Instruction Manual and Safety Instructions for Owners (Operators)

Chain lever hoist

Elephant lever model YⅡ-25 YA-50

(Automatic free chaining type)

Rated load : 250kg to 0.5t (551 to 1,102lbs)

Model No. :

Serial Number :

Date of initial use :

※The above information needs to be filled in by the purchaser.

⚠ WARNING

Owners (operators) are required to completely understand the installation, operation, maintenance and inspection of the equipment described within this instruction manual prior to use. Failure to understand or comply with the contents of this Manual may result in property damage, serious injury or death.

- Thank you very much for your purchase of Elephant products.
- Before using Elephant lever hoists, please read this instruction manual carefully to ensure that you fully understand the product and its proper use.
- Please store this instruction manual securely as it is required for maintenance, inspection, disassembly and assembly of the product.

ELEPHANT 39 **ELEPHANT CHAIN BLOCK CO.,LTD.**

Index

1. Safety Information and Warnings

1.1 Terminology

This Instruction Manual contains safety information necessary for owners responsible for the installation, operation, maintenance and inspection of this Product, and for operators actually engaged in the operation of the Product. In order to fully comprehend the structure and operation of this Product, please make sure that you understand the contents of this Instruction Manual.

The safety information provided within this Instruction Manual includes circumstances possibly leading to hazardous situations. The four terms "Danger, Warning, Caution, and Notice" are used to clearly indicate the seriousness of hazardous conditions.

⚠ **DANGER**	Danger indicates an imminently hazardous situation which, if not avoided, may result in fatalities or serious injuries.
⚠ **WARNING**	Warning indicates a potentially hazardous situation which, if not avoided, may result in fatalities or serious injuries.
⚠ **CAUTION**	Caution indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injuries.
NOTICE	Notices cover implementation procedures which do not require caution against personal injury.

⚠ DANGER

- Never perform any operation that could result in a [DANGER] condition as described in the Instruction Manual.

⚠ WARNING

- Failure to comprehend and comply with the restrictions described within this Instruction Manual may result in fatalities, severe injuries, or property damage.
- Owners and operators of this Equipment are prohibited from using the Equipment for any purpose other than that for which it was originally intended, or make any modifications that may impair the safety of this Equipment.
- This Equipment must not be used in a corrosive atmosphere such as acidic, alkaline, steam, high temperature, toxic gas, salt water, etc.
- This Equipment must not be used in a condition where it is repeatedly subjected to dynamic loads due to connecting it to other powered cranes or such load application devices.
- This Equipment shall not be used for transporting, supporting, lifting, or lowering people, or for transporting, supporting, lifting, or lowering loads above people. This Equipment is not intended for transporting people in any way.

⚠ CAUTION

- Owners and operators of this Equipment are required to record the model, serial number, and initial date of use on the front cover of this Manual prior to using the Equipment.
- This Manual is intended to provide safety information on installation, operation, maintenance, and inspection of the Equipment under normal operating conditions.
- If this Equipment is used in combination with other equipment, the supplier of the equipment combination concerned is responsible for ensuring compliance with applicable industrial standards, federal, state, and local laws and regulations.
- Repair and maintenance of this Equipment shall be conducted only with parts certified by ELEPHANT CHAIN BLOCK CO., LTD.

NOTICE

- Owners and operators of this Equipment are responsible for ensuring that all personnel engaged in the installation, operation, inspection, test, and servicing of this Equipment sufficiently comprehend the contents of this Manual, the applicable portions of ANSI/ASME B30.21 "Lever Hoists" standards, and OSHA regulations.
- Owners and operators are responsible for the installation, operation, inspection, testing, and maintenance of this Equipment in accordance with the provisions of the ANSI/ASME B 30.21 "Lever Hoists" standards and applicable OSHA regulations.
- Owners and operators should contact the dealer of this Equipment if any item in this Manual is unclear, or in case any additional information is necessary. Do not install, operate, inspect, test, or maintain this Equipment unless all uncertain articles are clarified accordingly.
- Designate a periodic inspection schedule for this Equipment in accordance with the requirements of ANSI/ASME B30.21 "Lever Hoists," maintaining records of the inspections conducted.

1.2 Restrictions on the use of this Equipment are as follows :

(1) This Equipment is to be used to pull or lift loads in horizontal or diagonal directions, or to tighten loads.

(2) Do not use this Equipment to transport humans.

(3) Do not incorporate the Product as part of facility equipment or machinery.

(4) The Equipment is to be used within a temperature range of −40°C to +60°C (with humidity of 100%RH or less).

(5) Never use this Equipment in locations constantly subjected to wind, rain, or waves, or in locations susceptible to salt damage, acid, alkali, etc., as this may cause damage to the Equipment and load chains.

1.3 Warning Tags, Labels

The warning tag indicated in Figure 1 below is attached to this Equipment upon shipment from the factory. Owners and operators of this Equipment are required to comprehend and comply with all articles provided on warning tags and labels.

If tags are not attached on the no-load side of the load chain of the Equipment, procure tags from your dealer and attach them accordingly. Read and follow all warnings attached to this Equipment. (Tag is not shown actual size.)

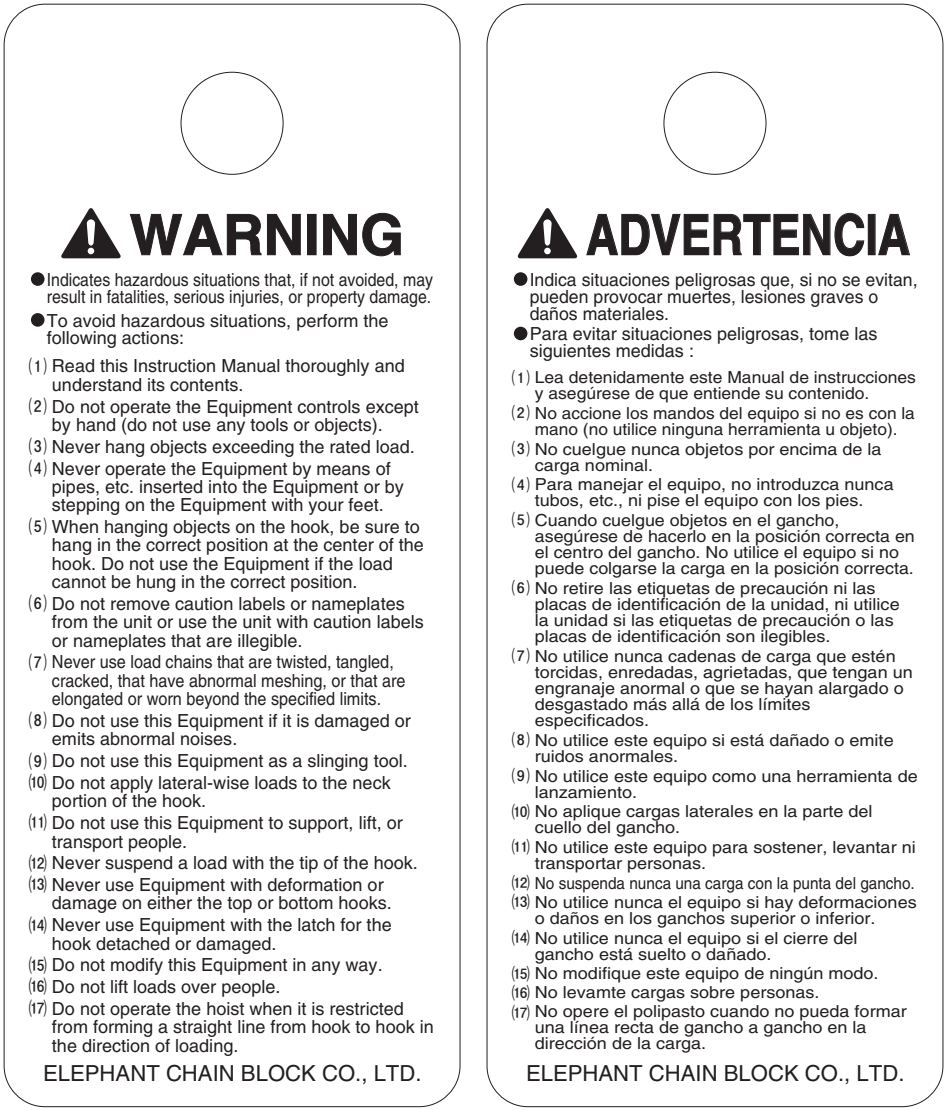


Figure 1

2. Regarding the personnel operating and using lever hoists

2.1 Names of Parts

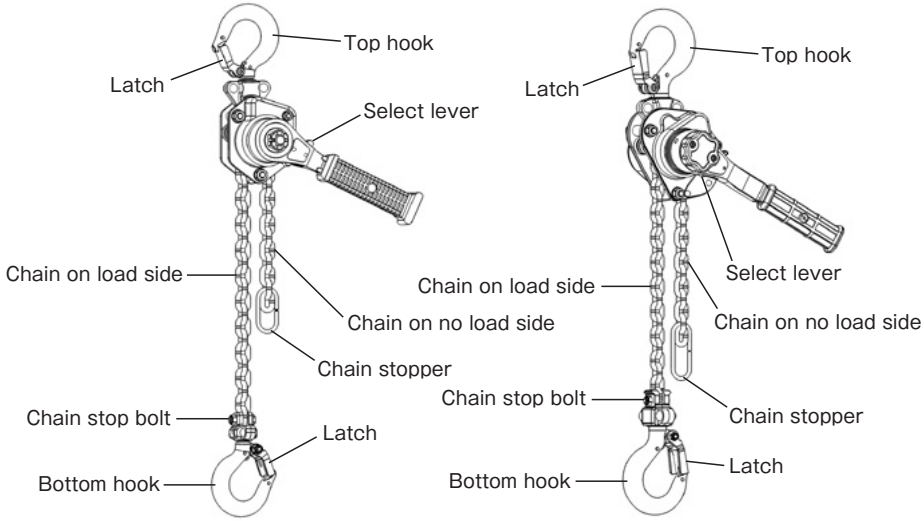
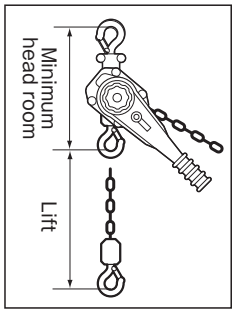


Figure 2

Minimum head room and lift



2.2 Unpacking the Product

(1)Check that the box labeling and product matches your order.
(2)Please confirm the contents of the container.
(3)Make sure the product has not been damaged during transportation.
(4)Check that no accessories are missing or disengaged.
(5)Check the integrity and condition of screws, fittings, etc. for all components.

