



**SWITCHGEAR**

# **RENEWAL PARTS ORDERING GUIDE**

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**TYPES MA-75C, MA-250C and MA-350C, 5-KV  
AIR MAGNETIC CIRCUIT BREAKERS  
WITH  
SOLENOID OPERATOR**

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MAR 3 1998

Supplement To 18X3087-03

18X4439-01

May , 1974

## 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>250C</u>	Rated Amps	<u>1200</u>	Serial Number	<u>H-64203A-3</u>
Type of Operator:	<input checked="" type="checkbox"/> Solenoid				
Renewal Parts Ordering Guide	<u>18X4439</u>				
<u>Fig</u>	<u>Item</u>	<u>Description</u>	<u>Part Number</u>	<u>Quantity</u>	
1	3	Barrier Assembly	71-118-797-501	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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MA-350C Solenoid Operated Basic Breaker	18-466-952	6	6
MA-350C Arc Chute	71-401-838	7	7

### USAGE CODE TABLE

Type	Application	Operator	Top Level Assembly	Usage Code*
MA-75	1200 AMP	Solenoid	72-422-901-601	A
MA-250C	1200 AMP	Solenoid	72-422-901-604	B
MA-250C	1200 AMP (80KA)	Solenoid	72-422-901-605	C
MA-250C	1200/2000 AMP	Solenoid	72-422-901-606	D
MA-250C	2000 AMP	Solenoid	72-422-901-608	E
MA-250C	2000 AMP (80KA)	Solenoid	72-422-901-609	F
MA-350C	1200 AMP	Solenoid	72-422-907-601	G
MA-350C	2000 AMP	Solenoid	72-422-907-602	H

\* If no usage code appears in the "USAGE" column of the following parts lists, the part is used on all assemblies listed in the figure title.

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Contact Finger Ass'y.	71-201-458-502	E	26	Basic Breaker	18-466-949-501	A
		71-201-458-503	F		(includes items 27 thru	18-466-949-504	B
		71-201-738-502	ABCD		37 below)	18-466-949-505	C
2	Contact Finger Ass'y.	71-106-079-501	D			18-466-949-506	D
3	Barrier Assembly	71-118-797-501	BCDEF			18-466-949-508	E
4	Support	72-120-203-001	A			18-466-949-509	F
5	Phase Barrier	71-208-833-501		27	Frame & Operator	72-420-070-501	ABDE
6	Phase Barrier	71-114-505-501			(See Figure 4)	72-420-070-502	CF
7	Phase Barrier	71-114-505-502		28	Shim	71-109-843-001	
8	Panel Spring	72-120-043-501		29	Shim	71-109-843-002	
9	Barrier	71-208-845-001		30	Shim	71-109-843-003	
10	Barrier	71-208-845-002		31	Link	71-113-440-003	
11	Panel	71-208-897-001		32	Tube	71-114-548-001	
12	Spring	71-114-806-001		33	Shim	71-114-833-001	
13	Shield	72-320-079-001		34	Angle	71-114-834-001	
14	Handle	71-207-184-001		35	Pin	71-164-062-012	
15	Label	71-113-871-001		36	Plate & Tube	18-657-424-545	
16	Connector	71-114-708-001		37	Stud and Support	71-401-833-501	A
17	Gasket	00-437-097-001			Assembly (See	71-401-833-502	B
18	Indicator	71-111-259-001			Figure 2)	71-401-833-508	C
19	Indicator	71-111-260-001				71-401-833-511	D
20	Label	71-114-320-001				71-401-833-504	E
21	Indicator - Closed	71-114-830-001				71-401-833-508	F
22	Indicator - Open	71-114-830-002		38	Arc Chute	71-401-835-509	A
23	Arrow	71-117-508-001			(See Figure 3)	71-401-835-502	BCDEF
24	Indicator	71-167-932-001					
25	Counter	71-110-940-001					

