

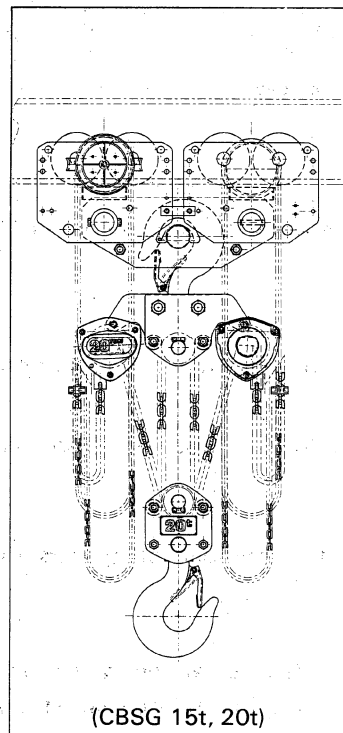
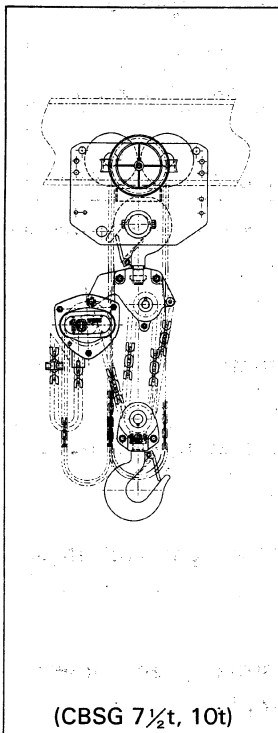
# Operating Instructions for Geared Trolley

## Capacity 7.5t, 10t, 15t and 20t

### IMPORTANT

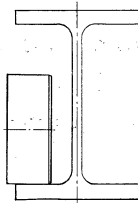
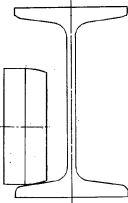
When using a hoist with this Geared trolley,  
follow the installation procedure on this Geared  
Trolley Operating Instructions.

### 1. Connection with KITO CB series hoists



Connect a trolley of this type with KITO Mighty hoist by directly hooking the suspension shaft.

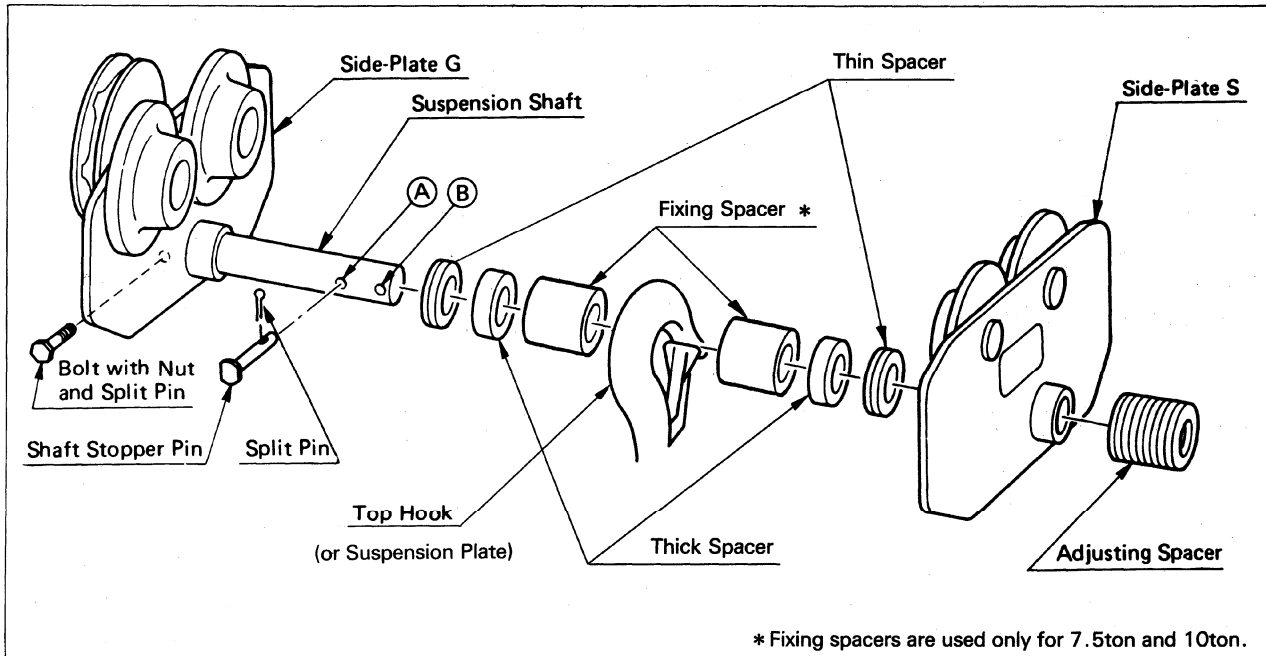
Trolley wheels for tapered flange are standard on 7.5t, 10t, 15t, and 20t trolleys. If Flat flange rail is used, specify trolley wheels for flat flange in advance.

flat flange wheel	Tapered' flange wheel
	

# KITO

## 2. Assembling of trolley

Assemble the trolley as follows, referring to Fig. 1 and Table 1.



