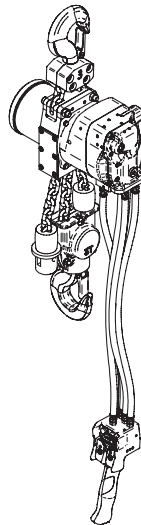


Product Parts Information



Second Generation Liftchain Mining Air Hoist Models LC2A015SM and LC2A030DM



(Dwg. MHP2684)



Save These Instructions



Form MHD56309

Edition 1

April 2005

71455786

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Only allow **Ingersoll-Rand** Certified Service Technicians to perform maintenance on these hoist. For additional information contact **Ingersoll-Rand** factory or nearest Distributor.

Refer to **Product Safety Information Manual for Pneumatic, Hydraulic and Electric Hoists Form MHD56295, Product Information Manual Form MHD56307 and Product Maintenance Information Manual Form MHD56308.**

Manuals can be downloaded from www.winchandhoistsolutions.com

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

The original language of this manual is English.

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

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PARTS ORDERING INFORMATION

The **LC2A** hoists 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.

The use of other than genuine **Ingersoll-Rand** replacement parts may result in decreased hoist performance, and may, invalidate the warranty. For prompt service and genuine **Ingersoll-Rand** replacement parts, provide your nearest Distributor with 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.

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

Model Number _____

Serial Number _____

Date Purchased _____

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 hoist.
- Using other than genuine **Ingersoll-Rand** parts may invalidate the warranty.

■ 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.

Hoists which have been modified without **Ingersoll-Rand** approval, mishandled or overloaded will not be repaired or replaced under warranty. A printed copy of the warranty which applies to this hoist is provided inside the back cover of this manual.

■ Disposal



When the life of the trolley 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