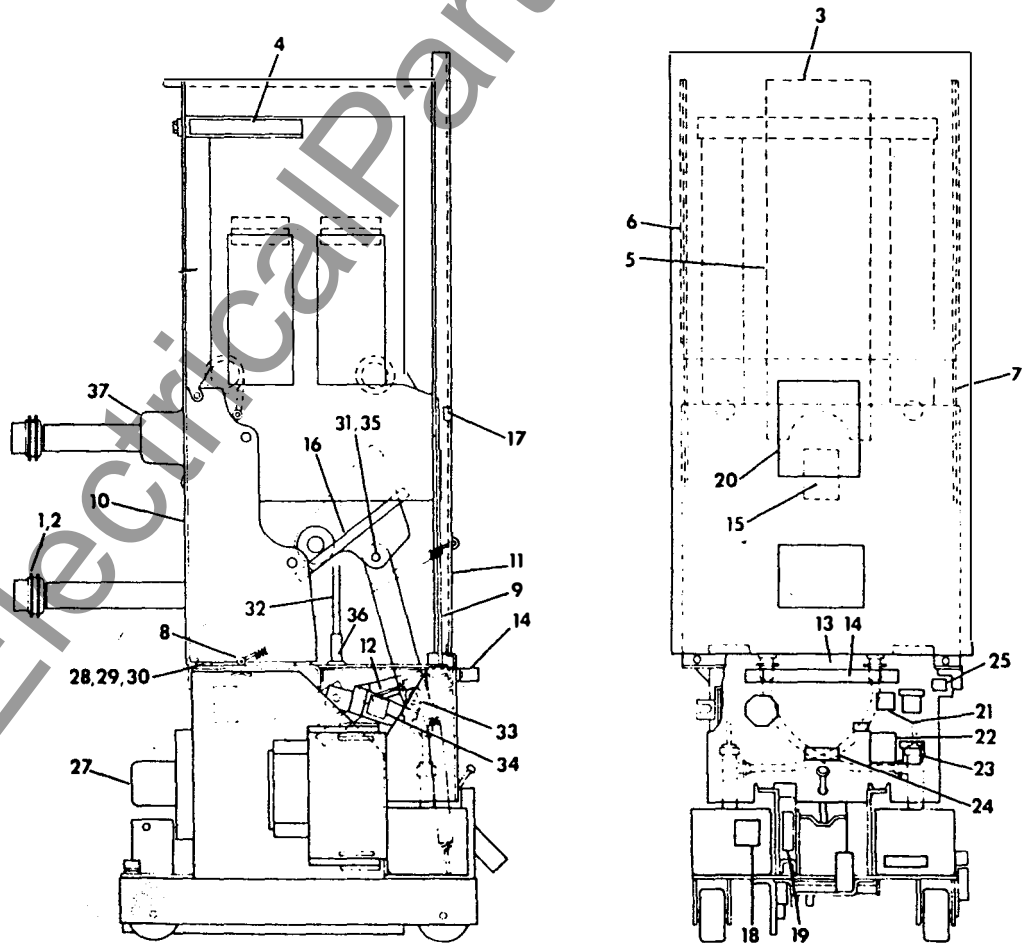


Figure 1. Type MA-75C and MA-250C Solenoid Operated Breaker Assembly - Code A thru F (See Code Table, page ii)

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Contact Assembly	71-112-966-502	BCDEF GH	13	Plate	71-112-910-001	
		71-112-966-501	A	14	Yoke	71-112-934-001	A
2	Contact Assembly	71-112-913-502	BCDEF GH			71-114-697-001	BCDEFGH
		71-112-913-501	A	15	Washer	71-177-196-005	A
3	Contact Assembly	71-112-913-503	BCDEF GH			71-114-701-001	BCDEF GH
4	Top Stud Ass'y.	71-208-214-506	EFH	16	Tube	71-170-947-008	DEF
		71-208-214-509	CG			71-170-947-007	ABCGH
		71-208-214-505	B	17	Bracket	71-302-850-002	DEF
		71-208-214-510	D			71-302-850-001	ABC
		71-208-214-504	A			71-302-850-003	G
5	Lower Stud Ass'y.	71-209-087-501	EFH			71-302-850-005	H
		71-208-831-501	ABCG	18	Spacer	71-107-716-010	
		71-209-087-502	D	19	Rod	71-107-724-001	
6	Disc Arm Ass'y.	71-208-255-511	DEFH	20	Washer	71-916-992-002	
		71-208-255-507	A	21	Not Used		
		71-208-255-509	B	22	Plate	71-112-911-001	
		71-208-255-515	CG	23	Spacer	71-112-948-001	
7	Disc Arm Ass'y.	71-208-255-512	DEFH	24	Barrier	71-112-971-001	
		71-208-255-508	A	25	Bar	71-113-038-001	
		71-208-255-510	B	26	Spacer	71-113-101-001	A
8	Contact Finger Ass'y.	18-657-372-501		27	Strip	71-113-681-001	
		18-657-372-505	B	28	Strip	71-114-147-001	
9	Tube	71-115-598-001	DEFH	29	Insulation	71-114-148-001	
		71-107-672-001	ABCG	30	Support	71-114-547-001	
10	Tube	71-115-598-002	DEFH	31	Washer	71-152-809-030	
		71-107-672-010	ABCG	32	Washer	71-158-647-015	
11	Spacer	71-107-716-001		33	Belville Washer	71-140-901-001	
12	Tubing	72-120-735-003	CDEF GH	34	Washer	71-167-537-001	
		72-120-735-002	B	35	Tubing	71-172-682-010	
				36	Washer	71-177-196-003	
				37	Spring	72-120-400-001	
				38	Channel Assembly	18-657-377-501	

