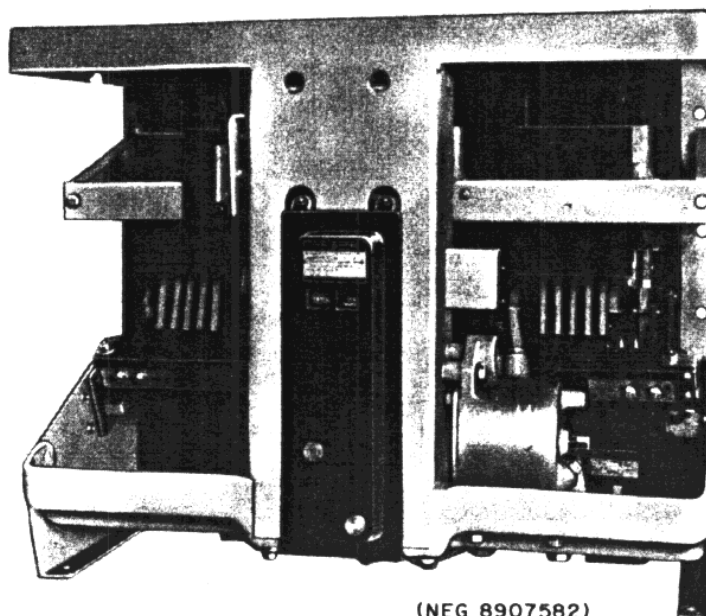


RENEWAL PARTS



TYPE AK-1-75-1 AND AK-1-100-1 AIR CIRCUIT BREAKERS



(NEG 8907582)

AK-1-100-1 air circuit breaker

ORDERING INSTRUCTIONS

1. Always specify the complete nameplate data of the breaker.
2. Specify the quantity, catalog number (if listed), reference number (if listed), description, and this bulletin number.
3. Standard hardware such as screws, bolts, nuts, washers, etc., is not listed in this bulletin. Such items should be purchased locally.
4. For prices, refer to the nearest office of the General Electric Company.

GENERAL  **ELECTRIC**

TYPE AK-1-75-1 AND AK-1-100-1 AIR CIRCUIT BREAKERS

COIL TABLE

Volts	Cycles	Shunt Trip Coil	Under Voltage Device Coil
115	25	6275081G26	6275081G5
208	25	6275081G29	6275081G3
230	25	6275081G29	6275081G3
460	25	6275081G7	6275081G17
575	25	6275081G5	6275081G21
115	50	6275081G24	6275081G4
208	50	6275081G26	6275081G5
230	50	6275081G26	6275081G5
380	50	6275081G4	6275081G3
460	50	6275081G4	6275081G3
575	50	6275081G29	6275081G8
115	60	6275081G25	6275081G26
208	60	6275081G26	6275081G27
230	60	6275081G26	6275081G7
460	60	6275081G27	6275081G31
575	60	6275081G7	6275081G10
125	D.C.	6275081G29	6275081G18
250	D.C.	6275081G30	6275081G19

Fig. No.	Ref. No.	No. Per AK-1-			Cat. No.	Description
		75-1 AC	75-1 DC	100-1 AC-DC		
1	1	2	2	2	267B129P1	Phase barrier
1	2	1	1	1	372A275G1	Lifting bracket, right
1	3	1	1	1	372A275G2	Lifting bracket, left
1	4	1	1		372A205P1	Arc quencher tie bar
1	4			1	372A205P2	Arc quencher tie bar
1	5	1	1		267B124P1	Cross bar (stationary breaker)
1	5			1	267B126P1	Cross bar (stationary breaker)
1	5			1	267B127P1	Cross bar (drawout breaker)
1	5	1	1		267B125P1	Cross bar (drawout breaker)
*	6	2	2	2	385A314	Opening springs
1	7	1	1	1	†12HGA11J70	Relay, 115 volts, 60 cycles
1	7	1	1	1	†12HGA11J74	Relay, 115 volts, 50 cycles
1	7	1	1	1	†12HGA11J78	Relay, 115 volts, 25 cycles
1	7	1	1	1	†12HGA11J71	Relay, 230 volts, 60 cycles
1	7	1	1	1	†12HGA11J75	Relay, 230 volts, 50 cycles
1	7	1	1	1	†12HGA11J79	Relay, 230 volts, 25 cycles
1	7	1	1	1	†12HGA11J52	Relay, 125 volts
1	7	1	1	1	†12HGA11J51	Relay, 250 volts
1	8	1	1	1	9921802G1	Front cover, with closing button
1	8	1	1	1	372A351G1	Front cover, without closing button
1	9	1	1		175L318G1	Gear box assembly
1	9			1	175L318G2	Gear box assembly
2	10	1	1	1	6447398P1	Plug
2	11	1	1	1	393A992P1	"O" ring for plug
2	12	1	1	1	372A283P1	Ratchet pin
2	13	1	1	1	6509871P1	Spring for ratchet pin
7	14	1	1	1	6447101P1	Motor gasket
*	15	1	1	1	393A991P1	Lubricant for gear box, 4 oz.
3	16	3			175L303G2	Arc quencher assembly
3	16		3	3	175L303G3	Arc quencher assembly
3	17	3			6414485P2	Arc quencher plate
3	17		3	3	6414480P2	Arc quencher plate
3	18	3	3	3	6404723P1	Side support
3	18	3	3	3	6404723P2	Side support
3	19	3			6555518P2	Cap
3	19		3	3	6555518P1	Cap
3	20	3			6203945P1	Block
3	20		3	3	6203945P2	Block
*	21	6	6	6	6555111P1	Spacer
3	22	3			6414486P1	Support
3	22		3	3	6414424P1	Support
3	23	3			6203944P1	Steel back plate
3	23		3	3	6203944P2	Steel back plate
3	24	3	3	3	6414494P1	Pocket barrier
3	24	3	3	3	6414494P2	Pocket barrier
3	25	6	6	6	6414493P1	Side barrier
3	26	6			6414492P1	Inner barrier
3	26		12	12	6414492P1	Inner barrier
3	27	3			175L303G39	Muffler and baffle assembly

