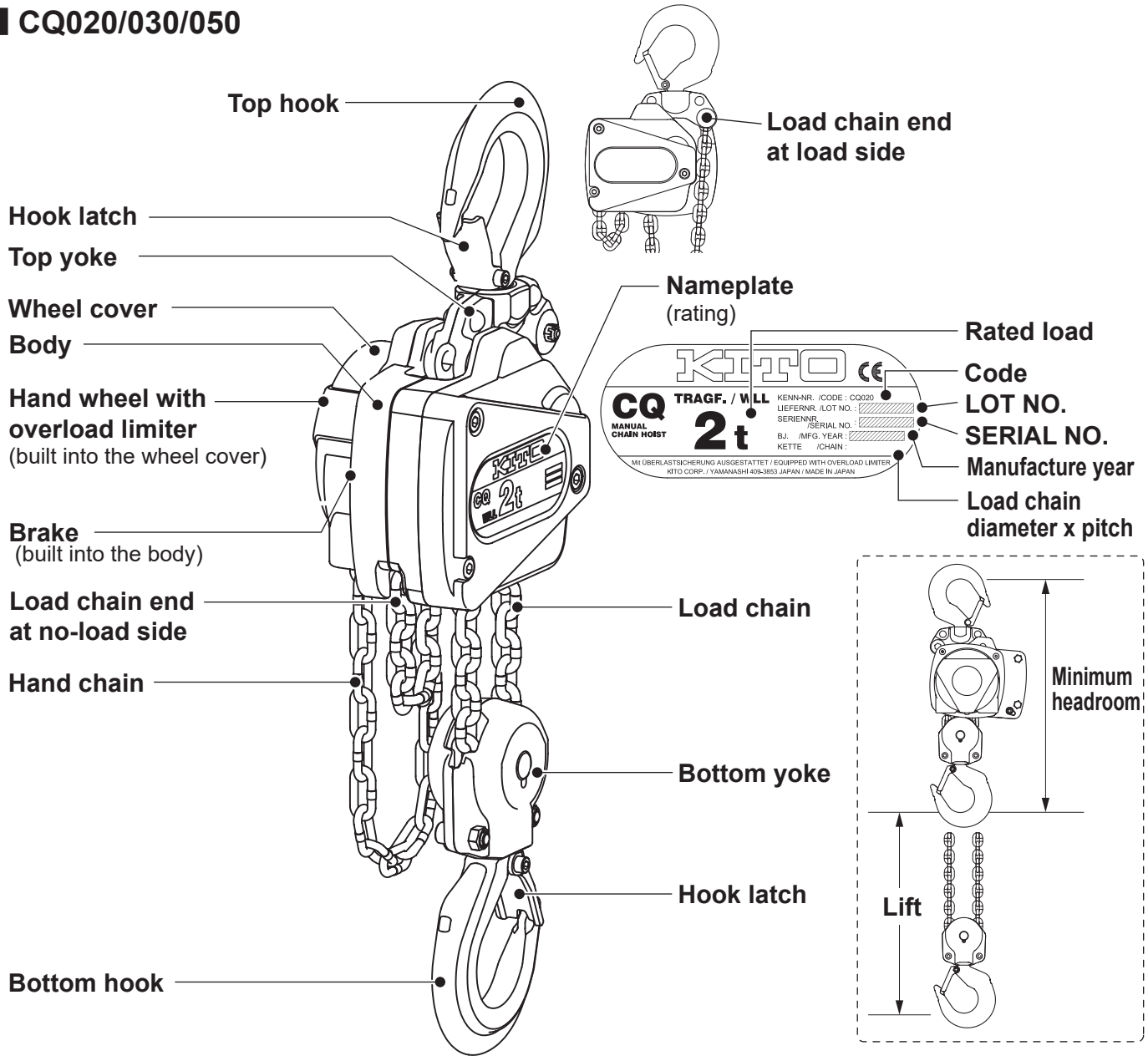
LOT NO.	
SERIAL NO.	
Date of purchase	
Store	

Main Parts

■ CQ005/010/015



■ CQ020/030/050



Specifications

Code	Rated load (t)	Standard lift (m)	Minimum headroom (mm)	Standard length of the hand chain double fold (m)	Pull to lift Load*1		Hand chain length for 1m lifting*2 (m)
					(N)	(kgf)	
CQ005	0.5	3	340	3	128	13.1	45.2
CQ010	1	3	360	3	175	17.8	66.6
CQ015	1.5	3	410	3	199	20.3	87.7
CQ020	2	3	480	3	178	18.2	133.3
CQ030	3	3	545	3	204	20.8	175.3
CQ050	5	3	585	3	232	23.7	262.9

Code	Load chain		Chain fall lines	Test Load*3 (t)	Weight for additional 1m of lift (kg/m)	Mass (kg)
	Diameter (mm)	Pitch (mm)				
CQ005	5	15	1	0.625	1.5	11
CQ010	6	16.7	1	1.25	1.8	12.5
CQ015	6.8	18.9	1	1.875	2	16
CQ020	6	16.7	2	2.5	2.6	18
CQ030	6.8	18.9	2	3.75	3	24.5
CQ050	6.8	18.9	3	6.25	4.1	32

*1: Average hand pull to lift the rated load.
*2: Length of the hand chain necessary to lift a load 1m.
*3: Test load used in an operation test, etc. Not available in actual work.
This device was tested according to the required static and dynamic load test provided on the European standard EN 13157.

Operating Environmental Conditions

Operating temperature range	–40ºC to +60ºC
Operating humidity range	Use the hoist at under 100%RH. This product cannot be used in water.

● Do not use the chain hoist in the following environments:

- In an alkaline/acidic atmosphere
- In an organic solvent/explosive atmosphere

Incidentally, when you wish to use the chain hoist in environments other than the aforementioned normal use environments, such as one with a high salt content, or in an environment where outdoor use in particular is extensive, it may be possible to use the chain hoist by carrying out maintenance inspection frequently. In such cases, consult Kito beforehand.

Installation

Read the “Safety Precautions: Installing” on page 6 carefully before use and follow the instructions.

- The safety factor of the chain hoist is 4:1. The hoist may lift and hold a load more than the rated load.
- Ensure the structure meets the intended ratings for both hoist and load before installing.
- Ensure that only qualified persons install the chain hoist.
- Do not install the chain hoist within the moving range of other devices (equipment), such as a trolley.
- Before using the chain hoist with a trolley, read the Instruction Manual of the trolley carefully and install it by adjusting the rail width. Install a stopper at both ends of the traversing rail for the trolley.

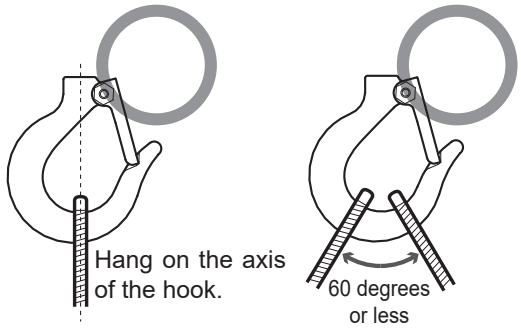
Preoperational Check

Read the “Safety Precautions: Installing” on page 6 and “Safety Precautions: Maintenance inspection / storage” on page 9 carefully before use and follow the instructions.
The user must carry out a daily inspection before operation.
Even if the chain hoist is permanently installed and used for the same purpose repeatedly, check all the works for the day and check to ensure that it does not exceed the rated load on each occasion.

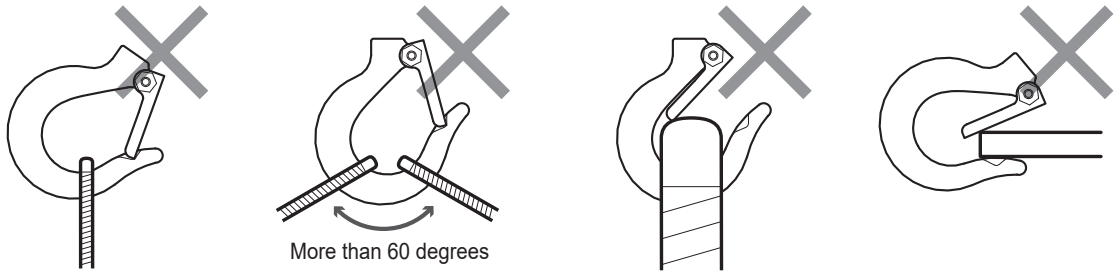
Operation

Read the “Safety Precautions: Operation on pages 7 to 9 carefully before use and follow the instructions.

[Correct way to lift a load]



Avoid the dangerous hooking method shown in the following diagrams.



The holding object or the sling is not hooked in the correct position.

The angle is too wide.

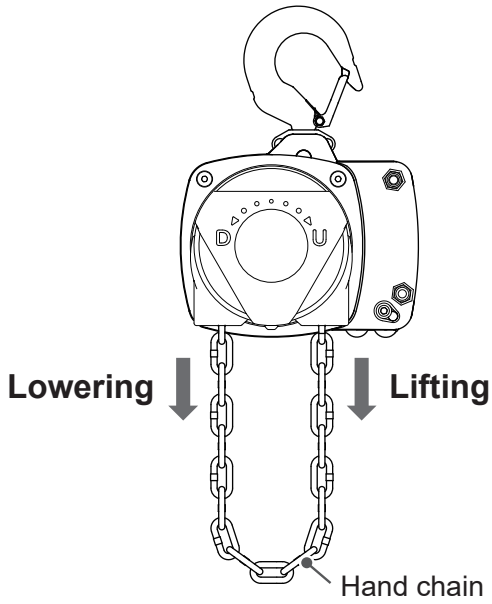
The hook latch does not close.

The load is applied at the tip of the hook.

[Operation method]

[Wheel cover side]

When the hand chain on the left, as viewed from the wheel cover side, is pulled down (in the D direction), the load is lowered.



When the hand chain on the right, as viewed from the wheel cover side, is pulled down (in the U direction), the load is lifted.

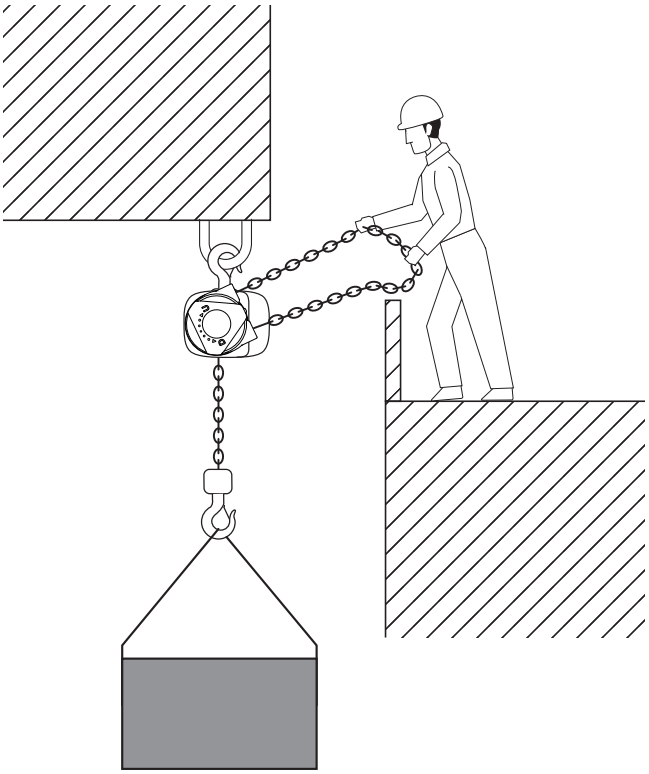
This product is designed for a rated load to be hoisted by pulling the hand chain with a force shown in the “Pull to lift load” table below or less. If the load cannot be lifted unless the hand chain is pulled with a force shown in the table below or greater during a load lifting operation under the rated load, there is a possibility of failure in the chain hoist. In such abnormal cases, stop use and consult the maintenance personnel.

