

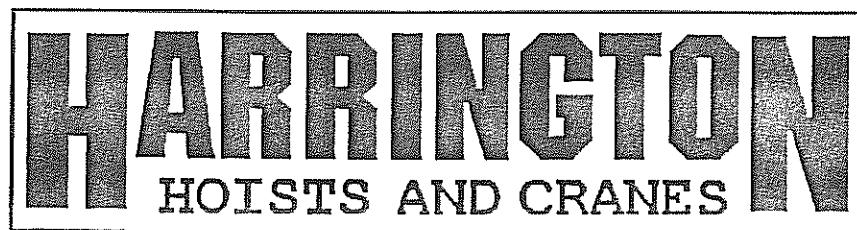
SUPPLEMENT TO OWNER'S MANUAL

FOR

HARRINGTON
PEERLESS CB
CHAIN HOIST

100 Ton Capacity

Model M3



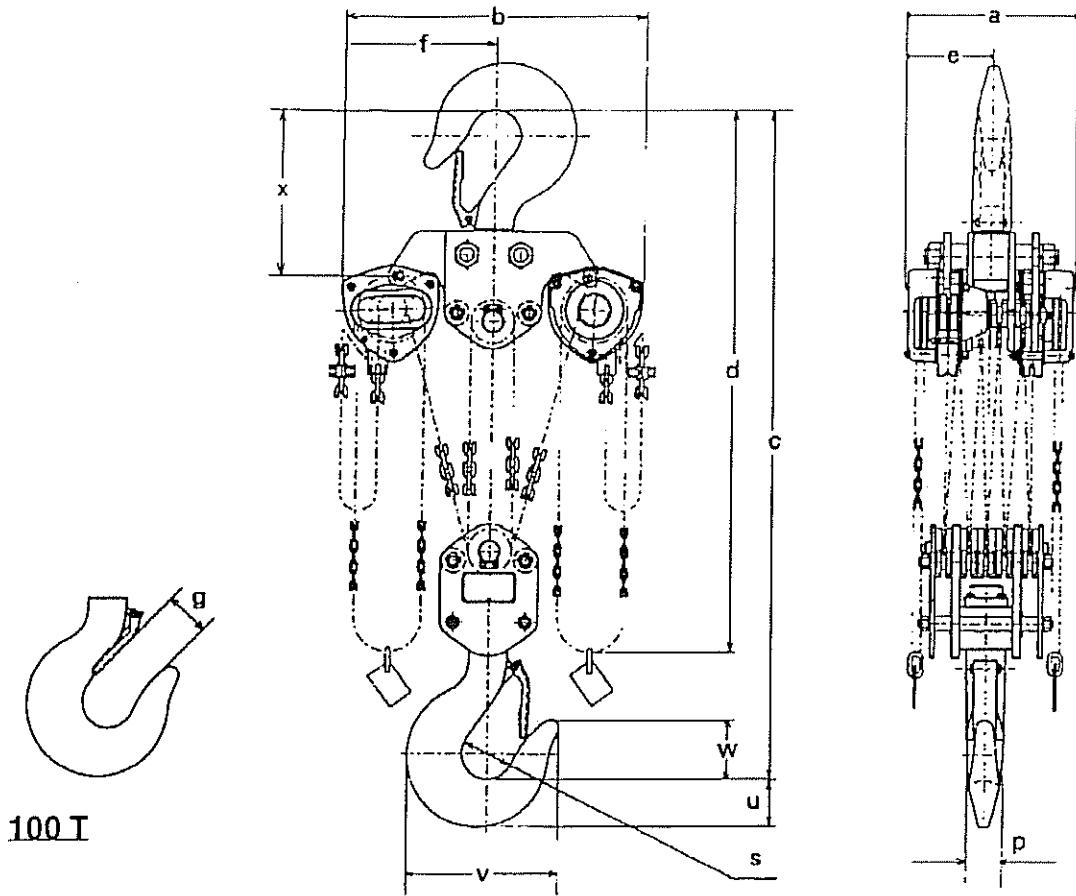
BUILT BETTER, BACKED BETTER

HARRINGTON HOISTS, INC.
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1. Main Specifications

