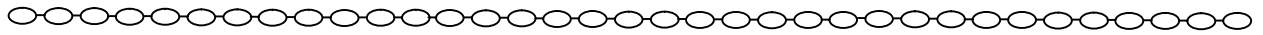
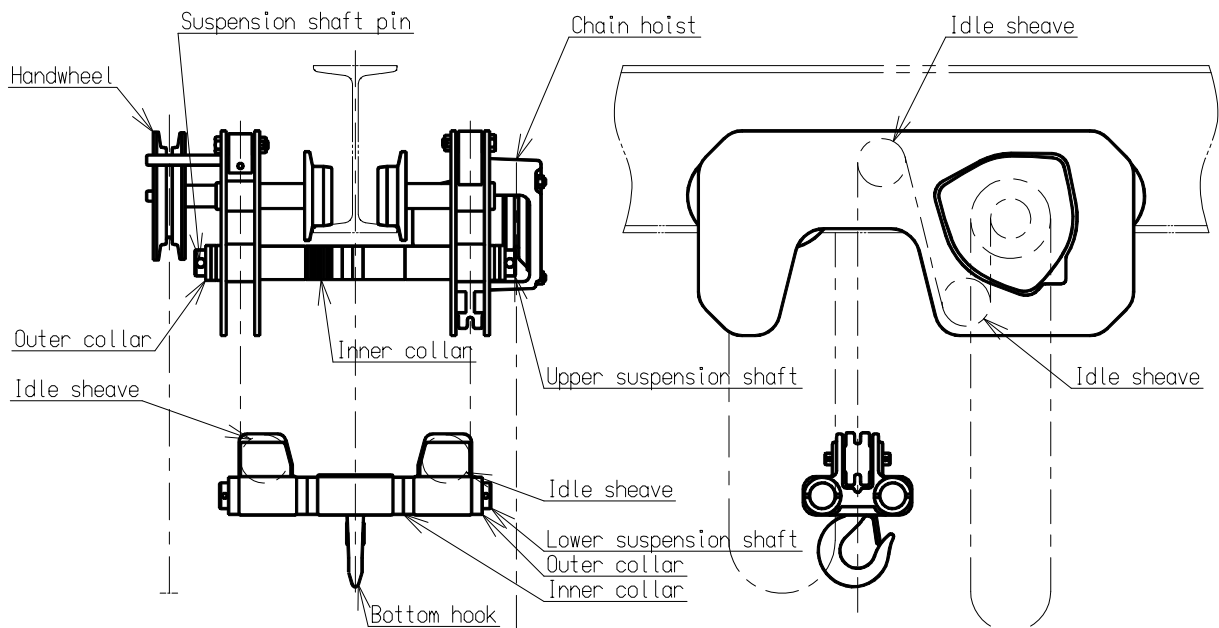


OWNER'S (OPERATOR'S) MANUAL AND SAFETY INSTRUCTION
FOR
KITO SHORT HEADROOM TYPE
< MANUAL CHAIN HOIST >



▲ WARNING This owner's (operator's) manual and safety instruction describes special steps to be taken with the Short Headroom Type Chain Hoist. Prior to use, make sure to read both the "Short Headroom type" and the "Standard CB Series Manual Chain Hoist" instruction manuals carefully.

1. NAME OF EACH PART



- ▲ CAUTION**
- At the time of delivery, confirm that the product conforms to the ordered specifications.
 - The above drawing shows the basic model of a short headroom type chain hoist. As each product is designed to order, yours may differ in actual details from the above drawing.

2. SPECIFICATIONS

Code	WLL (t)	Std. Lift (m)	Chain pull to lift full load (N)	Net weight (kg)
SHB005	0.5	2.5	147	65
SHB010	1	2.5	294	65
SHB020	2	3	265	110
SHB030	3	3	333	155
SHB050	5	3	372	275
SHB075	7.5	3.5	304	370
SHB100	10	3.5	402	370

