HARRINGTON
HOISTS AND CRANES

PURPOSE

Provide assembly and installation information for the four (4) types of steel chain container assemblies for use with the (N)ER2 Electric Chain Hoist.

IMPORTANT INFORMATION

This document is intended for use *in combination* with the **"Owner's Manual Electric Chain Hoist ER2 and NER2 Series 1/8 Ton through 5 Ton Capacity", or "Owner's Manual Supplement Electric Chain Hoist ER2 and NER2 Series 8 Ton through 20 Ton Capacity.** Before using the chain hoist refer to the Owner's Manual for important information.

PRODUCT OVERVIEW

There are four (4) types of steel chain container assemblies for use on the (N)ER2 Series Electric Chain Hoist, KA, KB, KC, and KD. Refer to figure 1 and the definitions that follow.
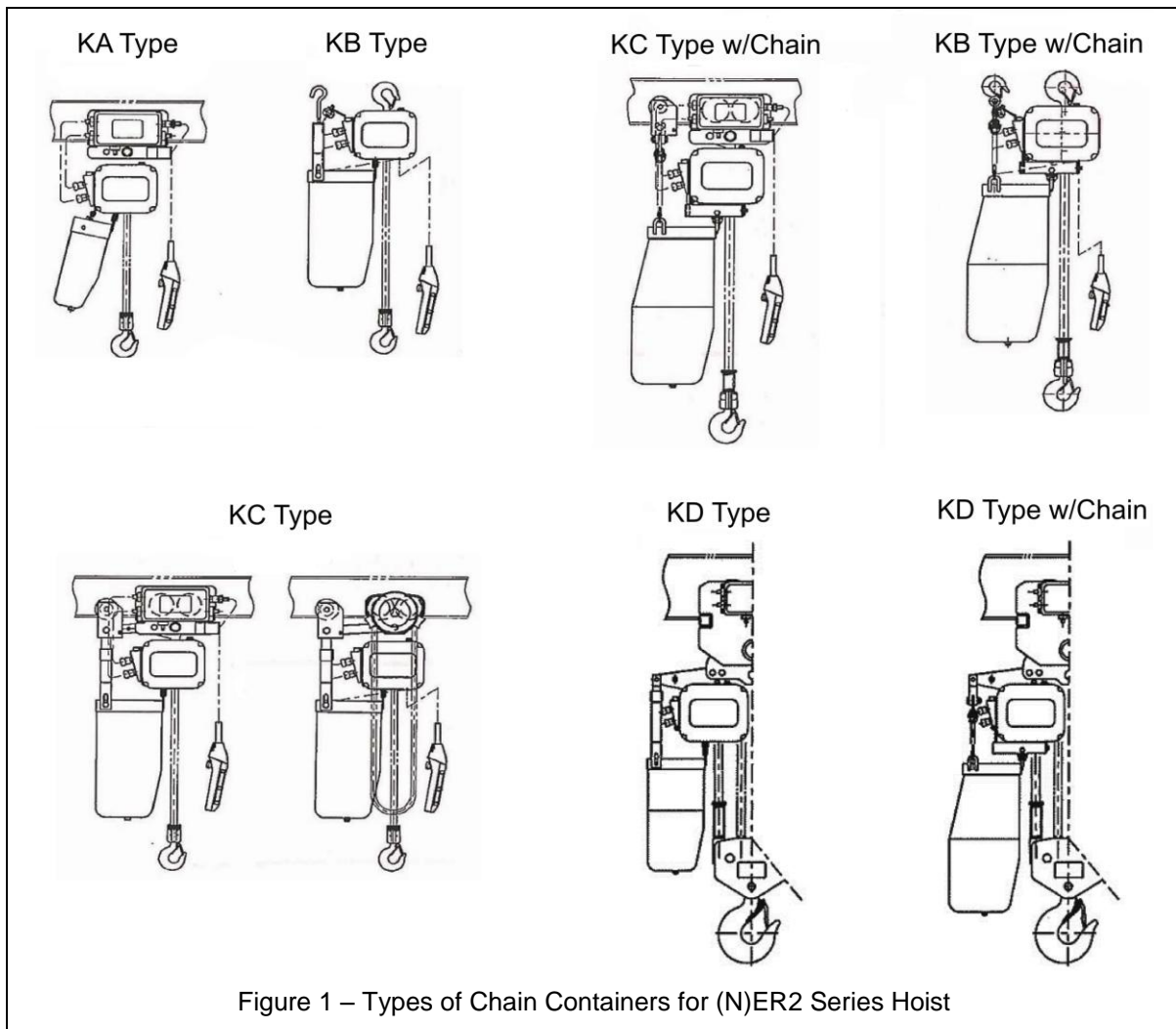

Figure 1 – Types of Chain Containers for (N)ER2 Series Hoist

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 19 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	EH	FH	EH	FH				
KB	A	B	C	D	E	F	G	H	I	J	K
KC											
KD					E	F	G	H	I	J	K

Table 2 – Containers Maximum Lifts

Capacity Code									
001S, 003S	AH	A	B	C	D				
	49	88	141	196	249				
003H, 005L, 005S	AH	BH	B	C	D	E	F		
	23	49	78	108	137	183	252		
010L, 010S	BH	DH	D	E	F	G	H		
	26	49	72	98	134	170	216		
020C	BH	DH	D	E	F	G	H		
	13	24	36	49	67	85	108		
015S, 020L 020S	CH	EH	E	F	G	H	I	J	K
	20	39	59	78	98	124	157	196	252
025S	DH	FH	E	F	G	H	I	J	K
	20	39	49	65	82	105	131	164	210
030C	CH	EH	E	F	G	H	I	J	K
	10	20	29	39	49	62	78	98	126
030L	TBD								
050L	DH	FH	E	F	G	H	I	J	K
	10	20	24	32	41	52	65	82	105
080S	E	F	G	H	I	J	K		
	16	21	26	34	42	54	70		
100L	E	F	G	H	I	J	K		
	11	16	20	26	32	41	52		
100S	DH	FH	E	F	G	H	I	J	K
	10	20	24	32	41	52	65	82	104
150S	FH	E	F	G	H	I	J	K	
	13	16	21	26	34	42	54	68	
200S	FH	E	F	G	H	I	J	K	
	9	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 010S and 020C………………………………….. Figure 2

Capacity Code 015S up to 050L as well as 080S and 100L……………… Figure 3

Capacity Code 100S, 150S, 200S…………………………………………… Figure 4

KB Type

Capacity Code 001H to 010S and 020C……………………………………. Figure 5

Capacity Code 015S up to 050L as well as 080S and 100L
         with Container Sizes E, F, G, and H……………………….. Figure 6

Capacity Code 015S up to 050L as well as 080S and 100L
         with Container Sizes I, J, and K…………………………… Figure 7

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 its motorized, push or geared trolley using a suspender T.

For Hoist with Motorized Trolley:

