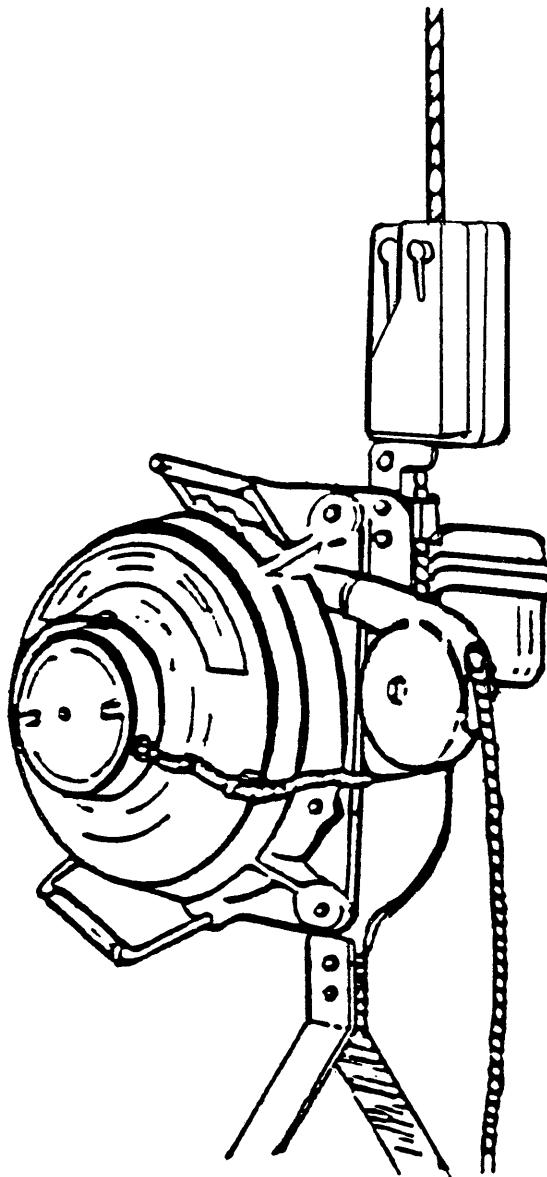


SKY CLIMBER®

ALPHA HOIST AND SKY LOCK TYPE II PARTS LIST

**220V/60VAC
Electric Powered Hoist**



EXCELLENCE IN ACCESS®

ALPHA HOIST

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INDEX AND INSTRUCTIONS ALPHA HOIST

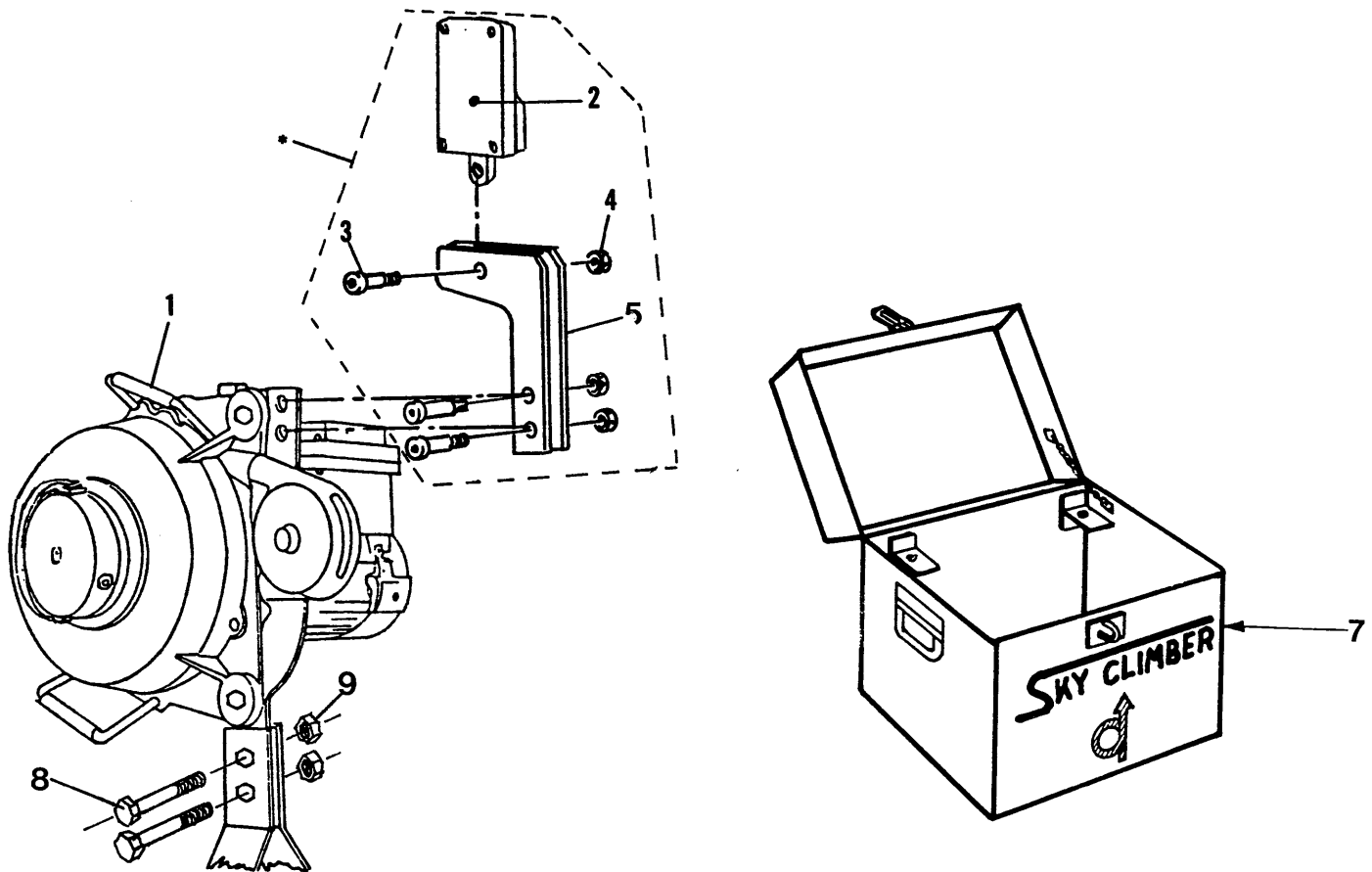
HOW TO USE THE ILLUSTRATED PARTS LIST

Refer to the Index or the Top Assembly to find the general area a required part may be found. Locate the figure number of that area, then locate that figure. Figure numbers are in numerical order. Locate the part on the exploded drawing, then correlate the item number shown on the drawing to the item number in the left-hand column of the Parts List.

Part relationship to other parts is shown by indentation. For example: A Sky Lock assembly may carry one dot, and just below a bolt may carry two dots, meaning the bolt is a sub-part to the Sky Lock assembly.

Parts may be ordered directly from Sky Climber, Inc.

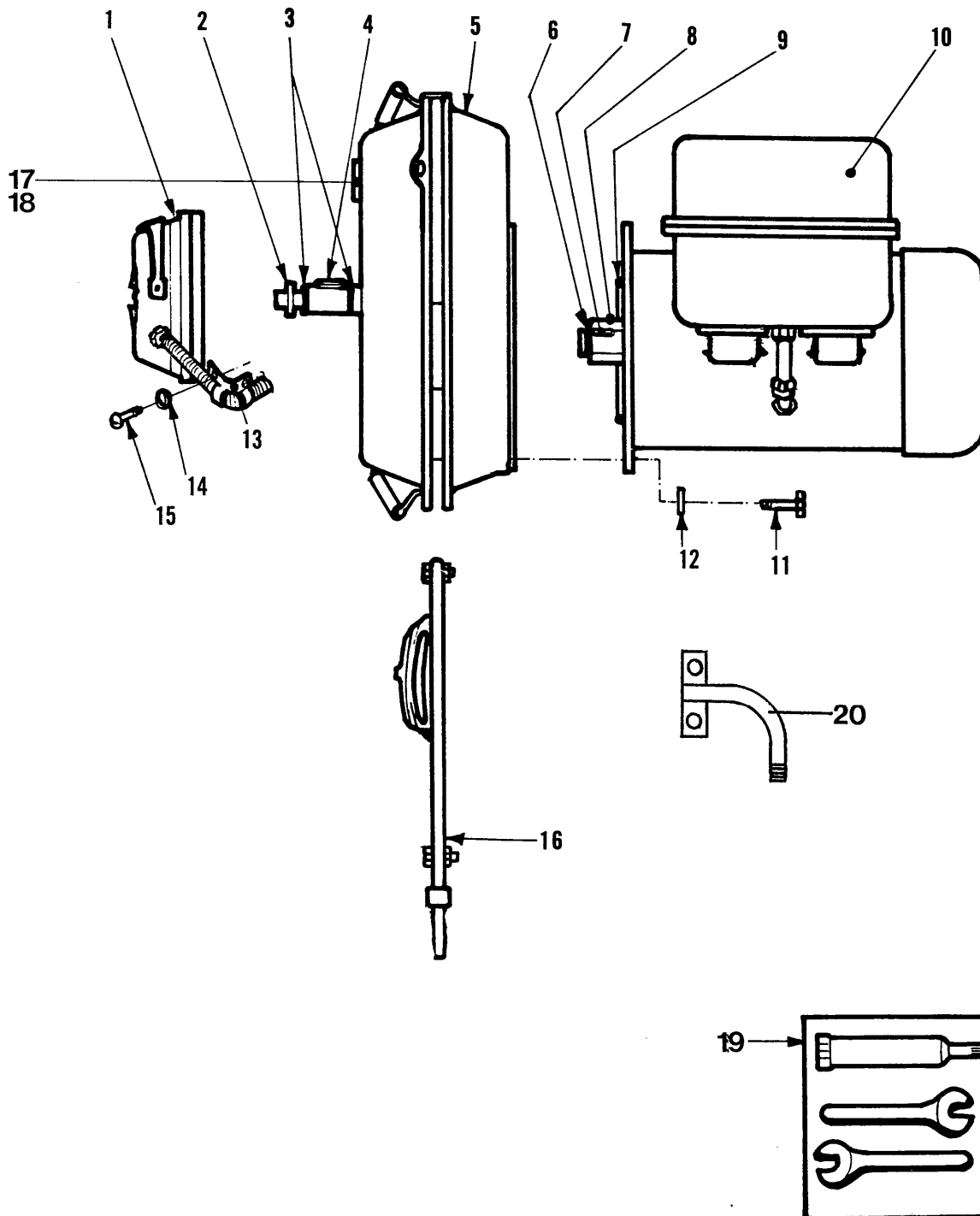
ALPHA HOIST **Fig. 1 - Alpha Hoist with Type II Sky Lock (P.N. 500-21)**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	41023009	• Alpha Hoist Top Assembly 220V/60Hz (refer Fig. 2 for details)	1
*	41009918	• Sky Lock II w/attachment hardware (consists of items 2-5)	1
2	56009826	•• Sky Lock Type II (refer Fig. 16 for details)	1
3	107-130	•• Bolt, Shoulder .50 Dia.	3
4	107-328	•• Nut, Flex. Lock. 3/8-16	3
5	305-395	•• Attachment Strap	2
6	41020708	• Control Box, Bolt On (refer Fig. 14 for details)	1
7	41008073	• Steel Box	1
8	100-179-1	• Bolt, 1/2-13 X 2	2
9	100-180	• Nut, Flex., 1/2 X 13	2
		Wiring Diagram, Single Phase (refer to Fig.15)	
	41008150	Vinyl Cover (optional)	1
	41020709	Control Box with 1 Meter Pendant (optional)	1
	41009843	Hand Crank Handle (optional)	1