Note : Although the above figure is showing TF type trolley, TS type trolley has the same structure as TF except "bumpers" which are assembled on only TS.

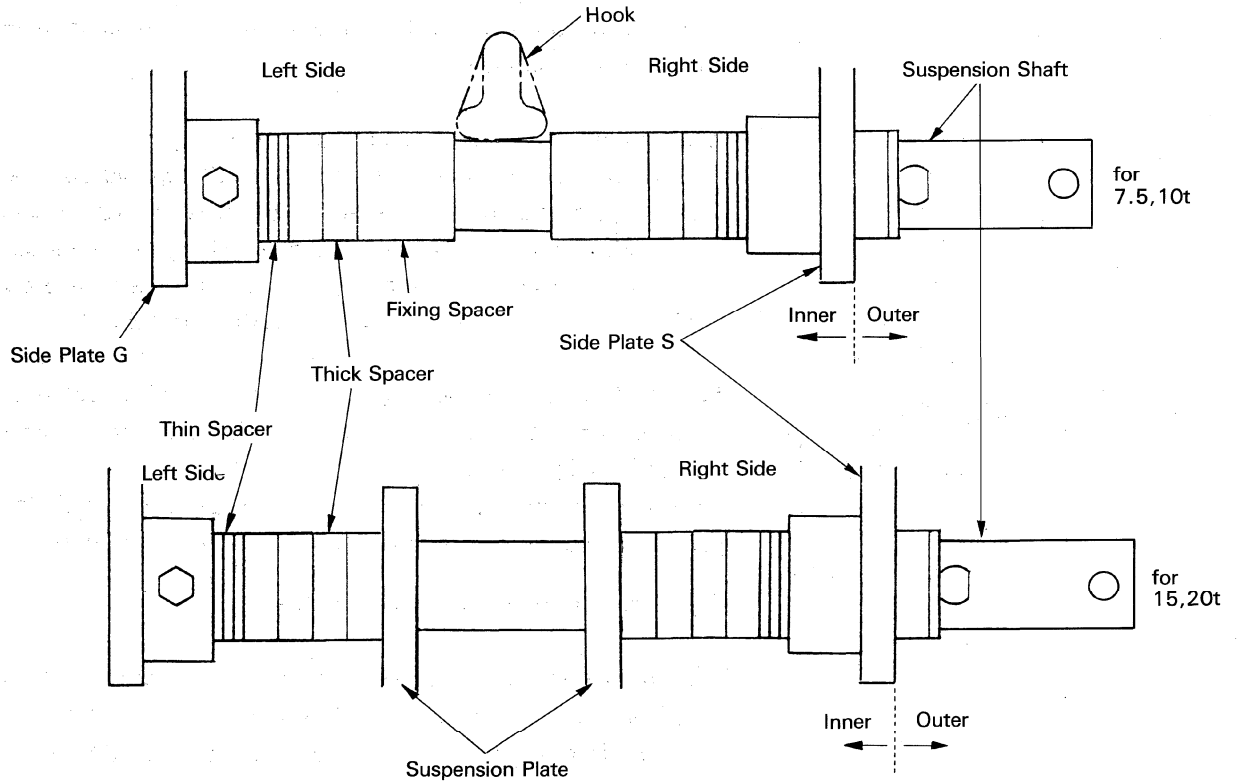
Fig. 1

- (1) Insert the suspension shaft into side-plate G and fix it with bolt for suspension shaft.
- (2) Insert the suspension shaft into adjusting spacers and the top hook (or suspension plate), referring to Fig. 1 and Table 1.

A difference of one adjusting spacer between the number of spacers on the right and those on the left does not cause any problem.

- (3) Insert the suspension shaft into side-plate S and the remaining adjusting spacers, and insert stopper pin into hole (A) in the shaft, and also insert a split pin into shaft stopper pin. Bend securely both branches of the split pin.

