



SWITCHGEAR

RENEWAL PARTS ORDERING GUIDE

**TYPES MA-75C1, MA-250C1, and MA-350C1 5KV
AIR MAGNETIC CIRCUIT BREAKERS
WITH 515-1 STORED
ENERGY OPERATORS**

HOW TO USE YOUR RENEWAL PARTS ORDERING GUIDE

1. Locate the part or parts to be replaced in one of the drawings in this manual. Refer to the usage code table on page ii for drawings applicable to your breaker.
2. Identify each part by item number, description and part number. Give drawing figure number in which part is shown.
3. Include breaker type, rating and breaker serial number with your order.
4. Place order with your Allis-Chalmers representative.

ORDERING EXAMPLE

Type	<u>MA-250C1</u>	Rated Amps	<u>1200</u>	Serial Number	<u>H-64203A-3</u>
Renewal Parts Ordering Guide	<u>18X5166-01</u>				
<u>Fig</u>	<u>Item</u>	<u>Description</u>	<u>Part Number</u>	<u>Quantity</u>	
1	3	Barrier Assembly	71-118-091-002	1	
1	34	Angle	71-114-834-001	2	
2	2	Contact Assembly	71-112-913-502	1	

If required part is not identified in this manual — — —

1. Make a copy of the drawing figure in which the part would appear.
2. Indicate with arrows or other markings location of part.
3. Describe or sketch required part.
4. Include breaker type, rating and breaker serial number with your order.
5. Place order with your Allis-Chalmers representative.

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ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
01	MA-75-150 1200 Amp	71-401-833-501	A	20	Washer	71-916-992-002	
	MA-250 1200 Amp	71-401-833-502	B	21	Block	18-657-824-250	
	MA-250 1200 Amp	71-401-833-515	C	22	Plate	71-112-911-001	
	80 KA			23	Spacer	71-112-948-001	
	MA-250 1200/2000	71-401-833-511	D	24	Barrier	71-112-971-001	
	Amp			25	Bar	71-113-038-001	
	MA-250 2000 Amp	71-401-833-504	E	26	Spacer	71-113-101-001	A
	MA-250 2000 Amp	71-401-833-516	F	27	Strip	71-113-681-001	
	80 KA			28	Strip	71-114-147-001	
1	Contact Assembly	71-112-966-502	BCDEF	29	Insulation	71-114-148-001	
		71-112-966-501	A	30	Support	71-114-547-001	
2	Contact Assembly	71-112-913-502	BCDEFHI	31	Washer	71-152-809-030	
		71-112-913-501	A	32	Washer	71-158-647-015	
3	Contact Assembly	71-112-913-503	BCDEFHI	33	Belville Washer	71-140-901-001	
4	Top Stud Ass'y.	71-208-214-506	EFI	34	Washer	71-167-537-001	
		71-208-214-509	C	35	Tubing	71-172-682-010	
		71-208-214-505	B	36	Washer	71-177-196-003	
		71-208-214-510	D	37	Spring	72-120-400-001	
		71-208-214-504	A	38	Channel Assembly	18-657-377-501	
5	Lower Stud Ass'y.	71-209-087-501	EFI	39	Roll Pin	00-671-176-350	
		71-208-831-501	AB	40	Screw	00-615-114-432	A
		71-209-087-504	C	41	Screw	00-615-114-438	CDEF
		71-209-087-502	D	42	Screw	00-615-114-440	B
6	Disc Arm Ass'y.	71-208-255-511	DEFI	43	Nut	15-171-063-006	
		71-208-255-515	ABC	44	Screw	00-615-249-235	B
7	Disc Arm Ass'y.	71-208-255-512	DEFI	45	Washer	00-655-017-022	
		71-208-255-516	ABC	46	Screw	00-615-249-239	CDEF
8A	Contact Finger Ass'y.	18-657-372-501		47	Screw	00-615-261-231	A
8B	Contact Finger Ass'y.	18-657-372-505		48	Cotter Pin	00-671-195-119	A
9	Tube	71-115-598-001	DEF	49	Pin	00-957-211-902	A
		71-107-672-001	ABC	50	Screw	00-611-315-373	
10	Tube	71-115-598-002	DEF	51	Screw	15-611-318-428	
		71-107-672-010	ABC	52	Screw	00-611-315-461	
11	Spacer	71-107-716-001		53	Screw	15-611-318-556	ABC
12	Tubing	72-120-735-003	DEF	54	Screw	00-611-318-558	DEF
		72-120-735-001	A	55	Epoxy	00-331-531-014	CF
		72-120-735-002	B	56	Screw	00-611-375-227	
13	Plate	71-112-910-001		57	Nut	15-171-063-006	
14	Yoke	71-112-934-001	A	58	Nut	15-171-063-065	
		18-657-777-565	BCDEF	59	Nut	15-171-063-008	
15	Washer	71-177-196-005	A	60	Pin	00-671-176-350	
		71-114-701-001	BCDEF	61	Washer	00-651-007-900	
16	Tube	71-170-947-008	DEF	62	Washer	00-651-017-087	
		71-170-947-007	ABC	63	Washer	00-655-017-022	
17	Bracket	71-302-850-002	DE	64	Washer	00-655-017-026	
		71-302-850-001	AB	65	Washer	00-651-017-913	
		71-302-850-010	F	66	Screw	00-611-315-490	
		71-302-850-009	C	67	Nut	15-171-063-011	
18	Spacer	71-107-716-010		68	Washer	00-651-007-230	
19	Rod	71-107-724-001		69	Washer	00-651-017-913	

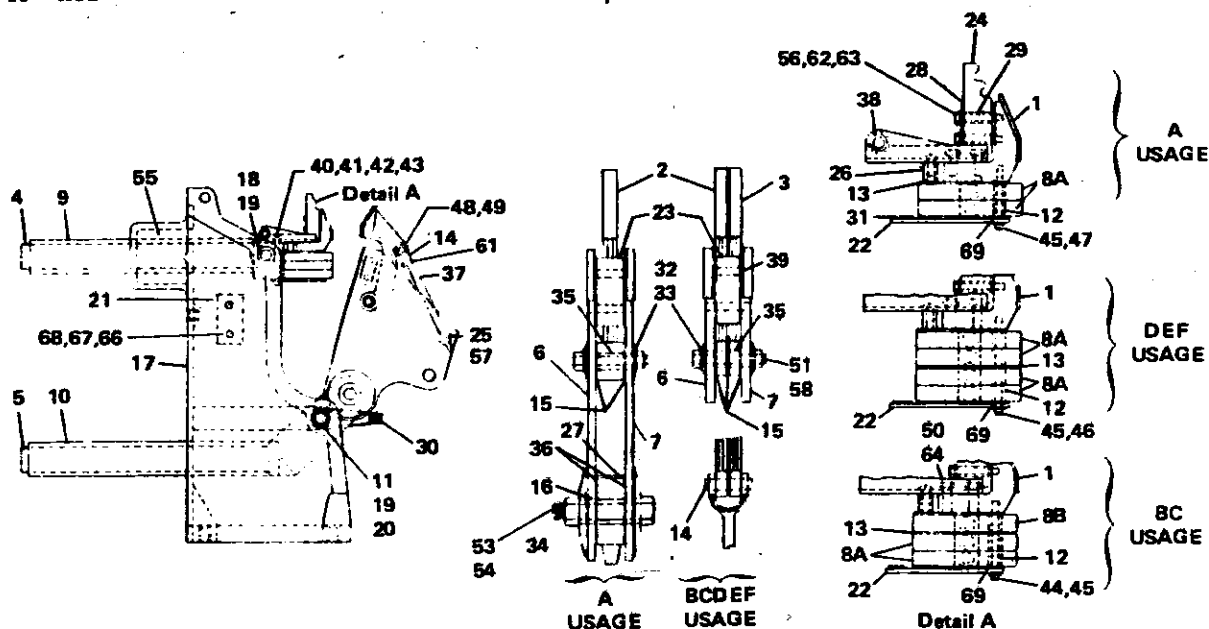


Figure 2. Stud and Support Assembly — Codes A through F (See Code Table, page ii)

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Arc Chute Ass'y.	71-401-835-501	ABCDEF	16	Rear Coil	71-208-860-001	
		71-461-835-502		17	Front Coil	71-208-861-001	
2	Plate	18-657-575-090		18	Support	71-210-601-003	
3	Pole Piece	71-114-575-501		19	Channel	71-302-881-001	
4	Core	71-200-806-503		20	Channel	71-302-881-002	
5	Barrier Stack	71-208-818-502		21	Screw	00-615-662-900	
6	Block	71-114-476-001		22	Barrier	71-114-528-501	A
7	Arc Runner	71-114-577-001				18-394-426-509	BCDEF
8	Screw	71-114-586-001		23	O-Ring	15-751-551-001	Effective
9	Block	71-115-470-001		24	Nut	00-633-039-210	2-1-75
10	Pin	71-115-471-001		25	Adhesive	15-333-031-001	
11	Tape	71-115-472-001		26	Arrow Label	15-171-120-004	
12	Washer	71-170-790-006		27	Screw	00-611-315-397	
13	Insulation	71-176-201-002		28	Nut	15-171-063-004	
14	Shield	71-208-812-001		29	Washer	00-651-007-146	
15	Bracket	71-208-817-001		30	Cement	00-331-121-063	
				31	Tape	00-479-411-900	

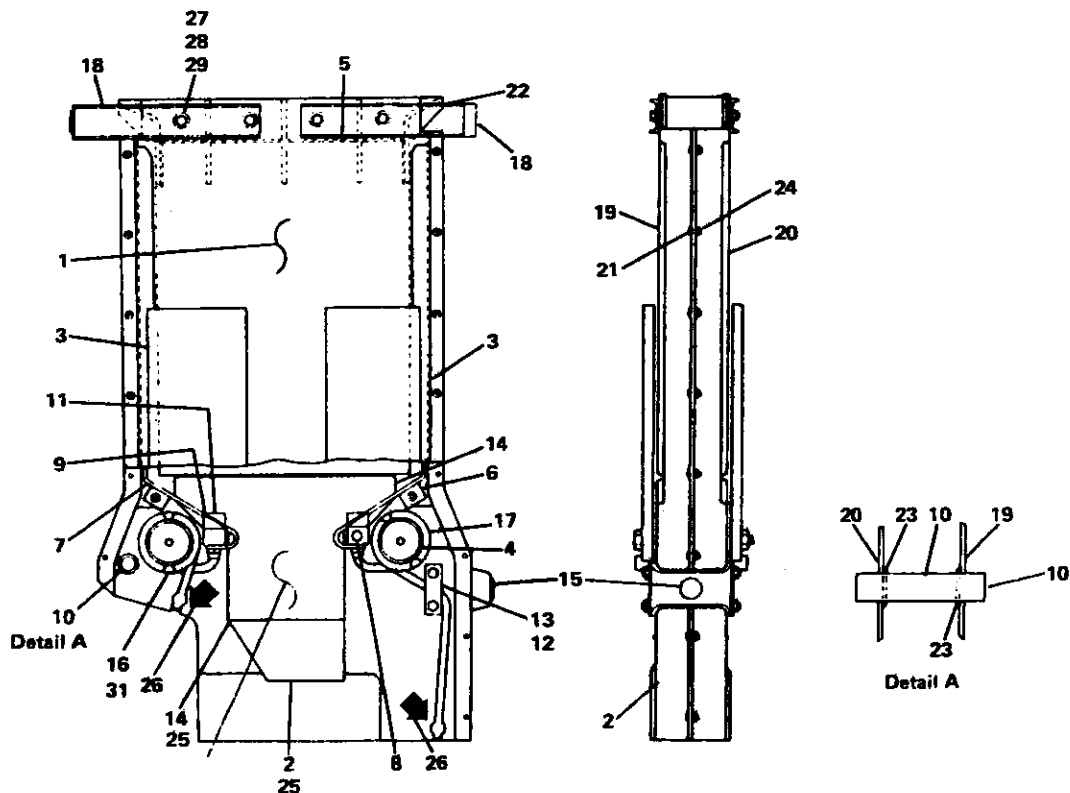


Figure 3. Type MA-75C1 and MA-250C1 Arc Chute Assembly — Codes A through F (See Code Table, page ii)

ITEM DESCRIPTION FOR FIGURE 4.