2724 Sixth Avenue South
Seattle, WA 98124-0046 USA
Phone: (206) 624-0466
or (866) 273-FAST (3278)
Fax: (206) 624-6265

or

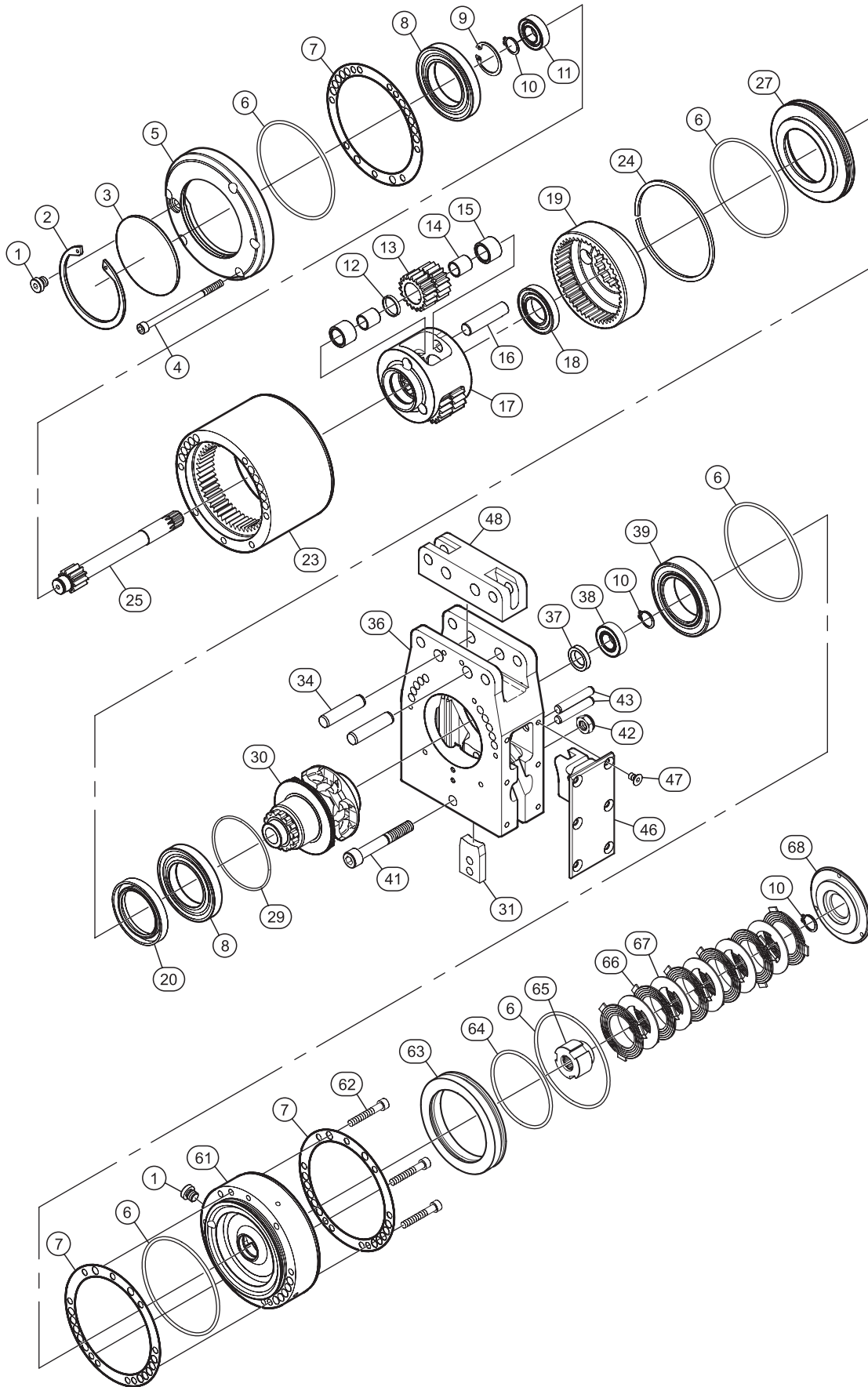
Ingersoll-Rand

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

POWERHEAD AND BRAKE ASSEMBLY DRAWING

1.5 and 3 ton Hoist Capacities

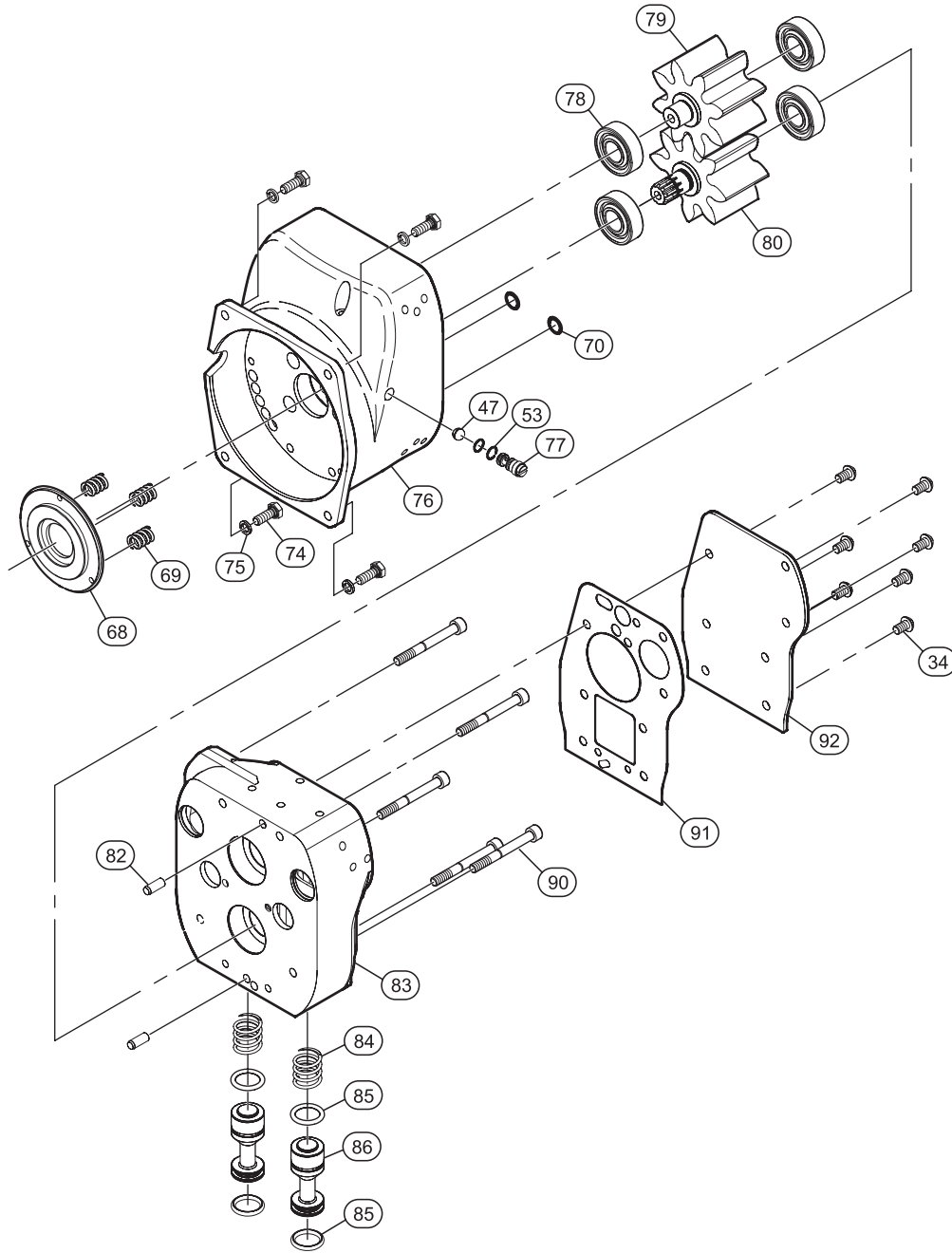


(Dwg. MHP2692)

