SCOPE & PURPOSE

Provide assembly and installation information for the four types of steel chain container assemblies, KA, KB, KC and KD, for use with Harrington's ER Electric Chain Hoist.

IMPORTANT INFORMATION

This document is intended for use ***in combination*** with the **"Owner's Manual for Electric Chain Hoist (N)ER Series 1/8 through 5 Ton, or Supplement owners Manual 8 through 20 Ton and SNER Series 1/4 through 3 Ton Capacity" (hereinafter referred to as Owner's Manual).** Before using the chain hoist refer to the Owner's Manual for important information.

PRODUCT OVERVIEW

There are four types of steel chain container assemblies for use on the ER Series Electric Chain Hoist. These are the KA Type, the KB Type, KC Type and the KD Type – refer to Figure 1 and the definitions that follow.

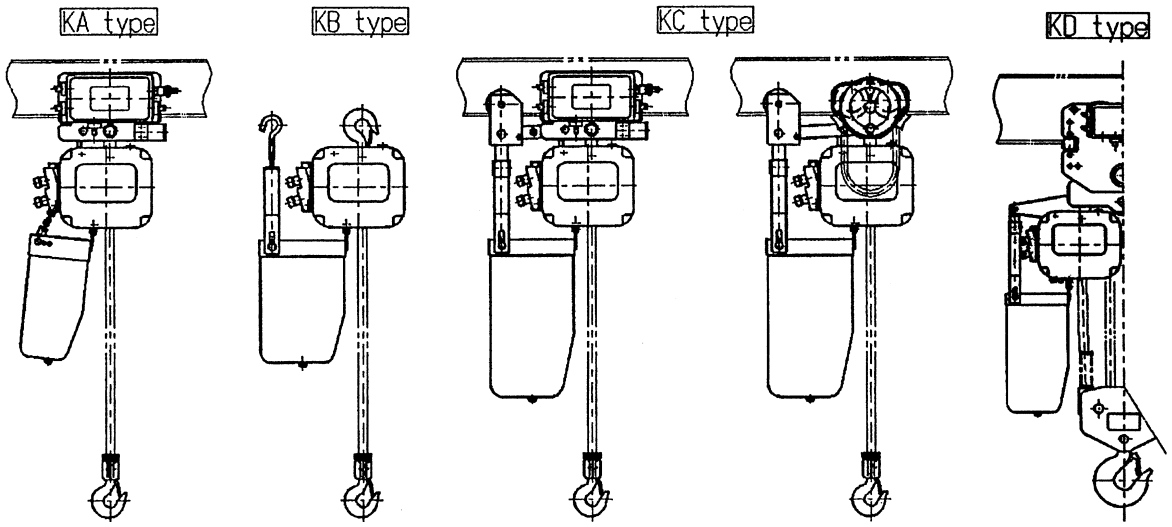


Figure 1 – Types of Chain Containers for (N)ER & SNER Series Hoist

Definitions of Chain Container Assembly Types:

KA Type — Suspended solely from the hoist itself. Can be used with hook mounted hoist, hoist on manual trolley, and hoist on motorized trolley. These are generally smaller size containers and are used for shorter lifts.

KB Type — Suspended partially from the hoist and partially from a separate suspension point. For use only with hook mounted hoist when container is too large for KA Type.

KC Type — Suspended partially from the hoist and partially from a separate trolley. For use only with hoist on manual trolley, and hoist on motorized trolley. These are generally larger size containers and are used for longer lifts.

KD Type — Suspended partially from the hoist body and partially from a suspension plate. For use only with large capacity dual bodied hoist, hook mount or trolley mount. These types incorporate a container for each hoist body.

There are 15 different sizes of chain containers used making chain container assemblies. Table 1 gives these chain containers and their relative sizes. Table 2 gives the maximum lifts these containers can accommodate.

Table 1 – Container Sizes

Container Type	Small			Medium							Large
KA	AH	BH	CH	DH							
KB KC	A	B	C	D	E	F	G	H	I	J	K
KD					E	F	G	H	I	J	K

Table 2 – Containers Maximum Lifts

Hoist Capacity Code	Sizes and Maximum Lift in ft.								
001H, 003S	AH	A	B	C					
	39	68	124	173					
003H, 005L, 005S	AH	BH	C	D	E				
	19	39	95	118	170				
010L, 010M, 010S	BH	CH	D	E	F	G	H		
	19	39	59	85	111	137	180		
015S, 020L, 020M	CH	DH	E	F	G	H			
	29	42	65	85	108	141			
020S	CH	DH	E	F	G	H	I	J	K
	29	42	65	85	108	141	177	219	275
025S	CH	DH	E	F	G	H	I	J	K
	23	32	49	65	82	105	131	164	210
030C	CH	DH	E	F	G	H			
	14	21	32	42	54	70			

030L, 030S	CH	DH	E	F	G	H	I	J	K
	16	23	39	49	62	82	105	131	164
050L	CH	DH	E	F	G	H	I	J	K
	10	16	24	32	41	52	65	82	105
080S		DH	E	F	G	H	I	J	K
		9.5	16	21	26	34	42	54	68
100L			E	F	G	H	I	J	K
			11	16	19	26	32	41	52
100S	CH	DH	E	F	G	H	I	J	K
	11	16	24	32	41	52	65	82	105
150S		DH	E	F	G	H	I	J	K
		9.5	16	21	26	34	42	54	68
200S			E	F	G	H	I	J	K
			11	16	19	26	32	41	52

ASSEMBLY AND INSTALLATION

NOTICE

Make sure that you use the assembly and installation information that corresponds to the chain container size that is marked on the container.

Road Map to assembly and installation information:

KA Type

Capacity Code 001H to 020M and 030C..... Figure 2

Capacity Code 020S up to 150S, Except 030C and 100L..... Figure 3

KB Type

Capacity Code 001H to 020M and 030C .....Figure 4

Capacity Code 020S up to 050L, 100L, Except 030C with Container Sizes E, F, G and H.....Figure 5

Capacity Code 020S up to 050L, 100L, Except 030C with Container Sizes I, J and K.....Figure 6

KC Type

The KC Type involves a separate trolley for the chain container. Therefore, there are more tables and figures involved. When using KC type containers, the hoist **MUST** be suspended from it's Motorized, push or geared trolley using a Suspender T.

