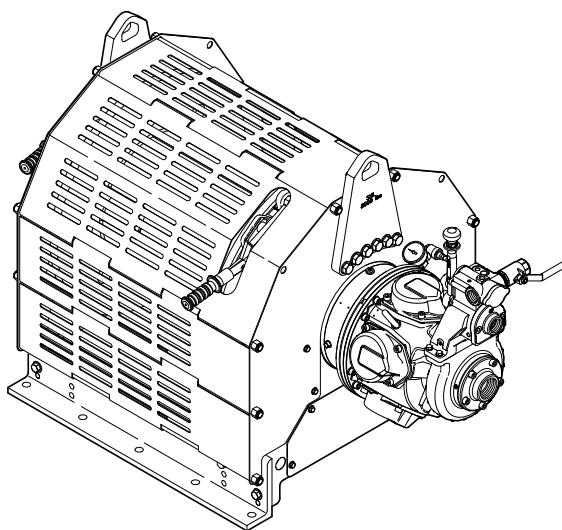


Product Parts Information



FORCE 5i™ Winch Series

Models FA7i, FA7Ti, FA7Ti-GL and FA7Ti-PL



(Dwg. MHP2919)



Save These Instructions



Form MHD56397
Edition B
August 2016
45877156

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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 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	Document Number (CCN)	Publication	Document Number (CCN)
Product Safety Manual (Non-Man Rider)	MHD56250 (71402598)	Product Information Manual (Man Rider)	Contact Factory
Product Safety Manual (Man Rider)	MHD56251 (71402606)	Product Maintenance Information Manual	MHD56398 (45877164)
Product Information Manual (Non-Man Rider)	MHD56396 (45877149)		

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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.

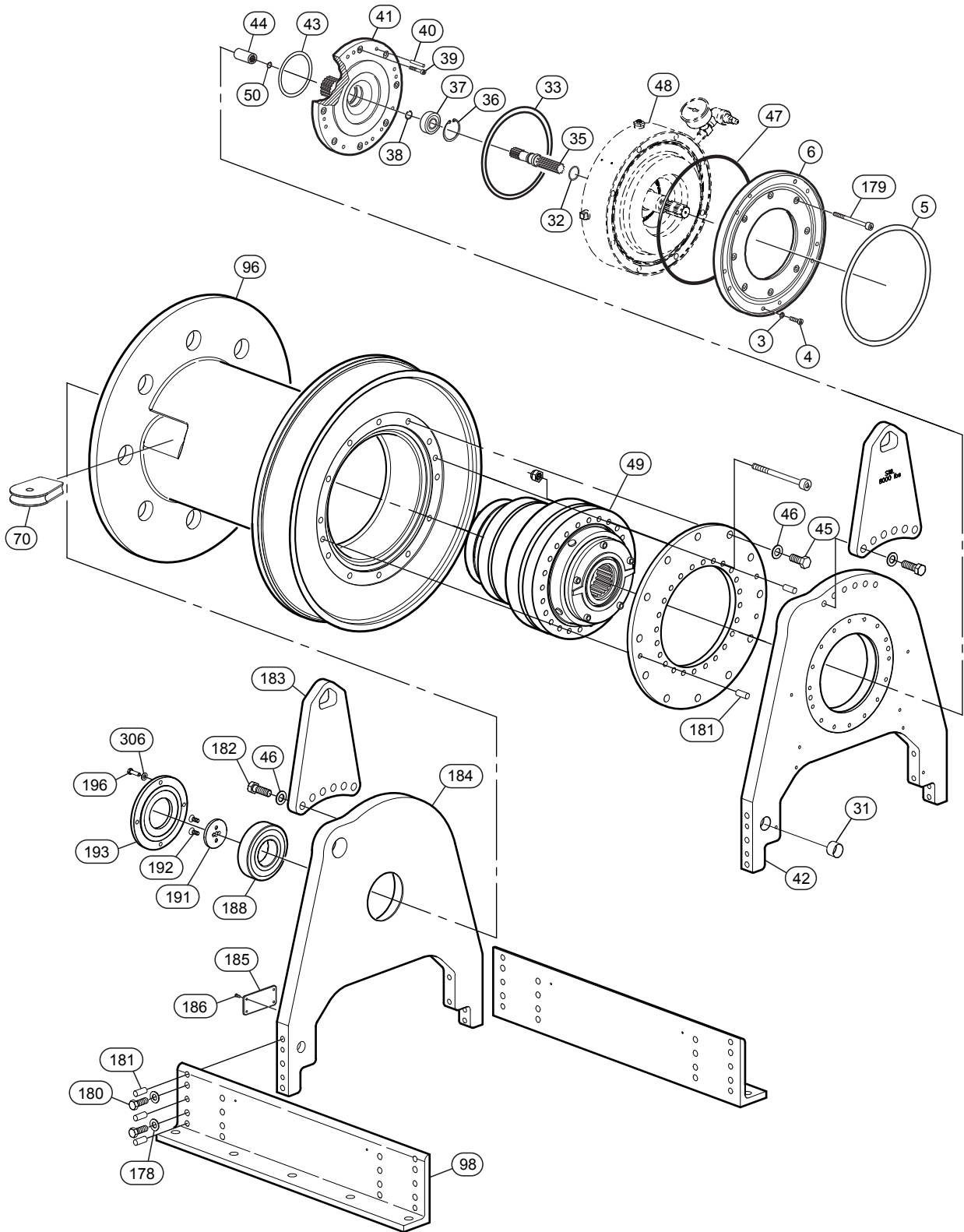
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59450 Sin Le Noble, France
Phone: (33) 03-27-93-08-08
Fax: (33) 03-27-93-08-00

DRUM, BASE AND REDUCTION GEAR ASSEMBLY DRAWING



(Dwg. MHP2937)

DRUM, BASE AND REDUCTION GEAR ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
3	Lockwasher	10	51607 (71225973)	50	Snap Ring	1	71308266
4	Capscrew	10	71268205	70	Wire Rope Anchor, 3/4 inch	1	382-33197 (45873064)
• 5	'O' Ring	1	51459 (03980588)		Wire Rope Anchor, 7/8 inch	1	382-33196 (45873056)
6	Motor Adapter	1	14227 (71062566)		Wire Rope Anchor, 1 inch	1	382-33960 (45888708)
31	Bushing	1	71443816	96	Drum †	1	Note 1
32	Sleeve Seal	1	10598	98	Siderail †	2	Note 1
• 33	'O' Ring	1	51460 (03980596)	178	Lockwasher	8	52915 (71004436)
35	Shaft, Drive †	1	25631 (71315303)	179	Capscrew (without disc brake only)	8	50910 (71077259)
36	Retainer Ring	1	52298 (71227334)	180	Capscrew	8	71316491
37	Bearing	1	50460 (71069702)	181	Pin	14	71266670
38	Retainer Ring	1	51872 (03980919)	182	Capscrew	12	71368252
39	Capscrew	8	52380 (71077267)	183	Lifting Lug †	2	382-33489 (45879103)
40	Pin, Dowel	2	52334 (71077275)	184	Upright, Outboard †	1	382-32211 (71475651)
41	Drum Shaft †	1	14168 (71130298)		Upright, Outboard † w/Drum Lock	1	382-32211-L (71476444)
42	Upright, Inboard †	1	382-32212 (71475669)		Guideline and Podline †	1	25761 (71342406)
	Guideline and Podline †	1	25759 (71342398)	185	Nameplate	1	Contact Factory
• 43	'O' Ring	1	52322 (71112197)	186	Rivet	4	50915 (03969557)
44	Coupling	1	25630 (71308704)	188	Bearing	1	71440002
45	Capscrew	12	71316517	191	Bearing Retainer	1	382-30646 (71435879)
46	Washer	24	71343768	192	Screw	2	50964 (71224893)
47	'O' Ring	1	51458 (03974805)	193	End Cover	1	382-30829 (71439947)
48	Disc Brake Assembly	1	382-30999 (71444707)	196	Capscrew	4	71369276
49	Reduction Gear Assembly	1	45889821	306	Washer	4	71376370
	Reduction Gear Assembly (For GL Model)	1	25875 (71317036)				

• Recommended spare for one winch, 2 years of normal operation.

Note 1: Refer to "DRUM AND SIDERAIL PARTS LIST" on page 6.

Note 2: Contact Factory, model and serial number required.

** Man Rider winches are only available with a band brake drum and no drum lock.

† These parts also come in a cold weather version. Refer to model code. Adding CH (DNV) or CHA (ABS) to the end of these part numbers is required to retain winch cold weather certification. Example: Order Drum item (96) (24 inches long part number 382-34920-5 as part number 382-34920-5CH.

Certification Type	Example Part Number To Order	
ABS	---	382-34920-5CHA
DNV	382-34920-5CH	---

Drum, Base And Reduction Gear Assembly Kit List:

Item No.	Description of Part	Total Qty	Part Number (CCN)
1000	Service Kit: Frame (included in Overhaul Kits) (include items: 3, 4, 5, 33, 36, 37, 38, 43, 47, 178, 179, 180, 181, 188, 192, 196, 306)	1	47571636001

DRUM AND SIDERAIL PARTS LIST

Drum (Item 96) With Band Brake	Part Number (CCN)	Drum (Item 96) W/out Band Brake **	Part Number	Drum (Item 96) With Band Brake and Drum Lock	Part Number (CCN)	Drum (Item 96) W/out Band Brake with Drum Lock **	Part Number (CCN)
Drum (20 inch)	382-34920-4 (45909272) †	Drum (20 inch)	382-34919-4 (45909223) †	Drum (20 inch)	Contact Factory	Drum (20 inch)	Contact Factory
Drum (24 inch)	382-34920-5 (45909280) †	Drum (24 inch)	382-34919-5 (45909231) †	Drum (24 inch)	382-34920-5L (45909587) †	Drum (24 inch)	382-34919-5L (45909561) †
Drum (30 inch)	382-34920-6 (45909298) †	Drum (30 inch)	382-34919-6 (45909249) †	Drum (30 inch)	Contact Factory	Drum (30 inch)	Contact Factory
Drum (36 inch)	382-34920-7 (45909306) †	Drum (36 inch)	382-34919-7 (45909256) †	Drum (36 inch)	Contact Factory	Drum (36 inch)	Contact Factory
Drum (42 inch)	382-34920-11 (45909314) †	Drum (42 inch)	382-34919-11 (45909264) †	Drum (42 inch)	382-34920-11L (45909595) †	Drum (42 inch)	382-34919-11L (45909579) †

Drum (Item 96) Tall Flange With Band Brake	Part Number (CCN)	Drum (Item 96) Tall Flange Without Band Brake	Part Number (CCN)
with 20 inch Drum	Contact Factory	with 20 inch Drum	Contact Factory
with 24 inch Drum	382-34925-5 (45909389) †	with 24 inch Drum	382-34921-5 (45909330) †
with 30 inch Drum	382-34925-6 (45909397) †	with 30 inch Drum	Contact Factory
with 36 inch Drum	Contact Factory	with 36 inch Drum	382-34921-7 (45909355) †
with 42 inch Drum	382-34925-11 (45909413) †	with 42 inch Drum	Contact Factory

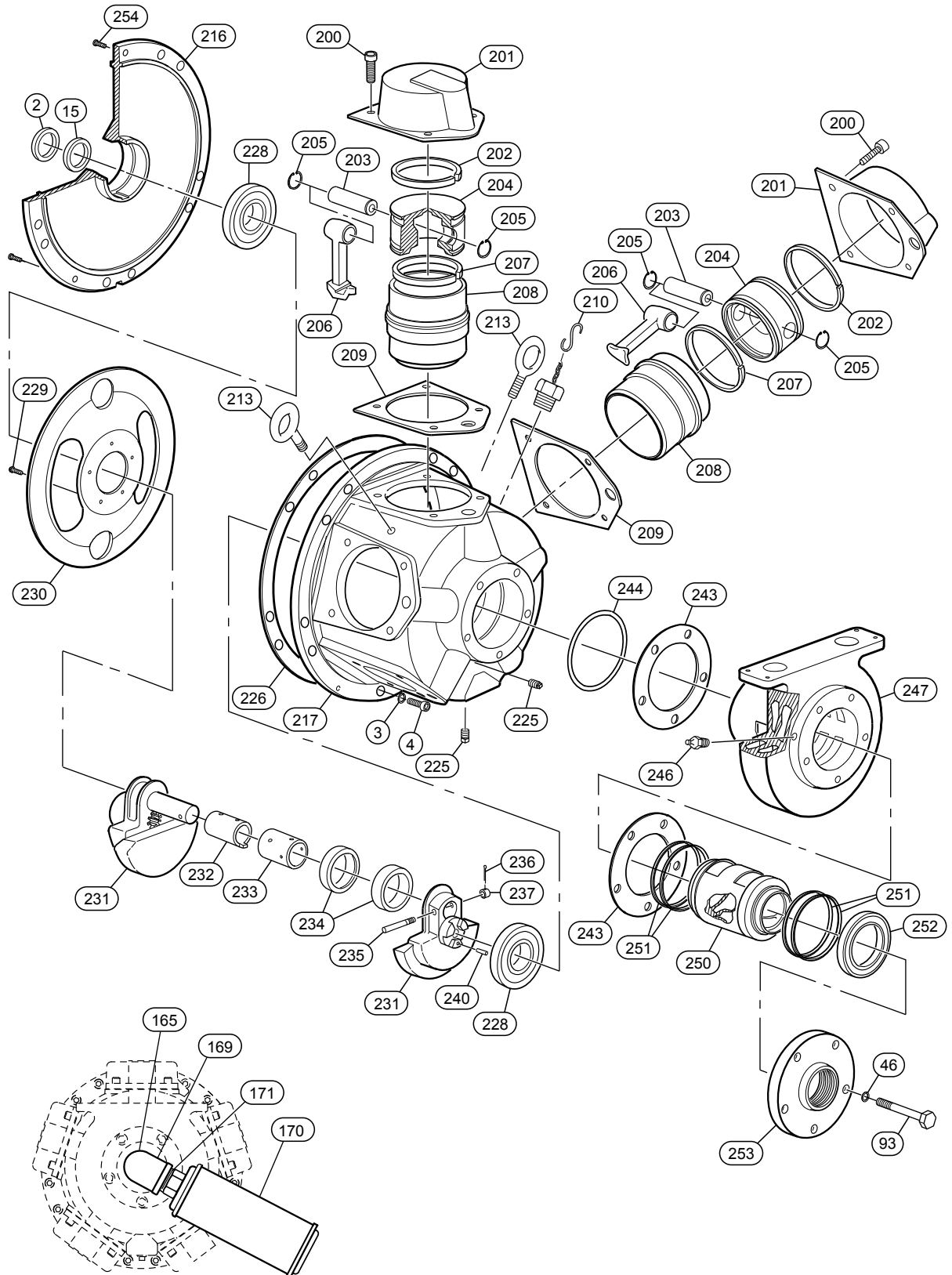
Siderail (Item 98) With Brake Band	Part Number (CCN)	Siderail (Item 98) Without Brake Band	Part Number (CCN)
Siderail (16 inch Drum)	382-32267-3 (71477913) †	Siderail (16 inch Drum)	Contact Factory
Siderail (20 inch Drum)	382-32267-4 (71477921) †	Siderail with 20 inch Drum	382-32268-4 (71477988) †
Siderail (24 inch Drum)	382-32267-5 (71477939) †	Siderail with 24 inch Drum	382-32268-5 (71477996) †
Siderail (30 inch Drum)	382-32267-6 (71477947) †	Siderail with 30 inch Drum	382-32268-6 (71478002) †
Siderail (36 inch Drum)	382-32267-7 (71477954) †	Siderail with 36 inch Drum	382-32268-7 (71478010) †
Siderail (42 inch Drum)	382-32267-8 (71477962) †	Siderail with 42 inch Drum	382-32268-8 (71478028) †
Siderail (55 inch Drum)	Contact Factory	Siderail with 55 inch Drum	Contact Factory

Note 1: Contact Factory for divided drum part numbers; not available for Man Rider application.

