PARTS MANUAL for

LECTRA-LINK[™] THREE PHASE ELECTRIC CHAIN HOIST

MODELS LE1 LE2 LE3 LE4 LE5

WARNING

Do not use these Hoists for lifting, supporting, or transporting people or lifting or supporting loads over people.

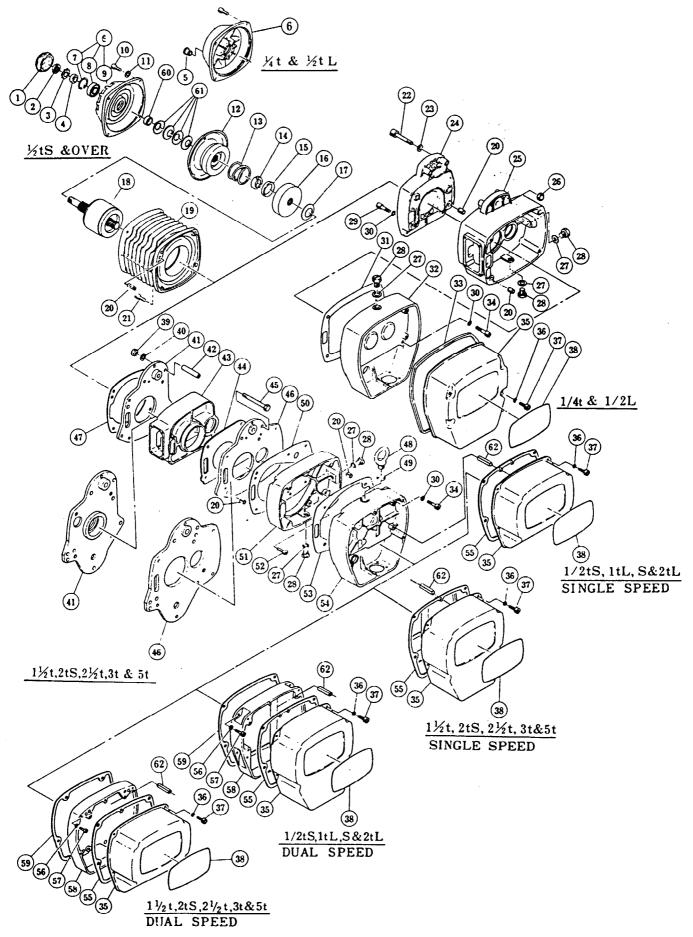
Always operate, inspect and maintain these Hoists in accordance with American National Standards Institute Safety Code (B30.16) and any other applicable safety codes and regulations.

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

Form MHD56023 Edition 4 November 1995 71052765 © 1995 Ingersoll-Rand Company

INGERSOLL-RAND® MATERIAL HANDLING

HOUSING AND MOTOR PARTS DRAWING



HOUSING AND MOTOR PARTS LIST

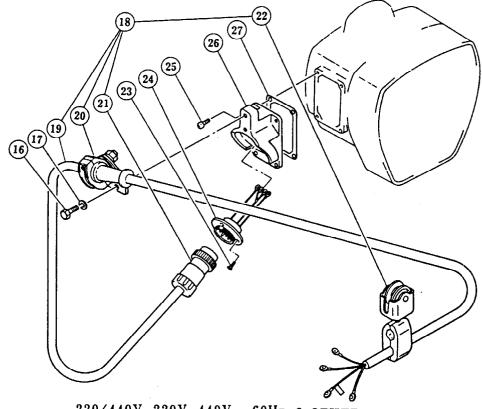
-	DRADIE					PART NU	MBER	
TEM NO.	DESCRIPTION OF PART		ГҮ ГАТ	LE1	LE2	LE3	LE4	LE5
NU.	OF FARI		IAL	1/4 1/2-L	1/2-S 1-L	1-S 2-L	, 1-1/2 3 2-8	5 2-1/2
1		S		70000	70000	70001		
1	Cover	D	1	70000	70001		- 7000	12
2	Nut	S	1	70003	70004	70005	- 7000	
4	INUL	D		70004	70005		7000	ю
3	Lock Washer	S	1	70007	70008	70009	- 7001	0
5	LOCK Washer	D		70008	7	0009	7001	U
4	Spacer	S	1	70011	70012	70013		1
	-	D		70012	7	0013	////	.т
5	Plug	1	l 	70015			• • •	
6	Motor Cover Assembly	S	1	70016	70017	70018	7001	.9
		D		70020	70021	70022	7002	!3
7	Snap Ring	S	1		70024	70025	7002	26
		D				0025		
8	Ball Bearing	S	1	71511	70027	70028		29
	`	D				0028		
10	Socket Bolt	S	4	70036	70037	70038	- 7003	19
		D		70040		0038		
11	Spring Washer	S	4		70041	70042	- 7004	13
		D				0042		
12	Brake Drum Assembly	S	1	70044	70045	70046	7004	
		D		70048	70049	70050	7005	
13	Brake Spring	S D	1	70052	70053	70054	7005	
		S		70056 70060	70057	70058	7005	
14	Thrust Disc	D	2		061	70062	7006	53
		S		70064	70065			
15	Thrust Collar	D	1		10005	70066	7006	57
		S		70068	70069			
16	Pull Rotor	D	1		1069	70070	7007	71
		S		70072	70073			
17	Coned-Disc Spring	D	1		073	70074	7007	15
		S		70076	70077	70078	7007	
18	Motor Shaft With Rotor	D	1	70080	70081	70082	7008	
		S	1	70084	70085	70086	7008	
19	Motor Frame with Stator	D		70088	70089	70090	7009	
•••			4	70092		_1		
20	Set Pin		6		70092		70093	
21	Socket Bolt		4	70095	70096	70097	7009	98
22	Socket Bolt		2	70099		I		
23	Washer		2	70100				
24	Body M		1	70101	1			
25	Body G		1	70102				
26	U Nut with Cap		2	70103	+			