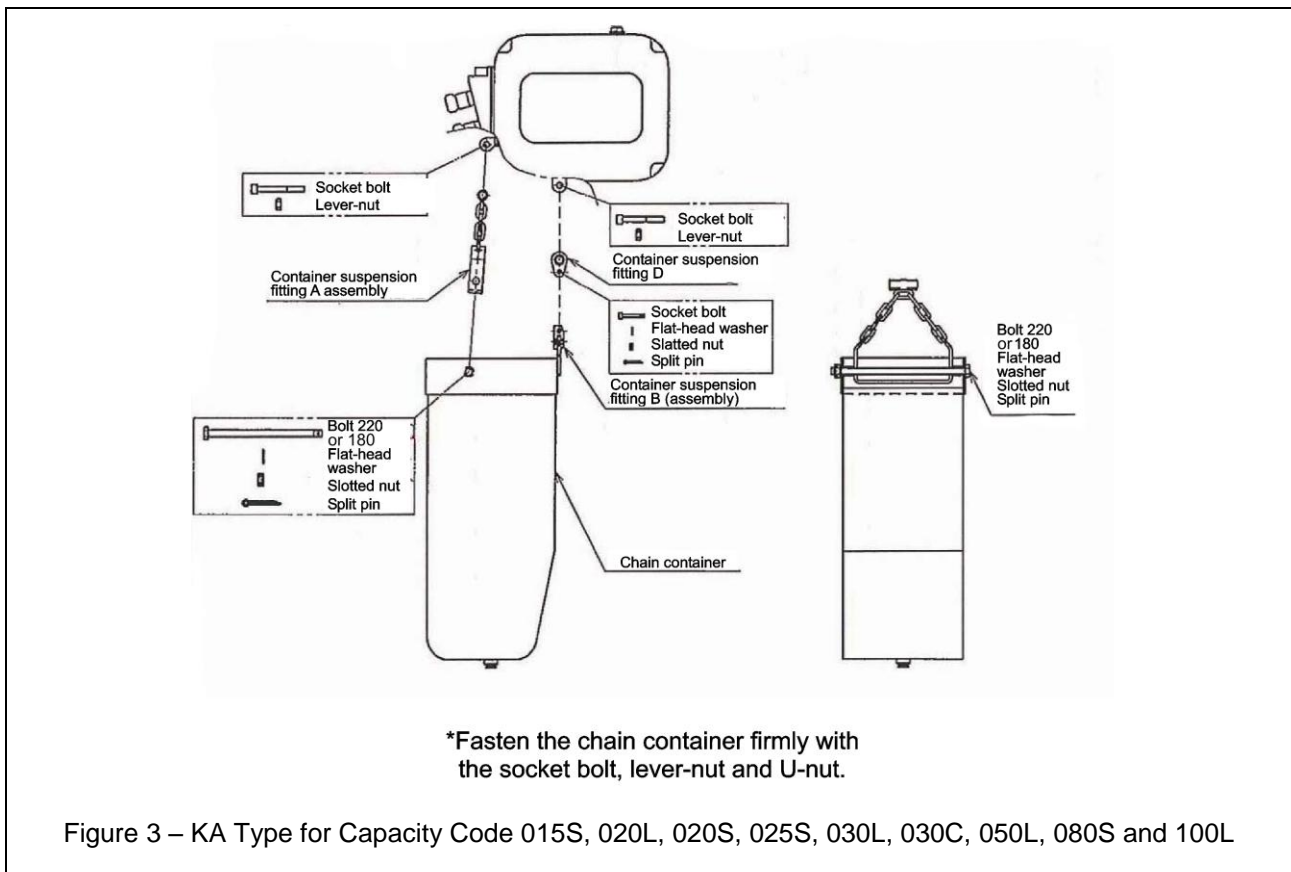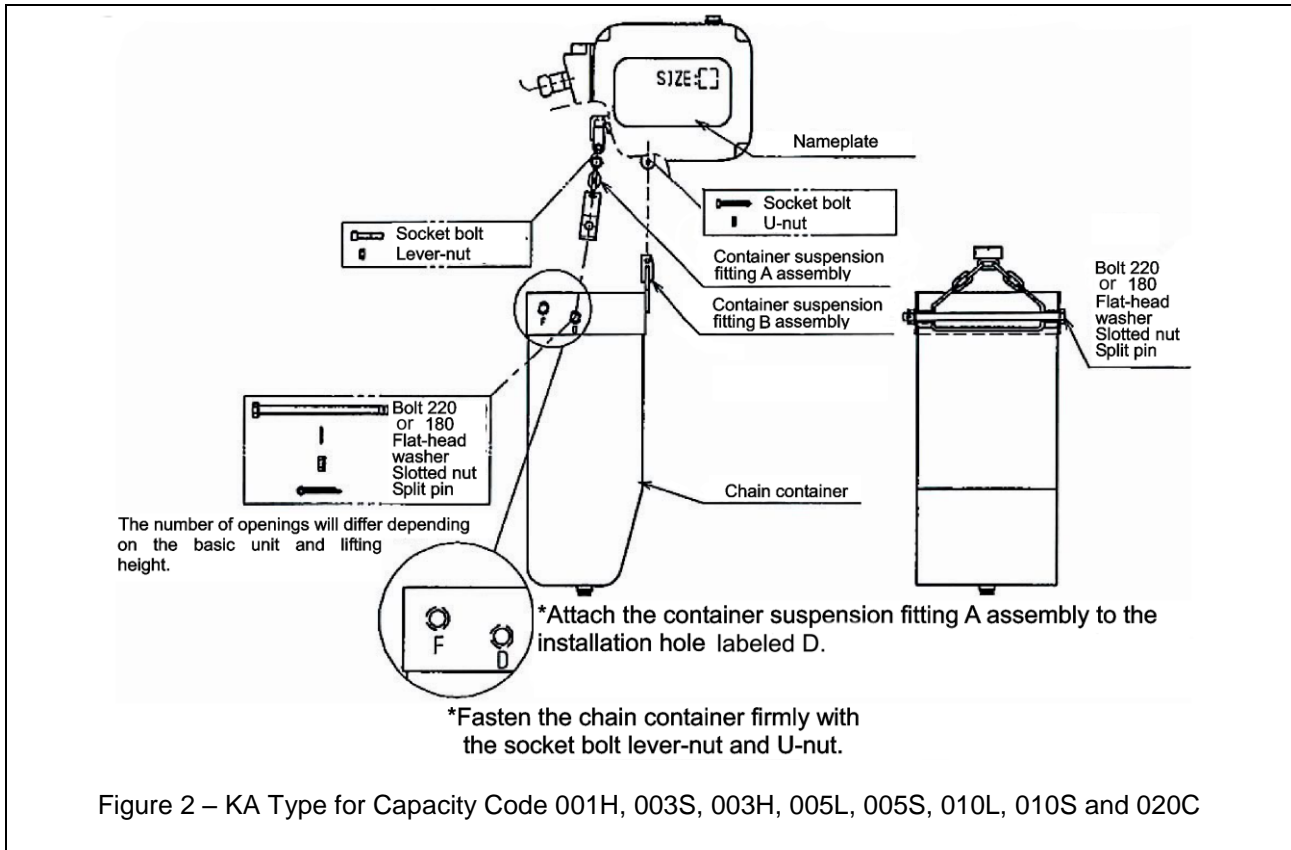| Hoist Capacity Code	Container Size	Container Assembly	Container Trolley Assembly and Adjustment	Hoist Trolley Adjustment
001H to 010S and 020C	All	Figure 8	Figure 13 & 14 Table 5	Use the MR Trolley Owner's Manual
015S up to 050L	E, F, G, & H	Figure 9	Figure 13 & 14 Table 5	Use the MR Trolley Owner's Manual
080S and 100L	E, F, G, & H	Figure 9	Figure 13 & 15 Table 5	Use the MR Trolley Owner's Manual
015S up to 050L	I, J, & K	Figure 10	Figure 13 & 14 Table 5	Use the MR Trolley Owner's Manual
080S and 100L	I, J, & K	Figure 10	Figure 13 & 15 Table 5	Use the MR Trolley Owner's Manual

For Hoist with Push and Geared Extended Hand wheel Trolley:

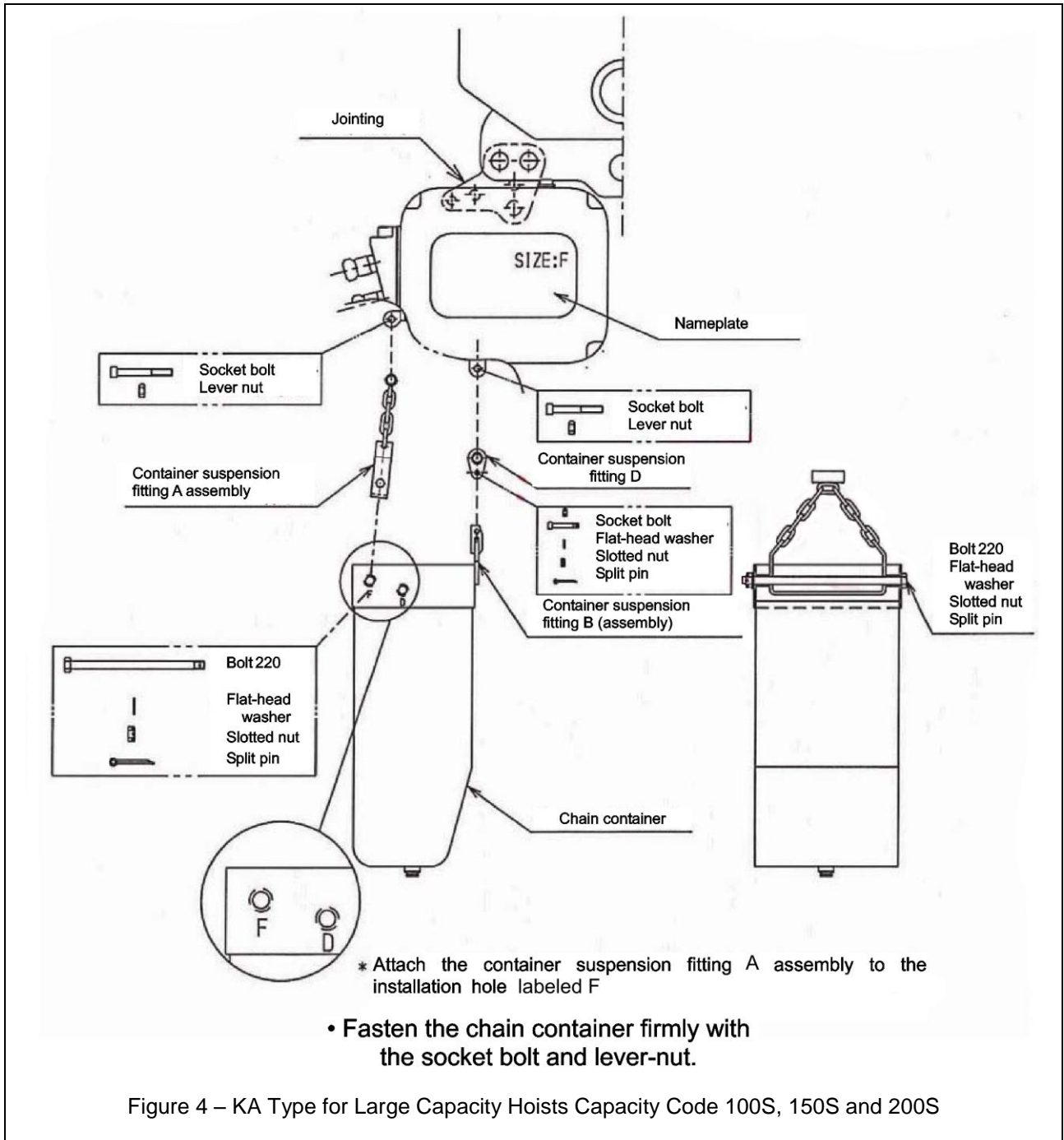| Hoist Capacity Code	Container Size	Container Assembly	Container Trolley Assembly and Adjustment	Hoist Trolley Adjustment
001H to 010S and 020C	All	Figure 8	Figure 13 & 14 Table 6	Table 7
015S up to 050L	E, F, G, & H	Figure 9	Figure 13 & 14 Table 6	Table 7
080S and 100L	E, F, G, & H	Figure 9	Figure 13 & 15 Table 8	Use Push or Geared Trolley Owner's Manual
015S up to 050L	I, J, & K	Figure 10	Figure 13 & 14 Table 6	Table 7
080S and 100L	I, J, & K	Figure 10	Figure 13 & 15 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 11	N/A	N/A
100S to 200S	I, J, & K	Figure 12	N/A	N/A

Figure 2 – KA Type for Capacity Code 001H, 003S, 003H, 005L, 005S, 010L, 010S and 020C

Figure 3 – KA Type for Capacity Code 015S, 020L, 020S, 025S, 030L, 030C, 050L, 080S and 100L

Jointing

SIZE:F

Nameplate

Socket bolt
Lever nut

Socket bolt
Lever nut

Container suspension
fitting A assembly

Container suspension
fitting D

Socket bolt
Flat-head washer
Slotted nut
Split pin

Bolt 220
Flat-head
washer
Slotted nut
Split pin

Container suspension
fitting B (assembly)

Bolt 220

Flat-head
washer
Slotted nut
Split pin

Chain container

F
D

＊ Attach the container suspension fitting A assembly to the
installation hole labeled F

• Fasten the chain container firmly with
the socket bolt and lever-nut.

Figure 4 – KA Type for Large Capacity Hoists Capacity Code 100S, 150S and 200S

- Fasten the chain container firmly with the socket bolt and U-nut.
- Turn the hook bolt to adjust the chain container to prevent it from tilting when loaded.

Figure 5 – KB Type for Capacity Code 001H, 003S, 003H, 005L, 005S, 010L, 010S and 020C
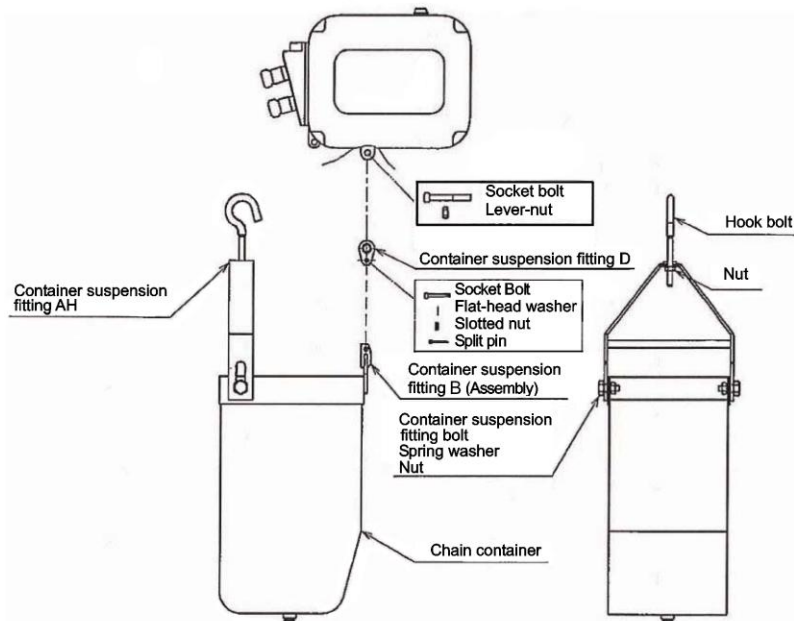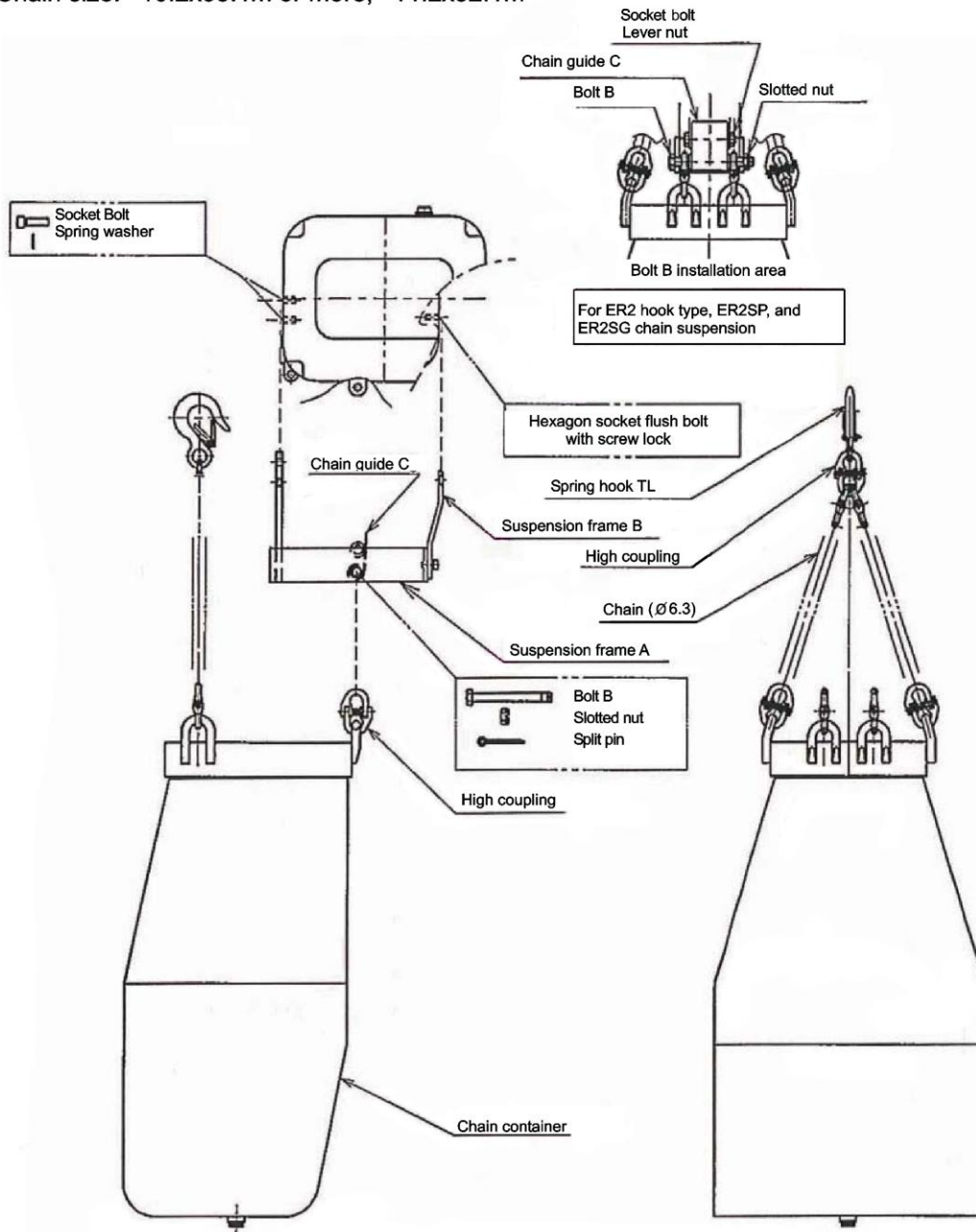

