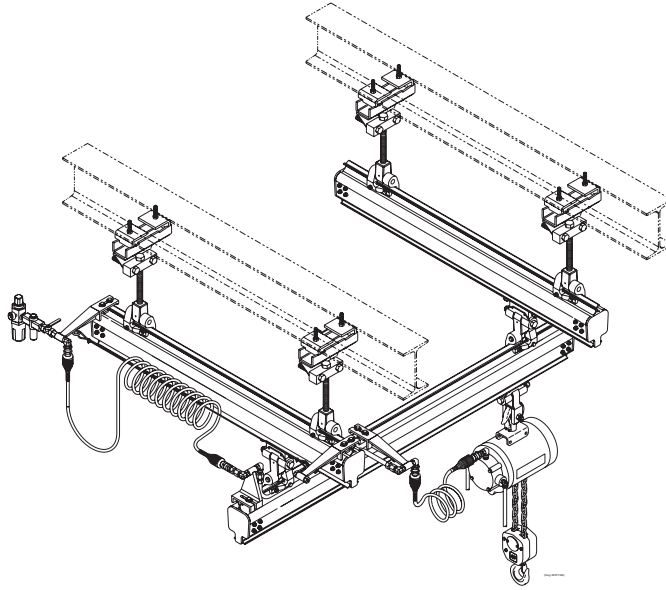




16600462
Edition 1
May 2007

Z Rail Aluminum and Steel Overhead Rail System



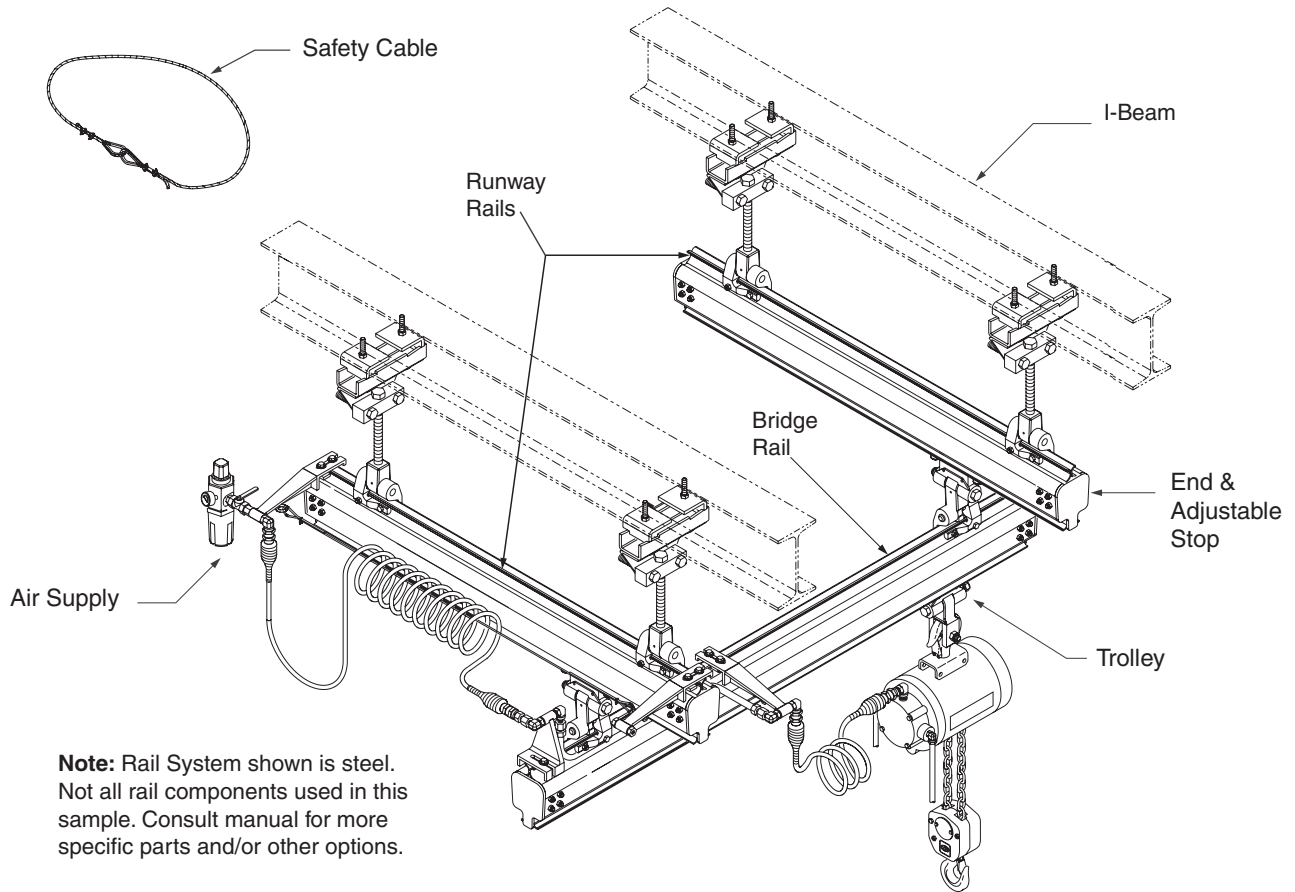
Parts Information



Save these Instructions



RUNWAY AND BRIDGE - PARTS DRAWING



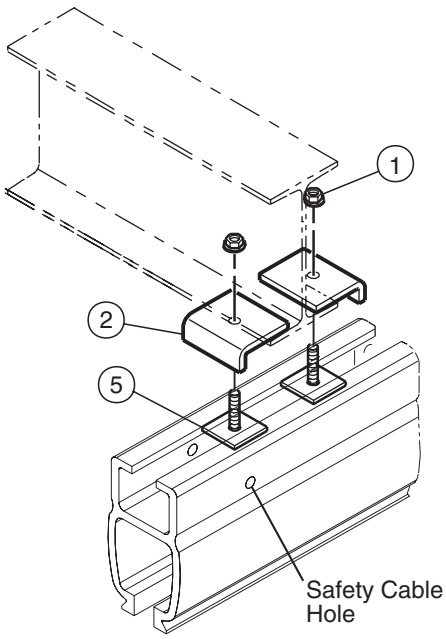
(Dwg. MHP2177)

RUNWAY AND BRIDGE - PARTS LIST

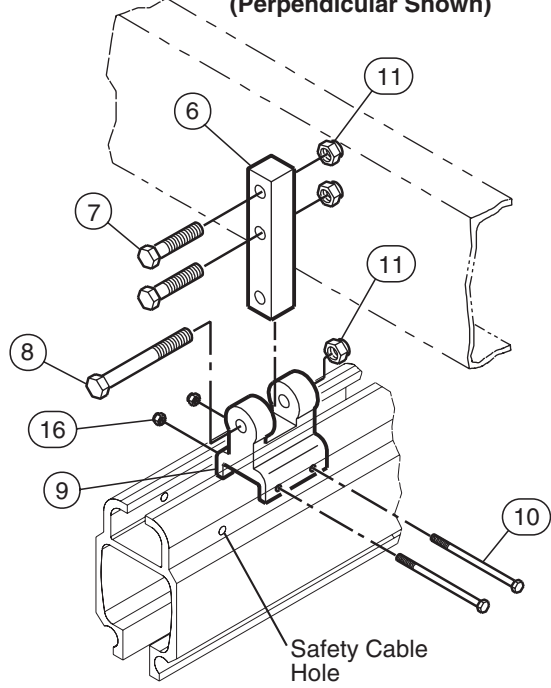
Item No.	Description of Part	Size or Length		Part Number				
		ft	m	ZRAT	ZRA1	ZRA2	ZRS2	ZRS3
500	Runway Rail - Aluminum	5	1.53	---	30200-050-2	---	---	---
		8	2.44		---	30000-080-2		
		10	3.05		30200-100-2	---		
		12	3.66		---	30000-120-2		
		15	4.57		30200-150-2	---		
		16	4.88		---	30000-160-2		
		20	6.10		30200-200-2	---		
		24	7.32		---	30000-240-2		
501	Runway Rail - Steel	5	1.53	---	---	---	30500-050-2	30550-050-2
		10	3.05				30500-100-2	30550-100-2
		15	4.57				30500-150-2	30550-150-2
		21	6.40				30500-210-2	30550-210-2
502	Bridge Beams	6	1.83	ZRAT0406	ZRA10406	ZRA20406	ZRS20406	ZRS30406
		8	2.44	ZRAT0608	ZRA10608	ZRA20608	ZRS20608	ZRS30608
		10	3.05	ZRAT0810	ZRA10810	ZRA20810	ZRS20810	ZRS30810
		12	3.66	ZRAT1012	ZRA11012	ZRA21012	ZRS21012	ZRS31012
		14	4.27	---	ZRA11214	ZRA21214	ZRS21214	ZRS31214
		16	4.88		ZRA11416	ZRA21416	ZRS21416	ZRS31416
		18	5.49		ZRA11618	ZRA21618	ZRS21618	ZRS31618
		20	6.10		ZRA11820	ZRA21820	ZRS21820	ZRS31820
		21	6.40		---	ZRA21921	ZRS21921	ZRS31921
		22	6.71			ZRA22022	---	---
		24	7.32			ZRA22224		
		26	7.92			ZRA22426		

BLOCK AND RIGID STANDARD HANGER - PARTS DRAWING

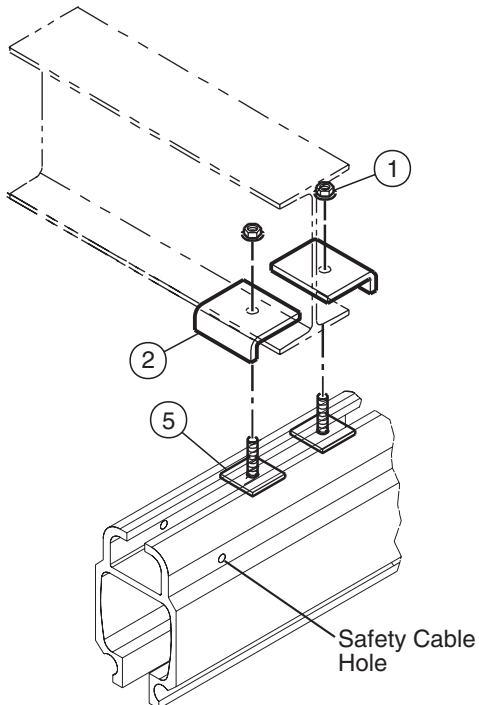
ZRAT/ZRA1 Runway, Rigid Mount Hanger Kit



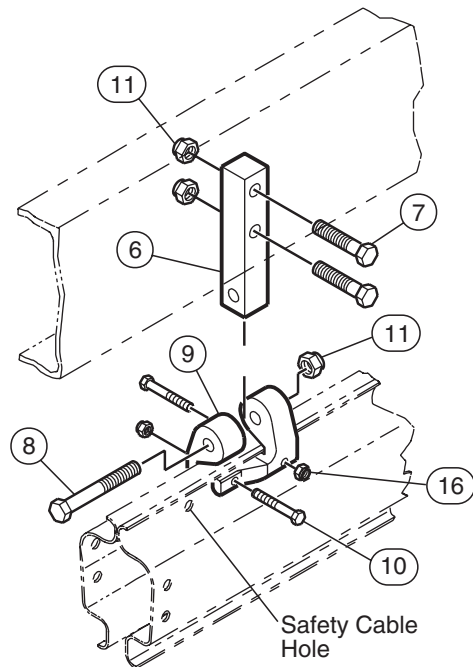
ZRAT, ZRA1, ZRA2 Block Hanger Kit (Perpendicular Shown)



ZRA2 Runway, Rigid Mount Hanger Kit



ZRS2 and ZRS3 Block Hanger Kit (Parallel Shown)



(Dwg. MHP1533)

BLOCK AND RIGID STANDARD HANGER - PARTS LIST

Item No.	Description of Part	Qty. Total	Part Number				
			ZRAT	ZRA1	ZRA2	ZRS2	ZRS3
1	Locknut, Flanged	2	75589			---	
2	Beam Toe Clamp	2	30160			---	
**5	Suspension Plate Assembly	2	30218	30109		---	
6	Hanger Block, Runway Parallel To Header Steel	1	30197				
	Hanger Block, Runway Perpendicular To Header Steel	1	30162				
7	Capscrew	2	72646				
8	Capscrew	1	72623				
9	Suspension Rail Bracket	See()	30266 (1)	30165 (1)		30801-A (2)	
10	Capscrew	2	70968	71481		70967	
11	Locknut	3	75587				
† 13	Bushing	1	65075				
16	Locknut	2	75582	75583		75582	

** Welded at factory.

NOTE 1: Item 9 part number 30801-A may also be ordered in stainless steel material, order by number 30801-S.

