

**SUPPLEMENT TO OWNER'S MANUAL**

**FOR**

**HARRINGTON  
PEERLESS CB  
CHAIN HOIST**

**30 to 50 Ton Capacity**

**Model M3**

**Hoists**

**HARRINGTON**  
Cranes

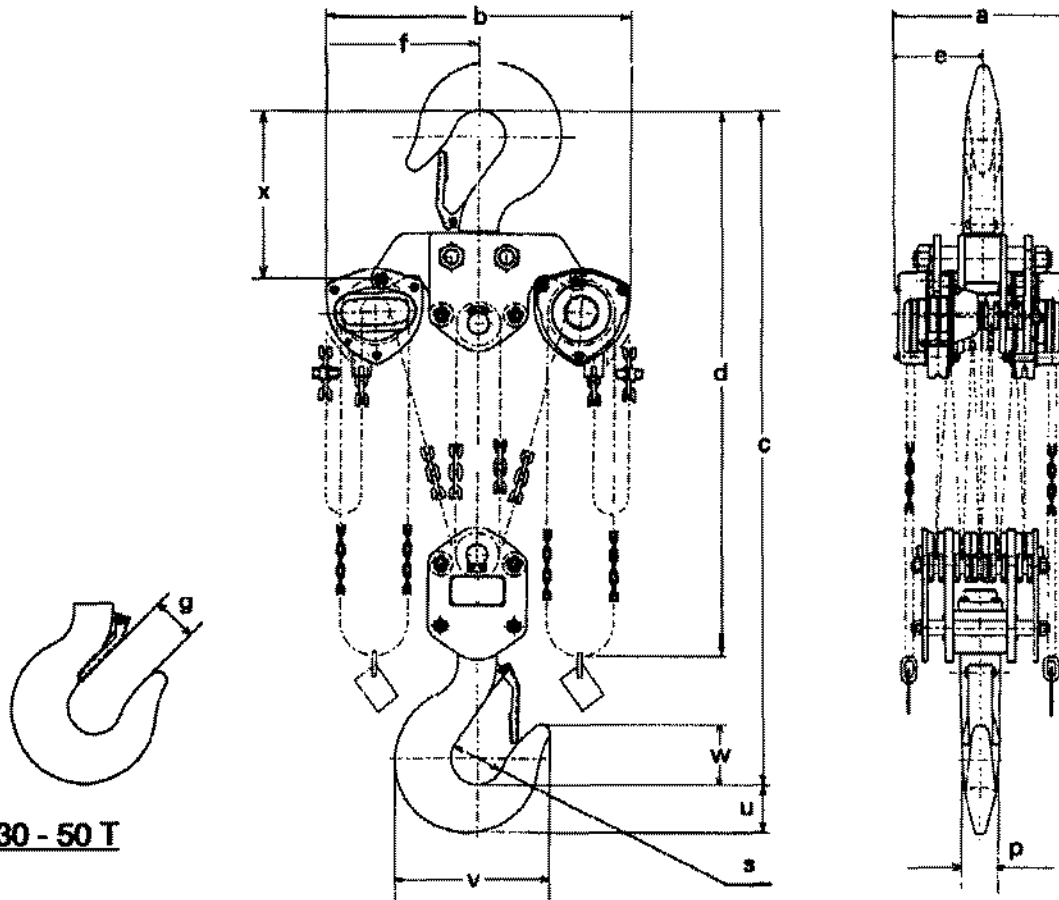
**BUILT BETTER, BACKED BETTER**

**HARRINGTON HOISTS, INC.  
401 WEST END AVENUE  
MANHEIM, PA 17545**

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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)	Weight for Additional One Foot of Lift kg (lbs)
M3	CB300	30	3.5(11.5)	43x2(94.8x2)	495 x 2	37.5	310(683)	400(882)	10	19.2(42.3)
M3	CB400	40	3.5(11.5)	43x2(94.8x2)	693 x 2	50	480(1058)	630(1389)	14	26.2(57.8)
M3	CB500	50	3.5(11.5)	49x2(108x2)	792 x 2	62.5	640(1411)	790(1742)	16	29.7(65.5)