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Frame & Operator Assembly	18-468-553-502	FHIK	47	Cotter Pin	00-671-195-049	
		18-468-553-501	ABDEC	48	Screw	00-617-499-421	
2	Operator Assembly	18-657-514-597		49	Yoke	00-615-114-542	
3	Pad	71-116-231-002	FHIK	50	Yoke	00-691-701-903	
4	Washer	71-163-273-002	FHIK	51	Crank Assembly	18-724-395-501	
5	Guide Assembly	71-208-910-501		52	Ball Joint	00-833-573-003	
6	Piston Assembly	71-114-161-503		54A	Nut	15-171-063-006	
7	Guide Assembly	71-114-765-501		55	Aux. Switch	71-208-922-505	
8	Grounding Contacts	71-114-787-502		56	Channel	72-120-062-001	
9	Bracket Assembly	71-116-800-501		57	Clamp	15-171-386-002	
10	Bracket Assembly	71-116-800-502		59	Clamp	00-857-271-105	
11	Clamp	15-171-070-002		60	Cement	00-331-121-063	
12	Foot Pedal Assembly (Includes items 63 & 69)	72-120-586-501		61	Clamp	15-171-070-001	
13	Pin	71-104-754-034		62	Spring	71-113-502-001	
14	Rod	72-120-688-001		63	Switch	00-871-351-107	
15	Plunger	71-113-442-001		64	Cover	72-120-228-001	
16	Yoke End	71-113-487-001		65	Shim	71-108-654-006	
17	Rod End	71-113-541-001		66	Screw	00-615-114-384	
18	Spring	71-113-621-001		67	Washer	71-152-809-012	
19	Cup	71-114-151-002		68	Nut	15-171-063-004	
20	Compression Spring	71-114-153-001		69	Bracket	72-220-073-001	
21	Bumper	71-114-154-001		70	Crank Assembly	18-723-507-501	
22	Cylinder	71-114-155-003		71	Nut	00-631-003-204	
23	Packing	71-114-156-001		72	Nut	00-633-025-216	
24	Spring	71-114-733-001		73	Spring	71-204-604-028	
25	Stop	71-114-749-002		74	Pull Rod	18-657-522-262	
26	Link	71-114-752-001		75	Nut	00-855-759-104	
27	Tube	71-114-860-002		76	Flex Shaft Support	18-652-523-335	
28	Bracket	71-114-786-001		77	Sec. Disconnect Ass'y.	72-120-237-501	
30	Valve Disc	71-115-244-001		78	Washer	71-152-908-002	
31	Guard	71-118-452-001		79	Roll Pin	00-671-176-189	Assembly 18-723-584-502
32	Compression Spring	71-140-125-001		80	Roller	72-120-706-001	
33	Pin	18-657-229-290		81	Bolt	00-611-343-030	
34	Pin	15-171-497-001		82	Nut	00-633-025-220	
35	Rivet	00-671-501-030		83	Bracket	18-723-506-001	
36	Indicator	72-120-190-001		84	Push Rod	18-723-509-503	
37	Bracket	18-657-491-589		85	Pin	00-957-211-901	
38	Roll Pin	00-671-176-377		86	Pin	00-671-195-119	
39	Rod	72-120-594-001		87	Yoke End Adj.	00-691-701-901	
40	Wheel	15-171-067-002		88	Pin	00-671-195-049	
41	Eye End	00-691-713-102		89	Pin	00-957-221-010	
42	Bar	72-120-689-001		90	Pin	00-671-195-119	
43	Screw	00-615-055-428	HIK	91	Link	18-657-767-327	
45	Lever Assembly	18-657-765-575		92	Pin	15-171-181-002	
46	Nut	00-631-003-204		93	Pull Rod	18-657-522-262	
				94	Rod	71-109-216-019	
				95	Rod	72-120-329-001	

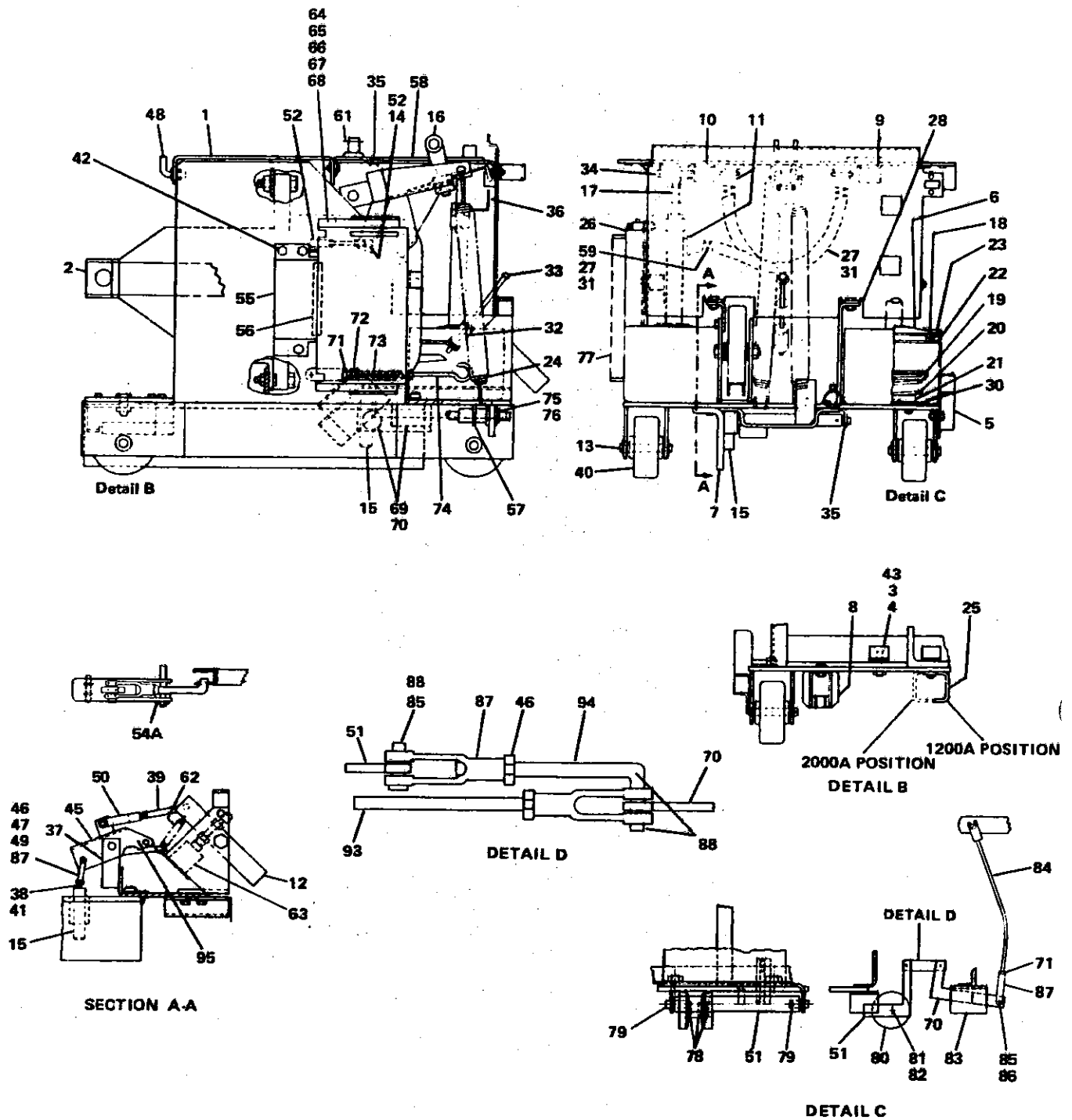


Figure 4. Type MA-75C1, MA-250C1 and MA-350C1 Stored Energy Operator and Frame Assembly – Codes A through K (See Code Table, page ii)

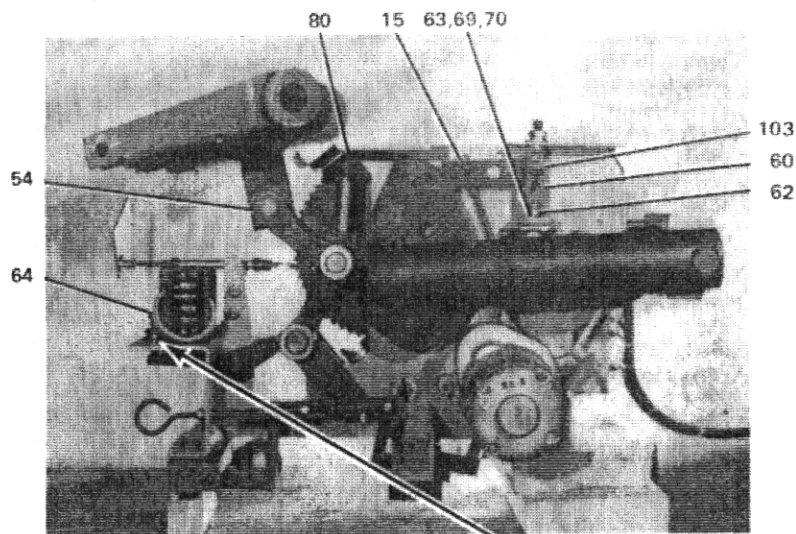
ITEM DESCRIPTION FOR FIGURE 5.