NOTE 2: Refer to page 43 for Safety Cable Kits.

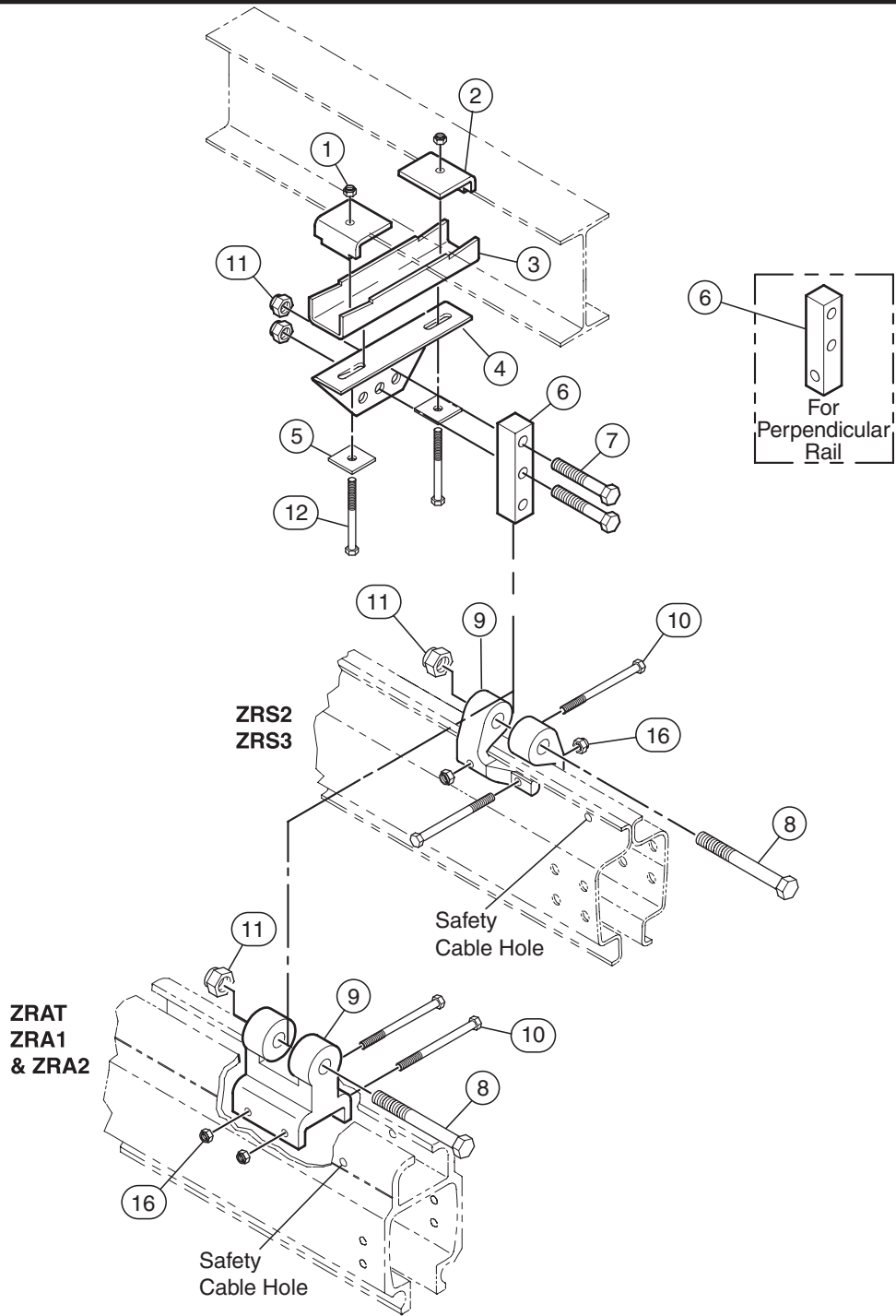
NOTE 3: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

† Item not illustrated.

Item No.	Rail Model	Hanger Type *	Flange Width	Orientation to Header Steel	Kit Number		
					Aluminum and Steel	Stainless	
314	ZRAT	Rigid	Not Applicable	Perpendicular	30227	Not Applicable	
		Block		Parallel	30289		
	ZRA1	Rigid		Perpendicular	30285		
		Block		Parallel	30227		
	ZRA2	Rigid		Perpendicular	30285		
		Block		Parallel	30052		
	ZRS2	Block		Perpendicular	30198		
				Parallel	30193		
	ZRS3	Block		Perpendicular	30816		30816S
				Parallel	30813		30813S
	ZRS3	Block		Perpendicular	30816		30816S
				Parallel	30813		30813S

* Rigid hangers cannot be used in parallel fashion.

BEAM HANGER - PARTS DRAWING



(Dwg. MHP1724)

BEAM HANGER - PARTS LIST

Item No.	Description of Part	Qty. Total	Part Number				
			ZRAT	ZRA1	ZRA2	ZRS2	ZRS3
1	Locknut, Flanged	2	75589				
2	Beam Toe Clamp	2	30062				
*3	Beam Clamp - Standard Flange	1	30091				
	Beam Clamp - Wide Flange		30154				
4	Beam Clamp Hanger Plate - Standard Flange	1	30188				
	Beam Clamp Hanger Plate - Wide Flange		30189				
5	Washer, Square	2	30094				
6	Hanger Block, Runway Parallel To Header Steel	1	30162				
	Hanger Block, Runway Perpendicular To Header Steel		30197				
7	Capscrew	2	72646				
8	Capscrew	1	72623				
9	Suspension Rail Bracket	See()	30266 (1)	30165 (1)	30801-A (2)		
10	Capscrew	2	70968	71481	70967		
11	Locknut	3	75587				
12	Capscrew	2	72037				
† 13	Bushing	1	65075				
16	Locknut	2	75582	75583	75582		

* Standard Hanger Kits will accommodate 2.5 in. to 5 in. (63.5 mm to 127 mm) flange width. Wide Flange Hanger Kits will accommodate 5 in. to 10 in. (127 mm to 254 mm) flange width.

NOTE: Refer to page 43 for Safety Cable Kits.

† Item not illustrated.

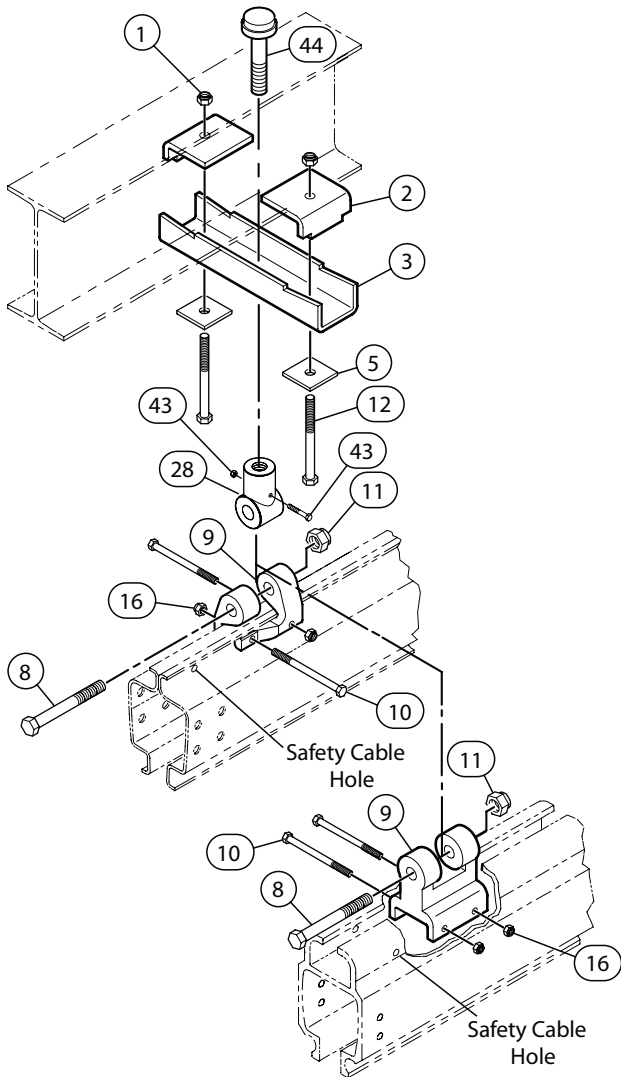
NOTE: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

Item No.	Rail Model	Hanger Type	Flange Width	Orientation to Header Steel	Kit Number		
					Aluminum and Steel	Stainless	
315	ZRAT / ZRA1	Beam	Standard	Parallel	30290	Not Applicable	
			Wide		30291		
			Standard	Perpendicular	30292		
			Wide		30293		
	ZRA2		Standard	Parallel	30199		
			Wide		30900		
			Standard	Perpendicular	30901		
			Wide		30902		
	ZRS2 / ZRS3		Standard	Parallel	30817		30817S
			Wide		30818		30818S
			Standard	Perpendicular	30819		30819S
			Wide		30820		30820S

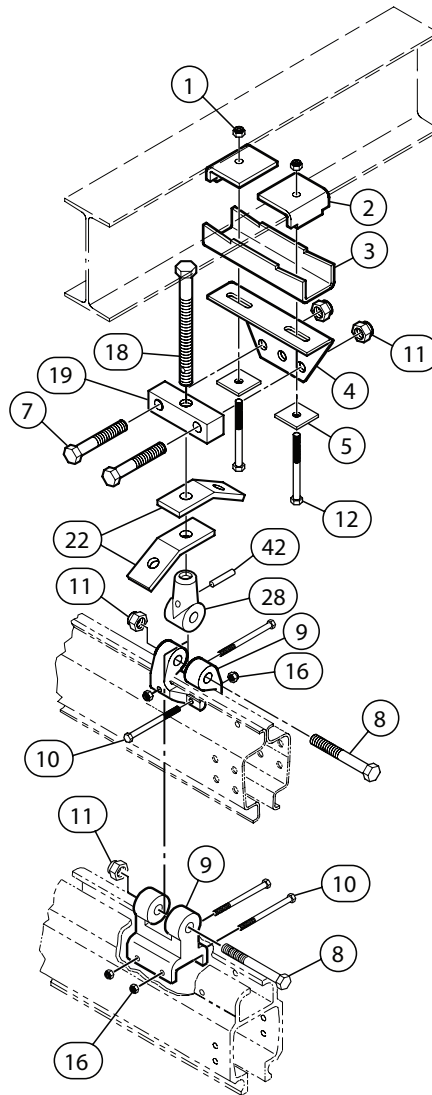
CLOSE AND ADJUSTABLE HANGER - PARTS DRAWING

Close Hanger

Adjustable Hanger



(Dwg. MHP1726)



(Dwg. MHP1548)

Rod Length	ZRAT/ZRA1	ZRAT/ZRA1	ZRA2	ZRA2	ZRS2	ZRS3
6 in.	30287-006	30288-006	30195-006	30196-006	30814-006	30815-006
12 in.	30287-012	30288-012	30195-012	30196-012	30814-012	30815-012
18 in.	30287-018	30288-018	30195-018	30196-018	30814-018	30815-018
24 in.	30287-024	30288-024	30195-024	30196-024	30814-024	30815-024
36 in.	30287-036	30288-036	30195-036	30196-036	30814-036	30815-036
48 in.	30287-048	30288-048	30195-048	30196-048	30814-048	30815-048
60 in.	30287-060	30288-060	30195-060	30196-060	30814-060	30815-060
72 in.	30287-072	30288-072	30195-072	30196-072	30814-072	30815-072

NOTE: Dash numbers refer to length in inches.

