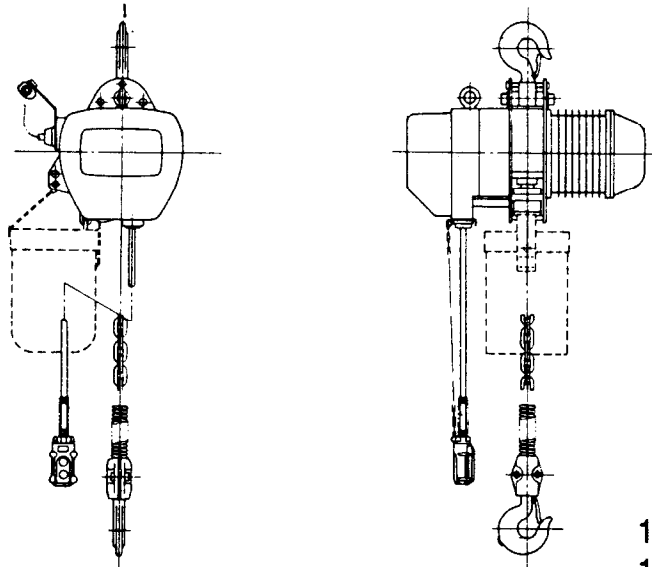


PARTS LIST

for

ES2 SERIES ELECTRIC CHAIN HOIST



1 U.S. ton = 2,000 lbs
1 metric ton = 2,200 lbs

READ THIS MANUAL BEFORE USING THESE PRODUCTS. This manual contains important safety, installation, operation and maintenance information. Make this manual available to all persons responsible for the operation, installation and maintenance of these products.

⚠ WARNING

Do not use this hoist for lifting, supporting, or transporting people or lifting or supporting loads over people.

Always operate, inspect and maintain this Hoist in accordance with American National Standards Institute Safety Code (ANSI HST-3M and B30.21) and any other applicable safety codes and regulations.

Refer all communications to the nearest Ingersoll-Rand Material Handling Products Office or Distributor.

Form MHD56052

Edition 1

October 1991

71079156

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INGERSOLL-RAND®
MATERIAL HANDLING