For Hoist with Motorized Trolley:

Hoist Capacity Code	Container Size	Container Assembly	Container Trolley Assembly and Adjustment	Hoist Trolley Adjustment
001H to 020M and 030C	All	Figure 7	Figure 12 & 13 Table 5	Use the MR Trolley Owner's Manual
020S up to 050L	E, F, G, & H	Figure 8	Figure 12 & 13 Table 5	Use the MR Trolley Owner's Manual
080S and 100L	E, F, G, & H	Figure 8	Figure 12 & 14 Table 5	Use the MR Trolley Owner's Manual
020S up to 050L	I, J, & K	Figure 9	Figure 12 & 13 Table 5	Use the MR Trolley Owner's Manual
080S and 100L	I, J, & K	Figure 9	Figure 12 & 14 Table 5	Use the MR Trolley Owner's Manual

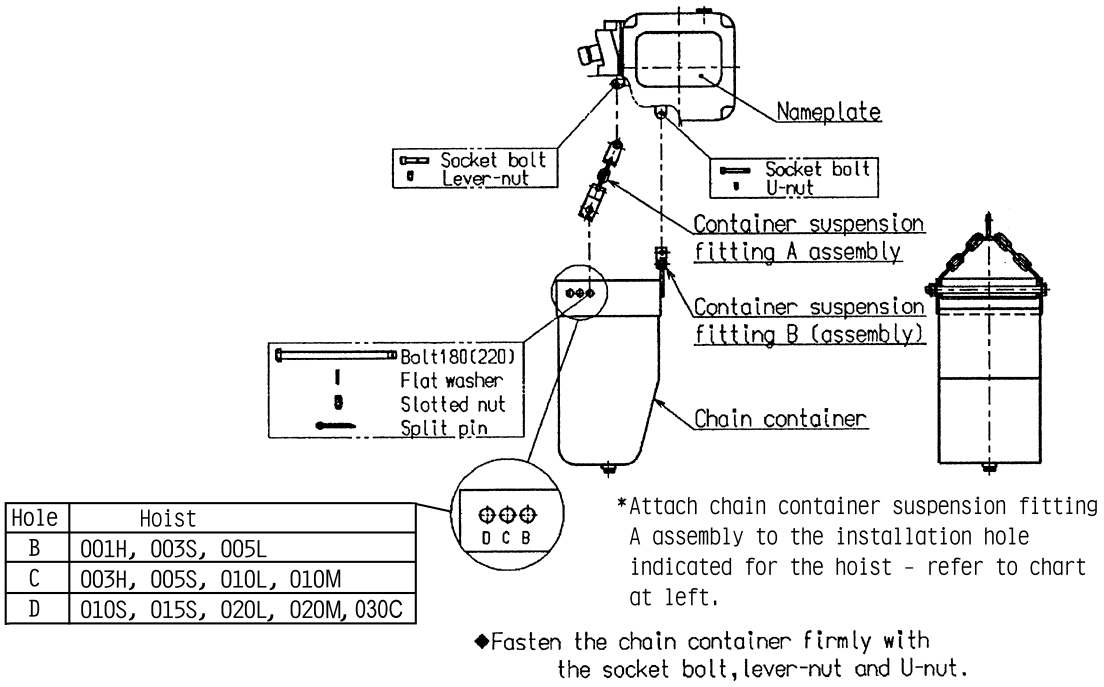
For Hoist with Push and Geared Extended Hand wheel Trolley:

Hoist Capacity Code	Container Size	Container Assembly	Container Trolley Assembly and Adjustment	Hoist Trolley Adjustment
001H to 020M and 030C	All	Figure 7	Figure 12 & 13 Table 6	Table 7
020S up to 050L	E, F, G, & H	Figure 8	Figure 12 & 13 Table 6	Table 7
080S and 100L	E, F, G, & H	Figure 8	Figure 12 & 14 Table 8	Use Push or Geared Trolley Owner’s Manual
020S up to 050L	I, J, & K	Figure 9	Figure 12 & 13 Table 6	Table 7
080S and 100L	I, J, & K	Figure 9	Figure 12 & 14 Table 8	Use Push or Geared Trolley Owner’s Manual

KD Type

For Hoists with Motorized or Manual Trolley:

Hoist Capacity Code	Container Size	Container Assembly	Container Trolley Assembly and Adjustment	Hoist Trolley Adjustment
100S to 200S	E, F, G, & H	Figure 10	N/A	N/A
100S to 200S	I, J, & K	Figure 11	N/A	N/A



Hole	Hoist
B	001H, 003S, 005L
C	003H, 005S, 010L, 010M
D	010S, 015S, 020L, 020M, 030C