CLOSE AND ADJUSTABLE HANGER - PARTS LIST

Item No.	Description of Part	Qty. Total	Part Number				
			ZRAT	ZRA1	ZRA2	ZRS2	ZRS3
1	Locknut, Flanged	2	75589				
2	Beam Toe Clamp	2	30062				
*3	Beam Clamp - Standard Flange	1	30091				
	Beam Clamp - Wide Flange		30154				
4	Beam Clamp Hanger Plate - Standard Flange	1	30188				
	Beam Clamp Hanger Plate - Wide Flange		30189				
5	Washer, Square	2	30094				
7	Capscrew	2	72646				
8	Capscrew	1	72623				
9	Suspension Rail Bracket	See()	20266 (1)		30165 (1)		30801 (2)
10	Capscrew	2	70968		71481		70967
11	Locknut	3	75587				
12	Capscrew	2	72037				
16	Locknut	1 or 3	75582		75583		85582
18	Capscrew	1	72043				
19	Adjustment Block	1	30194				
22	Bracing Connector	2	30097				
28	Adjustable Rail Hanger Assembly	1	30190				
	Male Clevis (Close Rail Hanger Assembly)		30163				
42	Pin	1	77058				
43	Capscrew and Nut Assembly	1	99118				
44	Mounting Screw	1	30174				

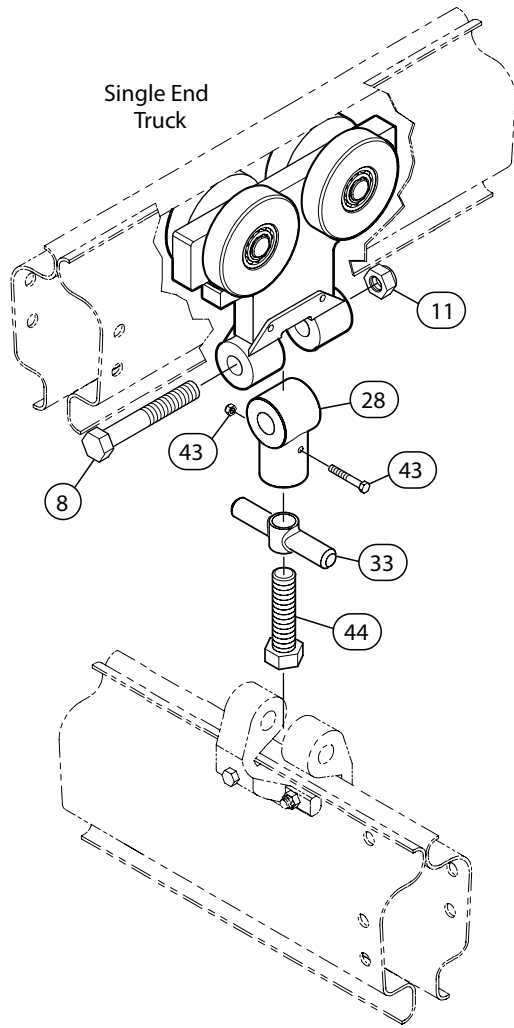
* Standard Flange Hanger Kits will accommodate 2.5 in. to 5 in. (63.5 mm to 127 mm) flange width. Wide Flange Hanger Kits will accommodate 5 in. to 10 in. (127 mm to 254 mm).

NOTE: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

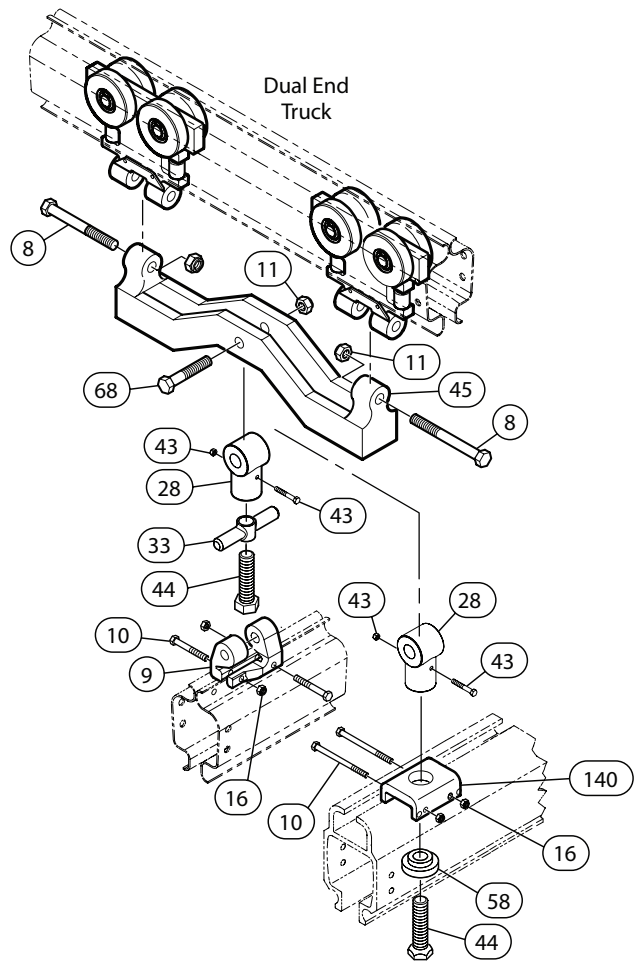
Item No.	Rail Model	Hanger Type	Flange Width	Orientation to Header Steel	Kit Number
316	ZRAT / ZRA1	Close	Standard	Rotates	30300
			Wide		30301
		Adjustable	Standard		30287**
			Wide		30288**
	ZRA2	Close	Standard		30921
			Wide		30922
		Adjustable	Standard		30195**
			Wide		30196**
	ZRS2 / ZRS3	Close	Standard		30840
			Wide		30841
		Adjustable	Standard		30814**
			Wide		30815**

** Reference table below for various lengths.

SINGLE AND DUAL END TRUCK DRAWINGS AND PARTS LIST



(Dwg. MHP1549)



(Dwg. MHP1555)

Item No.	Description of Part	Qty. Total	Part Number				
			ZRAT	ZRA1	ZRA2	ZRS2	ZRS3
8	Capscrew	1 or 2	72623				
10	Capscrew	2	70968				70926
11	Locknut	1 or 2	75587				
16	Locknut	2	75582				
28	Clevis, Female	1	Order Item 38				
33	Gimbal	1					
38	Bridge Sub-assembly	1	30282		30175		30596
43	Capscrew And Nut Assembly	1	99118				
44	Mounting Screw	1	30174				
45	Tie Bar	1	30173				30832
58	Chain Washer	1	91105				
68	Capscrew	1	72644				
140	Bracket	1	30267				

NOTE: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

SINGLE AND DUAL END TRUCK KIT - PARTS LIST

Single End Truck Kit

Item No.	Bridge Type	Runway Type	Capacity		Kit Number
			lbs	kg	
317	ZRAT	ZRAT	500	227	31059
	ZRAT or ZRA1	ZRA1			31059
	ZRAT				30283
	ZRA1	ZRS2 or ZRS3	500	227	30822
	ZRA2	ZRA1			30295
	ZRA1	ZRA2	1000	454	30909
	ZRA2	ZRA2	1000	454	30176
	ZRS2 or ZRS3	ZRS2 or ZRS3			30824
					30597

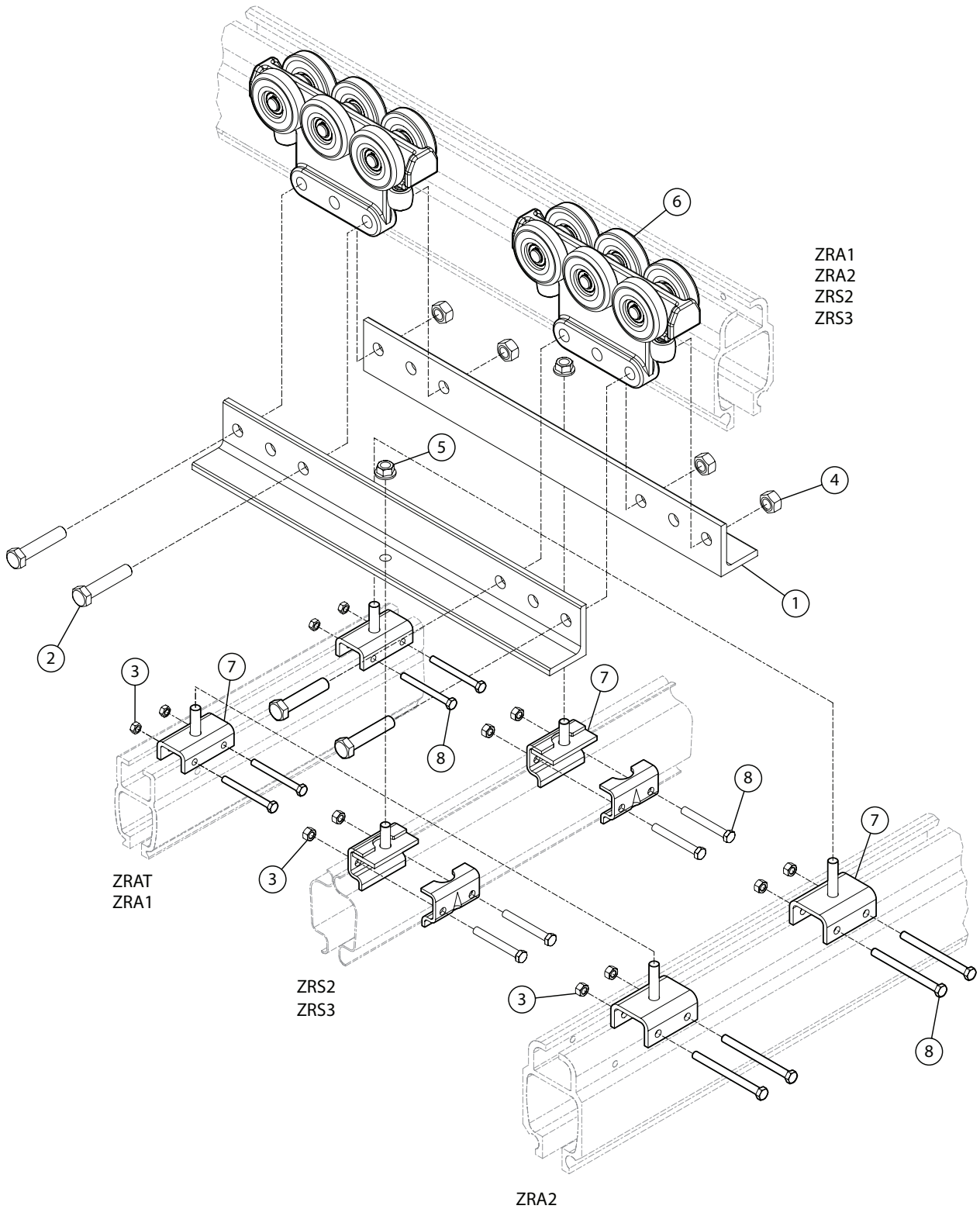
Dual End Truck Kit - Aluminum Trolley

Item No.	Bridge Type	Runway Type	Capacity		Kit Number
			lbs	kg	
318	ZRAT / ZRA1	ZRAT	1000	454	31060
	ZRA1	ZRA1			30286
		ZRS2 or ZRS3			30826
	ZRA2	ZRA2	2000	907	30177
	ZRS2 or ZRS3	ZRS2 or ZRS3			30828
					30599
	ZRA1	ZRA2	2000	907	30911
	ZRA2	ZRA1	1000	454	30272
	ZRA1	Curved ZRA1	1000	454	30296
	ZRA1	Curved ZRS2/3	2000	907	30833
	ZRA2	Curved ZRA1	1000	454	30297
	ZRA2	Curved ZRS2/3	2000	907	30835
ZRS2/3	Curved ZRS2/3	30837			

Dual Kit - Steel Trolley

Item No.	Bridge Type	Runway Type	Capacity		Kit Number
			lbs	kg	
319	ZRA1	Curved ZRS2/3	2000	907	30834
	ZRA2	Curved ZRS2/3			30836
	ZRS2/3	Curved ZRS2/3			30838