CQ005	128 N (13.1kgf)
CQ010	175 N (17.8kgf)
CQ015	212 N (21.6kgf)

CQ020	178 N (18.2kgf)
CQ030	218 N (22.2kgf)
CQ050	232 N (23.7kgf)

■ 360-degree Operation Function

With the wheel cover turning, the Model CQ manual chain hoist is operable from any angle. It is operable even from a place away from a work area. Pull to lift load may increase during horizontal pulling.



⚠ CAUTION

Mandatory

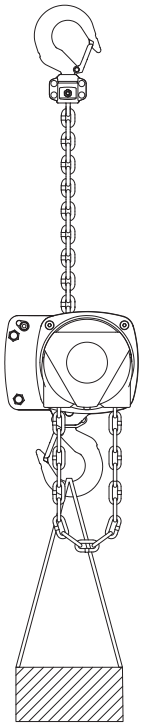
Observe the following when pulling the hand chain from every angle or from a distant position.

- Ensure ergonomic posture when operating the hoist.
- Fully secure footing.
- Maintain a firm footing or be otherwise secured when operating the hoist.
- When working on elevated areas, be careful not to drop the hand chain.

Failure to comply with these instructions may result in injury or physical damage to property.

■ Inverted Orientation

The model CQ manual chain hoist can be operated in an inverted position. When inverted, the hoist may be suspended using the bottom hook rather than the top hook attached to the hoist body.

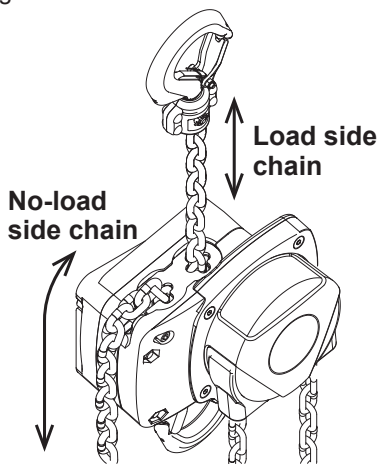


⚠ CAUTION

Mandatory

When operating an inverted CQ hoist, observe the following.

- When operating the hoist in an inverted position, ensure that the load chain does not become tangled.



- When operating the CQ hoist in an inverted position, ensure that the load chain and hand chain do not snag on the load.

Failure to comply with these instructions may result in injury or physical damage to property.

Overload limiter (OLL)

⚠ WARNING

Prohibited

Do not adjust or disassemble the Overload Limiter (OLL).

Failure to comply with this instruction may result in death or serious injury.

This product is equipped with an overload limiter (OLL) as standard. An excessive overload via the hand chain activates OLL which slips the hand wheel to prevent damage to the product.
When OLL operates, the load to the product is 1.5W±20% of the rated load.
If OLL operates, reduce a load to less than the rated load. Also check that the structure for installing the chain hoist (including a trolley) has no damage.

Maintenance and Storage

Read the "Safety Precautions: Maintenance inspection / storage" on page 9 carefully after use and follow the instructions.

[Care]

- Never apply oil to the braking part.
- Wipe off dust and moisture, and apply oil to the neck of hook and the load chain.

[Storage]

- Do not drag or throw the chain hoist when carrying.
- When not in use, ensure that it does not encumber other works.
- Store the hoist in a dry area indoors.
- When installing outdoors, cover the hoist to avoid exposure to rain or store in a place with covering against rain.
- Before storing the chain hoist, pull the hand chain by about 10cm to lower the hook and ensure that the brake is released. (Failure to comply with this instruction may cause the brake to get stuck, resulting in trouble.)

Inspection Classification

To maintain continuous and satisfactory operation, a regular inspection procedure must be initiated to replace worn or damaged parts before they become unsafe.

INSPECTION Classification

Inspection intervals must be determined by individual application and are based on the type of service to which the hoist will be subjected and the degree of exposure to wear, deterioration or malfunction of the critical components.

The type of service to which the hoist is subjected can be classified below.

- **Normal Service** – service that involves operation with randomly distributed loads within the rated load limit, or uniform loads less than 65% of rated load for not more than 15% of the time.
- **Heavy Service** – service that involves operation within the rated load limit which exceeds normal service.
- **Severe Service** – service that involves normal or heavy service with abnormal operating conditions.

The three general classifications are herein designated as DAILY, FREQUENT and PERIODIC, with respective intervals between inspections as defined below.

DAILY Inspection – visual examinations by the operator or other the maintenance personnel before daily operation.

FREQUENT Inspection – visual examinations by the maintenance personnel with intervals per the following criteria:

- **Normal service** – monthly
- **Heavy service** – weekly to monthly
- **Severe service** – daily to weekly

Records are not required.

PERIODIC Inspection – disassembly/reassembly inspection by the maintenance personnel with intervals per the following criteria:

- **Normal service** – yearly
- **Heavy service** – semiannually – 6 months
- **Severe service** – quarterly – 3 months

Records are to be kept for continuing evaluation of the condition of the hoist.

Daily Inspection

Inspections include the “Daily inspection” carried out by the operator, using the product before use, and a more thorough “Frequent/Periodic inspection” carried out by the maintenance personnel with sufficient knowledge, who can disassemble the chain hoist.

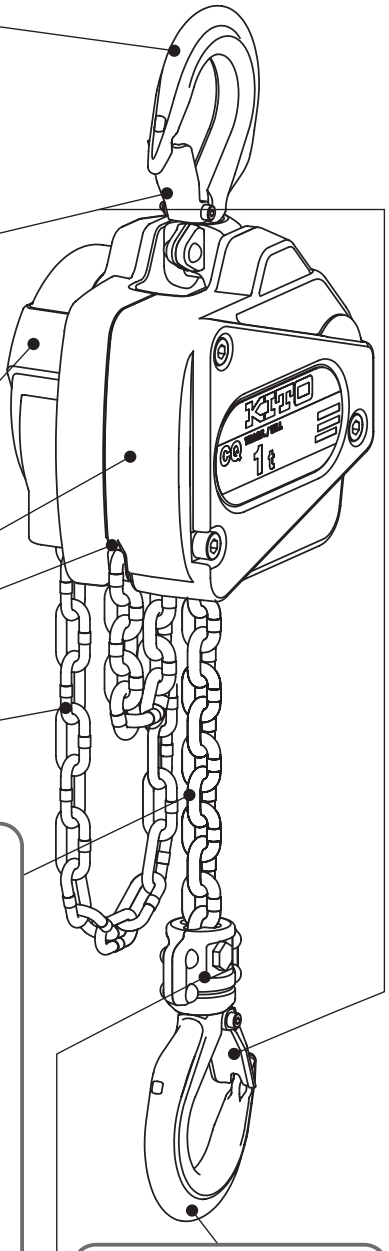
- Be sure to carry out these inspections in order to use the chain hoist safely.
- Separate document; Disassembly/Reassembly Manual is also available for the maintenance personnel. Please contact Kito or your dealer for the material.

■ CQ005/010/015

Top hook
- To have no deformation or flaws.
- The neck of the hook needs to turn smoothly.

Hook latch
- To be closed.
- To have no deformation or flaws.
- To open/close smoothly.

Wheel cover
- To turn smoothly.



Body

End at no-load side

Hand chain
- To have no deformation, flaws, twists or kinks.

Load chain
- For the end at the no-load side, to be fixed to the body.
- To have no deformation, flaws, twists or kinks.
- To have no conspicuous rust.
  * Remove rust, when it is observed.
- To be oiled.
  * If it is not oiled, remove the dust and moisture on the load chain and apply rust preventive oil equivalent to ISO VG 32. Consult Kito if the usage environment does not allow the application of lubricating oil to the load chain.

Bottom hook
- To have no deformation or flaws.
- For the neck part of the hook, to turn smoothly.

Bottom yoke
- To have no looseness in the bolts and nuts fixing the bottom yoke.

Appearance
- For the nameplate to be fixed firmly and for the displayed contents, to be clear and legible.
- No loosened or fallen-out bolts and nuts.
- To have no flaw, damage, deformation, and corrosion of all parts.

Lifting
To carry out a lifting operation with one hand while lightly pulling the load chain on the bottom hook side with the other.
- To be able to hear the pawl of the brake device sounds clicks and to move smoothly.
- The bottom hook should stop when the operation is stopped.
  * If the bottom hook is entangled with the load or hand chain, untangle the chain.

Lowering
To carry out a lowering operation with one hand while lightly pulling the load chain on the bottom hook side with the other.
- To make no noise during the lowering and move smoothly.
- The bottom hook should stop when the operation is stopped.
- If the hoist cannot be lowered, check that the bottom hook is not lowered excessively, and then carry out the lowering operation by strongly pulling the hand chain for a moment.
  If it is still unable to lower, consult the maintenance personnel or contact Kito.

If there are any abnormalities, consult the maintenance personnel or contact Kito.

■ CQ020/030/050

Top hook
- To have no deformation or flaws.
- For the neck part of the hook, to turn smoothly.

Hook latch
- To be closed.
- To have no deformation or flaws.
- To open/close smoothly.

Top yoke
- To have no looseness in the bolts and nuts fixing the top yoke.

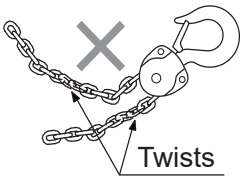
Wheel cover
- To turn smoothly.

Body

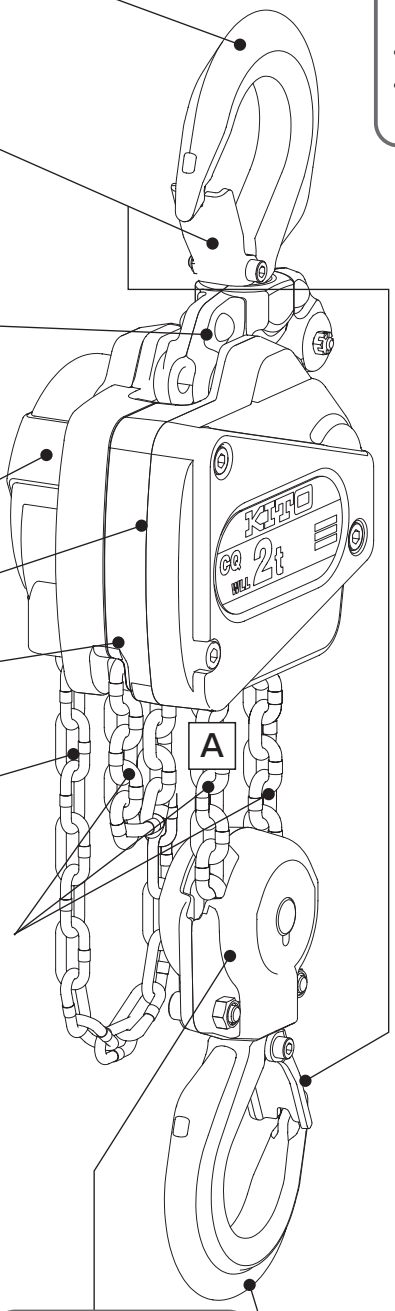
End at no-load side

Hand chain
- To have no deformation, flaws, twists or kinks.