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. (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.)
CB300	30	1300(51.2)	404(15.9)	746(29.4)	4.8(15.7)	202(8.0)	373(14.7)	103(4.1)	125(4.9)	85(3.3)	112(4.4)	367(14.4)	143(5.6)	400(15.7)
CB400	40	1480(58.3)	502(19.8)	760(29.9)	4.9(16.1)	251(9.9)	380(15.0)	104(4.1)	140(5.5)	95(3.7)	125(4.9)	420(16.5)	160(6.3)	445(17.5)
CB500	50	1560(61.4)	544(21.4)	796(31.3)	4.9(16.1)	272(10.7)	398(15.7)	112(4.4)	155(6.1)	106(4.2)	140(5.5)	468(18.4)	178(7.0)	467(18.4)

## 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.	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.

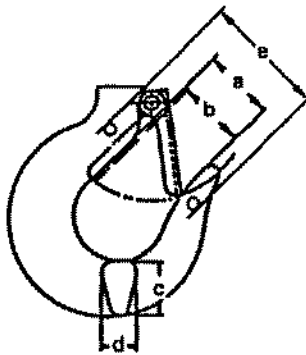
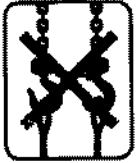
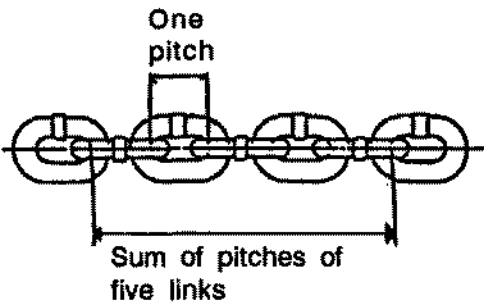



Table S1

Cap. (U.S. ton)	a		b		c mm(in)		d mm(in)	
	Normal mm(in)	Normal mm(in)	Normal	Discard	Normal	Discard		
30	118(4.65)	103(4.05)	112(4.41)	107(4.21)	71(2.80)	68(2.67)		
40	128(5.04)	104(4.09)	125(4.92)	119(4.68)	80(3.15)	76(3.00)		
50	136(5.35)	112(4.41)	140(5.51)	133(5.24)	90(3.54)	86(3.39)		

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

Item	Inspection Method	Discard Limit/Criteria	Measures						
<b>LOAD CHAIN (28)</b> 1. Wear	Measure with slide calipers.	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.	Replace the chain.						
		Table S2 <table border="1"> <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>30,40,50</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)	30,40,50	136.0(5.354)	140.0(5.512)
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30,40,50	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.	Check radial thickness (t) with caliper and oil existence.   Bushing (28)  t=Radial thickness	Radial thickness (t) should be uniform. Oil should be contained. Refer to Table S3.	Replace the part.						
		Table S3 <table border="1"> <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>30,40,50</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)	30,40,50	4.0(.157)	3.0(.118)
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30,40,50	4.0(.157)	3.0(.118)							