(1) Refer to Sec. 2....Pg. 7



Specifications

Model	Code	Cap. (U.S. ton)	Std. Lift m (ft.)	Chain Pull to Lift Full Load kg (lb)	Overhaul Ratio ft.	Test Load (U.S. ton)	Net Weight kg (lb)	Shipping Weight (approx) kg (lb)	Load chain Fall (Lines) x Dia. mm (in.)	Weight for Additional One Foot of Lift kg (lbs)
M3	CB1000	100	6.1(20)	49(108)x4	792x4	125	3100(6800)	3700(8150)	9.0x32(.354)	59.4 (131)

Any lift of chain is available on request. Because Harrington chains are specially heat treated, only authentic Harrington chains should be used on your hoist. NEVER attempt to lengthen the chain by attaching additional chain links to it or by any other means. Harrington can supply almost any length of chain desired. Simply specify the length of chain desired when ordering.

Dimensions

Code	Cap. (U.S. tons)	Min. Headroom:C mm(in)	a mm(in.)	b mm(in.)	d m(ft.)	e mm(in.)	f mm(in.)	g mm(in.)	s mm(in.)	p mm(in.)	u mm(in.)	v mm(in.)	w mm(in.)	x mm(in.)
M3	100	3180 (125)	795(31.3)	444(56.9)	6.8(223)	398(15.7)	722(28.4)	185(7.3)	240(9.4)	210(8.3)	250(9.8)	710(28.0)	310(12.2)	1270(E)

2. Periodic Inspection

(1) Refer to Sec. 4.3....Pg.11

Regular Inspection Procedure

Figures in parentheses are Figure Nos. in Parts List.

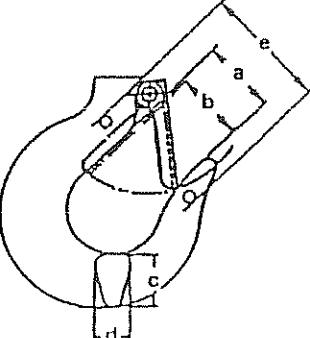
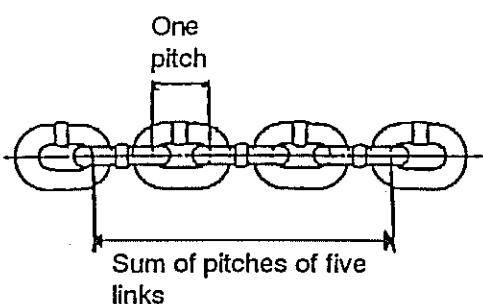
Item	Inspection Method	Discard Limit/Criteria	Measures
Name Plates	Check visually	Capacity indication is not clear.	Attach new name plate.
Hook (45,66) (Upper & Lower)	Measure dimension "e" between two embossed marks at time of purchase with slide calipers. "e" should be measured and recorded at time of purchase. 	Dimensions are greater than those in the following table.	Replace the hook.
1. Deformation/ twist of hook, opening of hook.	Check visually.	Twist is large enough to be detected visually.	Replace the hook.
2. Wear	Measure "c" and "d" with slide calipers. 	The dimensions are more than 5% greater than those just after purchase.	Replace the hook.

Table S1

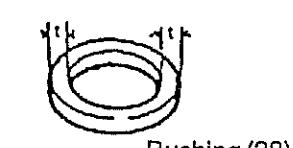
Cap. (U.S. ton)	Reference Dimensions - mm(in)					
	a	b	c		d	
Normal	Normal	Normal	Discard	Normal	Discard	
100	200(7.87)	185(7.28)	250(9.84)	238(9.37)	190(7.48)	181(7.13)