Load chain
- For the end at the no-load side, to be fixed to the body.
- Ensure that the terminal on the load side is securely fixed to the top yoke.
- To have no deformation, flaws, twists or kinks.
- To have no conspicuous rust.
  * Remove rust, when it is observed.
- To be oiled.
  * If it is not oiled, remove the dust and moisture on the load chain and apply rust preventive oil equivalent to ISO VG 32. Consult Kito if the usage environment does not allow the application of lubricating oil to the load chain.



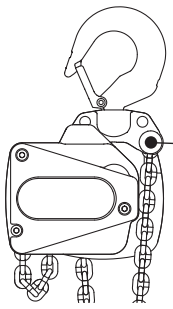
- Ensure that the load chain is not twisted due to the bottom hook being capsized.



Bottom yoke
- To have no looseness in the bolts and nuts fixing the bottom yoke.

Bottom hook
- To have no deformation or flaws.
- For the neck part of the hook, to turn smoothly.

Appearance
- For the nameplate to be fixed firmly and for the displayed contents, to be clear and legible.
- No loosened or fallen-out bolts and nuts.
- To have no flaw, damage, deformation, and corrosion of all parts.



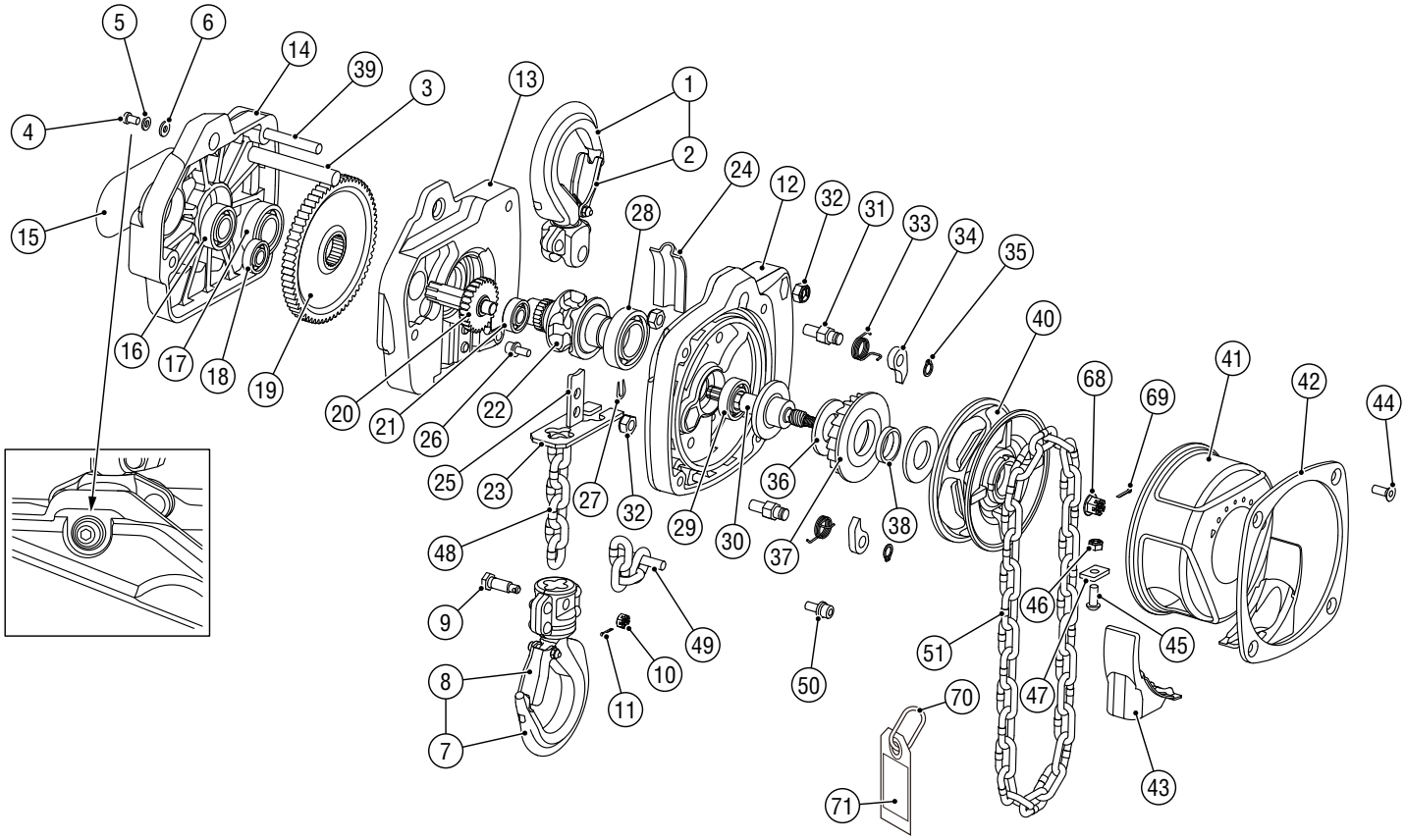
Load chain end at load side

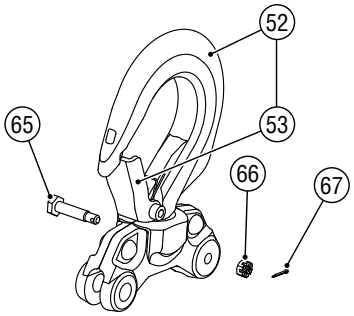
Lifting
To carry out a lifting operation with one hand while lightly pulling the load chain (A) on the body side with the other.
- To be able to hear the pawl of the brake device sounds clicks and to move smoothly.
- The bottom hook should stop when the operation is stopped.
  * If the bottom hook is entangled with the load or hand chain, untangle the chain.

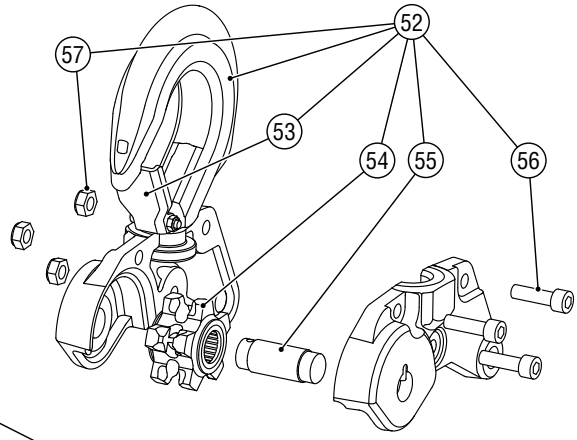
Lowering
To carry out a lowering operation with one hand while lightly pulling the load chain (A) on the body hook side with the other.
- To make no noise during the lowering and move smoothly.
- The bottom hook should stop when the operation is stopped.
- If the hoist cannot be lowered, check that the bottom hook is not lowered excessively, and then carry out the lowering operation by strongly pulling the hand chain for a moment.
  If it is still unable to lower, consult the maintenance personnel or contact Kito.

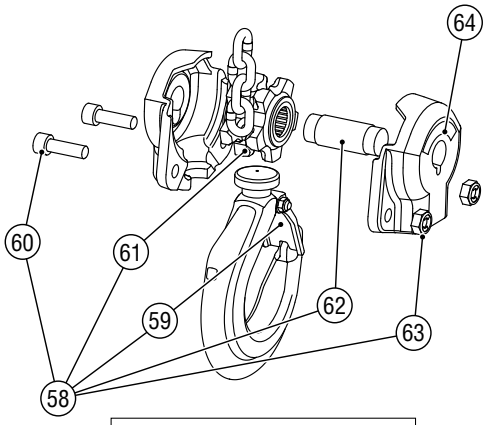
If there are any abnormalities, consult the maintenance personnel or contact Kito.

Parts List

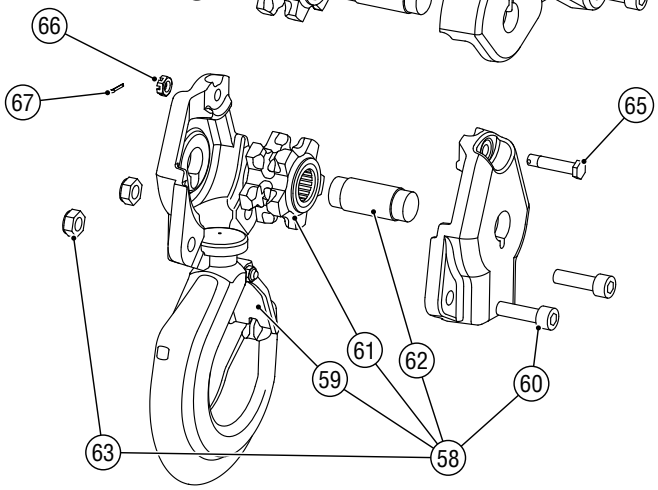








Exclusive parts for 2t (CQ020) and 3t (CQ030)



Exclusive parts for 5t (CQ050)