### 3. PARTS LIST

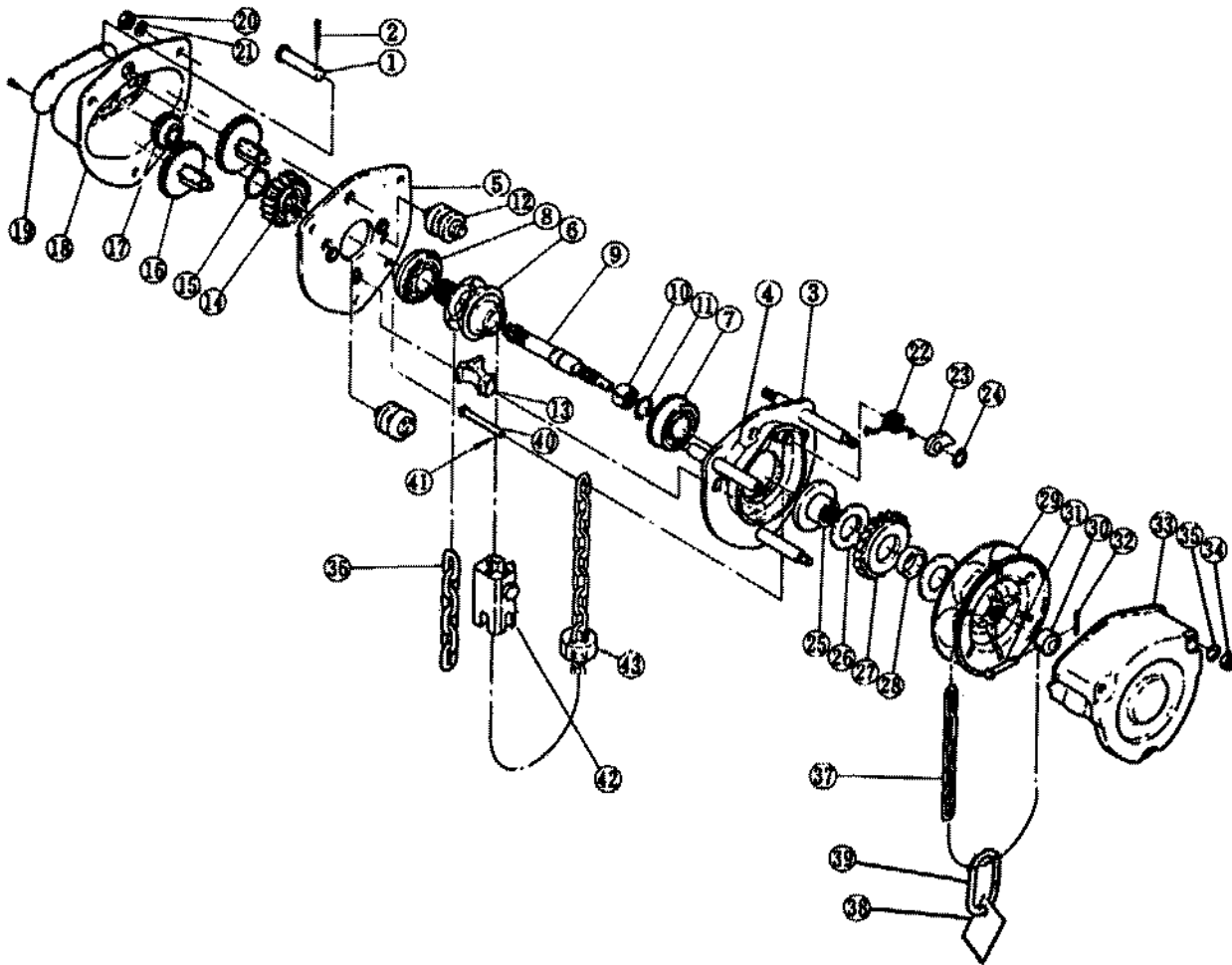


Fig. No.	Part Name	Nos. per Hoist	Capacity (tons)		
			30	40	50
1	Top Pin	2	M3163025		
2	Split Pin	2	9009424		
3	Side Plate A Assy.	2	M3B101025		
5	Side Plate B Assy.	2	M3B102025		
6	Load Sheave	2	M3116025		
7	Ball Bearing	2	M3140020		
8	Ball Bearing	2	M3140020		
9	Pinion	2	M3B111025		
10	Roller Bearing	2	M3130020		
11	Snap Ring	2	M3118020		
12	Guide Roller	4	M3B161025		
13	Stripper	2	M3162025		
14	Load Gear	2	M3114025		
15	Snap Ring	2	9047134		

