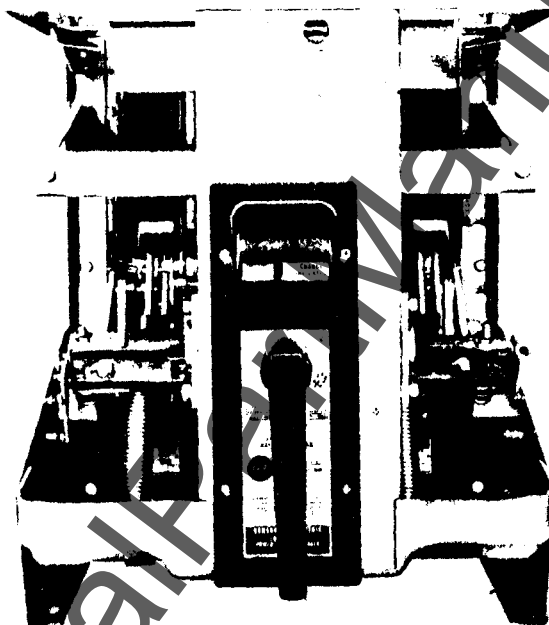




RENEWAL PARTS

GEF-4150B
Supersedes GEF-4150A

TYPE AK-2-50, AK-2A-50, AK-3-50 AND AK-3A-50 POWER CIRCUIT BREAKERS



(PHOTO 8029416)

