

# REPAIR PART LIST

## OVERHEAD HOISTS

**Sizes D and D6 Standard Hoists**

**and**

**DN, DQ, DR, DX, DZ, D6R and D6Z Long Lift Hoists**

### HOW TO ORDER

Order all repair parts for your Ingersoll-Rand Tool by the **NAME** and **NUMBER** shown in the Repair Part List section. **Never** use the illustration numbers which appear in the first column.

For prompt service and genuine Ingersoll-Rand parts, place orders with the nearest Ingersoll-Rand Branch Office.

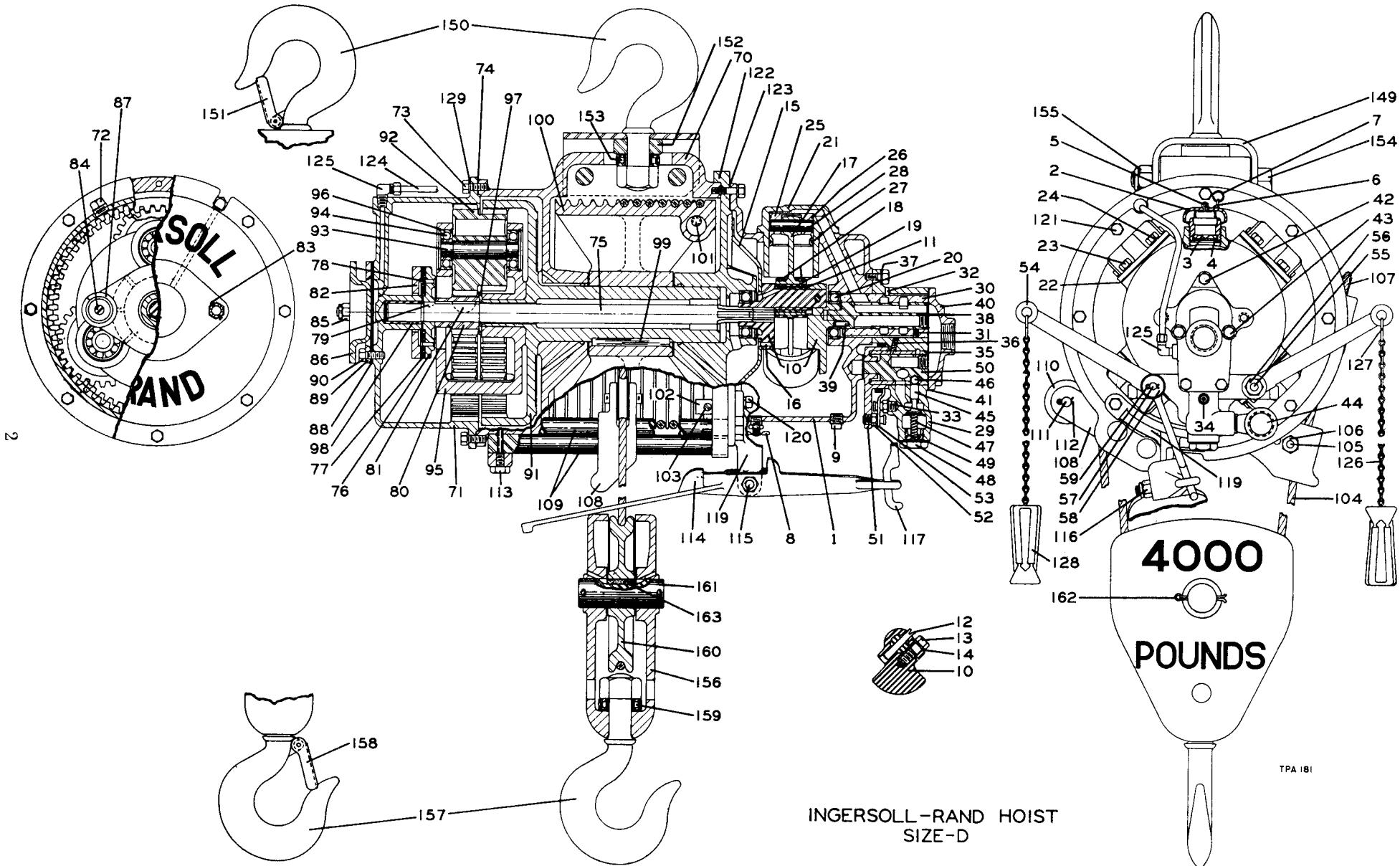
**Notice:** The use of other than genuine Ingersoll-Rand replacement parts may result in decreased tool performance and increased maintenance, and may, at the Company's option, invalidate all warranties.

Refer All Communications to the Nearest  
Ingersoll-Rand Branch Office or Distributor.  
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**Ingersoll-Rand**

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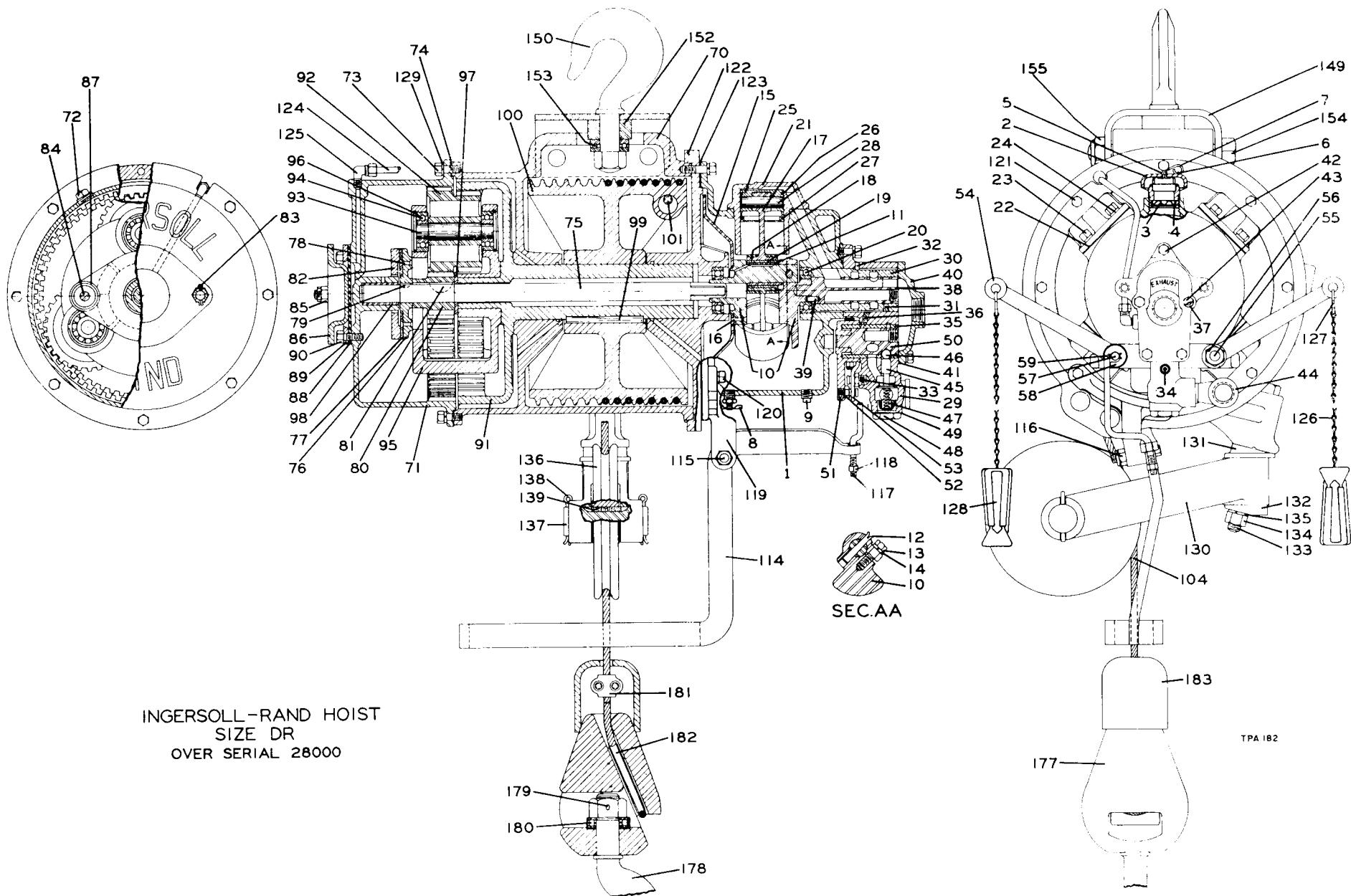