RIGID END TRUCK EXPLODED VIEW



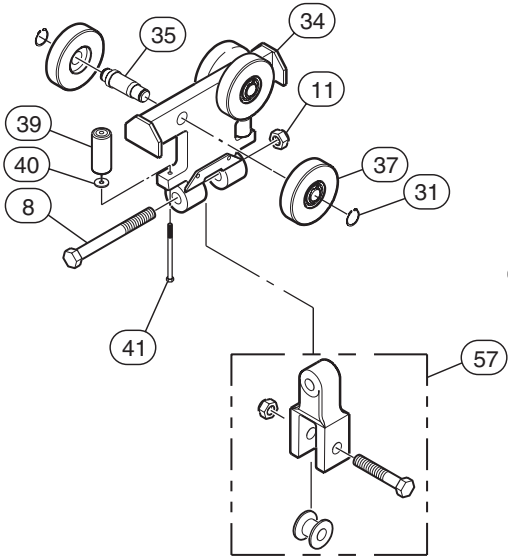
RIGID END TRUCK - PARTS LIST

Item No.	Description of Part	Qty. Total	Part Number			
			ZRA1/T	ZRA2	ZRS2	ZRS3
1	Dual Rigid Endtruck Bracket	1	16007890-XXXX	30327-XXXX		
2	Screw - Endtruck Bracket to Trolley	4	ZHS72023	72626		
3	Nut - Bridge to Suspension Bracket	4	75582	75583		
4	Nut - Endtruck Bracket to Trolley	4	75585	75587		
5	Nut - Suspension Bracket to Endtruck Bracket	2	75589			
6	Reaction Trolley	2	30279	ZHS30016	30511	45520079
7	Rigid Suspension Bracket	2	30326	ZHS30109	ZHS30773 & 30502	
8	Screw - Bridge to Suspension Bracket	4	ZHS70968	ZHS71481	ZHS71479	

Item No.	Bridge Type	Runway Type	Capacity		Kit Number
			lbs	kg	
	ZRA1/ZRAT	ZRA1	1000	454	16024861-XXXX
		ZRA2	2000	907	45519618-XXXX
		ZRS2			30634-XXXX
		ZRS3			45520830-XXXX
	ZRA2	ZRA1	1000	454	45519758-XXXX
		ZRA2	2000	907	30329-XXXX
		ZRS2			16045577-XXXX
		ZRS3			45520566-XXXX
	ZRS2/ZRS3	ZRA1	1000	454	45520343-XXXX
		ZRA2	2000	907	45520574-XXXX
		ZRS2			16031189-XXXX
		ZRS3			45520152-XXXX

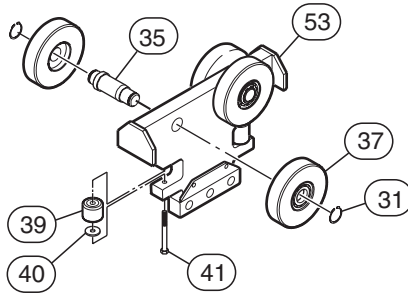
TROLLEY PARTS DRAWING

Item 27



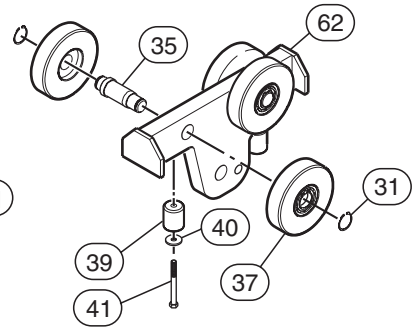
(Dwg. MHP2094)

Item 52



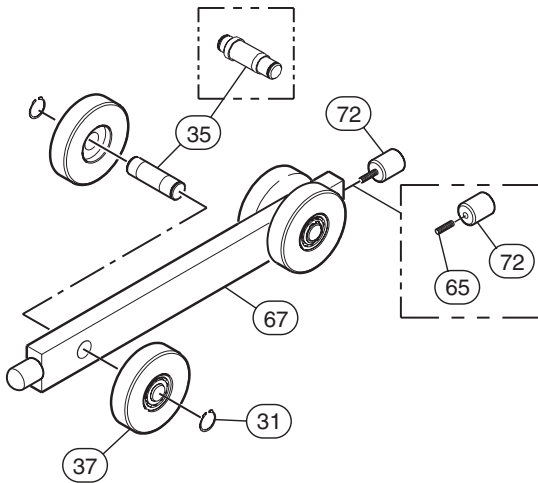
(Dwg. MHP2096)

Item 61



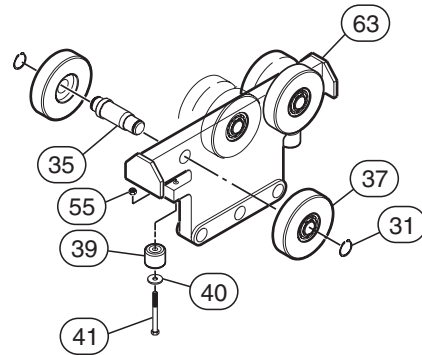
(Dwg. MHP2076)

Item 70



(Dwg. MHP2097)

Item 79



(Dwg. MHP2127)

TROLLEY PARTS LIST

ZRAT & ZRA1 Aluminum Trolley 500 lb (227 kg) Capacity (Dwg. MHP2094)

Item No.	Description of Part	Qty. Total	Part Number				
			ZRAT	ZRA1	ZRAT/ ZRA1		
27	Trolley Assembly	1	31057	30281	30304	30313	
8	Capscrew	1			72623		
11	Locknut	1	---	---		75587	
30	Trolley	1			---	30281	
31	Retainer Ring	4	99085				
*34	Trolley Body	1	30280				
35	Axle	2	30203				
**37	Wheel Assembly	4	31007	30208			---
39	Guide Roller	2	30223				
40	Washer	2	74504				
41	Capscrew	2	70484				
57	Hook Bracket Assembly	1		---		30903	

ZRA1 and ZRAT Aluminum Trolley 500 lb (227 kg) Capacity (Dwg. MHP2096)

Item No.	Description of Part	Qty. Total	Part Number	
			ZRAT	ZRA1
52	Trolley Assembly	1	31056	30279
31	Retainer Ring	4	99085	
35	Axle	2	30203	
**37	Wheel Assembly	4	31007	30208
39	Guide Roller	2	30223	
40	Washer	2	74504	
41	Capscrew	2	70484	
53	Trolley Body	1	30278	

ZRA1 Universal Trolley Aluminum 500 lb (227 kg) Capacity (Dwg. MHP2076)

Item No.	Description of Part	Qty. Total	Part Number
			ZRA1
61	Trolley Assembly	1	30204
31	Retainer Ring	4	99085
35	Axle	2	30203
**37	Wheel Assembly	4	30208
39	Guide Roller	2	30223
40	Washer	2	74504
41	Capscrew	2	70476
62	Trolley Body	1	30201

ZRA1, ZRA2, ZRS2 and ZRS3 Bumper Trolley - Single (Dwg. MHP2097)

Item No.	Description of Part	Qty. Total	Part Number			
			ZRA1	ZRA2	ZRS2	ZRS3
70	Trolley Assembly	1	30307-***	30148-***		
31	Retainer Ring	4	99085	93939		
35	Axle	2	30203	93934		
**37	Wheel Assembly	4	30208	30056		
65	Set Screw	2	---	71492		
67	Trolley Body	1	30311	30149		
72	Bumper	2	99097	93809		
***	Trolley	12	30307-12	30148-12		
		24	30307-24	30148-24		
		36	30307-36	30148-36		
		48	N/A	30148-48		

ZRA2 and ZRS2 Reaction Trolley 1000 lb (454 kg) Capacity (Dwg. MHP2127)

Item No.	Description of Part	Qty. Total	Part Number	
			ZRA2	ZRS2
79	Trolley Assembly	1	30016	30511
31	Retainer Ring	4	93939	
35	Axle	3	93934	
**37	Wheel Assembly	6	30056	
39	Guide Roller	2	93935	93936
41	Capscrew	2	70484	
55	Locknut	2	75581	
63	Trolley Body	1	30014	

ZRA2, ZRS2 and ZRS3 Load Trolley 1000 lb (454 kg) Capacity (Dwg. MHP2127)

Item No.	Description of Part	Qty. Total	Part Number		
			ZRA2	ZRS2	ZRS3
79	Trolley Assembly	1	30015	30510	
31	Retainer Ring	4	93939		
35	Axle	2	93934		
**37	Wheel Assembly	4	30056		
39	Guide Roller	2	93935	93936	
40	Washer	4	74504		
41	Capscrew	2	70484		
55	Locknut	2	75581		
63	Trolley Body	1	30014		

* Trolley Assembly 30313 uses the Trolley Assembly 30281 and adds a Hook Bracket Assembly.

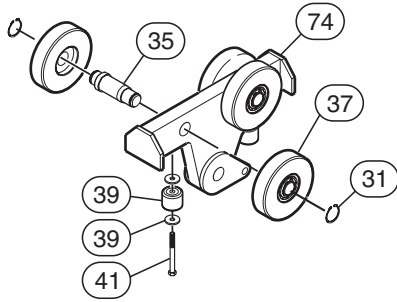
** Wheel Assembly comes with pressed in bearing, not sold separately.

*** Specifies lengths of trolley assembly.

NOTE: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

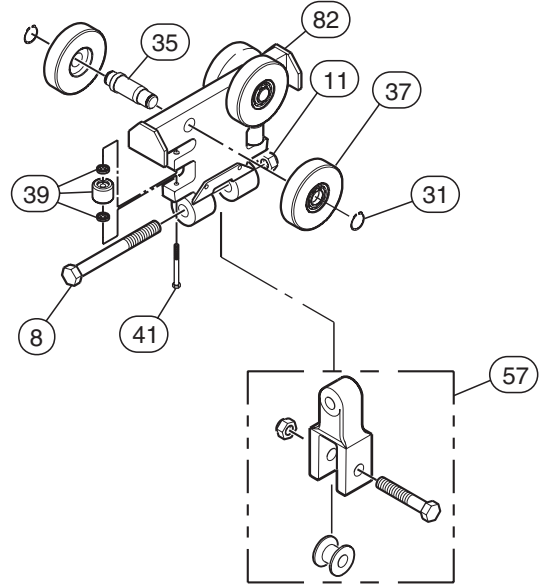
TROLLEY PARTS DRAWING - CONTINUED

Item 80



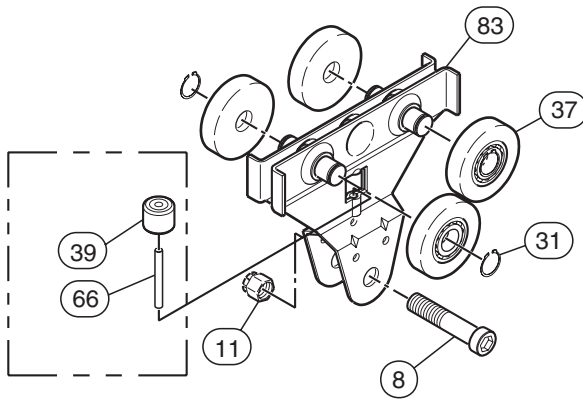
(Dwg. MHP2128)

Item 81



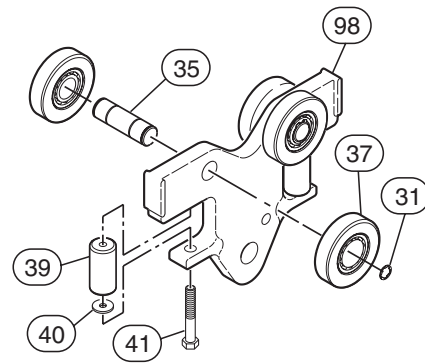
(Dwg. MHP2130)

Item 94



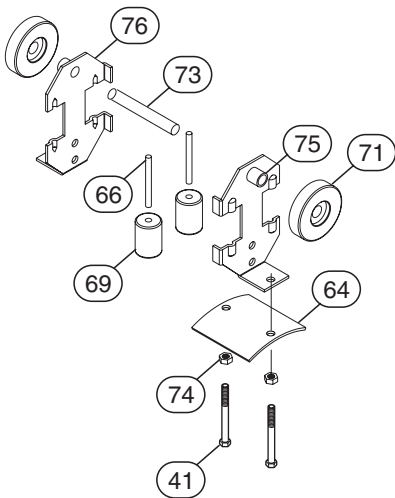
(Dwg. MHP2102)