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Frame Assembly	18-469-102-501		75	Lockwasher	00-655-047-060	
2	Needle Bearing	00-813-119-810		80	Chain Link	00-831-349-065	
3	Needle Bearing	00-813-119-814		81	Pin	18-657-464-105	
4	Needle Bearing	00-813-119-821		82	Retaining Ring	00-673-165-075	
5	Pawl Assembly	18-657-485-536		83	Washer	71-152-809-026	
6	Stop Bracket Ass'y.	18-657-816-564		84	Radius Arm	18-390-227-501	
7	Shaft	18-657-467-291		85	Stop	18-657-464-118	
8	Slit Spacer	18-657-800-113		86	Washer	00-655-067-200	
9	Collar	18-657-467-290		87	Check Switch Mtg.	18-395-321-801	
10	Inner Race**	18-657-467-335			Reclose Duty		
11	Spacer	18-158-935-009		88	Grease	00-337-131-001	
12	Thrust Washer	00-815-225-131		89	Grommet	00-691-872-130	
13	Needle Bearing	15-813-119-003		90	Spring Retainer	18-657-523-038	
14	Pin	18-657-463-368		91	Shaft	18-657-463-369	
15	Stop Latch	18-657-463-388		92	Drive Block	18-657-465-170	
16	Trip Latch	18-657-463-390		93	Bearing Block	18-657-463-370	
17	Pin	18-657-464-012		94	Spring	15-171-331-001	
18	Pin	18-657-523-064		96	Retaining Ring	00-673-165-100	
19	Shaft	18-657-463-389		97	Retaining Ring	00-673-165-087	
20	Motor*	18-469-223		98	Shim	18-657-784-007	
21	Charge Disc. Actuator	18-657-522-305		99	Screw	00-615-114-556	
22	Bracket	18-657-522-304		100	Flex. Shaft Assembly	18-657-768-377	
23	Interlock Rod	18-657-522-289		101	Roll Pin	00-671-176-185	
24	Roller Bearing	15-813-073-003		102	Clamp	15-171-386-002	
25	Torsion Spring	18-657-466-081		103	Washer	71-114-297-001	
26	Torsion Spring	18-657-466-080		104	Link	71-118-760-001	
27	Pawl Return Spring	18-657-229-240		105	Link	18-657-464-103	
28	Compression Spring	15-837-321-005		106	Roller	15-813-073-001	
29	Retaining Ring	00-673-165-062		107	Pin	18-657-464-104	
30	Spacer	18-158-935-011		108	Spring	18-657-523-331	
31	Adj. Screw	00-617-499-375		109	Washer	71-152-809-026	
32	Roll Pin	00-671-176-194		110	Spring Holder	18-657-523-332	
33	Roll Pin	00-671-176-325		111	Retaining Ring	00-673-165-075	
34	Roll Pin	00-671-176-383		112	Spring Anchor	18-657-523-333	
35	Roll Pin	15-671-173-002		113	Link	18-657-800-115	
36	Roll Pin	00-671-171-375		114	Needle Bearing	00-813-119-813	
37	Washer	18-657-522-303		115	Plate	18-723-641-001	
38	Washer	15-171-091-005		116	Terminal Block	00-857-036-012	
39	Screw	00-615-245-218		117	Microswitch*	15-171-323-001	
40	Lockwasher	00-655-017-022		118	Microswitch*	15-171-323-002	
41	Screw	00-611-315-392		119	Actuator Arm	18-657-522-355	
42	Washer	00-651-007-160		120	Shield	18-657-468-090	
43	Lockwasher	00-655-017-026		121	Extension Spring	18-657-523-061	
44	Elastic Stop Nut	00-633-025-116		122	Screw	00-615-471-130	
45	Jam Nut	00-631-143-104		123	Washer	00-655-047-060	
46	Roll Pin	00-671-176-373		124	Nut	14-147-052-002	
47	Roll Pin	00-671-171-379		125	Screw	00-617-247-470	
48	Spacer	18-657-523-278		126	Nut	00-631-171-106	
49	Flex Shaft Support	18-657-523-335		127	Washer	00-655-017-032	
50	Roll Pin	00-671-176-189		128	Washer	00-651-007-230	
51	Ratchet Assembly	18-390-202-501		129	Screw	00-615-471-124	
52	Cam Assembly	18-389-061-501		130	Screw	00-615-485-216	
53	Cam Assembly	18-389-061-502		131	Washer	00-655-017-022	
54	Linkage Assembly (Consists of items 104 to 113-138)			132	Washer	00-651-007-907	
55	Motor & Closing Control (See View "D")	18-390-246-501		133	Relay Anti-Pump	00-871-797-107	125V DC
56	Indicator Assembly	18-723-511-501				00-871-797-108	250V DC
58	Pin	18-724-690-003				00-871-797-109	48V DC
59						00-871-797-115	24V DC
60	Solenoid Trip Link Assembly	18-657-770-518		134	Washer	00-655-047-080	
62	Roll Pin	00-671-176-309		135	Screw	00-615-223-174	
63	Solenoid*	15-171-339		136	Relay	15-171-405-001	240V AC
64	Solenoid*	15-171-339				15-171-405-002	120V AC
66	Strip	18-657-467-239		137	Bumper	18-657-822-286	
67	Screw	00-615-223-172		138	Bearing	15-813-129-004	
68	Lockwasher	00-655-017-020		139	Washer	71-163-273-001	
69	Screw	00-615-245-222		140	Washer	71-140-443-001	
70	Lockwasher	00-655-017-022		141	Motor Cutoff Sw.	18-723-742-501	125V AC & DC
71	Screw	00-615-245-218				18-724-271-501	240V DC
72	Term. Block Supp. Bracket	18-657-524-111		143	Latch Check Relay (Reclose Duty Only)	18-471-853-*	
73	Term. Block	00-857-036-012		144	Capacitor Trip Device*	71-301-550-502	
74	Screw	00-615-471-124		145	Under Voltage Device (Reclose Duty)	18-395-369-501	

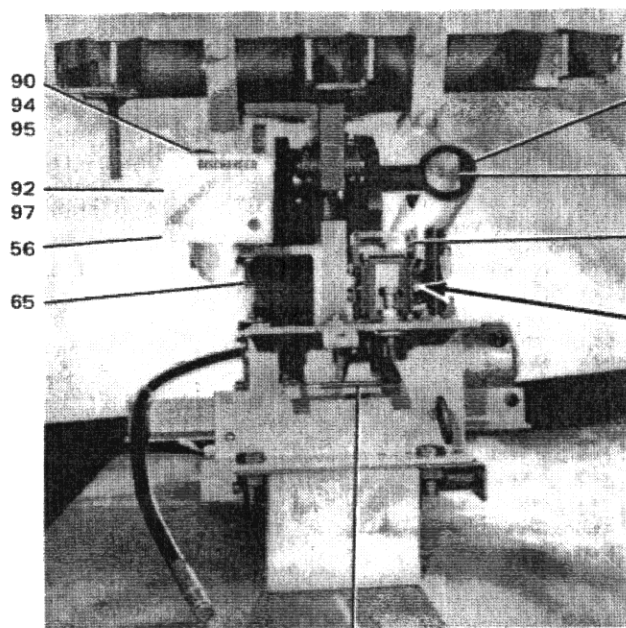
*Give breaker S/N and control voltage when ordering item.

**Must be supplied in pairs.

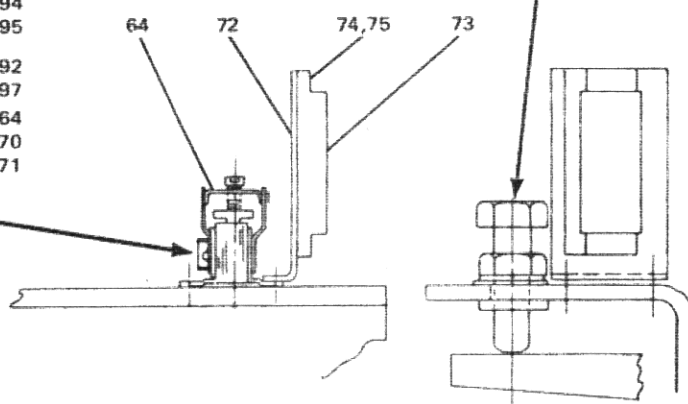
***Must be supplied as matched set.



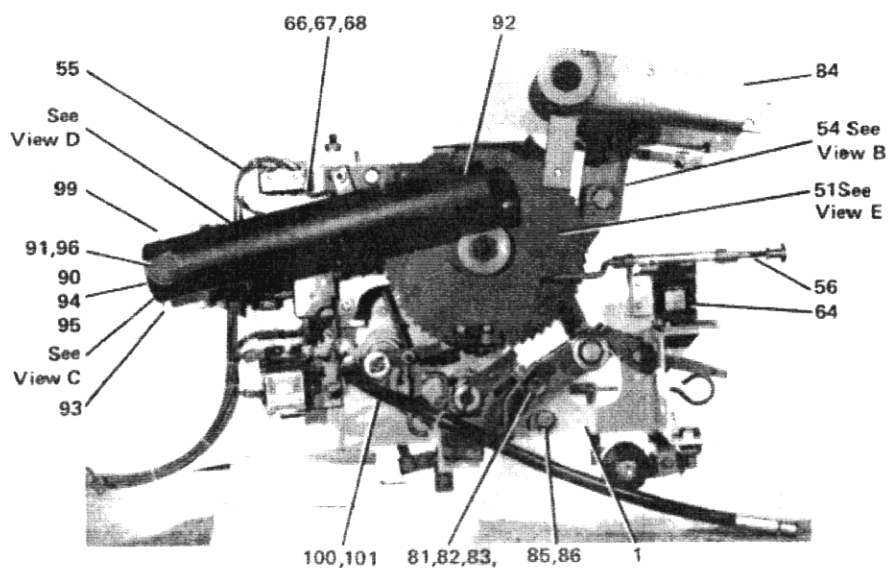
R.H. SIDE VIEW



FRONT VIEW



VIEW A



L.H. SIDE VIEW

Views B, C, D & E
Are Found on Following Pages

Figure 5. Type 515-1 Stored Energy Operator Assembly

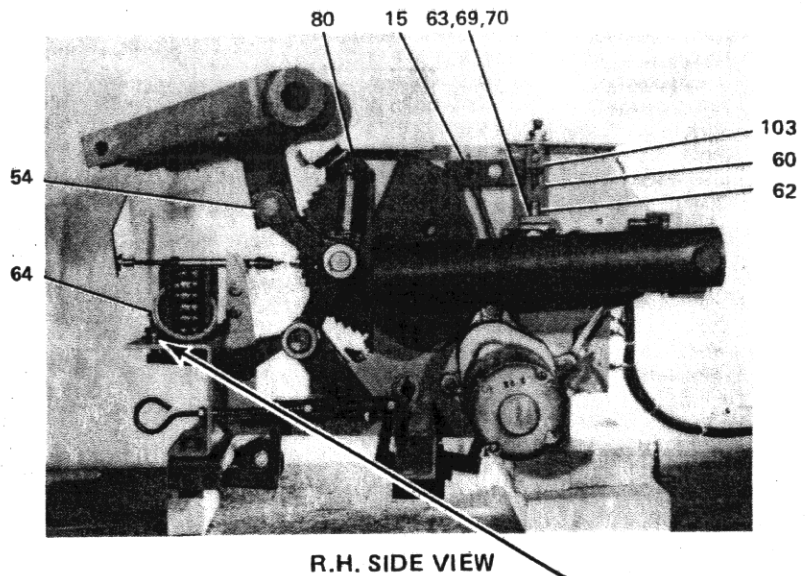
ITEM DESCRIPTION FOR FIGURE 5.