** Man Rider winches are only available with a band brake drum and no drum lock.

† These parts also come in a cold weather version. Refer to model code. Adding CH (DNV) or CHA (ABS) to the end of these part numbers is required to retain winch cold weather certification. Example: Order Drum item (96) (24 inches long part number 382-34920-5 as part number 382-34920-5CH.

MOTOR ASSEMBLY DRAWING



(Dwg. MHP2693)

MOTOR ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
199	Motor Assembly	1	K5B-546M-S (71445258)	213	Eye Bolt	2	71431506
	for use with Control Valve			216	Mounting Flange	1	K5B-502A
	for use w/out Control Valve			217	Motor Housing (Note 1)	1	382-30415-S (71475818)
2	Oil Seal	1	51873 (03980927)	225	Pipe Plug (Drain)	3	54912 (71077242)
3	Lockwasher	10	51607 (71225973)	226	Gasket	1	K5B-592 (03880655)
4	Capscrew	10	71268205	228	Bearing	2	51066 (03989746)
15	Seal Adapter	1	16354 (71063192)	229	Screw	5	71420277
46	Lockwasher	5	50181 (03898269)	230	Oil Slinger	1	K5B-540 (03880275)
93	Capscrew (Imperial thread)	5	51471 (71076772)	231	Crank Assembly	1	K5B-A516S
	Capscrew (Metric thread)	5	71452536	232	Sleeve	1	K5B-519 (03880267)
165	Reducer Bushing	1	71057459	233	Connecting Rod Bushing	1	K5B-511 (03880242)
169	Pipe, Elbow	1	71057434	234	Connecting Rod Ring	2	K5B-510 (03880218)
170	Muffler	1	50594 (03969524)	235	Lock Pin	1	HU-520 (03185048)
171	Pipe Nipple	1	71057467	236	Cotter Pin	1	53456 (71229389)
200	Capscrew (Metric thread)	20	71434260	237	Pin Nut	1	D02-394 (03197723)
	Capscrew (Imperial thread)		52317 (71063705)	240	Roll Pin	1	54257 (71231104)
201	Cylinder Head	5	K5B-H505 (03884509)	243	Gasket	2	K5B-928 (03880580)
202	Compression Ring	1 Set	K5B546-KRING (03944691)	244	'O' Ring	1	20A11CM248 (95086690)
203	Wrist Pin	5	HU-514A (03504750)	246	Grease Fitting	1	53095 (03900172)
204	Piston	5	**	247	Rotary Valve Housing	1	K5B-545M-S (71449300)
205	Retainer Ring	1	902A45-632-10 (03944717)	250	Rotary Valve Assembly	1	K5B-526EQ-RS (71352900)
206	Connecting Rod	5	K5B-509 (03880333)	251	Seal Ring Assembly	1 set	K5B-607A (03944485)
207	Oil Ring	Order Item 202		252	Bearing	1	K5B-97 (03880473)
208	Cylinder Liner	5	K5B-L505-47 (03880549)	253	Exhaust Flange	1	KK5B-276M (03925245)
209	Head Gasket	1 Set	K5B-507-5 (03944709)	254	Screw	2	71262810
210	Vent Cap Assembly	1	26604 (71339949)	411	Label, Caution (Note 2)	1	43810134

** Parts not sold separately. Refer to "K5B Motor Assembly Kit List."

Note 1: Motor housing (217) includes items 93, 200, 213, 949 and 951; Refer to control valve for 949 and 951.



- Check serial number before mounting control valve, these capscrews have been provided in both metric and standard threads for old and new style rotary housing. Refer to label item 411.

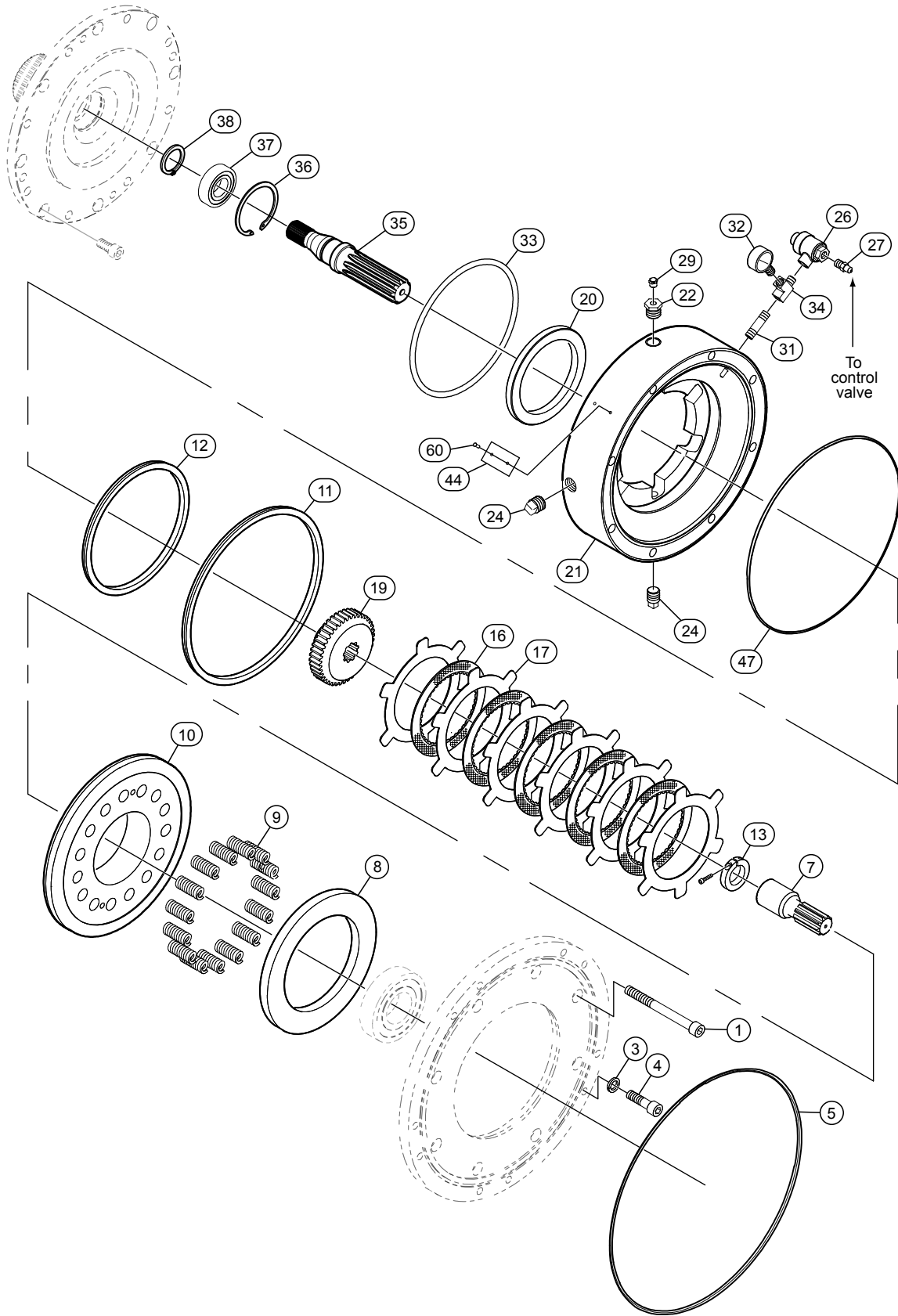
Note 2: Item 411 is provided with kits and not shipped with complete unit.

MOTOR ASSEMBLY PARTS LIST CONTINUED

Motor Assembly Kit List:

Item No.	Description of Part	Total Qty	Part Number (CCN)
1001	Service Kit: Motor (including in Overhaul Kits) (include items: 2, 3, 4, 5, 15, 93, 200, 202, 205, 207, 208, 209, 225, 226, 228, 229, 233, 235, 236, 237, 243, 244, 246, 251, 252 and 254)	1	71390181
1002	Motor Gasket Kit (include items: 209, 226, 243, 244, 248 and 946)	1	26823 (71351498)
1003	Motor Assembly with Control Valve (include items: 2, 15 and 227)	1	K5B-546M-S (71445258)
1004	Motor Assembly without Control Valve (include items: 2, 15 and 227)	1	K5B-546LM-S (71444830)
1005	Piston Assembly (include items: 202, 203, 204, 205 and 207)	1	K5B-A513-47 (03924495)
1006	Rotary Valve Assembly (include items: 243, 244, 250, 251 and 252)	1	K5B-526EQ-RS (71352900)
1007	Crankshaft Assembly (include items: 206, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237 and 240)	1	K5B-A516 (03918851)
1008	Replacement Kit: Muffler (include items: 165, 169, 170, 171, 957, 958, 959)	1	47572062001

DISC BRAKE ASSEMBLY DRAWING



(Dwg. MHP3878)

DISC BRAKE ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
48	Disc Brake Assembly	1	382-30999 (71444707)	22	Fitting, Reducer Bushing	1	51803 (71076582)
1	Capscrew (with Disc Brake)	8	51471 (71076772)	24	Pipe Plug	2	51467 (71074702)
3	Lockwasher	10	51607 (71225973)	26	Dump Valve	1	50276 (71025704)
4	Screw	10	71268205	27	Vented, Fitting	1	20770 (71121784)
5	'O' Ring	1	51459 (03980588)	29	Breather	1	51857 (71062558)
7	Shaft Extender	1	10594 (71062582)	29	Breather	1	51857 (71062558)
8	Brake Reaction Plate	1	10597 (71075204)	31	Fitting, Nipple	1	50859 (71063655)
9	Spring	15	50751 (03990181)	32	Gauge, Pressure	1	43806249
10	Brake Piston	1	382-31002 (71444731)	• 33	'O' Ring	1	51460 (03980596)
• 11	Seal	1	71444822	34	Fitting, Tee	1	71063374
• 12	Seal	1	51462 (03974821)	35	Drive Shaft	1	25631 (71315303)
13	Collar	1	71039333	36	Retaining Ring	1	52298 (71227334)
16	Friction Plate	5	71126874	37	Bearing	1	50460 (71069702)
17	Drive Plate †	6	382-31004 (71444756)	38	Retaining Ring	1	51872 (03980919)
19	Gear †	1	382-31707 (71463269)	44	Label, Low Pressure	1	71465942
20	Reaction Ring	1	382-31080 (71446793)	• 47	'O' Ring	1	51458 (03974805)
21	Brake Housing †	1	382-31000 (71444715)	60	Rivet	2	71028849

• Recommended spare for one winch, 2 years of normal operation.

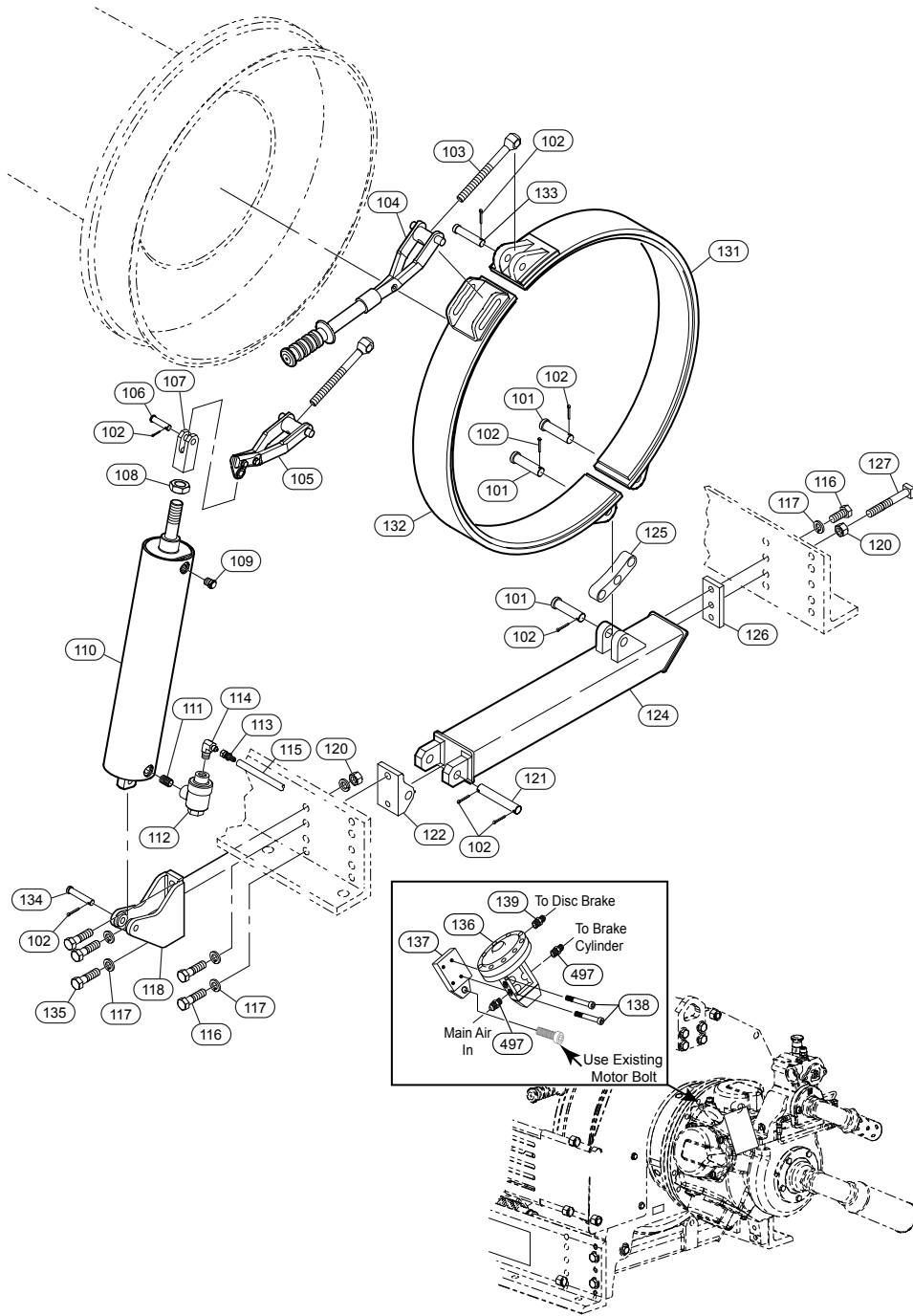
† These parts also come in a cold weather version. Refer to model code. Adding CH (DNV) or CHA (ABS) to the end of these part numbers is required to retain winch cold weather certification. Example: Order Brake Housing item (21) part number 382-31000 as part number 382-31000CH.