## MOTOR PARTS

ILLUSTRATION NUMBER <i>(Do not use for ordering)</i>	PART NAME FOR ORDERING  Parts Indented After An Item Are Included With That Item	PART NUMBER FOR ORDERING	
		Series D	Series D6
★1	<b>Motor Assembly</b> (See footnote No. 1 on page 5).....	D04-A501A	D06-A501A
2	Motor Case (See footnote No. 1 on page 5).....	D02-501A	D02-501A
3	Vent Cap.....	D02-303A	D02-303A
4	Vent Cap Screen.....	D02-889	D02-889
5	Vent Cap Screen Retainer.....	6CND-233-1/2	6CND-233-1/2
6	Vent Cap Cotter.....	D02-893	D02-893
7	Vent Cap Chain.....	D02-891	D02-891
8	S-Hook.....	D02-421	D02-421
9	Oil Cock (2).....	D02-308	D02-308
10	Drain Plug.....	D02-402	D02-402
	Crank Assembly.....	D04-A516	D06-A516
10	Crank Bare (Consists of two matched pieces, neither of which are sold separately).....	D04-516	D06-516
11	Crank Pin Sleeve.....	D02-519	D02-519
12	Crank Taper Pin.....	D02-520	D02-520
13	Crank Pinch Bolt.....	D02-521	D02-521
14	Crank Pinch Bolt Lock Washer.....	D02-537	D02-537
15	Oil Splasher.....	D04-540	D04-540
16	Oil Splasher Rivet (3).....	D02-541	D06-541
*	Crank Counterweight Rivet (2).....	- - -	D06-554
*	Crank Counterweight.....	- - -	D06-515
17	Connecting Rod (4).....	D04-509	D04-509
18	Connecting Rod Ring (2).....	D02-510	D02-510
19	Connecting Rod Bushing.....	D02-511	D02-511
20	Crank Bearing (2) (AFBMA No. 30BC02).....	TA-22	TA-22
21	Cylinder (4).....	D04-505	D06-505
22	Cylinder Gasket (4).....	D02-507	D02-507
23	Cylinder Cap Screw (16).....	D02-506	D02-506
24	Cylinder Cap Screw Washer (16).....	D02-504	D02-504
25	Piston (4).....	D6H60A-A513	D06-513A
26	Piston Ring (1 for each Piston).....	D04-337A	D06-337
27	Oil Regulating Piston Ring (1 for each Piston).....	D04-338	D06-338
28	Piston Wrist Pin (4).....	D04-514	D06-514

\* Not illustrated.

★ Always specify complete size symbol of the Hoist when ordering a repair Motor Case (so that the correct size symbol can be stamped on the name plate).



INGERSOLL-RAND HOIST  
SIZE DR  
OVER SERIAL 28000

## MOTOR PARTS

ILLUS. NUMBER (Do not use for ordering)	PART NAME FOR ORDERING  Parts Indented After An Item Are Included With That Item	PART NUMBER FOR ORDERING	
		Series D	Series D6
†	Valve Chest Assembly (If ordered for replacement for old style Valve Chest, Part D02-555 should also be ordered).....	D02-A545A	D02-A545A
●29	Valve Chest.....	D02-545A	D02-545A
●30	Rotary Valve Bushing.....	D02-525A	D02-525A
●31	Valve Oiler.....	JA4-75	JA4-75
●32	Bushing Key (2).....	D02-538	D02-538
●33	Throttle Lever Spring Stop Pin.....	D02-553	D02-553
●34	Valve Chest Grease Fitting.....	R1-188	R1-188
●35	Reverse Valve Bushing.....	D02-945	D02-945
●36	Valve Oiler.....	JA4-75	JA4-75
37	3/8" Lock Washer (5).....	D02-321	D02-321
●38	Rotary Valve.....	D02-526	D02-526
●39	Valve Drive Pin.....	D02-527	D02-527
●40	Valve Chest Cover.....	D02-546A	D02-546A
●41	Valve Chest Cover Gasket.....	D02-928	D02-928
●42	Valve Chest Short Screw (3).....	D02-506	D02-506
●43	Valve Chest Long Screw (2).....	D02-548	D02-548
●44	Inlet Ell.....	DU-581	DU-581
●45	Poppet Throttle Valve.....	D02-940	D02-940
●46	Throttle Valve Ball (1/2" dia. steel ball).....	D10-280	D10-280
●47	Throttle Valve Spring.....	B01-11	B01-11
●48	Throttle Valve Cap.....	D02-943	D02-943
●49	Throttle Valve Cap Gasket.....	G601-411	G601-411
●50	Reverse Valve.....	D02-944	D02-944
●51	Throttle Control Arm.....	D02-555	D02-555
●52	Throttle Spring Stop Pin.....	D02-553	D02-553
●53	Throttle Lever Spring.....	D02-412B	D02-412B
54	Throttle Lever (2).....	D02-556	D02-556
55	Throttle Lever Bolt.....	D02-411A	D02-411A
56	Throttle Lever Bolt Nut (2).....	D02-418A	D02-418A
57	Stop Link Bolt.....	D02-523	D02-523
58	Stop Link Bolt Washer.....	D02-419	D02-419
59	Stop Link Bolt Cotter (3/32" x 3/4").....	D02-524	D02-524

†Can be used as a replacement for the Valve Chest Assembly with "taper-plug" type Throttle Valve with which Hoists under serial 28,000 were equipped. A new style Throttle Control Arm(51) must also be purchased and installed when making this conversion. Neither the old style Valve Chest Assembly nor any of its components are available.

●Not available for Hoists with "taper-plug" Throttle Valve. Order a Valve Chest Assembly and Control Arm. See preceding note.

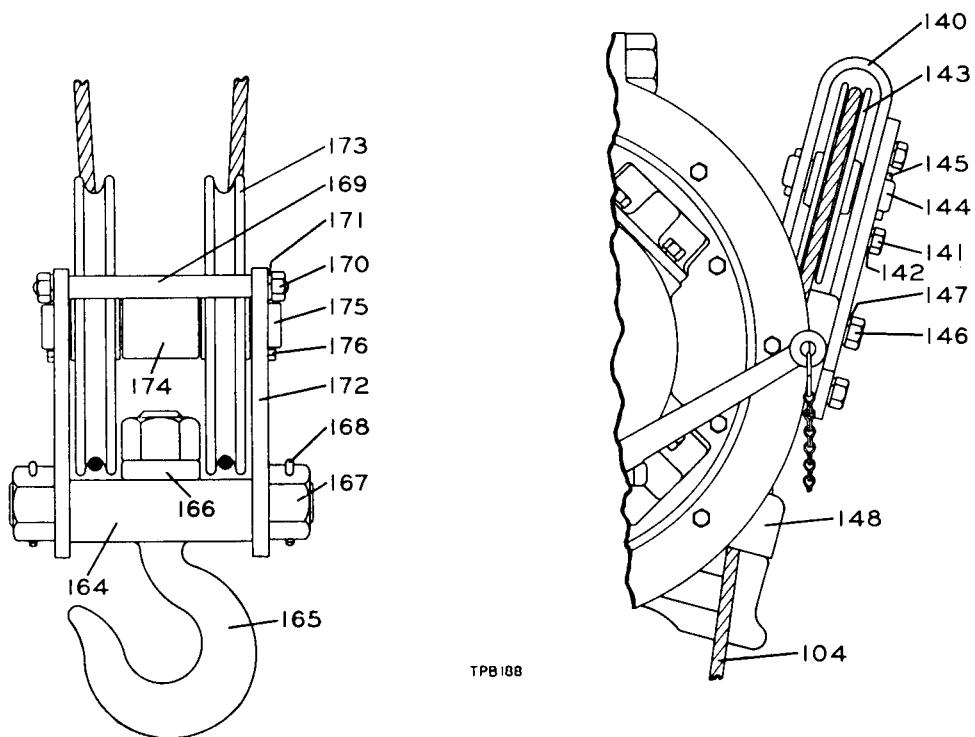
Footnote No. 1 - These Hoists now use a Stop Lever Bracket (119) which is attached to the flange on the Motor Case (1) with two Stop Lever Bracket Screws (120). Previously the bracket was cast integral with the Motor Case (1). When ordering a Motor Assembly or Motor Case, also order the Bracket and two Screws if the bracket is integral with the Motor Case that is to be replaced. Also order a Motor Case Cover (122), Brake Pipe (124) and Stop Lever Link (117) if the motor being replaced is under serial 13,000.

