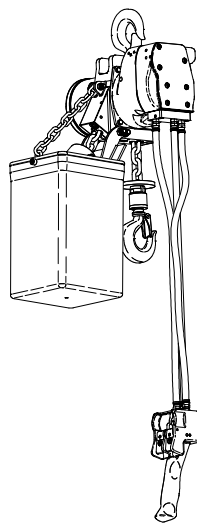


Product Parts Information



Liftchain Industrial Air Hoist Models

LC2A015S, LC2A030D, LC2A035S, LC2A040S, LC2A060S, LC2A060Q,
LC2A080D, LC2A120D, LC2A180T and LC2A250Q



(Dwg. MHP2659)



Save These Instructions



Form MHD56297
Edition 7
September 2013
71441307
© 2013 Ingersoll-Rand

Only allow **Ingersoll Rand** trained technicians to perform maintenance on this product. For additional information contact **Ingersoll Rand** factory or nearest Distributor.

For additional supporting documentation refer to Table 1 'Product Information Manuals' on page 2.

Manuals can be downloaded from <http://www.ingersollrandproducts.com>.

The use of other than genuine **Ingersoll Rand** replacement parts may result in safety hazards, decreased performance and increased maintenance and will invalidate all warranties.

Original instructions are in English. Other languages are a translation of the original instructions.

Refer all communications to the nearest **Ingersoll Rand** Office or Distributor.

Table 1: Product Information Manuals

Publication	Part/Document Number	Publication	Part/Document Number
Product Safety Information Manual	MHD56295	Product Maintenance Information Manual	MHD56279
Product Information Manual	MHD56296		

TABLE OF CONTENTS

Description	Page No.	Dwg. Name	Page No.
Parts Ordering Information	3		
1.5 Ton Single and 3 Ton Double Powerhead and Disc Brake Assembly Drawing	4	(Dwg. MHP2650)	4
1.5 Ton Single and 3 Ton Double Powerhead and Disc Brake Assembly Parts List	5		
4 Ton Single and 8 Ton Double Powerhead Assembly Drawing	6	(Dwg. MHP3003)	6
4 Ton Single and 8 Ton Double Powerhead Assembly Parts List	7		
6 Ton Quad Hoist Powerhead and Disc Brake Assembly Drawing	8	(Dwg. MHP2822)	8
6 Ton Quad Hoist Powerhead and Disc Brake Assembly Parts List	9		
6 Ton Single and 12 Ton Double Powerhead Assembly Drawing	10	(Dwg. MHP3011)	10
6 Ton Single and 12 Ton Double Powerhead Assembly Parts List	11		
18 Ton Triple and 25 Ton Quad Powerhead Assembly Drawing	12	(Dwg. MHP3014)	12
18 Ton Triple and 25 Ton Quad Powerhead Assembly Parts List	13		
3.5 HP Motor Assembly Without Emergency Stop Adapter Drawing	14	(Dwg. MHP2652)	14
3.5 HP Motor Assembly Without Emergency Stop Adapter Parts List	15		
3.5 HP Motor Assembly with Emergency Stop Adapter Drawing	16	(Dwg. MHP3037)	16
3.5 HP Motor Assembly with Emergency Stop Adapter Parts List	17		
6 HP Motor and Disc Brake Assembly Without Emergency Stop Adapter Drawing	18	(Dwg. MHP2999)	18
6 HP Motor and Disc Brake Assembly Without Emergency Stop Adapter Parts List	19		
6 HP Motor and Disc Brake Assembly with Emergency Stop Adapter drawing	20	(Dwg. MHP3038)	20
6 HP Motor and Disc Brake Assembly with Emergency Stop Adapter Parts List	21		
Two Function Pendant Control Assembly Without Emergency Stop Parts Drawing	22	(Dwg. MHP3040)	22
Two Function Pendant Control Assembly Without Emergency Stop Parts List	23		
Two Function Pendant Control Assembly with Emergency Stop Drawing	24	(Dwg. MHP3039)	24
Two Function Pendant Control Assembly with Emergency Stop Parts List	25		
Four Function Pendant Control Assembly w/o Emergency Stop Adapter Drawing	26	(Dwgs. MHP3061 and MHP3062)	26
Four Function Pendant Control Assembly Parts List	27		
1.5, 3 and 6 Ton Top Hook and Trolley Mount Assembly Drawing and Parts List	28	(Dwgs. MHP2656 and MHP2820)	28
4 and 6 Ton Top Hook and Trolley Mount Assembly Drawing and Parts List	29	(Dwgs. MHP2994 and MHP3041)	29
8 and 12 Ton Top Hook and Trolley Mount Assembly Drawing and Parts List	30	(Dwgs. MHP2995 and MHP3042)	30
18 and 25 Ton Top Hook and Trolley Mount Assembly Drawing and Parts List	31	(Dwg. MHP3019)	31
1.5 and 3 Ton Bottom Block Assembly Drawing and Parts List	32	(Dwg. MHP2657)	32
4, 6, 8 and 12 Ton Bottom Block Assembly Drawing and Parts List	33	(Dwg. MHP3006)	33
18 Ton Triple Bottom Block Assembly Drawing and Parts List	34	(Dwg. MHP3018)	34
6 Ton Quad Bottom Block Hook Assembly Drawing and Parts List	35	(Dwg. MHP2821)	35
25 Ton Quad Bottom Block Hook Assembly Drawing and Parts List	36	(Dwg. MHP3029)	36
Bottom Hook Accessories Parts Drawing and Parts List	37	(Dwg. MHP3079)	37
Non Metallic Chain Container Assembly Drawing	38	(Dwg. MHP2658)	38
Non Metallic Chain Container Assembly Parts List	39		
Metallic Chain Container Assembly Drawing and Parts List	40	(Dwg. MHP3059)	40
Rope Control Assembly Drawing and Parts List	41	(Dwg. MHP2662)	41
Rope Control with Overload Assembly Drawing and Parts List	42	(Dwg. MHP2663)	42
Label and Tag Placement Assembly Drawing and Parts List	43	(Dwg. MHP3081)	43
Service & Accessories	44		

PARTS ORDERING INFORMATION

These products are designed and constructed to provide long, trouble-free service. In time it may be necessary to order and install new parts to replace those that have been subjected to wear.

For your convenience and future reference, it is recommended that the following information be recorded.

Model Number _____

Serial Number _____

Date Purchase _____

When ordering replacement parts, please specify the following:

1. Complete model number and serial number as it appears on the data (name) plate.
2. Part number(s) and part description as shown in this manual.
3. Quantity required.

The data (name) plate is located on the product.

NOTICE

- **Continuing improvement and advancement of design may cause changes to this equipment which are not included in this manual. Manuals are periodically revised to incorporate changes. Always check the manual edition number on the front cover for the latest issue.**
- **Sections of this manual may not apply to your product.**
- **The use of other than genuine Ingersoll Rand replacement parts may result in safety hazards, decreased performance and increased maintenance, and will invalidate all warranties.**

■ Return Goods Policy

Ingersoll Rand will not accept any returned goods for warranty or service unless prior arrangements have been made and written authorization has been provided from the location the goods were purchased.

Products that have been modified without **Ingersoll Rand** approval, mishandled or overloaded will not be repaired or replaced under warranty. A printed copy of the warranty that applies to this product is provided inside the back cover of the product information manual or in some cases the parts manual.

■ Disposal



When the life of the product has expired, it is recommended that it be disassembled, degreased and parts separated as to materials so that they may be recycled.

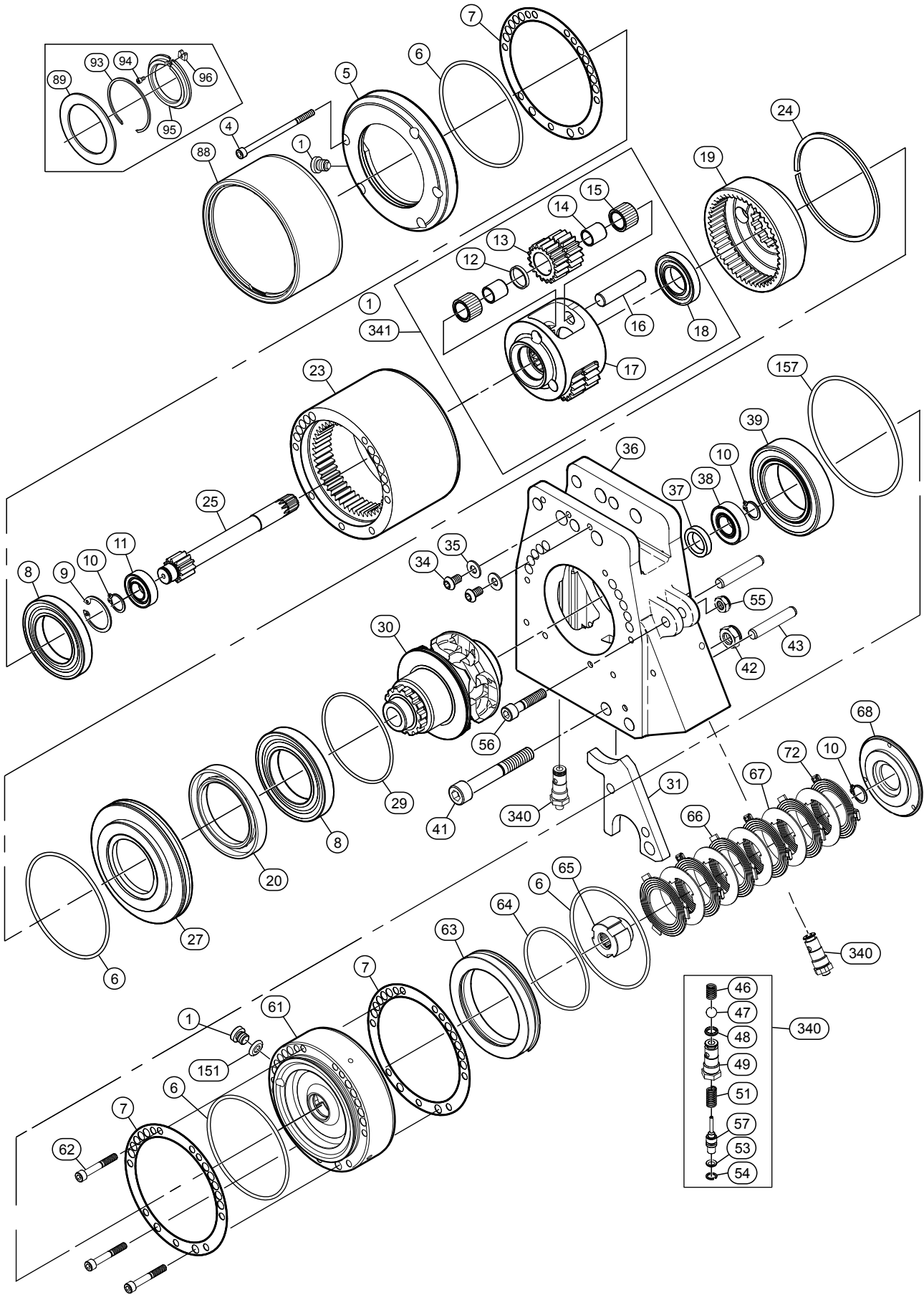
For additional information contact:

Ingersoll Rand
20017 72nd Avenue South
Kent, WA 98032 USA
Phone: (877) 584-0370
Fax: (253) 398-3473

or

**Ingersoll Rand
Douai Operations**
529, Avenue Roger Salengro
59450 Sin Le Noble, France
Phone: (33) 03-27-93-08-08
Fax: (33) 03-27-93-08-00

1.5 TON SINGLE AND 3 TON DOUBLE POWERHEAD AND DISC BRAKE ASSEMBLY DRAWING



(Dwg. MHP2650)

1.5 TON SINGLE AND 3 TON DOUBLE POWERHEAD AND DISC BRAKE ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number	
• 1	Plug	2	6511-0441	41	Capscrew	1	4132-9406	
4	Capscrew	5	4133-2506	42	Nut	1	75583M	
5	Reduction Gear End Cover (new style)	1	9644-0817	43	Pin	2	4600-2816	
	Reduction Gear End Cover (old style)	1	9644-3008	46	Spring	2	Order item 340	
• 6	'O' Ring	4	5823-5229	47	Ball	2		
• 7	Gasket	3	9644-1048	48	'O' Ring	2		
8	Bearing	2	5080-0009	49	Valve Housing	2		
9	Retainer Ring	1	4770-3032	51	Spring	2		
• 10	Retainer Ring	3	4770-0015	53	'O' Ring	2		
11	Bearing	1	5000-0002	54	Snap Ring	2		
12	Spacer	3	9644-1047	55	Nut	1		4370-6511
13	Planetary Gear	3	9644-1002	56	Capscrew	1		4132-6706
14	Bearing Ring	6	5636-2041	57	Valve	2		Order item 340
15	Needle Bearing	6	5656-2141	61	Brake Housing (Note 2)	1	9644-0574	
16	Planet Axle	3	9644-1046	62	Capscrew	3	4130-1106	
17	Planetary Carrier	1	9644-1006	63	Piston	1	9644-1014	
18	Bearing	1	5080-0005	• 64	'O' Ring	1	5823-5129	
19	Ring Gear	1	9644-1003	65	Splined Hub	1	9644-1013	
• 20	Oil Seal	1	5801-2130	66	Friction Plate (Note 2)	3	6302-8241	
23	Reducer Housing	1	9644-1007	67	Drive Plate (Note 2)	5	6302-8341	
24	Stop Ring	1	4782-9332	68	Brake Reaction Plate	1	9644-1015	
25	Pinion Shaft	1	9644-3005	72	Friction Plate with Spring Clips (Note 2)	3	9644-1552	
27	Cover	1	9644-3009	88	Muffler Assembly	1	3644-0567	
• 29	Quad Ring	1	5823-7329	89	Ring Flat (Note 3)	1	9644-0566	
30	Sprocket	1	9644-3039	93	Expansive Ring (Note 3)	1	4789-8541	
31	Chain Stripper	1	9644-3041	94	Capscrew (Note 3)	1	4130-9606	
34	Capscrew	2	4120-1604	95	Adapter Support (Note 3)	1	9644-0564	
35	Washer	2	4500-1106	96	Plate Stop (Note 3)	1	9644-0565	
36	Hoist Body	1	9644-3069	151	Gasket	1	9644-1503	
• 37	Oil Seal	1	5801-9830	• 157	'O' Ring	1	5823-9129	
38	Bearing	1	5005-0002	341	Planetary Support Assembly (Note 1)	1	7644-0759	
39	Bearing	1	5005-0009					

• Recommended spares, 2 years normal operation (ordering kits listed below is recommended).

Note 1: Do not disassemble planet support assembly item 341.

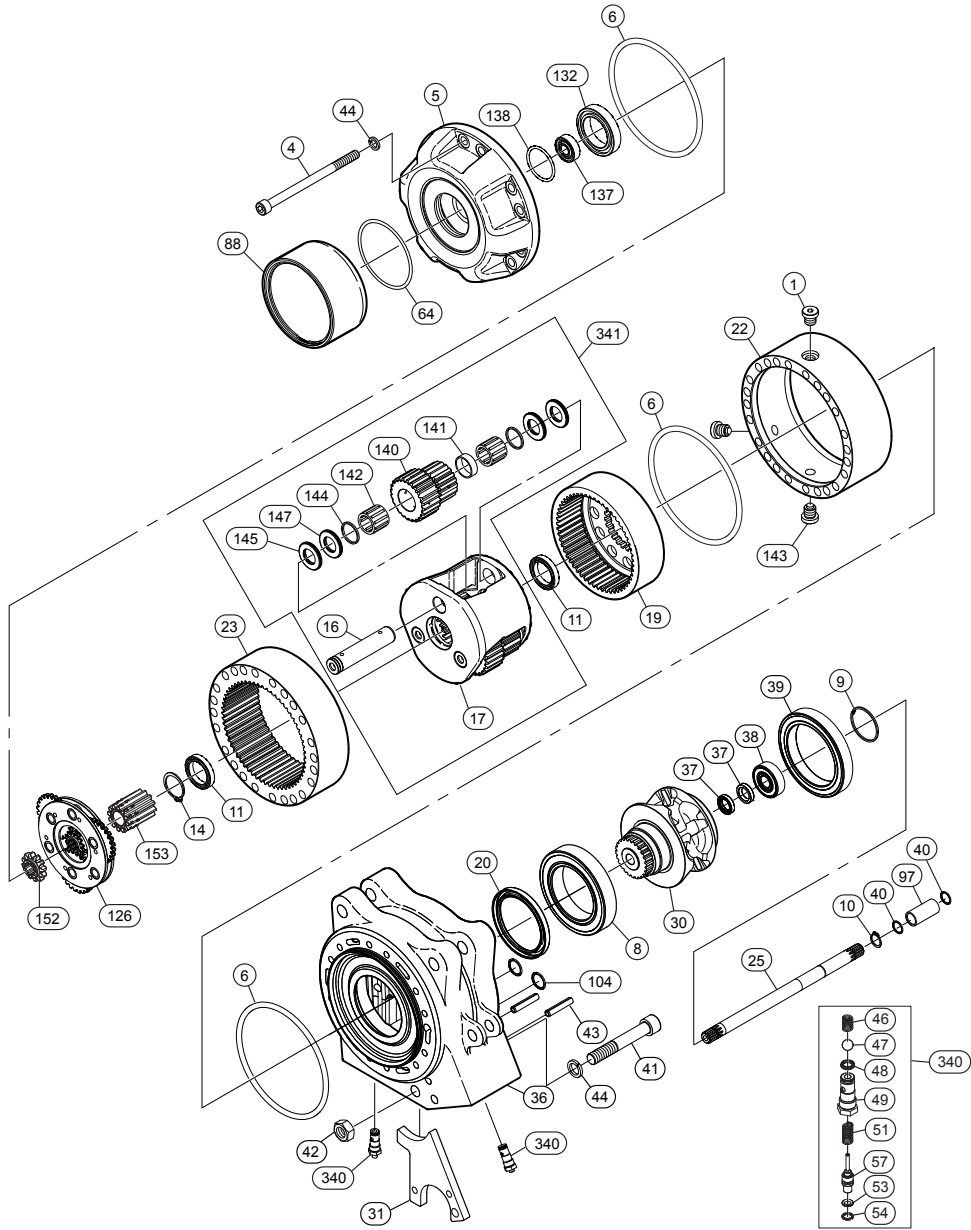
Note 2: When ordering disc brake replacement parts a new motor housing is required, refer to MHP2652. This change effects hoists with serial numbers of 08-04-52 and below.

Note 3: Items 89, 93 – 96 are for older style hoists, using old style item 5 part.