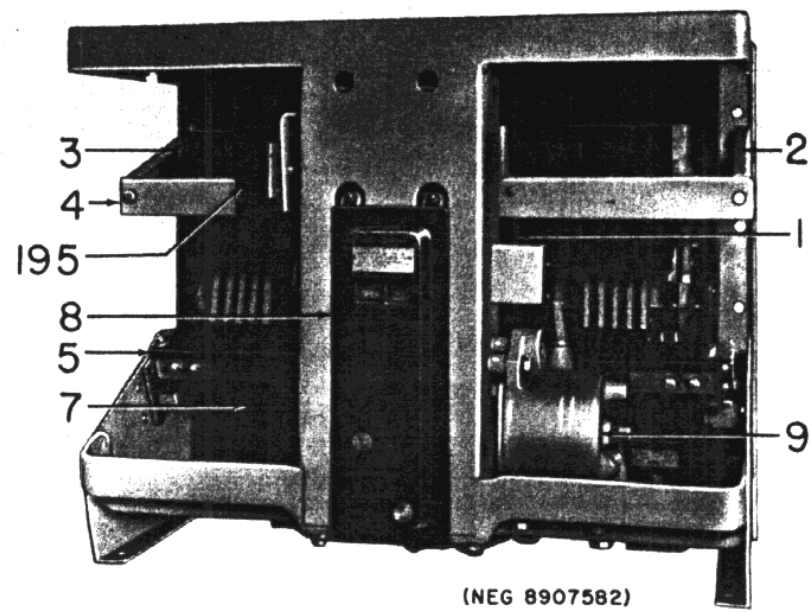


Fig. 1. AK-1-100-1 air circuit breaker

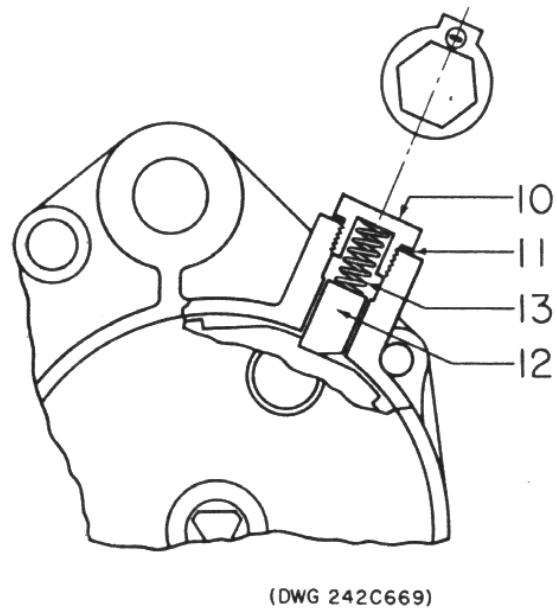


Fig. 2. Section of gear box

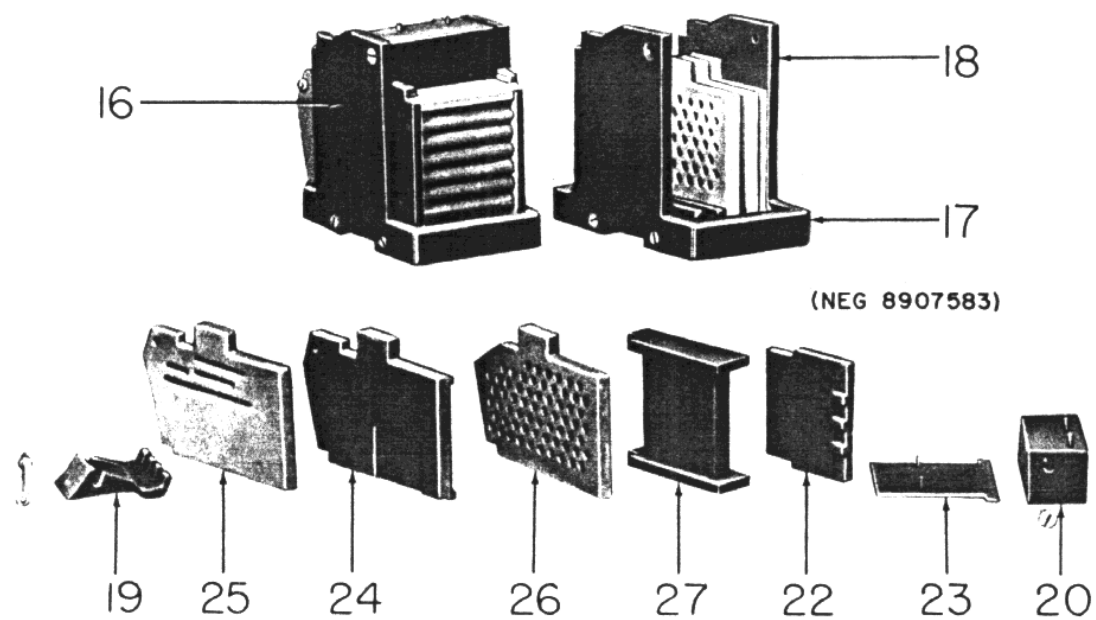


Fig. 3. Arc quencher

TYPE AK-1-75-1 AND AK-1-100-1 AIR CIRCUIT BREAKERS

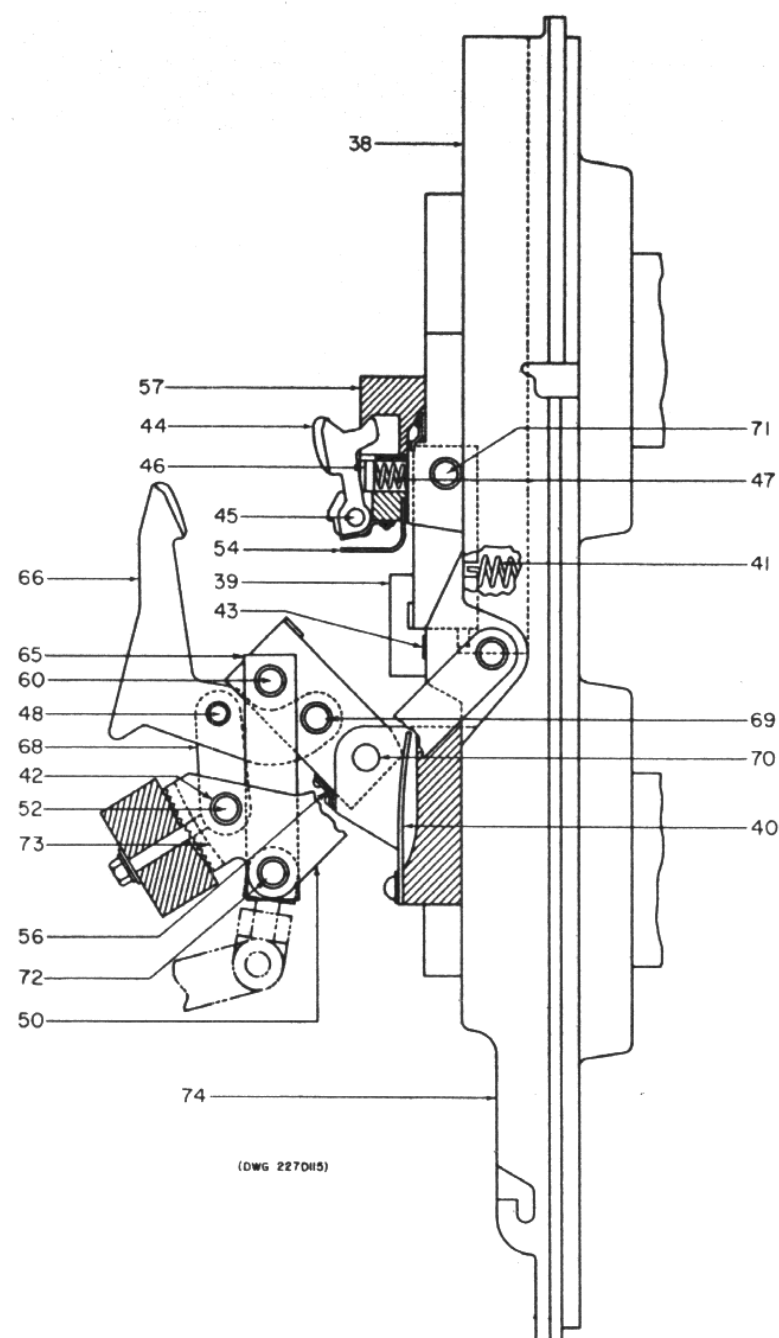


Fig. 4. Pole unit assembly

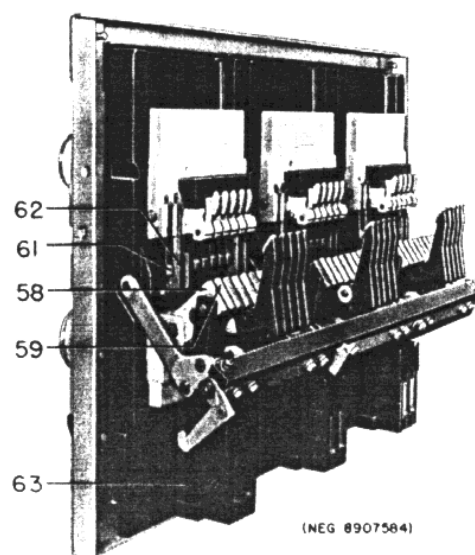


Fig. 5. Back frame assembly for type AK-1-100-1 breaker, front view

TYPE AK-1-75-1 AND AK-1-100-1 AIR CIRCUIT BREAKERS

GEF-3879

Fig. No.	Ref. No.	No. Per AK-1-			Cat. No.	Description
		75-1 AC	75-1 DC	100-1 AC-DC		
4	38	1	1	1	-----	Pole unit assembly
4	39	3	3	6	175L304G39	Barrier assembly for stationary intermediate contact
4	40			3	6203948P1	Spring for movable main contact
4	40	6	6	6	6555117P1	Spring for movable main contact
4	41	18	18		6509811P1	Spring for stationary main contact
4	41			30	6403370P1	Spring for stationary main contact
4	42	3	3		6447741P2	Spacer for side link pin
4	42			3	6447741P3	Spacer for side link pin
4	43	3	3		6414518P2	Contact stop for stationary main contact
4	43			3	6548047P2	Contact stop for stationary main contact
4	44	9			6203966G1	Contact, stationary arcing
4	44		15	15	6203966G1	Contact, stationary arcing
4	45	3			6404793P2	Pin for stationary arcing contact pivot
4	45		3	3	6404793P1	Pin for stationary arcing contact pivot