3. INSTALLATION

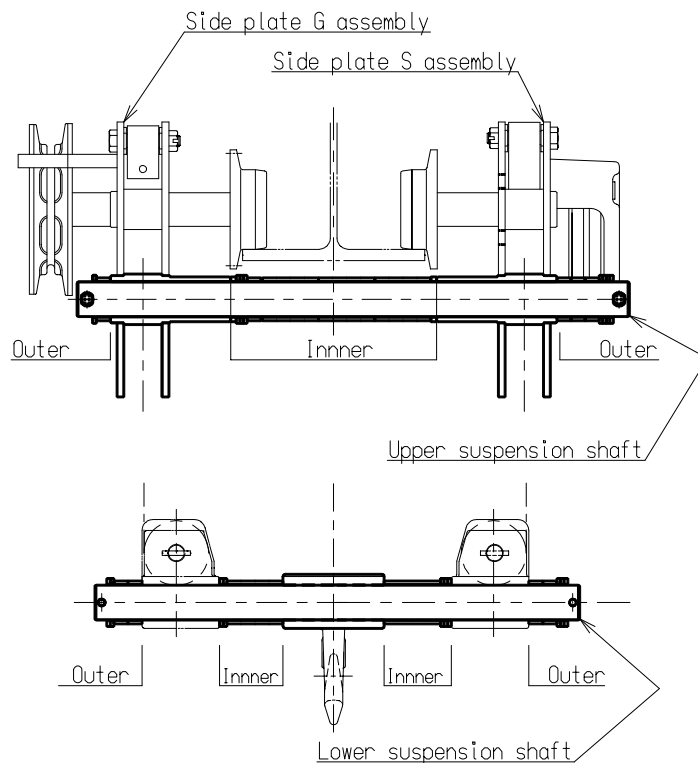
⚠ WARNING

- Always make sure on mounting that the chain is properly engaged with the idle sheave and is free of twisting, slack, etc.

3-1 ADJUSTING BEAM WIDTH

- Beam width of the geared trolley, prior to delivery, is set to the maximum value for the product (EX:125mm for 1ton). In order to change it into H-beam width, adjustment of the suspension shaft, spacers, etc. is necessary. Perform the adjustment as follows:
- Adjustment of upper and lower suspension shafts

The upper and lower suspension shafts are adjusted, by placing spacers according to the table of spacer shown in the end of this document, as shown in the following positions.

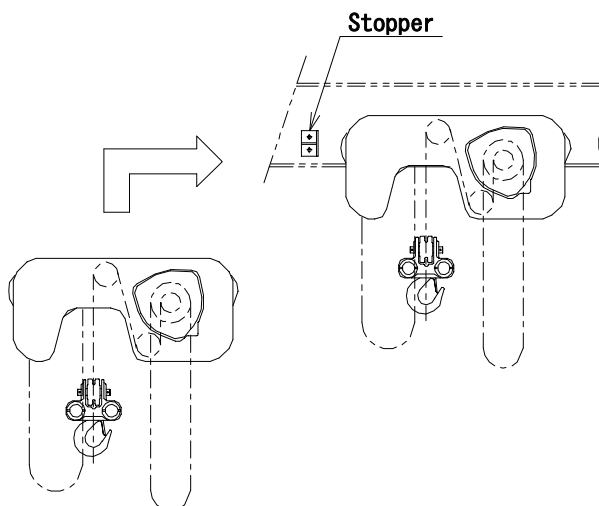


3-2 MOUNTING TROLLEY ON RAIL

- There are two ways for mounting the trolley on the travelling rail in accordance with location of the travelling rail installation in the building.

1) Mounting from the rail end

- After setting to the appropriate beam width of the trolley, remove the rail end stopper and mount the assembled trolley from the rail end as in the following drawing.



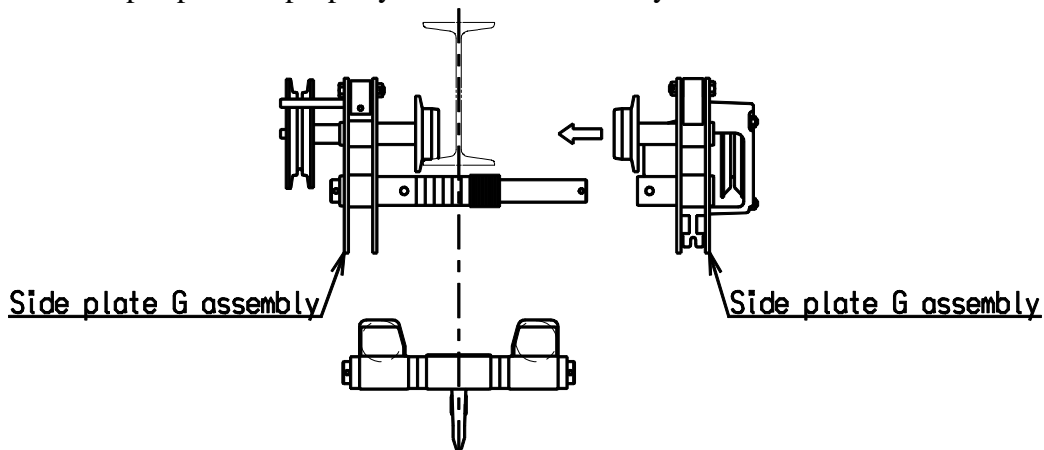
- Be sure to replace the detached stopper.