Kit Repair List:

Item No.	Description of Part	Total Qty	Part Number
• 340	Limit Switch Valve Kit	2	7645-0081
• 700	Reducer Repair Kit (includes items 1, 4, 6 – 11, 14, 15, 18, and 20)	1	7650-0092
• 701	Disc Brake Repair Kit (includes items 1, 6, 7, 10, 62, 64, 66, 67, and 72)	1	7650-0089
• 702	Center Section Repair Kit (includes items 4, 6 – 8, 10, 18, 31, 34, 35, 38, 41 – 43, 55, and 56)	1	7650-0090
• 703	Overhaul Repair Kit (includes all items required for rebuild, no further kits required)	1	7650-0001
• 704	Overhaul Repair Kit, Emergency Stop Version (includes all items required for rebuild, no further kits required)	1	7650-0002

4 TON SINGLE AND 8 TON DOUBLE POWERHEAD ASSEMBLY DRAWING



(Dwg. MHP3003)

4 TON SINGLE AND 8 TON DOUBLE POWERHEAD ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number	
• 1	Plug	2	6511-0741	46	Spring	2	Order item 340	
4	Capscrew	12	4133-4506	47	Ball	2	Order item 340	
5	Reduction Gear End Cover	1	9645-0029	48	'O' Ring	2		
• 6	'O' Ring	3	5824-0029	49	Valve Housing	2		
8	Bearing	1	5005-0014	51	Spring	2		
9	Retainer Ring	1	4770-3042	53	'O' Ring	2		
• 10	Retainer Ring	1	4770-0015	54	Snap Ring	2		
11	Bearing	2	5090-0006	57	Valve	2		
14	Retainer Ring	1	4770-0030	• 64	'O' Ring	1		5820-8529
16	Planet Axle	3	9645-0025	88	Muffler Assembly	1		3644-0567
17	Planetary Carrier	1	9645-0020	97	Spacer Ring	1		9645-0143
19	Ring Gear	1	9645-0017	•104	'O' Ring	2	5822-2829	
22	Reducer Housing	1	9645-0121	126	Primary Gear Assembly	1	7645-0075	
23	Ring Gear	1	9645-0010	132	Bearing	1	5090-0008	
25	Pinion Shaft	1	9645-0046	137	Bearing	1	5010-0001	
30	Sprocket	1	9645-0041	•138	'O' Ring	1	5822-4229	
31	Chain Stripper	1	9645-0061	140	Planetary Gear	3	9645-0018	
36	Hoist Body	1	9645-0040	141	Spacer	3	9645-0151	
• 37	Oil Seal	2	5801-9830	142	Needle Bearing	6	5650-2825	
38	Bearing	1	5025-0002	143	Plug	1	6517-0242	
39	Bearing	1	5090-0016	144	Spacer	6	9645-0045	
• 40	'O' Ring	2	5821-8129	145	Needle Bearing Spacer	6	5605-3520	
41	Capscrew	1	4132-9106	147	Needle Bearing	6	5731-9832	
42	Nut	1	4300-5811	152	Sun Gear	1	9645-0036	
43	Pin	2	4650-5520	153	Sun Gear	1	9645-0038	
44	Lockwasher	1	4520-1014	341	Planet Support Assembly (Note 1)	1	7645-0074	

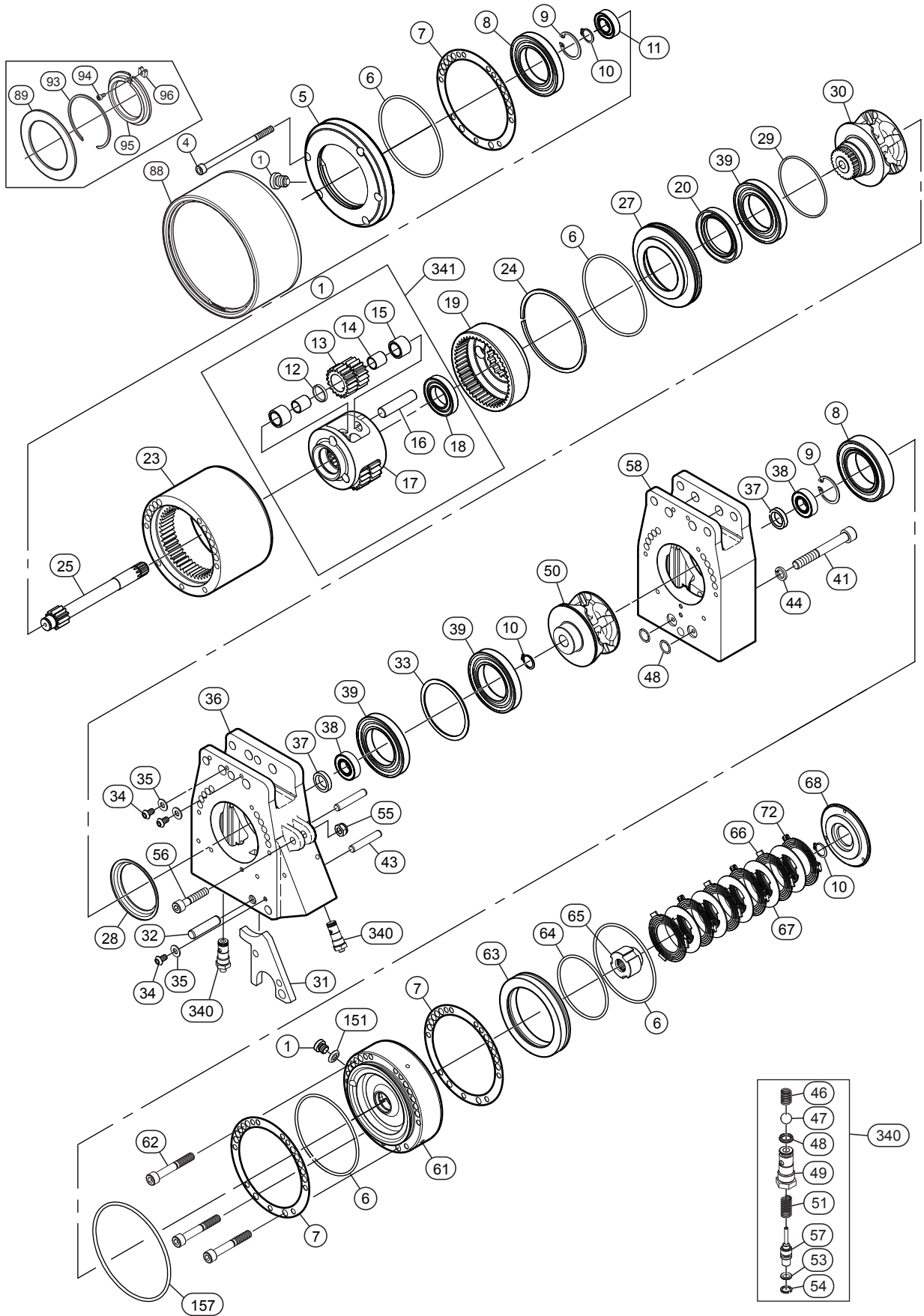
• Recommended spares, 2 years normal operation (ordering kits listed below is recommended).

Note 1: Do not disassemble planet support assembly item 341.

Kit Repair List:

Item No.	Description of Part	Total Qty	Part Number
• 340	Limit Switch Valve Kit	2	7645-0081
• 703	Overhaul Repair Kit (includes all items required for rebuild, no further kits required)	1	7650-0239
• 704	Overhaul Repair Kit, Emergency Stop Version (includes all items required for rebuild, no further kits required)	1	7650-0240
• 705	Reducer Repair Kit (includes items 1, 4, 6, 10, 14, 16, 132, 137, 138, 141 – 145, and 147)	1	7650-0224
• 706	Center Section Repair Kit (includes items 1, 4, 6, 8 – 10, 20, 31, 37 – 39, 43, 104, 132, 137, 138, and 143)	1	7650-0228

6 TON QUAD HOIST POWERHEAD AND DISC BRAKE ASSEMBLY DRAWING



(Dwg. MHP2822)

6 TON QUAD HOIST POWERHEAD AND DISC BRAKE ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
• 1	Plug	2	6511-0441	41	Capscrew	2	4133-0006
4	Capscrew	5	4133-2506	43	Pin	2	4600-2816
5	Reduction Gear End Cover	1	9644-3008	44	Lockwasher	2	4520-1010
• 6	'O' Ring	4	5823-5229	46	Spring	2	Order item 340
• 7	Gasket	3	9644-1048	47	Ball	2	
8	Bearing	2	5080-0009	• 48	'O' Ring	2	5821-2529
9	Retainer Ring	2	4770-3032	49	Valve Housing	2	Order item 340
• 10	Retainer Ring	3	4770-0015	50	Sprocket	1	9644-3494
11	Bearing	1	5000-0002	51	Spring	2	Order item 340
12	Spacer	3	9644-1047	53	'O' Ring	2	
13	Planetary Gear	3	9644-1002	54	Snap Ring	2	
14	Bearing Ring	6	5636-2041	55	Nut	1	4370-6511
15	Needle Bearing	6	5656-2141	56	Capscrew	1	4132-6706
16	Planet Axle	3	9644-1046	57	Valve	2	Order item 340
17	Planetary Carrier	1	9644-1006	58	Chain Guide Housing	1	9644-3495
18	Bearing	1	5080-0005	61	Brake Housing (Note 2)	1	9644-0574
19	Ring Gear	1	9644-1003	62	Capscrew	3	4130-1106
• 20	Oil Seal	1	5801-2130	63	Piston	1	9644-1014
23	Reducer Housing	1	9644-1007	• 64	'O' Ring	1	5823-5129
24	Stop Ring	1	4782-9332	65	Splined Hub	1	9644-1013
25	Pinion Shaft	1	9644-3463	66	Friction Plate (Note 2)	3	6302-8241
27	Cover	1	9644-3009	67	Drive Plate (Note 2)	5	6302-8341
28	Ring	1	5830-4009	68	Brake Reaction Plate	1	9644-1015
• 29	Quad Ring	1	5823-7329	72	Friction Plate with Spring Clips (Note 2)	3	9644-1552
30	Sprocket	1	9644-3311	88	Muffler Assembly	1	3644-0567
31	Chain Stripper	1	9644-3041	89	Ring Flat	1	9644-0566
32	Pin	1	9644-3244	93	Expansive Ring	1	4789-8541
33	Spacer	1	9644-3464	94	Capscrew	1	4130-9606
34	Capscrew	3	4120-1604	95	Adapter Support	1	9644-0564
35	Washer	3	4500-1106	96	Plate Stop	1	9644-0565
36	Hoist Body	1	9644-3377	151	Gasket	1	9644-1503
• 37	Oil Seal	2	5801-9830	• 157	'O' Ring	1	5823-9129
38	Bearing	2	5005-0002	341	Planet Support Assembly (Note 1)	1	3645-0133
39	Bearing	3	5080-0009				

• Recommended spares, 2 years normal operation (ordering kits listed below is recommended).

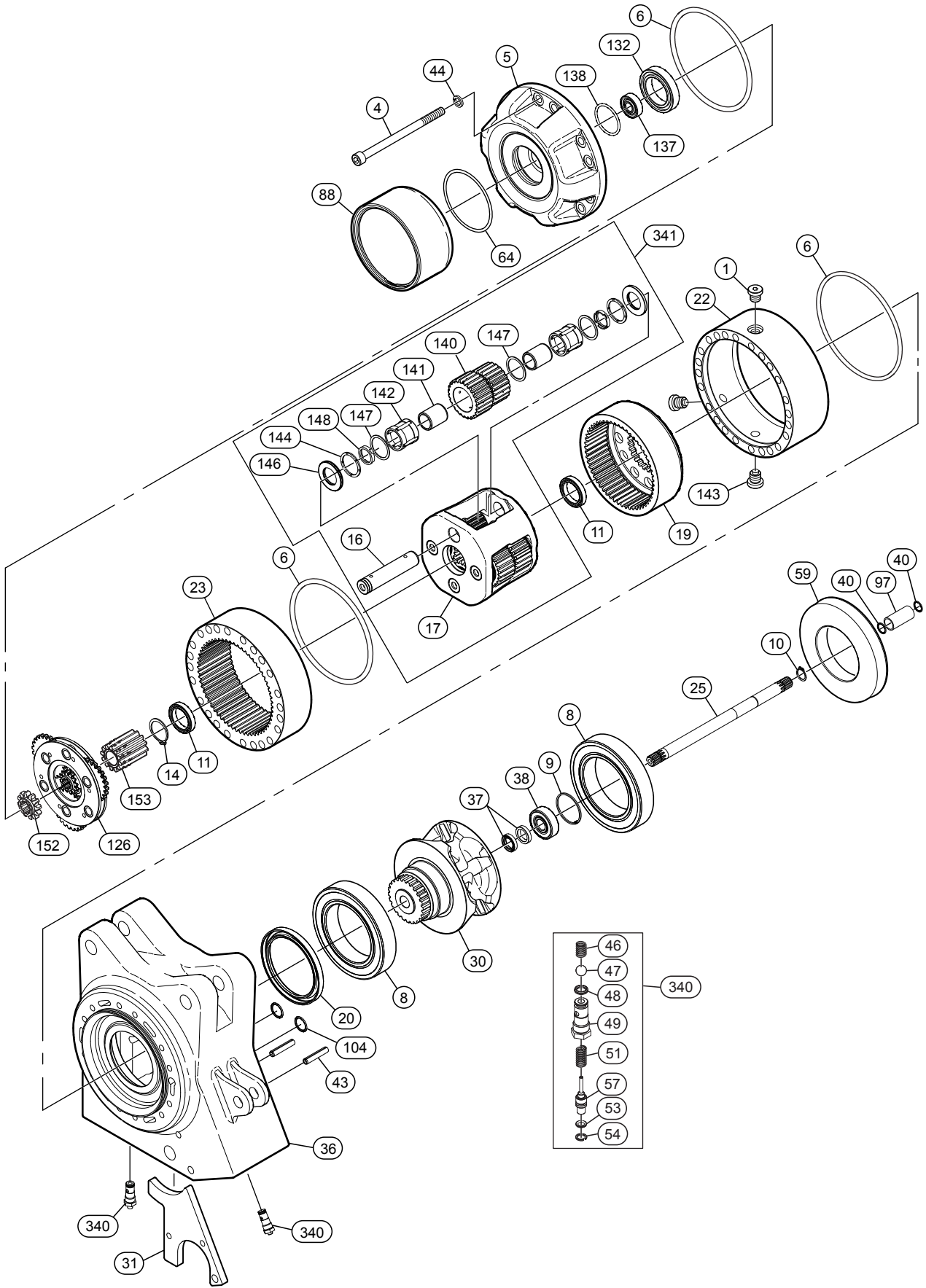
Note 1: Do not disassemble planet support assembly item 341.

Note 2: When ordering disc brake replacement parts a new motor housing is required, refer to MHP2652. This change effects hoists with serial numbers of 08-04-52 and below.

Kit Repair List:

Item No.	Description of Part	Total Qty	Part Number
• 340	Limit Switch Valve Kit	2	7645-0081
• 701	Disc Brake Repair Kit (includes items 6, 7, 10, 64, 66, 67, and 72)	1	7650-0089
• 708	Reducer Repair Kit (includes items 1, 4, 6, 7, 9 – 11, 14, 15, 18, 20, and 39)	1	7650-0252

6 TON SINGLE AND 12 TON DOUBLE POWERHEAD ASSEMBLY DRAWING



(Dwg. MHP3011)

6 TON SINGLE AND 12 TON DOUBLE POWERHEAD ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
1	Plug	2	6511-0741	48	'O' Ring	2	Order item 340
4	Capscrew	12	4133-4506	49	Valve Housing	2	
5	Reduction Gear End Cover	1	9645-0029	51	Spring	2	
• 6	'O' Ring	3	5824-0029	53	'O' Ring	2	
8	Bearing	2	5005-0015	54	Snap Ring	2	
9	Retainer Ring	1	4770-3042	57	Valve	2	
• 10	Retainer Ring	1	4770-0015	59	Adapter Ring	1	9649-0069
11	Bearing	2	5090-0006	• 64	'O' Ring	1	5820-8529
14	Retainer Ring	1	4770-0030	88	Muffler Assembly	1	3644-0567
16	Planet Axle	4	9645-0024	97	Spacer Ring	1	9645-0143
17	Planetary Carrier	1	9645-0019	• 104	'O' Ring	2	5822-2829
19	Ring Gear	1	9645-0011	126	Primary Gear Assembly	1	7645-0075
• 20	Oil Seal	1	5801-5130	132	Bearing	1	5090-0008
22	Reducer Housing	1	9645-0121	137	Bearing	1	5010-0001
23	Ring Gear	1	9645-0010	• 138	'O' Ring	1	5822-4229
25	Pinion Shaft	1	9645-0033	140	Planetary Gear	4	9645-0012
30	Sprocket	1	9645-0043	141	Internal Bearing Ring	8	5630-0642
31	Chain Stripper	1	9645-0063	142	Needle Bearing	8	5650-3530
36	Hoist Body	1	9645-0042	143	Plug	1	6517-0242
• 37	Oil Seal	2	5801-9830	144	Needle Bearing	8	5731-2632
38	Bearing	1	5025-0002	146	Needle Bearing Spacer	8	5605-4225
• 40	'O' Ring	2	5821-8129	147	Spacer	12	9645-0136
43	Pin	2	4650-5520	148	Ring	8	9645-0137
44	Lockwasher	12	4520-1010	152	Sun Gear	1	9645-0036
46	Spring	2	Order item 340	153	Sun Gear	1	9645-0038
47	Ball	2		341	Planet Support Assembly (Note 1)	1	7645-0134

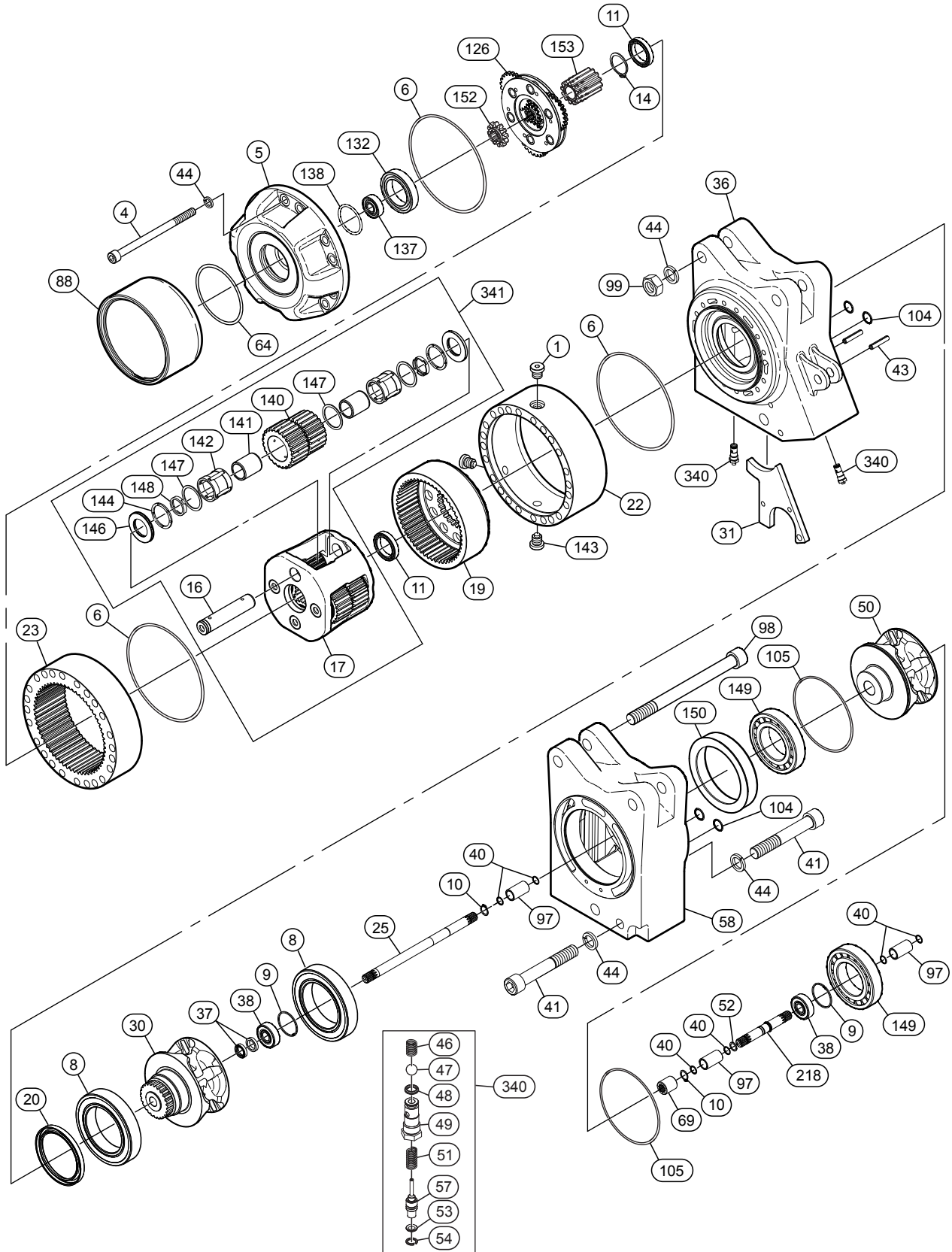
• Recommended spares, 2 years normal operation (ordering kits listed below is recommended).