POWERHEAD AND 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	65110441	35	Washer	2	45001106
2	Retainer Ring	1	47703080	36	Hoist Body	1	96443286
3	Exhaust Washer	1	96443190	37	Oil Seal	1	58019830
4	Capscrew	5	41332506	38	Bearing	1	50050002
5	Reduction Gear End Cover	1	96443008	39	Bearing	1	50050009
6	'O' Ring	5	58235229	41	Capscrew	1	41329406
7	Gasket	3	96441048	42	Nut	1	75583M
8	Bearing	2	50800009	43	Pin	2	46002816
9	Retainer Ring	1	47703032	46	Cover	1	96443287
10	Retainer Ring	3	47700015	47	Flathead Screw	6	41103603
11	Bearing	1	50000002	48	Support	1	96443289
12	Spacer	3	96441047	49	Valve Housing	2	96443032
13	Planetary Gear	3	96441002	51	Spring	2	69113941
14	Bearing Ring	6	56362041	52	Valve	2	96443033
15	Needle Bearing	6	56562141	53	'O' Ring	2	58209229
16	Gear Shaft Pin	3	96441046	54	Snap Ring	2	47859641
17	Planetary Carrier	1	96441006	55	Nut	1	51720M8
18	Bearing	1	50800005	56	Capscrew	1	41326706
19	Ring Gear	1	96441003	61	Brake Housing	1	96441012
20	Oil Seal	1	58012130	62	Capscrew	3	41301106
23	Reducer Housing	1	96441007	63	Piston	1	96441014
24	Stop Ring	1	47829332	64	'O' Ring	1	58235129
25	Pinion Shaft	1	96443005	65	Splined Hub	1	96441013
27	Cover	1	96443009	66	Friction Plate	6	63028241
29	'O' Ring	1	582372326	67	Drive Plate	5	63061941
30	Sprocket	1	96443039	68	Brake Reaction Plate	1	96441015
31	Chain Stripper	1	96443288	---	Reduction Gear Assembly	1	76441152
34	Pin	2	96443245				