Fig. No.	Part Name	Parts per Hoist	0.5t	1t	2t	1.5t	3t	5t	Remark
1	Top hook set	1	C1QA005-1001	C1QA010-1001		C1QA015-1001			
2	Hook latch assembly	1	C1QA005-1071	C1QA010-1071		C1QA015-1071			
3	Top pin	1	C1QA005-9163	C1QA010-9163		C1QA015-9163			
4	Button head socket bolt	1	J1BL9-0601212						For top pin
5	Spring lock washer	1	J1WS011-20060						
6	Plain washer	1	C1QA005-9165						
7	Bottom hook set	1	C1QA005-1021	C1QA010-1021		C1QA015-1021			
8	Hook latch assembly	1	C1QA005-1071	C1QA010-1071		C1QA015-1071			
9	Chain pin	1	C3BA005-9041	C1QA010-9041		C1QA015-9041			
10	Slotted nut	1	C3BA005-9049	C3BA005-9049		C3BA010-9049			
11	Split pin	1	J1PW01-016010	J1PW01-016010		J1PW01-020012			
12	Body A	1	C1QA005-9101	C1QA010-9101	C1QA010-9101	C1QA015-9101	C1QA015-9101	C1QA015-9101	
13	Body B	1	C1QA005-9102	C1QA010-9102	C1QA010-9102	C1QA015-9102	C1QA015-9102	C1QA015-9102	
14	Body C	1	C1QA005-9103	C1QA010-9103	C1QA010-9103	C1QA015-9103	C1QA015-9103	C1QA015-9103	
15	Name plate B	1	C1QG005-9800	C1QG010-9800	C1QG020-9800	C1QG015-9800	C1QG030-9800	C1QG050-9800	
16	Ball bearing	1	J1GR0M0-06002	J1GR0M0-06202	J1GR0M0-06202	J1GR0M0-06302	J1GR0M0-06302	J1GR0M0-06302	For gear #2 (body C side)
17	Ball bearing	1	J1GR0M0-06004	J1GR0M0-06004	J1GR0M0-06004	J1GR0M0-06005	J1GR0M0-06005	J1GR0M0-06005	For load sheave (body C side)
18	Ball bearing	1	J1GR0M0-06000	J1GR0M0-06000	J1GR0M0-06000	J1GR0M0-06000	J1GR0M0-06000	J1GR0M0-06000	For pinion (body B side)
19	Load gear	1	C1QA005-9114	C1QA010-9114	C1QA010-9114	C1QA015-9114	C1QA015-9114	C1QA015-9114	
20	Gear #2	1	C1QA005-9112	C1QA010-9112	C1QA010-9112	C1QA015-9112	C1QA015-9112	C1QA015-9112	
21	Ball bearing	1	J1GR0M0-06000	J1GR0M0-06000	J1GR0M0-06000	J1GR0M0-06002	J1GR0M0-06002	J1GR0M0-06002	
22	Load sheave	1	C1QA005-9116	C1QA010-9116	C1QA010-9116	C1QA015-9116	C1QA015-9116	C1QA015-9116	
23	Chain guide A	1	C1QA005-9178	C1QA010-9178	C1QA010-9178	C1QA015-9178	C1QA015-9178	C1QA015-9178	
24	Chain guide B	1	C1QA005-9179	C1QA010-9179	C1QA010-9179	C1QA015-9179	C1QA015-9179	C1QA015-9179	
25	Stripper	1	C1QA005-9162	C1QA010-9162	C1QA010-9162	C1QA015-9162	C1QA015-9162	C1QA015-9162	
26	Bolt	1				J1BX1-0601616	J1BX1-0601616	J1BX1-0601616	For ball bearing
27	U type retaing ring	1	C1QA005-9123	C1QA005-9123	C1QA005-9123	C1QA005-9123	C1QA005-9123	C1QA005-9123	For pinion shaft
28	Ball bearing	1	J1GR0M0-06004	J1GR0M0-06005	J1GR0M0-06005	J1GR0M0-06006	J1GR0M0-06006	J1GR0M0-06006	For load sheave (body A side)
29	Ball bearing	1	J1GR0M0-06002	J1GR0M0-06002	J1GR0M0-06002	J1GR0M0-06002	J1GR0M0-06002	J1GR0M0-06002	For pinion (body A side)
30	Pinion	1	C1QA005-9111	C1QA005-9111	C1QA005-9111	C1QA005-9111	C1QA005-9111	C1QA005-9111	
31	Pawl shaft	2	C1QA005-9156	C1QA005-9156	C1QA005-9156	C1QA005-9156	C1QA005-9156	C1QA005-9156	
32	Lever nut	5	C2BA100-9074	C2BA100-9074	C2BA100-9074	C2BA100-9074	C2BA100-9074	C2BA100-9074	For body and pawl shaft
33	Pawl spring	2	C1QA005-9158	C1QA005-9158	C1QA005-9158	C1QA005-9158	C1QA005-9158	C1QA005-9158	
34	Pawl	2	C1QA005-9155	C1QA005-9155	C1QA005-9155	C1QA005-9155	C1QA005-9155	C1QA005-9155	
35	Snap ring	2	J1SS000-00009	J1SS000-00009	J1SS000-00009	J1SS000-00009	J1SS000-00009	J1SS000-00009	
36	Friction plate	2	C1QA005-9151	C1QA005-9151	C1QA005-9151	C1QA005-9151	C1QA005-9151	C1QA005-9151	
37	Ratchet disc	1	C1QA005-9152	C1QA005-9152	C1QA005-9152	C1QA005-9152	C1QA005-9152	C1QA005-9152	
38	Bushing	1	C1QA005-9154	C1QA005-9154	C1QA005-9154	C1QA005-9154	C1QA005-9154	C1QA005-9154	
39	Bolt	3	J1BE1-0807028	J1BE1-0807028	J1BE1-0807028	J1BE1-0808028	J1BE1-0808028	J1BE1-0808028	For body
40	Hand wheel assembly	1	C1QA005-1115	C1QA010-1115	C1QA010-1115	C1QA015-1115	C1QA015-1115	C1QA050-1115	
41	Wheel cover	1	C1QA005-9171	C1QA005-9171	C1QA005-9171	C1QA015-9171	C1QA015-9171	C1QA015-9171	
42	Wheel cover retainer	1	C1QA005-9172	C1QA005-9172	C1QA005-9172	C1QA015-9172	C1QA015-9172	C1QA015-9172	
43	Hand chain guide	2	C1QA005-9173	C1QA005-9173	C1QA005-9173	C1QA015-9173	C1QA015-9173	C1QA015-9173	
44	Bolt	4	C1QA005-9181	C1QA005-9181	C1QA005-9181	C1QA005-9181	C1QA005-9181	C1QA005-9181	For wheel cover retainer
45	Bolt	1	J1BL1-0601616	J1BL1-0601616	J1BL1-0601616	J1BL1-0601616	J1BL1-0601616	J1BL1-0601616	For connecting plate
46	U nut	1	E5SE003S9855	E5SE003S9855	E5SE003S9855	E5SE003S9855	E5SE003S9855	E5SE003S9855	For connecting plate
47	Connecting plate	1	C1QA005-9174	C1QA005-9174	C1QA005-9174	C1QA005-9174	C1QA005-9174	C1QA005-9174	
48	NH Load chain	1	K6QN050W0000	KBQN060J0000	KBQN060J0000	KAQN068J0000	KAQN068J0000	KAQN068J0000	
49	Tail pin	1	C1QA005-9164	C1QA010-9164	C1QA010-9164	C1QA015-9164	C1QA015-9164	C1QA015-9164	
50	Bolt	1	J1BX1-0601616	J1BX1-0601616	J1BX1-0601616	J1BX1-0601616	J1BX1-0601616	J1BX1-0601616	For tail pin
51	Hand chain(CN)	1	K7NZ050J0000	K7NZ050J0000	K7NZ050J0000	K7NZ050J0000	K7NZ050J0000	K7NZ050J0000	
52	Top hook set	1			C1QA020-1001		C1QA030-1001	C1QA050-1001	
53	Hook latch assembly	1			C1QA020-1071		C1QA030-1071	C1QA050-1071	
54	Idle sheave assembly	1						C1QA030-5051	
55	Shaft subassembly	1						C3BA030-5053	
56	Socket bolt	3						J1BE1-1003535	
57	Lever nut	3						C2BA200-9074	
58	Bottom hook set	1			C1QA020-1021		C1QA030-1021	C1QA050-1021	
59	Hook latch assembly	1			C1QA020-1071		C1QA030-1071	C1QA050-1071	
60	Socket bolt	2			J1BE1-0802525		J1BE1-1003232	J1BE1-1003535	
61	Idle sheave set	1			C1QA020-5051		C1QA030-5051	C1QA030-5051	
62	Shaft subassembly	1			C1QA020-5053		C3BA030-5053	C3BA030-5053	
63	Lever nut	2			C2BA100-9074		C2BA200-9074	C2BA200-9074	
64	Name plate C	1			C1XA010W9805		C1XA010W9805		
65	Chain pin	1			C1QA020-9041		C1QA030-9041	C1QA030-9041	
66	Slotted nut	1			C3BA005-9049		C3BA010-9049	C3BA010-9049	
67	Split pin	1			J1PW01-016010		J1PW01-020012	J1PW01-020012	
68	Slotted flange nut	1	C1QA005-9209	C1QA005-9209	C1QA005-9209	C1QA005-9209	C1QA005-9209	C1QA005-9209	
69	Split pin	1	J1PW01-020012	J1PW01-020012	J1PW01-020012	J1PW01-020012	J1PW01-020012	J1PW01-020012	
70	Chain stopper link	1	L5BA032-9045	L5BA032-9045	L5BA032-9045	L5BA032-9045	L5BA032-9045	L5BA032-9045	
71	Warning tag CE-G	1	ER1BS9686	ER1BS9686	ER1BS9686	ER1BS9686	ER1BS9686	ER1BS9686	

Chapter 2

Inspection

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Inspection Check Sheet **35**

Safety Precautions

This Inspection Standards Manual for the Chain Hoist includes important contents to prevent injury to persons performing inspection, users and others, and damage to property, and to perform inspection of the Chain Hoist safely and correctly.
Before performing the inspection, be sure to read and follow pages 6 to 18 since its contents are also important for inspection.

Person to perform inspection

Inspection shall be performed only by the maintenance personnel*.

* Person who is authorized by company to have expertise on the structure and device of Chain Hoist, or has expertise and is capable of understanding pages 25 to 34 and Disassembly/Reassembly Manual.
When this requirement is not satisfied, consult with Kito, or request Kito for inspection.

Inspection in General

⚠ WARNING

Prohibited

Only the maintenance personnel to perform inspection of the Chain Hoist.

Inspection performed by anyone other than the maintenance personnel may result in death or serious injury.

Prohibited

Do not use parts that exceeded their service limits or do not meet criteria. Do not use unauthorized parts of Kito CQ Manual Chain Hoist.

Even if the part is an authorized part for the Kito Chain Hoist, it may not be used for a different model.
Use parts correctly in accordance with the Disassembly/Reassembly Manual.
Failure to comply with these instructions may result in death or serious injury.

Prohibited

Do not perform inspections while hoist is in use.

When performing inspection of the Chain Hoist, place it on a floor and perform the inspection.
Performing inspection of the Chain Hoist subject to a load may result in death or serious injury.

Prohibited

Do not lubricate the Friction Plate.

The Friction Plate is of the dry type.
Lubricating the Friction Plate may result in death or serious injury due to insufficient braking.

⚠ WARNING

Prohibited

Do not use any oil (grease, rust preventive oil, etc.) in areas near a fire or spark.

Otherwise, this may result in ignition.

Mandatory

Perform inspection (frequent, periodic).

Failure of inspection (frequent, periodic) causes death or serious injury.
Inspection may need to be performed earlier than inspection cycle depending on the condition of use. Inspect the hoist at appropriate interval in consideration of the result of daily checks and operating noise.

Mandatory

When any defect is observed during inspection, stop using the Chain Hoist, indicate Failure/Inspection underway and consult with the maintenance personnel or Kito for inspection and repair.

Use of a faulty Chain Hoist may result in death or serious injury.

Mandatory

When periodic inspection is completed, perform functional inspection (operational check) to confirm the correct operation in accordance with the Disassembly/ Reassembly Manual.

Failure to comply with this instruction may result in death or serious injury.

Inspection Check Sheet

⚠ WARNING

Mandatory

When any defect is observed during inspection, stop using the Chain Hoist, indicate Failure/Inspection underway and consult with the maintenance personnel or Kito for repair.

Use of a faulty Chain Hoist may result in death or serious injury.

* This Check Sheet is a standard sample based on Kito frequent and periodic inspection.
  Customers should decide upon their own format of the check sheet according to the operation environment and conditions of the customer, and perform the inspection.
  Be sure to include all check items into the check sheet.

Recommendation for Inspection

Inspection is the first step to safety operation. Carry out daily inspection and periodic inspection.

- Ensure that the operator refers to pages 6 to 18 and carry out daily inspection.
- This chapter is composed of frequent and periodic inspection items. (About each classification, refer to page 16)
- Inspection shall be performed by the maintenance personnel (with expertise), or consult with Kito.
- Inspection items are specified based on standard environment and conditions. Consult with Kito when using the Chain Hoist under special environment or conditions.
- Periodic inspection needs disassembly/reassembly. Refer to the separate Disassembly/Reassembly Manual for correct inspection.

Inspection Standards

⚠ WARNING

Prohibited

Do not use parts beyond their discard limit or criteria and unauthorized parts for Kito CQ Manual Chain Hoist.

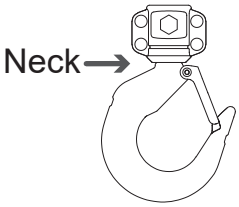
Even if the part is an authorized part for the Kito Chain Hoist, it may not be used for a different model.
Use parts correctly in accordance with the Disassembly/Reassembly Manual.
Failure to comply with these instructions may result in death or serious injury.

