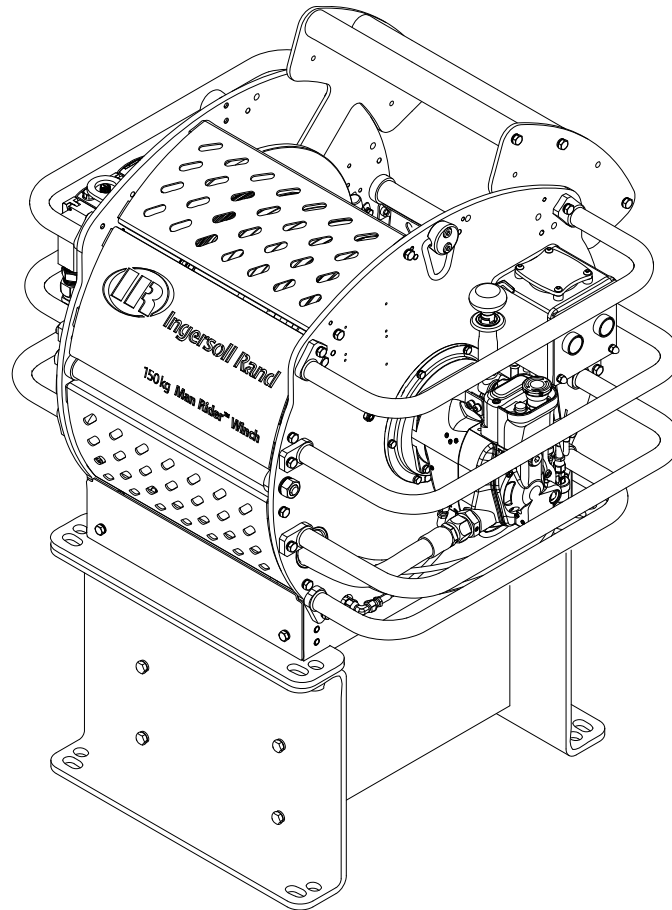


# Air Powered Man Rider™ Winch



MR150K Series



---

## Product Parts Information



**Save These Instructions**



Form MHD56489  
Edition E  
November 2021  
CCN 45957107

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, p. 2**.

Manuals can be downloaded from [www.irmhdocs.skysite.com](http://www.irmhdocs.skysite.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**

<b>Publication</b>	<b>Part/Document Number (CCN)</b>
Product Safety Information Manual	MHD56251 (71402606)
Product Information Manual	MHD56490 (45957115)
Product Maintenance Information Manual	MHD56492 (47512571)

# Table of Contents

Parts Ordering Information .....	4
Return Goods Policy .....	4
Guard and Base Winch Assembly for MK1 & MK2 .....	5
Guard and Base Winch Assembly for MK3 .....	8
Operator Guard Assembly for MK1 & MK2 .....	11
Operator Guard Assembly for MK3 .....	12
Automatic Band Drum Brake Assembly .....	13
Motor and Overload Assembly for MK1 & MK2 .....	15
Motor and Overload Assembly for MK3 .....	18
Reduction Gear and Disc Brake Assembly for MK1, MK2 & MK3 .....	21
Control Valve and Emergency Stop Assembly for MK1, MK2 & MK3 .....	23
Slackline Device Assembly for MK1 & MK2 .....	26
Slackline Device Assembly for MK3 .....	28
Press Roller Assembly for MK1, MK2 & MK3 .....	30
Limit Switch Assembly for MK1, MK2 & MK3 .....	32
Emergency Lowering Device for MK2 .....	35
Emergency Lowering Device for MK3 .....	37
MK1 (one-switch E-lowering) Hose Connections Assembly .....	39
MK2 (two-switch E-lowering) Hose Connections Assembly .....	41
MK3 (two switch push button type E-lowering) Hose Connections Assembly (After 11/19/ 2021) .....	43
Air Prep-Package Assembly for MK1 & MK2 .....	45
Air Prep-Package Assembly for MK3 .....	47
Labels and Tags Location for MK1, MK2 and MK3 .....	49
Pedestal Assembly for MK1, MK2 and MK3 .....	50
Manual Wire Rope Guide Assembly for MK1, MK2 & MK3 .....	51
Remote Two Function Pendant Control Assembly for MK1, MK2 & MK3 .....	52
Recertification Kits .....	55

# Parts Ordering Information

## ***NOTICE***

### **Product Manuals!**

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

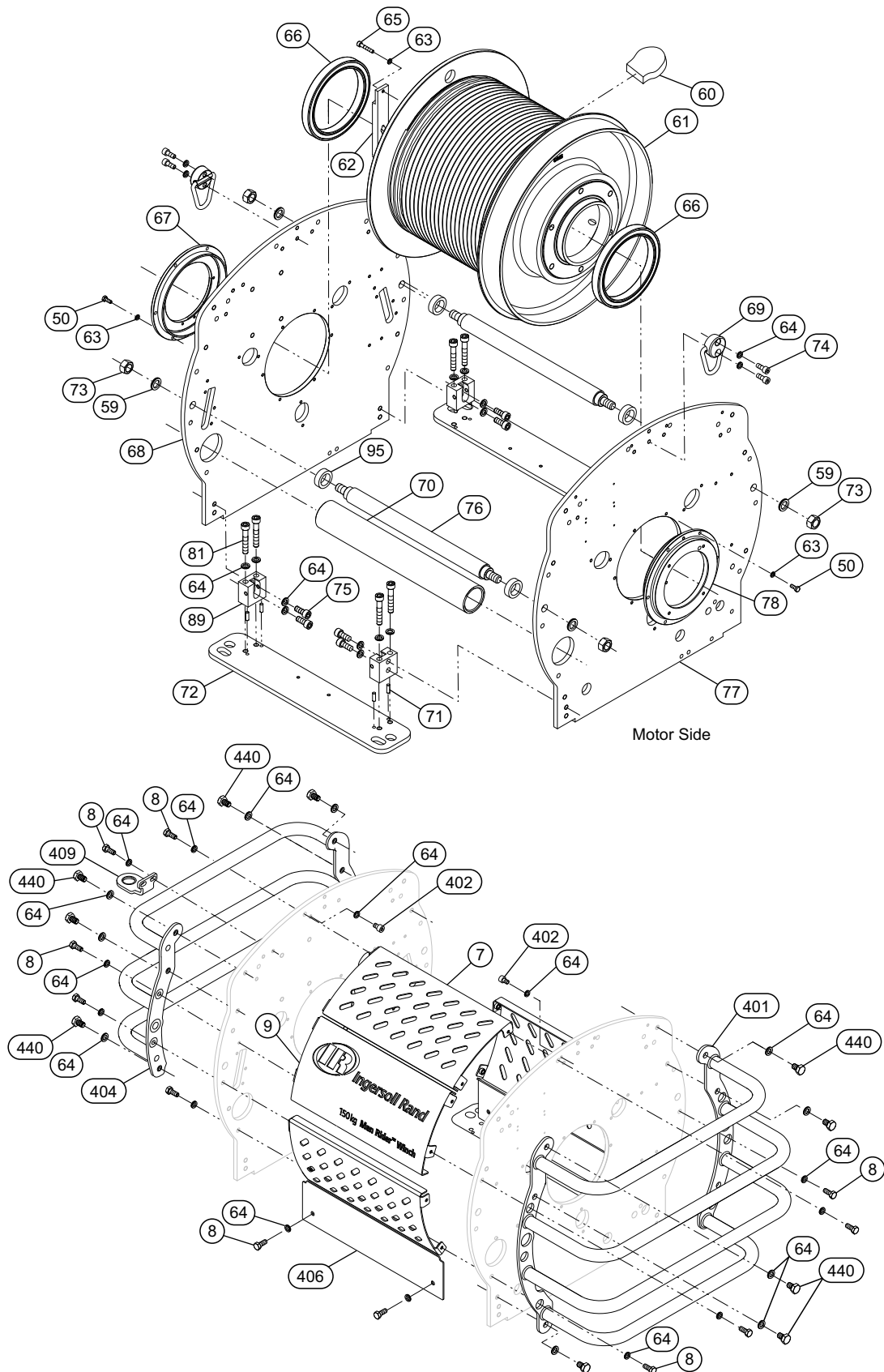
### **Return Goods Policy**

**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.

# Guard and Base Winch Assembly for MK1 & MK2

Figure 1. Guard and Base Winch Assembly Drawing (MHP3312) (Assembly before 11/19/2021)



## Guard and Base Winch Assembly for MK1 & MK2

**Table 2. Guard and Base Winch Assembly - Parts List (Parts before 11/19/2021)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
7 (a) (b)	Guard	3	9653-0145 (47529598001)
8 (b)	Capscrew	22	4102-5701 (46898847)
9 (a) (b)	Guard, with Logo	1	(47623142001)
50 (b)	Capscrew	12	4102-4701 (46898292)
59 (b)	Lockwasher	4	4510-0216 (38797346)
60 (b)	Cable Wedge (10 mm)	1	9631-0023 (38537445)
61 (a)	Drum	1	9653-0076 (46899340)
62	Adapter, Limitswitch	1	9653-0004 (46894036)
63 (b)	Lockwasher	14	4510-1206 (46898284)
64 (b)	Lockwasher	28	4510-1208 (46898730)
65 (b)	Capscrew	2	4130-1106 (38535779)
66 (b)	Bearing	2	5095-0028 (46894101)
67	End Cover	1	9645-0663 (46894010)
68 (a)	Endframe, Outboard	1	Contact Factory
69 (b)	Lifting Lug	2	6421-1342 (46898771)
70	Tube, Hose Control	1	9653-0127 (47528799001)
71 (b)	Pin, Dowel	8	(47528781001)
72	Base Connector	2	9653-0125 (47528741001)
73 (b)	Nut	4	4300-9411 (46898672)
74 (b)	Capscrew	4	(45987179)
75 (b)	Capscrew	8	(47528779001)
76	Bar, Frame Connector	2	9653-0010 (46893830)
77 (a)	Endframe, Inboard	1	Contact Factory
78	Adapter, Motor	1	9653-0002 (46894028)
81 (b)	Capscrew	8	(47528777001)
89	Connector	4	9653-0126 (47528798001)
95 (b)	Cushion	4	9653-0128 (47528842001)
‡401 (a)	Guarding, Inboard	1	9653-0157 (47535046001)
402 (b)	Capscrew	2	(45985439)
404 (a) (b)	Guarding, Outboard	1	9653-0156 (47524596001)
406 (a) (b)	Guard, Bottom	2	9653-0143 (47529596001)
409 (a) (b)	Protector, Lube Sight	1	47535540 (47535540001)
440 (b)	Capscrew	12	4102-0501 (38560868)

(a) Item not sold individually.

(b) Item available in a kit, see kit list below for details.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

**Table 3. Guard and Base Assembly Service and Replacement Kit List (Parts before 11/19/2021)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
901	MR150 – Drum Kit, Drum Replacement Kit (includes items: 61, 903)	1	7650-0536 (47513419037)
902	RPK-MR150-Frame Repair Kit Frame (includes items: 42, 59, 60, 63, 64, 65, 66, 69, 71, 73, 75, 81, 95)	1	7650-0517 (47694975001)

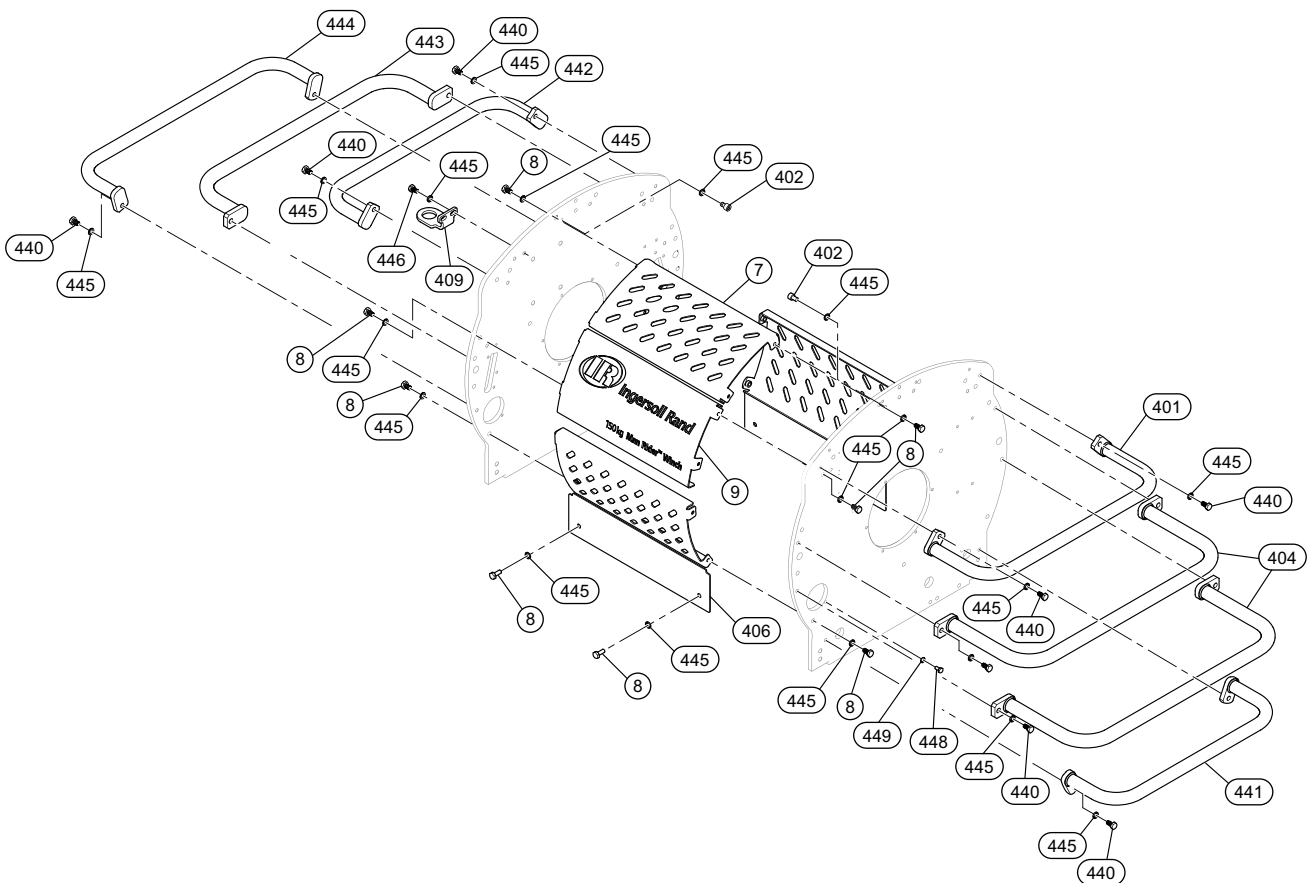
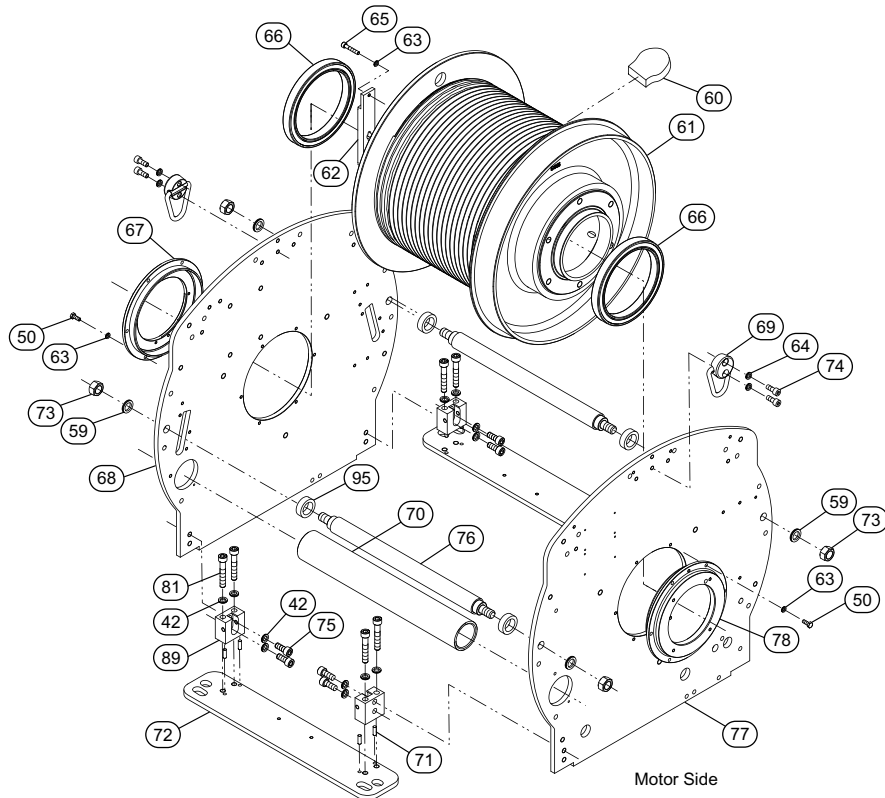
## Guard and Base Winch Assembly for MK1 & MK2

**Table 3. Guard and Base Assembly Service and Replacement Kit List (Parts before 11/19/2021) (continued)**

<b>Item No.</b>	<b>Description of Part</b>	<b>Total Qty</b>	<b>Part Number (CCN)</b>
903	RBK-MR150-Frame Rebuild Kit Frame (includes items: 902, 72)	1	7650-0518 (47513419019)
946	Service Kit: Guarding Hardware (includes items: 8, 50, 63, 64, 347, 402, 440, 531, 532)	1	(47543539001)

# Guard and Base Winch Assembly for MK3

Figure 2. Guard and Base Winch Assembly Drawing (MHP4475) (Assembly after 11/19/2021)





## Guard and Base Winch Assembly for MK3

**Table 4. Guard and Base Winch Assembly - Parts List (Parts after 11/19/2021)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
7 (a) (b)	Guard	3	9653-0145 (47529598001)
8 (b)	Capscrew	20	4102-5701 (46898847)
9 (a) (b)	Guard, with Logo	1	(47623142001)
42 (b)	Lockwasher	16	4510-0210 (38797353)
50 (b)	Capscrew	12	4102-4701 (46898292)
59 (b)	Lockwasher	4	4510-0216 (38797346)
60 (b)	Cable Wedge (10 mm)	1	9631-0023 (38537445)
61 (a)	Drum	1	9653-0076 (46899340)
62	Adapter, Limitswitch	1	9653-0004 (46894036)
63 (b)	Lockwasher	14	4510-1206 (46898284)
64 (b)	Lockwasher	28	4510-1208 (46898730)
65 (b)	Capscrew	2	4130-1106 (38535779)
66 (b)	Bearing	2	5095-0028 (46894101)
67	End Cover	1	9645-0663 (46894010)
68 (a)	Endframe, Outboard	1	9653-0124 (47528740001)
69 (b)	Lifting Lug	2	6421-1342 (46898771)
70	Tube, Hose Control	1	9653-0127 (47528799001)
71 (b)	Pin, Dowel	8	(47528781001)
72	Base Connector	2	9653-0125 (47528741001)
73 (b)	Nut	4	4300-9411 (46898672)
74 (b)	Capscrew	4	(45987179)
75 (b)	Capscrew	8	(47528779001)
76	Bar, Frame Connector	2	9653-0010 (46893830)
77 (a)	Endframe, Inboard	1	9653-0123 (47528732001)
78	Adapter, Motor	1	9653-0002 (46894028)
81 (b)	Capscrew	8	(47528777001)
89	Connector	4	9653-0126 (47528798001)
95 (b)	Cushion	4	9653-0128 (47528842001)
#401 (a)	Tube Guard, Inboard	1	(47666200001)
402 (b)	Capscrew	2	(45985439)
404 (a) (b)	Tube Guard, Inboard 2 and 3	2	(47666200002)
406 (a) (b)	Guard, Bottom	2	9653-0143 (47529596001)
409 (a) (b)	Protector, Lube Sight	1	47535540 (47535540001)
440 (b)	Capscrew	14	4102-0501 (38560868)
441(a) (b)	Tube Guard, Inboard 4	1	(47666200003))
442 (a)(b)	Tube Guard, Outboard 1	1	(47666200004)
443 (a) (b)	Tube Guard, Outboard 2	1	(47666200005)
444 (a) (b)	Tube Guard, Outboard 3	1	(47666200006)
445 (b)	Washer	38	4510-1208 (46898730)
446	Screw	2	(46898755)

## Guard and Base Winch Assembly for MK3

**Table 4. Guard and Base Winch Assembly - Parts List (Parts after 11/19/2021) (continued)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
448	Screw	1	4102-2301 (38598546)
449	Washer	1	(47530162001)

<sup>(a)</sup> Item not sold individually.