## Number of Adjusting Spacers



Capacity	Beam Width (mm)	Parts						
		Thin spacer			Thick spacer			Fixing spacer
		Outer	Inner		Outer	Inner		
Left	Right		Left	Right		1 for each side		
7.5t	150	6	1	1	4	2	2	—
	175	6	1	1	2	3	3	—
	200	6	1	1	0	4	4	—
10t	250	0	4	4	5	2	2	2
	300	4	4	0	0	4	5	2
15t	150	10	0	0	3	0	0	—
	175	10	0	0	1	1	1	—
	200	6	4	0	0	1	2	—
20t	250	0	4	4	5	3	3	—
	300	4	4	0	0	5	6	—

CAUTION : When the trolley is mounted on other sized rail than above table, adjust trolley width according to the Appendix on the final page of this manual.

Table 1

### 3. Installation of trolley on the beam

#### 3.1 Adjustment of trolley width before installation.

Before installation, never fail to make the following adjustments for a proper clearance.

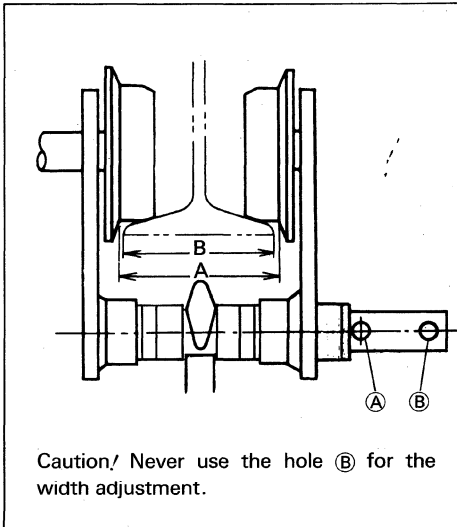


Fig. 2

#### Adjustment of "A" dimension (Refer to Fig.2)

When the left and the right frame are fully spread outside, the proper distance between them is beam width (B) + about 4 mm. Make adjustments by adding or taking out outer spacers and spare spacers (two spare spacers are provided), irrespective of the numbers of outer spacers specified in Table 1.

Two trolleys are connected with 15 t and 20 t trolleys. The width of each of these trolleys should be adjusted in the same way as explained above.

After adjustment, securely insert the split pin into the shaft stopper pin to avoid the latter coming off the suspension shaft.

#### 3.2 Installation of trolley on the beam

- (1) In case the trolley is to be installed from one end of the beam as it is connected with a hoist.
  - 1) Remove the stopper from one end of the beam and install the trolley from the end of the beam.
  - 2) Fix the stopper to the beam surely.
- (2) In case trolley can not be installed from beam end. Installation of the trolley, as assembled with a manual chain hoist, to the beam by separating the side plates S and G is extremely dangerous and should not be employed under any circumstances. Always install the trolley to the beam and connect the chain hoist to the trolley.
  - 1) Disconnect the chain hoist from the trolley, if they are assembled. (Leave the top hook and the suspension plate on the suspension shaft.)
  - 2) Install the trolley to the beam
    - ① Remove from the suspension shaft the shaft stopper pin, side plate S, spacers, and top hook or suspension plate.
    - ② Mount the trolley wheels of the side plate G on the beam flange. Assemble the spacers, top hook or suspension plate, spacers, and side plate S onto the suspension shaft. Pushing the side plate S, mount the trolley wheels of the side plate S onto the beam flange.
    - ③ Insert the shaft stopper pin into the suspension shaft and secure it with a split pin. Bend securely both branches of the split pin after insertion.
    - ④ Connect the chain hoist to the trolley by making sure of its relative position to the trolley.

Install the two trolley combination types for 15 and 20 ton capacity hoists on the running beam in the same way.

## 4. After installation work

After all the installation work is over, make sure

- 4.1 That the relative positions of the trolley and the electric chain hoist are correct. (Refer to Figure)
- 4.2 That the stoppers to prevent the trolley from running off, are surely fixed.
- 4.3 That all the bolts and nuts and split pins are properly used and surely tightened.

Note : Adjustment for the beam width shall be made within the specified number of spacers as given in Table 1. Consult your nearest dealer or KITO offices for any deviation.

The hole (B) is for cord chain support for 10-ton hoist. Never use this hole (B) for other purpose to prevent accident from strength reason.

## 5. Precautions to be made in handling trolley

### 5.1 Avoid pulling trolley aslant

If the trolley is pulled excessively aslant as it is connected to a hoist the trolley is tilted, applying strong force to the beam.

### 5.2 Prevent collisions

The trolley may be damaged if it is bumped against the stopper at beam end or against a trolley on the same beam. Take care to prevent such collisions.

Further, the small trolley for 7.5 ton capacity is provided optionally with a trolley for a chain container. Avoid letting the trolley to bump against this latter trolley, too.

### 5.3 Avoid permitting the hand chain to catch an object

If load is lowered with an object caught by the hand chain, the hand chain is pulled and damage may be caused to the trolley, such as a bend in the side-plate.

### 5.4 Disassembling

In case the hoist is to be disassembled for the purpose of inspection, never fail to make sure that there is no load.



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