Item 95



(Dwg. MHP2129)

Item 99



(Dwg. MHP1550)

TROLLEY PARTS LIST - CONTINUED

ZRA2 Trolley 1000 lb (454 kg) Capacity (Dwg. MHP2128)

Item No.	Description of Part	Qty. Total	Part Number		
			ZRA2	ZRS2	ZRS3
80	Trolley Assembly	1	30011	30512	
31	Retainer Ring	4	93939		
35	Axle	2	93934		
**37	Wheel Assembly	4	30056		
39	Guide Roller	2	93935	93936	
41	Capscrew	2	70484		
56	Trolley Body	1	30010		

ZRA2, ZRS2 and ZRS3 Trolley 1000 lb (454 kg) Capacity (Dwg. MHP2130)

Item No.	Description of Part	Qty. Total	Part Number		
			ZRA2	ZRS2	ZRS3
81	Trolley Assembly	1	30172	30923	
8	Capscrew	1	---	72623	
11	Locknut	1	---	75587	
31	Retainer Ring	4	93939		
35	Axle	2	93934		
**37	Wheel Assembly	4	30056		
39	Guide Roller	2	93935		
41	Capscrew	2	70484		
82	Trolley Body	1	30171		

ZRA2, ZRS2 and ZRS3 Trolley 1000 lb (454 kg) Capacity (Dwg. MHP2130)

Item No.	Description of Part	Qty. Total	Part Number			
			ZRS2/3			ZRA2
81	Trolley Assembly	1	30821	30842	30315	30314
8	Capscrew	1	---	72623	---	
11	Locknut	1	---	75587	---	
30	Trolley	1	---	30172	30842	
31	Retainer Ring	4	93939			
35	Axle	2	93934			
**37	Wheel Assembly	4	30056			
39	Guide Roller	2	93936			
41	Capscrew	2	70416			
57	Hook Bracket Assembly	1	---			
82	Trolley Body	1	30171	---		

ZRA1 500 lb (227 kg) Capacity and ZRA2 1000 lb (454 kg) Capacity Universal Trolley (Dwg. MHP2102)

Item No.	Description of Part	Qty. Total	Part Number		
			ZRA1	ZRA2	
94	Trolley Assembly	1	30259	30126	30131
8	Capscrew	1	72013	---	72608
11	Locknut	1	75583	---	75585
31	Retainer Ring	4	99085	93939	
**37	Wheel Assembly	4	30208	30056	
39	Guide Roller	1	30262	93935	
66	Pin	1	77057	77062	
83	Trolley Body	1	30602	30125	

ZRS2, ZRS3 and ZRSS 1000 lb (454 kg) Capacity Universal Trolley (Dwg. MHP2102)

Item No.	Description of Part	Qty. Total	Part Number		
			ZRS2 and ZRS3	ZRSS	
94	Trolley Assembly	1	30561	30565	30565S
8	Capscrew	1	---	72608	
11	Locknut	1	---	75585	
31	Retainer Ring	4	93939		
**37	Wheel Assembly	4	30056		
39	Guide Roller	1	30262	93935	
66	Pin	1	77062		
83	Trolley Body	1	30125		

ZRAT Universal Trolley 250 lb (113 kg) Capacity (Dwg. MHP2129)

Item No.	Description of Part	Qty. Total	Part Number
			ZRA1A
95	Trolley Assembly	1	31005
31	Retainer Ring	4	99085
35	Axle	2	30203
**37	Wheel Assembly	4	31007
39	Guide Roller	2	30223
40	Washer	2	74504
41	Capscrew	2	70484
98	Trolley Body	1	31006

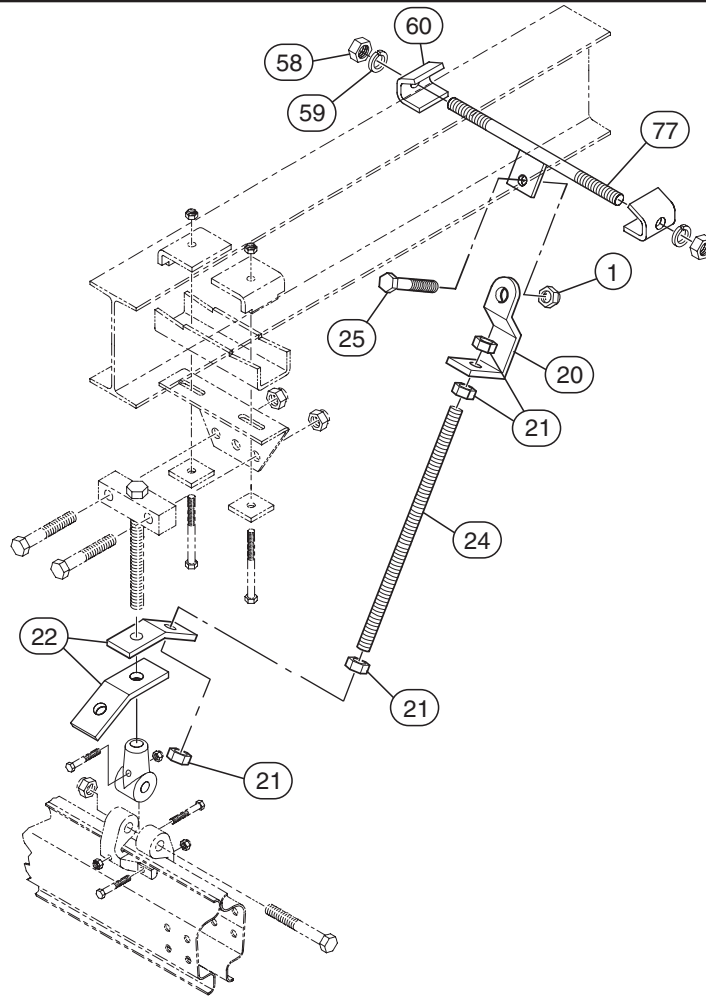
ZRA1, ZRA2, ZRS2 and ZRS3 Festoon Trolley - Single (Dwg. MHP1550)

Item No.	Description of Part	Qty. Total	Part Number			
			ZRA1	ZRA2	ZRS2	ZRS3
99	Trolley Assembly	1	30579	30581		
41	Capscrew	2	70498			
64	Clamp Plate	1	30578			
66	Pin	2	77057			
69	Guide Roller	2	30582			
**71	Wheel Assembly	2	9960T11			
73	Pin	1	77010	77011		
74	Locknut	2	75503			
75	Spacer	2	---	30585		
76	Body	2	Order Item 99			

** Wheel Assembly comes with pressed in bearing, not sold separately.

NOTE: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

ADJUSTABLE CROSS BRACE KIT PARTS DRAWING



(Dwg. MHP1650)

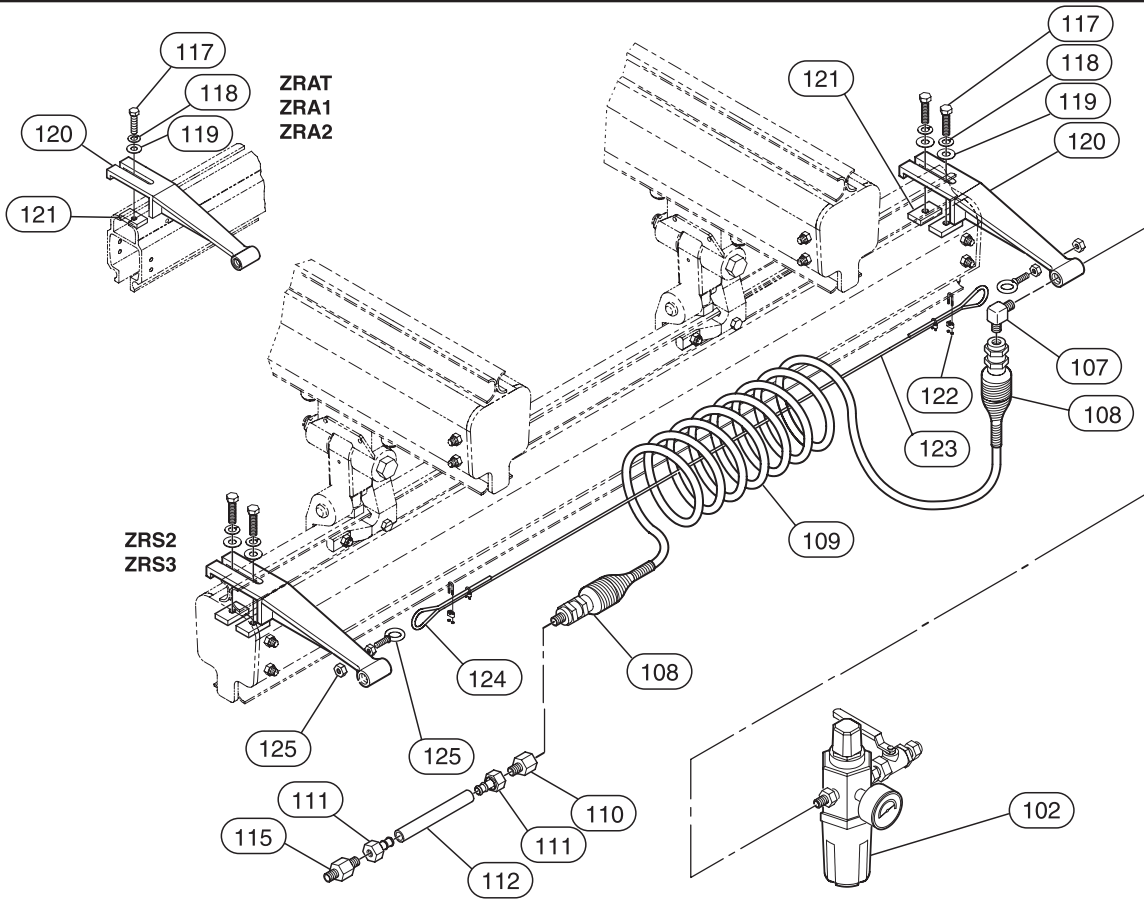
ADJUSTABLE CROSS BRACE KIT PARTS LIST

Item No.	Description of Part	Qty. Total	Part Number
1	Locknut	1	75512
20	Hanger Bracket	1	30099
21	Jam Nut	4	75558
22	Bracing Connector	2	30097
24	Threader Rod 1/2-13 x 32.12 in.	1	30522-3200
	Threader Rod 1/2-13 x 40.25 in.		30522-4000
	Threader Rod 1/2-13 x 48.31 in.		30522-4800
	Threader Rod 1/2-13 x 64.43 in.		30522-6400
	Threader Rod 1/2-13 x 80.56 in.		30522-8000
	Threader Rod 1/2-13 x 96.68 in.		30522-9600
25	Capscrew	1	72021
26	Clamp Mount	1	30158
29	Beam Clamp	2	30159
36	Lockwasher	2	74521
58	Nut	2	Order Item 77
59	Lockwasher		
60	Clamp		
77	Beam Clamp Assembly	1	30098
407	Locknut	1	75585

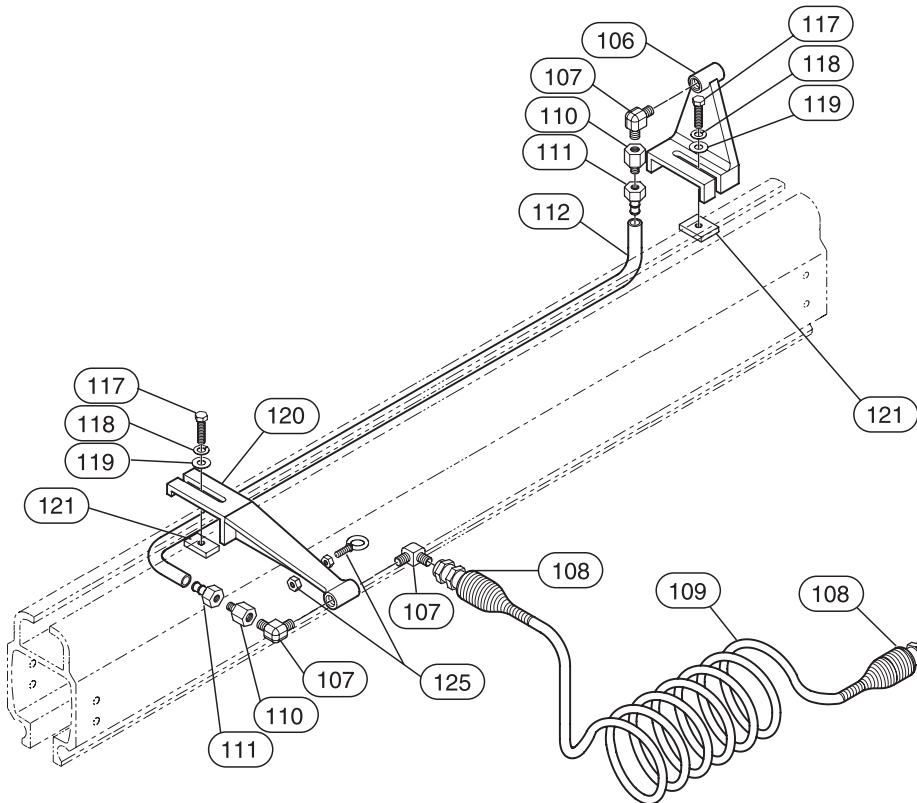
NOTE: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