(2) Refer to Sec. 4.3....Pg. 12

Item	Inspection Method	Discard Limit/Criteria	Measures						
LOAD CHAIN (28) 1. Wear	Measure with slide calipers.	<p>Measure the sum of pitches of five chain links and check that the maximum length is not exceeding the values shown below in Table S2.</p> <p style="text-align: right;">Table S2</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Capacity (U.S. ton)</th> <th>Sum of Pitches of Five Links mm(in)</th> <th>Discard Limit mm(in)</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>136.0(5.354)</td> <td>140.0(5.512)</td> </tr> </tbody> </table>	Capacity (U.S. ton)	Sum of Pitches of Five Links mm(in)	Discard Limit mm(in)	100	136.0(5.354)	140.0(5.512)	Replace the chain.
Capacity (U.S. ton)	Sum of Pitches of Five Links mm(in)	Discard Limit mm(in)							
100	136.0(5.354)	140.0(5.512)							



(3) Refer to Sec. 4.3....Pg. 14

Item	Inspection Method	Discard Limit/Criteria	Measures						
5. Bushing (39); wear and oil. Type of oil to be used: ISO VG68 or equivalent.	<p>Check radial thickness (t) with caliper and oil existence.</p>  <p>t=Radial thickness</p>	<p>Radial thickness (t) should be uniform. Oil should be contained. Refer to Table S3.</p> <p style="text-align: right;">Table S3</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Cap. (U.S. ton)</th> <th>Normal Thickness: t mm(in)</th> <th>Discard Limit mm(in)</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>4.0(.157)</td> <td>3.0(.118)</td> </tr> </tbody> </table>	Cap. (U.S. ton)	Normal Thickness: t mm(in)	Discard Limit mm(in)	100	4.0(.157)	3.0(.118)	Replace the part.
Cap. (U.S. ton)	Normal Thickness: t mm(in)	Discard Limit mm(in)							
100	4.0(.157)	3.0(.118)							