Frequent Inspection

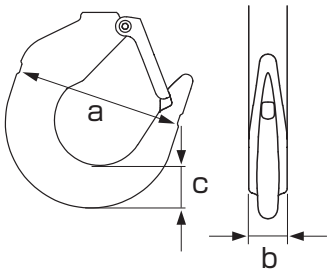
Check the Chain Hoist under the installation state or on the workbench.

NOTE

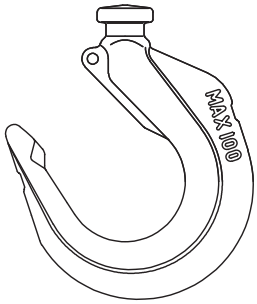
- Check the following items in addition to the daily inspection items.
  Before a frequent inspection, perform the daily inspection.

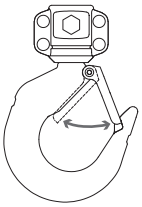
Item	Method	Discard limit or criteria	Action
Basic function	Suspend a light load and lift/lower it.	• Lifting operation should make regular click sounds of the Pawl of the brake unit and perform smoothly. • Sounds should be at a constant level or no irregular clicks should be heard. • No sounds should be made when lowering. • It should be free of any heavy pulling force. • There should be no slip in braking	Disassemble the Chain Hoist to verify that the hoist is properly assembled and the components are free of defects.
Top and Bottom Hooks	Check visually. 	• The hook should not be significantly twisted or deformed. • Should be free of any deep notches of flaws. • Should be free of any loosened or omitted rivets, bolts or nuts. • Should be free of any foreign matter such as sputter on the Hook.	Replace the Top Hook Set or the Bottom Hook Set.
	Visually check deformation of the Hook neck. 	• The neck should not be deformed or twisted beyond the discard limit.	Replace the Top Hook Set or the Bottom Hook Set.
	Rotate the Hook.	• Should rotate smoothly.	Replace the Top Hook Set or the Bottom Hook Set.

(Continued on the following page)

<table>
<tr><th>Item</th><th>Method</th><th>Discard limit or criteria</th><th>Action</th></tr>
<tr>
<td>Top and Bottom Hooks</td>
<td>Measure the dimensions of each a, b and c of the Top and Bottom Hooks using a vernier caliper.
 
</td>
<td>⚠ CAUTION
Mandatory
Compare the dimensions and thickness of the Top and Bottom Hooks with those when purchased to check they are not beyond the criteria.
Using a Hook with dimensions beyond the criteria may result in injury or damage to property.

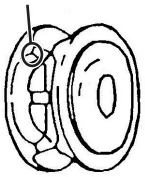
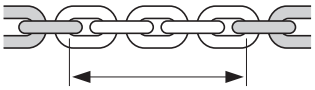
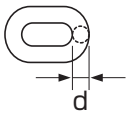
<table>
<tr><th>Standard</th><th>Discard</th></tr>
<tr><td>Dimension a</td><td>Not to exceed the value inscribed on the Hook *</td></tr>
<tr><td>Dimension b</td><td>5% or more wear</td></tr>
<tr><td>Dimension c</td><td>5% or more wear</td></tr>
</table>
• The nominal values are indicated below for reference, however, the Hook dimensions have tolerances to some extent because it is forged and thermally treated.

<table>
<tr><th rowspan="2">Rated load (t)</th><th colspan="2">Dimension a (mm)</th><th colspan="2">Dimension b (mm)</th><th colspan="2">Dimension c (mm)</th></tr>
<tr><th>Standard</th><th>Discard*</th><th>Standard</th><th>Discard</th><th>Standard</th><th>Discard</th></tr>
<tr><td>0.5</td><td>72</td><td>73</td><td>12</td><td>11.4</td><td>16.5</td><td>15.7</td></tr>
<tr><td>1</td><td>85</td><td>86</td><td>16</td><td>15.2</td><td>21.5</td><td>20.5</td></tr>
<tr><td>1.5</td><td>99</td><td>100</td><td>20</td><td>19</td><td>25.5</td><td>24.3</td></tr>
<tr><td>2</td><td>110.5</td><td>112</td><td>22</td><td>20.9</td><td>29</td><td>27.6</td></tr>
<tr><td>3</td><td>136</td><td>138</td><td>27</td><td>25.7</td><td>37.5</td><td>35.7</td></tr>
<tr><td>5</td><td>153</td><td>155</td><td>35</td><td>33.3</td><td>43.5</td><td>41.4</td></tr>
</table>
</td>
<td>Replace the Top Hook Set or the Bottom Hook Set.
 

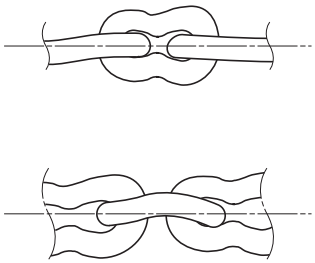
e.g.: Value inscribed on the Hook (*)</td>
</tr>
<tr>
<td></td>
<td>To ensure the Hook Latch is fully functioning, move the hook latch forward and backward a few times.
  </td>
<td>⚠ WARNING
Prohibited
Do not use the Hook without the Hook Latch.
Failure to comply with this instruction may result in death or serious injury.

• Should securely close the hook throat.
• Should move smoothly.</td>
<td>Replace the Hook Latch.</td>
</tr>
<tr>
<td>Idle Sheave</td>
<td>Move by hand.
 </td>
<td>⚠ CAUTION
Mandatory
Do not pinch fingers.

• Should rotate smoothly.
* If the bearing is broken or the sheave shaft is deformed, it will not rotate smoothly.</td>
<td>Replace the Idle Sheave.</td>
</tr>
</table>

<table>
<tr><th>Item</th><th>Method</th><th>Discard limit or criteria</th><th>Action</th></tr>
<tr><td>Idle Sheave</td><td>Check visually.
Pocket and tooth
  </td><td>• Should be free of wear in the Pocket, run-on flaws on the Tooth.</td><td>Replace the Idle Sheave.</td></tr>
<tr><td rowspan="2">Load Chain</td><td>Check wear visually and using a vernier caliper.
 
Pitch length for 5 links
 
d</td><td>NOTE
● Carefully check the position, especially where the Load Chain engages with the Load Sheave.
<table><tr><th rowspan="2">Rated load (t)</th><th colspan="2">Pitch length for 5 links (mm)</th><th colspan="2">Chain diameter (d) mm</th></tr><tr><th>Standard</th><th>Discard</th><th>Standard</th><th>Discard</th></tr><tr><td>0.5</td><td>75.5</td><td>77.7</td><td>5</td><td>4.5</td></tr><tr><td>1</td><td>84</td><td>86.5</td><td>6</td><td>5.4</td></tr><tr><td>1.5</td><td>95</td><td>97.8</td><td>6.8</td><td>6.2</td></tr><tr><td>2</td><td>84</td><td>86.5</td><td>6</td><td>5.4</td></tr><tr><td>3</td><td>95</td><td>97.8</td><td>6.8</td><td>6.2</td></tr><tr><td>5</td><td>95</td><td>97.8</td><td>6.8</td><td>6.2</td></tr></table>• Check wear of the Load Chain by measuring the total length of 5 links of the chain.
If the Load Chain is excessively worn when doing a visual check, replace the Load Chain.
• For measuring control, measure the chain diameter, referring to the discard limit value in the above table. Needle tip calipers are needed to measure pitch length of 5 links and the chain diameter.</td><td rowspan="2">Replace the Load Chain.</td></tr>
<tr><td>Visually ensure the Load Chain is free of corrosion (rust).</td><td>• Should be free of excessive corrosion (rust).
NOTE
● When wear on the Load Chain is observed, check the Load Sheave for safety and replace if necessary. (Refer to the item of Load Sheave in the “Lifting mechanism” page of Periodic Inspection.)
● Apply rust preventive oil equivalent to ISO VG 32.</td></tr>
</table>

(Continued on the following page)

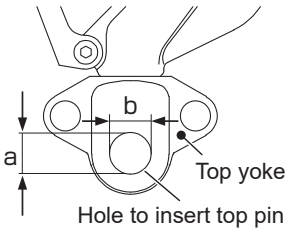
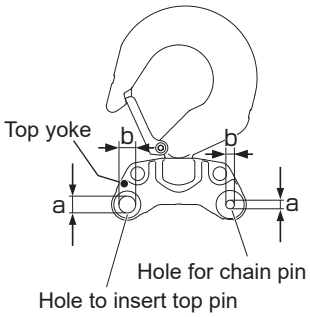
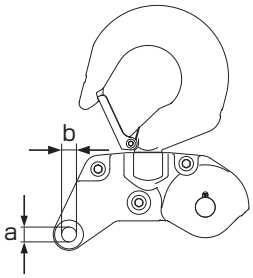
Item	Method	Discard limit or criteria	Action
Load Chain	Visually check the Load Chain has no deformations or flaws. 	**⚠ CAUTION** Mandatory **Do not perform any prohibited items on pages 6 to 16. Use the Load Chain correctly.** • Should have no deformations such as distortion or deep flaws. • Should have no deep flaws.	Replace the Load Chain.
	Visually check to see if there is any sputter on the Load Chain.	• Should be free of sputter. **NOTE** ● Keep the Chain Hoist away from welding sparks.	Replace the Load Chain.

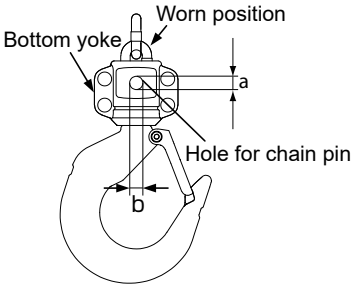
Periodic Inspection

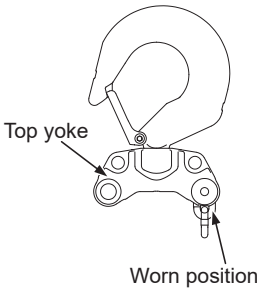
Disassemble the Chain Hoist and check each part in detail.
When this inspection is completed, reassemble the Chain Hoist correctly in accordance with the Disassembly/Reassembly Manual.

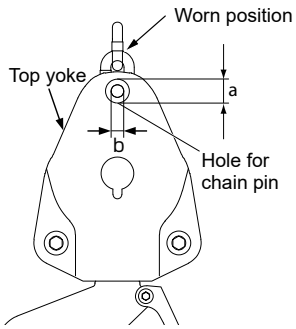
NOTE

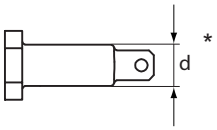
● Check the following items in addition to the frequent inspection items.
Perform disassembly/reassembly work correctly, referring to the separate Disassembly/Reassembly Manual.

Item	Method	Discard limit or criteria	Action
Top Yoke	Measure the hole of the Top Yoke where the top pin is inserted with vernier callipers.  CQ005, 010, 015  CQ020, 030, 050	• For the hole to insert the Top Pin and the hole for the Chain Pin, a difference between the dimensions a and b should be within 0.5mm.  CQ050	Replace the Top Hook Set.

<table>
<tr><th>Item</th><th>Method</th><th>Discard limit or criteria</th><th>Action</th></tr>
<tr><td rowspan="2">Top Yoke / Bottom Yoke</td><td>Check the wear at the worn position of the chain (indicated with an arrow) on the Top and Bottom Yoke sides.
 