Note 1: Do not disassemble planet support assembly item 341.

Kit Repair List:

Item No.	Description of Part	Total Qty	Part Number
• 340	Limit Switch Valve Kit	2	7645-0081
• 703	Overhaul Repair Kit (includes all items required for rebuild, no further kits required)	1	7650-0244
• 704	Overhaul Repair Kit, Emergency Stop Version (includes all items required for rebuild, no further kits required)	1	7650-0245
• 711	Reducer Repair Kit (includes items 1, 4, 6, 10, 11, 14, 132, 137, 138, and 141 - 148)	1	7650-0230
• 712	Center Section Repair Kit (includes items 1, 4, 6, 10, 14, 16, 132, 137, 138, and 141 - 148)	1	7650-0234

18 TON TRIPLE AND 25 TON QUAD POWERHEAD ASSEMBLY DRAWING



(Dwg. MHP3014)

18 TON TRIPLE AND 25 TON QUAD POWERHEAD ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
• 1	Plug	2	6511-0741	51	Spring	2	Order item 340
4	Capscrew	12	4133-4506	53	'O' Ring	2	
5	Reduction Gear End Cover	1	9645-0029	54	Snap Ring	2	
• 6	'O' Ring	3	5824-0029	57	Valve	2	
8	Bearing	2	5005-0015	58	Chain Guide Housing	1	9645-0050
9	Retainer Ring	2	4770-3042	• 64	'O' Ring	1	5820-8529
• 10	Retainer Ring	2	4770-0015	69	Coupling Sleeve	1	9645-0158
11	Bearing	2	5090-0006	88	Muffler Assembly	1	3644-0567
14	Retainer Ring	1	4770-0030	97	Spacer Ring	3	9645-0143
16	Planet Axle	4	9645-0024	98	Capscrew	2	4133-5106
17	Planetary Carrier	1	9645-0019	99	Locknut	2	4300-4011
19	Ring Gear	1	9645-0011	• 104	'O' Ring	4	5822-2829
• 20	Oil Seal	1	5801-5130	• 105	'O' Ring	2	5821-2829
22	Reducer Housing	1	9645-0121	126	Primary Gear Assembly	1	7645-0075
23	Ring Gear	1	9645-0010	132	Bearing	1	5090-0008
25	Pinion Shaft	1	9645-0033	137	Bearing	1	5010-0001
30	Sprocket	1	9645-0043	• 138	'O' Ring	1	5822-4229
31	Chain Stripper	1	9645-0063	140	Planetary Gear	4	9645-0012
36	Hoist Body	1	9645-0042	141	Internal Bearing Ring	8	5630-0642
• 37	Oil Seal	2	5801-9830	142	Needle Bearing	8	5650-3530
38	Bearing	2	5025-0002	143	Plug	1	6517-0242
• 40	'O' Ring	6	5821-8129	144	Needle Bearing	8	5731-2632
41	Capscrew	2	4132-3906	146	Needle Bearing Spacer	8	5605-4225
43	Pin	2	4650-5520	147	Bearing	12	9645-0136
44	Lockwasher	12	4520-1010	148	Ring	8	9645-0137
46	Spring	2	Order item 340	149	Bearing	2	5120-0012
47	Ball	2		150	Adapter	1	9645-0056
48	'O' Ring	2		152	Sun Gear	1	9645-0036
49	Valve Housing	2		153	Sun Gear	1	9645-0038
50	Sprocket	1	9645-0055	218	Pinion Shaft	1	9645-0156
52	Spacer	1	9645-0320	341	Planet Support Assembly (Note 1)	1	7645-0133

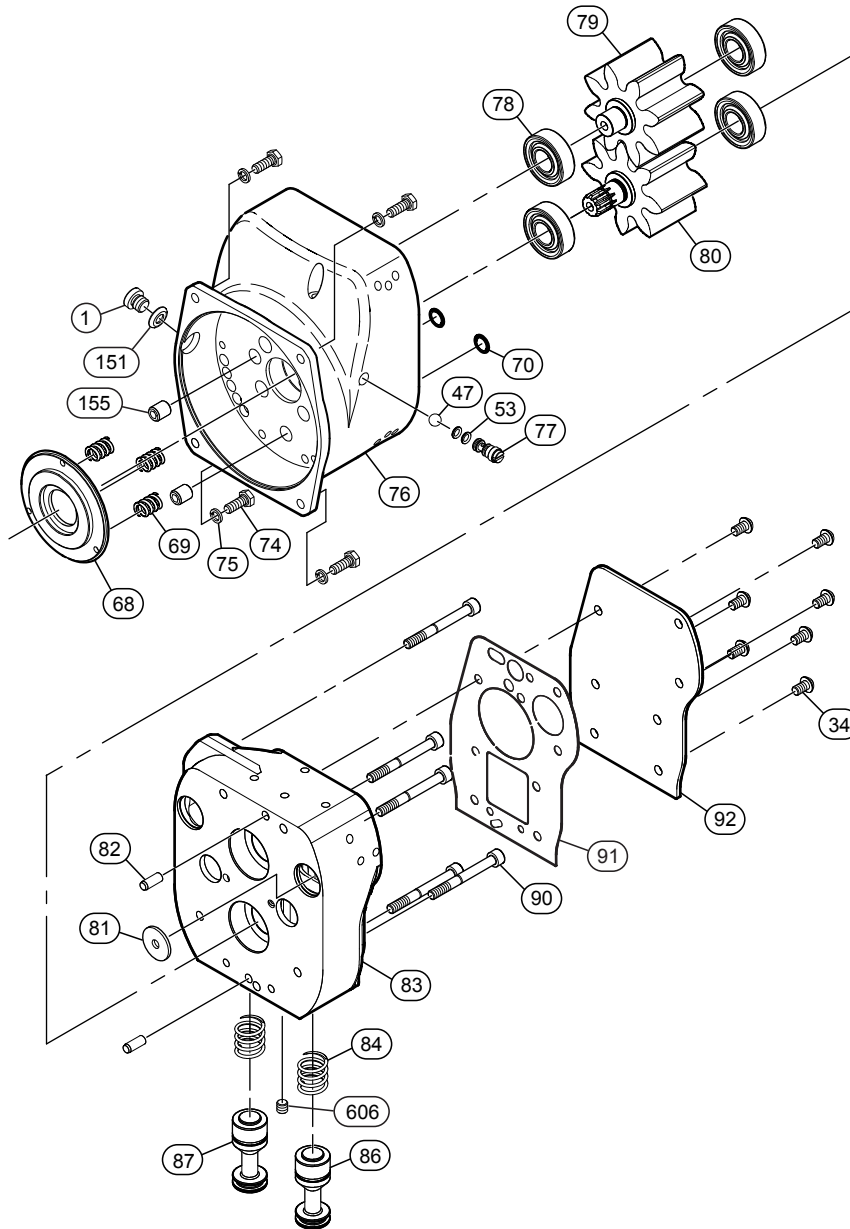
• Recommended spares, 2 years normal operation (ordering kits listed below is recommended).

Note 1: Do not disassemble planet support assembly item 341.

Kit Repair List:

Item No.	Description of Part	Total Qty	Part Number
• 340	Limit Switch Valve Kit	2	7645-0081
• 703	Overhaul Repair Kit (includes all items required for rebuild, no further kits required)	1	7650-0248
• 704	Overhaul Repair Kit, Emergency Stop Version (includes all items required for rebuild, no further kits required)	1	7650-0249
• 711	Reducer Repair Kit (includes items 1, 4, 6, 10, 11, 14, 132, 137, 138, and 141 - 148)	1	7650-0230
• 715	Center Section Repair Kit (includes items 1, 4, 14, 16, 132, 137, 138, and 141 - 148)	1	7650-0237

3.5 HP MOTOR ASSEMBLY WITHOUT EMERGENCY STOP ADAPTER DRAWING



(Dwg. MHP2652)

3.5 HP MOTOR ASSEMBLY WITHOUT EMERGENCY STOP ADAPTER PARTS LIST

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
800	Motor Assembly	1	7644-1114	81	Exhaust Washer	1	9644-1145
1	Plug	1	6511-0441	82	Pin	2	4600-1116
34	Capscrew	7	4120-1604	83	Motor Cover	1	9644-0515
47	Ball	1	6940-1625	84	Spring	2	6919-0341
• 53	'O' Ring	2	5820-9229	86	Valve Assembly (includes 'O' Rings)	1	7644-1356
68	Brake Reaction Plate	1	9644-1015	87	Valve Assembly (includes 'O' Rings)	1	7644-1357
69	Springs	3	6916-5532	90	Capscrew	5	4133-2206
• 70	'O' Ring	2	5823-7429	• 91	Gasket	1	9644-1188
• 74	Capscrew	4	4102-3001	92	Cover Plate	1	9644-1027
• 75	Lockwasher	4	4520-1006	151	Gasket	1	9644-1503
76	Motor Housing (new style) (Note 1)	1	9644-0575	155	Plug	2	9644-0725
77	Check Valve	1	9579-0106	606	Setscrew	3	4200-7407
78	Bearing	4	5016-0002				
79	Idle Gear **	1	7644-1256				
80	Drive Gear **	1					

• Recommended spares, 2 years normal operation (ordering kits listed below is recommended).

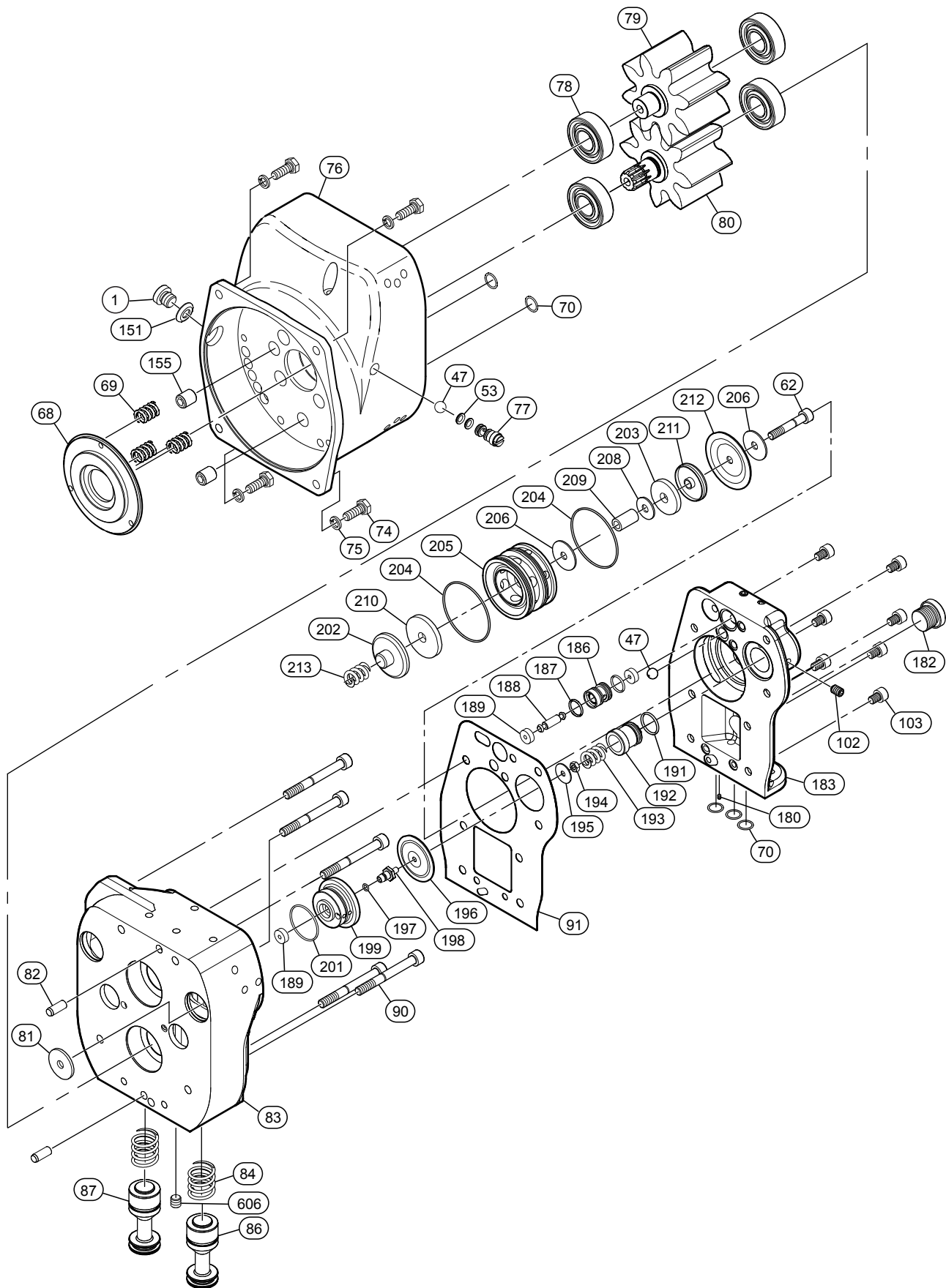
** Idle Gear (79) and Drive Gear (80) are not sold separately.

Note 1: Old Style motor housing used on hoist with serial number 08-04-52 and below. When ordering any new brake parts a new motor housing is required.

Kit Repair List:

Item No.	Description of Part	Total Qty	Part Number
• 719	3.5 HP Motor Repair Kit (includes items 7, 34, 47, 53, 70, 74, 75, 77, 78, 81, 82, 84, 86, 87, 90, and 91)	1	7650-0133

3.5 HP MOTOR ASSEMBLY WITH EMERGENCY STOP ADAPTER DRAWING



(Dwg. MHP3037)

3.5 HP MOTOR ASSEMBLY WITH EMERGENCY STOP ADAPTER PARTS LIST

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
800	Motor Assembly	1	7644-1115	79	Idle Gear **	1	7644-1256
1	Plug	1	6511-0441	80	Drive Gear **	1	
47	Ball	1	6940-1625	81	Exhaust Washer	1	9644-1145
• 53	'O' Ring	2	5820-9229	82	Pin	2	4600-1116
68	Brake Reaction Plate	1	9644-1015	83	Motor Cover (for Emergency Stop Adapter)	1	9644-1023
69	Springs	3	6916-5532	84	Spring	2	6919-0341
• 70	'O' Ring	2	5823-7429	86	Valve Assembly (includes 'O' Rings)	1	7644-1356
• 74	Capscrew	4	4102-3001	87	Valve Assembly (includes 'O' Rings)	1	7644-1357
• 75	Lockwasher	4	4520-1006	90	Capscrew	5	4133-2206
76	Motor Housing (new style) (Note 1)	1	9644-0575	• 91	Gasket	1	9644-1188
	Motor Housing (old style) (Note 1)		9644-1016	151	Gasket	1	9644-1503
77	Check Valve	1	9579-0106	155	Plug	2	9644-0725
78	Bearing	4	5016-0002	606	Setscrew	3	4200-7406

Emergency Stop Adapter for Pendant Control Parts List:

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
47	Ball	1	6940-1625	• 196	Diaphragm	1	9644-1097
62	Capscrew	1	4130-1106	• 197	'O' Ring	1	5822-2329
• 70	'O' Ring	3	5823-7429	• 198	Plunger	1	9636-0017
102	Setscrew	1	4200-9207	199	Base Plate	1	9644-1095
103	Capscrew	7	4133-2306	• 201	'O' Ring	1	5823-7029
180	Nozzle	1	9644-1187	202	Cap	1	9644-1101
182	Plug	1	6512-8928	• 203	Seal	1	9617-0056
183	Emergency Stop End Cover	1	9644-1077	• 204	'O' Ring	2	5823-7129
186	Valve Seat	1	9644-1106	205	Valve Seat	1	9644-1098
• 187	'O' Ring	2	5820-5029	206	Washer	2	4570-1006
• 188	Axle	1	9644-1105	208	Washer	1	4560-1006
• 189	Seal	3	9644-1103	209	Sleeve	1	9644-1102
• 191	'O' Ring	1	5821-1729	• 210	Seal	1	9644-1104
192	Regulating Screw	1	9644-1096	211	Cap	1	9644-1100
193	Spring	1	6913-7041	• 212	Diaphragm	1	9644-1099
194	Stop Nut	1	4300-1111	213	Spring	1	6915-8732
195	Washer	1	4570-1004				

• Recommended spares, 2 years normal operation (ordering kits listed below is recommended).

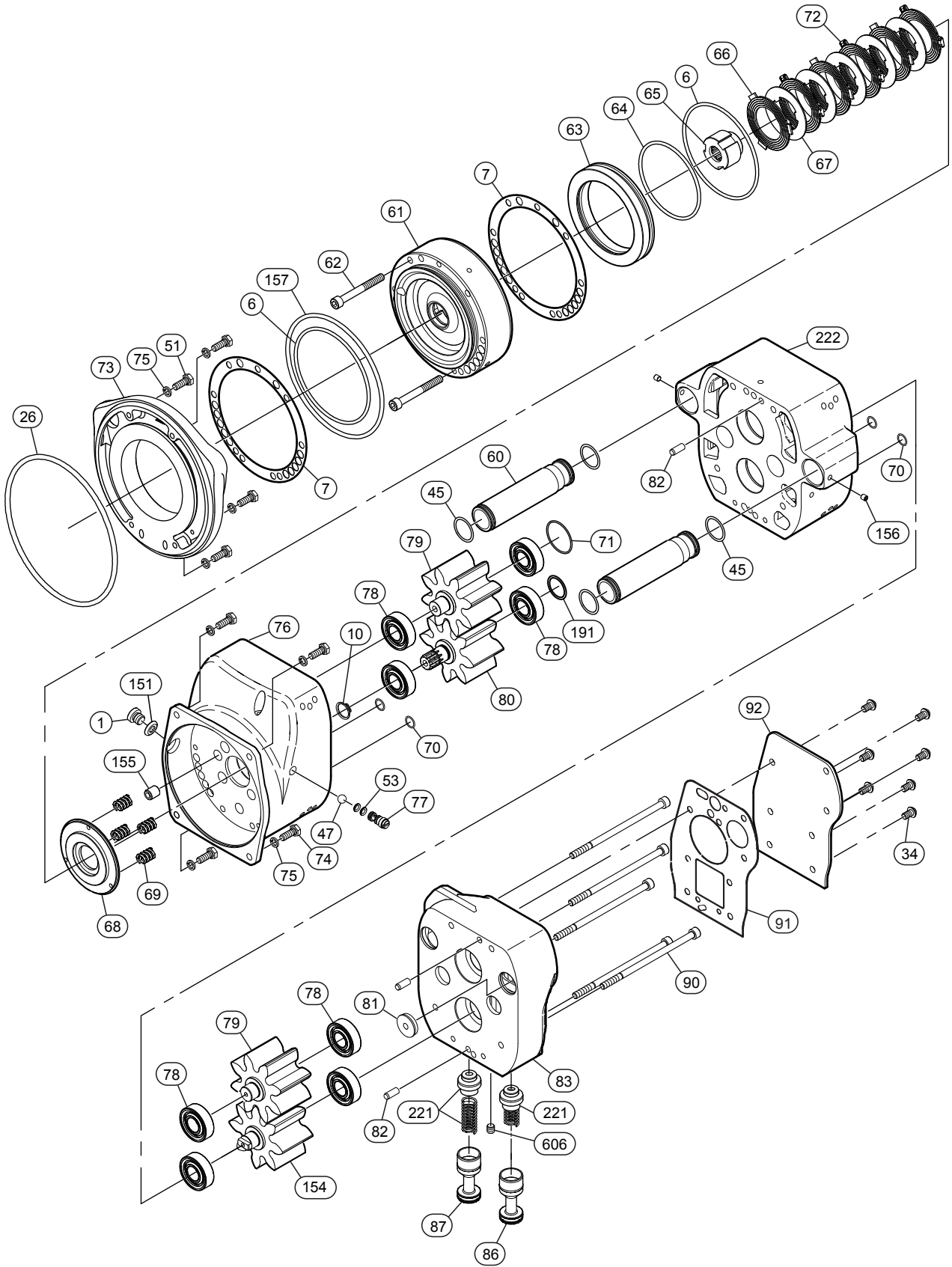
** Idle Gear (79) and Drive Gear (80) are not sold separately.