## HOIST PARTS

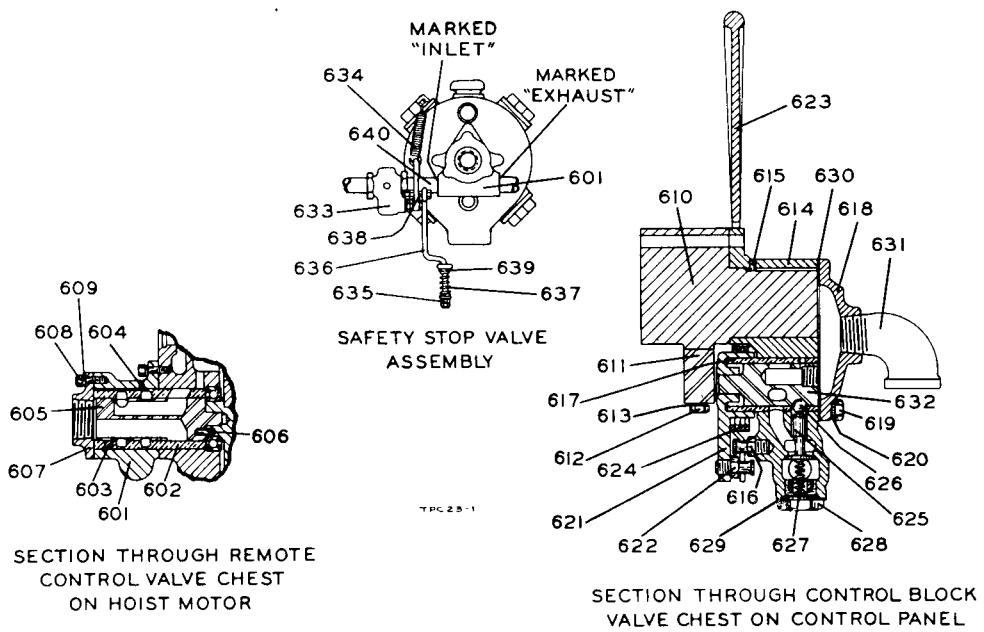
ILLUSTRATION NUMBER <small>(Do not use for ordering)</small>	PART NAME FOR ORDERING  <small>Parts Indented After An Item Are Included With That Item</small>	PART NUMBER FOR ORDERING					
		SIZES D, DN DQ, D	SIZES DR, DW, DX	SIZE DZ	SIZE D6	SIZE D6R	SIZE D6Z
70	Hoist Housing.....	D06-300A	D06W-300A	D06Z-300	D06-300A	D06W-300A	D06Z-300
*	Grease Plug.....	D02-351	D02-351	D02-351	D02-351	D02-351	D02-351
71	Gear Case.....	D04-353	D04-353	D04-353	D04-353	D04-353	D04-353
72	Grease Plug (2).....	D02-351	D02-351	D02-351	D02-351	D02-351	D02-351
73	Gear Case Screw (8).....	D02-354	D02-354	D02-354	D02-354	D02-354	D02-354
74	Gear Case Gasket.....	D04-931	D04-931	D04-931	D04-931	D04-931	D04-931
	Motor Shaft Assembly.....	D04-A316A	D04-A316A	D04-A316A	D04-A316A	D04-A316A	D04-A316A
75	Motor Shaft.....	D04-316A	D04-316A	D04-316A	D04-316A	D04-316A	D04-316A
76	Brake Disc.....	D02-388	D02-388	D02-388	D02-388	D02-388	D02-388
77	Brake Facing.....	D02-385	D02-385	D02-385	D02-385	D02-385	D02-385
78	Brake Facing Rivet (4).....	D02-398	D02-398	D02-398	D02-398	D02-398	D02-398
79	Brake Disc Key.....	TC-18	TC-18	TC-18	TC-18 *	TC-18	TC-18
80	Motor Shaft Pinion.....	D04-319	D04-319	D04-319	D04-319	D04-319	D04-319
81	Motor Shaft Pinion Key.....	D04-320	D04-320	D04-320	D04-320	D04-320	D04-320
82	Brake Plate.....	D02-389	D02-389	D02-389	D02-389	D02-389	D02-389
83	Brake Bolt Cotter (3/32" x 3/4") (2).....	D02-524	D02-524	D02-524	D02-524	D02-524	D02-524
84	Brake Bolt (2).....	D02-392	D02-392	D02-392	D02-392	D02-392	D02-392
85	Brake Bolt Nut (2).....	D02-394	D02-394	D02-394	D02-394	D02-394	D02-394
86	Brake Plunger.....	D02-391	D02-391	D02-391	D02-391	D02-391	D02-391
87	Brake Spring (2).....	D02-393	D02-393	D02-393	D02-393	D02-393	D02-393
88	Brake Diaphragm.....	D02-390	D02-390	D02-390	D02-390	D02-390	D02-390
89	Brake Diaphragm Ring.....	D02-395	D02-395	D02-395	D02-395	D02-395	D02-395
90	Brake Diaphragm Screw (8).....	D02-506	D02-506	D02-506	D02-506	D02-506	D02-506
91	Drum Gear.....	D04-357	D04-357	D04-357	D06-357	D06-357	D06-357
	Intermediate Gear Frame Assembly.....	D06-A367	D06-A367	D06-A367	D06-A367	D06-A367	D06-A367
92	Intermediate Gear (3).....	D04-364	D04-364	D04-364	D06-364	D06-364	D06-364
93	Intermediate Gear Shaft (3).....	D04-365	D04-365	D04-365	D04-365	D04-365	D04-365
94	Intermediate Gear Shaft Bearing (AFBMA No. 20BL03) (6)....	D04-366	D04-366	D04-366	D04-366	D04-366	D04-366
95	Intermediate Gear Frame.....	D04-367	D04-367	D04-367	D04-367	D04-367	D04-367
96	Bearing Retaining Spring (6).....	D04-340	D04-340	D04-340	D04-340	D04-340	D04-340
97	Pinion Thrust Washer.....	D04-397	D04-397	D04-397	D04-397	D04-397	D04-397
98	Gear Case Bushing.....	D04-355	D04-355	D04-355	D04-355	D04-355	D04-355
99	Rope Drum Key.....	D04-323	D04-323	D04-323	D04-323	D04-323	D04-323
100	Rope Drum						
	Grooved Type						
	For Sizes D, DR, D6 and D6R.....	D04-371	D04-371	-----	D06-371	D06-371	-----
	Spool Type						
	For Sizes DN, DQ, DW, DX, DZ and D6Z.....	D04-324	D04-324	D04Z-324A	-----	-----	D04Z-324A
101	Rope Set Screw(1 for Sizes D, DR, D6 and D6R; 4 for Sizes DZ and D6Z).....	D01-381B	D01-381B	D04-650	D01-381B	D01-381B	D04-650
102	Rope Clip (For sizes D, DR, D6 and D6R).....	D06-949	D06-949	-----	D06-949	D06-949	-----
103	Rope Clip Screw (for Sizes D, DR, D6 and D6R) (2).....	D02-950	D02-950	-----	D02-950	D02-950	-----
104	Wire Rope						
	For Sizes D, DR, DZ, D6, D6R and D6Z.....	D04-372	D04R-372	D04Z-372	D06-372	D06R-372	D04Z-372
	For Sizes DN and DW.....	D04N-372	D04N-372	-----	-----	-----	-----
	For Sizes DQ, and DX.....	D04Q-372	D04Q-372	-----	-----	-----	-----

ILLUSTRATION NUMBER (Do not use for ordering)	PART NAME FOR ORDERING  Parts Indented After An Item Are Included With That Item	PART NUMBER FOR ORDERING					
		SIZES D, DN DQ	SIZES DR, DW, DX	SIZE DZ	SIZE D6	SIZE D6R	SIZE D6Z
105	Wire Rope Clamp.....	D02-375	-----	-----	D02-375	-----	-----
106	Rope Clamp Nut.....	D02-418	-----	-----	D02-418	-----	-----
107	Rope Wedge.....	D02-373	-----	-----	D02-373	-----	-----
108	Rope Guide (used beginning serial 18,500) (for Sizes D and D6)..	D04-790	-----	-----	D06-790	-----	-----
109	Rope Guide Rod (2)(used beginning serial 18,500) (for Sizes D and D6).....	D04-791	-----	-----	D04-791	-----	-----
110	Rope Guide Roller(used beginning serial 18,500) (for Sizes D and D6).....	D02-792	-----	-----	D02-792	-----	-----
111	Guide Roller Pin (used beginning serial 18,500) (for Sizes D and D6).....	D02-793	-----	-----	D02-793	-----	-----
112	Roller Pin Cotter (2) (used beginning serial 18,500) (for Sizes D and D6).....	D02-524	-----	-----	D02-524	-----	-----
113	Guide Rod Retainer Screw (2) (used beginning serial 18,500) (for Sizes D and D6).....	D04-795	-----	-----	D04-795	-----	-----
114	Safety Stop Lever  For Sizes D and D6.....	D02-422B	-----	-----	D02-422B	-----	-----
	For Sizes DN, DQ, DR, DW, DX, DZ, D6R and D6Z.	D04-422A	D02-465A	D02-422A	-----	D02-465A	D02-422A
115	Stop Lever Bolt.....	D10-354A	D10-354A	D10-354A	D10-354A	D10-354A	D10-354A
116	Stop Lever Bolt Nut.....	D02-904	D02-904	D02-904	D02-904	D02-904	D02-904
117	Stop Lever Link  For D and D6 Hoists serial over 18,500.....	D10-424B	-----	-----	D10-424B	-----	-----
	For DN, DQ, DR, DW, DX, D6R, DZ and D6Z.....	D02W-424	D02W-424	D04Z-424	-----	D02W-424	D04Z-424
118	Stop Lever Link Nut (Not used on Sizes D and D6 over serial 18,500).....	D02-428	D02-428	D02-428	D02-428	D02-428	D02-428
119	Stop Lever Bracket.....	D02-905	D02-905	D02-905	D02-905	D02-905	D02-905
120	Stop Lever Bracket Screw (2).....	D02-906	D02-906	D02-906	D02-906	D02-906	D02-906
121	Motor Case Screws (6).....	D02-312	D02-312	D02-312	D02-312	D02-312	D02-312
*	Motor Case Screw Nut.....	D02-418	D02-418	D02-418	D02-418	D02-418	D02-418
122	Motor Case Cover.....	D04-502	D04-502	D04Z-502	D04-502	D04-502	D04Z-502
123	Motor Case Cover Gasket.....	D02-592	D02-592	D02-592	D02-592	D02-592	D02-592
124	Brake Pipe.....	D04-401A	D04-401A	D04-401A	D04-401A	D04-401A	D04-401A
125	Brake Pipe Elbow (2) (includes Connector).....	D02-400	D02-400	D02-400	D02-400	D02-400	D02-400
126	Throttle Lever Chain (2)  For Sizes D, DR, DZ, D6, D6R and D6Z.....	D02-413	D01Q-413	D02X-413	D02-413	D06R-413	D02X-413
	For Sizes DN and DW.....	D01Q-413	D02W-413	-----	-----	-----	-----
	For Sizes DQ and DX .....	D02Q-413	D02X-413	-----	-----	-----	-----
127	S-Hook (2 for each Chain).....	D02-421	D02-421	D02-421	D02-421	D02-421	D02-421
128	Pull Chain Throttle Handle (2).....	MR-415	MR-415	MR-415	MR-415	MR-415	MR-415
129	3/8" Lock Washer (16).....	D02-321	D02-321	D02-321	D02-321	D02-321	D02-321
130	Swivel Arm.....	-----	D04-460	-----	-----	D04-460	-----
131	Swivel Adapter.....	-----	D02-461	-----	-----	D02-461	-----
132	Swivel Adapter Cap.....	-----	D02-462	-----	-----	D02-462	-----
133	Swivel Bolt.....	-----	D01-694	-----	-----	D01-694	-----
134	Swivel Bolt Nut.....	-----	HU-776	-----	-----	HU-776	-----
135	Swivel Bolt Lock Washer.....	-----	A-67	-----	-----	A-67	-----
136	Sheave.....	-----	D04-380	-----	-----	D04-380	-----
137	Sheave Shaft.....	-----	D04-382	-----	-----	D04-382	-----
138	Sheave Shaft Cotter (2).....	-----	D04-383	-----	-----	D04-383	-----
139	Sheave Shaft Oiler.....	-----	D02-384	-----	-----	D02-384	-----