Manual breaker, Type AK-2-50

ORDERING INSTRUCTIONS

1. Always specify 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

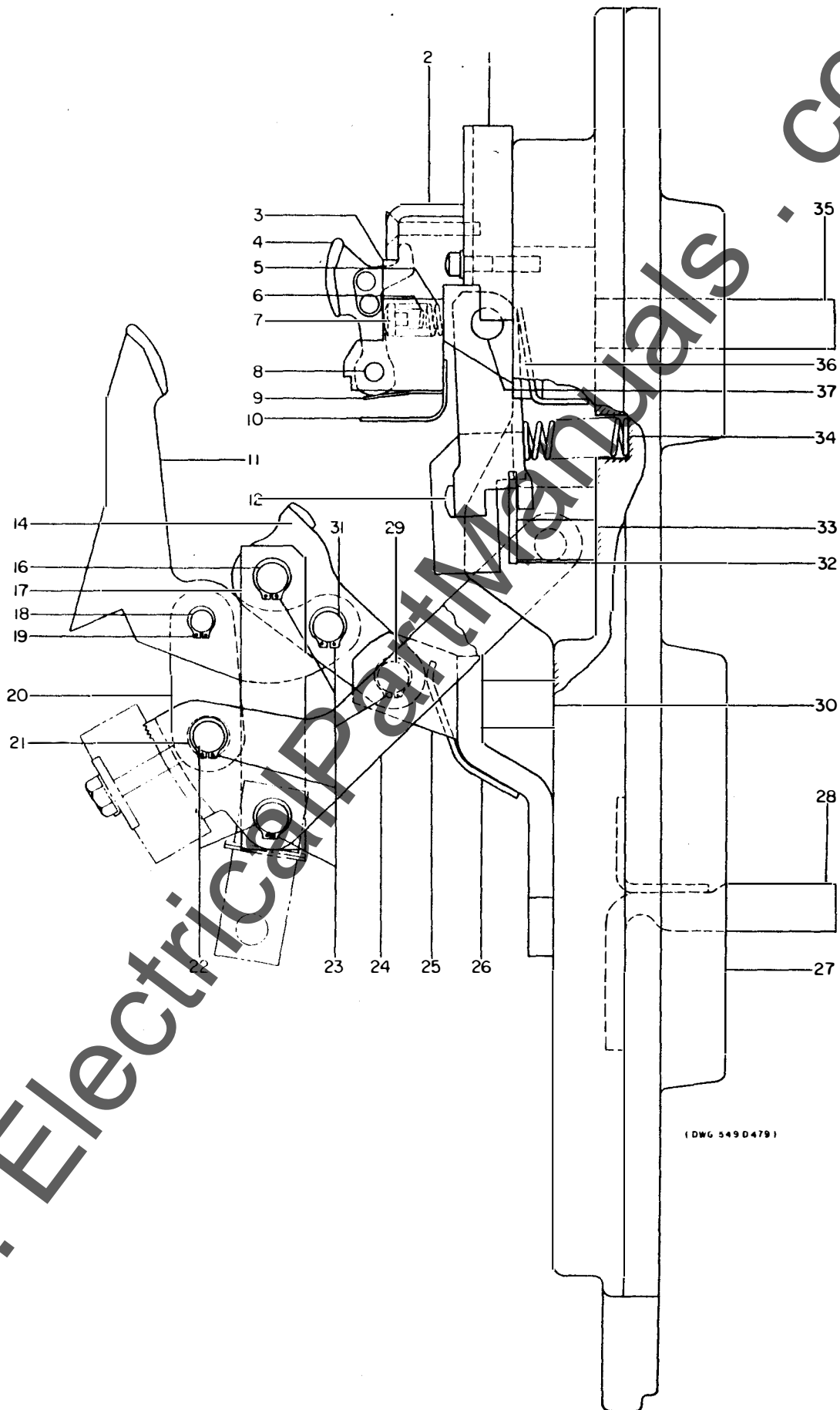


Fig. 1. Pole unit

TYPE AK POWER CIRCUIT BREAKERS

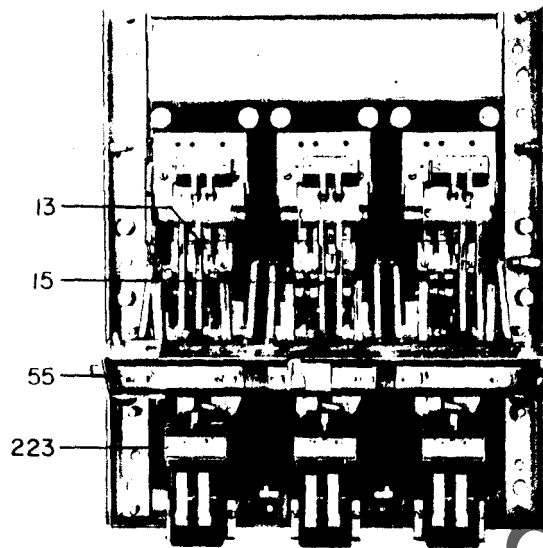
GEF-415011

Fig. No.	Ref. No.	No. Required per Pole †										Cat. No.	Description		
		AK-2-50			AK-2A-50		AK-3-50		AK-3A-50						
		Man.			Elec.		Man.		Elec.		Man.				
		†	-1	-2	†	-1	-2	†	†	†	†			†	†
1	1	1	1	1	1	1	1	1	1	1	1	1	073-371A208P1	Spacer	
1	2	1	1	1	1	1	1	1	1	1	1	1	9921587P1	Stop, AC	
1	2	1	1	1	1	1	1	1	1	1	1	1	449A994P3	Stop, DC	
1	3	1	1	1	1	1	1	1	1	1	1	1	117A512P1	Block, AC	
1	3	1	1	1	1	1	1	1	1	1	1	1	452A542P1	Block, DC	
1	4	-	-	-	2	-	-	-	-	2	-	-	295B408G1	Stationary arcing contact, AC	
1	4	-	-	-	3	-	-	-	-	3	-	-	295B408G1	Stationary arcing contact, DC	
1	4	2	2	2	-	2	2	2	2	-	2	2	295B408G3	Stationary arcing contact, AC	
1	4	3	3	3	-	3	3	3	3	-	3	3	295B408G3	Stationary arcing contact, DC	
1	5	2	2	2	2	2	2	2	2	2	2	2	6509858	Spring for stationary arcing contacts, AC (outer)	
1	5	3	3	3	3	3	3	3	3	3	3	3	6509858	Spring for stationary arcing contacts, DC (outer)	
1	6	2	2	2	2	2	2	2	2	2	2	2	6509859	Spring for stationary arcing contacts, AC (inner)	
1	6	3	3	3	3	3	3	3	3	3	3	3	6509859	Spring for stationary arcing contacts, DC (inner)	
1	7	2	2	2	2	2	2	2	2	2	2	2	6447046P1	Spring guide for stationary arcing contact springs, AC	
1	7	3	3	3	3	3	3	3	3	3	3	3	6447046P1	Spring guide for stationary arcing contact springs, DC	
1	8	1	1	1	1	1	1	1	1	1	1	1	6404793P3	Pivot pin for stationary arcing contacts, AC	
1	8	1	1	1	1	1	1	1	1	1	1	1	6404793P2	Pivot pin for stationary arcing contacts, DC	
1	9	1	1	1	1	1	1	1	1	1	1	1	433A319P2	Leaf spring for stationary arcing contacts, AC	
1	9	1	1	1	1	1	1	1	1	1	1	1	433A319P1	Leaf spring for stationary arcing contacts, DC	
1	10	1	1	1	1	1	1	1	1	1	1	1	459A373P1	Insulation for stationary arcing contacts, AC	
1	10	1	1	1	1	1	1	1	1	1	1	1	459A373P3	Insulation for stationary arcing contacts, DC	
1	11	2	2	2	2	2	2	2	2	2	2	2	9921572G2	Moving arcing contact, AC	
1	11	3	3	3	3	3	3	3	3	3	3	3	9921572G2	Moving arcing contact, DC	
1	12	3	3	3	3	3	3	3	3	3	3	3	293B221G1	Stationary main contact	
2	13	1	1	1	1	1	1	1	1	1	1	1	459A385G1	Stationary intermediate contact (includes barrier)	
1	14	3	3	3	3	3	3	3	3	3	3	3	293B220G3	Moving main contacts	
2	15	1	1	1	1	1	1	1	1	1	1	1	293B220G4	Moving intermediate contact	
1	16	1	1	1	1	1	1	1	1	1	1	1	452A528P1	Pin for movable main contact	
1	17	2	2	2	2	2	2	2	2	2	2	2	6404784P4	Link for movable main contact	
1	18	1	1	1	1	1	1	1	1	1	1	1	6447153P3	Pin for movable arcing contact link, AC	
1	18	1	1	1	1	1	1	1	1	1	1	1	6447153P1	Pin for movable arcing contact link, DC	
1	19	2	2	2	2	2	2	2	2	2	2	2	394A133P9	Retainer	
1	20	1	1	1	1	1	1	1	1	1	1	1	275B975P1	Link for movable arcing contact, AC	
1	20	2	2	2	2	2	2	2	2	2	2	2	275B975P1	Link for movable arcing contact, DC	
1	21	1	1	1	1	1	1	1	1	1	1	1	6447741P1	Insulating tube	
1	22	2	2	2	2	2	2	2	2	2	2	2	6203981P1	Pin for side link	
1	23	10	10	10	10	10	10	10	10	10	10	10	394A133P10	Retainer	
1	24	1	1	1	1	1	1	1	1	1	1	1	457A624G1	Side link, right	
1	24	1	1	1	1	1	1	1	1	1	1	1	457A624G2	Side link, left	
1	25	1	1	1	1	1	1	1	1	1	1	1	452A569G2	Terminal	
1	26	1	1	1	1	1	1	1	1	1	1	1	452A529P1	Leaf spring for movable main contacts	
1	27	1	1	1	1	1	1	1	1	1	1	1	6414314P2	Pole unit base	
1	28	1	1	1	1	1	1	1	1	1	1	1	452A564G1	Lower stud	
1	29	1	1	1	1	1	1	1	1	1	1	1	6203981P9	Pivot pin for movable main contacts	
1	30	1	1	1	1	1	1	1	1	1	1	1	293B287P3	Spacer for terminal	
1	31	1	1	1	1	1	1	1	1	1	1	1	6203981P13	Pivot pin for movable arcing contact	
1	32	1	1	1	1	1	1	1	1	1	1	1	453A116P1	Stop for stationary main contacts	
1	33	-	-	-	-	-	-	-	-	-	-	-	453A116P2	Spacer for stationary main contact stop	
1	33	1	1	1	1	1	1	1	1	1	1	1	453A116P3	Spacer for stationary main contact stop	
1	34	-	-	-	4	-	-	-	-	4	-	-	6509893	Spring for stationary main contacts	
1	34	4	4	4	-	4	4	4	4	-	4	4	412A0287	Spring for stationary main contacts	
1	35	1	1	1	1	1	1	1	1	1	1	1	293B240G1	Upper stud, AC	
1	35	1	1	1	1	1	1	1	1	1	1	1	293B240G2	Upper stud, DC	
1	36	1	1	1	1	1	1	1	1	1	1	1	449A995P1	Leaf spring for stationary main contacts	
1	37	1	1	1	1	1	1	1	1	1	1	1	6447734P2	Pivot pin for stationary main contacts	
3	38	1	1	1	1	1	1	1	1	1	1	1	238B674G1	Arc quencher, AC	
3	38	1	1	1	1	1	1	1	1	1	1	1	238B674G2	Arc quencher, DC	
3	39	1	1	1	1	1	1	1	1	1	1	1	275B866P1	Plate, AC	
3	39	1	1	1	1	1	1	1	1	1	1	1	293B242P1	Plate, DC	
3	40	1	1	1	1	1	1	1	1	1	1	1	265B248P1	Side frame, right, AC	

† To determine quantity required per breaker multiply by number of poles (2, 3 or 4)

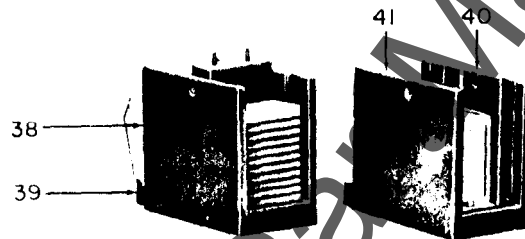
‡ Original breaker had no suffix letter or numeral

TYPE AK POWER CIRCUIT BREAKERS



(PHOTO 8029415)

Fig. 2. Back frame assembly



(PHOTO 8907587)

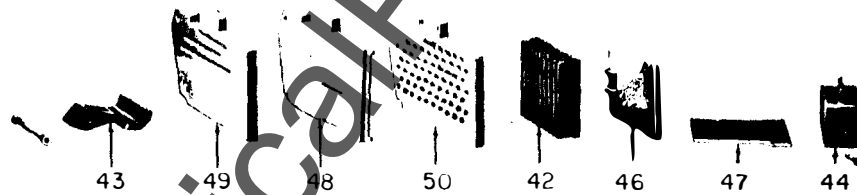


Fig. 3. Arc quencher

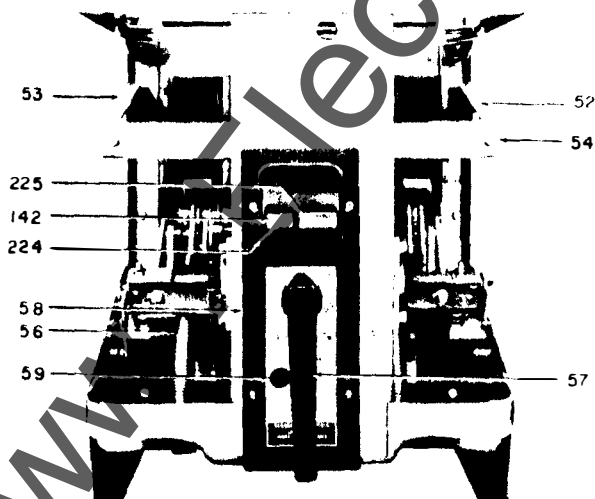
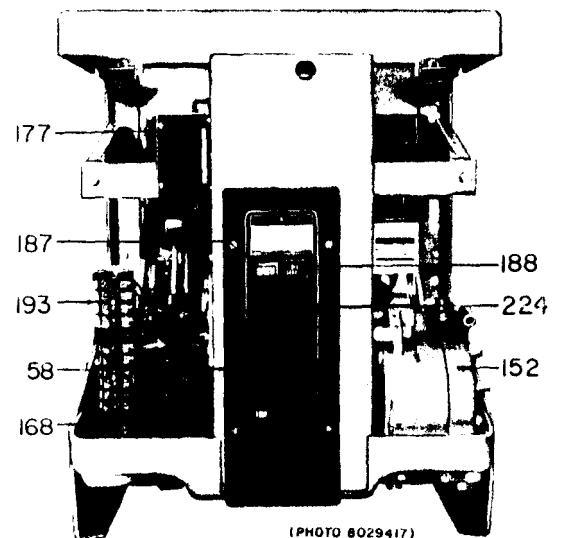