2.3 Specifications Table

Table 1 Specifications

Model	Rated load	Lift	Load chain		Minimum head room	Hand force	Self-weight
			Diameter	Number of chain falls			
YⅡ−25	250kg	5ft	4.3mm	1	235mm	294N	2.2kg
	551lbs		0.16in		9.25in	30kgf	4.85lbs
YA−50	0.5t	5ft	4.3mm	1	240mm	363N	3.0kg
	1,102lbs		0.16in		9.44in	37kgf	6.61lbs

2.3.1 YⅡ-25 · YA-50 Dimensions

YⅡ－25

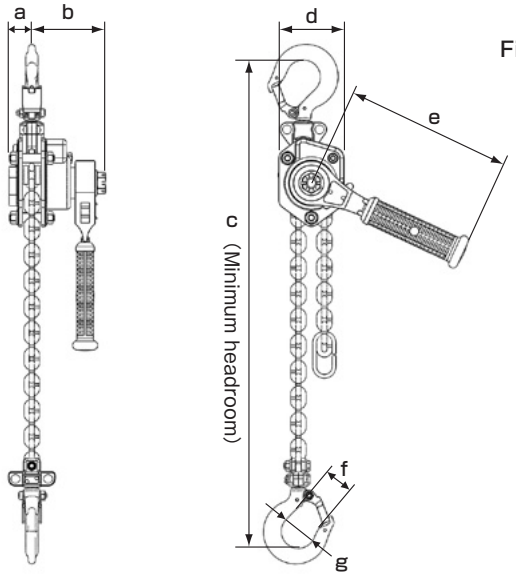


Figure 3

YA－50

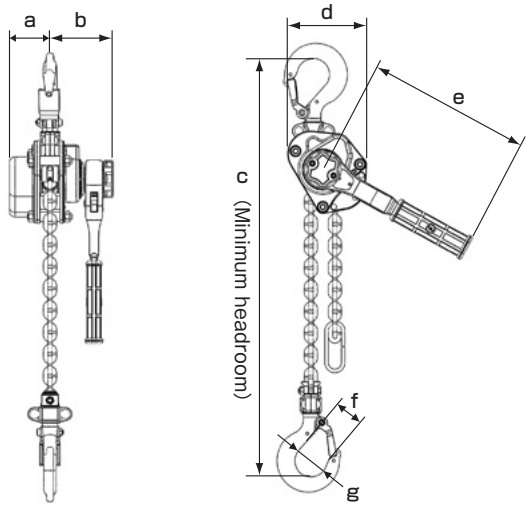


Table 2

Model	Rated load	a	b	c	d	e	f	g
YⅡ－25	250kg	21mm	70mm	235mm	60mm	155mm	20mm	31mm
	551lbs	0.82in	2.75in	9.25in	2.36in	6.10in	0.78in	1.22in
YA－50	0.5t	44mm	69mm	240mm	92mm	180mm	24mm	36mm
	1,102lbs	1.73in	2.71in	9.44in	3.82in	7.08in	0.94in	1.41in

2.3.2 YⅡ-25・YA-50 Hook Dimensions

(1)Measure dimensions A, B, and C in Figure 4 below, and record the actual measurements at the time of purchase. Although limit dimensions may also be determined based on the reference standard values, it should be noted that there will be some dimensional errors due to the forging process.

(2) If any of dimensions A, B, and C have reached the indicated limits, replace the hook with a new one.

(3)The opening of the hook will expand in the event loads exceeding the rated load are applied to the mouth, or if a concentrated load is applied to the tip section.

(4)Hooks with expanded openings lose their original strength and shock-absorbing capabilities, and should be replaced upon exceeding the limit.

(5)Never reuse hooks with expanded openings straightened by heating or repairing. Such attempts could cause extremely hazardous results. Hooks with flaws 1 mm or more deep or bent/twisted hooks should also be replaced.

Table 3

Model	Rated load	A	B	C
YⅡ−25	250kg	40.5mm	14mm	11mm
	551lbs	1.59in	0.55in	0.43in
YA−50	0.5t	44.7mm	16mm	13mm
	1,102lbs	1.75in	0.62in	0.51in

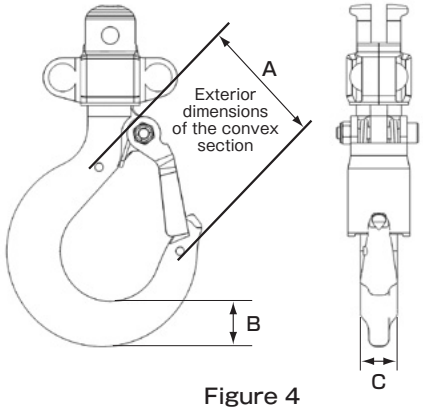


Figure 4

※Dimensions of the top and bottom hooks are the same.

Purchased Product			
Model	A	B	C

※Record actual measurement value at the time of purchase.

3. Pre-Operational Procedures

3.1 Chain

⚠ WARNING

(1)Make sure the chain stopper is attached to the second-to-last chain link on the no-load side of the load chain.

3.2 Lever Hoist Installation

⚠ WARNING

(1)Never install lever hoists without sufficient expertise in the equipment.

(2)Make sure the location of equipment installation has sufficient strength to support the equipment under load.

(3)When suspending a load from the hook, be sure to hang it in the correct position at the center of the hook.

(4)Never suspend loads from the tip of a hook.

(5)Never use the hoist with the hook working as a fulcrum (the suspended hook is shifted from its vertical position).

⚠ CAUTION

※Do not attach hooks in the manner illustrated in the figure below (both up and down) as it is dangerous.

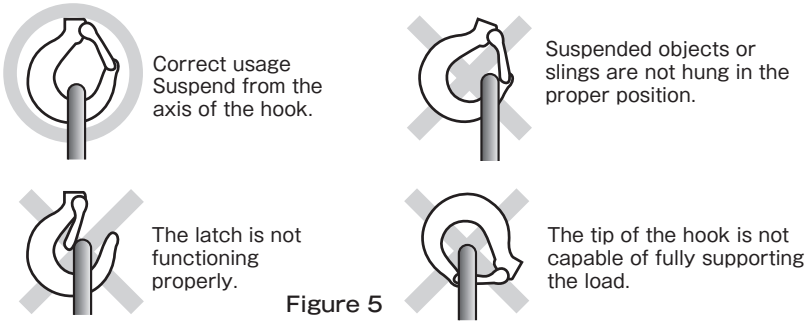


Figure 5

NOTICE

(1)When installing the hoist outdoors, lubricate the load chain. After use, clean the lever, apply lubricant, and store in a dry place.

3.3 Pre-Operational Inspection and Test Run

⚠ WARNING

(1)Before use, check the chain sling, wire rope, sling and all other hoisting equipment for appropriate rated load. Inspect all equipment for damage, replace it as needed with new equipment, or have it repaired before use.

(2)Before operating this equipment, check the entire length of the chain and straighten any twists.

(3)Measure the dimensions of the top and bottom hooks at the time of purchase, and record the actual measurements.

(4)Make sure the model, serial number, and initial date of use for this equipment is recorded accordingly at the time of purchase.

(5)Make sure the location of equipment installation has sufficient strength to support the equipment under load

3.3 Pre-Operational Inspection and Test Run (continued)

⚠ WARNING

(6)Make sure the equipment has been installed correctly.

(7)Make sure all nuts, bolts, and cotter pin are sufficiently secured in position.

(8)Understand the work to be done with the equipment and operate accordingly.

(9)Users are required to ensure this equipment has been safely installed and operated in accordance with the applicable provisions of ANSI/ASME B30.21 "Lever Hoists" standard and OSHA regulations, and that the maintenance and inspection requirements have been met.

(10)Before operating this equipment, make sure no interfering objects are present within its entire range of operation.

4. Precautions for Use

4.1 General Handling

⚠ DANGER

(1)Individuals unfamiliar with the contents of the instruction manual and caution nameplate must not operate this product.

(2)Do not use this product to support, lift, or transport people.

(3)Do not allow anyone to enter the area underneath or within the movement range of suspended loads.

Additionally, do not move the load above anyone. (Figure 6)

(4)Use this product within a temperature range of −40℃ to +60℃ (with humidity of less than 100%RH) .

(5)Do not use this product in water.

(6)Never use this equipment in locations constantly subjected to wind, rain, or waves, or in locations susceptible to salt damage, acid, alkali, etc., as this could cause damage to the equipment and load chains.

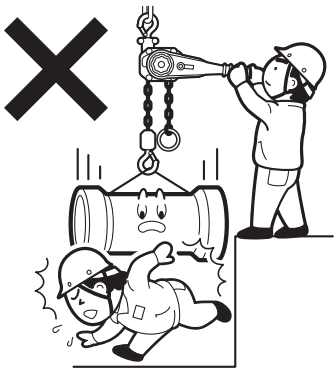


Figure 6

⚠ WARNING

(1)Only operators who have thoroughly read and fully understand the contents of this instruction manual should carry out work related to inspection and repair of the equipment. It is also necessary to understand the ANSI / ASME B30.21 and ANSI / ASME B30.10 and related standards of ANSI / ASME. Use of this product without thorough understanding of all relevant information is strictly prohibited.

(2)Those without an accurate understanding of its controls are not to operate this equipment.

(3)Those without an understanding of the proper operating procedures for attaching loads to the top and bottom hooks are not to use this equipment.

⚠ WARNING

(4)Operator are required to understand the adjustment, failure, and repair of this equipment. Operators unable to stop operation and take corrective action in the event of a malfunction are not to use this equipment.

(5)Operators should be attentive of potential malfunctions of the equipment which may require adjustment or repair, and must stop operation and contact a supervisor immediately in the event such a malfunction occurs.

(6)Individuals with restrictions in eyesight, field of vision, reaction time, or manual dexterity are not to operate this equipment.

(7)Individuals without sufficient bodily control, those with physical deficiencies, are emotionally unstable, have a history of seizures, are prone to seizures, or are otherwise likely to operate the equipment in a manner potentially hazardous to the operator or others are not to operate this equipment.

(8)Operator under the influence of drugs, medical drugs, or alcohol are not to operate this equipment.

NOTICE

Understanding of the hazard tags/labels and nameplate (tonnage) attached to the unit is required.

※From the provisions of the ANSI/ASME B30 standard:

●Engineering functions of this equipment alone cannot mitigate all hazards, which include hazards that can be mitigated by the operator's knowledge, experience, caution, and common sense. In order to enhance awareness of the above, fully understand the contents of this instruction manual and use the equipment safely.