Figure 2 – KA Type for Capacity Code 001H to 020M and 030C

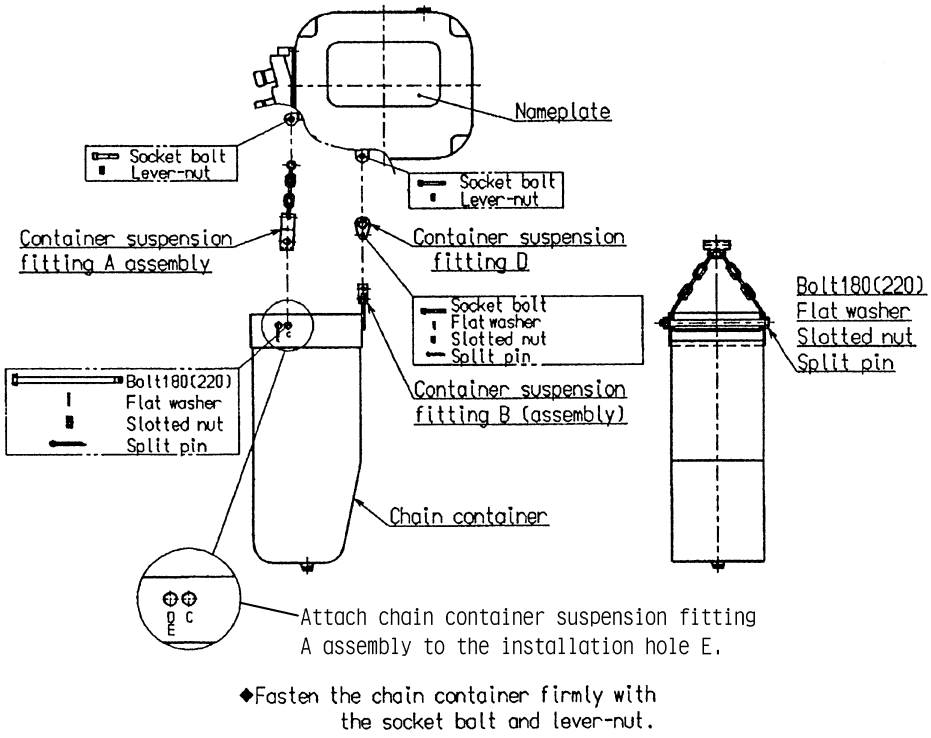
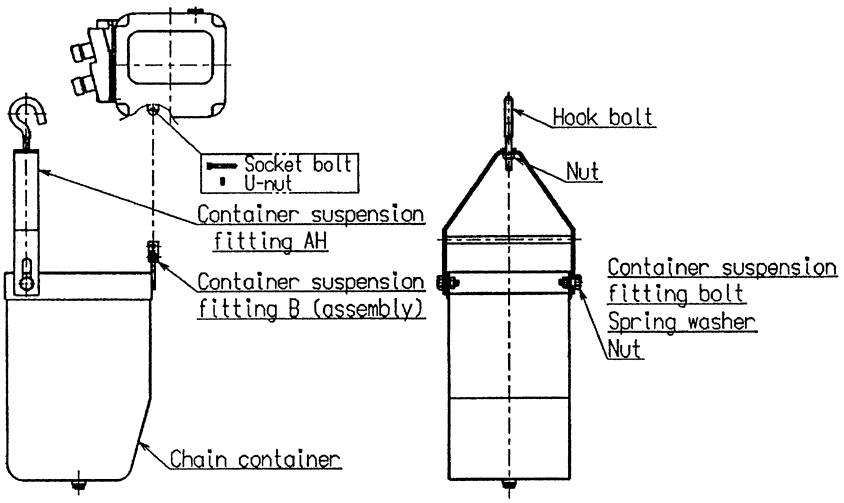
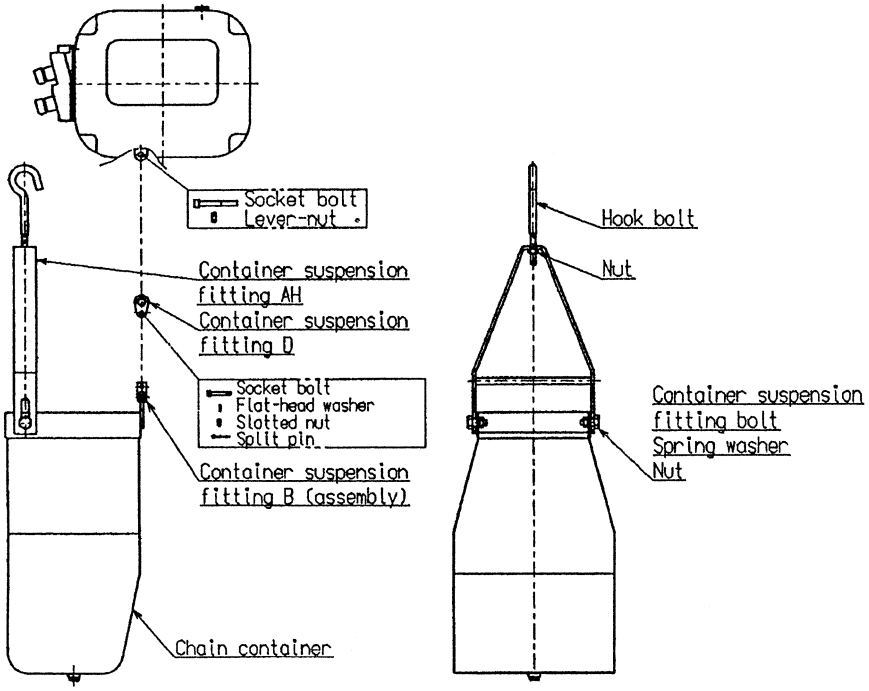


Figure 3 – KA Type for Capacity Code 020S to 150S, Except 030C and 100L



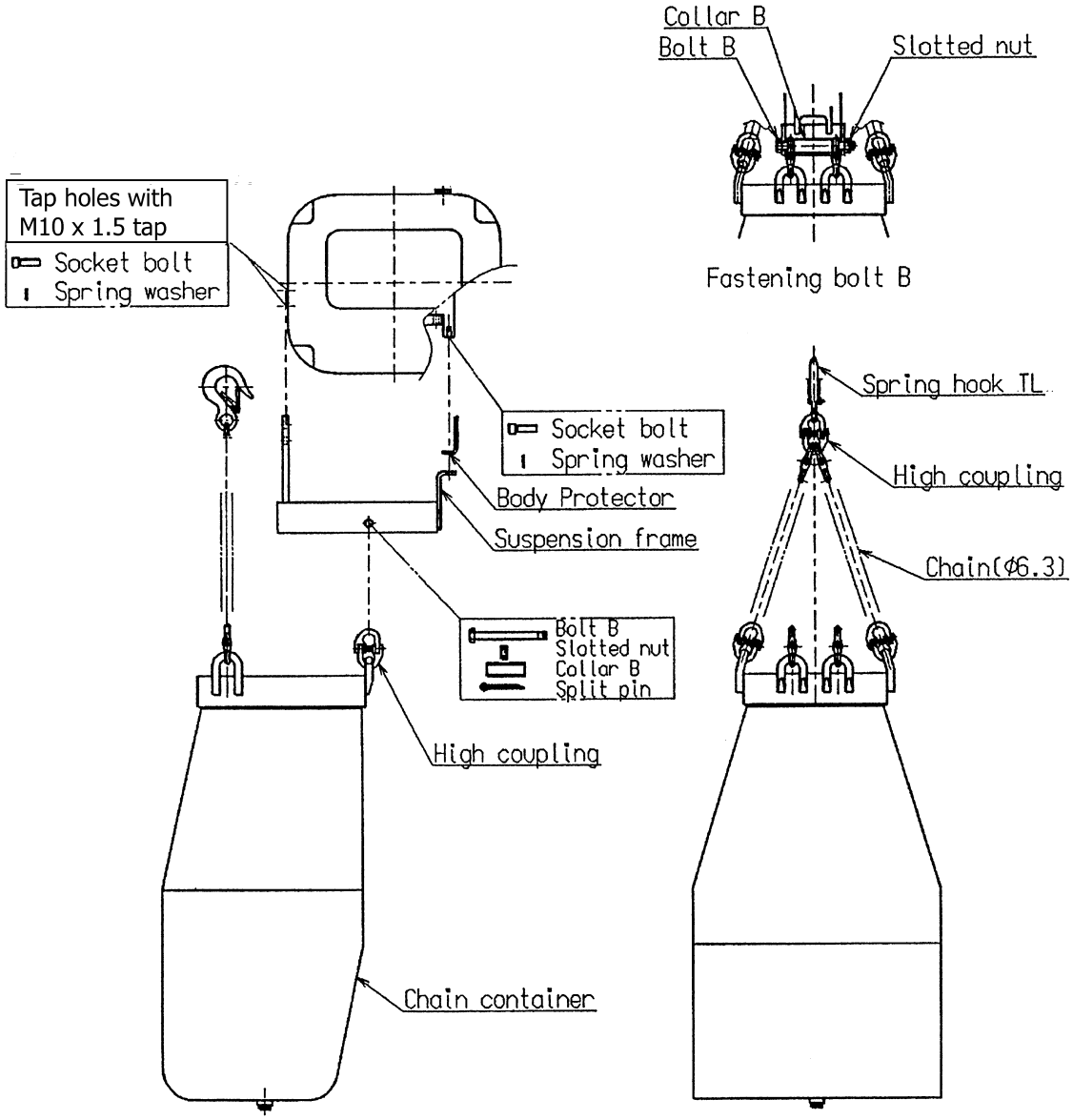
◆Fasten the chain container firmly with the socket bolt and U-nut.
◆Screw the hook bolt to adjust the chain container not to tilt when loaded.