Item No.	Description of Part	Size or Length		Part Number				
		in.	mm	ZRAT	ZRA1	ZRA2	ZRS2	ZRS3
506	Cross Brace Rod Kit	24	610	30081-24				
		30	762	30081-30				
		36	914	30081-36				
		48	1219	30081-48				
		60	1524	30081-60				
		72	1829	30081-72				

AIR SUPPLY PARTS DRAWING



(Dwg. MHP1535)



(Dwg. MHP1536)

AIR SUPPLY PARTS LIST

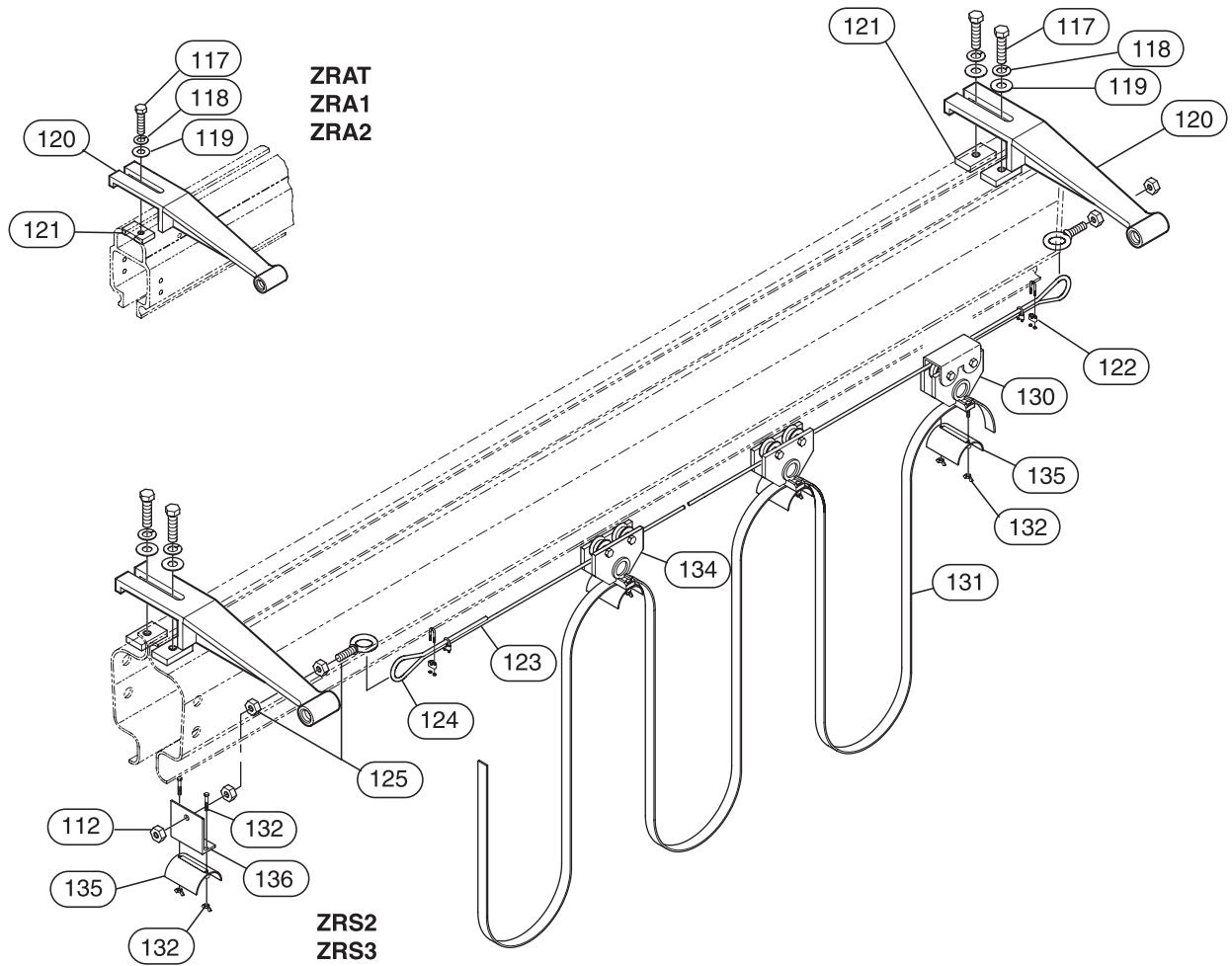
Item No.	Description of Parts	Qty. Total	Part Number	
			3/8 in.	1/2 in.
*101	Air Supply Kit	1	90000	90001
102	Filter/Regulator/Guage Kit	1	01941	01972
106	Bracket	1	30116-375	30116-500
107	Fitting, 90° Elbow	1	10354	01961
108	Fitting, Swivel	2	01957	01956
109	Precoil Hose	Specify Length	01910	01912
110	Fitting, Adapter	1 or 2	10765	10568
111	Fitting, Hose End	2	10560	10561
112	Adapter Hose	Specify Length	10555-B	10556-B
115	Fitting, Adapter	1	10566	10567
117	Capscrew	2 or 4	71480	
118	Lockwasher	2 or 4	74507	
119	Washer	2	74540	
120	Bracket	2	30114-375	30114-500
121	Plate	2 or 4	30038	
122	Clamp Assembly	4	10230	
123	Cable	Specify Length	10105	
124	Thimble	2	10210	
125	Eyebolt And Nut Assembly	2	01918	

* Each kit includes brackets, tagline assembly and coiled hose assembly.

NOTE: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

Item No.	Description of Part	Size or Length		Part Number	
		ft	m	3/8 in.	1/2 in.
503	Air Supply Package - Rail System	50	15.2	90000-1	90001-1
		75	22.8	90000-2	90001-2
		100	30.5	90000-3	90001-3
504	Air Supply Package - Bridges	5 to 8	1.5 to 2.4	90020-1	90021-1
		9 to 11	2.7 to 3.4	90020-2	90021-2
		12 to 14	3.7 to 4.3	90020-3	90021-3
		15 to 18	4.6 to 5.5	90020-4	90021-4
		19 to 24	5.8 to 7.3	90020-5	90021-5
505	Adapter Hose Assy Air Supply Package	N/A	N/A	30075-036	30076-036
				30075-054	30076-054
				30075-072	30076-072
507	Z-Rail and I-Beam System	50	15.2	90040-1	90041-1
		75	22.8	90040-2	90041-2
		100	30.5	90040-3	90041-3

ELECTRIFICATION PARTS DRAWING



(Dwg. MHP1538)

ELECTRIFICATION - PARTS LIST

Item No.	Description of Part	Qty. Total	Part Number				
			ZRAT	ZRA1	ZRA2	ZRS2	ZRS3
400	Electrification Festooning Kits	1	Refer to Chart Below				
112	Adapter Hose	Specify Length	10555-B (3/8 in.) or 10556-B (1/2 in.)				
117	Capscrew	2 or 4	71480				
118	Lockwasher	2 or 4	74507				
119	Flat Washer	2 or 4	74540				
120	Bracket	2	30114-375				
121	Plate	2 or 4	30038				
122	Clamp Assembly	4	10230				
123	Cable	1	10105				
124	Thimble	2	10210				
125	Eyebolt and Nut Assembly	1	01918				
130	Towing Trolley	1	99040				
131	Electric Cable	Specify Length	Refer to Chart				
132	Wing Nut Assembly	As Required	Order Item 96				
132	Capscrew	2	Order Item 96				
134	Cable Trolley (20 ft (6.1 m) Boom)	4	99041				
135	Flat Cable Clip	As Required	99042				
136	Anchor Bracket	1	99043				

NOTE: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

Electrification Festooning Kit

Boom Length		Part Number
ft	m	
12	3.66	90090-1
25	7.62	90090-2
50	15.24	90090-3
75	22.86	90090-4
100	30.48	90090-5
125	38.10	90090-6
150	45.72	90090-7

Each kit includes: Festoon lamp, sliders, flat cable, and junction box.

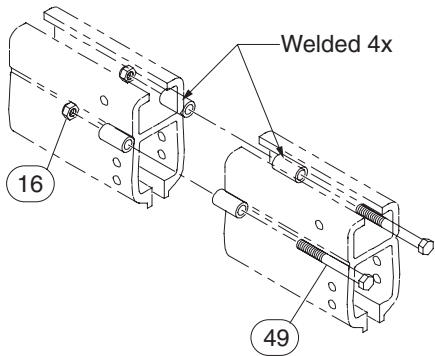
Optional Flat Electrification Cable*

Item No.	Part No.	No. of Conductors	Conductor Size-AWG	AMP Rating NEC 310 16
131	99050	8/C	16	15
	99051	12/C	16	15
	99052	4/C	14	17
	99053	8/C	14	17
	99054	12/C	14	17
	99055	4/C	12	30
	99056	7/C	12	30
	99057	4/C	10	40

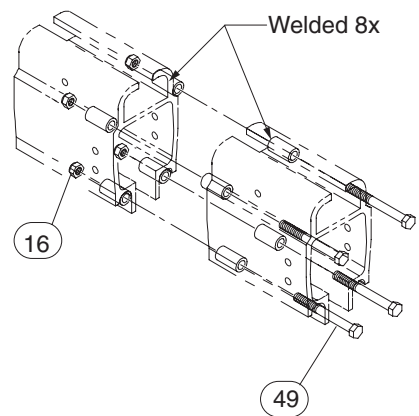
*PVC Jacket flat cable is available in the configuration shown. To determine the correct cable length, add 10 ft (3 m), plus 10% of system

SPLICE LUGS PARTS DRAWING

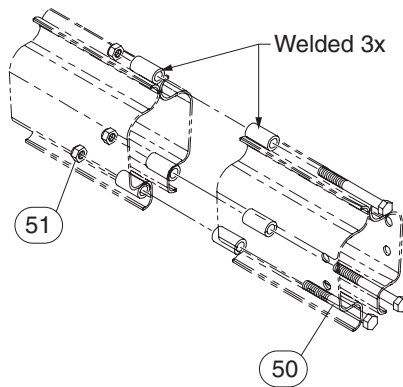
ZRA1 Rail



ZRA2 Rail



**ZRS2 and
ZRS3 Rail**



(Dwg. MHP1562)

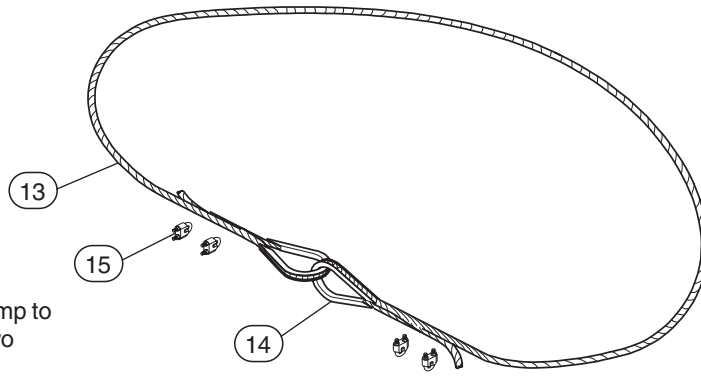
Item No.	Description Of Part	Qty. Total	Part Number				
			ZRAT	ZRA1	ZRA2	ZRS2/3	ZRSS
16	Capscrew	2 or 4	75582				
49	Locknut	2 or 4	70972	70926		---	
50	Capscrew	3	---			71910	71914
51	Locknut	3	---			75532	75600
140	Suspension Bracket	1	30267	---			

NOTE: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

Splice Kits

Item No.	Rail Model	Qty. Total	Part Number
339	ZRAT	1	31020
	ZRA1		30231
	ZRA2		30057
	ZRS2 and ZRS3		30515
	ZRSS		30317

SAFETY CABLE PARTS DIAGRAM AND PARTS LIST



Note: Wire rope clamp to be not more than two inches from end.