A HOUSING AND MOTOR PARTS

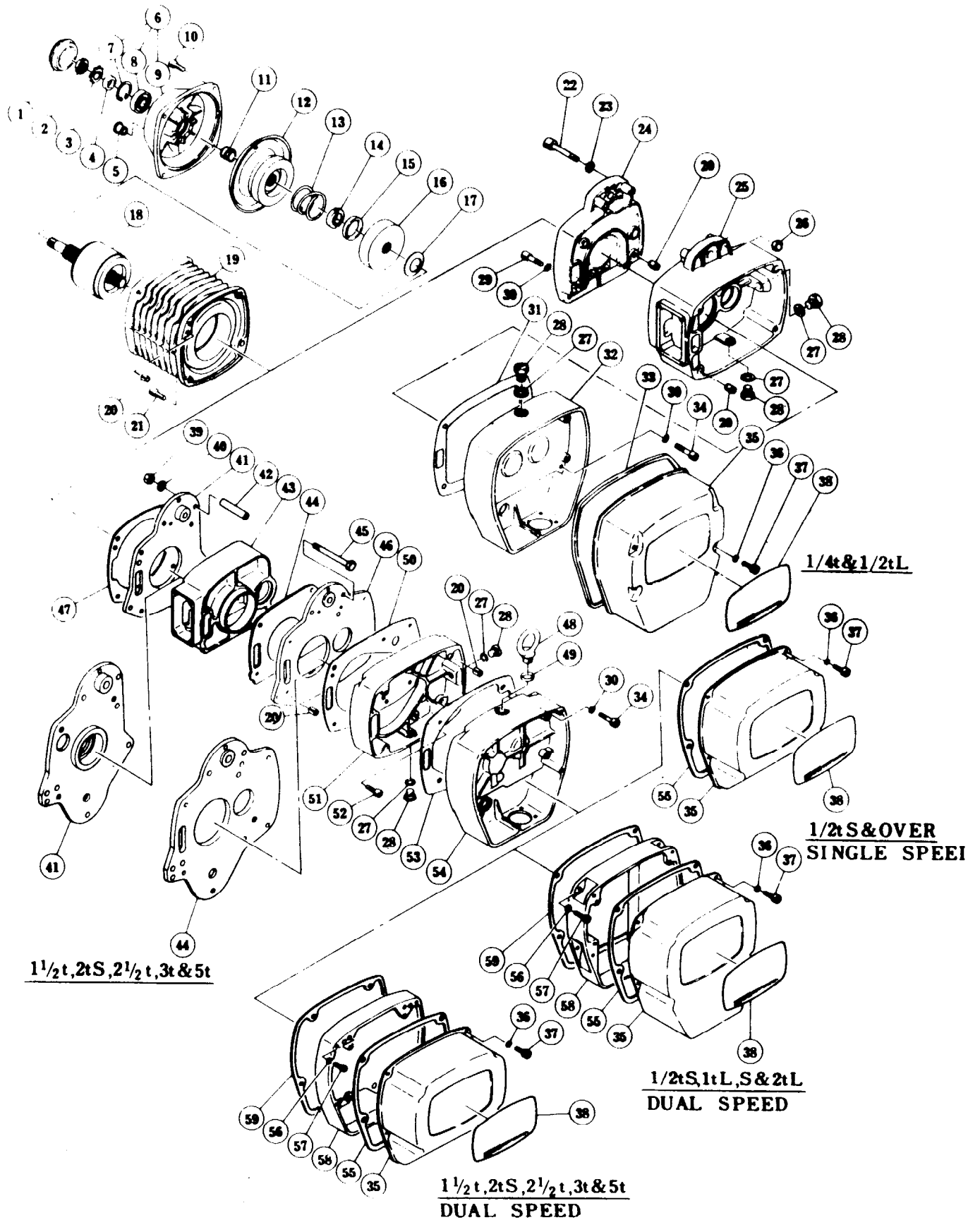


Fig No	Part No	Part Name	Parts per Hoist	Capacity										
				¼	½-L	½-S	1-L	1-S	2-S	1½	3	2-S	2½	5
1	ES108	Cover	S	1	70000					70002				
			D		70001									
2	ES217	Nut	S	1	70003	70004				70006				
			D		70004	70005								
3	ES218	Nut Washer	S	1	70007	70008				70010				
			D		70008	70009								
4	ES216	Spacer	S	1	70011	70012				70014				
			D		70012	70013								
5	ES113	Plug		1	70015									
6	ES5106	Motor Cover Assembly	S	1	70016	71510	71528	71603						
			D		70020	72144	71776	71777						
7	ES203	Snap Ring	S	1	71507	70024				70026				
			D		70024	70025								
8	ES202	Ball Bearing	S	1	71511	70027				70029				
			D		70027	70028								
9	ES6106	Motor Cover	S	1										
			D											
10	ES156	Socket Bolt	S	4	70036	70037				70039				
			D		70040	70038								
11	ES215	Set Spring	S	1	REPLACE WITH PCS. 60 & 61									
			D											
12	ES5212	Brake Drum Assembly	S	1	70044	71519	71529	71533						
			D		70048	71846	71847	71848						
13	ES214	Brake Spring	S	1	70052	70053	70054	70055						
			D		70056	70057	70058	70059						
14	ES505	Thrust Disc	S	2	70060			70062		70063				
			D		70061									
15	ES506	Thrust Collar	S	1	70064			70066		70067				
			D		70065									
16	ES503	Pull Rotor	S	1	70068			70070		70071				
			D		70069									
17	ES504	Conical Spring	S	1	70072			70074		70075				
			D		70073									
18	ES5502	Motor Shaft with Rotor	S	1	70076	70077	70078	70079						
			D		70080	70081	70082	70083						

Fig No	Part No	Part Name	Parts per Hoist	Capacity									
				¼	½-L	½-S	1-L	1-S	2-L	1½	3	2-S	2½
19	ES5501	Motor Frame with Stator	S	1	70084	70085	70086	70087					
			D		70088	70089	70090	70091					
20	ES120	Set Pin	4		70092								
			6			70092	70093						
21	ES157	Socket Bolt	4		70095	70096	70097	70098					
22	ES164	Socket Bolt	2		70099								
23	ES165	Washer	2		70100								
24	ES102	Body M	1		70101								
25	ES101	Body G	1		70102								
26	ES166	U Nut with Cap	2		70103								
27	E6F108	Plug Packing	3		70104								
			2		70104								
28	E6F111	Oil Plug	3		70105								
			2		70106								
29	ES151	Socket Bolt	2		70107								
30	ES153	Toothed Lock Washer	6		70108								
			4			70108	70109						
			5										
31	ES109	Gear Case Packing	1		70112								
32	ES103	Gear Case	1		70113								
33	ES110	Controller Cover Packing	1		70114								
34	ES152	Socket Bolt	4		70115	70116	70117						
			6					70118					
35	ES104	Controller Cover	S	1	70119	70120	70121	70122					
			D			70123	70124						
36	ES155	Spring Washer	4		70125			70126					
37	ES154	Socket Bolt	S	4	71520			70128					
			D									70127	
38	ES800	Name Plate	S	1									
			D										
39	ES174	Nut	4			70130	70131	70132					
40	ES175	Spring Washer	4			70133	70134	70135					
41	ES5122	Frame M Assembly	1			70136	70137	70138					
42	ES180	Collar F	4			70139	70140	70141					
43	ES101	Body	1			70142	70143	70144					

Fig No	Part No	Part Name	Parts per Hoist	Capacity									
				¼	½-L	½-S	1-L	1-S	2-L	1½	3	2-S	2½
44	ES124	Packing G	1				70145		70146				70147
45	ES173	Bolt	4				70148		70149				70150
46	ES5121	Frame G Assembly	1				70151		70152				70153
47	ES163	Packing M	1				70154		70155				70156
* 48	ES126	Eye Bolt	1										70157
	ES5126	Eye Bolt M Assembly											
49	ES127	Eye Bolt Packing	1										70158
50	ES125	Gear Case Packing A	1				70159		70160				70161
51	ES100	Gear Case A	1				70162		70163				70164
52	ES171	Socket Bolt	6				70165						70166
53	ES109	Gear Case Packing B	1				70167		70168				70169
54	ES103	Gear Case B	S	1			70170		70171				71537
			D	1			70173		70174				70522
55	ES110	Cotroller Cover Packing	1				70176		70177				70178
*56	ES177	Spring Washer	D 4						70179				70180
*57	ES176	Socket Bolt	D 4						70181				70182
*58	ES131	Balancer	D 1				70183		70184				70185
*59	ES132	Balancer Packing	D 1				70186		70187				70188
60		COLLAR M	S	1	70189		70190						70192
			D	1	70190				70191				
61		CONED DISC SPRING M	S	4	70193		70194						70196
			D	4	70194				70195				

*48 ES5126 is used on Mechanical Brake type only.

*56-59 are used on Dual Speed type only.