Figure 4 – KB Type for Capacity Code 001H to 020M and 030C



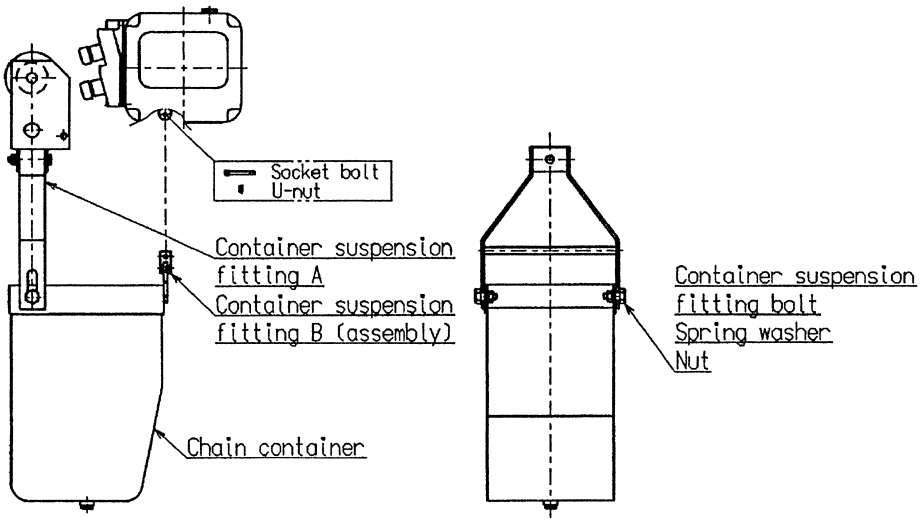
◆Fasten the chain container firmly with the socket bolt and lever-nut.
◆Screw the hook bolt to adjust the chain container not to tilt when loaded.

Figure 5 – KB Type, Container Sizes E, F, G and H for Hoist Capacity Code 020S up to 100L, Except 030C



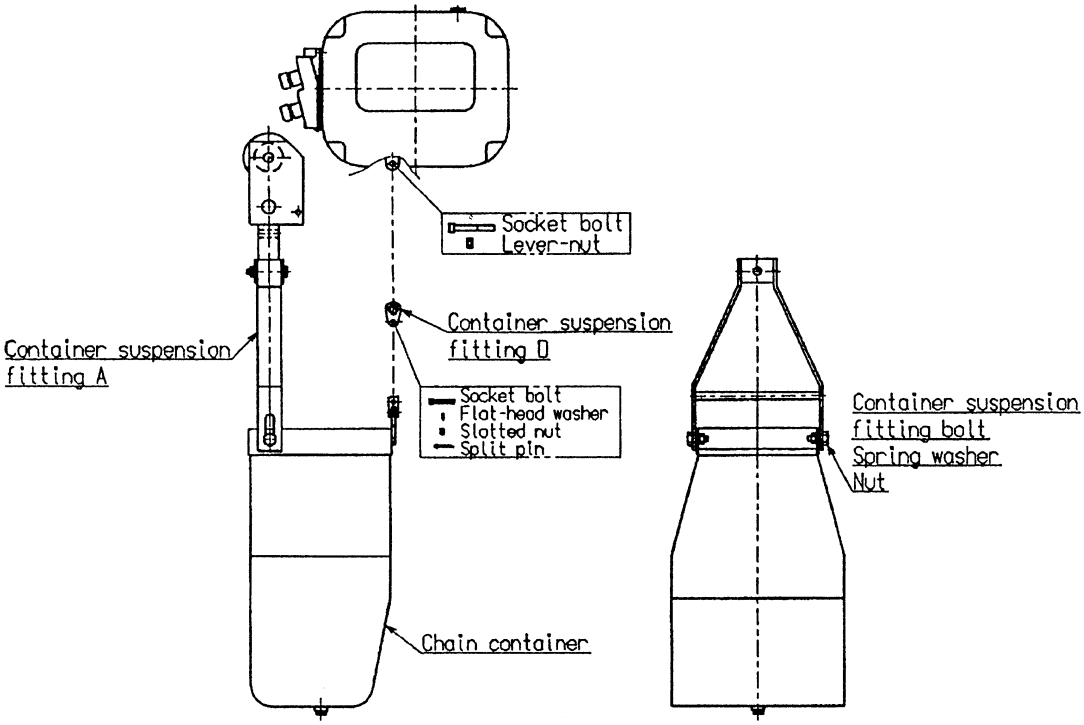
* Tap existing (4) 8.8 mm diameter holes to 10 mm with M10 x 1.5 tap.
* Fasten the suspension frame to the chain hoist firmly with the socket bolt.
* Fasten the chain container firmly with the bolt B, collar B, slotted nut and split pin.

Figure 6 – KB Type, Container Sizes I, J, and K, for Hoist Capacity Code 020S up to 100L, Except 030C