<sup>(b)</sup> Item available in a kit, see kit list below for details.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

**Table 5. Guard and Base Assembly Service and Replacement Kit List (Parts after 11/19/2021)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
902	MR150-Drum Kit Drum Replacement Kit (includes items: 61 and 904)	1	7650-0536 (47513419037)
903	RPK-MR150-Frame Repair Kit Frame (includes items: 42, 59, 60, 63, 64, 65, 66, 69, 71, 73, 75, 81, 95)	1	7650-0517 (47694975001)
904	RBK-MR150-Frame Rebuild Kit Frame (includes items: 902, 72)	1	7650-0518 (47513419019)
946	Service Kit: Guarding Hardware (includes items: 8, 42, 50, 63, 64, 347, 402, 440, 531, 532)	1	(47543539001)

# Operator Guard Assembly for MK1 & MK2

Figure 3. Operator Guard Assembly Drawing (MHP3614) (Assembly Before 11/19/2021)

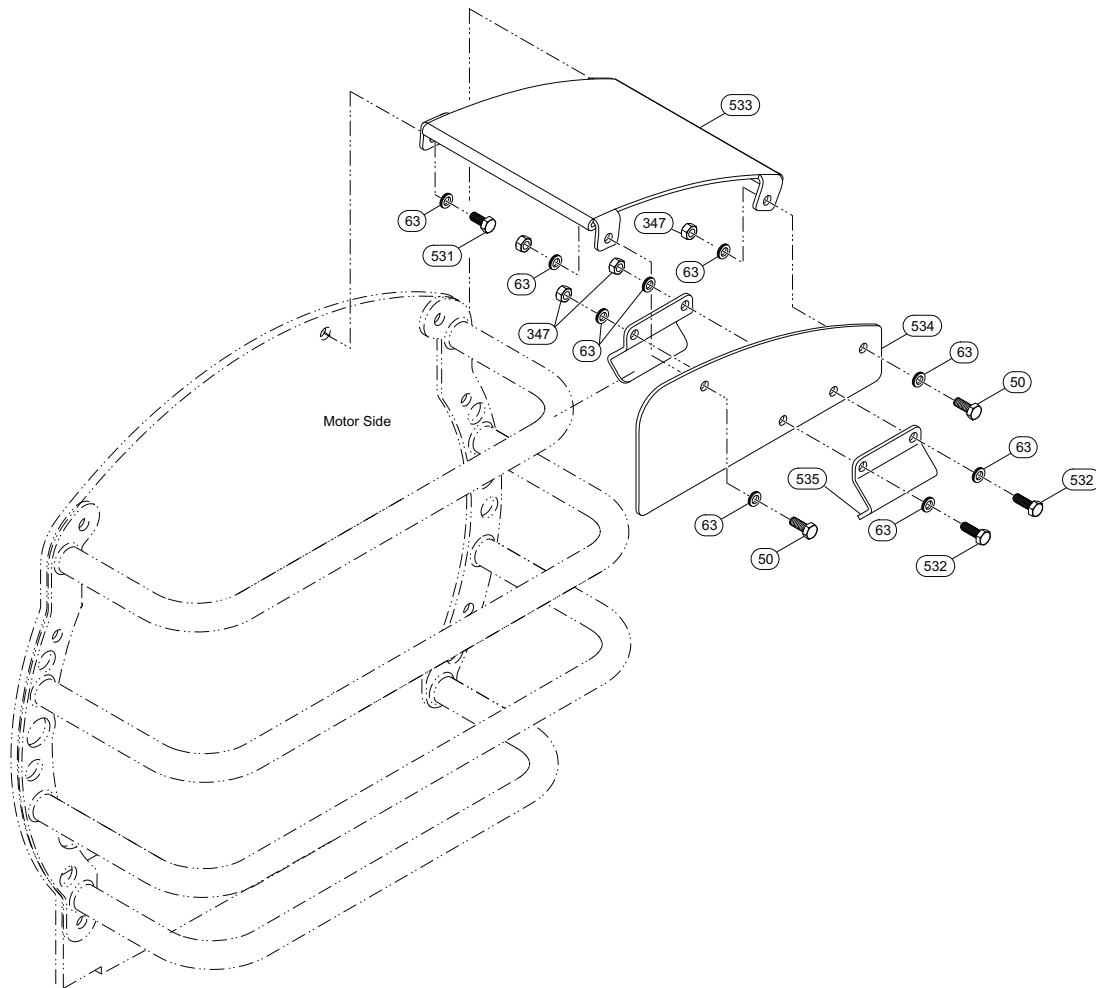


Table 6. Operator Guard Assembly - Parts List (Parts Before 11/19/2021)

Item No.	Description of Part	Total Qty	Part Number (CCN)
50 (a)	Capscrew	2	4102-4701 (46898292)
63 (a)	Lockwasher	10	4510-1206 (46898284)
347 (a)	Nut	4	4300-9311 (46898300)
531 (a)	Capscrew	2	(47535446001)
532 (a)	Capscrew	2	(47535447001)
533 (a) (b)	Guard, Top	1	(47535510001)
534 (a) (b)	Guard, Side	1	(47535511001)
535 (a)	Clamp	2	(47535512001)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

Table 7. Operator Guard Assembly Service and Replacement Kit List (Parts Before 11/19/2021)

Item No.	Description of Part	Total Qty	Part Number (CCN)
939	RPK: MR150K Operator Guard (includes items: 50, 63, 347, 531, 532, 533-535)	1	(47543414001)

# Operator Guard Assembly for MK3

Figure 4. Operator Guard Assembly Drawing (MHP4477) (Assembly After 11/19/2021)

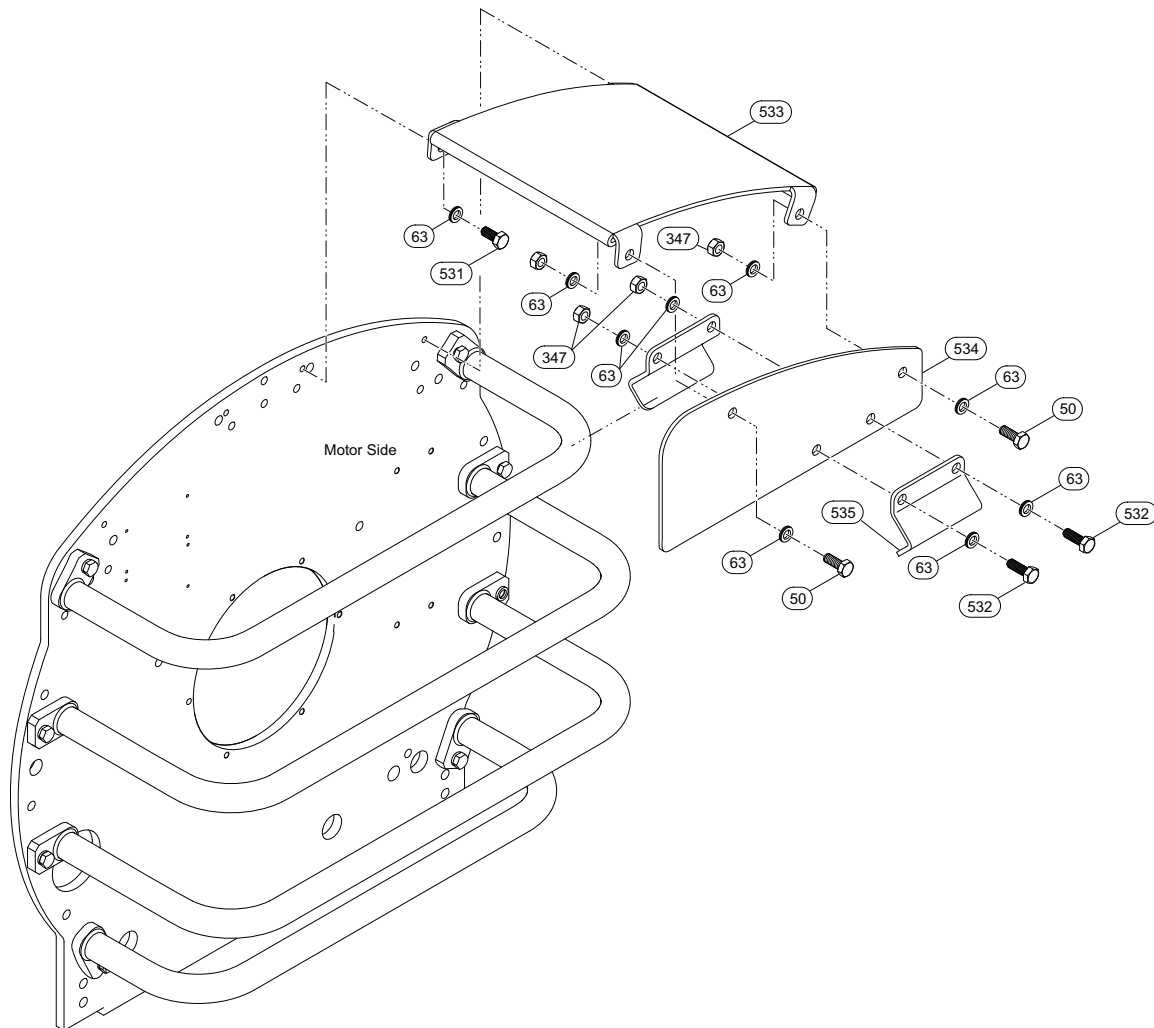


Table 8. Operator Guard Assembly - Parts List (Parts After 11/19/2021)

Item No.	Description of Part	Total Qty	Part Number (CCN)
50 (a)	Capscrew	2	4102-4701 (46898292)
63 (a)	Lockwasher	10	4510-1206 (46898284)
347 (a)	Nut	4	4300-9311 (46898300)
531 (a)	Capscrew	2	(47535446001)
532 (a)	Capscrew	2	(47535447001)
533 (a) (b)	Guard, Top	1	(47535510001)
534 (a) (b)	Guard, Side	1	(47535511001)
535 (a)	Clamp	2	(47535512001)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

Table 9. Operator Guard Assembly Service and Replacement Kit List (Parts After 11/19/2021)

Item No.	Description of Part	Total Qty	Part Number (CCN)
939	RPK: MR150K Operator Guard (includes items: 50, 63, 347, 531, 532, 533-535)	1	(47543414001)

# Automatic Band Drum Brake Assembly

Figure 5. Automatic Band Drum Brake Assembly Drawing (MHP3298)

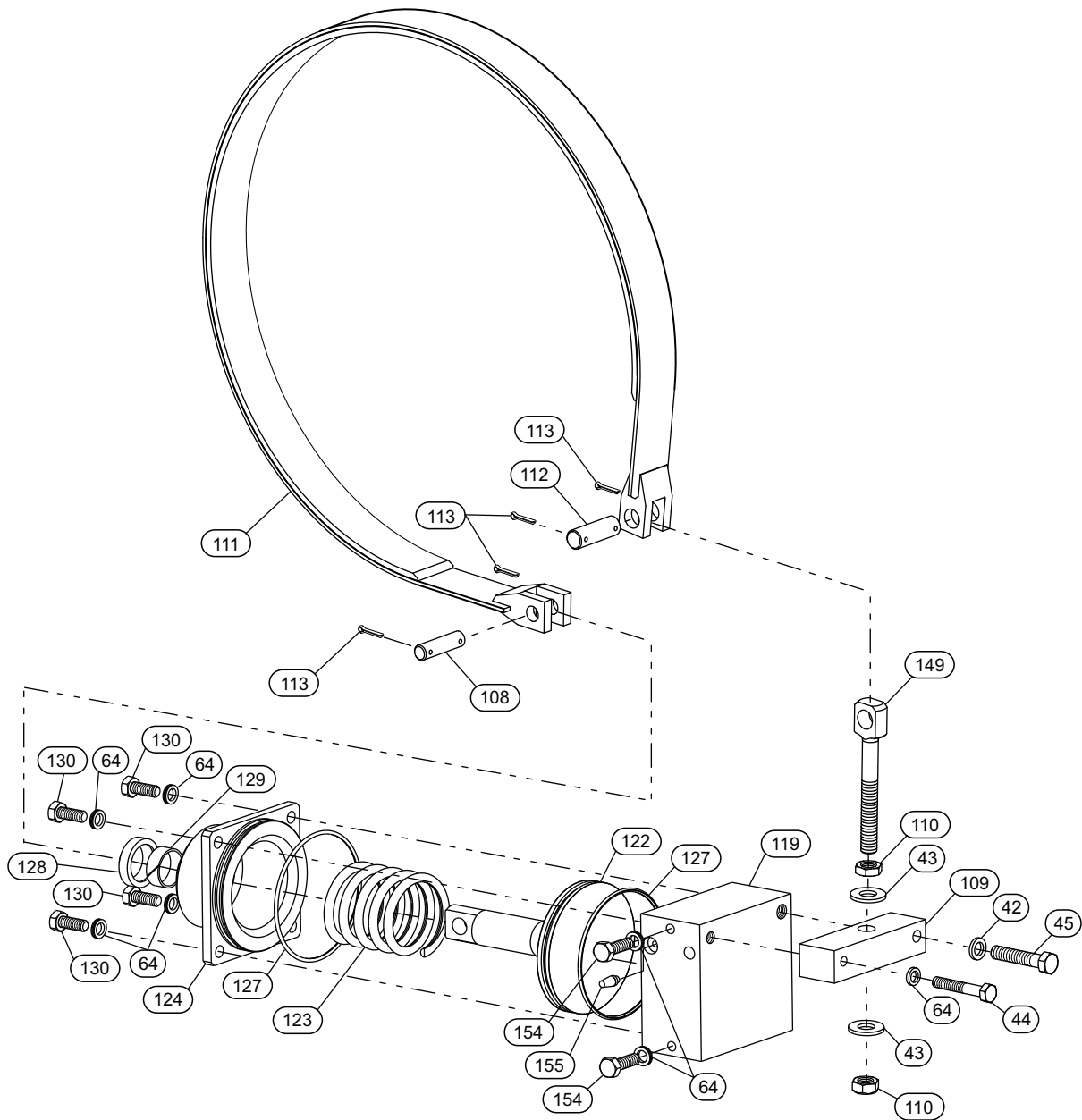


Table 10. Automatic Band Drum Brake Assembly - Parts List (for MK1, MK2 & MK3)

Item No.	Description of Part	Total Qty	Part Number (CCN)
8 (b) (a)	Capscrew	4	4102-5701 (46898847)
42 (a)	Lockwasher	1	4510-0210 (38797353)
43 (a)	Washer	2	4500-1112 (38633822)
44 (a)	Capscrew	1	4102-5601 (46898839)
45 (a)	Capscrew	1	4102-5501 (46898821)
64 (a)	Lockwasher	7	4510-1208 (46898730)
108	Pin	1	9615-7175 (38541108)
109	Connection Block	1	9653-0032 (46895090)
110 (a)	Locknut	2	(45983731)

## Automatic Band Drum Brake Assembly

**Table 10. Automatic Band Drum Brake Assembly - Parts List (for MK1, MK2 & MK3) (continued)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
111 (a) (b)	Band Brake	1	9653-0080 (46899803)
112	Pin	1	9653-0079 (46899795)
113 (a)	Cotter Pin	4	4630-2019 (38539235)
117 (a)	Cover	1	9653-0061 (46897047)
119 (a)	Brake Housing	1	9653-0029 (46895066)
122 (a)	Brake Piston	1	9647-0013 (38756672)
123 (a)	Spring	1	6918-9041 (38756987)
124 (a)	Brake Cover	1	9653-0061 (46897047)
127 (a)	O' Ring	2	5823-8829 (38757001)
128 (a)	Oil Seal	1	5810-5830 (38530309)
129 (a)	Ring	1	9647-0029 (38756821)
130 (a)	Capscrew	4	4102-5701 (46898847)
143 (a)	Ring	1	9647-0029 (38756821)
144 (a)	Spring	1	6918-9041 (38756987)
145 (a)	'O' Ring	2	5823-8829 (38757001)
146 (a)	Piston	1	9647-0013 (38756672)
147 (a) (b)	Brake Cylinder Assembly	1	3653-0015 (46894168)
149	Adjustment Screw	1	9653-0031 (46895082)
154 (a)	Capscrew	2	4102-5801 (46898854)
155 (a)	Breather	1	6848-9232 (38529996)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

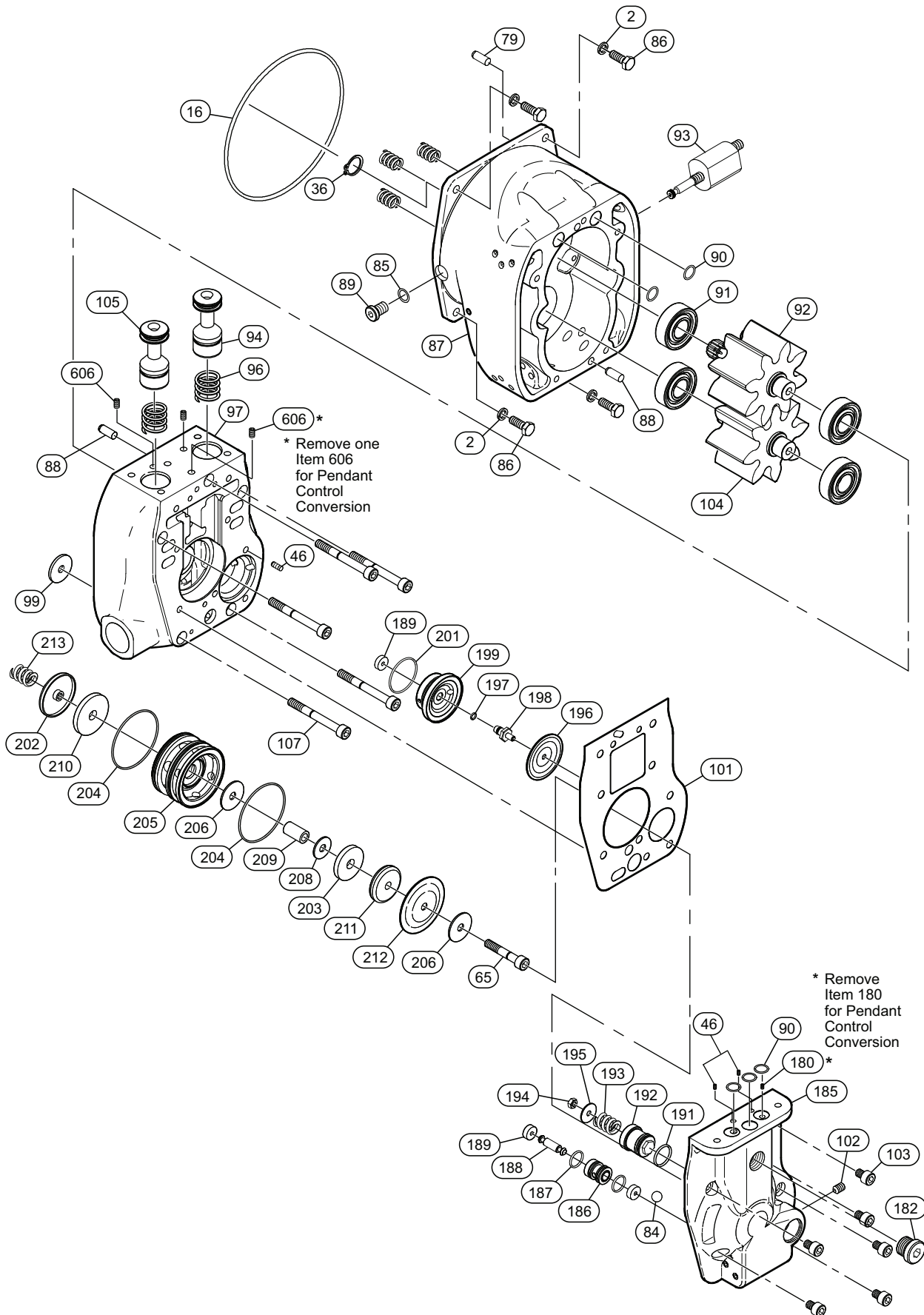
**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