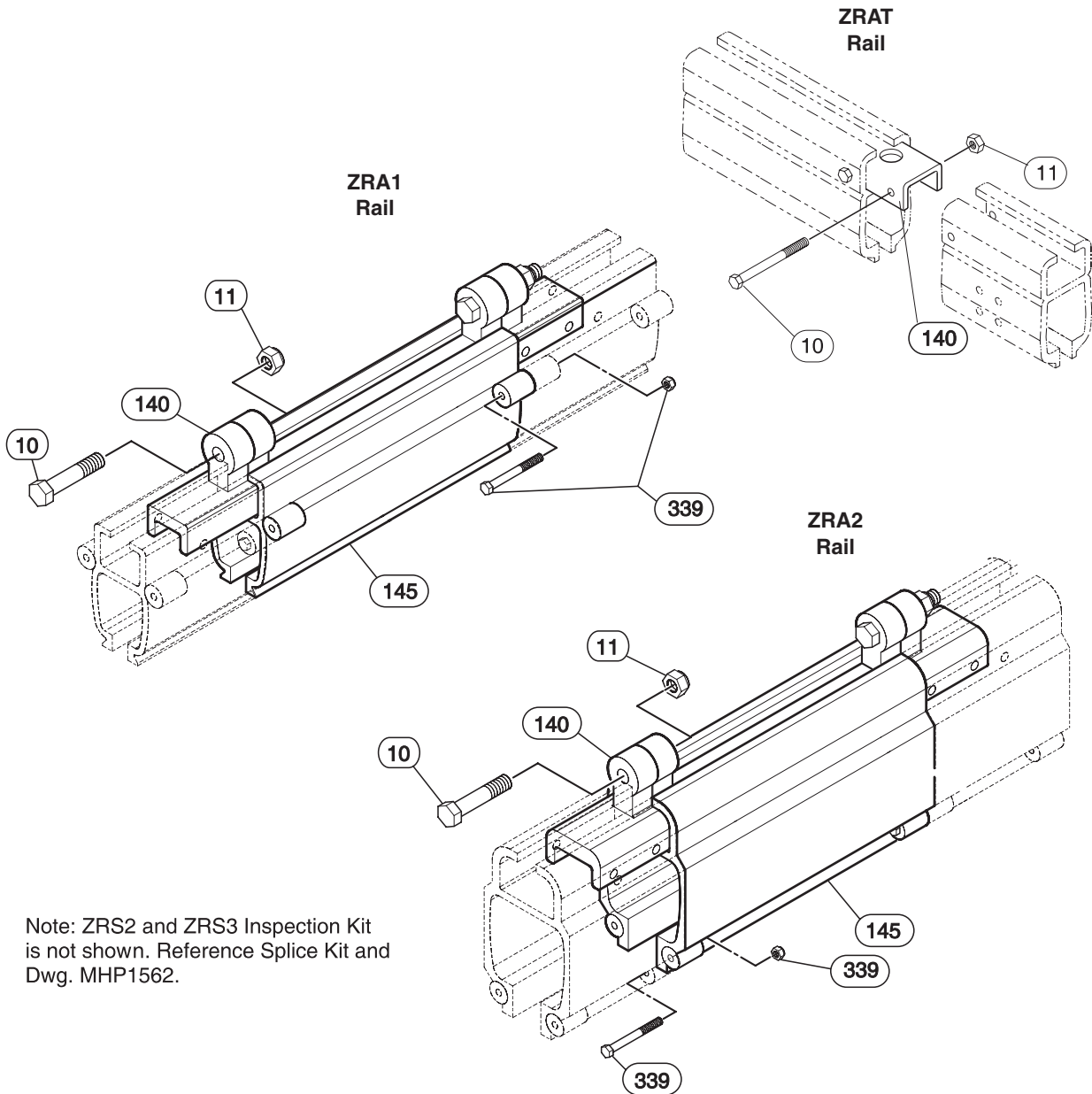
(Dwg. MHP1999)

Item No.	Description of Part	Qty. Total	Part Number
342	Safety Cable Kit (Incl's Items 13 through 15)	1	30907-XX
13	Wire Rope (bulk)	As Required	10099
14	Thimble	2	10212
15	Wire Rope Clamp	4	10235

XX = Wire rope length (feet).

NOTE: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

INSPECTION GATE ASSEMBLY DIAGRAM AND PARTS LIST



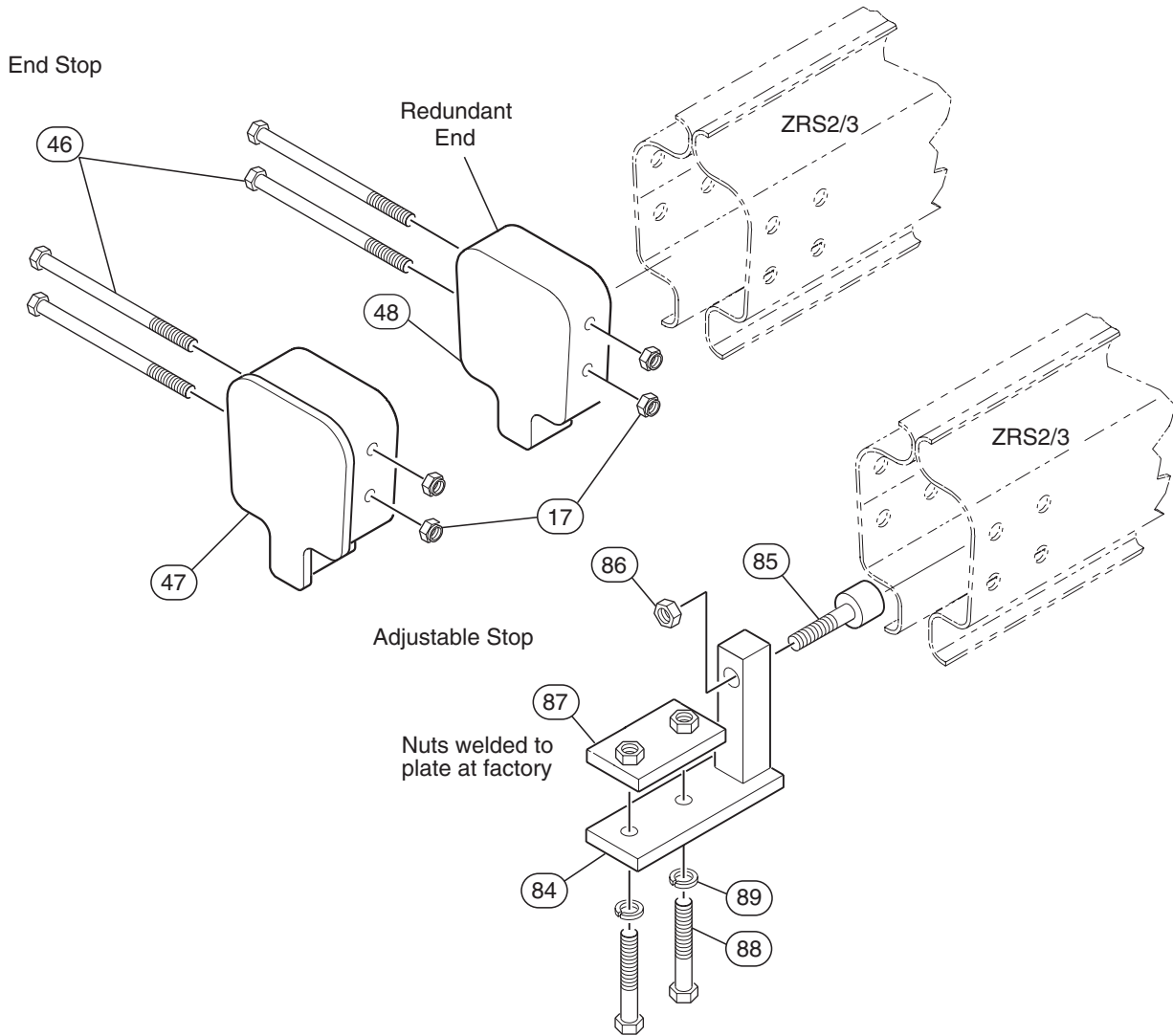
Note: ZRS2 and ZRS3 Inspection Kit is not shown. Reference Splice Kit and Dwg. MHP1562.

(Dwg. MHP2284)

Item No.	Description of Part	Qty. Total	Part Number				
			ZRAT	ZRA1	ZRA2	ZRS2	ZRS3
340	Inspection Gate Assembly	1	31034	30998	30995	30889	30892
10	Capscrew	4	70972	72652		---	
11	Locknut	4	75582	75587		---	
50	Capscrew	4	---	70964	71481	71910	
51	Locknut	4	---	75582	75583	75532	
140	Bridge Suspension Bracket	2 (4)	30267	30996	30994	---	
145	Gate End	1	31035	30997	30993	30891	30894
339	Splice Bolt Kit Assembly	2	---	30231	30057	---	

NOTE: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75582 would be 75582M.

END AND ADJUSTABLE STOP PARTS DIAGRAM AND LIST

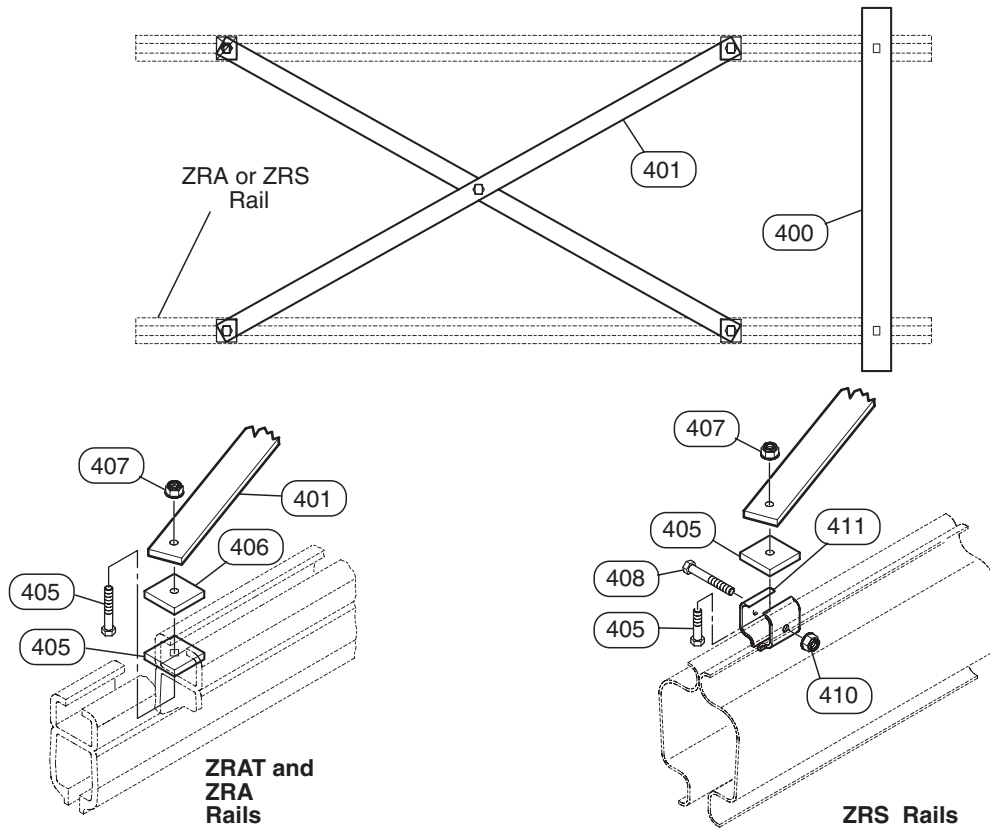


(Dwg. MHP1554)

