



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

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 CHAIN BLOCK CO.,LTD.

Index

1. Safety Information and Warnings	2
1.1 Terminology	2
1.2 Restrictions on the use of this Equipment are as follows :	3
1.3 Warning Tags, Labels	4
2.Regarding the personnel operating and using lever hoists	5
2.1 Names of Parts	5
2.2 Unpacking the Product	5
2.3 Specifications Table	5
2.3.1 Y II -25·YA-50 Dimensions	6
2.3.2 Y II -25·YA-50 Hook Dimensions	7
3.Pre-Operational Procedures	7
3.1 Chain	7
3.2 Lever Hoist Installation	8
3.3 Pre-Operational Inspection and Test Run	8
4.Precautions for Use	9
4.1 General Handling	9
4.2 Precautions before Operation	10
5.Lever Hoist Operation	14
5.1 About free chaining operation	14
5.2 How to adjust the length of the load chain	14
5.3 Lifting/Lowering Operation	15
6. Maintenance and Inspection of Lever hoists	18
6.1 Maintenance and Inspection	18
6.2 Inspection items	18
6.3 Inspection, Testing Methods and Reference Values	19
Inspection records	28
Breakdown Schematics	30
EC declaration of conformity	32
UK declaration of conformity	33

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, laws and regulations of the country.
- 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 laws and regulations of the country.
- Owners and operators are responsible for the installation, operation, inspection, testing, and maintenance of this Equipment in accordance with laws and regulations of the country.
- 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.
- Owners and operators should designate a periodic inspection schedule for this Equipment, 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 $+60^{\circ}\text{C}$ (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.)