B GEARING PARTS

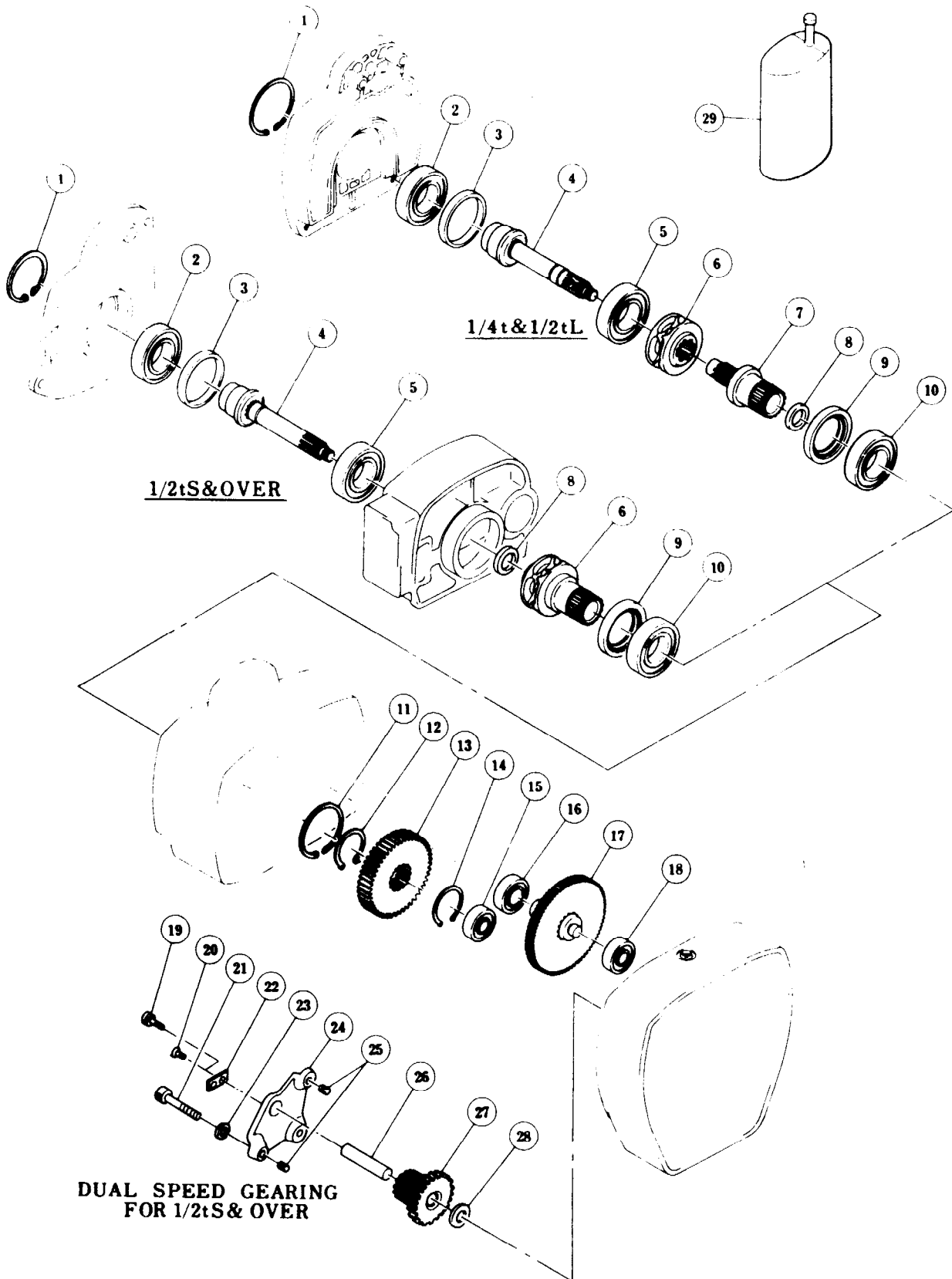


Fig No	Part No	Part Name	Parts per Hoist	Capacity											
				¼	½-L	½-S	1-L	1-S	2-L	1½	3	2-S	2½	5	
1	ES208	Snap Ring	1	70110	70111	70199									
2	ES205	Ball Bearing	1	70200	70201	70202									
3	ES206	Collar B	1	70203	70204	70205									
4	ES1220	Pinion Assembly	1	70206	71521	71530	71534	71535	71534						
5	ES230	Ball Bearing	1	70210	70211	70212	70213								
6	ES228	Load Sheave	1	70214	70215	70216	70217			70218					
7	ES229	Sheave Shaft	1												
8	ES221	Oil Seal	1	70219	70220	70221	70222								
9	ES232	Oil Seal	1	70223	70224	70225	70226								
10	ES231	Ball Bearing	1	70227		70228	70229								
11	ES207	Snap Ring	1	70230											
12	ES233	Snap Ring	1	70231											
13	ES227	Load Gear	S	70232	71522	71531	71538	70236							
			D	70238											
14	ES233	Snap Ring	1			70239	70240	70241							
15	ES222	Ball Bearing	1	70242	71523	70243	70244								
16	ES226	Ball Bearing	1	70245	70246	70247	70248								
17	ES5223	Gear #2 Assembly	S	70249	71524	71532	71548	71549	71550						
			D	70255								71562	71563	71564	71565
18	ES225	Ball Bearing	1	70261	70262	70263	71551								
*19	E6F151	Machine Screw with Spring Washer	D	2							70265				
*20	ES252	Flat Head Machine Screw	D	2	70266										
*21	ES251	Socket Bolt	D	3			70267	70268	70269						
*22	ES244	Plate	D	1	70270						70271				
*23	ES253	Spring Washer	D	3			70272	70273							
*24	ES243	Gear Holder Plate	D	1			70274	70275	70276						
*25	ES120	Set Pin	D	2			70092	70093							
*26	ES242	Gear B Shaft	D	1			70629	70630	70631						
*27	ES5241	Gear B Assembly	D	1			71569	71568	71566	71567	71566				
*28	ES247	Washer	D	1			71725	71726	71727						

* 19-28 are used on Dual Speed type only.