Certification Type	Example Part Number To Order	
ABS	---	382-31000CHA
DNV	382-31000CH	---

Disc Brake Kit List:

Item No.	Description of Part	Total Qty	Part Number (CCN)
1009	Conversion Kit: Automatic Disc Brake (include items: 1, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 16, 17, 19, 20, 21, 22, 24, 26, 27, 29, 30, 31, 32, 34, 35, 36, 37, 38, 44, 47, 60)	1	47571644001
1010	Service Kit: Disc Brake (included in Overhaul Kits) (include items: 1, 3, 4, 5, 9, 11, 12, 13, 16, 17, 22, 26, 27, 29, 30, 31, 32, 34, 47)	1	47571652001

BAND BRAKE ASSEMBLY DRAWING



(Dwg. MHP2923)

BAND BRAKE ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number (CCN)	
			Manual Brake	Automatic Brake
98	Siderail	2	Refer to "DRUM AND SIDERAIL PARTS LIST" on page 6	

Common Parts:

100	Brake Assembly - Manual Brake †	1	382-32935 (43811595)	---
	Brake Assembly - Automatic Brake	1	---	21342 (71202550)
101	Pin †	3	382-29653 (71415392KTW)	
102	Cotter Pin	7 (8)	51996 (71128425)	
103	Link Stud †	1	4115 (03979010)	
104	Brake Lever †	1	4127 (03979028)	---
	Brake Lever † (Ti Model)	1	382-32980 (43812361)	---
105	Brake Lever †	1	---	21158 (71201792)
106	Pin	1	---	8609 (03904711)
107	Clevis	1	---	21282 (71134282KTW)
108	Nut	1	---	54570 (03931045)
109	Breather	1	---	52384 (03899325)
110	Cylinder	1	---	6201-1 (4") (03931094)
111	Fitting, Bushing	1	---	52006 (71086839)
112	Dump Valve	1	---	51954 (03974870)
113	Fitting, Hose End	2	---	51029 (03990298)
114	Fitting, Elbow	1	---	54272 (71231153)
115	Hose (bulk - specify length)	As Req'd	---	50923-xx
116	Capscrew	2	---	43811058
	Capscrew	4	43811058	---
117	Lockwasher	4 (5)	71320972	
118	Bracket	1	---	23781 (71141147)
120	Nut	1 (2)	71418651	
121	Pin †	1	29660 (71415467)	
122	Pivot Bracket †	1	10922 (71130595)	
124	Arm †	1	382-29804 (71418552)	
125	Connecting Link †	1	382-29655 (71415418)	
126	Stop Plate	1	10879 (71075329)	
127	Screw, Adjusting	1	71033104	53092 (03981412)
129	Brake Band Service Kit	1 Kit	Contact Factory	
131	Brake Band, rear	1	382-29556 (71413470)	
132	Brake Band, front	1	382-29555 (71413462)	
133	Pin, Clevis †	1	382-29650	
134	Pin	1	---	22442 (71134290)
135	Screw	3	---	45877529
136	Valve, Volume Boost	1	---	71397194
137	Bracket	1	---	382-32137 (71473086)
138	Capscrew	2	---	71386957
139	Fitting, Tube	1	---	52092
497	Fitting, Tube	2	---	51814 (03980752)

• Recommended spare for one winch, 2 years of normal operation.

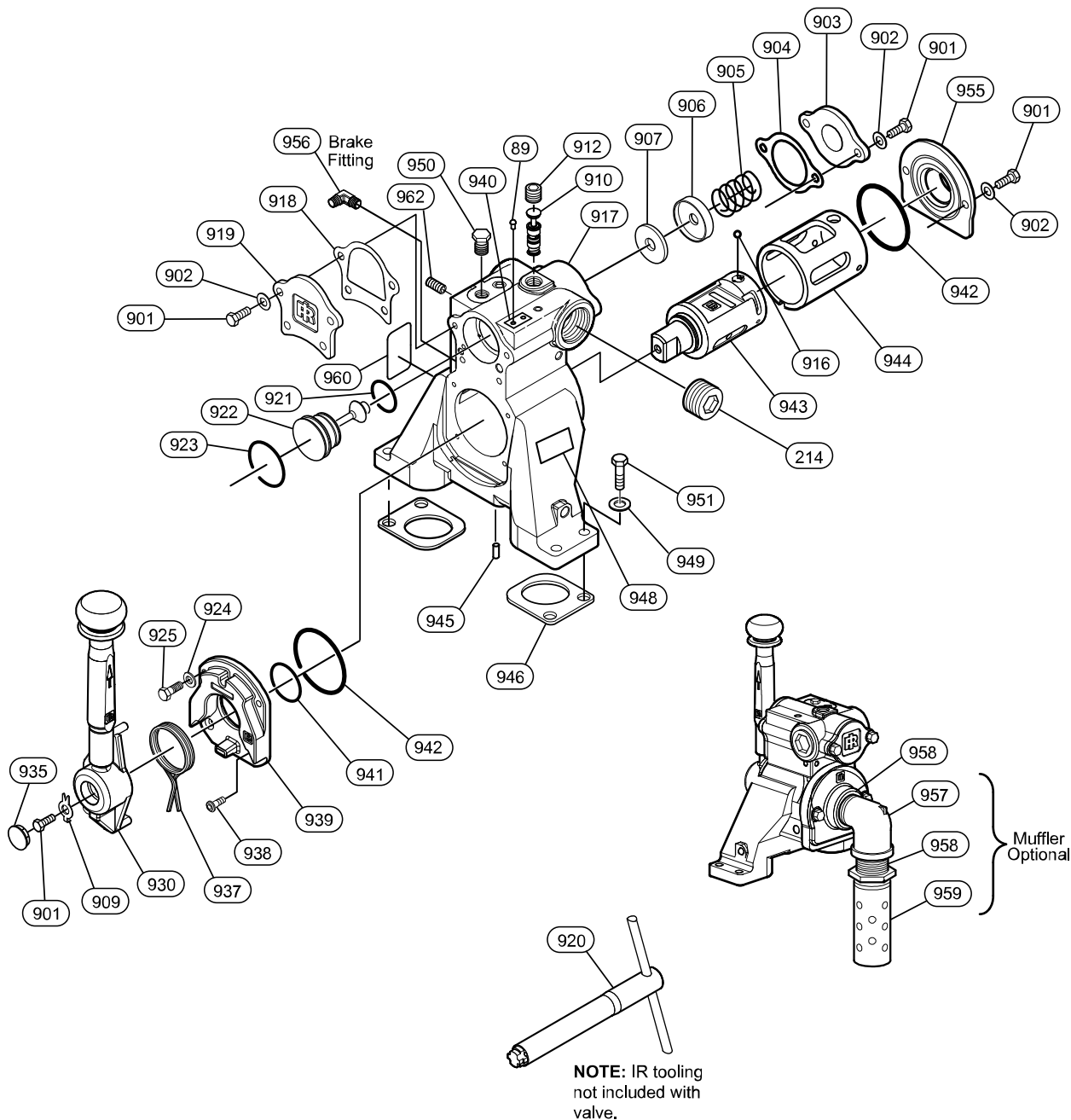
† These parts also come in a cold weather version. Refer to model code. Adding CH (DNV) or CHA (ABS) to the end of these part numbers is required to retain winch cold weather certification. Example: Order Brake Band item (128) part number 20758 as part number 20758CH.

Certification Type	Example Part Number To Order	
ABS	---	20758CHA
DNV	20758CH	---

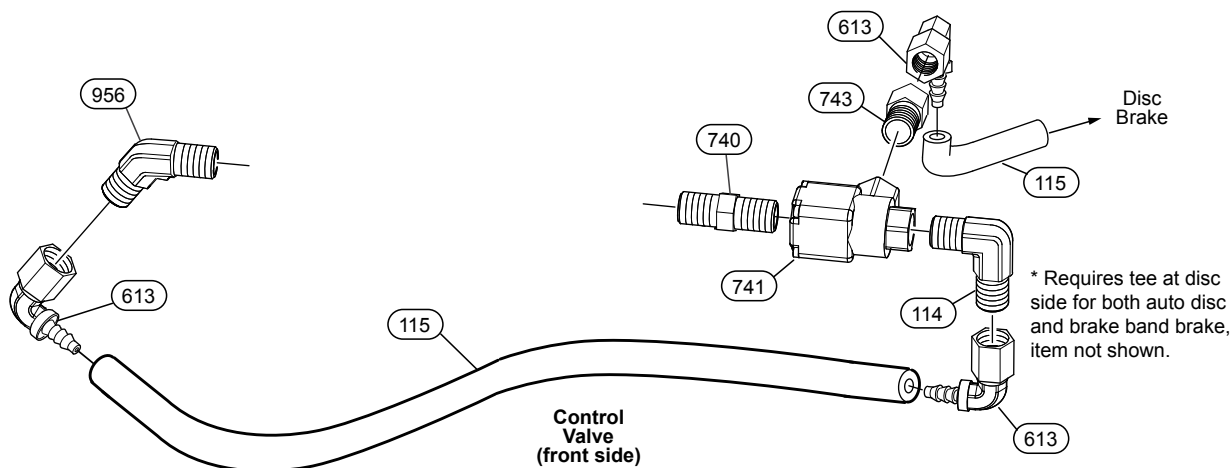
Band Brake Kit List:

Item No.	Description of Part	Total Qty	Part Number (CCN)
1011	Conversion Kit: Automatic Band Brake (include items: 102, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 117, 118, 120, 130, 134, 135, 136, 137, 497, 498)	1	47571639001
1012	Service Kit: Band Brake (included in Overhaul Kits) (include items: 102, 131, 132)	1	47571646001

CONTROL VALVE ASSEMBLY DRAWING



(Dwg. MHP2696)



* Requires tee at disc side for both auto disc and brake band brake, item not shown.

(Dwg. MHP3182)

CONTROL VALVE ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
900	Control Valve Assembly	1	K5C2-X (71382295)	925	Capscrew	2	71348338
89	Rivet	2	71028849	930	Handle Assembly	1	27239-1 (71398283)
114	Fitting, Elbow	1	52181 (03908357)	935	Plug	1	71348965
115	Hose (bulk)	As Req'd	50923 (03990215)	937	Spring	1	26966 (71348262)
214	Plug	1	71263297	938	Buttonhead Screw	2	71394407
613	Fitting	1	52179 (03895729)	939	Seal Bracket (Note 2)	1	28733-S (71394944)
740	Fitting, Connector	3	71367908	940	Tag (No FA2B)	1	71392757
741	Shuttle Valve	1	50277 (03969466)	941	'O' Ring	1	71357198
743	Fitting	1	51814 (71367908)	942	'O' Ring	2	51651 (71292056)
901	Capscrew	9	71342034	943	Reverse Valve Kit (Normal) **	1	27925-XLP (71471585)
902	Washer	8	71303408		Reverse Valve (Reverse Bias) **		28002 (71377303)
903	Poppet Cover	1	26997 (71350813)		Reverse Valve (Unbiased)		****
904	Poppet Gasket	1	27064 (71350862)	944	Bushing (Normal) ***	1	382-29739 (71417067)
905	Poppet Spring	1	71351068		Bushing (Reverse Bias) ***		27450 (71359707)
906	Poppet Cap	1	28734 (71394381)		Bushing (Unbiased)		****
907	Poppet Seal	1	26991 (71348908)	945	Dowel Pin	1	71146674
909	Washer, Tablock	1	71398051	946	Gasket	Set	27115 (71351936)
910	Pilot Valve Assembly	1	28696 (71393508)	948	Label, Throttle Direction	1	71352777
912	Plug	1	71267561	949	Washer	4	71413355
916	Ball	1	D10-280 (03176864)	950	Plug	1	71366348
917	Valve Housing	1	*	951	Capscrew	4	71431365
918	Cover Gasket	1	26999 (71349112)	955	Exhaust Flange	1	26691 (71348320)
919	Piston Cover	1	26998 (71350821)	956	Fitting, Elbow	1	71367932
920	IR Pilot Valve Tool	1	28690 (71393276)	957	Fitting, Elbow	1	54299 (71231195)
921	'O' Ring	1	52537 (03968617)	958	Fitting, Nipple	2	71311252
922	Piston (Note 1)	1	28735-S (71394936)	959	Muffler	1	52472 (03981040)
923	'O' Ring	1	71355796	960	Label, Warning	1	71373229
924	Washer	2	71271985	962	Breather	1	51559 (03989571)

* Item 917 not sold separately, order item 900

** Reverse Valve (Normal) for Standard Overwound operation. Reverse Valve (Reverse Bias) for Optional Underwound operation.

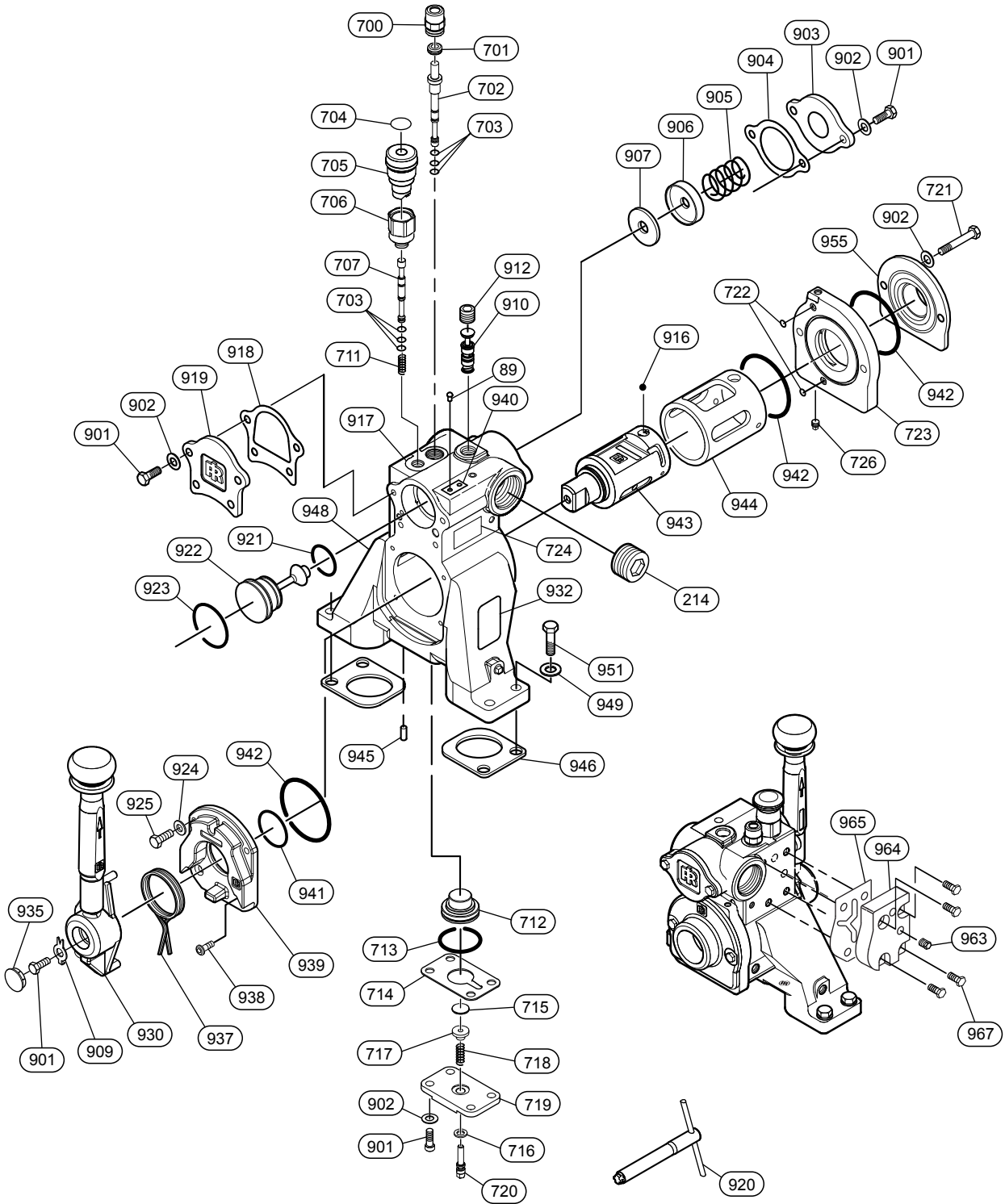
*** Ensure Bushing matches Reverse Valve (Reverse Valve (Normal) and Bushing (Normal)). Mixing these components can result in erratic winch operation.