HOUSING AND MOTOR PARTS LIST

				T				PAR'	Γ NUM	IBER				
ITEM NO.	DESCRIPTION OF PART		ГY ГAL	L	E1	L	E 2	L	E3		LE4		L	E5
				1/4	1/2-L	1/2-S	1-L	1-S	2-L	1-1/2	3	2-S	2-1/2	5
27	Plug Packing		3	70	104									
21	I lug I acking		2	-						70104				
28	Oil Plug		3	70	105									
20	Oli Flug		2	-						70106				
29	Socket Bolt		2	70	107									
		(5	70	108									
30	Toothed Lock Washer	4	1	-		70 1	08	70	109					
			5	-										
31	Gear Case Packing		1	70	112									
51	Ocai Case I acking		l	70	113									
33	Controller Cover Gasket		l	70	114									
34	Socket Bolt	4	4	70	115				·	70116				
54	Socket Doll		5								•	70118		
35	Controller Cover	S	1	70	119	70	20	70	121			70122		
33	Controller Cover	D	1	10	119	70	23	70	124			/0122		
36	Spring Washer	4	4			70	25					70126		
37	Socket Bolt	S	4			70	27					78128		
		D	4	70	127		701	29				/0120		
38	Name Plate	S	1	-	50047					1	1		50055	1
50		D	1	50057	50058	50059	50060	50061	50062	50063	50064	50065	50066	50067
39	Nut	4	4	-		70	130	70	131			70132		
40	Spring Washer	4	4	-		70	133	70	134			70135		
41	Frame M Assembly		1	-		70	136	70	137			70138		
42	Collar F	4	4	-		70	139	70	140			70141		
43	Body		1	-		70	142	70	143			70144		
44	Packing / Gasket		1	-		70	145	70	146			70147		
45	Bolt		4	-		70	48		149			70150		
46	Frame G Assembly		1	-		70	151	70	152			70153		
47	Packing / Gasket		1	-		70	154	70	155			70156		
48	Fill Plug / Eye Bolt		1	-						70157				
49	Eye Bolt Packing		1	-						70158				
50	Gear Case Packing A		1	-		70	159	70	160			70161		
51	Gear Case A		1	-		70	62	70	163			70164		
52	Socket Bolt		5	-		70	165				70166			
53	Gear Case Packing B		1	-	~ -	70	167	70	168			70169		
54	Gear Case B	S	1	-		70	170	70	171			70172		
		D		-		70	173	70	174			70175		
55	Controller Cover Packing		1	-		70	176	70	177			70178		
* 56	Spring Washer	D	4	-				179				70180		
* 57	Socket Bolt	D	4	-			70	181				70182		
* 58	Balancer	D	1	-		70	183	70	184			70185		
* 59	Balancer Packing	D	1	-		70	186	70	187			70188		
60	Collar M	S	1	70	189	70	190	70	191			70192	-	
		D		70	190			191				10192		
61	Coned Disc Spring M	S D	4		193 194	70	194 70	70 195	195			70196		
62	Spring Pin		1							70198			· · · · · · · · · · · · · · · · · · ·	

* Dual speed hoists only.