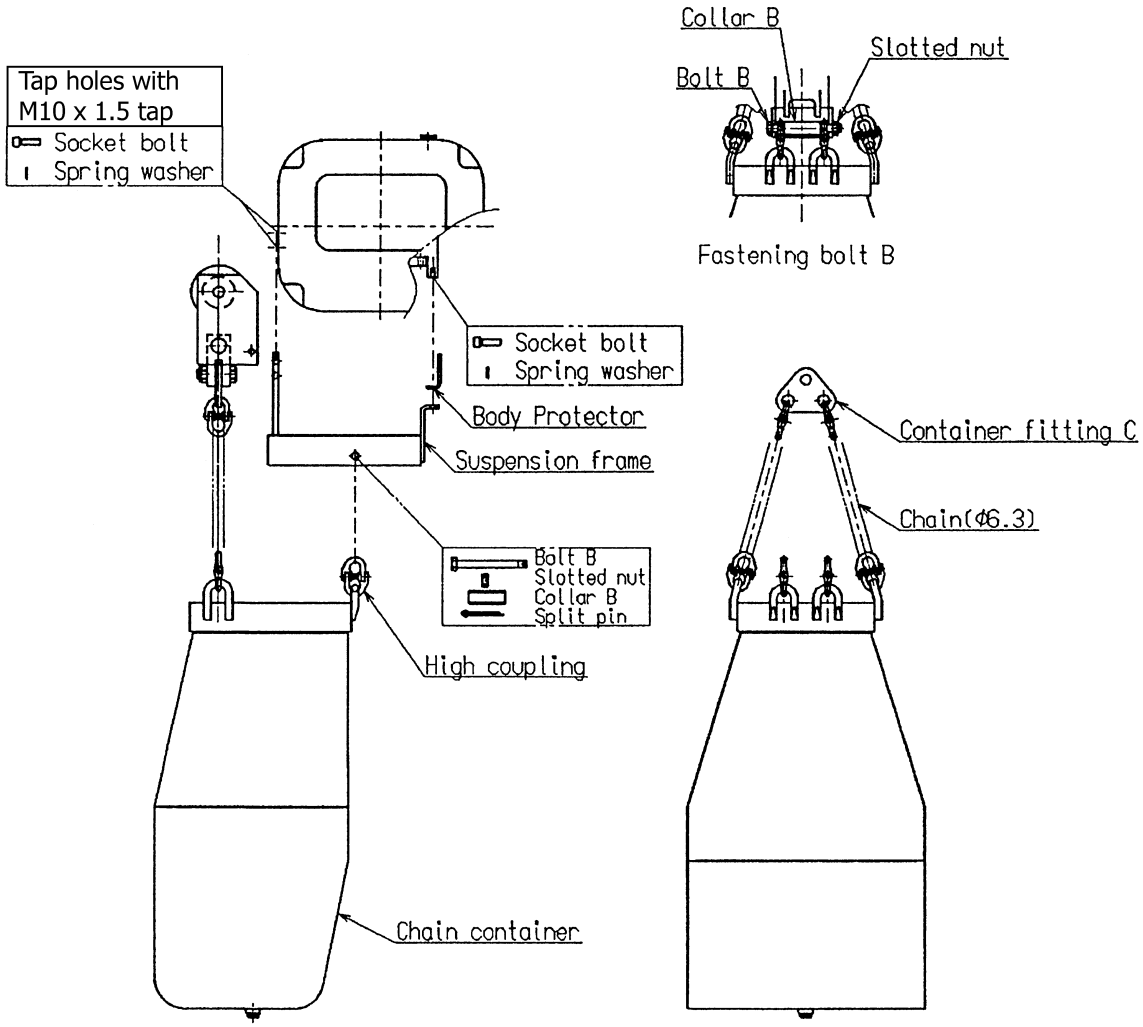
◆Fasten the chain container firmly with the socket bolt and U-nut.

Figure 7 – KC Type for Capacity Code 001H to 020M and 030C



◆Fasten the chain container firmly with the socket bolt and U-nut.

Figure 8 – KC Type, Container Sizes E, F, G and H for Hoist Capacity Code 020S up to 050L, Except 030C



* Tap existing (4) 8.8 mm diameter holes to 10 mm with M10 x 1.5 tap.
* Fasten the suspension frame to the chain hoist firmly with the socket bolt.
* Fasten the chain container firmly with the bolt B, collar B, slotted nut and split pin.

Figure 9 – KC Type, Container Sizes I, J, and K for Hoist Capacity Code 020S up to 050L, Except 030C