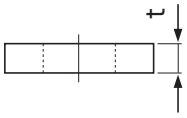
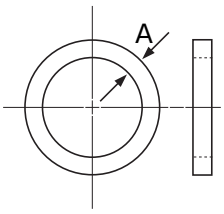
CQ005, 010, 015
 

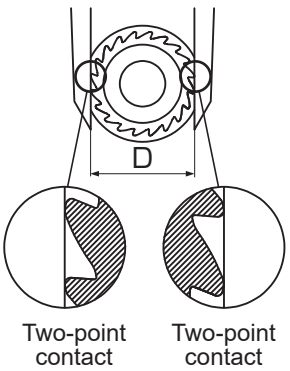
CQ020, 030
 

CQ050</td><td>• The Load Chain should be free of excessive wear and deformations at the worn position of the chain on the Top Yoke and Bottom Yoke sides.
• Perform measuring control of the chain diameter, referring to the Frequent Inspection (Page 27). Load Chain should not measure beyond the discard limit of the chain diameter.
• A point caliper is needed to measure the wear (of the chain diameter).</td><td>Replace the Load Chain.</td></tr>
<tr><td>• For the hole for the Chain Pin, a difference between the dimensions a and b should be within 0.5mm.</td><td>Replace the Bottom Hook Complete Set or the Top Hook Complete Set.</td></tr>
<tr><td>Chain Pin</td><td>Check the Chain Pin visually and using a vernier caliper to ensure no deformation or wear.
 

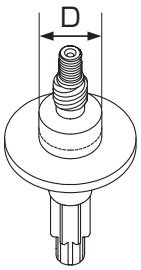
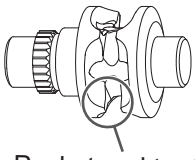
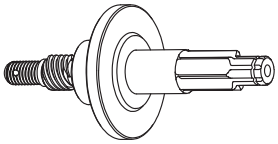
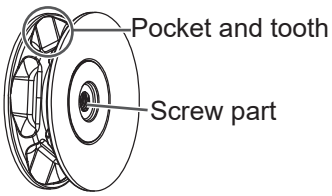
* Measure the max. diameter because the measuring spot is oval.</td><td>• The Chain Pin should not be deformed beyond the discard limit with visual check.
<table>
<tr><th rowspan="2">Rated load (t)</th><th colspan="2">Chain pin max. diameter (d) mm</th></tr>
<tr><th>Standard</th><th>Discard</th></tr>
<tr><td>0.5</td><td>6.2</td><td>5.9</td></tr>
<tr><td>1</td><td>8.3</td><td>7.9</td></tr>
<tr><td>1.5</td><td>9.8</td><td>9.4</td></tr>
<tr><td>2</td><td>7</td><td>6.7</td></tr>
<tr><td>3</td><td>8.3</td><td>7.9</td></tr>
<tr><td>5</td><td>8.3</td><td>7.9</td></tr>
</table>
• Should be free of excessive corrosion (rust).</td><td>Replace the Chain Pin.</td></tr>
</table>

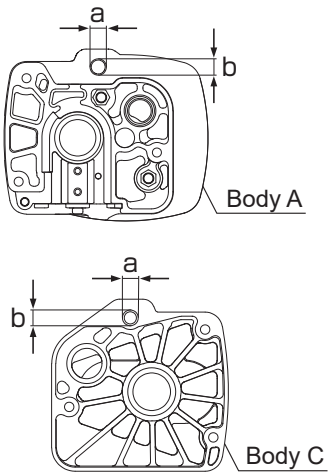
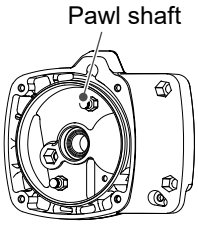
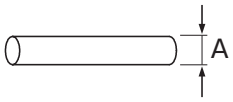
(Continued on the following page)

<table>
<tr><th>Item</th><th>Method</th><th>Discard limit or criteria</th><th>Action</th></tr>
<tr><td rowspan="3">Braking mechanism</td><td>Visually check the braking surface to ensure no wear or flaws.</td><td>
⚠ WARNING
Prohibited
Do not lubricate the Friction Plate.
The Friction Plate is a dry type brake. Lubricating the Friction Plate may result in death or serious injury due to insufficient braking.
• Should free of scars or gouged flaws on the braking surface of the Friction Disc, Friction Plate, Ratchet Disc, and Hand Wheel Assembly.
• The braking surface of the above-mentioned parts should not be excessively worn with the tool marks erased and surface lustered.
</td><td>Replace the scarred or worn parts.</td></tr>
<tr><td>Visually check crack of the Friction Plate and measure wear using a vernier caliper.
 
</td><td>
• The Friction Plate should be free of chips or cracks.
<table>
<tr><th rowspan="2">Rated load (t)</th><th colspan="2">Thickness of Friction Plate Dimension t (mm)</th></tr>
<tr><th>Standard</th><th>Discard</th></tr>
<tr><td>0.5</td><td rowspan="6">3</td><td rowspan="6">2.5</td></tr>
<tr><td>1</td></tr>
<tr><td>1.5</td></tr>
<tr><td>2</td></tr>
<tr><td>3</td></tr>
<tr><td>5</td></tr>
</table>
</td><td>Replace the Friction Plate.</td></tr>
<tr><td>Measure wear of the Bushing using a vernier caliper.
 
</td><td>
• Should be uniform in thickness in a circumferential direction.
<table>
<tr><th rowspan="2">Rated load (t)</th><th colspan="2">Dimension A (mm)</th></tr>
<tr><th>Standard</th><th>Discard</th></tr>
<tr><td>0.5</td><td rowspan="6">3</td><td rowspan="6">2.7</td></tr>
<tr><td>1</td></tr>
<tr><td>1.5</td></tr>
<tr><td>2</td></tr>
<tr><td>3</td></tr>
<tr><td>5</td></tr>
</table>
</td><td>Replace the Bushing.</td></tr>
</table>

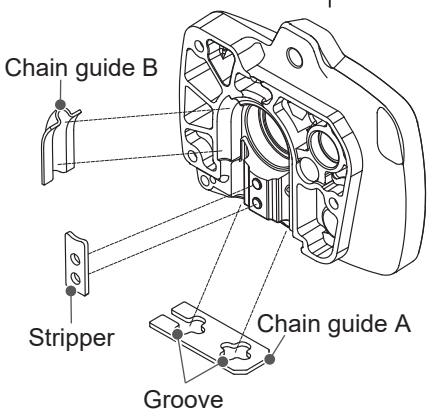
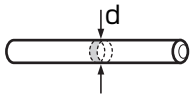
<table>
<tr><th>Item</th><th>Method</th><th>Discard limit or criteria</th><th>Action</th></tr>
<tr><td rowspan="5">Braking mechanism</td><td>Heat the Bushing to ensure that it has been impregnated with oil.</td><td>⚠ WARNING
Prohibited
Do not use any oil (grease, rust preventive oil, etc.) in areas near a fire or spark.
Failure to comply with this instruction may result in ignition.
• The Bushing should be sufficiently impregnated with oil (such that oil oozes off the surface when heated).
NOTE
● For replacing or assembling the Bushing, soak it in turbine oil for a day, and wipe excessive oil from its surface before reuse.</td><td>Soak the Bushing in turbine oil for a day and wipe off excessive oil.</td></tr>
<tr><td>Measure wear of the Ratchet Disc using a vernier caliper.
 
</td><td><table><tr><th rowspan="2">Rated load (t)</th><th colspan="2">Dimension D (mm)</th></tr><tr><th>Standard</th><th>Discard</th></tr><tr><td>0.5</td><td rowspan="6">63.5</td><td rowspan="6">60.4</td></tr><tr><td>1</td></tr><tr><td>1.5</td></tr><tr><td>2</td></tr><tr><td>3</td></tr><tr><td>5</td></tr></table>
NOTE
● Please measure the worn areas.</td><td>Replace the Ratchet Disc.</td></tr>
<tr><td>Visually check the Pawl.</td><td>• No significant wear on the tip of the Pawl.</td><td>Replace the Pawl.</td></tr>
<tr><td>Visually check the Pawl Spring.</td><td>• Should be free of deformations, flaws, breaks or poor spring.</td><td>Replace the Pawl Spring.</td></tr>
<tr><td>Visually check corrosion (rust).</td><td>• Each part should be free of excessive corrosion (rust).</td><td>Replace any rusty part.</td></tr>
</table>

(Continued on the following page)

<table>
<tr><th>Item</th><th>Method</th><th>Discard limit or criteria</th><th>Action</th></tr>
<tr><td>Braking mechanism</td><td>Measure the wear of the Pinion that is in contact with the Bushing.
 
</td><td><table>
<tr><th rowspan="2">Rated load (t)</th><th colspan="2">Dimension D (mm)</th></tr>
<tr><th>Standard</th><th>Discard</th></tr>
<tr><td>0.5</td><td rowspan="6">21.9</td><td rowspan="6">21.1</td></tr>
<tr><td>1</td></tr>
<tr><td>1.5</td></tr>
<tr><td>2</td></tr>
<tr><td>3</td></tr>
<tr><td>5</td></tr>
</table></td><td>Replace the Pinion.</td></tr>
<tr><td rowspan="5">Lifting mechanism</td><td>Visually check wear and flaw of the Load Sheave.
 
</td><td>• Should be free of wear in the Pocket or run-on flaws on the Tooth of the Load Sheave.</td><td>Replace the Load Sheave.</td></tr>
<tr><td>Visually check wear and flaw on tooth of the Load Gear and Gear #2.</td><td>• Should be free of chips of tooth, stepped wear, and flaws.</td><td>Replace the Load Gear and the Gear #2.</td></tr>
<tr><td>Visually check deformation of the Pinion.</td><td>• Should be free of all deformations such as bending.</td><td>Replace the Pinion.</td></tr>
<tr><td>Visually check wear, flaw, and crack on the tooth of the Pinion.</td><td>• The tooth of the Pinion should be free of cracks, stepped wear and flaws.
  </td><td>Replace the Pinion.</td></tr>
<tr><td>Visually check the Hand Wheel for wear, flaw and cracks.
 
</td><td>• The pocket of the Hand Wheel should be free of wear. The tooth of the Hand Wheel should be free of flaws or breaks.
• Should be free of wear or chips at the screw part.</td><td>Replace the Hand Wheel Assembly.</td></tr>
</table>

<table>
<tr><th>Item</th><th>Method</th><th>Discard limit or criteria</th><th>Action</th></tr>
<tr><td rowspan="2">Lifting mechanism</td><td>Visually check deformation of the Slotted Nut with Flange.</td><td>• Should be free of significant deformations.
NOTE
● Deformed Slotted Nut with Flange results from excessively lowering. Instruct the operator on proper use of the Chain Hoist.</td><td>Replace the Slotted Nut with Flange.</td></tr>
<tr><td>Visually check the Hand Chain.</td><td>• Should be free of deformations such as twist.</td><td>Replace the Hand Chain.</td></tr>
<tr><td rowspan="5">Body</td><td>Visually check and measure the bearing hole for Top Pin using a vernier caliper.
 
</td><td>• Should be free of significant deformations or flaws.
• A difference between dimensions a and b should be within 0.5mm.</td><td>Replace the Body Assembly.</td></tr>
<tr><td>Visually check the Pawl Shaft.
 
</td><td>• Pawl shaft should be secured to the Body.</td><td>Replace the Body Assembly.</td></tr>
<tr><td>Visually check deformation and flaw of the Gear Case.</td><td>• Should be free of significant deformations, flaws or cracks.</td><td>Replace the Gear Case Assembly.</td></tr>
<tr><td>Visually check and measure deformation and abrasion of the Top Pin using a vernier caliper.
 