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Frame Assembly	18-469-102-501		75	Lockwasher	00-655-047-060	
2	Needle Bearing	00-813-119-810		80	Chain Link	00-831-349-065	
3	Needle Bearing	00-813-119-814		81	Pin	18-657-464-105	
4	Needle Bearing	00-813-119-821		82	Retaining Ring	00-673-165-075	
5	Pawl Assembly	18-657-485-536		83	Washer	71-152-809-026	
6	Stop Bracket Ass'y.	18-657-816-564		84	Radius Arm	18-390-227-501	
7	Shaft	18-657-467-291		85	Stop	18-657-464-118	
8	Slit Spacer	18-657-800-113		86	Washer	00-655-067-200	
9	Collar	18-657-467-290		87	Check Switch Mtg.	18-395-321-801	
10	Inner Race**	18-657-467-335			Reclose Duty		
11	Spacer	18-158-935-009		88	Grease	00-337-131-001	
12	Thrust Washer	00-815-225-131		89	Grommet	00-691-872-130	
13	Needle Bearing	15-813-119-003		90	Spring Retainer	18-657-523-038	
14	Pin	18-657-463-368		91	Shaft	18-657-463-369	
15	Stop Latch	18-657-463-388		92	Drive Block	18-657-465-170	
16	Trip Latch	18-657-463-390		93	Bearing Block	18-657-463-370	
17	Pin	18-657-464-012		94	Spring	15-171-331-001	
18	Pin	18-657-523-064		96	Retaining Ring	00-673-165-100	
19	Shaft	18-657-463-389		97	Retaining Ring	00-673-165-087	
20	Motor*	18-469-223		98	Shim	18-657-784-007	
21	Charge Disc. Actuator	18-657-522-805		99	Screw	00-615-114-556	
22	Bracket	18-657-522-304		100	Flex. Shaft Assembly	18-657-768-377	
23	Interlock Rod	18-657-522-269		101	Roll Pin	00-671-176-185	
24	Roller Bearing	15-813-073-003		102	Clamp	15-171-386-002	
25	Torsion Spring	18-657-466-081		103	Washer	71-114-297-001	
26	Torsion Spring	18-657-466-080		104	Link	71-118-760-001	
27	Pawl Return Spring	18-657-229-240		105	Link	18-657-464-103	
28	Compression Spring	15-837-321-005		106	Roller	15-813-073-001	
29	Retaining Ring	00-673-165-062		107	Pin	18-657-464-104	
30	Spacer	18-158-935-011		108	Spring	18-657-523-331	
31	Adj. Screw	00-617-499-375		109	Washer	71-152-809-026	
32	Roll Pin	00-671-176-194		110	Spring Holder	18-657-523-332	
33	Roll Pin	00-671-176-325		111	Retaining Ring	00-673-165-075	
34	Roll Pin	00-671-176-383		112	Spring Anchor	18-657-523-333	
35	Roll Pin	15-671-173-002		113	Link	18-657-800-115	
36	Roll Pin	00-671-171-375		114	Needle Bearing	00-813-119-813	
37	Washer	18-657-522-303		115	Plate	18-723-641-001	
38	Washer	15-171-091-005		116	Terminal Block	00-857-036-012	
39	Screw	00-615-245-218		117	Microswitch*	15-171-323-001	
40	Lockwasher	00-655-017-022		118	Microswitch*	15-171-323-002	
41	Screw	00-611-315-392		119	Actuator Arm	18-657-522-355	
42	Washer	00-651-007-160		120	Shield	18-657-468-090	
43	Lockwasher	00-655-017-026		121	Extension Spring	18-657-523-061	
44	Elastic Stop Nut	00-633-025-116		122	Screw	00-615-471-130	
45	Jam Nut	00-631-143-104		123	Washer	00-655-047-060	
46	Roll Pin	00-671-176-373		124	Nut	14-147-052-002	
47	Roll Pin	00-671-171-379		125	Screw	00-617-247-470	
48	Spacer	18-657-523-278		126	Nut	00-631-171-106	
49	Flex Shaft Support	18-657-523-335		127	Washer	00-655-017-032	
50	Roll Pin	00-671-176-189		128	Washer	00-651-007-230	
51	Ratchet Assembly	18-390-202-501		129	Screw	00-615-471-124	
52	Cam Assembly	18-389-061-501		130	Screw	00-615-485-216	
53	Cam Assembly	18-389-061-502		131	Washer	00-655-017-022	
54	Linkage Assembly (Consists of items 104 to 113-138)			132	Washer	00-651-007-907	
55	Motor & Closing Control (See View "D")	18-390-246-501		133	Relay Anti-Pump	00-871-797-107	125V DC
56	Indicator Assembly	18-723-511-501				00-871-797-108	250V DC
58	Pin	18-724-690-003				00-871-797-109	48V DC
59						00-871-797-115	24V DC
60	Solenoid Trip Link Assembly	18-657-770-518		134	Washer	00-655-047-080	
62	Roll Pin	00-671-176-309		135	Screw	00-615-223-174	
63	Solenoid*	15-171-339		136	Relay	15-171-405-001	240V AC
64	Solenoid*	15-171-339				15-171-405-002	120V AC
66	Strip	18-657-467-239		137	Bumper	18-657-822-286	
67	Screw	00-615-223-172		138	Bearing	15-813-129-004	
68	Lockwasher	00-655-017-020		139	Washer	71-163-273-001	
69	Screw	00-615-245-222		140	Washer	71-140-443-001	
70	Lockwasher	00-655-017-022		141	Motor Cutoff Sw.	18-723-742-501	125V AC & DC
71	Screw	00-615-245-218				18-724-271-501	240V DC
72	Term. Block Supp. Bracket	18-657-524-111		143	Latch Check Relay (Reclose Duty Only)	18-471-853-*	
73	Term. Block	00-857-036-012		144	Capacitor Trip Device*	71-301-550-502	
74	Screw	00-615-471-124		145	Under Voltage Device (Reclose Duty)	18-395-369-501	

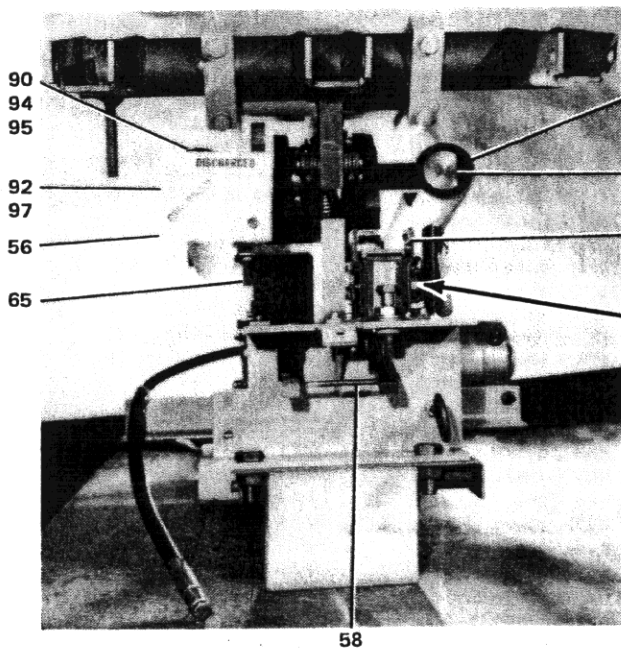
*Give breaker S/N and control voltage when ordering item.

**Must be supplied in pairs.

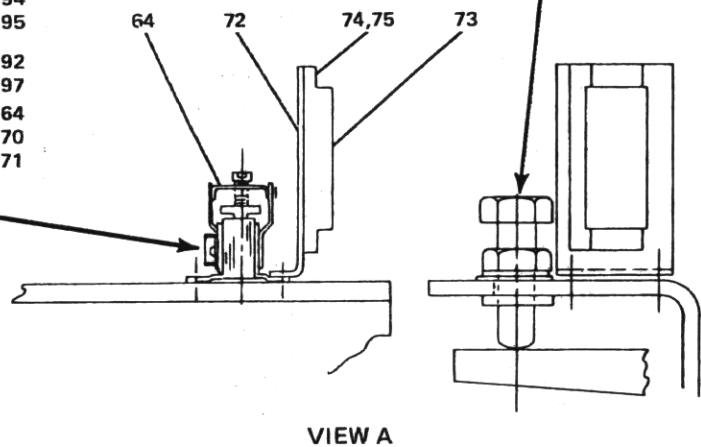
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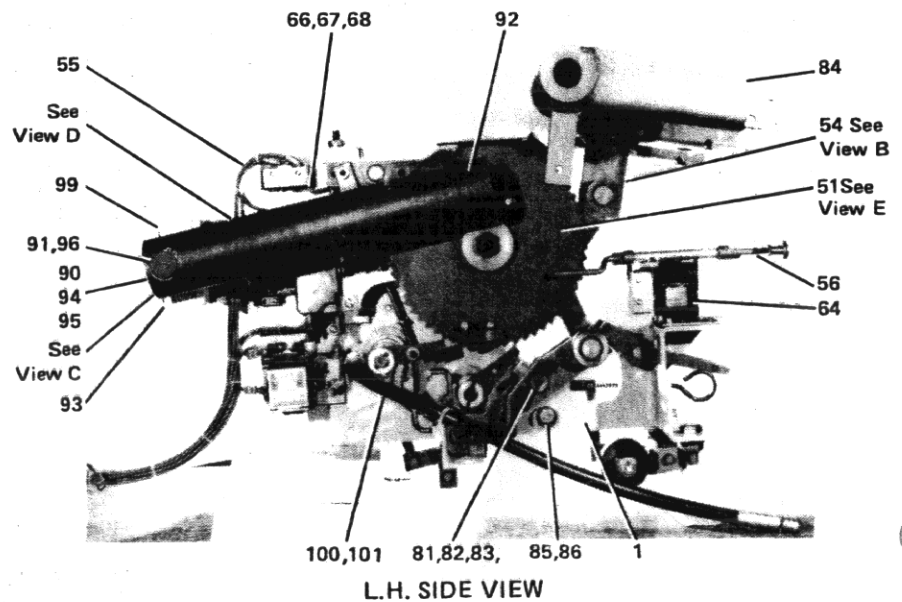
R.H. SIDE VIEW



FRONT VIEW



VIEW A



L.H. SIDE VIEW

Views B, C, D & E
Are Found on Following Pages

Figure 5. Type 515-1 Stored Energy Operator Assembly

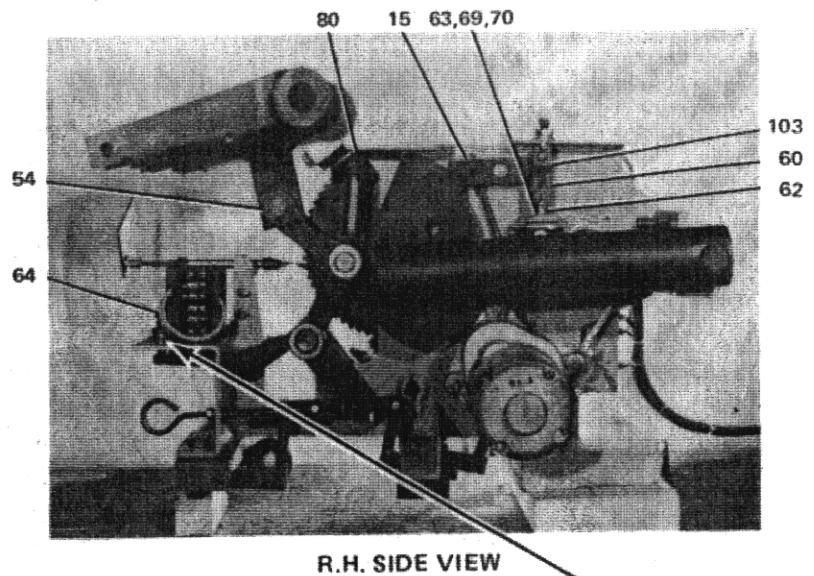
ITEM DESCRIPTION FOR FIGURE 5.