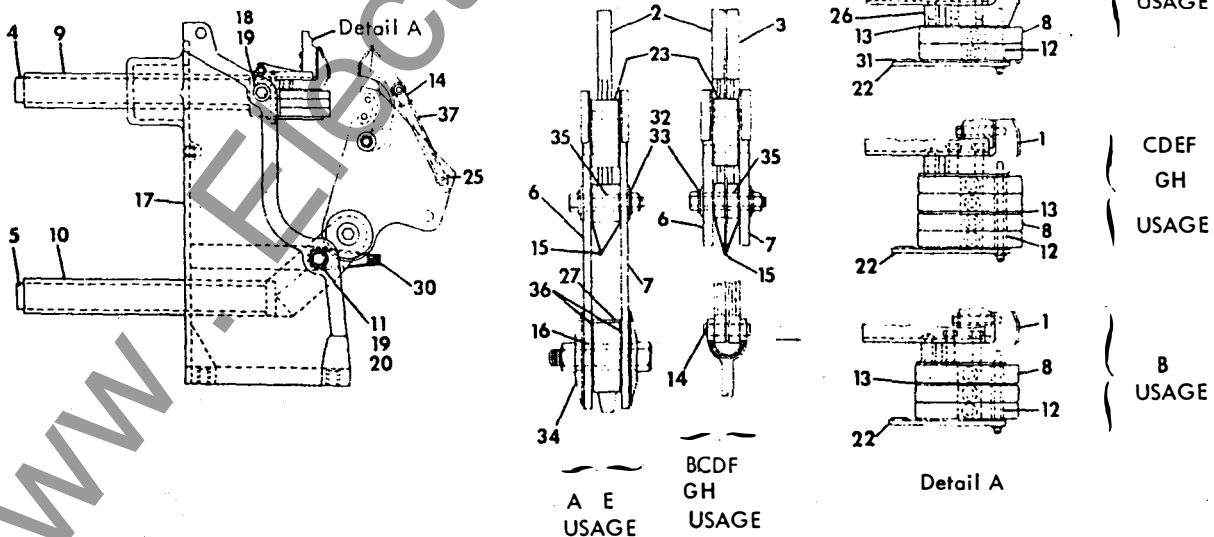


Figure 2. Stud and Support Assembly - Codes A thru H (See Code Table, page ii)

New 18-657-782-090

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Plate	71-114-471-501		13	Insulation	71-176-201-002	
2	Plate	71-114-471-502		14	Shield	71-208-812-001	
3	Pole Piece	71-114-575-501		15	Bracket	71-208-817-001	
4	Core	71-200-806-503		16	Rear Coil	71-208-860-001	
5	Barrier Stack	71-208-818-502		17	Front Coil	71-208-861-001	
6	Block	71-114-476-001		18	Support	71-210-601-002	
7	Arc Runner	71-114-577-001		19	Channel	71-302-881-001	
8	Screw	71-114-586-001		20	Channel	71-302-881-002	
9	Block	71-115-470-001		21	Screw	00-615-662-900	
10	Pin	18-657-411-326		22	Barrier	71-114-528-501	A
11	Tape	71-115-472-001				71-117-710-501	BCDEF
12	Washer	71-170-790-006		23	Pin	18-657-411-327	BCDEF