\* Not illustrated.



**Sheave Block and Auxiliary Sheave Parts  
for Sizes DZ and D6Z Long Lift Hoists.**



**Remote Control Parts**

(Part List on Page 15)

ILLUSTRATION NUMBER (Do not use for ordering)	PART NAME FOR ORDERING  Parts Indented After An Item Are Included With That Item	PART NUMBER FOR ORDERING					
		SIZES D, DN, DQ	SIZES DR, DW, DX	SIZE DZ	SIZE D6	SIZE D6R	SIZE D6Z
140	Auxiliary Sheave Assembly.....	-----	-----	D04-A638	-----	-----	D04-A638
141	Auxiliary Sheave Housing.....	-----	-----	D04-639	-----	-----	D04-639
142	Auxiliary Sheave Housing Short Screw (4).....	-----	-----	D10-354	-----	-----	D10-354
142	1/2" Lock Washer (4).....	-----	-----	D10-322	-----	-----	D10-322
143	Auxiliary Sheave.....	-----	-----	D04-638	-----	-----	D04-638
144	Auxiliary Sheave Shaft.....	-----	-----	D10-641	-----	-----	D10-641
145	Auxiliary Sheave Shaft Cotter (2).....	-----	-----	D04-383	-----	-----	D04-383
146	Auxiliary Sheave Housing Long Screw (4).....	-----	-----	215-148	-----	-----	215-148
147	1/2" Lock Washer (4).....	-----	-----	D10-322	-----	-----	D10-322
148	Rope Guide.....	-----	-----	D04-645	-----	-----	D04-645
*	Rope Guide Bolt.....	-----	-----	D01-339	-----	-----	D01-339
*	Rope Guide Bolt Nut.....	-----	-----	HU-776	-----	-----	HU-776
	Top Hook Yoke Assembly (for Sizes D, DN, DR, DW, DZ, D6 D6R and D6Z)						
	With Open Hook.....	D04-A590A	D04-A590A	D04-A590A	D06-A590A	D06-A590A	D06-A590A
	With Safety Hook.....	D04-AS590A	D04-AS590A	D04-AS590A	D06-AS590A	D06-AS590A	D06-AS590A
149	Top Hook Yoke						
	With Open Hook.....	D04-590A	D04-590A	D04-590A	D06-590A	D06-590A	D06-590A
	With Safety Hook.....	D04-S590A	D04-S590A	D04-S590A	D06-S590A	D06-S590A	D06-S590A
‡ 150	Top Hook and Nut						
	Open Type.....	D04-304B	D04-304B	D04-304B	D06-304B	D06-304B	D06-304B
	Safety Type.....	D04-S377	D04-S377	D04-S377	D06-S377	D06-S377	D06-S377
6	151	Safety Latch Kit (individual parts not sold separately) (for	Safety Hook)				
	for Crosby-Laughlin Hoists.....	D04-S4055	D04-S4055	D04-S4055	D06-S4055	D06-S4055	D06-S4055
	for Williams-Vulcan Hooks.....	D04-S123	D04-S123	D04-S123	D06-S123	D06-S123	D06-S123
‡ 152	Top Hook Spacer.....	D04-591A	D04-591A	D04-591A	D06-591A	D06-591A	D06-591A
‡ 153	Top Hook Bearing						
	Timken No. T-113 or its equivalent.....	D04-379A	D04-379A	D04-379A	-----	-----	-----
	Timken No. T-126 or its equivalent.....	-----	-----	-----	D06-379A	D06-379A	D06-379A
154	Yoke Bolt (2).....	D02-339	D02-339	D02-339	D02-339	D02-339	D02-339
155	Yoke Bolt Nut (1 for each Bolt).....	D02-440B	D02-440B	D02-440B	D02-440B	D02-440B	D02-440B
	Sheave Block Assembly						
	With Open Hook.....	D04-A378A	-----	-----	D06-A378A	-----	-----
	With Safety Hook.....	D04-AS378A	-----	-----	D06-AS378A	-----	-----
156	Sheave Block						
	With Open Hook.....	D04-378A	-----	-----	D06-378A	-----	-----
	With Safety Hook.....	D04-S378A	-----	-----	D06-S378A	-----	-----
●157	Bottom Hook and Nut						
	Open Type.....	D04-304B	-----	-----	D06-304B	-----	-----
	Safety Type.....	D04-S377	-----	-----	D06-S377	-----	-----
158	Safety Latch Kit (individual parts not sold separately) (for Safety Hook)						
	for Crosby-Laughlin Hooks.....	D04-S4055	-----	-----	D06-S4055	-----	-----
	for Williams-Vulcan Hooks.....	D04-S123	-----	-----	D06-S123	-----	-----
●159	Bottom Hook Bearing						
	Timken No. T-113 or its equivalent.....	D04-379A	-----	-----	-----	-----	-----
	Timken No. T-126 or its equivalent.....	-----	-----	-----	D06-379A	-----	-----
160	Sheave.....	D04-380	-----	-----	D06-380	-----	-----
161	Sheave Shaft.....	D04-382	-----	-----	D04-382	-----	-----
162	Sheave Shaft Cotter (2).....	D04-383	-----	-----	D04-383	-----	-----
163	Sheave Shaft Oiler.....	D02-384	-----	-----	D02-384	-----	-----

ILLUSTRATION NUMBER (Do not use for ordering)	PART NAME FOR ORDERING  Parts Indented After An Item Are Included With That Item	PART NUMBER FOR ORDERING					
		SIZES D, DN DQ	SIZES DR, DW, DX	SIZE DZ	SIZE D6	SIZE D6R	SIZE D6Z
164	Sheave Block Assembly With Open Hook.....	-----	-----	D04-A630	-----	-----	D06Z-A630
	With Safety Hook.....	-----	-----	D04-AS630	-----	-----	D06Z-AS630
▲165	Sheave Hook Support With Open Hook.....	-----	-----	D04-632	-----	-----	D06-632
	With Safety Hook.....	-----	-----	D04-S632	-----	-----	D06-S632
* ▲166	Bottom Hook and Nut Open Type.....	-----	-----	D04-304B	-----	-----	D06-304B
	Safety Type.....	-----	-----	D04-S377	-----	-----	D06-S377
* 167	Safety Hook Latch Kit (individual parts not sold separately) (for Safety Hook) for Crosby-Laughlin Hooks.....	-----	-----	D04-S4055	-----	-----	D06-S4055
	for Williams-Vulcan Hooks.....	-----	-----	D04-S123	-----	-----	D06-S123
168	Bottom Hook Bearing Timken No. T-113 or its equivalent.....	-----	-----	D04-379A	-----	-----	D06-379A
	Timken No. T-126 or its equivalent.....	-----	-----	-----	-----	-----	-----
169	Hook Support Nut (2).....	-----	-----	D04-305	-----	-----	D04-305
	Hook Support Cotter (2).....	-----	-----	D02-438	-----	-----	D02-438
170	Side Plate Spacer (2).....	-----	-----	D04-635	-----	-----	D04-635
	Side Plate Spacer Nut (2 for each Spacer).....	-----	-----	215-182	-----	-----	215-182
171	1/2" Lock Washer (2 for each Spacer).....	-----	-----	D10-322	-----	-----	D10-322
	Sheave Block Side Plate (2) (Sold only in sets).....	-----	-----	D04-630	-----	-----	D04-630
172	Sheave (2).....	-----	-----	D04-649	-----	-----	D04-649
	Sheave Oiler (1 for each Sheave).....	-----	-----	H54U-432	-----	-----	H54U-432
173	Sheave Spacer.....	-----	-----	D04-631	-----	-----	D04-631
	Sheave Shaft.....	-----	-----	D04Z-382	-----	-----	D04Z-382
174	Sheave Shaft Oiler.....	-----	-----	D04Z-384	-----	-----	D04Z-384
	Sheave Shaft Cotter (2).....	-----	-----	D04-383	-----	-----	D04-383
175	Hook Block Assembly With Open Hook.....	-----	-----	D04-A463A	-----	-----	D04-A463A
	With Safety Hook.....	-----	-----	D04-AS463A	-----	-----	D04-AS463A
★177	Hook Block.....	-----	-----	D04-463A	-----	-----	D04-463A
	Bottom Hook and Nut Open Type .....	-----	-----	D04-304B	-----	-----	D04-304B
★178	Safety Type.....	-----	-----	D04-S377	-----	-----	D04-S377
	Safety Hook Latch Kit (individual parts not sold separately) (for Safety Hook).....	-----	-----	D04-S4055	-----	-----	D04-S4055
* 179	for Crosby-Laughlin Hooks.....	-----	-----	D06-S123	-----	-----	D06-S123
	for Williams-Vulcan Hooks.....	-----	-----	D02-438	-----	-----	D02-438
★180	Hook Cotter.....	-----	-----	D04-379A	-----	-----	D04-379A
	Bottom Hook Bearing (Timken No. T-113 or its equivalent)....	-----	-----	D04-464	-----	-----	D04-464
181	Bottom Hook Bearing (Timken No. T-113 or its equivalent)....	-----	-----	D02-373	-----	-----	D02-373
	Rope Clamp.....	-----	-----	D02-469	-----	-----	D02-469
182	Wire Rope Wedge.....	-----	-----	D02-469	-----	-----	D02-469
	Safety Stop Block.....	-----	-----	D02-469	-----	-----	D02-469