2) Mounting by disassembling the main body

- When there is no space between the rail end and the building, remove the frame on the chain hoist side and, after placing the opposite side frame on the travelling surface, perform reassembly.

(NOTE :See “2-1.ADJUSTING BEAM WIDTH”.)

- Be sure to firmly support the parts during reassembly from the bottom side so that the handwheel side is not tilted or otherwise shifted.
- On completion of reassembly, be sure to confirm that various shafts, nuts, lock pins and split pins are properly fastened without any slack and have not been loosened.

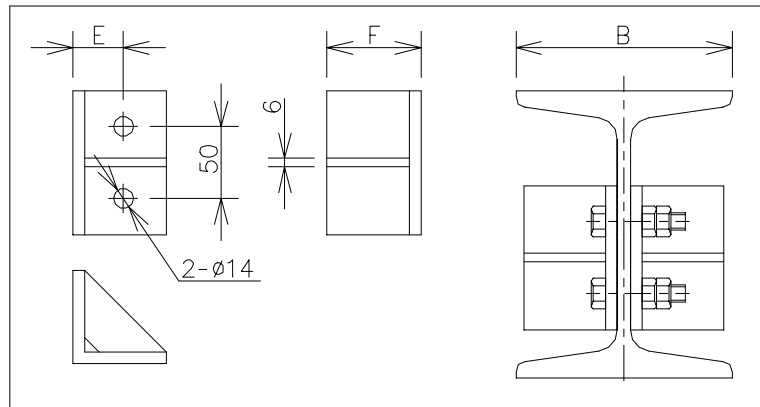


3-3 MOUNTING STOPPER

- Always make sure to mount the stopper to prevent dropping of the trolley at the rail end.
- Fabricate the stopper based on the following table and drawing, and determine the position for its' mounting according to wheel size,

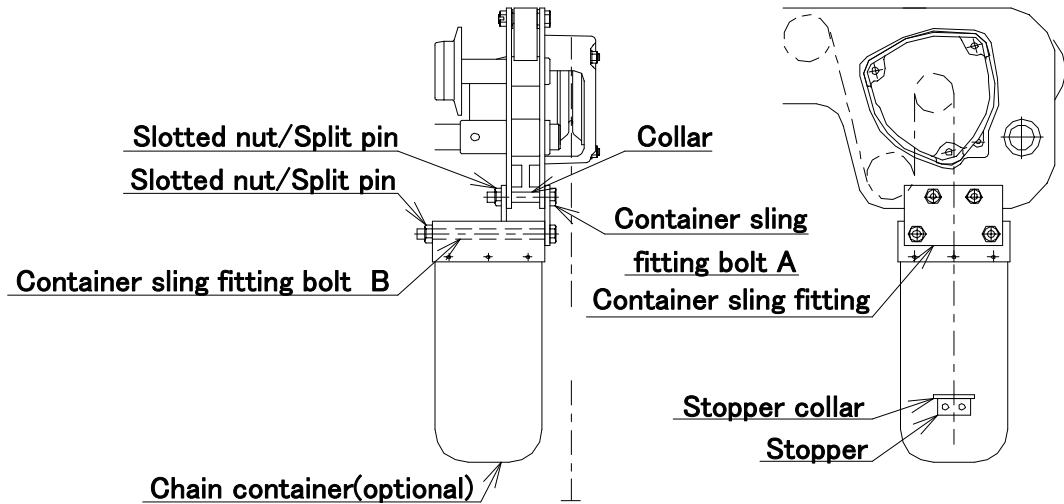
RAIL WIDTH	MATERIAL SIZE	E	F	Q'ty	BOLT, NUT
75	L-50×50×6	30	40	4	M12×55×55 (×4) NUT M12 (×8)
100					
125					
150	L-65×65×8	35	65	4	
175	L-75×75×9	40	75	4	

Use the double nut to tightly fasten the bolts.