3. PARTS LIST

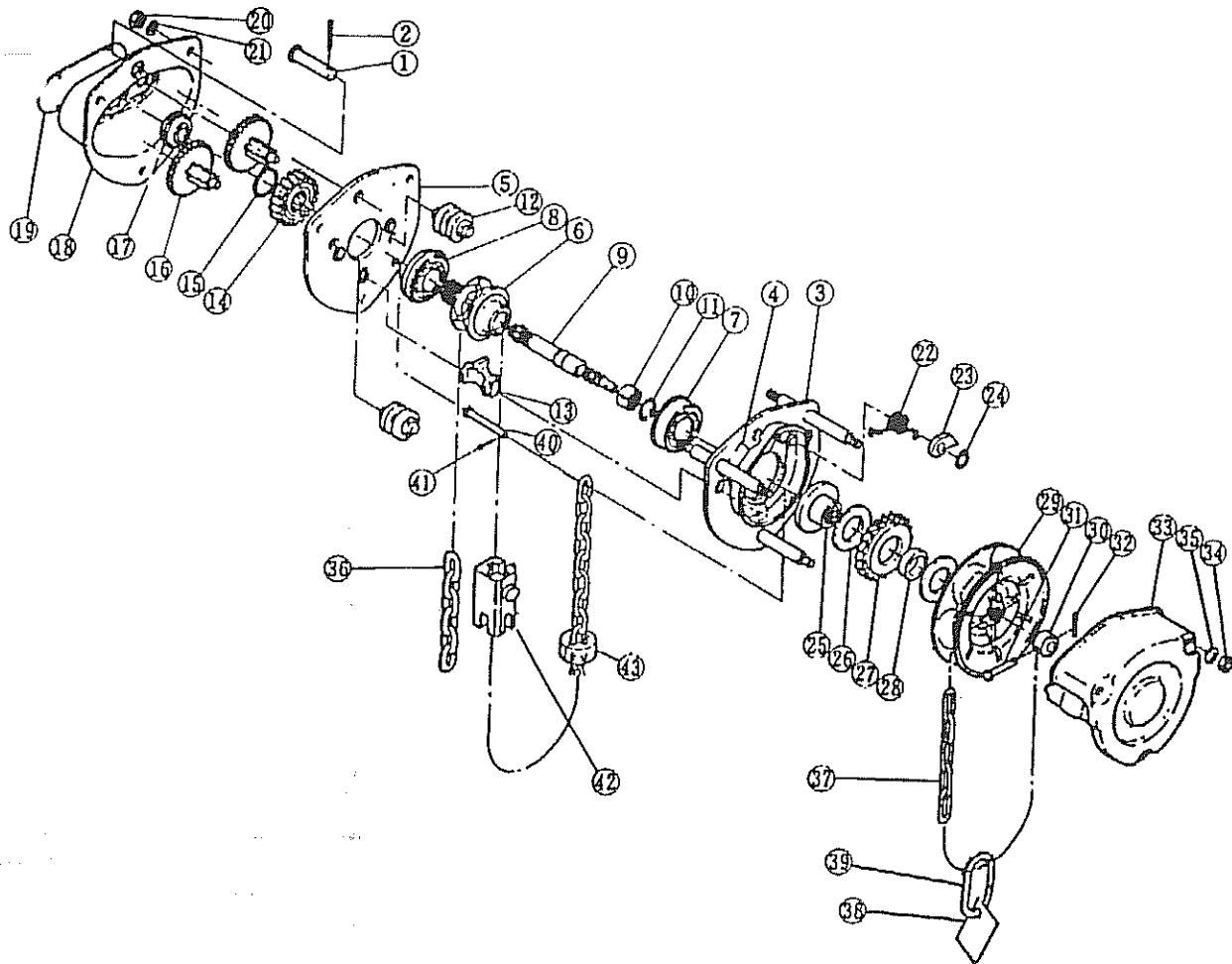
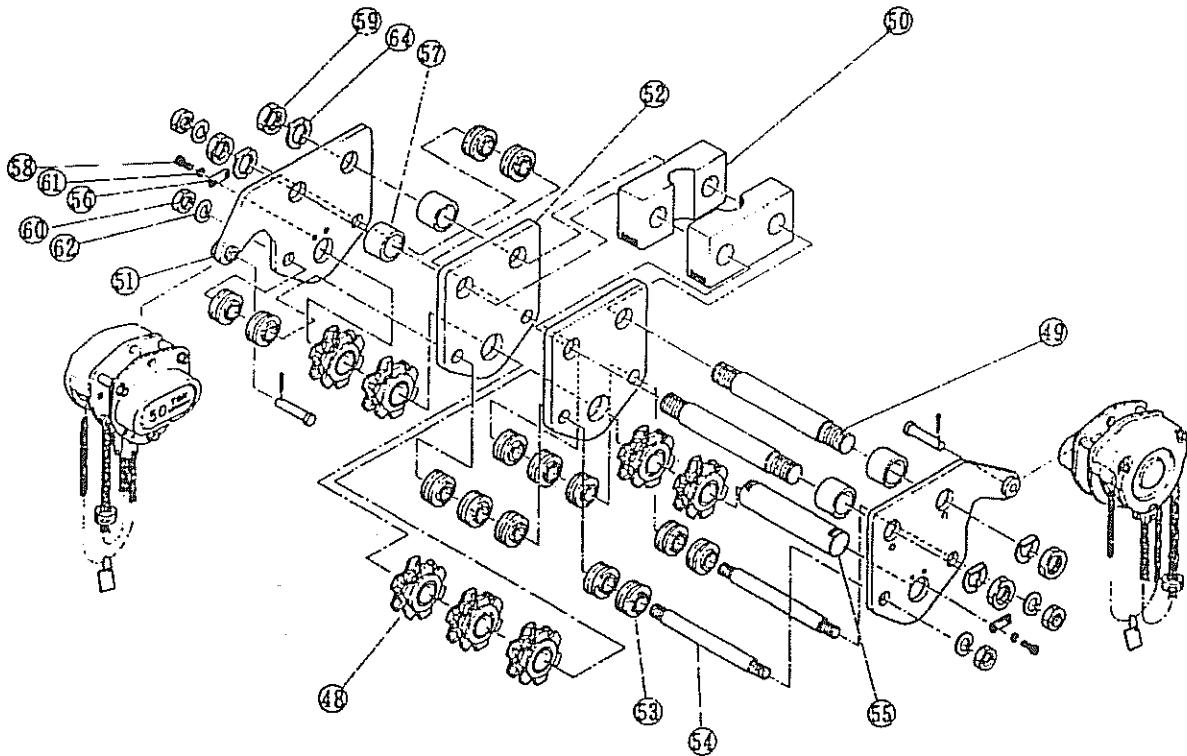