\* Not illustrated.

† Unless the present Top Hook shank is 1 1/8" - 12 thread for Series D Hoists; 1 1/4" - 12 thread for Series D6 Hoists, order a Top Hook Yoke(149).

● Unless the present Bottom Hook shank is 1 1/8" - 12 thread for Series D Hoists; 1 1/4" - 12 thread for Series D6 Hoists, order a Sheave Block (156).

▲ Unless the present Bottom Hook shank is 1 1/8" - 12 thread for Size DZ; 1 1/4" - 12 thread for Size D6Z, order a Sheave Hook Support (164).

★ Unless the shank on the present Bottom Hook is threaded 1 1/8" - 12 thread, order a Hook Block Assembly.

TABLE A

## TROLLEY BRACKET BOLTS, HINGE PINS and TROLLEY BRACKET SPACERS,

## REQUIRED FOR MOUNTING TROLLEYS ON VARIOUS TRACKS

(Refer to illustration and part list on pages 14, 16, 17 and 18)

## I-BEAMS and RICHARDS-WILCOX "TRU-TRED" TRACKS

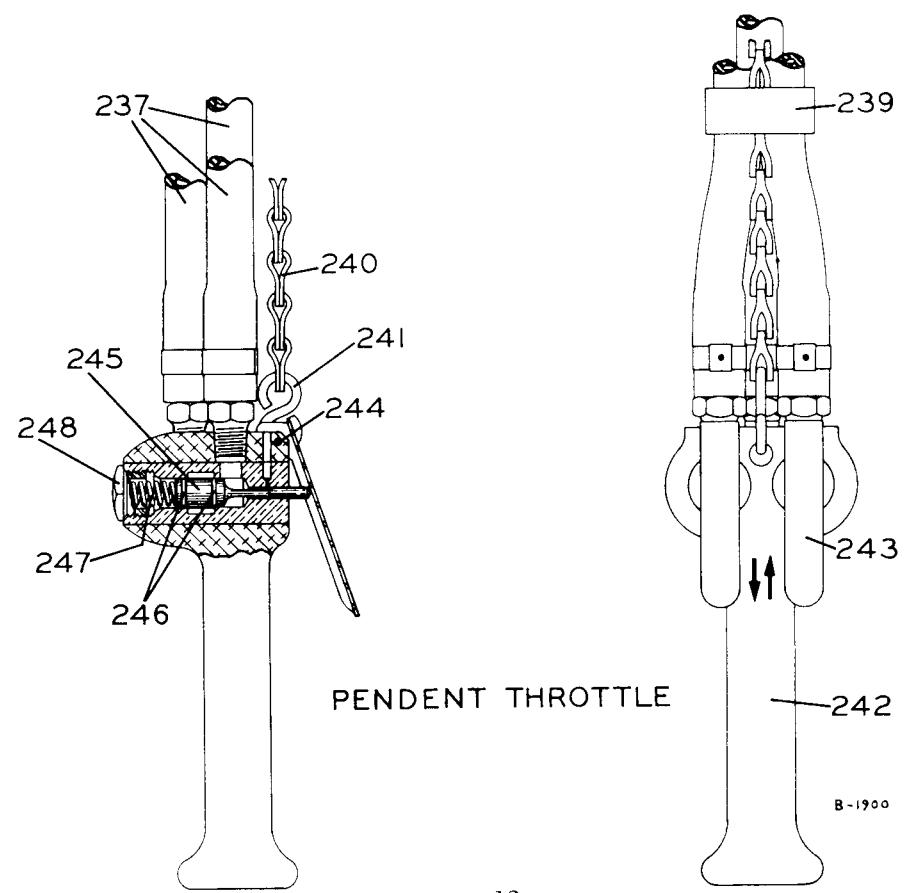
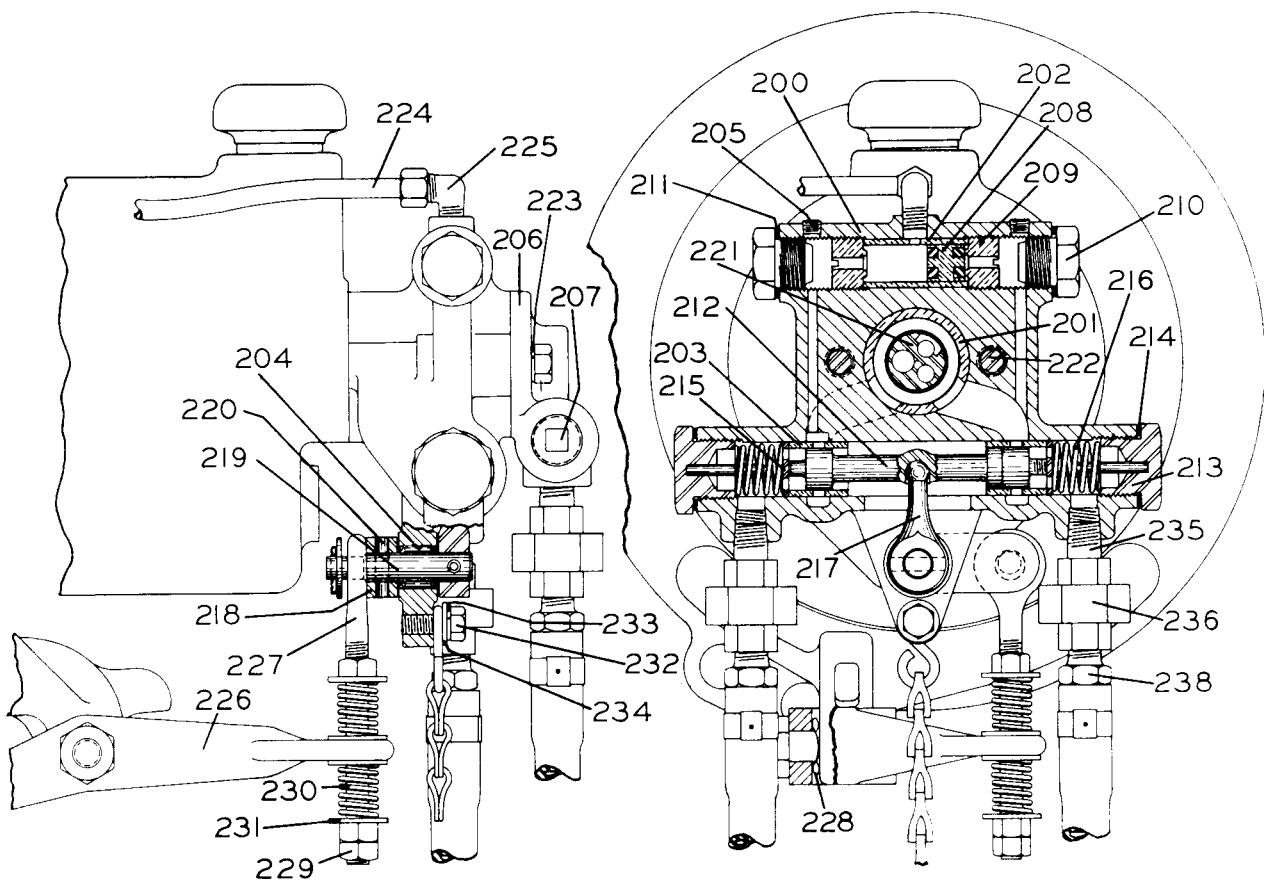
Beam Size, inches	Flange Width, inches	Length of Trolley Bracket Bolt, inches		Length of Bracket Hinge Pin, inches	Trolley Bracket Spacers	
		For Hoists under Serial 30,000	For Hoists over Serial 30,000		Length, inches	Quantity Required
6	3.33	9	10	10½	—	—
7	3.66	9	10	10½	1/6	4
8	4.00	9	10	10½	—	—
9	4.33	9	10	10½	1/6	4
10	4.66	10	11	10½	1/6	8
12	5.00	10	11	11½	1/2	4
15	5.50	11	11	11½	3/4	4
18	6.00	11	12	12	1	4