</td><td>• Significantly deformed Top Pin has reached the discard limit.
<table>
<tr><th rowspan="2">Rated load (t)</th><th colspan="2">Dimension A (mm)</th></tr>
<tr><th>Standard</th><th>Discard</th></tr>
<tr><td>0.5</td><td>12</td><td>11.4</td></tr>
<tr><td>1</td><td>12</td><td>11.4</td></tr>
<tr><td>1.5</td><td>16</td><td>15.2</td></tr>
<tr><td>2</td><td>12</td><td>11.4</td></tr>
<tr><td>3</td><td>16</td><td>15.2</td></tr>
<tr><td>5</td><td>16</td><td>15.2</td></tr>
</table>
• Should be free of excessive corrosion (rust).</td><td>Replace the Top Pin.</td></tr>
<tr><td>Ball bearing</td><td>• Should move smoothly.</td><td>Replace the bearing.</td></tr>
</table>

(Continued on the following page)

Item	Method	Discard limit or criteria	Action
Others	Visually check deformation of the Chain Guide and Stripper.  	• Should be free of crushed grooves, deformations or cracks.	Replace the Chain Guide and Stripper.
	Visually check and measure deformation, wear and corrosion (rust) of the End Pin using a vernier caliper.  	• Should be free of significant deformations. • Should be free of flaws or deformations. • Should be free of significant corrosion (rust). (Measure dimension d) Rated load (t) / Dimension d (mm): Standard / Discard 0.5: 6 / 5.7 1: 7 / 6.7 1.5: 8 / 7.6 2: 7 / 6.7 3: 8 / 7.6 5: 8 / 7.6	Replace the End Pin.

Preoperational Test

⚠ WARNING

Mandatory

When the periodic inspection is completed, perform a preoperational test to check that the hoist operates correctly.

Failure to comply with this instruction may result in death or serious injury.

Item	Method	Discard limit or criteria	Action
No load test	Repeat lifting and lowering a few times.	• The Chain Hoist should be operated with a light pulling force. • The Chain Hoist should have regular click sounds of the Pawl when lifting.	Disassemble the Chain Hoist to verify that the hoist is assembled properly and the components are free of defects.
Rated load test	Lift and lower the rated load by 20 to 30cm. Perform the items in the “Basic function” of Frequent Inspection.	• The Chain Hoist should have regular click sounds of the Pawl and run smoothly when lifting. • The sound should be at a constant level with no irregular clicks. • The Chain Hoist should make no sound when lowering. • Should not have a heavy pull force. • Free of brake slip.	

KITO®

KITO CQ MANUAL CHAIN HOIST

Inspection Check Sheet

(005/010/015/020/030/050)

Type	Rated Load	Lot No.	Control No.	Date of Installation	Installed Place

■ Check mark example: ○= Good, △= To be replaced (adjusted) at next inspection, ×= Defective. To be replaced (adjusted)

Range	Category	Check Item	Date of Check					
Frequent Inspection	Appearance	Nameplate (from daily check)						
		Appearance of Body and others (from daily check)						
		Loosened or missing nuts (from daily check)						
	Function	Lifting / lowering						
		Abnormal sound						
		Hand pulling force						
		Brake						
	Top/Bottom Hook	Deformation, flaw						
		Loosened or missing bolts or nuts (from the daily check)						
		Sputter						
		Gap at Neck						
		Rotation of Hook						
		Throat opening						
		Hook Latch						
	Idle Sheve	Behavior						
		Flaw, wear						
	Load Chain	Twist (from daily check)						
		Oil application (from daily check)						
		Wear						
		Corrosion (rust)						
		Deformation, Flaw						
		Sputter						

Inspected by	**Inspector**						
Checked by	**Maintenance personnel**						

⚠ WARNING

Mandatory

When any defect is observed during inspection, stop using the Chain Hoist, indicate Failure/Inspection underway and consult with the maintenance personnel or Kito for repair.

Use of a faulty Chain Hoist may result in death or serious injury.

NOTE

This Check Sheet is a standard sample based on Kito frequent and periodic inspection. Customers should decide upon their own format of the check sheet according to the operation environment and conditions of the customer, and perform the inspection. Be sure to include all check items into the check sheet.

■ Check mark example: ○= Good, △= To be replaced (adjusted) at next inspection, ×= Defective. To be replaced (adjusted)

Range	Category	Check Item	Date of Check					
Periodic Inspection	Top/Bottom Yoke	Deformation of hole to combine the Top Yoke						
		Deformation of hole to combine the Bottom Yoke						
		Wear of the chain on the Top Yoke and Bottom Yoke sides						
		Deformation, wear, and corrosion of the Chain Pin						
	Braking mechanism	Wear and flaw on the braking surface						
		Wear and crack on the Friction Plate						
		Wear of the Bushing						
		Oil impregnation of the Bushing						
		Wear of the Ratchet Disc						
		Wear of the Pawl						
		Deformation and flaw of the Pawl Spring						
		Corrosion (rust)						
		Wear of the Pinion in contact with the Bushing						
	Lifting mechanism	Wear and flaw of the Load Sheave						
		Wear and flaw on tooth of the Load Gear and Gear #2						
		Deformation of the Pinion						
		Wear, flaw, and crack on tooth of the Pinion						
		Wear and flaw of the Hand Wheel						
		Deformation of the Slotted Nut with Flange						
		Twist and deformation of the Hand Chain						
	Body	Deformation of the bearing hole for the Top Pin						
		Loosened Pawl Shaft						
		Deformation and flaw of the Gear Case						
		Deformation, wear, and corrosion of the Top Pin						
		Ball bearing movement						
	Others	Deformation of the Chain Guide and Stripper						
		Deformation, wear, and corrosion (rust) of the End Pin						
	Test	No load test						
		Rated load test						

Inspected by	**Inspector**							
Checked by	**Maintenance personnel**							

Chapter 3

Troubleshooting

Table of Contents

Introduction **38**
Safety precautions **38**
Troubleshooting **39**
Lifting up failure 39
Lowering failure 41

Introduction

When a defect is observed while using the Chain Hoist or during its inspection, stop using the Chain Hoist and repair (maintain) the hoist. This chapter describes how to troubleshoot causes of the failure and defect and to take countermeasures for the maintenance personnel*.
When a defect is found, stop using the Chain Hoist immediately and check the cause.

- Most of the causes of failure or defect of the Chain Hoist come from improper usage. Carefully read OWNER'S (OPERATOR'S) MANUAL and use the Chain Hoist correctly. Also, inform operators of the result of repair (maintenance) and direct them to operate the Chain Hoist properly.
- For repair (maintenance) of the Chain Hoist, perform the repair (maintenance) correctly in accordance with pages 22 to 34 and separate "Disassembly/Reassembly Manual".

* A person who is authorized by the business entity as having thorough knowledge and expertise on the structure and devices of a chain hoist, or a person with similar thorough knowledge and expertise and capable of understanding periodic inspection, and Disassembly/Reassembly Manual.
When these conditions are not satisfied, consult Kito or your dealer, or request maintenance.

Safety Precautions

This Troubleshooting for the Chain Hoist includes important contents to prevent injury to persons performing repair (maintenance), users and others, and damage to property, and to perform repair (maintenance) of the Chain Hoist safely and correctly.
Before performing repair (maintenance), be sure to read and follow pages 6 to 18 since its contents are also important for repair (maintenance).

Person to perform repair (maintenance)

Repair (maintenance) shall be performed by the maintenance personnel, or consult Kito or your dealer.

Repair (Maintenance) in General

⚠ WARNING

Prohibited

Only the maintenance personnel are allowed to perform repair (maintenance) of the Chain Hoist.

Repair (maintenance) by anyone other than the maintenance personnel may result in death or serious injury.

Prohibited

When replacing parts, only use parts authorized by Kito for use in the CQ Manual Chain Hoist.

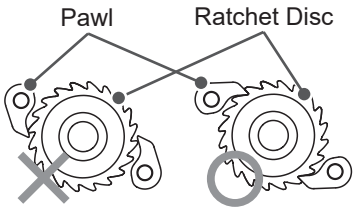
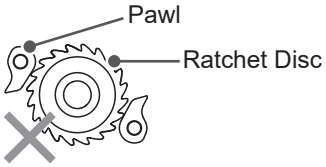
Even if the part is an authorized part for the Kito Chain Hoist, it may not be used for a different model.
Use parts correctly in accordance with the Disassembly/Reassembly Manual. After disassembling/reassembling, perform the operation check described in the Disassembly/Reassembly Manual.
Failure to comply with these instructions may result in death or serious injury.

Troubleshooting

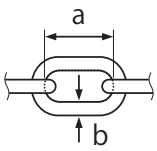
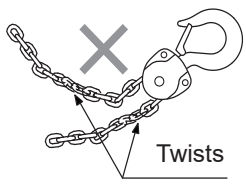
Lifting up failure

Checking sounds from the hoist is a critical inspection point. Usually note the operating sound of the Chain Hoist.

- For lifting, the Chain Hoist makes clicking sounds.
- For lowering, the Chain Hoist does not make clicking sounds.

Symptom		Cause	Action
Cannot lift load	The Pawl sounds weak or irregularly.	• The Pawl is assembled with its wrong side fitting, as shown in the figure.  	Reassemble the Pawl and Ratchet Disc to ensure they engage correctly.
	The Pawl makes no sounds.	• The Pawl is assembled incorrectly and upside down as shown in the figure.  	Reassemble the Pawl in the correct direction.
		• The Pawl and Pawl Shaft are clogged with dust or rust caused by insufficient maintenance, may cause poor contact for the Pawl and Ratchet Disc.	Perform periodic disassembly and inspection to remove dust and rust. Replace if found rusty significantly. Any irregularities such as rust may deteriorate Pawl Spring. Replace if found rusty.
	Cannot operate manually.	• When assembled the Load Chain was twisted or tangled and is caught between the Chain Guide and Load Sheave.	Reassemble the Load Chain correctly, being careful not to assemble it twisted or tangled. (Refer to separate Disassembly/Reassembly Manual.)
	Cannot lift the rated load or less.	• Fault of the Overload Limiter (OLL: a device to prevent an excessive overload) due to frequent lifting of an excessive overload.	Stop using the Chain Hoist. Replace the Hand Wheel Assembly. Lift the rated load or less and avoid frequent use of overload limiter.