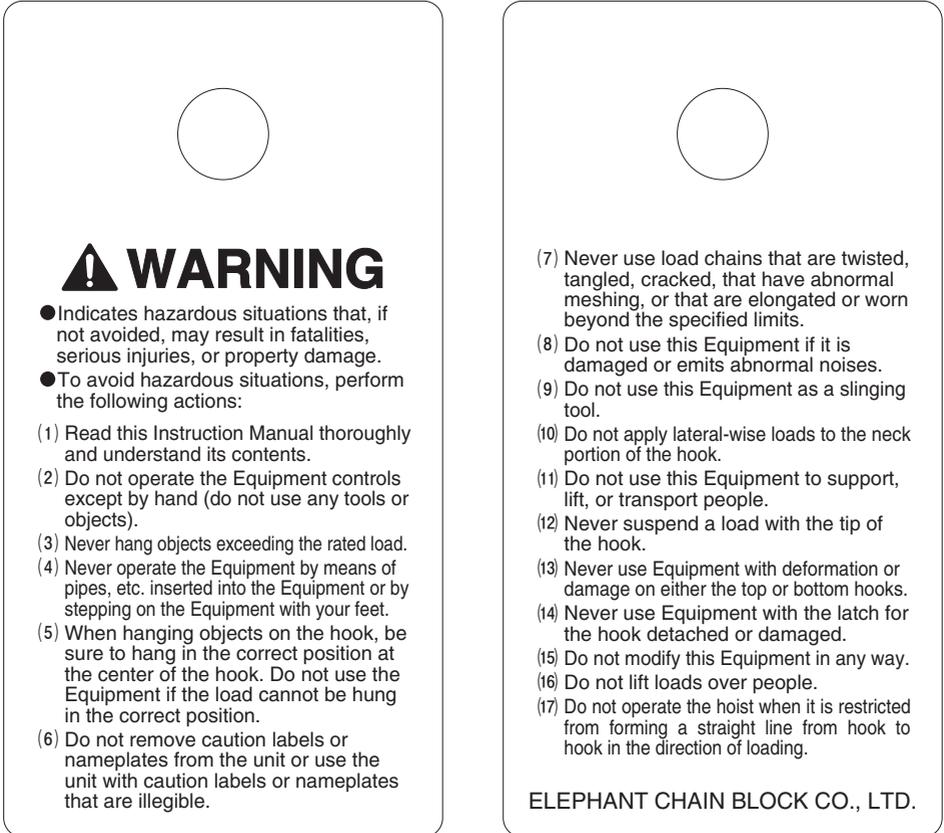


Figure 1

2. Regarding the personnel operating and using lever hoists

2.1 Names of Parts

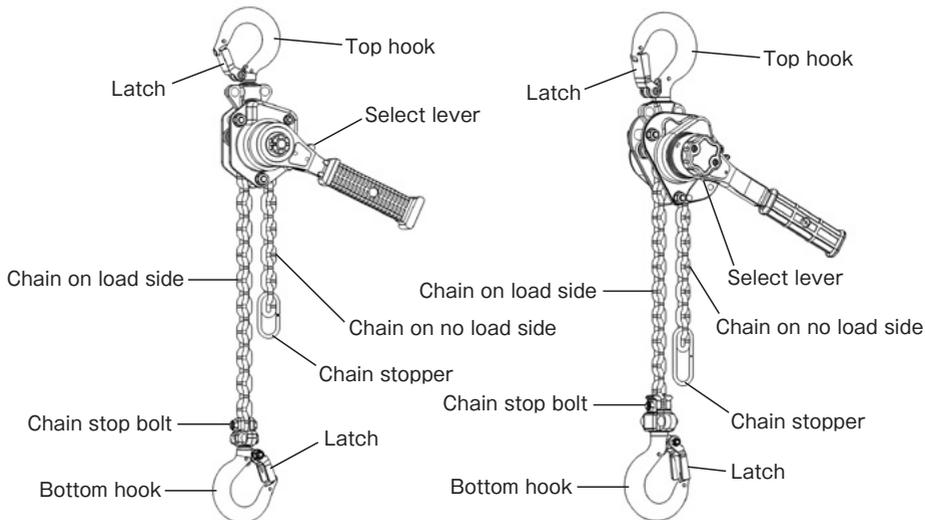


Figure 2

2.2 Unpacking the Product

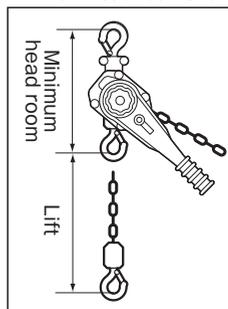
- (1) Check that the box labeling and product matches your order.
- (2) Please confirm the contents of the container.
- (3) Make sure the product has not been damaged during transportation.
- (4) Check that no accessories are missing or disengaged.
- (5) Check the integrity and condition of screws, fittings, 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			
Y II -25	250kg	5ft	4.3mm	1	235mm	294N	2.2kg
YA-50	0.5t	5ft	4.3mm	1	240mm	363N	3.0kg

Minimum head room and lift



2.3.1 YII-25 · YA-50 Dimensions

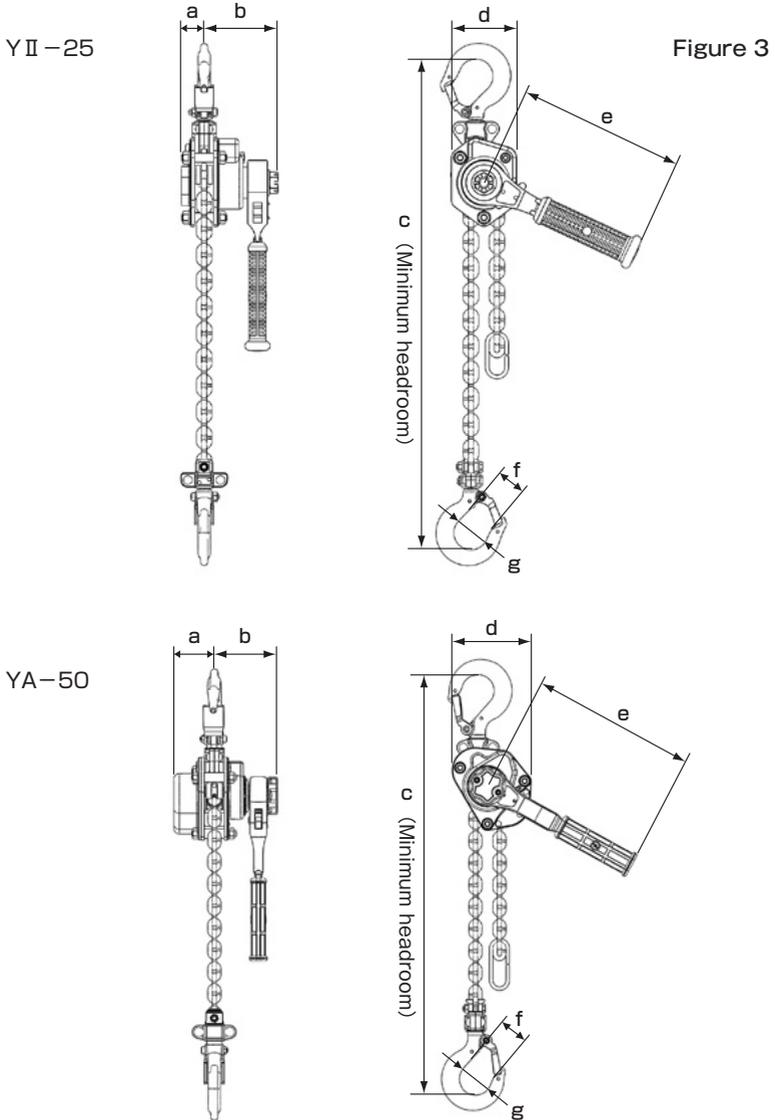


Table 2

Model	Rated load	a	b	c	d	e	f	g
YII-25	250kg	21mm	70mm	235mm	60mm	155mm	20mm	31mm
YA-50	0.5t	44mm	69mm	240mm	92mm	180mm	24mm	36mm

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
YA-50	0.5t	44.7mm	16mm	13mm

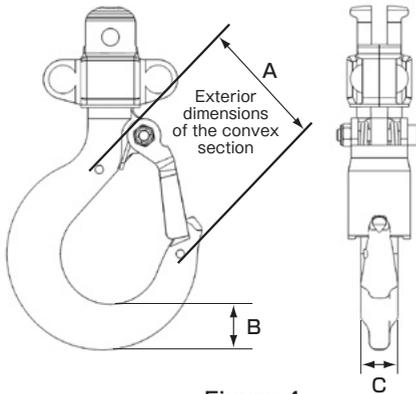


Figure 4

※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.



Correct usage
Suspend from the
axis of the hook.



Suspended objects or
slings are not hung in the
proper position.



The latch is not
functioning
properly.



The tip of the hook is not
capable of fully supporting
the load.

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 laws and regulations of the country, 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°C to $+60^{\circ}\text{C}$ (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.

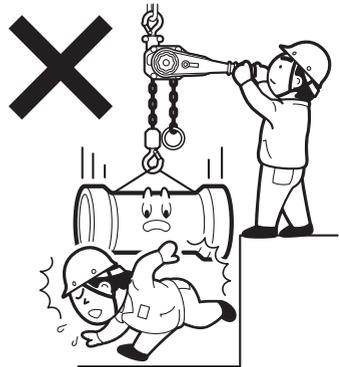


Figure 6

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 relevant standards, laws and regulations of the country. 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.