**Table 11. Automatic Band Drum Brake Assembly Service and Replacement Kit List (for MK1, MK2 & MK3)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
927	RBK – MR150–B–Band Rebuild Kit Brake Band (includes items: 42, 43, 44, 45, 64, 110, 111, 112, 113 and 149)	1	7650-0511 (47513419012)
928	RPK MR150K Band Brake Cylinder (includes items: 64, 108, 113, 123, 127, 128, 129 and 155)	1	7650-0547 (47695169001)

# Motor and Overload Assembly for MK1 & MK2

Figure 6. Motor and Overload Assembly Drawing (MHP3375) (Assembly Before 11/19/2021)



## Motor and Overload Assembly for MK1 & MK2

**Table 12. Motor and Overload Assembly - Parts List (Parts Before 11/19/2021)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
2 (a)	Lockwasher	4	4520-1006 (38540142)
14 (a)	Plug	1	6511-0441 (38648184)
16 (a)	'O' Ring	2	5823-5229 (38548236)
36 (a)	Retainer Ring	1	4770-0015 (38522264)
40 (a)	Fitting	1	6136-9228 (47531669001)
46 (a)	Setscrew	3	4200-8407 (38511713)
65 (a)	Capscrew	1	4130-1106 (38535779)
79 (a)	Dowel Pin	1	4600-0416 (38522827)
84 (a)	Ball	1	6940-1625 (38542924)
85 (a)	Gasket	1	9644-1503 (38767372)
86 (a)	Capscrew	4	4102-3001 (38749602)
87 (a) (b)	Housing	1	9653-0048 (46896059)
88 (a)	Dowel Pin	2	4600-1116 (38522231)
90 (a)	'O' Ring	5	5823-7429 (38597241)
91 (a)	Bearing	4	5016-0002 (38636999)
92 (a) (b)	Drive Gear (includes item 104)	1 set	7644-1979 (46888764)
93	Connection Assembly	1	3653-0028 (46894804)
94 (a)	Valve, Lifting (includes 'O' rings) (kit 430; 45978467)	1	7647-0063 (38759734)
96 (a)	Spring	2	6919-0341 (38758272)
97 (a) (b)	Motor Cover	1	9644-1023 (38577912)
99 (a)	Exhaust Washer	1	9647-0236 (38778304)
101 (a)	Gasket	1	9644-1188 (38634770)
102 (a)	Setscrew	1	4200-9207 (38597266)
103 (a)	Capscrew	7	4133-2306 (38597506)
104 (a) (b)	Idle Gear (includes item 92)	1 set	7644-1979 (46888764)
105 (a)	Valve, Lowering (includes 'O' rings)	1	7647-0064 (38759742)
107 (a)	Capscrew	5	4133-2206 (38597498)
152 (a)	Brass Adapter	1	6823-7528 (38563789)
166 (a)	'O' Ring	1	5820-9229 (38534517)
180 (a)	Nozzle	1	9644-1187 (38634762)
182 (a)	Plug	1	6512-8928 (38648291)
185 (a) (b)	Emergency Stop End Cover	1	9644-1077 (38593554)
186 (a)	Valve Seat	1	9644-1106 (38593562)
187 (a)	'O' Ring	2	5820-5029 (38522645)
188 (a)	Axle	1	9644-1105 (38593638)
189 (a)	Seal	3	9644-1103 (38593653)
191 (a)	'O' Ring	1	5821-1729 (38524401)
192 (a)	Regulating Screw	1	9644-1096 (38593588)
193 (a)	Spring	1	6913-7041 (38570743)
194 (a)	Nut	1	4300-1111 (38633046)
195 (a)	Washer	1	4570-1004 (38570792)



## Motor and Overload Assembly for MK1 & MK2

**Table 12. Motor and Overload Assembly - Parts List (Parts Before 11/19/2021) (continued)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
196 <sup>(a)</sup>	Diaphragm	1	9644-1097 (38593679)
197 <sup>(a)</sup>	'O' Ring	1	5822-2329 (38522702)
198 <sup>(a)</sup>	Valve Cone	1	9636-0017 (38745626)
199 <sup>(a)</sup>	Base Plate	1	9644-1095 (38593620)
201 <sup>(a)</sup>	'O' Ring	1	5823-7029 (38570750)
202 <sup>(a)</sup>	Cap	1	9644-1101 (38593604)
203 <sup>(a)</sup>	Seal	1	9617-0056 (38544300)
204 <sup>(a)</sup>	'O' Ring	2	5823-7129 (38570768)
205 <sup>(a)</sup>	Valve Seat	1	9644-1098 (38593570)
206 <sup>(a)</sup>	Washer	2	4570-1006 (38570784)
208 <sup>(a)</sup>	Washer	1	4560-1006 (38570800)
209 <sup>(a)</sup>	Sleeve	1	9644-1102 (38593661)
210 <sup>(a)</sup>	Seal	1	9644-1104 (38593596)
211 <sup>(a)</sup>	Cap	1	9644-1100 (38593612)
213 <sup>(a)</sup>	Spring	1	6915-8732 (38525333)
606 <sup>(a)</sup>	Setscrew	7	4200-7407 (38540498)

<sup>(a)</sup> Item available in a kit, see kit list below for details.

<sup>(b)</sup> Item not sold individually.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.  
For pendent control remove (1) each of item 180 and 606, refer to [Figure 6, p. 15](#).

**Table 13. Motor and Overload Assembly Service and Replacement Kit List (Parts Before 11/19/2021)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
919	RPK-MR150-M Repair Kit Motor (includes items: 2, 14, 16, 18, 24, 26, 36, 40, 65, 84-86, 90, 91, 94, 96, 101-103, 105, 107, 152, 166, 326, 922)	1	7650-0525 (47513419026)
920	RBK-MR150-M Rebuild Kit Motor (includes items: 82, 88, 92, 99, 104, 180, 192, 193, 213, 919)	1	7650-0526 (47513419027)
922	RBK-MR150-P-Head Rebuild Kit Power Head (includes kits 7650-0526, 7650-0512, 7650-0520)	1	7650-0529 (47513419030)
925	MR150-Motor Only (Less Brake)	1	7650-0539 (47513419040)
945	MR150-Motor With Brake	1	7650-0538 (47513419039)
946	MR150-Power-Head Power Head Assembly	1	7650-0537 (47513419038)
947	MR150-E Stop Section Emergency Stop Section (includes items: 46, 84, 90, 101, 102, 103, 180, 182, 186, 187, 188, 189, 191, 192, 193, 194, 195)	1	7650-0542 (47513921001)

**Table 14. Parts used on winches with serial number prior to 31.12.19**

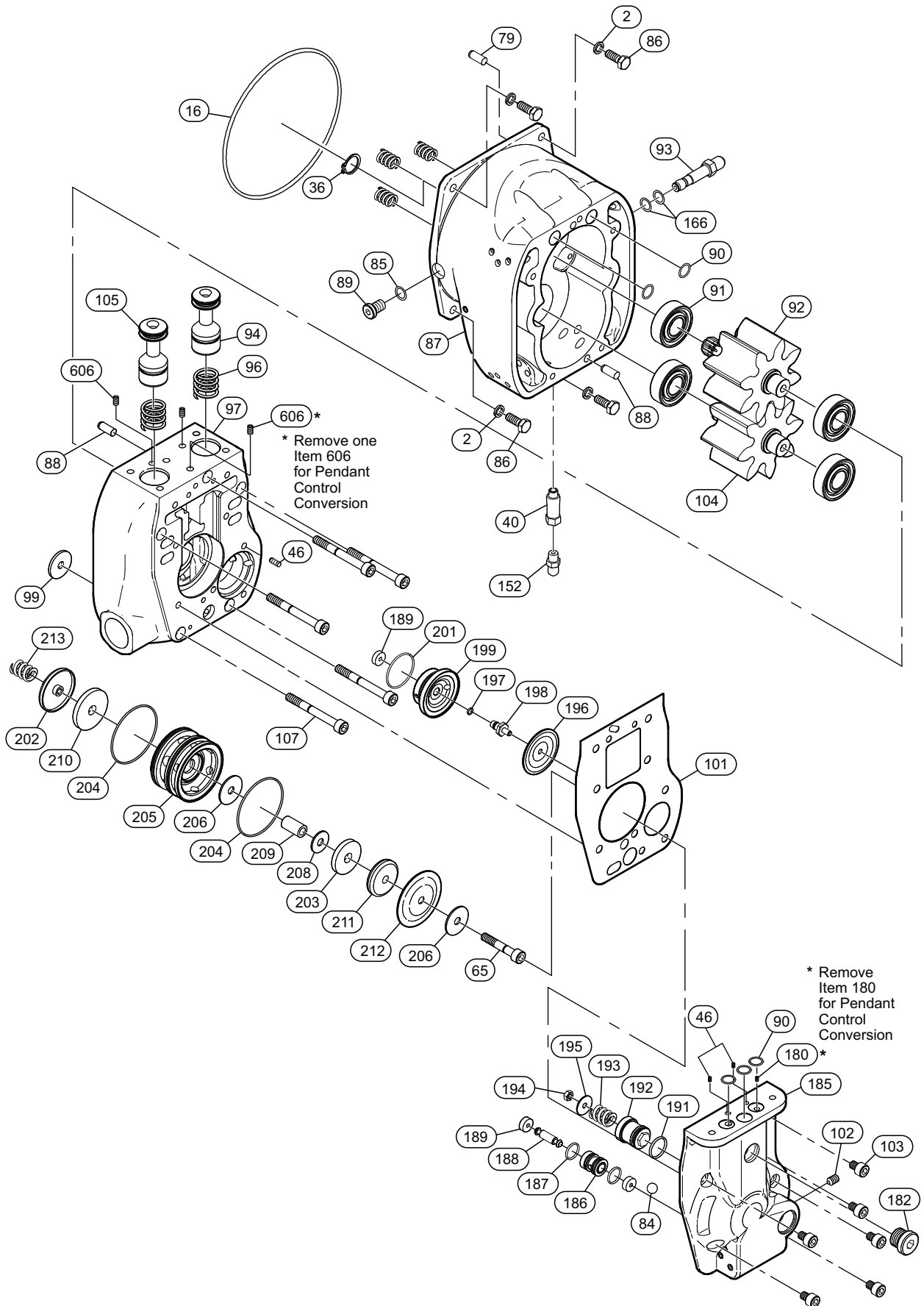
Item No.	Description of Part	Total Qty	Part Number (CCN)
212	Kit PR of Diaphragm	1	7652-2379 (47560888001)

**Table 15. Parts used on winches with serial number 16.01.01**

Item No.	Description of Part	Total Qty	Part Number (CCN)
212	Diaphragm	1	9652-3386 (47565204001)

# Motor and Overload Assembly for MK3

Figure 7. Motor and Overload Assembly Drawing (MHP4512) (Assembly After 11/19/2021)



**Table 16. Motor and Overload Assembly - Parts List (Parts After 11/19/2021)**

<b>Item No.</b>	<b>Description of Part</b>	<b>Total Qty.</b>	<b>Part Number (CCN)</b>
2 (a)	Lockwasher	4	4520-1006 (38540142)
16 (a)	'O' Ring	2	5823-5229 (38548236)
36 (a)	Retainer Ring	1	4770-0015 (38522264)
40 (a)	Fitting	1	6136-9228 (47531669001)
46 (a)	Setscrew	3	4200-8407 (38511713)
65 (a)	Capscrew	1	4130-1106 (38535779)
79 (a)	Dowel Pin	1	4600-0416 (38522827)
84 (a)	Ball	1	6940-1625 (38542924)
85 (a)	Gasket	1	9644-1503 (38767372)
86 (a)	Capscrew	4	4102-3001 (38749602)
87 (a) (b)	Housing	1	9653-0048 (46896059)
88 (a)	Dowel Pin	2	4600-1116 (38522231)
90 (a)	'O' Ring	5	5823-7429 (38597241)
91 (a)	Bearing	4	5016-0002 (38636999)
92 (a) (b)	Drive Gear (includes item 104)	1 set	7644-1979 (46888764)
93 (a)	Brass Adapter	1	9653-0190 (47695983001)
94 (a)	Valve, Lifting (includes 'O' rings) (kit 430; 45978467)	1	7647-0063 (38759734)
96 (a)	Spring	2	6919-0341 (38758272)
97 (a) (b)	Motor Cover	1	9644-1023 (38577912)
99 (a)	Exhaust Washer	1	9647-0236 (38778304)
101 (a)	Gasket	1	9644-1188 (38634770)
102 (a)	Setscrew	1	4200-9207 (38597266)
103 (a)	Capscrew	7	4133-2306 (38597506)
104 (a) (b)	Idle Gear (includes item 92)	1 set	7644-1979 (46888764)
105 (a)	Valve, Lowering (includes 'O' rings)	1	7647-0064 (38759742)
107 (a)	Capscrew	5	4133-2206 (38597498)
152 (a)	Brass Adapter	1	6823-7528 (38563789)
166 (a)	'O' Ring	2	5820-9229 (38534517)
180 (a)	Nozzle	1	9644-1187 (38634762)
182 (a)	Plug	1	6512-8928 (38648291)
185 (a) (b)	Emergency Stop End Cover	1	9644-1077 (38593554)
186 (a)	Valve Seat	1	9644-1106 (38593562)
187 (a)	'O' Ring	2	5820-5029 (38522645)
188 (a)	Axle	1	9644-1105 (38593638)
189 (a)	Seal	3	9644-1103 (38593653)
191 (a)	'O' Ring	1	5821-1729 (38524401)
192 (a)	Regulating Screw	1	9644-1096 (38593588)
193 (a)	Spring	1	6913-7041 (38570743)
194 (a)	Nut	1	4300-1111 (38633046)
195 (a)	Washer	1	4570-1004 (38570792)
196 (a)	Diaphragm	1	9644-1097 (38593679)

## Motor and Overload Assembly for MK3

**Table 16. Motor and Overload Assembly - Parts List (Parts After 11/19/2021) (continued)**

Item No.	Description of Part	Total Qty.	Part Number (CCN)
197 (a)	'O' Ring	1	5822-2329 (38522702)
198 (a)	Valve Cone	1	9636-0017 (38745626)
199 (a)	Base Plate	1	9644-1095 (38593620)
201 (a)	'O' Ring	1	5823-7029 (38570750)
202 (a)	Cap	1	9644-1101 (38593604)
203 (a)	Seal	1	9617-0056 (38544300)
204 (a)	'O' Ring	2	5823-7129 (38570768)
205 (a)	Valve Seat	1	9644-1098 (38593570)
206 (a)	Washer	2	4570-1006 (38570784)
208 (a)	Washer	1	4560-1006 (38570800)
209 (a)	Sleeve	1	9644-1102 (38593661)
210 (a)	Seal	1	9644-1104 (38593596)
211 (a)	Cap	1	9644-1100 (38593612)
213 (a)	Spring	1	6915-8732 (38525333)
606 (a)	Setscrew	7	4200-7407 (38540498)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.  
For pendent control remove (1) each of item 180 and 606, refer to [Figure 7, p. 18](#).

**Table 17. Motor and Overload Assembly Service and Replacement Kit List (Parts After 11/19/2021)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
919	RPK-MR150-M Repair Kit Motor (includes items: 2, 14, 16, 18, 24, 26, 36, 40, 65, 84-86, 90, 91, 94, 96, 101-103, 105, 107, 152, 166, 326, 922)	1	7650-0525 (47513419026)
920	RBK-MR150-M Rebuild Kit Motor (includes items: 82, 88, 92, 99, 104, 180, 192, 193, 213, 919)	1	7650-0526 (47513419027)
922	RRBK-MR150-P-Head Rebuild Kit Power Head (includes kits 7650-0526, 7650-0512, 7650-0520)	1	7650-0529 (47513419030)
925	MR150-Motor Only (Less Brake)	1	7650-0539 (47513419040)
945	MR150 - Motor with Brake	1	7650-0538 (47513419039)
946	MR150 - Powerhead Assembly	1	7650-0537 (47513419038)
947	MR150 - Emergency Stop Section (includes items: 46, 84, 90, 101, 102, 103, 180, 182, 186, 187, 188, 189, 191, 192, 193, 194, 195)	1	7650-0542 (47513921001)

# Reduction Gear and Disc Brake Assembly for MK1, MK2 & MK3

Figure 8. Reduction Gear and Disc Brake Assembly Drawing (MHP3376)

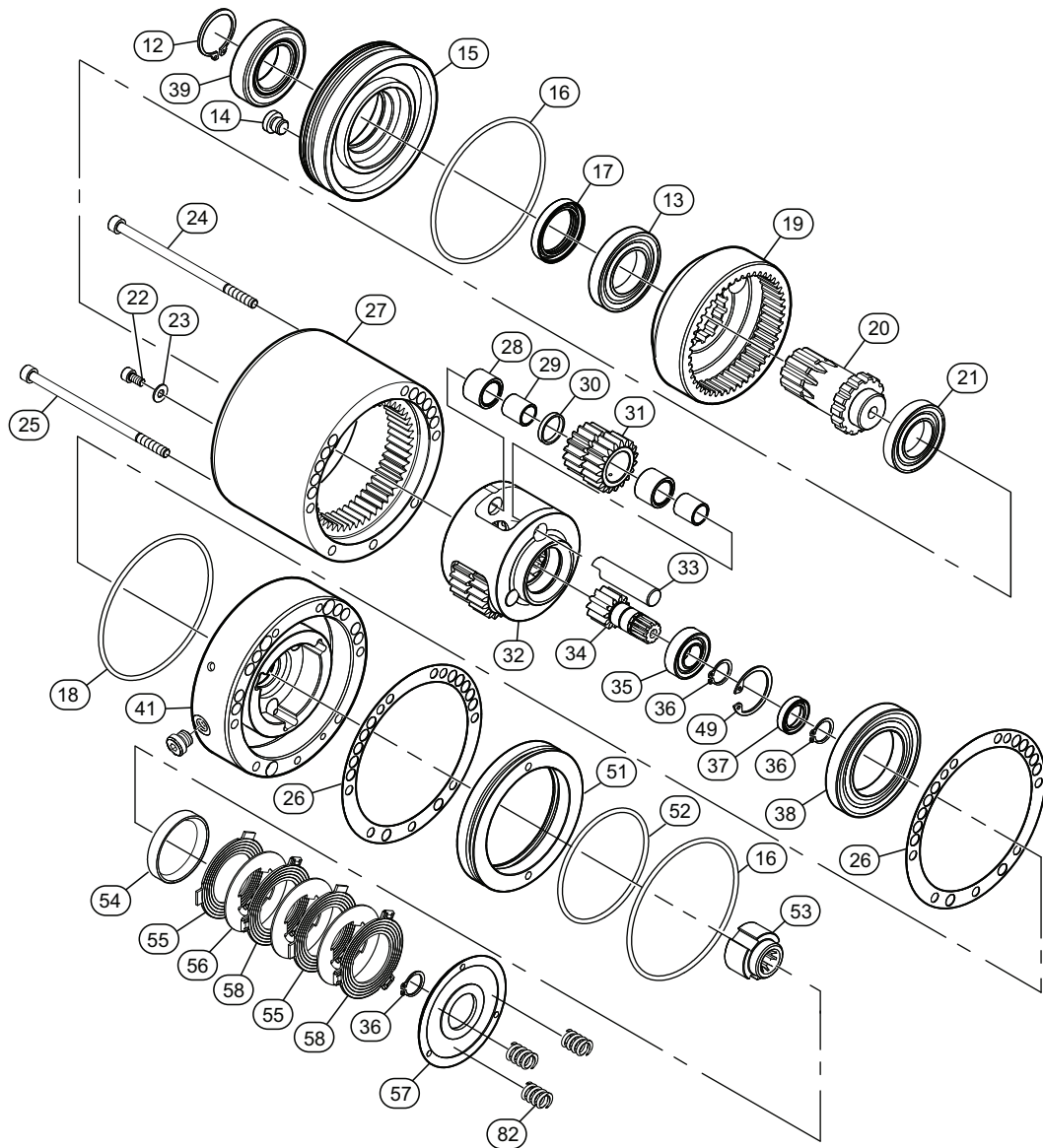


Table 18. Reduction Gear and Disc Brake Assembly - Parts List

Item No.	Description of Part	Total Qty	Part Number (CCN)
12 (a)	Retainer Ring	1	4770-0029 (38522272)
13 (a)	Bearing	1	5080-0006 (38522157)
14 (a)	Plug	1	6511-0441 (38648184)
15 (a)	Reduction Gear End Cover	1	9644-2010 (38577854)
16 (a)	'O' Ring	1	5823-5229 (38548236)
17 (a)	Oil Seal	1	5801-3430 (38533212)
18 (a)	'O' Ring	1	5823-9129 (38767380)
19 (a)	Ring Gear (48 teeth)	1	9644-1003 (38577698)
20 (a)	Output Shaft	1	9644-2011 (38577862)
21 (a)	Bearing	1	5080-0005 (38522140)