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Frame Assembly	18-469-102-501		75	Lockwasher	00-655-047-060	
2	Needle Bearing	00-813-119-810		80	Chain Link	00-831-349-065	
3	Needle Bearing	00-813-119-814		81	Pin	18-657-464-105	
4	Needle Bearing	00-813-119-821		82	Retaining Ring	00-673-165-075	
5	Pawl Assembly	18-657-485-536		83	Washer	71-152-809-026	
6	Stop Bracket Ass'y.	18-657-816-564		84	Radius Arm	18-390-227-501	
7	Shaft	18-657-467-291		85	Stop	18-657-464-118	
8	Slit Spacer	18-657-800-113		86	Washer	00-655-067-200	
9	Collar	18-657-467-290		87	Check Switch Mtg.	18-395-321-801	
10	Inner Race**	18-657-467-335			Reclose Duty		
11	Spacer	18-158-935-009		88	Grease	00-337-131-001	
12	Thrust Washer	00-815-225-131		89	Grommet	00-691-872-130	
13	Needle Bearing	15-813-119-003		90	Spring Retainer	18-657-523-038	
14	Pin	18-657-463-368		91	Shaft	18-657-463-369	
15	Stop Latch	18-657-463-388		92	Drive Block	18-657-465-170	
16	Trip Latch	18-657-463-390		93	Bearing Block	18-657-463-370	
17	Pin	18-657-464-012		94	Spring	15-171-331-001	
18	Pin	18-657-523-064		96	Retaining Ring	00-673-165-100	
19	Shaft	18-657-463-389		97	Retaining Ring	00-673-165-087	
20	Motor*	18-469-223		98	Shim	18-657-784-007	
21	Charge Disc. Actuator	18-657-523-305		99	Screw	00-615-114-556	
22	Bracket	18-657-523-304		100	Flex. Shaft Assembly	18-657-768-377	
23	Interlock Rod	18-657-522-269		101	Roll Pin	00-671-176-185	
24	Roller Bearing	15-813-073-003		102	Clamp	15-171-386-002	
25	Torsion Spring	18-657-466-081		103	Washer	71-114-297-001	
26	Torsion Spring	18-657-466-080		104	Link	71-118-760-001	
27	Pawl Return Spring	18-657-229-240		105	Link	18-657-464-103	
28	Compression Spring	15-837-321-005		106	Roller	15-813-073-001	
29	Retaining Ring	00-673-165-062		107	Pin	18-657-464-104	
30	Spacer	18-158-935-011		108	Spring	18-657-523-331	
31	Adj. Screw	00-617-499-375		109	Washer	71-152-809-026	
32	Roll Pin	00-671-176-194		110	Spring Holder	18-657-523-332	
33	Roll Pin	00-671-176-325		111	Retaining Ring	00-673-165-075	
34	Roll Pin	00-671-176-383		112	Spring Anchor	18-657-523-333	
35	Roll Pin	15-671-173-002		113	Link	18-657-800-115	
36	Roll Pin	00-671-171-375		114	Needle Bearing	00-813-119-813	
37	Washer	18-657-522-303		115	Plate	18-723-641-001	
38	Washer	15-171-091-005		116	Terminal Block	00-657-036-012	
39	Screw	00-615-245-218		117	Microswitch*	15-171-323-001	
40	Lockwasher	00-655-017-022		118	Microswitch*	15-171-323-002	
41	Screw	00-611-315-392		119	Actuator Arm	18-657-522-355	
42	Washer	00-651-007-160		120	Shield	18-657-468-090	
43	Lockwasher	00-655-017-026		121	Extension Spring	18-657-523-061	
44	Elastic Stop Nut	00-633-025-116		122	Screw	00-615-471-130	
45	Jam Nut	00-631-143-104		123	Washer	00-655-047-060	
46	Roll Pin	00-671-176-373		124	Nut	14-147-052-002	
47	Roll Pin	00-671-171-379		125	Screw	00-617-247-470	
48	Spacer	18-657-523-278		126	Nut	00-631-171-106	
49	Flex Shaft Support	18-657-523-335		127	Washer	00-655-017-032	
50	Roll Pin	00-671-176-189		128	Washer	00-651-007-230	
51	Ratchet Assembly	18-390-202-501		129	Screw	00-615-471-124	
52	Cam Assembly	18-389-061-501		130	Screw	00-615-485-216	
53	Cam Assembly	18-389-061-502		131	Washer	00-655-017-022	
54	Linkage Assembly (Consists of items 104 to 113-138)			132	Washer	00-651-007-907	
55	Motor & Closing Control (See View "D")	18-390-246-501		133	Relay Anti-Pump	00-871-797-107	125V DC
56	Indicator Assembly	18-723-611-501				00-871-797-108	250V DC
58	Pin	18-724-690-003				00-871-797-109	48V DC
59						00-871-797-115	24V DC
60	Solenoid Trip Link Assembly	18-657-770-518		134	Washer	00-655-047-080	
62	Roll Pin	00-671-176-309		135	Screw	00-615-223-174	
63	Solenoid*	15-171-339		136	Relay	15-171-405-001	240V AC
64	Solenoid*	15-171-339				15-171-405-002	120V AC
66	Strip	18-657-467-339		137	Bumper	18-657-822-286	
67	Screw	00-615-223-173		138	Bearing	15-813-129-004	
68	Lockwasher	00-655-017-020		139	Washer	71-163-273-001	
69	Screw	00-615-245-222		140	Washer	71-140-443-001	
70	Lockwasher	00-655-017-022		141	Motor Cutoff Sw.	18-723-742-501	125V AC & DC
71	Screw	00-615-245-218				18-724-271-501	240V DC
72	Term. Block Supp. Bracket	18-657-524-111		143	Latch Check Relay (Reclose Duty Only)	18-471-853*	
73	Term. Block	00-657-036-012		144	Capacitor Trip Device*	71-301-550-502	
74	Screw	00-615-471-124		145	Under Voltage Device (Reclose Duty)	18-395-369-501	

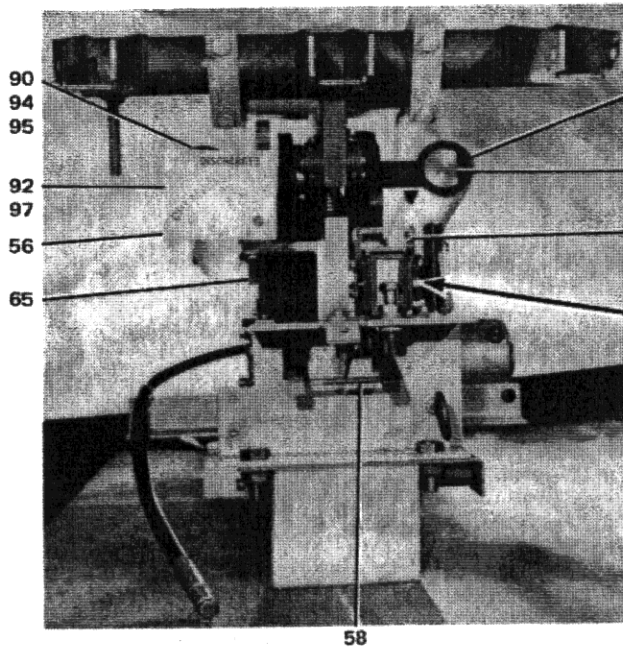
*Give breaker S/N and control voltage when ordering item.

**Must be supplied in pairs.

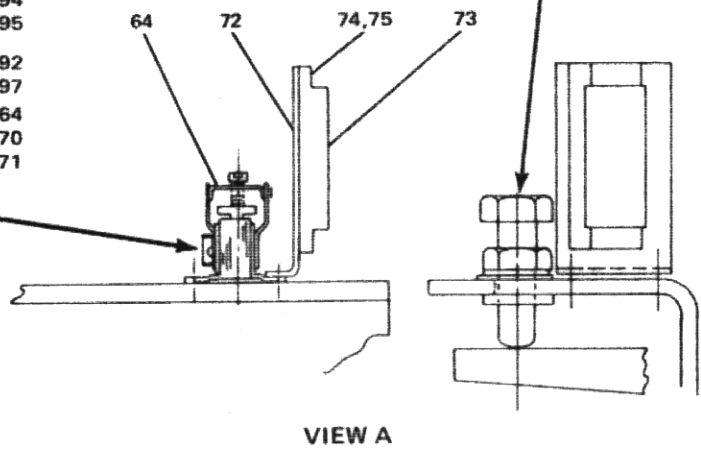
***Must be supplied as matched set.



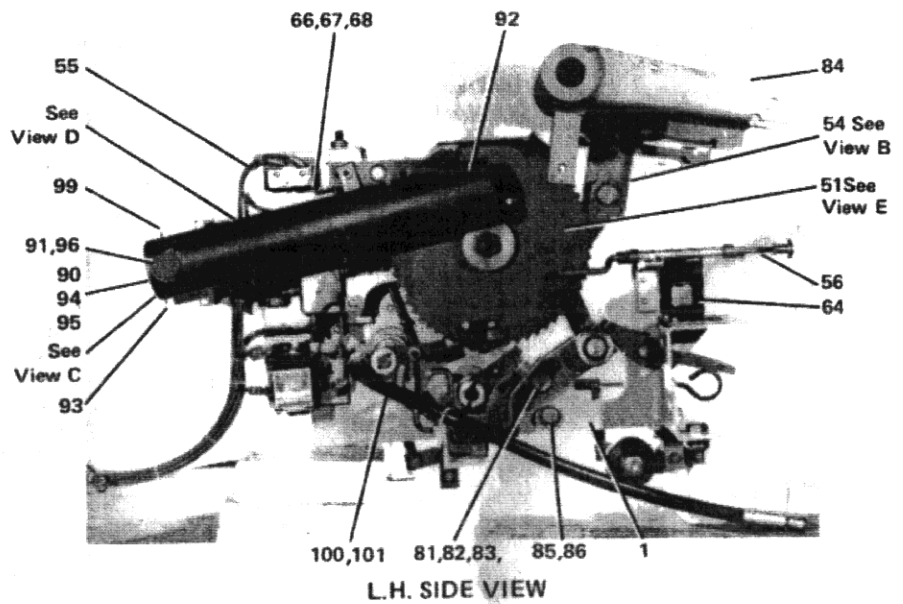
R.H. SIDE VIEW



FRONT VIEW



VIEW A



L.H. SIDE VIEW

Views B, C, D & E
Are Found on Following Pages

Figure 5. Type 515-1 Stored Energy Operator Assembly

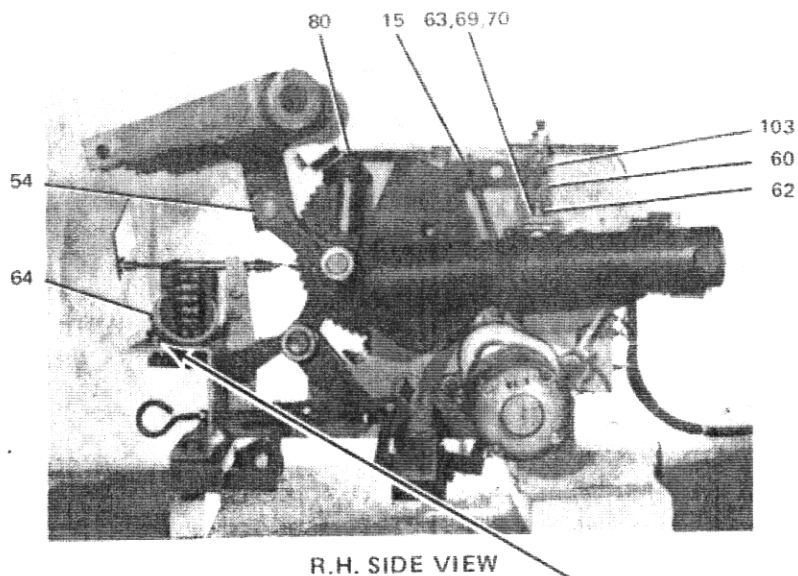
ITEM DESCRIPTION FOR FIGURE 5.