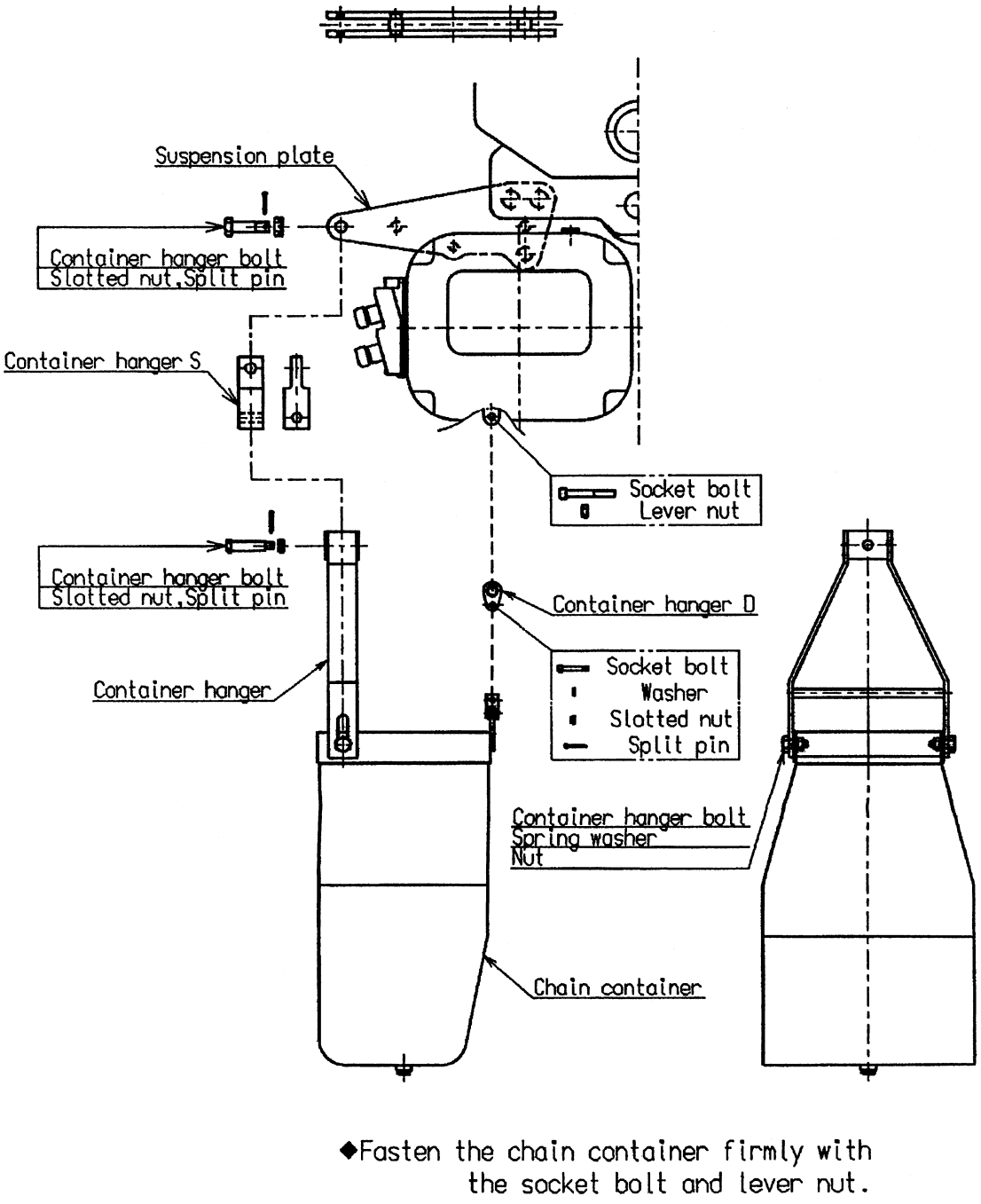
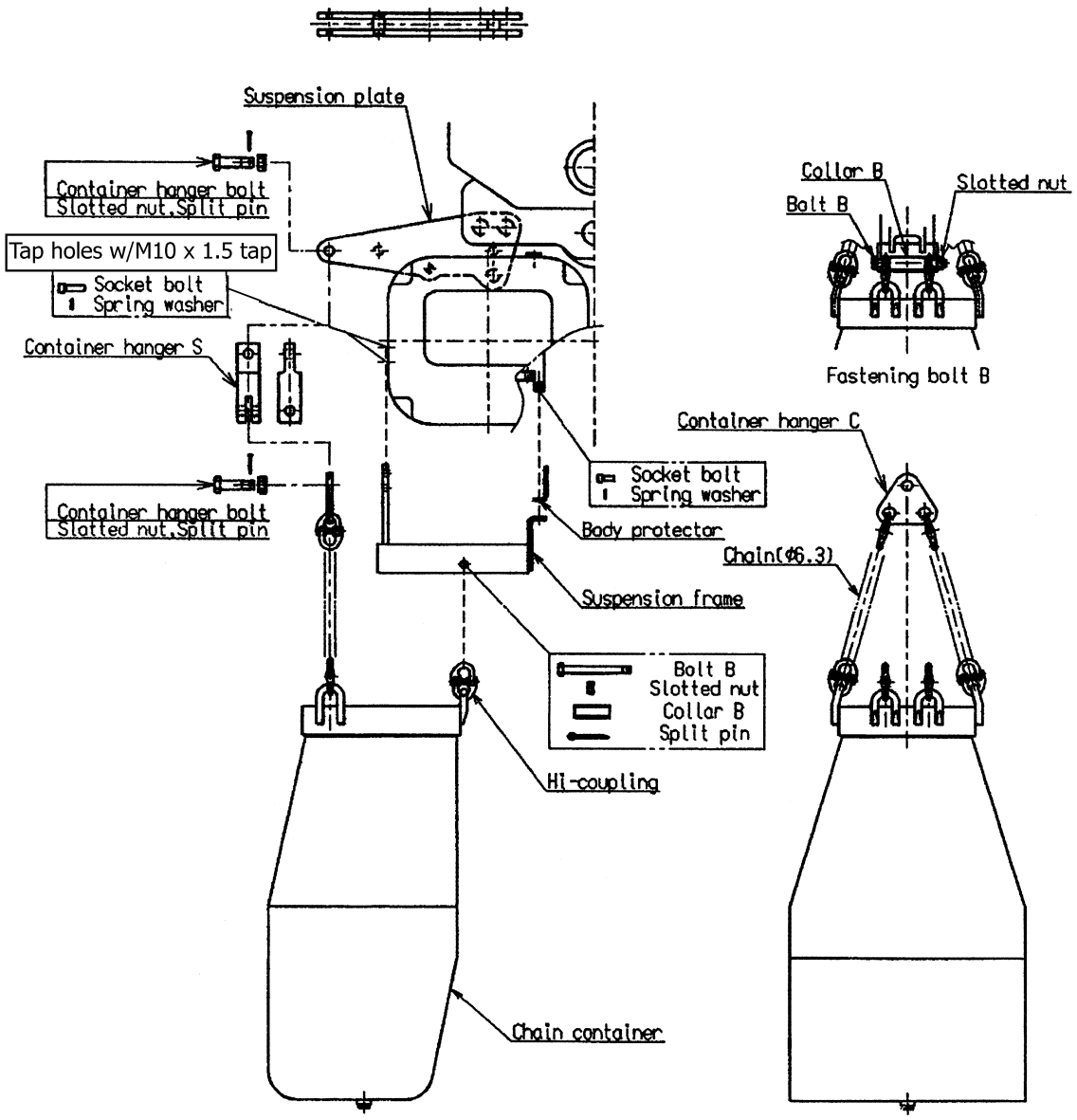
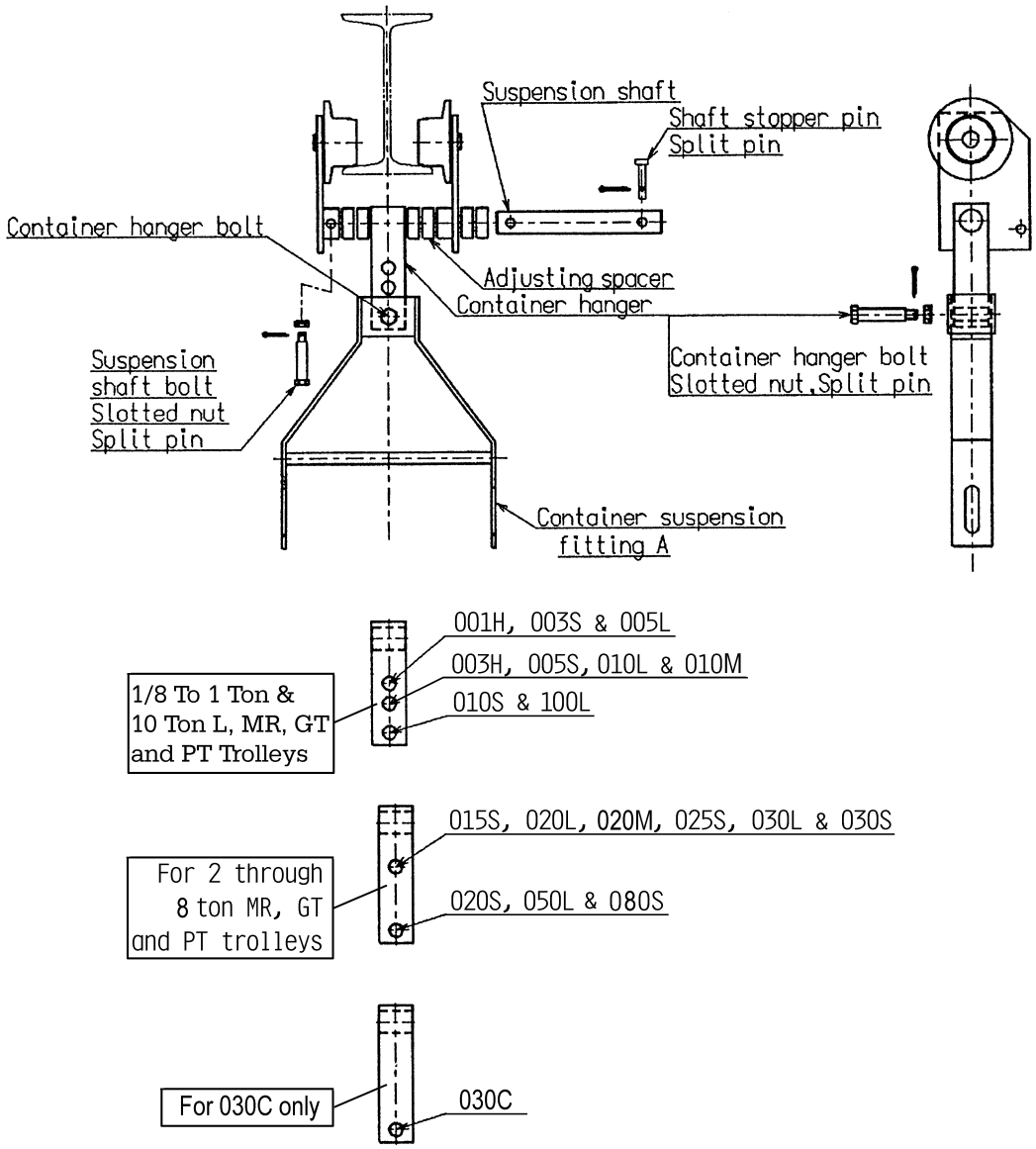