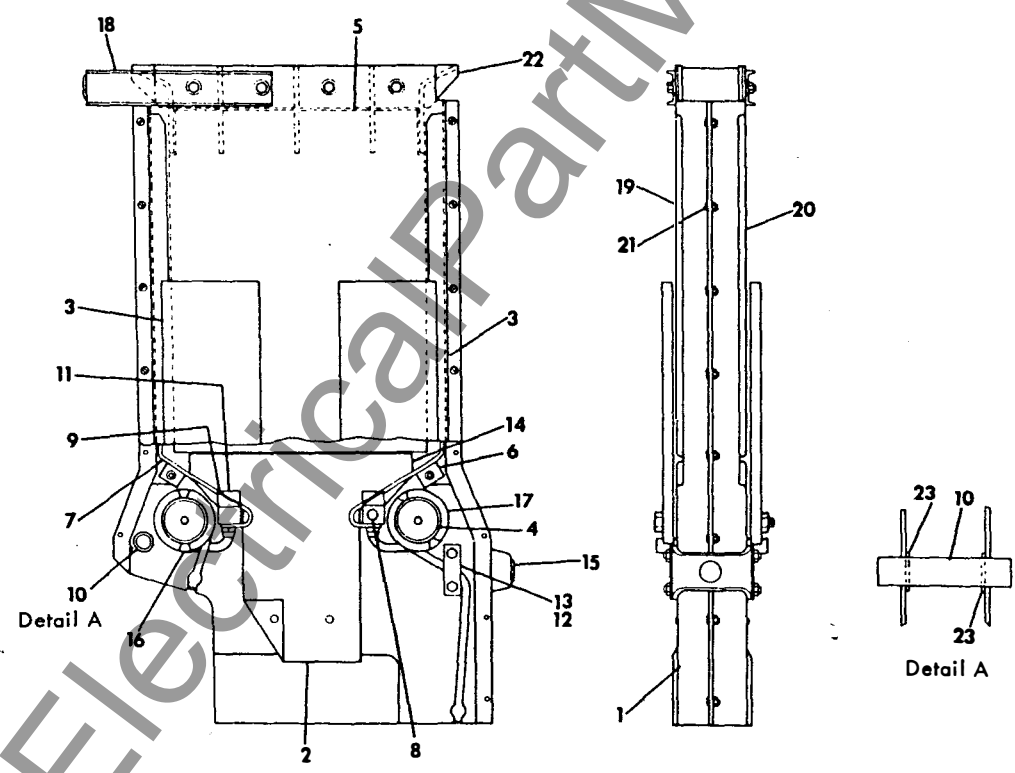


Figure 3. Type MA-75C and MA-250 Arc Chute Assembly  
(Codes A through F; See Code Table, page ii)

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Frame	72-420-064-502	ABDE CFGH	23	Compression Spring	71-114-153-001	
2	Pin	71-104-754-035 71-919-736-009	CFGH ABDE	24	Bumper	71-114-154-001	
3	Angle	71-116-073-002	ABCDE FGH	25	Cylinder	71-114-155-003	
4	Pad	71-116-231-001	CFGH	26	Packing	71-114-156-001	
5	Pad	71-116-231-002	CFGH	27	Spring	71-114-733-001	
6	Washer	71-163-273-002	CFGH	28	Bracket	71-114-747-001	
7	Not Used			29	Stop	71-114-749-002	
8	Guide Assembly	71-208-910-501		30	Link	71-114-752-001	
9	Piston Assembly	71-114-161-503		31	Support Angle	71-114-760-002	
10	Guide Assembly	71-114-765-501		32	Bracket	71-114-786-001	
11	Contact Assembly	71-114-787-502		33	Valve Disc	71-115-244-001	
12	Bracket Assembly	71-116-800-501		34	Compression Spring	71-140-125-001	
13	Bracket Assembly	71-116-800-502		35	Pin	71-915-161-032	
14	Operator Assembly	72-320-029-505		36	Indicator	72-120-190-001	
15	Foot Pedal Assembly	72-120-586-502		37	Rod	72-120-594-001	
16	Pin	71-104-754-034		38	Ball Joint	00-833-573-003	
17	Rod	71-109-216-007		39	Ratchet Plate	00-633-182-060	
18	Plunger	71-113-442-001		40	Wheel	15-171-067-002	
19	Yoke	71-113-487-001		41	Screw	00-617-499-421	
20	Rod End	71-113-541-001		42	Yoke	00-691-701-901	
21	Spring	71-113-621-001		43	Yoke	00-691-701-903	
22	Cup	71-114-151-002					