**Fig. 2-Alpha Hoist Top
Assembly (P.N. 41023009)**

ALPHA HOIST



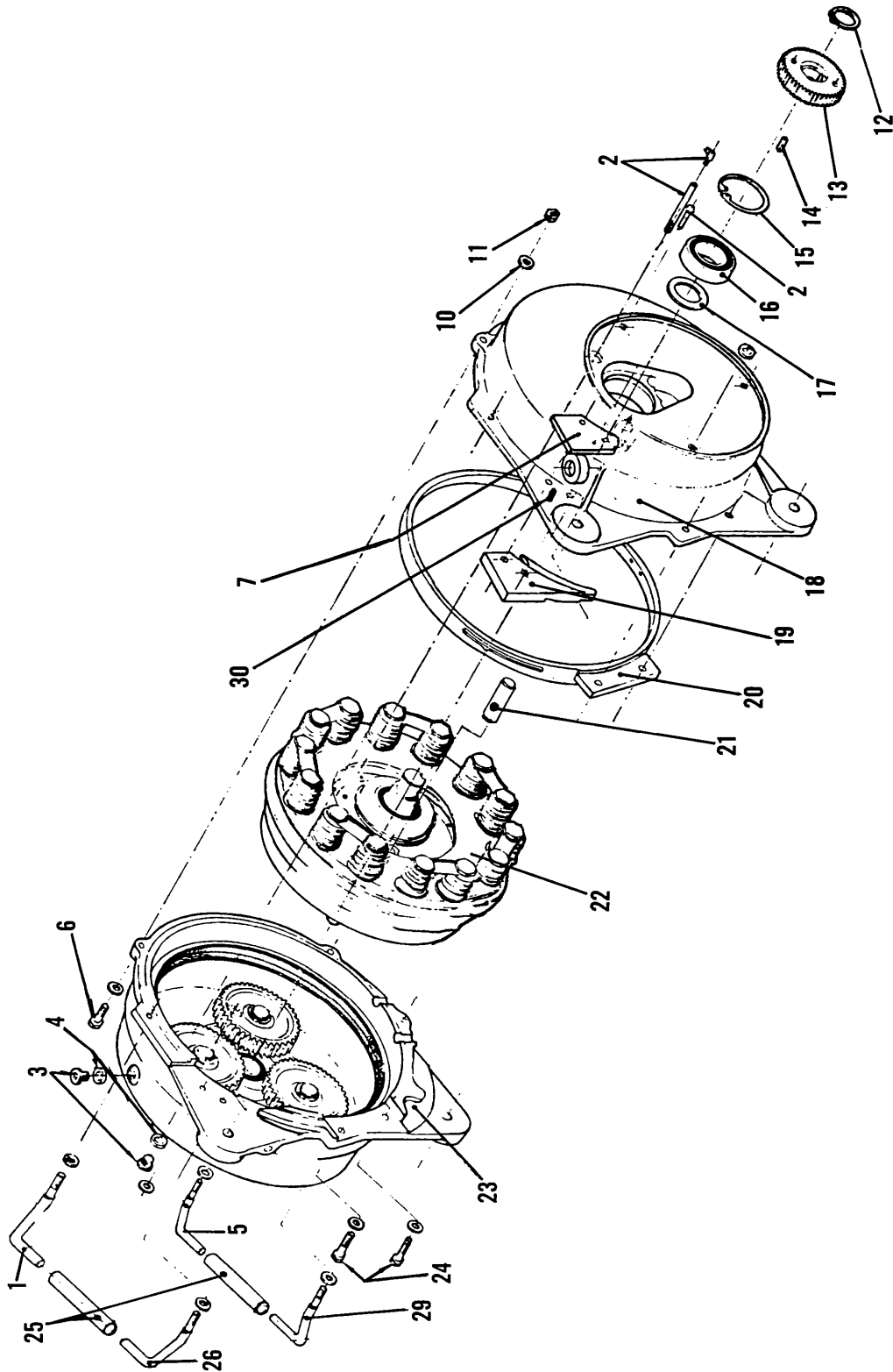
ALPHA HOIST

Fig. 2-Alpha Hoist Top Assembly (P.N. 41023009)

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	41062916	• Brake Unit, 96Vdc (refer Fig. 9 for details)	1
2	12003520	• Roll Pin	1
3	12002020	• Ring, Retaining	2
4	14003220	• Key, 6 X 6 X 20mm	1
5	41009002	• Sheave/Gearbox, Traction (refer Fig. 3 for details)	1
6	12002017	• Ring, Retaining	2
7	14004120	• Key, 5 X 5 X 20mm	1
8	41008100	• Pinion	1
9	52008271	• O-Ring	1
10	41023607	• Motor Unit, 220V/60HZ (refer Fig. 11 for details)	1
11	11000335	• Bolt	3
12	12000408	• Lockwasher	3
13	41008108	• Retainer, Cable	1
14	12000406	• Lockwasher	1
15	11002210	• Screw, Allan	1
16	41009004	• Stirrup Strap Assembly (refer to Fig. 10 for details)	1
17	41008094	• Nameplate	1
18	11002210	• Screw	3
19	41009019	• Tool Kit	1
20	102-373	Guide, Departure for Wire Winder (optional)	1

**Fig. 3 - Traction Sheave
Gearbox Ass'y. (P.N. 41009002)**

ALPHA HOIST



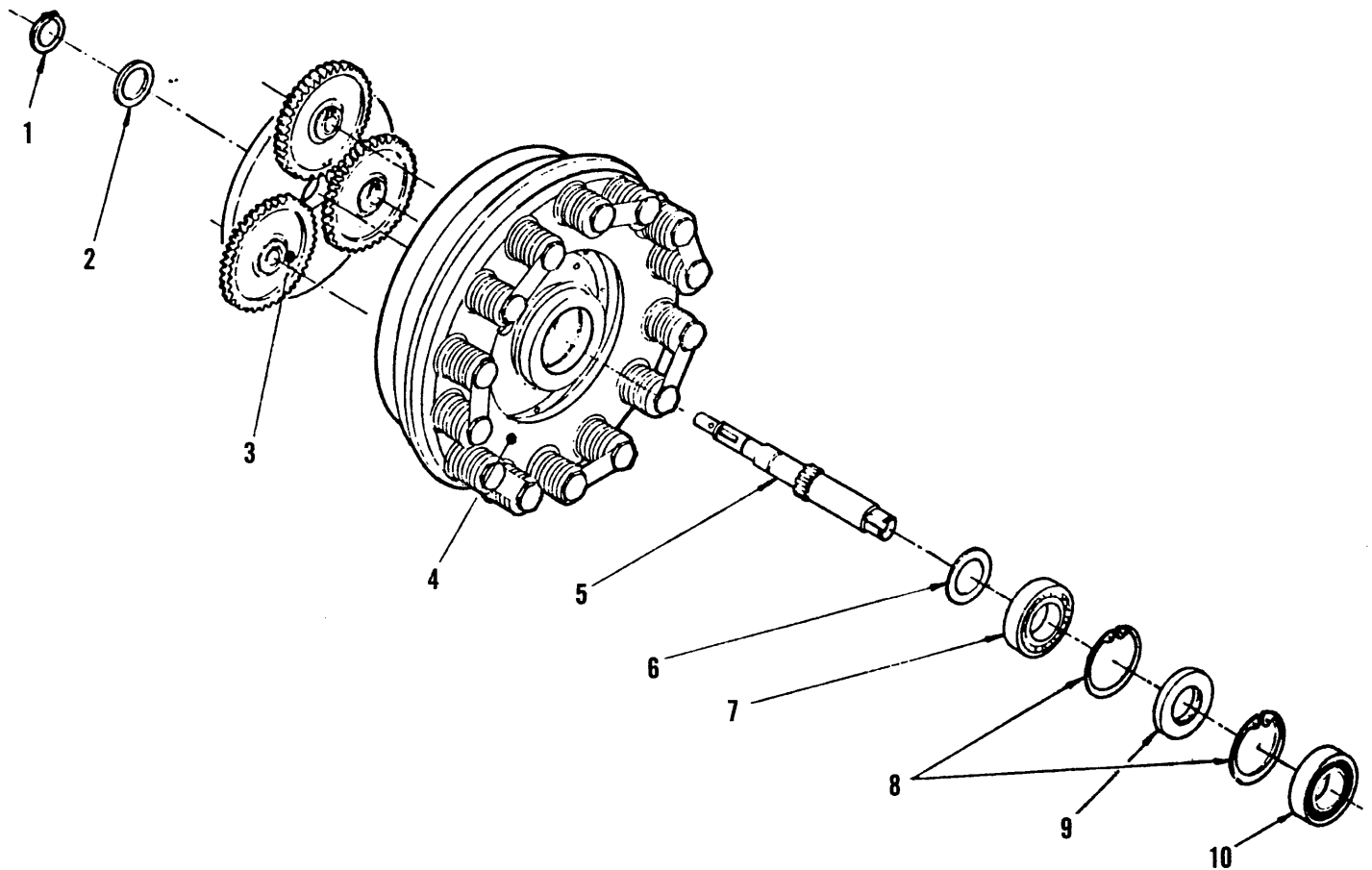
ALPHA HOIST

Fig. 3 - Traction Sheave Gearbox Ass'y. (P.N. 41009002)

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	41008086	• Handgrip	1
2	13000048	• Bolt	1
3	12009072	• Plug, Oil	2
4	12009073	• Ring, Oil Plug	2
5	41008060	• Handgrip	1
6	11001340	• Bolt	1
7	41008083	• Entry Guide	1
10	12000008	• Washer	16
11	12005508	• Nut, Self-Locking	8
12	12002025	• Ring, Retaining	1
13	41008047	• Gearwheel	1
14	14004318	• Key	1
15	12002162	• Ring, Retaining	1
16	26008529	• Ball Bearing,	1
17	13000087	• Spacer	1
18	41008009	• Casting (Motor Side)	1
19	41008020	• Guide, Departure	1
20	41008019	• Ring, Rope Guide	1
21	41008048	• Shaft (Excenter)	1
22	41009009	• Gearing and Traction Sheave Ass'y. (refer Fig. 4 for details)	1
23	41009008	• Housing Ass'y. (brake side) (refer Fig. 5 for details)	1
24	11001345	• Bolt	2
25	41008062	• Tube, Handgrip	2
26	41008063	• Handgrip	1
27	41008016	• Grease Tube	1
28	12009062	• Grease Nipple	1
29	41008061	• Handgrip	1
30	13000504	• Screw, Socket	1