- 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.

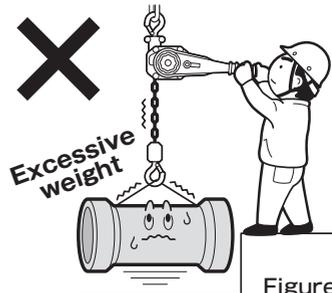


Figure 7

4.2 Precautions before Operation (continued)

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

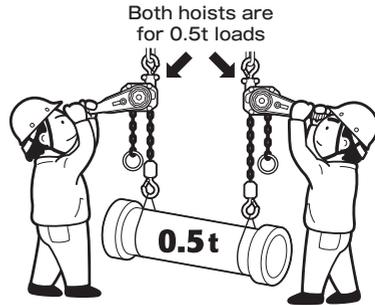


Figure 9

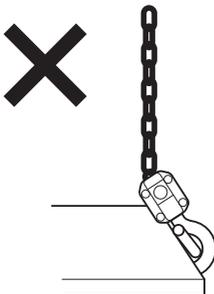


Figure 10

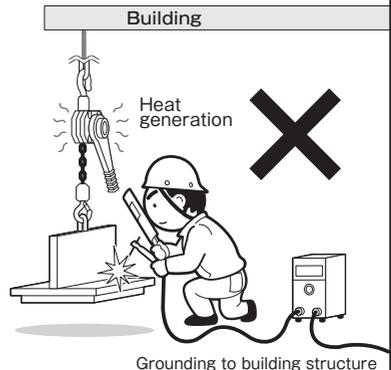


Figure 11

4.2 Precautions before Operation (continued)

WARNING

- (24) Do not allow anyone to ride on suspended loads. Never use the lever hoist for human transport purposes. (Figure 12)
- (25) Never reverse a suspended load without sufficient expertise in doing so.
- (26) Do not suspend excessive loads.
- (27) When maintaining the load in a suspended condition for a short period of time, be sure to leave the switch pawls in the lifting position.
- (28) Never use the hoist or the hook to work as a fulcrum.
- (29) Do not use damaged or deformed top/bottom hooks.
- (30) Never use this equipment if the load chain is deformed or damaged.
- (31) Do not operate the equipment with the load chain lodged against a steel plate or other corners. (Figure 13)
- (32) Do not operate the load chain by any means other than human power (do not use any tools or objects on the controls).
- (33) Do not apply abrupt force to the load chain during idle operation.
- (34) Suspend slings properly onto the hook.
- (35) During lifting, temporarily pause winding once either the load chain or sling comes under tension.
- (36) Keep the lever hoist unit and load chain clean and free of sand and other debris.
- (37) Make sure the lifting height is sufficient for the intended work.
- (38) Make sure the load chain is sufficiently lubricated.
- (39) Do not modify this equipment in any way.
- (40) Do not use with the load chain wrapped around the load. (Figure 14)
- (41) Do not suspend the load chain directly from rope hook fixtures on trucks. Do not use the load chain as a suspension device. (Figure 15)

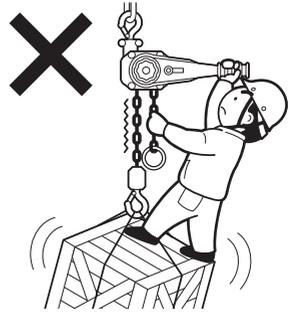


Figure 12

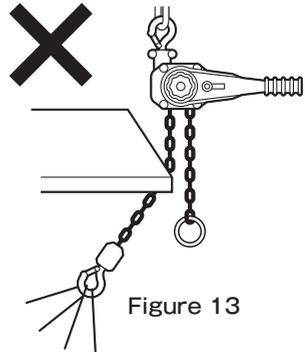


Figure 13

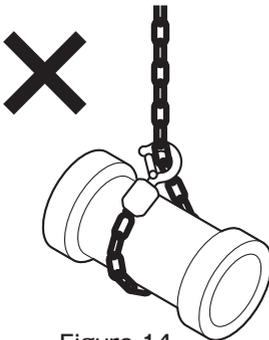


Figure 14

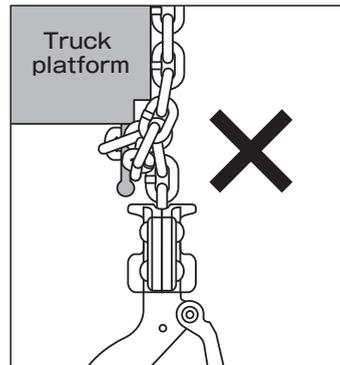


Figure 15

4.2 Precautions before Operation (continued)

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.