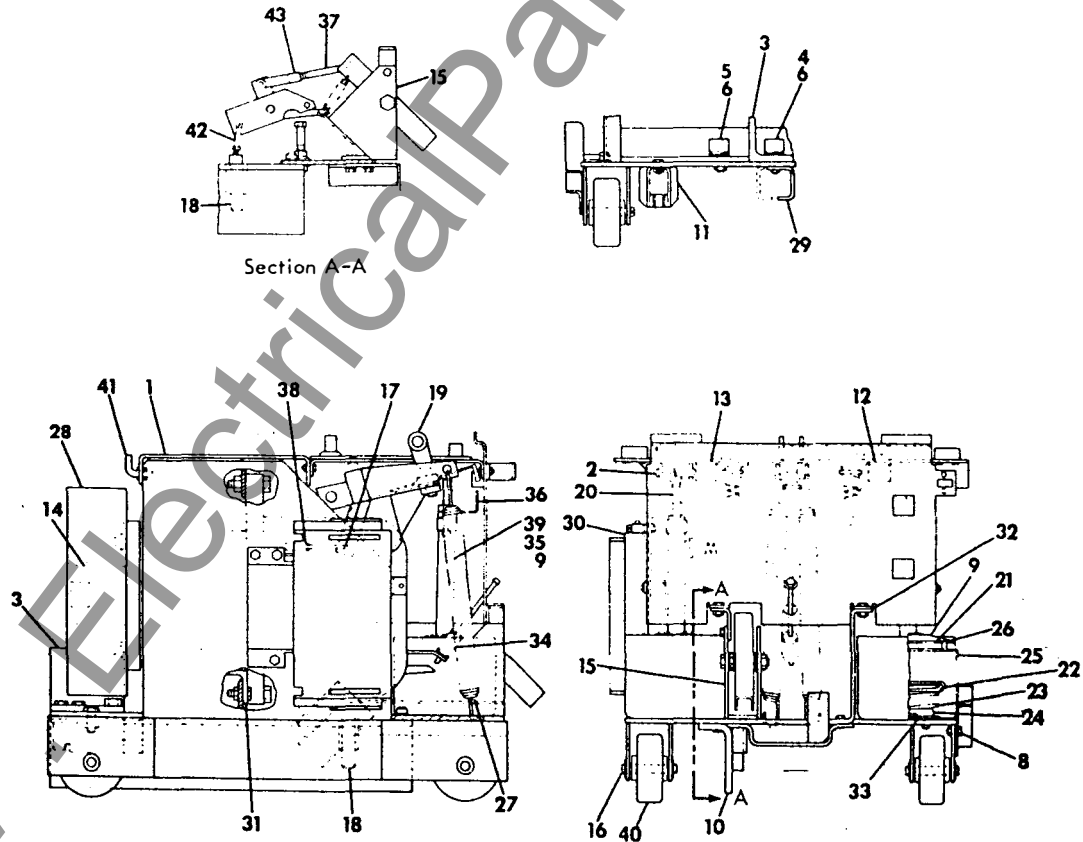


Figure 4. Type MA-75C, MA-250C, and MA-350C Solenoid Operator and Frame Assembly  
(Codes A through H; See Code Table, page ii)

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Tube	71-114-775-501		29	Washer	71-114-271-001	
2	Washer	71-024-132-039		30	Washer	71-115-149-001	
3	Washer	71-140-422-035		31	Tubing	71-115-973-001	
4	Washer	71-140-443-001		32	Washer	71-158-647-013	
5	Rod	72-120-329-001		33	Washer	71-162-014-018	
6	Lever	72-120-568-501		34	Washer	71-170-538-001	
7	Link Assembly	18-657-372-502		35	Washer	71-173-732-004	
8	Latch Assembly	71-100-264-501		36	Pin	71-915-161-025	
9	Not Used			37	Washer	71-922-850-001	
10	Arm Assembly	71-101-269-503		38	Cam	71-120-007-001	
11	Plate Assembly	71-116-083-501		39	Lever	72-120-189-002	
12	Cap	71-100-213-001		40	Bracket	72-120-193-001	
13	Screw	71-100-356-001		41	Pin	72-120-194-002	
14	Pin	71-100-377-001		42	Bracket	72-120-195-001	
15	Pin	71-100-382-002		43	Spacer	72-120-198-001	
16	Pin	71-100-382-001		44	Compression Spring	71-204-606-020	
17	Pin	71-100-391-001		45	Roller Bearing	15-813-073-001	
18	Pin	71-100-929-005		46	Needle Bearing	00-813-119-814	
19	Washer	71-102-710-001		47	Nyliner	00-815-279-010	
20	Shield	71-108-526-001		48	Stud - Stop	18-657-354-100	
21	Shim	71-109-649-001		49	Spring	15-837-321-002	
22	Shim	71-109-649-002		50	Micro Switch	18-657-372-504	
23	Stop	71-109-654-001		51	Limit Switch	18-657-372-503	
24	Spring	71-112-627-001		52	Rod	71-107-949-005	
25	Latch	71-113-355-001		53	Spring	71-140-076-001	
26	Link	71-113-413-001					
27	Link	71-113-416-001					
28	Spring	71-113-503-001					