C CHAINING PARTS

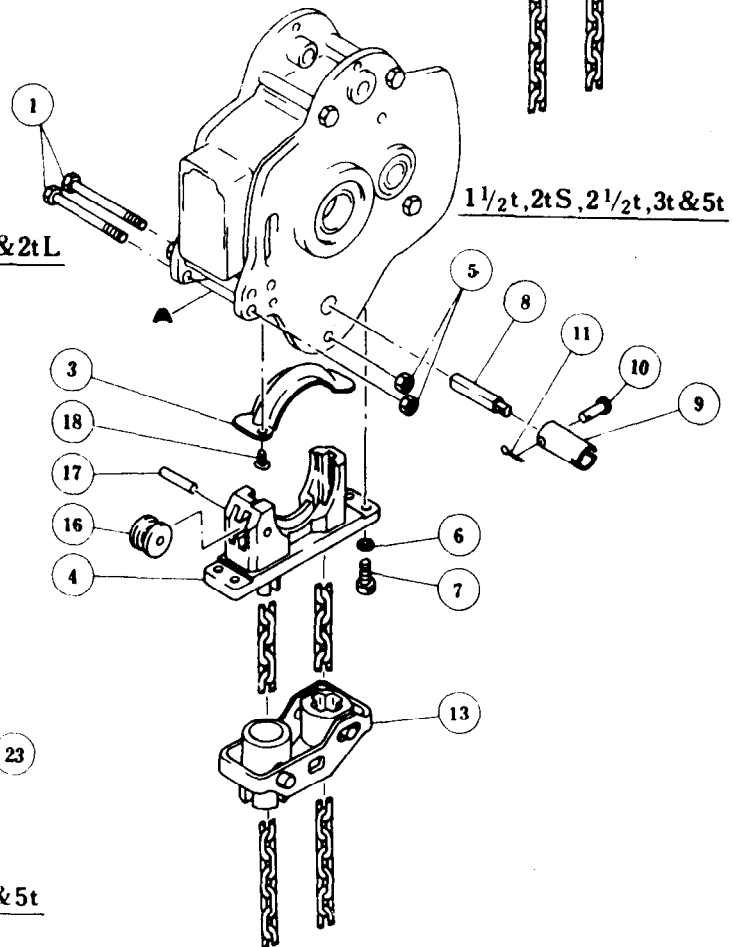
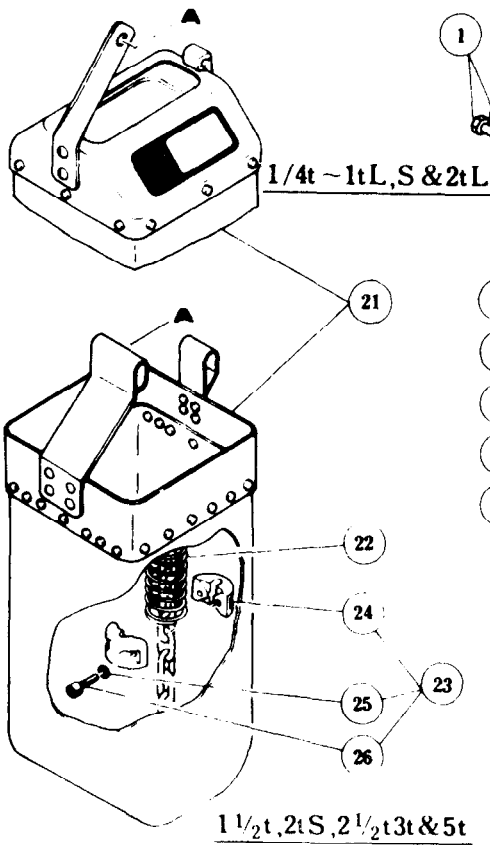
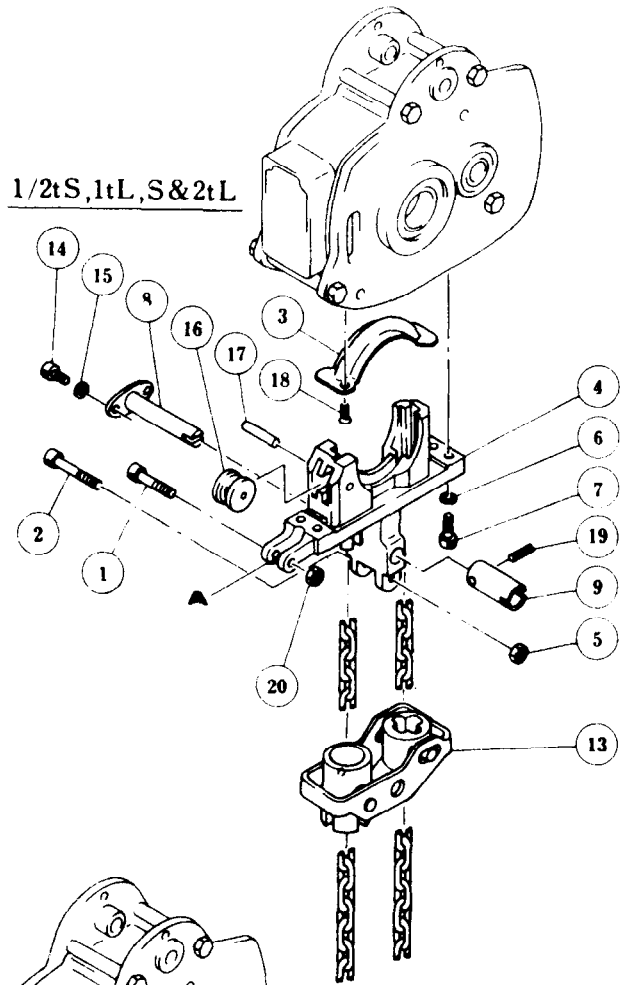
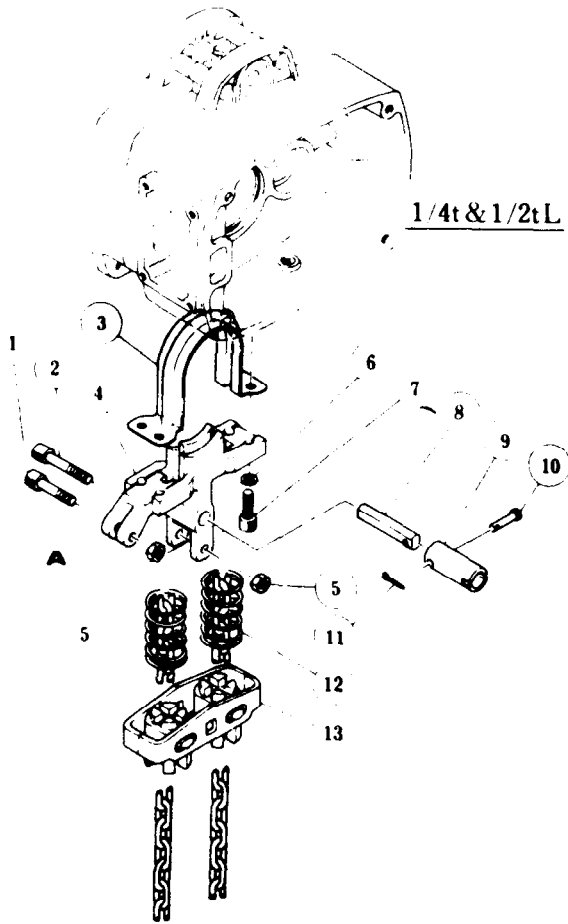
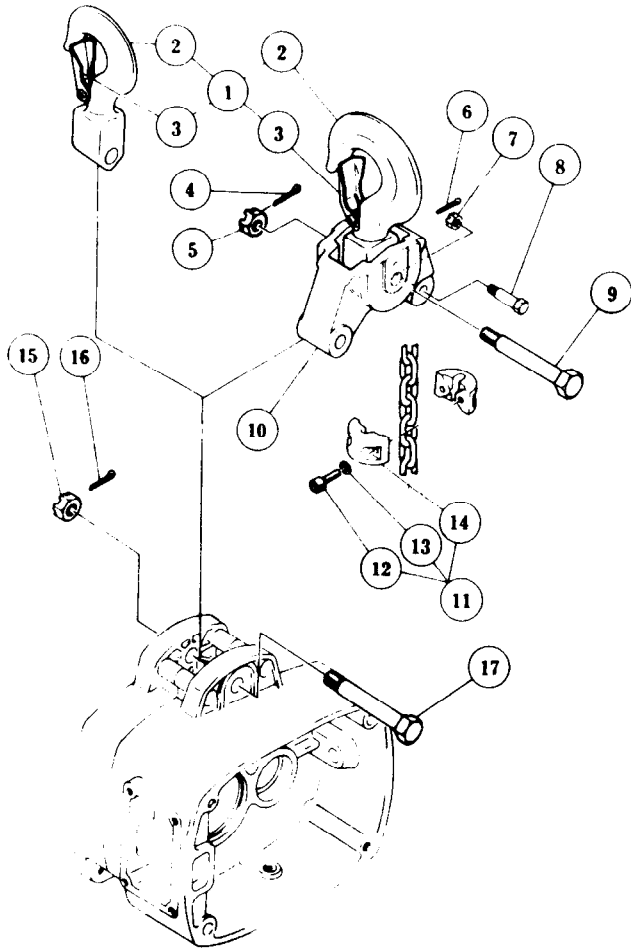