**** Reverse Valve (Unbiased) and Bushing (Unbiased) contact factory for application.

Note 1: Includes items (6) each of 901 and 902, items 904-907, 918, 921 and 923.

Note 2: Includes items (1) each of 901 and 902, items 924, 925, 935, 937, 938, 941 and 942.

EMERGENCY STOP AND OVERLOAD CONTROL VALVE ASSEMBLY DRAWING (-E MODEL)



(Dwg. MHP2697)

EMERGENCY STOP AND OVERLOAD CONTROL VALVE ASSEMBLY PARTS LIST (-E MODEL)

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
908	Control Valve Assembly	1	K5C2-EXLP (71455372)	918	Cover Gasket	1	26999 (71349112)
89	Rivet	2	71028849	919	Piston Cover	1	26998 (71350821)
214	Plug	1	71263297	920	IR Pilot Valve Tool	1	28690 (71393276)
700	Cap	1	27491 (71360721)	921	'O' Ring	1	52537 (03968617)
701	Grommet	1	71365779	922	Piston (Note 1)	1	28735-S (71394936)
702	Plunger	1	27490 (71360716)	923	'O' Ring	1	71355796
703	'O' Ring	6	71127039	924	Washer	2	71271985
704	Label, Stop	1	95790099 (DNM38730107)	925	Capscrew	2	71348338
705	Button, E-Stop	1	71372601	930	Handle Assembly	1	27239-1 (71398283)
706	Adapter	1	27488 (71360697)	935	Plug	1	71348965
707	Plunger	1	27489 (71360705)	937	Spring	1	26966 (71348262)
711	Spring	1	71365787	938	Buttonhead Screw	2	71394407
712	Piston	1	27964 (71372593)	939	Seal Bracket (Note 2)	1	28733-S (71394944)
713	'O' Ring	1	51768 (03989514)	940	Tag, No FA2B	1	71392757
714	Gasket	1	27493 (71360747)	941	'O' Ring	1	71357198
715	Plate	1	27624 (71364376)	942	'O' Ring	3	51651 (71292056)
716	'O' Ring	1	71365795	943	Reverse Valve Kit (Normal) **	1	27925-XLP (71471585)
717	Adjustment Nut	1	24374 (71265995)		Reverse Valve (Reverse Bias) **		**
718	Spring	1	71053730		Reverse Valve (Unbiased)		****
719	Cover	1	27494 (71360754)	944	Bushing (Normal) ***	1	382-29739 (71417067)
720	Screw, Adjusting	1	27571 (71365605)		Bushing (Reverse Bias) ***		***
721	Capscrew	2	71398879		Bushing (Unbiased)		****
722	'O' Ring	2	71138135	945	Dowel Pin	1	71146674
723	Exhaust Adapter	1	27540 (71362784)	946	Gasket	Set	27115 (71351936)
724	Label Plate, LP (Note 3)	1	71465959	948	Label, Throttle Direction	1	71352777
726	Plug	1	27945 (71372635)	949	Washer	4	71413355
901	Capscrew	11	71342034	951	Capscrew	4	71431365
902	Washer	12	71303408	955	Exhaust Flange	1	26691 (71348320)
903	Poppet Cover	1	26997 (71350813)	956	Fitting, Elbow	1	71367932
904	Poppet Gasket	1	27064 (71350862)	957	Fitting, Elbow (refer to Dwg. MHP2696)	1	54299 (71231195)
905	Poppet Spring	1	71351068	958	Fitting, Nipple (refer to Dwg. MHP2696)	1	71311252
906	Poppet Cap	1	28734 (71394381)	959	Muffler (refer to Dwg. MHP2696)	1	52472 (03981040)
907	Poppet Seal	1	26991 (71348908)	960	Label, Warning	1	71373229
909	Washer, Tablock	1	71398051	963	Plug	3	28628
910	Pilot Valve Assembly	1	28696 (71393508)	964	Manifold Block †	1	382-31727 (71463681)
912	Plug	1	71267561	965	Gasket †	1	382-31762
916	Ball	1	D10-280 (03176864)	966	Washer †	4	71271985
917	Valve Housing	1	*	967	Capscrew †	4	71348338

EMERGENCY STOP AND OVERLOAD CONTROL VALVE ASSEMBLY PARTS LIST (-E MODEL) CONTINUED

- † Items 964 through 967
- * Item 917 not sold separately, order item 908.
- ** Reverse Valve (Normal) for Standard Overwound operation. Reverse Valve (Reverse Bias) for Optional Underwound operation.
- *** Ensure Bushing matches Reverse Valve (Reverse Valve [Normal] and Bushing [Normal]). Mixing these components can result in erratic winch operation.
- **** Reverse Valve (Unbiased) and Bushing (Unbiased) contact factory for application.

Refer to 'Control Valve Assembly Parts List' on page 17 for Notes 1 and 2 and all other kit part numbers.

Note 1: Includes items (6) each of 901 and 902, items 904-907, 918, 921 and 923.

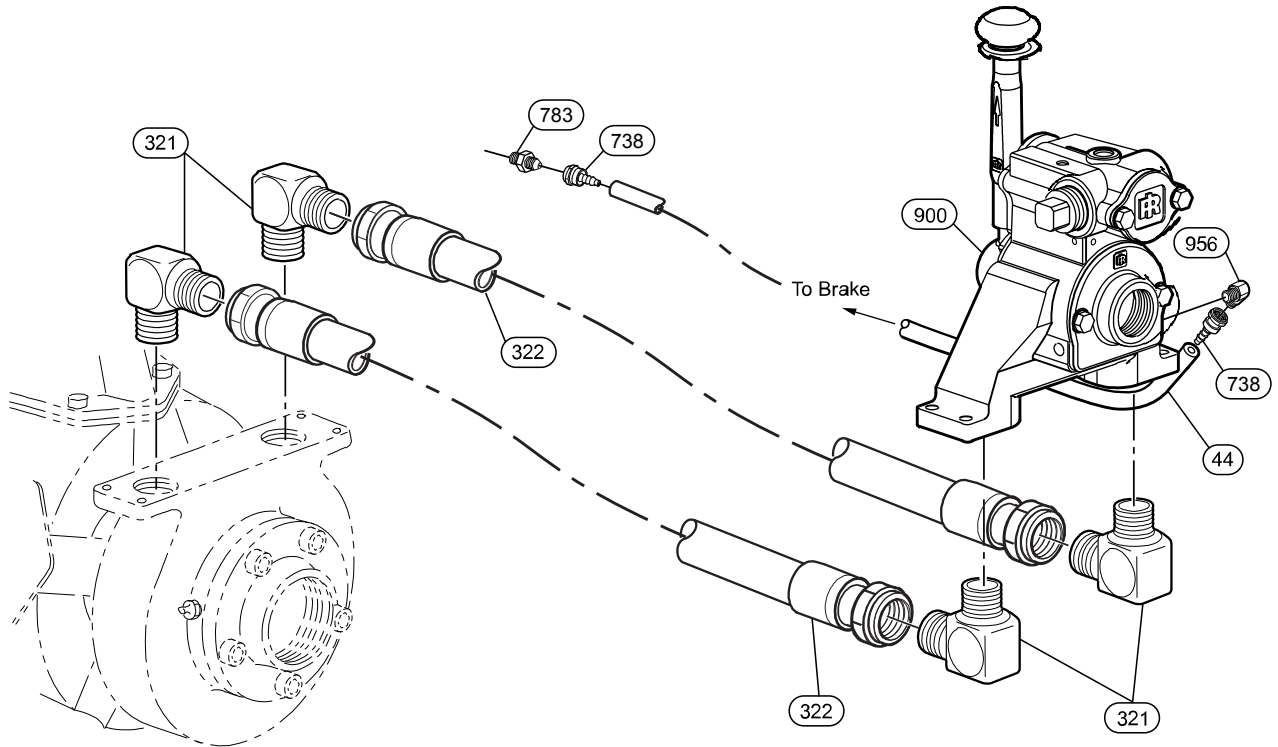
Note 2: Includes items (1) each of 901 and 902, items 924, 925, 935, 937, 938 and 940.

Note 3: Refer to Label Placement Dwg. MHP2718 on page 40.

Emergency Stop and Overload Control Valve Assembly Kit List:

Item No.	Description of Part	Total Qty	Part Number (CCN)
1013	Service Kit: K5C2 Valve (include items: 701, 703, 711, 713, 714, 716, 721, 722, 901, 902, 904, 905, 907, 909, 916, 918, 921, 923, 924, 925, 935, 937, 938, 941, 942, 946, 949, 951 and 965)	1	27240 (71354401)
1014	K5C2-E E-Stop Seal Kit (include items: 703 and 711)	1	27994 (71373328)

FULL FLOW REMOTE CONTROL VALVE ASSEMBLY DRAWING AND PARTS LIST



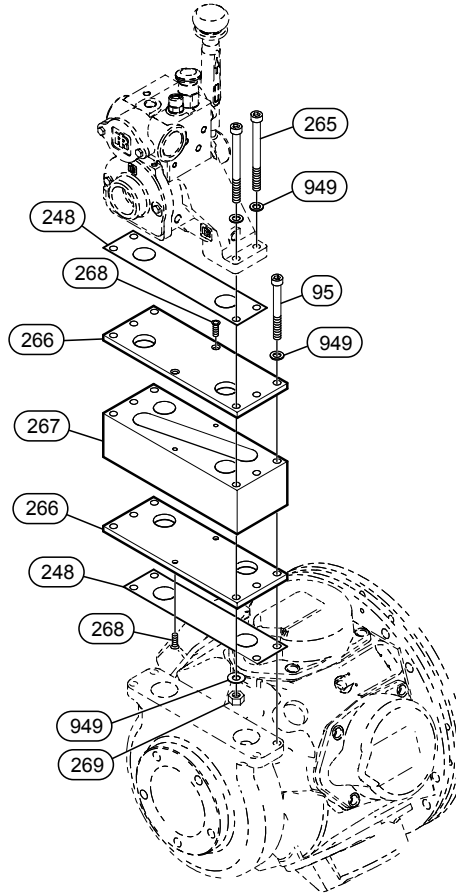
(Dwg. MHP2698)

Item No.	Description of Part	Total Qty	Part Number (CCN)
900	Control Valve Assembly	1	K5C2-X (71382295)
44	Hose (bulk)	As Req'd	50923 (03990215)
321	Fitting, Elbow	4	54270 (71075915)
322	Hose Assembly	2	47533155001
738	Fitting	2	51029 (03990298)
783	Fitting	1	20770 (71121784)
956	Fitting, Elbow	1	71367932

Note 1: Requires special tool to install fittings into hose ends.

Note 2: Maximum hose length of 20 ft.

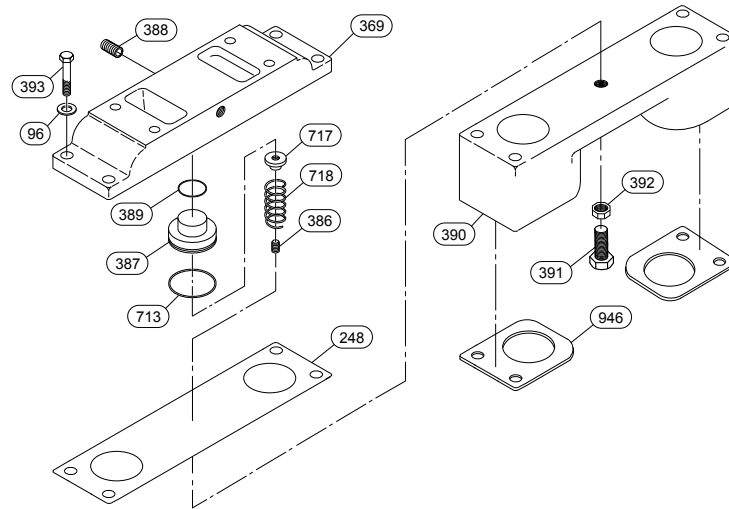
UNDERWIND REVERSING MANIFOLD (OPTIONAL) ASSEMBLY DRAWING AND PARTS LIST



(Dwg. MHP2939)

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
264	Reversing Manifold Assembly	1	28749 (71394639)	267	Manifold	1	W21007/89063 (71257232)
95	Capscrew	2	71106736	268	Capscrew	4	71262810
248	Gasket	2	K5B-547 (03885258)	269	Nut	2	43805258
265	Capscrew	4	71475073	949	Washer	8	71413355
266	Cover	2	W21008/89063 (71257240)				

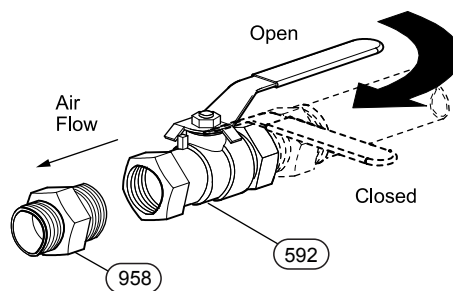
PENDANT OPERATED OVERLOAD (OPTIONAL) ASSEMBLY DRAWING AND PARTS LIST



(Dwg. MHP3640)

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
96	Washer	4	71376370	391	Adjustment Screw	1	45989571
248	Gasket, Housing	1	K5B-547 (03885258)	392	Nut	1	45989563
369	Adapter	1	24373 (71265987)	393	Capscrew	4	45989803
386	Setscrew	1	71266589	713	'O' Ring	2	51768 (03989514)
387	Piston	1	24372 (71265979)	717	Adjustment Nut	1	28929 (71398861)
388	Plug, Orifice	1	382-31313 (71454359)	718	Spring	1	
389	'O' Ring	1	50557 (03990082)	946	Gasket	2	27115 (71351936)
390	Adjustment Adapter	1	382-37733 (45989555)				

SHUT-OFF VALVE ASSEMBLY DRAWING AND PARTS LIST



(Dwg. MHP2958)

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
592	Valve, Shut-off	1	71416911	958	Fitting, Nipple	1	71311252

Note: Shut-off valve assembly is supplied unattached to product. Refer to Product Information Manual for installation.

PENDANT OPERATED PILOT CONTROL VALVE (OPTIONAL) ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
96	Washer (Note 2)	4	71376370	347	Pin	1(2)	71146195
248	Gasket, Housing	1	K5B-547 (03885258)	354	Exhaust Poppet	1	23516 (71135628)
330	Valve Assembly:	1	PTV1 (71465827)	355	Plug	1	51897 (71112148)
	Standard			356	Spring	2	71138028
	-E Option			357	Inlet Poppet	2	23517 (71135636)
	Reverse Bias			358	Gasket	1	71264725
331	Valve Shaft	1	23522 (71135685)	359	Fitting, Elbow	1	71262299
332	Restrictor, Poppet	1	23523 (71135693)	360	'O' Ring	2	52662 (03930906)
333	Restrictor, Seat	1	23524 (71135701)	361	Poppet Seat	2	23518 (71135644)
334	'O' Ring	1	71137988	362	Retainer Ring	2	53833 (71149132)
335	Pin	2	71293179	363	'O' Ring	2	52573 (71138127)
336	Pin	2	71293161	366	Capscrew	4	71138069
337	Setscrew	1	71138093	367	Valve Cap	2	28433 (71386726)
338	Sleeve	1	23606 (71139398)	368	Capscrew	4	71138077
339	Valve Body	1	*	369	Adapter, Standard	1	23514 (71335602)
340	Gasket	2	23592 (71139257)		Adapter, -E Option		24373 (71265987)
341	Pin (Note 1)	1(2)	23594 (71139273)	370	Capscrew	4	52303 (71078026)
	Valve Assembly (Note 1)	1(2)		380	Washer (not shown)	4	51013 (03898632)
	'O' Ring (Note 1)	2(4)		381	Capscrew	1	53807 (71059570)
342	Manifold	1	382-31755 (71464044)	389	Elbow, Fitting	2	51714
343	Spring Clip	1	24793 (71299531)	713	'O' Ring	2	51768 (03989514)
344	Washer	1	50899 (71224794)	924	Washer	8	71271985
345	Capscrew	2	71261747	951	Capscrew	4	71431365
346	Gasket	1	382-31761 (71464168)				

* Item not sold separately. Order item 330.