(Continued on the following page)

Symptom		Cause	Action
Sometimes fails to lift load	The Pawl sounds weak. The Pawl sounds irregularly.	• The Pawl Spring loses its elasticity, or breaks. • The Pawl does not return to the original position due to accumulated rust (corrosion).	Replace the Pawl Spring. Perform disassembly inspection regularly.
		• Missing Pawl Spring causes poor return. • Poor return of the Pawl due to mis-assembly. (The Pawl Spring is caught between the step of the Pawl Shaft and the Pawl.)	Reassemble the Pawl Spring correctly. When reassembly is completed, be sure to perform an operational test, and check that the Pawl sounds click.
		• Frequently extended use causes the Pawl or Ratchet Disc to wear with poor engagement.	Replace the Pawl Spring, Pawl and Ratchet Disc. Perform disassembly inspection regularly.
	The Hand Chain slips.	• Worn sprocket of the Hand Wheel. • Elongation or wear of the Hand Chain. • Wrong size of the Hand Chain.  Length when purchased (guideline) a: 25 b: 5	Replace the Hand Wheel Assembly. Perform disassembly inspection regularly. Use proper Hand Chain.
	The chain of the Bottom Yoke does not slide smoothly.	• Sand or dust mixed in the Idle Sheave.	Remove sand or dust. Perform disassembly inspection regularly.
Lift load normally but Pawl clicking sounds are weak (with regular clicks).		• Poor or broken Pawl Spring causes insufficient force of the Pawl.	Replace the Pawl Spring. Perform disassembly inspection regularly.
		• Poor return of the Pawl due to mis-assembly. (The Pawl Spring is caught between the step of the Pawl Shaft and the Pawl.)	Reassemble the Pawl Spring correctly. When reassembly is completed, be sure to perform an operational test, and check that the Pawl sounds click.
Heavy pulling force at no load (with occasional squeaking sound).		• Poor gear engagement. • Worn gear tooth flank. • Lack of lubricant caused by a long-term negligent maintenance may result in wear or breakage of each part.	Replace the Gear. Perform disassembly inspection regularly.
Lift load only halfway but not further.		• The Bottom Hook is entangled or twisted with the Load Chain or Hand Chain.	Be sure to check that the Bottom Hook is not entangled or twisted with the Load Chain or Hand Chain.
		• The Overload Limiter (OLL: a device to prevent an excessive overload) is activated due to overload lifting.	Reduce the load to less than the rated load.
		• The Bottom Hook is capsized or the Overload Limiter (OLL: a device to prevent an excessive overload) is activated due to the Bottom Hook being capsized.  	Turn the capsized hook back to normal. If the Load Chain is scratched or deformed, replace the Load Chain. Before using the Chain Hoist, check that the Load Chain is not twisted due to the Bottom Hook being capsized.

Lowering failure

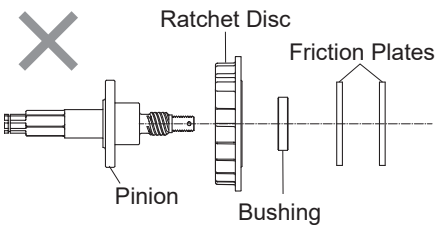
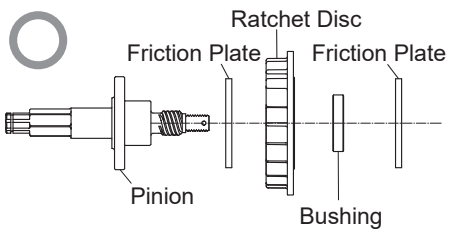
Lowering failure is mainly due to a deficiency of the brake.

⚠ WARNING

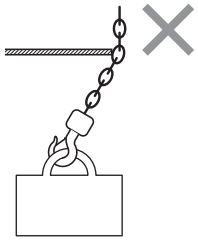
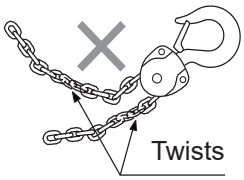
Prohibited

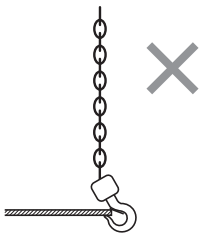
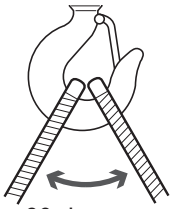
Do not lubricate the Friction Plate.

The Friction Plate is of the dry type. Lubricating the Friction Plate may result in death or serious injury due to insufficient braking.

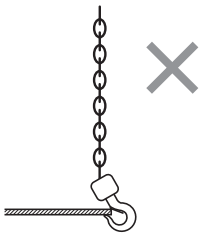
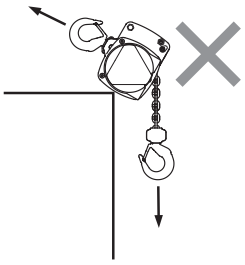
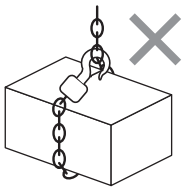
Symptom	Cause	Action
Cannot lower load.	• Leaving the Chain Hoist loaded for a long time or subjecting to mechanical impact during work may lock the brake.	Pull the Hand Chain strongly for lowering for a moment to release the brake.
	• Rust locks the brake.	Replace the rusted part. Perform disassembly inspection regularly.
Hard to lower load.	• The Cam Guide contacts the inner upper right corner of the Hand Wheel.	Reassemble the Cam Guide correctly. (Refer to separate Disassembly/ Reassembly Manual.)
Load falls when lowering starts.	• A foreign object between friction surfaces.	Disassemble the Chain Hoist, remove the object, and then reassemble. Replace the Friction Plate if the friction surfaces are scratched.
	• Brake slip caused by significant rust.	Replace the rusted part. Use the Chain Hoist according to Operating Environmental Conditions in page 12. After use, store the Chain Hoist in accordance with the Maintenance and Storage in page 15.
	• Mis-assembly of the Friction Plate. Friction Plates are set at only one side as shown below, or one Friction Plate is missing.  	Reassemble the Friction Plates correctly as shown below. 
	• The Friction Plate is cracked.	Replace the cracked Friction Plate.
Load drifts.	• Slight dust on the brake surface. • The brake surface has oil such as grease.	Disassemble the Chain Hoist, remove the dust or oil on the brake surface, and then reassemble. Replace the Friction Plate if the brake surface is scratched. Perform disassembly inspection regularly according to the operating environment.
	• Worn Friction Plate.	Replace the worn Friction Plate. Perform disassembly inspection regularly, according to the frequency of operation.

(Continued on the following page)

Symptom	Cause	Action
Worn Load Chain	• Lack of lubricant (frequent extended use). • Attached foreign objects.	Replace the worn Load Chain. Always apply oil to the Load Chain in accordance with pages 6 to 18. Also perform disassembly inspection regularly.
Scarred or deformed Load Chain	• Mis-assembly causes the Load Chain to twist.	Assemble the Load Chain correctly in accordance with the Disassembly/ Reassembly Manual.
	• The Load Chain is entangled with the Hand Chain.	Before use, be sure to check that the Load Chain is not entangled with the Hand Chain.
	• Load Chain is in contact with an obstacle. 	Prevent interference of the Load Chain by other objects. Do not wind the Load Chain around the load.
	• Overload elongates the Load Chain.	Replace the Load Chain. **⚠ WARNING** **Prohibited** **Do not lift the load beyond the rated load.** Failure to comply with this instruction may result in death or serious injury.
	• The Load Chain is deformed due to the Bottom Hook being capsized. 	Replace the Load Chain. Before using the Chain Hoist, check that the Load Chain is not twisted due to the Bottom Hook being capsized.
Rust or corrosion	• Lack of oil. • The use of a Chain Hoist exposed to the rain. • Influenced by seawater, chemicals, etc.	Thorough safety control in accordance with the operating environment. **⚠ CAUTION** **Mandatory** **Remove dirt and water, and apply oil to the neck of the Hook and Load Chains, and then store the Chain Hoist indoors.** Failure to comply with this instruction may result in injury or damage to property.

Symptom	Cause	Action
Broken Load Chain	• May result from combination with the causes described in pages 42 to 43, including impact load. • Welding heat affects strength. • Entangled Load Chain.	**⚠ WARNING** Mandatory **Cutting of the Load Chain may result in severe accidents, including fatalities. Conduct appropriate maintenance, including correct handling, daily check and inspection.**
Stretched Hook	• Overload.	Replace the Hook. **⚠ WARNING** Prohibited **Hook opening indicates overload. Do not lift the load beyond the rated load.** Lifting a load beyond the rated load may result in death or serious injury.
	• Lifting a load at the tip of the Hook. 	Replace the Hook. Lift a load at the center of the Hook.
	• Improper hooking of the sling or the use of a sling of inappropriate size relative to the Hook. • Slinging angle too wide.	Replace the Hook. Use a sling appropriate for the work. The slinging angle should be 60 degrees or less.  60 degrees or less

(Continued on the following page)

Symptom	Cause	Action
Bent hook neck	• Lifting a load at the tip of the Hook.  • Applied force from an oblique direction to the Hook being fixed. 	Replace the Hook. **⚠ WARNING** **Mandatory** **Lift a load at the center of Hook.** Lifting a load at a position other than the center of the hook may cause to break the Hook and result in death or serious injury. Lift a load while the Top and Bottom Hooks are aligned straight with the load direction.
Twisted Hook	• Winding the Load Chain around the load. 	Replace the Hook. Do not wind the Load Chain around the load as a sling.
Detached Hook Latch	• Hook deformed by overload. • Improper sling size to the Hook. • Sling hooked on the Hook Latch.	Replace the Hook. Sling a load correctly.

WARRANTY

Kito Corporation (referred to after as Kito) extends the following warranty to the original purchaser (referred to after as Purchaser) of new products manufactured by Kito (Kito's Products)

Kito warrants that Kito's Products, when shipped, shall be free from defects in workmanship and/or materials under normal use and service and Kito shall, at the election of Kito, repair or replace free of charge any parts or items which are proven to have said defects, provided that all claims for defects under this warranty shall be made in writing immediately upon discovery and, if there is anything within one (1) year from the date of purchase of Kito's Products by Purchaser and provided, further, that defective parts or items shall be kept for examination by Kito or its authorized agents or returned to Kito's factory or authorized service center upon request by Kito.

Kito does not warrant components of products provided by other manufacturers. However, to the extent possible, Kito will assign to Purchaser applicable warranties of such other manufacturers.

Except for the repair or replacement mentioned above which is Kito's sole liability and purchaser's exclusive remedy under this warranty, Kito shall not be responsible for any other claims arising out of the purchase and use of Kito's Products, regardless of whether Purchaser's claims are based on breach of contract tort or other theories, including claims for any damages whether direct, indirect incidental or consequential.
This warranty is conditional upon the installation, maintenance and use of Kito's Products pursuant to the product manuals prepared in accordance with content instructions by Kito. This warranty shall not apply to Kito's Products which have been subject to negligence, misuse, abuse, misapplication or any improper use or combination or improper fittings, alignment or maintenance.

Kito shall not be responsible for any loss or damage caused by transportation, prolonged or improper storage or normal wear and tear of Kito's Products or for loss of operating time.

This warranty shall not apply to Kito's Products which have been fitted with or repaired with parts, components or items not supplied or approved by Kito or which have been modified or altered.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES. EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

CONTENTS OF EC DECLARATION OF CONFORMITY

We, **KITO Corporation**,
2000, Tsuijiarai, Showa-cho,
Nakakoma-gun, Yamanashi, 409-3853, Japan

declare under our sole responsibility that the products:

Hand chain operated chain hoist CQ, model CQ1

in capacity range of 500 kg up to 5 tonnes,

to which this declaration relates is in conformity with the following EC directives and standards.

EC directives:

Machinery Directive	**2006/42/EC**

Harmonized standards:

EN ISO 12100: 2010	**Risk assessment and risk reduction**
EN 13157: 2004 +A1: 2009	**Hand powered cranes**
EN 818-7: 2002 +A1: 2008	**Short link chain for lifting purposes, increased quality, grade VH, with exceptional requirement of '5.3.1.4 Chemical composition', certified by Fachausschuss Metall und Oberflächenbehandlung**

《Memo》

Kito Crosby Germany GmbH
Hansaallee 187, 40549 Düsseldorf, Germany
TEL: +49-(0)211-528009-00
E-mail: cs.germany@kitocrosby.com
Website: kitocrosby.com

Kito corporation
Tokyo Head Office:
SHINJUKU NS Building 9F, 2-4-1, Nishi-Shinjuku, Shinjuku-ku, Tokyo 163-0809, Japan
Website: kitocrosby.com
Head Office & Factory:
2000 Tsuijiarai Showa-Cho, Nakakoma-Gun, Yamanashi 409-3853, Japan
Website: kitocrosby.com