Note 1: Old Style motor housing used on hoist with serial number 08-04-52 and below. When ordering any new brake parts a new motor housing is required.

Kit Repair List:

Item No.	Description of Part	Total Qty	Part Number
• 720	3.5 HP Motor for Emergency Stop Version Repair Kit (includes items 7, 34, 47, 53, 70, 75, 77, 78, 81, 82, 84, 85, 87, 90, 91, 103, 180, 194, 195, 198, 209, 607 and 612)	1	7650-0135

6 HP MOTOR AND DISC BRAKE ASSEMBLY WITHOUT EMERGENCY STOP ADAPTER DRAWING



(Dwg. MHP2999)

6 HP MOTOR AND DISC BRAKE ASSEMBLY WITHOUT EMERGENCY STOP ADAPTER PARTS LIST

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
802	Motor Assembly (without Disc Brake)	1	7645-0071	74	Capscrew	4	4102-3001
• 1	Plug	1	6511-0441	75	Washer	8	4520-1006
• 6	'O' Ring	2	5823-5229	76	Motor Housing	1	9644-0575
• 7	Gasket	2	9644-1048	77	Check Valve	1	9579-0106
• 10	Retainer Ring	1	4770-0015	78	Bearing	8	5016-0002
• 26	'O' Ring	1	5823-9329	79	Idle Gear **	Set	7644-1788
34	Capscrew	7	4120-1604	80	Drive Gear **		
45	'O' Ring	4	5822-0129	81	Exhaust Washer	1	9644-1145
47	Ball	1	6940-1625	82	Pin	4	4600-1116
51	Capscrew	4	4131-2206	83	Motor Cover	1	9644-0515
• 53	'O' Ring	2	5820-9229	86	Valve Assembly (includes 'O' Rings)	1	7645-0379
60	Exhaust Pipe	2	9645-0031	87	Valve Assembly (includes 'O' Rings)	1	7645-0381
61	Brake Housing	1	9644-0574	90	Capscrew	5	4133-2406
62	Capscrew	2	4132-2306	• 91	Gasket	1	9644-1188
63	Piston	1	9644-1014	92	Cover Plate	1	9644-1027
• 64	'O' Ring	1	5823-5129	151	Gasket	1	9644-1503
65	Splined Hub	1	9644-1013	154	Drive Gear for Second Step **	Set	7644-1788
66	Friction Plate	3	6302-8241	155	Plug	2	9644-0725
67	Drive Plate	5	6302-8341	156	Setscrew	5	4200-7407
68	Brake Reaction Plate	1	9644-1015	• 157	'O' Ring	1	5823-9129
69	Spring	4	6916-5532	• 191	'O' Ring	1	5821-1729
• 70	'O' Ring	4	5823-7429	221	Spring Assembly	2	9645-0380
• 71	'O' Ring	1	5823-9529	222	Motor Cover	1	9644-1364
72	Friction Plate with Spring Clips	3	9644-1552	606	Setscrew	1	4200-7406
73	End Cover	1	9645-0044				

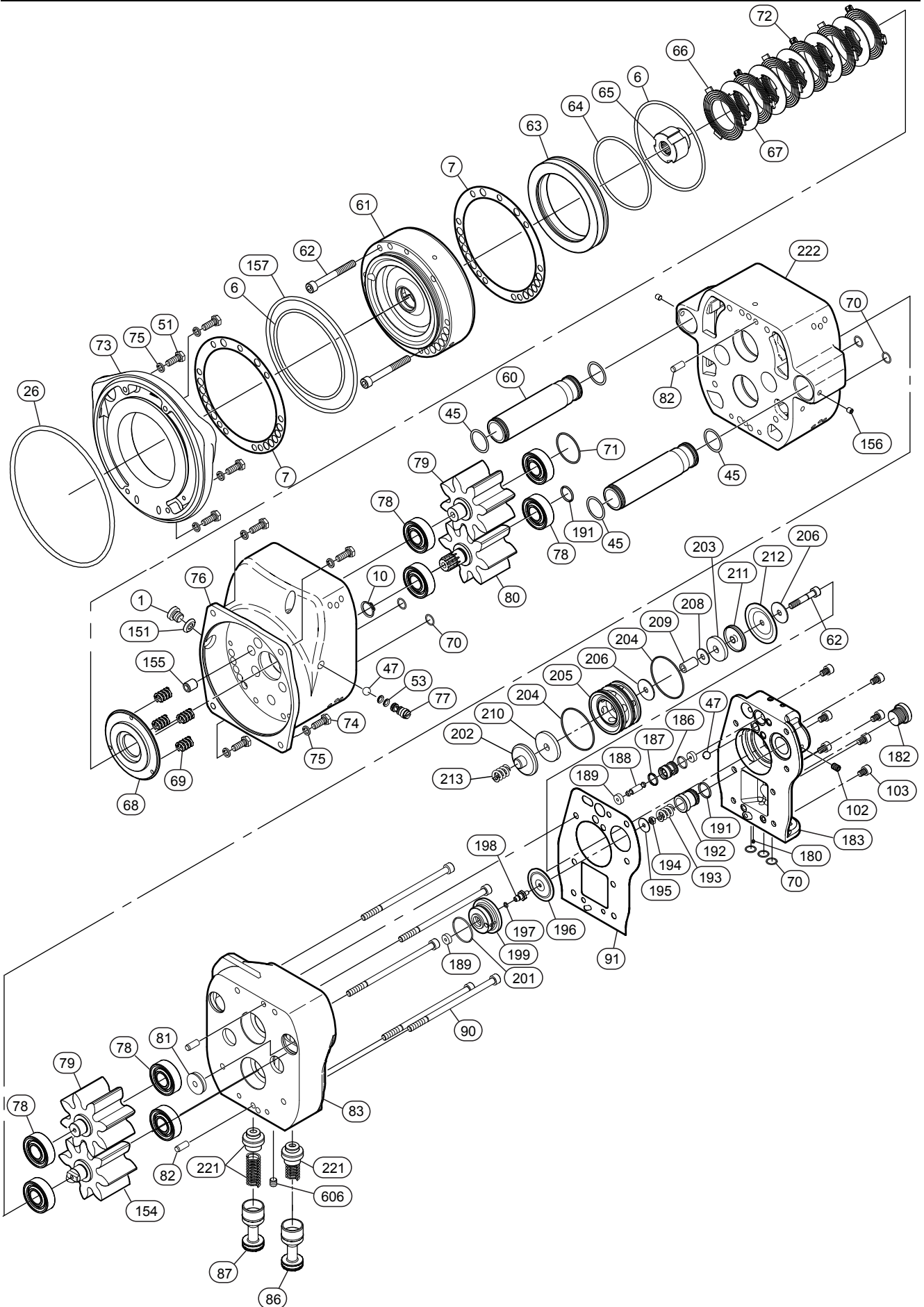
• Recommended spares, 2 years normal operation (ordering kits listed below is recommended).

** Idle Gear (79) and Drive Gear (80) and (154) are not sold separately.

Kit Repair List:

Item No.	Description of Part	Total Qty	Part Number
• 721	6 HP Motor Repair Kit (includes items 1, 7, 34, 45, 47, 53, 64, 70, 71, 74, 75, 77, 78, 82, 84, 90, 91, 157, 604, 607 and 612)	1	7650-0219
• 722	Brake Repair Kit (includes items 6, 7, 10, 64, 66, 67, 69 and 72)	1	7650-0223

6 HP MOTOR AND DISC BRAKE ASSEMBLY WITH EMERGENCY STOP ADAPTER DRAWING



(Dwg. MHP3038)

6 HP MOTOR AND DISC BRAKE ASSEMBLY WITH EMERGENCY STOP ADAPTER PARTS LIST

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
	Motor Assembly (without Disc Brake)	1	7645-0072	74	Capscrew	4	4102-3001
• 1	Plug	1	6511-0441	75	Washer	8	4520-1006
• 6	'O' Ring	2	5823-5229	76	Motor Housing	1	9644-0575
• 7	Gasket	2	9644-1048	77	Check Valve	1	9579-0106
• 10	Retainer Ring	2	4770-0015	78	Bearing	8	5016-0002
• 26	'O' Ring	1	5823-9329	79	Idle Gear **	Set	7644-1788
• 45	'O' Ring	4	5822-0129	80	Drive Gear **		
47	Ball	1	6940-1625	81	Exhaust Washer	1	9644-1145
51	Capscrew	4	4131-2206	83	Motor Cover (for Emergency Stop Adapter)	1	9644-1023
• 53	'O' Ring	2	5820-9229	82	Pin	4	4600-1116
60	Exhaust Pipe	2	9645-0031	86	Valve Assembly (includes 'O' Rings)	1	7645-0379
61	Brake Housing	1	9644-0574	87	Valve Assembly (includes 'O' Rings)	1	7645-0381
62	Capscrew	2	4132-2306	90	Capscrew	5	4133-2406
63	Piston	1	9644-1014	• 91	Gasket	1	9644-1188
• 64	'O' Ring	1	5823-5129	92	Cover Plate	1	9644-1027
65	Splined Hub	1	9644-1013	151	Gasket	1	9644-1503
66	Friction Plate	3	6302-8241	154	Drive Gear for Second Step **	Set	7644-1788
67	Drive Plate	5	6302-8341	155	Plug	2	9644-0725
68	Brake Reaction Plate	1	9644-1015	156	Setscrew	2	4200-7407
69	Spring	4	6916-5532	• 157	'O' Ring	1	5823-9129
• 70	'O' Ring	4	5823-7429	• 191	'O' Ring	1	5821-1729
• 71	'O' Ring	1	5823-9529	221	Spring Assembly	1	9645-0380
72	Friction Plate with Spring Clips	3	9644-1552	222	Motor Cover	1	9644-1364
73	End Cover	1	9645-0044	606	Setscrew	1	4200-7406

• Recommended spares, 2 years normal operation (ordering kits listed below is recommended).

** Idle Gear (79) and Drive Gear (80) and (154) are not sold separately.

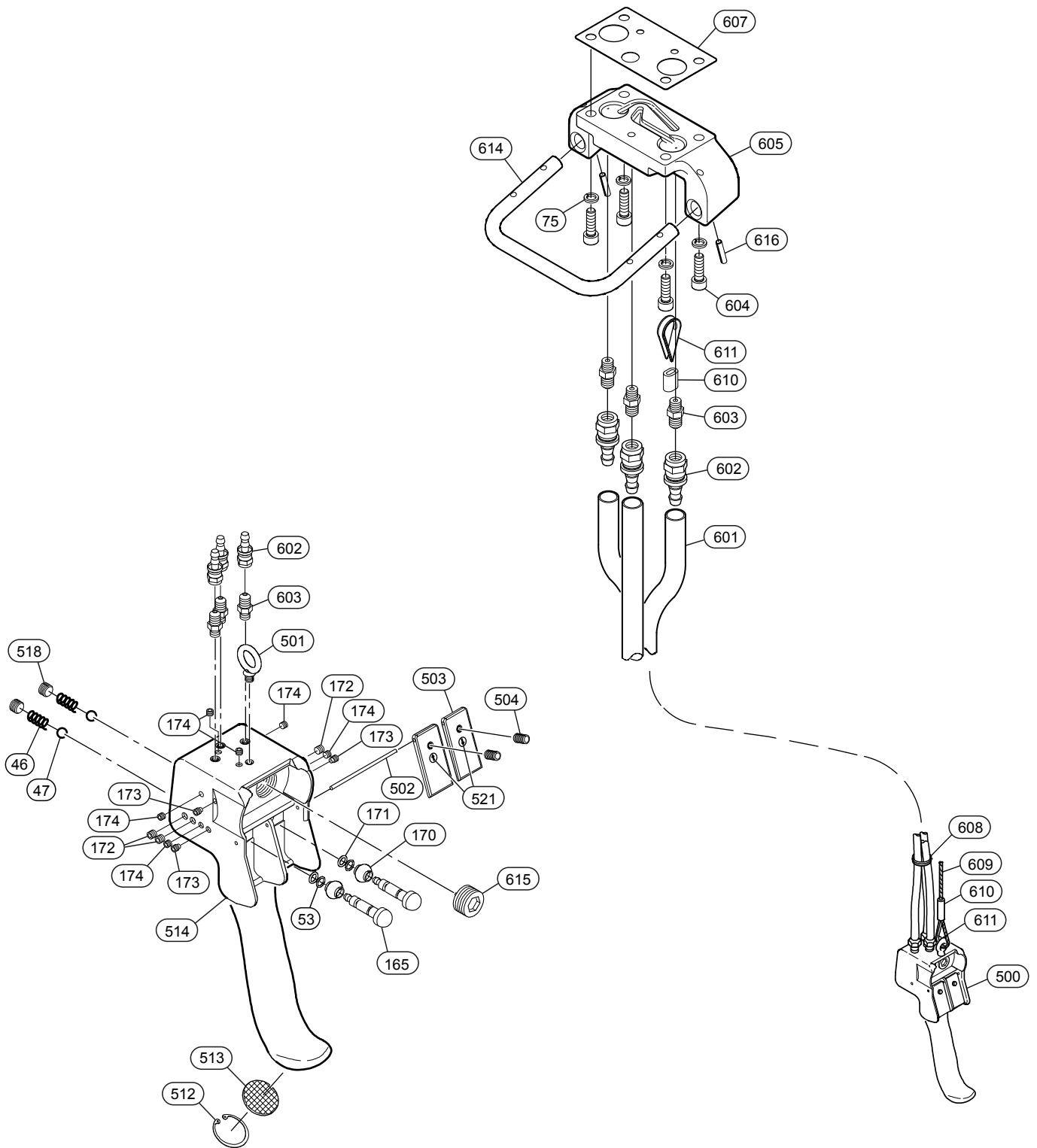
Emergency Stop Adapter for Pendant Control Parts List:

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
47	Ball	1	6940-1625	• 196	Diaphragm	1	9644-1097
62	Capscrew	1	4130-1106	• 197	'O' Ring	1	5822-2329
• 70	'O' Ring	3	5823-7429	• 198	Plunger	1	9636-0017
102	Setscrew	1	4200-9207	199	Base Plate	1	9644-1095
103	Capscrew	7	4133-2306	• 201	'O' Ring	1	5823-7029
180	Nozzle	1	9644-1187	202	Cap	1	9644-1101
182	Plug	1	6512-8928	• 203	Seal	1	9617-0056
183	Emergency Stop End Cover	1	9644-1077	• 204	'O' Ring	2	5823-7129
186	Valve Seat	1	9644-1106	205	Valve Seat	1	9644-1098
• 187	'O' Ring	2	5820-5029	206	Washer	2	4570-1006
• 188	Axle	1	9644-1105	208	Washer	1	4560-1006
• 189	Seal	3	9644-1103	209	Sleeve	1	9644-1102
• 191	'O' Ring	1	5821-1729	• 210	Seal	1	9644-1104
192	Regulating Screw	1	9644-1096	211	Cap	1	9644-1100
193	Spring	1	6913-7041	• 212	Diaphragm	1	9644-1099
194	Stop Nut	1	4300-1111	213	Spring	1	6915-8732
195	Washer	1	4570-1004				

Kit Repair List:

Item No.	Description of Part	Total Qty	Part Number
• 722	Brake Repair Kit (includes items 6, 7, 10, 64, 66, 67, 69 and 72)	1	7650-0223
• 723	6 HP Motor For Emergency Stop Version Repair Kit (includes items 1, 7, 10, 34, 45, 47, 53, 64, 70, 71, 74, 75, 77, 78, 82, 84, 86, 87, 90, 91, 157, 186, 189, 191 — 193, 197, 201, 203, 204, 206, 212, 213, 604, 607 and 612)	1	7650-0220

TWO FUNCTION PENDANT CONTROL ASSEMBLY WITHOUT EMERGENCY STOP PARTS DRAWING



(Dwg. MHP3040)

TWO FUNCTION PENDANT CONTROL ASSEMBLY WITHOUT EMERGENCY STOP PARTS LIST

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
500	Pendant Assembly	1	PHS2E	521	Label Kit	1	9579-0111
46	Spring	2	6912-8541	601	Hose **	As req'd	50923
• 47	Ball	2	6940-1625	602	Fitting, Adapter	6	51029
• 53	'O' Ring	2	5820-9229	603	Fitting, Nipple	6	6823-7528
• 75	Lockwasher	4	4520-1006	604	Capscrew	4	4132-2206
165	Valve	2	9579-0104	605	Adapter Plate	1	9644-0821
• 170	Protector	2	9579-0107	606	Setscrew	1	4200-7406
• 171	'O' Ring	2	5823-5329	• 607	Gasket	1	9644-0822
173	Setscrew	2	4200-8207	608	Hose Tie	1	6112-5132
501	Lifting Eye	1	6422-2332	609	Strain Relief Wire	As req'd	6976-3132
502	Pin	1	9579-0040	610	Sleeve Clamp	1	6112-5032
503	Lever	2	9579-0122	611	Thimble	1	6932-5332
504	Screw	2	4200-8607	614	Handle	1	9644-0829
512	Retainer Ring	1	4771-3030	616	Pin	2	4650-3420
513	Exhaust Washer	1	6760-0303	---	Exhaust Valve Kit ***	As req'd	20417
514	Pendant Handle	1	9579-0129	---	Label: "Read the Manual" ***	1	9618-0098
518	Plug	2	6510-7741	---	Label: "Do Not Use for Lifting Personnel" ***	1	9618-0100

• Recommended spares, 2 years normal operation (ordering kits listed below is recommended).