4	46	9			6447046P1	Spring guide for stationary arcing contact spring
4	46		15	15	6447046P1	Spring guide for stationary arcing contact spring
4	47	9			6509858P1	Spring for stationary arcing contact
4	47	9			6509859P1	Spring for stationary arcing contact
4	47		15	15	6509858P1	Spring for stationary arcing contact
4	47		15	15	6509859P1	Spring for stationary arcing contact
4	48	3			6447153P4	Pin for movable arcing contact link
4	48		3	3	6447153P2	Pin for movable arcing contact link
*	49	6	6	6	394A133P9	Retaining ring for movable arcing contact link pin
4	50	3	3	3	175L304G38	Link assembly, left
4	51	3	3	3	175L304G37	Link assembly, right
4	52	3	3		6203981P5	Pin for side link
4	52	3	3	3	6555600P1	Pin for side link
*	53	36	36	36	394A133P10	Retainer for 1/2 in. pins
4	54	3			6555406P2	Insulation for stationary arcing contact
4	54		3	3	6555406P1	Insulation for stationary arcing contact
*	55	6	6	6	6447449P1	Clip for insulation
4	56	3	3		6555134G1	Braid for movable main contacts
4	56			3	6555135G1	Braid for movable main contacts
4	57	3			6203983P1	Stop for stationary arcing contact
4	57		3	3	6203985P1	Stop for stationary arcing contact
5	58	15	15	24	6203978G1	Movable main contact
5	59	3	3		6203978G2	Movable intermediate contact
5	59			6	6203978G3	Movable intermediate contact
4	60	3	3		6447192P1	Pin for movable main contact link
4	60			3	6447172P1	Pin for movable main contact link