- Fasten the chain container firmly with the socket bolt and U-nut.
- Turn the hook bolt to adjust the chain container to prevent it from tilting when loaded.

Figure 6 – KB Type for Capacity Code 020L, 020S, 025S, 030C, 050L, 080S and 100L

Chain size: 10.2x38.1m or more, 11.2x32.1m

Socket bolt
Lever nut

Chain guide C

Bolt B   Slotted nut

Bolt B installation area

For ER2 hook type, ER2SP, and
ER2SG chain suspension

Socket Bolt
Spring washer

Hexagon socket flush bolt
with screw lock

Chain guide C

Spring hook TL

Suspension frame B

High coupling

Chain (Ø6.3)

Suspension frame A

Bolt B
Slotted nut
Split pin

High coupling

Chain container

•Fasten the suspension frame to the chain hoist firmly with
   the socket bolt and the hexagon socket flush bolt.
•Fasten the chain container firmly with bolt B, collar B,
   slotted nut and split pin.

Figure 7 – KB Type for Container Sizes I, J, and K for Hoist Capacity
Code 015S, 020L, 020S, 025S, 030C, 050L, 080S and 100L

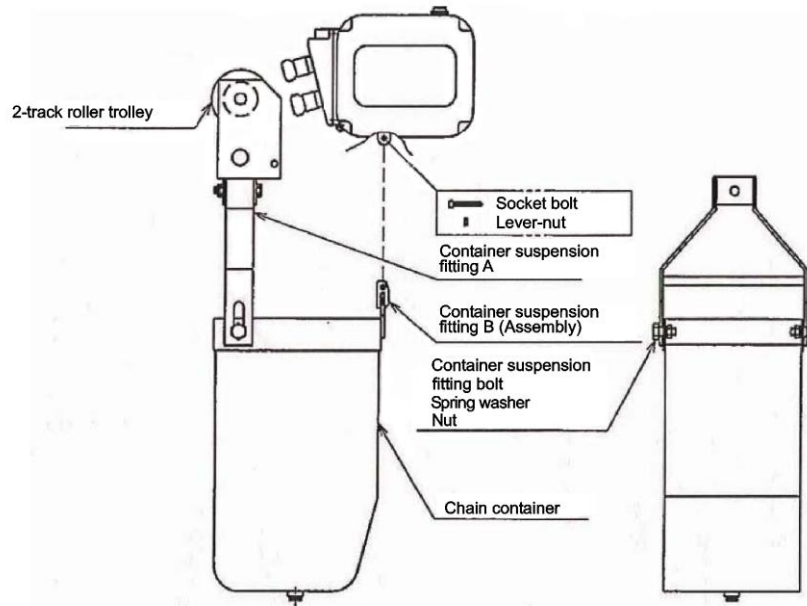Figure 8 - KC Type for Capacity Code 001H, 003S, 003H, 005L, 005S, 010L, 010S and 020C

Figure 9 – KC Type for Capacity Code 015S, 020L, 020S, 025S, 030C, 050L, 080S and 100L

Chain size: 10.2x38.1m or more, 11.2x32.1m or more.

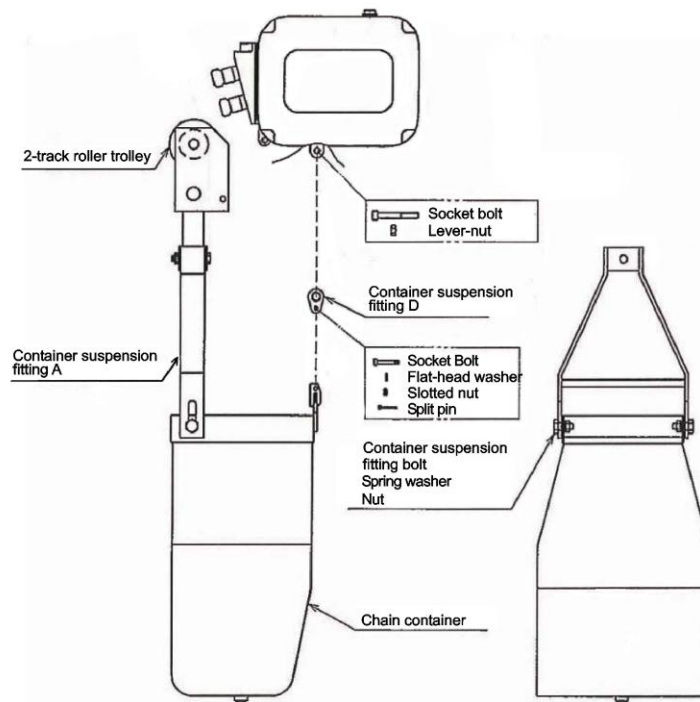Collar B
Bolt B   Slotted nut
Fastening bolt B
For ER2M

Socket bolt
Lever nut
Chain guide C
Bolt B   Slotted nut
Bolt B installation area
For ER2 hook type, ER2SP, and ER2SG chain suspension area

Socket Bolt
Spring washer

2-track roller trolley

Chain guide C

Hexagon socket flush bolt with screw lock

Suspension frame B

Container fitting C

Chain (⌀ 6.3)

Suspension frame A

Bolt B
Slotted nut
Collar B
Split pin
When using chain guide C, collar B is not necessary

High coupling

Chain container

•Fasten the hoist frame firmly with the socket bolt and the
   hexagon socket flush bolt.
•Fasten the chain container firmly with bolt B, collar B,
   slotted nut and split pin.

Figure 10 – KC Chain Type Container Sizes I, J and K for Hoist Capacity
Code 015S, 020L, 025S, 030C, 050L, 080S and 100L

Figure 11 – KD Type, Container Size E, F, G, and H for Capacity Code 100S, 150S and 200S

Container suspension fastener
pin, Slotted nut, split pin

Jointing

Collar B
Bolt B
Slotted nut

Socket bolt
Spring washer

Container suspension
fastener S

Fastening bolt B

Container suspension fastener pin
Slotted nut, split pin

Hexagon socket flush
bolt

Suspension frame B
Container suspension faster C

Chain(⌀6.3)

Suspension frame A

Bolt B
Slotted nut
Collar B
Split pin

High coupling

Chain container

· Fasten the suspension frame to the chain hoist
  with the socket bolt.
· Fasten the chain container firmly with bolt B,
  collar B, slotted nut and split pin.