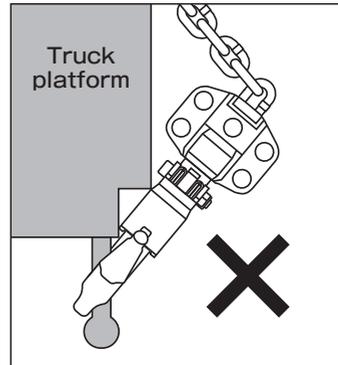


Figure 16

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

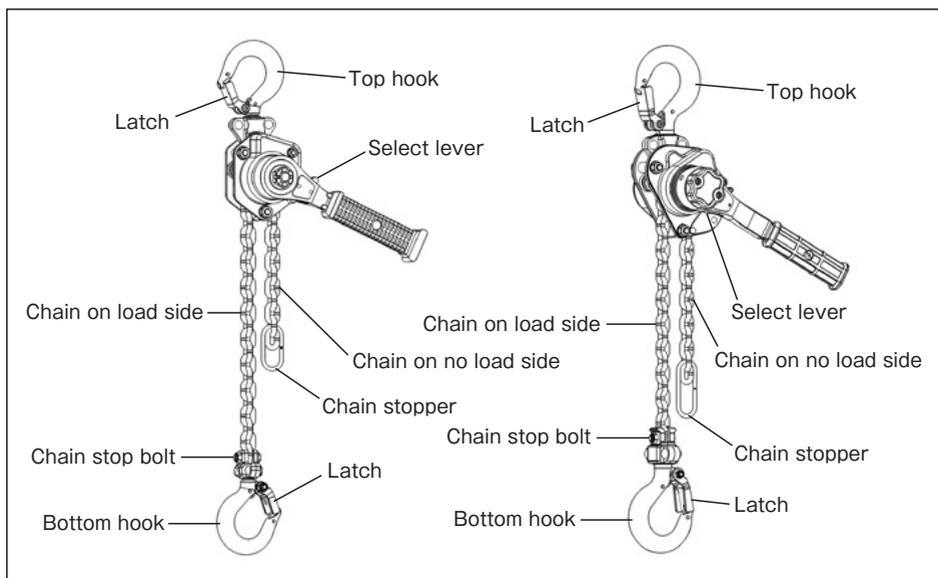
(1) Never select the free chaining operation while the load chain is under load. Always select it when there is no load.

WARNING

(1) Make sure that the select lever is set to the N position.

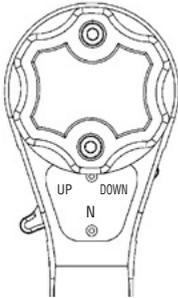
To adjust the length of the load chain when no load is applied to the load chain, perform the free chaining operation in the order shown in the figure below.

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



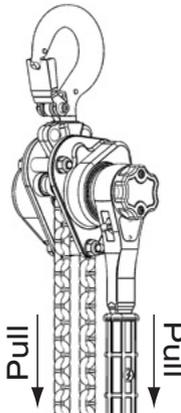
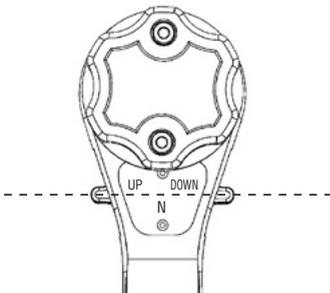
Operating procedure

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



- ② Move the lever 2-3 times.

- ③ Set the select lever to “N”



- ④ Slowly 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

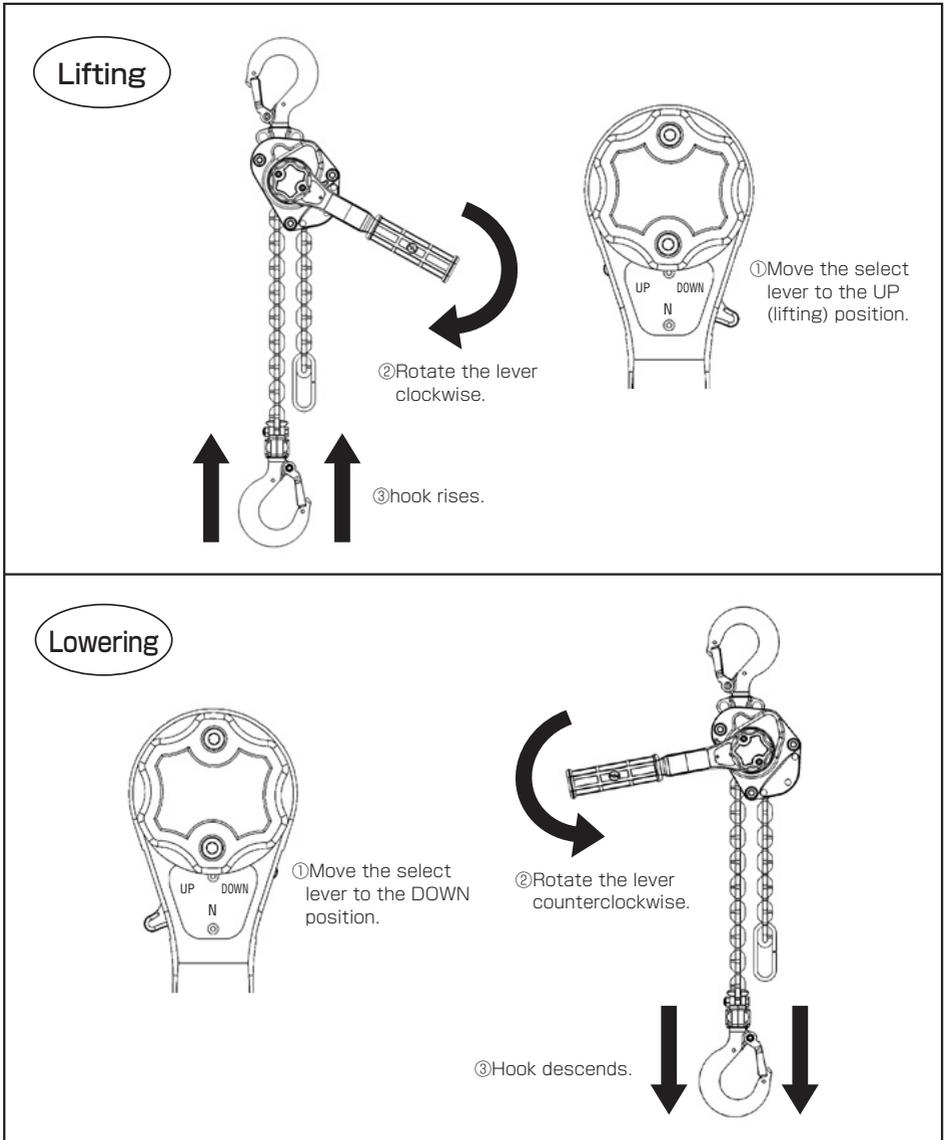
- (1) Do not pull the load chain strongly during free chaining operation.
(2) When the load chain is pulled strongly, the brake is applied and the load chain is fixed.