Fig. No.	Part Name	Nos. per Hoist	Capacity (tons)
			100
1	Top Pin	4	M3163025
2	Split Pin	4	9009424
3	Side Plate A Assy.	4	M3B101025
5	Side Plate B Assy.	4	M3B102025
6	Load Sheave	4	M3116025
7	Ball Bearing	4	M3140020
8	Ball Bearing	4	M3140020
9	Pinion	4	M3B111025
10	Roller Bearing	4	M3130020
11	Snap Ring	4	M3118020
12	Guide Roller	8	M3B161025
13	Stripper	4	M3162025
14	Load Gear	4	M3114025
15	Snap Ring	4	9047134

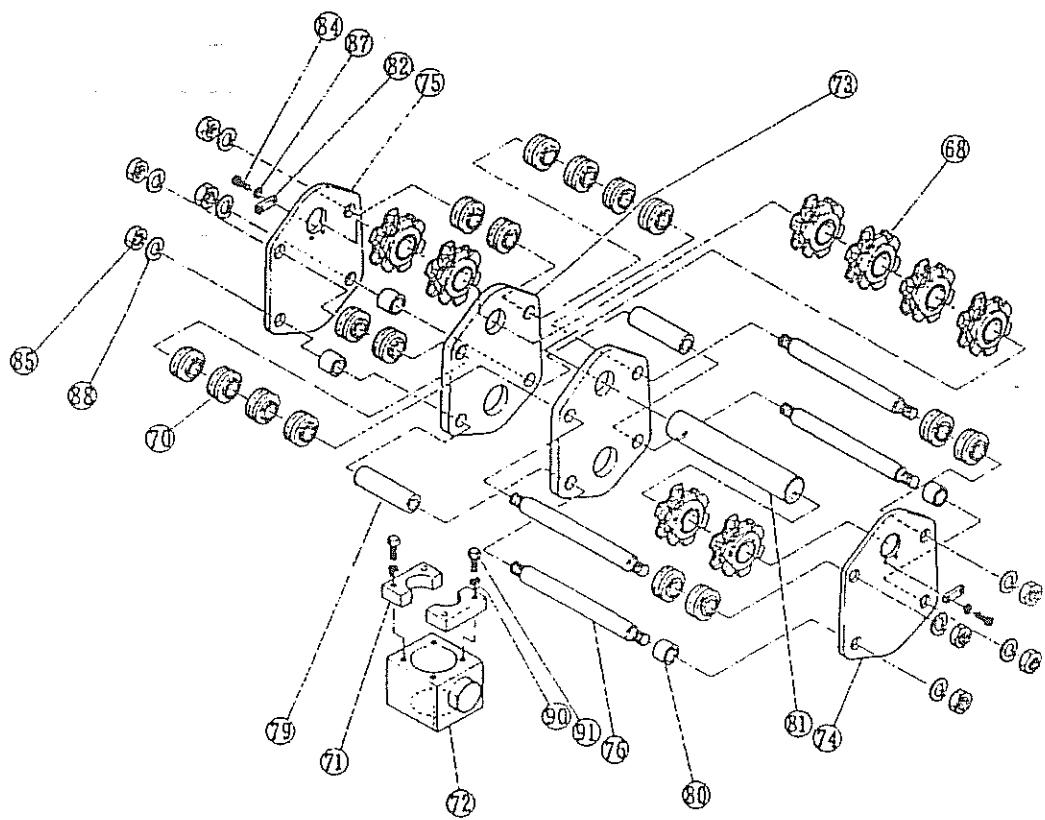
Fig. No.	Part Name	Nos. per Hoist	Capacity (tons)
			100
16	Gear #2 Assy.	8	M3B112025
17	Ball Bearing	4	M3135020
18	Gear Case Assy.	4	M3103025
19	Name Plate B w/ Rivets	4	M3B800025
20	Nut	12	9093433
21	Spring Washer	12	9012713
22	Pawl Spring A*	4	M3179005
	Pawl Spring B*	4	M3180005
23	Pawl	4	M3155005
24	Snap Ring	4	9047110
25	Friction Disc	4	M3B153025
26	Friction Plate	8	M3B151025
27	Ratchet Disc	4	M3B152025
28	Bushing	4	M3B154025
29	Hand Wheel	4	M3B115025
30	Wheel Stopper	4	CF159010
31	Wheel Stopper Pin	4	M2167005
32	Split Pin	4	9009410
33	Wheel Cover Assy.	4	M3171025
34	Nut	12	9093424
35	Spring Washer	12	9012711
36	Load Chain	4	LCC3025
37	Hand Chain	4	HCCF005
38	Warning Tag	4	WTAG4
39	Chain Stopper Link	4	L4045030
40	End Pin	4	M3B164100
41	Split Pin	4	9009415-5
42	Cross Guide	4	M3B176100
43	Stopper Assy.	8	M3045100