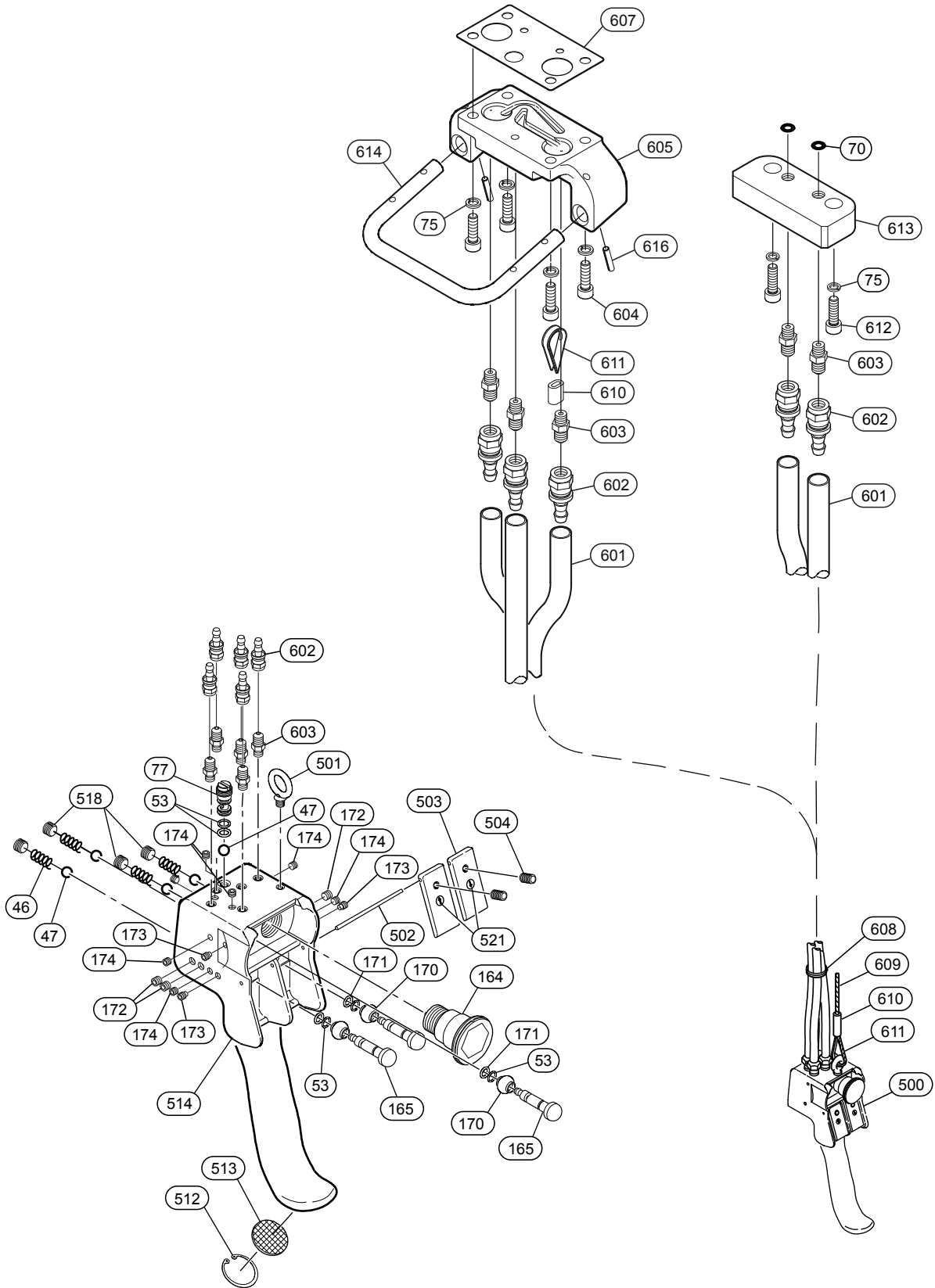
** Required for hose lengths greater than 20 ft (6 m).
 0 - 19 ft (0 - 6 m) Hose Length, 0 Exhaust Valve Kits Required.
 20 - 39 ft (6 - 12 m) Hose Length, 2 Exhaust Valve Kits Required.
 40 - 59 ft (12 - 18 m) Hose Length, 4 Exhaust Valve Kits Required.

*** Not illustrated

Kit Repair List:

Item No.	Description of Part	Total Qty	Part Number
• 730	Pendant Repair Kit	1	7650-0141
• 732	Pendant Rebuild Kit (includes Pendant Repair Kit)	1	7650-0079

TWO FUNCTION PENDANT CONTROL ASSEMBLY WITH EMERGENCY STOP DRAWING



(Dwg. MHP3039)

TWO FUNCTION PENDANT CONTROL ASSEMBLY WITH EMERGENCY STOP PARTS LIST

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
500	Pendant Assembly	1	PHS2E-U	518	Plug	4	6510-7741
46	Spring	4	6912-8541	521	Label Kit	1	9579-0111
• 47	Ball	5	6940-1625	601	Hose **	As req'd	50923
• 53	'O' Ring	5	5820-9229	602	Fitting, Adapter	10	51029
• 70	'O' Ring	3	5823-7429	603	Fitting, Nipple	10	6823-7528
• 75	Lockwasher	6	4520-1006	604	Capscrew	4	4132-2206
77	Check Valve	1	9579-0106	605	Adapter Plate	1	9644-1026
164	Valve, Emergency Stop	1	9579-0108	606	Setscrew	2	4200-7406
165	Valve	3	9579-0104	• 607	Gasket	1	9644-1093
• 170	Protector	3	9579-0107	608	Hose Tie	1	6112-5132
• 171	'O' Ring	3	5823-5329	609	Strain Relief Wire	As req'd	6976-3132
173	Setscrew	2	4200-8207	610	Sleeve Clamp	1	6112-5032
327	Fitting	5	6165-2632	611	Thimble	1	6932-5332
501	Lifting Eye	1	6422-2332	612	Capscrew	2	4132-4306
502	Pin	1	9579-0040	613	Adapter Plate (Emergency Stop)	1	9644-1173
503	Lever	2	9579-0122	615	Plug	1	6512-9541
504	Screw	2	4200-8607	616	Pin	2	4650-3420
512	Retainer Ring	1	4771-3030	---	Exhaust Valve Kit ***	As req'd	20417
513	Exhaust Washer	1	6760-0303	---	Label: Read the Manual ***	1	9618-0098
514	Pendant Handle	1	9579-0116	---	Label: Do Not Use for Lifting Personnel ***	1	9618-0100

• Recommended spares, 2 years normal operation (ordering kits listed below is recommended).

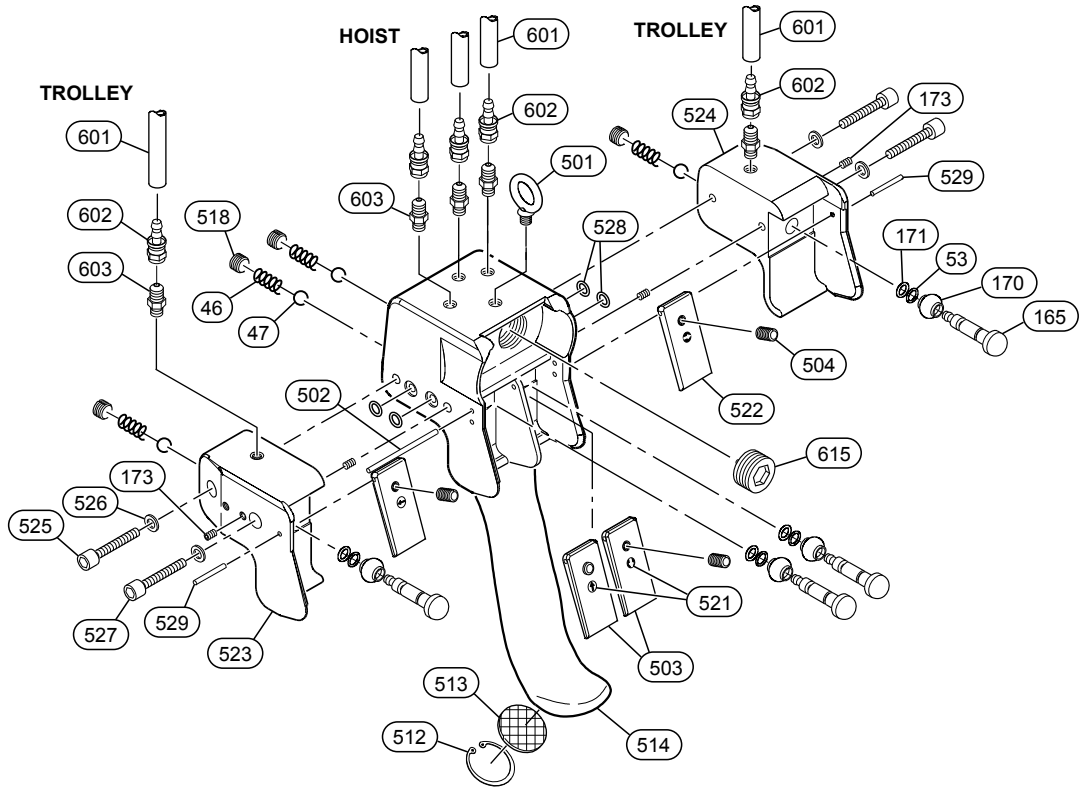
** Required for hose lengths greater than 20 ft (6 m).
 0 - 19 ft (0 - 6 m) Hose Length, 0 Exhaust Valve Kits Required.
 20 - 39 ft (6 - 12 m) Hose Length, 2 Exhaust Valve Kits Required.
 40 - 59 ft (12 - 18 m) Hose Length, 4 Exhaust Valve Kits Required.

*** Not illustrated

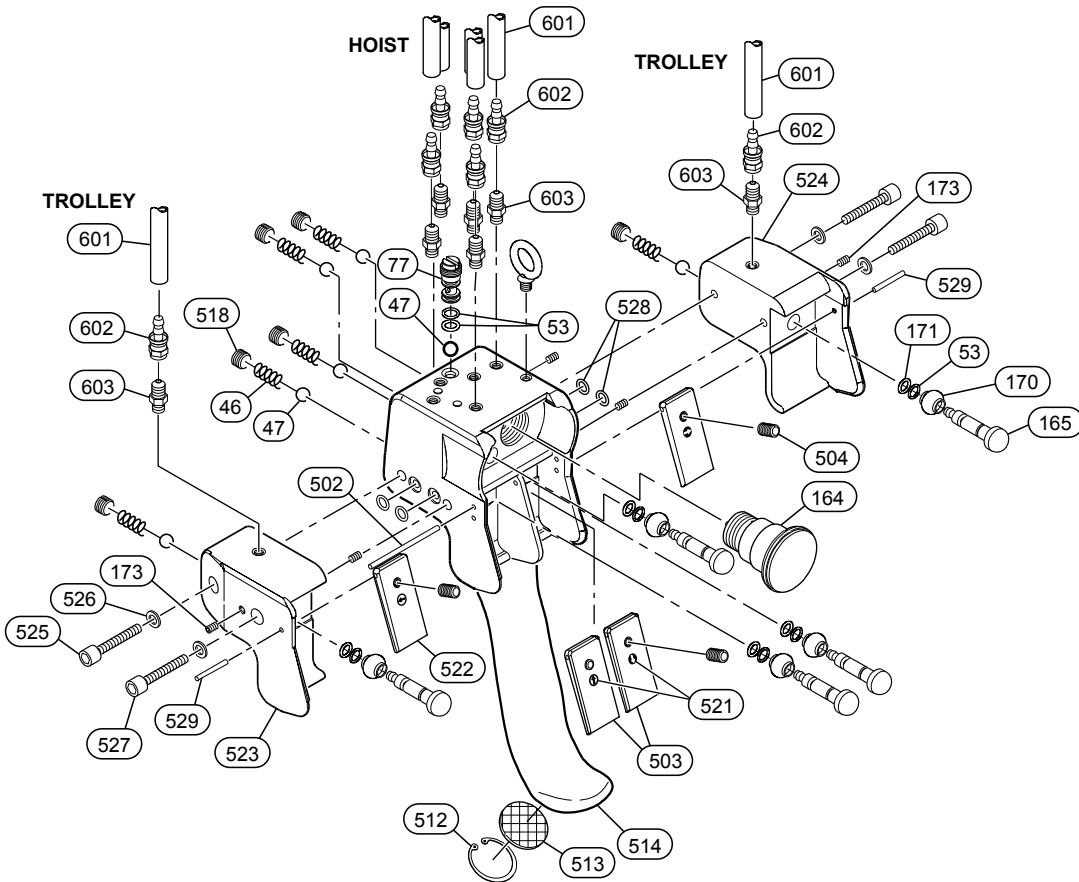
Kit Repair List:

Item No.	Description of Part	Total Qty	Part Number
• 733	Pendant Repair Kit	1	7650-0142
• 734	Pendant Rebuild Kit (includes Pendant Repair Kit)	1	7650-0080

FOUR FUNCTION PENDANT CONTROL ASSEMBLY W/O EMERGENCY STOP ADAPTER DRAWING



(Dwg. MHP3061)



(Dwg. MHP3062)

FOUR FUNCTION PENDANT CONTROL ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number			
			PHS4E	PHS4E-R	PHS4E-U	PHS4E-RU
500	Pendant Assembly	1	PHS4E	PHS4E-R	PHS4E-U	PHS4E-RU
46	Spring	4	6912-8541			
• 47	Ball	4	6940-1625			
• 53	'O' Ring	4	5820-9229			
77	Check Valve	1	---		9579-0106	
164	Emergency Stop Valve	1	---		9579-0108	
165	Valve	4	9579-0104			
170	Protector	4	9579-0107			
• 171	'O' Ring	()	5823-5329 (4)		5823-5329 (5)	
173	Setscrew	()	4200-8207 (4)		4200-8207 (5)	
501	Lifting Eye	1	6422-2332			
502	Pin	1	9579-0040			
503	Lever	2	9579-0122			
504	Screw	4	4200-8607			
512	Retainer Ring	1	4771-3030			
513	Exhaust Washer	1	6760-0303			
514	Pendant Handle *	1	Order item 500			
518	Plug	4	6510-7741			
521	Label Kit	1	9579-0111			
522	Lever	2	9579-0128			
523	Attachment (Left)	1	9579-0125	9579-0143	9579-0125	9579-0143
524	Attachment (Right)	1	9579-0126	9579-0142	9579-0126	9579-0142
525	Capscrew	2	4133-0506			
526	Washer	4	4520-1005			
527	Capscrew	2	4132-2106			
• 528	'O' Ring	4	5821-8229			
529	Pin	2	9579-0127			
601	Hose **	As req'd	50923			
602	Fitting, Adapter	10	51029			
603	Fitting Hose	5	6823-7528			
615	Plug	1	6512-9541		---	
---	Label: Read the Manual***	1	9618-0098			
---	Label: Do Not Use Lifting Personnel***	1	9618-0100			

• Recommended spares, 2 years normal operation (ordering kits listed below is recommended).

* Not sold separately. Order new pendant

** Order in ft (m)

*** Not illustrated

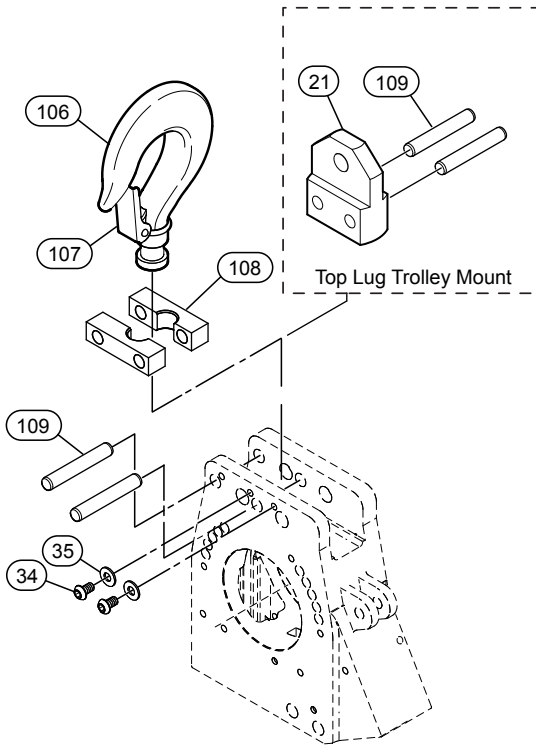
Kit Repair List:

Item No.	Description of Part	Total Qty	Part Number
• 736	Pendant Without Emergency Stop Repair Kit	1	7650-0143
• 737	Pendant Without Emergency Stop Rebuild Kit (includes Non-Emergency Stop Pendant Repair Kit)	1	7650-0081
• 738	Pendant With Emergency Stop Repair Kit	1	7650-0144
• 739	Pendant With Emergency Stop Rebuild Kit (includes Emergency Stop Pendant Repair Kit)	1	7650-0082

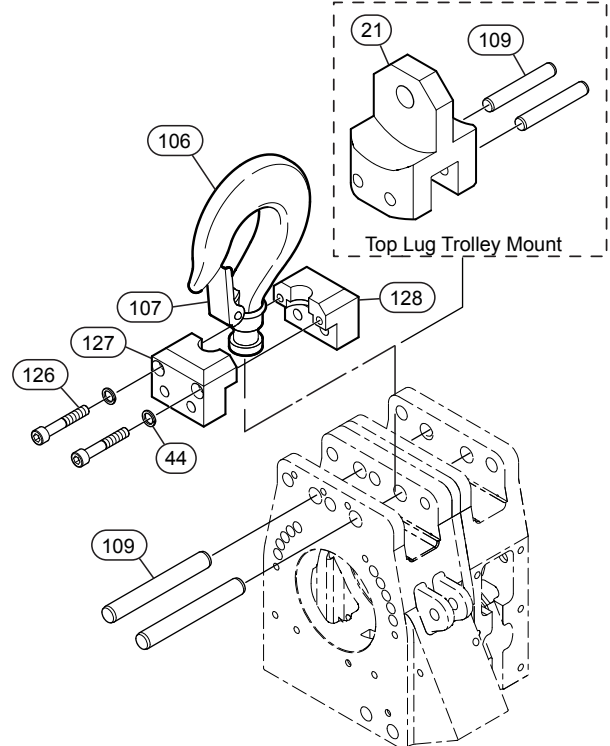
1.5, 3 AND 6 TON TOP HOOK AND TROLLEY MOUNT ASSEMBLY DRAWING AND PARTS LIST

1.5 t single and 3 t Double Fall Capacity

6 t Quad Fall Capacity



(Dwg. MHP2656)



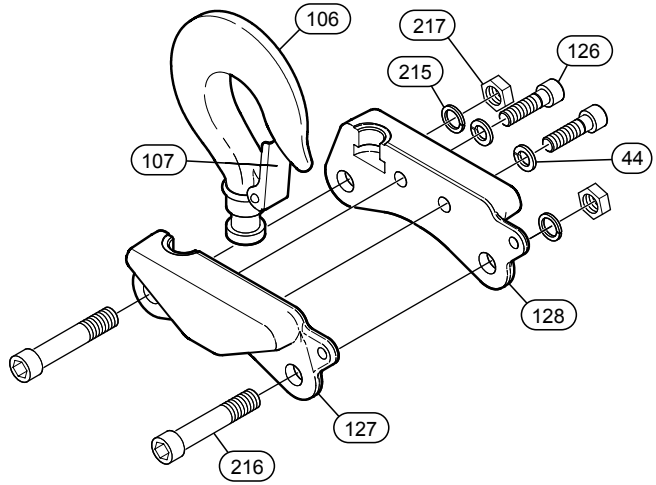
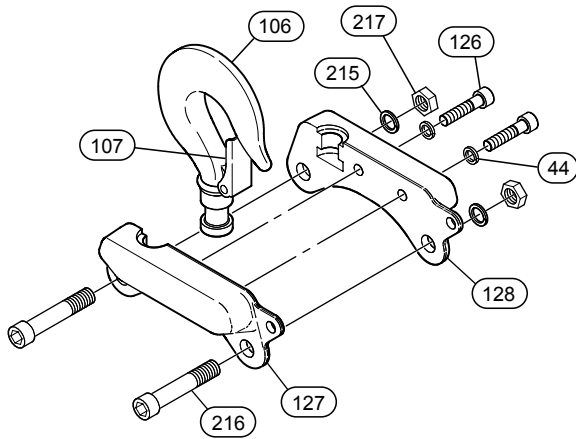
(Dwg. MHP2820)

Item No.	Description of Part	Total Qty	Part Number		
			1.5 t Single	3 t Double	6 t Quad
---	Top Hook Assembly	1	7644-3124	7644-3125	7644-3334
21	Trolley Suspension Lug	1	9644-0223	9649-0089	9649-0202
34	Capscrew	2	4120-1604		---
35	Washer	2	4500-1106		---
44	Lockwasher	2	---		4520-1210
106	Hook	1	9424-8356	9424-8357	9412-8402
107	Hook Latch Kit	1	9424-0364	9424-0365	9412-0460
108	Hook Support	2	9644-3034	9644-3035	---
109	Pin	2	9644-3244	9644-3245	9644-3375
126	Capscrew	2	---		4133-0006
127	Half Hook Support	1	---		9644-3324
128	Half Hook Support	1	---		9644-3323