**Fig. 4 - Gearing and Traction
Sheave Ass'y. (P.N. 41009009)**

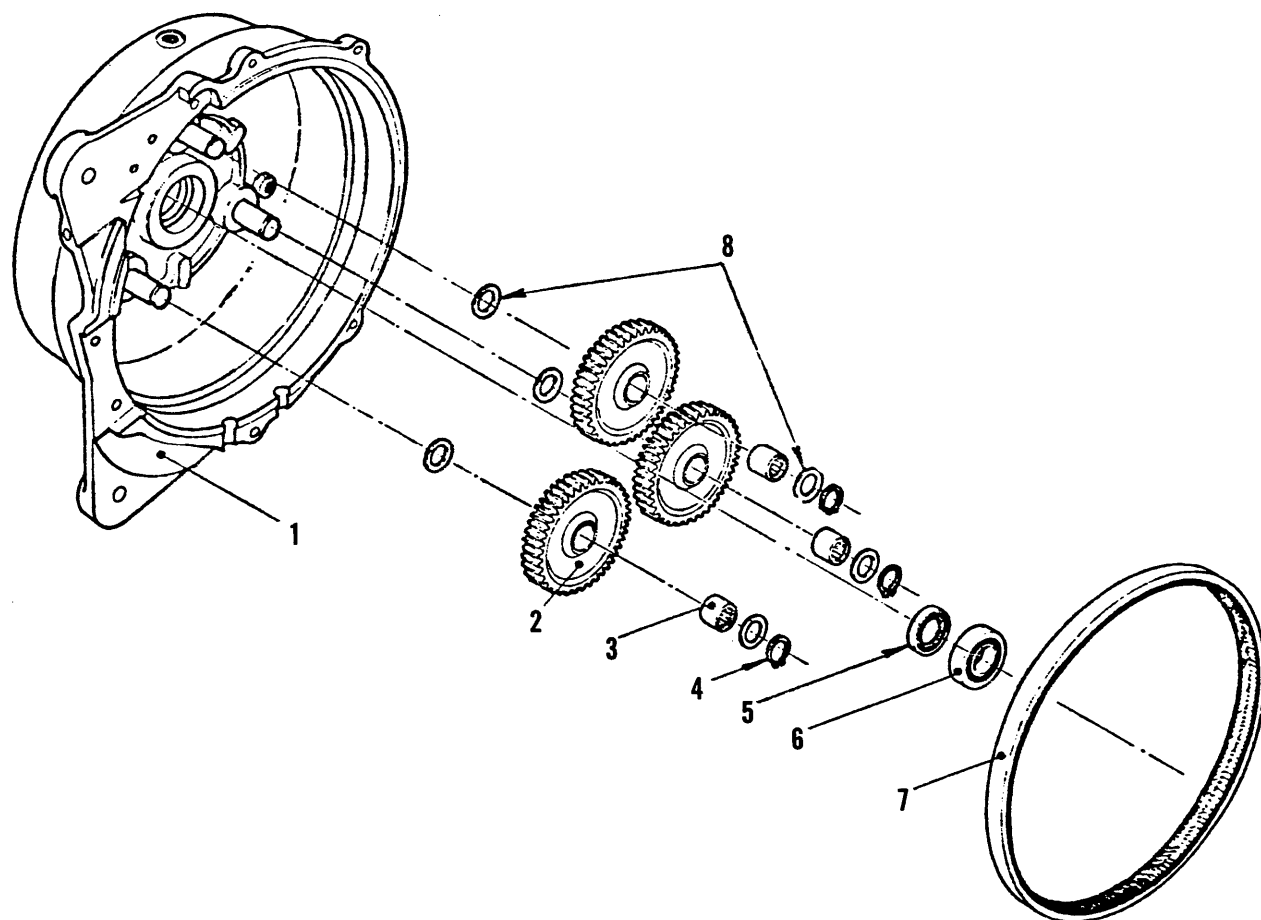
ALPHA HOIST



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	12002025	• Ring, Retaining	1
2	13000086	• Washer, Steel	1
3	41009011	• Planet Carrier Ass'y. (refer Fig. 7 for details)	1
4	41009010	• Traction Sheave Ass'y. (refer Fig. 6 for details)	1
5	41008026	• Shaft, Main	1
6	13000087	• Washer, Steel	1
7	26008529	• Ball Bearing	1
8	12002162	• Ring, Retaining	2
9	52008277	• Seal	1
10	26008529	• Ball Bearing	1

ALPHA HOIST

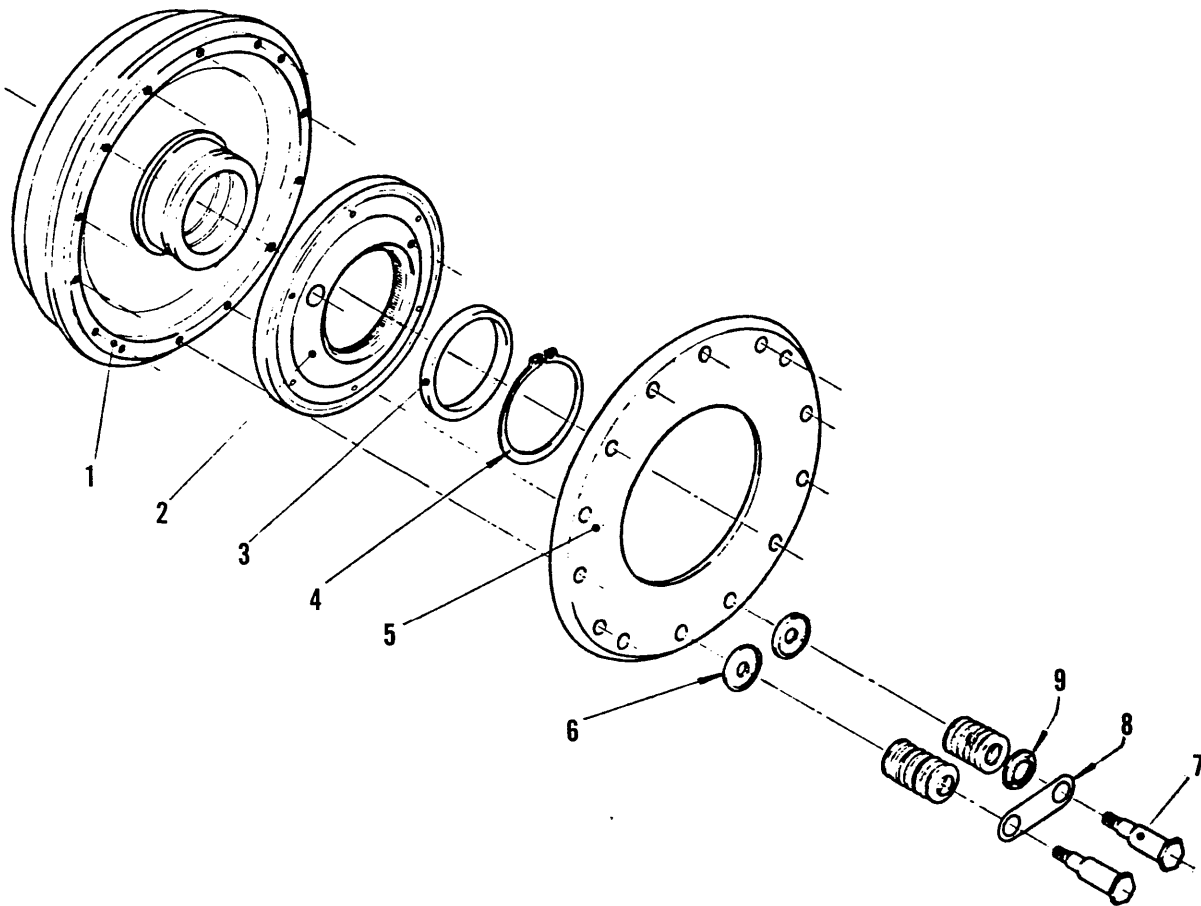
**Fig. 5 - Housing Ass'y. Brake
Side (P.N. 41009008)**



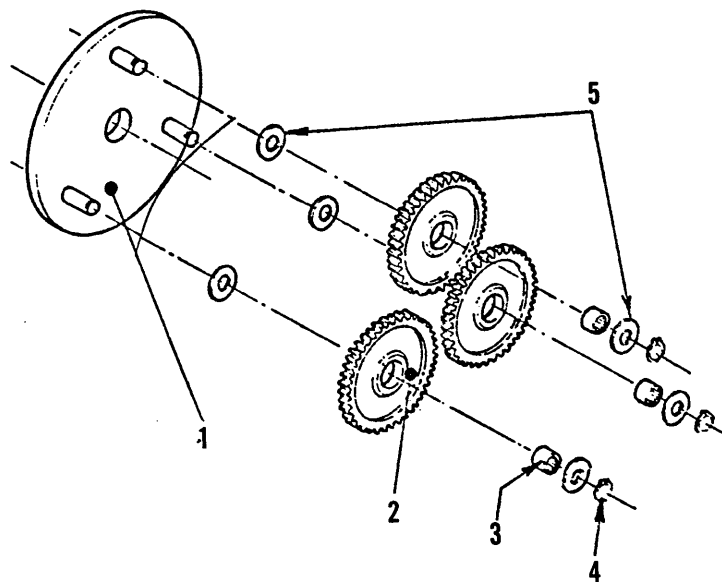
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	41009040	• Casting (brake side) With Shafts	1
2	41008038	• Planet Gear Wheel	3
3	26008535	• Needle Roller	3
4	12002017	• Ring, Retaining	3
5	52008265	• Seal	1
6	26008548	• Ball Bearing	1
7	52008266	• Seal	1
8	26008538	• Washer	6

**Fig. 6 - Traction Sheave
Ass'y. (P.N. 41009010)**

ALPHA HOIST



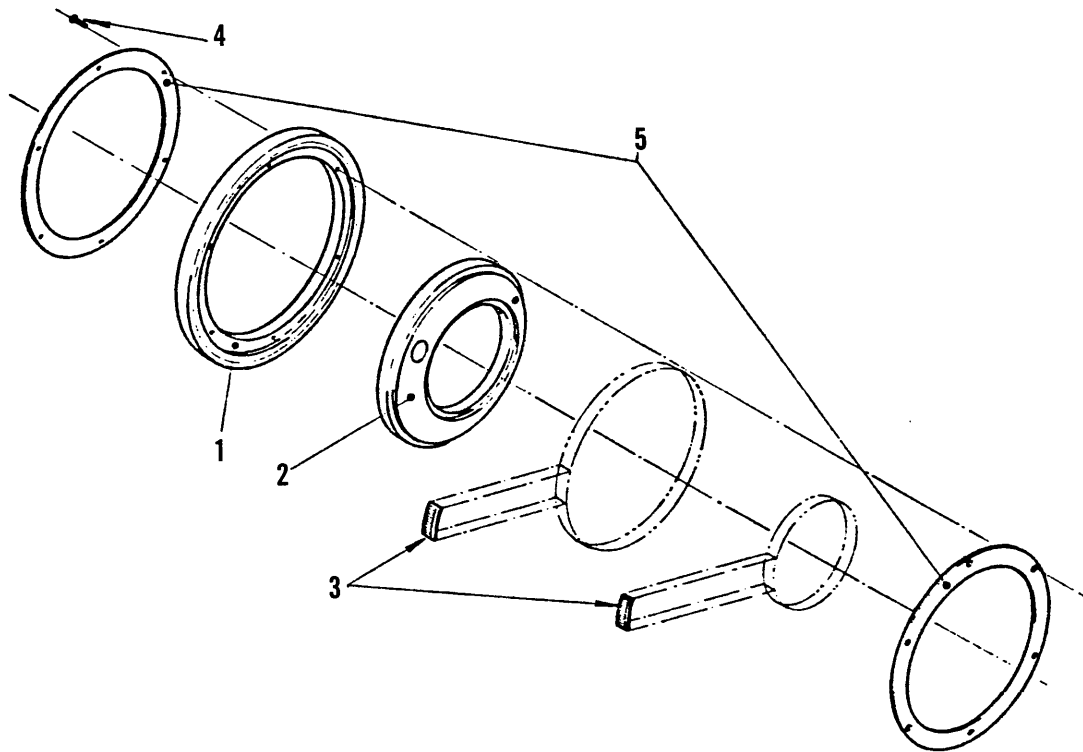
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	41008001	• Disc, Drive	1
2	41009012	• Excenter Ass'y. (refer Fig. 8 for details)	1
3	41008014	• Ring, Spacer	1
4	12002085	• Ring, Retaining	1
5	41008002	• Disc, Pressure	1
6	41008049	• Washer, Guide (for dish springs)	14
7	41008003	• Bolt	14
8	41008017	• Plate, Locking	7
9	12000518	• Spring, Belleville	196