* Pawl Spring A and B must be used as a set.

ADDITIONAL PARTS

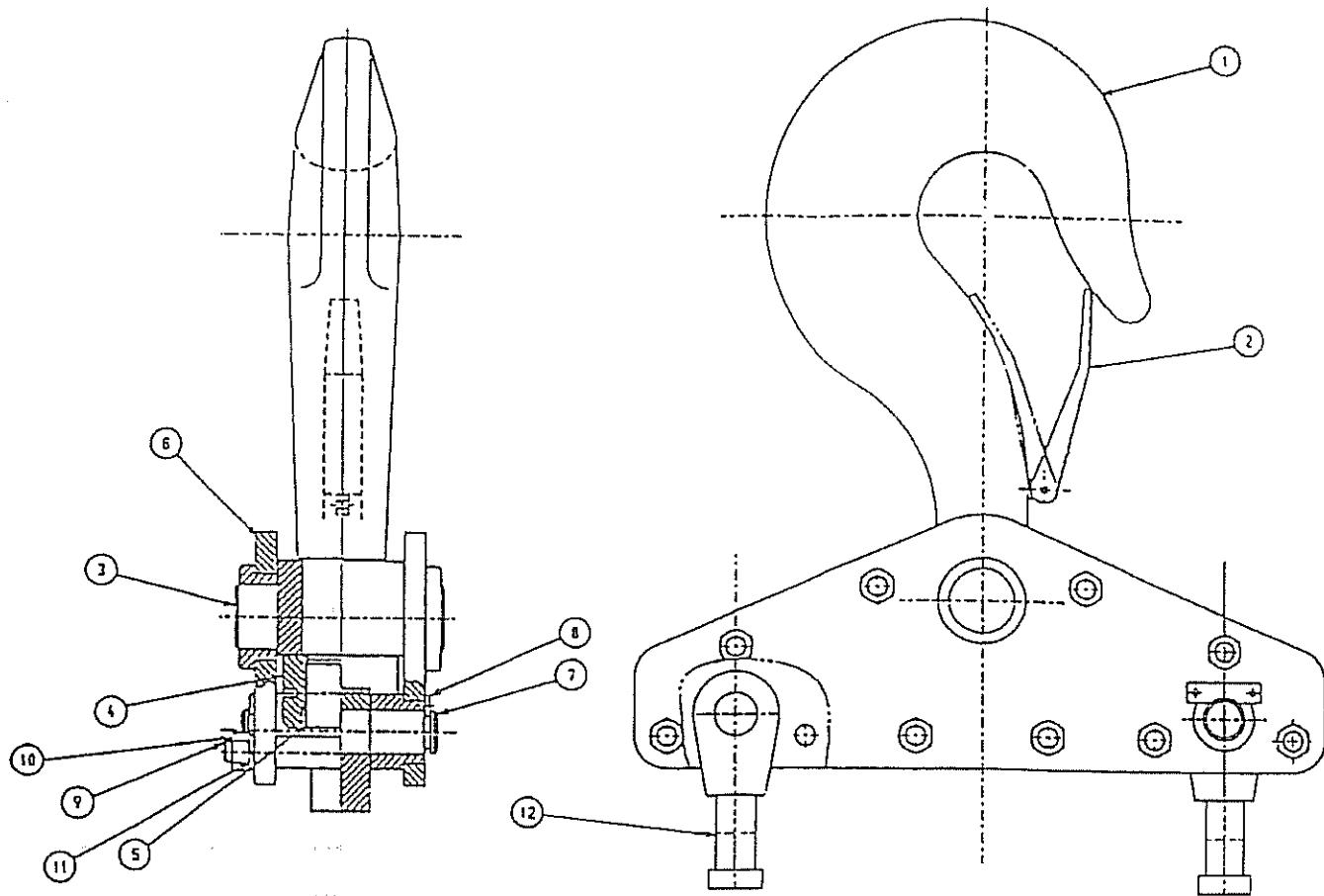


Top Hook Set Parts for 100 Ton



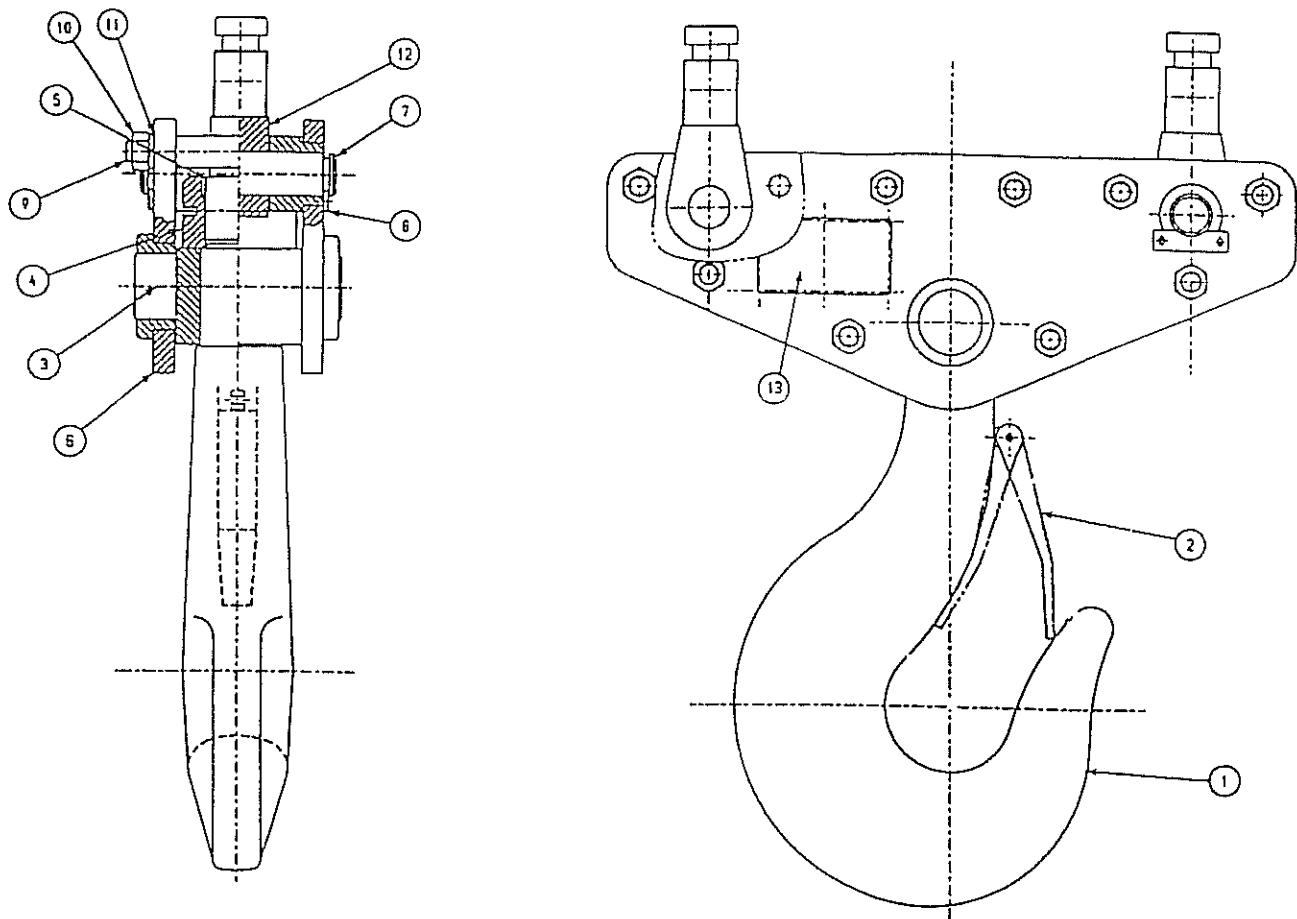
Bottom Hook Set Parts for 100 Ton

Fig. No.	Part Name	Nos. per Hoist	Capacity
			100
--	Top Hook Set	1	M3001A1000
48	Idle Sheave Assembly	14	M3051150
49	Top Suspension Shaft	4	M3010500
50	Top Yoke	4	M3011500
51	Top Plate A Assembly	4	M3021500
52	Top Plate C	4	M3114500
53	Guide	28	M3018500
54	Stay Bolt	4	M3019500
55	Top Shaft	2	M3053500
56	Key Plate	4	M2056150
57	Collar	8	M3027500
58	Socket bolt	8	9091270
59	Nut	8	9093472
60	Nut	8	9093464
61	Spring Washer	8	9012711
62	Spring Washer	8	9012723
64	Pawled Washer	8	M2089500