Figure 12 – KD Type, Container Size I, J, K, for Hoist Capacity Code 100S, 150S and 200S
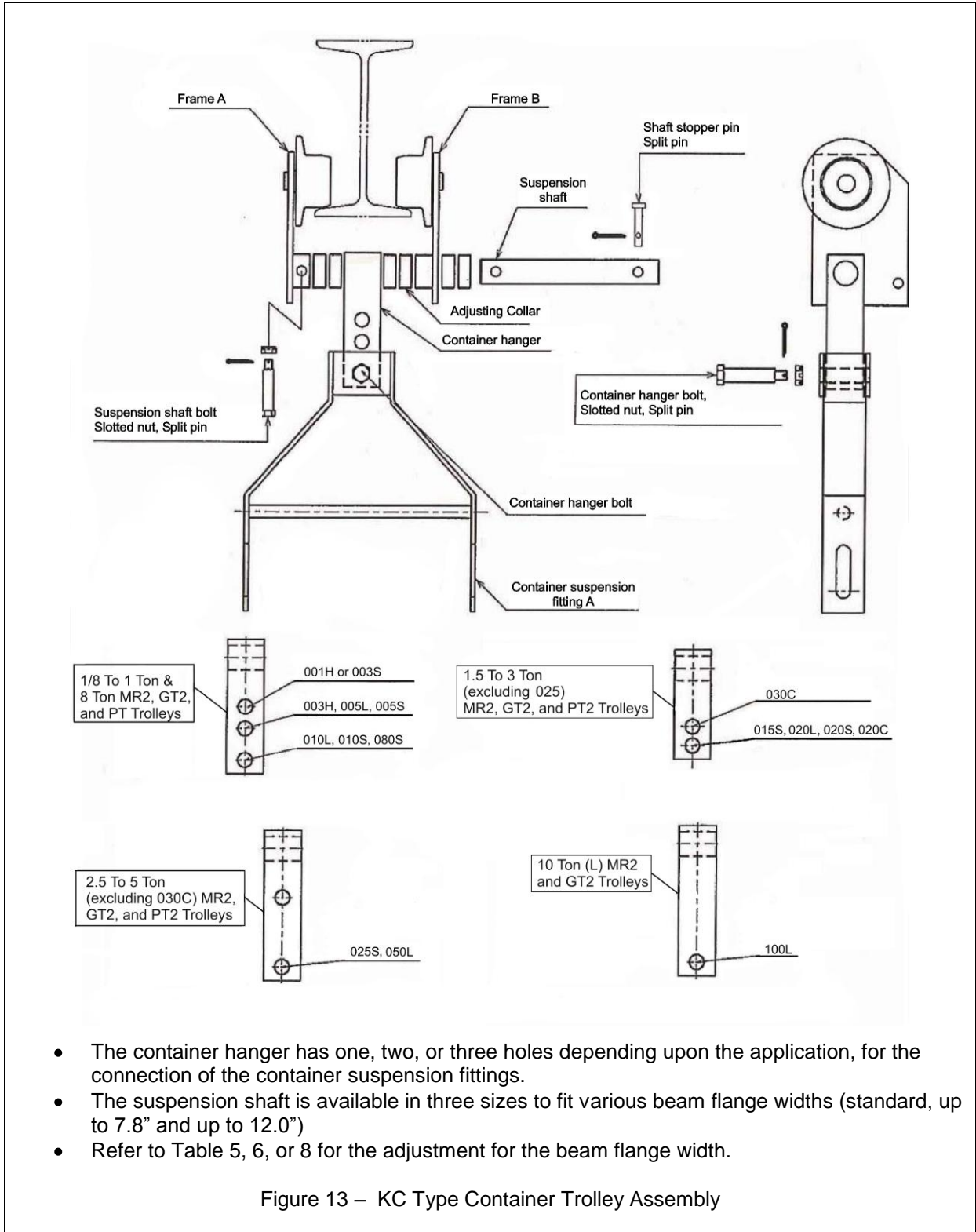
- The container hanger has one, two, or three holes depending upon the application, for the connection of the container suspension fittings.
- The suspension shaft is available in three sizes to fit various beam flange widths (standard, up to 7.8" and up to 12.0")
- Refer to Table 5, 6, or 8 for the adjustment for the beam flange width.

Figure 13 – KC Type Container Trolley Assembly
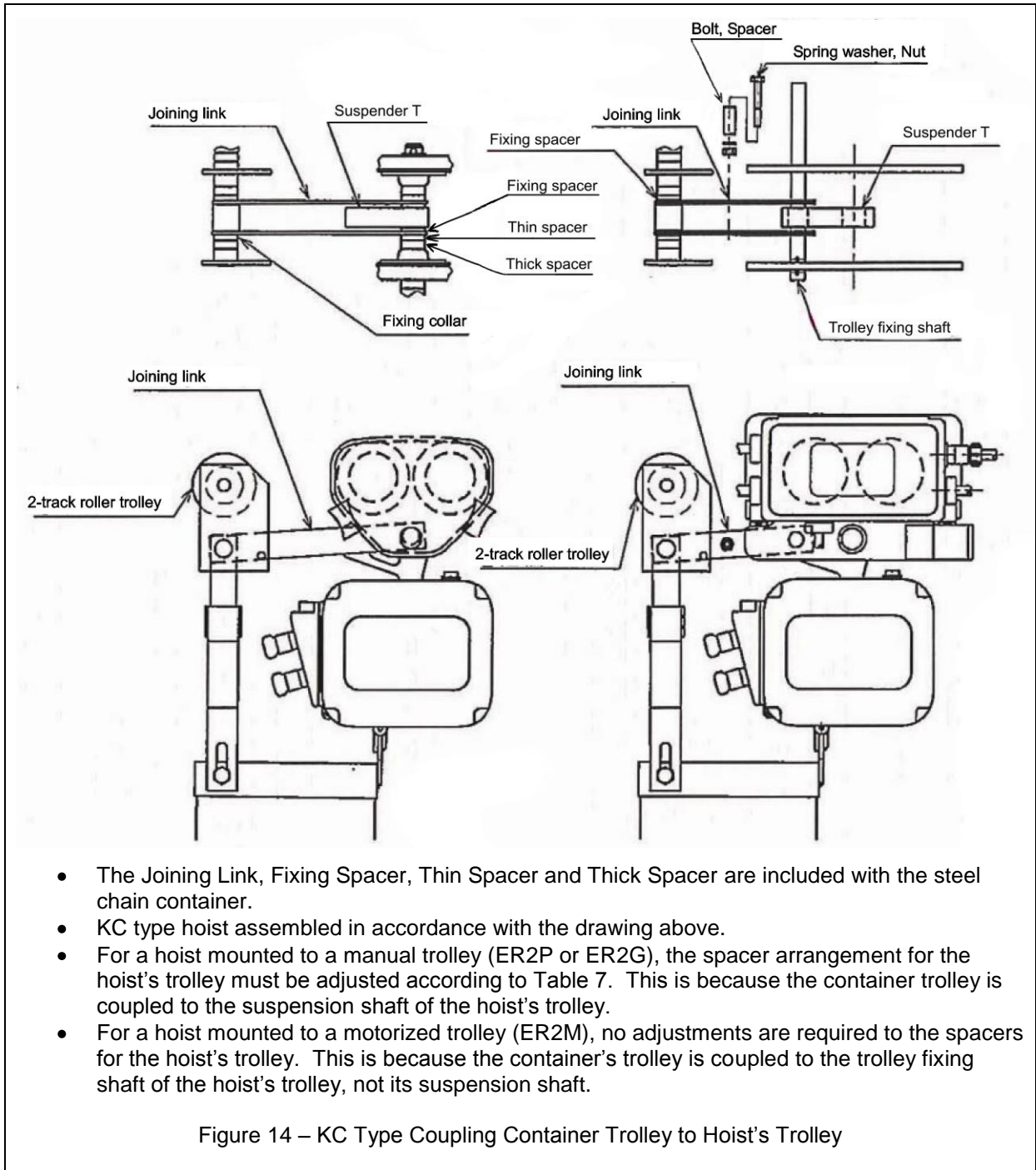
- The Joining Link, Fixing Spacer, Thin Spacer and Thick Spacer are included with the steel chain container.
- KC type hoist assembled in accordance with the drawing above.
- For a hoist mounted to a manual trolley (ER2P or ER2G), the spacer arrangement for the hoist's trolley must be adjusted according 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 (ER2M), 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 14 – KC Type Coupling Container Trolley to Hoist's Trolley
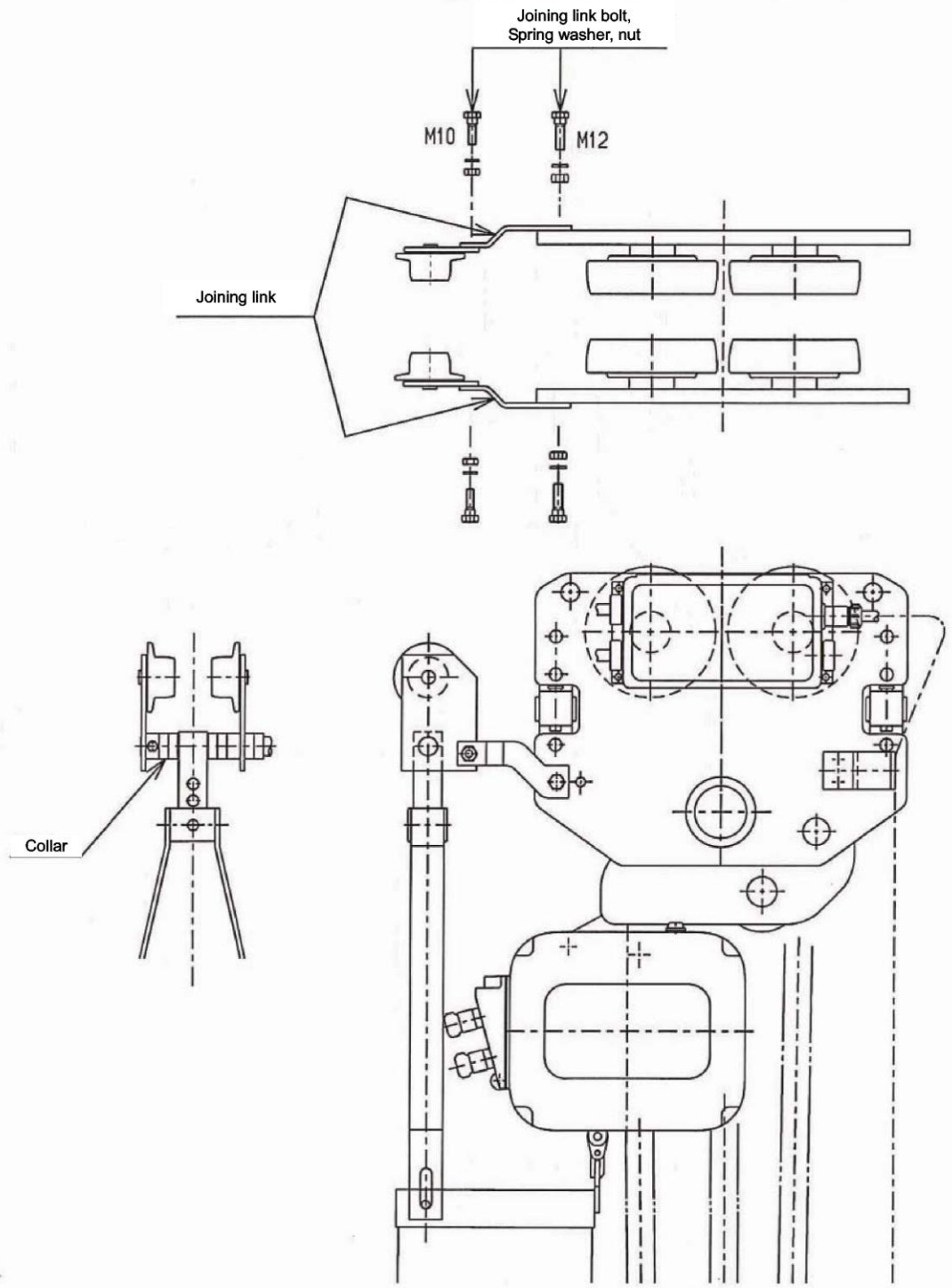
- The connection plate, adjusting spacer are enclosed in your package as the standard accessory parts of the steel chain container.
- KC type hoist is assembled in accordance with the drawing above.
- Adjust the hoist's trolley following the instructions that came with the trolley.