Fig. No.	Part Name	Nos. per Hoist	Capacity (tons)		
			30	40	50
16	Gear #2 Assy.	4	M3B112025		
17	Ball Bearing	2	M3135020		
18	Gear Case Assy.	2	M3103025		
19	Name Plate B w/ Rivets	2	M3B800025		
20	Nut	6	9093433		
21	Spring Washer	6	9012713		
22	Pawl Spring A*	2	M3179005		
	Pawl Spring B*	2	M3180005		
23	Pawl	2	M3155005		
24	Snap Ring	2	9047110		
25	Friction Disc	2	M3B153025		
26	Friction Plate	4	M3B151025		
27	Ratchet Disc	2	M3B152025		
28	Bushing	2	M3B154025		
29	Hand Wheel	2	M3B115025		
30	Wheel Stopper	2	CF159010		
31	Wheel Stopper Pin	2	M2167005		
32	Split Pin	2	9009410		
33	Wheel Cover Assy.	2	M3171025		
34	Nut	6	9093424		
35	Spring Washer	6	9012711		
36	Load Chain	1	LCC3025		
37	Hand Chain	2	HCCF005		
38	Warning Tag	2	WTAG4		
39	Chain Stopper Link	2	L4045030		
40	End Pin	2	M3B164100		
41	Split Pin	2	9009415-5		
42	Cross Guide	2	M3B176100		
43	Stopper Assy.	2	M3045100		