POWER SUPPLY PARTS DRAWING

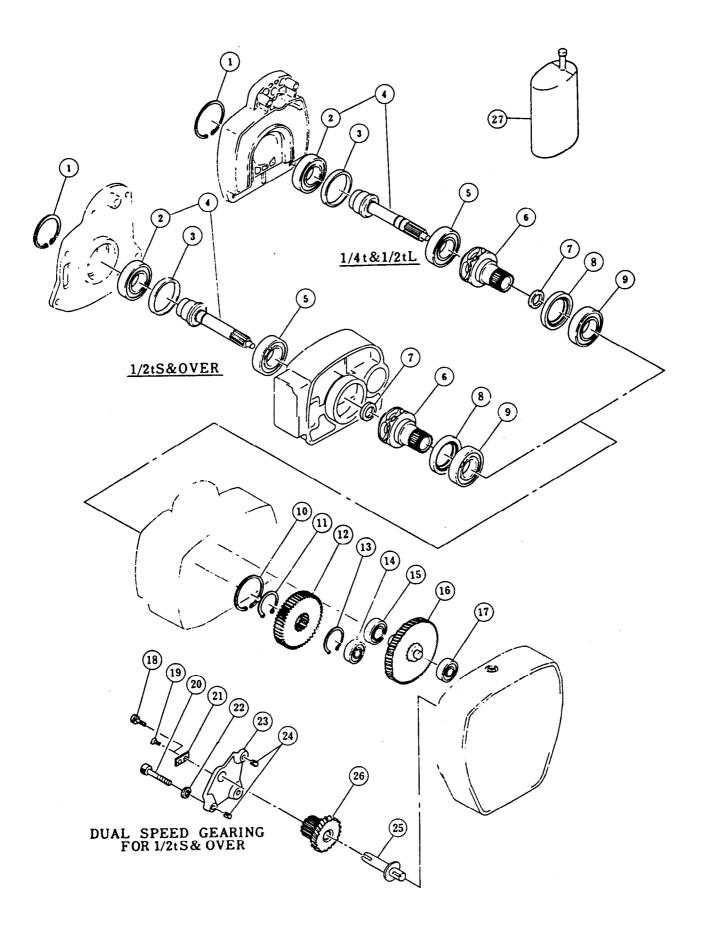


220/440V, 220V, 440V -60Hz & OTHER VOLTAGES

POWER SUPPLY PARTS LIST

	DECORTEMAN	0.777					PAR'	T NUN	ABER						
NO.	DESCRIPTION OF PART	QTY TOTAL	LE1		LI	E 2	L	E3		LE4		LE	25		
1101		IOIAL	1/4	1/2-L	1/2-S	1-L	1-S	2-L	1-1/2	3	2-S	2-1/2	5		
16	Bolt	2	1		k			70564	/			d1			
17	Spring Washer	2						70565							
18	Power Supply Cable Complete Set	1	70566												
19	Power Supply Cable 4C	1	70568												
20	Cable Clamp Arm Assembly	1	70570												
21	Plug 4P	1	70572												
22	Cable Hanger Assembly	3	70574												
23	Flat Head Machine Screw	4					- • • • • • • • • • • • • • • • • • • •	70546				· ·			
24	Socket 4P Assembly	S 1			704	.75					70576				
27	Socket 41 Assembly	D		70575 70577											
25	Machine Screw w/ Spring Washer	4	70578												
26	Socket Holder A	1	70579												
27	Socket Holder Packing A	1	70	580					70581		·				

GEARING PARTS DRAWING

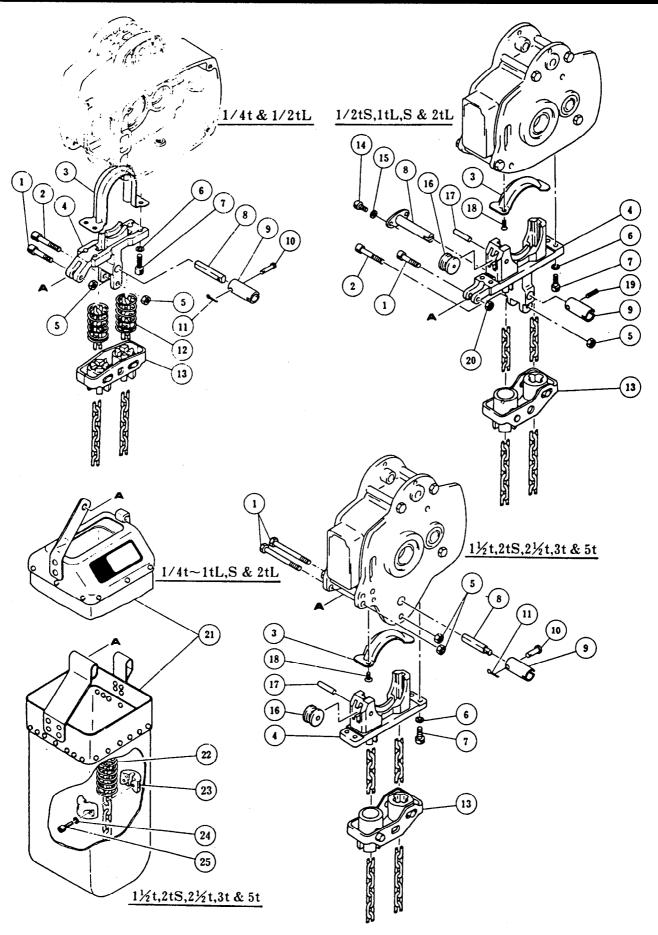


GEARING PARTS LIST

			PART NUMBER												
ITEM NO.	DESCRIPTION OF PART	QTY TOTAL	L	E1	L	E2	L	E 3		LE4		LE	:5		
NO.		IUIAL	1/4	1/2-L	1/2-S	1-L	1-S	2-L	1-1/2	3	2-S	2-1/2	5		
1	Snap Ring	1	70	110	701	111			70199						
2	Ball Bearing	1	70	200	70201		70202								
3	Collar B	1	70	203	702	204	702	205	Γ						
4	Pinion Assembly	1	70	206	702	207	702	208	1		70209				
5	Ball Bearing	1	70	210	702	211	702	212			70213				
6	Load Sheave	1	70	214	702	215	702	216	1	70217		702	18		
7	Oil Seal	1	70	219	702	220	702	221			70222	I			
8	Oil Seal	1	70	223	702	224	702	225			70226				
9	Ball Bearing	1		70	227		702	228			70229				
10	Snap Ring	1	70	230			ł	·							
11	Snap Ring	1	70	231							-				
12	Load Gear	S 1	70	232	70233				70225						
12	Load Gear	D 1	70	70238		233	702	.34	70235 702		70236	702	37		
13	Snap Ring	1		702		239		240			70241	1			
14	Ball Bearing	1	70	242	70341		702	243	70244						
15	Ball Bearing	1	70	245	70246		70247		7024		70248	18			
16	Gear #2 Assembly	<u>S</u> 1	70	249	702	250	70251		702	.52	70253	702	54		
10	Ocal #2 Assembly	D	70	255	702	256	70257		702	58	70259	702	60		
17	Ball Bearing	1	70	261	702	262	702	263			70264				
* 18	Machine Screw w/ Spring Washer	2	-					-			70265				
* 19	Flat Head Machine Screw	2	-			702	266								
* 20	Socket Bolt	3	-		702	267	702	268			70269				
* 21	Plate	1	-			702	270				70271				
* 22	Spring Washer	3	-			272				70273					
* 23	Gear Holder Plate	1	-			274	702	275			70276				
* 24	Set Pin	2	-)92			70093						
* 25	Gear B Shaft	1	-)94	70277		70278						
* 26	Gear B Assembly	1	-		70279		70280		70281						
27	Gear Oil	1	-		·		LE	-Gear (Oil				. <u> </u>		