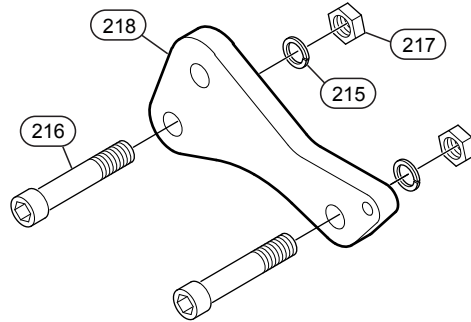
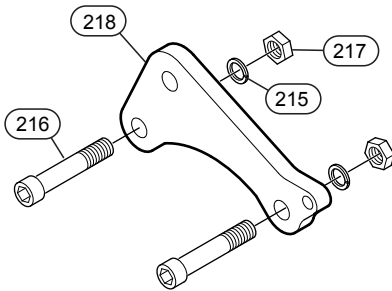
4 AND 6 TON TOP HOOK AND TROLLEY MOUNT ASSEMBLY DRAWING AND PARTS LIST

4 t Single Fall Hoist Capacity

6 t Single Fall Hoist Capacity



(Dwg. MHP2994)



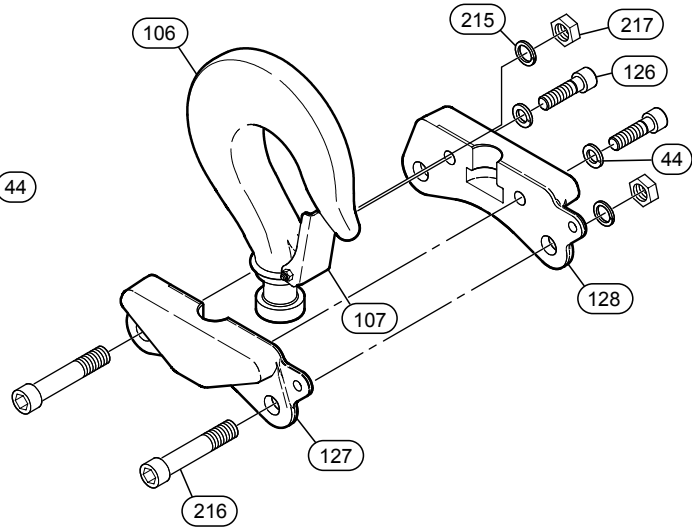
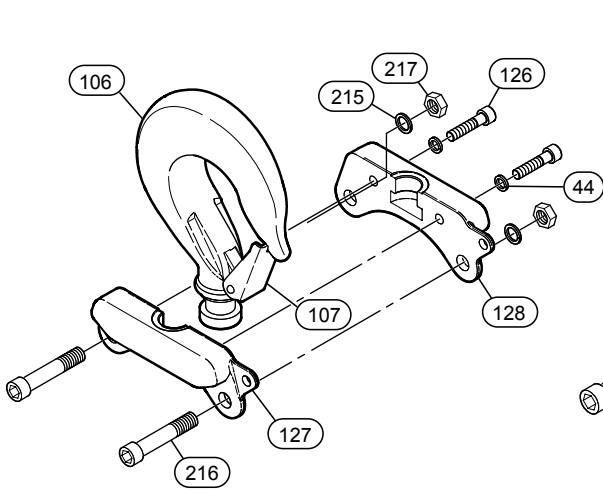
(Dwg. MHP3041)

Item No.	Description of Part	Total Qty	Part Number	
			4 t Single	6 t Single
---	Top Hook Assembly	1	7645-0077	7645-0089
44	Lockwasher	2	4520-1010	4520-1014
106	Hook	1	9645-0120	9412-8459
107	Hook Latch Kit	1	9424-0365	9412-0460
126	Capscrew	2	4132-3206	4133-4306
127	Half Hook Support	1	9645-0058	9645-0066
128	Half Hook Support	1	9645-0057	9645-0065
215	Washer	2	4520-1016	4520-1120
216	Capscrew	2	4131-9306	4133-4006
217	Locknut	2	4300-6011	4300-4011
218	Trolley Suspension Plate	1	9649-0088	9649-0071

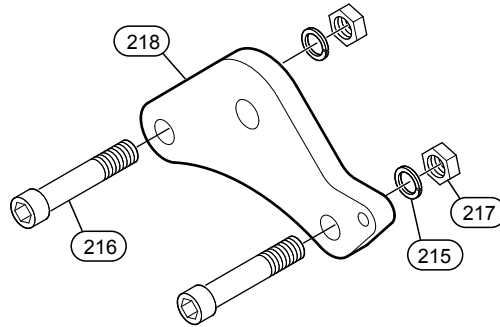
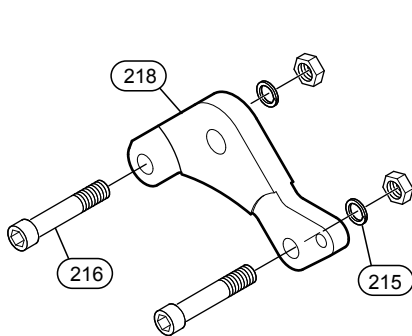
8 AND 12 TON TOP HOOK AND TROLLEY MOUNT ASSEMBLY DRAWING AND PARTS LIST

8 t Double Fall Hoist Capacity

12 t Double Fall Hoist Capacity



(Dwg. MHP2995)



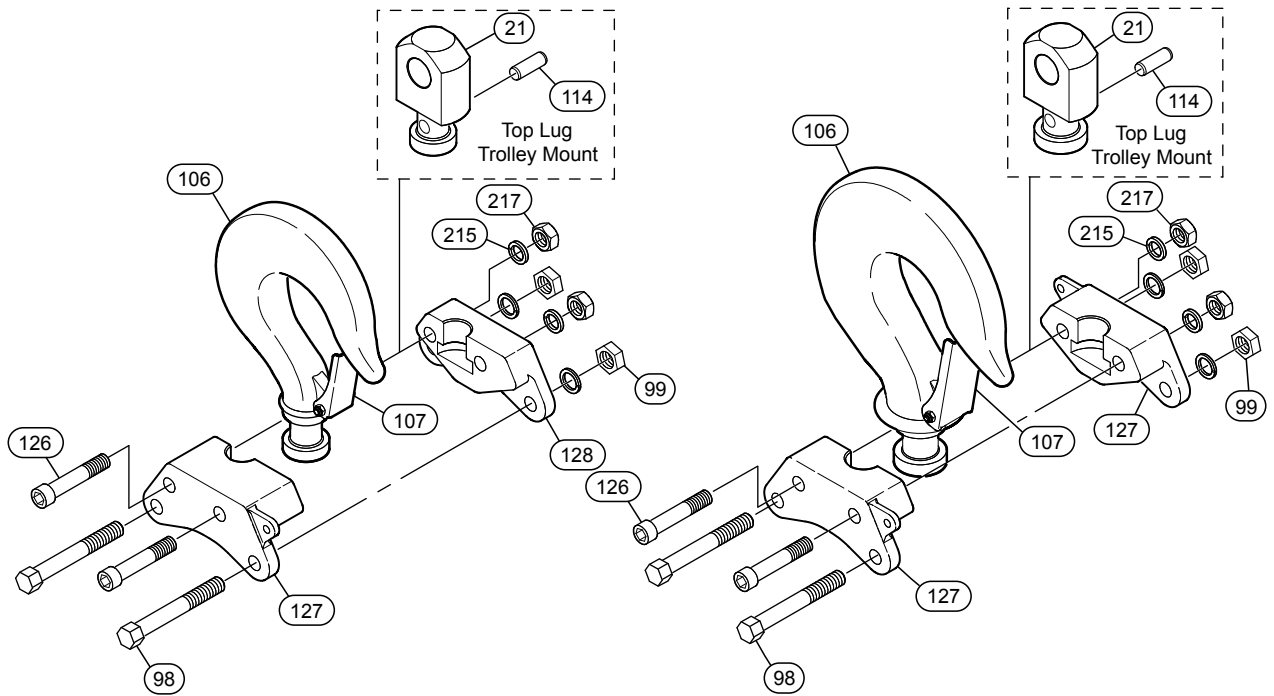
(Dwg. MHP3042)

Item No.	Description of Part	Total Qty	Part Number	
			8 t Double	12 t Double
---	Top Hook Assembly	1	7645-0078	7645-0090
44	Washer	2	4520-1010	4520-1014
106	Hook	1	9645-0180	9623-8234
107	Hook Latch Kit	1	9645-0316	9623-0236
126	Capscrew	2	4132-3206	4133-4306
127	Half Hook Support	1	9645-0060	9645-0068
128	Half Hook Support	1	9645-0059	9645-0067
215	Washer	2	4520-1016	4520-1120
216	Capscrew	2	4131-9306	4133-4006
217	Locknut	2	4300-6011	4300-4011
218	Trolley Suspension Plate	1	9649-0068	9649-0043

18 AND 25 TON TOP HOOK AND TROLLEY MOUNT ASSEMBLY DRAWING AND PARTS LIST

18 t Triple Fall Hoist Capacity

25 t Quad Fall Hoist Capacity



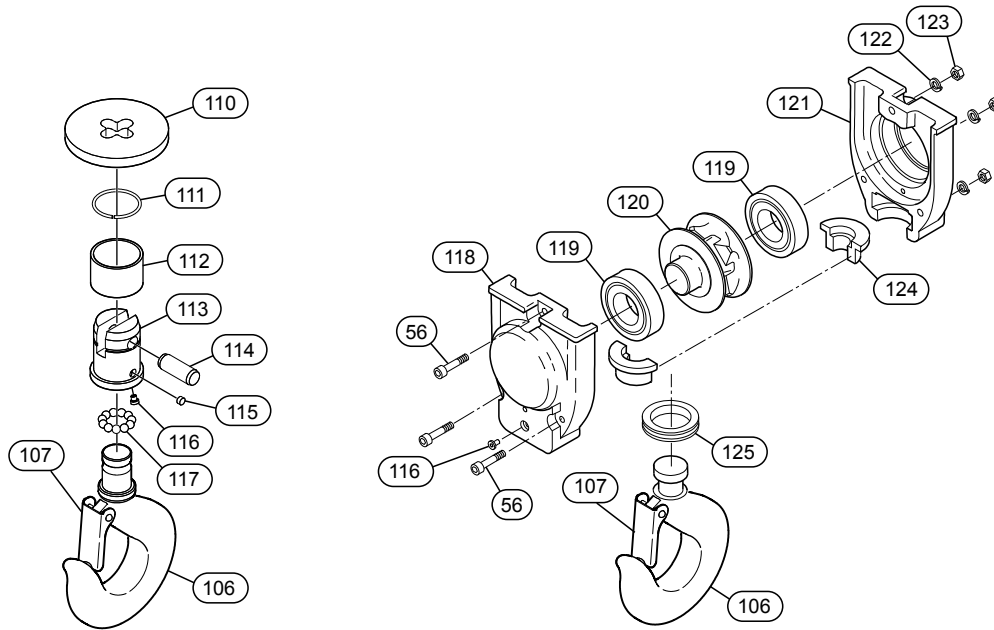
(Dwg. MHP3019)

Item No.	Description of Part	Total Qty	Part Number	
			18 t Triple	25 t Quad
---	Top Hook Assembly	1	7645-0161	7645-0160
---	Trolley Suspension Assembly	1	7649-0136	7649-0135
21	Trolley Suspension Lug	1	9649-0134	9649-0013
98	Capscrew	2	4102-4201	
99	Nut	2	4300-4011	
106	Hook	1	9596-8135	9623-8233
107	Hook Latch Kit	1	9596-0136	9623-0235
114	Pin	1	4600-2216	
126	Capscrew	2	4133-1206	
127	Half Hook Support	()	9645-0146 (1)	9645-0144 (2)
128	Half Hook Support	1	9645-0147	---
215	Lockwasher	4	4520-1120	4520-1020
217	Nut	2	4300-4011	

1.5 AND 3 TON BOTTOM BLOCK ASSEMBLY DRAWING AND PARTS LIST

1.5 t Single Fall Capacity

3t Double Fall Capacity



(Dwg. MHP2657)

Single Fall Hoist

Item No.	Description of Part	Total Qty	Part Number	
			1.5 t Single	
			Standard	Option T1
---	Bottom Block Assembly	1	7644-3237	7644-3301
106	Hook	1	9424-8358	9424-0453
107	Hook Latch Kit	1	9424-0364	
110	Limit Stop Washer	1	9644-3150	
111	Retainer Wire	1	9609-0148	
112	Ring	1	9609-0025	
113	Hook Block	1	9424-0293	9424-0452
114	Pin	1	4600-1916	
115	Plug	1	9609-0060	
116	Grease Fitting	1	6710-2627	
117	Ball	11	6940-1125	

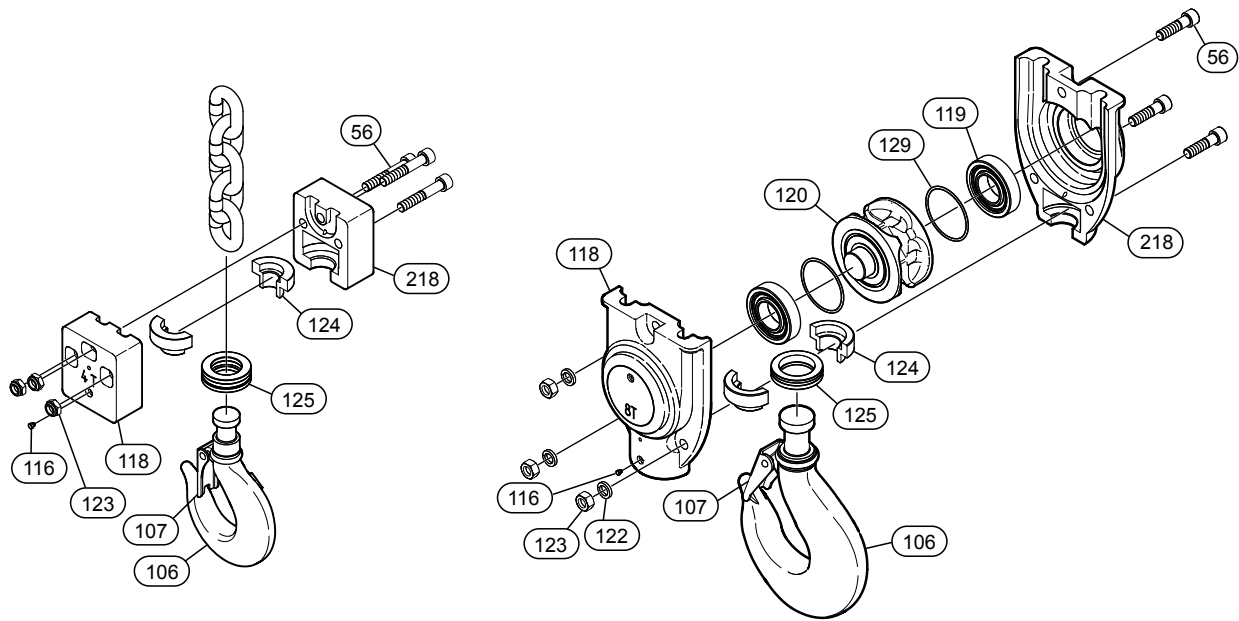
Double Fall Hoist

Item No.	Description of Part	Total Qty	Part Number	
			3 t Double	
			Standard	Option T1
---	Bottom Block Assembly	1	7424-0111	7424-0455
56	Capscrew	3	4132-6706	
106	Hook	1	9424-8357	9424-8390
107	Hook Latch	1	9424-0365	
116	Grease Fitting	1	6710-2627	
118	Half Hook Block	1	9424-0289	9424-0388
119	Bearing	2	5025-0005	
120	Sprocket	1	9424-0056	
121	Half Hook Block	1	9424-0288	9424-0387
122	Lockwasher	3	4520-1008	
123	Nut	3	4300-3511	
124	Ring, (2 piece)	1	9424-7291	
125	Thrust Bearing	1	5400-0006	

4, 6, 8 AND 12 TON BOTTOM BLOCK ASSEMBLY DRAWING AND PARTS LIST

4 and 6 t Single Fall Capacities

8 and 12 t Double Fall Capacities



(Dwg. MHP3006)

Single Fall Hoist

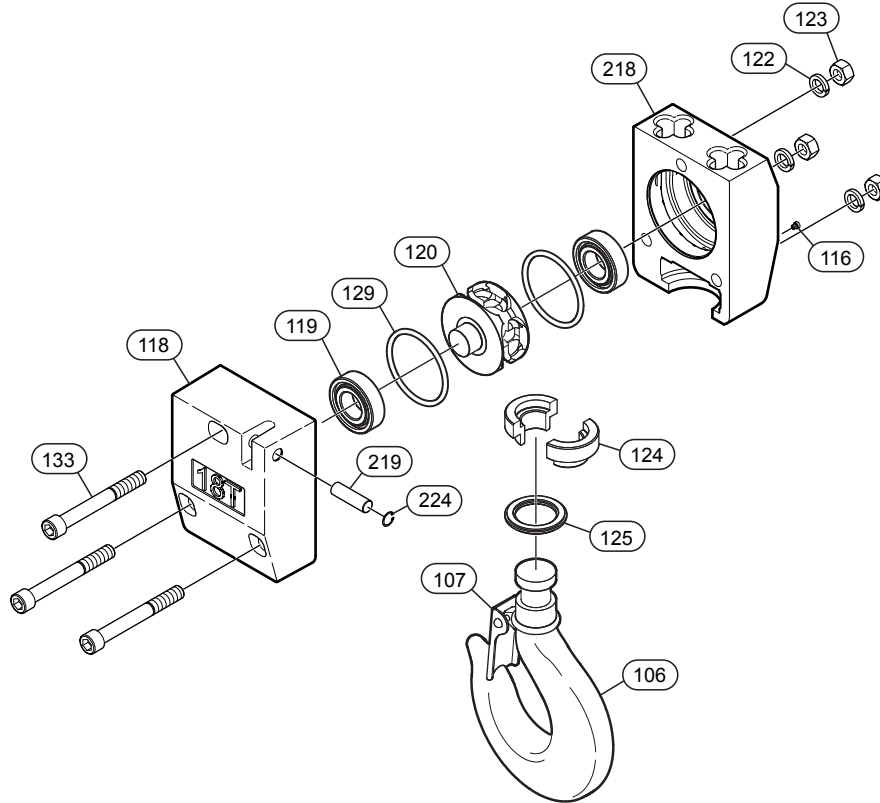
Item No.	Description of Part	Total Qty	Part Number			
			4 T Single		6 T Single	
			Standard	Option T1	Standard	Option T1
---	Bottom Block Assembly	1	7645-0118	7645-0315	7526-0100	7526-7245
44	Lockwasher	()	---		4520-1020 (1)	4520-1010 (2)
56	Capscrew	()	4132-3306 (3)		9526-0037 (1)	4133-0006 (2)
106	Hook	1	9645-0120	9645-0249	9412-8459	9412-8559
107	Hook Latch Kit	1	9424-0365		9412-0460	
116	Greaser	1	6710-2627			
118	Half Hook Block	1	9645-0117	9645-0252	9526-0138	9526-8246
123	Nut	()	75583M (3)		4300-4011 (1)	4300-6911 (2)
124	Ring, (2 Piece)	1	9645-0115		9412-7398	
125	Thrust Bearing	1	5400-0106		5470-0007	
218	Half Hook Block	1	9645-0116	9645-0251	9526-0139	9525-8247

Double Fall Hoist

Item No.	Description of Part	Total Qty	Part Number			
			8 T Double		12 T Double	
			Standard	Option T1	Standard	Option T1
---	Bottom Block Assembly	1	7645-0123	7645-0314	7526-0356	7526-7248
44	Lockwasher	3	4520-1012			
56	Capscrew	3	4132-4406		4131-0306	
106	Hook	1	9645-0124	9645-0250	9623-8234	9623-8263
107	Hook Latch Kit	1	9645-0316		9623-0236	
116	Greaser	1	6710-2627			
118	Half Hook Block	1	9645-0125	9645-0253	9526-0352	9526-7203
119	Bearing	2	5120-0007		5120-0009	
120	Sprocket	1	9645-0127		9590-8069	
123	Nut	3	4300-3611			
124	Ring, (2 Piece)	1	9645-0126		9623-7014	
125	Thrust Bearing	1	5470-0041		5470-0013	
• 129	'O' Ring	2	5822-8029		5823-2329	
218	Half Hook Block	1	9645-0159	9645-0254	9526-0364	9526-7204

• Recommended spares, 2 years normal operation.