## Reduction Gear and Disc Brake Assembly for MK1, MK2 & MK3

**Table 18. Reduction Gear and Disc Brake Assembly - Parts List (continued)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
22 (a)	Capscrew	3	4132-6306 (38543427)
23 (a)	Washer	3	4500-1105 (38633806)
24 (a)	Capscrew	5	4133-2406 (38597548)
25 (a)	Capscrew	1	4133-2506 (38597563)
26 (a)	Gasket	2	9644-1048 (38578258)
27 (a) (b)	Reducer Housing	1	9644-1007 (38577714)
28 (a)	Needle Bearing	6	5656-2141 (38597225)
29 (a)	Bearing Ring	6	5636-2041 (38597217)
30 (a)	Spacer	3	9644-1047 (38578134)
31 (a)	Planet Gear	3	9644-1002 (38577672)
32 (a)	Planet Gear Support	1	9644-1006 (38577706)
33 (a)	Gear Shaft	3	9644-1046 (38578126)
34 (a)	Sun Gear	1	9644-2004 (38577847)
35 (a)	Bearing	1	5000-0002 (38522116)
36 (a)	Retainer Ring	2	4770-0015 (38522264)
37 (a)	Oil Seal	1	5801-9830 (38540456)
38 (a)	Bearing	1	5080-0009 (38522165)
39 (a)	Bearing	1	5005-0006 (38522124)
41	Housing	1	9644-0574 (38776258)
49	Retainer Ring	1	4770-3032 (38522280)
51 (a)	Piston	1	9644-1014 (38578274)
52 (a)	'O' Ring	1	5823-5129 (38548228)
53 (a)	Splined Hub	1	9644-1013 (38577748)
54 (a)	Spacer	1	9647-0047 (38758017)
55 (a)	Friction Plate	2	6302-8241 (38548186)
56 (a)	Drive Plate	3	6302-8341 (38548194)
57 (a)	Brake Reaction Plate	1	9644-1015 (38577763)
58 (a)	Friction Plate with Spring	2	9644-1552 (38774139)
82 (a)	Spring	3	6916-5532 (38522587)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

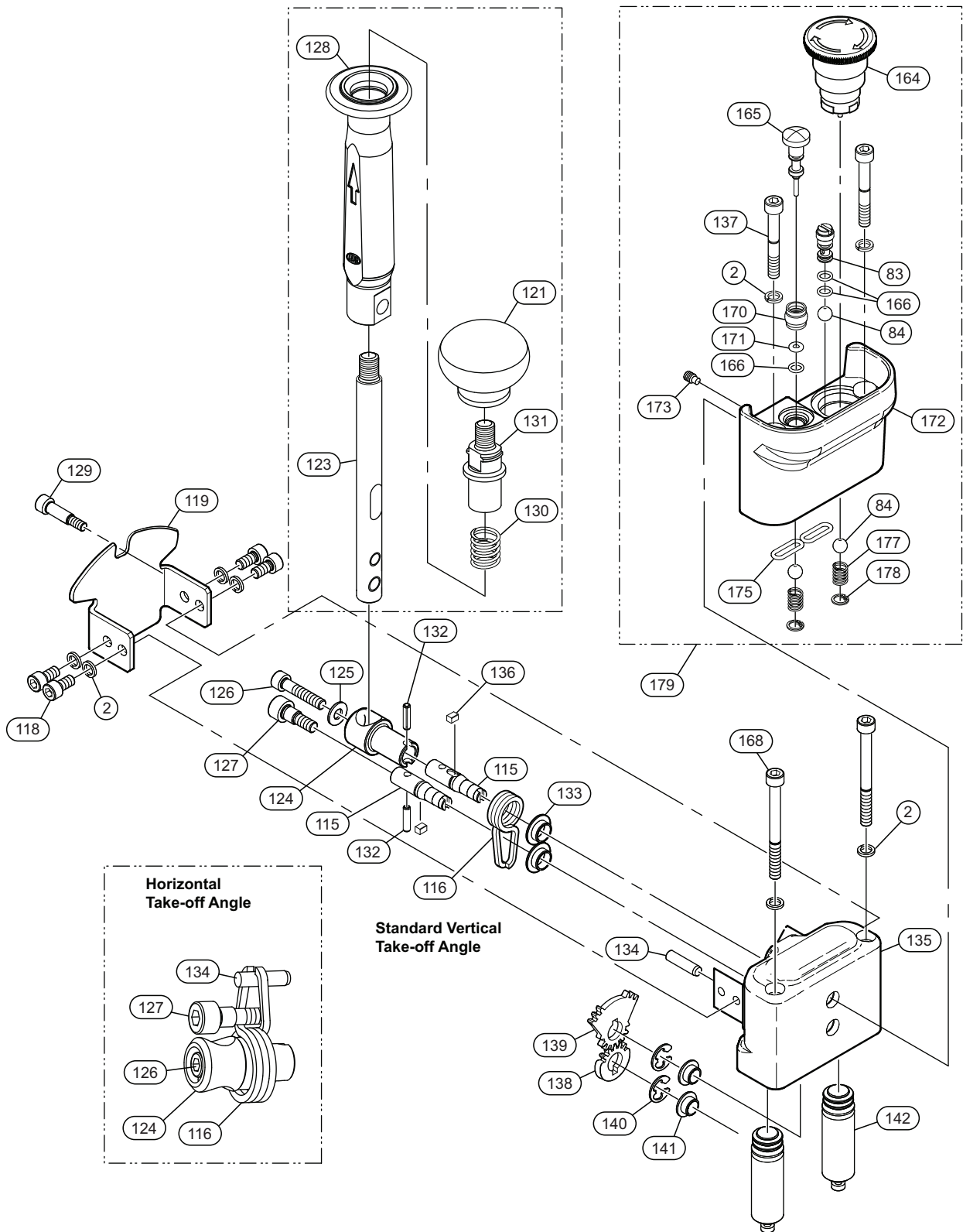
**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

**Table 19. Reduction Gear and Disc Brake Assembly Service and Replacement Kit List**

Item No.	Description of Part	Total Qty	Part Number (CCN)
924	RPK - MR150 Repair Kit Gear Box	1	7650-0519 (47513419020)
938	RPK - MR150-B-Disc Repair Kit Brake Disc	1	7650-0512 (47513419013)
939	RBK - MR150-G-Box Rebuild Kit Gear Box	1	7650-0520 (47513419021)
940	MR150 Reducer + Brake Assembly	1	7650-0541 (47513794001)

# Control Valve and Emergency Stop Assembly for MK1, MK2 & MK3

Figure 9. Control Valve and Emergency Stop Assembly Drawing (MHP3307)



## Control Valve and Emergency Stop Assembly for MK1, MK2 & MK3

**Table 20. Control Valve and Emergency Stop Assembly - Parts List**

Item No.	Description of Part	Total Qty	Part Number (CCN)
2 (a)	Lockwasher	8	4520-1006 (38540142)
83 (a)	Check Valve	1	9579-0106 (38551198)
84 (a)	Ball	3	6940-1625 (38542924)
115 (a)	Spindle Shaft	2	9644-0413 (38760435)
116 (a)	Spring	1	9644-1421 (38760518)
118 (a)	Capscrew	4	4132-4306 (38632089)
119 (a)	Stop Plate	1	9644-2749 (38794285)
121 (a)	Ball, Handle	1	(71348353)
123 (a)	Spool, Handle	1	47535399 (47535399001)
124 (a)	Coupling	1	9644-1422 (38760526)
125 (a)	Washer	1	4500-1106 (38543468)
126 (a)	Capscrew	1	4132-2306 (38540183)
127 (a)	Shoulder Screw	1	9644-1108 (38595492)
128 (a)	Lever Shaft	1	47535398 (47535398001)
129 (a)	Shoulder Screw	1	4133-5606 (46898268)
130 (a)	Spring	1	(71348346)
131 (a)	Post, Handle	1	382-32532 (43803626)
132 (a)	Roll Pin	2	4650-8320 (38592333)
133 (a)	Bushing	2	5900-8726 (38592291)
134 (a)	Pin	1	4600-1216 (38522835)
135 (a)	Valve Housing	1	9647-0038 (38757506)
136 (a)	Key	2	9644-0415 (38760450)
137 (a)	Capscrew	2	4132-1706 (38631917)
138 (a)	Gear (includes items 140 and 115)	1 set	7644-0417 (46880985)
139 (a)	Gear Cam		
140 (a)	Retainer	2	4783-7241 (38592341)
141 (a)	Bushing	2	5900-8826 (38592770)
142 (a)	Spool	2	9644-0414 (38760443)
164 (a)	Valve, Emergency Stop	1	9579-0108 (38551180)
165 (a)	Valve	1	9579-0104 (38550190)
166 (a)	'O' Ring	3	5820-9229 (38534517)
168 (a)	Capscrew	2	4133-2106 (38597233)
170 (a)	Protector	1	9579-0107 (38554580)
171 (a)	'O' Ring	1	5823-5329 (38550208)
172 (a)	Emergency Stop Housing	1	9644-2091 (38592390)
173 (a)	Screw	1	4200-8307 (38633004)
175 (a)	'O' Ring	2	5821-6529 (38640629)
177 (a)	Spring	2	6912-8541 (38553889)
178 (a)	Retainer Ring	2	4771-3009 (38592408)
179 (a) (b)	Emergency Stop Assembly (includes items 2[2 ea], 83, 84, 137, 161, 164-166, 170, 172, 173, 175, 177 and 178)	1	7644-1116 (38767315)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.



## Control Valve and Emergency Stop Assembly for MK1, MK2 & MK3

**Table 21. Control Valve and Emergency Stop Assembly Service and Replacement Kit List**

<b>Item No.</b>	<b>Description of Part</b>	<b>Total Qty</b>	<b>Part Number (CCN)</b>
926	Emergency Stop Module	1	7644-1116 (38767315)
930	RPK - MR150K V-L Repair Kit Valve Lever	1	7650-0533 (47513419034)
931	MR150K Reverse Valve - Vertical Rope Entry	1	7653-0176 (47632282001)
932	RBK - MR150K-V-L Rebuild Kit Valve Lever	1	7650-0534 (47513419035)
941	Repair Kit: E-Stop Button (includes items: 2, 83, 84, 90, 137, 166, 170, 171, 173, 175, 177, 178)	1	7650-0515 (47513419016)
944	Rebuild Kit: E-Stop Button (includes items: 164, 166, 941 and 7650-0515)	1	7650-0516(47513419017)
945	MR150K Horizontal Lever	1	7653-0177 (47632285001)

# Slackline Device Assembly for MK1 & MK2

Figure 10. Slackline Device Assembly Drawing (MHP3296) (Assembly Before 11/19/2021)

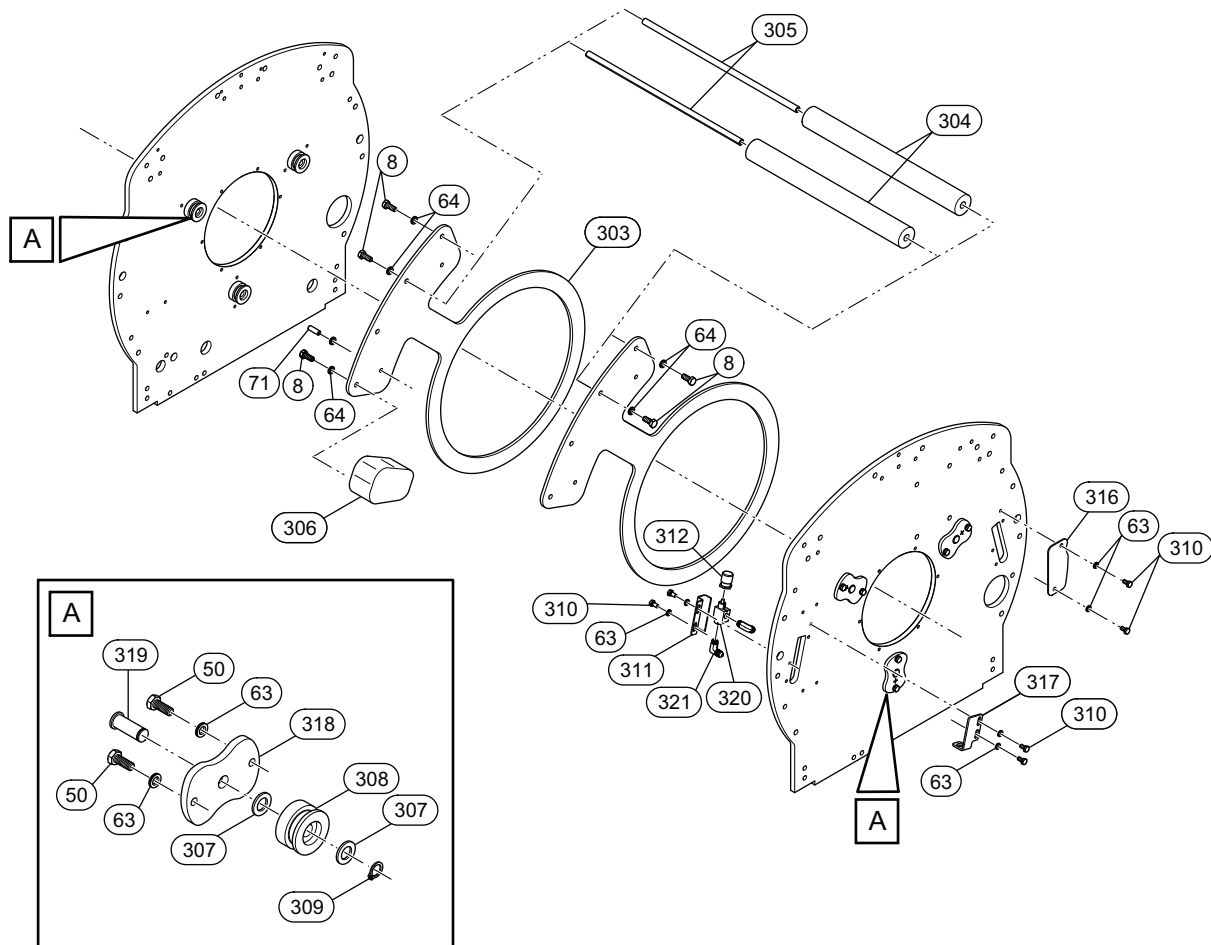


Table 22. Slackline Device Assembly - Parts List (Parts Before 11/19/2021)

Item No.	Description of Part	Total Qty	Part Number (CCN)
8 (a)	Capscrew	5	4102-0501 (38560868)
50 (a)	Capscrew	12	4102-4701 (46898292)
63 (a)	Lockwasher	18	4510-1206 (46898284)
64 (a)	Lockwasher	5	4510-1208 (46898730)
71 (a)	Dowel Pin	1	(47528781001)
303 (a)	Arm	2	9653-0107 (46003737)
304 (a)	Roller	2	9653-0017 (46894424)
305 (a)	Roller Axle	2	9653-0016 (46894416)
306 (a) (b)	Counterweight	1	9653-0138 (47529514001)
307 (a)	Washer	12	(47529996001)
308 (a) (b)	Roller, Insert	6	9653-0139 (47529583001)
309 (a)	Retainer	6	(47529997001)
310 (a)	Capscrew	6	4102-2301 (38598546)
311 (a) (b)	Sensor	1	9653-0132 (47529439001)
312 (a)	Push Button	1	(45895034)
316 (a) (b)	Cover	1	9653-0134 (47529470001)

## Slackline Device Assembly for MK1 & MK2

**Table 22. Slackline Device Assembly - Parts List (Parts Before 11/19/2021) (continued)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
317 (a)	Mounting Bracket	1	9653-0136 (47529479001)
318 (a)	Base	6	9653-0129 (47528846001)
319 (a)	Axle	6	9653-0130 (47529152001)
320 (a) (b)	Valve	1	47531871 (47531871001)
321 (a)	Fitting, Elbow	2	(71262299)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

**Note:** Hardware items may come in prepackaged amounts; “Total Qty” is usage per unit.

**Table 23. Slackline Device Assembly Service and Replacement Kit List (Parts Before 11/19/2021)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
914	RPK-MR150-SLK Repair Kit Slack Valve (includes items: 63, 307, 310, 311, 312, 317, 320, 321)	1	7650-0548 (47695149001)
915	RPK-MR150-SLK Repair Kit Slack Valve Cover (includes items: 63, 310, 316)	1	7650-0549 (47695110001)
916	RPK-MR150-SLK Repair Kit Slack (includes items: 8, 63, 64, 304, 307, 308, 309, 319)	1	7650-0531 (47513419032)

# Slackline Device Assembly for MK3

Figure 11. Slackline Device Assembly Drawing (MHP4478) (Assembly After 11/19/2021)