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	41009050	• Carrier, Planet, with Shafts	1
2	41008050	• Gear, Planet	3
3	26008536	• Needle Roller	3
4	12002015	• Ring, Retaining	3
5	26008537	• Washer	6

Fig. 8 - Spreader Assembly
(P.N. 41009012)

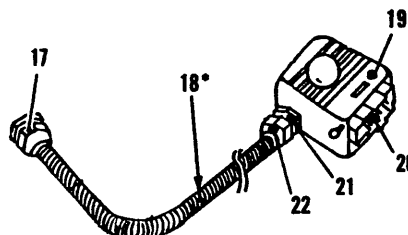
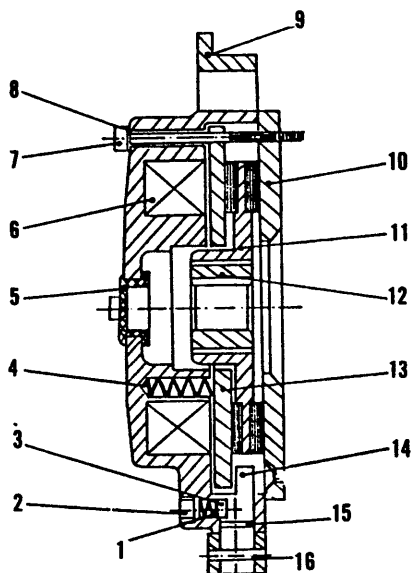
ALPHA HOIST



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	41008006	• Ring, Spread	1
2	41008007	• Disc, Eccentric Drive	1
3	26008524	• Needle Roller Segment	25
4	12008004	• Rivet	6
5	41008018	• Shield, Bearing	2

ALPHA HOIST

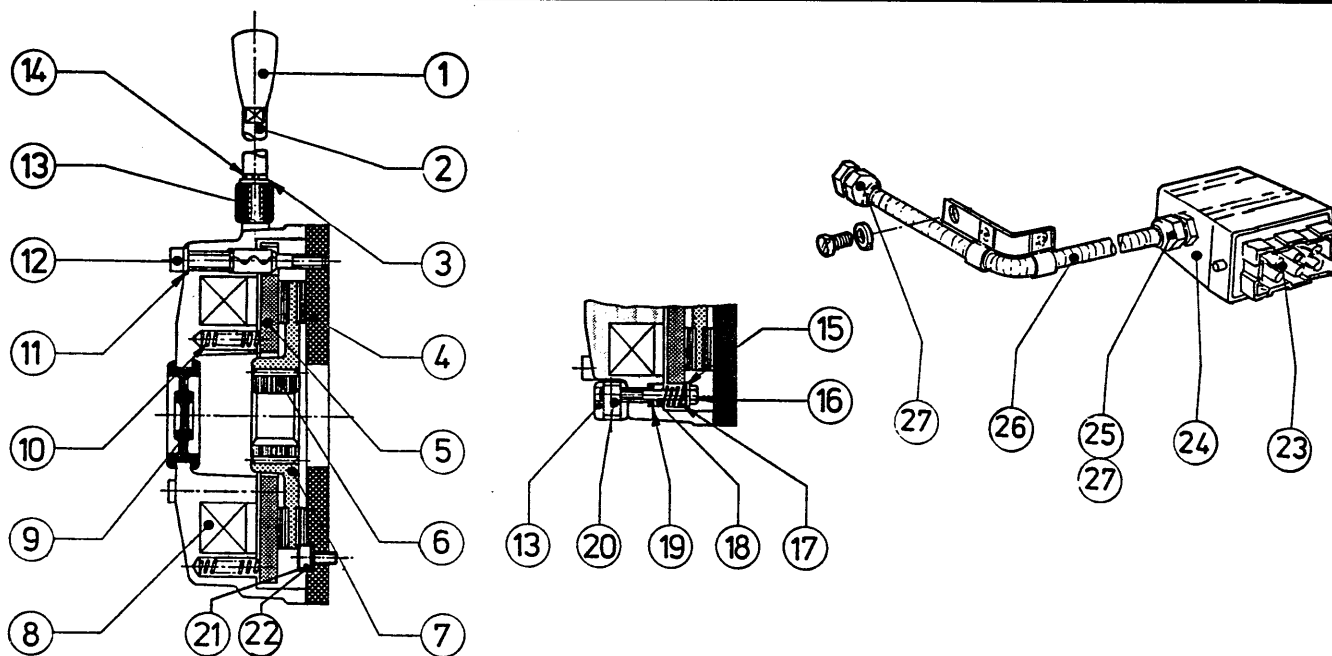
Fig. 9A - Brake Unit, 96V dc
(P.N. 41062906)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	41008118	• Spring, Pressure	2
2	11003406	• Screw, Socket	2
3	41008119	• Pin	2
4	41008121	• Spring, Pressure	5
5	41008122	• Plug	1
6	41008162	• Brake, Housing, with Coil	1
7	11002275	• Bolt	3
8	41008123	• Washer, Seal	3
9	41008124	• Manual Handle	1
10	41008125	• Flange	1
11	41008127	• Disc, Brake	1
12	41008128	• Coupling, Spline Gear	1
13	41008129	• Disc, Core	1
14	41008130	• Pin, Actuating	2
15	52008281	• O-Ring	2
16	12003424	• Pin, Roll	2
17	53008173	• Fitting, Cable	1
18	52009010	• Tube, Protection	1
19	53008682	• Plug Housing	1
20	53008717	• Plug, Male	1
21	53008177	• Fitting, Reducer	1
22	53008173	• Fitting, Cable	1
	41009111	Electromagnetic Brake, Complete (items 1-17)	
*	52009011	• Protective Tube for Wire	

**Fig. 9B - Brake Ass'y. 96V dc
32Nm (P.N. 41062916)**

ALPHA HOIST

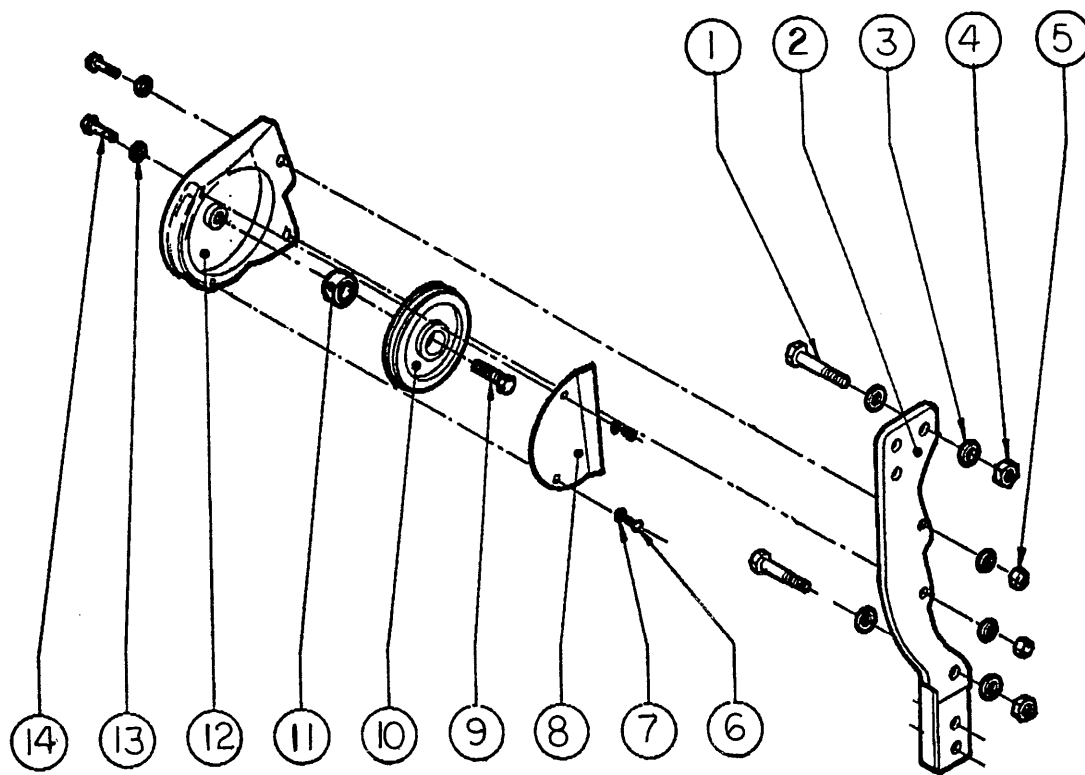


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	41008214	• Knob	1
2	41008212	• Handle	1
3	41008215	• Washer	1
4	41008206	• Flange	1
5	41008202	• Core Disc	1
6	41008204	• Toothed Coupling	1
7	41008203	• Rotor	1
8	41008220	• Brake Housing with coil 96V dc	1
9	41008209	• Rubber Plug	1
10	41008205	• Pressure Spring	7
11	41008210	• Seal Washer	3
12	11002260	• Bolt	3
13	41008211	• Brace	3
14	12000306	• Washer	1
15	12000004	• Washer	1
16	11001040	• Bolt	2
17	41008213	• Pressure Spring	2
18	41008207	• Pressure Piece	2
19	41008208	• O-Ring	2
20	41008216	• Axle	2
21	11002220	• Bolt	2
22	12000406	• Dented Washer	3
23	53008717	• Male Plug	3
24	53008682	• Plug Housing	1
25	53008177	• Gland Reductor	1
26	52009010	• Protection Tube	1 ft.
27	53008173	• Cord Connector	2

Note: P.N. for brake 96Vdc-32Nm only: 41009150 (Positions 1 - 20 + 27)