Fig. 4. AK-2-50 manual



(PHOTO 8029417)

Fig. 5. AK-2-50 electrical

TYPE AK POWER CIRCUIT BREAKER

GEF-4150B

Fig. No.	Ref. No.	No. Required per Pole †										Cat. No.	Description		
		AK-2-50		AK-2A-50		AK-3-50		AK-3A-50							
		Man.		Elec.		Man.		Elec.		Man.				Elec.	
		†	-1-2	†	-1-2	†	-1-2	†	-1-2	†	-1-2			†	-1-2
3	40	1	1	1	1	1	1	1	1	1	1	1	073-265B248P1	Side frame, right, DC	
3	41	1	1	1	1	1	1	1	1	1	1	1	265B248P2	Side frame, left, AC	
3	41	1	1	1	1	1	1	1	1	1	1	1	265B248P2	Side frame, left, DC	
3	42	1	1	1	1	1	1	1	1	1	1	1	265B249P1	Baffle, AC	
3	42	1	1	1	1	1	1	1	1	1	1	1	372A498G1	Baffle, DC	
3	43	1	1	1	1	1	1	1	1	1	1	1	265B229P1	Cap, AC	
3	43	1	1	1	1	1	1	1	1	1	1	1	6555518P2	Cap, DC	
3	44	1	1	1	1	1	1	1	1	1	1	1	371A206P1	Block, AC	
3	44	1	1	1	1	1	1	1	1	1	1	1	371A206P2	Block, DC	
*	45	1	1	1	1	1	1	1	1	1	1	1	371A205P1	Magnet, AC	
*	45	1	1	1	1	1	1	1	1	1	1	1	371A205P2	Magnet, DC	
3	46	1	1	1	1	1	1	1	1	1	1	1	371A207P1	Compound support, AC	
3	46	1	1	1	1	1	1	1	1	1	1	1	372A464P2	Compound support, DC	
3	47	1	1	1	1	1	1	1	1	1	1	1	371A209P1	Steel back plate, AC	
3	47	1	1	1	1	1	1	1	1	1	1	1	371A209P2	Steel back plate, DC	
3	48	1	1	1	1	1	1	1	1	1	1	1	6414494P1	Pocket barrier, right, AC	
3	48	1	1	1	1	1	1	1	1	1	1	1	6414494P1	Pocket barrier, right, DC	
3	48	1	1	1	1	1	1	1	1	1	1	1	6414494P2	Pocket barrier, left, AC	
3	48	1	1	1	1	1	1	1	1	1	1	1	6414494P2	Pocket barrier, left, DC	
3	49	2	2	2	2	2	2	2	2	2	2	2	6414493P1	Side barrier, AC	
3	49	2	2	2	2	2	2	2	2	2	2	2	6414493P1	Side barrier, DC	
3	50	1	1	1	1	1	1	1	1	1	1	1	6414492P1	Inner barrier, AC	
3	50	2	2	2	2	2	2	2	2	2	2	2	6414492P1	Inner barrier, DC	

Fig. No.	Ref. No.	No. Required per Breaker										Cat. No.	Description		
		AK-2-50		AK-2A-50		AK-3-50		AK-3A-50							
		Man.		Elec.		Man.		Elec.		Man.				Elec.	
		†	-1-2	†	-1-2	†	-1-2	†	-1-2	†	-1-2			†	-1-2
*	51	2	2	2	2	2	2	2	2	2	2	2	073-6414763P1	Phase barrier	
4	52	1	1	1	1	1	-	1	1	-	-	-	372A275G1	Lifting bracket, right (pearl gray)	
4	52	1	1	1	1	1	-	1	1	-	-	-	372A275G3	Lifting bracket, right (sand gray)	
4	53	1	1	1	1	1	-	1	1	-	-	-	372A275G2	Lifting bracket, left (pearl gray)	
4	53	1	1	1	1	1	-	1	1	-	-	-	372A275G4	Lifting bracket, left (sand gray)	
4	54	1	1	1	1	1	-	1	1	-	-	-	9921630P1	Arc quencher tie bar (pearl gray)	
4	54	1	1	1	1	1	-	1	1	-	-	-	9921630P3	Arc quencher tie bar (sand gray)	
4	54	-	-	-	-	-	1	1	-	-	1	1	9921630P2	Arc quencher tie bar	
2	55	1	1	1	1	1	1	1	1	1	1	1	267B101P2	Cross bar	
4	56	2	2	2	2	2	2	2	2	2	2	2	6509914	Opening spring	
4	57	1	1	1	-	-	-	-	1	-	-	-	6548046P3	Handle (black)	
17	57	-	-	1	-	-	-	1	-	-	-	-	669D0807P2	Handle (gray)	
4	58	1	1	1	-	-	-	-	1	-	-	-	698C997P1	Front escutcheon (black)	
5	58	-	-	-	1	1	1	-	-	-	-	-	275B997P2	Front escutcheon (w/o closing switch, black)	
*	58	-	-	-	1	1	1	-	-	-	1	-	805B975P1	Front escutcheon (with closing switch, black)	
*	58	-	-	1	-	-	-	1	-	-	-	-	698C997P5	Front escutcheon (blue)	
*	58	-	-	-	-	-	1	-	-	-	-	1	805B975P2	Front escutcheon (blue)	
4	59	1	1	1	1	1	1	1	1	1	1	1	411A904G5	Trip button and rod assembly	
*	60	1	1	1	1	1	1	1	1	1	1	1	412A139	Trip button spring	
7	61	1	1	1	1	1	1	1	1	1	1	1	620393P3	Hand, trip paddle	
*	62	1	1	1	1	1	1	1	1	1	1	1	6444141P1	Clamp	
7	63	2	2	2	2	2	2	2	2	2	2	2	276B250P1	Trip shaft (outside)	
7	64	2	2	2	2	2	2	2	2	2	2	2	174V536P1	Coupling	
7	65	2	2	2	2	2	2	2	2	2	2	2	127A6493P2	Dowel Pin	
8	66	1	1	1	1	1	1	1	1	1	1	1	276B250P2	Trip shaft (center)	
*	67	2	2	2	2	2	2	2	2	2	2	2	394A133P1	Retainer	
*	68	4	4	4	4	4	4	4	4	4	4	4	377A871P5	Trip shaft bearing (side sheets and mechanisms frame)	
*	69	2	2	2	2	2	2	2	2	2	2	2	394A133P16	Retainer	
6	74	1	1	1	1	1	1	1	1	1	1	1	174V531P1	Pin	
6	75	6	6	6	6	6	6	6	6	6	6	6	394A133P10	Retainer	

* Not shown

† To determine quantity required per breaker multiply by number of poles (2, 3 or 4)