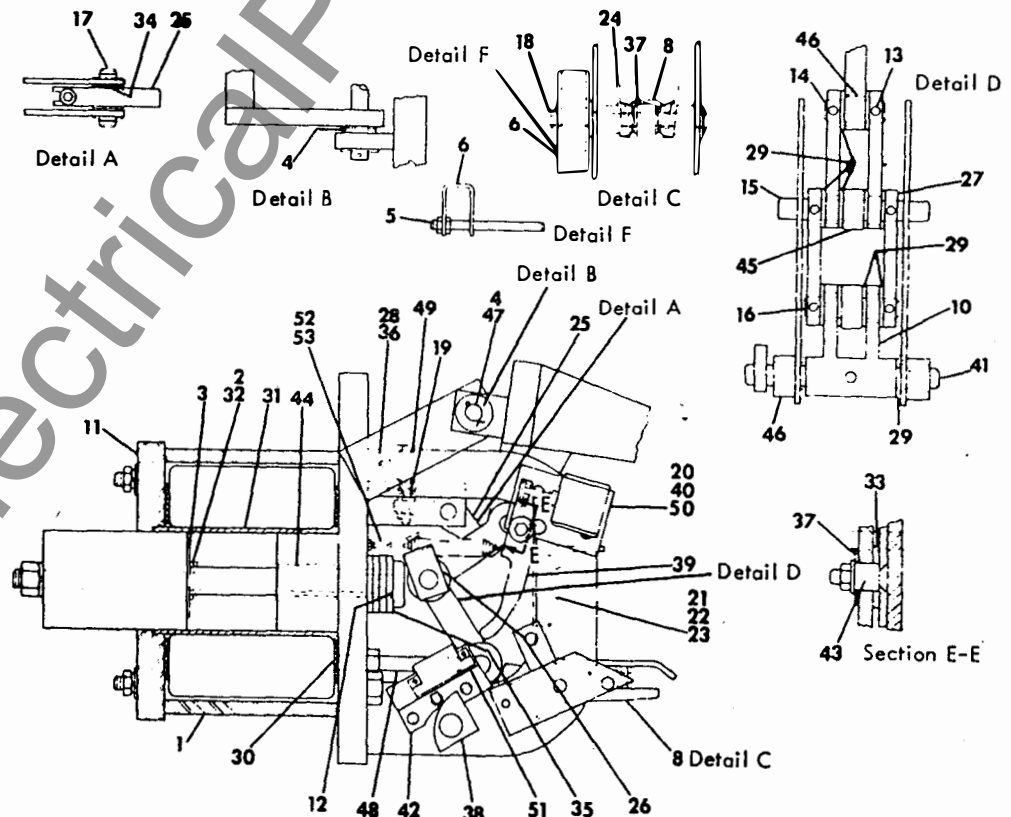


Figure 5. Type MA-75, MA-250, and MA-350 Solenoid Operator Assembly (Codes A through H; See Code Table, page ii)