5	61	15	15	24	6203979G1	Stationary main contact
5	62	3	3		6203979G2	Stationary intermediate contact
5	62			6	6203979G3	Stationary intermediate contact
5	63	1	1	1	175L319DA	Series overcurrent tripping device
*	64	18	18	18	9921652P1	Spacer for movable arcing contact
4	65	6	6	6	383A680P1	Link for movable main contact
4	66	6	6	6	6404753P1	Movable arcing contact
4	66	9	9	9	9921572G1	Movable arcing contact †
*	67	18	36	36	6447773P1	Spacer for movable arcing contact
*	67	12	24	24	6447773P2	Spacer for movable arcing contact
4	68	3	3	3	383A681P1	Link for movable arcing contact
4	68	3	3	3	383A681P2	Link for movable arcing contact
4	69			3	6203981P6	Pin for movable arcing contact pivot
4	69	3	3		6203981P10	Pin for movable arcing contact pivot
4	70			6	6203981P7	Pin for movable main contact pivot
4	70	3	3		6203981P12	Pin for movable main contact pivot
4	71	3	3		6203981P8	Pin for stationary main contact pivot
4	72	3	3		6555423P2	Pin for side link, shouldered
4	72			3	6555423P3	Pin for side link, shouldered
4	73			3	6555167P1	Bracket for link
4	73			3	6555167P2	Bracket for link
4	74	3	3		175L304G36	Base assembly for pole unit
4	74			3	175L304G35	Base assembly for pole unit

† Specify the breaker frame size, whether A.C. or D.C. and whether breaker is stationary or drawout. If breaker is stationary, indicate whether the upper and lower studs are horizontal or vertical.