* Dual Speed Hoists Only

CHAINING PARTS DRAWING

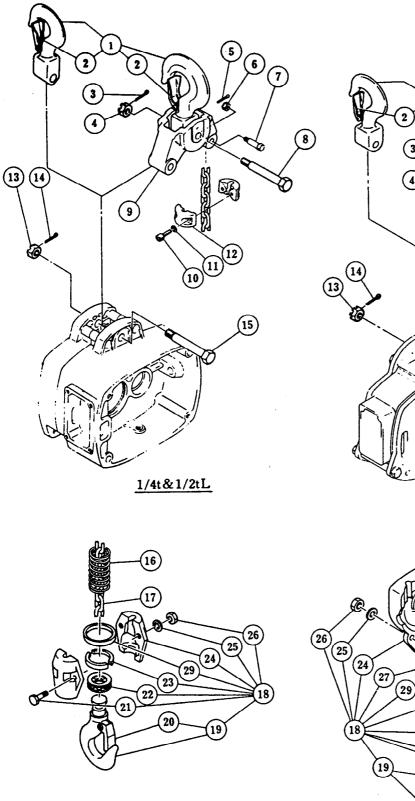


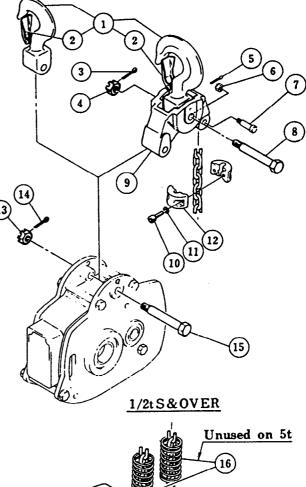
CHAINING PARTS LIST

	DESCRIPTION			PART NUMBER												
ITEM NO.	DESCRIPTION OF PART		ГY ГAL	L	E1	L	E 2	LI	E 3		LE4	• •	LE	5		
110.			IAL	1/4	1/2-L	1/2-S	1-L	1-S	2-L	1-1/2	3	2-S	2-1/2	5		
1	Socket Bolt		1	70	282		702	283	L		L	I I				
1	Bolt		2							70284						
2	Socket Bolt		1			702	285			1						
3	Chain Guide B		1	70	286	702	287	702	288		70289	7029	. 90			
4	Chain Guide A		1	70	291	702	292	702	293	1	70294		7029	9 5		
5	NL		2	70	296			• •	•	+		70297	- L			
3	Nut		1	-			702	296								
6	Spring Washer		4		702	298			•	4	70299					
7	Socket Bolt		4	70	300	703	301	703	02	1		70303				
	Limit Lever Pin		1	70	304			- -				70305				
8	Limit Lever Pin Assembly		1	-			703	306					<u></u>			
9	Laura Dia Caualina	S			207	703	308	703	09							
9	Lever Pin Coupling	D	D 1		70307		70311 70312		1		70310					
10	Coupling Pin		1		70313			• -				70314				
11	Split Pin		1		315				····			70315				
12	Guide Spring	1	2	70	317											
13	Limit Lever Assembly		1	70	318	703	319	703	20		70321		7032	22		
14	Socket Bolt	1	2				703	323								
15	Spring Washer		2			70324		324								
16	Guide Roller		1	-		70325		70326		70327			7032	28		
17	Roll Pin		1			70329		70330		70331			L			
	Flat Head Machine Screw						703	32								
18	Machine Screw w/ Spring Washer	7	2		• -			-			<u>. </u>					
19	Spring Pin		1				703	34								
20	U Nut		1				703	35		+						
21	Chain Container **	L	1	CC	2-2	CC	2-3	CC	-4	CC-6						
21	Cham Container **	S	1	CC	C-1	CC	2-2	CC	-7			CC-5				
22	Chain Spring	S		703	343	703	44	703			70346		7034	 17		
		D	1	70348		703	49	703	50		70351		7035			
23	Stopper Assembly (includes Stopper and items 24 & 25)	2	2		71505		707			71724		7152				
24	Spring Washer	2	2	703	357		703	58				70359	i			
25	Socket Bolt	2	2	703	360		703					70362				

** Specify Model and Lift when ordering. Some special models or those with long lifts will require steel chain buckets. NOTE: Steel chain buckets not listed; contact Ingersoll-Rand Distributor for assistance.