Item No.	Description of Part	Qty. Total	Part Number					
			ZRAT	ZRA1	ZRA2	ZRS2	ZRS3	ZRSS
17	Locknut	2	75582	75583				75593
46	Capscrew	2	70972	71479	71472	71481		71502
47	End Stop	1	31019	30274	30182	30803	30807	30803
48	Redundant End Stop	1	31023	30276	30184	30805	30809	30805
84	Bar Weldment	1	30734		30735			---
85	Hex Shoulder Bumper	1	30744					
86	Locknut	1	75582					
87	Nut	1	30736		30737			
88	Capscrew	2	72002		72022			
89	Lockwasher	2	74513					
510	End Stop Kit	1	31022	30275	30183	30804	30808	308045
512	Redundant End Stop Kit	1	31024	30277	30185	30806	30810	308065
514	Adjustable Stop Kit	1	30738		30733			---

NOTE: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

DUAL BRIDGE TIE BAR DIAGRAM



(Dwg. MHP2225)

DUAL BRIDGE TIE BAR PARTS LIST

Item No.	Description of Part	Span Between Bridges	Qty. Total	Part Number							
				ZRAT	ZRA1	ZRA2	ZRA2T	ZRS2	ZRS3	ZRS2T	ZRS3T
400	Dual Bridge Tie Bar Assembly	18.00	2 or 3	30221-1800	30101-1800	30791-1800	30535-1800	30638-1800			
		24.00		30221-2400	30101-2400	30791-2400	30535-2400	30638-2400			
		28.50		30221-2850	30101-2850	30791-2850	30535-2850	30638-2850			
		36.00		30221-3600	30101-3600	30791-3600	30535-3600	30638-3600			
401	Dual Bridge Cross Brace Kit For Bridge Lengths up to 16 feet	See Note 3	---	30718	30719	N/A	30720	N/A			
		18.00		30718-1800	30719-1800	30787-1800	30720-1800	30637-1800			
		24.00		30718-2400	30719-2400	30787-2400	30720-2400	30637-2400			
		28.50		30718-2850	30719-2850	30787-2850	30720-2850	30637-2850			
		36.00		30718-3600	30719-3600	30787-3600	30720-3600	30637-3600			
	Dual Bridge Cross Brace Kit for Bridge Lengths greater than 16 feet	See Note 3	---	30771	30770	N/A	30772	N/A			
		18.00		30771-1800	30770-1800	30788-1800	30772-1800	30795-1800			
		24.00		30771-2400	30770-2400	30788-2400	30772-2400	30795-2400			
		28.50		30771-2850	30770-2850	30788-2850	30772-2850	30795-2850			
		36.00		30771-3600	30770-3600	30788-3600	30772-3600	30795-3600			
402	Cross Brace Bar	---	2 or 4	30717							
403	Tie Bar/Spacer Bar (Weldment For ZRS2/3 Applications)	18.00	2 or 3	42499-1800		30789-1800	30779-1800	30796-1800			
		24.00		42499-2400		30789-2400	30779-2400	30796-2400			
		28.50		42499-2850		30789-2850	30779-2850	30796-2850			
		36.00		42499-3600		30789-3600	30779-3600	30796-3600			
405	Suspension Plate Assembly		1	30218	30109	30218					
406	Toe Clamp Plate		4	30094							
407	Locknut		See ()	75585 (5)							
408	Capscrew		See ()	72010 (5)		72010 (1)					
409	Capscrew		4	---		71479					
410	Locknut		4	---		75583					
411	Side Plate		8	---		30502					

* Item 400 is included in item 401 Kit.

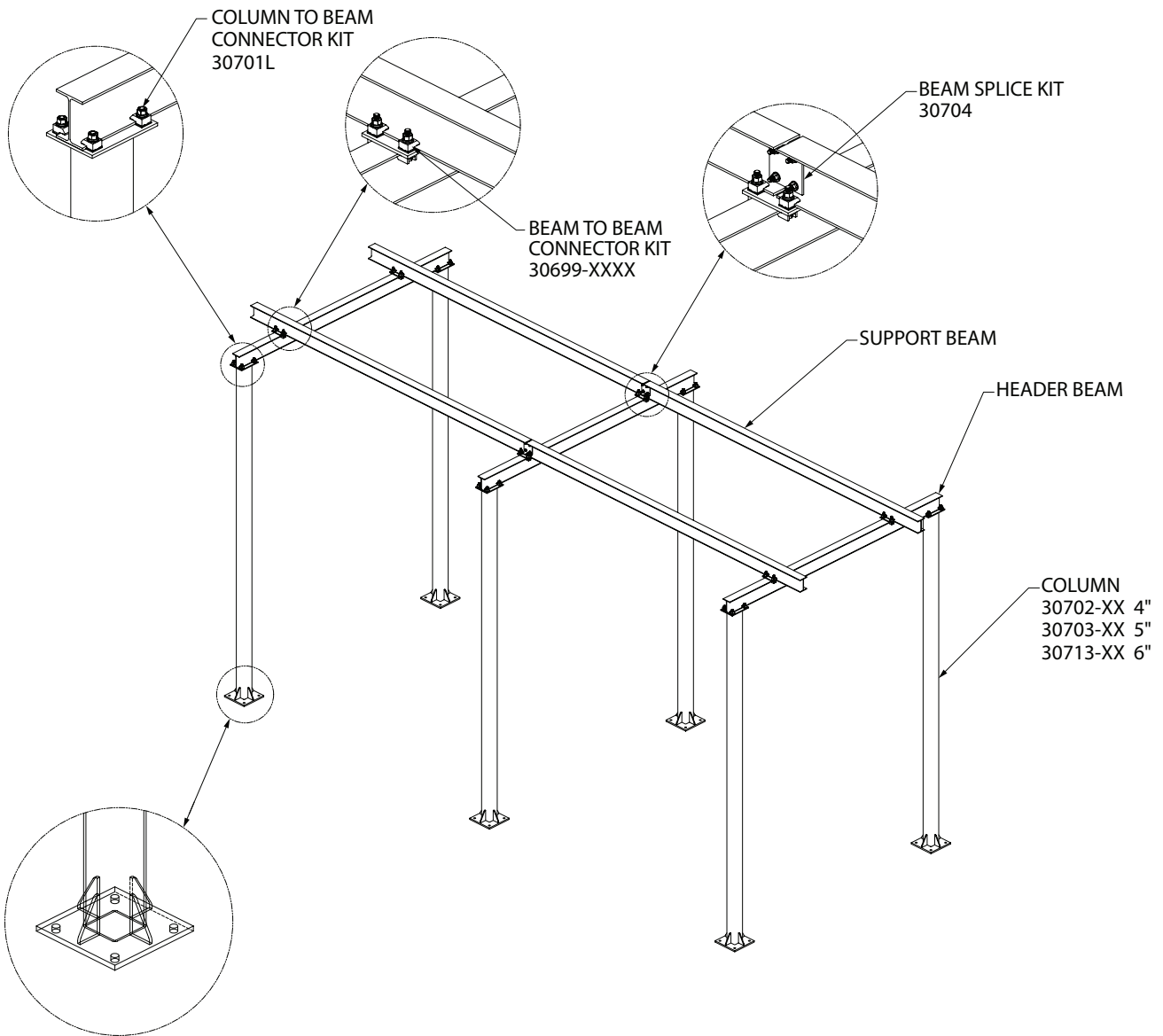
** Item 401 includes item 400 and 405 through 410.

NOTE 1: Dual Bridge Cross Brace Kits should be used on any bridge spans over 10 ft (3.05 m).

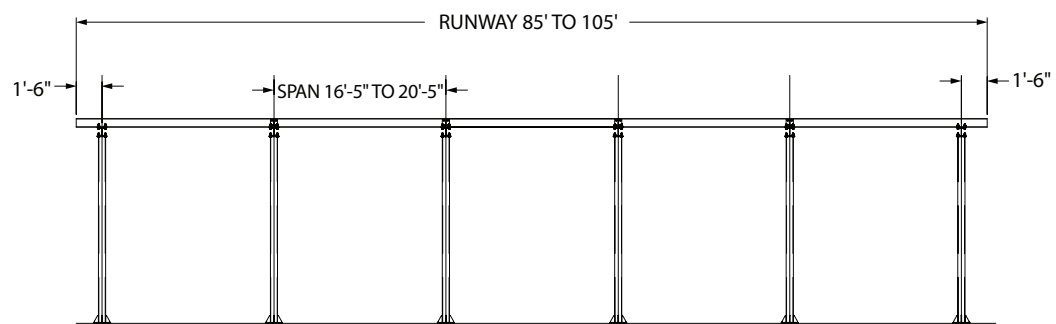
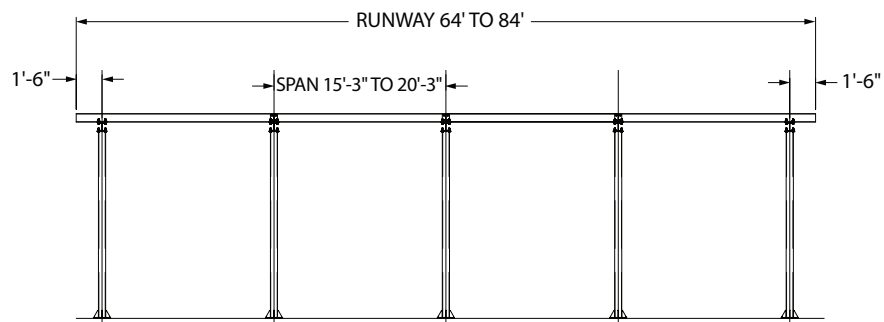
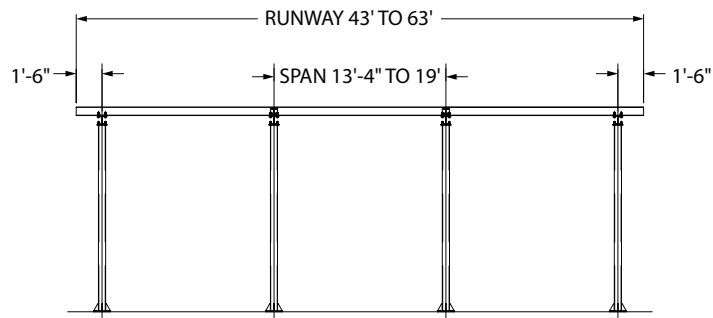
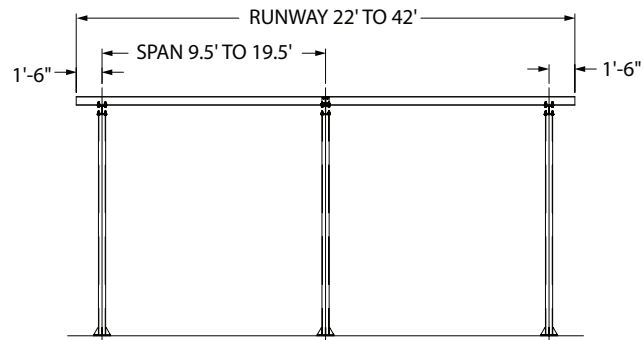
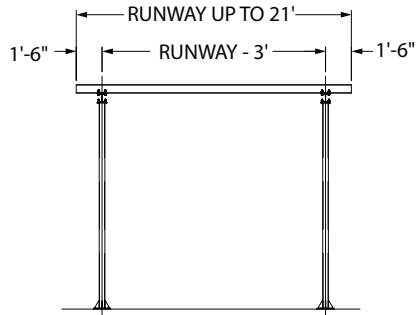
NOTE 2: When placing an order for metric on all capscrews and locknuts place the letter "M" after a part number; example: part number 75587 would be 75587M.

NOTE 3: If bridge span is not indicated, then kit will not include tie bar assembly. Bridge tie bars are required on dual bridges that have articulating endtrucks.

FLOOR SUPPORTS-GENERAL ASSEMBLY, PARTS, AND AVAILABLE MODELS



AVAILABLE FLOOR SUPPORT LENGTHS AND COLUMN SPACING



NOTES

NOTES

NOTES

www.irtools.com

© 2007 **Ingersoll Rand** Company