Figure 15 – 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 MR2 Trolley,

Number of Adjusting Spacers

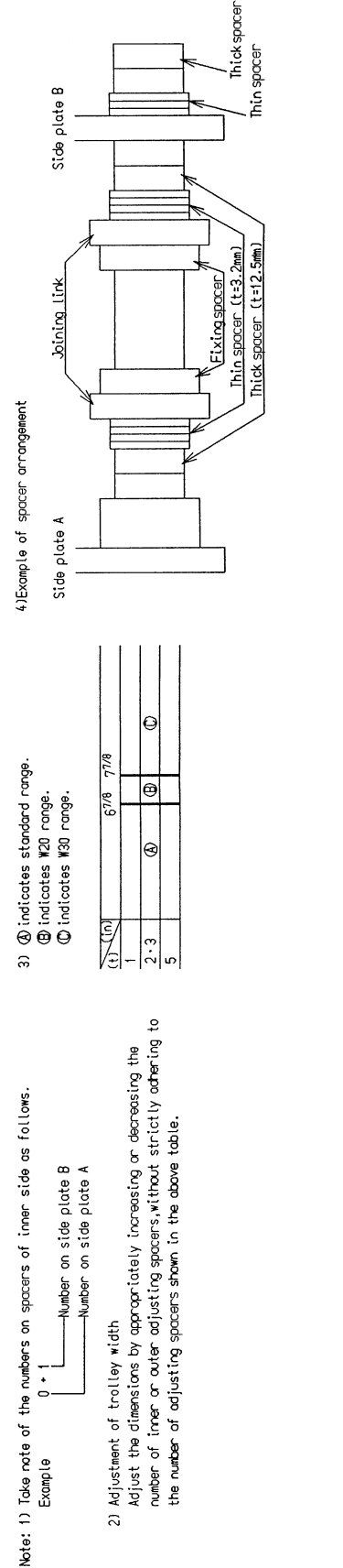| Capacity | Parts | | 2½ / 2⅜ (64 66) | 2⅞ / 2⁷⁄₁₆ (73 74) | 2¹⁵⁄₁₆ (75 76) | 3 (82) | 3¾ (90 91) | 3⅞ (98) | 3⁹⁄₁₆ (100) | 4 (102) | 4³⁄₁₆ (106) | 4⁷⁄₁₆ (110) | 4⁹⁄₁₆ (113) | 4¹¹⁄₁₆ 4¾ (119 120) | 5 (125) | 5³⁄₁₆ (127) | 5⅜ (131) | 5⁹⁄₁₆ (135) | 5⅝ (137) | 5⅞ (143) | 5¹⁵⁄₁₆ 5⁷⁄₈ (149 150) | 6 (153) | 6¹⁄₁₆ (155) | 6⁷⁄₁₆ (160) | 6⁹⁄₁₆ (163) | 6⅞ (170) | 7 (175) | 7¹⁄₁₆ (178) | 7³⁄₁₆ 7⅛ (180 181) | 7¼ 7⁹⁄₁₆ (184 185) | 7⅞ (200) | 8 (203) | 8⁷⁄₁₆ (215) | 8¹¹⁄₁₆ (220) | 9 (229) | 9⅛ (232) | 9⅞ (250) | 10 (254) | 10⅛ (257) | 10¼ (260) | 10⅜ (267) | 10½ (279) | 11 (283) | 11¹⁄₁₆ (286) | 11⅛ (289) | 11¼ (295) | 11⅜ (298) | 11⅝ 11¹⁵⁄₁₆ 11¾ 11⁹⁄₁₆ (300) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Thin spacer | Inner | 0-1 | 1-2 | 2-2 | 3-3 | 4-5 | 5-6 | 2-2 | 2-3 | 3-3 | 3-4 | 4-4 | 5-5 | 2-2 | 2-3 | 3-3 | 3-4 | 4-4 | 5-5 | 2-2 | 2-3 | 3-3 | 4-4 | 4-4 | 5-5 | 6-6 | 2-3 | 3-3 | 3-4 | 6-6 | 2-3 | 0-1 | 1-2 | 2-3 | 3-3 | 6-6 | 2-3 | 3-3 | 3-4 | 1-1 | 2-3 | 3-4 | 4-4 | 4-5 | 5-5 | 5-6 | 6-6 |
| | | Outer | 11 | 9 | 8 | 6 | 3 | 1 | 8 | 7 | 6 | 5 | 4 | 2 | 8 | 7 | 6 | 5 | 4 | 2 | 8 | 7 | 6 | 5 | 4 | 2 | 0 | 7 | 6 | 5 | 0 | 7 | 11 | 10 | 7 | 6 | 0 | 7 | 6 | 5 | 10 | 7 | 5 | 4 | 3 | 2 | 1 | 0 |
| | Thick spacer | Inner | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 |
| | | Outer | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 6 | 6 | 6 | 0 | 6 | 0 | 0 | 6 | 6 | 0 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | Fixing spacer | Inner | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 0-0 | 1-2 | 1-2 | 2-3 | 3-3 | 5-5 | 2-2 | 2-3 | 3-4 | 4-4 | 1-2 | 2-3 | 3-3 | 4-4 | 4-5 | 5-5 | 5-5 |
| 2 · 3 | Thin spacer | Inner | | | | | 3-4 | 4-5 | 5-5 | | | | | | 4-4 | | | | | 4-4 | 5-5 | 2-2 | 2-3 | 3-3 | 3-4 | 4-4 | 5-5 | 2-3 | 2-2 | 2-3 | 5-5 | 1-2 | 3-4 | 0-1 | 0-1 | 1-2 | 5-5 | 1-2 | 2-2 | 2-3 | 4-4 | 1-2 | 2-3 | 3-3 | 3-4 | 4-4 | 5-5 | 5-5 |
| | | Outer | | | | 6 | 3 | 1 | 0 | | | | | | 7 | 6 | 5 | | | 5 | 0 | 7 | 6 | 5 | 4 | 2 | 0 | 7 | 8 | 7 | 0 | 7 | 3 | 11 | 11 | 9 | 0 | 7 | 6 | 5 | 2 | 7 | 5 | 4 | 3 | 2 | 1 | 0 |
| | Thick spacer | Inner | | | | 0-0 | 0-0 | 0-0 | 0-0 | | | | | | 1-1 | 1-1 | 1-1 | | | 2-2 | 2-2 | 2-2 | 2-2 | 2-2 | 3-3 | 3-3 | 3-3 | 2-3 | 3-3 | 3-3 | 6-6 | 2-3 | 3-3 | 0-1 | 0-1 | 1-2 | 6-6 | 2-3 | 3-3 | 3-3 | 4-4 | 2-3 | 3-4 | 4-4 | 8-8 | 8-8 | 8-8 | 8-8 |
| | | Outer | | | | 6 | 6 | 6 | 6 | | | | | | 4 | 4 | 4 | | | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 7 | 6 | 5 | 0 | 7 | 9 | 11 | 11 | 9 | 0 | 7 | 6 | 5 | 4 | 7 | 5 | 4 | 0 | 0 | 0 | 0 |
| | Fixing spacer | Inner | | | | 0-0 | 0-0 | 0-0 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 0-0 | 0-0 | 0-0 | 2-3 | 0-0 | 0-0 | 6-6 | 0-1 | 3-4 | 11 | 11 | 9 | 6-6 | 2-3 | 3-3 | 3-3 | 4-4 | 2-3 | 3-4 | 4-4 | 0-0 | 0-0 | 0-0 | 0-0 |
| 5 | Thin spacer | Inner | | | | | | | 2-2 | 2-2 | 2-2 | 2-3 | 3-3 | 4-4 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 5-5 | 2-2 | 2-2 | 2-2 | 2-2 | 2-2 | 5-5 | 2-3 | 2-2 | 2-3 | 6-6 | 2-3 | 5-5 | 5-5 | 5-5 | 5-5 | 6-6 | 2-3 | 3-3 | 3-3 | 4-4 | 2-3 | 3-4 | 4-4 | 4-5 | 5-5 | 5-6 | 6-6 |
| | | Outer | | | | | | | 8 | 7 | 6 | 5 | 4 | 2 | 8 | 7 | 6 | 5 | 4 | 2 | 0 | 7 | 6 | 5 | 4 | 2 | 0 | 7 | 8 | 7 | 0 | 7 | 0 | 0 | 5 | 5 | 0 | 7 | 6 | 5 | 4 | 7 | 5 | 4 | 3 | 2 | 1 | 0 |
| | Thick spacer | Inner | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6-6 | 7-7 | 7-7 | 7-7 | 7-7 | 7-7 | 7-7 | 7-7 | 7-7 | 7-7 | 7-7 |
| | | Outer | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | *Fixing spacer | Inner | | | | | | | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 1-1 | 0 | 0 | 1-1 | 0 | 0 | 1-1 | 1-1 | 1-1 | 1-1 |