4.2 Precautions before Operation

⚠ WARNING

(1)Never suspend loads exceeding the rated load. (Figure 7)

(2)Do not use this equipment if it is damaged or emits abnormal noises.

(3)Never use load chains that are twisted, tangled, cracked, have abnormal meshing, or are elongated or worn beyond specified limits.

(4)Do not intrude into the area beneath the load or within the moving range of the load.

Additionally, do not move the load above anyone.

(5)Never operate the hoist in such a manner as to let the load drop even a slight distance.

(6)Never cut, splice, or weld the load chain.

(7)Do not operate the lever hoist if the load cannot be suspended from the center portion of the hook.

(8)Do not use this equipment as a sling suspension device. Also, do not use with the load chain wrapped around the load.

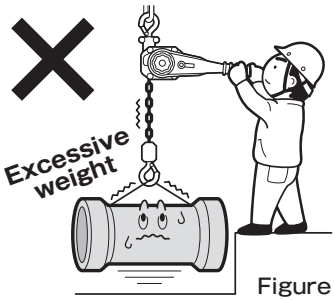


Figure 7

⚠ WARNING

(9)Never operate equipment by means of pipes, etc. inserted into the Equipment or by stepping on the Equipment with your feet. (Figure 8)

(10)Never apply loads exceeding the rated load on a single unit of this equipment when performing two-hoist lifting. (Figure 9)

(11)Never over-wind or over-lower loads.

(12)Never suspend a load with the tip portion of the hook. (Figure 10)

(13)When suspending loads from the hook, never operate the hook in such a way that a lateral load is applied to either the top or bottom hooks.

(14)Do not leave the load suspended for a long time.

(15)Do not connect the grounding from welding machines to the load chain. (Figure 11)

(16)Never allow welding electrodes to come in contact with the load chain.

(17)Do not remove caution labels or nameplates from the unit or use the unit with caution labels or nameplates in an illegible condition.

(18)Do not use the product if the nameplate affixed to the main unit is illegible.

(19)Make sure that all personnel are clear of the support load.

(20)Do not allow sparks from welding, etc. into come in contact with this equipment.

(21)When lifting or moving a load, notify surrounding workers.

(22)Never install this equipment without sufficient expertise in the equipment.

(23)Make sure the location of equipment installation maintains sufficient strength to support the equipment under load.

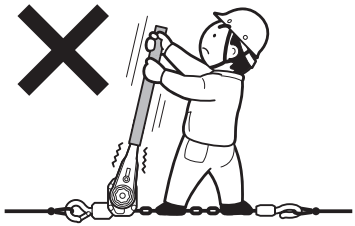


Figure 8

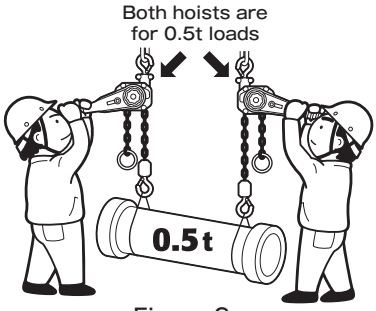


Figure 9

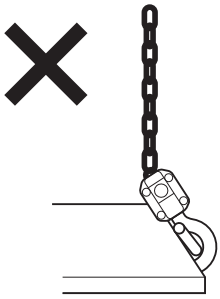


Figure 10

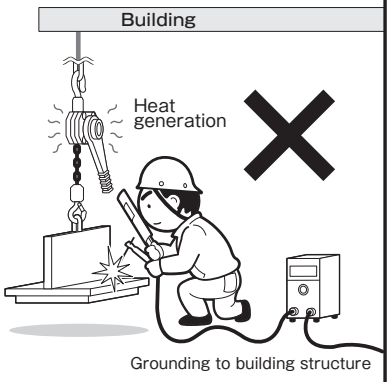


Figure 11

⚠ WARNING

⑵④Do not allow anyone to ride on suspended loads. Never use the lever hoist for human transport purposes. (Figure 12)

⑵⑤Never reverse a suspended load without sufficient expertise in doing so.

⑵⑥Do not suspend excessive loads.

⑵⑦When maintaining the load in a suspended condition for a short period of time, be sure to leave the switch pawls in the lifting position.

⑵⑧Never use the hoist or the hook to work as a fulcrum.

⑵⑨Do not use damaged or deformed top/bottom hooks.

⑶⓪Never use this equipment if the load chain is deformed or damaged.

⑶①Do not operate the equipment with the load chain lodged against a steel plate or other corners. (Figure 13)

⑶②Do not operate the load chain by any means other than human power (do not use any tools or objects on the controls).

⑶③Do not apply abrupt force to the load chain during idle operation.

⑶④Suspend slings properly onto the hook.

⑶⑤During lifting, temporarily pause winding once either the load chain or sling comes under tension.

⑶⑥Keep the lever hoist unit and load chain clean and free of sand and other debris.

⑶⑦Make sure the lifting height is sufficient for the intended work.

⑶⑧Make sure the load chain is sufficiently lubricated.

⑶⑨Do not modify this equipment in any way.

⑷⓪Do not use with the load chain wrapped around the load. (Figure 14)

⑷①Do not suspend the load chain directly from rope hook fixtures on trucks. Do not use the load chain as a suspension device. (Figure 15)

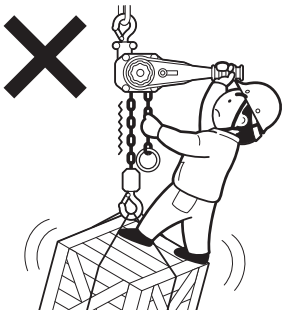


Figure 12

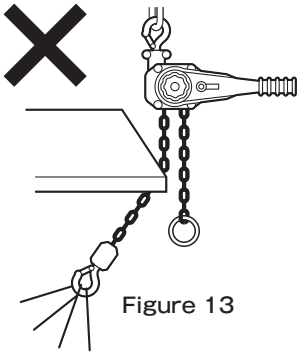


Figure 13

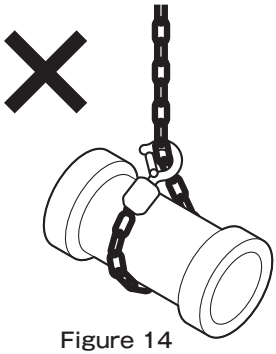


Figure 14

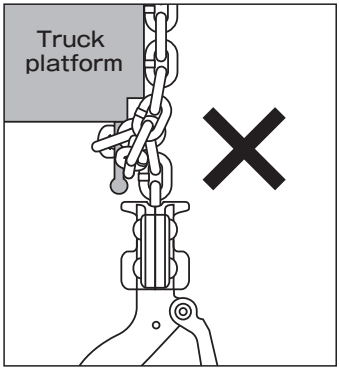


Figure 15

⚠ WARNING

(42)Do not hang hooks onto the rope hook fixtures of trucks in a manner subjecting the neck portion of hooks to strain when tying down the cargo (could result in neck breakage).

(Do not use hooks in a manner that it is subjected to lateral bending forces.) (Figure 16)

Instead, hook wire slings onto the rope hook fixtures first, and then tie down the cargo.

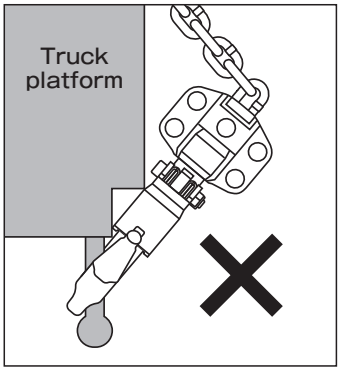


Figure 16

⚠ CAUTION

(1)When operating this equipment, be sure to maintain a firm foothold, and otherwise ensure safe working conditions (for performance of operations).

(2)Always check the brake function before using this equipment.

(3)Make sure the latch for the hook is properly attached. The latch helps prevent slings, chain slings, and other slinging tools and loads from being released.

(4)Make sure all obstacles are removed from the vicinity of the load.

(5)Avoid shaking either the load or the hook.

(6)Make sure the hook is moving in the predetermined direction.

(7)Inspect this equipment periodically and replace any damaged or worn parts. Maintain records of the inspections.

(8)Never use other than genuine parts from the manufacturer of this equipment.

(9)Do not become distracted from the load during operation.

(10)Repairs of the equipment must only be done by qualified service technicians.

(11)After finishing operation of the hoist, wipe off any mud, water, and foreign matter, and apply lubrication to the chain and hook.

(12)Never apply lubricants to the brake parts.

(13)Store the equipment in a dry location, protected from rain and dew.

(14)Always loosen the brake for storage, and never store the equipment with the brake in a tightened condition.

※If the hoist is stored with the brake tightened, it will not be able to perform lowering operations the next time it is used.

In this case, perform a lowering operation once to disengage the brake.

(15)When disposing of this equipment, disassemble it to prevent its reuse by others.

5. Lever Hoist Operation

5.1 About free chaining operation

Lever hoist type YⅡ-25 / YA-50 in the no-load state, enables free chaining operation by operating the select lever.

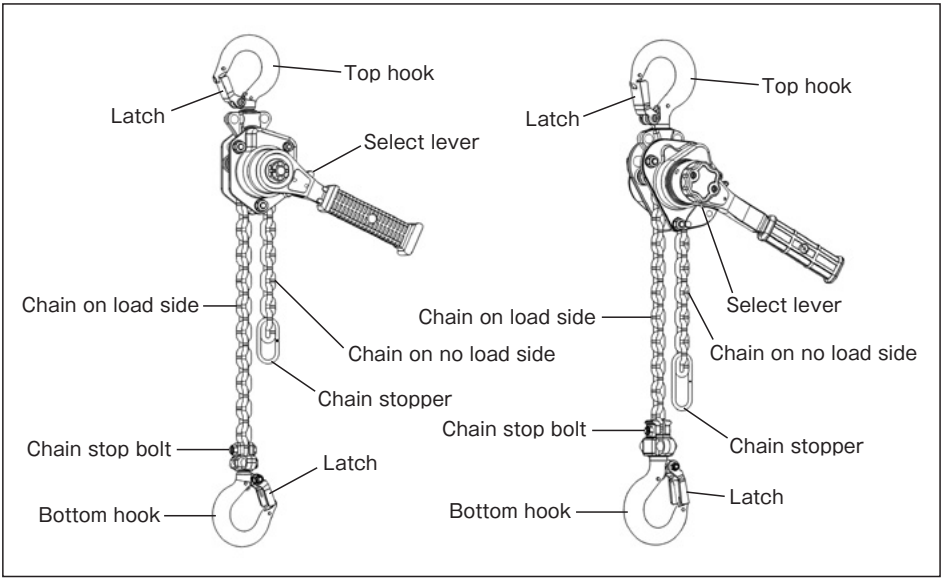
※Free chaining operation is a state in which the load chain can be moved by releasing the brake when there is no load.