18 TON TRIPLE BOTTOM BLOCK ASSEMBLY DRAWING AND PARTS LIST

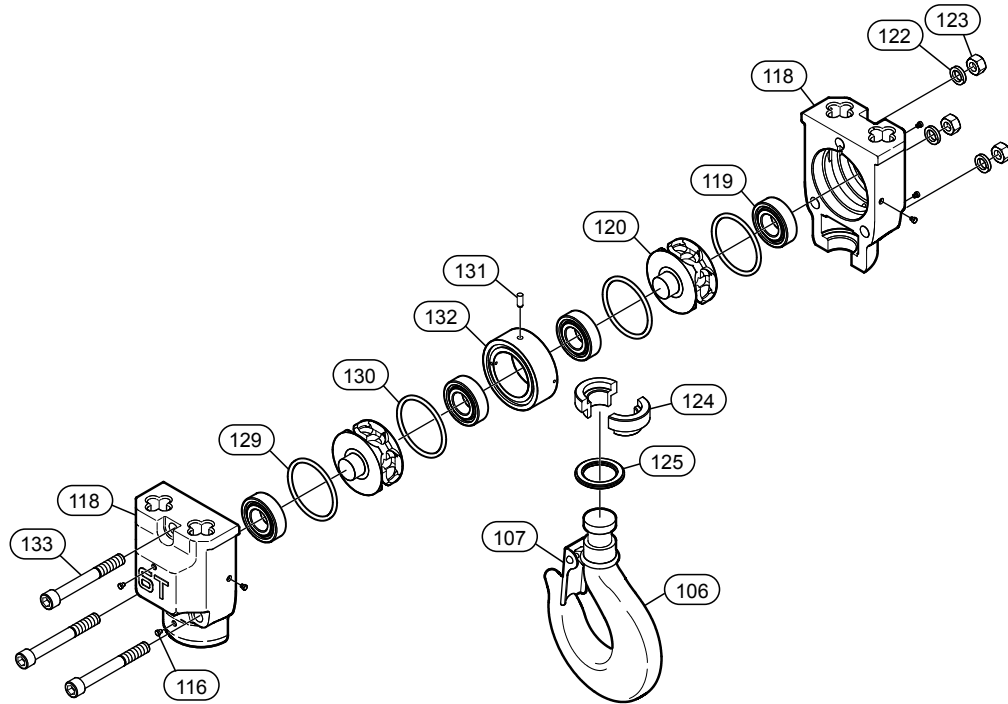


(Dwg. MHP3018)

Item No.	Description of Part	Total Qty	Part Number	
			18 t Triple	
			Standard	Option T1
---	Bottom Block Assembly	1	7590-0009	7590-0127
106	Hook	1	9596-8135	9596-8145
107	Hook Latch Kit	1	9596-0136	
116	Grease Fitting	1	6710-0827	
118	Half Hook Block	1	9590-7073	9590-0126
119	Bearing	2	5120-0009	
120	Sprocket	1	9590-8069	
122	Lockwasher	3	4520-1020	
123	Nut	3	4300-4011	
124	Ring (2 piece)	1	9596-7060	
125	Thrust Bearing	1	5470-0018	
• 129	'O' Ring	2	5823-2329	
133	Capscrew	3	4133-1206	
218	Half Hook Block	1	9590-7072	9590-0125
219	Anchor Pin	1	9590-7074	
224	Retainer Ring	1	4771-3020	

• Recommended spares, 2 years normal operation.

6 TON QUAD BOTTOM BLOCK HOOK ASSEMBLY DRAWING AND PARTS LIST

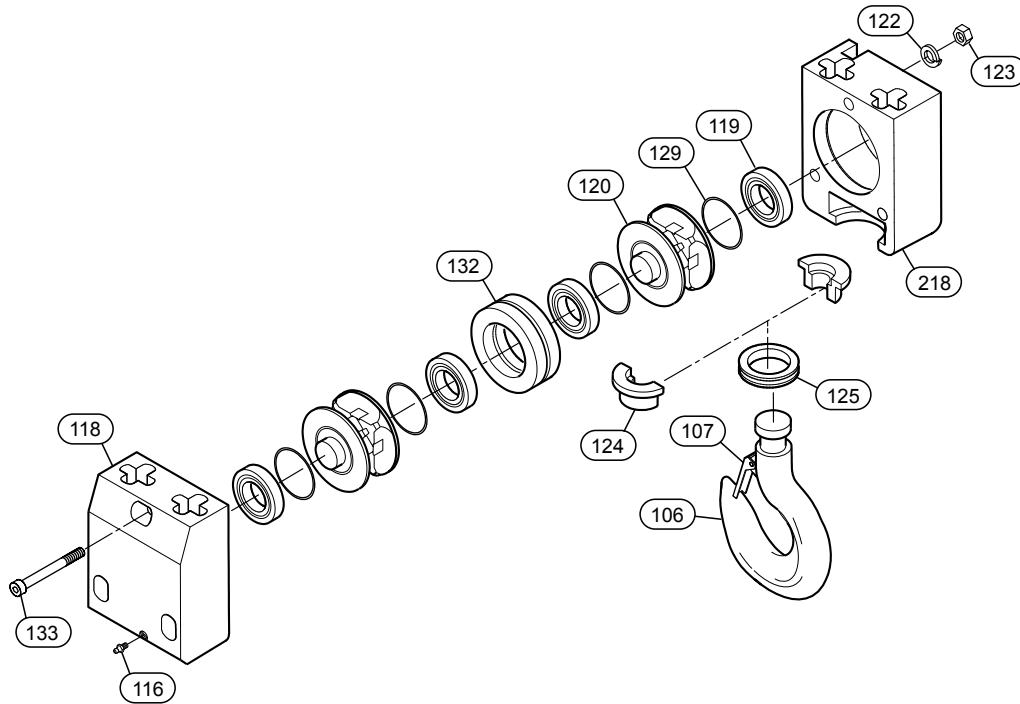


(Dwg. MHP2821)

Item No.	Description of Part	Total Qty	Part Number	
			6 t Quad	
			Standard	Option T1
---	Bottom Block Assembly	1	7644-3337	7644-3396
106	Hook	1	9412-8459	9412-8558
107	Hook Latch Kit	1	9412-0460	
116	Grease Fitting	6	6710-2627	
118	Half Hook Block	2	9644-3325	9644-3394
119	Bearing	4	5120-0005	
120	Sprocket	2	9644-3338	
122	Lockwasher	3	4520-1012	
123	Nut	3	4300-3611	
124	Ring (2 piece)	1	9412-7398	
125	Thrust Bearing	1	5470-0007	
• 129	'O' Ring	2	5823-9029	
• 130	Quad Ring	2	5823-8929	
131	Pin	1	4600-1116	
132	Center Ring	1	9644-3326	
133	Capscrew	3	4132-2006	

• Recommended spares, 2 years normal operation.

25 TON QUAD BOTTOM BLOCK HOOK ASSEMBLY DRAWING AND PARTS LIST

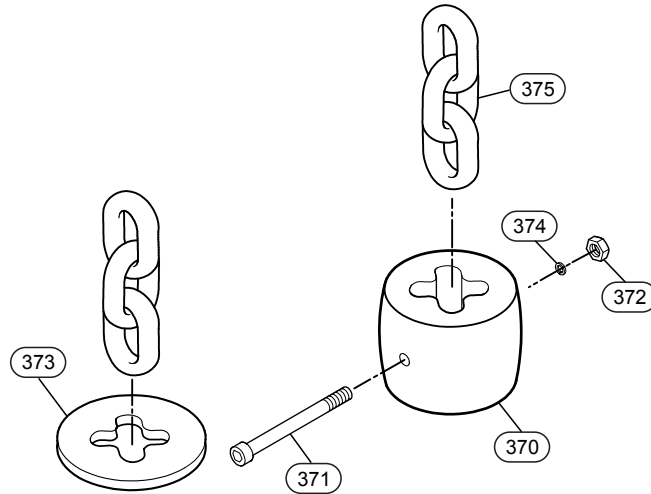


(Dwg. MHP3029)

Item No.	Description of Part	Total Qty	Part Number	
			25 t Quad	
			Standard	Option T1
---	Bottom Block Assembly	1	7590-0008	3590-0131
106	Hook	1	9623-8233	9623-8301
107	Hook Latch Kit	1	9623-0235	
116	Grease Fitting	1	6710-0827	
118	Half Hook Block	1	9590-7071	9623-8299
119	Bearing	4	5120-0009	
120	Sprocket	2	9590-8069	
122	Lockwasher	3	4520-1020	
123	Nut	3	4300-4011	
124	Ring (2 piece)	1	9623-7026	
125	Thrust Bearing	1	5470-0018	
• 129	'O' Ring	4	5823-2329	
131	Pin	1	4600-1116	
132	Center Ring	1	9590-0068	
133	Capscrew	3	4133-1106	
218	Half Hook Block	1	9590-7070	9623-8300

• Recommended spares, 2 years normal operation.

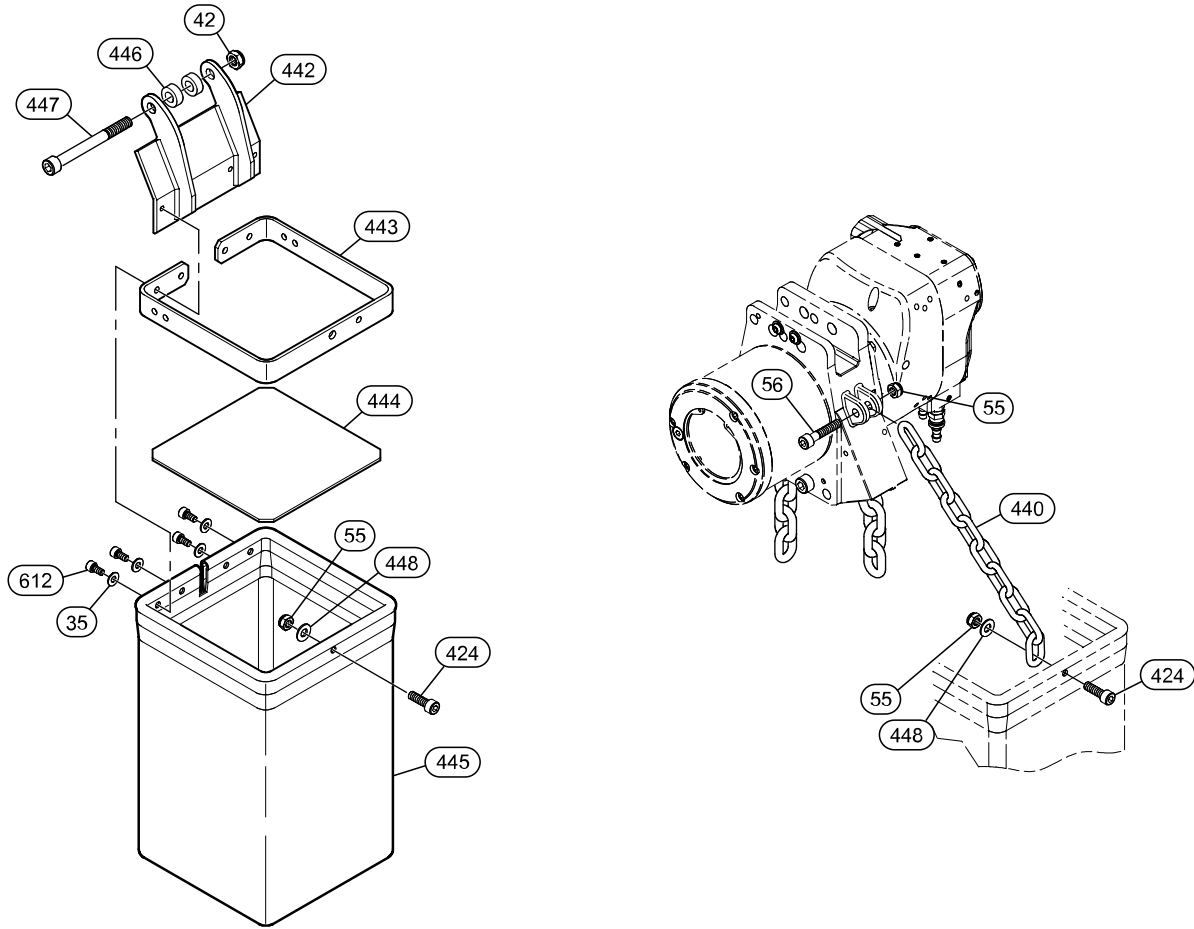
BOTTOM HOOK ACCESSORIES PARTS DRAWING AND PARTS LIST



(Dwg. MHP3079)

Item No.	Description of Part	Total Qty	Part Number						
			LC2A015S	LC2A030D	LC2A060Q	LC2A040S	LC2A080D	LC2A060S	LC2A120D /125D/180T/ 250Q
			1.5 ton	3 ton	6 ton	4 ton	8 ton	6 ton	12/12.5/18/25 ton
1	Capscrew	1	4132-6706			4133-0106		4132-1906	
3	Nut	1	75582M			75589M		4370-3711	
4	Buffer	1	9644-3191			9412-0119		9526-0040	
5	Capscrew	1	4132-1506			70926M		4132-2006	
7	Nut	1	75582M					4370-6311	
8	Washer	1	9644-3150			---			
9	Load Chain (Bulk)	Specify Length (meters)	LC824-G8ZP			LC1336-G8ZP		LC1645-G8ZP	

NON METALLIC CHAIN CONTAINER ASSEMBLY DRAWING



(Dwg. MHP2658)

NON METALLIC CHAIN CONTAINER ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number					
			LC2A015S, LC2A030D and LC2A060Q			LC2A040S and LC2A080D		LC2A060S, LC2A120D, LC2A180T and LC2A250Q
			39.4 ft (12 m)	98.4 ft (30 m)	196.8 ft (60 m)	39.4 ft (12 m)	82.0 ft (25 m)	39.4 ft (12 m)
35	Washer	4	4560-1006					
42	Nut	1	75583M					
55	Nut	()	4370-6511 (2)		4370-6511 (3)	4370-6511 (2)		4370-6511 (3)
56	Capscrew	1	4132-6706			4132-6206		
424	Capscrew	()	4132-4906 (1)		4132-4906 (2)	4132-4906 (1)		4132-4906 (2)
440	Chain (Non-Metallic Chain Container)	Specify Length	6902-9232					
442	Support Bracket	1	9644-3168			9645-0236		9645-0238
443	Frame	1	9424-0139	9412-0179	9526-0054	9412-0179	9526-0054	
444	Plate (Bottom)	1	9424-0161	9412-0201	9526-0057	9412-0201	9526-0057	
445	Chain Container	1	9424-0137	9412-0177	9526-0056	9412-0177	9526-0056	
446	Washer	2	4530-1010			---		
447	Capscrew	1	4132-7006			4133-0706		4133-0306
448	Washer	()	4500-1108 (1)		4500-1108 (2)	4500-1108 (1)		4500-1108 (2)
612	Capscrew	4	4132-4306					

* Specify length in ft (m) when ordering replacement.

** Item not included in Non-Metallic Chain Container.

Note 1: Item numbers 110, 449 and 450 are not required on Non-Metallic Chain Container option.

Note 2: Refer to Service & Accessories Table 10 'Bulk Load Chains' on page 44 for Load Chain part numbers

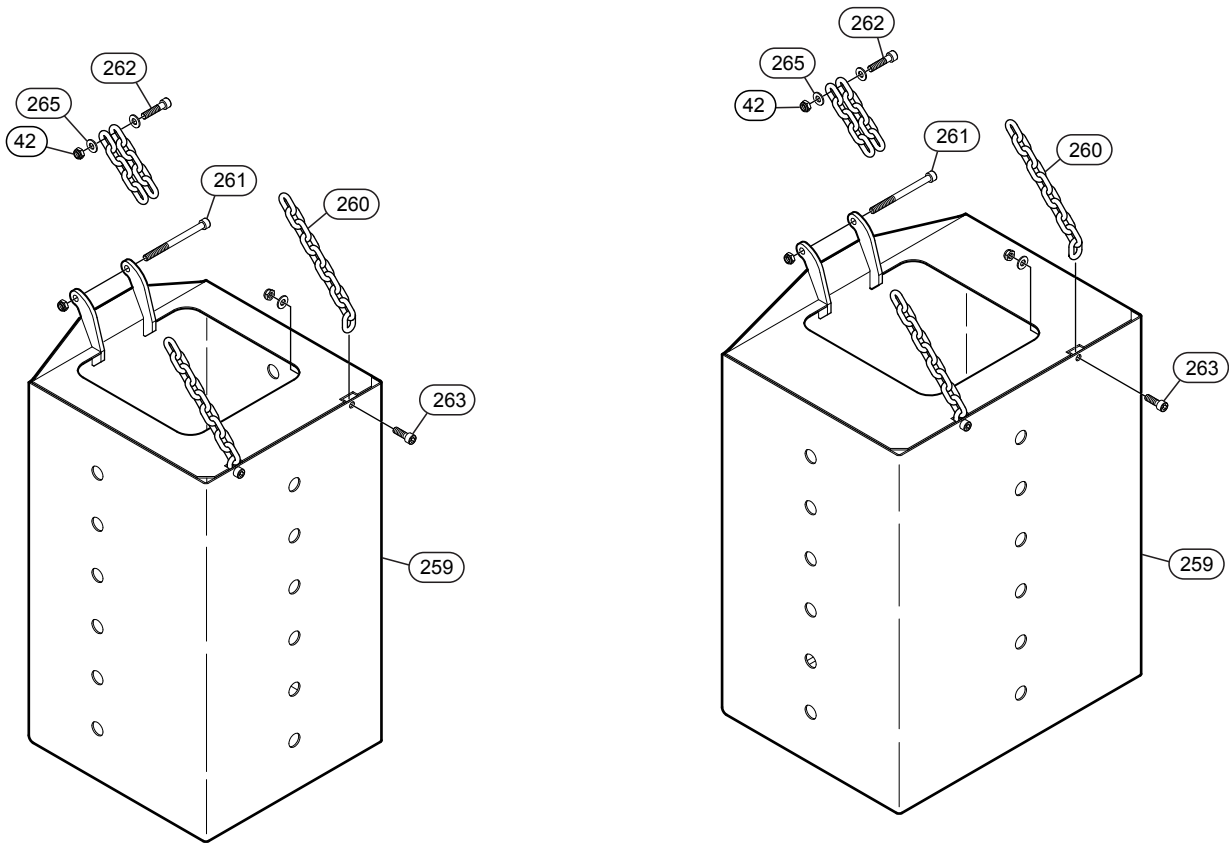
Chain Container Assembly Part Numbers

Hoist Model	Capacity		Container Part Number	
	ft	m	Non-metallic	Metallic
LC2A015S LC2A030D LC2A060Q	39	12	CB2-030D-12M	---
	98	30	CB2-030D-30M	---
	197	60	CB2-030D-60M	---
LC2A040S LC2A080D	39	12	CB2-080D-12M	---
	82	25	CB2-080D-25M	---
	131	40	---	CB2-080D-40M
LC2A060S LC2A120D LC2A180T LC2A250Q	39	12	CB2-120D-12M	---
	85	26	---	CB2-120D-24M
	131	40	---	CB2-120D-40M