MOTOR WITHOUT EMERGENCY STOP ASSEMBLY DRAWING AND PARTS LIST

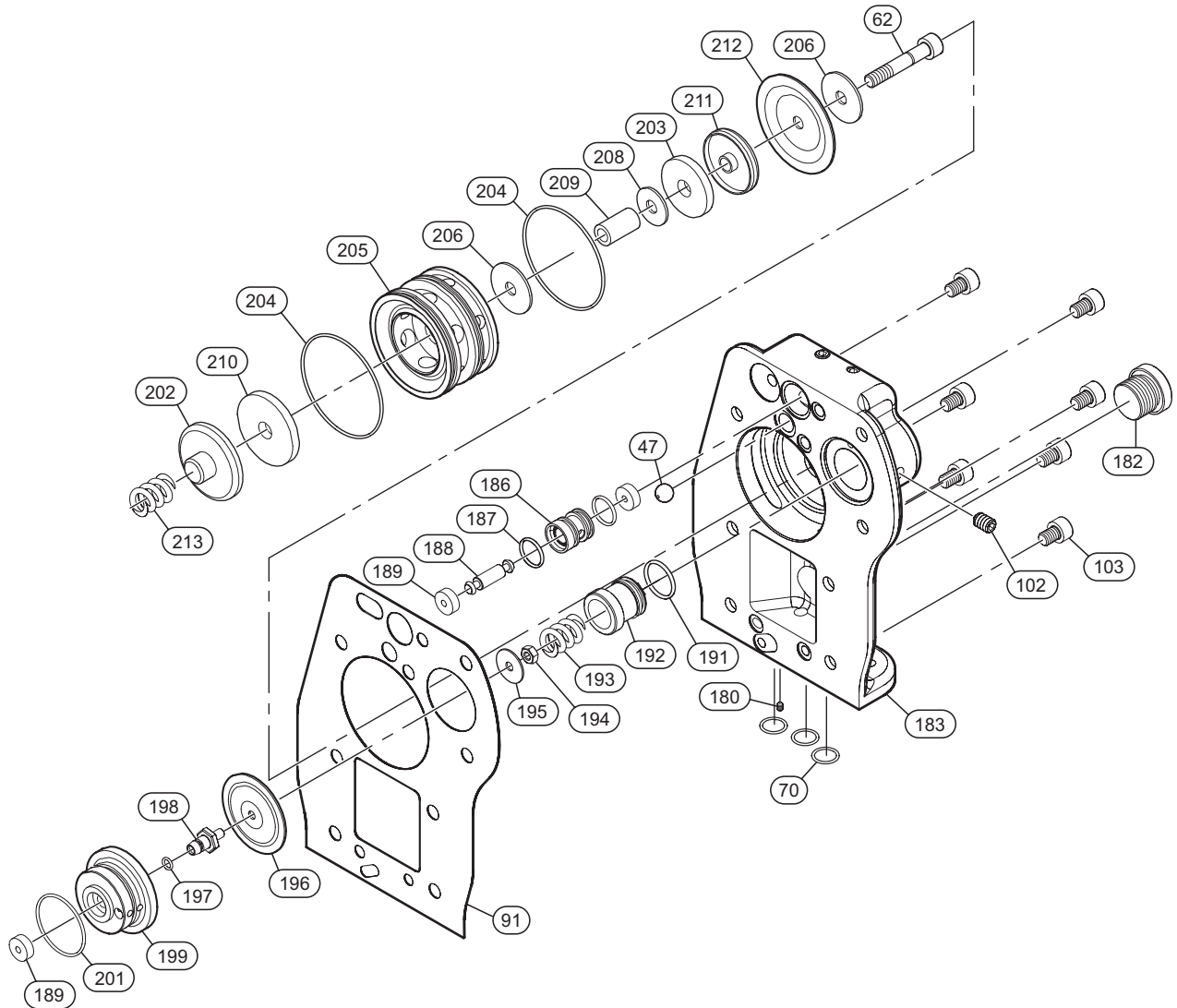


(Dwg. MHP2685)

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
---	Motor Assembly	1	36443303	79	Idle Gear **	1	76441256
34	Capscrew	7	41201604	80	Drive Gear **	1	76441256
47	Ball	1	69401625	81	Exhaust Washer	1	96441145
53	'O' Ring	2	58209229	82	Pin	2	46001116
68	Brake Reaction Plate	1	96441015	83	Motor Cover	1	96441023
69	Springs	3	69165532	84	Spring	2	69113741
70	'O' Ring	2	58237429	85	'O' Ring	4	58238129
74	Capscrew	4	41023001	86	Valve	2	96441024
75	Lockwasher	4	45201006	90	Capscrew	5	41332206
76	Motor Housing	1	96441016	91	Gasket	1	96441188
78	Bearing	4	50100002	92	Cover Plate	1	96441027

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

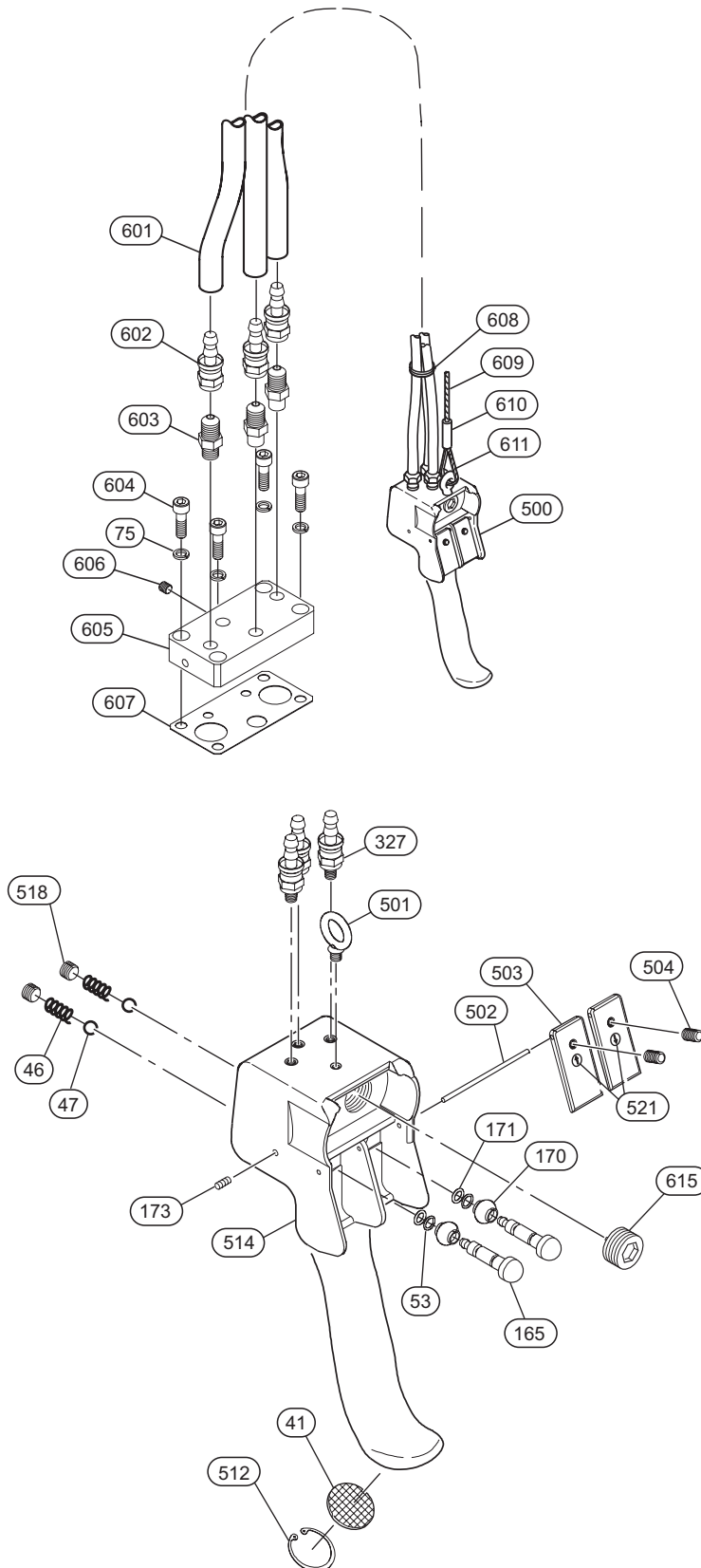
EMERGENCY STOP PENDANT ADAPTER ASSEMBLY DRAWING AND PARTS LIST



(Dwg. MHP2654)