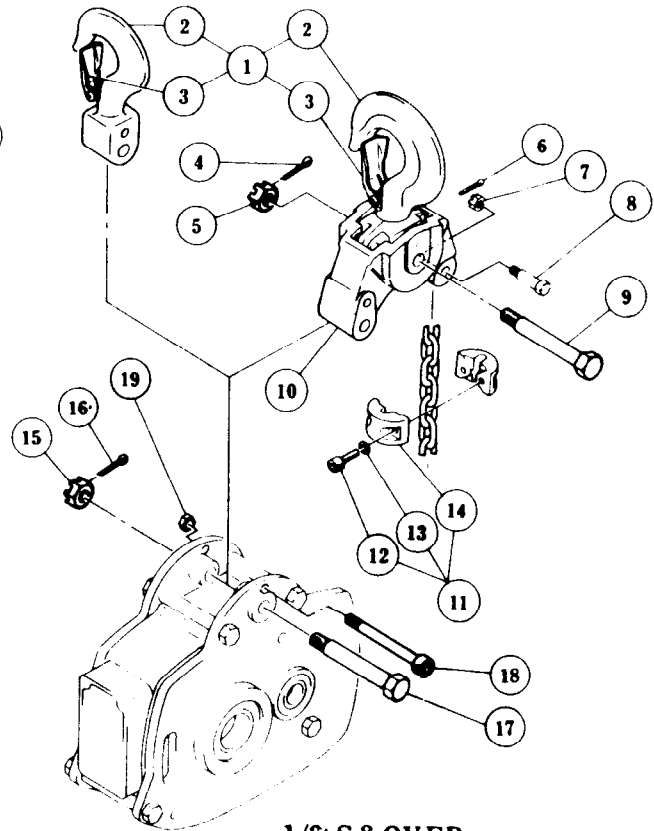
Fig No	Part No	Part Name	Parts per Hoist	Capacity										
				¼	½-L	½-S	1-L	1-S	2-L	1½	3	2-S	2½	5
1	ES854	Socket Bolt	1	70282	70283									
		Bolt	2							70284				
2	E6F154	Socket Bolt	1	71518										
3	ES402	Chain Guide B	1	70286	70287	70288	70289		70290					
4	ES461	Chain Guide A	1	70291	70292	70293	70294		70295					
5	ES855	U Nut	2	70296							70297			
			1	70296										
6	E6F155	Spring Washer	4	70298			70299							
7	ES451	Socket Bolt	4	70300	70301	70302	70303							
8	ES406	Limit Lever Pin	1	70304							70305			
	ES5406	Limit Lever Pin Assembly	1	70306										
9	ES407	Lever Pin Coupling	S	1	70307	70308	70309	70310						
			D			70311	70312							
10	ES408	Coupling Pin												
			1	70313							70314			
11	ES453	Split Pin												
			1	70315							70315			
12	ES410	Guide Spring	2	70317										
13	ES5405	Limit Lever Assembly	1	70318	70319	70320	70321		70322					
14	E6F856	Socket Bolt	2	70323										
15	E6F155	Spring Washer	2	70324										
16	ES403	Guide Roller	1											
17	ES404	Roller Pin	1											
18	ES463	Flat Head Machine Screw	2											
		Machine Screw with Spring Washer												
19	ES451	Spring Pin	1											
20	ES857	U Nut	1											
* 21	ES5830	Chain Container L	1	CC-2	CC-3	CC-4	CC-6							
	ES5831	Chain Container S	1	CC-1	CC-2	CC-7	CC-5							
22	ES047	Chain Spring	S	1	70343	70344	70345	70346		70347				
			D		70348	70349	70350	70351		70352				
23	ES1045	Stopper Assembly	1	71505	70777		71724		71525					
24	ES045	Stopper	2	70353	70354		70355		70356					
25	ES087	Spring Washer	2	70357	70358		70359							
26	ES086	Socket Bolt	2	70360	70361		70362							

* 21 is available on request.