ITEM	DESCRIPTION	PART NUMBER	USAGE	ITEM	DESCRIPTION	PART NUMBER	USAGE
1	Contact Finger Assembly	71-201-458-503	H	22	Spring	71-114-806-001	
2	Contact Finger Assembly	71-201-738-502	G	23	Shield	72-320-079-001	
3	Barrier Assembly	71-118-797-502		24	Handle	71-207-184-001	
4	Label	71-113-871-001		25	Basic Breaker Assembly (Includes items 26 thru 38 below)	18-466-952-502 18-466-952-501	H G
5	Phase Barrier Assembly	71-114-505-503		26	Frame & Operator (See Figure 4)	72-420-070-502	
6	Phase Barrier Assembly	71-114-505-504		27	Shim	71-109-843-001	
7	Phase Barrier Assembly	71-116-181-501		28	Shim	71-109-843-002	
8	Panel Spring Assembly	72-120-043-501		29	Shim	71-109-843-003	
9	Barrier	71-208-845-001		30	Link	71-113-440-003	
10	Barrier	71-208-845-002		31	Tube	71-114-548-001	
11	Panel	71-208-897-001		32	Shim	71-114-833-001	
12	Connector	71-114-708-001		33	Angle	71-114-834-001	
13	Strap	71-115-588-002		34	Pin	71-164-062-012	
14	Indicator	71-111-259-001		35	Plate & Tube Assembly	18-657-424-545	
15	Indicator	71-111-260-001		36	Stud & Support (See Figure 2)	71-401-833-505 71-401-833-507	H G
16	Label	71-114-320-001		37	Arc Chute Assembly (See Figure 10)	71-401-838-501 71-401-838-502	
17	Indicator-Closed	71-114-830-001		38	Clevis	00-957-211-906	
18	Indicator-Open	71-114-830-002					
19	Arrow	71-117-508-001					
20	Indicator	71-167-932-001					
21	Counter	71-110-940-001					

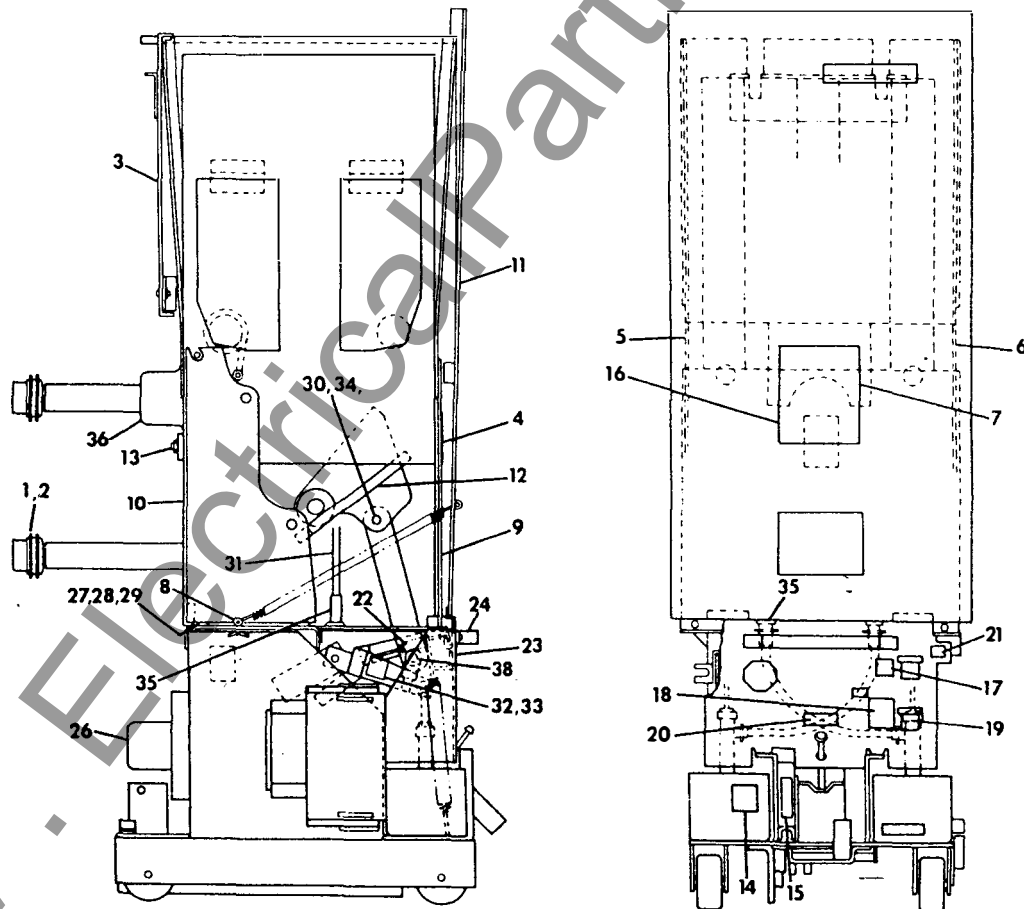


Figure 6. Type MA-350C Solenoid Operated Breaker Assembly  
1200 AMP (Code G) and 2000 AMP (Code H) (See Code Table, page ii)

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