--	Bottom Hook Set	1	M3G21A1000
68	Idle Sheave Assembly	16	M3051150
70	Guide	32	M3018500
71	Hook Support	4	M3026500
72	Bottom Yoke	2	M3030500
73	Bottom Plate A	4	M3030500
74	Bottom Plate B	2	M3035500
75	Bottom Plate C	2	M3036500
76	Stay Bolt	8	M3038500
79	Collar A	4	M3039500
80	Collar B	8	M3040500
81	Bottom Shaft	2	M3054500
82	Key Plate	4	M3056150
84	Socket Bolt	8	9091270
85	Nut	16	9093464
87	Spring Washer	8	9012711
88	Spring Washer	16	9012723
90	Tongued Washer	8	M3091150
91	Bolt	8	9093354



Top Hook Set Parts for 100 Ton

Fig. No.	Part Name	Nos. per Hoist	Part Number
1	Top Hook	1	M30011000
2	Safety Latch Assembly	1	M330751000
3	Top Yoke A	1	M3X031000
4	Hook Nut	1	M3X041000
5	Stopper Screw	1	M3X051000
6	Top Suspension Plate A	2	M3X061000
7	Top Shaft A	2	M3X071000
8	Stopper Plate A	4	M3X081000
9	Stay Bolt A	10	M3X091000
10	Nut	20	M3X101000
11	Spring Washer	20	M3X111000
12	Top Suspender	2	M3X121000



Bottom Hook Set Parts for 100 Ton

Fig. No.	Part Name	Nos. per Hoist	Part Number
1	Bottom Hook	1	M30211000
2	Safety Latch Assembly	1	M30721000
3	Bottom Yoke A	1	M3Z031000
4	Hook Nut	1	M3Z041000
5	Stopper Screw	1	M3Z051000
6	Bottom Suspension Plate A	2	M3Z061000
7	Bottom Shaft A	2	M3Z071000
8	Stopper Plate A	4	M3Z081000
9	Stay Bolt A	10	M3Z091000
10	Nut	20	M3Z101000
11	Spring Washer	20	M3Z111000
12	Bottom Suspender	2	M3Z121000
13	Name Plate	2	M3Z131000



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M3CB1000M