5.2 How to adjust the length of the load chain

⚠ DANGER
(1)Never select the free chaining operation while the load chain is under load. Always select it when there is no load.
⚠ WARNING
(1)Make sure that the select lever is set to the N position.

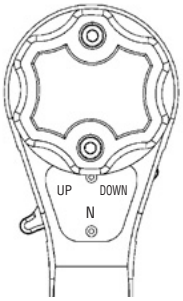
To adjust the length of the load chain when no load is applied to the load chain, perform the free chaining operation in the order shown in the figure below.

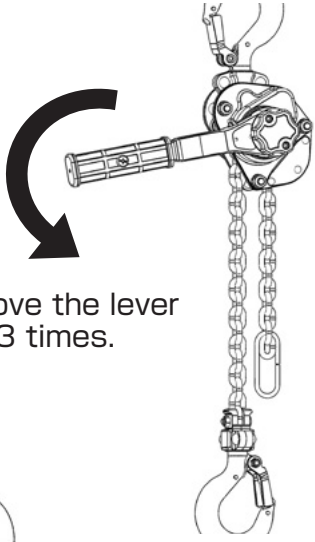
※Below explanation is for YA-50. The operation method is the same for YⅡ-25 and YA-50.



Operating procedure

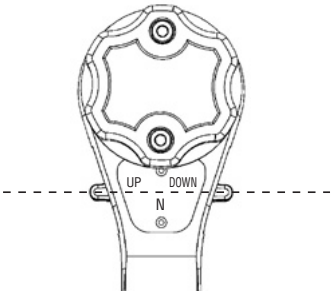
①Move the select lever to the “DOWN” position.

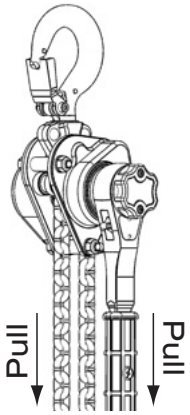




②Move the lever 2-3 times.

③Set the select lever to “N”





④Slowly pull the load chain to the desired position.

(If the load chain on the hook side is pulled strongly, the brake will be applied, The load chain will be fixed.)

※If the brake is engaged and the chain is fixed, move the select lever to (UP or DOWN) and rotate the lever to adjust the length of chain.

NOTICE

(1)Do not pull the load chain strongly during free chaining operation.

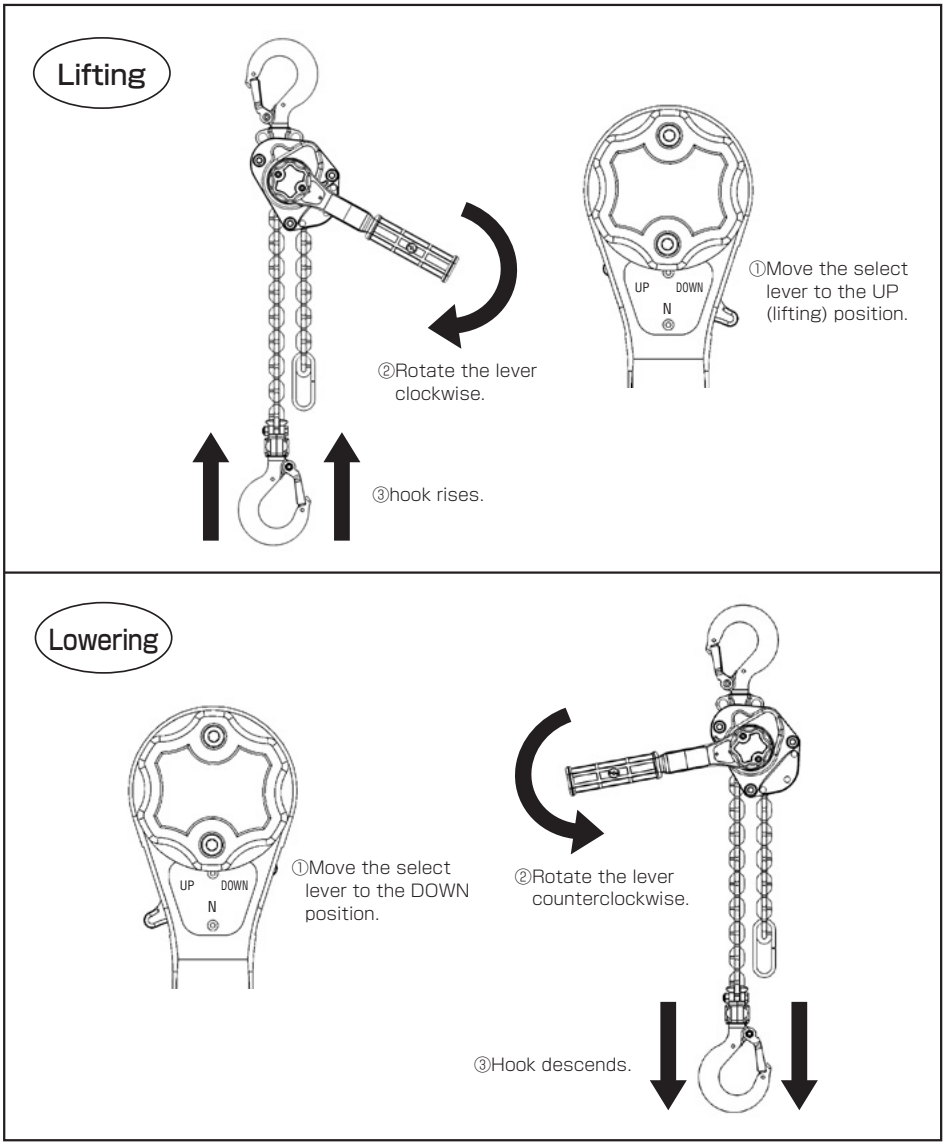
(2)When the load chain is pulled strongly, the brake is applied and the load chain is fixed,

5.3 Lifting/Lowering Operation

(1)Adjust the position of the lower hook and the length of the load chain with the free chaining operation.
(2)Suspend the load on the bottom hook.
(3)Set the select lever to (UP) and apply load by operating the lever.
(4)Move the lever clockwise to wind up the load chain and bottom hook.
(5)Set the select lever to (DOWN) and rotate the lever counterclockwise to lower the load chain and bottom hook.
(6)If the lever operation is heavy when lowering, apply a little more force to the lever.
(7)To stop operation with the hoist under a load, set the select lever to the (UP) position.
(8)If the load chain does not move when the lever hoist is operated with no load or light load, the brake is released. In this case, operate while lightly pulling the load chain on the load side.(This is not a malfunction)

(9)Even if it is in free chaining state, if a load is applied to the bottom hook, the brake will be activated instantly.
(10)When lifting, the load is always fixed by the pawls of the mechanical brake.
(11)When lowering the load, the lever is operated to loosen the mechanical brake and the load is lowered.
When the lowering operation is stopped, the mechanical brake is instantly tightened and the brake is applied.

Operating procedure



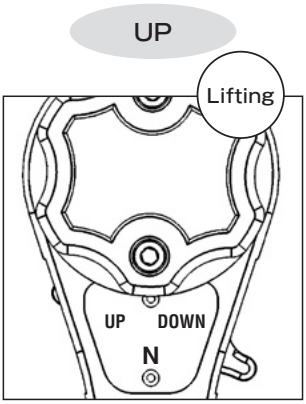


Figure 17

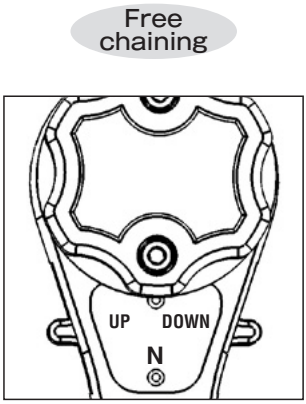


Figure 18

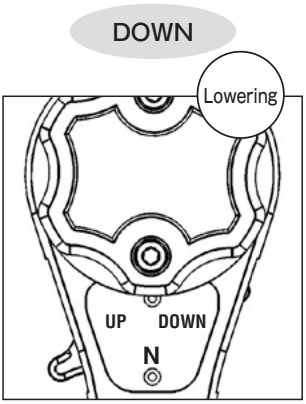


Figure 19

⚠ WARNING

(1)Make sure that the location where the top hook is hung to install this device has sufficient strength.
(2)When lifting one load with two units of this equipment, select equipment of which rated load that can lift the load with one unit of this equipment.
(3)Never wind up or wind down excessively.
(4)Inspect the lifting components for any abnormalities before use.
Choose a method that does not overload the lifting components.

NOTICE

(1)Before operating the lever, make sure that the lever hoists is not in free chaining state and that the position of the select lever is correct.
(2)When lowering a light load, if the load chain does not lower, lightly pull the chain on the load side to operate.

6. Inspection of lever hoists

6.1 Definition

This inspection procedure is compliant with the provisions of the ANSI / ASMEB30.21 standard.
The following word definitions, considered important, are from ANSI / ASME B30.21 and are relevant to the following inspection procedures:
Inspection criteria reflecting dimensional and geometrical characteristics are provided separately.

●**Normal Service**
Form of maintenance to be performed on equipment operated with randomly distributed loads within the rated load range and uniform loads of less than 65% of the rated load for 15% or less of the overall usage time.

●**Heavy Service**
Form of maintenance to be normally performed on equipment used under static loads exceeding the level of normal service.

●**Severe Service**
Form of maintenance to be performed on equipment subjected to operations exceeding the level of normal or heavy services and exhibiting abnormal behavior.

●**Personnel Competence**
Personnel performing duties identified within this document shall meet the applicable qualification criteria described in this document.
Additionally, those personnel are required to acquire abilities to perform the duties of the position as determined by the employer or the employer's representative and, where appropriate, to ensure competency based on education, training, experience, skills, and physical fitness.

●**Qualified Person**
To be in possession of a recognized degree or have certificate of professional standing in the applicable field, or extensive knowledge, training, and experience making one competent to solve job-related problems.

6.2 General

(a)All inspections are to be performed by designated personnel in accordance with the recommendations of the manufacturer and the requirements of this document. Defects identified shall be investigated and determined by qualified personnel as to whether they constitute a hazard and whether or not more detailed inspection or disassembly is required.