‡ Original breaker had no suffix letter or numeral

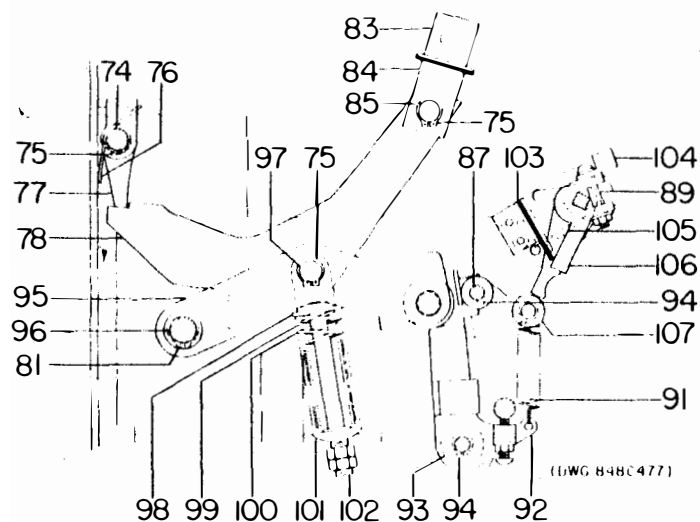


Fig. 6. AK-2-50 mechanism assembly

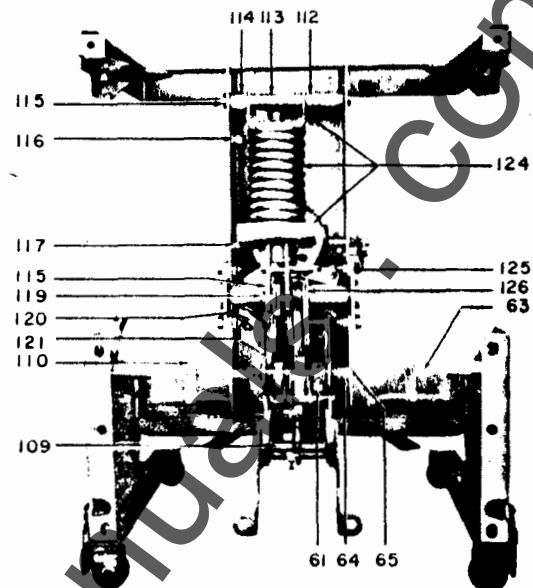


Fig. 7. AK-2-50 manual front frame assembly

Fig No.	Ref. No.	No. Required per 1 reaker										Cat. No.	Description		
		AK-2-50						AK-2A-50		AK-3-50				AK-3A-50	
		Man.			Elec.			Man.	Elec.	Man.	Elec.			Man.	Elec.
		†	-1	-2	†	-1	-2	†	†	†	†			†	†
6	76	1	1	1	1	1	1	1	1	1	1	1	073-412A140	Spring	
6	77	1	1	1	1	1	1	1	1	1	1	1	419A366P1	Prop	
6	78	1	1	1	1	1	1	1	1	1	1	1	6414743P1	Cam	
6	83	1	1	1	1	1	1	1	1	1	1	1	6555414P2	Coupling	
6	84	1	1	1	1	1	1	1	1	1	1	1	412A413P3	Clevis	
6	85	1	1	1	1	1	1	1	1	1	1	1	412A405P414	Pin	
6	87	1	1	1	1	1	1	1	1	1	1	1	6447744P1	Pin	
*	88	-	-	-	1	1	-	-	-	-	-	-	457A610G1	Reset latch	
6	89	1	1	1	1	1	1	1	1	1	1	1	6444916P1	Latch bolt	
*	90	-	-	-	1	1	-	-	-	1	-	-	6414764P1	Latch	
6	91	1	1	1	1	1	1	1	1	1	1	1	6403348	Spring	
6	92	1	1	1	1	1	1	1	1	1	1	1	698C993G1	Prop	
6	93	2	2	2	2	2	2	2	2	2	2	2	377A871P2	Prop shaft bearing	
6	94	4	4	4	4	4	4	4	4	4	4	4	394A133P9	Retainer	
6	95	1	1	1	1	1	1	1	1	1	1	1	457A622G1	Link assembly	
6	96	1	1	1	1	1	1	1	1	1	1	1	6447099P1	Pin	
6	97	1	1	1	1	1	1	1	1	1	1	1	6447091P1	Pin	
6	98	1	1	1	1	1	1	1	1	1	1	1	6447331P1	Spring guide (upper)	
6	99	1	1	1	1	1	1	1	1	1	1	1	148A2213	Spring reset (inner)	
6	100	1	1	1	1	1	1	1	1	1	1	1	148A2214	Spring reset (outer)	
6	101	1	1	1	1	1	1	1	1	1	1	1	6447353P1	Spring guide (lower)	
6	102	1	1	1	1	1	1	1	1	1	1	1	6203914G1	Spring support assembly	
6	103	1	1	1	1	-	1	1	1	-	1	1	457A627G1	Buffer assembly	
6	104	1	1	1	1	1	1	1	1	1	1	1	383A671G2	Counter weight	
6	105	1	1	1	1	1	1	1	1	1	1	1	6403366	Trip shaft return spring	
6	106	1	1	1	-	-	1	1	1	-	1	1	848C0487P1	Latch	
6	107	1	1	1	-	-	1	1	1	-	1	1	889130410G1	Reset latch	
7	109	1	1	1	1	1	1	1	1	1	1	1	412A412P2	Prop stop	
7	110	3	3	3	3	3	3	3	3	3	3	3	269C267G5	Trip paddle	

* Not shown.

Original breaker had no suffix letter or numeral.