D HOOK PARTS



1/4t & 1/2tL



1/2t S & OVER

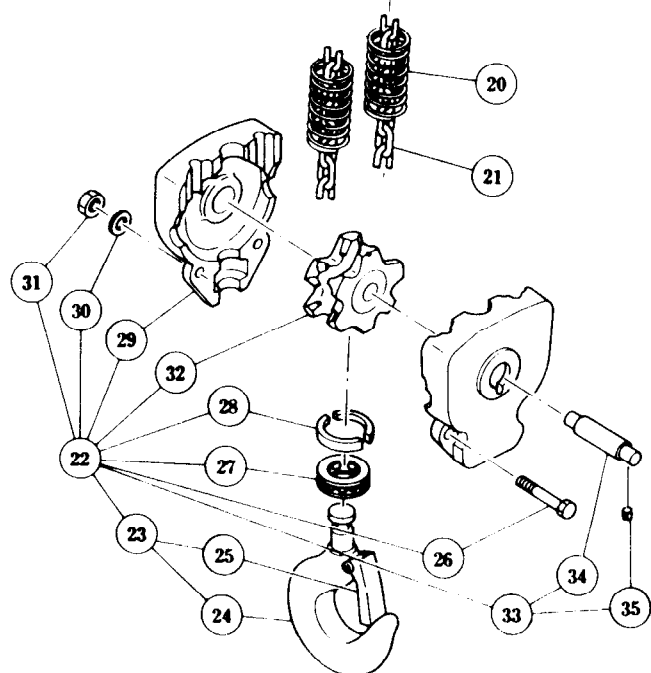
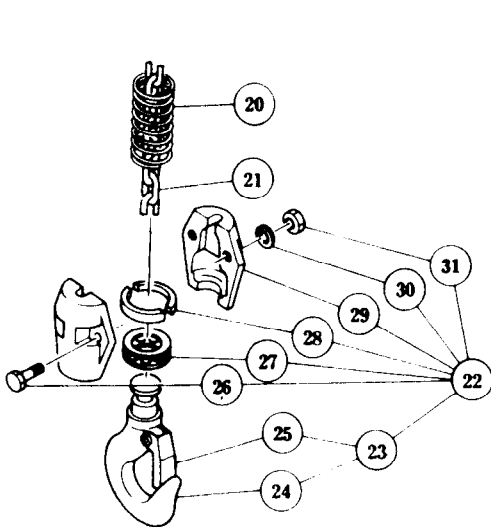


Fig No	Part No	Part Name	Parts per Hoist	Capacity											
				¼	½-L	½-S	1-L	1-S	2-L	1½	3	2-S	2½	5	
1	ES1001	Top Hook Assembly	1	70316			70363			70364		70365	70364	70365	70366
2	ES001														
3	CF1071	Safety Latch Assembly	1	70367			70368			70369		70370	70369	70370	70371
4	ES089	Split Pin	1		70372		70372		70373		70373			70374	
5	ES088	Slotted Nut	1		70375		70375		70376		70376			70377	
6	ES096	Split Pin	1		70378		70378		70379		70379			70380	
7	M2049	Slotted Nut	1		70381		70381		70382		70383			70384	
8	ES041	Chain Pin	1		70385		70386		70387		70388			70389	
9	ES006	Top Pin L	1		70390		70390		70391		70391			70392	
10	ES005	Connection Yoke	1		70393		70394		70395		70396			70397	
11	ES1045	Stopper Assembly	1		—		—		—		—			—	
12	ES086	Socket Bolt	2		70360		70361		70361		70362				
13	ES087	Spring Washer	2		70357		70358		70358		70359				
14	ES045	Stopper	2		70353		70354		70354		70355				
15	ES161	Slotted Nut	1	70398					70399						
16	ES162	Split Pin	1	70400					70401						
17	ES117	Top Pin	1	70402		70403		70404		70405					
18	ES065	Socket Bolt	1												
19	ES066	U Nut	1												
20	ES047	Chain Spring	S	1	70343		70344		70345		70346		70346	70347	
				2		70343		70344		70345		70346			
			D	1	70348		70349		70350		70351		70351		70352
				2		70348		70349		70350		70351			
21	ES840	Load Chain	1	LCES 003		LCES 005		LCES 010		LCES 020			LCES 025		
22	ES1021	Bottom Hook Complete Set	1	70411	70412	70413	70414	70415	70416	70417	70418	70419	70420	70421	
23	ES2021	Bottom Hook Assembly	1	70422	70423		70424		70425	70426	70427	70425	70428	70429	
24															
25	CF1071	Safety Latch Assembly	1	70430			70431			70432	70433	70434	70432	70435	
26	ES082	High Strength Bolt	2	70436		70436		70437		70438		70438	70439		
		Bolt	2		70440		70441		70441					70443	
			3								70442				
27	ES022	Thrust Bearing	1	70444			70445			70446	70447	70446	70447	70448	
28	ES027	Hook Stopper	2	70449			70450			70451	70452	70451	70452	70453	
29	ES032	Bottom Yoke	2	70454	70455	70456	70457	70458	70459	70460	70461	70462	70463	70464	
30	ES084	Spring Washer	2	70465			70466			70467		70467	70468	70468	
			2	70469			70470			70471		70471	70472	70472	
			3								70471			70472	
32	ES1051	Idle Sheave Assembly	1		70473		70474		70475		70476			70477	
33	ES5054	Bottom Shaft Assembly	1		70478		70479		70480		70481			70482	
34															
35	ES055	THRUST COLLAR A	1	70483			70484			70485	70486	70485	70486	70487	