Item No.	Description of Part	Total Qty	Part Number	Item No.	Description of Part	Total Qty	Part Number
---	Motor Assembly	1	36443304	195	Washer	1	45701004
47	Ball	4	69401625	196	Diaphragm	1	96441097
62	Capscrew	1	41301106	197	'O' Ring	1	58222329
70	'O' Ring	3	58237429	198	Plunger	1	96360017
91	Gasket	1	96441188	199	Base Plate	1	96441095
102	Screw	1	42009407	201	'O' Ring	1	58237029
103	Capscrew	7	41332306	202	Cap	1	96441101
180	Setscrew	1	96441187	203	Seal	1	96170056
182	Plug	1	65128928	204	'O' Ring	2	58237129
183	Emergency Stop End Cover	1	96441077	205	Valve Seat	1	96441098
186	Valve Seat	1	96441106	206	Washer	2	45701006
187	'O' Ring	2	58205029	208	Washer	1	45601006
188	Axle	1	96441105	209	Sleeve	1	96441102
189	Seal	3	96441103	210	Seal	1	96441104
191	'O' Ring	1	58211729	211	Cap	1	96441100
192	Regulating Screw	1	96441096	212	Diaphragm	1	96441099
193	Spring	1	69137041	213	Spring	1	69158732
194	Stop Nut	1	43001111				

REMOTE TWO LEVER PENDANT ASSEMBLY DRAWING



(Dwg. MHP2716)

REMOTE TWO LEVER PENDANT ASSEMBLY PARTS LIST

Item No.	Description of Parts	Total Qty	Part Number	Item No.	Description of Parts	Total Qty	Part Number
500	Pendant Assembly	1	PHS2E-R	601	Hose **	As req'd	50923
41	Exhaust Washer	1	67600303	602	Fitting, Barbed	2	61652632
46	Spring	2	69128541	603	Fitting, Nipple	3	68237528
47	Ball	2	69401625	604	Capscrew	4	41322206
53	'O' Ring	2	58209229	605	Adapter Plate	1	96441026
75	Lockwasher	4	45201006	606	Setscrew	1	4200-7406
165	Valve	2	95790104	607	Gasket	1	96441093
170	Protector	2	95790107	608	Hose Tie	1	54235
171	'O' Ring	2	58235329	609	Strain Relief Wire	As req'd	71073506
173	Screw	1	42008307	610	Sleeve Clamp	1	54799
327	Fitting	3	51029	611	Thimble	1	71111827
501	Lifting Eye	1	64222332	615	Plug	1	6519541
502	Pin	1	95790040	***	Label Kit	1	95790111
503	Lever	2	95790122	***	Exhaust Valve Kit **	As req'd	20417
504	Screw	2	41008607	***	Repair Kit	1	75790183
512	Retainer Ring	1	47713030	***	Label: "Read the Manual"	1	96180098
514	Pendant handle	1	95790131	***	Label: "Do Not Use for Lifting Personnel"	1	96180100
518	Plug	2	65107741				

* Fittings (327) can be replaced with fittings (602) and (603).