METALLIC CHAIN CONTAINER ASSEMBLY DRAWING AND PARTS LIST

13 x 36 mm Chain Size

16 x 45 mm Chain Size

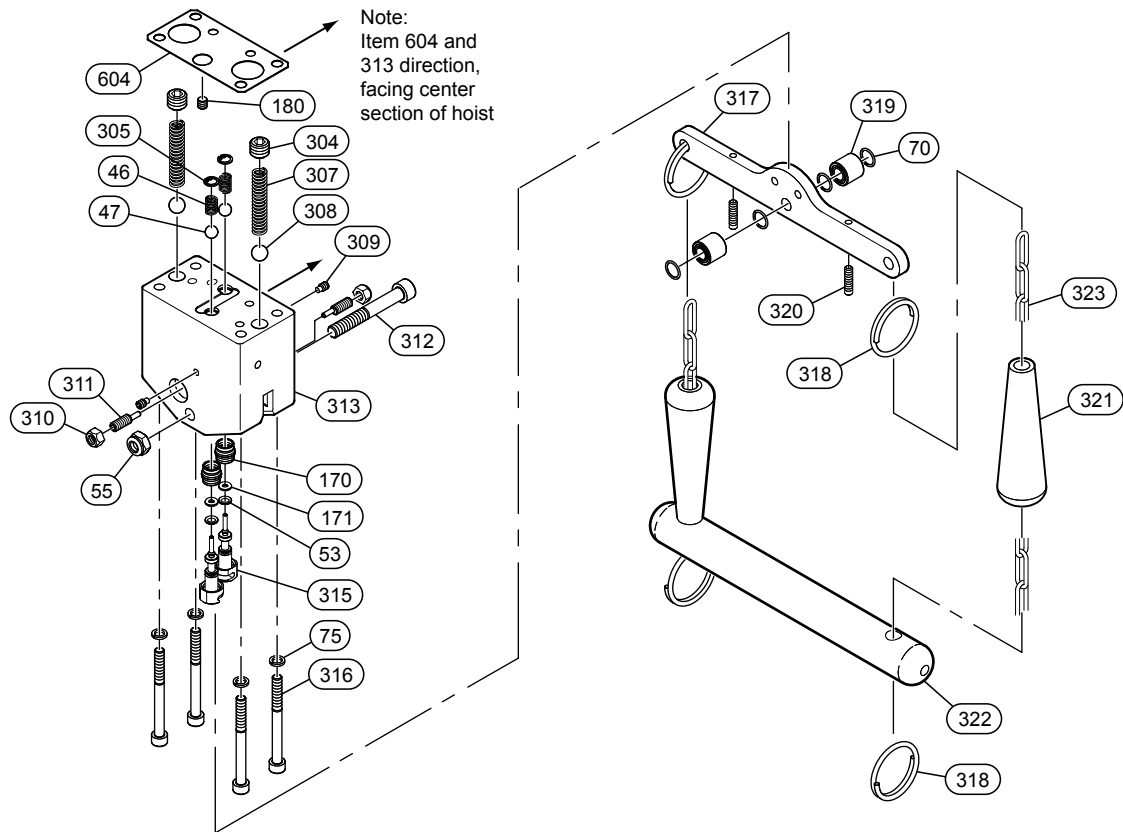


(Dwg. MHP3059)

Item No.	Description of Part	Total Qty	Part Number		
			LC2A040S	LC2A080D	LC2A060S, LC2A120D, LC2A180T and LC2A250Q
			131.2 ft (40 m)	85.3 ft (26 m)	131.2 ft (40 m)
---	Chain Container Assembly	1	3645-0244	3645-0242	3645-0246
42	Nut	()	75583M (3)		
259	Chain Container	1	9645-0245	9645-0243	9645-0247
260	Chain	Specify Length	6908-9432		
261	Capscrew	1	4133-0706	4133-0306	
262	Capscrew	1	4132-3306		
263	Capscrew	()	4132-3506 (1)	4132-3506 (2)	
265	Washer	()	4500-1110 (3)	4500-1110 (4)	

Note 1: Refer to Service & Accessories Table 10 'Bulk Load Chains' on page 44 for Load Chain part numbers

ROPE CONTROL ASSEMBLY DRAWING AND PARTS LIST



(Dwg. MHP2662)

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
---	Rope Control Assembly *	1	7644-3179	310	Nut	2	4370-7611
46	Spring	2	6912-8541	311	Adjustment Screw	2	9644-3177
• 47	Ball	4	6940-1625	312	Capscrew	1	4132-1506
• 53	'O' Ring	2	5820-9229	313	Rope Control Block	1	9644-3174
55	Nut	1	4370-6511	315	Valve	2	9644-3175
70	'O' Ring	4	5823-7429	316	Capscrew	4	4133-2106
75	Washer	4	4520-1006	317	Lever	1	9644-3176
170	Protector	2	9579-0107	318	Ring	4	9053-0031
• 171	'O' Ring	2	5823-5329	319	Spacer	2	9644-3178
180	Setscrew	1	9644-1187	320	Screw	2	4200-7707
• 304	Plug	2	4200-6307	321	Handle	2	33268
• 305	Retainer Ring	2	4771-3009	322	Bar	1	44806
307	Spring	2	6916-4741	323	Chain (bulk) **	As Req'd	6900-1332
308	Ball	2	6940-0425	• 604	Gasket	1	9644-1093
309	Setscrew	2	4200-8307				

• Recommended spares, 2 years normal operation.

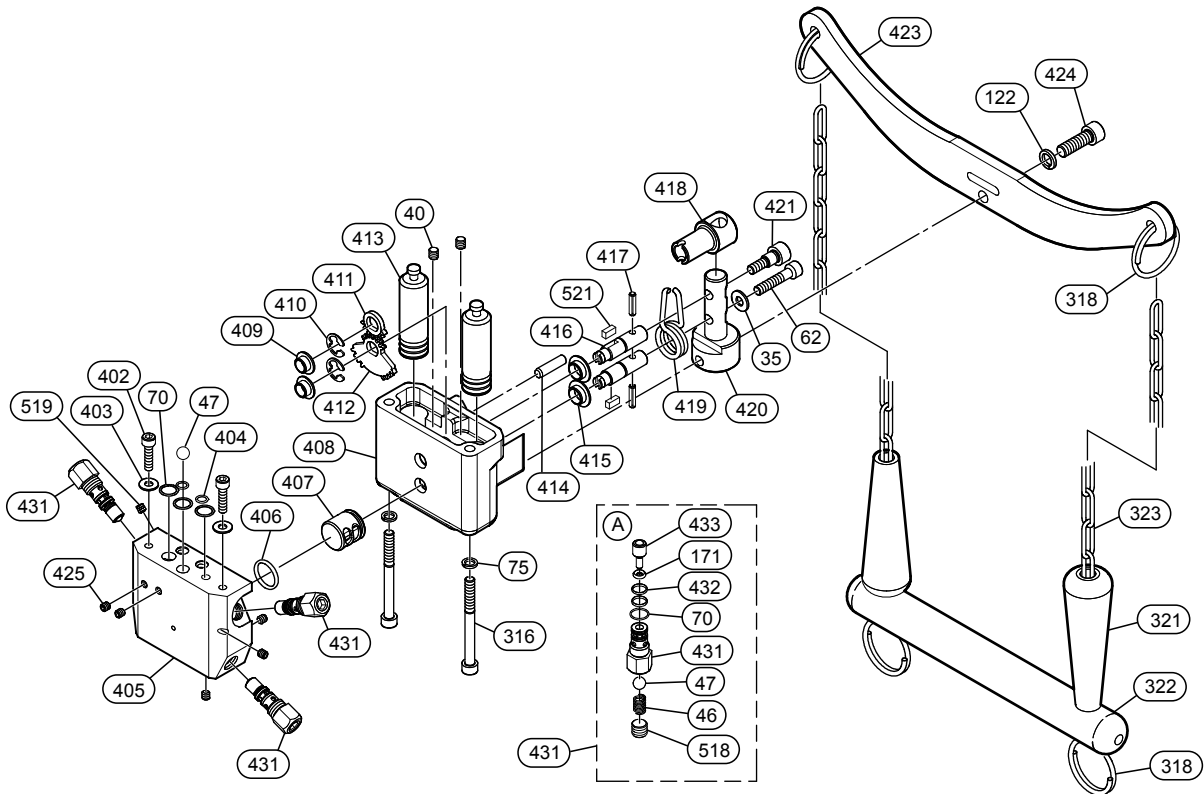
* Rope Control Assembly (includes items 46, 47, 53, 55, 70, 75, 170, 171, 180, 302, 304, 305, 307-313 and 315-323).

** Order by ft (m).

⚠ CAUTION

- When changing from a pendant control to rope control option replace three setscrews item 606 with part number 9644-1187

ROPE CONTROL WITH OVERLOAD ASSEMBLY DRAWING AND PARTS LIST



(Dwg. MHP2663)

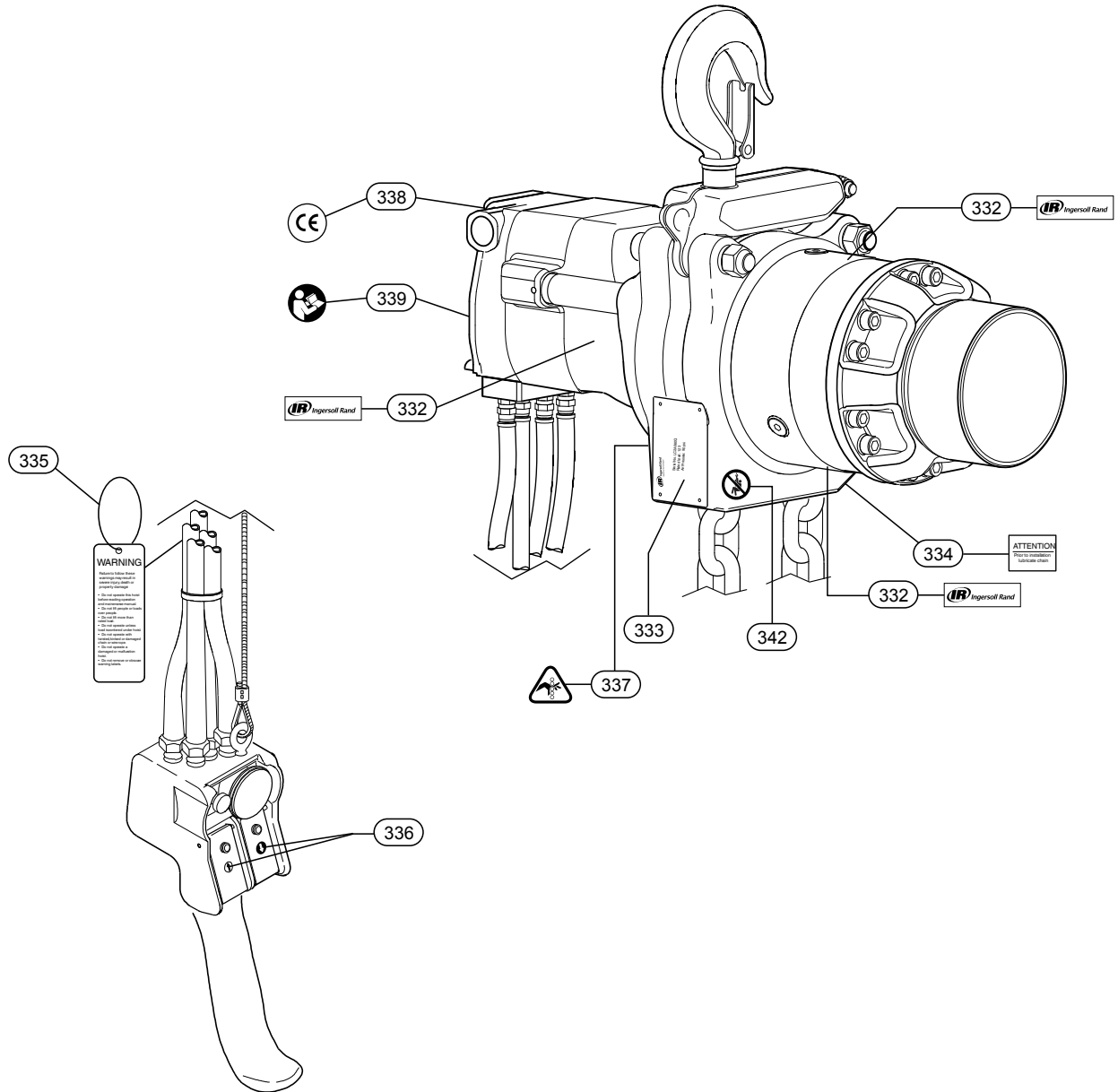
Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
---	Rope Control Assembly *	1	7644-3186	409	Bushing	2	5900-8826
35	Washer	1	4500-1106	• 410	Retainer Ring	2	4783-7241
40	Pipe Plug	2	4200-7406	• 411	Gear	1	7644-0417
46	Spring	3	6912-8541	• 412	Gear Cam	1	
• 47	Ball	4	6940-1625	413	Spool	2	9644-0414
62	Capscrew	1	4132-2306	414	Pin	2	4600-1216
• 70	'O' Ring	6	5823-7429	415	Collar	2	5900-8726
75	Washer	2	4520-1006	416	Spindle Shaft	2	9644-0413
122	Lockwasher	1	4520-1008	417	Roll Pin	2	4650-8320
• 171	'O' Ring	3	5823-5329	418	Coupling	1	9644-1422
316	Capscrew	2	4133-2106	419	Spring	1	9644-1421
318	Ring	4	9053-0031	420	Lever	1	9644-3182
321	Handle	2	33268	421	Shoulder Screw	1	9644-1108
322	Bar	1	44806	423	Bar	1	9644-3183
323	Chain (bulk) **	As Req'd	6900-1332	424	Capscrew	1	4132-4906
402	Capscrew	2	4132-3006	425	Pipe Plug	5	4200-8407
403	Washer	2	4500-1105	431	Valve	3	9644-3181
• 404	'O' Ring	2	5821-2229	• 432	'O' Ring	6	5821-2229
405	Rope Control Block	1	9644-3180	433	Spool	3	9644-3184
• 406	'O' Ring	1	5821-1529	518	Plug	3	6510-7741
407	Cam	1	9644-3185	519	Setscrew ***	1	9617-0071
408	Valve Housing	1	9644-1082	521	Key ***	2	9644-0415

- Recommended spares, 2 years normal operation.
- * Rope Control Assembly (includes items 46, 47, 53, 55, 70, 75, 170, 171, 180, 302, 304, 305, 307-313 and 315-323).
- ** Order by ft (m).
- *** Item not shown.



- When changing from a pendant control to rope control option replace three setscrews item 606 with part number 9644-1187.

LABEL AND TAG PLACEMENT ASSEMBLY DRAWING AND PARTS LIST



(Dwg. MHP3081)

Item No.	Description of Part	Total Quantity	Part Number
330	CE Label Kit (includes 332-339 and 342)	1	7424-0370
331	Label Kit (includes 332-337, 339 and 342)	1	7412-0461
332	Ingersoll Rand Logo	3	See kit list
333	Data (Name) Plate	1	
334	Notice (Lubricate Chain) Label	1	
335	Warning Tag	1	
336	Pendant Label Kit	1	
337	Pinch Hazard Symbol Label	1	
338	CE Label	1	
339	Read Literature Symbol Label	1	
342	Non-Manrider Symbol Label	1	

SERVICE & ACCESSORIES

Table 7: FRLs

Port Thread *	Port Size	Part Number	CPN	Item Type	Combination Weight		Inlet Pressure Maximum		Temp Range		Flow		Filter	Regulator	Lubricator
					lbs	kg	psi	bar	F	C	scfm	m ³ /min			
NPT	3/4"	C38451-810	15317506	3-Piece Combination	18.2	8.2	250	17.2	23 - 175	-5 - 79.4	199	5.6	F35451-410	R37451-600	L36351-110
BSP	3/4"	79990066	38529681	3-Piece Combination	18.2	8.2	250	17.2	32 - 150	0 - 65.5	220	6.2	F39-C6-SL00-29	R21-C6-000-29	L39-C6-LD00-29
NPT	1-1/4"	-**	-	-	34.7	15.7	150	10.3	32 - 150	0 - 65.5	800	22.6	F35571-410	R37571-100***	L36571-110
BSP	1-1/4"	79990070	38529749	3-Piece Combination	32.7	14.8	150	10.3	32 - 125	0 - 51.6	800	22.6	F35-CA-A29	R31-CA-000-29	L40-CA-A29

* Hoists with a 3/4" BSP inlet port may use either 3/4" NPT or BSP fittings.

** The 1-1/4" NPT FRLs are not offered in combination. Order separately by part number and use 1-1/4" nipples to make combinations. A 1-1/4" BSP to NPT nipple must be used to connect to the hoist.

*** R37571-100 is not supplied with a gauge. Order Part Number 104502 for a 0-160 psi gauge.

Table 8: Lubricants

Part Number	CPN	Description	Where Used	Size
Lubri-Link-Green	71124754	Triple protection USDA approved lubricant. Extreme pressure formula and corrosion inhibitors to prevent formation of rust.	Hook and Latch Pivot Point, Chain	16 oz (.47 L) Spray Bottle
LLG-5	71261291			5 gal (18.9 L) Bulk Container
50P	03875705	Detergent free SAE 50W oil with formulation to inhibit the formation of rust.	Chain	1 pt (.47 L)
50G	03875713			1 gal (3.78 L)
68 8 lb	03820016	High performance, extreme pressure, multiple purpose lubricating grease.	Upper & Lower Hook Thrust Bearings, Trolley Wheel Bearings & Gear	8 lb (3.62 kg) Can
29665	04205936	Detergent free spindle oil with viscosity of 155-165 S.U.S. at 100 deg F and aniline pt of 217 deg F.	Air Line Lubricator	1 qt (.94 L)

Table 9: Pendant Handles

Part Number	CPN	Description	Air Inlet Sizes (BSP)
PHS2E	38559233	Single motor pendant	1/4"
PHS2E-U	38559258	Single motor pendant w/ E-Stop	1/4"
PHS4E	38559274	Two motor pendant	1/4"
PHS4E-U	38559290	Two motor pendant w/ E-Stop	1/4"

Table 10: Bulk Load Chains

Bulk Load Chains for LIFTCHAIN® Series					
Used on models	Chain Part Number	Chain Size Dia x pitch (mm)		Weight per lineal meter	CPN
LC2A015S/030D	LC824-G8ZP	8 x 24		1.5	38532172
LC2A030S/060D	LC1336-G8ZP	13 x 36		3.85	38527677
LC2A060S/120D/180T/250Q	LC1645-G8ZP	16 x 45		5.75	38527800
LC2A125S to 500Q	LC2266-G8ZP	22 x 66		11	38537544
Used on models	Chain Part Number	Chain Size Dia x pitch (mm)	Length in Meters	Weight per lineal meter	CPN
LC2A015S/030D	LC824-G8ZP-100M	8 x 24	100	150	38756557
LC2A015S/030D	LC824-G8ZP-200M	8 x 24	200	300	38756540
LC2A030S/060D	LC1336-G8ZP-100M	13 x 36	100	385	38756508
LC2A060S/120D/180T/250Q	LC1645-G8ZP-100M	16 x 45	100	575	38756524
LC2A125S to 500Q	LC2266-G8ZP-100M	22 x 66	100	1,100	38756532

NOTICE

All accessories should be ordered using the corresponding CPN, except for customers within the U.S. and Canada. These customers should use the noted part number.

NOTICE

Load chain is corrosion resistant treated as standard (grade 80)

SERVICE NOTES

SERVICE NOTES

SERVICE NOTES