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Frame Assembly	18-469-102-501		75	Lockwasher	00-655-047-060	
2	Needle Bearing	00-813-119-810		80	Chain Link	00-831-349-065	
3	Needle Bearing	00-813-119-814		81	Pin	18-657-464-103	
4	Needle Bearing	00-813-119-821		82	Retaining Ring	00-673-165-075	
5	Pawl Assembly	18-657-485-536		83	Washer	71-152-809-026	
6	Stop Bracket Ass'y.	18-657-816-561		84	Radius Arm	18-390-227-501	
7	Shaft	18-657-467-291		85	Stop	18-657-464-118	
8	Slit Spacer	18-657-800-113		86	Washer	00-655-067-290	
9	Collar	18-657-467-290		87	Check Switch Mtr	18-395-321-801	
10	Inner Race**	18-657-467-335			Reclose Duty		
11	Spacer	18-158-935-009		88	Grease	00-337-131-001	
12	Thrust Washer	00-815-225-131		89	Grommet	00-691-872-130	
13	Needle Bearing	15-813-119-003		90	Spring Retainer	18-657-523-038	
14	Pin	18-657-463-368		91	Shaft	18-657-463-369	
15	Stop Latch	18-657-463-388		92	Drive Block	18-657-465-170	
16	Trip Latch	18-657-463-390		93	Bearing Block	18-657-463-370	
17	Pin	18-657-464-012		94	Spring	15-171-331-001	
18	Pin	18-657-523-064		96	Retaining Ring	00-673-165-100	
19	Shaft	18-657-463-389		97	Retaining Ring	00-673-165-087	
20	Motor*	18-469-223		98	Shim	18-657-784-007	
21	Charge Disc. Actuator	18-657-522-305		99	Screw	00-615-114-556	
22	Bracket	18-657-522-304		100	Flex. Shaft Assembly	18-657-768-377	
23	Interlock Rod	18-657-522-269		101	Roll Pin	00-671-176-185	
24	Roller Bearing	15-813-073-003		102	Clamp	15-171-386-002	
25	Torsion Spring	18-657-466-081		103	Washer	71-114-297-001	
26	Torsion Spring	18-657-466-080		104	Link	71-118-760-001	
27	Pawl Return Spring	18-657-229-240		105	Link	18-657-464-103	
28	Compression Spring	15-837-321-005		106	Roller	15-813-073-001	
29	Retaining Ring	00-673-165-062		107	Pin	18-657-464-104	
30	Spacer	18-158-935-011		108	Spring	18-657-523-331	
31	Adj. Screw	00-617-499-375		109	Washer	71-152-809-026	
32	Roll Pin	00-671-176-194		110	Spring Holder	18-657-523-332	
33	Roll Pin	00-671-176-325		111	Retaining Ring	00-673-165-075	
34	Roll Pin	00-671-176-383		112	Spring Anchor	18-657-523-333	
35	Roll Pin	15-671-173-002		113	Link	18-657-800-115	
36	Roll Pin	00-671-171-375		114	Needle Bearing	00-813-119-813	
37	Washer	18-657-522-303		115	Plate	18-723-641-001	
38	Washer	15-171-092-005		116	Terminal Block	00-857-036-012	
39	Screw	00-615-245-218		117	Microswitch*	15-171-323-001	
40	Lockwasher	00-655-017-022		118	Microswitch*	15-171-323-002	
41	Screw	00-611-315-392		119	Actuator Arm	18-657-522-355	
42	Washer	00-651-007-160		120	Shield	18-657-468-090	
43	Lockwasher	00-655-017-026		121	Extension Spring	18-657-523-061	
44	Elastic Stop Nut	00-633-025-116		122	Screw	00-615-471-130	
45	Jam Nut	00-631-143-104		123	Washer	00-655-047-060	
46	Roll Pin	00-671-176-373		124	Nut	14-147-052-002	
47	Roll Pin	00-671-171-379		125	Screw	00-617-247-470	
48	Spacer	18-657-523-278		126	Nut	00-631-171-106	
49	Flex Shaft Support	18-657-523-335		127	Washer	00-655-017-032	
50	Roll Pin	00-671-176-189		128	Washer	00-651-007-230	
51	Ratchet Assembly	18-390-202-501		129	Screw	00-615-471-124	
52	Cam Assembly	18-389-061-501		130	Screw	00-615-485-216	
53	Cam Assembly	18-389-061-502		131	Washer	00-655-017-022	
54	Linkage Assembly (Consists of items 104 to 113-138)			132	Washer	00-651-007-907	
55	Motor & Closing Control (See View "D")	18-390-246-501		133	Relay Anti-Pump	00-871-797-107	125V DC
56	Indicator Assembly	18-723-511-501				00-871-797-108	250V DC
58	Pin	18-724-690-003				00-871-797-109	48V DC
59						00-871-797-115	24V DC
60	Solenoid Trip Link Assembly	18-657-770-518		134	Washer	00-655-047-080	
62	Roll Pin	00-671-176-309		135	Screw	00-615-223-174	
63	Solenoid*	15-171-339		136	Relay	15-171-405-001	240V AC
64	Solenoid*	15-171-339				15-171-405-002	120V AC
66	Strip	18-657-467-239		137	Bumper	18-657-822-286	
67	Screw	00-615-223-172		138	Bearing	15-813-129-004	
68	Lockwasher	00-655-017-020		139	Washer	71-163-273-001	
69	Screw	00-615-245-222		140	Washer	71-140-413-001	
70	Lockwasher	00-655-017-022		141	Motor Cutoff Sw.	18-723-712-501	125V AC & DC
71	Screw	00-615-245-218				18-724-271-501	240V DC
72	Term. Block Supp. Bracket	18-657-524-141		143	Latch Check Relay (Reclose Duty Only)	18-471-853-*	
73	Term. Block	00-857-036-012		144	Capacitor Trip Device*	71-301-550-502	
74	Screw	00-615-471-124		145	Under Voltage Device (Reclose Duty)	18-395-369-501	

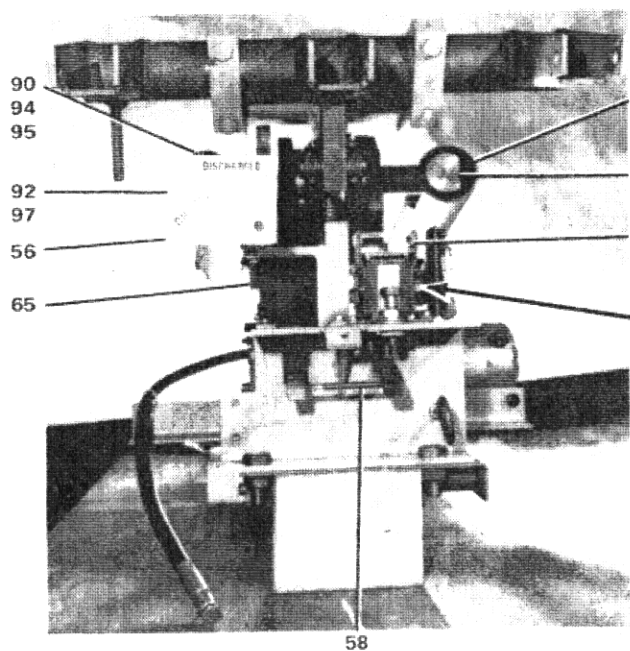
*Give breaker S/N and control voltage when ordering item.

**Must be supplied in pairs

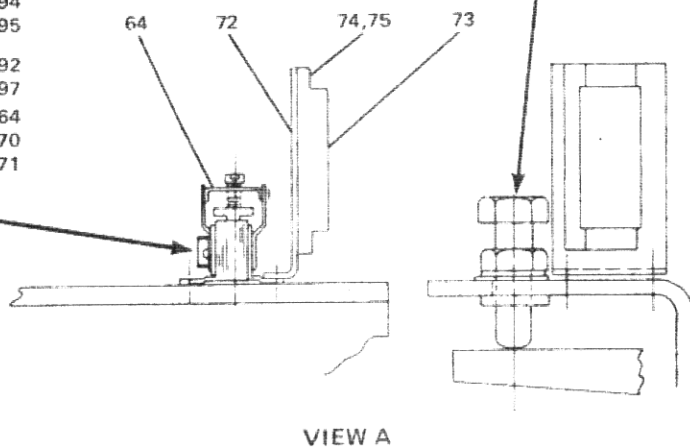
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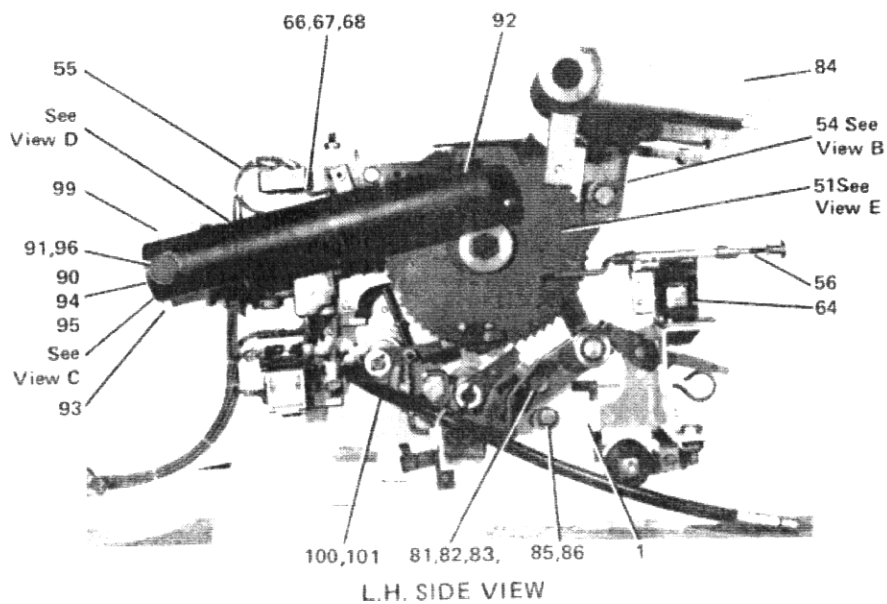
R.H. SIDE VIEW