Note 1: Refer to the following to determine Pin (347) and Valve Assembly (341) configuration requirements: Winches without disc or automatic band brake use quantity of 2 Pins (347). Winches with a single automatic brake (disc or drum band) (Valve Assembly 25439 or 25440) use quantity of 1 Pin (347) and 1 Valve Assembly (341). Winches with disc and automatic band brakes (Valve Assemblies 25441 or 25468) use quantity of 2 Valve Assemblies (341).

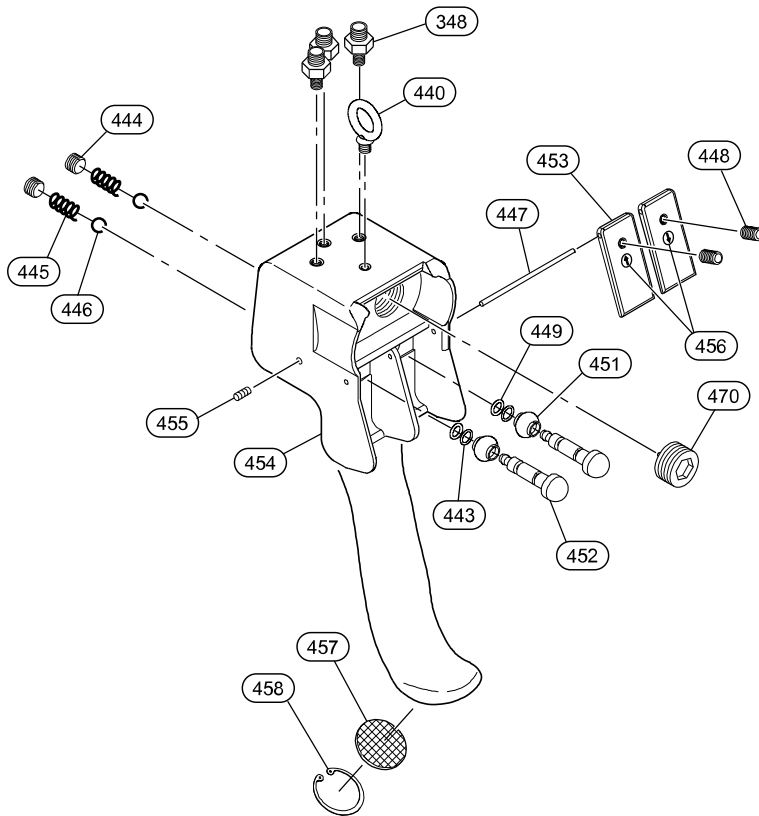
Note 2: Quantity of 4 Washers (96) required to mount Adapter (369). Additional Washer (96) quantities are 'As Required' to establish clearance tolerances described in "MAINTENANCE" section.

Pendant Operated Pilot Control Valve (Optional) Assembly Kit List:

Item No.	Description of Part	Total Qty	Part Number (CCN)
1015	Service Kit: PTV1 Control Valve (included in Overhaul Kits) (include items: 96, 248, 334, 336, 337, 340, 345, 346, 356, 358, 360, 363, 366, 368, 370, 381, 713, 924 and 951)	1	47528608001

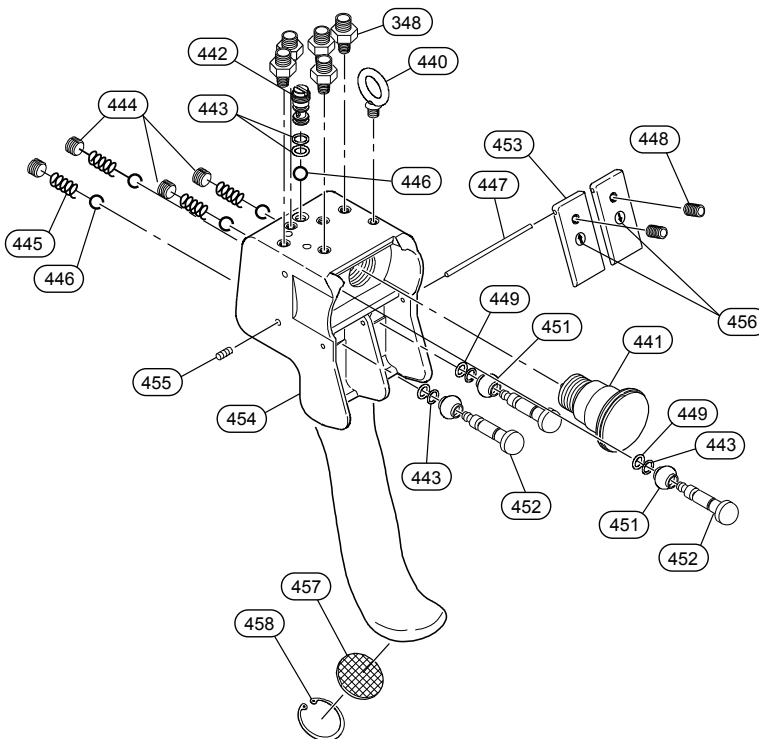
TWO LEVER REMOTE PENDANT (OPTIONAL) ASSEMBLY DRAWINGS

Pendant without Emergency Stop



(Dwg. MHP2346)

Pendant with Emergency Stop



(Dwg. MHP1677)

TWO LEVER REMOTE PENDANT (OPTIONAL) ASSEMBLY PARTS LIST

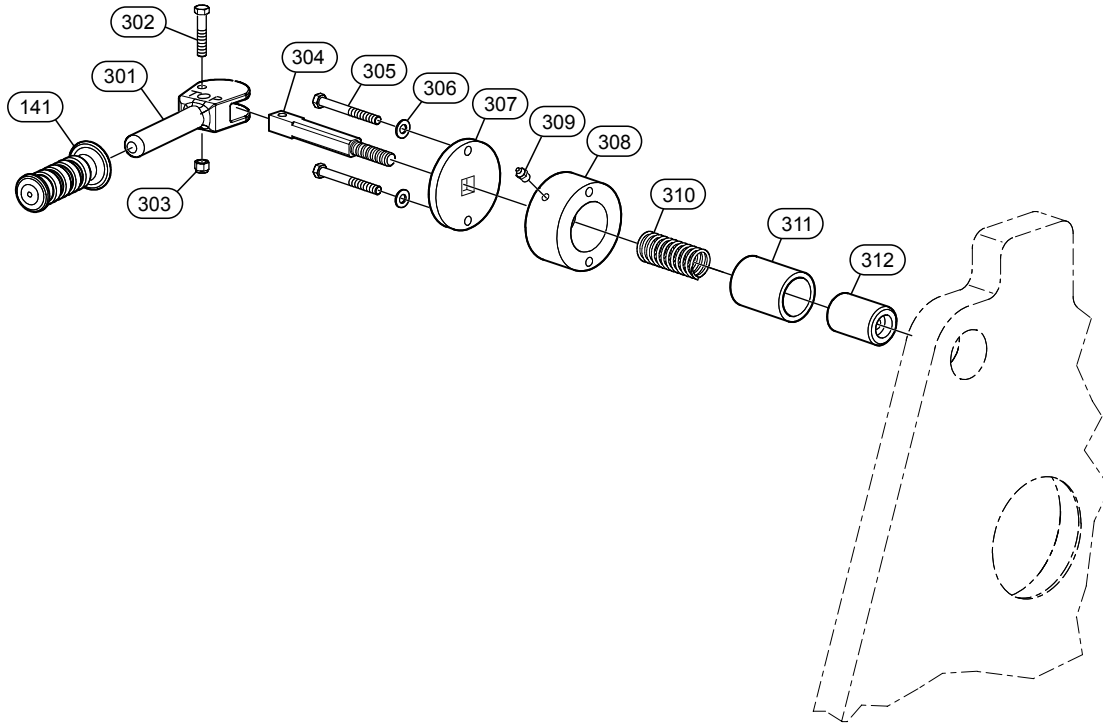
Item No.	Description of Part	Total Qty	Part Number (CCN)	
			Without E-Stop	With E-Stop
353	Pendant Assembly *	1	PHS2E (38559233)	PHS2E-U (38559258)
348	Fitting	3(5)	71048268	
440	Lifting Eye	1	6422-2332 (38529160)	
441	Emergency Stop Valve	1	---	9579-0108 (38851180)
442	Valve	1		9579-0106 (38551198)
443	'O' Ring	2(5)	5820-9229 (38534517)	
444	Plug	2(4)	6510-7741 (38648143)	
445	Spring	2(4)	6912-8541 (38553889)	
446	Ball	2(5)	6940-1625 (38542924)	
447	Pin	1	9579-0040 (38538237)	
448	Setscrew	2	4200-8607 (38555546)	
449	'O' Ring	2(3)	5823-5329 (38550208)	
451	Protector	2(3)	9579-0107 (38554580)	
452	Valve	2(3)	9579-0104 (38550190)	
453	Lever	2	9579-0122 (38559100)	
454	Pendant Handle	1	order item 353	
455	Setscrew	3(5)	71078158	
456	Label Kit	1	9579-0111 (38554598)	
457	Exhaust Washer	1	6760-0303 (38535621)	
458	Retainer Ring	1	4771-3030 (38559373)	
470	Plug	1	6512-9541 (38559530)	---

* PHS2E includes items 440-449 and 451-458.
PHS2E-U includes items 440, 443-449, 451-458 and 470.

Two Lever Remote Pendant (Optional) Assembly Kit List:

Item No.	Description of Part	Total Qty	Part Number (CCN)
1016	Service Kit: PHS2-U Pendant (include items: 442, 443, 444, 445, 446, 449, 451 and 456)	1	38781431

DRUM LOCKING PIN (OPTIONAL) ASSEMBLY DRAWING AND PARTS LIST



(Dwg. MHP2675)

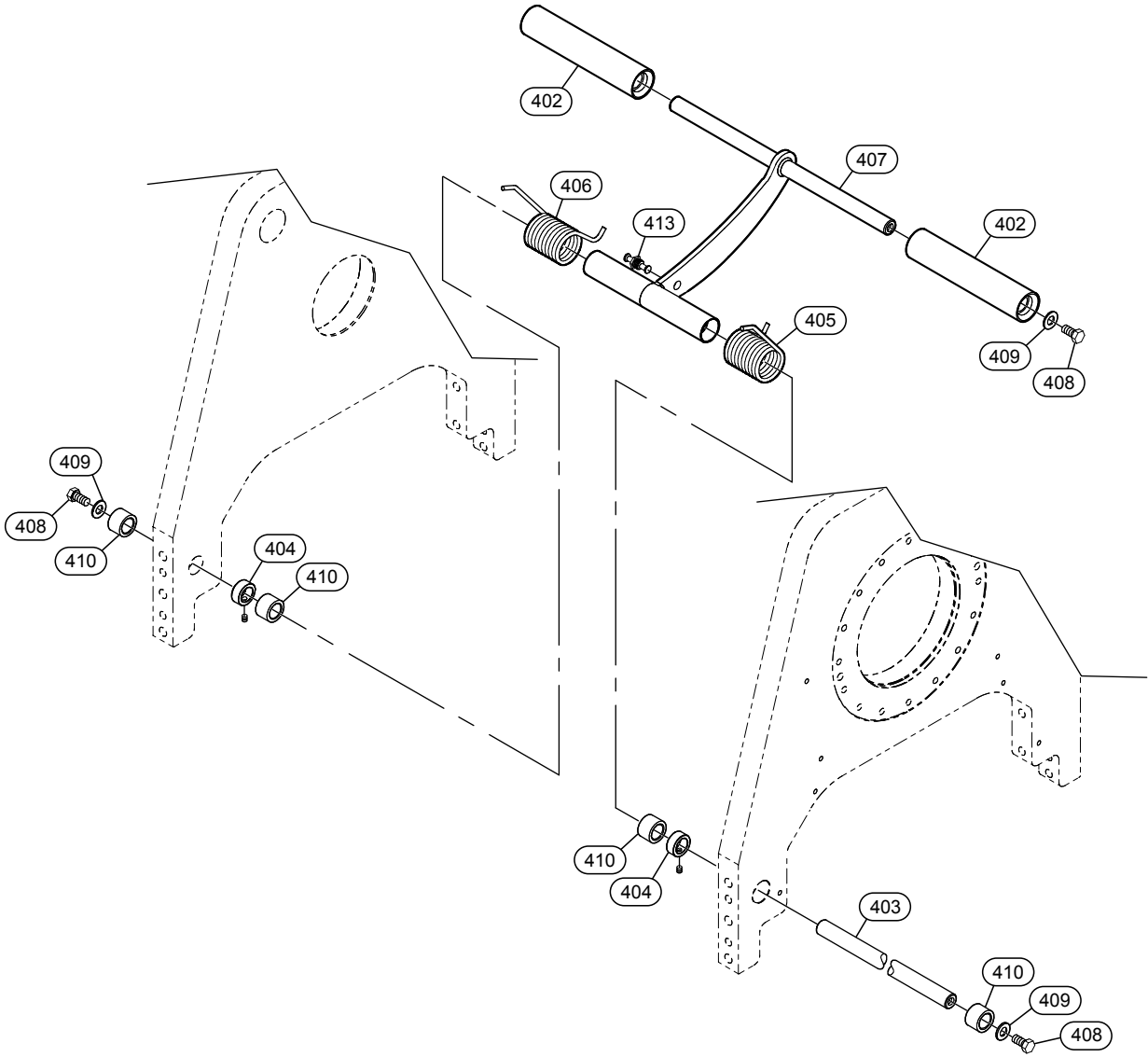
Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
300	Drum Locking Assembly	1	382-32271 (71476485)	307	Cover	1	382-30704 (71436513)
141	Handle Grip	1	71436851	308	Housing	1	382-32380 (71478481)
301	Handle	1	382-30639 (71435721)	309	Grease Fitting	1	71111942
302	Capscrew	1	71445654	310	Spring	1	71436869
303	Locknut	1	71069132	311	Bushing	1	71316616
304	Shaft	1	382-30705 (71436521)	312	Drum Lock Pin	1	382-32272 (71476493)
305	Capscrew	2	71328744	313	Label, Drum Lock *	1	71465967
306	Washer	2	71376370				

* Item not illustrated.