ALPHA HOIST

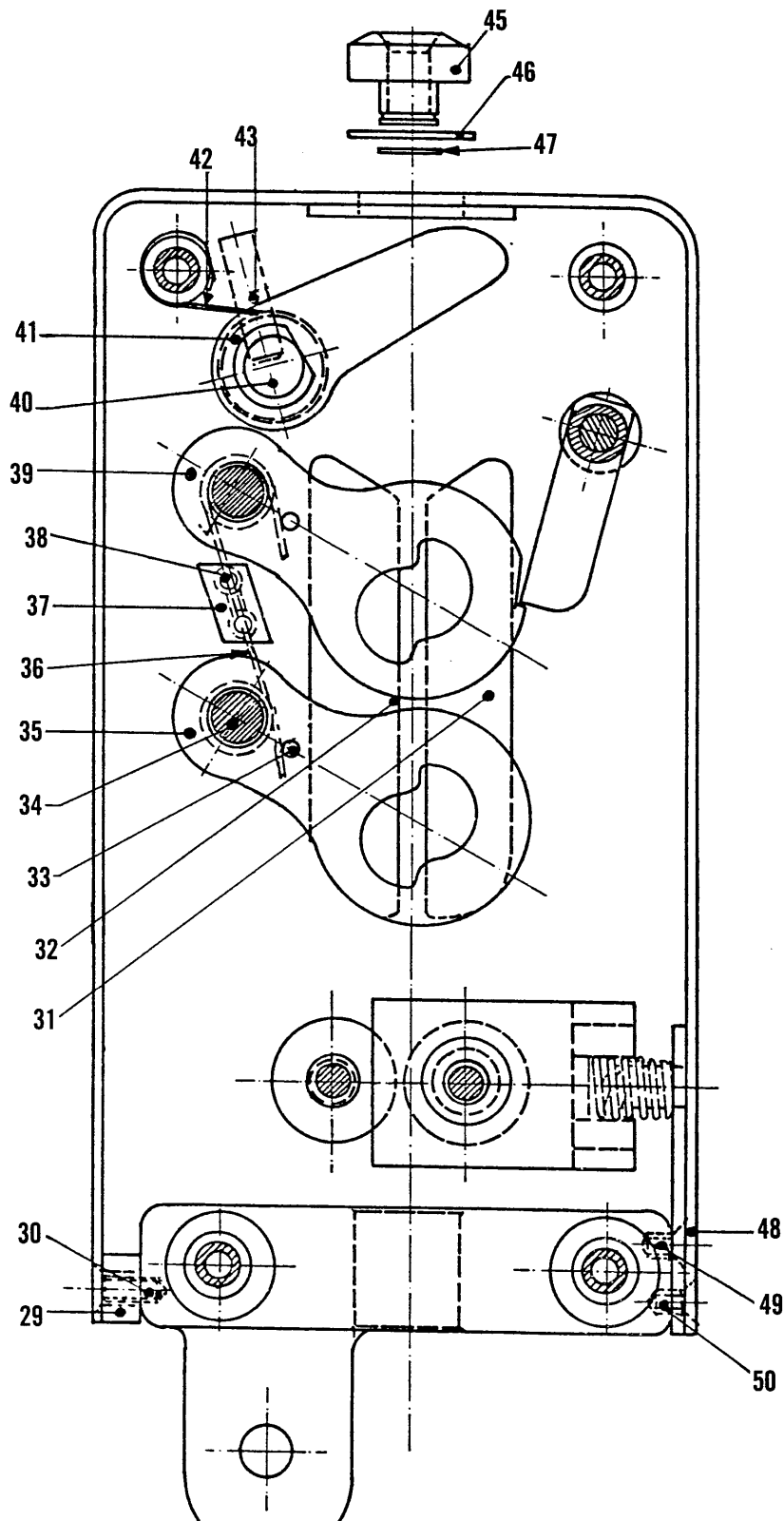
Fig. 10A - Stirrup Strap Ass'y.
(P.N. 41009004)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	13000134	• Bolt	2
2	41008030	• Stirrup Strap	2
3	12000012	• Washer	4
4	12005512	• Nut	2
5	12005508	• Nut	2
6	11004110	• Bolt	2
7	12000405	• Washer	2
8	41008035	• Cover Plate	1
9	11000525	• Bolt	1
10	41008036	• Pulley	1
11	41008034	• Bushing	1
12	41008032	• Housing for Pulley	1
13	12000008	• Washer	4
14	11001340	• Bolt	2
*	41009007	Departure Ass'y. (consists of Items 6, 7, 8, 9, 10, 11, & 12)	

**Fig. 20 - Sky Lock,
Section E-F (see page 26)**

ALPHA HOIST

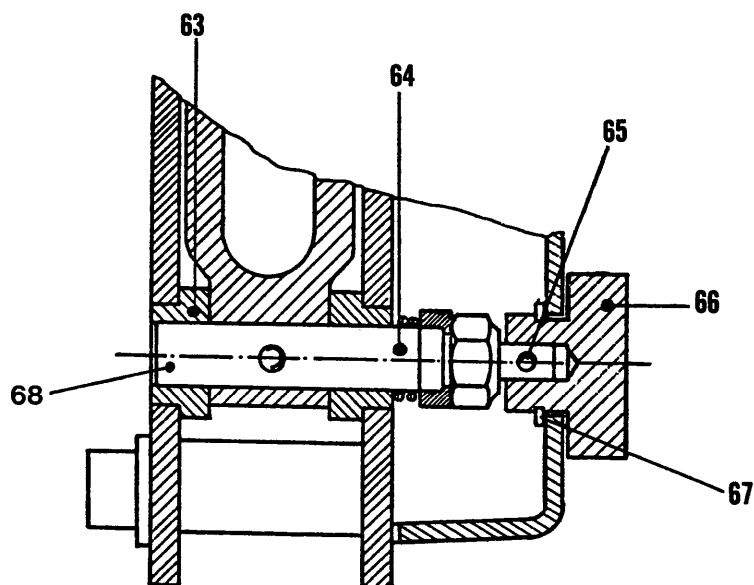


ALPHA HOIST Fig. 20 - Sky Lock, Section E-F

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
29	56008913	• Ring, Distance	1
30	13000508	• Screw	1
31	56008939	• Jaw, Right	1
32	56008938	• Jaw, Left	1
33	56008806	• Pin, Retainer Jaw	2
34	56008807	• Spring, Shaft	2
35	56008941	• Retainer, Jaw (lower)	2
36	56008808	• Spring, Main	1
37	56008833	• Retainer, Spring	1
38	13000505	• Screw	2
39	56008940	• Retainer, Jaw (upper)	2
40	56008835	• Shaft, Reset	1
41	56008942	• Plate, Reset	1
42	56008855	• Spring, Reset Shaft	1
43	56008837	• Pin, Reset Shaft	1
44	56008838	• Rubber Bumper	1
45	56008852	• Cable Entrance	1
46	12000214	• Washer	1
47	13000052	• Ring, Retaining	1
48	56008910	• Enclosure	1
49	13000506	• Screw	1
50	13000507	• Screw	1

**Fig. 21 - Sky Lock,
Section C-D (see page 26)**

ALPHA HOIST



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
63	56008894	• Bushing	2
64	56009804	• Ass'y. - Fork and Shaft	1
65	13000432	• Roll Pin	1
66	56008914	• Lever, Manual Trip	1
67	13000052	• Ring, Retaining 15mm	1
68	12003415	• Roll Pin	1

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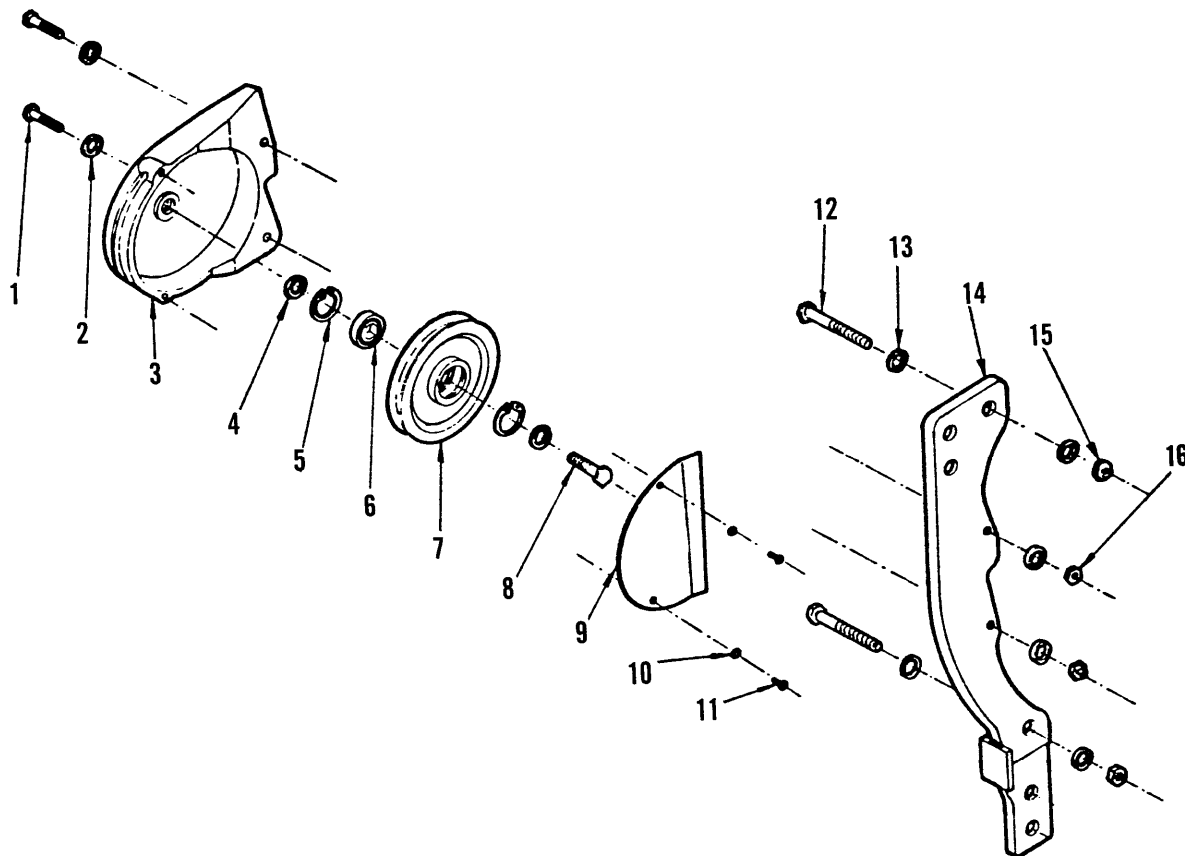
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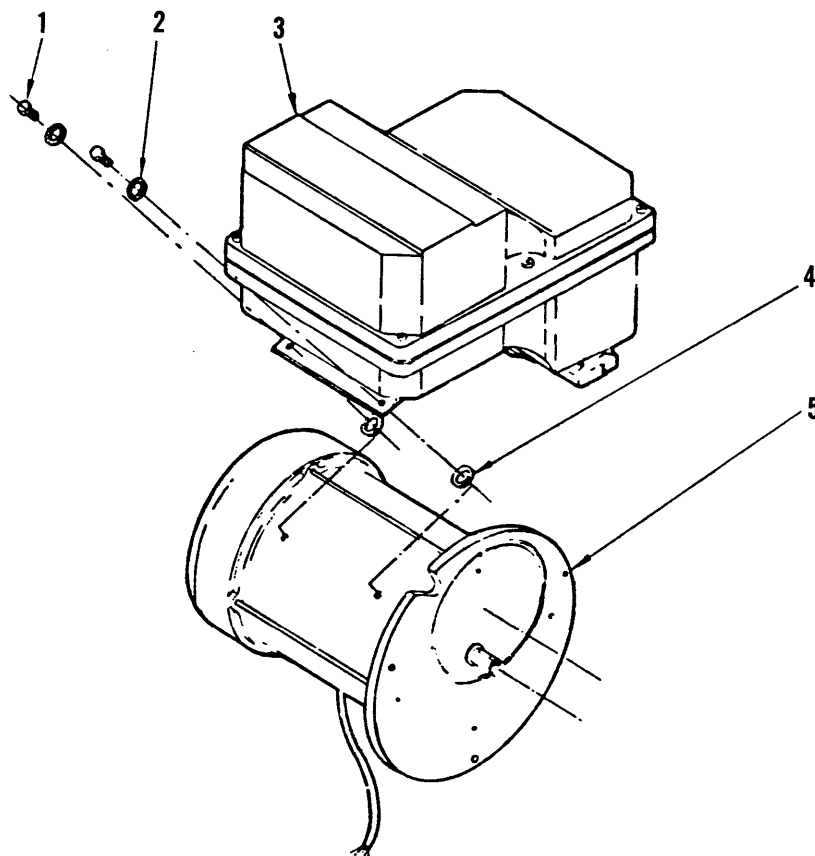
Fig. 10B - Stirrup Strap Ass'y. ALPHA HOIST
(P.N. 41009003)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	11001340	• Bolt	2
2	12000008	• Washer	4
3	41008032	• Pulley, Housing	1
4	41008031	• Washer	2
5	12002128	• Ring, Retaining	2
6	26008540	• Ball Bearing	1
7	41008033	• Pulley	1
8	41008054	• Shaft	1
9	41008035	• Plate, Cover	1
10	12000405	• Washer	2
11	11004110	• Screw	2
12	11001570	• Bolt	2
13	12000012	• Washer	4
14	41008165	• Stirrup Strap	1
15	12005512	• Nut, Self Locking	2
16	12005508	• Nut, Self Locking	2