(b)Inspection frequency

Inspection intervals shall be determined by a qualified person based on the intended operating conditions and the impact of such conditions on critical hoist components.

6.3 Inspection Category

(a)**Initial inspection:** Hoists to be used for the first time and hoists experiencing repairs and components exchange shall be inspected in accordance with the **routine inspection requirements of Section 6.5**.

(b)**Pre-use inspection:** A visual pre-use inspection, for which no records are required, shall be performed at the beginning of each operation.

(c)**Normal inspection:** A visual inspection for which no records are required.
(1)Normal service: Monthly basis
(2)Heavy service: Weekly to monthly basis
(3)Severe service: Daily to weekly basis

(d)**Routine Inspection:** A documented visual inspection to provide the basis for ongoing evaluation. Coded markings inscribed on the exterior of hoists are acceptable identification in lieu of a record.
(1)Normal service: Annual basis
(2)Heavy Service: Semi-annual basis
(3)Severe service: Quarterly basis

(e)Hoists not in use on a **regular** basis

(1)Hoists unused for a duration of one month or more but less than one year shall be inspected in accordance with the provisions of **Section 6.5** prior to use.

(2)Hoists unused for a duration of one year or more shall be inspected in accordance with the provisions of **Section 6.6** prior to use.

6.4 Pre-use inspections

Minimum inspection requirements include the following items:

(a)Proper operability and appropriate adjustment of the operating mechanism, and any abnormal noise emission.

(b)Routine inspection of hooks in accordance with **ASME B30.10.** (item numbers 10-1.10.3 and 10-2.10.3)

(c)Application of load to the load chain without overall damage. Inspection items (refer to **Section 6.7.**)

(d)Load sheaves, idle wheels

(e)Proper installation of load chain terminal anchorage.

(f)Deformation, cracks, and/or other damage to the hoist unit and levers.

(g)Evidence of damage to the support structure

6.5 Normal inspection

Minimum inspection requirements include the following items:

(a)Proper operability and appropriate adjustment of the operating mechanism, and any abnormal noise emission.

(b)Routine inspection of hooks in accordance with **ASME B30.10.** (item numbers 10-1.10.3 and 10-2.10.3)

(c)Application of load to the load chain without overall damage. Inspection items (refer to **Section 6.7.**)

(d)Load sheaves, idle wheels

(e)Proper installation of load chain terminal anchorage.

(f)Deformation, cracks, and/or other damage to the hoist unit and levers.

(g)Evidence of damage to the support structure

6.6 Routine Inspection

(a)Routine inspections can be performed at the location of usage, and disassembly of the hoist is not necessary.

(b)Covers and other parts of the structure may be released or removed for inspection, but the covers must be closed or replaced before the hoist is restored to its normal state.

(c)Minimum inspection requirements include the following items:

(1)Items listed in section **6.5**

(2)Routine inspection of hooks, including latches, in accordance with ASME B30.10 Hooks (items 10-1.10.4 and 10-2.10.4)

(3)Inspection for loose fasteners including rivets and bolts.

(4)Inspection for wear, corrosion, cracks, and distortion of structural parts.

(5)Damage and wear of load sheaves, idle wheels, etc.

(6)Inspection for traces of worn or oil-contaminated friction discs, worn pawls and ratchet wheels, corroded, stretched or broken pawl springs due to the structure of the friction brake.

(7)Inspection for damage to the support structure.

(8)One or more labels as required under provision ASME B30.21 21-1.1.4 to be intact and clearly visible.

(9)Inspection for deterioration, corrosion, cracks, damage, and deformation of load chain terminal anchorage.

(10)Inspection for missing hoist mounts and hoist fitting mounts.

6.7 Load Chain Inspection

(a)Load chains should initially be inspected with the hoist suspended in a vertical position and subjected to a load of approximately 50 pounds (23 kg), with the chain integrated into the hoist.

(1)With the designated load applied, operate the hoist in both lifting and lowering directions, confirming that the load chains and load sheaves operate to feed the chain smoothly out of the load sheave.

(2)If the load chain is tangled, jumpy, or noisy, confirm that the load chain is clean and properly lubricated. If the problem persists, inspect the load chain and mating parts for wear, warping, or other damage.

(b)Load chains are to be inspected over their entire length for overall damage that may be directly hazardous, such as:

(1)Visual inspection for melt damage, weld spatter, corrosion, and deformed links.

(2)Verify the smooth feed of load chains back and forth against the sprocket wheels during the lifting and lowering operation under load.

(3)Loosen the load chain and move adjacent links to one side, inspecting the contact points for wear.

When wear is evident or if elongation deformation is suspected, dimensional measurement of the chain should be performed.

Refer to the section on inspection and inspection contents and standard dimensions of load chains concerning the dimensional measurement of load chains.

6.8 Operational Tests

Newly manufactured hoists are tested by the manufacturer.

All hoists experiencing modifications or repairs, as well as previously used hoists that have not been operated within 12 months, are to be tested by, or under the direction of designated personnel, to ensure compliance with the requirements of this instruction manual.

(a)All functions of the hoist are to be confirmed with the hoist suspended under no load. (Some hoists require the application of their rated load or manual pulling on the hook to test the lowering action.)

(b)After the no-load test, 100 pounds (46kg) per load chain should be loaded to confirm the braking control capability.

6.9 Load Tests

(a)New hoists are tested by the manufacturer with a test load of at least 125% of the rated load.

(b)Hoists experiencing modifications, replacements or repairs to load-bearing components are to be statically or dynamically load tested.

(1)The need for load testing of the hoist is to be determined by qualified persons.

(2)A written report of the test must be prepared and kept on file.

(3)The test load must not exceed 100% of the rated load of the hoist, or 125% of the rated load of the hoist.

(4)Load chain replacement is specifically excluded from this load test. However, hoist operation testing is to be conducted in accordance with the provisions of Section **6.8**.

(c)The test location and hoisting method needs to be approved by a qualified person.

6.10 Inspection, Testing Methods and Reference Values

Inspection/testing method and standard values are as follows:

※Some of part names and part numbers listed below differ depending on YII-25 or YA-50. Therefore, YII-25 or YA-50 is stated under some of part names and part numbers in the inspection item (part name). If the items have no statement of YII-25 or YA-50, they are common part names and part numbers. (Note: It does not mean a common part.) ※Although details of inspection and limit dimensions are specified for respective parts, users should determine the frequency of use and duration of service individually, replacing the necessary parts with new parts or new products in order to prevent accidents and enhance the operational safety factor. ※Please note, some of the parts are forged and may have slight dimensional errors. The following dimensions are limit values based on reference standard values.

Inspection item (part name) part number	Method	Inspection/test details/standard values	Measures
Top hook set (No.1) Bottom hook set (No.7)	Visual inspection, measurement	Inspect opening of the hook, hook thickness and wear in vertical/horizontal dimensions Inspect diameter of the top hook pin-hole for elongation Inspect the hook for bends, twists, damage, etc. and smooth hook rotation Dimensions are not to exceed the reference standard values.	Replace with a new part.

Table 4

Rated load	Position	Reference standard values	Limit Value ("A" dimension should not exceed actual measured value at the time of purchase)
250kg 551lbs	A : Between punches	40.5mm 1.59in	Not to exceed dimension A
	B : Hook thickness, vertical	14.0mm 0.55in	13.3mm 0.52in
	C : Hook thickness, horizontal	11.0mm 0.43in	10.4mm 0.40in
	D : Hole diameter, top hook pin	8.0mm 0.31in	8.4mm 0.33in
0.5t 1102lbs	A : Between punches	44.7mm 1.75in	Not to exceed dimension A
	B : Hook thickness, vertical	16.0mm 0.62in	15.2mm 0.59in
	C : Hook thickness, horizontal	13.0mm 0.51in	12.3mm 0.48in
	D : Hole diameter, top hook pin	10.5mm 0.41in	11.0mm 0.43in
250kg 551lbs	A : Between punches	40.5mm 1.59in	Not to exceed dimension A
	B : Hook thickness, vertical	14.0mm 0.55in	13.3mm 0.52in
	C : Hook thickness, horizontal	11.0mm 0.43in	10.4mm 0.40in
	E : Chain stop bolt hole diameter	6.2mm 0.24in	6.7mm 0.25in
0.5t 1102lbs	A : Between punches	44.7mm 1.75in	Not to exceed dimension A
	B : Hook thickness, vertical	16.0mm 0.62in	33.2mm 1.30in
	C : Hook thickness, horizontal	13.0mm 0.51in	26.6mm 1.04in
	E : Chain stop bolt hole diameter	6.2mm 0.24in	6.7mm 0.25in

Dimension A is not to exceed dimension A value.
Actual measured values of dimensions B, C, and D are not to indicate wear of 5% or more.
Dimension E is not to indicate wear of 0.5mm(0.01in) or more in relation to the above reference standard value.

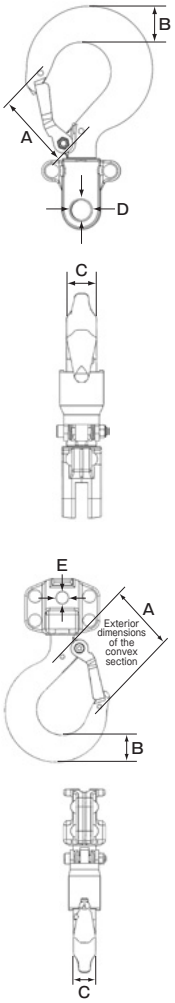


Figure 20

Inspection item (part name) part number	Method	Inspection/test details/standard values	Measures
Safety latch set (No.2)	Visual inspection, measurement	Confirm engagement with the hook, the repulsive force of the spring, and if there is any damage or deformation.	Replace with a new part.

Table 5

Rated load	Engraving	Dimension A	Dimension B
250kg 551lbs	H－1	35.0mm	17.2mm
		1.37in	0.67in
0.5t 1102lbs	C－3	45.0mm	22.0mm
		1.77in	0.86in

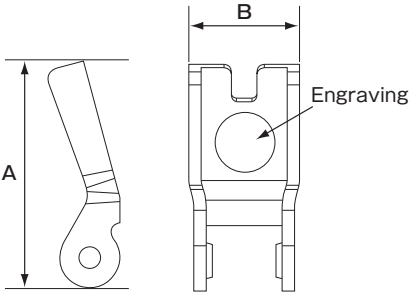


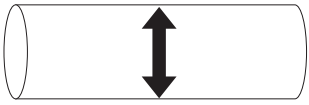
Figure 21

Top hook pin (No.6)	Visual inspection, measurement	Inspect for pin diameter wear.	Replace with a new part.