Figure 10 – KD Type, Container Size E, F, G and H, for Hoist Capacity 100S and above.



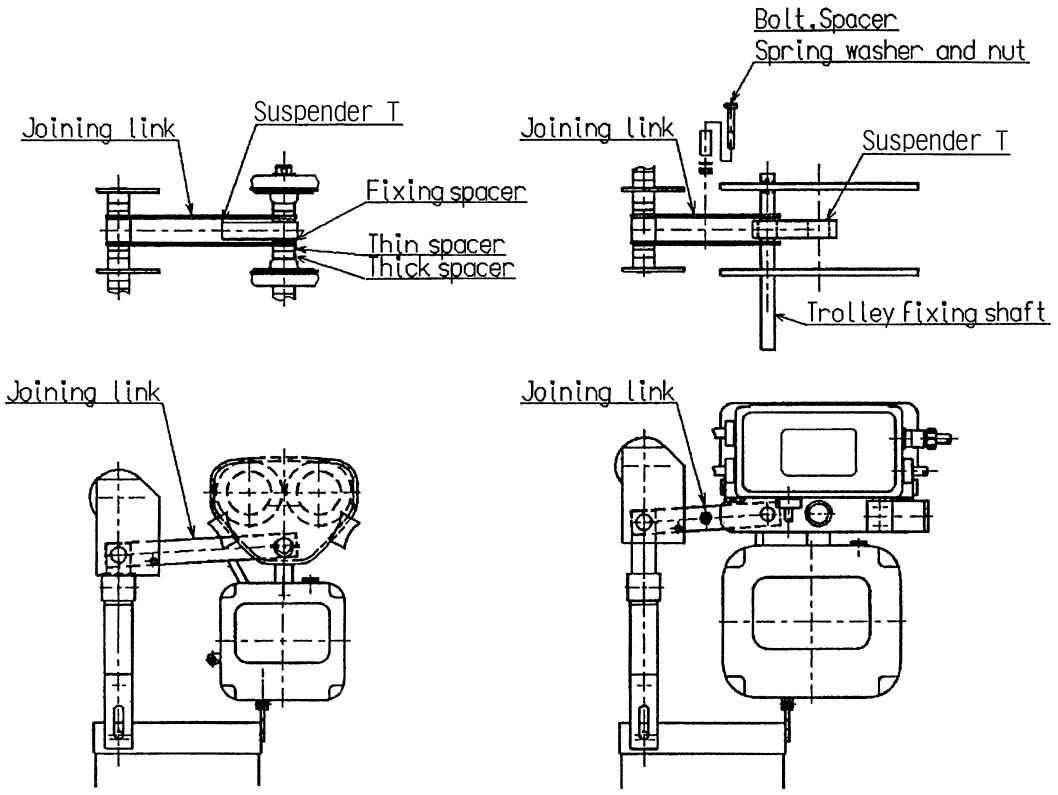
* Tap existing (4) 8.8 mm diameter holes to 10 mm with M10 x 1.5 tap.
* Fasten the suspension frame to the chain hoist firmly with the socket bolt.
* Fasten the chain container firmly with the bolt B, collar B, slotted nut and split pin.

Figure 11 – KD Type, Container Size I, J and K, for Hoist Capacity 100S and above.



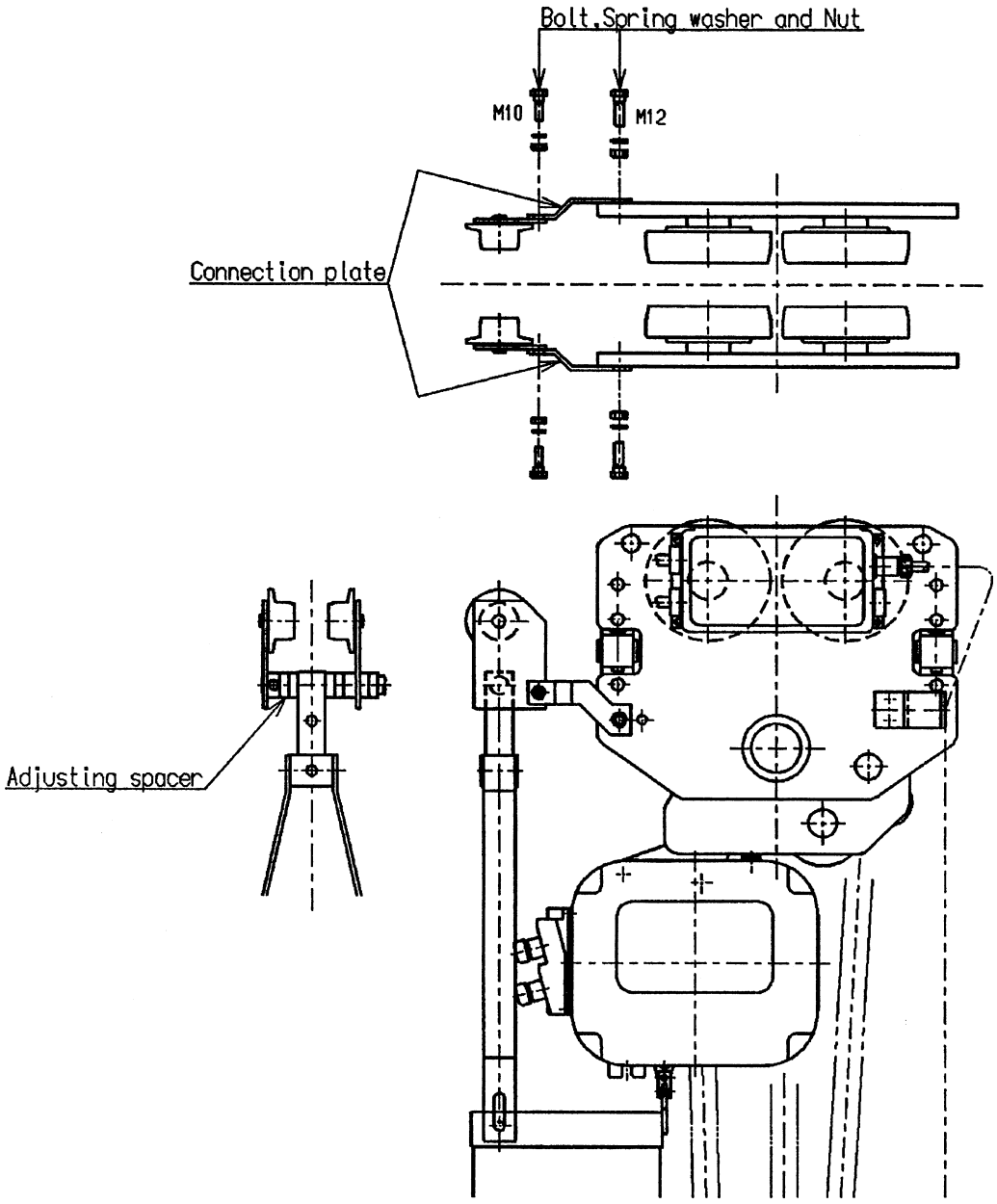
- The container hanger has two or three holes for the connection of the container suspension fittings. Use the appropriate container hanger as required for the hoist capacity.
- The suspension shaft is available in three sizes to fit various beam flange widths (standard, up to 7.8", and up to 12.0").
- Refer to the Table 5, 6 or 8 for the adjustment for the beam flange width.