FRONT VIEW



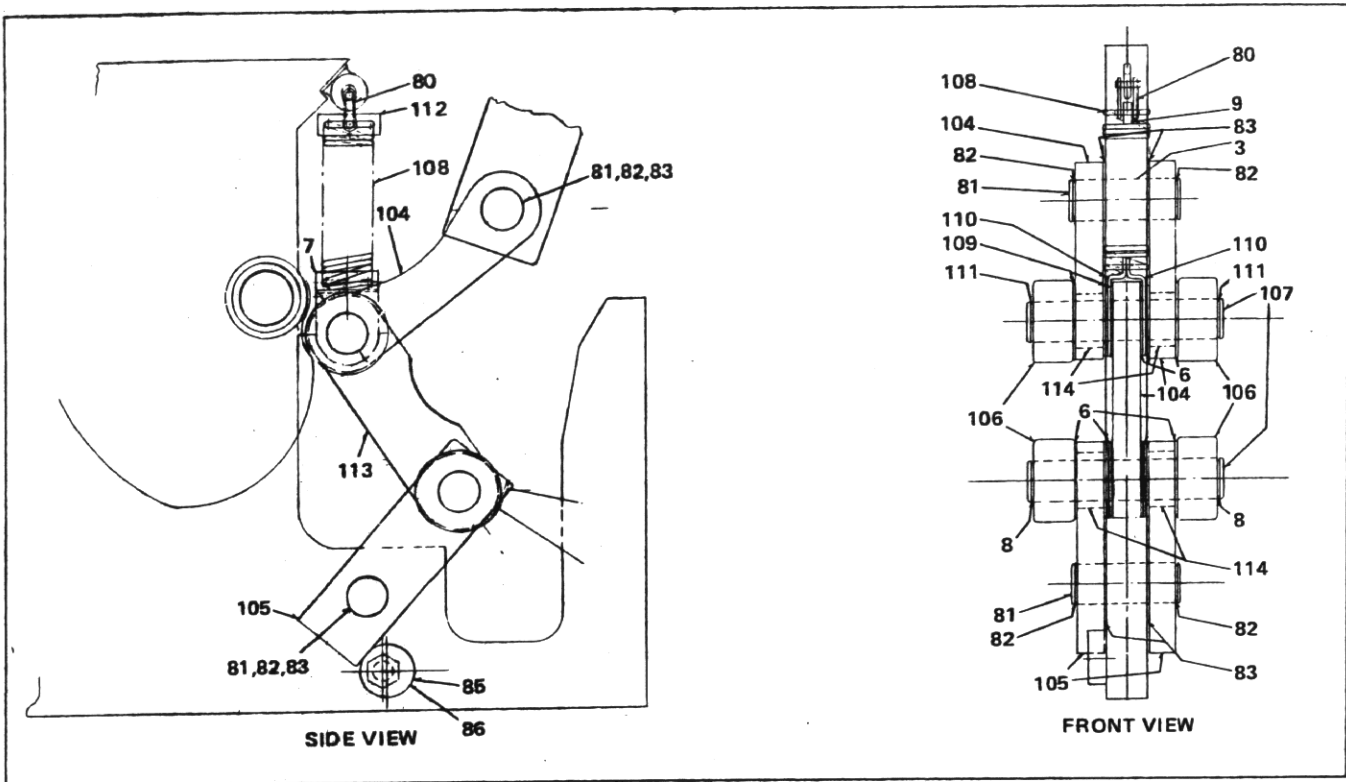
VIEW A



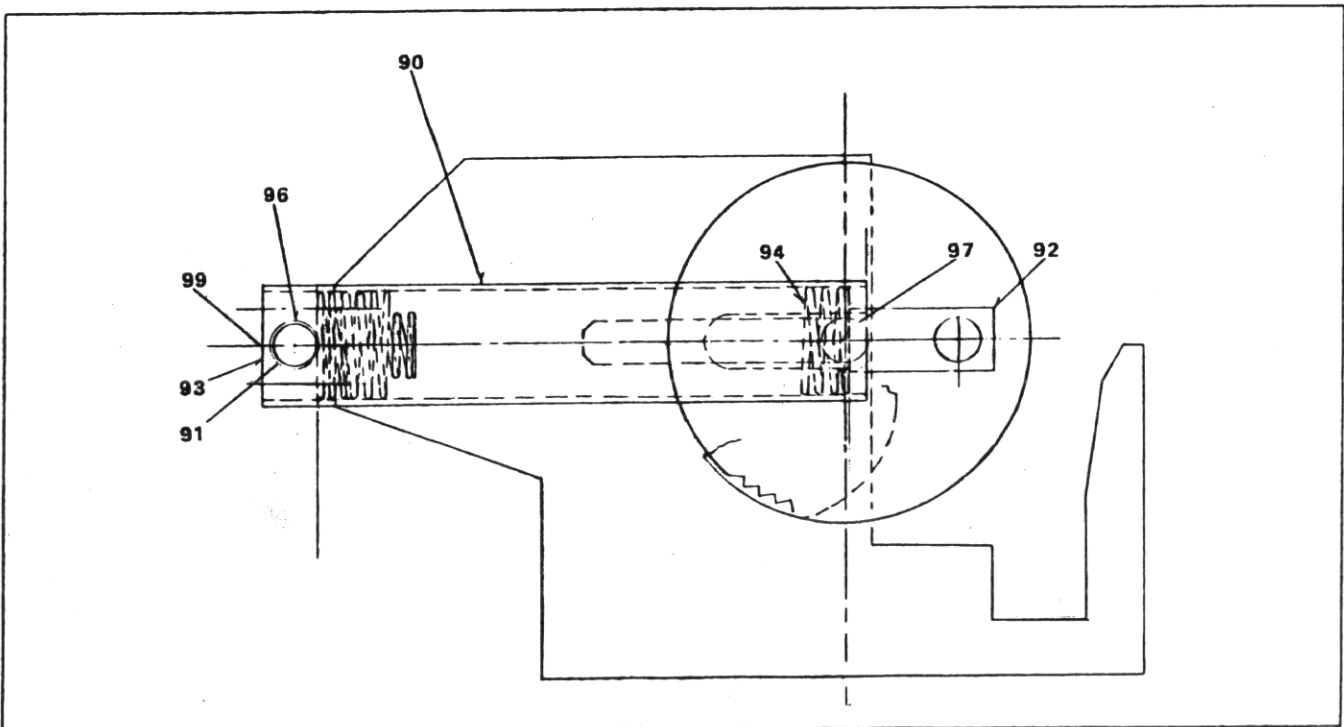
L.H. SIDE VIEW

Views B, C, D & E
Are Found on Following Pages

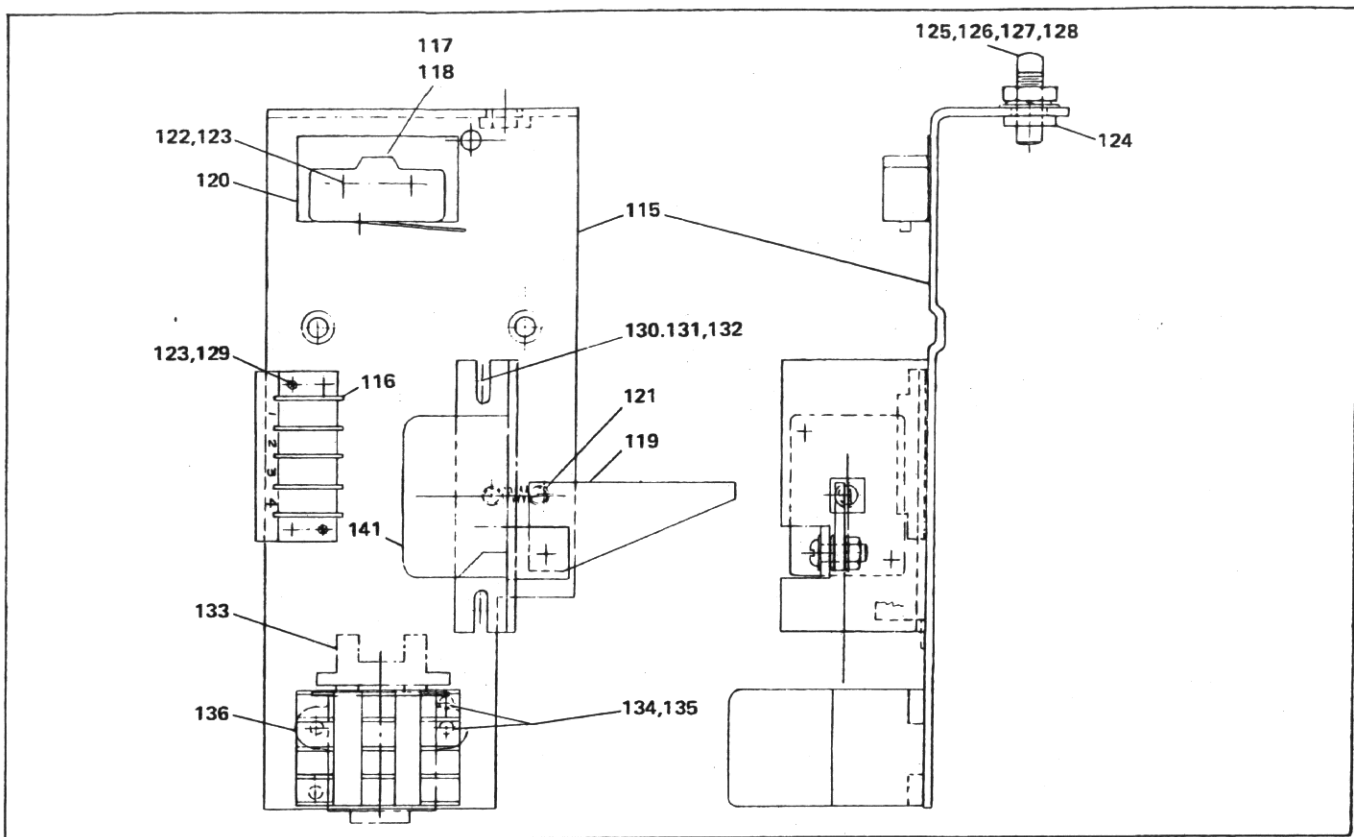
Figure 5. Type 515-1 Stored Energy Operator Assembly



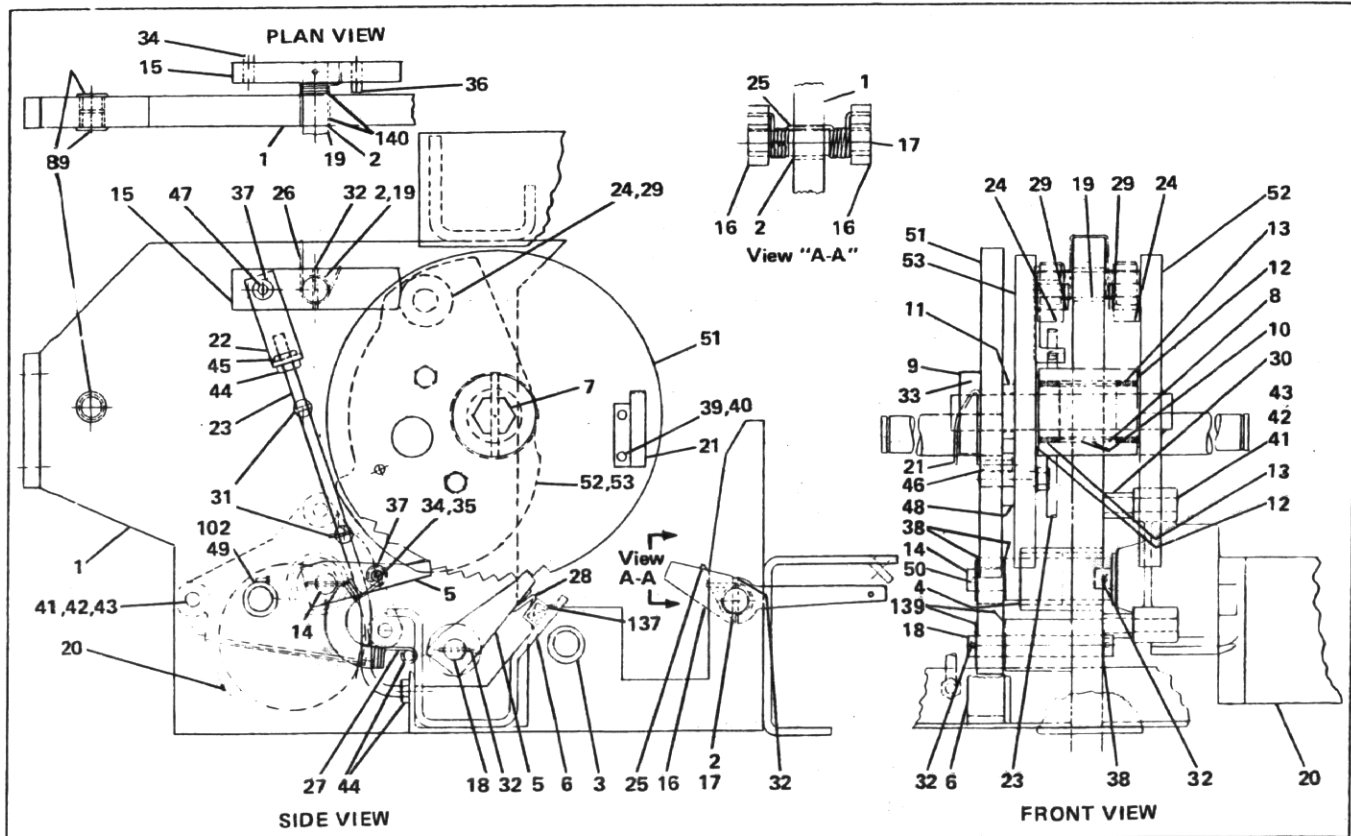
VIEW B



VIEW C



VIEW D



VIEW E
FRAME AND DRIVE ASSY.

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Contact Finger Ass'y.	18-657-456-579	K	25	Nut	15-171-033-002	
2	Contact Finger Ass'y.	18-723-565-501	I	26	Frame & Operator (See Figure 4)	18-468-553-502	
3	Phase Barrier - L.H. - Ctr. - R.H.	71-118-091-003		27	Shim	71-109-843-001	
4	Front Barrier	18-723-598-004		28	Shim	71-109-843-002	
5	Rear Barrier	18-723-598-005		29	Shim	71-109-843-003	
7	Strap	71-115-588-002		30	Link	71-113-440-003	
8	Block	71-116-188-001		31	Tube	71-114-548-001	
9	Soc. Hd. Cap Scr. .31 x 1.25 Lg.	00-615-124-424		32	Shim	71-114-833-001	
10	Roundwasher - .31	00-651-007-900		33	Angle	71-114-834-001	
11	Lockwasher - .31	00-655-017-030		34	Pin	15-171-497-002	
12	Hex. Hd. Cap Scr. - .31 x .62 Lg.	00-611-315-417		35	Tube	71-114-860-001	
13	Strap	71-115-588-002		36	Stud & Support (See Figure 2)	71-401-833-513	H
14	Indicator	71-111-259-001				71-401-833-514	I
15	Indicator	71-111-260-001		37	Arc Chute Ass'y. (01) (See Figure 7) (01 & 3)	71-401-833-517	K
16	Label	71-114-320-001		38	Bolt	71-401-838-501	
17	Indicator - Closed	71-114-830-001		39	Screw	71-401-838-502	
18	Indicator - Open	71-114-830-002		40	Screw	15-171-480-001	
19	Arrow	71-117-508-001		41	Nut	00-615-114-371	
20	Indicator	71-167-932-001		42	Washer	00-611-315-375	
21	Counter	71-110-940-001		43	Screw	15-171-063-004	
22	Spring	71-114-806-001		44	Label	00-651-007-160	
23	Shield	72-320-079-001		45	Label	00-611-315-382	
24	Handle	71-207-184-001		46	Screw	71-114-294-001	
				47	AC Decal	15-171-083-030	
				48	Twin Roller	00-617-475-375	
						00-891-105-002	
						18-723-584-502	