HOOK PARTS DRAWING





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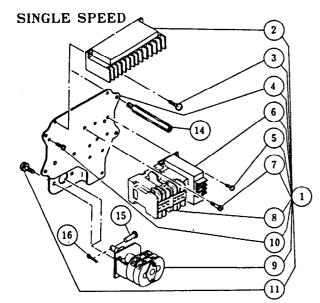
23

22

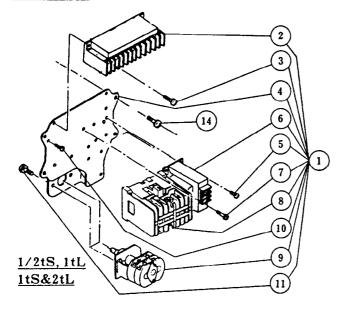
HOOK PARTS LIST

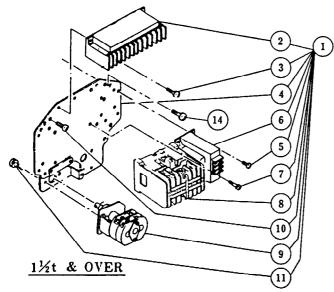
TOTAL C	DECOMPTON					PART NUMBER										
ITEM NO.	DESCRIPTION OF PART		TY TAL	L	E1	L	E2	L	E3		LE4		L	E5		
		10		1/4	1/2-L	1/2-S	1-L	1-S	2-L	1-1/2	3	2-S	2-1/2	5		
1	Top Hook Assembly		1		70316		70	363	70	364	70365	70364	70365	70366		
2	Hook Latch Assembly		1		70367		7036		70	369	70370	70369	70370	70371		
3	Split Pin		1	70372		,	70372		70373		70373			70374		
4	Slotted Nut		1	• • • •	70375		70375		70376		70376			70377		
5	Split Pin		1		70378		70378		70379		70379			70380		
6	Slotted Nut		1		70381	1	70381		70382		70383			70384		
7	Chain Pin	1	1		70385		70386		70387		70388			70389		
8	Top Pin L		1		70390		70390		70391		70391			70392		
9	Connection Yoke		1		70393		70394		70395		70396			70397		
10	Socket Bolt		2		70360		70361		70361		70362					
11	Spring Washer	-	2		70357		70358		70358		70359					
12	Stopper		2		70353		70354		70354		70355					
13	Slotted Nut	1	1		I	70	398	I	I		L	70399	1			
14	Split Pin		1			70-	400					70401				
15	Top Pin		1	704	1 02	70	403	704	404			70405				
			1	70343		70344		70345		70346		70346	703	347		
16	Chain Series	S	2		70343		70344		70345		70346					
10	Chain Spring	5	1	70348		70349		70350		70351		70351	703	52		
		D	2		70348		70349		70350		70351					
17	Load Chain	-	1	LCE	S003	LCE	S005	LCE	S010	I	CES02)	LCE	\$025		
18	Bottom Hook Complete Set	-	1	70411	70412	70413	70414	70415	70416	70417	70418	70419	70420	70421		
19	Bottom Hook Assembly			70422	704	423	704	24	70425	70426	70427	70425	70428	70429		
20	Hook Latch Assembly	1	1	1	70430		704	31	70432	70433	70434	704		70435		
21	Bolt		2	70436	70440	70436	70441	70437	70441	70438		70438	70439	'		
21	Doit		3	i						·	70442			70443		
22	Thrust Bearing		1		70444		704	45	704	46	70447	70446	70447	70448		
23	Hook Stopper		2		70449		704	50	704	51	70452	70451	70452	70453		
24	Bottom Yoke	1	2	70454	70455	70456	70457	70458	70459	70460	70461	70462	70463	70464		
25	Spring Washer		2		70465			70466	L	70467		70467				
25	Spring washer		3								70467		-	70468		
26	Nut		2		70469			70470		70471		70471	70472			
20	INUL		3						I		70471			70472		
27	Idle Sheave Assembly	1	1	70473			70474		70475		70476		-	70477		
28	Bottom Shaft Assembly		1	70478			70479		70480		70481		-	70482		
29	Thrust Collar	1		<u>├</u>	70483		704	.84	704	85		·	70486			