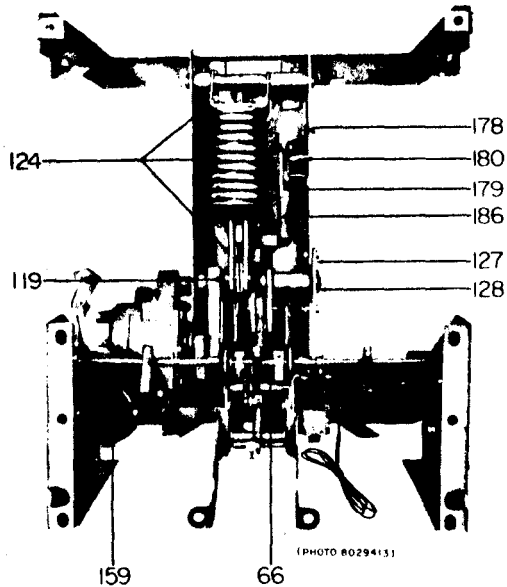


Fig. 8. AK-2-50 electrical front frame assembly

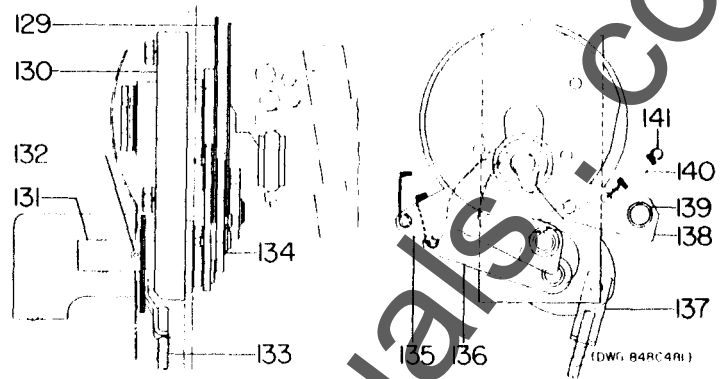


Fig. 9. AK-2-50 manual closing mechanism

Fig. No.	Ref. No.	No. Required per Breaker										Cat. No.	Description				
		AK-2-50			AK-2A-50		AK-3-50		AK-3A-50								
		Man.			Elec.		Man.		Elec.		Man.			Elec.			
		†	-1	-2	†	-1	-2	†	†	†	†			†	†	†	†
*	111	1	1	1	1	1	1	1	1	1	1	1	093-6447767P1	Trip shaft stop			
7	112	1	1	1	1	1	1	1	1	1	1	1	148A1946P10	Spacer			
7	113	1	1	1	1	1	1	1	1	1	1	1	6447010P1	Upper spring guide assembly pin			
7	114	1	1	1	1	1	1	1	1	1	1	1	148A1946P1	Spacer			
7	115	4	4	4	4	4	4	4	4	4	4	4	394A133P4	Retaining ring			
7	116	1	1	1	-	-	-	1	-	1	-	1	698C996G5	Pawl spring support (upper)			
7	117	1	1	1	-	-	-	1	-	1	-	1	698C996G4	Pawl spring support (lower)			
*	118	2	2	2	-	-	-	2	-	2	-	2	698C996P13	Pawl spring rollers			
7	119	1	1	1	-	-	-	1	-	1	-	1	6447032P2	Lower spring guide assembly pin			
8	119	-	-	-	1	1	1	-	1	-	1	-	6447032P1	Lower spring guide assembly pin			
7	120	1	1	1	-	-	-	1	-	1	-	1	698C993P4	Buffer pin			
7	121	1	1	1	-	-	-	1	-	1	-	1	698C993P3	Buffer support			
*	122	1	1	1	-	-	-	1	-	1	-	1	698C993P5	Buffer washer			
*	123	1	1	1	-	-	-	1	-	1	-	1	393A993P24	Buffer stop nut			
7	124	1	1	1	-	-	-	1	-	1	-	1	889B0408G1	Spring guide assembly (closing)			
8	124	-	-	-	1	1	1	-	1	-	-	1	273B569G4	Spring guide assembly (closing)			
7	125	2	2	2	-	-	-	2	-	2	-	2	698C992G5	Support			
7	126	1	1	1	-	-	-	1	-	1	-	1	698C992G4	Crank			
8	127	-	-	-	1	1	1	-	1	-	1	-	393A554P1	Support			
8	128	-	-	-	1	1	1	-	1	-	1	-	393A796P3	Bearing			
9	129	1	1	1	-	-	-	1	-	1	-	1	698C987G2	Ratchet assembly			
9	130	1	1	1	-	-	-	1	-	1	-	1	698C988G3	Support assembly			
9	131	1	1	1	-	-	-	1	-	1	-	1	698C990G2	Shaft assembly			
9	132	1	1	1	-	-	-	1	-	1	-	1	394A137P12	Roll pin			
9	133	1	1	1	-	-	-	1	-	1	-	1	127A8306	Spring			
9	134	1	1	1	-	-	-	1	-	1	-	1	394A133P28	Retainer			
9	135	1	1	1	-	-	-	1	-	1	-	1	698C985G1	Pawl with spring (rear)			
9	136	1	1	1	-	-	-	1	-	1	-	1	698C985G2	Pawl with spring (front)			
9	137	1	1	1	-	-	-	1	-	1	-	1	846C817G1	Spring arm			
9	138	1	1	1	-	-	-	1	-	1	-	1	698C991G5	Prop			
9	139	1	1	1	-	-	-	1	-	1	-	1	394A133P3	Retainer			
9	140	1	1	1	-	-	-	1	-	1	-	1	412A280	Prop spring			
9	141	1	1	1	-	-	-	1	-	1	-	1	698C991P10	Pin			
4,10	142	1	1	1	-	-	-	1	-	1	-	1	698C996G1	Indicator (when ordering indicator include label ref. No. 151)			

* Not shown.

† Original breaker had no suffix letter or numeral.

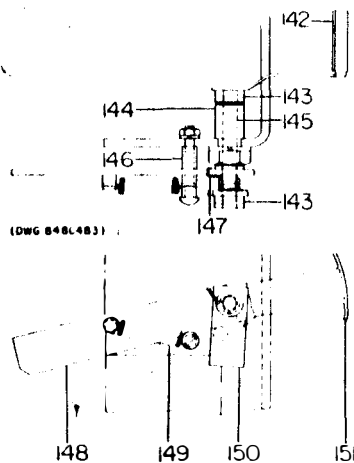


Fig. 10. AK-2-50 manual indicator assembly

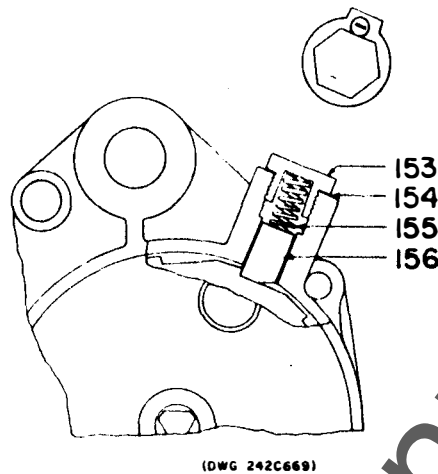


Fig. 11. Section of gear box

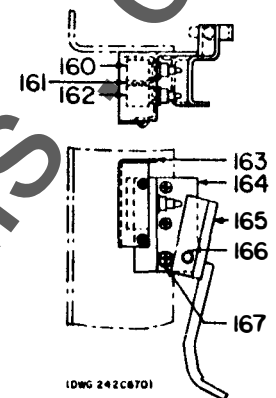


Fig. 12. Motor cut-off switch

Fig. No.	Ref. No.	No. Required per Breaker										Cat. No.	Description		
		AK-2-50			AK-2A-50			AK-3-50		AK-3A-50					
		Man.		Elec.	Man.		Elec.	Man.	Elec.	Man.	Elec.				
		†	-1	-2	†	-1	-2	†	†	†	†			†	†
10	143	2	2	2	-	-	-	2	-	2	-	2	-	073-394A137P11	Roll pin
10	144	1	1	1	-	-	-	1	-	1	-	1	-	698C995P2	Bearing
10	145	1	1	1	-	-	-	1	-	1	-	1	-	127A6493P3	Rod
10	146	1	1	1	-	-	-	1	-	1	-	1	-	698C995P14	Tube
10	147	1	1	1	-	-	-	1	-	1	-	1	-	412A267	Spring
10	148	1	1	1	-	-	-	1	-	1	-	1	-	698C995G1	Indicator lever assembly
10	149	1	1	1	-	-	-	1	-	1	-	1	-	412A0292	Spring
10	150	1	1	1	-	-	-	1	-	1	-	1	-	698C995G2	Indicator crank assembly
10	151	1	1	1	-	-	-	1	-	1	-	1	-	259C608P3	Open-close label
5	152	-	-	-	1	1	1	-	1	-	1	-	1	177L362G2	Gear box assembly, standard (state color: pearl gray or sand gray)
5	152	-	-	-	1	1	1	-	1	-	1	-	1	177L362G1	Gear box assembly, dynamic braking, 30-cy closing
5	152	-	-	-	1	1	1	-	1	-	1	-	1	177L362G3	Gear box assembly, quick close, 5-cy closing
11	153	-	-	-	1	1	1	-	1	-	1	-	1	6447398P1	Plug
11	154	-	-	-	1	1	1	-	1	-	1	-	1	393A992P2	"O" ring for plug
11	155	-	-	-	1	1	1	-	1	-	1	-	1	6509871	Spring for ratchet pin
11	156	-	-	-	1	1	1	-	1	-	1	-	1	372A382P1	Ratchet pin
*	157	-	-	-	1	1	1	-	1	-	1	-	1	393A991P1	Lubricant for gear box (4 oz.)
*	158	-	-	-	1	1	1	-	1	-	1	-	1	6447101P1	Gasket motor
8	159	-	-	-	1	1	1	-	1	-	1	-	1	5P66MA6	Motor, 115 volts, 25, 50, 60 cycles and 125 volt DC
8	159	-	-	-	1	1	1	-	1	-	1	-	1	5P66MA7	Motor, 208-230 volts, 25, 50, 60 cycles and 250 volt DC
12	160	-	-	-	1	1	1	-	1	-	1	-	1	9921661P2	Cut-off switch "G"
12	161	-	-	-	1	1	1	-	1	-	1	-	1	174V521P1	Cut-off switch insulation
12	162	-	-	-	1	1	1	-	1	-	1	-	1	9921661P1	Cut-off switch "F"
12	163	-	-	-	1	1	1	-	1	-	1	-	1	371A235P1	Cut-off switch cover
12	164	-	-	-	1	1	1	-	1	-	1	-	1	371A233G1	Cut-off switch mounting bracket
12	165	-	-	-	1	1	1	-	1	-	1	-	1	371A234G1	Cut-off switch lever bracket
12	166	-	-	-	1	1	1	-	1	-	1	-	1	394A133P9	Cut-off switch retainer

* Not shown.