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

# ADDITIONAL PARTS

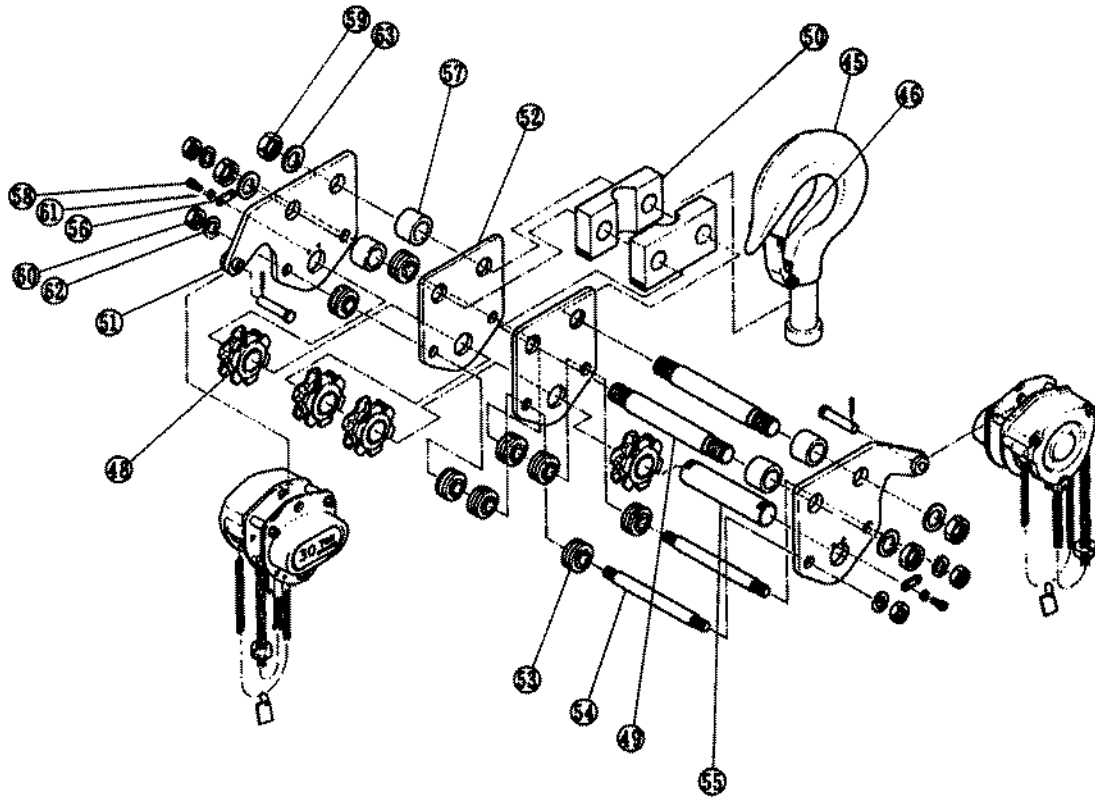


Fig. 44 Top hook set for 30t

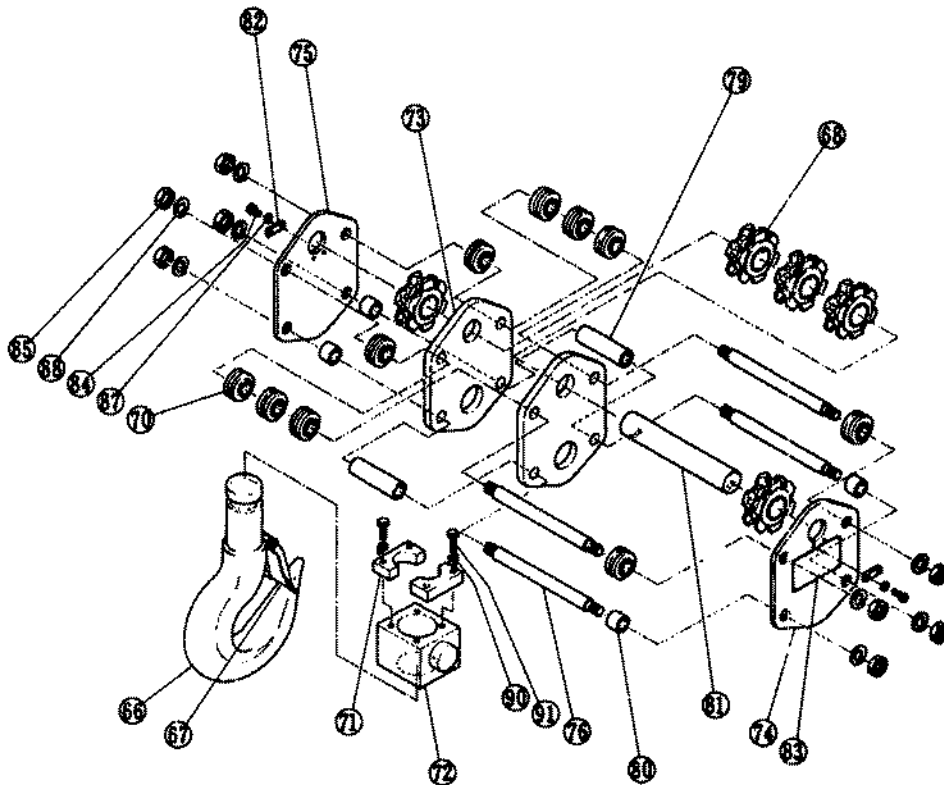


Fig. 65 Bottom hook set for 30t

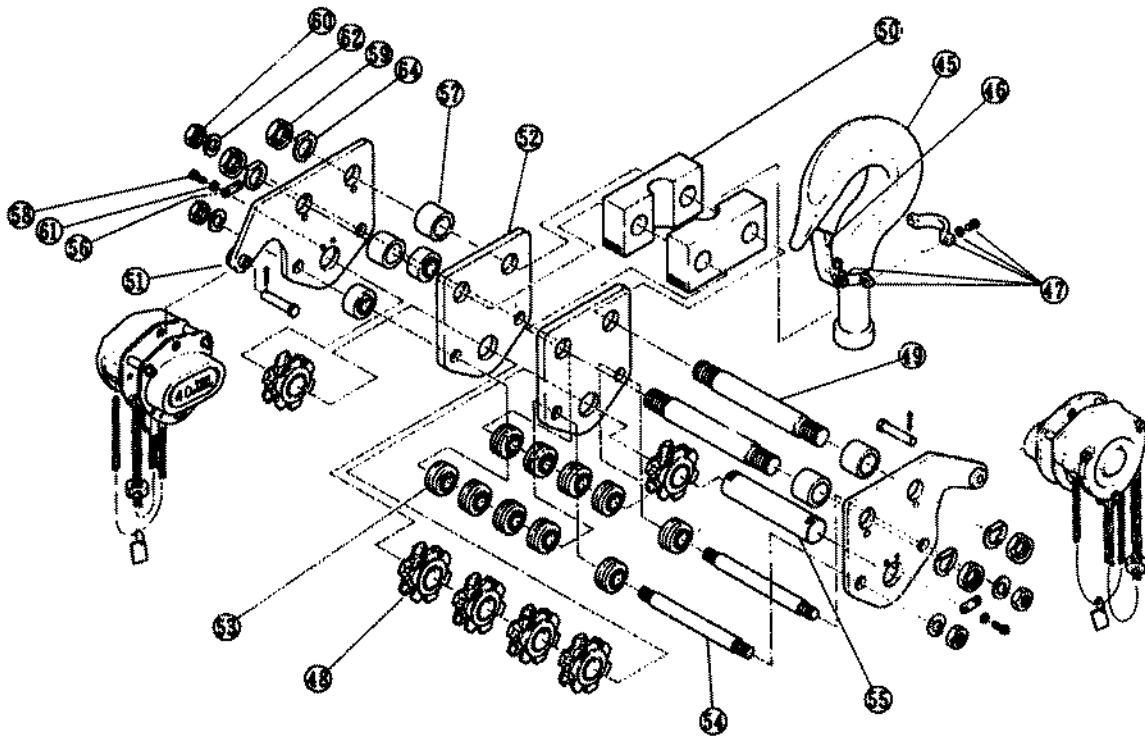


Fig. (44) Top hook set for 40t

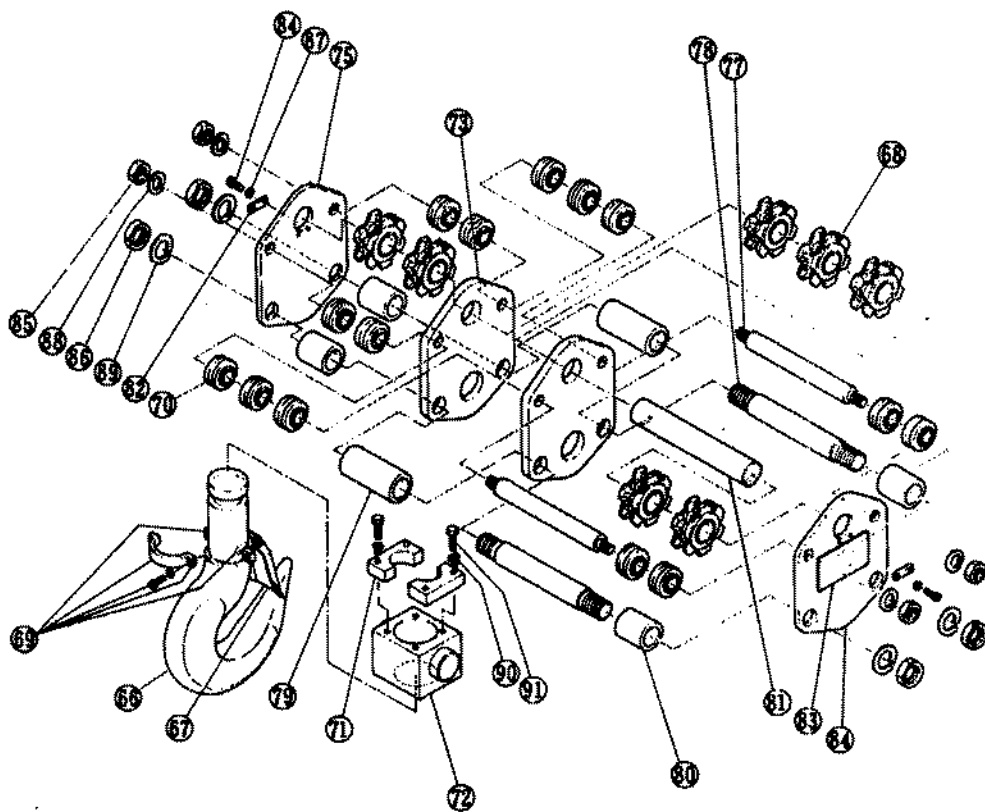


Fig. (65) Bottom hook set for 40t



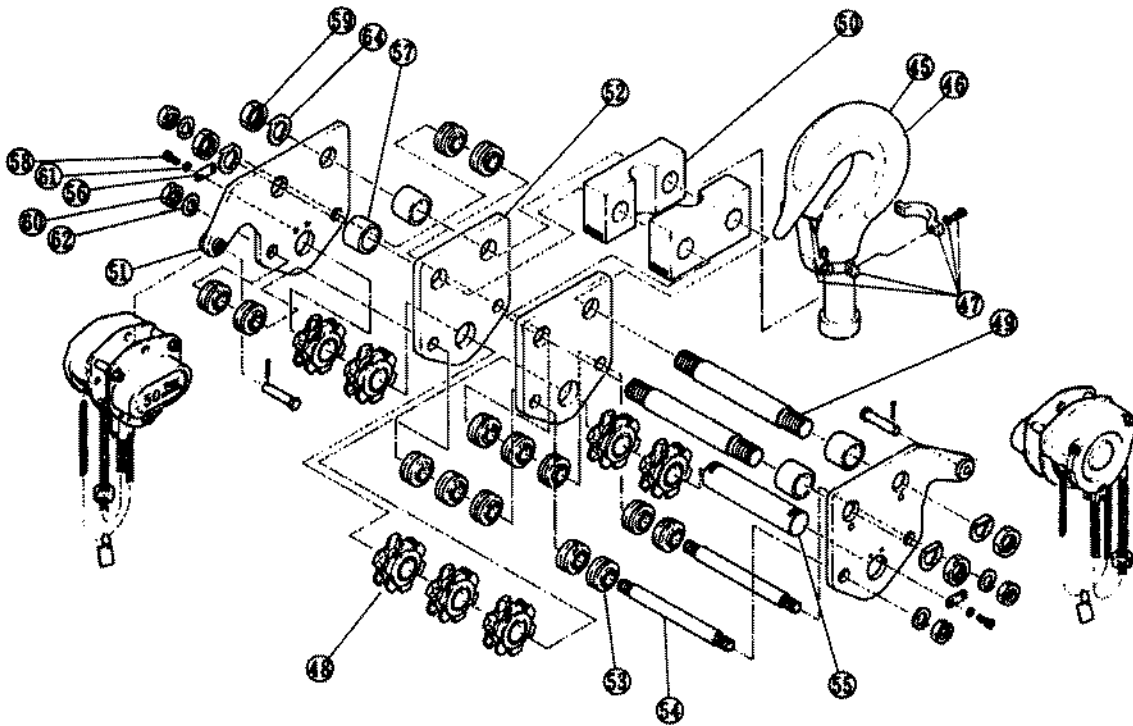


Fig. (44) Top hook set for 50t

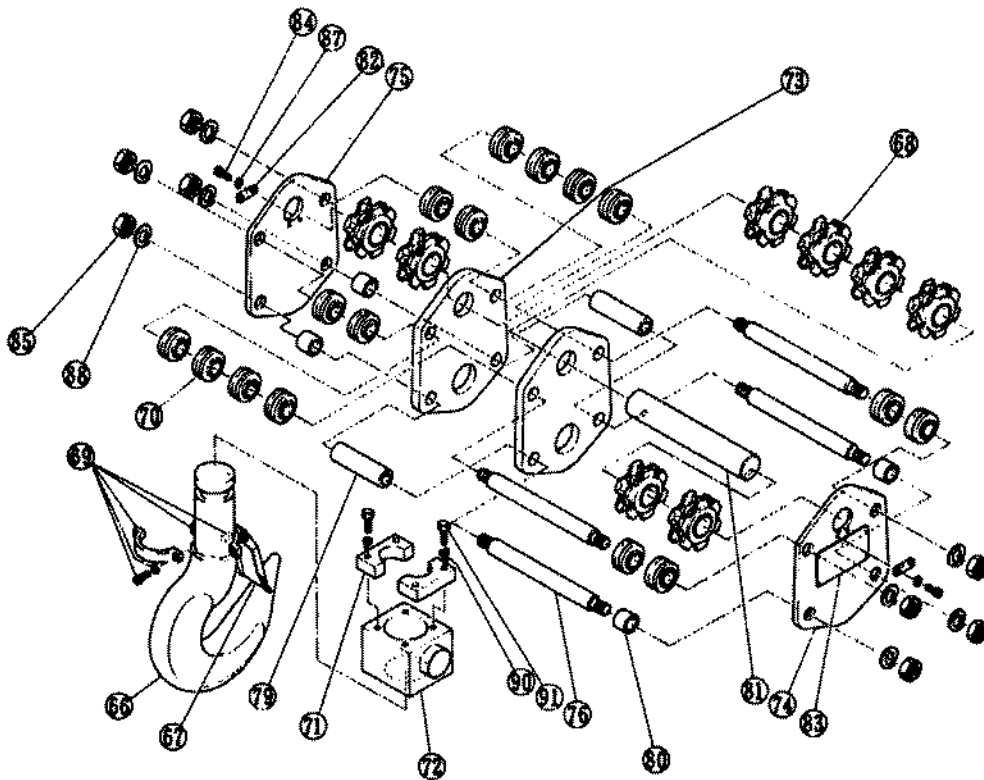


Fig. (65) Bottom hook set for 50t

Fig. No.	Part Name	Nos. per Hoist	Capacity (tons)		
			30	40	50
44	Top Hook Set	1	M3001A300	M3001A400	M3001A500