Table 6

Rated load	Dimension A reference standard value	Limit value
250kg 551lbs	7.5mm	7.1mm
	0.29in	0.27in
0.5t 1102lbs	10.0mm	9.5m
	0.39in	0.37in

Not to indicate wear of 5% or more in relation to above dimensional value.



Dimension A

Figure 22

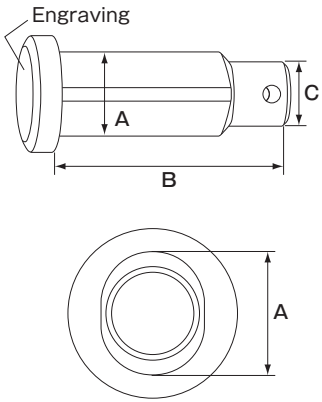
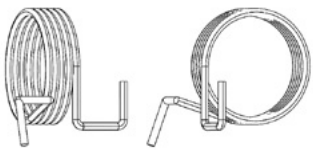
<table>
<tr><th>Inspection item
(part name)
part number</th><th>Method</th><th>Inspection/test details/standard values</th><th>Measures</th></tr>
<tr><td>Chain stop bolt set
(No.8)</td><td>Visual
inspection,
measurement</td><td>Inspect for wear of the chain stop bolt diameter; damage or deformation of the retaining bolt; cracks in the hex nut</td><td>Replace with a new part.
※Periodic replacemen
is recommended</td></tr>
<tr><td colspan="4">
Table 7
<table>
<tr><th>Rated load</th><th>Dimension A</th><th>Dimension A
limit value</th><th>Dimension B</th><th>Dimension C</th><th>Engraving</th></tr>
<tr><td rowspan="2">250kg
551lbs</td><td>6.0mm</td><td>5.5mm</td><td>21.5mm</td><td rowspan="2">M5XP0.8</td><td rowspan="2">HD</td></tr>
<tr><td>0.23in</td><td>0.22in</td><td>0.84in</td></tr>
<tr><td rowspan="2">0.5t
1102lbs</td><td>6.0mm</td><td>5.5mm</td><td>21.5mm</td><td rowspan="2">M5XP0.8</td><td rowspan="2">HD</td></tr>
<tr><td>0.23in</td><td>0.22in</td><td>0.84in</td></tr>
</table>


Figure 23

Wear shall not 0.5 mm (0.01 in) or more of the above dimensional value
</td></tr>
<tr><td>Gear side plate assey set
(No.11)
YⅡ-25</td><td>Visual
inspection</td><td>Inspect for damage or deformation of the top hook pin hole, sheave hole, and stay bolt</td><td>Replace with a new part.
See part No.82 for the figure for YA-50</td></tr>
<tr><td>Lever side plate assey set
(No.12)
YⅡ-25</td><td>Visual
inspection</td><td>Inspect for damage or deformation of the top hook pin hole, sheave hole, and stay bolt</td><td>Replace with a new part.
See part No.83 for the figure for YA-50</td></tr>
<tr><td>Hex. nut
(No.13)</td><td>Visual
inspection</td><td>Inspect for damage, wear, deformation, etc.</td><td>Replace with a new part.</td></tr>
<tr><td>Spring washer
(No.14)</td><td>Visual
inspection</td><td>Inspect for damage, wear, deformation, etc.</td><td>Replace with a new part.</td></tr>
<tr><td>Pawl
(No.15)</td><td>Visual
inspection</td><td>Inspect for chipped teeth on pawls, bumpy wear and damage</td><td>Replace with a new part.</td></tr>
<tr><td>Pawl spring A / B
(No.16)</td><td>Visual
inspection</td><td>To be without wear on the surfaces contacting the pawls.
Bending portion of the spring to be free of indicate cracks or breaks.
Spring to be free of expansion/contraction or deformation due to compression.
 
Figure 24</td><td>Replace with a new part.</td></tr>
</table>

Inspection item (part name) part number	Method	Inspection/test details/standard values	Measures
E-ring for pawl (No.17)	Visual inspection	Inspect for opening of ring and damage.	Replace with a new part.
Gear cover (No.18)	Visual inspection	Inspect for significant deformation and wear with bumps identifiable by hand. Inspect for cracks, wear, or rattling of the metal clasped to the gear cover.	Replace with a new part.
Pinion shaft (No.19) YA-50	Visual inspection	Inspect for chipped gear teeth, bumpy wear or damage, and smooth rotation of the gear when passing through the disc hub and feed gear.	Replace with a new part.
Washer for pinion shaft (No.20)	Visual inspection	Inspect for significant deformation, wear with bumps identifiable by hand.	Replace with a new part.
Hex. castle nut (No.21)	Visual inspection	Inspect for damage, wear, deformation, etc.	Replace with a new part.
Cotter pin (No.22)	Visual inspection	Inspect for damage, wear, deformation, etc.	Replace with a new part.
2nd and 3nd gear set (No.23) (YA-50)	Visual inspection	Inspect for chipped gear teeth, bumpy wear or damage	Replace with a new part.
Load gear (No.24)	Visual inspection	Inspect for chipped gear teeth, bumpy wear or damage	Replace with a new part.
Load sheave (No.25)	Visual inspection	Inspect for bumpy wear, damage, deformation, etc., on parts engaging the chain (pocket). Inspect for signs of obduction by the chain	Replace with a new part.
Chain guide set (No.26)	Visual inspection	Inspect for bumpy wear, damage and signs of obduction by the chain	Replace with a new part.
Chain stripper (No.27)	Visual inspection	Inspect for bumpy wear, damage and signs of obduction by the chain	Replace with a new part.
Disc hub (No.28)	Visual inspection	Inspect for chipped gear teeth, bumpy wear and damage; smooth rotation when the pinion shaft is passed through.	Replace with a new part.

Locations with possibility of being obducted by the chain

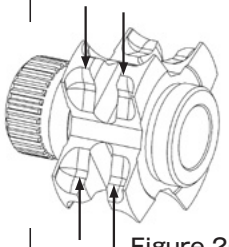
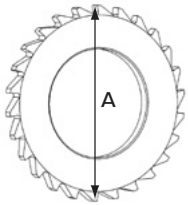
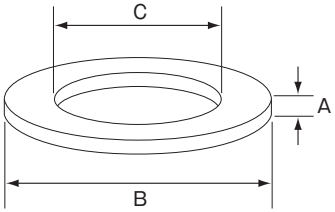


Figure 25

<table>
<tr><th>Inspection item
(part name)
part number</th><th>Method</th><th>Inspection/test details/standard values</th><th>Measures</th></tr>
<tr><td>Ratchet wheel
(No.30)</td><td>Visual
inspection,
measurement</td><td>Inspect for chipped teeth, wear in positions engaging the pawls, damage
Braking section to be free of any bumpy wear</td><td>Replace with a new part.</td></tr>
<tr><td colspan="4">Table 8
<table><tr><th>Rated load</th><th>Dimension A</th><th>Dimension A
limit value</th></tr><tr><td rowspan="2">250kg
551lbs</td><td>43.0mm</td><td>40.8mm</td></tr><tr><td>1.69in</td><td>1.60in</td></tr><tr><td rowspan="2">0.5t
1102lbs</td><td>45.0mm</td><td>42.7mm</td></tr><tr><td>1.77in</td><td>1.68in</td></tr></table> 
Dimension A :
Ratchet wheel diameter
Figure 26
Not to indicate wear of 5% or more in relation to above dimensional value.</td></tr>
<tr><td>Brake lining
(No.31)</td><td>Visual
inspection</td><td>Inspect for chipped teeth, wear in positions engaging the pawls, damage
Braking section to be free of any bumpy wear</td><td>Replace with a new part.</td></tr>
<tr><td colspan="4">Table 9
<table><tr><th>Rated load</th><th>Dimension A</th><th>Dimension A
limit value</th><th>Dimension B</th><th>Dimension C</th></tr><tr><td rowspan="2">250kg
551lbs</td><td>2.5mm</td><td>2.3mm</td><td>35.0mm</td><td>21.0mm</td></tr><tr><td>0.098in</td><td>0.090in</td><td>1.37in</td><td>0.82in</td></tr><tr><td rowspan="2">0.5t
1102lbs</td><td>2.5mm</td><td>2.3mm</td><td>39.0mm</td><td>22.7mm</td></tr><tr><td>0.098in</td><td>0.090in</td><td>1.37in</td><td>0.82in</td></tr></table> 
Figure 27
To be free of wear deviating 0.2mm or more from the dimensional value above</td></tr>
<tr><td>Check washer
(No.32)
YⅡ-25</td><td>Visual
inspection</td><td>Inspect for damage, wear, deformation, etc</td><td>Replace with a new part.</td></tr>
<tr><td>Lever set
(No.33)</td><td>Visual
inspection</td><td>Inspect for significant deformation and normal movement of the changeover knob.</td><td>Replace with a new part.</td></tr>
<tr><td>Lever grip
(No.34)</td><td>Visual
inspection</td><td>Inspect for cracks in the rubber handle, deformation, etc.</td><td>Replace with a new part.</td></tr>
<tr><td>Bracket screw
(No.35)</td><td>Visual
inspection</td><td>Inspect for attachment of bracket screws</td><td>Replace with a new part.</td></tr>
</table>

Inspection item (part name) part number	Method	Inspection/test details/standard values	Measures
Female screw (No.38)	Visual inspection	Inspect for damage, wear, deformation, etc.	Replace with a new part.
Brake cover (No.45)	Visual inspection	Inspect for damage, wear, deformation, etc.	Replace with a new part.
Stay bolt (No.51)	Visual inspection	Inspect for damage, wear, deformation, etc.	Replace with a new part.
Ratchet pin (No.58)	Visual inspection	Inspect for damage, wear, deformation, etc.	Replace with a new part.
Stay pipe (No.59)	Visual inspection	Inspect for damage, wear, deformation, etc.	Replace with a new part.
Plain washer (No.60) YⅡ-25	Visual inspection	Inspect for damage, wear, deformation, etc.	Replace with a new part.
Hex.nut (No.61) YⅡ-25	Visual inspection	Inspect for damage, wear, deformation, etc.	Replace with a new part.
Spring washer (No.62) YⅡ-25	Visual inspection	Inspect for damage, wear, deformation, etc.	Replace with a new part.
Gear-side plate set (No.82) YA-50	Visual inspection, measurement	Inspect for damage or deformation of the top hook pin hole, sheave hole, and stay bolt.	Replace with a new part.