Note:

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

   Example   0 + 1
        └── Number on side plate B
          └── 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)		6⅞	7⅞
1		Ⓐ	
2 · 3		Ⓑ	Ⓒ
5		Ⓐ	

4) Example of spacer arrangement

Side plate A — Side plate B — Joining link — *Fixing spacer (t=3.2mm) — Thin spacer (t=3.2mm) — Thick spacer (t=12.5mm) — Thick spacer — Thin spacer

5) *5 Ton MR fixing spacer is identical to the thick spacer.

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

Number of Adjusting Spacers

Capacity	Parts		2½ (64/66)	2⅞ 2 15/16 (73/74)	3 (75/76)	3¾ (82)	3 9/16 (90/91)	3⅞ (98)	3 15/16 (100)	4 (102)	4 3/16 (106)	4 5/16 (110)	4⅞ (113)	4 11/16·4¾ (119/120)	5 (125)	5 3/16 (127)	5 5/16 (131)	5⅜ (135)	5⅝ (137)	5 15/16 (143)	5⅞·5 15/16 (149/150)	6 (153)	6⅛ (155)	6 5/16 (160)	6 7/16 (163)	6⅞ (170)	7 (175)	7 1/16 (178)	7⅛·7 5/16 (180/181)	7¼·7 7/16 (184/185)	7⅞ (200)	8 (203)	8 3/16 (215)	8 7/16 (220)	9 (229)	9⅛ (232)	9⅞ (250)	10 (254)	10⅛ (257)	10¼ (260)	10½ (264)	10¾ (267)	11 (279)	11⅛ (283)	11¼ (286)	11⅜ (289)	11¾ (295)	11⅝·11¾ (298)	11 13/16 (300)
1	Thin spacer	Inner	1·1	2·2	2·3	3·4	5·5	6·6	2·3	3·4	4·4	4·5	5·6	5·6	2·3	3·3	3·4	4·4	4·5	5·6	2·3	3·3	3·4	4·4	4·5	5·6	6·7	3·3	3·4	4·4	6·7	3·3	1·1	2·2	3·3	3·4	5·6	3·4	4·4	4·4	1·2	1·1	3·3	4·4	4·5	5·5	5·6	6·6	6·7
		Outer	11	9	8	6	3	1	8	6	5	4	2	2	7	6	5	5	4	2	7	6	5	5	4	2	0	7	6	5	0	7	11	9	7	6	0	5	6	7	10	11	7	6	5	4	3	2	0
	Thick spacer	Inner	0·0	0·0	0·0	0·0	0·0	0·0	1·1	1·1	1·1	1·1	3·3	1·1	2·2	2·2	2·2	2·2	2·2	2·2	3·3	3·3	3·3	3·3	3·3	3·3	3·3	4·4	4·4	4·4	4·4	5·5	6·6	6·6	6·6	6·6	7·7	7·7	7·7	7·7	8·8	8·8	8·8	8·8	8·8	8·8	8·8	8·8	8·8
		Outer	6	6	6	6	6	6	4	4	4	4	0	4	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	4	6	4	4	4	2	2	2	2	0	0	0	0	0	0	0	0	0
	Fixing	Inner	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0
2·3	Thin spacer	Inner			2·3	2·3	4·4	5·5	2·2	2·3	3·3	3·4	5·6	4·5	2·2	2·3	3·3	3·3	4·5	4·5	2·2	2·3	3·3	3·4	4·5	4·5	5·6	2·3	2·3	2·3	5·6	2·2	0·1	4·4	3·3	3·4	5·6	2·3	2·3	3·3	4·4	3·4	2·2	3·4	3·4	4·4	4·5	5·5	5·6
		Outer			6	6	3	0	7	6	6	5	2	2	7	6	5	5	2	2	7	6	5	5	2	2	0	7	7	7	0	7	11	7	6	5	0	6	7	6	6	5	7	5	5	4	3	2	1
	Thick spacer	Inner			0·0	0·0	0·0	0·0	1·1	1·1	1·1	1·1	3·3	1·1	2·2	2·2	2·2	2·2	2·2	2·2	3·3	3·3	3·3	3·3	3·3	3·3	3·3	4·4	4·4	4·4	4·4	5·5	6·6	6·6	6·6	6·6	7·7	7·7	7·7	7·7	8·8	8·8	8·8	8·8	8·8	8·8	8·8	8·8	8·8
		Outer			6	6	6	6	4	4	4	4	0	4	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	4	6	4	4	4	2	2	2	2	0	0	0	0	0	0	0	0	0
	Fixing spacer	Inner			0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	2·2	2·3	2·2	2·2	2·2	2·2	2·3
5	Thin spacer	Inner	3·4	4·4	5·5	5·6	5·6	5·5	3·4	4·4	4·5	5·5	7·8	5·6	4·4	4·5	5·5	5·5	5·6	5·6	4·4	4·5	5·5	5·5	5·6	5·6	6·7	4·4	4·4	4·5	7·8	0·0	2·2	4·4	3·3	4·4	7·8	4·4	4·5	5·5	5·6	4·4	4·4	5·5	5·6	6·6	6·7	7·7	7·8
		Outer	6	5	4	3	2	2	8	7	6	5	0	4	5	5	5	5	4	4	6	5	5	5	4	4	2	6	7	6	0	15	11	7	6	7	0	7	6	6	7	5	7	5	5	4	3	2	0
	Thick spacer	Inner	0·0	0·0	0·0	0·0	0·0	0·0	1·1	1·1	1·1	1·1	0·0	1·1	2·2	2·2	2·2	2·2	2·2	1·1	2·2	3·3	3·3	3·3	3·3	3·3	3·3	4·4	4·4	4·5	3·3	5·5	5·5	5·5	5·5	5·5	3·3	6·6	6·6	7·7	7·7	7·7	7·7	7·7	7·7	7·7	7·7	7·7	7·7
		Outer	4	4	4	4	6	6	4	4	4	4	4	4	4	4	4	4	4	6	4	2	2	2	2	2	2	0	0	0	2	4	4	4	4	4	2	2	2	0	0	2	2	0	0	0	0	0	0
	Fixing spacer	Inner	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1	1·1