45	Top Hook	1	M3001300	M3001400	M3001500
46	Hook Latch Assembly	1	M3072300	M3072400	M3075500
47	Lever Holder Assembly	1		M2076400	M2076500
48	Idle Sheave Assembly	4	M3051150		
		6		M3051150	
		7			M3051150
49	Top Suspension Shaft	2	M3010300	M3010400	M3010500
50	Top Yoke	2	M3011300	M3011400	M3011500
51	Top Plate A Assembly	2	M3012300	M3012400	M3021500
52	Top Plate C	2	M3114300	M3114400	M3114500
53	Guide	8	M3018150		
		12		M3018400	
		14			M3018500
54	Stay Bolt	2	M3019300	M3019400	M3019500
55	Top Shaft	1	M3053300	M3053400	M3053500
56	Key Plate	2	M2056150		
57	Collar	4	M3027300	M3027400	M3027500
58	Socket bolt	4	9091270		
59	Nut	4	9093464	9093469	9093472
60	Nut	4	9093445	9093452	9093464
61	Spring Washer	4	9012711		
62	Spring Washer	4	9012717	9012719	9012723
63	Spring Washer	4	9012723	9012725	9012727
64	Pawled Washer	4		M2089400	M2089500
65	Bottom Hook Set	1	M3021A300	M3021A400	M3021A500
66	Bottom Hook	1	M3021300	M3021400	M3021500
67	Hook Latch Assembly	1	M3072300	M3072400	M3072500
68	Idle Sheave Assembly	5	M3051150		
		7		M3051150	
		8			M3051150
69	Lever Holder Assembly	1		M2076400	M2076500
70	Guide	10	M3018150		
		14		M3018400	
		16			M3018500

Fig. No.	Part Name	Nos. per Hoist	Capacity (tons)		
			30	40	50
71	Hook Support	2	M3026300	M3026400	M3026500
72	Bottom Yoke	1	M3030300	M3030400	M3030500
73	Bottom Plate A	2	M3034300	M3030400	M3030500
74	Bottom Plate B	1	M3035300	M3035400	M3035500
75	Bottom Plate C	1	M3036300	M3036400	M3036500
76	Stay Bolt	4	M3038300		M3038500
77	Stay Bolt A	2		M3037400	
78	Stay Bolt B	2		M3038400	
79	Collar A	2	M3039300	M3039400	M3039500
80	Collar B	4	M3040300	M3040400	M3040500
81	Bottom Shaft	1	M3054300	M3054400	M3054500
82	Key Plate	2	M2056150		
83	Name Plate A w/ Rivets	1	M3069300	M3069400	M3069500
84	Socket Bolt	4	9091270		
85	Nut	4		9093452	
		8	9093445		9093464
86	Nut	4		9093458	
87	Spring Washer	4	9012711		
88	Spring Washer	8	9012717		9012723
		4		9012719	
89	Spring Washer	4		9012721	
90	Tongued Washer	4	M3091150		
91	Bolt	4	9093351	9093354	