3-4 MOUNTING CHAIN CONTAINER (OPTIONAL)

- Mount the chain container according to the following procedure. (See the drawing below:)
- 1) Fix the container sling fitting to the chain container by using the container sling fitting bolt B.
- 2) Fix the chain container assembly to the frame by using the container sling fitting bolt A and collar.



⚠ WARNING

- Always confirm that all the slotted nuts and split pins are properly fixed.
- Always confirm that the stopper and the collar are firmly fixed on the third link from the end of the chain on the unloaded side and also that the stopper and collar are free of slack.
- Put a load chain from its no-load side end slowly and in such a manner that the chain does not get tangled up.
- Do not put a whole load chain in the bucket at one time.

4. SAFETY INSTRUCTIONS

4-1 PRE-START INSPECTION

▲ WARNING

Daily inspection is a MUST for safety purposes. Always perform a daily inspection before starting operation.

— Checking Items —

Check before opening

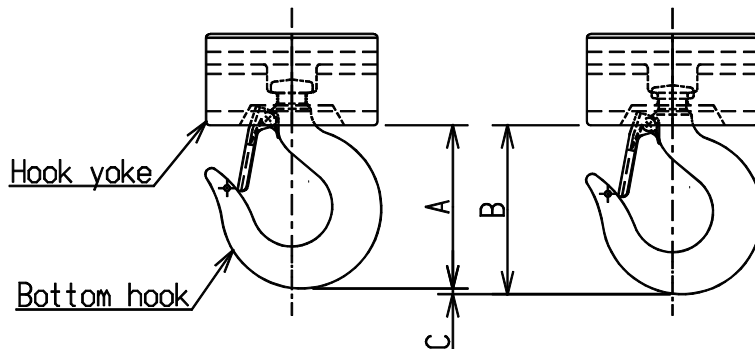
- Does the unloaded trolley travel smoothly without any load?
- Is travel free of jolts?
- Is the frame free of any visible deformation?
- Is the traveling rail free of any deformation /damage?

Monthly check

- Is a contact surface of hook yoke and bottom hook not worn?
 - ① Measure the distance (A dimensions in a figure) from the hook yoke undersurface to the bottom hook undersurface at the time of the purchase and record it.
 - ② A check method: Measure the dimensions of the same position of ①.

Assume measurements of this time B.

If values of $B - A = C$ exceed the numerical value of the list shown below, please change hook yoke and bottom hook.



W.L.L	1 t	2 t	3 t	5 t	7.5 t	10 t
C	3 mm	3 mm	3 mm	3 mm	5 mm	5 mm
A (Design level)	86mm	116mm	135.5mm	160.5mm	235.5mm	235.5mm

- ③ At the time of check, please confirm that you turn bottom hook and turn smoothly. When bottom hook does not turn smoothly, please break down a hook yoke part and clean, and, please improve grease. (shell Albania grease S3 or an equal article.) Still, please change bottom hook and hook yoke when it is not improved.

⚠ WARNING

- Always refer to the “Standard CB Series Manual Chain Hoist” instruction manual for pre-start inspection procedures for the hoisting unit.
 - Never use a hoist under abnormal condition.
 - Always stop operation immediately on detection of any abnormality, and either repair or replace the damaged part with the appropriate product without delay.

4-2. PRECAUTIONS FOR SAFE OPERATION

⚠ WARNING

- Always apply sufficient oil to the load chain and idle sheaves.
- Always perform a daily inspection of the load chain and idle sheaves. Upon detecting wear, etc., replace parts immediately. A worn load chain is dangerous and can cause breakage.
- Never lift a load aslant. Always move the trolley to the position directly above the load to be lifted so that it can be lifted vertically.
- Never allow the trolley to hit the stopper.
- When two or more trolleys are installed on the same rail, never bring them into contact and hit with each other.
- Never hitch the hand chain of a geared trolley into any other machine.
- Always operate travelling the trolley from a position to the rear of the load
- Abrasion may occur between hook yoke and bottom hook when turn a load in the state that lifted a load.
Because bottom hook may drop when abrasion exceeds a permission level, please carry out a periodic inspection by all means.