Drum Locking Pin (Optional) Assembly Kit List:

Item No.	Description of Part	Total Qty	Part Number (CCN)
1017	Conversion Kit: Drum Locking Assembly (include items: 141, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, *-Drum Lock Label)	1	47571654001

PRESS ROLLER (OPTIONAL) ASSEMBLY DRAWING



(Dwg. MHP2935)

PRESS ROLLER (OPTIONAL) ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number (CCN)	
			With Brake Band	Without Brake Band
400	Press Roller Assembly (16 inch Drum)	1	Contact Factory	
	Press Roller Assembly (20 inch Drum)	1	382-32601-4B	382-32601-4
	Press Roller Assembly (24 inch Drum)	1	382-32601-5B (43804004)	382-32601-5 (43803998)
	Press Roller Assembly (30 inch Drum)	1	382-32601-6B	382-32601-6
	Press Roller Assembly (36 inch Drum)	1	382-32601-7B	382-32601-7
402	Roller (16 inch Drum)	2	Contact Factory	
	Roller (20 inch Drum)	2	382-30966-4 (71476725)	
	Roller (24 inch Drum)	2	382-30966-5 (71443915)	
	Roller (30 inch Drum)	2	382-30966-6 (45890605)	
	Roller (36 inch Drum)	2	382-30966-7 (45890613)	
403	Shaft (16 inch Drum)	1	Contact Factory	
	Shaft (20 inch Drum)	1	382-32597-4B (45888948)	382-32597-4 (45888930)
	Shaft (24 inch Drum)	1	382-32597-5B (43803915)	382-32597-5 (43803907)
	Shaft (30 inch Drum)	1	382-32597-6B (45888963)	382-32597-6 (45888955)
	Shaft (36 inch Drum)	1	382-32597-7B (45888989)	382-32597-7 (45888971)
407	Arm (16 inch Drum)	1	Contact Factory	
	Arm (20 inch Drum)	1	382-31263-4 (43804111)	
	Arm (24 inch Drum)	1	382-31263-5 (71450498)	
	Arm (30 inch Drum)	1	382-31263-6 (45959871)	
	Arm (36 inch Drum)	1	382-31263-7	

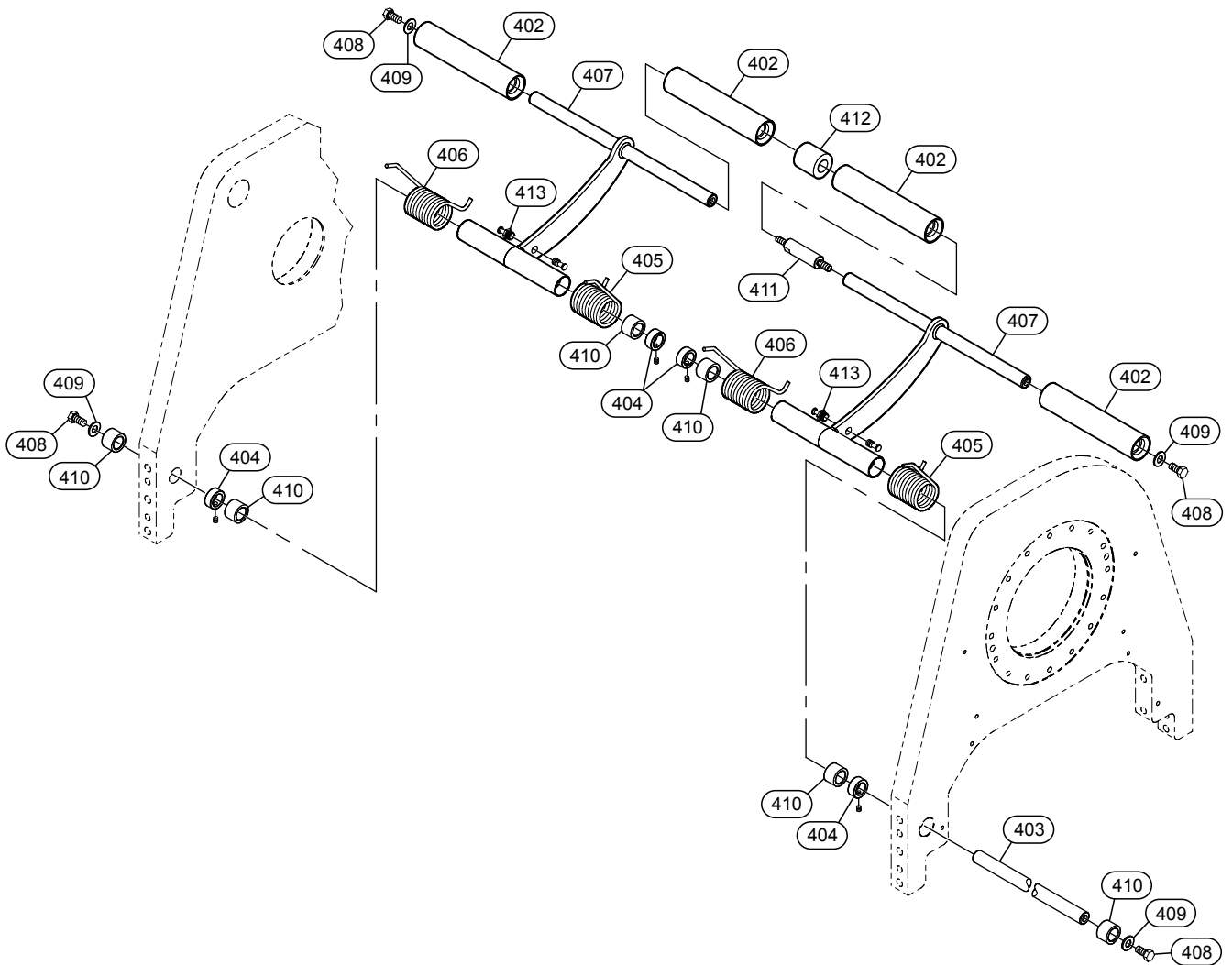
Common Items

404	Collar	2	71443980	
405	Spring	1	382-30968 (71443824)	
406	Spring	1	382-30969 (71443832)	
408	Capscrew	4	71371652	
409	Washer	4	51009 (03898624)	
410	Bushing	4	71443816	
413	Pin	1	382-30965 (71443790)	

Press Roller Kit List:

Item No.	Description of Part	Total Qty	Part Number (CCN)
1018	Press Roller with Brake Band - 16"	1	Contact Factory
1019	Press Roller without Brake Band - 16"	1	
1020	Press Roller with Brake Band - 20"	1	
1021	Press Roller without Brake Band - 20"	1	
1022	Press Roller with Brake Band - 24" (include items: 402, 403, 404, 405, 406, 407, 408, 409, 410 and 413)	1	47571656001
1023	Press Roller without Brake Band - 24" (include items: 402, 403, 404, 405, 406, 407, 408, 409, 410 and 413)	1	47572068001
1024	Press Roller with Brake Band - 30"	1	Contact Factory
1025	Press Roller without Brake Band - 30"	1	
1026	Press Roller with Brake Band - 36"	1	
1027	Press Roller without Brake Band - 36"	1	

PRESS ROLLER (OPTIONAL) ASSEMBLY DRAWING AND PARTS LIST (CONTINUED)



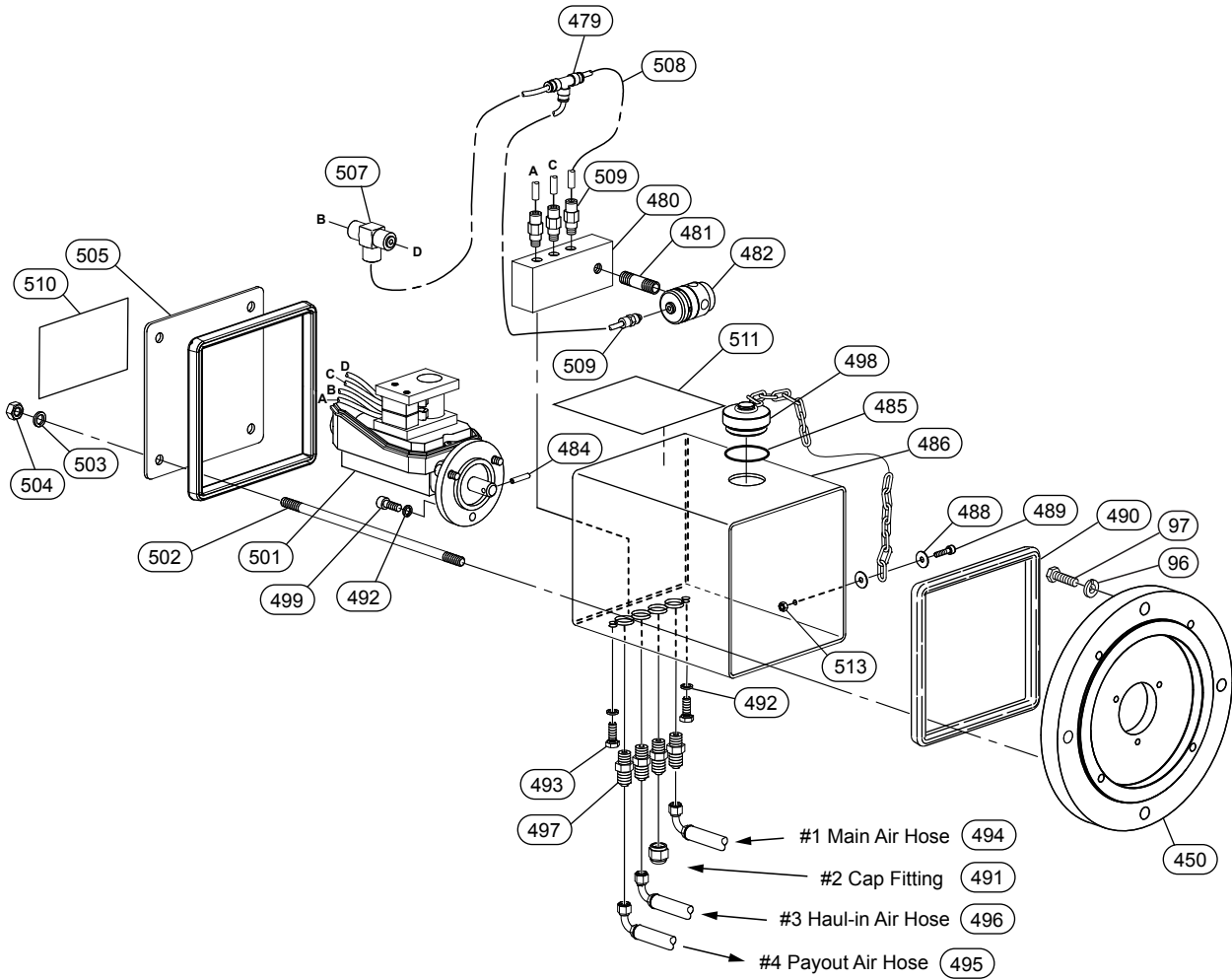
(Dwg. MHP2938)

Item No.	Description of Part	Total Qty	Part Number (CCN)	
			With Brake Band	Without Brake Band
400	Press Roller Assembly (42 inch Drum)	1	382-32600-B (43803972)	382-32600 (43803964)
402	Roller (42 inch Drum)	4	382-30966-4 (71476725)	---
403	Shaft (42 inch Drum)	1	382-32597-8B (43803931)	382-32597-8 (43803923)
404	Collar	4	71443980	
405	Spring	2	382-30968 (71443824)	
406	Spring	2	382-30969 (71443832)	
407	Arm	2	382-31263-4 (43804111)	
408	Capscrew	4	71371652	
409	Washer	4	51009 (03898624)	
410	Bushing	4	71443816	
411	Link	1	382-32599 (43803956)	
412	Roller, Short	1	382-32598 (43803949)	
413	Pin	2	382-30965 (71443790)	

Press Roller Kit List:

Item No.	Description of Part	Total Qty	Part Number (CCN)
1028	Press Roller with Brake Band - 42" (include items: 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413)	1	47572066001
1029	Press Roller without Brake Band - 42" (include items: 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413)	1	47571630001

LIMIT SWITCH (OPTIONAL) ASSEMBLY DRAWING



(Dwg. MHP2677)

LIMIT SWITCH (OPTIONAL) ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
475	Limit Switch Assembly (Note 1)	1	382-32134-S (43807759)	495	Hose Assembly (42 in. [1067 mm]) standard hose	1	382-31423-10 (71457444)
96	Washer	4	71376370		Hose Assembly (42 in. [1067 mm]) stainless steel hose		382-31426-10 (71457642)
97	Capscrew	4	52160	496	Hose Assembly (42.5 in. [1080 mm]) standard hose	1	382-31423-9 (71457436)
450	Adapter (FA2.5i)	1	382-30831 (71439962)		Hose Assembly (42.5 in. [1080 mm]) stainless steel hose		382-31426-9 (71457634)
		Adapter (FA5i/5Ti)	1	382-30829 (71439947)	497	Fitting, Hose	4
479	Fitting, Hose Tee	1	5825-5860	498	Cap Assembly	1	9615-0662 (38599577)
480	Connection Block	1	382-31427 (71457501)	499	Capscrew	3	71324115
481	Fitting, Pipe	1	54242 (03895778)	501	Spindle Switch Assembly (Note 2)	1	382-32134-S (43807759)
482	3-way Valve	1	71460760	502	Rod	4	382-31037 (71445639)
484	Pin	1	4650-3420 (38523627)	503	Washer	4	4520-1008 (38543484)
•485	'O' Ring	1	5823-7529	504	Nut	4	4300-3511 (38633079)
486	Housing	1	382-32124 (71472872)	505	Cover, Housing	1	9615-0566 (38595880)
488	Washer	2	4500-1104 (38560991)	507	Fitting, Hose Tee	1	71457519
489	Capscrew	1	4131-1906 (38631404)	508	Hose	1	6804-5328 (38582326)
•490	Gasket	2	6976-1541 (38595864)	509	Fitting, Adapter	4	71457485
491	Fitting, Cap	1	71111975	510	Label, Limit Switch Configuration	1	71459929
492	Washer	5	4520-1006 (38540142)	511	Label, Limit Switch Instructions, Underwind Winches Only	1	71462337
493	Capscrew	2	4102-1804		Label, Limit Switch Instructions, Overwind Winches Only	1	71446439
494	Hose Assembly (37 in. [940 mm]) standard hose	1	382-31423-8 (71457428)	*	Chain	As Req'd	6903-3232 (38653663)
	Hose Assembly (37 in. [940 mm]) stainless steel hose		382-31426-8 (71457626)	*	Chain Grip	1	9412-0206 (38711420)

• Recommended spare for one winch, 2 years of operation.

Note 1: Includes items 476-481, 484-486 and 488-509.

Note 2: Item not sold separately. Order Limit Switch Assembly, item 475.