## FLAT-TREAD MONORAILS

Flange Width of Monorail, inches	Length of Trolley Bracket Bolt, inches	Length of Bracket Hinge Pin, inches	Trolley Bracket Spacers	
			Length, inches	Quantity Required
3.25 to 3.33 4½	10 11	10½ 11½	— 3/8	— 4

## MAINTENANCE TOOLS

Tool Number For Ordering	Tool Name For Ordering	Operation
P25-228	Grease Gun.....	Lubrication.
D02-426	Rope Set Screw Wrench.....	Installing or removing the Rope Set Screw (101) in the Rope Drum (100).
D02-932	Valve Chest Jack Bolt (2 required).....	Removing Valve Chest (29) from the Motor Case (1).
D04-933	Piston Ring Compressor (for Series D Hoists).....	Compressing Oil Regulating Piston Ring (27) when installing Cylinder (21).
D06-933	Piston Ring Compressor (for Series D6 Hoists).....	Compressing Oil Regulating Piston Ring (27) when installing Cylinder (21).
23468 23470	Throttle Valve Seat Reamer..... Throttle Valve Stem Reamer.....	Refacing seat in Valve Chest (29) for Poppet Valve (45). Reaming throttle valve stem hole in Reverse Valve Bushing (35) after installing a new Bushing.
37860	Shuttle Valve Bushing Reamer.....	Reaming Shuttle Valve Bushings (203) after installation in the Shuttle Valve Chest (200).
37871	Shuttle Valve Inserting Tool.....	Inserting new Shuttle Valve Bushings (203) in the Shuttle Valve Chest (200).
38180	Brake Valve Bushing Inserting Tool.....	Installing the Brake Valve Bushing (202) in the Shuttle Valve Chest (200).



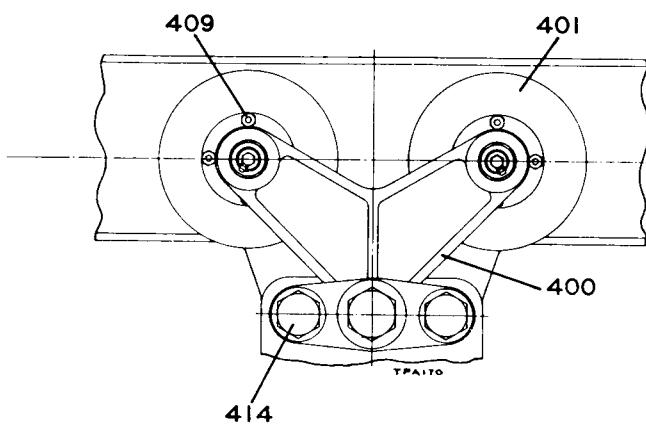
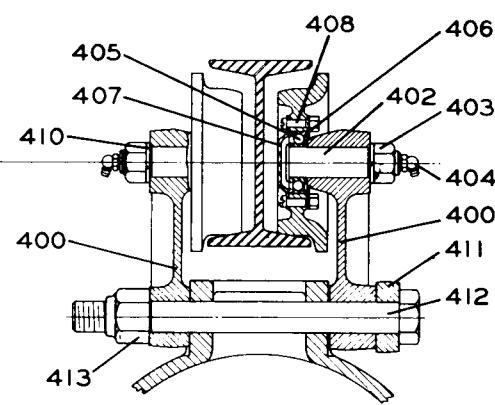
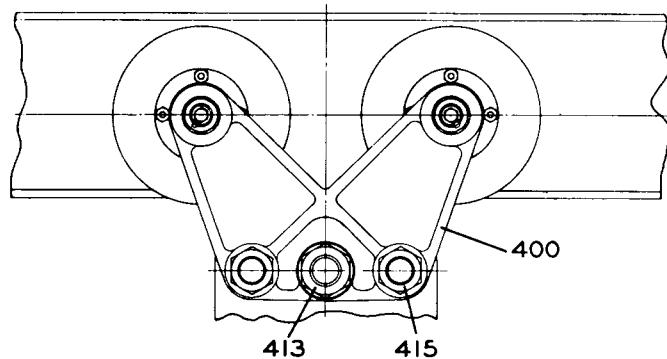
**PENDENT THROTTLE PARTS**

<b>ILLUSTRATION NUMBER (Do not use for ordering)</b>	<b>PART NAME FOR ORDERING Parts Indented After An Item Are Included With That Item</b>	<b>PART NUMBER FOR ORDERING</b>
200	Shuttle Valve Chest Assembly.....	D02-A245
201	Shuttle Valve Chest.....	D02-245
*	Rotary Valve Bushing.....	D02-525A
*	Valve Oiler.....	JA4-75
202	Bushing Key.....	ROAJ-191
203	Brake Valve Bushing.....	D01-63
204	Shuttle Valve Bushing (2).....	D02-247
205	Stop Arm Shaft Bearing (Torrington No. B-810 or its equivalent). ....	D01-243
206	1/16" Pipe Plug (2).....	502-95
207	Shuttle Valve Chest Cover.....	D02-241
208	Air Inlet Plug.....	22SR-165
209	Brake Valve.....	D01-62A
210	Brake Valve Seat (2).....	D01-65
211	Brake Valve Cap (2).....	D01-943
212	Brake Valve Cap Gasket (2).....	D01-946
213	Shuttle Valve .....	D02-246
214	Shuttle Valve Cap (2).....	D02-238
215	Shuttle Valve Cap Gasket (2).....	D02-239
216	Shuttle Valve Washer (2).....	D02-248
217	Shuttle Valve Spring (2).....	D02-250
218	Shuttle Valve Finger.....	D01-251
219	Stop Arm.....	D01-254
220	Stop Arm Shaft.....	D01-255
221	Stop Arm Shaft Pin (2).....	D01-256
*	Rotary Valve.....	D02-526
222	Valve Drive Pin.....	D02-527
223	Shuttle Valve Chest Screw (3).....	D02-548
224	Valve Chest Screw Lock Washer (3).....	D02-321
225	Brake Pipe.....	D04-201
226	Brake Pipe Elbow (2).....	D02-400
	Safety Stop Lever	
	For Sizes D and D6.....	D02-222
	For Sizes DN, DQ, DZ and D6Z.....	D02N-222
	For Sizes DR, DW, DX and D6R.....	D02W-222
227	Safety Stop Lever Link.....	D02-224
228	Friction Spring (2) (used only on Sizes D and D6).....	D01-268
229	Safety Stop Lever Link Nut (3 used on Sizes D and D6; 2 on others).....	D02-418
230	Safety Stop Lever Link Spring (2 used on Sizes D and D6; 1 on others).....	D02-106
231	Safety Stop Lever Link Washer (4 used on Sizes D and D6; 2 on others).....	D02-419
232	Pendent Throttle Chain Screw.....	R3-7A
233	Chain Screw Lock Washer.....	T11-58
234	5/16" Plain Washer.....	B8-259
235	Pendent Throttle Inlet Nipple (3) .....	D02-908
236	Control Hose Union (3).....	D02-129
237	Control Hose (3) (standard length 5 ft. Any length up to and including 15 ft. will be furnished when specified).....	D02-930
238	Control Hose Nipple (2 for each Hose).....	D02-14
239	Control Hose Binder (3).....	D02-927
240	Pendent Throttle Chain (specify length 1" shorter than (237) Control Hose).....	D01-240
241	Pendent Throttle Chain S-Hook (2).....	D01-221
242	Pendent Throttle Handle.....	D02-269
243	Pendent Throttle Lever (2).....	R00H-273A
244	Throttle Lever Pin.....	DLC-120
245	Pendent Throttle Valve (2).....	D02-264
246	Pendent Throttle Valve Seal Ring (2 for each Valve).....	ROAR-210
247	Pendent Throttle Valve Spring (2) .....	D01-51
248	Pendent Throttle Valve Cap (2).....	D02-180
†*	Control Hose Exhaust Valve (2).....	MR-939

\* Not illustrated.

† Control Hose Exhaust Valve (2) required when control exceeds 15 feet.