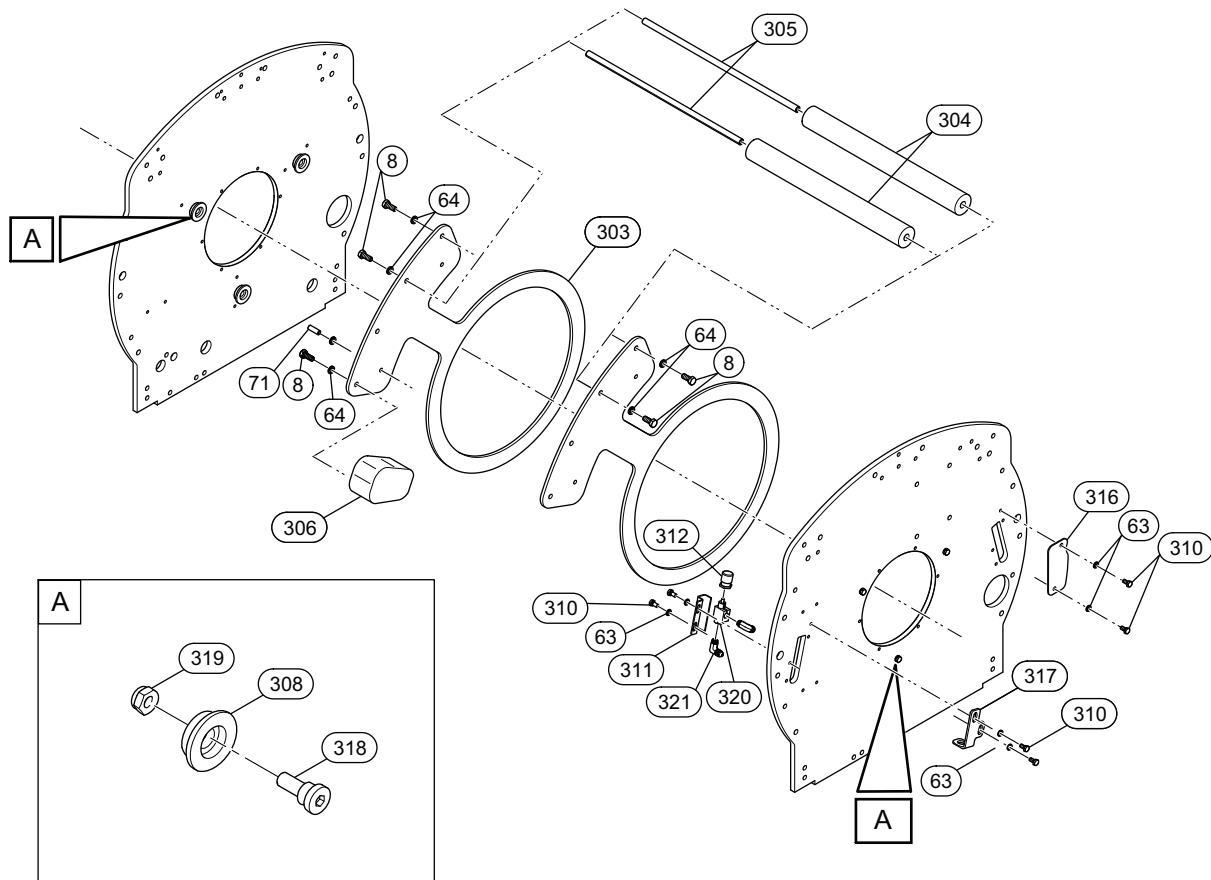


Table 24. Slackline Device Assembly - Parts List (Parts After 11/19/2021)

Item No.	Description of Part	Total Qty	Part Number (CCN)
8 (a)	Capscrew	5	4102-0501 (38560868)
63 (a)	Lockwasher	6	4510-1206 (46898284)
64 (a)	Lockwasher	5	4510-1208 (46898730)
71 (a)	Dowel Pin	1	(47528781001)
303 (a)	Arm	2	9653-0107 (46003737)
304 (a)	Roller	2	9653-0017 (46894424)
305 (a)	Roller Axle	2	9653-0016 (46894416)
306 (a) (b)	Counterweight	1	9653-0138 (47529514001)
308 (a) (b)	Roller	6	9653-0184 (47668748001)
310 (a)	Capscrew	6	4102-2301 (38598546)
311 (a) (b)	Sensor	1	9653-0132 (47529439001)
312 (a)	Push Button	1	(45895034)
316 (a) (b)	Cover	1	9653-0134 (47529470001)
317 (a)	Mounting Bracket	1	9653-0193 (47750940001)
318 (a)	Axle	6	9653-0183 (47668753001)
319 (a)	Locknut	6	4370-6511 (38633491)

**Table 24. Slackline Device Assembly - Parts List (Parts After 11/19/2021) (continued)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
320 (a) (b)	Valve	1	47531871 (47531871001)
321 (a)	Fitting, Elbow	2	(71262299)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

**Note:** Hardware items may come in prepackaged amounts; **"Total Qty"** is usage per unit.

**Table 25. Slackline Device Assembly Service and Replacement Kit List (Parts After 11/19/2021)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
916	RPK-MR150-SLK Repair Kit Slack Valve Cover (includes items: 63, 310, 316)	1	7650-0549 (47695110001)

# Press Roller Assembly for MK1, MK2 & MK3

Figure 12. Press Roller Assembly Drawing (MHP3313)

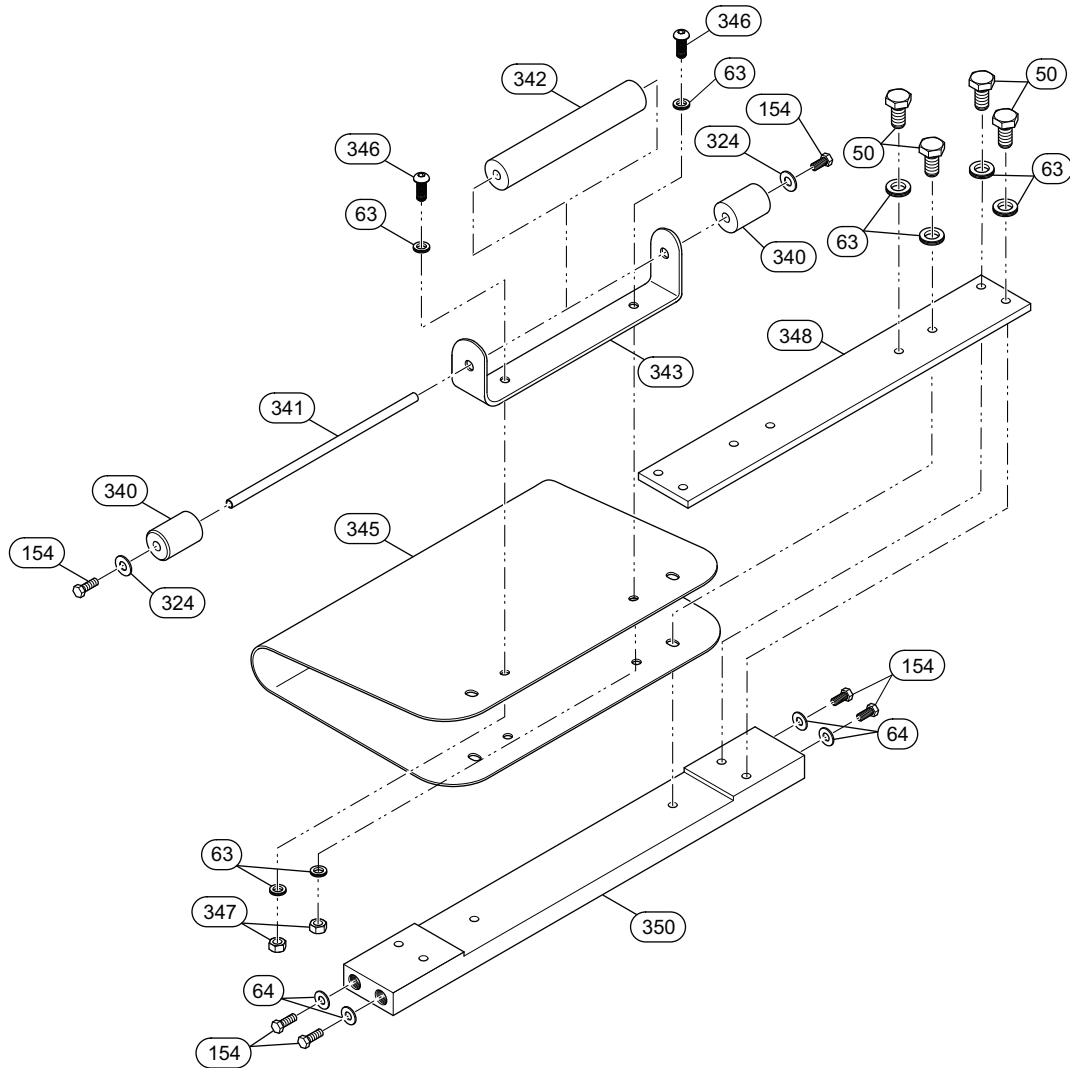


Table 26. Press Roller Assembly - Parts List

Item No.	Description of Part	Total Qty	Part Number (CCN)
50 (a)	Capscrew	6	4102-0301 (38560843)
63 (a)	Lockwasher	10	4510-0206 (38797304)
64 (a)	Lockwasher	4	4510-0208 (46889812)
154 (a)	Capscrew	6	4102-3401 (38765566)
324 (a)	Washer	2	(71431589)
340 (a) (b)	Roller, Short	2	9653-0068 (46897609)
341 (a)	Shaft	1	9653-0036 (46895207)
342 (a) (b)	Roller, Long	1	9653-0035 (46895199)
343 (a)	Bracket	1	9653-0067 (46897591)
345 (a)	Spring Frame	1	9653-0034 (46895181)
346 (a)	Screw, Buttonhead	2	(45977253)
347 (a)	Nut	2	4300-9311 (46898300)

## Press Roller Assembly for MK1, MK2 & MK3

**Table 26. Press Roller Assembly - Parts List (continued)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
348 <sup>(a)</sup>	Plate, Nut	1	(45989548)
350 <sup>(a)</sup> <sup>(b)</sup>	Clamp, Bottom	1	9653-0140 (47529589001)

<sup>(a)</sup> Item available in a kit, see kit list below for details.

<sup>(b)</sup> Item not sold individually.

**Note:** Hardware items may come in prepackaged amounts; **"Total Qty"** is usage per unit.

**Table 27. Press Roller Assembly Service and Replacement Kit List**

Item No.	Description of Part	Total Qty	Part Number (CCN)
912	RPK - MR150 Press Roller (includes items: 63, 324, 340, 342, 347)	1	7650-0530 (47513419031)
913	Press Roller subassembly	1	3653-0013 (46894143)

# Limit Switch Assembly for MK1, MK2 & MK3

Figure 13. Limit Switch Assembly Drawing (MHP4476)

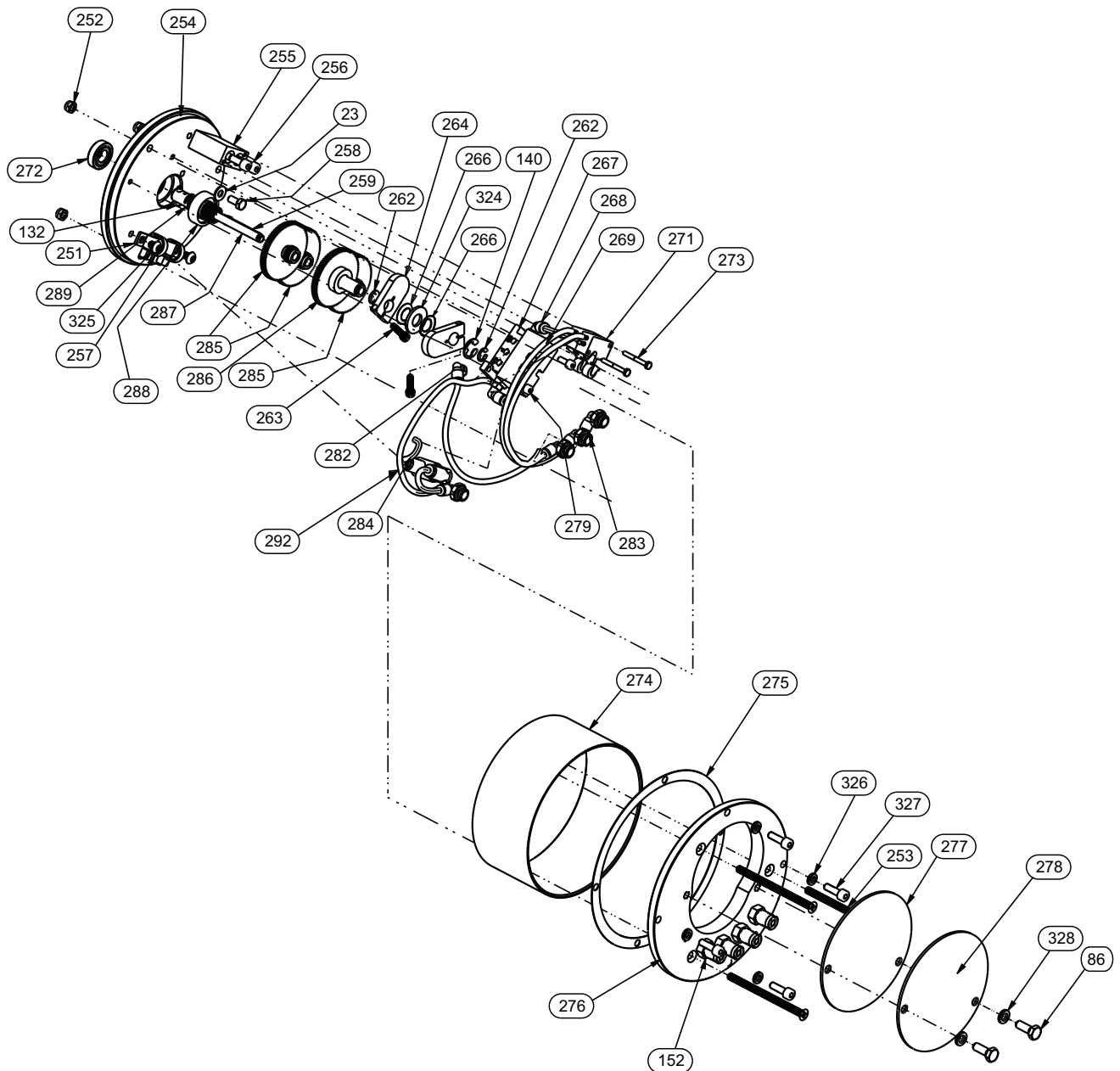


Table 28. Limit Switch Assembly - Parts List

Item No.	Description of Part	Total Qty	Part Number (CCN)
23 (a)	Washer	1	4500-1105 (38633806)
86 (a)	Capscrew	2	4102-3001 (38749602)
132 (a)	Pin	1	4650-8320 (38592333)
140 (a)	Retainer Ring	1	4783-7241 (38592341)
152 (a) (b)	Fitting, Adapter	4	6823-7528 (38563789)
251	Tie Mount	2	(4601-0252)
252 (a) (b)	Locknut	3	4370-7211 (38540688)
253 (a) (b)	Capscrew	3	(46010260)
254 (a) (b)	Support, Rear	1	9653-0155 (47537033001)



## Limit Switch Assembly for MK1, MK2 & MK3

**Table 28. Limit Switch Assembly - Parts List (continued)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
255 (a) (b)	Support	1	9651-0007 (38791588)
256 (a)(b)	Capscrew	2	4132-2706 (38543419)
257	Cable Tie	2	(03250776)
258 (a) (b)	Capscrew	1	4100-5101 (38535696)
259 (a) (b)	Axle	1	9651-0003 (38791547)
262 (a) (b)	Shoulder Collar	2	4780-3342 (38791612)
263 (a) (b)	Capscrew	2	4102-7901 (47535954001)
264	Cam Limit Switch	2	9651-0004 (38791554)
266 (a)(b)	Washer	2	6910-3442 (38791653)
267 (a)(b)	Base Plate	1	6859-8941 (38776340)
268 (a)(b)	Fitting, Elbow	2	9651-0032 (46890612)
269 (a) (b)	Valve	1	6859-8841 (38776332)
271 (a) (b)	Switch	2	6855-8741 (38590592)
272 (a) (b)	Bearing	1	(47535120)
273 (a) (b)	Capscrew	2	4101-9101 (38630638)
274 (a) (b)	Tube	1	9651-0036 (46893251)
275 (a) (b)	Gasket	1	9651-0042 (46893327)
276 (a) (b)	Support, Front	1	9651-0035 (46893285)
277 (a) (b)	'O' Ring	1	9651-0039 (46893293)
278 (a) (b)	Cover	1	9651-0040 (46893301)
279 (a) (b)	Capscrew	2	4131-6506 (38540647)
282 (a) (b)	Fitting, Elbow	1	6815-9828 (38793840)
283 (a) (b)	Fitting, Elbow	4	4689-7302 (46897302)
284 (a) (b)	Valve	1	4689-7484 (46897484)
285 (a) (b)	Pinion	3	9651-0017 (38793816)
286 (a) (b)	Support Cam	1	9651-0008 (38791596)
287 (a) (b)	Shaft	1	9651-0038 (46893277)
288 (a)(b)	Bearing	1	5005-0000 (38791620)
289 (a)(b)	Expansive Ring	1	(47578361001)
292 (a)(b)	Tube	1	6804-5328 (38582326)
324 (a)	Washer	1	4500-1110 (38539250)
±325 (b)	Capscrew	2	(46010278)
326 (a)	Lockwasher	4	4510-0205 (46892410)
327 (a) (b)	Capscrew	4	4132-2906 (38531562)
328 (a) (b)	Lockwasher	2	4510-0206 (38797304)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

## Limit Switch Assembly for MK1, MK2 & MK3

---

**Table 29. Limit Switch Assembly Replacement Kit List**

<b>Item No.</b>	<b>Description of Part</b>	<b>Total Qty</b>	<b>Part Number (CCN)</b>
933	MR150K Limit Switch Assembly	1	(47543382001)
934	RPK - MR150K-LS Repair Kit Limit Switch (includes items: 257, 327, 258, 324, 279, 252, 256, 152, 292, 271, 132, 140, 273, 23, 86, 269, 267, 264, 262, 288, 266, 282, 328, 251, 253, 325, 268, 326, 275, 283, 284, 263 and 289)	1	7650-0523 (47513419024)

# Emergency Lowering Device for MK2

Figure 14. Emergency Lowering Device Drawing (MHP3314) (Assembly Before 11/19/2021)

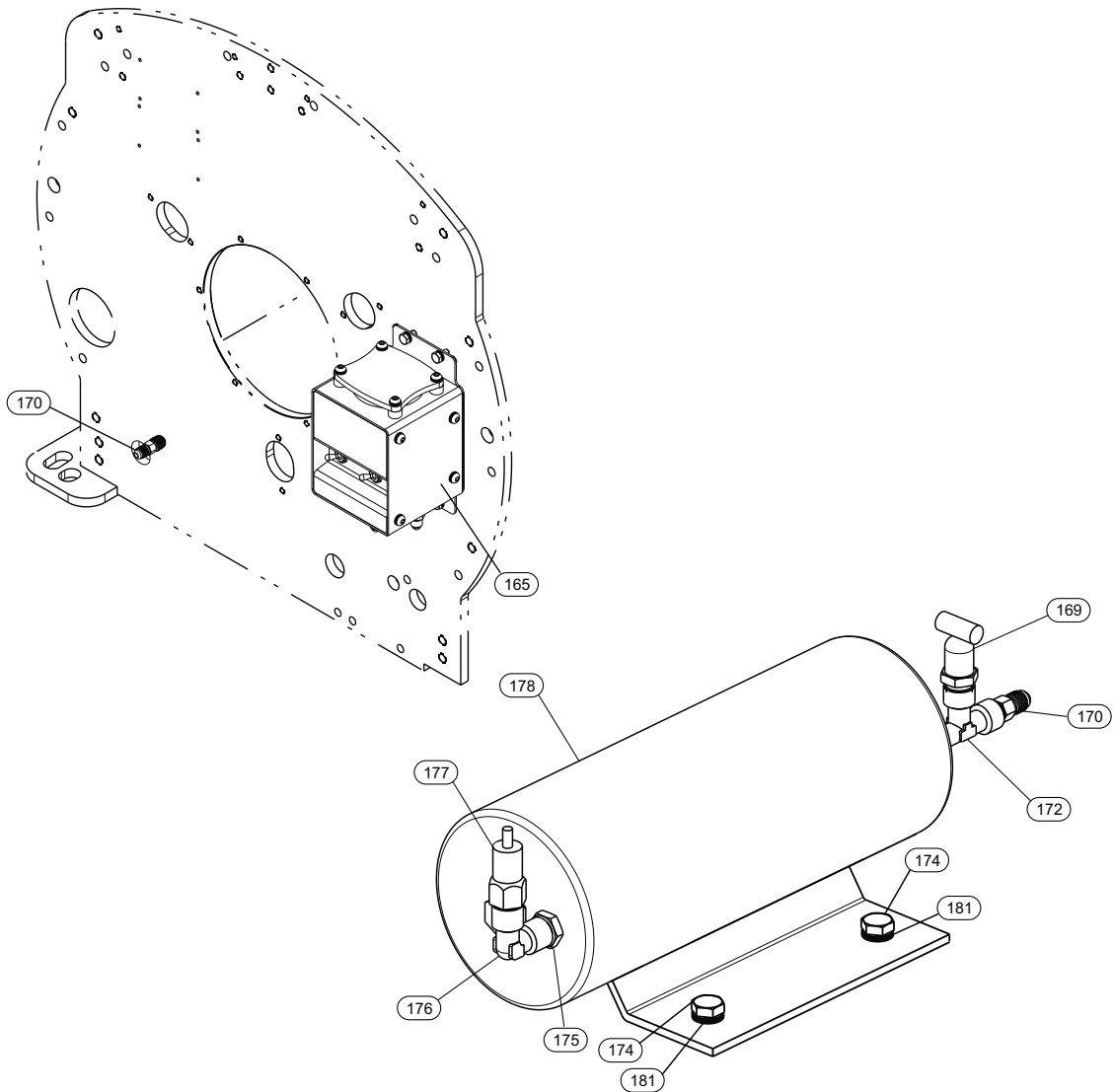


Table 30. Emergency Lowering Device - Parts List (Parts Before 11/19/2021)

Item No.	Description of Part	Total Qty	Part Number (CCN)
165	Controls Assembly	1	9653-0163 (47559642001)
169 (a) (b)	Drain Valve	1	(46897641)
170 (a)	Fitting	1	(45975620)
172 (a)	Fitting	1	(46006300)
174 (a)	Screw	2	4102-2301 (38598546)
175 (a)	Fitting	2	(46006318)
176 (a)	Fitting	1	(46006326)
177 (a) (b)	Valve	1	(46897690)
178 (a) (b)	Air Reservoir	1	(46006292)
181 (a)	Washer	2	4510-1206 (46898284)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

## Emergency Lowering Device for MK2

---

**Table 31. Emergency Lowering Device Service and Replacement Kit List (Parts Before 11/19/2021)**

<b>Item No.</b>	<b>Description of Part</b>	<b>Total Qty</b>	<b>Part Number (CCN)</b>
942	MR150K E-Lowering Air Reservoir Assembly (includes items: 169, 170, 172, 174-178, 181)	1	(47543554001)
943 <sup>(a)</sup>	RPK-MR150-ELD-Box-2 Buttons (includes items: 169, 170, 172, 174-177, 181)	1	7650-0551(47695112001), 7650-0551B (47703700001)

<sup>(a)</sup> Kits not sold individually.