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



UP

Lifting

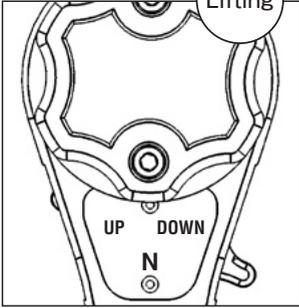


Figure 17

Free
chaining

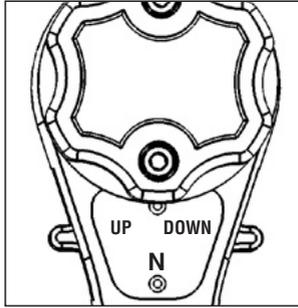


Figure 18

DOWN

Lowering

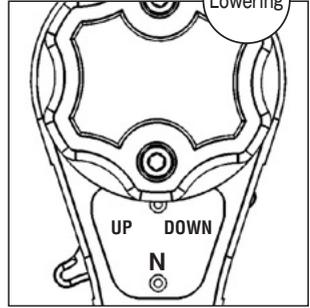


Figure 19

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. Maintenance and Inspection of Lever hoists

6.1 Maintenance and Inspection

To use this equipment at ease, it is essential to perform daily and periodic inspection. Please read below explanation thoroughly and inspect in right way.

Danger

1. Specialist or a person who has expertise designated by owner should perform the inspection and repairment.
2. In inspecting the product, do not put a load on it.
3. Never modify the product.
4. Never cut and weld the load chains.
5. Do not use the part and product over the limit of use.

6.2 Inspection items

(1) Check if there any deformation or missing part noticeable at a glance on the appearance.

A : Check if there any deformation of the part that top hook is connected to the unit on.

B : Check if bolt, nut, and cotter pin which are connecting load chain on bottom hook are fixed correctly.

C : Check if shape of top and bottom hook is normal, if there any scar, opening of hook, if their safety latch is normal.

D : Check if there are any scar or deformation, elongation of pitch, wear on the load chain.

(2) Check if changeover knob can move smoothly. Confirm it by operating it.

(3) Set changeover knob to position "DOWN" and turn feed handle clockwise. Check if you can hear click sound of the pawl.

6.3 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.

Rated load	Position	Reference standard values	Limit Value (*A dimension should not exceed actual measured value at the time of purchase)
250kg	A : Between punches	40.5mm	Not to exceed dimension A
	B : Hook thickness, vertical	14.0mm	13.3mm
	C : Hook thickness, horizontal	11.0mm	10.4mm
	D : Hole diameter, top hook pin	8.0mm	8.4mm
0.5t	A : Between punches	44.7mm	Not to exceed dimension A
	B : Hook thickness, vertical	16.0mm	15.2mm
	C : Hook thickness, horizontal	13.0mm	12.3mm
	D : Hole diameter, top hook pin	10.5mm	11.0mm
250kg	A : Between punches	40.5mm	Not to exceed dimension A
	B : Hook thickness, vertical	14.0mm	13.3mm
	C : Hook thickness, horizontal	11.0mm	10.4mm
	E : Chain stop bolt hole diameter	6.2mm	6.7mm
	A : Between punches	44.7mm	Not to exceed dimension A
0.5t	A : Between punches	44.7mm	Not to exceed dimension A
	B : Hook thickness, vertical	16.0mm	33.2mm
	C : Hook thickness, horizontal	13.0mm	26.6mm
	E : Chain stop bolt hole diameter	6.2mm	6.7mm

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 or more in relation to the above reference standard value.

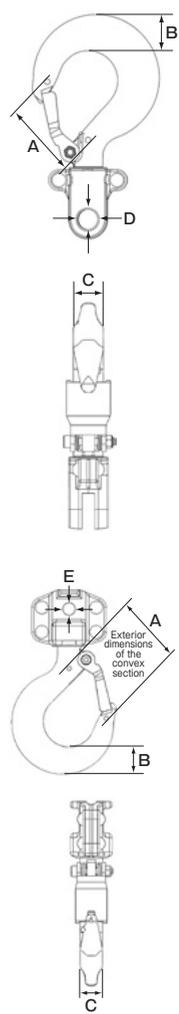
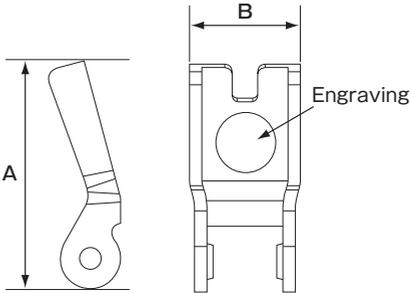
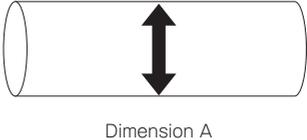