† Original breaker had no suffix letter or numeral

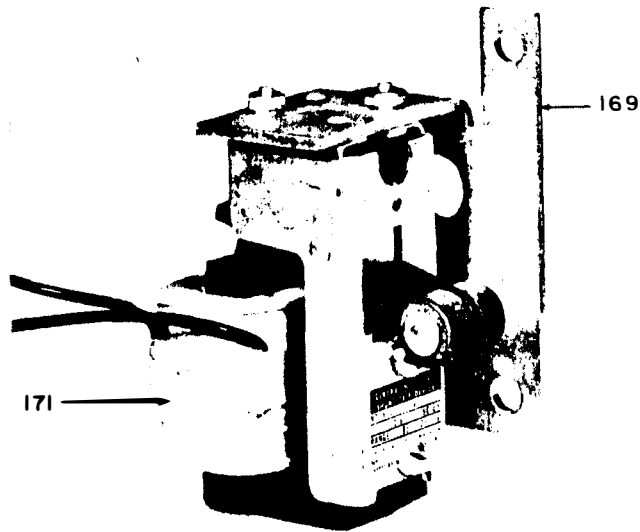


Fig. 13. Shunt trip
(Ref. No. 170)

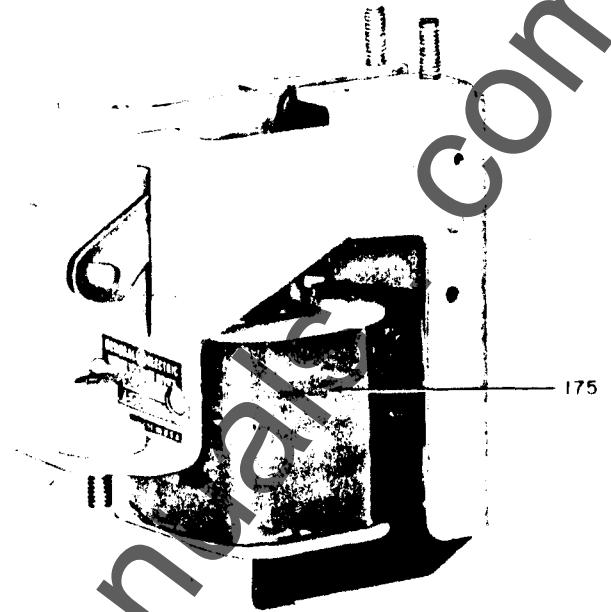


Fig. 14. Time delay undervoltage device
(Ref. No. 173)

Fig. No.	Ref. No.	No. Required per Breaker										Cat. No.	Description		
		AK-2-50			AK-2A-50		AK-3-50		AK-3A-50						
		Man.			Elec.		Man.		Elec.		Man.				
		†	-1	-2	†	-1	-2	†	†	†	†			†	†
12	167	-	-	-	1	1	1	-	1	-	1	-	1	073-6176109P17	Cut-off switch spacer
5	168	-	-	-	1	1	1	-	1	-	1	-	1	See Table "A"	Relay
13	169	1	1	1	1	1	1	1	1	1	1	1	1	449A537P1	Shunt trip device support
13	170	1	1	1	1	1	1	1	1	1	1	1	1	622C502G1	Shunt trip device (with coil)
13	171	1	1	1	1	1	1	1	1	1	1	1	1	See Table "A"	Shunt trip coil
*	172	1	1	1	1	1	1	1	1	1	1	1	1	423A380P1	Undervoltage device support
14	173	1	1	1	1	1	1	1	1	1	1	1	1	δ	Time delay undervoltage device, AC
14	173	1	1	1	1	1	1	1	1	1	1	1	1	δ	Time delay undervoltage device, DC
15	174	1	1	1	1	1	1	1	1	1	1	1	1	#	Static time delay, AC or DC (replaces complete oil displacement time delay undervoltage device)
14	175	1	1	1	1	1	1	1	1	1	1	1	1	See Table "A"	Undervoltage device coil
*	176	1	1	1	1	1	1	1	1	1	1	1	1	269C282G2	Instantaneous undervoltage device AC (with coil)
*	176	1	1	1	1	1	1	1	1	1	1	1	1	269C282G5	Instantaneous undervoltage device DC (with coil)
5	177	-	-	-	1	1	1	-	1	-	1	-	1	6353562G3	Auxiliary switch 3 stage
5	177	-	-	-	1	1	1	-	1	-	1	-	1	6353562G6	Auxiliary switch 6 stage
*	177	1	1	1	-	-	-	1	-	1	-	1	-	6353562G2	Auxiliary switch 2 stage
*	177	1	1	1	-	-	-	1	-	1	-	1	-	6353562G5	Auxiliary switch 5 stage
8	178	1	1	1	1	1	1	1	1	1	1	1	1	411A952G1	Auxiliary switch crank bracket
8	179	-	-	-	1	1	1	-	1	-	1	-	1	887B386G2	Auxiliary switch link assembly
8	179	1	1	1	-	-	-	1	-	1	-	1	-	887B386G1	Auxiliary switch link assembly
8	180	1	1	1	1	1	1	1	1	1	1	1	1	6447157P1	Tube
*	181	1	1	1	1	1	1	1	1	1	1	1	1	457A643P8	Groove pin
*	182	1	1	1	1	1	1	1	1	1	1	1	1	127A6463G2	Auxiliary switch operating rod
*	183	1	1	1	1	1	1	1	1	1	1	1	1	127A6439P1	Auxiliary switch coupling
*	184	2	2	2	2	2	2	2	2	2	2	2	2	6076402P203	Pin
*	185	1	1	1	-	-	-	1	-	1	-	1	-	887B387G1	Adjusting plate
8	186	-	-	-	1	1	1	-	1	-	1	-	1	6203934P1	Open and close indicator link
5	187	-	-	-	1	1	1	-	1	-	1	-	1	265B268G1	Open and close indicator
5	188	-	-	-	1	1	1	-	1	-	1	-	1	265B268G2	Charged and discharged indicator

* Not shown.

† Original breaker had no suffix letter or numeral.

δ When ordering time delay undervoltage devices, the following information must be included:

(1) Complete nameplate reading of breaker involved.

(2) Desired voltage rating of device, whether a-c or d-c, and if a-c, the frequency

Order by circuit breaker Serial No.

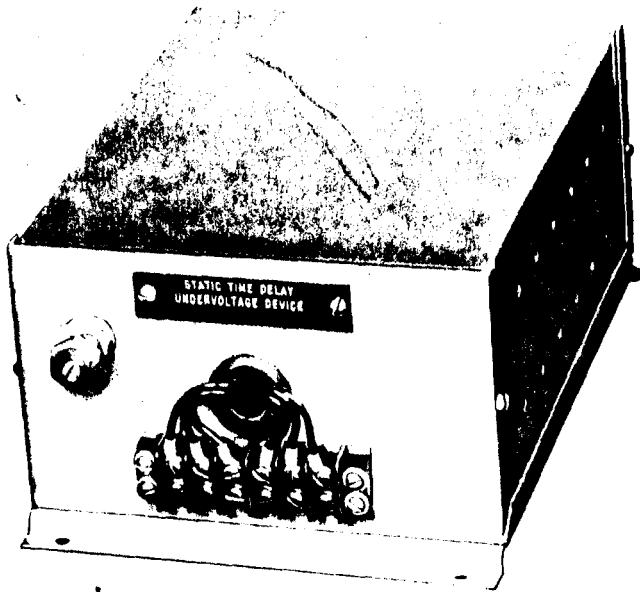


Fig. 15. Static time delay, (Ref. No. 174)



Fig. 16. AK-2A-50 manual

TABLE A

Rating		Catalog Number		
		Closing Relay	Shunt Trip Device Coil (Ref. 171)	Undervoltage Device Coil (Ref. 175)
Volts	Cycles			
24	D-C	---	073-6275081G55	073-6275081G15
48		---	6275081G28	6275081G9
125		12HGA11J52	6275081G29	6275081G18
250		12HGA11J51	6275081G30	6275081G19
115	25	12HGA11J78	6275081G26	6275081G12
208		12HGA11J79	6275081G29	6275081G10
230		12HGA11J79	6275081G29	6275081G10
460		---	6275081G7	6275081G17
575	50	---	6275081G5	6275081G21
115		12HGA11J74	6275081G56	6275081G4
208		12HGA11J75	6275081G26	6275081G12
230		12HGA11J75	6275081G26	6275081G12
380	60	---	6275081G27	6275081G31
460		---	6275081G4	6275081G3
575		---	6275081G29	6275081G8
115		12HGA11J70	6275081G25	6275081G26
208	60	12HGA11J71	6275081G26	6275081G27
230		12HGA11J71	6275081G26	6275081G7
460		---	6275081G27	6275081G31
575		---	6275081G7	6275081G20