Table 10

Rated load	Dimension A	Dimension A limit value
250kg 551lbs	8.0mm	8.5mm
	0.31in	0.32in
0.5t 1102lbs	10.3mm	10.8mm
	0.40in	0.41in

To be without wear of 0.5 mm (0.01 in) or more in relation to the above dimensional value.
Measurement to be taken at 90° angles horizontally and vertically.

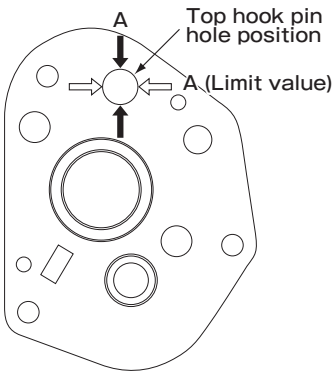


Figure 28

Inspection item (part name) part number	Method	Inspection/test details/standard values	Measures
Lever-side plate set (No.83) YⅡ-25	Visual inspection, measurement	Inspect for damage or deformation of the top hook pin hole and sheave hole.	Replace with a new part.

Table 11

Rated load	Dimension A	Dimension A limit value
250kg 551lbs	8.0mm	8.5mm
	0.31in	0.32in
0.5t 1102lbs	10.3mm	10.8mm
	0.40in	0.41in

To be without wear of 0.5 mm (0.01 in) or more in relation to the above dimensional value.
Measurement to be taken at 90° angles horizontally and vertically.

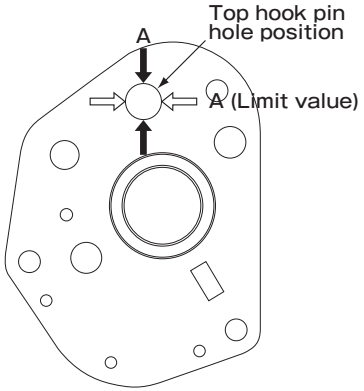


Figure 29

Spring for floating mechanism (No.87)	Visual inspection, measurement	Inspect for expansion/contraction beyond the specified value.	Replace with a new part.

Table 12

Rated load	Dimension A reference standard value	
250kg 551lbs	21.5mm	To be without expansion/contraction beyond the dimension indicated on the left (to be without deformation due to compression)
	0.84in	
0.5t 1102lbs	23.0mm	
	0.90in	

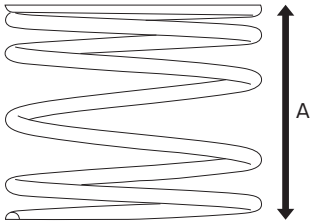


Figure 30

Feed handle (No.88) YA-50	Visual inspection	To be without damage or deformation	Replace with a new part.

Inspection item (part name) part number	Method	Inspection/test details/standard values	Measures
Chain stopper (No.91)	Visual inspection, measurement	Inspect for expansion/contraction beyond the specified value.	Replace with a new part.

Table 13

Rated load	A	B	C	
250kg 551lbs	37mm	15mm	1mm	To be without expansion/contraction beyond the dimension indicated on the left (to be without deformation due to compression)
	1.45in	0.59in	0.03in	
0.5t 1102lbs	50mm	15mm	1mm	
	1.96in	0.59in	0.03in	

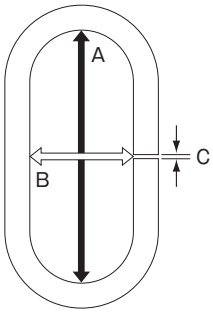


Figure 31

Name plate (No.92)	Visual inspection	inspect for damage, legibilty	Replace with a new part.
Check washer (No.102) (YA-50)	Visual inspection	Inspect for significant deformation, wear with bumps identifiable by hand.	Replace with a new part.
Hex. socket head cap screw set (No.103) (YA-50)	Visual inspection	Inspect for damage, deformation and wear	Replace with a new part.
Tag (No.110)	Visual inspection	Inspect for damage, deformation and wear	Replace with a new part.

Inspection item (part name) part number	Method	Inspection/test details/standard values	Measures
Load chain (No.53)	Visual inspection, measurement	Inspect for any damage, deformation, or elongation beyond the specified value	Replace with a new part.

Table 14

Rated load	Diameter (mm)		Pitch (P×5) (mm)	
	Standard value	Limit value	Standard value	Limit value
250kg 551lbs	4.3mm	4.0mm	60.3mm	62.1mm
	0.16in	0.15in	2.37in	2.44in
0.5t 1102lbs	4.3mm	4.0mm	60.3mm	62.1mm
	0.16in	0.15in	2.37in	2.44in

Wear of the diameter is not to exceed 5% of the dimension value indicated above. 5-link pitch must not be elongated by 3% or more of the dimension value indicated above.

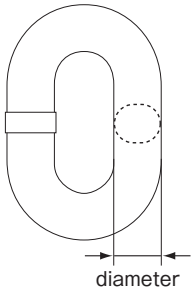
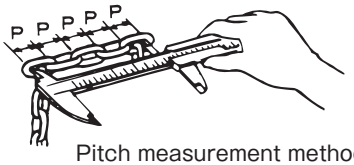
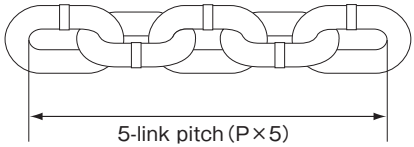


Figure 32



Pitch measurement method

Figure 33



5-link pitch

Figure 34

Lubrication and greasing of various parts

Load chain

- First, use cleaning solution to remove dust and dirt from the load chain.
- Apply NLGI No. 00 grease.
- Depending on the frequency of use and other conditions, increase the frequency of grease application to the load chain during daily inspections.

Gears and other parts

- First, use cleaning solution to remove any dust and dirt from the old grease coating of the gears.
- Apply NLGI No. 1 grease evenly to the gear sections.
- Apply grease to the pawls and rotating parts of the lever, as well as the rotating parts of the load sheave and side plate.

Inspection records YⅡ-25 YA-50

Model		Date of inspection	
Tonnage		Name of qualified person (Name of inspector)	
Production No.			
Lift			

Inspection Part (Part No., Part Name)			Inspection contents	Judgment	Remarks
1		Top hook set	Check for openings in hook, twists, damage, etc.		
			Between punches		
			Hook thickness, vertical		
			Hook thickness, horizontal		
			Hole diameter of top hook pin		
	2	Safety latch set	Whether the hook is engaged, damaged, deformed, etc.		
6		Top hook pin	Inspect for pin diameter wear.		
7		Bottom hook set	Check for openings in hook, twists, damage, etc.		
			Between punches		
			Hook thickness, vertical		
			Hook thickness, horizontal		
			Hole diameter of chain stop bolt set		
	2	Safety latch set	Whether the hook is engaged, damaged, deformed, etc.		
	8	Chain stop bolt set	Check the bolt diameter for wear, damage, deformation, etc.		
11		Gear side plate set (YⅡ-25)	Inspect for wear and deformation of the pin hole diameter in the respective parts		
12		Lever side plate set (YⅡ-25)	Inspect for wear and deformation of the pin hole diameter in the respective parts		
13		Hex. nut	Inspect for damage, wear, deformation, etc.		
14		Spring washer	Inspect for damage, wear, deformation, etc.		
15		Pawl	Inspect for wear with bumps identifiable by hand and other damage.		
16		Pawl spring A/B	Inspect for damage, wear, deformation, etc.		
17		E-ring for pawl	Inspect for openings in the snap ring and damage, etc		
18		Gear cover	Inspect for wear with bumps identifiable by hand and other damage.		
19		Pinion shaft (YA-50)	Inspect for chipped gear teeth and other damage		
20		Washer for pinion shaft	Inspect for damage, wear, deformation, etc.		
21		Hex. castle nut	Inspect for damage, wear, deformation, etc.		
22		Cotter Pin	Inspect for damage, wear, deformation, etc.		
23		2nd and 3rd gear set (YA-50)	Inspect for chipped gear teeth and other damage		
24		Load gear (YA-50)	Inspect for chipped gear teeth and other damage		

Inspection Part (Part No., Part Name)			Inspection contents	Judgment	Remarks
25		Load sheave	Inspect for engagement with the chain, damage, deformation, etc.		
26		Chain guide set	Inspect for damage, wear, deformation, etc.		
27		Chain stripper	Inspect for damage, wear, deformation, etc.		
28		Disc hub	Inspect for chipped gear teeth and other damage		
30		Ratchet wheel	Inspect for chipped gear teeth and other damage		
31		Brake lining	Inspect for wear, damage, deformation, etc.		
32		Check washer (YⅡ-25)	Inspect for damage, wear, deformation, etc.		
33		Lever set	Inspect for proper operation of the changeover knob		
	34	Lever grip	Inspect for cracks in the rubber handle, deformation, etc.		
	35	Bracket screw	Inspect for damage, wear, deformation, etc.		
38		Female screw	Inspect for damage, wear, deformation, etc.		
45		Brake cover	Inspect for damage, wear, deformation, etc.		
51		Stay bolt	Inspect for damage, wear, deformation, etc.		
58		Ratchet pin	Inspect for damage, wear, deformation, etc.		
59		Stay pipe	Inspect for damage, wear, deformation, etc.		
60		Plain washer (YⅡ-25)	Inspect for damage, wear, deformation, etc.		
61		Hex. Nut (YⅡ-25)	Inspect for damage, wear, deformation, etc.		
62		Spring washer (YⅡ-25)	Inspect for damage, wear, deformation, etc.		
82		Gear-side plate set (YA-50)	Inspect for wear and deformation of the pin hole diameter in the respective parts		
83		Lever-side plate set (YA-50)	Inspect for wear and deformation of the pin hole diameter in the respective parts		
	92	Name plate (YA-50)	Inspect for damage, legibility.		
87		Spring for floating mechanism	Inspect for damage, wear, deformation, etc.		
88		Feed handle (YA-50)	Inspect for damage, wear, deformation, etc.		
91		Chain stopper	Inspect for damage, wear, deformation, etc.		
92		Name plate (YⅡ-25)	Inspect for damage, legibility.		
102		Check washer (YA-50)	Inspect for damage, wear, deformation, etc.		
103		Hex. socket head cap screw set (YA-50)	Inspect for damage, wear, deformation, etc.		
110		Tag	Inspect for damage, legibility.		
53		Load chain set	Inspect for damage, wear, deformation, etc.		