‡ For AK-1-75-1 D. C. breaker order with preceding part.

For AK-1-75-1 A. C. breaker omit preceding part.

* Not illustrated

TYPE AK-1-75-1 AND AK-1-100-1 AIR CIRCUIT BREAKERS

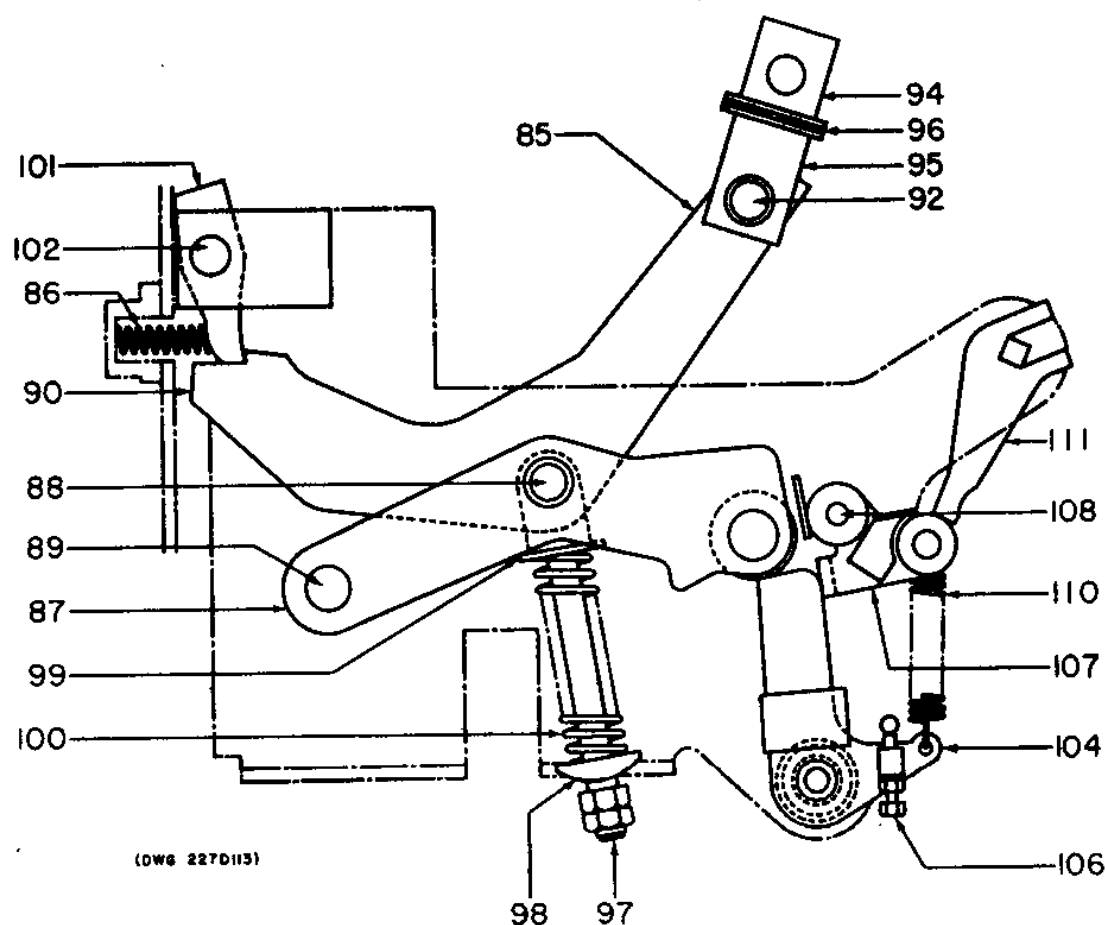


Fig. 6. Operating mechanism

Fig. No.	Ref. No.	No. Per AK-1-			Cat. No.	Description
		75-1 AC	75-1 DC	100-1 AC-DC		
6	85	1	1		175L315G6	Mechanism assembly, 2 pole breaker
6	85			1	175L315G7	Mechanism assembly, 2 pole breaker
6	85	1	1		175L315G2	Mechanism assembly, 3 pole breaker
6	85			1	175L315G3	Mechanism assembly, 3 pole breaker
6	86	1	1	1	365A333P1	Spring for prop-closing cam
6	87	1	1	1	175L315G40	Link assembly
6	88	1	1	1	6447091P1	Pin for closing cam
6	89	1	1	1	6447099P1	Pin for link
6	90	1	1	1	6414743P1	Closing cam
*	91	2	2	2	175L315P24	Spacers for closing cam
6	92	1	1	1	6447352P1	Clevis pin
*	93	2	2	2	394A133P10	Retainer for clevis pin
6	94	1	1	1	6555414P1	Coupling
6	95	1	1	1	6447043P1	Clevis
6	96	2	2	2	9921652P4	Washer for clevis
6	96	2	2	2	9921652P5	Washer for clevis
6	97	1	1	1	6203914G1	Support assembly for mechanism reset spring
6	98	1	1	1	6447353P1	Spring guide, bottom
6	99	1	1	1	6447331P1	Spring guide, top
6	100	1	1	1	6403393P1	Spring for reset
6	101	1	1	1	371A273G2	Prop for closing cam
6	102	1	1	1	174V531P1	Pin for prop-closing cam
*	103	2	2	2	394A133P10	Retainer for Ref. No. 16, Fig. 5
*	103	2	2	2	394A133P10	Retainer for Ref. No. 4, Fig. 5
6	104	1	1	1	9921596G1	Prop for linkage
*	105	7	7	7	6007608P3	Washers for prop
6	106	2	2	2	377A871P2	Bearing for prop
6	107	1	1	1	175L315G39	Reset latch assembly
6	108	1	1	1	6447744P1	Pin for reset latch
*	109	2	2	2	394A133P9	Retainer for pin in reset latch
6	110	1	1	1	6403348P1	Spring for reset latch
6	111	1	1		6414481P1	Latch
6	111	2	2	1	6414481P2	Latch