Figure 20

Inspection item (part name) part number	Method	Inspection/test details/standard values	Measures									
Safety latch set (No.2)	Visual inspection, measurement Table 5	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 border="1"> <thead> <tr> <th>Rated load</th> <th>Engraving</th> <th>Dimension A</th> <th>Dimension B</th> </tr> </thead> <tbody> <tr> <td>250kg</td> <td>H-1</td> <td>35.0mm</td> <td>17.2mm</td> </tr> <tr> <td>0.5t</td> <td>C-3</td> <td>45.0mm</td> <td>22.0mm</td> </tr> </tbody> </table>	Rated load	Engraving	Dimension A	Dimension B	250kg	H-1	35.0mm	17.2mm
Rated load	Engraving	Dimension A	Dimension B									
250kg	H-1	35.0mm	17.2mm									
0.5t	C-3	45.0mm	22.0mm									
		 <p style="text-align: center;">Figure 21</p>										
Top hook pin (No.6)	Visual inspection, measurement Table 6	Inspect for pin diameter wear.	Replace with a new part.									
				<table border="1"> <thead> <tr> <th>Rated load</th> <th>Dimension A reference standard value</th> <th>Limit value</th> </tr> </thead> <tbody> <tr> <td>250kg</td> <td>7.5mm</td> <td>7.1mm</td> </tr> <tr> <td>0.5t</td> <td>10.0mm</td> <td>9.5mm</td> </tr> </tbody> </table>	Rated load	Dimension A reference standard value	Limit value	250kg	7.5mm	7.1mm	0.5t	10.0mm
Rated load	Dimension A reference standard value	Limit value										
250kg	7.5mm	7.1mm										
0.5t	10.0mm	9.5mm										
		 <p style="text-align: center;">Figure 22</p>										
Not to indicate wear of 5% or more in relation to above dimensional value.												

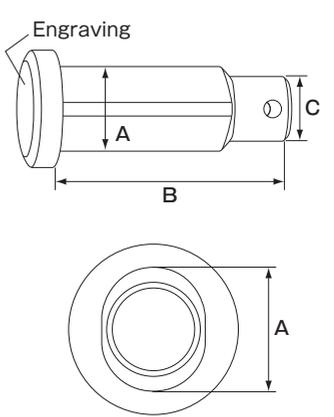
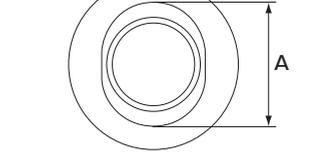
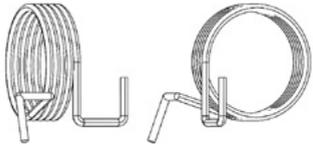
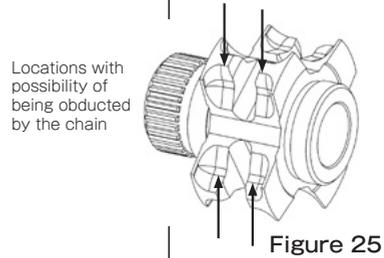
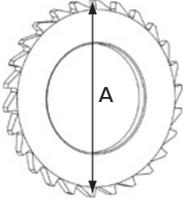
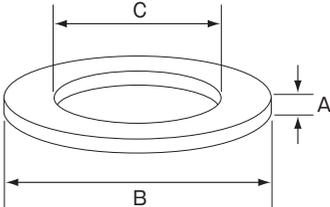
Inspection item (part name) part number	Method	Inspection/test details/standard values	Measures			
Chain stop bolt set (No.8)	Visual inspection, measurement Table 7	Inspect for wear of the chain stop bolt diameter; damage or deformation of the retaining bolt; cracks in the hex nut	Replace with a new part. ※Periodic replacement is recommended			
Rated load	Dimension A	Dimension A limit value	Dimension B	Dimension C	Engraving	
250kg	6.0mm	5.5mm	21.5mm	M5XP0.8	HD	
0.5t	6.0mm	5.5mm	21.5mm	M5XP0.8	HD	
Wear shall not 0.5 mm or more of the above dimensional value						
Gear side plate assey set (No.11) YII-25	Visual inspection	Inspect for damage or deformation of the top hook pin hole, sheave hole, and stay bolt	Replace with a new part. See part No.82 for the figure for YA-50			
Lever side plate assey set (No.12) YII-25	Visual inspection	Inspect for damage or deformation of the top hook pin hole, sheave hole, and stay bolt	Replace with a new part. See part No.83 for the figure for YA-50			
Hex. nut (No.13)	Visual inspection	Inspect for damage, wear, deformation, etc.	Replace with a new part.			
Spring washer (No.14)	Visual inspection	Inspect for damage, wear, deformation, etc.	Replace with a new part.			
Pawl (No.15)	Visual inspection	Inspect for chipped teeth on pawls, bumpy wear and damage	Replace with a new part.			
Pawl spring A / B (No.16)	Visual inspection	<p>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.</p> 	Replace with a new part.			

Figure 24

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 3rd 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.