** Required for hose lengths greater than 20 ft (6 m).

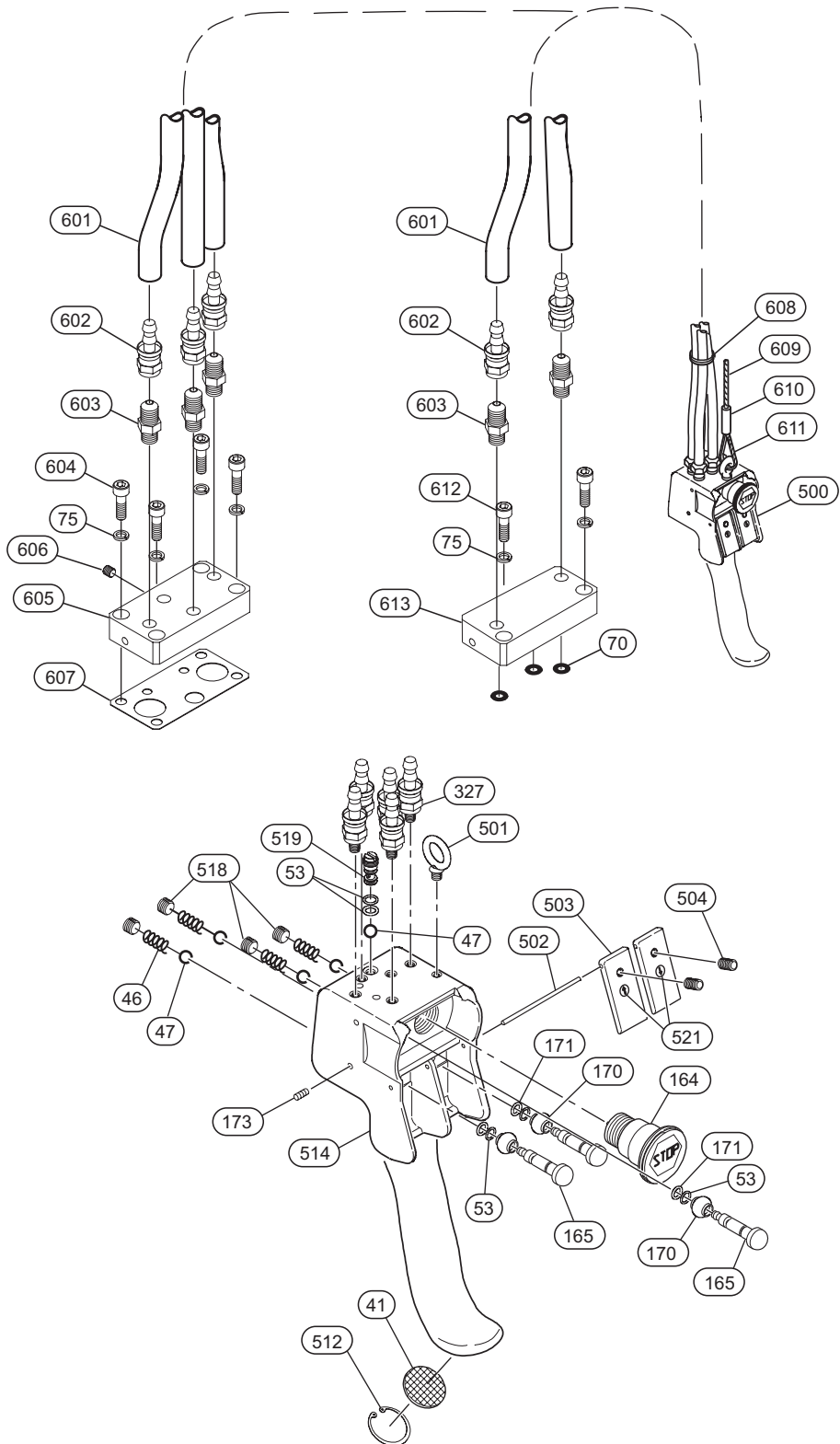
0 - 19 ft (0 - 6 m) Hose Length, 0 Exhaust Valve Kits Required.

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

REMOTE EMERGENCY STOP TWO LEVER PENDANT ASSEMBLY DRAWING



(Dwg. MHP2717)

REMOTE EMERGENCY STOP TWO LEVER PENDANT ASSEMBLY PARTS LIST

Item No.	Description of Parts	Total Qty	Part Number	Item No.	Description of Parts	Total Qty	Part Number
500	Pendant Assembly	1	PHS2E-RU	519	Plug	1	95790106
41	Exhaust Washer	1	67600303	521	Label Kit ***	1	95790111
46	Spring	4	69128541	601	Hose **	As req'd	50923
47	Ball	5	69401625	602	Fitting, Adapter	5	61652632
53	'O' Ring	5	58209229	603	Fitting, Nipple	5	68237528
70	'O' Ring	3	58237429	604	Capscrew	4	41322206
75	Lockwasher	6	45201006	605	Adapter Plate	1	96441026
164	Valve, Emergency Stop	1	95790108	606	Setscrew	1	4200-7406
165	Valve	3	95790104	607	Gasket	1	96441093
170	Protector	3	95790107	608	Hose Tie	1	54235
171	'O' Ring	3	58235329	609	Strain Relief Wire	As req'd	71073506
173	Screw	1	42008307	610	Sleeve Clamp	1	54799
327	Fitting	5	51029	611	Thimble	1	71111827
501	Lifting Eye	1	64222332	612	Capscrew	2	41324306
502	Pin	1	95790040	613	Adapter	1	96441173
503	Lever	2	95790122	***	Exhaust Valve Kit **	As req'd	20417
504	Screw	2	41008607	***	Repair Kit	1	75790183
512	Retainer Ring	1	47713030	***	Label: "Read the Manual"	1	96180098
514	Pendant handle	1	95790130	***	Label: "Do Not Use for lifting Personnel"	1	96180100
518	Plug	4	65107741				

* Fittings (327) can be replaced with fittings (602) and (603).