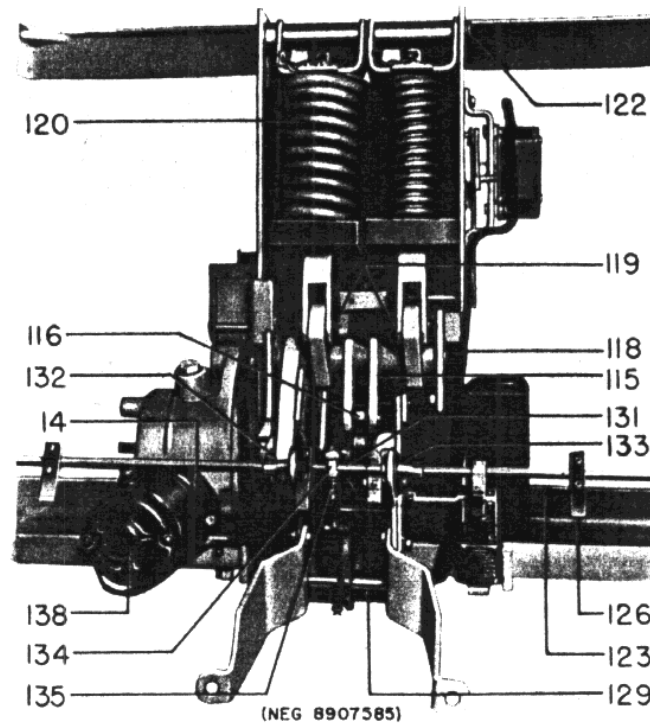


Fig. 7. Front frame assembly for type AK-1-100-1 breaker, rear view

Fig. No.	Ref. No.	No. Per AK-1-			Cat. No.	Description
		75-1 AC	75-1 DC	100-1 AC-DC		
7	115	1	1	1	267B103G1	Crank
7	116	1	1	1	393A796P2	Crank bearing
*	117	1	1	1	394A137P1	Roll pin for crank bearing
7	118	1	1	1	393A796P1	End bearing for crankshaft, right
7	118	1	1	1	393A796P3	End bearing for crankshaft, left
7	119	2	2	2	6447032P1	Pin for spring charging arm
7	120			1	273B569G1	Closing spring assembly
7	120	2	2		273B569G2	Closing spring assembly
7	120			1	273B569G3	Closing spring assembly
*	121	4	4	4	394A133P4	Retaining ring for spring charging arm
*	121	2	2	2	394A133P4	Retaining ring for spring support
7	122	1	1	1	6447010P2	Pin for spring support
7	123	2	2		265B234P3	Tripshaft
7	123			2	265B234P4	Tripshaft
*	124	2	2	2	377A871P2	Bearing for tripshaft end
*	125	2	2	2	394A133P1	Retaining ring for tripshaft end bearing
7	126	2	2	2	6447765P1	Overload trip paddle
*	127	2	2	2	6447766P1	Clamp for overload trip paddle
*	128	1	1	1	6440999P1	Operation counter
7	129	1	1	1	6447748P1	Stop for prop
*	130	2	2	2	394A133P9	Retainer for prop linkage
7	131	1	1	1	265B234P2	Tripshaft
7	132	2	2	2	174V536P1	Tripshaft coupling
7	133	2	2	2	377A871P2	Bearing for tripshaft
7	134	1	1	1	6444916P1	Latch bolt
7	135	1	1	1	N402P69B5	Latch washer
*	136	1	1	1	6403366P1	Spring for tripshaft return
*	137	2	2	2	394A133P11	Retainer for pin link
7	138	1	1	1	†5P66MA1	Motor, 125 volts, D.C.
7	138	1	1	1	†5P66MA3	Motor, 250 volts, D.C.
7	138	1	1	1	†5P66MA1	Motor, 115 volts, 25, 50, 60 cycles
7	138	1	1	1	†5P66MA3	Motor, 208 volts, 25, 50, 60 cycles
7	138	1	1	1	†5P66MA3	Motor, 230 volts, 25, 50, 60 cycles
7	138	1	1	1	†5P66MA3	Motor, 380 volts, 50 cycles, used with transformer
7	138	1	1	1	†5P66MA3	Motor, 460 volts, 25, 50, 60 cycles, used with transformer
7	138	1	1	1	†5P66MA3	Motor, 575 volts, 25, 50, 60 cycles, used with transformer