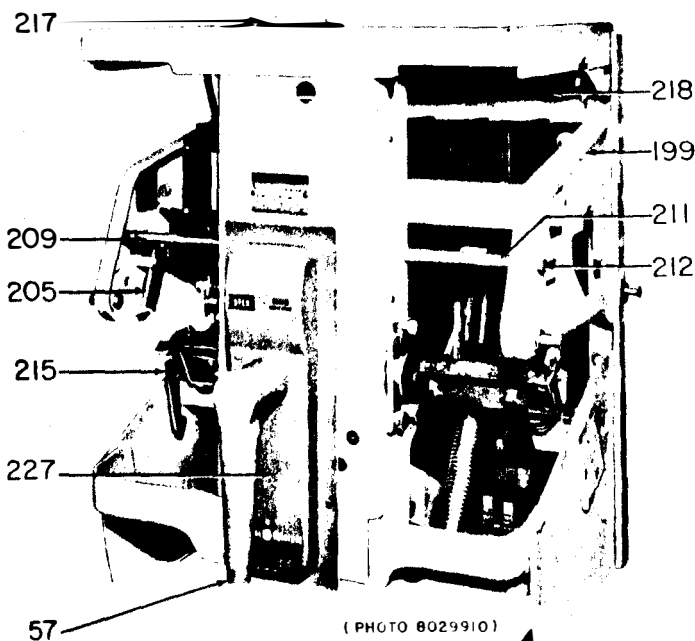


Fig. 17. AK-2A-50 manual

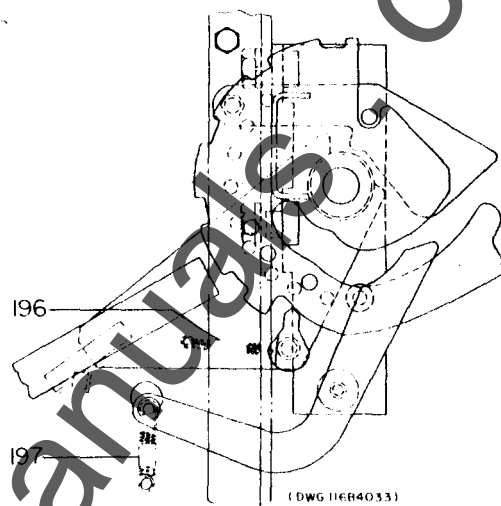


Fig. 18. Drawout racking mechanism, (Ref. No. 195)

Fig. No.	Ref. No.	No. Required per Breaker										Cat. No.	Description				
		AK-2-50			AK-2A-50		AK-3-50		AK-3A-50								
		Man.			Elec.		Man.		Elec.		Man.			Elec.			
		†	-1	-2	†	-1	-2	†	†	†	†			†	†	†	†
*	189	-	-	-	1	1	1	-	1	-	1	-	1	073-174V532P1	Pin for indicator		
*	190	-	-	-	3	3	3	-	3	-	3	-	3	394A133P1	Retainer for indicator		
*	191	-	-	-	2	2	2	-	2	-	2	-	2	6176109P7	Spacer for indicator		
*	192	-	-	-	1	1	1	-	1	-	1	-	1	365A305	Spring for indicator		
5	193	-	-	-	1	1	1	-	-	-	-	-	-	6293908G185	Terminal board (4 point)		
5	193	1	1	1	1	1	1	-	-	1	1	-	-	6293908G168	Terminal board (6 point)		
*	194	1	1	1	1	1	1	-	-	1	1	-	-	6423721P4	Terminal board support		
*	194	-	-	-	-	-	-	-	-	-	-	-	-	9921543P1	Terminal board support		
18	195	1	1	1	1	1	1	-	-	1	1	-	-	238D689G1	Drawout racking mechanism assembly		
18	196	1	1	1	1	1	1	-	-	1	1	-	-	365A313	Pawl spring		
18	197	1	1	1	1	1	1	-	-	1	1	-	-	412A135	Link spring		
16	198	-	-	-	-	-	-	1	1	-	-	1	1	669D0819G1	Upper side sheet (left hand side)		
17	199	-	-	-	-	-	-	1	1	-	-	1	1	669D0819G2	Upper side sheet (right hand side)		
16	200	-	-	-	-	-	-	2	2	-	-	2	2	888B0420P1	Wheel		
16	201	-	-	-	-	-	-	2	2	-	-	2	2	888B0420P2	Shaft		
16	202	-	-	-	-	-	-	1	1	-	-	1	1	846C0839G1	Interlock link assembly		
16	203	-	-	-	-	-	-	4	4	-	-	4	4	127A8324P1	Mounting stud		
16	204	-	-	-	-	-	-	4	4	-	-	4	4	148A1988P1	Jam nut		
17	205	-	-	-	-	-	-	1	1	-	-	1	1	846C0839P1	Latch		
16	206	-	-	-	-	-	-	1	1	-	-	1	1	6076401P12	Pin		
16	207	-	-	-	-	-	-	1	1	-	-	1	1	177L292P53	Rivet		
*	208	-	-	-	-	-	-	1	1	-	-	1	1	846C0839P10	Spring		
17	209	-	-	-	-	-	-	1	1	-	-	1	1	148A1946P5	Spacer (left)		
16	210	-	-	-	-	-	-	1	1	-	-	1	1	177L292P58	Screw (left)		
17	211	-	-	-	-	-	-	1	1	-	-	1	1	148A1946P6	Spacer (right)		
17	212	-	-	-	-	-	-	1	1	-	-	1	1	177L292P59	Screw (right)		
*	213	-	-	-	-	-	-	1	1	-	-	1	1	6203939P5	Trip paddle		
*	214	-	-	-	-	-	-	1	1	-	-	1	1	6444141P1	Clamp		
17	215	-	-	-	-	-	-	1	1	-	-	1	1	801B138G4	Anti rebound hook and slider		
*	216	1	1	1	1	1	1	1	1	1	1	1	1	265B237P1	Secondary disconnect support		
17	217	x	x	x	x	x	x	x	x	x	x	x	x	386A110G2	Secondary disconnect device (7 pt.)		
17	218	1	1	1	1	1	1	1	1	1	1	1	1	362A494P1	Insulation		
*	219	2	2	2	2	2	2	2	2	2	2	2	2	6176109P72	Spacer		

† Original breaker had no suffix letter or numeral.

x Order as required. Quantity of 3 maximum for AK-50 Breakers.

* Not shown.

Fig. No.	Ref. No.	No. Required per Breaker										Cat. No.	Description		
		AK-2-50						AK-2A-50		AK-3-50				AK-3A-50	
		Man.			Elec.			Man.	Elec.	Man.	Elec.			Man.	Elec.
		†	-1	-2	†	-1	-2	†	†	†	†			†	†
*	220	3	3	3	3	3	3	3		3	3	3	3	073-845C276G6	Movable primary disconnect
*	221	-	-	-	1	1	1	-	1	-	1	-	1	6414677G1	Maintenance handle
*	222	-	-	-	1	1	1	-	1	-	1	-	1	805B949G1	Closing switch
2	223	3	3	3	3	3	3	3	3	3	3	3	3	δ	Overcurrent trip device
5	224	-	-	-	2	2	2	-	2	-	2	-	2	174V535P1	Window
4	224	1	1	1	-	-	-	1	-	1	-	1	-	269C272P8	Window (open and close)
4	225	1	1	1	-	-	-	1	-	1	-	1	-	698C997P2	Window (charge indicator) (when ordering window include label ref. No. 226)
*	226	1	1	1	-	-	-	1	-	1	-	1	-	698C997P4	Label (charge indicator)
17	227	-	-	-	1	-	-	1	-	-	-	1	-	NP148A1048	Bib for front esc. (Manual) (blue)
17	227	-	-	-	-	-	1	-	1	-	-	-	1	NP148A1049	Bib for front esc. (Elec. breaker w/o closing switch) (blue)
17	227	-	-	-	-	-	1	-	1	-	-	-	1	NP148A1050	Bib for front esc. (Elec. breaker with closing switch) (blue)

* Not shown.

† Original breaker had no suffix letter or numeral

δ (1) No parts furnished for field installation on EC-1 trip devices.

(2) Only part furnished for field installation on EC-2 or EC-2A trip devices is plastic cover, Cat. No. 242C645P1.

(3) When replacement trip devices are ordered, it is imperative that order includes complete nameplate reading of the breaker or breakers involved and, if a contemplated ampere rating change is involved, the order should also include information as to ampere rating, time-current characteristic, and instantaneous trip setting desired.

NOTE:

Illustrations and catalog numbers listed on the following pages apply only to Type AK-3-50 and AK-3A-50 breakers.