14



**Plain Trolley**  
(Repair Part List on page 16)

(See illustration on page 8)  
**REMOTE CONTROL PARTS**

ILLUSTRATION NUMBER (Do not use for ordering)	PART NAME FOR ORDERING  Parts Indented After An Item Are Included With That Item	PART NUMBER FOR ORDERING
601	Remote Control Valve Chest Assembly.....	D02-A686
602	Remote Control Valve Chest.....	C04-545
603	Rotary Valve Bushing.....	D02-525A
604	Valve Oiler.....	JA4-75
605	Bushing Key.....	D02-538
606	Rotary Valve.....	D02-526
607	Valve Drive Pin.....	D02-527
608	Remote Control Valve Chest Cover.....	C04-546
*	Valve Chest Short Screw (2).....	D02-506
609	Valve Chest Long Screw (2).....	D02-548
	3/8" Lock Washer (4).....	D02-321
610	Remote Control Block Assembly.....	D02-A685
611	Remote Control Block.....	D02-685
612	Control Arm Retainer.....	D02-687
613	Control Arm Retainer Screw (2).....	G7-7A
*	Control Arm Retainer Screw Lock Washer (2).....	T11-58
614	Reducing Bushing (1" to 3/4") (2).....	C10-284
615	Control Block Valve Chest.....	D02-876A
616	Bushing Key (2).....	D02-538
617	Throttle Spring Stop Pin.....	D02-553
618	Control Block Reverse Valve Bushing.....	D02-945
619	Control Block Valve Chest Cover.....	D02-546A
620	Control Block Valve Chest Cover Screw (2).....	D02-506
621	Cover Screw Lock Washer....	D02-321
622	Control Block Throttle Arm.....	D02-555
623	Throttle Spring Stop Pin.....	D02-553
624	Control Block Throttle Lever.....	EU-556
625	Control Block Throttle Lever Spring.....	D02-412B
626	Control Block Poppet Throttle Valve.....	D02-940
627	Control Block Throttle Valve Ball.....	D10-280
628	Control Block Throttle Valve Spring.....	B01-11
629	Control Block Throttle Valve Cap.....	D02-943
630	Control Block Throttle Valve Cap Gasket.....	G601-411
*	Control Block Valve Chest Cover Gasket.....	D02-928
*	Throttle Lever Bolt (2).....	D02-411A
*	Throttle Lever Bolt Nut (2).....	D02-418A
631	Grease Fitting.....	R1-188
632	Exhaust Ell.....	DU-587
	Control Block Reverse Valve.....	D02-944
633	Safety Stop Valve Assembly.....	D02-A988
634	Safety Stop Valve.....	D02-988
635	Valve Return Spring.....	D04-249
636	Hexagon Nut (5/16"-18 thd.) (4).....	D02-428
637	Stop Lever Link.....	D02-924
638	Stop Link Spring.....	207-357
639	Stop Lever Link Bolt.....	20-26
640	5/16" Plain Washer (3).....	B8-259
	Pipe Nipple (3/4" x 3").....	D02-987

\* Not illustrated.

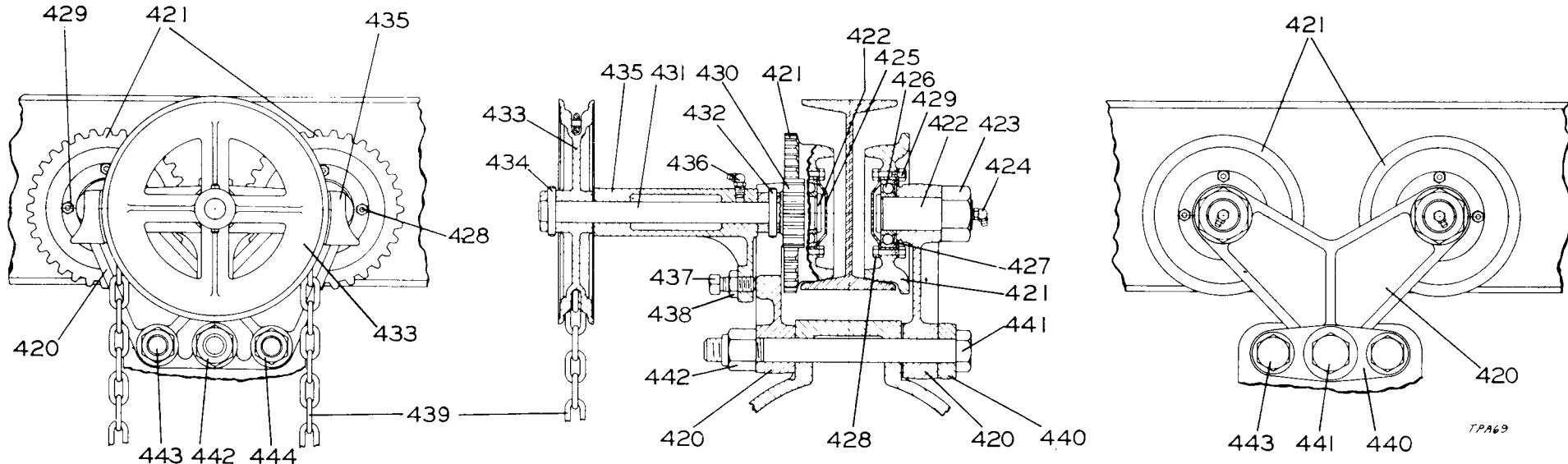
**PLAIN TROLLEY**  
 (Illustrated on Page 14)  
**FOR SIZES D, DQ, DR, DX, DZ, D6, D6R, D6Z HOISTS**

ILLUSTRATION NUMBER (Do not use for ordering)	PART NAME FOR ORDERING  Parts Indented After An Item Are Included With That Item	PART NUMBER FOR ORDERING					
		For Hoists over Serial 30,000			For Hoists Under Serial 30,000		
		For 6" or 7" I-Beam	For 8" to 18" I-Beam	For Flat Tread Monorails	For 6" to 7" I-Beam	For 8" to 18" I-Beam	For Flat Tread Monorails
16	★ Trolley Assembly.....	D04-A430-6	D04-A430	D04-AT430	D04-C430-6	D04-C430	D04-CT430
	Assembled Trolley Bracket						
	Hinge Type.....	D04-B427-6	D04-B427	D04-BT427	-----	-----	-----
	Rigid Type (1 for Hoists over serial 30,000; 2 for others).....	D04-B430-6	D04-B430	D04-BT430	D04-B430-6	D04-B430	D04-BT430
	400 Trolley Bracket	D04-427	D04-427	D04-427	-----	-----	-----
	Hinge Type.....						
	Rigid Type (1 for Hoists over serial 30,000; 2 for others).....	D04-430	D04-430	D04-430	D04-430	D04-430	D04-430
	401 Trolley Wheel (2 for each assembled Trolley Bracket).....	D04-231	D04-431	D04-T431	D04-231	D04-431	D04-T431
	402 Trolley Wheel Shaft (1 for each wheel).....	D04-435	D04-435	D04-435	D04-435	D04-435	D04-435
	403 Trolley Wheel Shaft Nut (1 for each shaft).....	D10-305	D10-305	D10-305	D10-305	D10-305	D10-305
16	404 Angle Grease Fitting (1 for each shaft).....	23-189	23-189	23-189	23-189	23-189	23-189
	405 Trolley Wheel Bearing (1 for each wheel) (AFBMA No. 35BC02JP).....	D04-956	D04-956	D04-956	D04-956	D04-956	D04-956
	406 Bearing Plate (1 for each wheel).....	D04-955	D04-955	D04-955	D04-955	D04-955	D04-955
	407 Bearing Cap (1 for each wheel).....	D04-954	D04-954	D04-954	D04-954	D04-954	D04-954
	408 1/4" Cap Screw (4 for each wheel).....	501-638	501-638	501-638	501-638	501-638	501-638
	409     1/4" Elastic Stop Nut (1 for each Cap Screw).....	501-639	501-639	501-639	501-639	501-639	501-639
	* Trolley Wheel Bearing Spacer (1 for each wheel).....	D04-963	-----	D04-963	-----	-----	-----
	411 Trolley Bracket Yoke.....	D04-952	D04-952	D04-952	-----	-----	-----
	412 Bracket Hinge Pin (Refer to Table A on page 11)	D04-953-10 1/2	D04-953-10 1/2	D04-953-10 1/2	-----	-----	-----
	10 1/2" Long.....	-----	D04-953-11 1/2	D04-953-11 1/2	-----	-----	-----
16	11 1/2" Long.....	-----	D04-953-12	-----	-----	-----	-----
	12" Long.....	-----	-----	-----	-----	-----	-----
	413 1" Hexagon Nut (1"-8 thread Elastic Stop Nut).....	D04-959A	D04-959A	D04-959A	-----	-----	-----
	414 Trolley Bracket Bolt (2) (Refer to Table A on page 11)	-	D02-439A-10	D02-439A-10	D02-439A-10	D02-439A-10	D02-439A-10
	10" Long.....	-----	D02-439A-11	-----	-----	D02-439A-11	-----
	11" Long.....	-----	D02-439A-12	-----	-----	D02-439A-12	-----
	12" Long.....	-----	D02-440B	D02-440B	D02-440B	D02-440 B	D02-440B
	415 Trolley Bracket Bolt Nut (2) (Elastic Stop Nut).....	D02-440B	D02-440B	D02-440B	D02-440B	D02-440 B	D02-440B
	Trolley Bracket Spacer (Refer to Table A on page 11)	D02-442A-1/6	D02-442A-1/6	D02-442A-1/6	D02-442A-1/6	D02-442A-1/6	D02-442A-1/6
	1/6" Long.....	-----	D02-442A-3/8	-----	-----	-----	D02-442A-3/8

\* Not illustrated.

★ Always specify the flange width of the I-Beam or Monorail on which the Trolley is to operate.