ALPHA HOIST

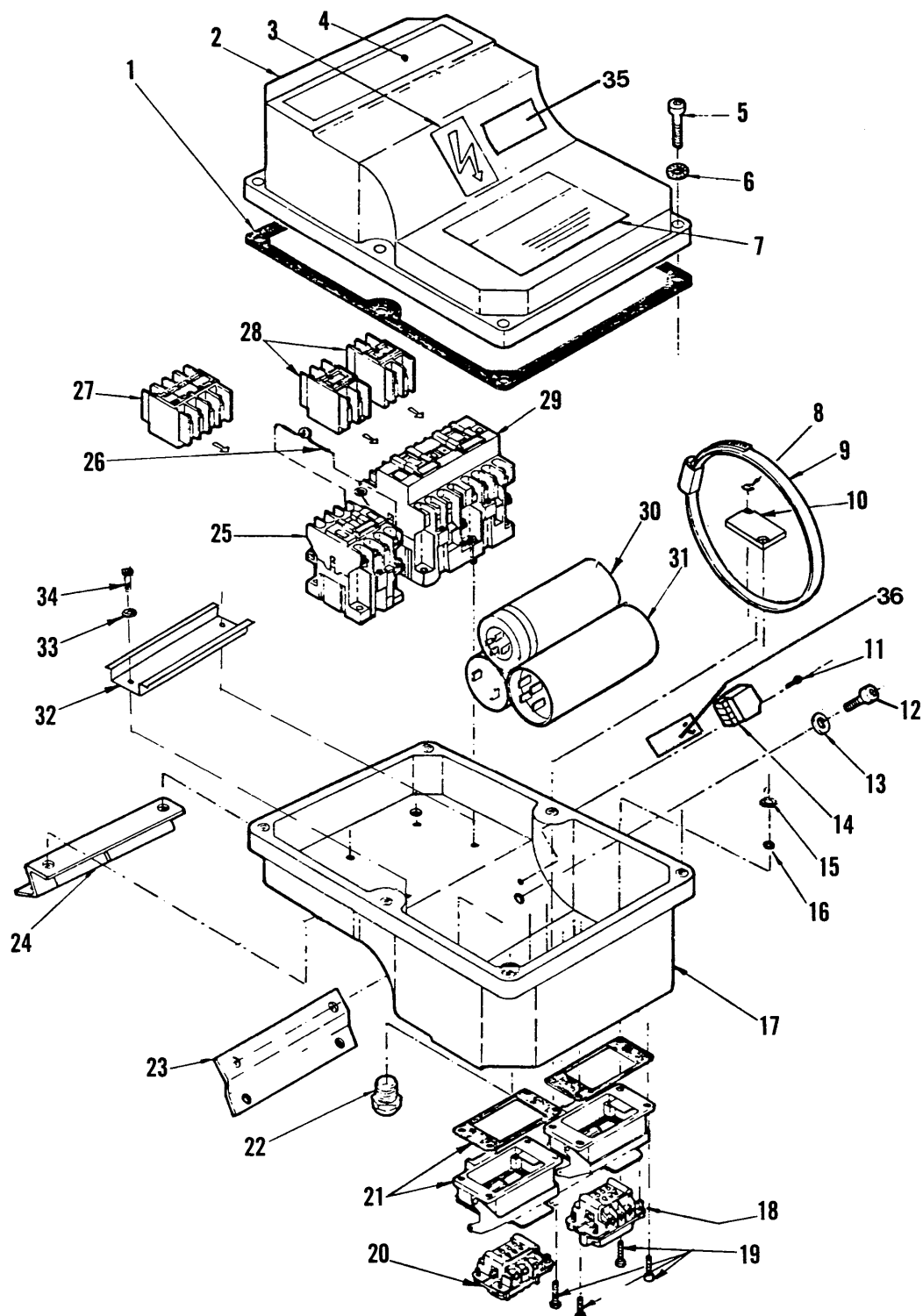
Fig. 11 - Motor Unit, Single Phase (P.N. 41023607)



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	11000312	• Bolt	4
2	12000408	• Washer	4
3	41023605	• Box, Electric 220V/60Hz - (refer fig. 12 for details)	1
4	12001933	• Washer, Polymide	4
5	41023603	• Motor, Electric Single Phase 220V60Hz - (refer Fig.13)	1

Fig. 12 - Electric Box
(P.N. 41023605)

ALPHA HOIST



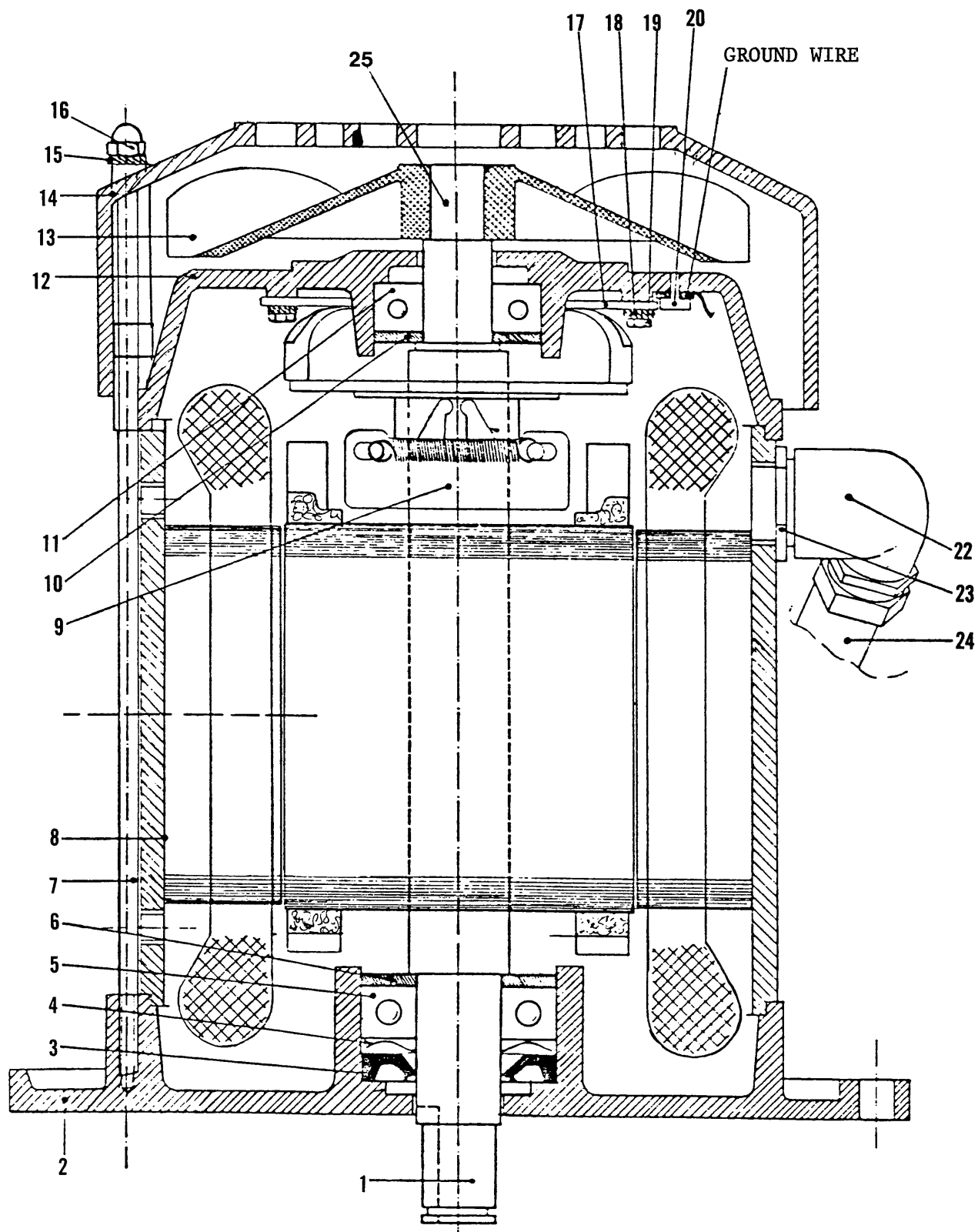
ALPHA HOIST

Fig. 12 - Electric Box (P.N. 41023605)

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	41008104	• Gasket	1
2	41008102	• Cover	1
3	12009102	• Decal	1
4	102-372	• Decal	1
5	11002230	• Bolt	6
6	12000406	• Lockwasher	6
7	102-374	• Decal - "Sky Climber"	1
8	12005004	• Nut	2
9	54008258	• Clamp, Capacitor	1
10	41008177	• Support, Capacitor Clamp	1
11	13000023	• Screw	1
12	11002320	• Bolt	4
13	12001933	• Washer, Polymide	4
14	53008740	• Rectifier, 220Vac/96Vdc	1
15	12005004	• Nut	3
16	12000404	• Lockwasher	3
17	41008166	• Bottom, Electrobox	1
18	53008717	• Plug, Male	1
19	11004020	• Screw	8
20	53008718	• Plug, Female	1
21	53008720	• Plug Housing with Gasket	2
22	53008752	• Fitting, Cable T & B 7363 PE-16	1
23	41008158	• Support Motorbox	1
24	41008159	• Support Motorbox	1
25	53008418	• Contactor, LC1-D123M-A60	1
26	41009114	• Varistor Unit	1
27	53008425	• Contactbloc LA1-D22	1
28	53008417	• Contactbloc LA1-D11	2
29	53008426	• Contactor CA2-DK122M-A60	1
30	53008476	• Capacitor 40mF/360V	2
31	53008477	• Capacitor 100mF/320V	1
32	53008219	• Symmetric Rail	16
33	12005004	• Lockwasher	2
34	11004020	• Screw	2
35	102-242	• U.L. Decal	1
36	500-60	• Insulator	1

**Fig. 13 - Electric Motor, Single
Phase (P.N.41023603)**

ALPHA HOIST



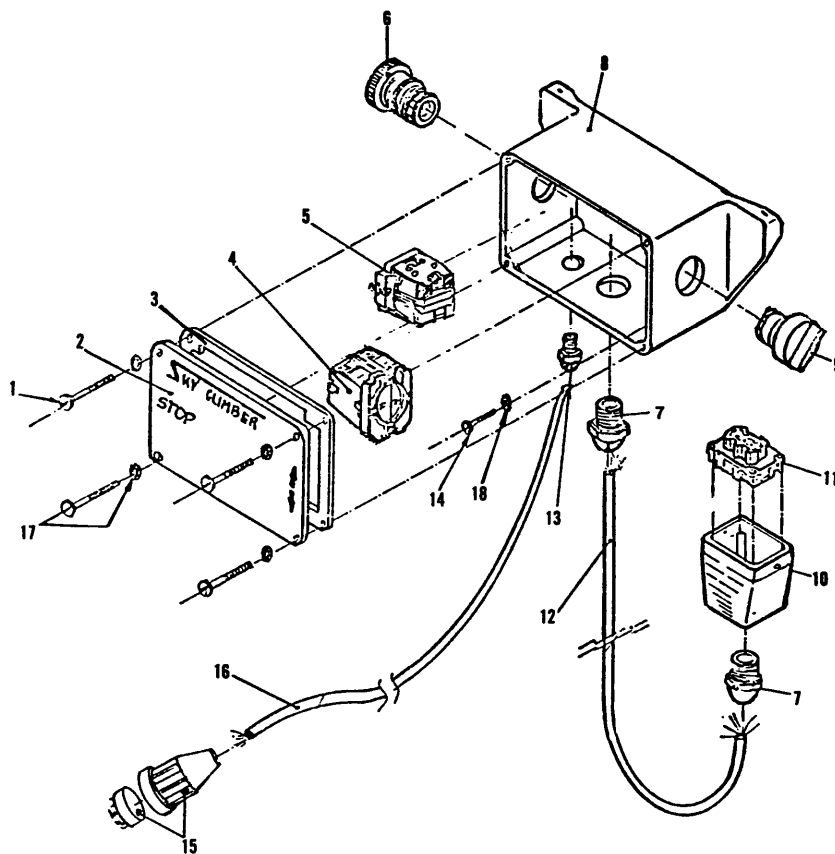
ALPHA HOIST

Fig. 13 - Electric Motor, Single Phase (P.N.41023603)