** Required for hose lengths greater than 20 ft (6 m).

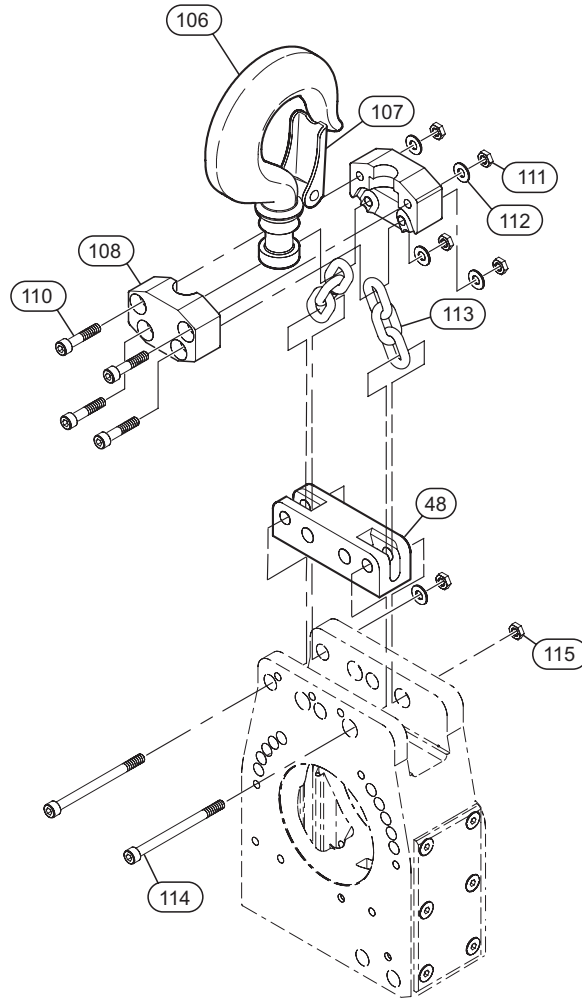
0 - 19 ft (0 - 6 m) Hose Length, 0 Exhaust Valve Kits Required.

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

TOP HOOK ASSEMBLY DRAWING AND PARTS LIST

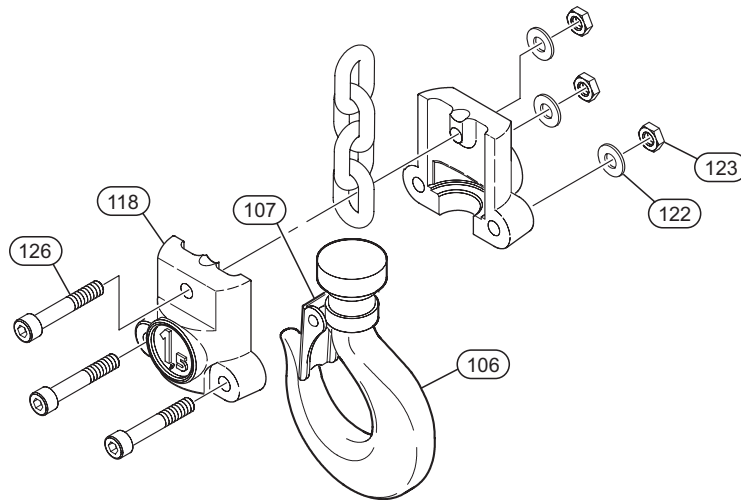


(Dwg. MHP1453)

Item No.	Description of Part	Total Qty	Part Number	
			1.5 ton	3 ton
48	Support	1	96443289	
106	Hook	1	94248125	
107	Hook Latch Kit	1	Contact Factory	
108	Half Hook Catch	2	94240081	
110	Capscrew	4	41301806	
111	Nut	4	43000111	
112	Lockwasher	4	45200008	
113	Chain	2	94240221	
114	Capscrew	2	41329406	
115	Nut	2	43008011	

BOTTOM BLOCK HOOK ASSEMBLY DRAWING AND PARTS LIST

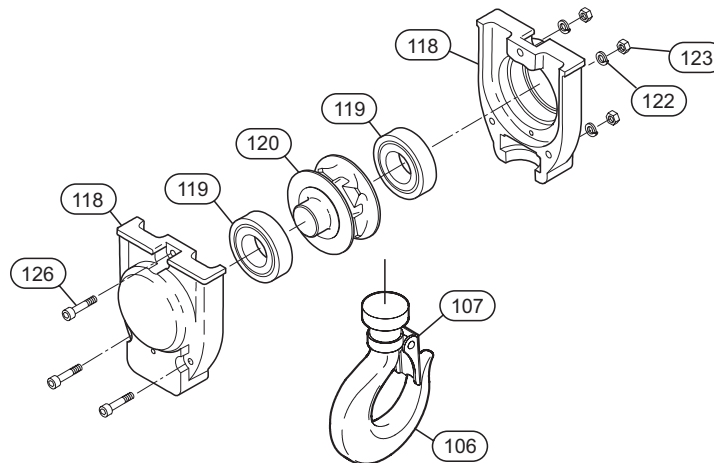
Single Fall Hoist



(Dwg. MHP2687)

Item No.	Description of Part	Total Qty	Part Number
			1.5 ton
106	Hook	1	94128125
107	Hook Latch Kit	1	94240364
118	Hook Block	2	94120126
122	Lockwasher	3	45200008
123	Nut	3	43000111
126	Capscrew	3	41301806