**HAND CHAIN DRIVEN TROLLEY  
FOR SIZES D, DQ, DR, DX, DZ, D6, D6R, D6Z HOISTS**



17

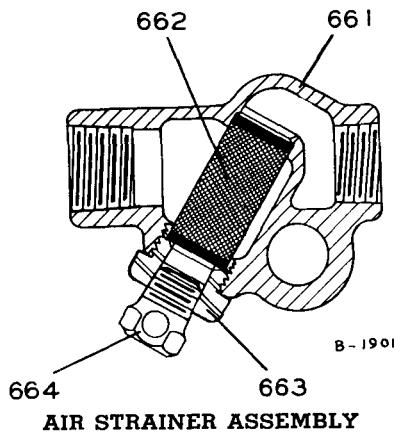
ILLUSTRATION NUMBER (Do not use for ordering)	PART NAME FOR ORDERING  Parts Indented After An Item Are Included With That Item	PART NUMBER FOR ORDERING			
		For Hoists over Serial 30,000		For Hoists under Serial 30,000	
		For 8" to 18" I-Beam	For Flat Tread Monorails	For I-Beam	For Flat Tread Monorails
★	Hand Chain Trolley Assembly For Sizes D and D6..... For Sizes DX, DZ and D6Z..... For Size DQ..... For Size DR..... For Size D6R.....	D04-A471 D04X-A471 D04Q-A471 D04R-A471 D06R-A471	D04-AT471 D04X-AT471 D04Q-AT471 D04R-AT471 D06R-AT471	D04-C471 D04X-C471 D04Q-C471 D04R-C471 D06R-C471	D04-CT471 D04X-CT471 D04Q-CT471 D04R-CT471 D06R-CT471
420	Assembled Trolley Bracket Geared Side..... Plain Side.....	D04-G430 D04-B427	D04-GT430 D04-BT427	D04-G430 D04-B430	D04-GT430 D04-BT430
421	Trolley Bracket Geared Side..... Plain Side.....	D04-430 D04-427	D04-430 D04-427	D04-430 D04-430	D04-430 D04-430
	Trolley Wheel Geared Side (2)..... Plain Side (2).....	D04-472 D04-431	D04-T472 D04-T431	D04-472 D04-431	D04-T472 D04-T431

\* Always specify the flange width of the I-Beam or Monorail on which the Trolley is to operate.

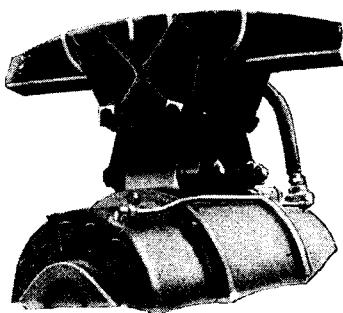
ILLUSTRATION NUMBER (Do not use for ordering)	PART NAME FOR ORDERING  Parts Indented After An Item Are Included With That Item	PART NUMBER FOR ORDERING			
		For Hoists over Serial 30,000		For Hoists under Serial 30,000	
		For 8" to 18" I-Beam	For Flat Tread Monorails	For I-Beam	For Flat Tread Monorails
422	Trolley Wheel Shaft Geared Side (2)..... Plain Side (2).....	D04-474 D04-435	D04-474 D04-435	D04-474 D04-435	D04-474 D04-435
423	Trolley Wheel Shaft Nut Geared Side (2)..... Plain Side (2).....	DU-562 D10-305 23-189	DU-562 D10-305 23-189	DU-562 D10-305 23-189	DU-562 D10-305 23-189
424	Angle Grease Fitting (1 for each shaft).....				
425	Bearing Cap (1 for each wheel).....	D04-954	D04-954	D04-954	D04-954
426	Trolley Wheel Bearing (1 for each wheel) (AFBMA No. 35BC02JP) .....	D04-956	D04-956	D04-956	D04-956
427	Bearing Plate (1 for each wheel).....	D04-955	D04-955	D04-955	D04-955
428	1/4" Cap Screw (4 for each wheel).....	501-638	501-638	501-638	501-638
429	1/4" Elastic Stop Nut (1 for each Cap Screw).....	501-639	501-639	501-639	501-639
*	3/4" Lock Washers (2).....	D01-692	D01-692	D01-692	D01-692
430	Drive Pinion.....	D02-473	D04-T473	D02-473	D04-T473
431	Chain Sprocket Shaft.....	D02-475	D02-475	D02-475	D02-475
432	Taper Pin.....	D02-520	D02-520	D02-520	D02-520
433	Chain Sprocket.....	D02-470	D02-470	D02-470	D02-470
434	Taper Pin.....	D02-520	D02-520	D02-520	D02-520
435	Chain Sprocket Bracket.....	D04-471	D04-471	D04-471	D04-471
436	Angle Grease Fitting.....	23-189	23-189	23-189	23-189
437	Bracket Set Screw.....	D02-480 A	D02-480 A	D02-480 A	D02-480 A
438	Bracket Set Screw Nut.....	G7-18	G7-18	G7-18	G7-18
439	Hand Chain For Sizes D and D6..... For Sizes DX, DZ and D6Z..... For Size DQ..... For Size DR..... For Size D6R.....	D02-476 D02X-476 D02Q-476 D01Q-476 D10Y-476	D02-476 D02X-476 D02Q-476 D01Q-476 D10Y-476	D02-476 D02X-476 D02Q-476 D01Q-476 D10Y-476	D02-476 D02X-476 D02Q-476 D01Q-476 D10Y-476
440	Trolley Bracket Yoke.....	D04-952	D04-952	D04-952	D04-952
441	Bracket Hinge Pin (Refer to Table A on page 11) 10 1/2" Long..... 11 1/2" Long..... 12" Long.....	D04-953-10 1/2 D04-953-11 1/2 D04-953-12	D04-953-10 1/2 D04-953-11 1/2 D04-953-12	----- ----- -----	----- ----- -----
442	1" Hexagon Nut .....	D04-959A	D04-959A	-----	-----
443	Trolley Bracket Bolt (2) (Refer to Table A on page 11) 10" Long..... 11" Long..... 12" Long.....	D02-439A-10 D02-439A-11 D02-439A-12	D02-439A-10 D02-439A-11 D02-439A-12	D02-439A-10 D02-439A-11 D02-439A-12	D02-439A-10 D02-439A-11 D02-439A-12
*	Trolley Bracket Bolt Nut (2).....	D02-440B	D02-440B	D02-440B	D02-440B
444	Trolley Bracket Spacer (Refer to Table A on page 11) 1/6" Long..... 3/8" Long..... 1/2" Long..... 3/4" Long..... 1" Long.....	D02-442A-1/6 ----- D02-442A-1/2 ----- D02-442A-3/4 ----- D02-442A-1	D02-442A-1/6 ----- D02-442A-1/2 ----- D02-442A-3/4 ----- D02-442A-1	D02-442A-1/6 ----- D02-442A-1/2 ----- D02-442A-3/4 ----- D02-442A-1	D02-442A-1/6 ----- D02-442A-1/2 ----- D02-442A-3/4 ----- D02-442A-1

\* Not illustrated.

## SPECIAL EQUIPMENT and ACCESSORIES



**AIR STRAINER ASSEMBLY**  
ILLUSTRATION No. 661



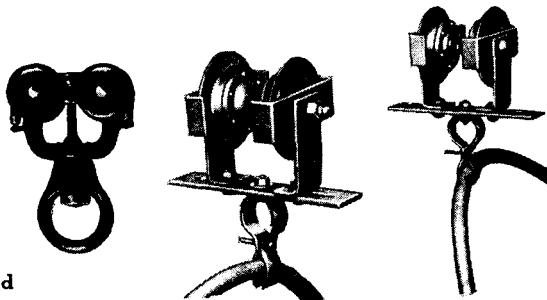
**90° ANGLE ATTACHMENT**  
ILLUSTRATION Nos. 665,  
666 and 667



**EXHAUST MUFFLER**  
ILLUSTRATION No. 668



**HOSE TROLLEY, TRACK and  
BRACKET**  
ILLUSTRATION Nos. 669  
670 and 671



**I-BEAM HOSE TROLLEY**  
ILLUSTRATION No. 672

## SPECIAL EQUIPMENT AND ACCESSORIES

<b>ILLUSTRATION NUMBER (Do not use for ordering)</b>	<b>PART NAME FOR ORDERING</b>	<b>PART NUMBER FOR ORDERING</b>
	<b>Parts Indented After An Item Are Included With That Item</b>	
661	Air Strainer Assembly.....	EU-A267
662	Air Strainer Screen.....	P25-61A
663	Air Strainer Cap.....	P25-268
664	Air Strainer Plug.....	P25-536
*	Air Strainer Nipple (required for attaching Air Strainer Assembly to Hoist)..	D02-456
665	90°Angle Attachment.....	D02-444B
666	Angle Attachment Bolt (2).....	D01C-694-8 1/2
667	Angle Attachment Bolt Nut (2).....	D02-440B
668	Exhaust Muffler	
	For Hoists with Pull Chain Throttle.....	D02-674A
	For Hoists with Pendent Throttle.....	D02-P674A
*	Muffler Nipple	
	For Hoists with Pull Chain Throttle .....	P35-286
	For Hoists with Pendent Throttle .....	C04-286
*	Muffler Chain.....	D02-673
*	S-Hook.....	D02-421
*	Reducing Bushing (for Hoists with Pendent Throttle).....	C10-284
669	Hose Trolley....	D02-730 A
670	Hose Trolley Track (10 ft. length).....	D02-731A
671	Hose Trolley Track Bracket.....	D02-732A
672	I-Beam Hose Trolley	
	For operation on I-Beams with flanges 2.33" up to and including 5.00" wide.....	D02-8888
	For operation on I-Beams with flanges 5.00" up to and including 8.75" wide.....	D10-8888

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