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

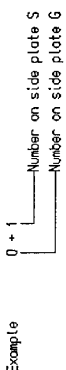Example   0 · 1
                └ Number on side plate B
          └ Number on side plate A

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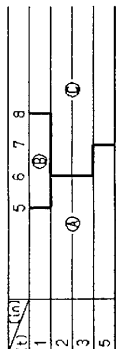
3) Ⓐ indicates standard range.
   Ⓑ indicates W20 range.
   Ⓒ indicates W30 range.

(in)	6⅞	7⅞
1		
2·3	Ⓐ	Ⓑ
5		Ⓒ

4) Example of spacer arrangement

Side plate B — Thick spacer — Thin spacer
Joining link
Side plate A
Fixing spacer
Thin spacer (t=3.2mm)
Thick spacer (t=12.5mm)

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

Number of Adjusting Spacers

Beam Flange width (in)	2½ 2⅝	2⅞ 2¹⁵/₁₆	3	3¼	3¾ 3⅞ 3⁹/₁₆	3⅞	4	4³/₁₆ 4⁵/₁₆ 4⁷/₁₆	4¹¹/₁₆ 4¾	5	5³/₁₆ 5⅝	5⅜	5½ 5⅝	5⅞ 5¹⁵/₁₆	6	6⅛ 6⁵/₁₆ 6⁷/₁₆ 6¹³/₁₆ 6⅞	7	7¹/₁₆ 7⅛ 7¼ 7⁵/₁₆	7⅞	8	8⁷/₁₆ 8⁹/₁₆	9	9⅛ 9⅞	10	10⅛ 10¼ 10⅜ 10½	11	11⅛ 11¼ 11⅜ 11⅝ 11¾ 11¹³/₁₆ 11¹⁵/₁₆

The table consists of Beam flange widths in inches and millimeters (64/66, 73/74, 75/76, 82, 90/91, 98, 100, 102, 106, 110, 113, 119/120, 125, 127, 131, 135, 137, 143, 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) crossed with Capacity (1, 2, 3, 5) and Parts (Thin spacer, Thick spacer, Fixing spacer — each Inner/Outer), giving spacer adjustment values.

Note:
1) Take note of the numbers on spacers of inner side as follows.
   Example   0 + 1
   Number of trolley width
   Number on side plate S
   Number on side plate G

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.

4) Example of spacer arrangement

Thin spacer
Side plate G or S
Joining link
Fixing spacer
Thin spacer (t=3.2mm)
Thick spacer (t=12.5mm)
Side plate SN
Thick spacer
Thin spacer

Table 8 – Container Trolley Spacers Adjustment for KC Type Containers used with MR2 & Manual Trolley, 8 & 10L.

Number of Adjusting Spacers

Capacity	Beam flange width (in)	Parts		5⅝ / 5¹⁵⁄₁₆	6	6⅛	6⁵⁄₁₆	6⅜ / 6⁷⁄₁₆	6⅞	7	7⁷⁄₁₆	7⅛ / 7⁷⁄₁₆	7¼ / 7⁵⁄₁₆	7⅞	8	8⁷⁄₁₆ / 8¹⁄₁₆	9	9⅛	9⅞	10	10⅛	10¼	10⅜	10½	11	11⅛	11¼	11⅜	11½	11¾	11⅞
	(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	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	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	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	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
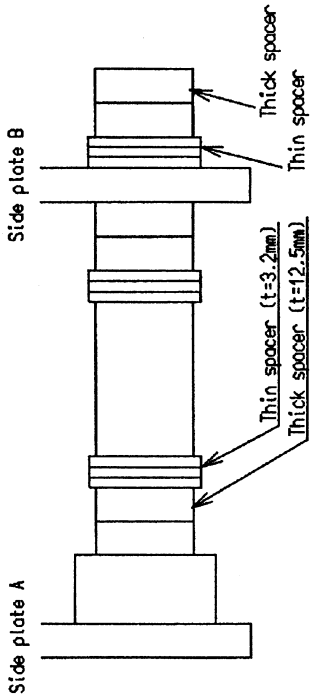   ├ Number on side plate B
    └ Number on side plate A

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.

4) Example of spacers arrangement

Side plate A   Side plate B

Thin spacer (t=3.2mm)   Thick spacer (t=12.5mm)   Thick spacer   Thin spacer

| (in)	6⅞	7⅞	
(t) 8 ~ 10	Ⓐ	Ⓑ	Ⓒ

Post Installation Checks

⚠️ **WARNING** • Check all container, suspension, and trolley hardware to ensure that it is securely fastened. Check all slotted nuts and split pin locations to confirm all are installed. Neglecting to install these items can cause the chain to spill out, resulting in hoist/trolley damage, or serious injury.

⚠️ **WARNING** • Be sure to use the number of adjustment collars specified in Tables 5, 6, 7, and 8. If the specified number of collars is not used, the trolley could fall or run off the track.

Installing A Rail End Stopper
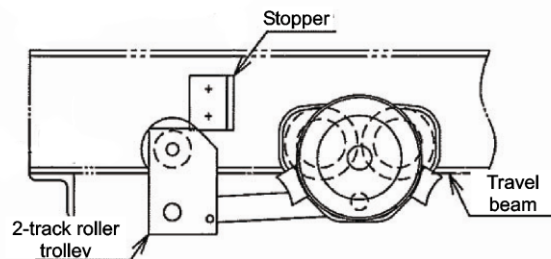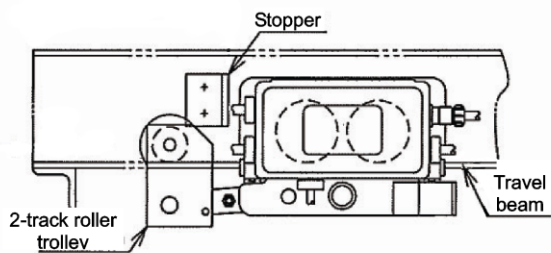
• When using a 2-track roller trolley with a KC type steel chain container, install the stopper in a position as shown in the figures to the left so that it securely receives the trolley car (the trolley frame when using GT or PT) while not coming into contact with the 2-track roller.

Chain Container and Water Accumulation

• When using the equipment outdoors, rainwater may enter the chain container. If this occurs, remove the oil plug and allow the water to drain. This will not only extend the life of the chain, but the container as well.