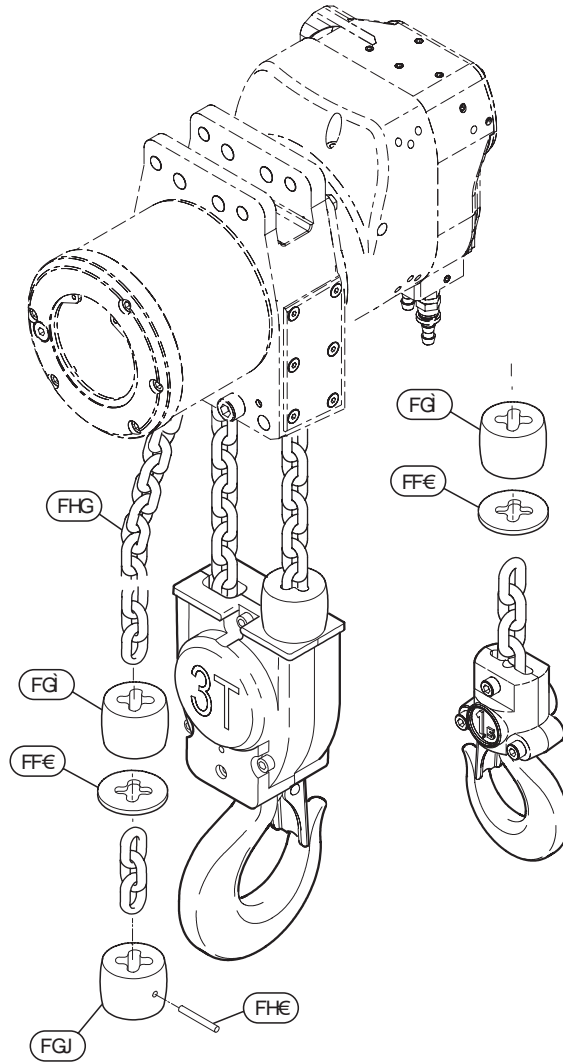
Double Fall Hoist



(Dwg. MHP1454)

Item No.	Description of Part	Total Qty	Part Number
			3 ton
106	Hook	1	94128125
107	Hook Latch Kit	1	94240365
118	Hook Block	2	94240010
119	Bearing	2	50250005
120	Sprocket Wheel	1	94240056
122	Lockwasher	3	45200008
123	Nut	3	43000111
126	Capscrew	3	41304506

BOTTOM BLOCK HOOK ACCESSORIES DRAWING AND PARTS LIST



(Dwg. MHP1431)

Item No.	Description of Part	Total Qty	Part Number	
			Single Fall Hoist	Double Fall Hoist
110	Washer	1	94240177	
128	Buffer	See ()	94240070 (1)	94240070 (2)
129	Limit Stop	1	---	94240105
130	Pin	1	---	46502820
132	Load Chain (Bulk)	Specify Length	LC824-G8ZP	

WARRANTY

Ingersoll-Rand Company (I-R) warrants to the original user its Hoists and Winches (Products) to be free of defects in material and workmanship for a period of one year from the date of purchase. **I-R** will repair, without cost, any Product found to be defective, including parts and labor charges, or at its option, will replace such Products or refund the purchase price less a reasonable allowance for depreciation, in exchange for the Product. Repairs or replacements are warranted for the remainder of the original warranty period.

If any Product proves defective within its original one year warranty period, it should be returned to any Authorized Hoist and Winch Service Distributor, transportation prepaid with proof of purchase or warranty card.

This warranty does not apply to Products which **I-R** has determined to have been misused or abused, improperly maintained by the user, or where the malfunction or defect can be attributed to the use of non-genuine **I-R** parts.

I-R makes no other warranty, and all implied warranties including any warranty of merchantability or fitness for a particular purpose are limited to the duration of the expressed warranty period as set forth above. I-R's maximum liability is limited to the purchase price of the Product and in no event shall I-R be liable for any consequential, indirect, incidental, or special damages of any nature arising from the sale or use of the Product, whether based on contract, tort, or otherwise.

Note: Some states do not allow limitations on incidental or consequential damages or how long an implied warranty lasts so that the above limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

IMPORTANT NOTICE

It is our policy to promote safe delivery of all orders.

This shipment has been thoroughly checked, packed and inspected before leaving our plant and receipt for it in good condition has been received from the carrier. Any loss or damage which occurs to this shipment while en route is not due to any action or conduct of the manufacturer.

VISIBLE LOSS OR DAMAGE

If any of the goods called for on the bill of lading or express receipt are damaged or the quantity is short, do not accept them until the freight or express agent makes an appropriate notation on your freight bill or express receipt.

CONCEALED LOSS OR DAMAGE

When a shipment has been delivered to you in apparent good condition, but upon opening the crate or container, loss or damage has taken place while in transit, notify the carrier's agent immediately.

DAMAGE CLAIMS

You must file claims for damage with the carrier. It is the transportation company's responsibility to reimburse you for repair or replacement of goods damaged in shipment. Claims for loss or damage in shipment must not be deducted from the **Ingersoll-Rand** invoice, nor should payment of **Ingersoll-Rand** invoice be withheld awaiting adjustment of such claims as the carrier guarantees safe delivery.

You may return products damaged in shipment to us for repair, which services will be for your account and form your basis for claim against the carrier.