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	41009119	• Rotor and Shaft for Single Phase Motor	1
2	41008116	• Flange, Front	1
3	52008280	• Seal	1
4	41008115	• Washer, Spring	1
5	26008556	• Ball Bearing	1
6	41008114	• Washer	1
7	41008161	• Thru Bolt	4
8	41009120	• Stator and Housing 230V60Hz	1
9	41009121	• Centrifugal Mechanism for 60 Hz	1
10	41008114	• Washer	1
11	26008556	• Ball Bearing	1
12	41008160	• Flange, Rear	1
13	41008168	• Fan, Cooling (Alu)	1
14	41008109	• Cover, Cooling Fan	1
15	12000405	• Lockwasher	4
16	12005405	• Nut, Cap	4
17	41009115	• Switch, Centrifugal	1
18	12000404	• Lockwasher, Serrated	1
19	11000008	• Screw, Hexagon	2
20	11000008	• Screw, Hexagon	1
22	53008751	• Fitting, Elbow T & B - PE16	1
23	102-88-2	• Counternut PE16	1
24	53008756	• Tube, Protection	115m
25	12003536	• Roll Pin	1

Fig. 14 - Control Box
(P.N. 4120708)

ALPHA HOIST

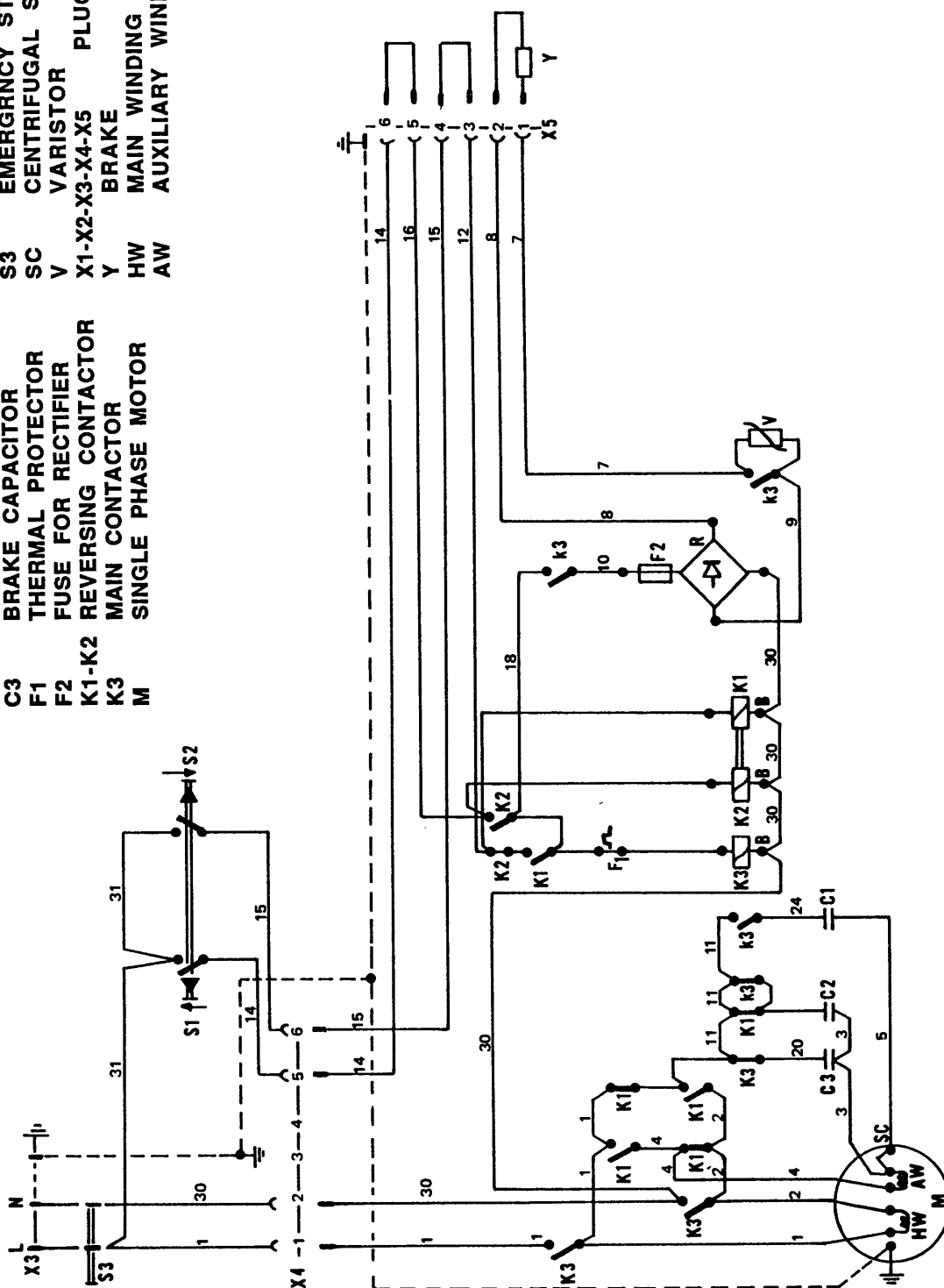


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	11004120	• Screw	4
2	41008133	• Cover	1
3	41008134	• Gasket	1
4	53008369	• Body, Switch	1
5	53008377	• Body, Push Button	1
6	53008363	• Push Button, Emergency	1
7	53008152	• Connector, Cord	2
8	41008132	• Box	1
9	53008368	• Head, Switch	1
10	53008684	• Plug, Housing	1
11	53008718	• Plug Body, Female	1
12	53008042	• Cable, Electric	A/R
13	53008152	• Connector, Cord	1
14	11004010	• Screw	1
15	102-92-1	• Plug, Male	1
	102-94-1	• Cover, Plug	1
16	53008041	• Cable, Electric	A/R
17	12000405	• Washer	4
18	12000404	• Washer	1

ALPHA HOIST

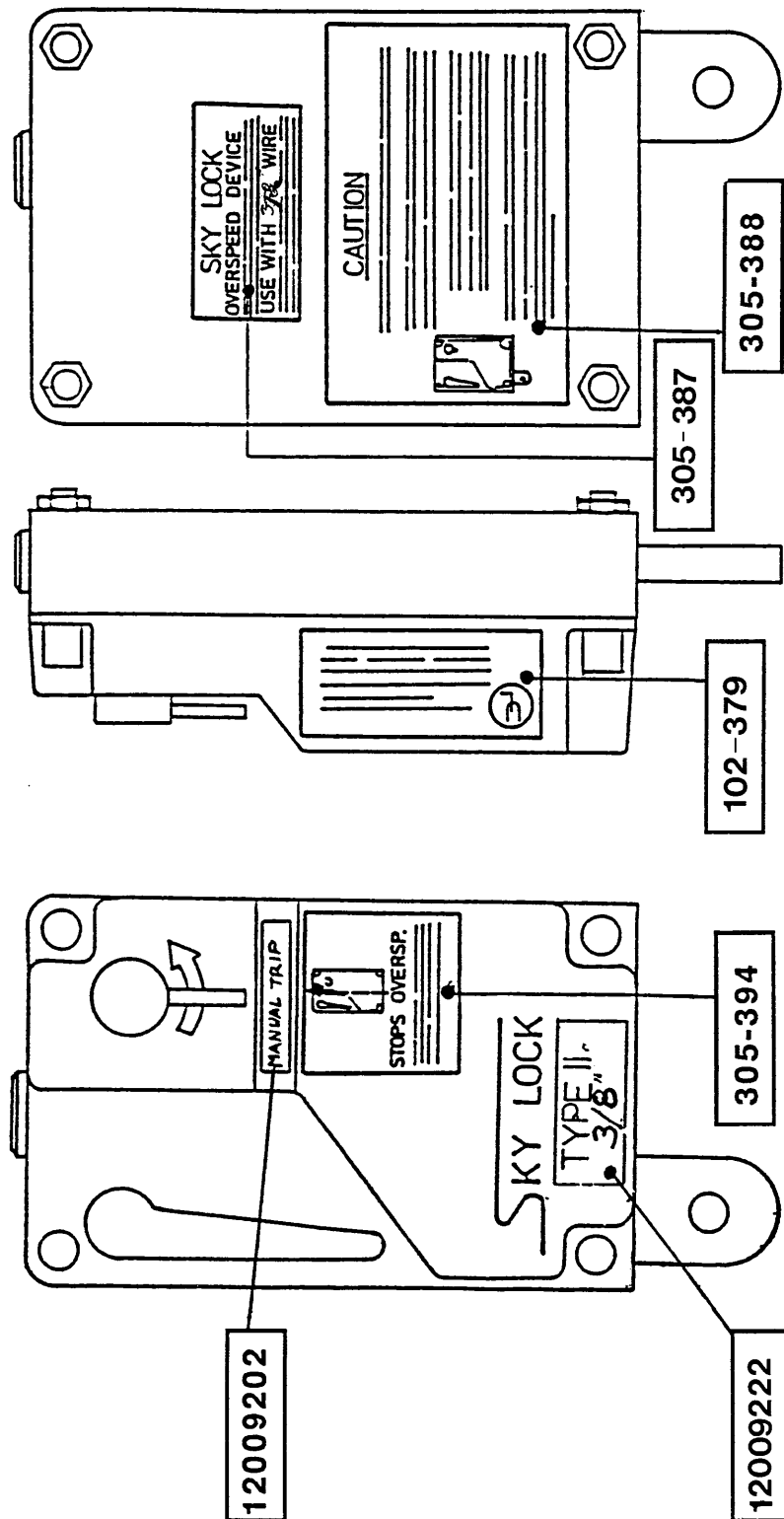
Fig. 15 - Wiring Diagram,
Single Phase 220V/60Hz Individual
Control Pendant (Standard)

- | | | | |
|-------|---------------------|----------------|---------------------|
| C1 | STARTING CAPACITOR | R | RECTIFIER |
| C2 | RUNNING CAPACITOR | S1-S2 | PUSH BUTTON UP-DOWN |
| C3 | BRAKE CAPACITOR | S3 | EMERGENCY STOP |
| F1 | THERMAL PROTECTOR | SC | CENTRIFUGAL SWITCH |
| F2 | FUSE FOR RECTIFIER | V | VARIATOR |
| K1-K2 | REVERSING CONTACTOR | X1-X2-X3-X4-X5 | PLUGS |
| K3 | MAIN CONTACTOR | Y | BRAKE |
| M | SINGLE PHASE MOTOR | HW | MAIN WINDING |
| | | AW | AUXILIARY WINDING |