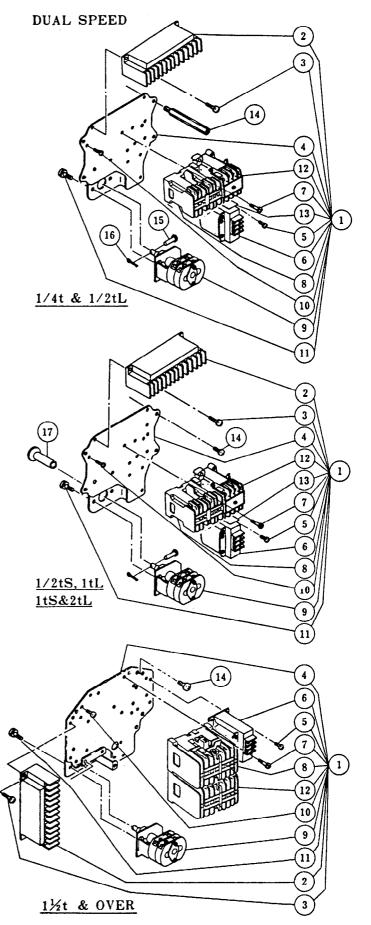
ELECTRICAL PARTS DRAWING



1/4 & 1/2tL



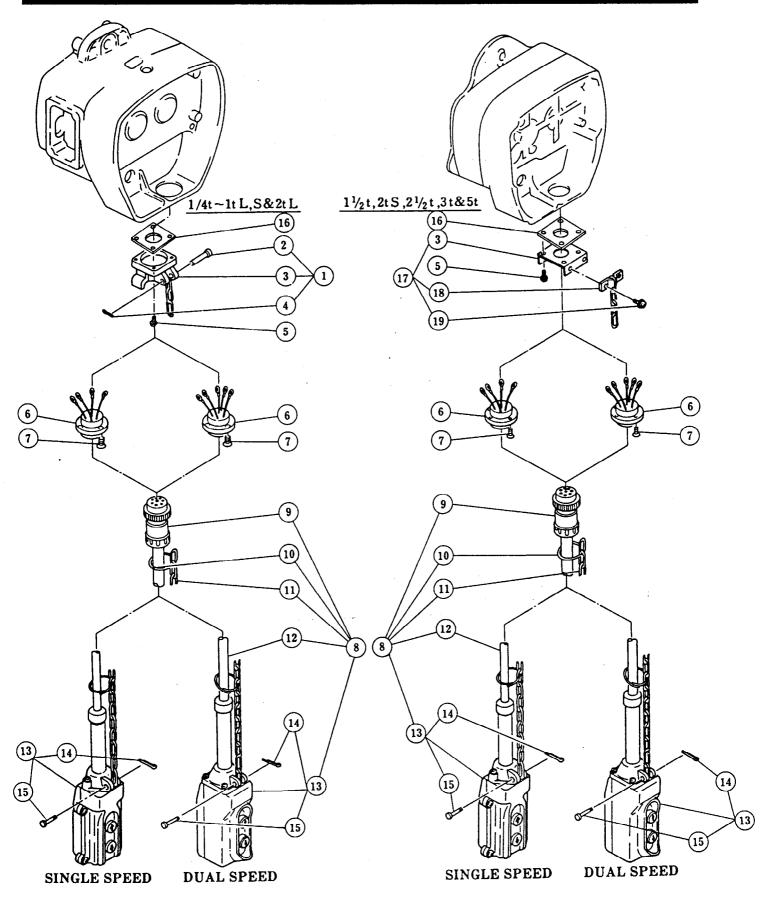




ELECTRICAL PARTS LIST

				PART NUMBER												
	DESCRIPTION OF PART		ГY ГAL	LE1	LE2	LI	E 3	LE4			LE5					
NO.	OF PARI		IAL	1/4 1/2-L	1/2-S 1-L	1-S	2-L	1-1/2	3	2-S	2-1/2	5				
·	Dist. Com las for	S		70488	70489	704	190		70491							
1	Plate Complete Set	D	1	70492	70493	704	194			70495						
2	Non-Reverse Relay	S D	1		70497											
3	Machine Screw w/ Spring Washer		2	70500												
		S	1	70501	70502	705	503	1		70507	!					
4	Plate Assembly	D	1	70504	70505	705	506	1		70508	;					
		S	4		70500			1		70509)					
5	Machine Screw w/ Spring Washer	D	3		70509											
	w opring washer	D	4		~ ~ ~			1		70510)					
4	Transformer	S	1		70511					70512						
6	Transformer	D		70	513	705	514		;							
		s	2		70516											
		3	3							70516	5					
7	Machine Screw w/ Spring Washer				70516	~ <u></u>		1								
	w oping washer	D	2		70517		_									
			6					70516								
8	Electromagnetic Contactor	S	1		70518			70519								
0	Electromagnetic Contactor	D			70518					70520)					
9	Limit Switch Complete Set	T	1	70569				70524								
10	Machine Screw w/ Spring Washer		1		70525					70526	5					
11	Machine Screw		2				70527									
12	Electromagnetic Contactor		1	70	528	70	529			70530)					
13	Insulating Paper		1	70531												
14	Stay Bolt / Machine Screw w / Washer		4	70532		_		70533								
15	Coupling Pin		1	70313												
16	Split Pin		1	70315												
17	Dust Guard		1		70	534										
10	Relay with Module	S			•		70547	1								
19	(not shown on drawing)	D	1		······································		70548	;			- <u>,,</u> ,					