# Emergency Lowering Device for MK3

Figure 15. Emergency Lowering Device Drawing (MHP4513) (Assembly After 11/19/2021)

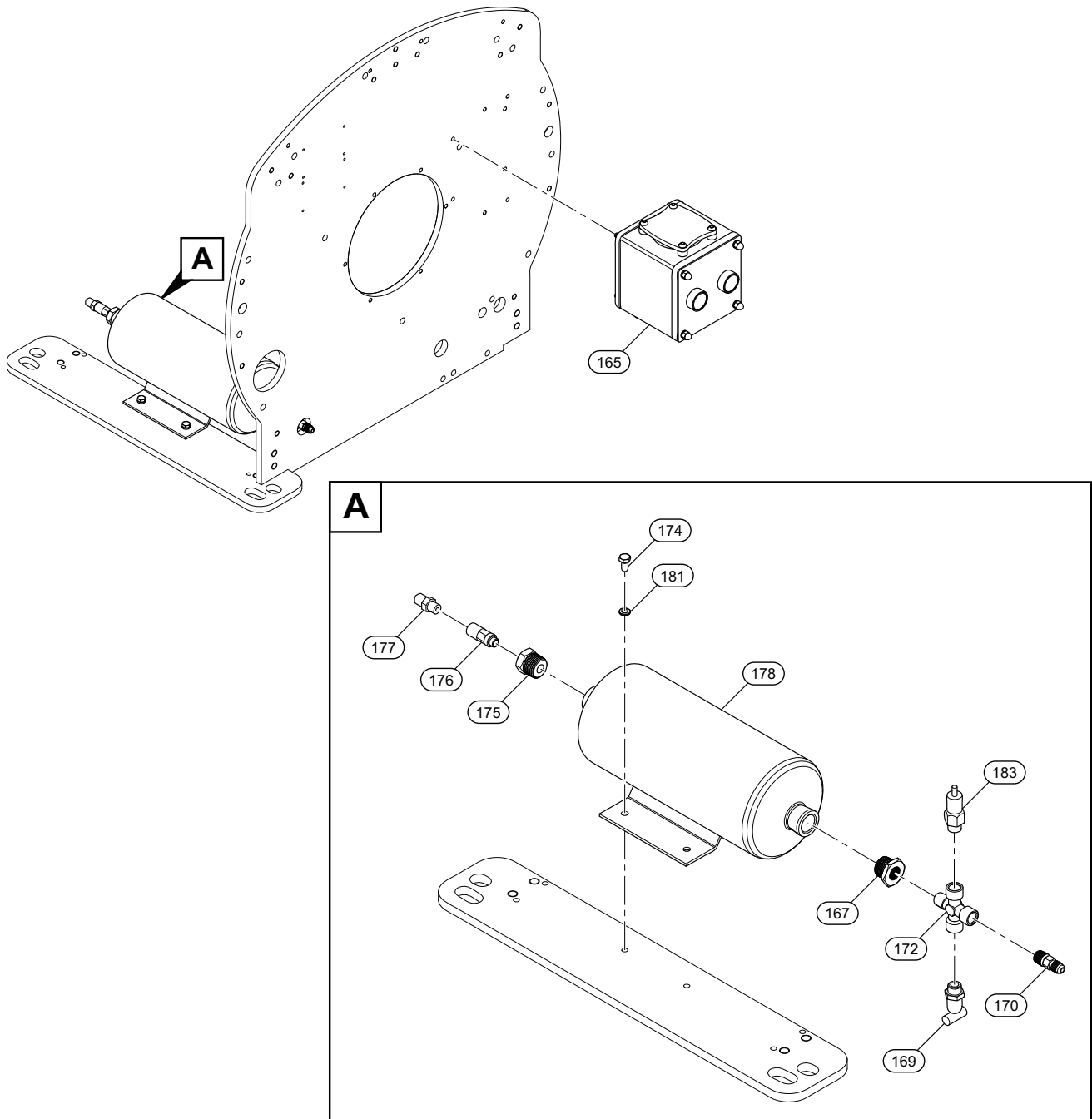


Table 32. Emergency Lowering Device - Parts List (Parts After 11/19/2021)

Item No.	Description of Part	Total Qty.	Part Number (CCN)
165	Emergency Lowering Device – MK3 Type	1	9653-0186 (47696355001)
167 (a)	Fitting	1	(46006318)
169 (a) (b)	Drain Valve	1	(46897641)
170 (a)	Fitting	1	(45975620)
172 (a)	Cross Fitting	1	6823-4342 (47701536001)
174 (a)	Screw	2	4102-2301 (38598546)
175 (a)	Reducer	1	6833-4442 (47701537001)

## Emergency Lowering Device for MK3

**Table 32. Emergency Lowering Device - Parts List (Parts After 11/19/2021) (continued)**

Item No.	Description of Part	Total Qty.	Part Number (CCN)
176 (a)	Non Return Valve	1	5793-4542 (47695977001)
177 (a) (b)	Brass Adapter	1	6823-7528 (38563789)
178 (a) (b)	Air Reservoir	1	(46006292)
181 (a)	Washer	2	4510-1206 (46898284)
183 (a) (b)	Valve	1	(46897690)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

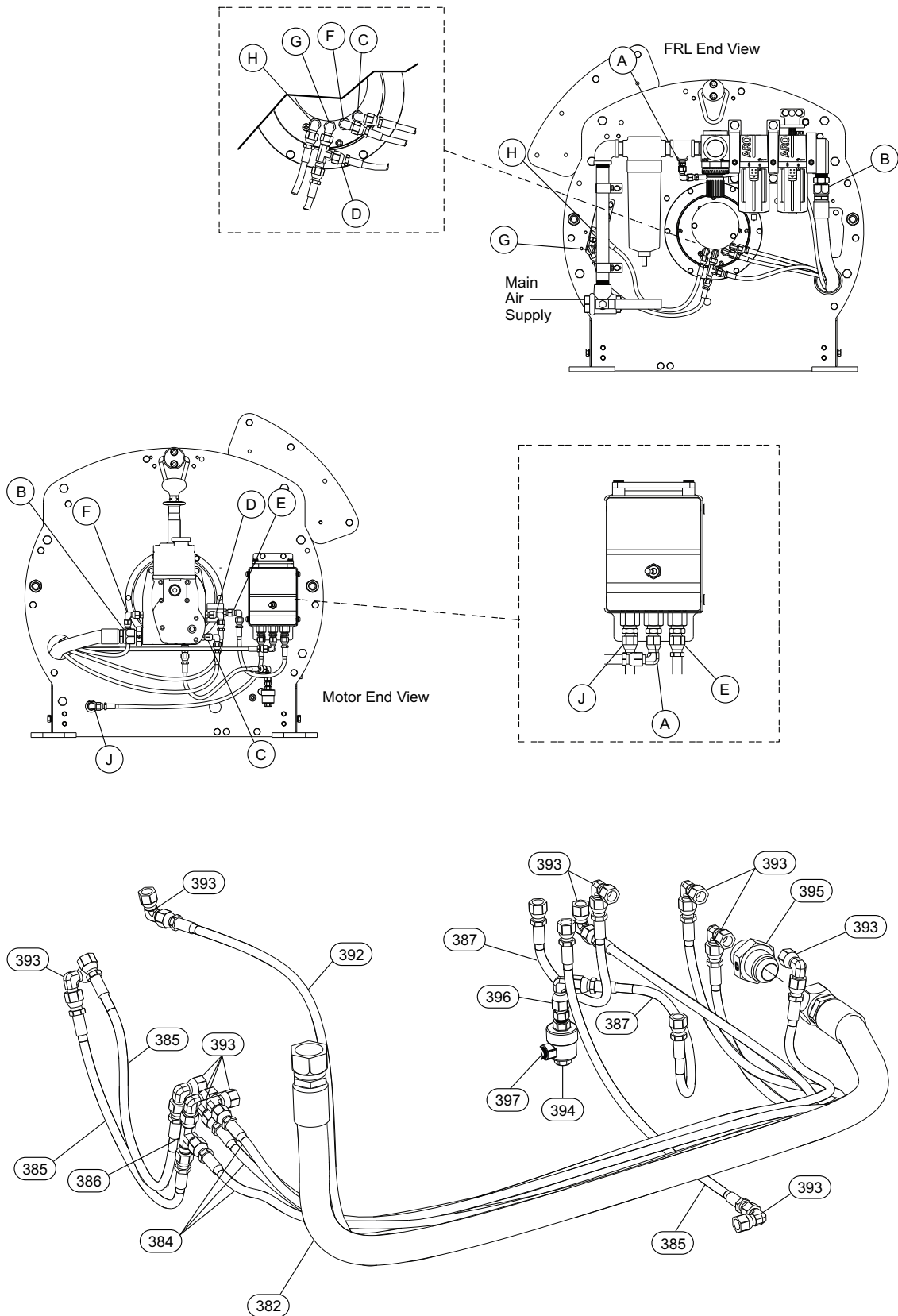
**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

**Table 33. Emergency Lowering Device Service and Replacement Kit List (Parts After 11/19/2021)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
942	Replacement Kit: E-Lowering Air Reservoir Assembly	1	Contact Factory
943	Service Kit: Emergency Lowering (includes items: 167, 169, 170, 172, 174-177, 181, 183)	1	Contact Factory

# MK1 (one-switch E-lowering) Hose Connections Assembly

Figure 16. MK1 (one-switch E-lowering) Hose Connections Assembly Drawing (MHP4482)



## MK1 (one-switch E-lowering) Hose Connections Assembly

**Table 34. MK1 (one-switch E-lowering) Hose Connections Assembly - Parts List**

Item No.	Description of Part	Total Qty	Part Number (CCN)
382 (a)	SST Hose Assembly (1,150 mm)	1	(45973492)
384 (a)	SST Hose Assembly (325 mm)	3	(45973435)
385 (a)	SST Hose Assembly (430 mm)	3	(45973427)
386 (a)	Fitting, Tee	1	(45973419)
387 (a)	SST Hose Assembly (955 mm)	2	(45973450)
392 (a)	SST Hose Assembly (200 mm)	1	(45973468)
393 (a)	SST Hose Assembly (300 mm)	13	(45895208)
394 (a)	Valve, Quick Exhaust	1	(46009205)
395 (a)	Fitting	1	(45981222)
396 (a)	Fitting	1	(71048268)
397 (a)	Fitting	1	(46008942)

(a) Item available in a kit, see kit list below for details.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

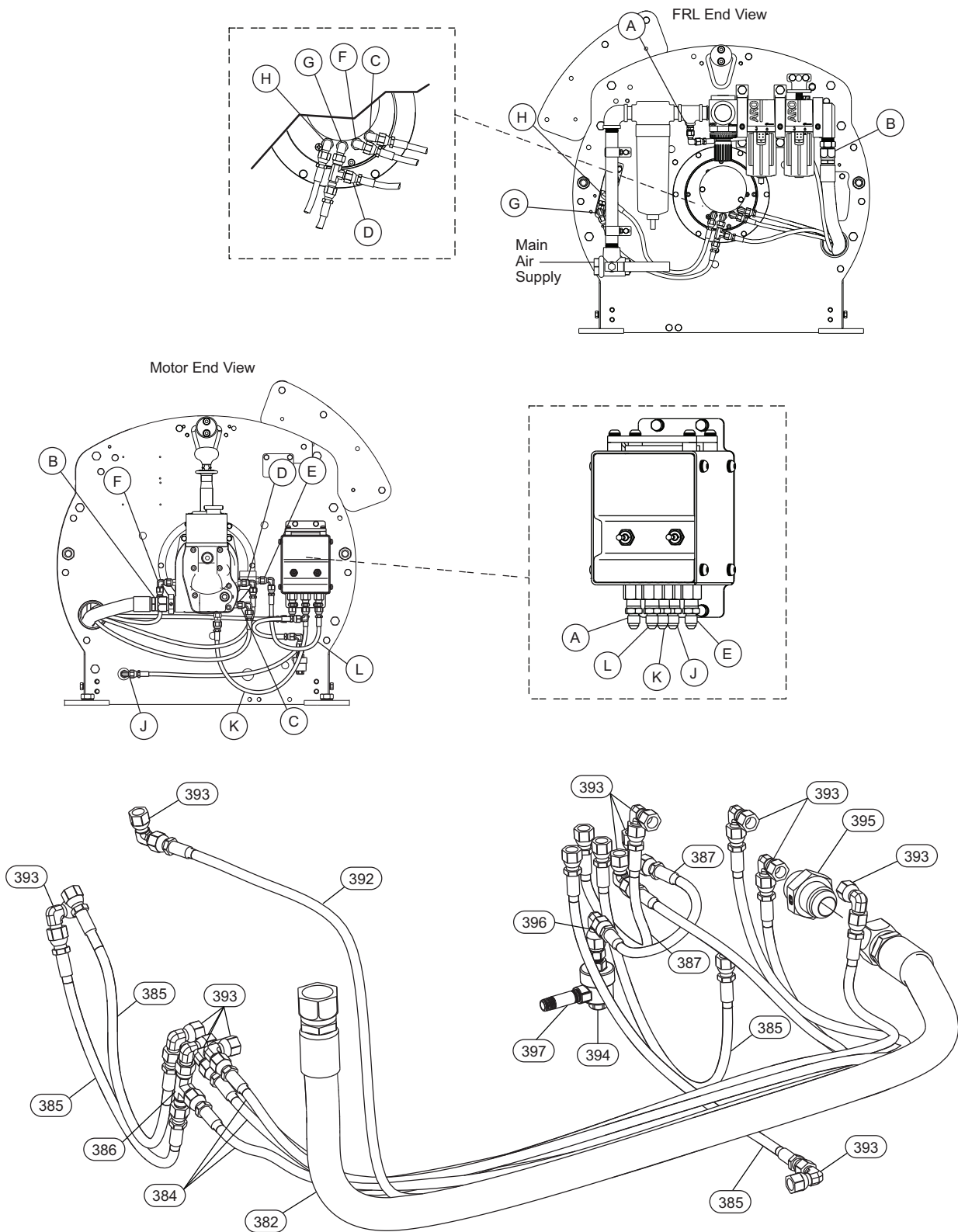
**Table 35. Hose Connections Assembly Service Kit List**

Item No.	Description of Part	Total Qty	Part Number (CCN)
934	RPK - MR150K Hoses and Fitting	1	7650-0522 (47513419023)



# MK2 (two-switch E-lowering) Hose Connections Assembly

Figure 17. MK2 (two-switch E-lowering) Hose Connections Assembly Drawing (MHP4483)



## MK2 (two-switch E-lowering) Hose Connections Assembly

**Table 36. MK2 (two-switch E-lowering) Hose Connections Assembly - Parts List**

Item No.	Description of Part	Total Qty	Part Number (CCN)
382 (a)	SST Hose Assembly (1,150 mm)	1	(45973492)
384 (a)	SST Hose Assembly (325 mm)	3	(45973435)
385 (a)	SST Hose Assembly (430 mm)	4	(45973427)
386 (a)	Fitting, Tee	1	(45973419)
387 (a)	SST Hose Assembly (955 mm)	2	(45973450)
392 (a)	SST Hose Assembly (200 mm)	1	(45973468)
393 (a)	SST Hose Assembly (300 mm)	13	(45895208)
394 (a)	Valve, Quick Exhaust	1	(46009205)
395 (a)	Fitting	1	(45981222)
396 (a)	Fitting	1	(71048268)
397 (a)	Fitting	1	(46008942)

(a) Item available in a kit, see kit list below for details.