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

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	8.0mm	8.5mm
0.5t	10.3mm	10.8mm

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

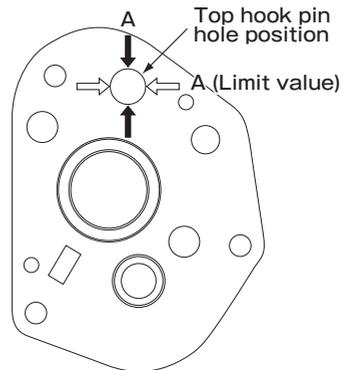
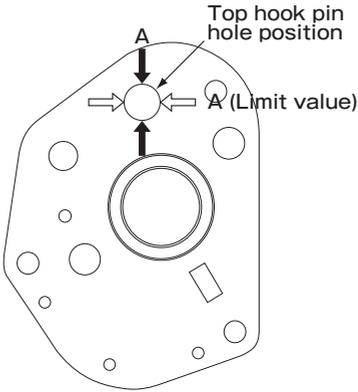
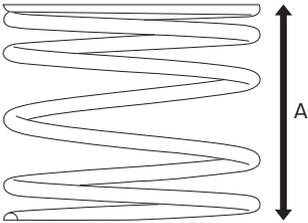
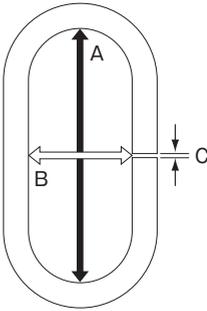


Figure 28

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	8.0mm	8.5mm	
0.5t	10.3mm	10.8mm	
<p>To be without wear of 0.5 mm or more in relation to the above dimensional value. Measurement to be taken at 90° angles horizontally and vertically.</p> <p style="text-align: center;">Figure 29</p>			
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	<p>To be without expansion/contraction beyond the dimension indicated on the left (to be without deformation due to compression)</p>	
250kg	21.5mm		
0.5t	23.0mm		
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	To be without expansion/contraction beyond the dimension indicated on the left (to be without deformation due to compression)
250kg	37mm	15mm	1mm	
0.5t	50mm	15mm	1mm	
				
				Figure 31
Name plate (No.92)	Visual inspection	inspect for damage, legibility	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.	

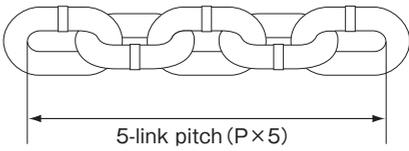
Inspection item (part name) part number	Method	Inspection/test details/standard values	Measures	
Load chain (No.53)	Visual inspection, measurement	Inspect for any damage, deformation, or elongation beyond the specified value	Replace with a new part.	
Table 14				
Rated load	Diameter (mm)		Pitch (P×5) (mm)	
	Standard value	Limit value	Standard value	Limit value
250kg	4.3mm	4.0mm	60.3mm	62.1mm
0.5t	4.3mm	4.0mm	60.3mm	62.1mm

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.



Pitch measurement method

Figure 33



5-link pitch (P×5)

5-link pitch **Figure 34**

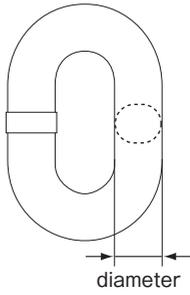


Figure 32

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	2	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

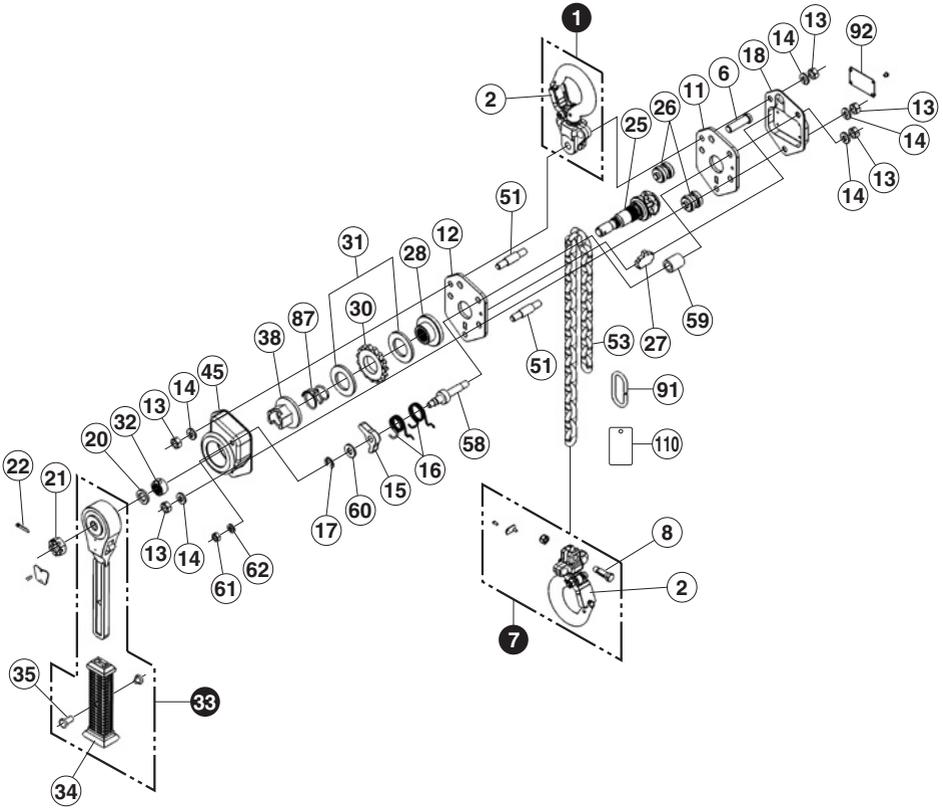
25	Load sheave	Inspect for engagement with the chain, damage, deformation, etc.		
26	Chain guide set	Inspect for damage, wear, deformation, etc.		
27	Chain stripper	Inspect for damage, wear, deformation, etc.		
28	Disc hub	Inspect for chipped gear teeth and other damage		
30	Ratchet wheel	Inspect for 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.