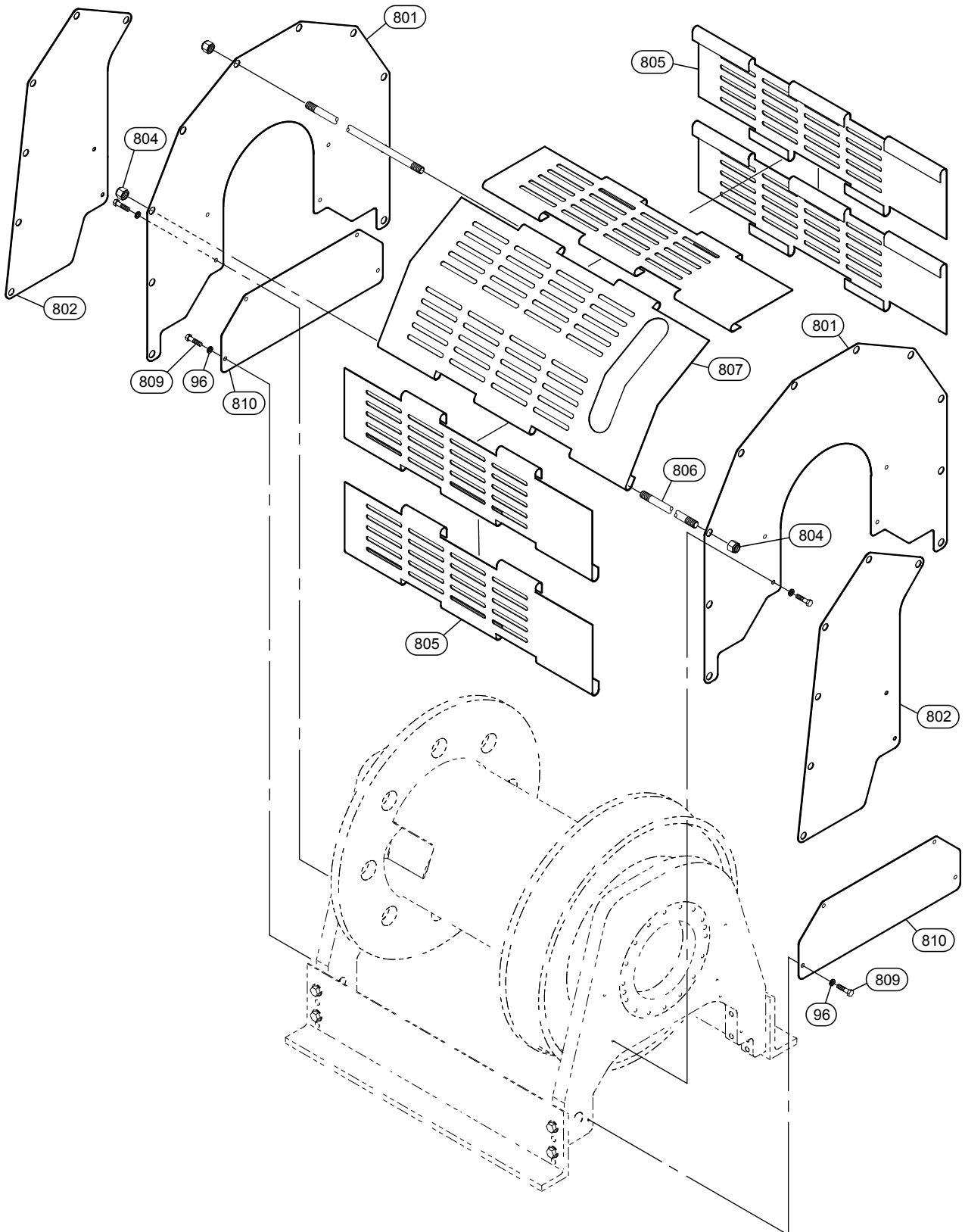
Note 3: If converting a winch to have a Limit Switch Assembly order item 450.

Limit Switch (Optional) Assembly Kit List:

Item No.	Description of Part	Total Qty	Part Number (CCN)
1030	Service Kit: Limit Switch (include items: 96, 97, 306, 485, 488, 489, 490, 491, 492, 493, 499, 502, 503, 504, 513 and 582)	1	47534540001
1031	Replacement Kit: Limit Switch Assembly (include items: 510 and 511)	1	382-32134-S (43807759)

* Limit Switch Assembly items not sold separately

DRUM GUARD ASSEMBLY DRAWING



(Dwg. MHP2921)

DRUM GUARD ASSEMBLY PARTS LIST

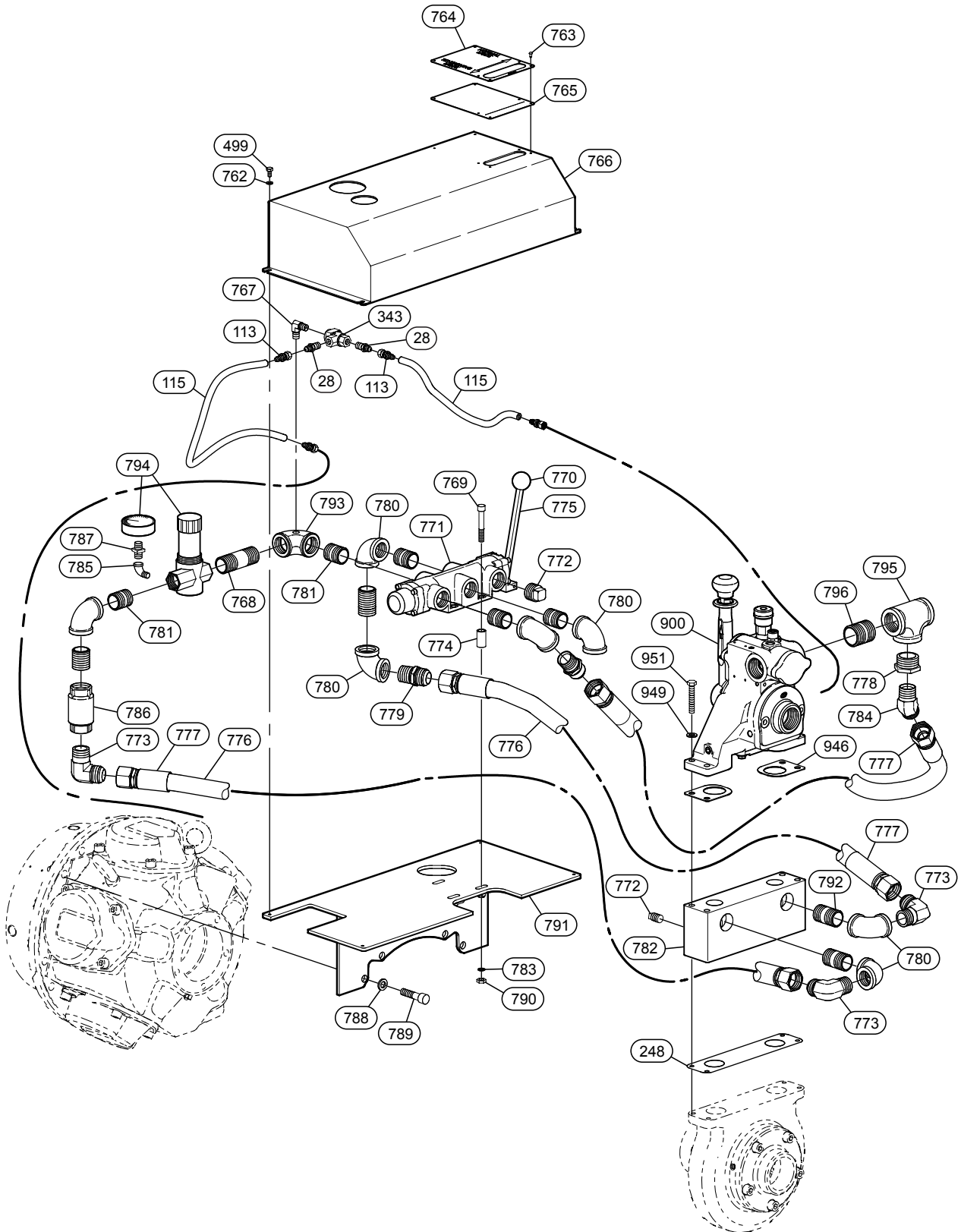
Item No.	Description of Part	Total Qty	Part Number (CCN)					
			16 inch Drum	20 inch Drum	24 inch Drum	30 inch Drum	36 inch Drum	42 inch Drum
800	Drum Guard Assembly	1	382-32575-3	382-32575-4	382-32575-5 (43805472)	382-32575-6 (45892536)	382-32575-7 (45974516)	382-32575-8 (43805480)
	Drum Guard Assembly Auto Band Brake		382-32575-3AB	382-32575-4AB	382-32575-5AB (43805506)	382-32575-6AB (45980042)	382-32575-7AB (45913860)	382-32575-8AB (43805514)
	Drum Guard Assembly Tall Flange		382-32576-3	382-32576-4	382-32576-5 (43805647)	382-32576-6 (45897279)	382-32576-7 (45915840)	382-32576-8 (43805654)
	Drum Guard Assembly Auto Band Brake & Drum Lock		382-32575-3ABL	382-32575-4ABL	382-32575-5ABL (43805530)	382-32575-6ABL	382-32575-7ABL	382-32575-8ABL (43805548)
	Drum Guard Assembly Tall Flange Auto Band Brake		382-32576-3AB	382-32576-4AB	382-32576-5AB (43805670)	382-32576-6AB	382-32576-7AB	382-32576-8AB (43805688)
	Drum Guard Assembly Tall Flange Auto Band Brake & Drum Lock		382-32576-3ABL	382-32576-4ABL	382-32576-5ABL (43805704)	382-32576-6ABL	382-32576-7ABL	382-32576-8ABL (43805712)
805	Guard panel without Band Brake	7	382-32607-3 (43804665)	382-32607-4 (43804681)	382-32607-5 (43804707)	382-32607-6 (43804723)	382-32607-7 (43804749)	382-32607-8 (43804764)
	Guard panel with Band Brake	7 or 8	382-32607-3B (43804673)	382-32607-4B (43804699)	382-32607-5B (43804715)	382-32607-6B (43804731)	382-32607-7B (43804756)	382-32607-8B (43804772)
806	Crossbar without Band Brake	9	382-32604-3	382-32604-4 (45902897)	382-32604-5 (43805977)	382-32604-6 (45892544)	382-32604-7 (45915857)	382-32604-8 (43805993)
	Crossbar with Band Brake	9 or 10	382-32604-3B (45986825)	382-32604-4B (45987492)	382-32604-5B (43805985)	382-32604-6B (45896008)	382-32604-7B (45913878)	382-32604-8B (43806009)
807	Guard Panel Std. Flange (Manual Brake)	1	382-32214-3 (43805050)	382-32214-4 (43805068)	382-32214-5 (43805076)	382-32214-6 (43805084)	382-32214-7 (43805092)	382-32214-8 (43805100)
	Guard Panel Tall Flange (Manual Brake)		382-32215-3 (43805118)	382-32215-4 (43805126)	382-32215-5 (43805134)	382-32215-6 (43805142)	382-32215-7 (43805159)	382-32215-8 (43805167)

Common Parts List

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
96	Washer	16	71376370	802	Drum Guard (Tall Flange) Auto Band Brake	2	382-32662 (43806272)
801	Guard Frame (Std. Flange) w/o Drum Lock	2	382-32278 (71478697)	804	Nut	18 or 20	71445415
	Guard Frame (Std. Flange) w/Drum Lock	2	382-32278-L (71478705)	809	Capscrew	16	71445407
	Guard Frame (Tall Flange) w/o Drum Lock	2	382-32389 (71478606)	810	Upright	2	382-32565 (43803865)
	Guard Frame (Tall Flange) w/Drum Lock	1	382-32389-L (43806165)	811	Label (without drum guard) *	1	71449714
802	Drum Guard Auto Band Brake	2	382-32661 (43806264)	812	Label (with drum guard) *	1	382-31662 (71462360)

* Item not illustrated.

CONSTANT TENSION (OPTIONAL) ASSEMBLY DRAWING



(Dwg. MHP2959)

CONSTANT TENSION (OPTIONAL) ASSEMBLY PARTS LIST

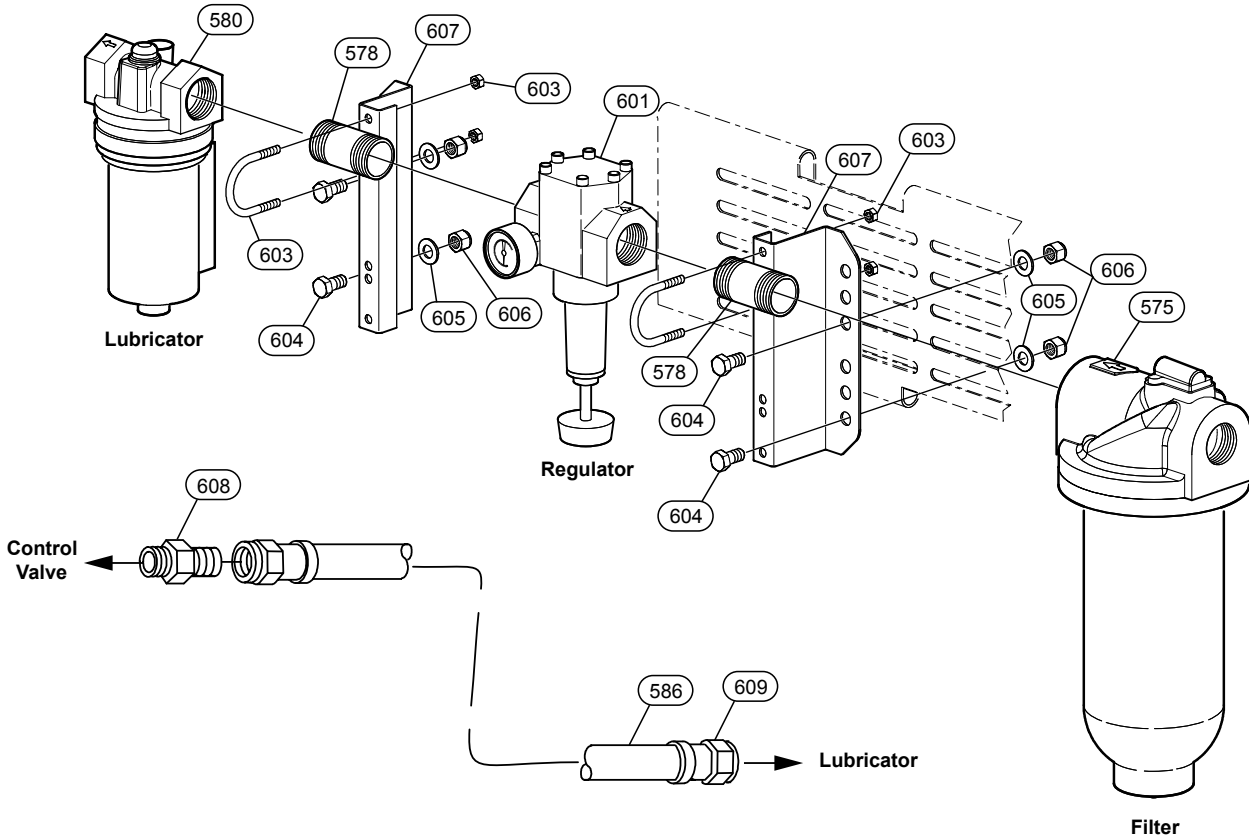
Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
28	Fitting	2	51814 (03980752)	779	Fitting, Connector	2	71308258
113	Fitting, Hose End	4	51029 (03990298)	780	Fitting, Elbow	7	50928 (03895653)
115	Hose (bulk)	As Req'd	50923-XX (03990215)	781	Fitting, Nipple	6	50933 (03895661)
248	Gasket	1	K5B-547 (03885258)	782	Manifold	1	25874 (71317028)
343	Valve, Shuttle	1	50277 (03969466)	783	Washer	3	53881 (71078125)
499	Capscrew	4	71324115	784	Fitting, Hose End	1	71440184
762	Washer	4	71268890	785	Fitting, Elbow	1	51031 (71224992)
763	Rivet	6	50915 (03969557)	786	Check Valve	1	71320915
764	Label, Constant Tension	1	382-33543 (45880598)	787	Fitting, Connector	1	50859 (71063655)
765	Gasket	1	382-33544 (45880606)	788	Lockwasher	4	51607 (71225973)
766	Cover	1	382-33540 (45880549)	789	Capscrew	4	71320949
767	Fitting, Elbow	1	54273 (71231161)	790	Locknut	3	71069132
768	Fitting, Elbow	1	45880572	791	Bracket	1	382-33523 (45880515)
769	Capscrew	3	71319073	792	Fitting, Nipple	3	71320907
770	Ball, Handle	1	71138051	793	Fitting, Elbow	1	382-33541 (45880564)
771	Valve, 5-Way	1	71316434	794	Regulator and Gauge *	1	71325047
772	Plug	2	52304 (71084891)	795	Fitting, Tee	1	51707 (71086375)
773	Fitting, Elbow	3	51001 (71224935)	796	Fitting, Nipple	1	51704 (03897782)
774	Spacer	3	14998-8B (71322432)	900	Control Valve Assembly	1	K5C2-ELP (71464770)
775	Handle	1	26149 (71326706)	946	Gasket	2	27115 (71351936)
776	Hose (bulk)	As Req'd	47519434003	949	Washer	4	71413355
777	Fitting, Hose End	6	51002 (71065049)	951	Capscrew	4	71431357
778	Fitting, Bushing	1	51705 (71086367)				

* Item not sold separately.