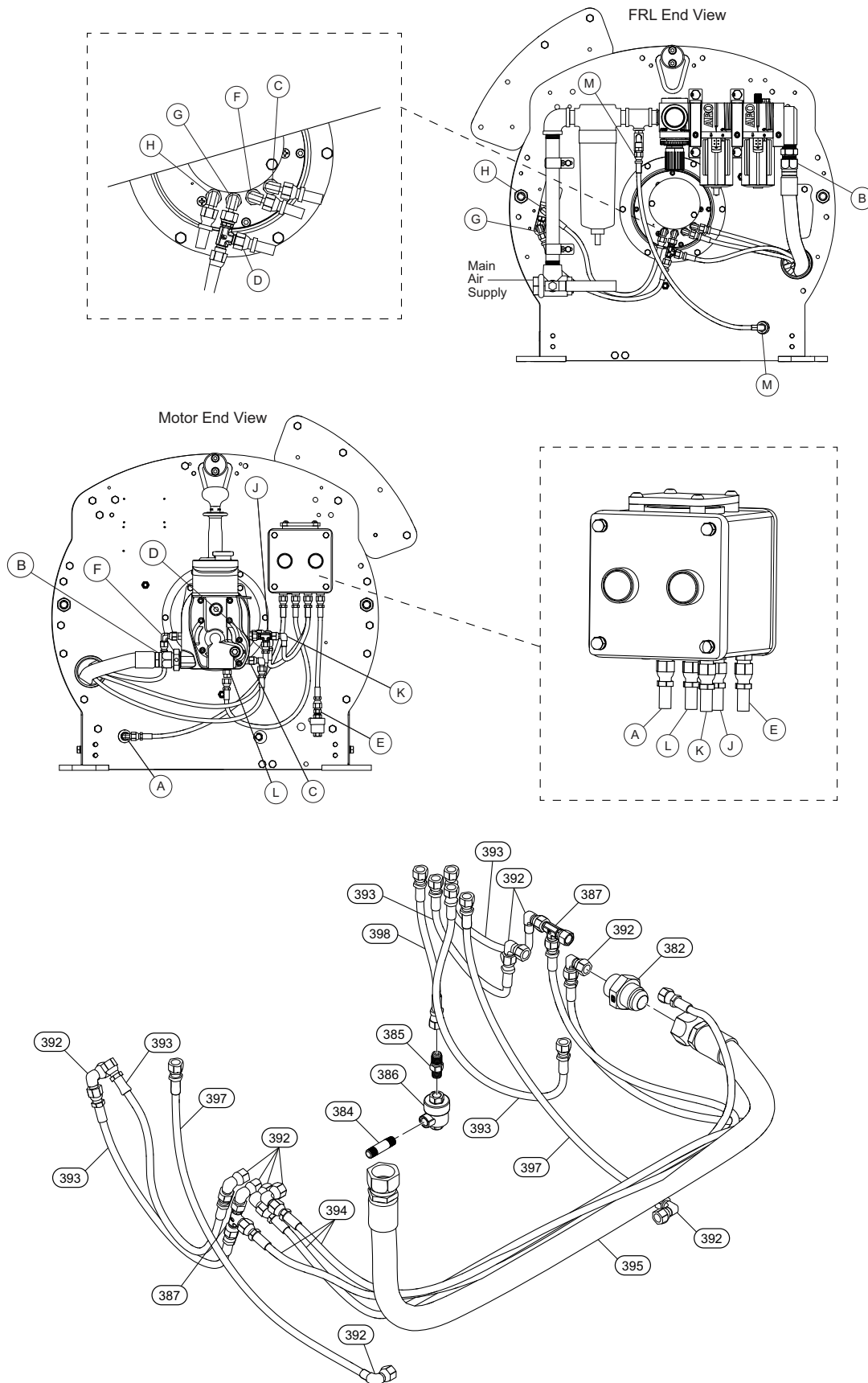
**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

**Table 37. Hose Connections Assembly Service Kit List**

Item No.	Description of Part	Total Qty	Part Number (CCN)
939	RPK - MR150K Hoses and Fitting	1	7650-0522 (47513419023)

# MK3 (two switch push button type E-lowering) Hose Connections Assembly (After 11/19/2021)

Figure 18. MK3 (two switch push button type E-lowering) Hose Connections Assembly Drawing (MHP4514)



## **MK3 (two switch push button type E-lowering) Hose Connections Assembly**

**Table 38. MK3 (two switch push button type E-lowering) Hose Connections Assembly - Parts List**

<b>Item No.</b>	<b>Description of Part</b>	<b>Total Qty</b>	<b>Part Number (CCN)</b>
382	Fitting	1	(45981222)
384	Fitting	1	(46008942)
385	Fitting	1	(71048268)
386	Valve, Quick Exhaust	1	(46009205)
387	T-Fitting	2	6823-4642 (47695987001)
392	Fitting	10	(45895208)
393	SST Hose Assembly	5	(45973427)
394	SST Hose Assembly	3	(45973435)
395	SST Hose Assembly	1	(45973492)
397	SST Hose Assembly	2	(47718058001)
398	SST Hose Assembly	1	(47718057001)

# Air Prep-Package Assembly for MK1 & MK2

Figure 19. Air Prep-Package Assembly Drawing (MHP3385) (Assembly Before 11/19/2021)

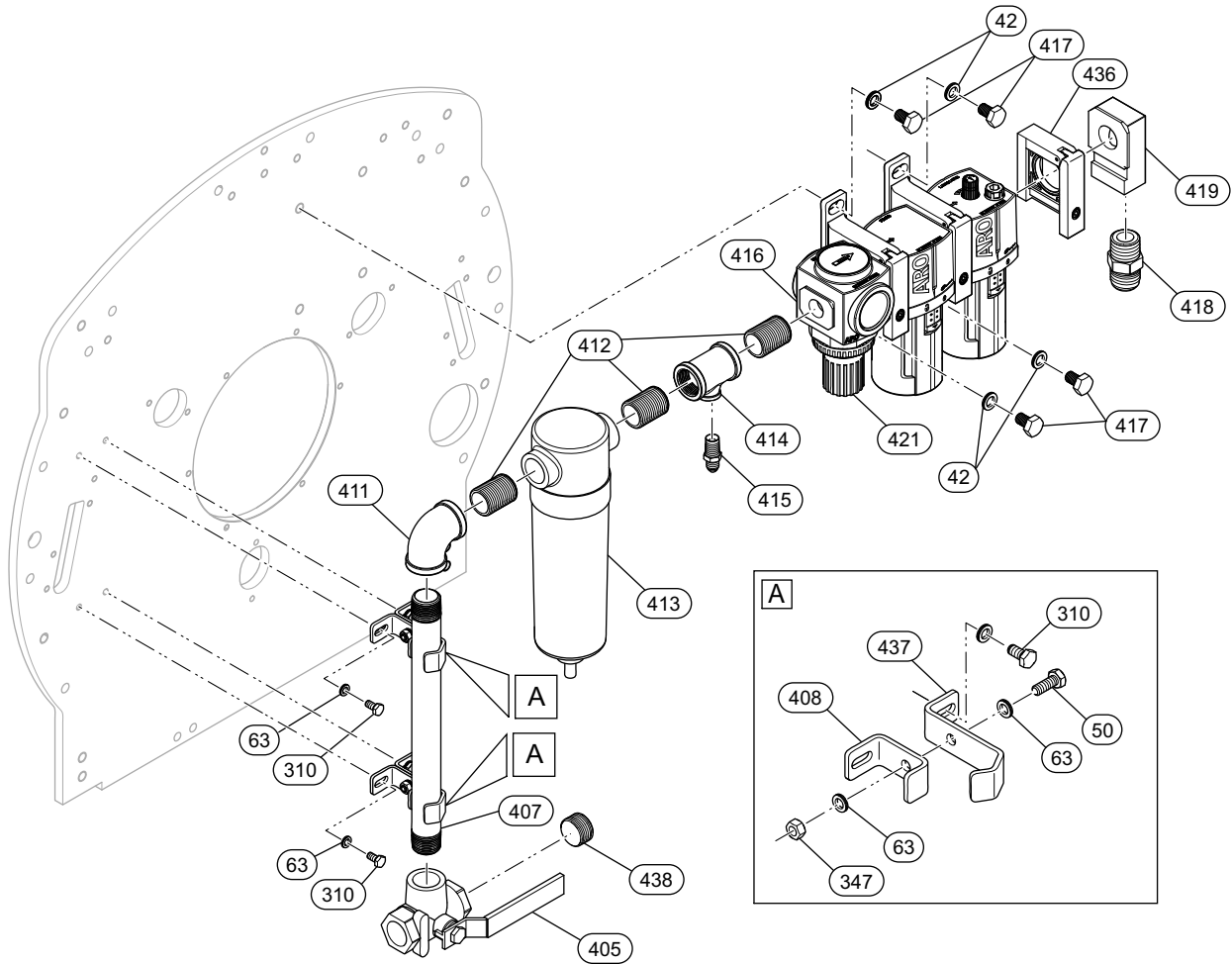


Table 39. Air Prep-Package Assembly - Parts List (Parts Before 11/19/2021)

Item No.	Description of Part	Total Qty	Part Number (CCN)
42 <sup>(a)</sup>	Lockwasher	4	4510-0210 (38797353)
50 <sup>(a)</sup>	Capscrew	2	4102-4701 (46898292)
63 <sup>(a)</sup>	Lockwasher	8	4510-1206 (46898284)
310 <sup>(a)</sup>	Capscrew	4	4102-2301 (38598546)
347 <sup>(a)</sup>	Nut	2	4300-9311 (46898300)
405 <sup>(a)</sup>	Valve, Ball	1	6163-3041 (38563375)
407 <sup>(a)</sup>	Fitting, Nipple	1	(47529998001)
408 <sup>(a)</sup>	Support, Clamp	2	9653-0152 (47529878001)
411 <sup>(a)</sup>	Fitting, Elbow	1	(45993011)
412 <sup>(a)</sup>	Fitting, Pipe	3	(46008868)
413 <sup>(a)</sup>	Water Separator	1	WS180A (23768906)
414 <sup>(a)</sup>	Fitting, Reducer	1	(46008884)
415 <sup>(a)</sup>	Fitting, Nipple	1	(45975620)
416 <sup>(a)</sup>	Filter / Lubricator / Regulator	1	C38351-801 (15295223)
417 <sup>(a)</sup>	Capscrew	4	(47531258001)
418 <sup>(a)</sup>	Fitting, Adapter	1	(45988821)

## Air Prep-Package Assembly for MK1 & MK2

**Table 39. Air Prep-Package Assembly - Parts List (Parts Before 11/19/2021) (continued)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
419 <sup>(a)</sup>	Connection Block	1	(45988607)
421 <sup>(a)</sup>	Regulator Lock	1	104329 (15299522)
436 <sup>(a)</sup>	Spacer Kit	1	104397 (15307309)
437 <sup>(a)</sup>	Clamp	2	9653-0150 (47529815001)
438 <sup>(a)</sup>	Fitting, Plug	1	(45993086)
A <sup>(a)</sup>	Regulator Lock	1	104329 (15299522)

<sup>(a)</sup> Item available in a kit, see kit list below for details.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

**Table 40. Air Prep-Package Assembly Service and Replacement Kit List (Parts Before 11/19/2021)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
911	RBK-MR150-Air-Prep Rebuild Kit Air Preparation Assembly (includes items: 405, 407, 408, 411-416, 418, 419, 436-438, 909)	1	7650-0509 (47513419010)

# Air Prep-Package Assembly for MK3

Figure 20. Air Prep-Package Assembly Drawing (MHP4481) (Assembly After 11/19/2021)

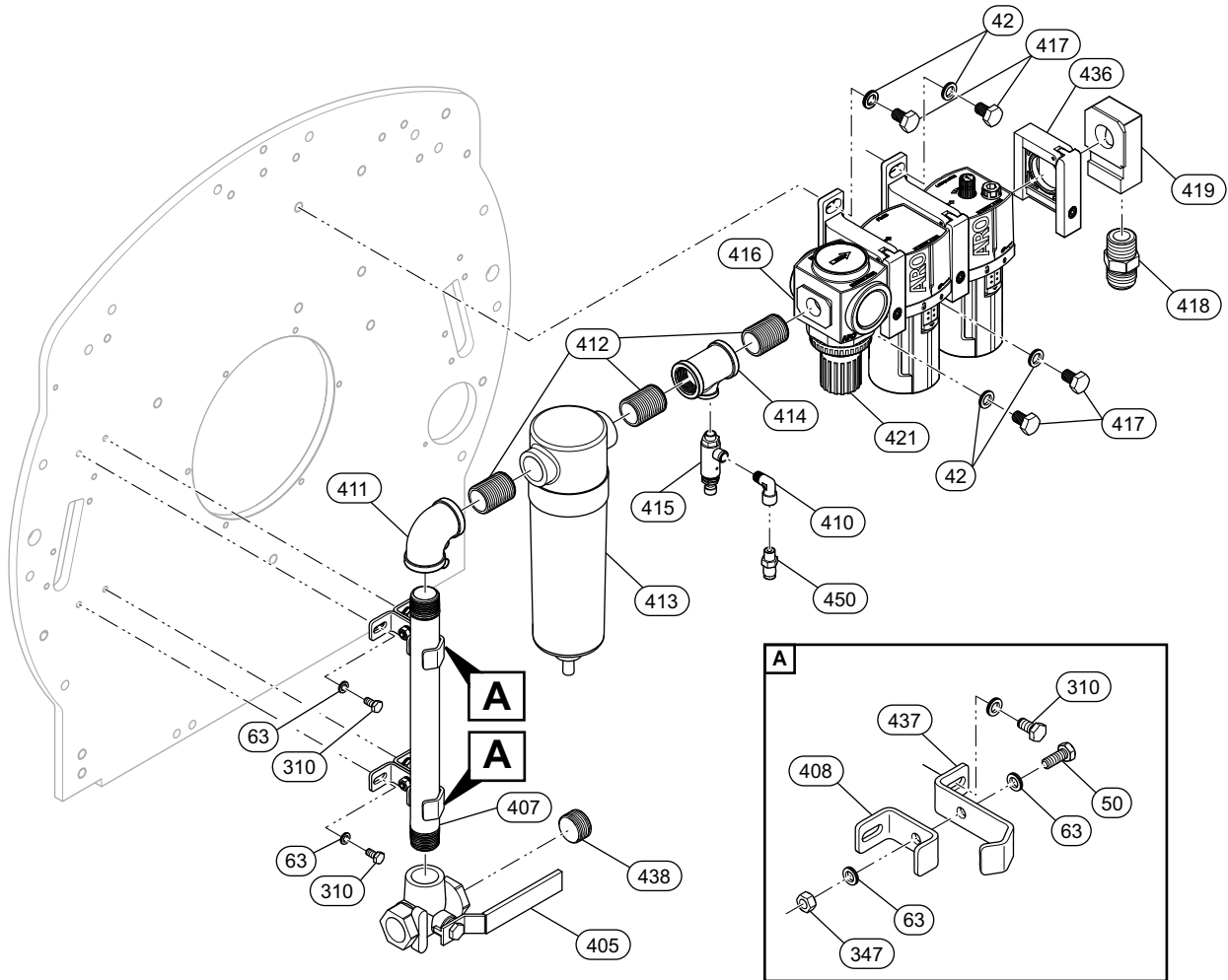


Table 41. Air Prep-Package Assembly - Parts List (Parts After 11/19/2021)

Item No.	Description of Part	Total Qty	Part Number (CCN)
42 <sup>(a)</sup>	Lockwasher	4	4510-0210 (38797353)
50 <sup>(a)</sup>	Capscrew	2	4102-4701 (46898292)
63 <sup>(a)</sup>	Lockwasher	8	4510-1206 (46898284)
310 <sup>(a)</sup>	Capscrew	4	4102-2301 (38598546)
347 <sup>(a)</sup>	Nut	2	4300-9311 (46898300)
405 <sup>(a)</sup>	Valve, Ball	1	6163-3041 (38563375)
407 <sup>(a)</sup>	Fitting, Nipple	1	(47529998001)
408 <sup>(a)</sup>	Support, Clamp	2	9653-0152 (47529878001)
410 <sup>(a)</sup>	Brass Elbow	1	6813-4142 (47695976001)
411 <sup>(a)</sup>	Fitting, Elbow	1	(45993011)
412 <sup>(a)</sup>	Fitting, Pipe	3	(46008868)
413 <sup>(a)</sup>	Water Separator	1	WS180A (23768906)
414 <sup>(a)</sup>	Fitting, Reducer	1	(46008884)
415 <sup>(a)</sup>	Pressure Regulator	1	45975620
416 <sup>(a)</sup>	Filter / Lubricator / Regulator	1	C38351-801 (15295223)

## Air Prep-Package Assembly for MK3

**Table 41. Air Prep-Package Assembly - Parts List (Parts After 11/19/2021) (continued)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
417 <sup>(a)</sup>	Capscrew	4	(47531258001)
418 <sup>(a)</sup>	Fitting, Adapter	1	(45988821)
419 <sup>(a)</sup>	Connection Block	1	(45988607)
421 <sup>(a)</sup>	Regulator Lock	1	104329 (15299522)
436 <sup>(a)</sup>	Spacer Kit	1	104397 (15307309)
437 <sup>(a)</sup>	Clamp	2	9653-0150 (47529815001)
438 <sup>(a)</sup>	Fitting, Plug	1	(45993086)
450 <sup>(a)</sup>	Brass Adapter	1	6823-7528 (38563789)

<sup>(a)</sup> Item available in a kit, see kit list below for details.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

**Table 42. Air Prep-Package Assembly Service and Replacement Kit List (Parts After 11/19/2021)**

Item No.	Description of Part	Total Qty	Part Number (CCN)
911	RBK - MR150K Air Prep	1	7650-0509 (47513419010)



# Labels and Tags Location for MK1, MK2 and MK3

Figure 21. Labels and Tags Location Drawing (MHP4484)

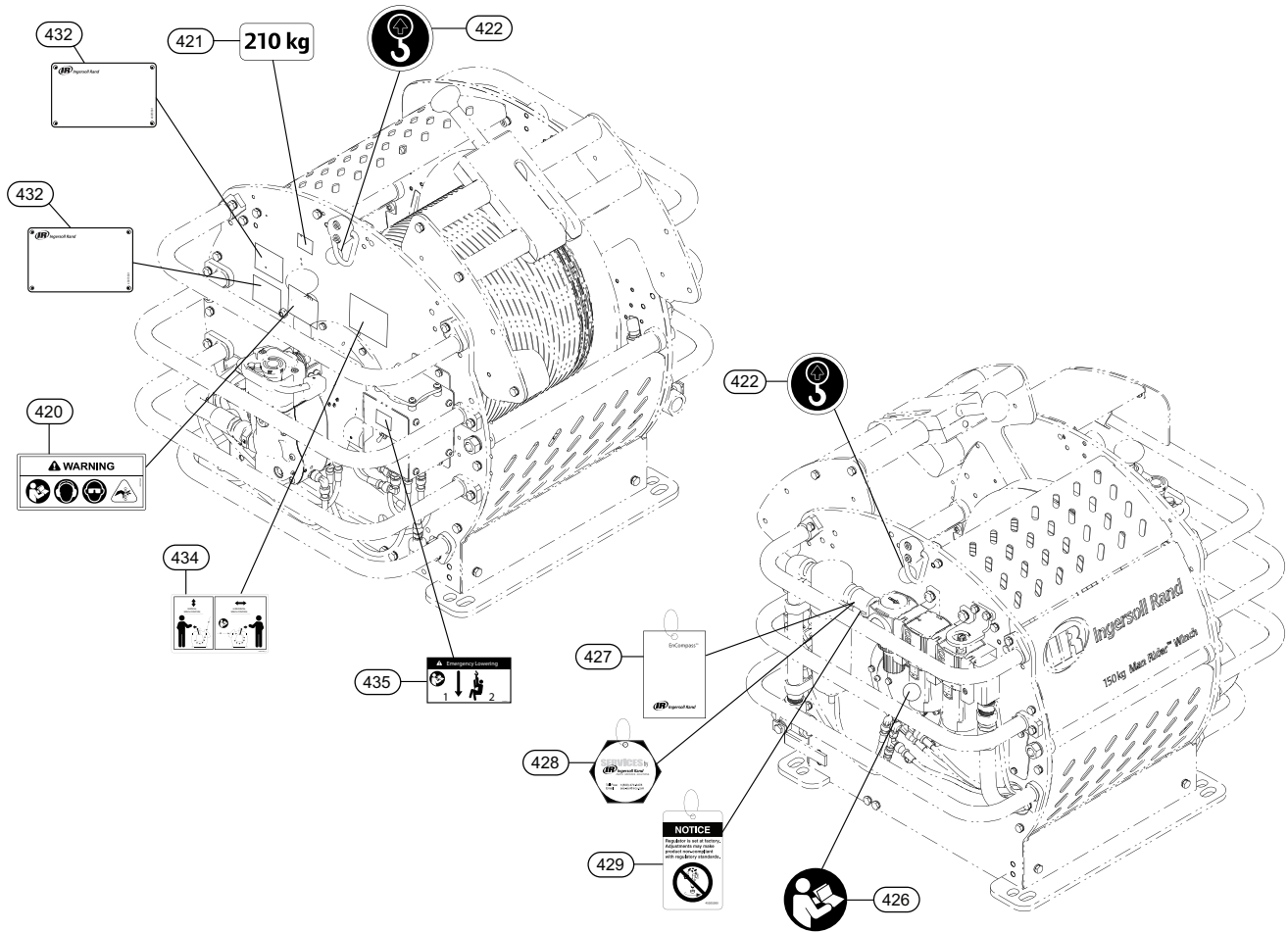


Table 43. Labels and Tags Location - Parts List

Item No.	Description of Part	Total Qty	Part Number (CCN)
420 (a)	Label, Warning	1	(45972163)
421 (a)	Label, Weight of Winch	1	(45975828)
422 (a)	Label, Lifting Point	2	(45971785)
426 (a)	Label, Read the Manual	1	(45913852)
427 (a)	Tag, Encompass Certification	1	(71462709)
428 (a)	Tag, Service	1	(71455455)
429 (a)	Tag, Do Not Adjust	1	(45925260)
432	Nameplate	2	(45973591)
434 (a)	Label, Directional	1	(45972643)
435 (a)	Label, Emergency Lowering	1	(45981172)