Breakdown Schematics and Parts Names: Models Y II - 25



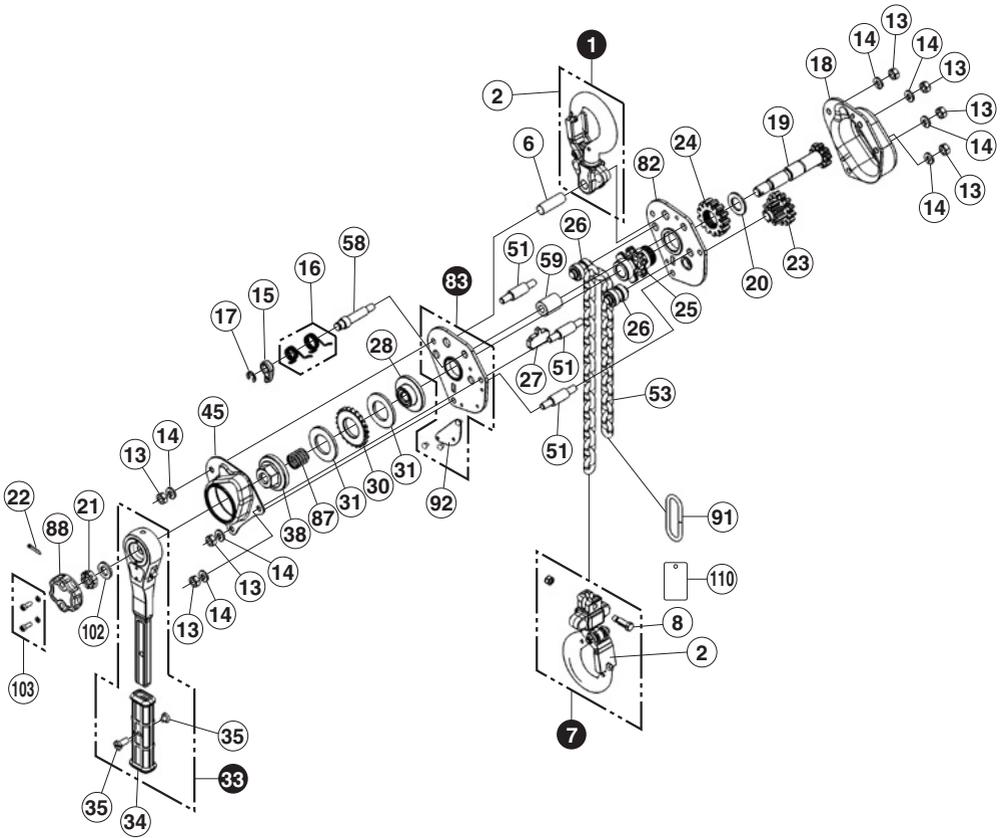
Symbols in Breakdown Schematics		Parts Names	Symbols in Breakdown Schematics		Parts Names	Symbols in Breakdown Schematics		Parts Names			
Set	Individual unit		Set	Individual unit		Set	Individual unit		Set	Individual unit	
1		Top hook set	15		Pawl	28		Disc hub	58		Ratchet pin
	2	Safety latch set	16		Pawl 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.

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

Example : Part No. 7, Bottom hook set includes Part No. 2, Safety latch set and Part No. 8, Chain stop bolt set.

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			
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 3rd 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.

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

Example : Part No. 7, Bottom hook set includes Part No. 2, Safety latch set and Part No. 8, Chain stop bolt set.



EC declaration of conformity

in compliance with the EC Machinery Directive 2006/42/EC, Annex II A

We hereby confirm that due to its design and construction and in the type marketed by us the machine designated below conforms with the pertinent essential safety and health requirements of the relevant EC Directive.

In case of a modification of the machine which is not agreed with us, this declaration is no longer valid.

Designation of the
machine : Manual chain lever hoist

Types : Y II-25, YA-50

Pertinent
EC Directives : EC Machinery Directive 2006/42/EC

Used harmonized
standards, especially : EN 13157:2004+A1:2009 Hand powered lifting
equipment
(except for the part of “5.1.6 Operating effort”)
ISO 9001-2015 (Certificate Number IQA-1547)
JIS B 8819, JIS B 8812

Date/signature of manufacturer : 2nd. Mar. 2022

Information on the signer : *T. Uryu*

(T. Uryu)

Quality assurance division



ELEPHANT CHAIN BLOCK CO., LTD.

**180 Iwamuro 2-chome, Osaka-Sayama-City,
Osaka Postal code 589-8502, JAPAN
Phone : 072-365-7778 Fax : 072-365-7869**



UK declaration of conformity

in compliance with the Supply of Machinery (Safety) Regulations 2008.

We hereby confirm that due to its design and construction and in the type marketed by us the machine designated below conforms with the pertinent essential safety and health requirements of the relevant UK regulations.

In case of a modification of the machine which is not agreed with us, this declaration is no longer valid.

Designation of the
machine : Manual chain lever hoist

Types : Y II -25, YA-50

Pertinent
UK Directives : Supply of Machinery (Safety) Regulations 2008

Used harmonized
standards, especially : BS EN 13157:2004+A1:2009 Hand powered
lifting equipment
(except for the part of “5.2.6 Operating effort”)
ISO 9001-2015 (Certificate Number IQA-1547)
JIS B 8802, JIS B 8812

Date/signature of manufacturer : 2nd. Jun. 2022

Information on the signer : *T. Uryu*

(T. Uryu)

Quality assurance division



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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*



ELEPHANT CHAIN BLOCK CO.,LTD.

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