Figure 12 – KC Type Container Trolley Assembly



- The Joining Link, Fixing Spacer, Thin Spacer and Thick Spacer are included with the steel chain container.
- KC type hoist is assembled in accordance with the drawings above.
- For a hoist mounted to a manual trolley (ERP or ERG), the spacer arrangement for the hoist's trolley must be adjusted according to Table 7. This is because the container trolley is coupled to the suspension shaft of the hoist's trolley.
- For a hoist mounted to a motorized trolley (ERM), no adjustments are required to the spacers for the hoist's trolley. This is because the container's trolley is coupled to the trolley fixing shaft of the hoist's trolley, not its suspension shaft.

Figure 13 – KC Type Coupling Container Trolley to Hoist's Trolley



- The connection plate, adjusting spacer are enclosed in your package as the standard accessory parts of the steel chain container.
- KC type hoist is assembled in accordance with the drawing above.
- Adjust the hoist's trolley following the instructions that came with the trolley.

Figure 14 – KC Type Coupling Container Trolley to Hoist's Trolley, for Hoist Capacity 080S and 100L.

Table 5 – Container Trolley Spacers Adjustment for KC Type Containers Used with MR & SMR Trolley,

| Number of Adjusting Spacers | | |

Table 6 – Container Trolley Spacers Adjustment for KC Type Containers used with Push and Geared Hoist Trolleys.

| Number of Adjusting Spacers | | |

Table 7 – Hoist's Trolley Spacers Adjustment for Push and Geared trolleys Used with KC Type Containers

| Capacity | Parts | | Number of Adjusting Spacers | | |

Table 8 – Container Trolley Spacers Adjustment for KC Type Containers used with MR & Manual Trolley, 8 & 10L.

Number of Adjusting Spacers																																				
Beam flangh width		(in)	5 7/8 5 15/16	6	6 1/8	6 5/16	6 7/16	6 1/16	6 7/8	7	7 1/16 7 1/8	7 1/4 7 5/16	7 7/8	8	8 7/16	8 1/16	9	9 1/8	9 7/8	10	10 1/8	10 1/4	10 3/8	10 1/2	11	11 1/8	11 1/4	11 3/8	11 5/8	11 3/4	11 13/16
Capacity	Parts	(mm)	149 150	153	155	160	163	170	175	178	180 181	184 185	200	203	215	220	229	232	250	254	257	260	264	267	279	283	286	289	295	298	300
8 ~ 10	Thin spacer	Inner	0	0+1	1+1	1+2	2+2	3+3	4+4	0+1	1+1	1+2	4+4	0+1	2+3	3+4	4+5	5+5	8+8	1+1	1+2	1+2	2+3	3+3	4+5	5+6	6+6	6+7	7+7	7+8	8+8
		Outer	8	7	6	5	4	2	0	7	6	5	0	15	11	9	7	6	0	14	13	13	11	10	7	5	4	3	2	1	0
	Thick spacer	Inner	4+4	4+4	4+4	4+4	4+4	4+4	4+4	5+5	5+5	5+5	5+5	6+6	6+6	6+6	6+6	6+6	6+6	8+8	8+8	8+8	8+8	8+8	8+8	8+8	8+8	8+8	8+8	8+8	8+8
		Outer	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0

Note: 1) Take note of the numbers on spacers of inner side as follows.

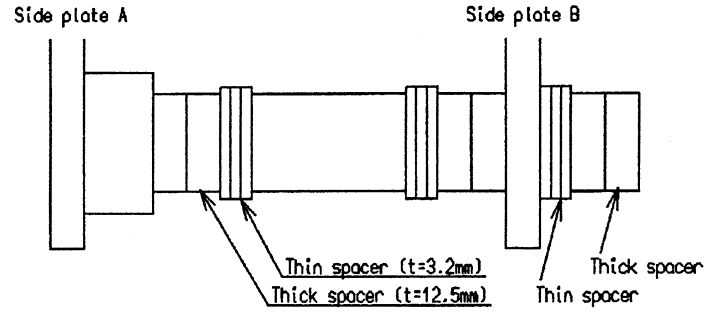
Example 0 + 1
- 1 — Number on side plate B
- 0 — Number on side plate A

2) Adjustment of trolley width
Adjust the dimensions by appropriately increasing or decreasing the number of inner or outer adjusting spacers, without strictly adhering to the number of adjusting spacers shown in the above table.

3) Ⓐ indicates standard range.
Ⓑ indicates W20 range.
Ⓒ indicates W30 range.

(t) \ (in)	6 7/8	7 7/8	
8 ~ 10	Ⓐ	Ⓑ	Ⓒ

4)Example of spacers arrangement



GENERAL USE
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