**Fig. 16 - Sky Lock Type II
Decal Placement**

ALPHA HOIST



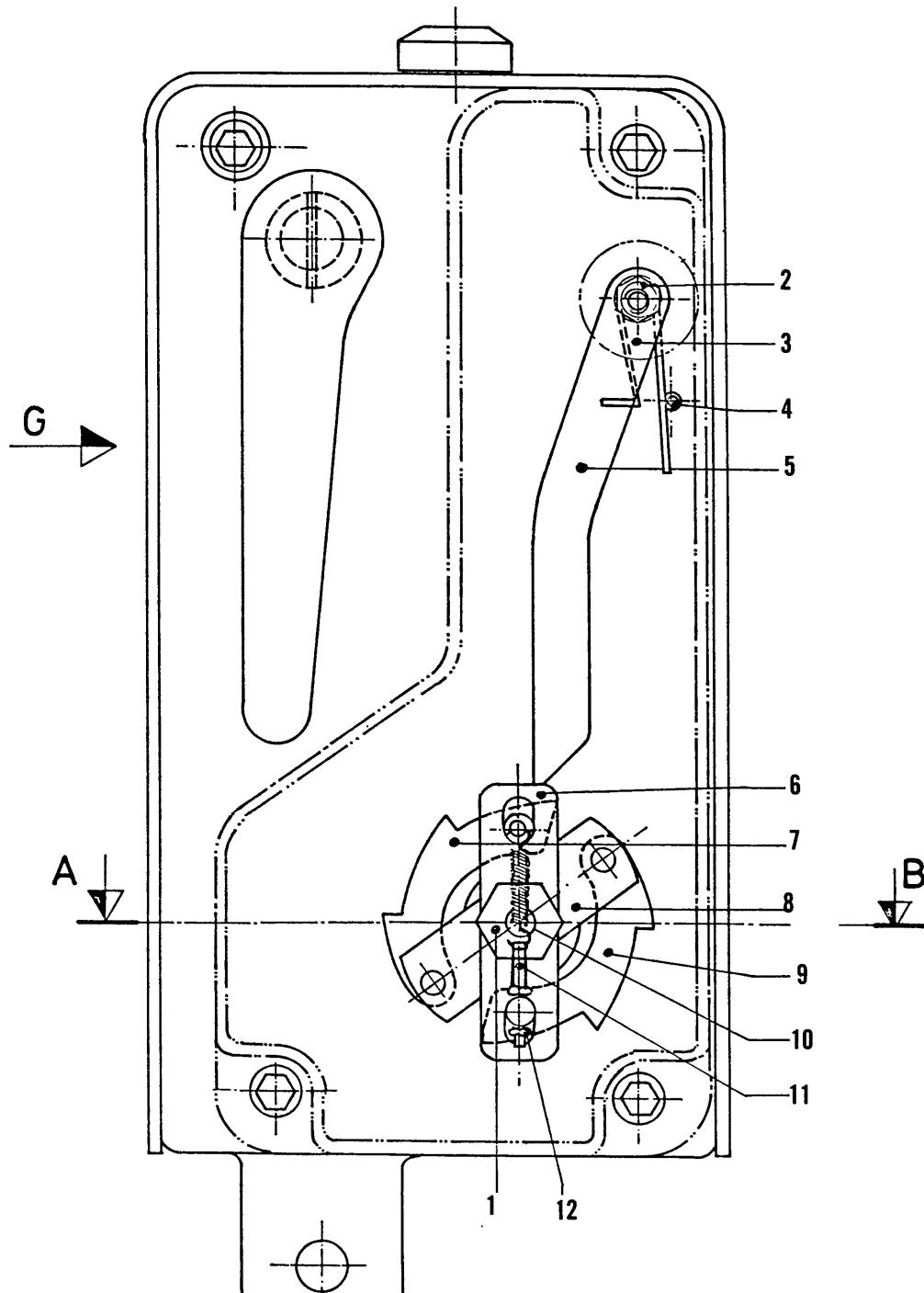


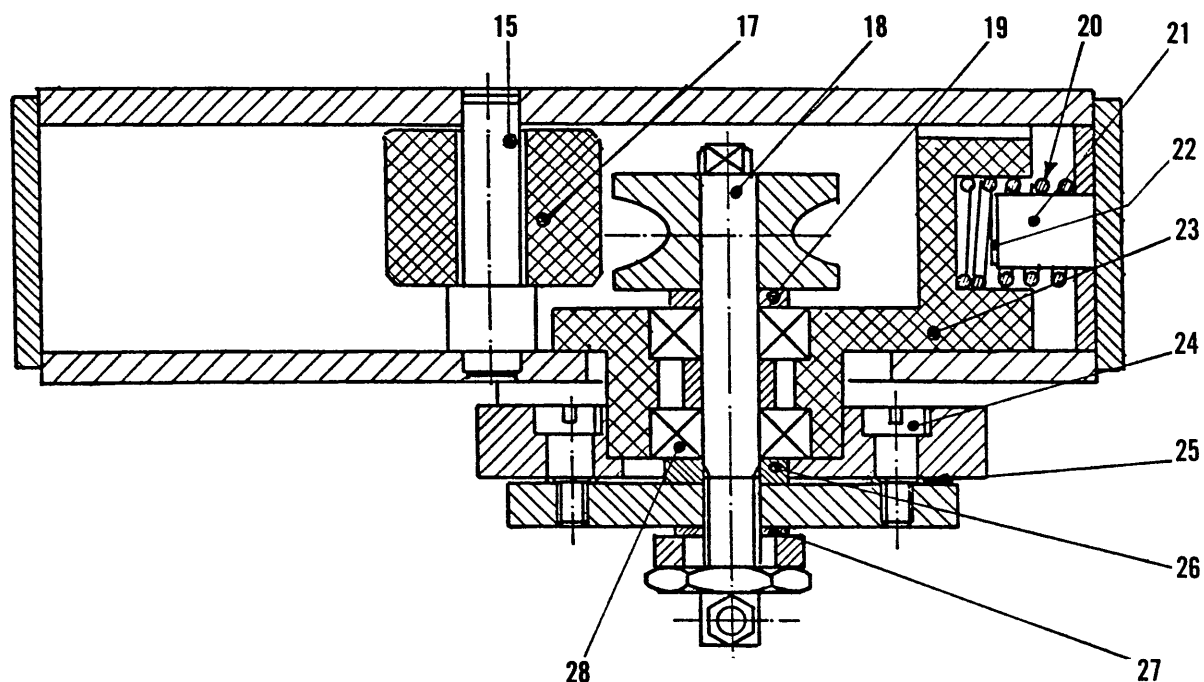
Fig. 18 - Sky Lock Top Ass'y.
(P.N. 56009826)

ALPHA HOIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	56008820	• Nut, Lock	1
2	13000163	• Nut	1
3	56008888	• Spring, Trip Lever	1
4	13000487	• Roll Pin	1
5	56008810	• Lever, Trip	1
6	56008813	• Guide, Speed Sensor	1
7	56009814	• Ass'y. A - Centrifugal Weight	1
8	56008815	• Plate, Speed Sensor	1
9	56009815	• Ass'y. B - Centrifugal Weight	1
10	56008817	• Spring, Speed Sensor	1
11	56008818	• Set Screw, Spring	1
12	13000151	• Nut	2

ALPHA HOIST

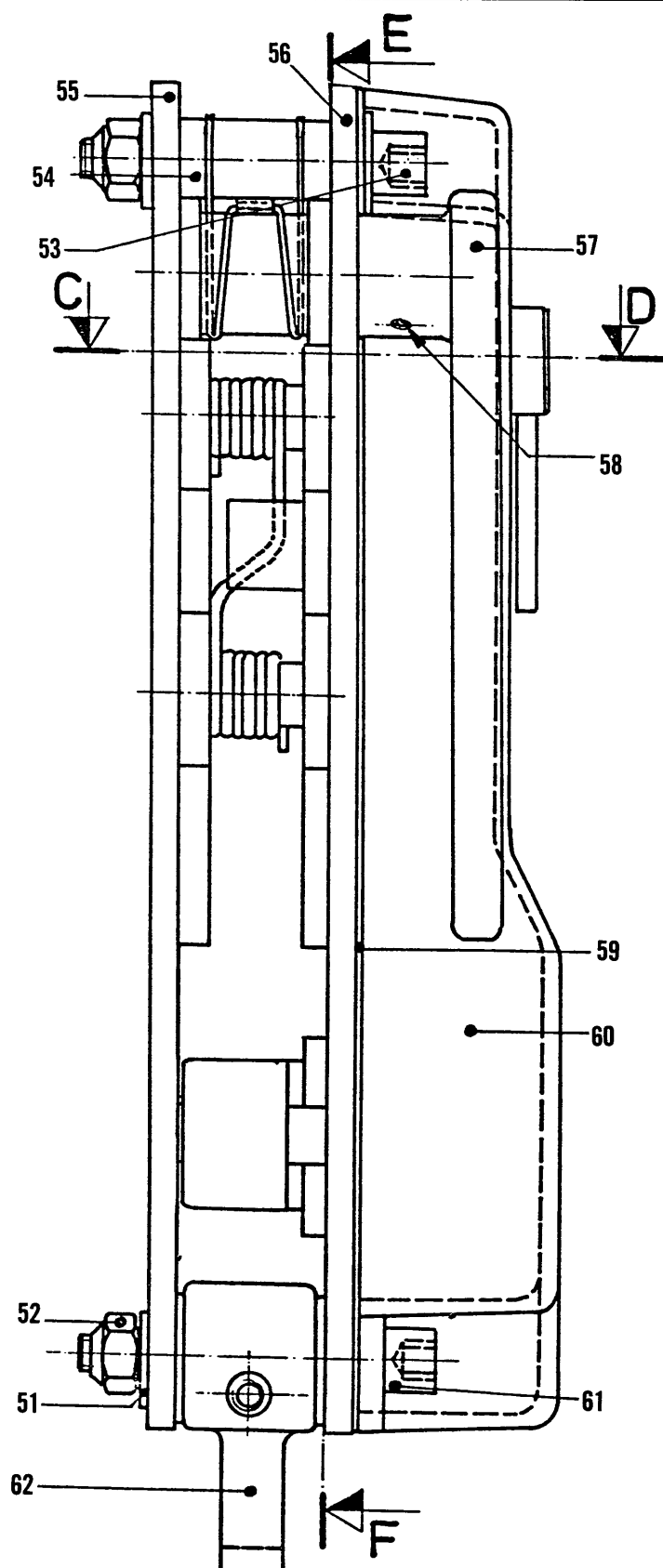
**Fig. 17 - Sky Lock,
Section A-B (see page 23)**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
15	56008872	• Wheel, Axle Pressure	1
17	56008900	• Wheel, Pressure	1
18	56009802	• Sensor, Ass'y. Wheel	1
19	56008891	• Washer, Special	1
20	56008854	• Spring, Trip Mechanism	1
21	56008908	• Bracket	1
22	56008892	• Ring, Distance	1
*23	56008865	• Housing, Trip Mechanism	1
24	56008832	• Bolt, Special	2
25	13000097	• Washer	2
26	56008891	• Washer, Special	1
27	13000098	• Washer	1
28	26008525	• Bearing	2
*	56009825	Housing, Trip Mechanism w/Bearings & Distance Washer (Items 23, 22, & 2 X 28)	

Fig. 19 - Sky Lock, View G
(See page 23)

ALPHA HOIST



ALPHA HOIST

Fig. 19 - Sky Lock, View G

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
51	13000079	• Washer	5
52	13000163	• Nut	4
53	13000509	• Screw	1
54	56008846	• Tube, Distance	1
54A	56008961	• Tube, Distance	3
55	56008898	• Plate, Rear	1
56	56008899	• Plate, Front	1
57	56008849	• Lever, Reset	1
58	13000487	• Roll Pin	1
59	56008912	• Cover, Gasket	1
60	56008911	• Cover	1
61	13000510	• Screw	3
62	56008925	• Fitting, Lower	1