* Not illustrated

† Model Number

TYPE AK-1-75-1 AND AK-1-100-1 AIR CIRCUIT BREAKERS

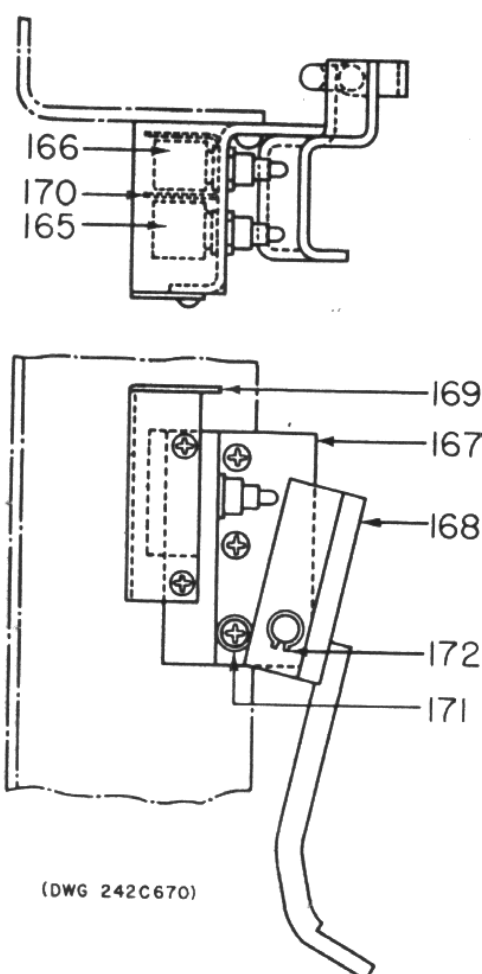


Fig. 8. Motor cut off switch

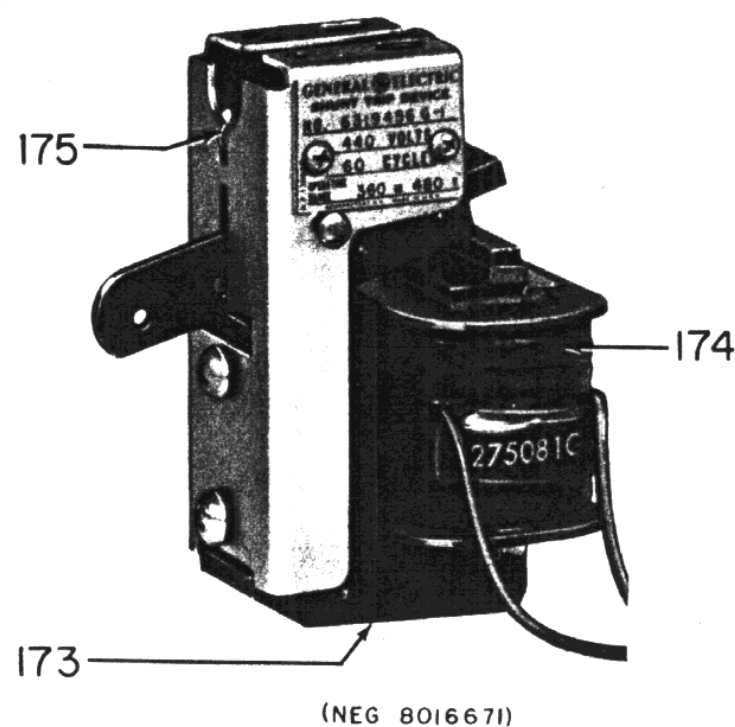


Fig. 9. Shunt tripping device

Fig. No.	Ref. No.	No. Per AK-1-		Cat. No.	Description
		75-1	100-1		
*	150	1	1	61G27	Transformer, 380-230 volts, 50 cycles
*	151	1	1	76G327	Transformer, 460-230 volts, 25 cycles
*	152	1	1	61G27	Transformer, 460-230 volts, 50/60 cycles
*	153	1	1	76G348	Transformer, 575-230 volts, 25 cycles
*	154	1	1	61G48	Transformer, 575-230 volts, 50 cycles
*	155	1	1	9921661P1	Closing switch
8	165	1	1	9921661P1	Motor cut-off "F" switch
8	166	1	1	9921661P2	Motor cut-off "G" switch
8	167	1	1	371A233G1	Cut-off switch mounting bracket
8	168	1	1	371A234G1	Cut-off switch lever bracket
8	169	1	1	371A235P1	Cut-off switch cover
8	170	1	1	174V521P1	Cut-off switch insulation
8	171	1	1	6176109P17	Spacer for cut-off switch
8	172	1	1	394A133P9	Retaining ring for cut-off switch
9	173	1	1	6319456G1	Shunt trip device, less coil
9	174	1	1	-----	Shunt trip coil, see page 2
9	175	1	1	6172583	Shunt trip spring