GUIDELINE CONTROL (OPTIONAL) ASSEMBLY PARTS LIST

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
--	Guideline Assembly	1	382-33522 (45880507)	777	Fitting, Hose End	6	51002 (71065049)
28	Fitting	2	51814 (03980752)	778	Fitting, Bushing	1	51705 (71086367)
32	Gauge, Pressure	1	43806249	779	Fitting, Connector	2	71308258
113	Fitting, Hose End	4	51029 (03990298)	780	Fitting, Elbow	7	50928 (03895653)
115	Hose (bulk)	As Req'd	50923-XX (03990215)	781	Fitting, Nipple	6	50933 (03895661)
248	Gasket	1	K5B-547 (03885258)	782	Manifold	1	25874 (71317028)
343	Valve, Shuttle	1	50277 (03969466)	783	Washer	3	53881 (71078125)
499	Capscrew	4	71324115	784	Fitting, Hose End	1	71440184
762	Lockwasher	4	71268890	786	Check Valve	1	71320915
763	Rivet	6	50915 (03969557)	788	Lockwasher	4	51607 (71225973)
764	Label, Guideline	1	382-33542 (45880580)	789	Capscrew	4	71320949
765	Gasket	1	382-33544 (45880606)	790	Nut	3	71069132
766	Cover	1	382-33524 (45880523)	791	Bracket	1	382-33523 (45880515)
767	Fitting, Elbow	1	54273 (71231161)	792	Fitting, Nipple	3	71320907
768	Fitting, Elbow	1	45880572	793	Fitting, Elbow	1	382-33541 (45880564)
769	Capscrew	3	71319073	794	Regulator	1	45880390
770	Ball, Handle	1	71138051	795	Fitting, Tee	1	51707 (71086375)
771	Valve, 5-Way	1	71316434	796	Fitting, Nipple	1	51704 (03897782)
772	Plug	2	50935 (71032635)	900	Control Valve Assembly	1	K5C2-ELP (71464770)
773	Fitting, Elbow	3	51001 (71224935)	946	Gasket	2	27115 (71351936)
774	Spacer	3	14998-8B (71322432)	949	Washer	4	71413355
775	Handle	1	26149 (71326706)	951	Capscrew	4	71431357
776	Hose (bulk)	As Req'd	51003 (03974763)				

AIR PREPARATION ASSEMBLY DRAWING AND PARTS LIST



(Dwg. MHP3879)

Item No.	Description of Part	Total Qty	Part Number (CCN)
- - -	Air Preparation Assembly	1	382-31020 (71445209)
575	Filter 1-1/2 NPT	1	F35581-411 (15327851)
578	Pipe Nipple	2	71311260
580	Lubricator 1-1/2 NPT	1	L36581-110 (15328107)
586	Hose, bulk (4 ft [1.22 mm]) *	1	47519434009
601	Regulator	1	382-35598 (45921814)
603	U-Bolt	2	71445308
604	Capscrew	4	71391080
605	Washer	4	71445324
606	Nut	4	71445316
607	Bracket	2	382-31021 (71445225)
608	Hose Fitting	2	54738 (71075899)
609	Fitting, Connector (Note)	1	71106520
**	Fitting	1	71391064

Air preparation components for 1-1/2 inch FNPT system.

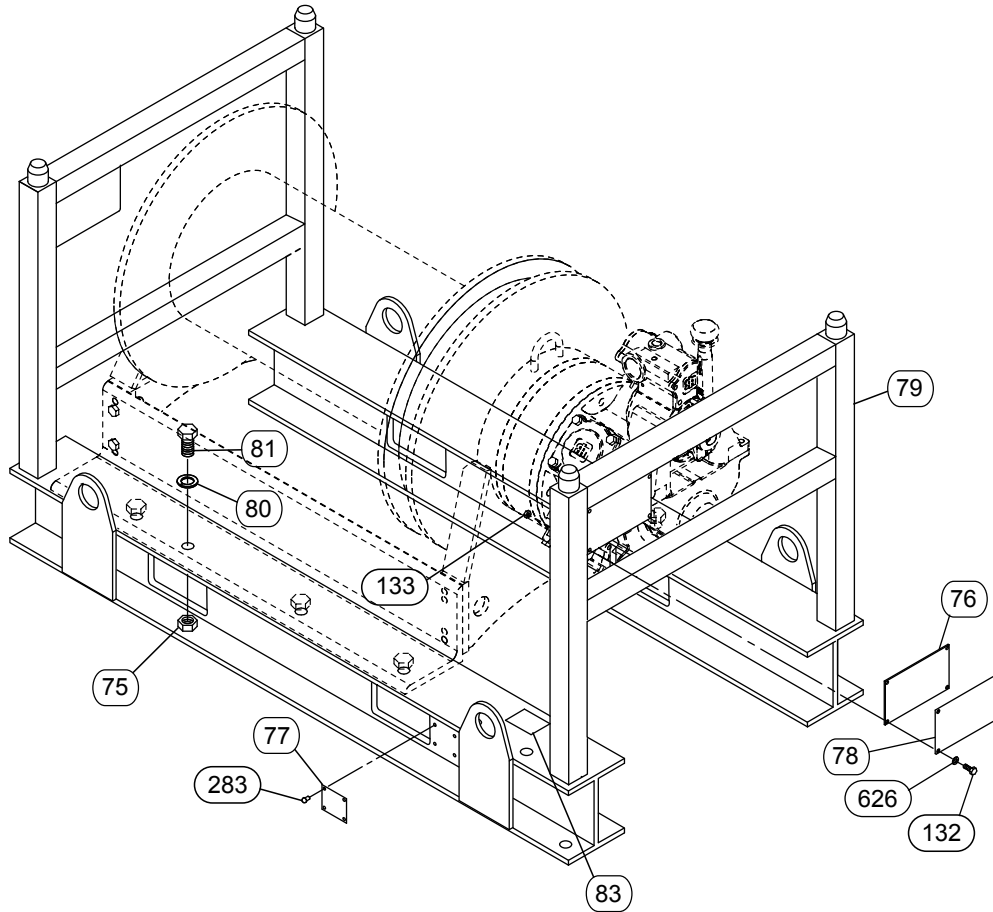
* Length as required for installation.

Note: Requires special tool to install fitting into hose ends.

Air Preparation Assembly Kit List:

Item No.	Description of Part	Total Qty	Part Number (CCN)
1032	Replacement Kit: Air Preparation Assembly (include items: 575, 578, 580, 586, 601, 603, 604, 605, 606, 607, 608 and 609)	1	382-31020-S (43803451)
1033	Replacement Kit: Filter (include items: 575 and 578)	1	47533243001
1034	Replacement Kit: Regulator (include items: 578 and Regulator Assembly)	1	47533246001
1035	Replacement Kit: Lubricator (include items: 578 and 580)	1	47533239001

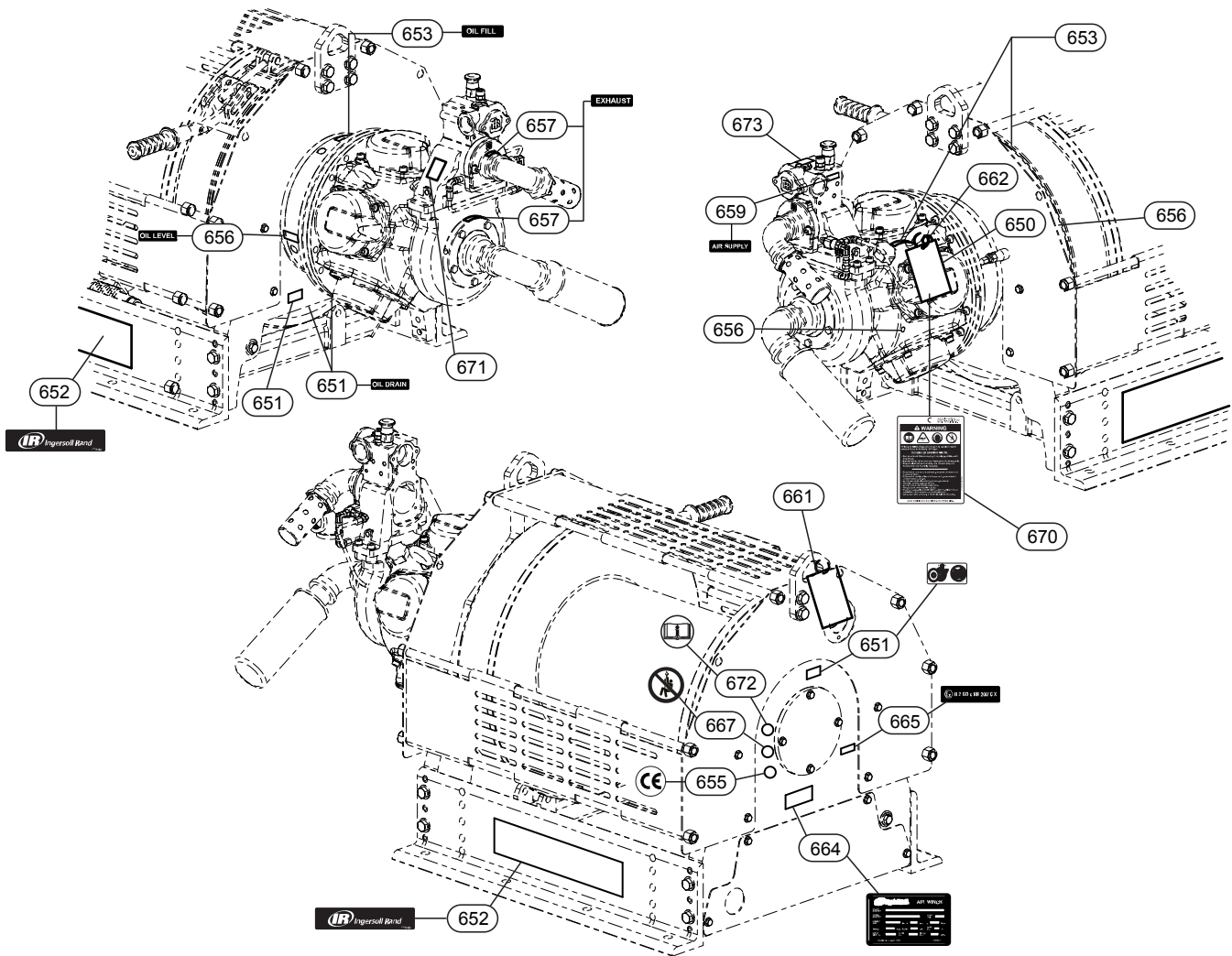
CONSTRUCTION CAGE (OPTIONAL) ASSEMBLY DRAWING AND PARTS LIST



(Dwg. MHP2045)

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
75	Nut	10	71386353	79	Construction Cage (42 inch Drum)	1	Contact Factory
76	Label, Specifications	1	Contact Factory	80	Lockwasher	10	52837 (03899952)
77	Nameplate	1	Contact Factory	81	Capscrew	10	71357735
78	Cover	1	27426 (71359103)	83	Warning Label	1	71359384
79	Construction Cage (16 inch Drum)	1	Contact Factory	132	Capscrew	4	71359129
	Construction Cage (20 inch Drum)	1	Contact Factory	133	Nut	4	53390 (71090344)
	Construction Cage (24 inch Drum)	1	Contact Factory	283	Rivet	4	71028849
	Construction Cage (30 inch Drum)	1	Contact Factory	626	Washers	4	51831 (71226476)
	Construction Cage (36 inch Drum)	1	Contact Factory				

LABELS AND TAGS ASSEMBLY DRAWING AND PARTS LIST



(Dwg. MHP2718)

Item No.	Description of Part	Total Qty	Part Number (CCN)	Item No.	Description of Part	Total Qty	Part Number (CCN)
89	Rivet	4	71028849		Data (Name) Plate - Utility CE & -E	1	71373815
650	Tag Kit, Warning - Utility	1	29452 (71410567)	664	Data (Name) Plate	1	71070643
651	Label, Overwind	2	71462725	665	Label, ATEX (CE, MRCE & -E)	1	71427413
	Label, Underwind		71462733	667	Label, Do Not Lift People - Utility	1	9618-0100 (DNM38543872)
652	Label, IR Logo 24 + in. drum		71109102	668	Label, Oil Drain	3	71042188
653	Label, Oil Fill	3	71042204	669	Tag Kit, Aftermarket	1	382-31663 (71462378)
656	Label, Oil Level	3	71043616	670	Tag, Encompass Inspected	1	71462709
657	Label, Exhaust	2	71042196	671	Label, Warning	1	71289326
659	Label, Air Supply	1	71046395	672	Label, CE	1	71153464
662	Tag, Check Oil Level	1	382-31664 (71462386)	673	Label	1	9618-0102 (38543880)
663	Label, Notice - Pressure Guage	1	45925260				

Note 1: Not all labels are illustrated. Some labels are on component assembly drawings.

Note 2: Some labels may not be applicable to your product, refer to products date (name) plate and the Information Manual for specific model.

Note 3: For a replacement data (name) plate (664) a model and serial number are be required.

KITS AND ACCESSORIES

Description of Kit	Part Number (CCN)
OVK: FA7i with K5C Valve, Auto Disc Brake, and Auto/Manual BB	47574843001
OVK: FA7i with K5C Valve and Auto Disc Brake	47574839001
OVK: FA7i with K5C Valve and Auto/Manual BB	47574786001
OVK: FA7i with PTV1 Valve, Auto Disc Brake, and Auto/Manual BB	47574756001
OVK: FA7i with PTV1 Valve and Auto Disc Brake	47574754001
Lubricant	LUBRI-LINK-GREEN®

WARRANTY

Ingersoll Rand Limited Warranty

Ingersoll Rand Company ("IR") warrants to the original user its material handling products ("Products") to be free of defects in material and workmanship for a period of one year from the date of purchase. IR will, at its option either (1) repair, without cost, any Product found to be defective, including parts and labor charges, or (2) 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.

If any Product proves defective within its original one-year warranty period, it should be returned to any Authorized Product Service Distributor, transportation prepaid with proof of purchase or warranty card. This warranty does not apply to Products which IR 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 IR repair parts.

IR MAKES NO OTHER WARRANTY, CONDITION OR REPRESENTATION OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, STATUTORY OR OTHERWISE, AND ALL IMPLIED WARRANTIES AND CONDITIONS RELATING TO MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED.

IR's maximum liability is limited to the purchase price of the Product and in no event shall IR be liable for any consequential, indirect incidental or special damages of any nature arising from the sale or use of the Product, whether in contract, tort or otherwise.

Note: Some states do not allow limitations on incidental or consequential damages, 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.

Fulcrum series electric winch, product code 405-002: 2 year warranty.

Winch and Hoist Solutions Extended Warranty This option provides a price for extending the **Ingersoll Rand** Winch and Hoist Solutions Warranty from the standard one (1) year to two (2) years from the date of purchase. All other provisions of the standard warranty to remain in effect.

For additional information or quotations for warranties falling outside of these parameters, please contact your Client Services Representative with your requirements.