CONTROL STATION PARTS 220/440V, 220V, 440V-60Hz & OTHER VOLTS DWG



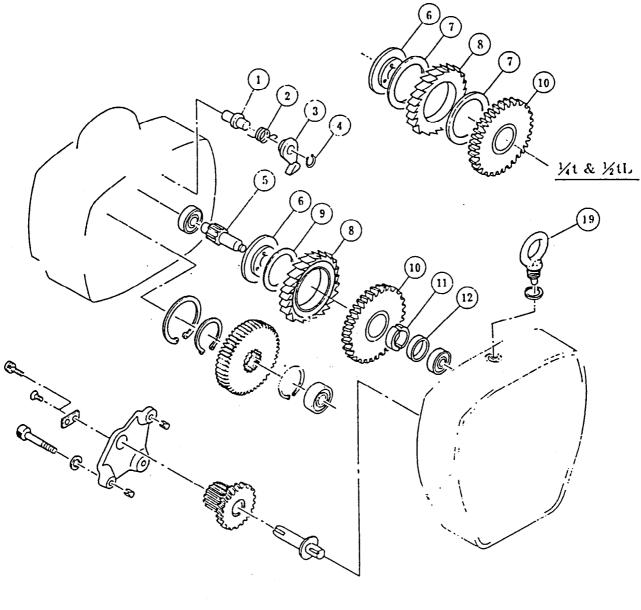
CONTROL STATION PARTS LIST

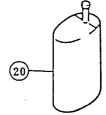
ITEM	DESCRIPTION		,			PAR	Γ NUN	ABER				
NO.	OF PART	QTY TOTA		LE1	LE2	L	E3	LE4			LE	25
				/4 1/2-L	1/2-S 1-L	1-S	2-L	1-1/2	3	2-S	2-1/2	5
1	Socket Holder B Assembly	1			70535	_ l,	1		L		L	
2	Cord Chain Pin	1			70536							
3	Socket Holder B	1			70537					71560		
4	Split Pin	1			70538				-			
5	Machine Screw (includes Spring Washer)	4			70539					70540	4	
6	Socket 5P with 4 Leads	S	,	•	70541					70542	. <u> </u>	
	Socket 5P with 5 Leads	D	1		70543					70544		
7	Screw	4			70545					70546		
	2 Pushbutton Cord Complete Set	S					2PBXX	ζ				
	with Strain Relief	D				2	PBXX	D				
* 8	4 Pushbutton Cord Complete Set	S	ı [_				4PBXX	ζ				
0	with Strain Relief	D				4	PBXX	D				
	6 Pushbutton Cord Complete Set	S				(5PBXX	[
	with Strain Relief	D				6	PBXX	D				
9	Plug 5P	1					70549			-		
10	Cord Ring	5					50040					
11	Cord Chain	1					50041				······	
	Pushbutton Cord 3C	S					73216					
12	Pushbutton Cord 4C	D				7	10321	2				
	Pushbutton Cord 5C	S	`				73299					
	Pushbutton Cord 7C	D				7	103233	8				
	2 Pushbutton Switch Assembly	S					70555					
		D					70556					
	2 Pushbutton Switch Assembly	S					103378					
	with On/Off **	D				7	105702	3				
	4 Pushbutton Switch Assembly	S					70552					
13		D 1	ı	· · · · · · · · · · · · · · · · · · ·			70789					
	4 Pushbutton Switch Assembly with On/Off **	S					51211					
		D					105103	1				
	6 Pushbutton Switch Assembly	S					71509					
		D										
	6 Pushbutton Switch Assembly with On/Off **	S D	-				52758					
14	Split Pin						105104	9				
15	Cord Chain Pin	1					70557					
16	Socket Holder Packing B	1			70559		70558			70540		
17	Socket Holder Assembly B	1								70560		
18	Cord Chain Stopper	1								70561		
	Machine Screw	1								70562		
19	(includes Spring Washer)	2								70563		

* Replace "XX" in part number with required cord length. Example: for a 15 foot cord to be used on a 2 Pushbutton, single speed unit order part number 2PB15. For a 15 foot cord to be used on dual speed units order part number 2PB15D.

** Total buttons for Pushbutton Switch Assemblies are as follows: 2 Button Switch = 3 total buttons; 4 Button Switch = 5 total buttons; 6 Button Switch = 7 total buttons.

MECHANICAL BRAKE PARTS DRAWING (OPTIONAL)





MECHANICAL BRAKE PARTS LIST

TTEM	DESCRIPTION	PTION QTY		PART NUMBER												
NO.	OF PART	TOTAL	L	E1	LI	E2	L	E3	LE4			LE	5			
		TOTAL	1/4	1/2-L	1/2-S	1-L	1-S	2-L	1-1/2	3	2-S	2-1/2	5			
1	Pawl Pin	1		70:	582		L	1	70583	1		·				
2	Pawl Spring	1		70:	584											
3	Pawl	1		70	586					70587		······				
4	Snap Ring	1		70	588					70589						
5	Gear #3	S I	70	590		~										
		D 1	70	70596 70591		71503		715	95	70594	7059) 5				
6	Friction Disc	1	70597		705	98	705	599			70600	 }				
7	Friction Plate	2	70601													
8	Ratchet Disc Assembly	1	70	602	70603		70604		70605			5				
9	Bushing	1	-		706	06	70607				70608					
10	Gear #2	S 1	70	509	706	10	70611		70612			2				
10		D 1	/04	009	706	13	706	14			70615					
11	Thrust Disc	2	70	616	706	617	706	18			70619					
12	Thrust Collar	1	70	520	706	21	706	22			70623					
19	Eye Bolt Assembly	1	-					••••	70633							
20	Gear Oil	*			LE-Gear oil											

* Quantity for L1E, L2E and L3E = 1; quantity for L4E and L5E = 2.

ACCESSORIES

DESCRIPTION OF ACCESSORY	ACCESSORY PART NUMBER
Orange Touch-up Paint	MHD-OR
Chain Lubricant	LUBRI-Link

PARTS ORDERING INFORMATION

The use of replacement parts other than **Ingersoll-Rand** Material Handling replacement parts may result in decreased hoist performance and may 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 and serial number as it appears on the nameplate.
- 2. Voltage
- 3. Single or dual speed hoist.
- 4. Part number(s) and part description as shown in this manual.
- 5. Quantity required.

For your convenience and future reference it is recommended that the following information be recorded.

Hoist Model Number _____

Hoist Serial Number

Date Purchased _

Return Goods Policy

Ingersoll-Rand will not accept any returned goods for warranty or service work unless prior arrangements have been made and written authorization has been provided from the location where the goods were purchased. Hoists returned with opened, bent or twisted hooks, or without chain and hooks, will not be repaired or replaced under warranty.

NOTICE

• Continuing improvement and advancement of design may cause changes to this hoist which are not included in this manual. Manuals are periodically revised to incorporate changes. Always check the manual edition number on the front cover for the latest issue.

Disposal

When the life of the hoist has expired, it is recommended that the hoist be disassembled, degreased and parts separated as to materials so that they may be recycled.

For additional information contact:

Ingersoll-Rand Material Handling

P.O. Box 24046 2724 Sixth Avenue South Seattle, WA 98124-0046 USA Phone: (206) 624-0466 Fax: (206) 624-6265

or

Ingersoll-Rand Material Handling Douai Operations

111, avenue Roger Salengro 59450 Sin Le Noble, France Phone: (33) 27-93-08-08 Fax: (33) 27-93-08-00

HOIST AND WINCH LIMITED WARRANTY

Ingersoll-Rand Company (**I-R**) warrants to the original user its Hoists and Winches (Products) to be free of defects in material and workmanship for a period of one year from the date of purchase. **I-R** will repair, without cost, any Product found to be defective, including parts and labor charges, or at its option, will replace such Products or refund the purchase price less a reasonable allowance for depreciation, in exchange for the Product. Repairs or replacements are warranted for the remainder of the original warranty period.