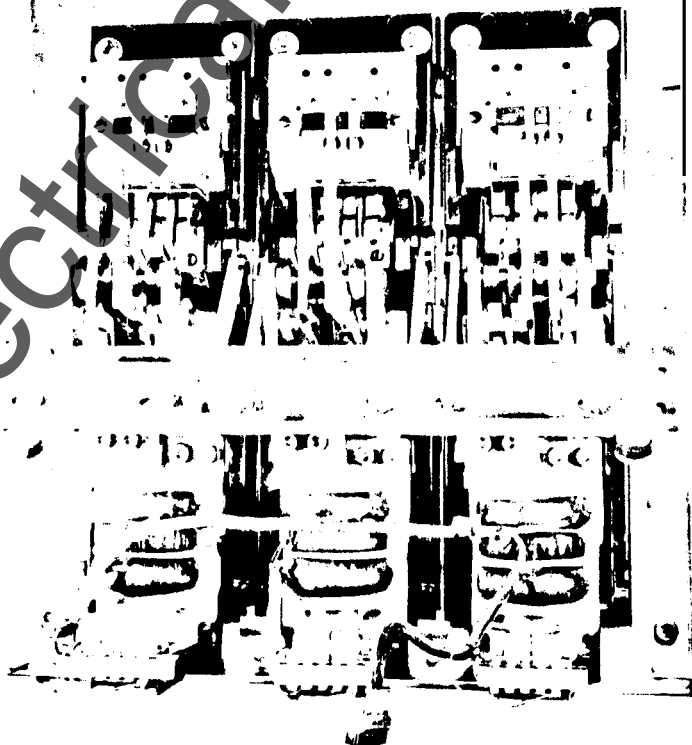


Fig. 19. Front view of back frame assembly—AK-3-50

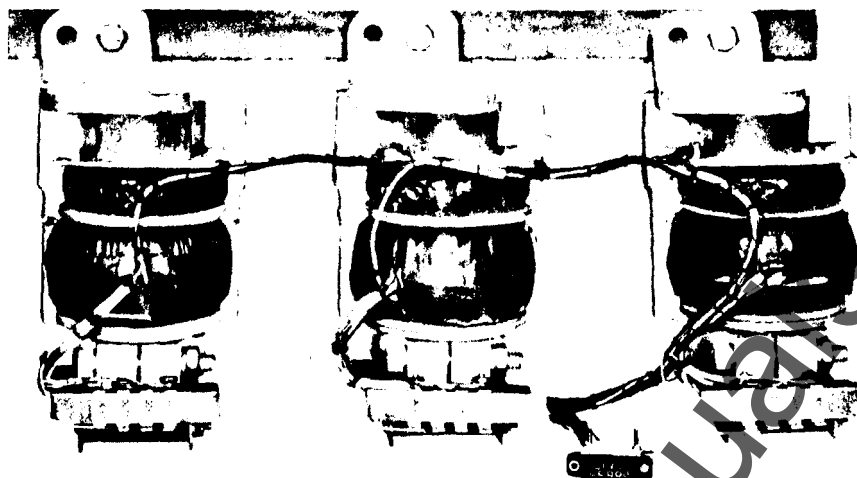


Fig. 20. Magnetic coil assembly for AK-3-50 breakers

Magnetic Sensor Coils - Assembly

Without ground trip			With ground trip		
Pole	Rating	Cat. No.	Pole	Rating	Cat. No.
2P	200/600	073-0133C1555 G2	3P (1-non-automatic)	200/600	073-0133C1555 G8
2P	600/1600	0133C1555 G3	3P	200/600	0133C1555 G9
3P (1-non-automatic)	200/600	0133C1555 G4	3P (1-non-automatic)	600/1600	0133C1555 G10
3P	200/600	0133C1555 G5	3P	600/1600	0133C1555 G11
3P (1-non-automatic)	600/1600	0133C1555 G6			
3P	600/1600	0133C1555 G7			

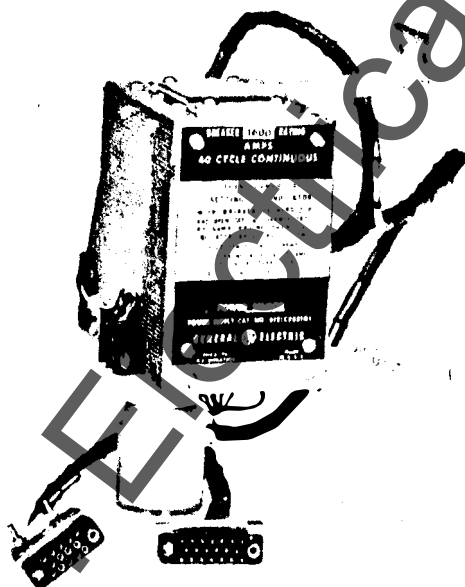


Fig. 21. Power supply unit

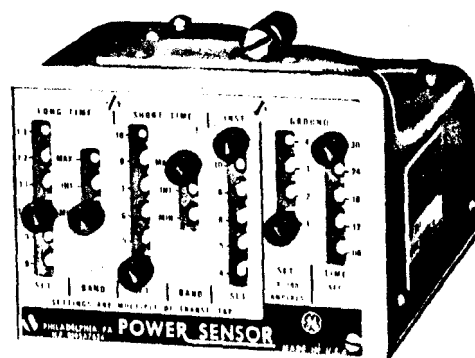


Fig. 22. Power sensor unit

Power Supply Units - Cat. No. 0121C7521 G1

- 0121C7501 P24 (upper) mounting bracket
- 0121C7501 P21 (lower) mounting bracket

TYPE AK POWER CIRCUIT BREAKERS

Power Sensor Unit - Cat. No. 184L373 (see Fig. 22)

Nameplate - 184L373 G29

With ground trip

	Cat. No.
L-S (Lo)-I	073-184L373 G15
L-S (Hi)-I	184L373 G16
L ———-I	184L373 G17
L-S (Lo)—	184L373 G18
L-S (Hi)—	184L373 G19
—S (Lo)-I	184L373 G20
—S (Hi)-I	184L373 G21
—S (Lo)—	184L373 G22
—S (Hi)—	184L373 G23
—————I	184L373 G24

Without ground trip

	Cat. No.
L-S (Lo)-I	073-184L373 G1
L-S (Hi)-I	184L373 G2
L ———-I	184L373 G3
L-S (Lo)—	184L373 G4
L-S (Hi)—	184L373 G5
—S (Lo)-I	184L373 G6
—S (Hi)-I	184L373 G7
—S (Lo)—	184L373 G8
—S (Hi)—	184L373 G9
—————I	184L373 G10

L - Long Time
 S - Short Time
 (Lo) - Low Set
 (Hi) - High Set
 I - Instantaneous



Fig. 23. Magnet trip device with mounting bracket

Magnet Trip Device with Mounting Bracket - Cat. No. 0846C0882 G4

Nameplate - 0178A9981



Fig. 24. Ground sensor coil with neutral mounting

Fourth Wire Grid Sensor Coils - Cat. No. 0132C2606 G1

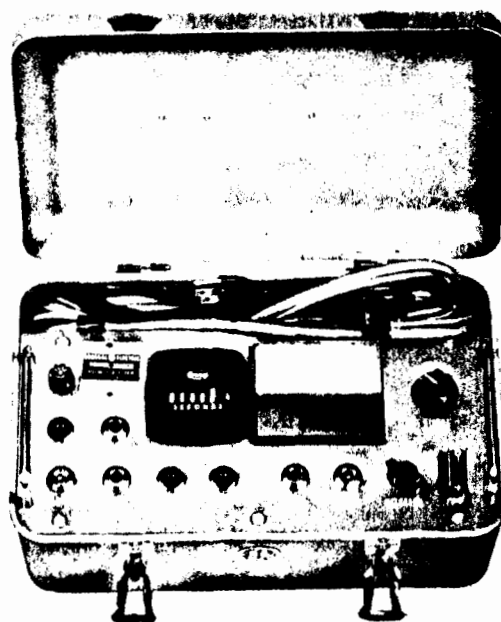


Fig. 25. Power sensor kit

Power Sensor Test Kit - Cat. No. 0102D2526 G1

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