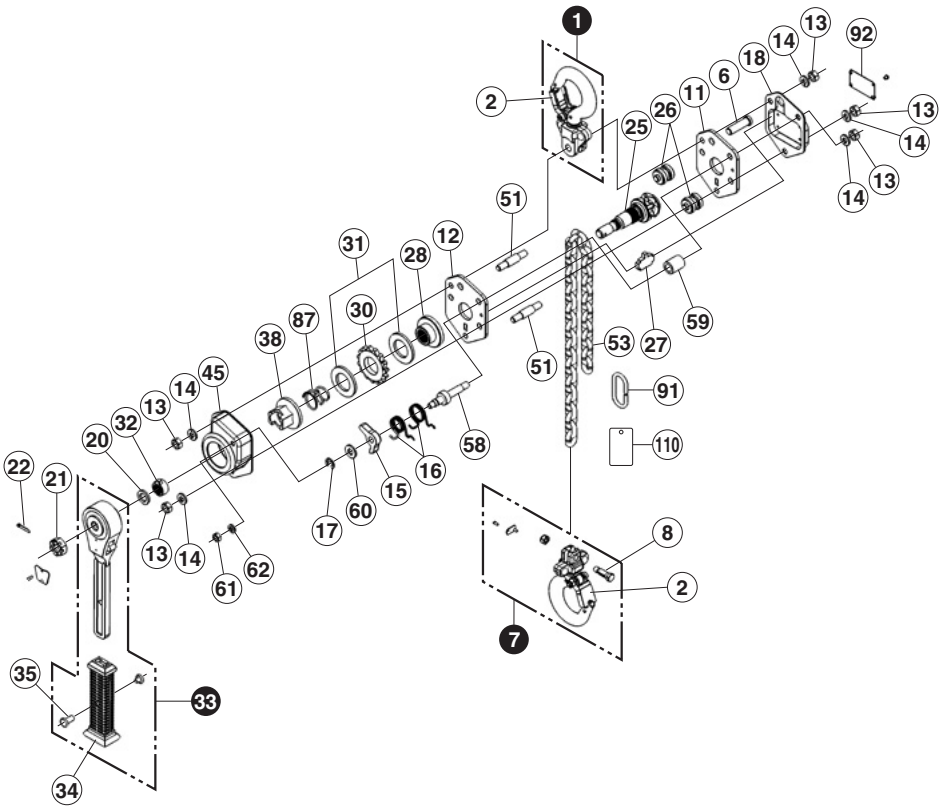
Judgment : ○ (Good) , × (Replacement)

※Perform the inspections and tests indicated above. Be sure to maintain records of the inspections.

※Be sure to replace any parts that are found to be even slightly unsafe with new parts.

※Please inspect based on ASME B30.21.

Breakdown Schematics and Parts Names: Models YⅡ-25

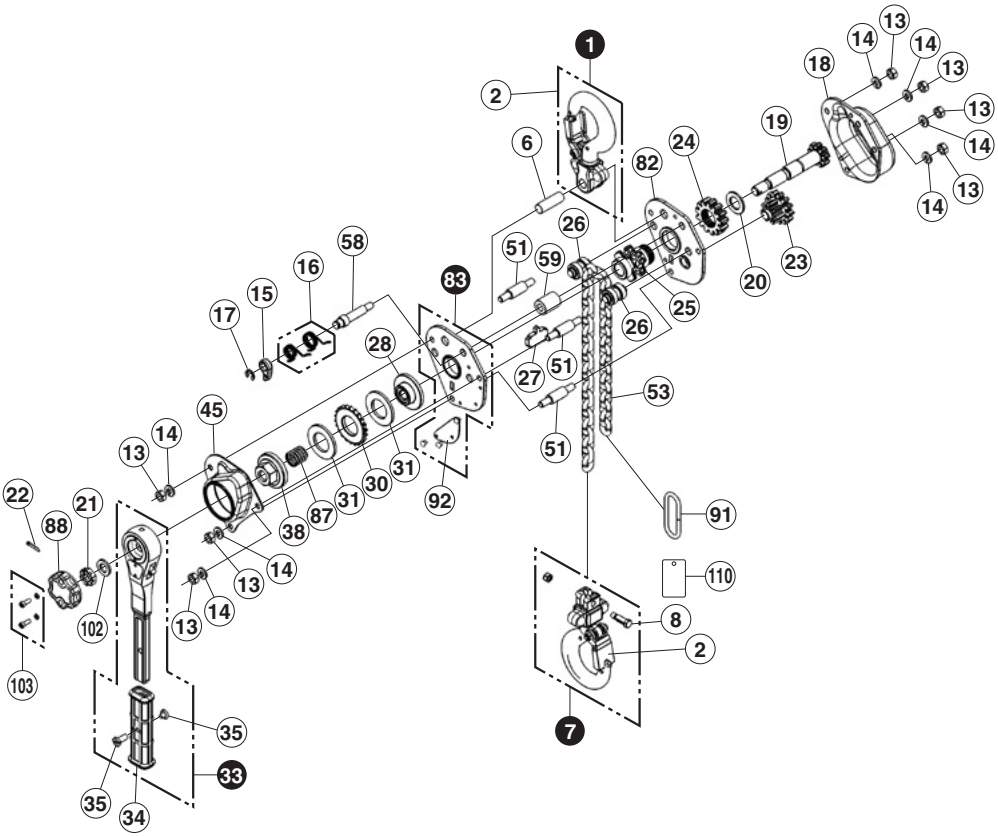


Symbols in Breakdown Schematics		Parts Names	Symbols in Breakdown Schematics		Parts Names	Symbols in Breakdown Schematics		Parts Names	Symbols in Breakdown Schematics		Parts Names
Set	Individual unit		Set	Individual unit		Set	Individual unit		Set	Individual unit	
1		Top hook set		15	Pawl		28	Disc hub		58	Ratchet pin
	2	Safety latch set		16	Pawl spring A/B		30	Ratchet wheel		59	Stay pipe
	6	Top hook pin		17	E-ring for pinion shaft		31	Brake lining		60	Plain washer
7		Bottom hook set		18	Gear cover		32	Check washer		61	Hex. Nut
	2	Safety latch set		20	Washer for pinion shaft	33		Lever set		62	Spring washer
	8	Chain stop bolt set		21	Hex. castle nut		34	Lever grip		87	Spring for floating mechanism
	11	Gear side plate set		22	Cotter Pin		35	Bracket screw		91	Chain stopper
	12	Lever side plate set		25	Load sheave		38	Female screw		92	Name plate
	13	Hex. nut		26	Chain guide set		45	Brake cover		110	Tag
	14	Spring washer		27	Chain stripper		51	Stay bolt		53	Load chain set

※Parts indicated with black lines are included in the parts with gray lines.
Example : Part No. 7, Bottom hook set includes Part No. 2, Safety latch set and Part No. 8, Chain stop bolt set.

※The black line parts are also provided for sale individually.

Breakdown Schematics and Parts Names: Models YA-50



Symbols in Breakdown Schematics		Parts Names	Symbols in Breakdown Schematics		Parts Names	Symbols in Breakdown Schematics		Parts Names	Symbols in Breakdown Schematics		Parts Names
Set	Individual unit		Set	Individual unit		Set	Individual unit		Set	Individual unit	
1		Top hook set		18	Gear cover		30	Ratchet wheel	83		Lever-side plate set
∣	2	Safety latch set		19	Pinion shaft		31	Brake lining	∣	92	Name plate
	6	Top hook pin		20	Washer for pinion shaft	33		Lever ass'y		87	Spring for floating mechanism
7		Bottom hook set		21	Hex.castle nut	∣	34	Lever grip		88	Feed handle
∣	2	Safety latch set		22	Cotter pin	∣	35	Bracket screw		91	Chain stopper
∣	8	Chain stop bolt set		23	2nd and 3nd gear set		38	Female screw		102	Check washer
	13	Hex. nut		24	Load gear		45	Brake cover		103	Hex. socket head cap screw set
	14	Spring washer		25	Load sheave		51	Stay bolt		110	Tag
	15	Pawl		26	Chain guide set		58	Ratchet pin		53	Load chain set
	16	Pawl spring A/B		27	Chain stripper		59	Stay pipe			
	17	E-ring for pawl		28	Disc hub		82	Gear-side plate set			

※Parts indicated with black lines are included in the parts with gray lines.
Example : Part No. 7, Bottom hook set includes Part No. 2, Safety latch set and Part No. 8, Chain stop bolt set.

※The black line parts are also provided for sale individually.

Warranty

In this section, ELEPHANT CHAIN BLOCK CO., LTD is hereinafter referred to as "ELEPHANT".
In this section, Owners or Operators are hereinafter referred to as "Customer".
ELEPHANT warrants that the product (Manually Lever Operated Chain Hoist) manufactured and marketed by ELEPHANT will be free from defects in material and workmanship for the following period from the initial date of use by Customer.

Manually Lever Operated Chain Hoist 1 year

Customers are requested to write down the start date of use of the product on the cover of this Instruction Manual.
However, the product must be used in accordance with ELEPHANT's recommendations. In addition, the product must not be subjected to rough use, inadequate maintenance, misuse, careless use, incorrect repairs or modification. If ELEPHANT's inspection of the product reveals that the product has become defective in material and workmanship within the period indicated above, ELEPHANT agrees, at its sole discretion, to send and deliver the affected parts to the Customer for replacement free of charge (not including installation work).

The Customer must follow the instructions provided by ELEPHANT to obtain a return authorization prior to returning the product for warranty evaluation.
If you have a complaint about a product, please submit the product and the following documents.
1) Detailed description at the time of use
2) Photos or videos that show the usage status
3) Record of start date of use (cover of this manual)
4) Inspection record (based on ASME)
5) Product (stored as it was at the time of the accident and not disassembled)
In addition, the return shipment must be made with freight prepaid, to the address and in the shipping way directed by ELEPHANT.

After returning from repair, the product shall be warranted for the remainder of the original warranty period.
Replacement parts installed after the expiration of the original warranty period shall be warranted (not including installation labor) only for a period of one year from the date of installation.
If the product is found to be without defect or it is determined by ELEPHANT that the malfunction was caused by Customer's operating condition, the customer shall be responsible for the cost of returning the product. If ELEPHANT repairs the product according to the request of the customer, the customer shall be responsible for the cost of repair and returning the product.

ELEPHANT shall make no other express or implied (unwritten) warranties as to the suitability of the product or its applicability to particular purposes.
ELEPHANT shall not be liable for any loss or expense incurred in connection with the use of the product, resulting in death, injury to persons or property, or for incidental, special or consequential damage.
In addition, ELEPHANT shall not be liable for any loss or expense incurred as a result of any act or omission or for any other reason, whether due to negligence or intentional.

The goods has passed rigid inspection by us ahead of delivery in accordance with our standard in terms of test load and all other respects in good and satisfactory condition.

Inspector J. Uryu

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