E ELECTRIC PARTS

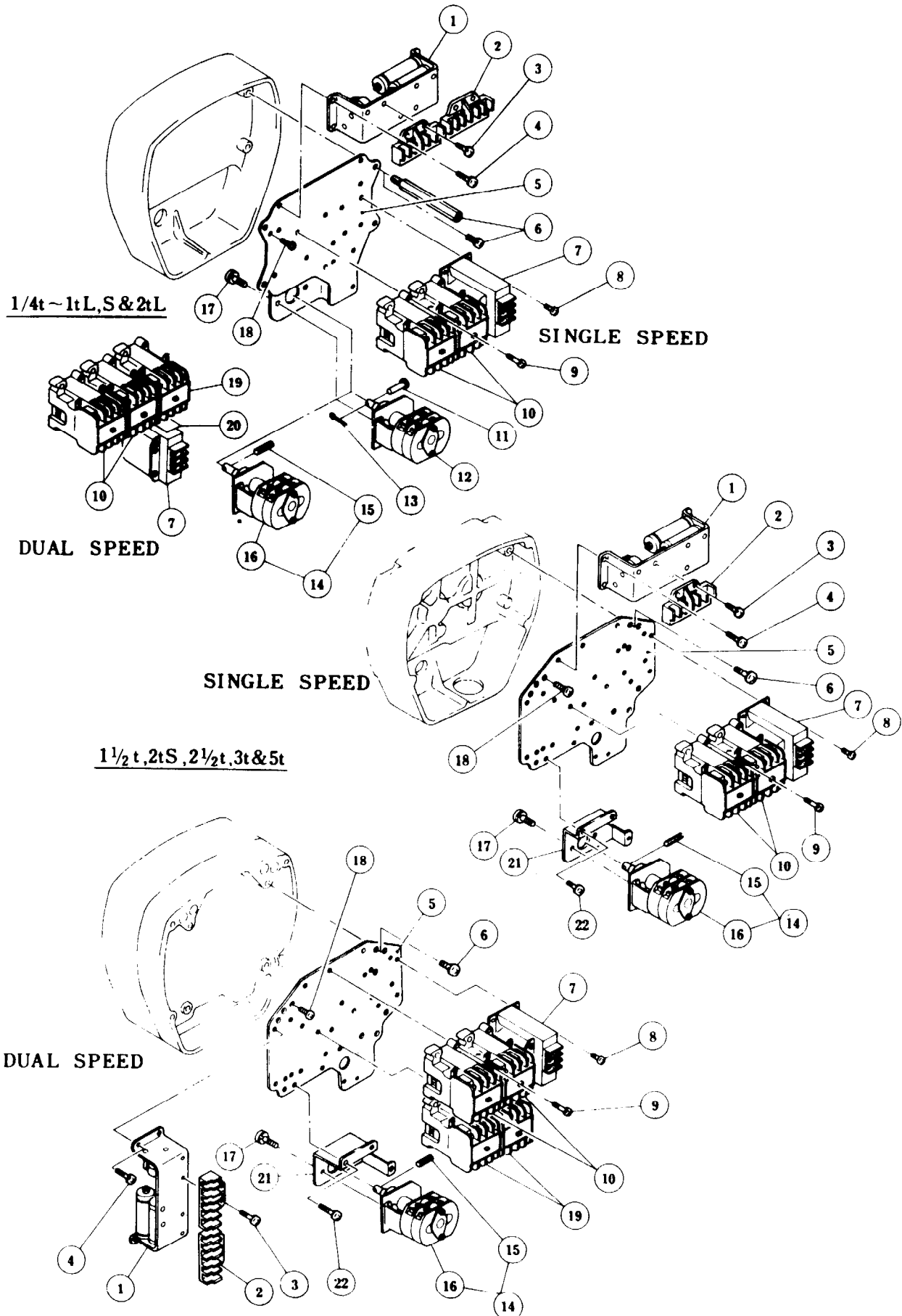


Fig No	Part No	Part Name	Parts per Hoist	Capacity									
				¼	½-L	½-S	1-L	1-S	2-L	1½	3	2-S	2½
1	ES622	Non-reverse Relay	1	70497									
2													
3													
4	ES666	Machine Screw with Spring Washer	4	70500									
5	ES5601	Plate Assembly	1	70501	70502	70503	71558						
6	ES602	Stay Bolt	4	70532									
	ES650	Machine Screw with Spring Washer	4	70533									
7	ES616	Transformer	S	1			71559		71570				
			D	1	71506	71559							
8	ES660	Machine Screw with Spring Washer	S	4	70509								
			D	3					70510				
			D	4									
9	ES662	Machine Screw with Spring Washer	S	3	70516								
			D	2	70516 & 70517								
			D	6					70516				
10	ES616	Electromagnetic Contactor INTERLOCKING NON-INTERLOCKING INTERLOCKING	S	1	71514				71557				
			D	2	71513		71536		71556				
			D	1					71602				
11	ES408	Coupling Pin	1	70313									
12	ES2619	Limit Switch	1	70571									
13	ES453	Split Pin	1	70315									
14	ES1619	Limit Switch Assembly	S	1					70523				
			D	1									
15	ES451	Spring Pin	1					71526					
16	ES5619	Limit Switch Assembly	1										
17	E6F152	Machine Screw with Spring Washer	2	71516									
*18	ES670	Machine Screw with Spring Washer	1	70525				70526					
*19	ES618	Electromagnetic Contactor	D	1					71605				
			D	2	71597		71598		71599				
*20	ES635	Insulating Paper	D	1	70531								
21	ES620	Limit Switch Holder Plate	S	1					71561				
			D	1									
22	E6F151	Machine Screw with Spring Washer	3					71517					

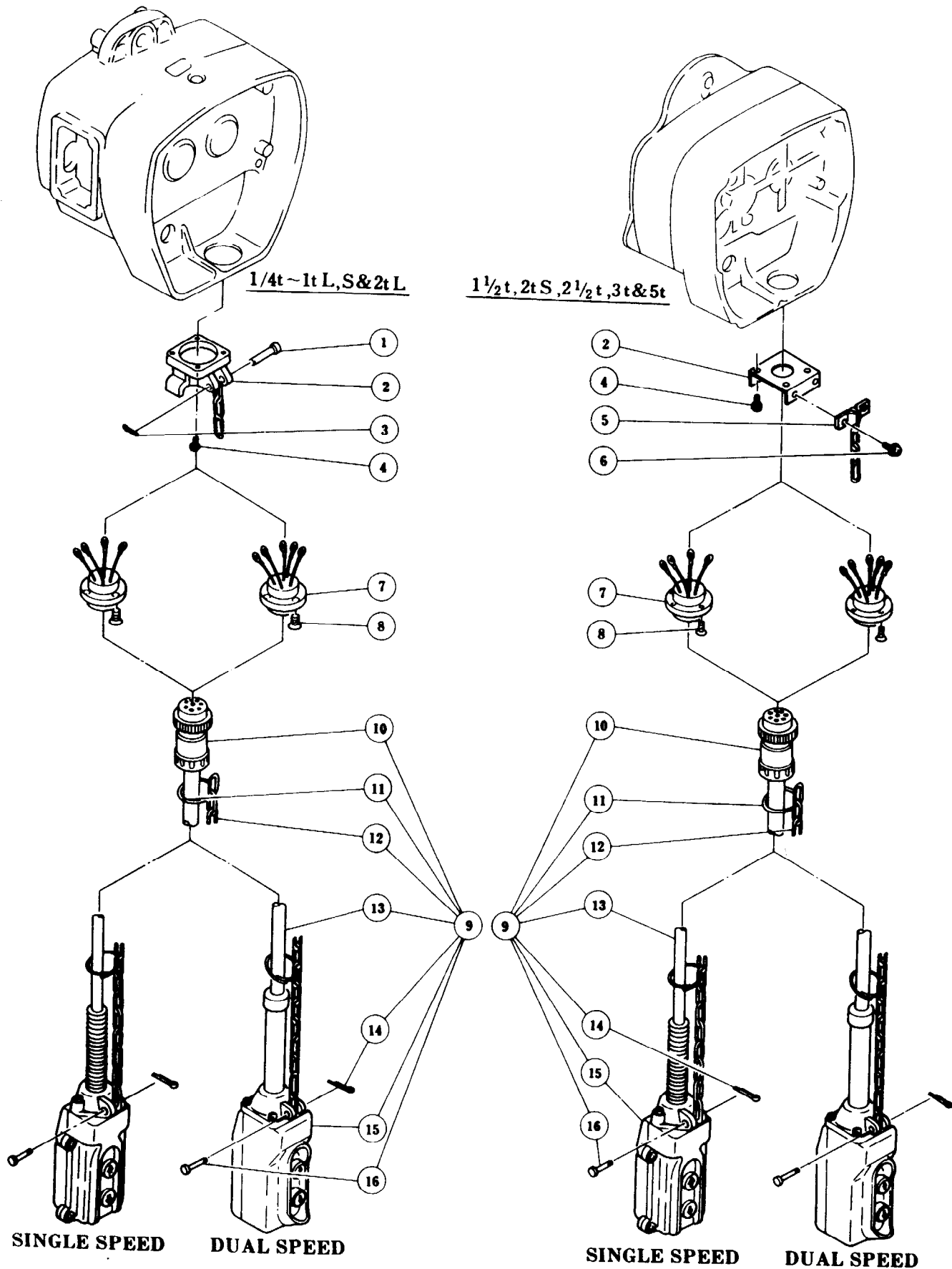
* 60 is on 230/380V 50Hz only.