If any Product proves defective within its original one year warranty period, it should be returned to any Authorized Hoist and Winch Service Distributor, transportation prepaid with proof of purchase or warranty card.

This warranty does not apply to Products which I-R has determined to have been misused or abused, improperly maintained by the user, or where the malfunction or defect can be attributed to the use of non-genuine I-R parts. I-R makes no other warranty, and all implied warranties including any warranty of merchantability or fitness for a particular purpose are limited to the duration of the expressed warranty period as set forth above. I-R's maximum liability is limited to the purchase price of the Product and in no event shall I-R be liable for any consequential, indirect, incidental, or special damages of any nature rising from the sale or use of the Product, whether based on contract, tort, or otherwise.

Note: Some states do not allow limitations on incidental or consequential damages or how long an implied warranty lasts so that the above limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

IMPORTANT NOTICE

It is our policy to promote safe delivery of all orders.

This shipment has been thoroughly checked, packed and inspected before leaving our plant and receipt for it in good condition has been received from the carrier. Any loss or damage which occurs to this shipment while enroute is not due to any action or conduct of the manufacturer.

Visible Loss or Damage

If any of the goods called for on the bill of lading or express receipt are damaged or the quantity is short, do not accept them until the freight or express agent makes an appropriate notation on your freight bill or express receipt.

Concealed Loss or Damage

When a shipment has been delivered to you in apparent good condition, but upon opening the

crate or container, loss or damage has taken place while in transit, notify the carrier's agent immediately.

Damage Claims

You must file claims for damage with the carrier. It is the transportation company's responsibility to reimburse you for repair or replacement of goods damaged in shipment. Claims for loss or damage in shipment must not be deducted from the **Ingersoll-Rand** invoice, nor should payment of **Ingersoll-Rand** invoice be withheld awaiting adjustment of such claims as the carrier guarantees safe delivery.

You may return products damaged in shipment to us for repair, which services will be for your account and form your basis for claim against the carrier.

United States Office Locations

For Order Entry and Order Status

Ingersoll-Rand Distribution Center P.O. Box 618 510 Hester Drive White House, TN 37188 Phone: (615) 672-0321 Fax: (615) 672-0801

For Technical Support

Ingersoll-Rand Material Handling

P.O. Box 24046 2724 Sixth Avenue South Seattle, WA 98124-0046 Phone: (206) 624-0466 Fax: (206) 624-6265

Regional Sales Offices

Chicago, IL

888 Industrial Drive Elmhurst, IL 60126 Phone: (708) 530-3800 Fax: (708) 530-3891

Detroit, MI

23192 Commerce Drive Farmington Hills, MI 48335 Phone: (810) 476-6677 Fax: (810) 476-6670

Houston, TX

Suite 150 2500 East T.C. Jester Houston, TX 77008 Phone: (713) 864-3700 Fax: (713) 864-2244

Los Angeles, CA

11909 E. Telegraph Road Santa Fe Springs, CA 90670 Phone: (310) 948-4189 Fax: (310) 948-1828

Philadelphia, PA

P.O. Box 425 900 E. 8th Ave., Suite 103 King of Prussia, PA 19406 Phone: (610) 337-5930 Fax: (610) 337-5912

International Office Locations

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

Ingersoll-Rand Material Handling P.O. Box 24046 2724 Sixth Avenue South Seattle, WA 98124-0046 USA

Phone:(206) 624-0466Fax:(206) 624-6265

Canada

National Sales Office Regional Warehouse Toronto, Ontario 51 Worcester Road Rexdale, Ontario M9W 4K2 Phone: (416) 675-5611 Fax: (416) 213-4510 Order Desk Fax: (416) 213-4506

Regional Sales Offices

Calgary, Alberta

44 Harley Road S.E. Calgary, Alberta T2V 3K3 Phone: (403) 252-4180 Fax: (403) 252-4462

Edmonton, Alberta

1430 Weber Center 5555 Calgary Trail N.W. Edmonton, Alberta T6H 5G8 Phone: (403) 438-5039 Fax: (403) 437-3145

Montreal, Quebec

3501 St. Charles Blvd. Kirkland, Quebec H9H 4S3 Phone: (514) 695-9040 Fax: (514) 695-0963

British Columbia

201-6351 Westminster Hwy Richmond, B. C. V7C 5C7 Phone: (604) 278-0459 Fax: (604) 278-1254

Latin America Operations Ingersoll-Rand Production Equipment Group

730 N.W. 107 Avenue Suite 300, Miami, FL, USA 33172-3107 Phone: (305) 559-0500 Fax: (305) 559-7505

Europe, Middle East and Africa Ingersoll-Rand

Material Handling Douai Operations

111, avenue Roger Salengro 59450 Sin Le Noble, France Phone: (33) 27-93-08-08 Fax: (33) 27-93-08-00

Asia Pacific Operations Ingersoll-Rand (Japan) Ltd.

Shin-Yokohama Square Bldg. (5th Floor) 2-3-12 Shin-Yokohama, Kouhoku-ku Yokoham-shi, Kanagawa Pref. 222 Japan Phone: 81-45-476-7800 Fax: 81-45-476-7806

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