(a) Item available in a kit, see kit list below for details.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

Table 44. Labels and Tags Location Replacement Kit List

Item No.	Description of Part	Total Qty	Part Number (CCN)
940	Replacement Kit: Labels (includes items: 420-422, 426-429, 434, 435)	1	Contact Factory

# Pedestal Assembly for MK1, MK2 and MK3

Figure 22. Pedestal Assembly Drawing (MHP3612)

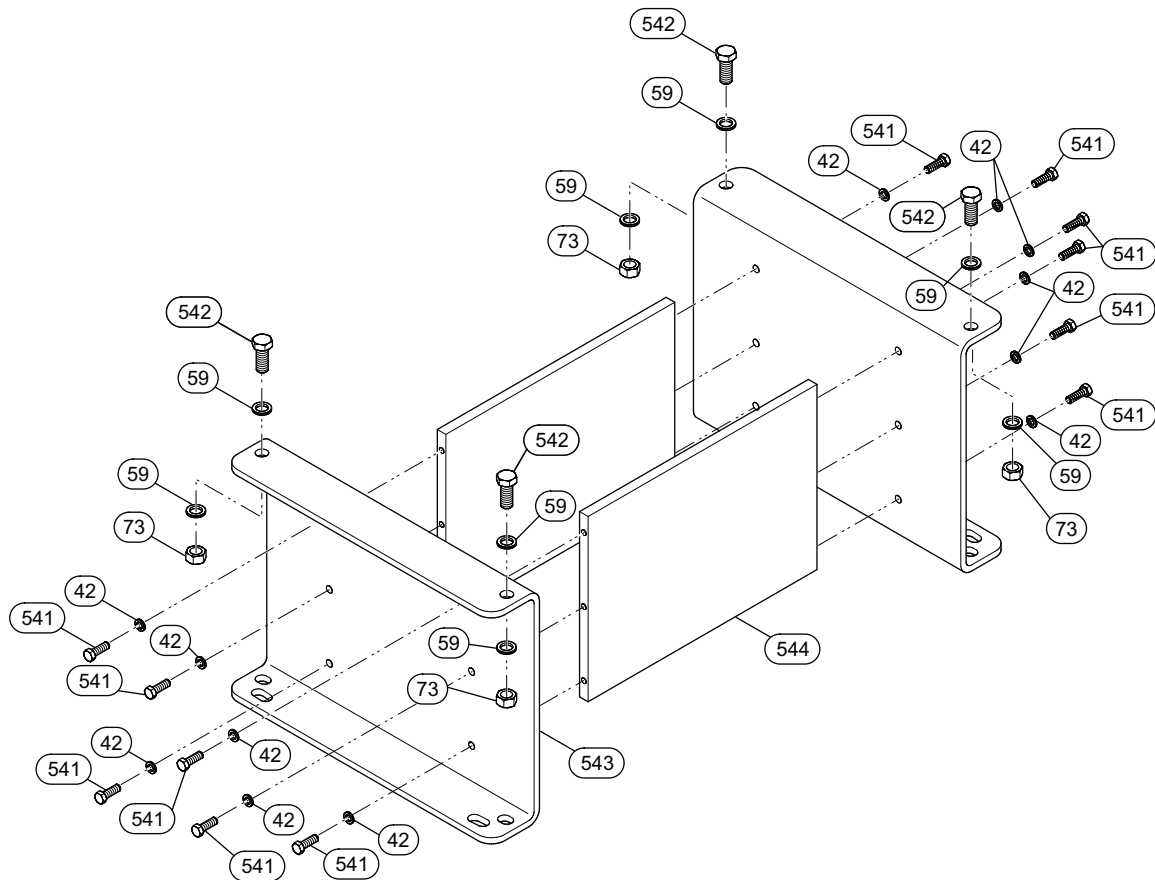


Table 45. Pedestal Assembly - Parts List

Item No.	Description of Part	Total Qty	Part Number (CCN)
42 (a)	Lockwasher	12	4510-0210 (38797353)
59 (a)	Lockwasher	8	4510-0216 (38797346)
73 (a)	Nut	4	4300-9411 (46898672)
541 (a)	Capscrew	12	4102-5101 (46898664)
542 (a)	Capscrew	4	4102-4901 (46898649)
543 (a) (b)	Side Frame	2	9653-0058 (46896551)
544 (a) (b)	End Frame	2	9653-0060 (46896577)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

Table 46. Pedestal Assembly Replacement Kit List

Item No.	Description of Part	Total Qty	Part Number (CCN)
935	Pedestal Assembly	1	(46896544)

# Manual Wire Rope Guide Assembly for MK1, MK2 & MK3

Figure 23. Manual Wire Rope Guide Assembly Drawing (MHP3613)

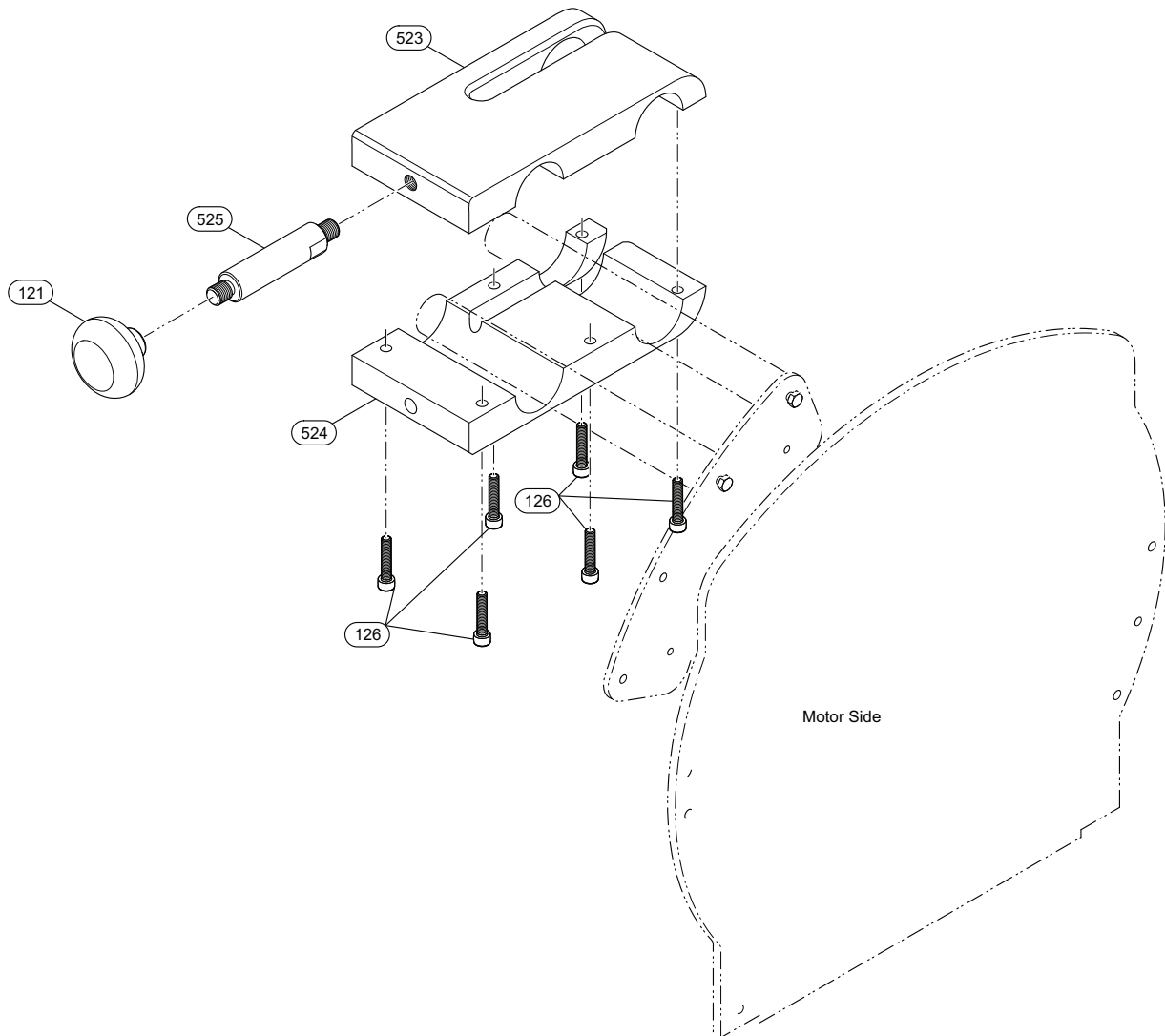


Table 47. Manual Wire Rope Guide Assembly - Parts List

Item No.	Description of Part	Total Qty	Part Number (CCN)
121 (a)	Ball, Handle	1	(71348353)
126 (a)	Capscrew	6	4132-2306 (38540183)
523 (a) (b)	Base, Upper	1	(47536535001)
524 (a) (b)	Base, Lower	1	(47536493001)
525 (a)	Handle	1	9653-0122 (47522608001)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

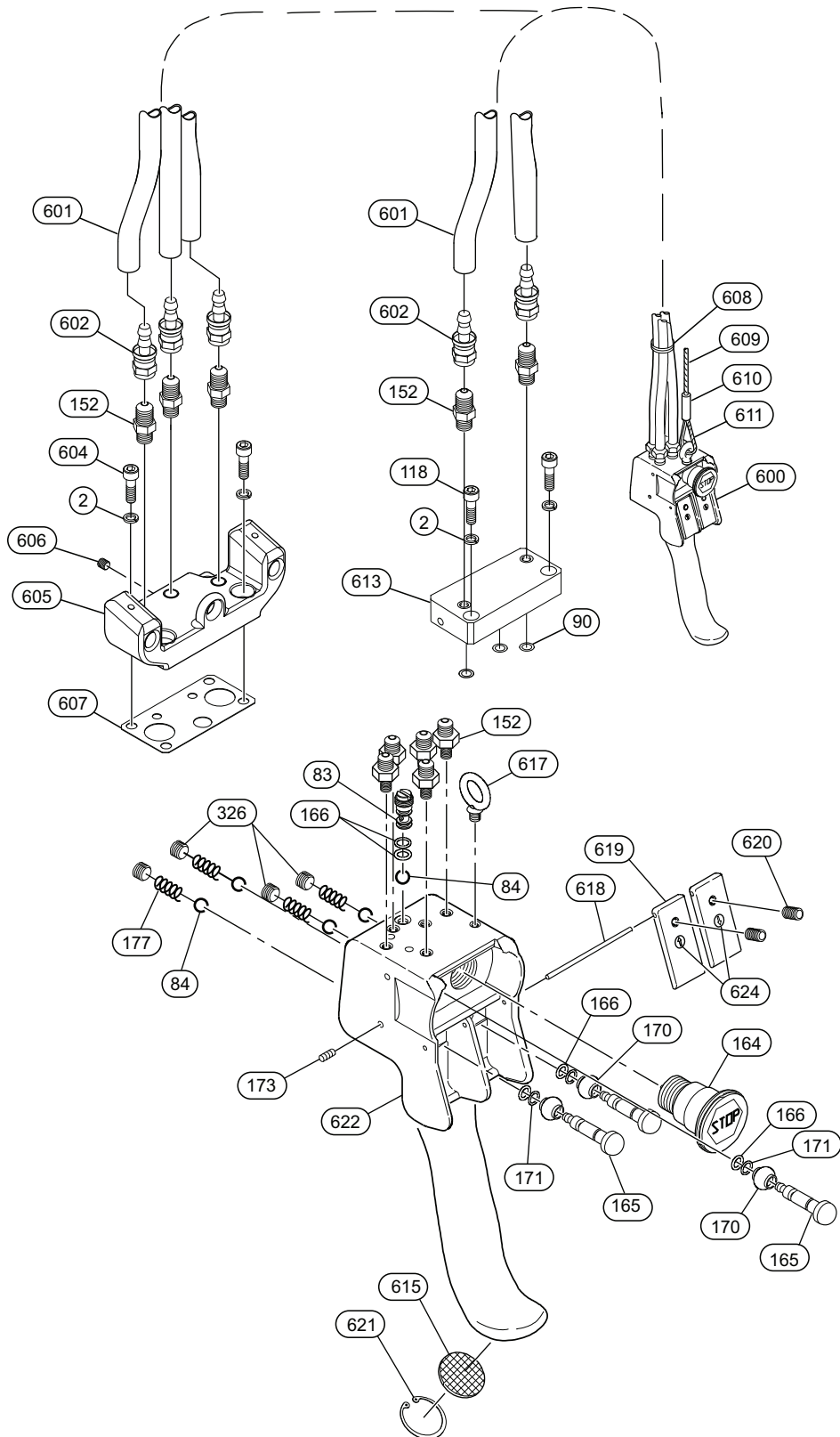
**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

Table 48. Manual Wire Rope Guide Assembly Replacement Kit List

Item No.	Description of Part	Total Qty	Part Number (CCN)
936	Manual Rope Guide Assembly	1	(47536486001)

# Remote Two Function Pendant Control Assembly for MK1, MK2 & MK3

Figure 24. Remote Two Function Pendant Control Assembly with Emergency Stop Function (MHP2818)



## Remote Two Function Pendant Control Assembly for MK1, MK2 & MK3

**Table 49. Remote Two Function Pendant Control Assembly - Parts list**

Item No.	Description of Part	Total Qty	Part Number (CCN)
600	Pendant Assembly	1	PHS2E-U (38559258)
2	Lockwasher	6	4520-1006 (38540142)
83	Check Valve	1	9579-0106 (38551198)
84 (a)	Ball	5	6940-1625 (38542924)
90	`O' Ring	3	5823-7429 (38597241)
118	Capscrew	2	4132-4306 (38632089)
152	Fitting, Adapter	10	6823-7528 (38563789)
164	Valve, Emergency Stop	1	9579-0108 (38551180)
165 (a)	Valve	3	9579-0104 (38550190)
166 (a)	`O' Ring	5	5820-9229 (38534517)
170 (a)	Protector	3	9579-0107 (38554580)
171 (a)	`O' Ring	3	5823-5329 (38550208)
173	Screw	3	4200-8307 (38633004)
177 (a)	Spring	4	6912-8541 (38553889)
326 (a)	Plug	4	6510-7741 (38648143)
601	Hose **	(m)	50923 (03990215)
602	Hose End, Barbed	10	51029 (03990298)
604	Capscrew	4	4132-2206 (38541132)
605	Adapter Plate	1	3644-1118 (38592598)
606	Setscrew	1	4200-7407 (38540498)
607	Gasket	1	9644-0822 (38799698)
608	Hose Tie	1	6112-5132 (38525226)
609	Strain Relief Wire	(m)	6976-4041 (38629838)
610	Sleeve Clamp	1	6112-5032 (38525218)
611	Thimble	1	6932-5332 (38525242)
613	Adapter	1	9644-1173 (38609426)
615 (a)	Exhaust Washer	1	6760-0303 (38535621)
617	Lifting Eye	1	6422-2332 (38529160)
618 (a)	Pin	1	9579-0040 (38538237)
619 (a)	Lever	2	9579-0122 (38559100)
620	Screw	2	4200-6207 (38632873)
621 (a)	Retainer Ring	1	4771-3030 (38559373)
622 (b)	Pendant Handle	1	—
624 (a)	Label Kit	1	9579-0111 (38554598)
626	Label: "Read the Manual"	1	9618-0098 (38543856)
628	Exhaust Valve Kit	1	20417 (71069579)

(a) Item available in a kit, see kit list below for details.

(b) Item not sold individually.

**Note:** Hardware items may come in prepackaged amounts; "Total Qty" is usage per unit.

## Remote Two Function Pendant Control Assembly for MK1, MK2 & MK3

---

**Table 50. Remote Two Function Pendant Control Assembly Replacement Kit List**

<b>Item No.</b>	<b>Description of Part</b>	<b>Total Qty</b>	<b>Part Number (CCN)</b>
937	Service Kit: PHS2E-U (includes items: 84, 165, 166, 170, 171, 177, 326, 615, 618, 619, 621, 624)	1	7579-0183 (38607354)
947	Replacement Kit: PHS2E-U Pendant	1	PHS2E-U (3859258)
948	Rebuild Kit: PHS2E-U Pendant (includes items: 164, 165, 611, 615, 617-619, 621, 937)	1	7650-0080 (38780813)

# MK2 Recertification Kits

**Table 51. Recertification Kits**

Description of Kit	Total Qty	Part Number (CCN)
Recertification Kit: MR150 with Pendant Control	1	7650-1051 (47734838001)
Recertification Kit: MR150 with Lever Control	1	7650-1050 (47697433001)

**Table 52. Recertification kits contents**

Part Number (CCN)	Description of Kit	7650-1051 (47734838001)	7650-1050 (47697433001)
9644-2011 (38577862)	Output Shaft	X	X
7650-0080 (38780813)	RBK-PHS2-U Rebuild Kit Pendent	X	
7650-0161 (38781928)	RPK-3,5/6HP M-V-PH+E Repair Kit	X	
7650-0509 (47513419010)	RBK-MR150-Air-Prep Rebuild Kit Air Preparation	X	X
7650-0511 (47513419012)	RBK-MR150-B-Band Rebuild Kit Brake Band	X	X
7650-0512 (47513419013)	RPK-MR150-B-Disc Repair Kit Brake Disc	X	X
7650-0514 (47513419015)	RPK-MR150-E-Lowering Repair Kit Emergency Lowering	X	X
7650-0519 (47513419020)	RPK-MR150-G-Box Repair Kit Gear Box	X	X
7650-0522 (47513419023)	RPK-MR150-Hoses Full Set Hose & Fitting	X	X
7650-0523 (47513419024)	RPK-MR150-LS Repair Kit Limit Switch	X	X
7650-0530 (47513419031)	RPK-MR150-Roll Repair Kit Roller	X	X
7650-0531 (47513419032)	RPK-MR150-SLK Repair Kit Slack	X	X
7650-0545 (47673624001)	MR150-Motor Less Brake High Temperature	X	X
7650-0517 (47694975001)	RPK-MR150-Frame Repair Kit Frame	X	X
7650-0549 (47695110001)	RPK-MR150-SLK Repair Kit Slack Valve Cover	X	X
7650-0551 (47695112001)	RPK-MR150-ELD-Box-2 Buttons	X	X
7650-0548 (47695149001)	RPK-MR150-SLK Repair Kit Slack Valve	X	X
7650-0550 (47695161001)	RPK-Labels MR150K	X	X
7650-0547 (47695169001)	RPK MR150K Band Brake Cylinder	X	X
(47695378001)	Encompass Certification Form, MR150K Series	X	X
7650-0551B (47703700001)	RPKS-MR150-ELD-Box-2 Buttons Bolting Kit	X	X
7650-0533 (47513419034)	RPK-MR150-V-L Repair Kit Valve Lever		X
7650-0516 (47513419017)	RBK-E-Stop Rebuild Kit E-Stop Button		X