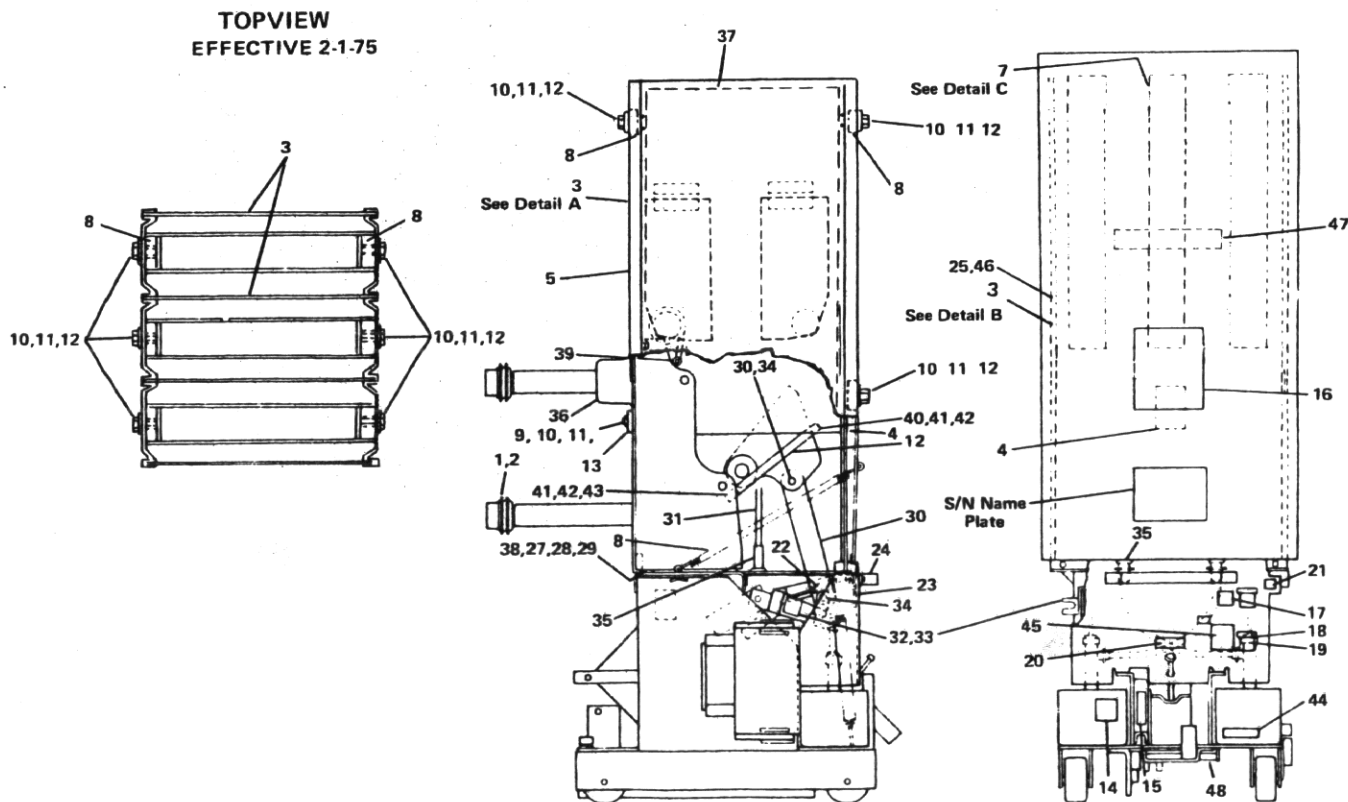


Figure 6. Type MA-350C1 Stored Energy Operated Breaker Assembly
1200 AMP (Code H) and 2000 AMP (Code J) (See Code Table, page ii) 1200/2000 Code K

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Support	71-210-601-003		19	Washer	71-170-790-006	
2	Screw	00-611-315-397		20	Insulation	71-176-201-002	
3	Plate	18-657-782-090		21	O-Ring	15-751-551-001	
4	Pole Piece	71-116-147-501		22	Band	71-915-843-006	
5	Screw	00-611-315-396		23	Strip	71-209-359-001	
6	Core	71-200-806-505		24	Strip	71-209-359-002	
7	Barrier	71-209-332-501		25	Strip	71-209-359-003	
8	Barrier Stack	71-303-065-501		26	Strip	71-209-359-004	
9	Screw	71-114-586-001		27	Shield	71-209-360-001	
10	Block	71-115-470-001		28	Arc Runner	71-209-361-001	
11	Pin	18-657-524-051		29	Rear Coil	71-209-389-001	
12	Tape	71-115-472-001		30	Front Coil	71-209-390-001	
13	Shield	18-657-658-515		31	Plate	71-303-072-001	
14	Plate	71-116-185-001		32	Plate	71-303-072-002	
15	Plate	71-116-185-002		33	Screw	00-615-413-220	
16	Strip	71-116-186-001		34	Arrow	15-171-120-004	
17	Block	71-116-187-001		35	Adhesive	15-333-031-001	
18	Block	71-116-188-001		36	Tape	00-479-411-900	

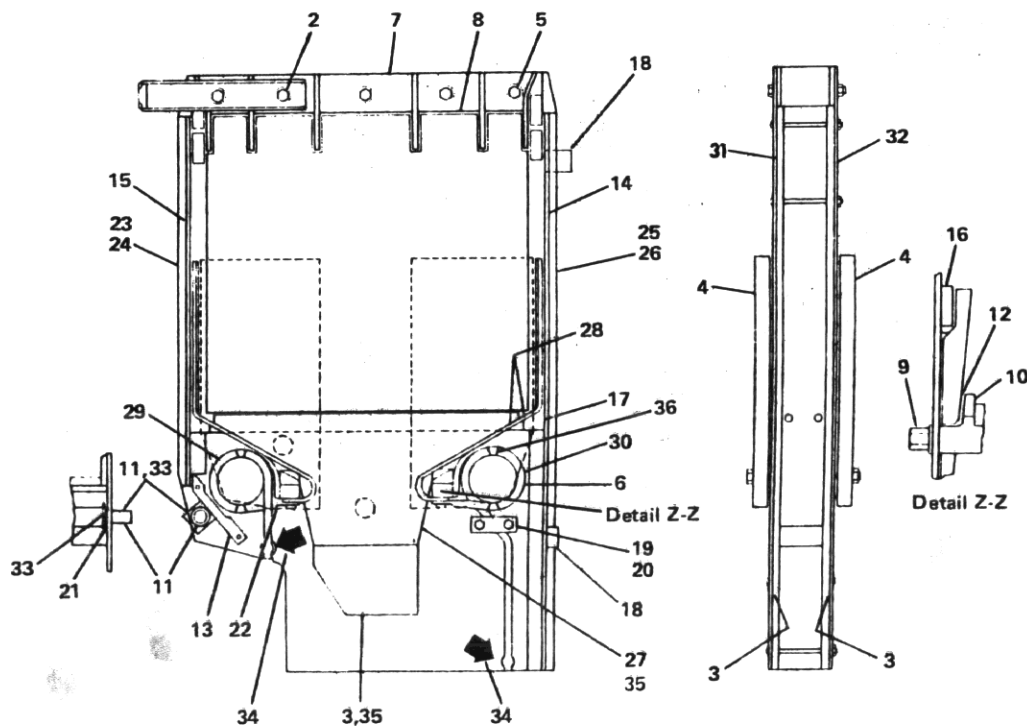


Figure 7. Type MA-350C1 Arc Chute – Codes H, I & K
(See Code Table, page ii)

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
01	Stud & Support Ass'y.	71-401-833-513	H	19	Rod	71-107-724-001	
02	Stud & Support Ass'y.	71-401-833-514	I	20	Washer	71-916-992-002	
1	Contact Assembly	71-112-966-502		21	Screw	00-611-315-373	
2	Contact Assembly	71-112-913-502		22	Plate	71-112-911-001	
3	Contact Assembly	71-112-913-503		23	Spacer	71-112-948-001	
4	Top Stud Ass'y.	71-208-214-506	I	24	Barrier	71-112-971-001	
		71-208-214-509	H	25	Bar	71-113-038-001	
5	Lower Stud Ass'y.	71-209-087-504	H	26	Screw	00-615-249-235	
		71-209-087-501	I	27	Strip	71-113-681-001	
6	Disc Arm Ass'y.	71-208-255-511	I	28	Strip	71-114-147-001	
		71-208-255-515	H	29	Insulation	71-114-148-001	
7	Disc Arm Ass'y.	71-208-255-512	IK	30	Support	71-114-547-001	
		71-208-255-516	H	31	Washer	71-152-809-030	
8	Contact Finger Ass'y.	18-657-372-501		32	Washer	71-158-647-015	
9	Tube	71-115-598-001	IK	33	Belville Washer	71-140-901-001	
		71-107-672-001	H	34	Washer	71-167-537-001	
10	Tube	71-115-598-002	IK	35	Tubing	71-172-682-010	
		71-107-672-010	H	36	Washer	71-177-196-003	
11	Spacer	71-107-716-001		37	Spring	72-120-400-001	
12	Tubing	72-120-735-003		38	Channel Assembly	18-657-377-501	
13	Plate	71-112-910-001		39	Roll Pin	00-671-176-350	
14	Yoke	18-657-777-565		40	Bolt	15-611-318-556	H
		71-114-697-001				00-611-318-558	IK
15	Washer	71-114-701-001		41	Epoxy	00-331-531-014	
16	Tube	71-170-947-007		43	Support	18-657-824-250	
17	Bracket	71-302-850-007	H	43	Screw	00-611-315-490	
		71-302-850-008	IK	44	Nut	15-171-321-001	
18	Spacer	71-107-716-010		45	Washer	00-651-007-230	
				46	Washer	00-651-017-913	

NOTE: TUBE ITEM 9 IS
CEMENTED TO ITEM 17
EFFECTIVE 9-1-1975.

For K Usage Code Add:

03	Stud & Support	71-401-833-517	K
04	Top Stud	71-208-214-510	K
05	Lower Stud	71-209-087-502	K

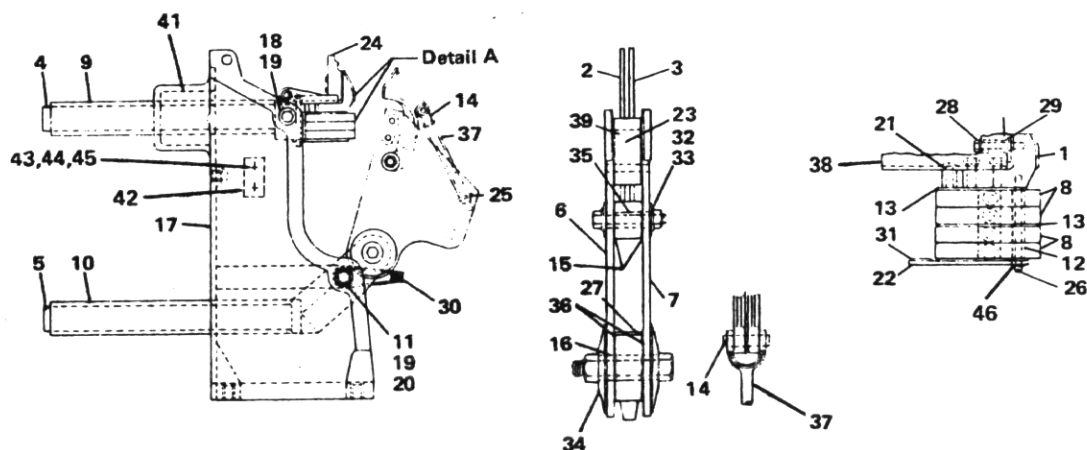


Figure 8. Type MA-350C1 Stud and Support Assembly —
Codes H, I & K (See Code Table, page ii)