* Not illustrated

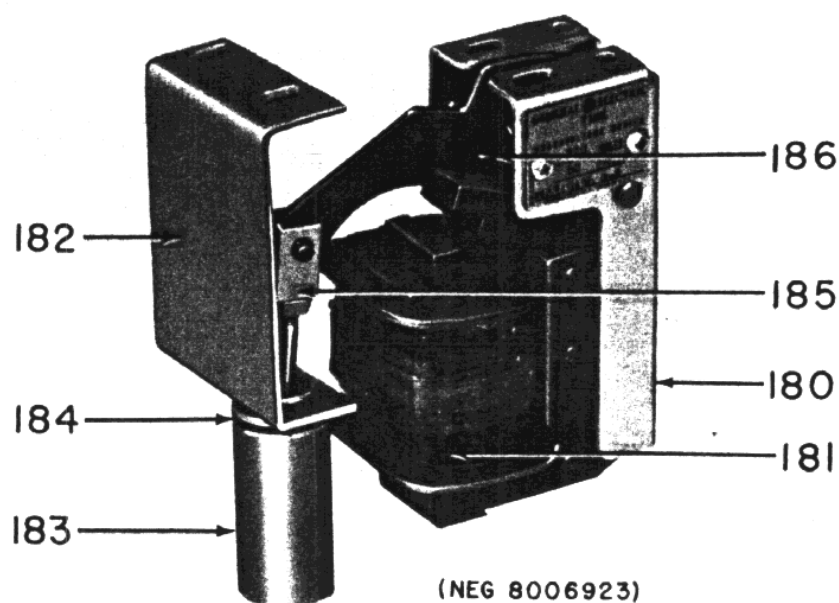


Fig. 10. Time-delay undervoltage tripping device

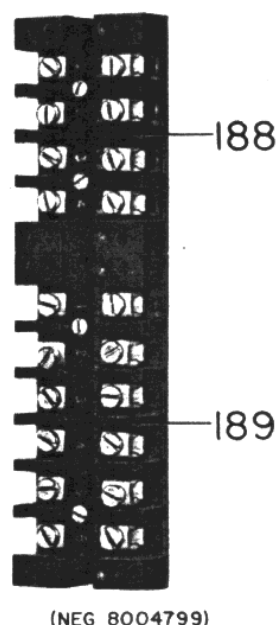


Fig. 11. Terminal board, without cover

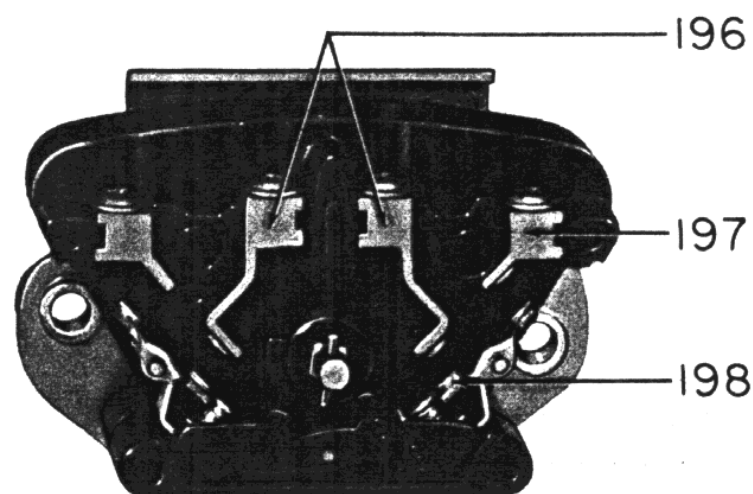


Fig. 12. Type SB-12 auxiliary switch, with back frame removed

Fig. No.	Ref. No.	No. Per AK-1-		Cat. No.	Description
		75-1	100-1		
10	180		1	6319456G7	Undervoltage device, instantaneous, A.C.
10	180	1	1	6319456G9	Undervoltage device, instantaneous, D.C.
10	180		1	6319456G8	Undervoltage device, time delay, A.C.
10	180	1	1	6319456G10	Undervoltage device, time delay, D.C.
10	181	1	1	-----	Undervoltage device coil, see page 2
10	182	1	1	6319456G40	Cylinder support and guide
10	183	1	1	6403126P1	Cylinder
10	184	1	1	6444315P1	Gasket
10	185	1	1	6403128G1	Plunger and link
10	186	1	1	6172594	Spring
*	187	1	1	393A991P2	Silicone oil, No. 9981LT40NV, 1/4 oz.
11	188	1	1	6293908G32	Terminal board (4 point)
11	189	1	1	6293908G33	Terminal board (6 point)
1	195	1	1	6353562G2	Auxiliary switch (2 stage)
1	195	1	1	6353562G5	Auxiliary switch (5 stage)
12	196	Δ	Δ	6472067G1	Stationary contact, center
12	197	Δ	Δ	6472067G2	Stationary contact, outside
12	198	Δ	Δ	6402656G1	Movable contact

* Not illustrated

Δ 4 furnished for 2 stage switch

Δ 10 furnished for 5 stage switch