* 19 & 20 are used on Duel Speed type only.

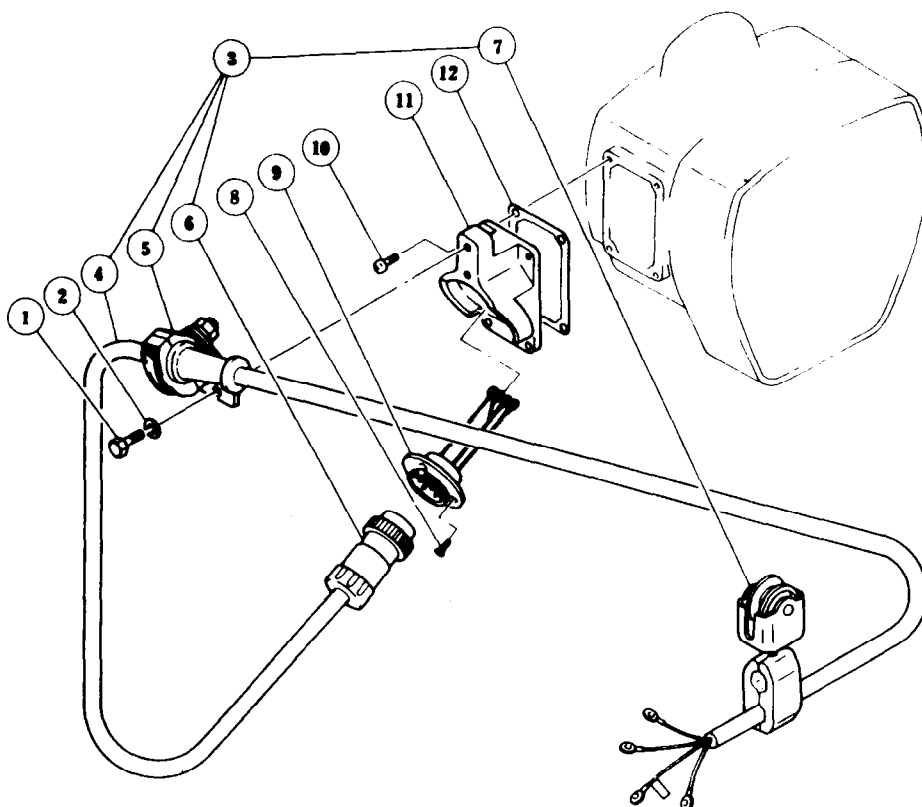
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CONTROL STATION PARTS 220/440V 60HZ & OTHER VOLTAGES



G POWER SUPPLY PARTS



220/440V 60Hz & OTHER VOLTAGES

Fig No	Part No	Part Name	Parts per Hoist	Capacity										
				¼	½-L	½-S	1-L	1-S	2-L	1½	3	2-S	2½	5
220	440V 60Hz & OTHER VOLTAGES													
1	E6F853	Bolt	2	70564										
2	E6F854	Spring Washer	2	70565										
3	ES1521	Power Supply Cable Complete Set	1	70566										
4	ES521	Power Supply Cable 4C	1	70568										
5	ES1822	Cable Clamp Arm Assembly	1	70570										
6	ES522	Plug 4P	1	70572										
7	E6FL1527	Cable Hanger Assembly	3	70574										
8	E6FL558	Flat Head Machine Screw	4	70546										
9	ES1523	Socket 4P Assembly	S D 1	70575							70576			
											70577			
10	M6F321	Machine Screw with Spring Washer	4	70578										
11	ES118	Socket Holder A	1	70579										
12	ES119	Socket Holder Packing A	1	70581										

PARTS ORDERING INFORMATION

The use of replacement parts other than INGERSOLL-RAND Material Handling will invalidate the Company's warranty. For prompt service and genuine INGERSOLL-RAND Material Handling parts, provide your nearest Distributor with the following:

1. Complete model number.
2. Part number and part description as shown in this manual.
3. Quantity required.

United States Office Locations

For Order Entry and Order Status:

INGERSOLL-RAND Distribution Center

510 Hester Drive
P.O. Box 618
White House, TN 37188
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Telex: 786573
Fax: (615) 672-0601

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Houston, TX

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(713) 864-3700

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Los Angeles, CA 90022
(213) 725-2826

Philadelphia, PA

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International

Office and distributors in principal cities throughout the world. Contact the nearest Ingersoll-Rand office for the name and address or the distributor in your country or write to:
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